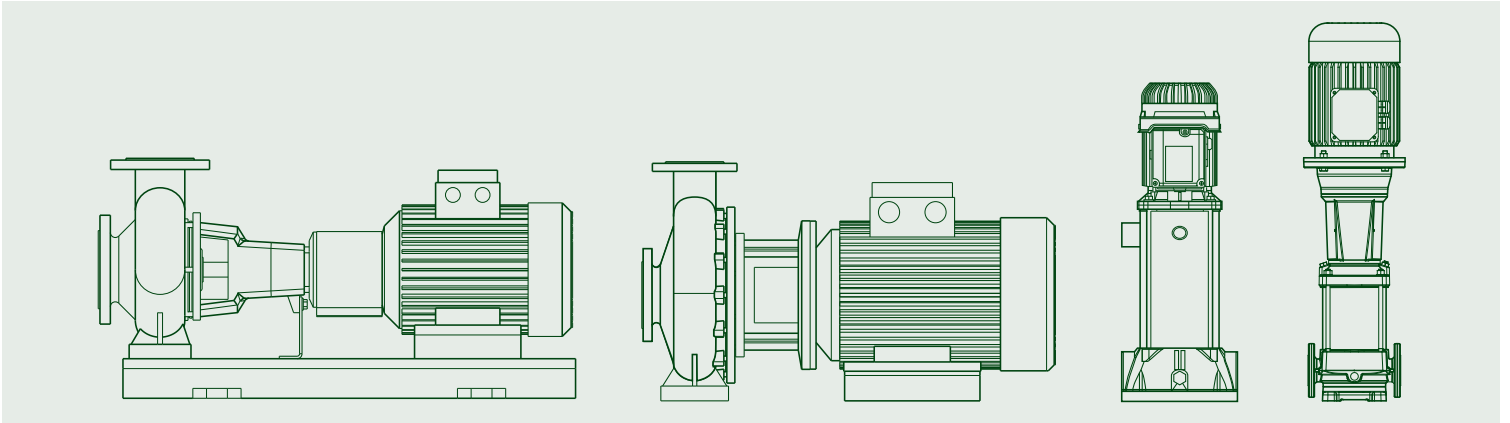


# CENTRIFUGAL PUMPS



**TECHNICAL  
CATALOGUE**



THE INTERNATIONAL CERTIFICATION NETWORK

## CERTIFICATE

CISQ/IMQ has issued an IQNet recognized certificate that the organization:

**DWT HOLDING SPA**  
VIA MARCO POLO 14 - 35035 MESTRINO (PD)  
BRENDOLA (VI) - CASTELLO DI GODEGO (TV) - BIENTINA (PI) -  
VAL LIONA (VI) - PRC CHINA - HUNGARY

has implemented and maintains a

Quality Management System

for the following scope:

**Design, production, sale and assistance of components and electronic controls for pumps, electropumps and pump sets for cold and hot water for civil, industrial and agricultural use**

Further clarifications regarding the applicability of ISO 9001:2015 requirements may be obtained by consulting the organization

which fulfills the requirements of the following standard:

**ISO 9001:2015**

Issued on: **2018 - 05 - 21**

Expires on: **2021 - 05 - 27**

This attestation is directly linked to the IQNet Partner's original certificate and shall not be used as a stand-alone document

Registration Number: IT - 824



*Alex Stoichitov*  
Alex Stoichitov  
President of IQNET



*Ing. Claudio Provetti*  
Ing. Claudio Provetti  
President of CISQ

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Ann. 1 of 1



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IQNet is composed of more than 30 bodies and counts over 120 subsidiaries all over the globe.

ALLEGATO CERTIFICATO n. **9101.COGE**  
ANNEX CERTIFICATE

(\*) Unità Operative:  
(\*) Operative Units:

**DAB PUMPS SPA**  
VIA BONANNO PISANO 1 - 56031 BIENTINA (PI)

**DAB PUMPS SPA**  
VIA DEL LAVORO 3 - 36040 VAL LIONA (VI)

**DAB PUMPS QINGDAO CO. LTD**  
40 KAITUO ROAD, QINGDAO DEVELOPMENT ZONE - SHANGDONG PROVINCE, PRC CHINA

**DAB PUMPS HUNGARY KFT**  
BUDA ERNO H - 8800 NAGYKANISZA HUNGARY

| DATE: | PRIMA CERTIFICAZIONE<br>FIRST CERTIFICATION | EMMISSIONE CORRENTE<br>CURRENT ISSUE | SCADENZA<br>EXPIRY |
|-------|---|--------------------------------------|--------------------|
|       | 1995-07-17                                  | 2018-05-21                           | 2021-05-27         |

*Ing. Claudio Provetti*  
IMQ S.p.A. - VIA QUINTILIANO, 43 - 20138 MILANO ITALY  
Management Systems Division - Flavio Onago



SGQ N° 005 A  
Membro della Unione di Reti  
Internazionali (IR) di IAF  
Membro della IR di IAF  
Membro della IR di IAF

IAF: 18, 19, 29



Organismo di Certificazione Federato CISQ  
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CISQ è la Federazione Italiana di Organismi di Certificazione dei sistemi di gestione aziendali.  
CISQ è the Italian Federation of management system Certification Bodies.



CERTIFICATO N.  
CERTIFICATE N. **9101.COGE**

SI CERTIFICA CHE IL SISTEMA QUALITÀ DI  
WE HEREBY CERTIFY THAT THE QUALITY SYSTEM OPERATED BY

**DWT HOLDING SPA**  
VIA MARCO POLO 14 - 35035 MESTRINO (PD)

UNITÀ OPERATIVE / OPERATIVE UNITS

**DAB PUMPS SPA**  
VIA MARCO POLO 14 - 35035 MESTRINO (PD)  
**DAB PUMPS SPA**  
VIA EINAUDI 2 - 36040 BRENDOLA (VI)  
**DAB PUMPS SPA**  
VIA E. FERMI 6-8-10 - 31030 CASTELLO DI GODEGO (TV)

Vedere gli Allegati per le altre Unità Operative (n° 1 pagina)  
View the Annexes for the other Operative Units (n° 1 page)

E' CONFORME ALLA NORMA / IS IN COMPLIANCE WITH THE STANDARD  
**ISO 9001:2015**

PER LE SEGUENTI ATTIVITÀ / FOR THE FOLLOWING ACTIVITIES

Progettazione, produzione, commercializzazioni e assistenza di componenti e controlli elettronici per pompe, elettropompe e gruppi di pompaggio per acqua fredda e calda ad uso civile, industriale ed agricolo  
**Design, production, sale and assistance of components and electronic controls for pumps, electropumps and pump sets for cold and hot water for civil, industrial and agricultural use**

IL PRESENTE CERTIFICATO E' SOGGETTO AL RISPETTO DEL  
REGOLAMENTO PER LA CERTIFICAZIONE DEI SISTEMI DI GESTIONE  
THE USE AND THE VALIDITY OF THE CERTIFICATE SHALL SATISFY THE  
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|-------|---|--------------------------------------|--------------------|
|       | 1995-07-17                                  | 2018-05-21                           | 2021-05-27         |

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SGQ N° 005 A  
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Membro della IR di IAF  
Membro della IR di IAF

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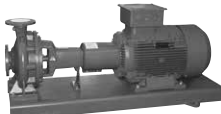
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### TECHNICAL DATA

**Operating range:**

from 8 to 45 l/m with head up to 53 metres

**Pumped liquid:**

clean, free of solids and abrasives, non-viscous, non-crystallised and chemically neutral, with properties similar to water

**Liquid temperature range:**

from 0 °C to +35 °C for domestic use (EN 60335-2-41)

from -10°C to +80°C for other uses

**Maximum ambient temperature:** +40°C

**Maximum operating pressure:** 10 bar (1000 kPa)

**Protection class:** IP 44

**Protection class at the terminal board:** IP 55

**Insulation class:** F

**Standard voltage:** single-phase 220-240 V / 50 Hz

three-phase 230-400 V / 50 Hz.

**Installation:** fixed, horizontal position

### APPLICATIONS

Self-priming pump with side liquid channel and star-shaped impeller; excellent suction capabilities even in unfavourable operating conditions, such as the presence of air bubbles, or lack of continuity of the liquid at the suction.

Used in domestic, agricultural civil and industrial installations.

### CONSTRUCTION FEATURES OF THE PUMP

Cast iron pump body with brass wear disk.

Motor support and impeller fully made of brass to avoid the risk of blockage.

Carbon/ceramic mechanical seal.

Stainless steel motor shaft.

### CONSTRUCTION FEATURES OF THE MOTOR

Closed asynchronous type, external ventilation cooling.

Rotor running on permanently lubricated ball bearings, oversized to ensure low noise and durability.

Built-in thermal and current overload protection in the single-phase version.

For the protection of the three-phase motor, we recommend the use of remote overload cut-outs, in compliance with current local regulations.

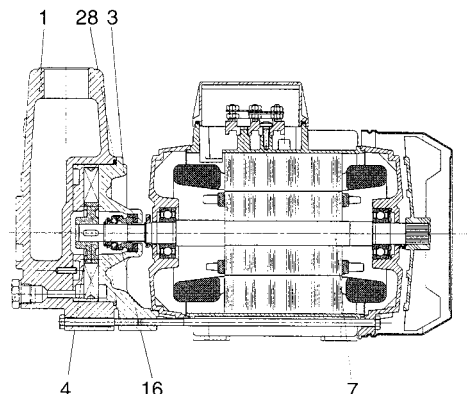
Permanently connected capacitor in the single-phase version.

Construction according to CEI 2-3 and CEI 61-69 (EN 60335-2-41).

### MATERIALS

| No. | PARTS*           | MATERIALS  |
|-----|------------------|--|
| 1   | PUMP BODY        | CAST IRON 250 ISO UNI 185<br>WITH BRASS PRESSURE RING PCU ZN 40<br>PB2 UNI 5705/65 |
| 3   | SUPPORT          | BRASS PCu Zn 40 Pb2 UNI 5705/65  |
| 4   | IMPELLER         | BRASS PCu Zn 40 Pb2 UNI 5705/65  |
| 7   | SHAFT WITH ROTOR | AISI 303 STAINLESS STEEL X12 CrNiS 13<br>UNI 6900/71                               |
| 16  | MECHANICAL SEAL  | CARBON / CERAMIC   |
| 28  | OR RING          | VITON  |

\* In contact with the liquid



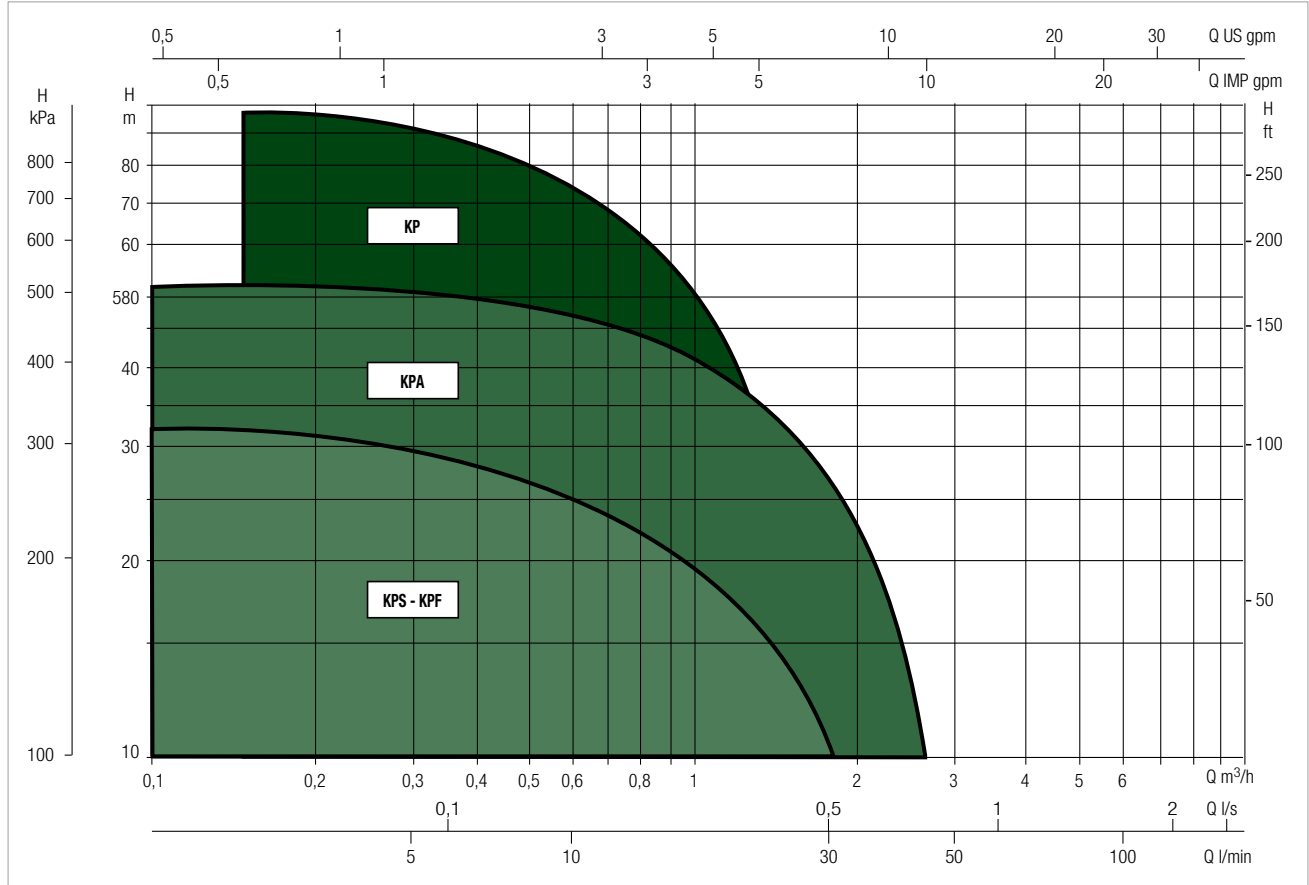
# KPA / KPS / KPF / KP RANGE

PERIPHERAL ELECTRIC PUMPS

## PERFORMANCE RANGE

The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

### GRAPHIC SELECTION TABLE



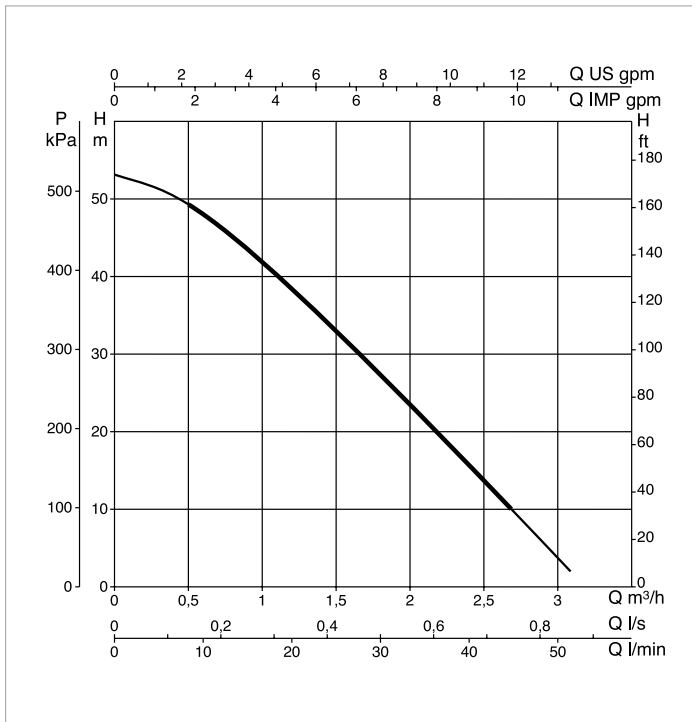
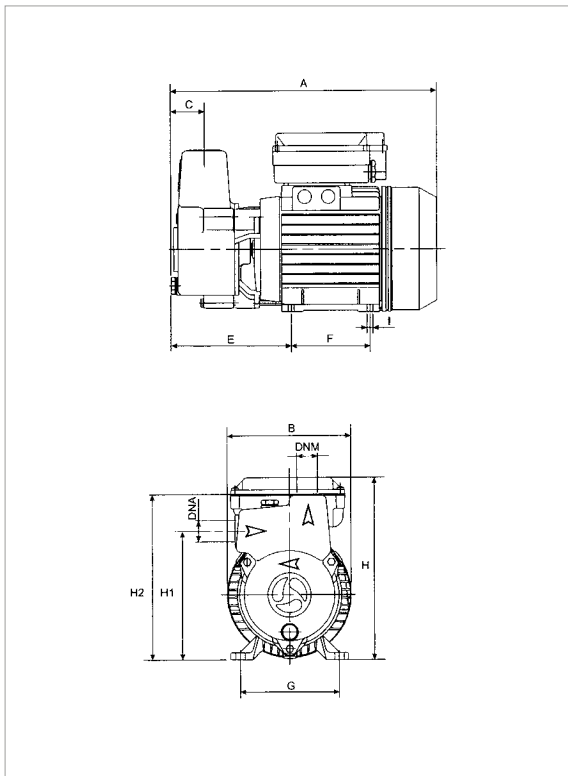
### SELECTION TABLE

| MODEL           | Q=m <sup>3</sup> /h | 0  | 0,3 | 0,6 | 0,9 | 1,2 | 1,8 | 2,4 |
|-----------------|---------------------|----|-----|-----|-----|-----|-----|-----|
|                 | Q=l/min             | 0  | 5   | 10  | 15  | 20  | 30  | 40  |
| KPA 40/20 M - T | H (m)               | 53 | 51  | 48  | 43  | 38  | 27  | 16  |

## KPA - SELF-PRIMING PERIPHERAL PUMPS

Pumped liquid temperature range: from 0 °C to +35 °C for domestic use (EN 60335-2-41). From -10 °C to +80 °C for other uses.

Maximum ambient temperature: +40°C



The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

| MODEL       | ELECTRICAL DATA      |              |            |    |                     |                      |       |           |     |            |
|-------------|----------------------|--------------|------------|----|---------------------|----------------------|-------|-----------|-----|------------|
|             | POWER INPUT<br>50 Hz | P1 MAX<br>kW | P2 NOMINAL |    | I <sub>n</sub><br>A | I <sub>st</sub><br>A | 1/min | CAPACITOR |     | MOTOR TYPE |
|             |                      |              | kW         | HP |                     |                      |       | μF        | Vc  |            |
| KPA 40/20 M | 1 x 230V ~           | 1,1          | 0,75       | 1  | 5,1                 | 17,3                 | 2800  | 20        | 450 | -          |
| KPA 40/20 T | 3 x 230 - 400V ~     | 1,3          | 0,75       | 1  | 4/2,3               | 27 - 15,4            | 2800  | -         | -   | IE3        |
| KPA 40/20 T | 3 x 230 - 400V ~     | 1            | 0,75       | 1  | 3,6/2,1             | 24,3 - 14,07         | 2860  | -         | -   | IE2        |

| MODEL           | A   | B   | C  | E   | F  | G   | I Ø | H   | H1  | H2  | DNA<br>GAS | DNM<br>GAS | PACKING DIMENSIONS |     |     | VOLUME<br>(m <sup>3</sup> ) | WEIGHT<br>Kg |
|-----------------|-----|-----|----|-----|----|-----|-----|-----|-----|-----|------------|------------|--------------------|-----|-----|-----------------------------|--------------|
|                 |     |     |    |     |    |     |     |     |     |     |            |            | L/A                | L/B | H   |                             |              |
| KPA 40/20 M - T | 301 | 142 | 38 | 136 | 90 | 112 | 7   | 206 | 146 | 187 | 1" G       | 1" G       | 406                | 267 | 402 | 0,044                       | 12,4         |



### TECHNICAL DATA

#### Operating range:

from 5 to 50 l/m with head up to 84 metres

**Pumped liquid:** clean, free of solids and abrasives, non-viscous, non-aggressive, non-crystallised and chemically neutral

#### Liquid temperature range:

from 0 °C to +35 °C for domestic use

from -10°C to +50°C for other uses

**Maximum ambient temperature:** +40°C

**Maximum operating pressure:** 10 bar (6 bar for KPS-KPF 30/16)

**Installation:** fixed, horizontal position

**Motor protection class:** IP 44

**Protection class at the terminal board:**

IP 55 for KP38/18 and for KPF 45/20;

IP44 for KPF/S 30/16

**Insulation class:** F

**Standard voltage:** single-phase 1 x 230 V / 50 Hz

three-phase: 3 x 230-400 V / 50 Hz

**Special executions on requests:** alternative voltages and frequencies

### APPLICATIONS

Peripheral centrifugal pump with compact dimensions. Capable of generating high heads and suitable for domestic installations, water supply systems, small gardening applications, draining and filling cisterns, and for light industrial uses, such as feeding pressurized boilers (anti-condensation).

### CONSTRUCTION FEATURES OF THE PUMP

Brass pump body and motor support for KP 60/6 and KP 60/12. Pump body with radial suction for KP and KPS; front suction for KPF. Cast iron support with brass wear disc for KPS 30/16 and KP 38/18. KPS 30/16 is available on request with bronze pump body and support. Brass impeller. Carbon/ceramic mechanical seal.

### CONSTRUCTION FEATURES OF THE MOTOR

Closed asynchronous type, external ventilation cooling. Rotor running on permanently lubricated ball bearings, oversized to ensure low noise and durability. Standard built-in thermo-amperometric protection. Capacitor permanently fitted on single phase versions. For the protection of the three-phase motor, we recommend the use of remote overload cut-outs, in compliance with current local regulations. Construction according to CEI 2-3 and CEI 61-69 (EN 60335-2-41).

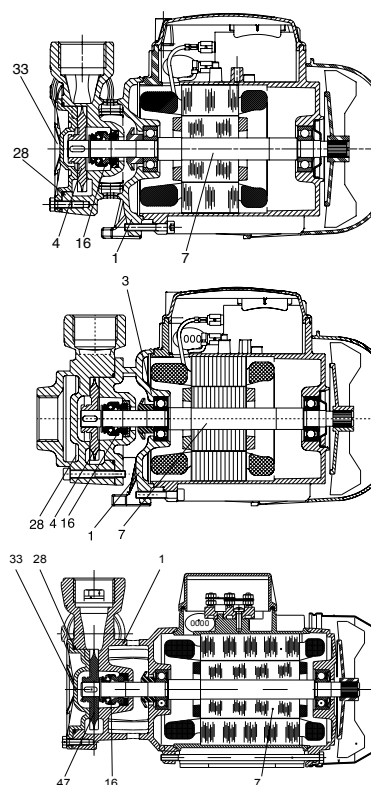
## MATERIALS

| No. | PARTS* KPS       | MATERIALS  |
|-----|------------------|--|
| 1   | PUMP BODY        | CAST IRON 200 UNI ISO 185                          |
| 4   | IMPELLER         | BRASS PCU ZN 40 PB2 UNI 5705/65                    |
| 7   | SHAFT WITH ROTOR | AISI 416 STAINLESS STEEL<br>X12 CRS 13 UNI 6900/71 |
| 16  | MECHANICAL SEAL  | CARBON / CERAMIC                                   |
| 28  | OR RING          | NBR  |
| 33  | COVER            | BRASS PCU ZN 40 PB2 UNI 5705/65                    |

| No. | PARTS* KPF       | MATERIALS  |
|-----|------------------|--|
| 1   | PUMP BODY        | G20 EN-GJL-250 UNI EN 1561                         |
| 3   | MOT. SUPP. PUMP  | G20 EN-GJL-250 UNI EN 1561                         |
| 4   | IMPELLER         | BRASS PCU ZN 40 PB2 UNI 5705/65                    |
| 7   | SHAFT WITH ROTOR | AISI 416 STAINLESS STEEL<br>X12 CRS 13 UNI 6900/71 |
| 16  | MECHANICAL SEAL  | CARBON / CERAMIC                                   |
| 28  | OR RING          | NBR  |

| No. | PARTS* KP 38     | MATERIALS  |
|-----|------------------|--|
| 1   | PUMP BODY        | CAST IRON 200 UNI ISO 185                          |
| 4   | IMPELLER         | BRASS PCU ZN 40 PB2 UNI 5705/65                    |
| 7   | SHAFT WITH ROTOR | AISI 416 STAINLESS STEEL<br>X12 CRS 13 UNI 6900/71 |
| 16  | MECHANICAL SEAL  | CARBON / CERAMIC                                   |
| 28  | OR RING          | NBR  |
| 33  | COVER            | BRASS PCu Zn 40 Pb2 UNI 5705/65                    |

\* In contact with the liquid





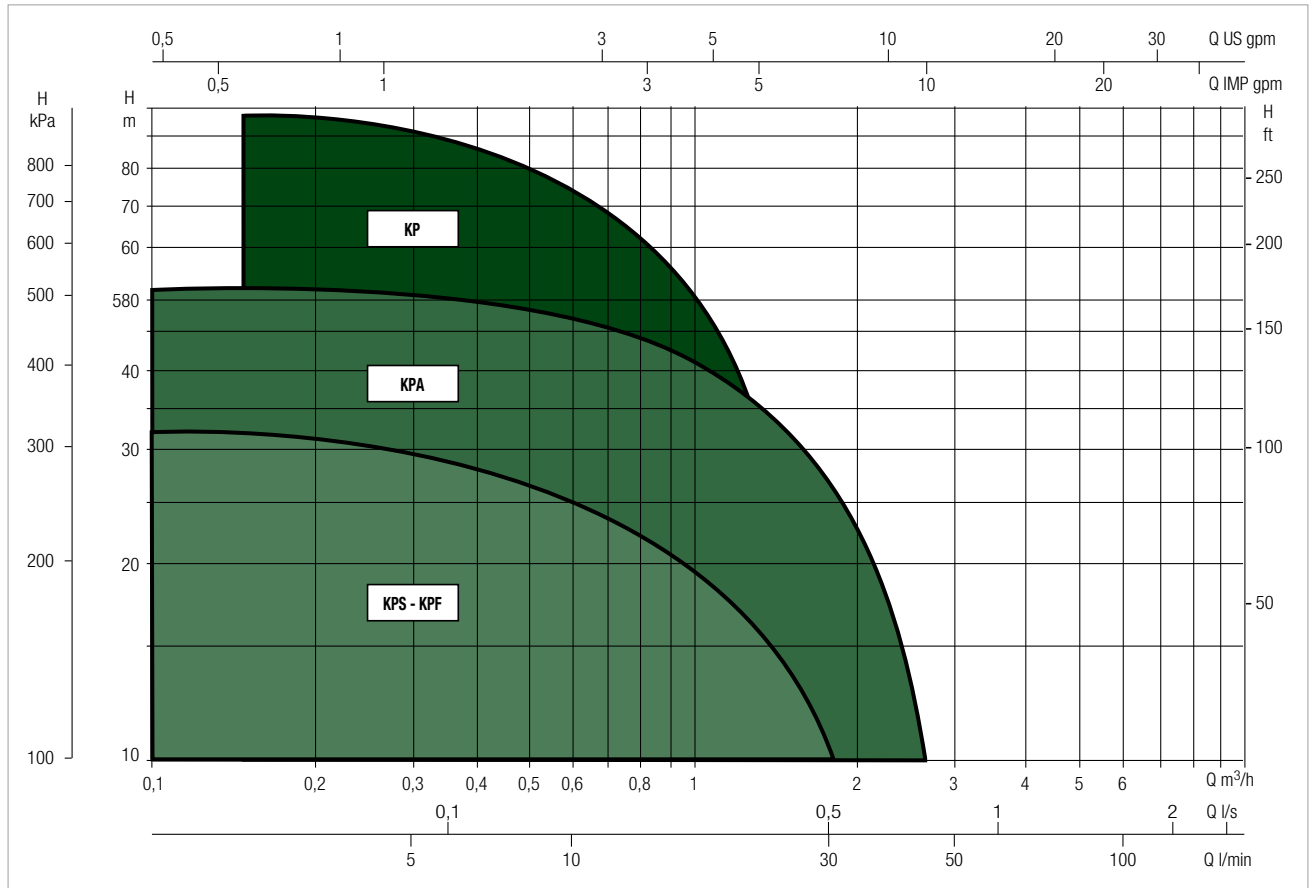
# KPA / KPS / KPF / KP RANGE

## PERIPHERAL PUMPS

### PERFORMANCE RANGE

The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

### GRAPHIC SELECTION TABLE



### SELECTION TABLE

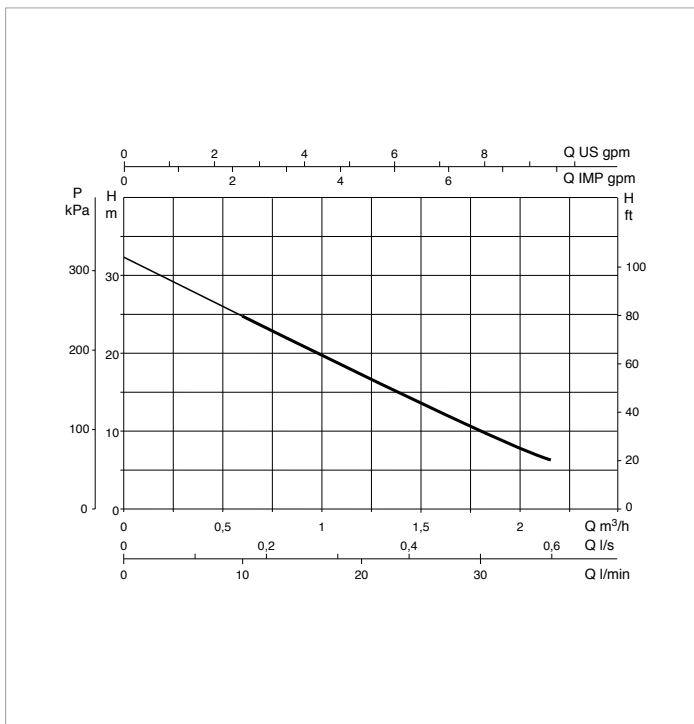
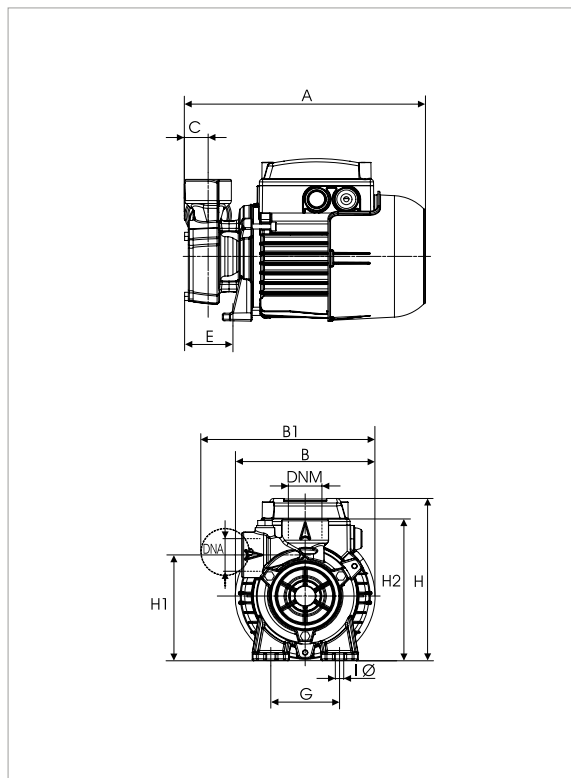
| MODEL           | Q=m <sup>3</sup> /h | 0    | 0,3 | 0,6 | 0,9 | 1,2  | 1,8  | 2,4  |
|-----------------|---------------------|------|-----|-----|-----|------|------|------|
|                 | Q=l/min             | 0    | 5   | 10  | 15  | 20   | 30   | 40   |
| KPF 30/16 M - T | H<br>(m)            | 32,5 | 31  | 25  | 22  | 17,5 | 10   |      |
| KPS 30/16 M - T |                     | 32,5 | 31  | 25  | 22  | 17,5 | 10   |      |
| KPS 30/16 M-P*  |                     | 32,5 | 31  | 25  | 22  | 17,5 | 10   |      |
| KP 38/18 M - T  |                     | 54   | 50  | 46  | 41  | 36   | 27,5 | 17,5 |
| KPF 45/20 M - T |                     | 84   | 76  | 68  | 62  | 56   | 38   | 24   |

\* KPS-fitted - pump with a pressure gauge, pressure switch, power supply cable with plug and five-way fitting for connection to a tank.

## KPS - PERIPHERAL PUMPS

Pumped liquid temperature range: from 0 °C to +35 °C for domestic use. From -10 °C to +50°C for other uses.

Maximum ambient temperature: +40°C



The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

| MODEL          | ELECTRICAL DATA      |              |            |     |                     |           |                |
|----------------|----------------------|--------------|------------|-----|---------------------|-----------|----------------|
|                | POWER INPUT<br>50 Hz | P1 MAX<br>kW | P2 NOMINAL |     | I <sub>n</sub><br>A | CAPACITOR |                |
|                |                      |              | kW         | HP  |                     | μF        | V <sub>c</sub> |
| KPS 30/16 M    | 1 x 230 V ~          | 0,47         | 0,37       | 0,5 | 2                   | 8         | 450            |
| KPS 30/16 T    | 3 x 230 - 400 V ~    | 0,45         | 0,37       | 0,5 | 1,4/0,8             | -         | -              |
| KPS 30/16 M-P* | 1 x 230 V ~          | 0,47         | 0,37       | 0,5 | 2                   | 8         | 450            |

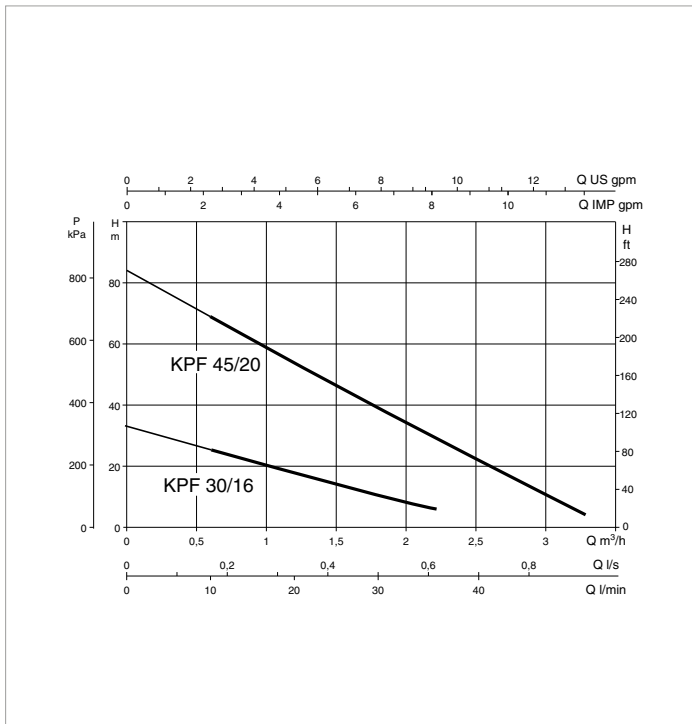
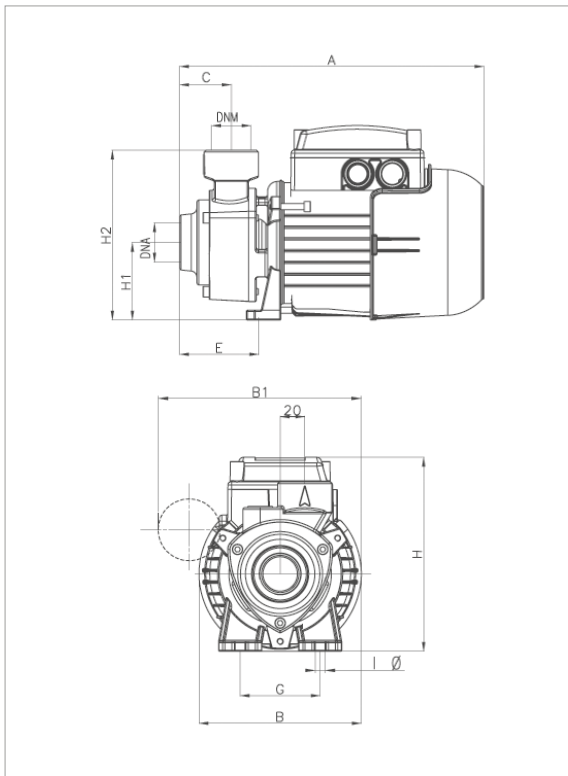
| MODEL           | A   | B   | B1  | C  | E  | F | G  | I Ø | H   | H1  | H2  | DNA  | DNM  | PACKING DIMENSIONS |     |     | VOLUME<br>(m <sup>3</sup> ) | WEIGHT<br>Kg |
|-----------------|-----|-----|-----|----|----|---|----|-----|-----|-----|-----|------|------|--------------------|-----|-----|-----------------------------|--------------|
|                 |     |     |     |    |    |   |    |     |     |     |     |      |      | L/A                | L/B | H   |                             |              |
| KPS 30/16 M - T | 228 | 132 | 165 | 22 | 46 | - | 65 | 8   | 158 | 103 | 138 | 1" G | 1" G | 259                | 164 | 197 | 0,0084                      | 5,4          |
| KPS 30/16 M-P*  | 228 | 132 | 165 | 22 | 46 | - | 65 | 8   | 158 | 103 | 138 | 1" G | 1" G | 259                | 164 | 197 | 0,0084                      | 5,4          |

\* KPS-fitted - pump with a pressure gauge, pressure switch, power supply cable with plug and five-way fitting for connection to a tank.

## KPF - PERIPHERAL PUMPS

Pumped liquid temperature range: from 0 °C to +35 °C for domestic use. From -10 °C to +50°C for other uses.

Maximum ambient temperature: +40°C



The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

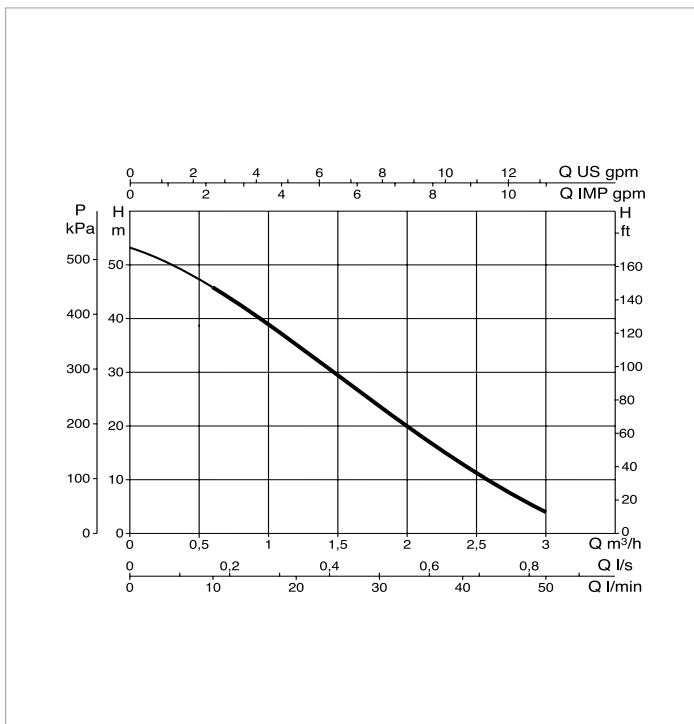
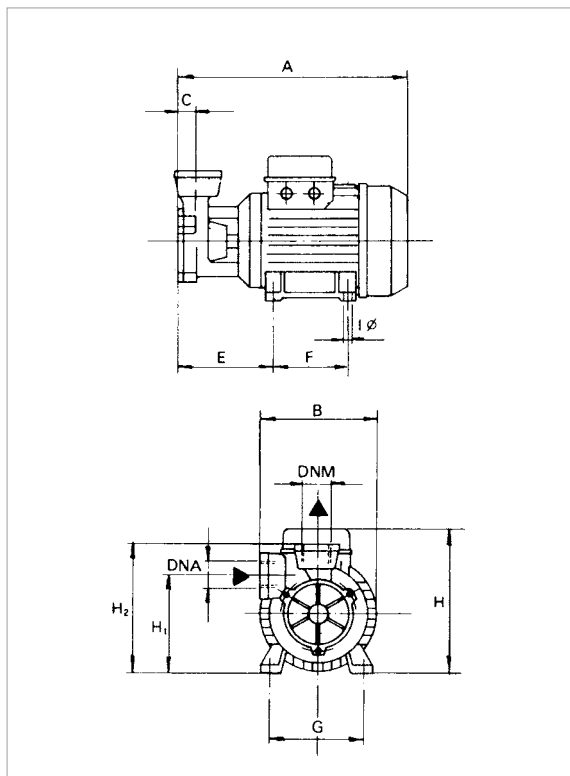
| MODEL       | ELECTRICAL DATA      |              |            |      |             |           |     | MOTOR TYPE |
|-------------|----------------------|--------------|------------|------|-------------|-----------|-----|------------|
|             | POWER INPUT<br>50 Hz | P1 MAX<br>kW | P2 NOMINAL |      | In<br>A     | CAPACITOR |     |            |
|             |                      |              | kW         | HP   |             | µF        | Vc  |            |
| KPF 30/16 M | 1 x 230V ~           | 0.53         | 0.37       | 0.5  | 2.37        | 8         | 450 | -          |
| KPF 30/16 T | 3 x 230 - 400V ~     | 0.47         | 0.37       | 0.5  | 1,45 - 0.82 | -         | -   | -          |
| KPF 45/20 M | 1 x 230V ~           | 1.5          | 1          | 1.34 | 5.9         | 25        | 450 | -          |
| KPF 45/20 T | 3 x 230 - 400V ~     | 1,2          | 1          | 1,34 | 4/2,3       | -         | -   | IE3        |
| KPF 45/20 T | 3 x 230 - 400V ~     | 1,4          | 1          | 1,34 | 4,5/2,6     | -         | -   | IE2        |

| MODEL           | A   | B   | B1  | C  | E  | F | G   | I Ø | H   | H1 | H2  | DNA  | DNM  | PACKING DIMENSIONS |     |     | VOLUME<br>(m <sup>3</sup> ) | WEIGHT<br>Kg | MOTOR<br>TYPE |
|-----------------|-----|-----|-----|----|----|---|-----|-----|-----|----|-----|------|------|--------------------|-----|-----|-----------------------------|--------------|---------------|
|                 |     |     |     |    |    |   |     |     |     |    |     |      |      | L/A                | L/B | H   |                             |              |               |
| KPF 30/16 M - T | 247 | 132 | 165 | 42 | 64 | - | 65  | 8   | 158 | 63 | 138 | 1" G | 1" G | 262                | 140 | 180 | 0,0066                      | 5,3          | -             |
| KPF 45/20 M     | 315 | 155 | -   | 55 | 95 | - | 112 | 7   | 188 | 78 | 163 | 1" G | 1" G | 325                | 165 | 198 | 0,0106                      | 9            | -             |
| KPF 45/20 T     | 315 | 155 | -   | 55 | 95 | - | 112 | 7   | 188 | 78 | 163 | 1" G | 1" G | 325                | 165 | 198 | 0,0106                      | 9            | IE3           |
| KPF 45/20 T     | 315 | 155 | -   | 55 | 95 | - | 112 | 7   | 188 | 78 | 163 | 1" G | 1" G | 325                | 165 | 198 | 0,0106                      | 9            | IE2           |

## KP 38/18 - PERIPHERAL PUMPS

Pumped liquid temperature range: from 0 °C to +35 °C for domestic use. From -10 °C to +50°C for other uses.

Maximum ambient temperature: +40°C



The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

| MODEL      | POWER INPUT<br>50 Hz | P1 MAX<br>kW | ELECTRICAL DATA |     |         |           |     |
|------------|----------------------|--------------|-----------------|-----|---------|-----------|-----|
|            |                      |              | P2 NOMINAL      |     | In<br>A | CAPACITOR |     |
|            |                      |              | kW              | HP  |         | μF        | Vc  |
| KP 38/18 M | 1 x 230V ~           | 0,89         | 0,6             | 0,8 | 4       | 12,5      | 450 |
| KP 38/18 T | 3 x 230 - 400V ~     | 0,86         | 0,6             | 0,8 | 2,9-1,7 | -         | -   |

| MODEL          | A   | B   | B1 | C  | E   | F  | G   | I Ø | H   | H1  | H2  | DNA  | DNM  | PACKING DIMENSIONS |     |     | VOLUME<br>(mc) | WEIGHT<br>Kg |
|----------------|-----|-----|----|----|-----|----|-----|-----|-----|-----|-----|------|------|--------------------|-----|-----|----------------|--------------|
|                |     |     |    |    |     |    |     |     |     |     |     |      |      | L/A                | L/B | H   |                |              |
| KP 38/18 M - T | 255 | 130 | -  | 26 | 106 | 80 | 100 | 7   | 186 | 108 | 153 | 1" G | 1" G | 271                | 176 | 209 | 0,01           | 7,5          |



### TECHNICAL DATA

**Operating range:**

from 1 to 35 l/m with head up to 107 metres

**Pumped liquid:** clean, free of solids and abrasives, non-viscous, non-aggressive, non-crystallised and chemically neutral, with properties similar to water

**Liquid temperature range:**

from 0 °C to +35 °C for domestic use (EN 60335-2-41)

from -10 °C to +80 °C for other uses

**Maximum ambient temperature:** +40°C

**Maximum operating pressure:** 12 bar (1200 kPa)

**Installation:** fixed, horizontal position

**Motor protection class:** IP 44

**Protection class at the terminal board:** IP 55

**Insulation class:** F

**Standard voltage:** single-phase 1 x 230 V / 50 Hz

three-phase: 3 x 230-400 V / 50 Hz

**Special executions on requests:** alternative voltages and frequencies

### APPLICATIONS

Peripheral centrifugal pump with compact dimensions. Capable of generating high heads and suitable for domestic installations, water supply systems, small gardening applications, draining and filling cisterns, and for light industrial uses, such as feeding pressurized boilers (anti-condensation).

### CONSTRUCTION FEATURES OF THE PUMP

Brass pump body and motor support for KP 60/6 and KP 60/12.

Side suction pump body.

Brass impeller.

Carbon/ceramic mechanical seal.

### CONSTRUCTION FEATURES OF THE MOTOR

Closed asynchronous type, external ventilation cooling.

Rotor running on permanently lubricated ball bearings, oversized to ensure low noise and durability.

Standard built-in thermo-amperometric protection. Capacitor permanently fitted on single phase versions.

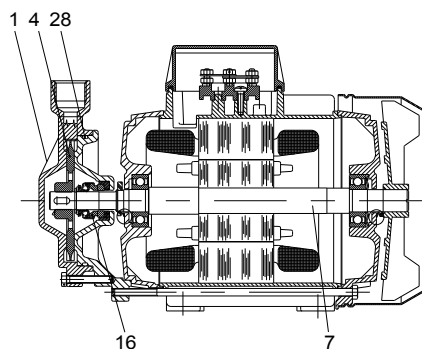
For the protection of the three-phase motor, we recommend the use of remote overload cut-outs, in compliance with current local regulations.

Construction according to CEI 2-3 and CEI 61-69 (EN 60335-2-41).

### MATERIALS

| No. | PARTS*           | MATERIALS  |
|-----|------------------|--|
| 1   | PUMP BODY        | BRASS PCU ZN 40 PB2 UNI 5705/65                    |
| 3   | SUPPORT          | BRASS PCU ZN 40 PB2 UNI 5705/65                    |
| 4   | IMPELLER         | BRASS PCU ZN 40 PB2 UNI 5705/65                    |
| 7   | SHAFT WITH ROTOR | AISI 416 STAINLESS STEEL<br>X12 CRS 13 UNI 6900/71 |
| 16  | MECHANICAL SEAL  | CARBON / CERAMIC                                   |
| 28  | OR RING          | VITON  |

\* In contact with the liquid



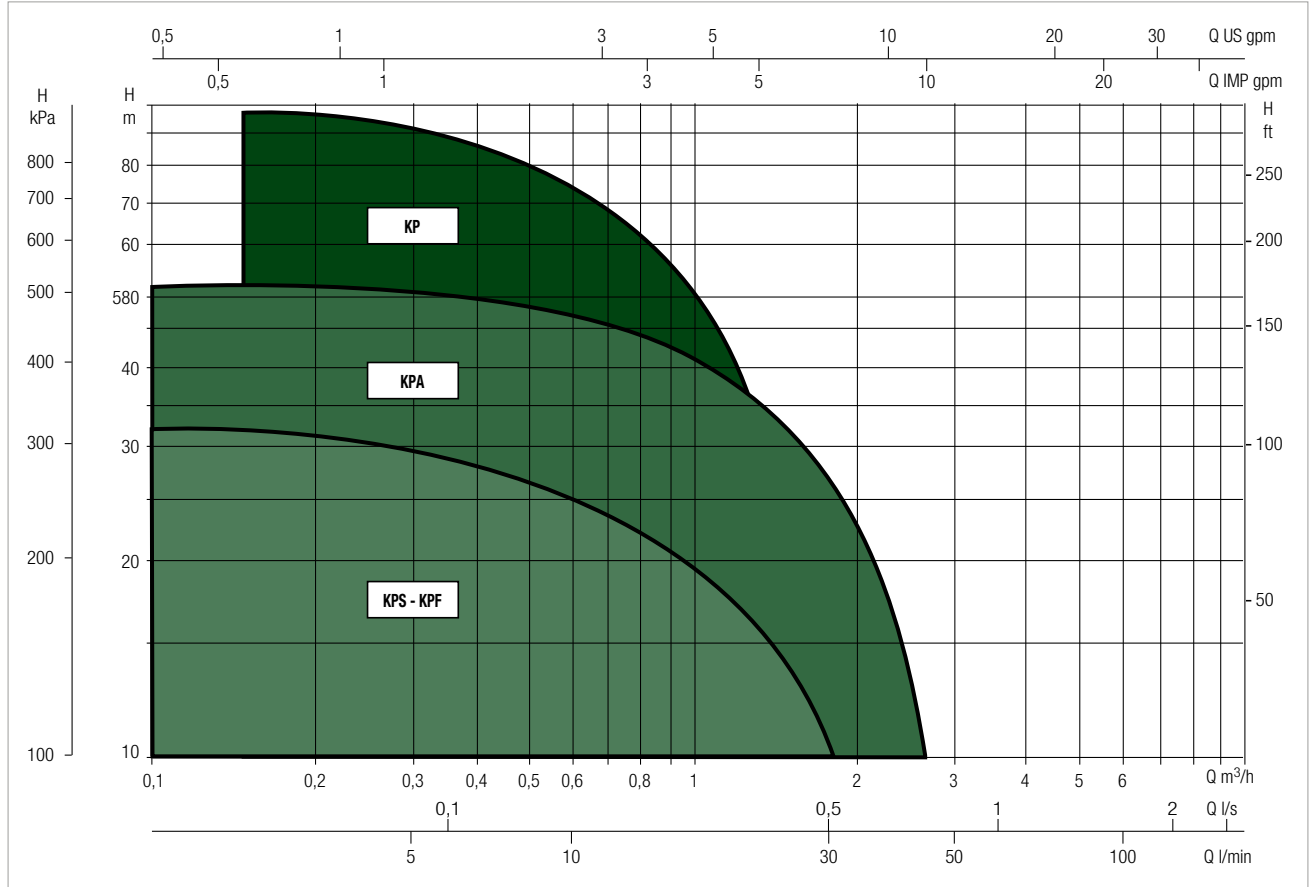
# KPA / KPS / KPF / KP RANGE

## PERIPHERAL PUMPS

### PERFORMANCE RANGE

The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

### GRAPHIC SELECTION TABLE



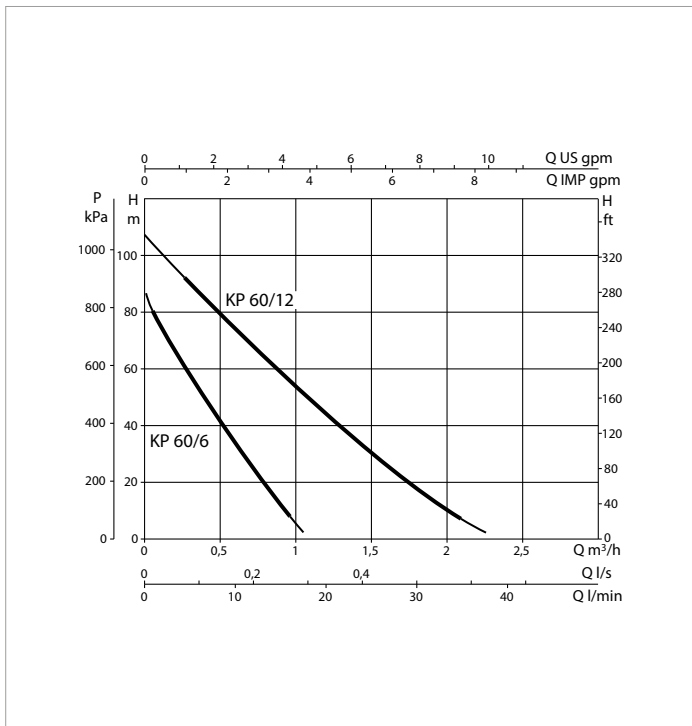
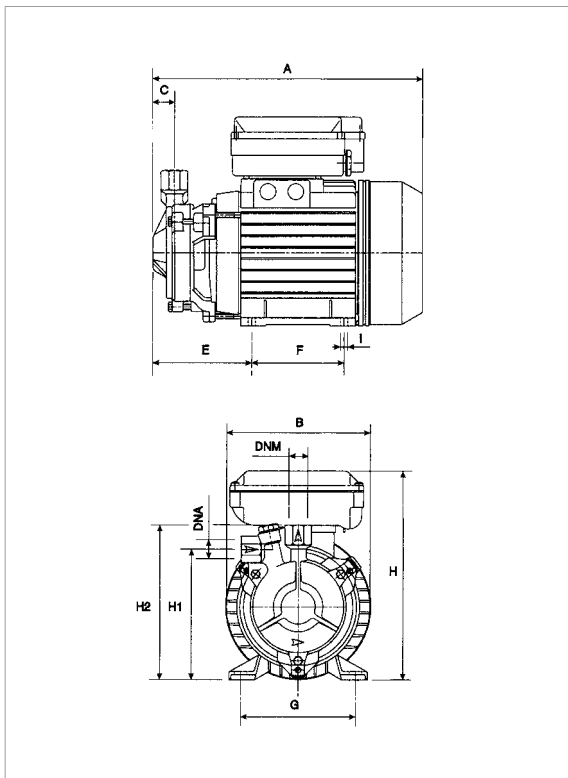
### SELECTION TABLE

| MODEL      | Q=m <sup>3</sup> /h | 0   | 0,3 | 0,6 | 0,9 | 1,2 | 1,8 |
|------------|---------------------|-----|-----|-----|-----|-----|-----|
|            | Q=l/min             | 0   | 5   | 10  | 15  | 20  | 30  |
| KP 60/6 M  | H<br>(m)            | 87  | 57  | 33  | 13  |     |     |
| KP 60/6 T  |                     | 87  | 57  | 33  | 13  |     |     |
| KP 60/12 M |                     | 107 | 91  | 74  | 58  | 43  | 17  |
| KP 60/12 T |                     | 107 | 91  | 74  | 58  | 43  | 17  |

## KP 60 - PERIPHERAL PUMPS

Liquid temperature range: from 0 °C to +35 °C for domestic use (EN 60335-2-41). From -10 °C to +80 °C for other uses.

Maximum ambient temperature: +40°C



The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

| MODEL      | ELECTRICAL DATA      |              |            |     |                     |           |     | MOTOR TYPE |
|------------|----------------------|--------------|------------|-----|---------------------|-----------|-----|------------|
|            | POWER INPUT<br>50 Hz | P1 MAX<br>kW | P2 NOMINAL |     | I <sub>n</sub><br>A | CAPACITOR |     |            |
|            |                      |              | kW         | HP  |                     | μF        | Vc  |            |
| KP 60/6 M  | 1 x 230 V ~          | 0,54         | 0,37       | 0,5 | 2,4                 | 10        | 450 |            |
| KP 60/6 T  | 3 x 230 - 400 V ~    | 0,52         | 0,37       | 0,5 | 1,8-1               | -         | -   |            |
| KP 60/12 M | 1 x 230 V ~          | 1,15         | 0,75       | 1   | 5,2                 | 20        | 450 |            |
| KP 60/12 T | 3 x 230 - 400 V ~    | 1,1          | 0,75       | 1   | 3,6-2,1             | -         | -   | IE3        |
| KP 60/12 T | 3 x 230 - 400 V ~    | 1            | 0,75       | 1   | 3,8-2,2             | -         | -   | IE2        |

| MODEL      | A   | B   | C  | E  | F  | G   | I Ø | H   | H1  | H2  | DNA  | DNM  | PACKING DIMENSIONS |     |     | VOLUME<br>(m <sup>3</sup> ) | WEIGHT<br>Kg |
|------------|-----|-----|----|----|----|-----|-----|-----|-----|-----|------|------|--------------------|-----|-----|-----------------------------|--------------|
|            |     |     |    |    |    |     |     |     |     |     |      |      | L/A                | L/B | H   |                             |              |
| KP 60/6 M  | 262 | 142 | 21 | 96 | 90 | 112 | 7   | 204 | 127 | 151 | ½" G | ½" G | 406                | 267 | 402 | 0,043                       | 8,2          |
| KP 60/6 T  | 262 | 142 | 21 | 96 | 90 | 112 | 7   | 173 | 127 | 151 | ½" G | ½" G | 406                | 267 | 402 | 0,043                       | 7,9          |
| KP 60/12 M | 262 | 142 | 20 | 96 | 90 | 112 | 7   | 204 | 126 | 161 | ¾" G | ¾" G | 406                | 267 | 402 | 0,043                       | 10,1         |
| KP 60/12 T | 262 | 142 | 20 | 96 | 90 | 112 | 7   | 173 | 126 | 161 | ¾" G | ¾" G | 406                | 267 | 402 | 0,043                       | 9,9          |



## TECHNICAL DATA

**Operating range:** flow rate up to 11 m<sup>3</sup>/h, with head up to 40 meters

**Pumped liquid:** clean, free of solids and abrasives, non-viscous, non-aggressive, non-crystallised and chemically neutral, with properties similar to water

**Liquid temperature range:** from -10°C to +90°C

**Maximum ambient temperature:** +40°C

**Maximum operating pressure:** 8 bar

**Protection class:** IP 55

**Insulation class:** F

**Standard Voltage:**

single-phase 220-230 V 50 Hz

three-phase 230 / 400 V 50Hz

**Installation:** horizontal or vertical position, provided that the motor is always above the pump

**Special executions on requests:**

**V version:** Alox Ceramic/Carbon/FKM: for oily liquids (up to 110°C) and propylene glycol

**VS version:** SiC/SiC/FKM: for oily liquids (up to 110°C) and fluids with abrasive particles

**E version:** SiC/Carbon/EPDM: high temperature water up to 120 °C and ethylene glycol

## APPLICATIONS

Single-impeller stainless steel end suction centrifugal pump, suitable for thermal waters, industrial washing, civil and industrial pressure boosting (cold, hot, refrigerated liquid).

## CONSTRUCTION FEATURES OF THE PUMP

The Pump body and impeller in stainless steel AISI 304 make the pump more resistant to the corrosion, reliable and compact.

The support in aluminium and the mechanical seal in Carbon Ceramic and NBR complete the hydraulic part of the pump.

The pump is MEI comply.

## CONSTRUCTION FEATURES OF THE MOTOR

Closed asynchronous type, external ventilation cooling.

Rotor running on ball bearings, oversized to ensure low noise and durability.

Standard built-in thermo-amperometric protection. Capacitor permanently fitted on single phase versions.

For the protection of the three-phase motor, we recommend the use of remote overload cut-outs, in compliance with current local regulations.

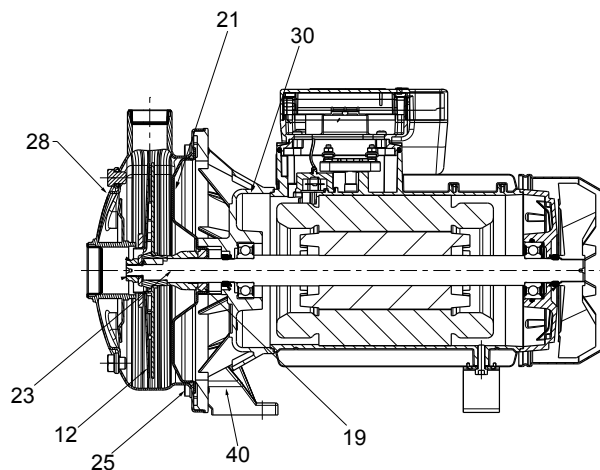
Construction according to CEI 2-3.

Three-phase IE2 motors as standard.

## MATERIALS

| N° | PART                 | MATERIALS   |
|----|----------------------|---|
| 28 | PUMP BODY            | STAINLESS STEEL AISI 304<br>X5CRNI 1810 UNI 6900/71   |
| 12 | IMPELLER             | STAINLESS STEEL AISI 304<br>X5CRNI 1810 UNI 6900/71   |
| 19 | MECHANICAL SEAL (*)  | CARBON/CERAMIC/NBR/AISI316                            |
| 21 | MECHANICAL SEAL DISC | STAINLESS STEEL AISI 304                              |
| 25 | O-RING               | NBR RUBBER  |
| 23 | PUMP SHAFT           | STAINLESS STEEL AISI 303<br>X10CRNIS 1089 UNI 6900/71 |
| 30 | MOTOR CASE           | ALUMINIUM   |
| 40 | MOTOR SUPPORT        | ALUMINIUM   |

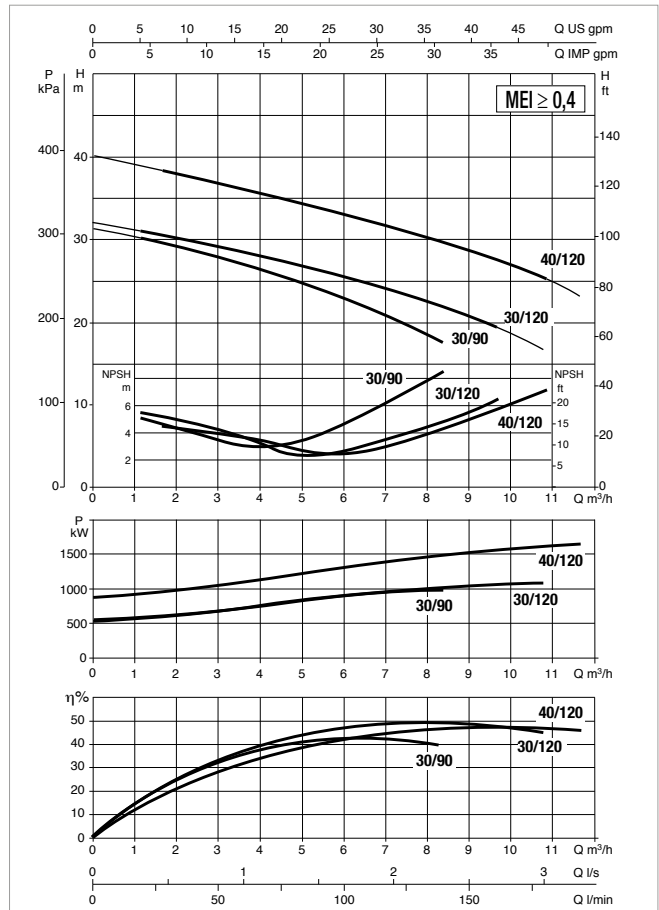
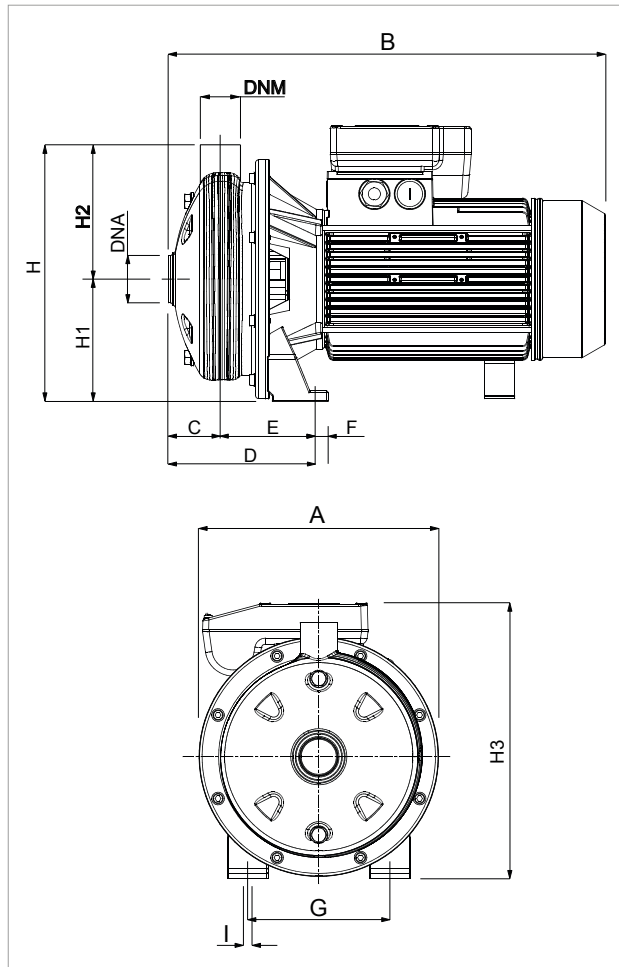
(\*) Special mechanical seal: Alox Ceramic/Carbon/FKM - SiC/SiC/FKM - SiC/Carbon/EPDM





# KI - SINGLE IMPELLER PUMP

Liquid temperature range: from -10°C to +90°C - Maximum operating pressure: 8 bar



The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

| MODEL             | Q=m <sup>3</sup> /h | 0    | 1,2  | 3    | 4,8  | 5,4  | 6,6  | 7,8  | 8,4  | 9,6  | 10,8 | 11,7 |
|-------------------|---------------------|------|------|------|------|------|------|------|------|------|------|------|
|                   | Q=l/min             | 0    | 20   | 50   | 80   | 90   | 110  | 130  | 140  | 160  | 180  | 195  |
| KI 30/90 M - T    | H<br>(m)            | 31,4 | 30,1 | 27,8 | 25,1 | 24   | 21,7 | 19   | 17,5 |      |      |      |
| KI 30/120 M - T   |                     | 32   | 30,7 | 28,9 | 27   | 26,3 | 24,8 | 22,8 | 21,6 | 19,2 | 16,5 |      |
| KI 40/120 M* - T* |                     | 40,3 | 39,1 | 37,2 | 35,2 | 34,5 | 33   | 31,3 | 30,4 | 28,5 | 26,4 | 23   |

| MODEL        | POWER INPUT<br>50 Hz | P1 max<br>kW | POWER P2 |      | In<br>A   | MOTOR TYPE | CAPACITOR |     | MEI   |
|--------------|----------------------|--------------|----------|------|-----------|------------|-----------|-----|-------|
|              |                      |              | kW       | Hp   |           |            | uF        | Vc  |       |
| KI 30/90 M   | 1x220-230 V          | 1,4          | 0,75     | 1    | 6,5       | -          | 25        | 450 | ≥ 0,4 |
| KI 30/90 T   | 3x230/400 V          | 1,25         | 0,75     | 1    | 4 / 2,3   | IE3        | -         | -   | ≥ 0,4 |
| KI 30/120 M  | 1x220-230 V          | 1,55         | 1        | 1,36 | 7         | -          | 25        | 450 | ≥ 0,4 |
| KI 30/120 T  | 3x230/400 V          | 1,4          | 1        | 1,36 | 4,7 / 2,7 | IE3        | -         | -   | ≥ 0,4 |
| KI 40/120 M* | 1x220-230 V          | 2,2          | 1,5      | 2    | 9,7       | -          | 40        | 450 | -     |
| KI 40/120 T* | 3x230/400 V          | 2,1          | 1,5      | 2    | 7 / 4,1   | IE3        | -         | -   | -     |
| KI 30/90 T   | 3x230/400 V          | 1,29         | 0,75     | 1    | 4,5 / 2,6 | IE2        | -         | -   | ≥ 0,4 |
| KI 30/120 T  | 3x230/400 V          | 1,45         | 1        | 1,36 | 5 / 2,9   | IE2        | -         | -   | ≥ 0,4 |
| KI 40/120 T* | 3x230/400 V          | 2,2          | 1,5      | 2    | 7,5 / 4,3 | IE2        | -         | -   | -     |

| MODEL        | A   | B   | C  | D     | E    | F  | G   | H   | H1  | H2  | H3  | ø I | DNA     | DNM  | PACKING DIMENSIONS |     |     | WEIGHT<br>Kg | Q.TY<br>X<br>PALLET |
|--------------|-----|-----|----|-------|------|----|-----|-----|-----|-----|-----|-----|---------|------|--------------------|-----|-----|--------------|---------------------|
|              |     |     |    |       |      |    |     |     |     |     |     |     |         |      | L/A                | L/B | H   |              |                     |
| KI 30/90 M   | 214 | 337 | 53 | 143,5 | 90,5 | 13 | 130 | 232 | 108 | 124 | -   | 9   | 1"1/4 G | 1" G | 400                | 240 | 275 | 13,4         | 27                  |
| KI 30/90 T   | 214 | 354 | 53 | 144   | 91   | 13 | 130 | 232 | 108 | 124 | -   | 9   | 1"1/4 G | 1" G | 400                | 240 | 275 | 12,2         | 27                  |
| KI 30/120 M  | 214 | 337 | 53 | 143,5 | 90,5 | 13 | 130 | 232 | 108 | 124 | -   | 9   | 1"1/4 G | 1" G | 400                | 240 | 275 | 13,4         | 27                  |
| KI 30/120 T  | 214 | 354 | 53 | 143,5 | 90,5 | 13 | 130 | 232 | 108 | 124 | -   | 9   | 1"1/4 G | 1" G | 400                | 240 | 275 | 12,3         | 27                  |
| KI 40/120 M* | 236 | 432 | 53 | 146,5 | 93,5 | 13 | 140 | 252 | 120 | 132 | 272 | 9   | 1"1/4 G | 1" G | 500                | 300 | 315 | 19,6         | 18                  |
| KI 40/120 T* | 236 | 432 | 53 | 159   | 94   | 13 | 140 | 252 | 120 | 132 | 272 | 9   | 1"1/4 G | 1" G | 500                | 300 | 315 | 19,3         | 27                  |
| KI 30/90 T   | 214 | 354 | 53 | 144   | 91   | 13 | 130 | 232 | 108 | 124 | -   | 9   | 1"1/4 G | 1" G | 400                | 240 | 275 | 12,2         | 27                  |
| KI 30/120 T  | 214 | 354 | 53 | 143,5 | 90,5 | 13 | 130 | 232 | 108 | 124 | -   | 9   | 1"1/4 G | 1" G | 400                | 240 | 275 | 13,8         | 27                  |
| KI 40/120 T* | 236 | 432 | 53 | 159   | 94   | 13 | 140 | 252 | 120 | 132 | 272 | 9   | 1"1/4 G | 1" G | 500                | 300 | 315 | 19,3         | 27                  |

# K SINGLE-IMPELLER

## SINGLE-IMPELLER PUMPS



### TECHNICAL DATA

**Operating range:**

from 1,8 to 96 m<sup>3</sup>/h, with head up to 62 metres

**Pumped liquid:** clean, free of solids and abrasives, non-viscous, non-aggressive, non-crystallised and chemically neutral, with properties similar to water

**Liquid temperature range:**

K 20/41, K 30/70, K 30/100, K 36/100

K 12/200, K 36/200, K 40/200:

from -10 °C to +50 °C

Rest of the range:

from -15 °C to +110 °C

**Maximum ambient temperature:** +40°C

**Maximum operating pressure:**

K 20/41, K 30/70, K 30/100, K 36/100, K 12/200, K 14/400 : 6 bar (600 kPa)

K 36/200, K 40/200, K 55/200, K 11/500, K 18/500, K 28/500 : 8 bar (800 kPa)

K 40/400, K 50/400, K 30/800, K 40/800, K 50/800,

: 10 bar (1000 kPa)

**Protection class:**

IP 44 (IP 55 for 2,2 - 3 - 4 - 5,5 - 7,5 - 9,2 - 11 kW motors)

**Protection class at the terminal board:** IP 55

**Insulation class:** F

**Standard voltage:**

single-phase 220-240 V / 50 Hz

three-phase 230-400 V / 50 Hz up to 4 kW included - 400 V Δ 50 Hz from 5,5 kW

**Installation:** horizontal or vertical position, provided that the motor is always above the pump.

**Special executions on requests:** alternative voltages and frequencies

### APPLICATIONS

Single-impeller centrifugal pump suitable for domestic, civil, industrial and agricultural systems, and for decanting, mixing and irrigation uses.

### CONSTRUCTION FEATURES OF THE PUMP

Pump body and motor support in cast iron.

Technopolymer or cast iron impeller, as per the TECHNICAL DATA table.

Carbon/ceramic mechanical seal.

### CONSTRUCTION FEATURES OF THE MOTOR

Closed asynchronous type, external ventilation cooling.

Rotor running on ball bearings, oversized to ensure low noise and durability.

Standard built-in thermo-amperometric protection. Capacitor permanently fitted on single phase versions.

For the protection of the three-phase motor, we recommend the use of remote overload cut-outs, in compliance with current local regulations.

Construction according to CEI 2-3.

IE2 motors as standard, from 0,75 kW to 5,5 kW - IE3 ≥ 7,5 kW.

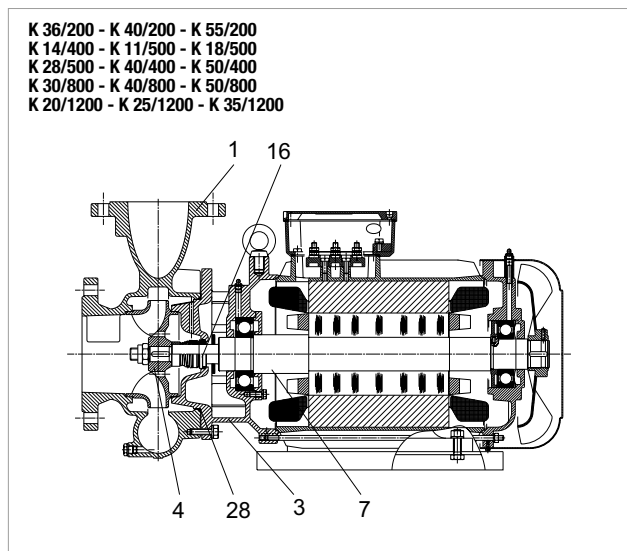
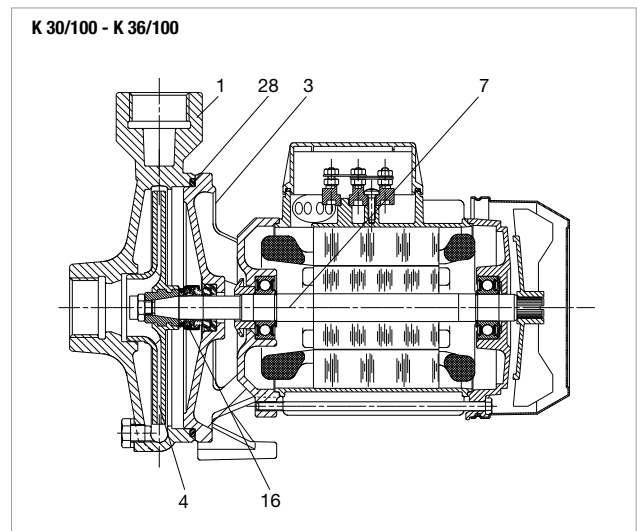
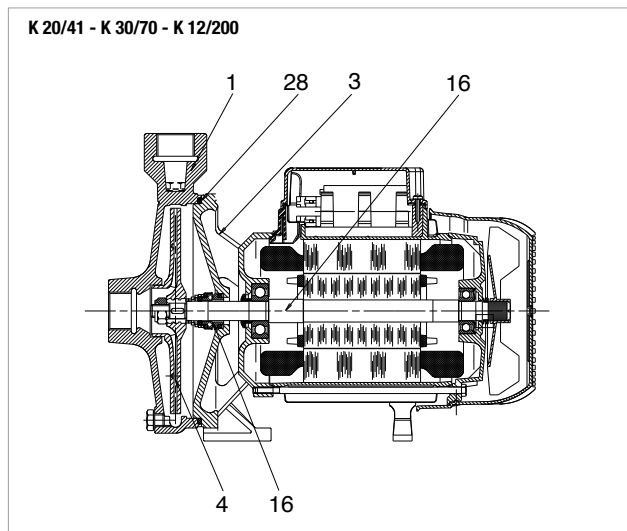
# K SINGLE-IMPELLER

## SINGLE-IMPELLER PUMPS

### MATERIALS

| No. | PARTS*           | MATERIALS   | MODELS   |
|-----|------------------|---|--|
| 1   | PUMP BODY        | CAST IRON 200 UNI ISO 185                           |  |
| 3   | SUPPORT          | CAST IRON 200 UNI ISO 185                           |  |
| 4   | IMPELLER         | TECHNOPOLYMER A                                     | 20/41; K 30/70; K 30/100; K 36/100; K 12/200; K 36/200; K 40/200;  |
|     |                  | TECHNOPOLYMER B                                     | K 55/200   |
|     |                  | CAST IRON 200 UNI ISO 185                           | K 14/400; K 11/500; K 18/500; K 28/500; K 40/400; K 50/400; K 30/800; K 40/800; K 50/800; K 20/1200; K 25/1200; K 35/1200;           |
| 7   | SHAFT WITH ROTOR | AISI 416 STAINLESS STEEL<br>X12CRS13 UNI 6900/71    | K 20/41; K 30/70; K 12/200   |
|     |                  | AISI 303 STAINLESS STEEL<br>X10CRN13 UNI 6900/71    | K 30/100; K 36/100; K 36/200; K 40/200; K 55/200; K14/400; K 11/500; K 18/500; K 28/500  |
|     |                  | AISI 304 STAINLESS STEEL<br>X5CRNI 1810 UNI 6900/71 | K 40/400; K 50/400; K 30/800; K 40/800; K 50/800; K 20/1200; K 25/1200; K 35/1200;   |
| 16  | MECHANICAL SEAL  | CARBON / CERAMIC                                    |  |
| 28  | OR RING          | NBR RUBBER  |  |
|     |                  | EPDM RUBBER   | K 36/200; K 40/200; K 55/200; K 14/400; K 11/500; K 18/500; K 28/500; K 30/800; K 40/800; K 50/800; K 20/1200; K 25/1200; K 35/1200; |

\* In contact with the liquid



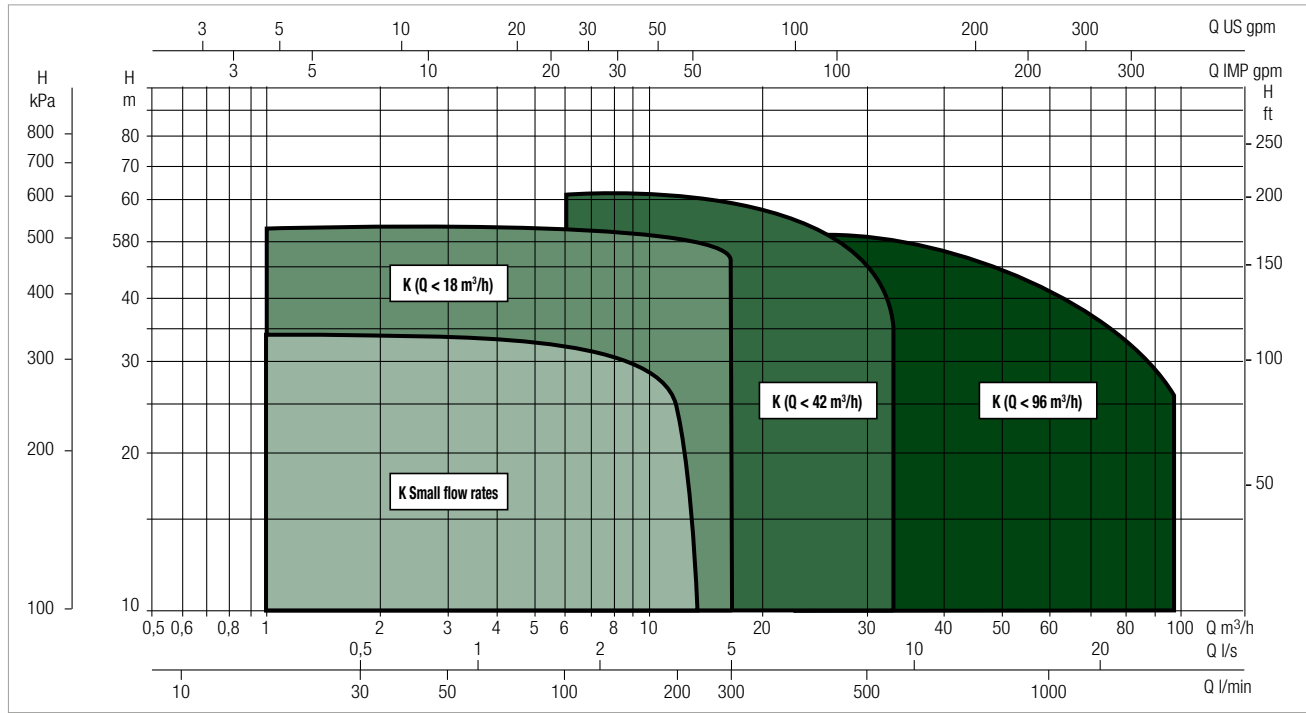
# K SINGLE-IMPELLER RANGE

ELECTRIC PUMPS

## PERFORMANCE RANGE

The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

### GRAPHIC SELECTION TABLE

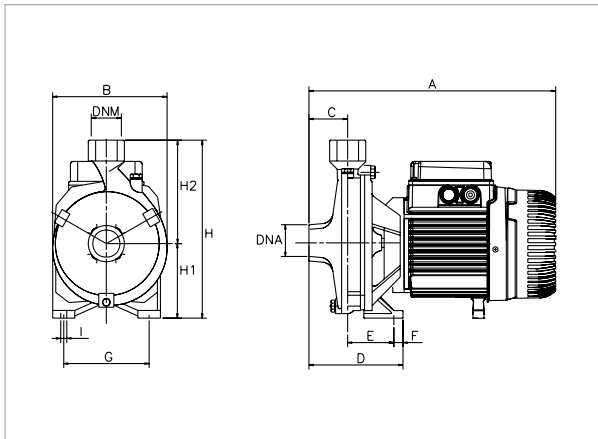


## SELECTION TABLE

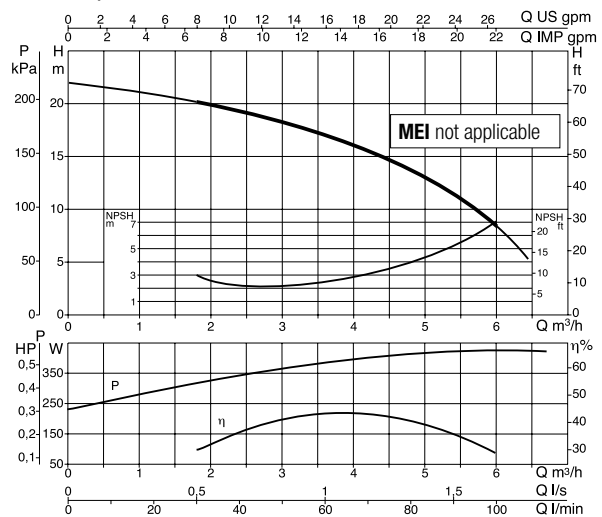
| MODEL          | Q=                | 0    | 1,8  | 2,4  | 3,6  | 4,8  | 6    | 7,2  | 9    | 9,6  | 10,8 | 12   | 15   | 18   | 24   | 30   | 36   | 42   | 60   | 72   | 84   | 96   |    |  |
|----------------|-------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----|--|
|                | m <sup>3</sup> /h | 0    | 30   | 40   | 60   | 80   | 100  | 120  | 150  | 160  | 180  | 200  | 250  | 300  | 400  | 500  | 600  | 700  | 1000 | 1200 | 1400 | 1600 |    |  |
| K 20/41 M - T  | H<br>(m)          |      | 20,3 | 19,4 | 16,9 | 13,6 | 8,3  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |    |  |
| K 30/70 M - T  |                   | 31,8 | 29,5 | 28,9 | 27   | 24,2 | 19,8 | 13,5 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |    |  |
| K 30/100 M - T |                   | 29,2 |      | 29   | 28,8 | 28   | 26,8 | 25,3 | 22,5 | 21,5 | 18,5 |      |      |      |      |      |      |      |      |      |      |      |    |  |
| K 36/100 M - T |                   | 34,9 |      | 34,8 | 34,6 | 34   | 33   | 32   | 29,8 | 29   | 26,5 |      |      |      |      |      |      |      |      |      |      |      |    |  |
| K 12/200 M - T |                   | 18,4 |      | 17,2 | 16,5 | 16   | 15,3 | 14,7 | 13,5 | 13,1 | 12,3 | 11,4 | 8,9  | 5,5  |      |      |      |      |      |      |      |      |    |  |
| K 36/200 M - T |                   | 36,6 |      |      |      | 36   | 35,5 | 35   | 34   | 33,3 | 32,5 | 31,5 | 28   | 23,5 |      |      |      |      |      |      |      |      |    |  |
| K 40/200 M - T |                   | 41,3 |      |      |      | 41   | 40,5 | 40   | 39   | 38,8 | 38   | 37   | 33,5 | 29   |      |      |      |      |      |      |      |      |    |  |
| K 55/200 M - T |                   | 54   |      |      |      |      | 54   | 53,9 | 53,2 | 53   | 52   | 51,5 | 48,5 | 45   |      |      |      |      |      |      |      |      |    |  |
| K 14/400 M - T |                   | 19   |      |      |      |      |      |      |      |      |      | 18,8 | 18,5 | 18   | 16,3 | 13,8 | 10   |      |      |      |      |      |    |  |
| K 11/500 M - T |                   | 24,5 |      |      |      |      |      |      |      |      |      | 22,5 | 21,5 | 20   | 16,5 | 11,5 | 6,5  |      |      |      |      |      |    |  |
| K 18/500 M - T |                   | 31   |      |      |      |      |      |      | 30,9 |      |      | 30,7 | 30,4 | 30   | 28   | 24   | 17,9 |      |      |      |      |      |    |  |
| K 28/500 M - T |                   | 35   |      |      |      |      |      |      |      |      |      | 34,5 | 34   | 32,8 | 29,3 | 25,2 | 20   |      |      |      |      |      |    |  |
| K 40/400 T     |                   | 50,5 |      |      |      |      |      |      |      |      |      | 49   | 48   | 45   | 37   | 24   |      |      |      |      |      |      |    |  |
| K 50/400 T     |                   | 62   |      |      |      |      |      |      |      |      |      | 61   | 60   | 59   | 54,5 | 46   |      |      |      |      |      |      |    |  |
| K 30/800 T     |                   | 44   |      |      |      |      |      |      |      |      |      |      |      |      |      | 42   | 40   | 38   | 35   | 21,5 |      |      |    |  |
| K 40/800 T     |                   | 51,5 |      |      |      |      |      |      |      |      |      |      |      |      |      | 50   | 48   | 47   | 43,5 | 32,5 | 21   |      |    |  |
| K 50/800 T     |                   | 58   |      |      |      |      |      |      |      |      |      |      |      |      |      | 56,5 | 55   | 53,5 | 51   | 41   | 31   |      |    |  |
| K 20/1200 T    |                   | 37,5 |      |      |      |      |      |      |      |      |      |      |      |      |      | 36,5 | 36   | 35   | 34   | 30   | 26   | 21   | 15 |  |
| K 25/1200 T    |                   | 40,7 |      |      |      |      |      |      |      |      |      |      |      |      |      | 39   | 38,5 | 38   | 37   | 33,5 | 30   | 25   | 18 |  |
| K 35/1200 T    |                   | 45   |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 43   | 42,5 | 38,5 | 35   | 31,5 | 27   |    |  |

## K 20/41 - SINGLE-IMPELLER PUMPS

Pumped liquid temperature range: from -10 °C to +50°C - Maximum ambient temperature: +40°C



For MEI index refer to the hydraulic efficiency section.  
The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

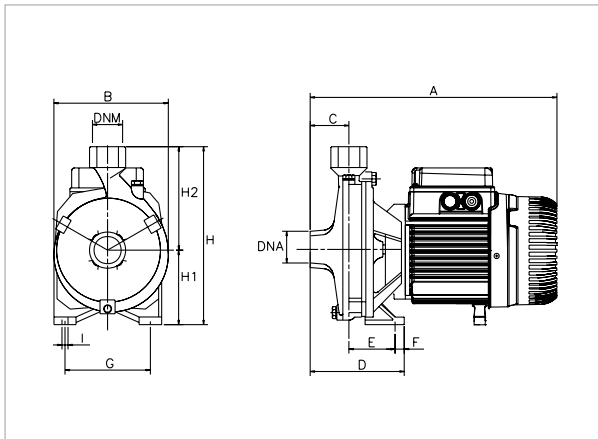


| MODEL     | POWER INPUT<br>50 Hz | P1<br>MAX kW | P2 NOMINAL |     | ELECTRICAL DATA |               |            |                  | CAPACITOR |     |
|-----------|----------------------|--------------|------------|-----|-----------------|---------------|------------|------------------|-----------|-----|
|           |                      |              | kW         | HP  | In<br>A         | MOTOR<br>TYPE | I st.<br>A | rpm<br>n. 1/min. | μF        | Vc  |
| K 20/41 M | 1 x 220 - 240 V ~    | 0,65         | 0,37       | 0,5 | 3               | -             | 8,5        | 2800             | 10        | 450 |
| K 20/41 T | 3 x 230 - 400 V ~    | 0,64         | 0,37       | 0,5 | 2,3/1,3         | -             | 8,6-5      | 2800             | -         | -   |

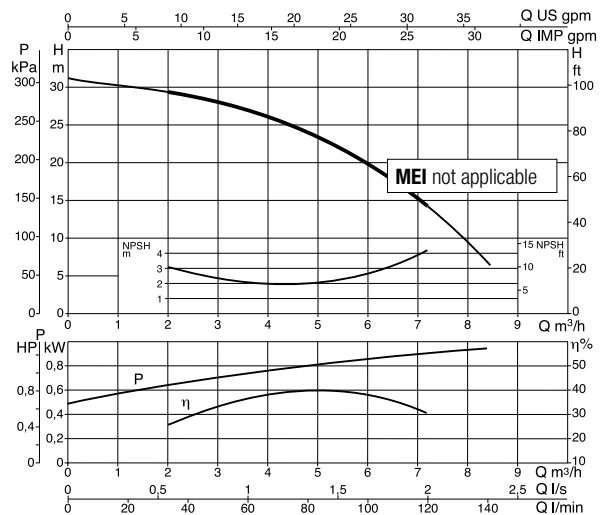
| MODEL     | MOTOR<br>TYPE | A   | B   | C  | D   | E  | F  | G   | ØI | H   | H1 | H2  | DNA  | DNM  | PACKING DIMENSIONS |     |     | VOLUME<br>(m <sup>3</sup> ) | WEIGHT<br>kg |
|-----------|---------------|-----|-----|----|-----|----|----|-----|----|-----|----|-----|------|------|--------------------|-----|-----|-----------------------------|--------------|
|           |               |     |     |    |     |    |    |     |    |     |    |     |      |      | L/A                | L/B | H   |                             |              |
| K 20/41 M | -             | 275 | 160 | 50 | 100 | 50 | 15 | 110 | 9  | 205 | 85 | 120 | 1° G | 1° G | 332                | 202 | 257 | 0,024                       | 10           |
| K 20/41 T | -             | 275 | 160 | 50 | 100 | 50 | 15 | 110 | 9  | 205 | 85 | 120 | 1° G | 1° G | 332                | 202 | 257 | 0,024                       | 10           |

## K 30/70 - SINGLE-IMPELLER PUMPS

Pumped liquid temperature range: from -10 °C to +50°C - Maximum ambient temperature: +40°C



For MEI index refer to the hydraulic efficiency section.  
The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

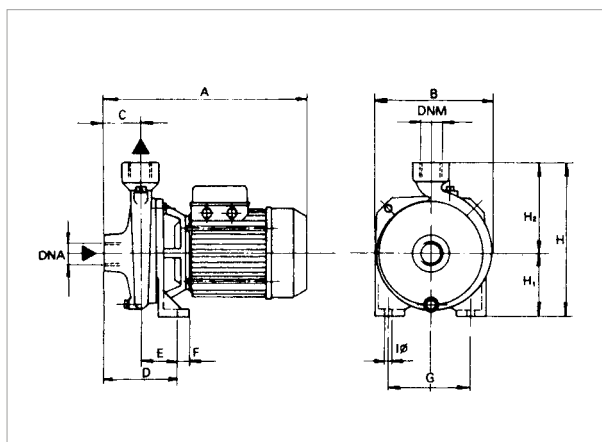


| MODEL     | POWER INPUT<br>50 Hz | P1<br>MAX kW | P2 NOMINAL |    | ELECTRICAL DATA |               |            |                  | CAPACITOR |     |
|-----------|----------------------|--------------|------------|----|-----------------|---------------|------------|------------------|-----------|-----|
|           |                      |              | kW         | HP | In<br>A         | MOTOR<br>TYPE | I st.<br>A | rpm<br>n. 1/min. | μF        | Vc  |
| K 30/70 M | 1 x 220 - 240 V ~    | 1,3          | 0,75       | 1  | 6               | -             | 15,8       | 2800             | 20        | 450 |
| K 30/70 T | 3 x 230 - 400 V ~    | 1,2          | 0,75       | 1  | 4/2,3           | IE3           | 18         | 2820             | -         | -   |
| K 30/70 T | 3 x 230 - 400 V ~    | 1,2          | 0,75       | 1  | 4,3/2,5         | IE2           | 22,1-12,8  | 2820             | -         | -   |

| MODEL     | MOTOR<br>TYPE | A   | B   | C  | D   | E  | F  | G   | ØI | H   | H1  | H2  | DNA  | DNM  | PACKING DIMENSIONS |     |     | VOLUME<br>(m <sup>3</sup> ) | WEIGHT<br>kg |
|-----------|---------------|-----|-----|----|-----|----|----|-----|----|-----|-----|-----|------|------|--------------------|-----|-----|-----------------------------|--------------|
|           |               |     |     |    |     |    |    |     |    |     |     |     |      |      | L/A                | L/B | H   |                             |              |
| K 30/70 M | -             | 330 | 185 | 50 | 108 | 58 | 15 | 140 | 9  | 235 | 100 | 135 | 1° G | 1° G | 386                | 226 | 272 | 0,024                       | 13,9         |
| K 30/70 T | IE3           | 330 | 185 | 50 | 108 | 58 | 15 | 140 | 9  | 235 | 100 | 135 | 1° G | 1° G | 386                | 226 | 272 | 0,024                       | 13,7         |
| K 30/70 T | IE2           | 330 | 185 | 50 | 108 | 58 | 15 | 140 | 9  | 235 | 100 | 135 | 1° G | 1° G | 386                | 226 | 272 | 0,024                       | 13,7         |

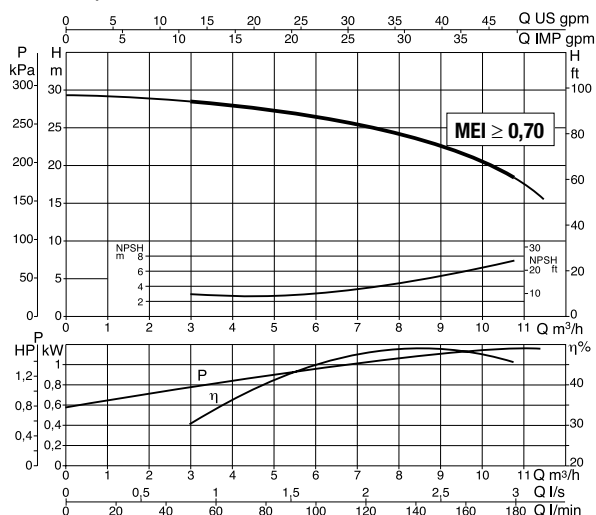
## K 30/100 - SINGLE-IMPELLER PUMPS

Pumped liquid temperature range: from -10 °C to +50°C - Maximum ambient temperature: +40°C



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

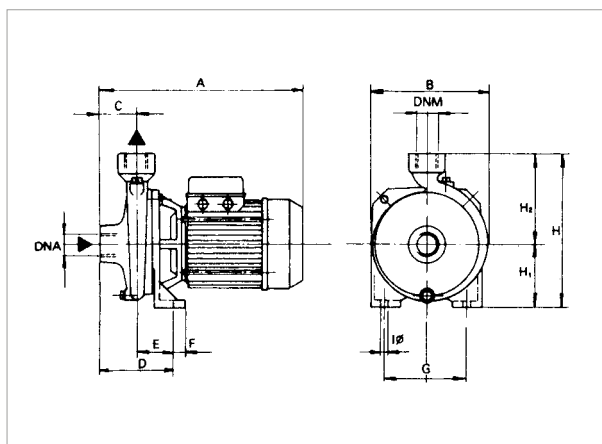


| MODEL      | POWER INPUT<br>50 Hz | P1<br>MAX kW | P2 NOMINAL |     | In<br>A | MOTOR<br>TYPE | I st.<br>A | rpm<br>n. 1/min. | CAPACITOR |     |
|------------|----------------------|--------------|------------|-----|---------|---------------|------------|------------------|-----------|-----|
|            |                      |              | kW         | HP  |         |               |            |                  | μF        | Vc  |
| K 30/100 M | 1 x 220 - 240 V ~    | 1,6          | 1,1        | 1,5 | 7,1     | -             | 33         | 2800             | 31,5      | 450 |
| K 30/100 T | 3 x 230 - 400 V ~    | 1,6          | 1,1        | 1,5 | 5,4/3,1 | IE3           | 26,4       | 2860             | -         | -   |
| K 30/100 T | 3 x 230 - 400 V ~    | 1,63         | 1,1        | 1,5 | 6,9/3,9 | IE2           | 21         | 2860             | -         | -   |

| MODEL      | MOTOR<br>TYPE | A   | B   | C  | D   | E  | F  | G   | ØI | H   | H1  | H2  | DNa      | DNM  | PACKING DIMENSIONS |     |     | VOLUME<br>(m <sup>3</sup> ) | WEIGHT<br>kg |
|------------|---------------|-----|-----|----|-----|----|----|-----|----|-----|-----|-----|----------|------|--------------------|-----|-----|-----------------------------|--------------|
|            |               |     |     |    |     |    |    |     |    |     |     |     |          |      | L/A                | L/B | H   |                             |              |
| K 30/100 M | -             | 333 | 200 | 50 | 114 | 64 | 15 | 140 | 9  | 255 | 105 | 150 | 1 1/2" G | 1" G | 427                | 246 | 307 | 0,032                       | 18,5         |
| K 30/100 T | IE3           | 333 | 200 | 50 | 114 | 64 | 15 | 140 | 9  | 255 | 105 | 150 | 1 1/2" G | 1" G | 427                | 246 | 307 | 0,032                       | 18,2         |
| K 30/100 T | IE2           | 333 | 200 | 50 | 114 | 64 | 15 | 140 | 9  | 255 | 105 | 150 | 1 1/2" G | 1" G | 427                | 246 | 307 | 0,032                       | 18,2         |

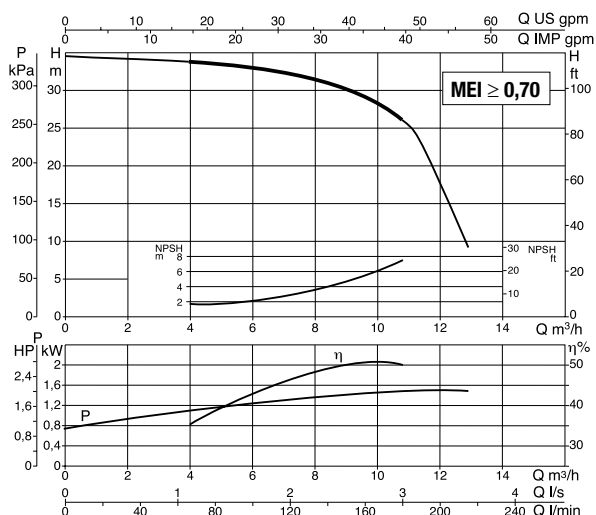
## K 36/100 - SINGLE-IMPELLER PUMPS

Pumped liquid temperature range: from -10 °C to +50°C - Maximum ambient temperature: +40°C



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

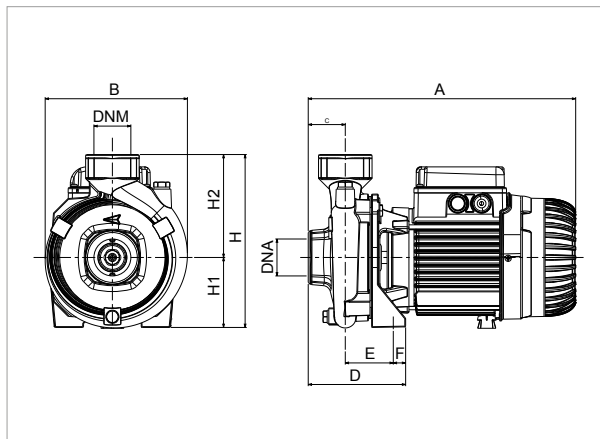


| MODEL      | POWER INPUT<br>50 Hz | P1<br>MAX kW | P2 NOMINAL |     | In<br>A | MOTOR<br>TYPE | I st.<br>A | rpm<br>n. 1/min. | CAPACITOR |     |
|------------|----------------------|--------------|------------|-----|---------|---------------|------------|------------------|-----------|-----|
|            |                      |              | kW         | HP  |         |               |            |                  | μF        | Vc  |
| K 36/100 M | 1 x 220 - 240 V ~    | 2,1          | 1,85       | 2,5 | 8,8     | -             | 45         | 2850             | 40        | 450 |
| K 36/100 T | 3 x 230 - 400 V ~    | 1,9          | 1,85       | 2,5 | 6/3,5   | IE3           | 26,4       | 2870             | -         | -   |
| K 36/100 T | 3 x 230 - 400 V ~    | 2            | 1,85       | 2,5 | 6,9/4   | IE2           | 22         | 2870             | -         | -   |

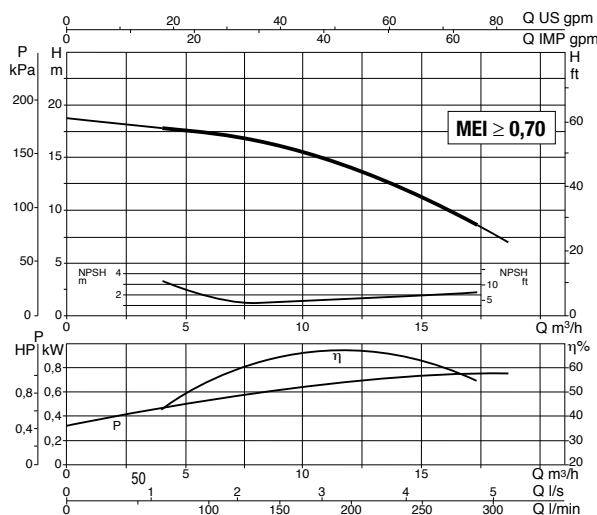
| MODEL      | MOTOR<br>TYPE | A   | B   | C  | D   | E  | F  | G   | ØI | H   | H1  | H2  | DNa      | DNM  | PACKING DIMENSIONS |     |     | VOLUME<br>(m <sup>3</sup> ) | WEIGHT<br>kg |
|------------|---------------|-----|-----|----|-----|----|----|-----|----|-----|-----|-----|----------|------|--------------------|-----|-----|-----------------------------|--------------|
|            |               |     |     |    |     |    |    |     |    |     |     |     |          |      | L/A                | L/B | H   |                             |              |
| K 36/100 M | -             | 333 | 200 | 50 | 114 | 64 | 15 | 140 | 9  | 255 | 105 | 150 | 1 1/2" G | 1" G | 427                | 246 | 307 | 0,032                       | 23,3         |
| K 36/100 T | IE3           | 333 | 200 | 50 | 114 | 64 | 15 | 140 | 9  | 255 | 105 | 150 | 1 1/2" G | 1" G | 427                | 246 | 307 | 0,032                       | 19,7         |
| K 36/100 T | IE2           | 333 | 200 | 50 | 114 | 64 | 15 | 140 | 9  | 255 | 105 | 150 | 1 1/2" G | 1" G | 427                | 246 | 307 | 0,032                       | 19,7         |

## K 12/200 - SINGLE-IMPELLER PUMPS

Pumped liquid temperature range: from -10 °C to +50°C - Maximum ambient temperature: +40°C



For MEI index refer to the hydraulic efficiency section.  
The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

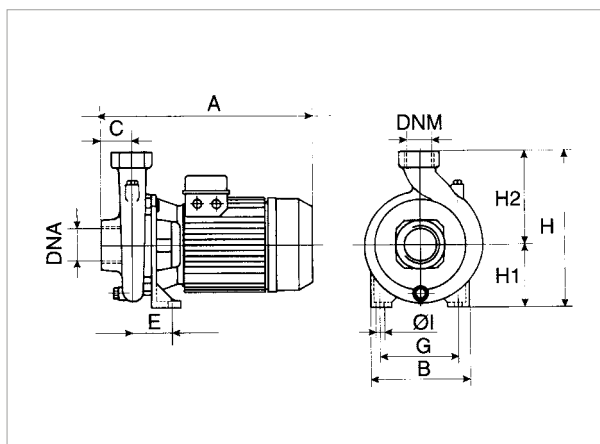


| MODEL      | ELECTRICAL DATA      |              |            |    |         |               |            |                  |           |     |
|------------|----------------------|--------------|------------|----|---------|---------------|------------|------------------|-----------|-----|
|            | POWER INPUT<br>50 Hz | P1<br>MAX kW | P2 NOMINAL |    | In<br>A | MOTOR<br>TYPE | I st.<br>A | rpm<br>n. 1/min. | CAPACITOR |     |
|            |                      |              | kW         | HP |         |               |            |                  | μF        | Vc  |
| K 12/200 M | 1 x 220 - 240 V ~    | 1,1          | 0,75       | 1  | 5,2     | -             | 18,5       | 2940             | 25        | 450 |
| K 12/200 T | 3 x 230 - 400 V ~    | 0,97         | 0,75       | 1  | 3,5/2   | IE3           | 18         | 2940             | -         | -   |
| K 12/200 T | 3 x 230 - 400 V ~    | 0,97         | 0,75       | 1  | 4/2,3   | IE2           | 22,1-12,8  | 2940             | -         | -   |

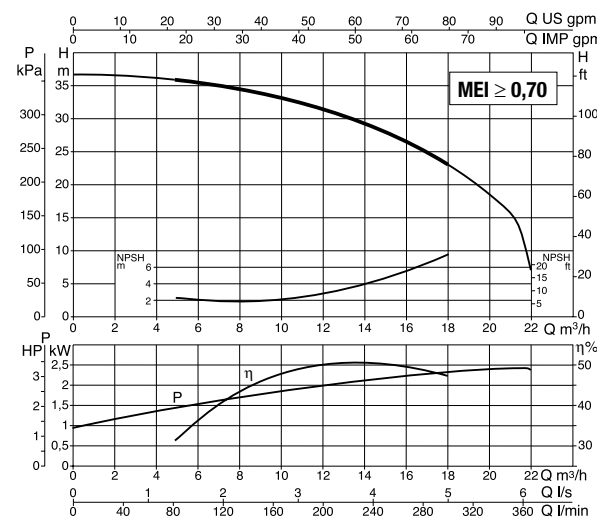
| MODEL      | MOTOR<br>TYPE | A   | B   | C  | D   | E  | F  | G   | ØI  | H   | H1 | H2  | DNA      | DNM      | PACKING DIMENSIONS |     |     | VOLUME<br>(m <sup>3</sup> ) | WEIGHT<br>kg |
|------------|---------------|-----|-----|----|-----|----|----|-----|-----|-----|----|-----|----------|----------|--------------------|-----|-----|-----------------------------|--------------|
|            |               |     |     |    |     |    |    |     |     |     |    |     |          |          | L/A                | L/B | H   |                             |              |
| K 12/200 M | -             | 325 | 173 | 45 | 118 | 58 | 15 | 110 | 9,5 | 218 | 85 | 125 | 1 1/2" G | 1 1/2" G | 392                | 232 | 280 | 0,026                       | 13,7         |
| K 12/200 T | IE3           | 325 | 173 | 45 | 118 | 58 | 15 | 110 | 9,5 | 218 | 85 | 125 | 1 1/2" G | 1 1/2" G | 392                | 232 | 280 | 0,026                       | 13,8         |
| K 12/200 T | IE2           | 325 | 173 | 45 | 118 | 58 | 15 | 110 | 9,5 | 218 | 85 | 125 | 1 1/2" G | 1 1/2" G | 392                | 232 | 280 | 0,026                       | 13,8         |

## K 36/200 - SINGLE-IMPELLER PUMPS

Pumped liquid temperature range: from -10 °C to +50°C - Maximum ambient temperature: +40°C



For MEI index refer to the hydraulic efficiency section.  
The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

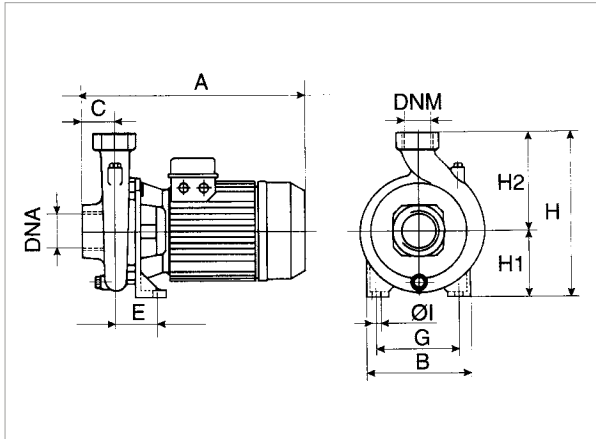


| MODEL      | ELECTRICAL DATA      |              |            |    |         |               |            |                  |           |     |
|------------|----------------------|--------------|------------|----|---------|---------------|------------|------------------|-----------|-----|
|            | POWER INPUT<br>50 Hz | P1<br>MAX kW | P2 NOMINAL |    | In<br>A | MOTOR<br>TYPE | I st.<br>A | rpm<br>n. 1/min. | CAPACITOR |     |
|            |                      |              | kW         | HP |         |               |            |                  | μF        | Vc  |
| K 36/200 M | 1 x 220 - 240 V ~    | 3            | 2,2        | 3  | 13,5    | -             | 50         | 2900             | 80        | 450 |
| K 36/200 T | 3 x 230 - 400 V ~    | 3,1          | 2,2        | 3  | 9,7/5,6 | IE3           | 33,5       | 2860             | -         | -   |
| K 36/200 T | 3 x 230 - 400 V ~    | 3            | 2,2        | 3  | 9/5,2   | IE2           | 45-26      | 2860             | -         | -   |

| MODEL      | MOTOR<br>TYPE | A   | B   | C  | E  | G   | ØI | H   | H1  | H2  | DNA  | DNM      | PACKING DIMENSIONS |     |     | VOLUME<br>(m <sup>3</sup> ) | WEIGHT<br>kg |
|------------|---------------|-----|-----|----|----|-----|----|-----|-----|-----|------|----------|--------------------|-----|-----|-----------------------------|--------------|
|            |               |     |     |    |    |     |    |     |     |     |      |          | L/A                | L/B | H   |                             |              |
| K 36/200 M | -             | 425 | 250 | 55 | 86 | 175 | 14 | 320 | 135 | 185 | 2" G | 1 1/4" G | 512                | 276 | 345 | 0,049                       | 35,5         |
| K 36/200 T | IE3           | 425 | 250 | 55 | 86 | 175 | 14 | 320 | 135 | 185 | 2" G | 1 1/4" G | 512                | 276 | 345 | 0,049                       | 21           |
| K 36/200 T | IE2           | 425 | 250 | 55 | 86 | 175 | 14 | 320 | 135 | 185 | 2" G | 1 1/4" G | 512                | 276 | 345 | 0,049                       | 33,1         |

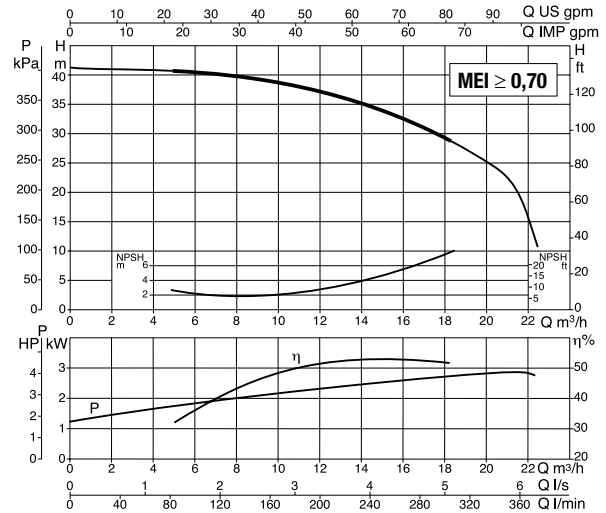
## K 40/200 - SINGLE-IMPELLER PUMPS

Pumped liquid temperature range: from -10 °C to +50°C - Maximum ambient temperature: +40°C



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

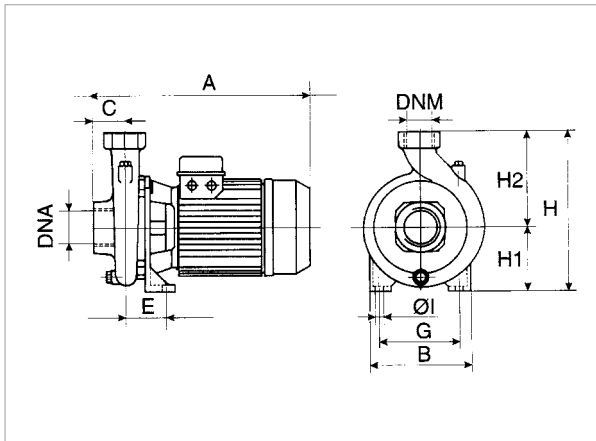


| MODEL      | POWER INPUT<br>50 Hz | P1<br>MAX kW | ELECTRICAL DATA |    |          |               |            |                  |           |     |
|------------|----------------------|--------------|-----------------|----|----------|---------------|------------|------------------|-----------|-----|
|            |                      |              | P2 NOMINAL      |    | In<br>A  | MOTOR<br>TYPE | I st.<br>A | rpm<br>n. 1/min. | CAPACITOR |     |
|            |                      |              | kW              | HP |          |               |            |                  | µF        | Vc  |
| K 40/200 M | 1 x 220 - 240 V ~    | 3,9          | 3               | 4  | 17,5     | -             | 80         | 2900             | 160       | 450 |
| K 40/200 T | 3 x 230 - 400 V ~    | 3,6          | 3               | 4  | 10,9/6,3 | IE3           | 44,2       | 2830             | -         | -   |
| K 40/200 T | 3 x 230 - 400 V ~    | 4            | 3               | 4  | 13,3/7,5 | IE2           | 67,5-39    | 2830             | -         | -   |

| MODEL      | MOTOR<br>TYPE | A   | B   | C  | E  | G   | ØI | H   | H1  | H2  | DNA  | DNM      | PACKING DIMENSIONS |     |     | VOLUME<br>(m <sup>3</sup> ) | WEIGHT<br>kg |
|------------|---------------|-----|-----|----|----|-----|----|-----|-----|-----|------|----------|--------------------|-----|-----|-----------------------------|--------------|
|            |               |     |     |    |    |     |    |     |     |     |      |          | L/A                | L/B | H   |                             |              |
| K 40/200 M | -             | 425 | 250 | 55 | 86 | 175 | 14 | 320 | 135 | 185 | 2" G | 1 1/4" G | 512                | 276 | 345 | 0,049                       | 37,8         |
| K 40/200 T | IE3           | 425 | 250 | 55 | 86 | 175 | 14 | 320 | 135 | 185 | 2" G | 1 1/4" G | 512                | 276 | 345 | 0,049                       | 19           |
| K 40/200 T | IE2           | 425 | 250 | 55 | 86 | 175 | 14 | 320 | 135 | 185 | 2" G | 1 1/4" G | 512                | 276 | 345 | 0,049                       | 34,9         |

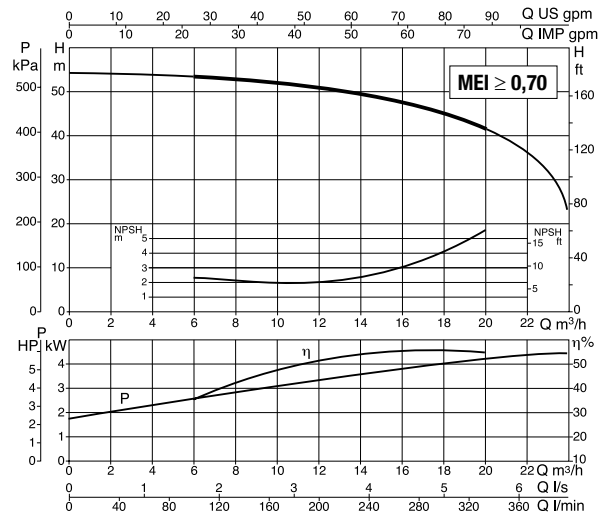
## K 55/200 - SINGLE-IMPELLER PUMPS

Pumped liquid temperature range: from -10 °C to +110°C - Maximum ambient temperature: +40°C



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.



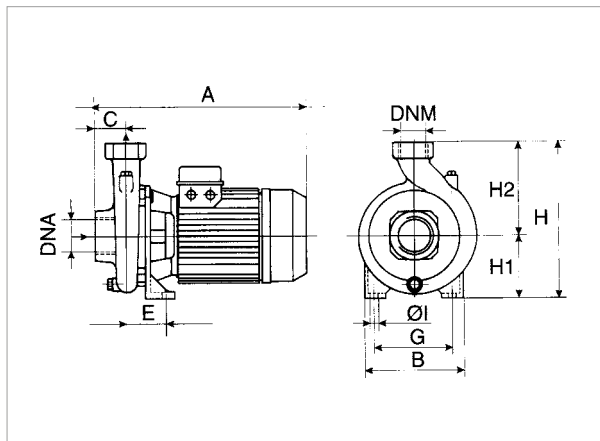
| MODEL      | POWER INPUT<br>50 Hz | P1<br>MAX kW | ELECTRICAL DATA |     |          |               |            |                  |           |     |
|------------|----------------------|--------------|-----------------|-----|----------|---------------|------------|------------------|-----------|-----|
|            |                      |              | P2 NOMINAL      |     | In<br>A  | MOTOR<br>TYPE | I st.<br>A | rpm<br>n. 1/min. | CAPACITOR |     |
|            |                      |              | kW              | HP  |          |               |            |                  | µF        | Vc  |
| K 55/200 M | 1 x 220 - 240 V ~    | 5            | 4               | 5,5 | 21,8     | -             | 110        | 2900             | 160       | 450 |
| K 55/200 T | 3 x 230 - 400 V ~    | 5,1          | 3,7             | 5   | 15,9/6,2 | IE3           | 51,6       | 2880             | -         | -   |
| K 55/200 T | 3 x 230 - 400 V ~    | 5,1          | 4               | 5,5 | 16,3/9,4 | IE2           | 104-60     | 2900             | -         | -   |

| MODEL      | MOTOR<br>TYPE | A   | B   | C  | E  | G   | ØI | H   | H1  | H2  | DNA  | DNM      | PACKING DIMENSIONS |     |     | VOLUME<br>(m <sup>3</sup> ) | WEIGHT<br>kg |
|------------|---------------|-----|-----|----|----|-----|----|-----|-----|-----|------|----------|--------------------|-----|-----|-----------------------------|--------------|
|            |               |     |     |    |    |     |    |     |     |     |      |          | L/A                | L/B | H   |                             |              |
| K 55/200 M | -             | 425 | 250 | 55 | 86 | 175 | 14 | 320 | 135 | 185 | 2" G | 1 1/4" G | 512                | 276 | 345 | 0,049                       | 40,2         |
| K 55/200 T | IE3           | 425 | 250 | 55 | 86 | 175 | 14 | 320 | 135 | 185 | 2" G | 1 1/4" G | 512                | 276 | 345 | 0,049                       | 39           |
| K 55/200 T | IE2           | 425 | 250 | 55 | 86 | 175 | 14 | 320 | 135 | 185 | 2" G | 1 1/4" G | 512                | 276 | 345 | 0,049                       | 39           |

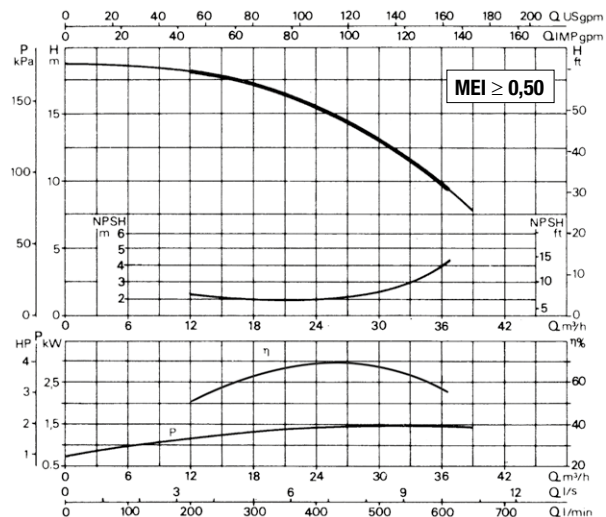


## K 14/400 - SINGLE-IMPELLER PUMPS

Pumped liquid temperature range: from -10 °C to +110°C - Maximum ambient temperature: +40°C



For MEI index refer to the hydraulic efficiency section.  
The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

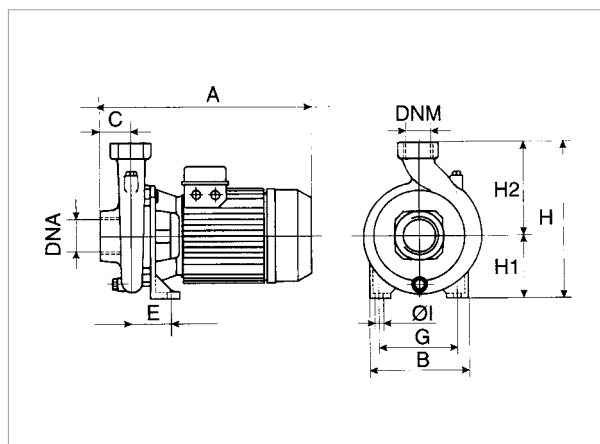


| MODEL      | POWER INPUT<br>50 Hz | P1<br>MAX kW | P2 NOMINAL |     | In<br>A | MOTOR<br>TYPE | I st.<br>A | rpm<br>n. 1/min. | CAPACITOR |     |
|------------|----------------------|--------------|------------|-----|---------|---------------|------------|------------------|-----------|-----|
|            |                      |              | kW         | HP  |         |               |            |                  | μF        | Vc  |
| K 14/400 M | 1 x 220 - 240 V ~    | 2,1          | 1,85       | 2,5 | 9,5     | -             | 38         | 2850             | 40        | 450 |
| K 14/400 T | 3 x 230 - 400 V ~    | 1,9          | 1,85       | 2,5 | 6/3,5   | IE3           | 26,4       | 2850             | -         | -   |
| K 14/400 T | 3 x 230 - 400 V ~    | 2,1          | 1,85       | 2,5 | 7/4     | IE2           | 37,5-21,7  | 2850             | -         | -   |

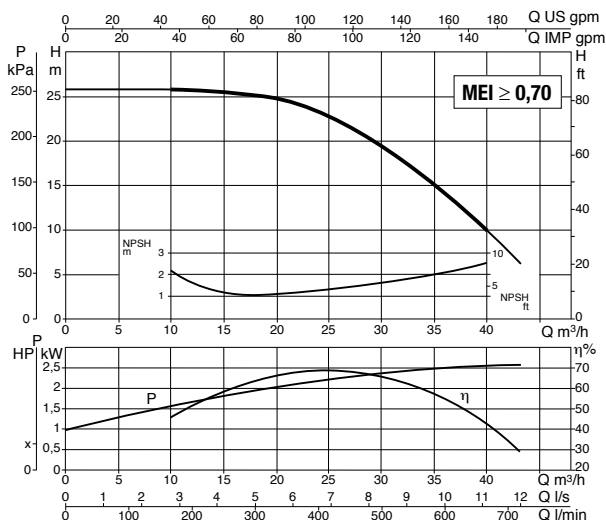
| MODEL      | MOTOR<br>TYPE | A   | B   | C  | E  | G   | ØI | H   | H1  | H2  | DNA  | DNM  | PACKING DIMENSIONS |     |     | VOLUME<br>(m <sup>3</sup> ) | WEIGHT<br>kg |
|------------|---------------|-----|-----|----|----|-----|----|-----|-----|-----|------|------|--------------------|-----|-----|-----------------------------|--------------|
|            |               |     |     |    |    |     |    |     |     |     |      |      | L/A                | L/B | H   |                             |              |
| K 14/400 M | -             | 430 | 200 | 62 | 74 | 120 | 11 | 270 | 105 | 165 | 2" G | 2" G | 427                | 246 | 307 | 0,032                       | 24,5         |
| K 14/400 T | IE3           | 358 | 200 | 62 | 74 | 120 | 11 | 270 | 105 | 165 | 2" G | 2" G | 427                | 246 | 307 | 0,032                       | 22           |
| K 14/400 T | IE2           | 358 | 200 | 62 | 74 | 120 | 11 | 270 | 105 | 165 | 2" G | 2" G | 427                | 246 | 307 | 0,032                       | 22           |

## K 11/500 - SINGLE-IMPELLER PUMPS

Pumped liquid temperature range: from -10 °C to +110°C - Maximum ambient temperature: +40°C



For MEI index refer to the hydraulic efficiency section.  
The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

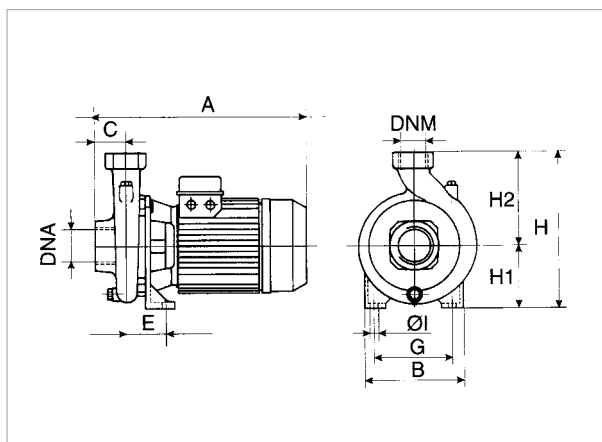


| MODEL      | POWER INPUT<br>50 Hz | P1<br>MAX kW | P2 NOMINAL |    | In<br>A | MOTOR<br>TYPE | I st.<br>A | rpm<br>n. 1/min. | CAPACITOR |     |
|------------|----------------------|--------------|------------|----|---------|---------------|------------|------------------|-----------|-----|
|            |                      |              | kW         | HP |         |               |            |                  | μF        | Vc  |
| K 11/500 M | 1 x 220 - 240 V ~    | 2,8          | 2,2        | 3  | 12,5    | -             | 50         | 2900             | 80        | 450 |
| K 11/500 T | 3 x 230 - 400 V ~    | 2,9          | 2,2        | 3  | 9,3/5,4 | IE3           | 33,5       | 2950             | -         | -   |
| K 11/500 T | 3 x 230 - 400 V ~    | 2,9          | 2,2        | 3  | 9,3/5,4 | IE2           | 45-26      | 2900             | -         | -   |

| MODEL      | MOTOR<br>TYPE | A   | B   | C  | E   | G   | ØI | H   | H1  | H2  | DNA      | DNM  | PACKING DIMENSIONS |     |     | VOLUME<br>(m <sup>3</sup> ) | WEIGHT<br>kg |
|------------|---------------|-----|-----|----|-----|-----|----|-----|-----|-----|----------|------|--------------------|-----|-----|-----------------------------|--------------|
|            |               |     |     |    |     |     |    |     |     |     |          |      | L/A                | L/B | H   |                             |              |
| K 11/500 M | -             | 440 | 240 | 62 | 100 | 155 | 14 | 312 | 132 | 180 | 2 1/2" G | 2" G | 512                | 286 | 345 | 0,049                       | 35,6         |
| K 11/500 T | IE3           | 440 | 240 | 62 | 100 | 155 | 14 | 312 | 132 | 180 | 2 1/2" G | 2" G | 512                | 286 | 345 | 0,049                       | 21           |
| K 11/500 T | IE2           | 440 | 240 | 62 | 100 | 155 | 14 | 312 | 132 | 180 | 2 1/2" G | 2" G | 512                | 286 | 345 | 0,049                       | 34,2         |

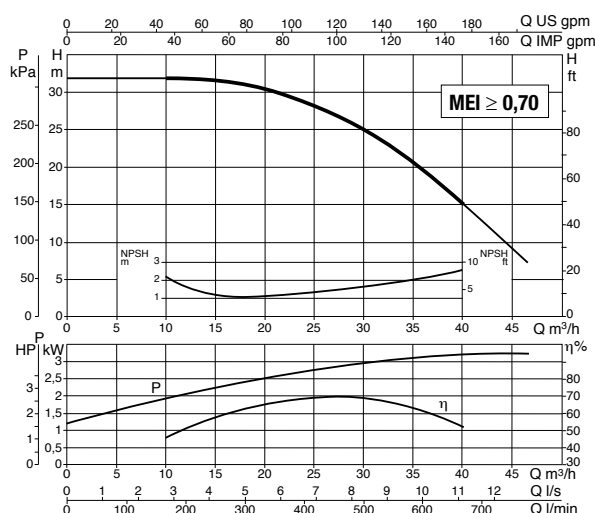
## K 18/500 - SINGLE-IMPELLER PUMPS

Pumped liquid temperature range: from -10 °C to +110°C - Maximum ambient temperature: +40°C



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

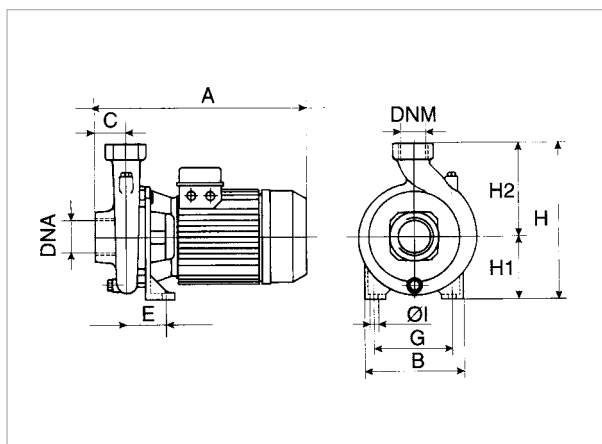


| MODEL      | ELECTRICAL DATA      |              |            |    |          |               |            |                  |           |     |
|------------|----------------------|--------------|------------|----|----------|---------------|------------|------------------|-----------|-----|
|            | POWER INPUT<br>50 Hz | P1<br>MAX kW | P2 NOMINAL |    | In<br>A  | MOTOR<br>TYPE | I st.<br>A | rpm<br>n. 1/min. | CAPACITOR |     |
|            |                      |              | kW         | HP |          |               |            |                  | μF        | Vc  |
| K 18/500 M | 1 x 220 - 240 V ~    | 3,9          | 3          | 4  | 18       | -             | 80         | 2900             | 160       | 450 |
| K 18/500 T | 3 x 230 - 400 V ~    | 3,7          | 3          | 4  | 11,4/6,6 | IE3           | 44,2       | 2950             | -         | -   |
| K 18/500 T | 3 x 230 - 400 V ~    | 3,8          | 3          | 4  | 13/7,5   | IE2           | 67,5-39    | 2900             | -         | -   |

| MODEL      | MOTOR<br>TYPE | A   | B   | C  | E   | G   | ØI | H   | H1  | H2  | DNA      | DNM  | PACKING DIMENSIONS |     |     | VOLUME<br>(m <sup>3</sup> ) | WEIGHT<br>kg |
|------------|---------------|-----|-----|----|-----|-----|----|-----|-----|-----|----------|------|--------------------|-----|-----|-----------------------------|--------------|
|            |               |     |     |    |     |     |    |     |     |     |          |      | L/A                | L/B | H   |                             |              |
| K 18/500 M | -             | 440 | 240 | 62 | 100 | 155 | 14 | 312 | 132 | 180 | 2 1/2" G | 2" G | 512                | 286 | 345 | 0,049                       | 39,4         |
| K 18/500 T | IE3           | 440 | 240 | 62 | 100 | 155 | 14 | 312 | 132 | 180 | 2 1/2" G | 2" G | 512                | 286 | 345 | 0,049                       | 19           |
| K 18/500 T | IE2           | 440 | 240 | 62 | 100 | 155 | 14 | 312 | 132 | 180 | 2 1/2" G | 2" G | 512                | 286 | 345 | 0,049                       | 36,6         |

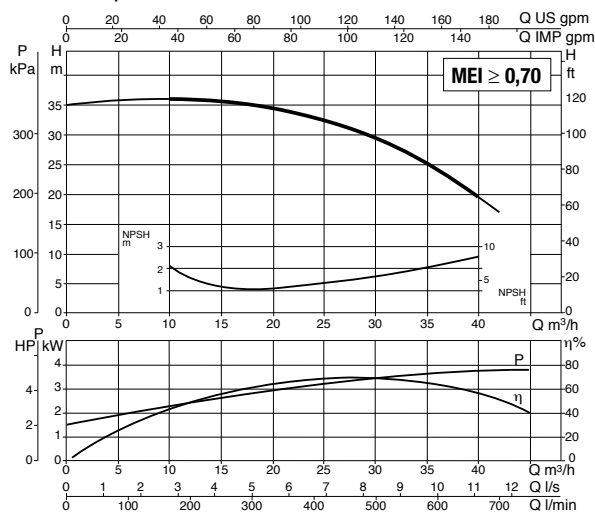
## K 28/500 - SINGLE-IMPELLER PUMPS

Pumped liquid temperature range: from -10 °C to +110°C - Maximum ambient temperature: +40°C



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

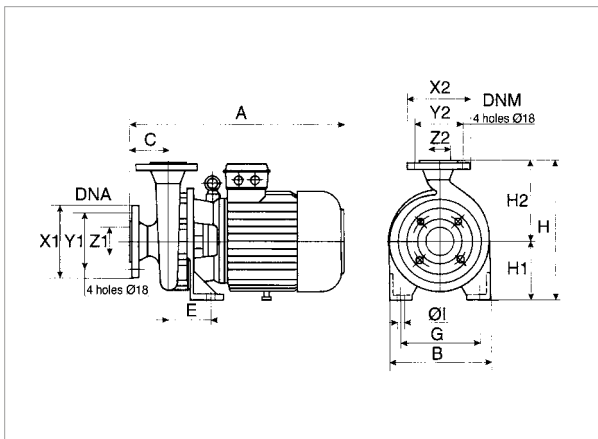


| MODEL      | ELECTRICAL DATA      |              |            |     |          |               |            |                  |           |     |
|------------|----------------------|--------------|------------|-----|----------|---------------|------------|------------------|-----------|-----|
|            | POWER INPUT<br>50 Hz | P1<br>MAX kW | P2 NOMINAL |     | In<br>A  | MOTOR<br>TYPE | I st.<br>A | rpm<br>n. 1/min. | CAPACITOR |     |
|            |                      |              | kW         | HP  |          |               |            |                  | μF        | Vc  |
| K 28/500 M | 1 x 220 - 240 V ~    | 4,7          | 4          | 5,5 | 21,4     | -             | 110        | 2900             | 160       | 450 |
| K 28/500 T | 3 x 230 - 400 V ~    | 4,6          | 3,7        | 5   | 14,2/8,2 | IE3           | 51,6       | 2950             | -         | -   |
| K 28/500 T | 3 x 230 - 400 V ~    | 4,55         | 4          | 5,5 | 13,7/8   | IE2           | 104-60     | 2900             | -         | -   |

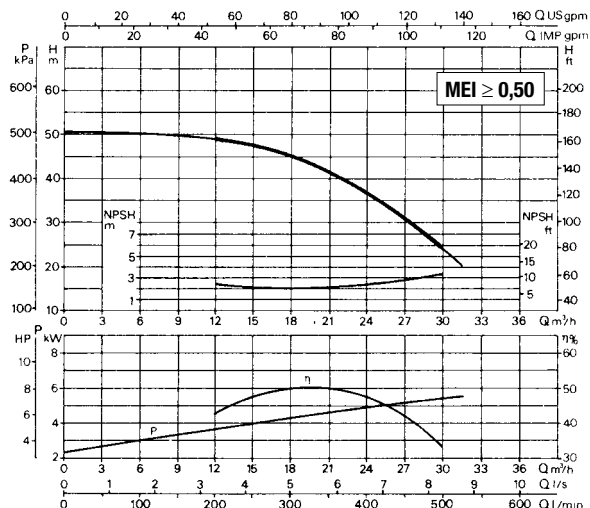
| MODEL      | MOTOR<br>TYPE | A   | B   | C  | E   | G   | ØI | H   | H1  | H2  | DNA      | DNM  | PACKING DIMENSIONS |     |     | VOLUME<br>(m <sup>3</sup> ) | WEIGHT<br>kg |
|------------|---------------|-----|-----|----|-----|-----|----|-----|-----|-----|----------|------|--------------------|-----|-----|-----------------------------|--------------|
|            |               |     |     |    |     |     |    |     |     |     |          |      | L/A                | L/B | H   |                             |              |
| K 28/500 M | -             | 440 | 240 | 62 | 100 | 155 | 14 | 312 | 132 | 180 | 2 1/2" G | 2" G | 512                | 286 | 345 | 0,049                       | 42           |
| K 28/500 T | IE3           | 440 | 240 | 62 | 100 | 155 | 14 | 312 | 132 | 180 | 2 1/2" G | 2" G | 512                | 286 | 345 | 0,049                       | 40,6         |
| K 28/500 T | IE2           | 440 | 240 | 62 | 100 | 155 | 14 | 312 | 132 | 180 | 2 1/2" G | 2" G | 512                | 286 | 345 | 0,049                       | 40,6         |

## K 40/400 - SINGLE-IMPELLER PUMPS

Pumped liquid temperature range: from -10 °C to +110°C - Maximum ambient temperature: +40°C



For MEI index refer to the hydraulic efficiency section.  
The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.



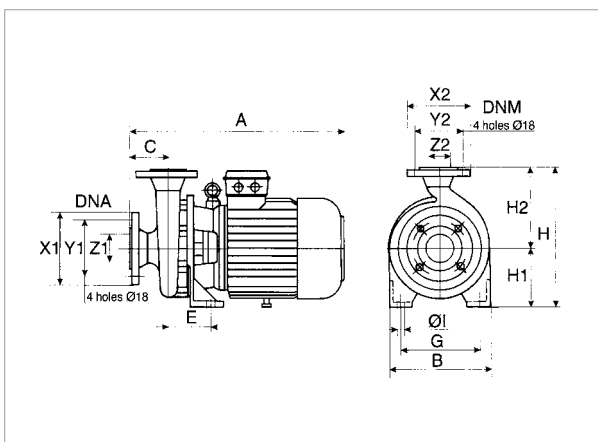
| MODEL      | POWER INPUT<br>50 Hz | P1<br>MAX kW | P2 NOMINAL |     | In<br>A | MOTOR<br>TYPE | Ist<br>A | rpm<br>n. 1/min. |
|------------|----------------------|--------------|------------|-----|---------|---------------|----------|------------------|
|            |                      |              | kW         | HP  |         |               |          |                  |
| K 40/400 T | 3 x 400 V ~ 1        | 6,7          | 5,5        | 7,5 | 11,7    | IE3           | 76       | 2900             |

| MODEL      | A   | B   | C   | E   | G   | I Ø | H   | H1  | H2  | DNA | DNA |     |    | DNM | DNM |     |    | PACKING DIMENSIONS |     |     | VOLUME<br>(m <sup>3</sup> ) | WEIGHT<br>Kg |
|------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|-----|-----|-----|----|--------------------|-----|-----|-----------------------------|--------------|
|            |     |     |     |     |     |     |     |     |     |     | x1  | y1  | z1 |     | x2  | y2  | z2 | L/A                | L/B | H   |                             |              |
| K 40/400 T | 560 | 273 | 100 | 110 | 212 | 14  | 360 | 160 | 200 | 65  | 185 | 145 | 65 | 50  | 165 | 125 | 50 | 680                | 330 | 572 | 0,128                       | 79           |

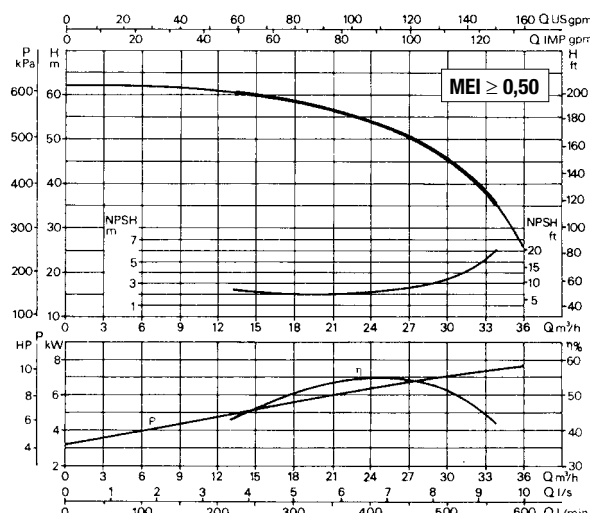
<sup>1</sup> star starting is possible (A)

## K 50/400 - SINGLE-IMPELLER PUMPS

Pumped liquid temperature range: from -10 °C to +110°C - Maximum ambient temperature: +40°C



For MEI index refer to the hydraulic efficiency section.  
The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.



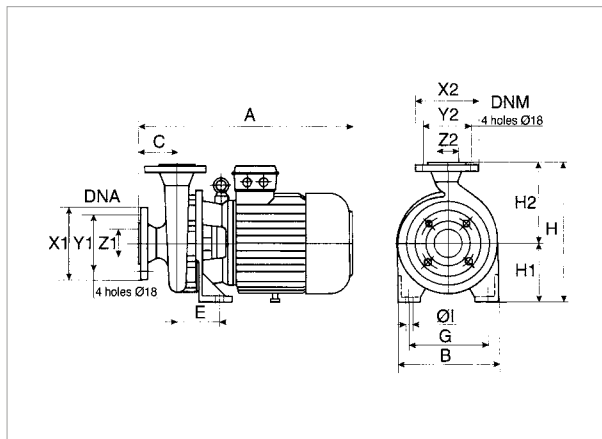
| MODEL      | POWER INPUT<br>50 Hz | P1<br>MAX kW | P2 NOMINAL |    | In<br>A | MOTOR<br>TYPE | Ist<br>A | rpm<br>n. 1/min. |
|------------|----------------------|--------------|------------|----|---------|---------------|----------|------------------|
|            |                      |              | kW         | HP |         |               |          |                  |
| K 50/400 T | 3 x 400 V ~ 1        | 8,5          | 7,5        | 10 | 14,5    | IE3           | 112      | 2910             |

| MODEL      | A   | B   | C   | E   | G   | I Ø | H   | H1  | H2  | DNA | DNA |     |    | DNM | DNM |     |    | PACKING DIMENSIONS |     |     | VOLUME<br>(m <sup>3</sup> ) | WEIGHT<br>Kg |
|------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|-----|-----|-----|----|--------------------|-----|-----|-----------------------------|--------------|
|            |     |     |     |     |     |     |     |     |     |     | x1  | y1  | z1 |     | x2  | y2  | z2 | L/A                | L/B | H   |                             |              |
| K 50/400 T | 560 | 273 | 100 | 110 | 212 | 14  | 360 | 160 | 200 | 65  | 185 | 145 | 65 | 50  | 165 | 125 | 50 | 680                | 330 | 572 | 0,128                       | 78,8         |

<sup>1</sup> star starting is possible (A)

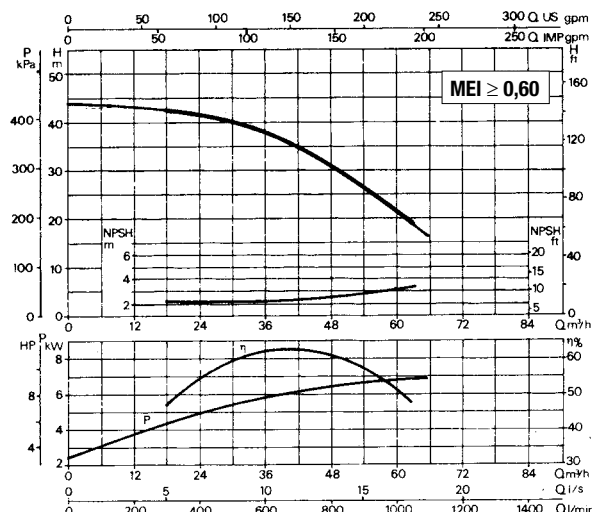
## K 30/800 - SINGLE-IMPELLER PUMPS

Pumped liquid temperature range: from -10 °C to +110°C - Maximum ambient temperature: +40°C



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.



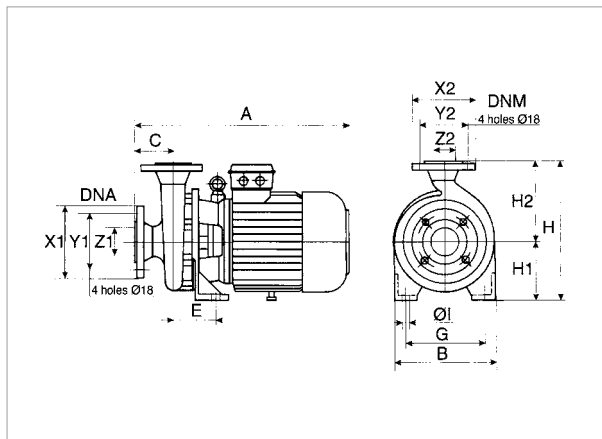
| MODEL      | POWER INPUT<br>50 Hz | P1<br>MAX kW | P2 NOMINAL |    | In<br>A | MOTOR<br>TYPE | Ist<br>A | rpm<br>n. 1/min. |
|------------|----------------------|--------------|------------|----|---------|---------------|----------|------------------|
|            |                      |              | kW         | HP |         |               |          |                  |
| K 30/800 T | 3 x 400 V ~ 1        | 8,2          | 7,5        | 10 | 14,4    | IE3           | 112      | 2920             |

| MODEL      | A   | B   | C   | E   | G   | I Ø | H   | H1  | H2  | DNA | DNA |     |    | DNM | DNM |     |    | PACKING DIMENSIONS |     |     | VOLUME<br>(m <sup>3</sup> ) | WEIGHT<br>Kg |
|------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|-----|-----|-----|----|--------------------|-----|-----|-----------------------------|--------------|
|            |     |     |     |     |     |     |     |     |     |     | x1  | y1  | z1 |     | x2  | y2  | z2 | L/A                | L/B | H   |                             |              |
| K 30/800 T | 600 | 273 | 100 | 110 | 212 | 14  | 385 | 160 | 225 | 80  | 200 | 160 | 80 | 65  | 185 | 145 | 65 | 680                | 330 | 572 | 0,128                       | 90,2         |

<sup>1</sup> star starting is possible (A)

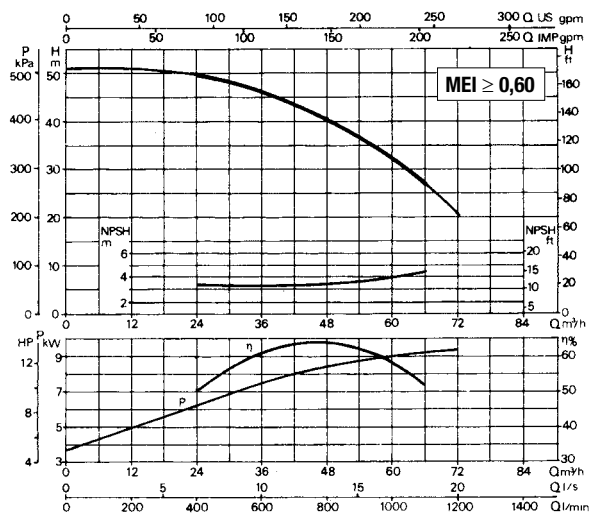
## K 40/800 - SINGLE-IMPELLER PUMPS

Pumped liquid temperature range: from -10 °C to +110°C - Maximum ambient temperature: +40°C



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.



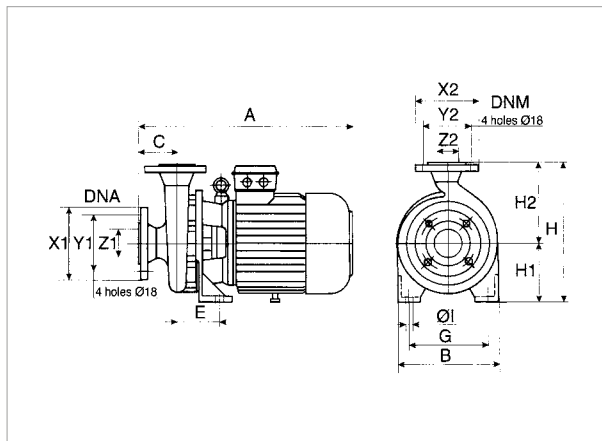
| MODEL      | POWER INPUT<br>50 Hz | P1<br>MAX kW | P2 NOMINAL |      | In<br>A | MOTOR<br>TYPE | Ist<br>A | rpm<br>n. 1/min. |
|------------|----------------------|--------------|------------|------|---------|---------------|----------|------------------|
|            |                      |              | kW         | HP   |         |               |          |                  |
| K 40/800 T | 3 x 400 V ~ 1        | 10,2         | 9,2        | 12,5 | 17,1    | IE3           | 135      | 2920             |

| MODEL      | A   | B   | C   | E   | G   | I Ø | H   | H1  | H2  | DNA | DNA |     |    | DNM | DNM |     |    | PACKING DIMENSIONS |     |     | VOLUME<br>(m <sup>3</sup> ) | WEIGHT<br>Kg |
|------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|-----|-----|-----|----|--------------------|-----|-----|-----------------------------|--------------|
|            |     |     |     |     |     |     |     |     |     |     | x1  | y1  | z1 |     | x2  | y2  | z2 | L/A                | L/B | H   |                             |              |
| K 40/800 T | 600 | 273 | 100 | 110 | 212 | 14  | 385 | 160 | 225 | 80  | 200 | 160 | 80 | 65  | 185 | 145 | 65 | 680                | 330 | 572 | 0,128                       | 95           |

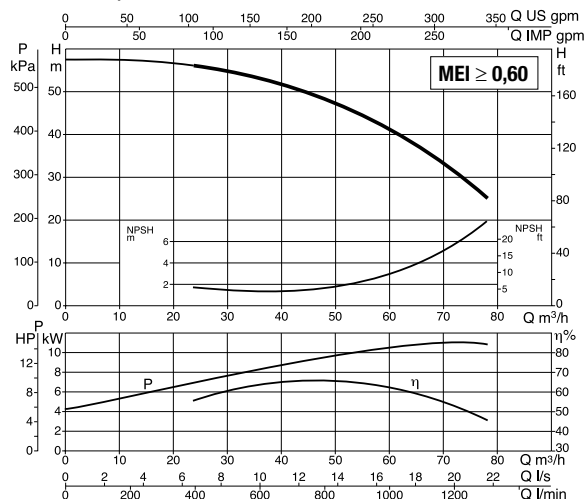
<sup>1</sup> star starting is possible (A)

## K 50/800 - SINGLE-IMPELLER PUMPS

Pumped liquid temperature range: from -10 °C to +110°C - Maximum ambient temperature: +40°C



For MEI index refer to the hydraulic efficiency section.  
The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.



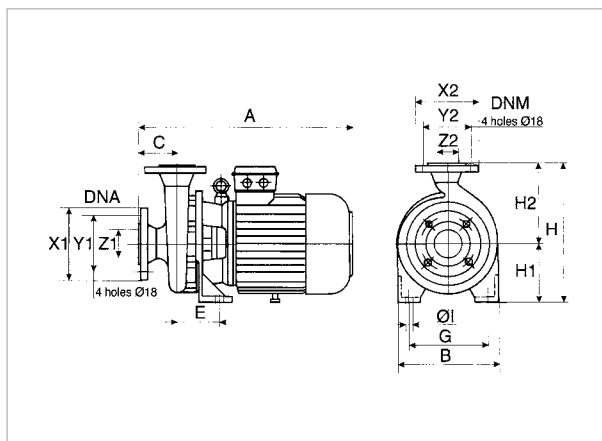
| MODEL      | POWER INPUT<br>50 Hz | P1<br>MAX kW | P2 NOMINAL |    | In<br>A | MOTOR<br>TYPE | Ist<br>A | rpm<br>n. 1/min. |
|------------|----------------------|--------------|------------|----|---------|---------------|----------|------------------|
|            |                      |              | kW         | HP |         |               |          |                  |
| K 50/800 T | 3 x 400 V ~ 1        | 12,7         | 11         | 15 | 21      | IE3           | 193      | 2900             |

| MODEL      | A   | B   | C   | E   | G   | I Ø | H   | H1  | H2  | DNA | DNA |     |    | DNM | DNM |     |    | PACKING DIMENSIONS |     |     | VOLUME<br>(mc) | WEIGHT<br>Kg |
|------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|-----|-----|-----|----|--------------------|-----|-----|----------------|--------------|
|            |     |     |     |     |     |     |     |     |     |     | x1  | y1  | z1 |     | x2  | y2  | z2 | L/A                | L/B | H   |                |              |
| K 50/800 T | 600 | 273 | 100 | 110 | 212 | 14  | 385 | 160 | 225 | 80  | 200 | 160 | 80 | 65  | 185 | 145 | 65 | 680                | 330 | 572 | 0,128          | 104,3        |

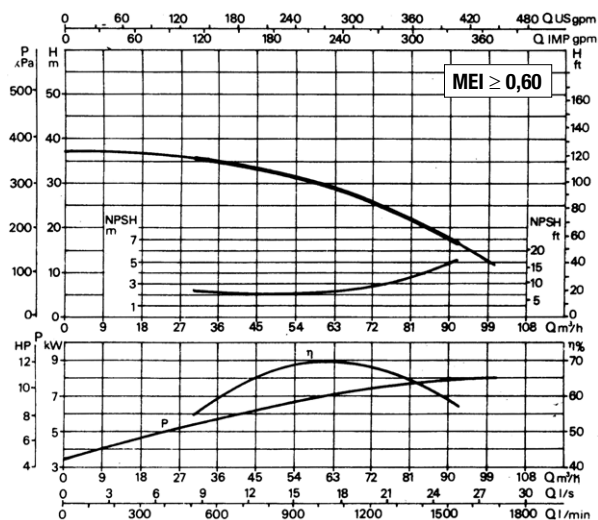
<sup>1</sup> star starting is possible ( A )

## K 20/1200 - SINGLE-IMPELLER PUMPS

Pumped liquid temperature range: from -10 °C to +110°C - Maximum ambient temperature: +40°C



For MEI index refer to the hydraulic efficiency section.  
The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.



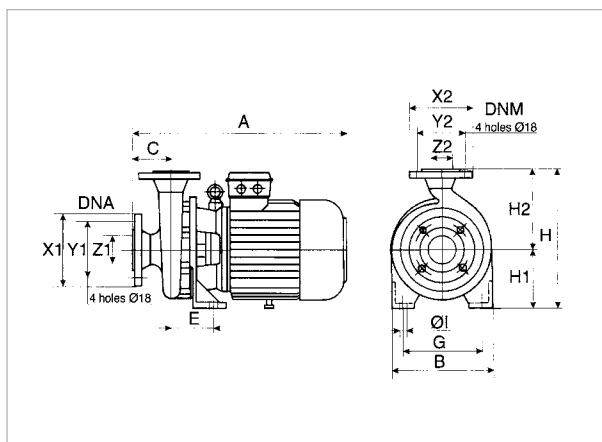
| MODEL       | POWER INPUT<br>50 Hz | P1<br>MAX kW | P2 NOMINAL |    | In<br>A | MOTOR<br>TYPE | Ist<br>A | rpm<br>n. 1/min. |
|-------------|----------------------|--------------|------------|----|---------|---------------|----------|------------------|
|             |                      |              | kW         | HP |         |               |          |                  |
| K 20/1200 T | 3 x 400 V ~ 1        | 8,3          | 7,5        | 10 | 14,3    | IE3           | 112      | 2920             |

| MODEL       | A   | B   | C   | E   | G   | I Ø | H   | H1  | H2  | DNA | DNA |     |    | DNM | DNM |     |    | PACKING DIMENSIONS |     |     | VOLUME<br>(m³) | WEIGHT<br>Kg |
|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|-----|-----|-----|----|--------------------|-----|-----|----------------|--------------|
|             |     |     |     |     |     |     |     |     |     |     | x1  | y1  | z1 |     | x2  | y2  | z2 | L/A                | L/B | H   |                |              |
| K 20/1200 T | 600 | 273 | 100 | 110 | 212 | 14  | 385 | 160 | 225 | 80  | 200 | 160 | 80 | 65  | 185 | 145 | 65 | 680                | 330 | 572 | 0,128          | 88           |

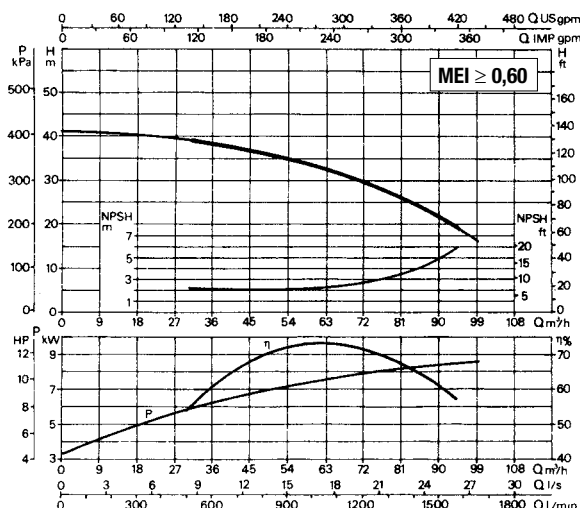
<sup>1</sup> star starting is possible ( A )

## K 25/1200 - SINGLE-IMPELLER PUMPS

Pumped liquid temperature range: from -10 °C to +110°C - Maximum ambient temperature: +40°C



For MEI index refer to the hydraulic efficiency section.  
The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.



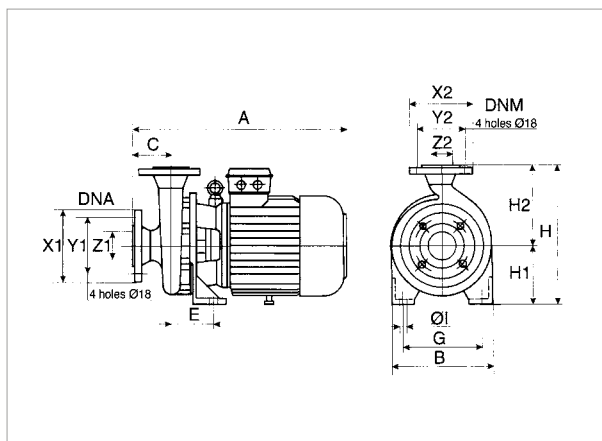
| MODEL              | POWER INPUT<br>50 Hz | P1<br>MAX kW | P2 NOMINAL |      | In<br>A | MOTOR<br>TYPE | Ist<br>A | rpm<br>n. 1/min. |
|--------------------|----------------------|--------------|------------|------|---------|---------------|----------|------------------|
|                    |                      |              | kW         | HP   |         |               |          |                  |
| <b>K 25/1200 T</b> | 3 x 400 V ~ 1        | 9,4          | 9,2        | 12,5 | 16,2    | IE3           | 135      | 2910             |

| MODEL              | A   | B   | C   | E   | G   | I Ø | H   | H1  | H2  | DNA | DNA |     |    | DNM | DNM |     |    | PACKING DIMENSIONS |     |     | VOLUME<br>(mc) | WEIGHT<br>Kg |
|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|-----|-----|-----|----|--------------------|-----|-----|----------------|--------------|
|                    |     |     |     |     |     |     |     |     |     |     | x1  | y1  | z1 |     | x2  | y2  | z2 | L/A                | L/B | H   |                |              |
| <b>K 25/1200 T</b> | 600 | 273 | 100 | 110 | 212 | 14  | 385 | 160 | 225 | 80  | 200 | 160 | 80 | 65  | 185 | 145 | 65 | 680                | 330 | 572 | 0,128          | 94           |

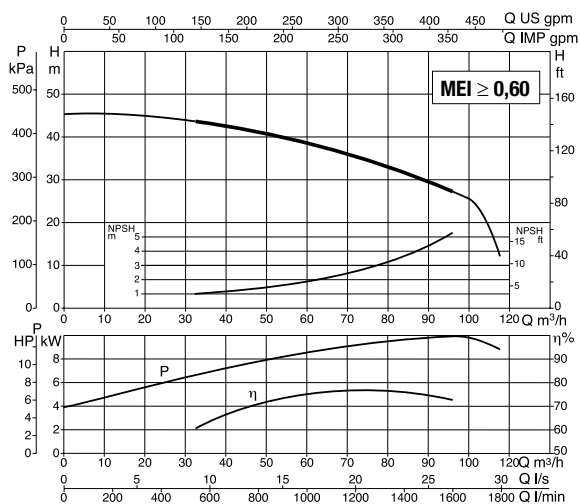
<sup>1</sup> star starting is possible (λ)

## K 35/1200 - SINGLE-IMPELLER PUMPS

Pumped liquid temperature range: from -10 °C to +110°C - Maximum ambient temperature: +40°C



For MEI index refer to the hydraulic efficiency section.  
The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.



| MODEL              | POWER INPUT<br>50 Hz | P1<br>MAX kW | P2 NOMINAL |    | In<br>A | MOTOR<br>TYPE | Ist<br>A | rpm<br>n. 1/min. |
|--------------------|----------------------|--------------|------------|----|---------|---------------|----------|------------------|
|                    |                      |              | kW         | HP |         |               |          |                  |
| <b>K 35/1200 T</b> | 3 x 400 V ~ 1        | 11,8         | 11         | 15 | 20      | IE3           | 193      | 2900             |

| MODEL              | A   | B   | C   | E   | G   | I Ø | H   | H1  | H2  | DNA | DNA |     |    | DNM | DNM |     |    | PACKING DIMENSIONS |     |     | VOLUME<br>(mc) | WEIGHT<br>Kg |
|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|-----|-----|-----|----|--------------------|-----|-----|----------------|--------------|
|                    |     |     |     |     |     |     |     |     |     |     | x1  | y1  | z1 |     | x2  | y2  | z2 | L/A                | L/B | H   |                |              |
| <b>K 35/1200 T</b> | 600 | 273 | 100 | 110 | 212 | 14  | 385 | 160 | 225 | 80  | 200 | 160 | 80 | 65  | 185 | 145 | 65 | 680                | 330 | 572 | 0,128          | 100          |

<sup>1</sup> star starting is possible (λ)

# K TWIN-IMPELLER

## TWIN-IMPELLER PUMPS



### TECHNICAL DATA

**Operating range:**

from 1,2 to 30 m<sup>3</sup>/h with head up to 97 metres

**Pumped liquid:** clean, free of solids and abrasives, non-viscous, non-aggressive, non-crystallised and chemically neutral, with properties similar to water

**Liquid temperature range:**

K 35/40, K 45/50,

K 35/100, K 40/100, K 55/100 :from -10 °C to +50 °C

K 55/50, K 66/100, K 90/100

K 70/300, K 80/300, K 70/400, K 80/400 :from -15 °C to +110 °C

**Maximum ambient temperature:** +40°C

**Maximum operating pressure:**

K 35/40, K 35/100, K 40/100 :6 bar (600 kPa)

K 45/50, K 55/50 :8 bar (800 kPa)

K 55/100, K 66/100 :10 bar (1000 kPa)

K 90/100, K 70/300, K 80/300, K 70/400, K 80/400 :12 bar (1200 kPa)

**Protection class:**

IP 55, IP 44 per K 35/40, K 45/50, K 55/50, K 35/100, K 40/100

**Protection class at the terminal board:** IP 55

**Insulation class:** F**Standard voltage:**

single-phase 220-240 V / 50 Hz

three-phase 230-400 V / 50 Hz up to 4 kW included - 400 V 50 Hz from 5,5 kW

**Installation:** fixed, horizontal or vertical position, provided that the motor is always above the pump.

**Special executions on requests:** alternative voltages and frequencies.

### APPLICATIONS

Twin-impeller centrifugal pump designed for the realisation of pressurization units in water systems and filling of pressure vessels.

Suitable for sprinkler systems and other general water supply uses.

### CONSTRUCTION FEATURES OF THE PUMP

Pump body and motor support in cast iron.

Technopolymer impeller.

Carbon/ceramic mechanical seal.

### CONSTRUCTION FEATURES OF THE MOTOR

Closed asynchronous type, external ventilation cooling.

Rotor running on permanently lubricated ball bearings, oversized to ensure low noise and durability.

Standard built-in thermo-amperometric protection. Capacitor permanently fitted on single phase versions.

For the protection of the three-phase motor, we recommend the use of remote overload cut-outs, in compliance with current local regulations.

Construction according to CEI 2-3.

IE2 motors as standard, from 0,75 kW to 5,5 kW - IE3 ≥ 7,5 kW.

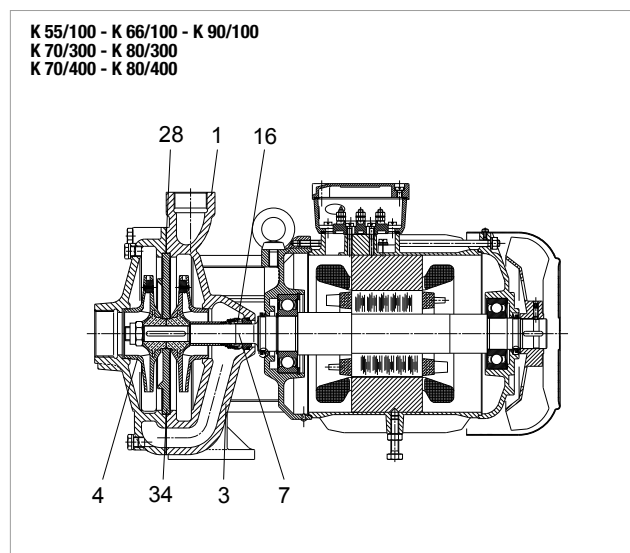
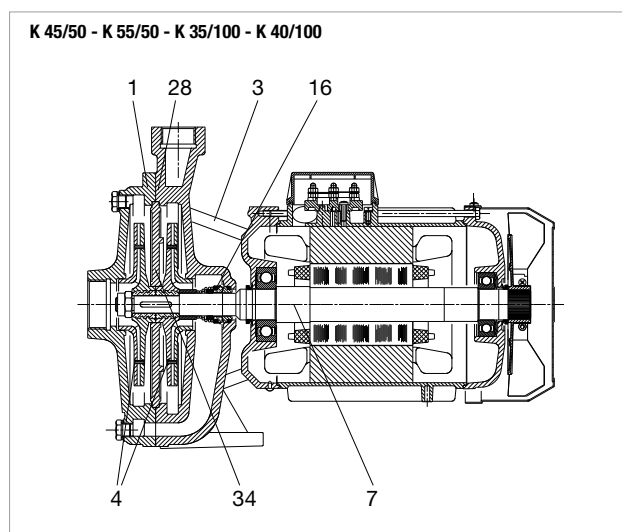
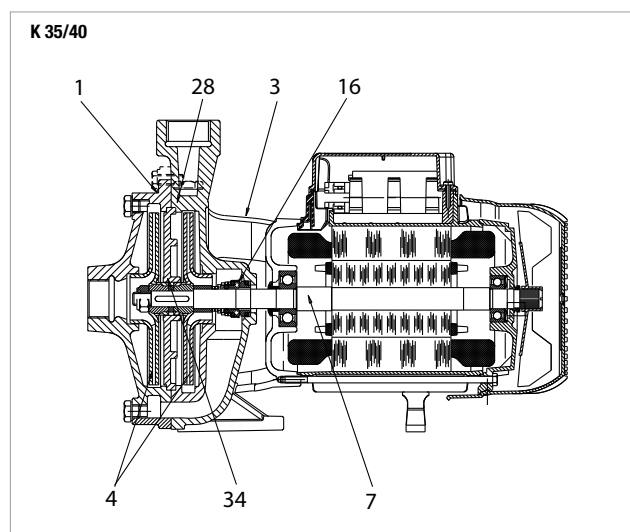
# K TWIN-IMPELLER

## TWIN-IMPELLER PUMPS

### MATERIALS

| No. | PARTS*            | MATERIALS   | MODELS   |
|-----|-------------------|---|--|
| 1   | PUMP BODY         | CAST IRON 200 UNI ISO 185                             |  |
| 3   | SUPPORT           | CAST IRON 200 UNI ISO 185                             |  |
| 4   | IMPELLER          | TECHNOPOLYMER A                                       | K 35/40; K 45/50; K 35/100; K 40/100; K 55/100   |
|     |                   | TECHNOPOLYMER B                                       | K 55/50; K 66/100; K 90/100; K 70/300; K 80/300; K 70/400; K 80/400                                |
| 7   | SHAFT WITH ROTOR  | AISI 416 STAINLESS STEEL<br>X12CRS13 UNI 6900/71      | K 35/40  |
|     |                   | AISI 303 STAINLESS STEEL<br>X10CRNIS 1089 UNI 6900/71 | K 45/50; K 55/50; K 35/100; K 40/100; K 55/100; K 66/100; K 90/100                                 |
|     |                   | AISI 304 STAINLESS STEEL<br>X5 1810 UNI 6900/71       | K 70/300; K 80/300; K 70/400; K 80/400   |
| 16  | MECHANICAL SEAL   | CARBON / CERAMIC                                      |  |
| 28  | GASKET            | NBR RUBBER  | K 35/40; K 45/50; K 55/50; K 55/100; K 35/100; K 40/100  |
|     |                   | GUARNITAL   | K 66/100; K 90/100; K 70/300; K 80/300; K 70/400; K 80/400   |
| 34  | INTERMEDIATE DISC | CAST IRON 200 UNI ISO 185                             | K 35/40; K 45/50; K 55/50; K 55/100; K 66/100; K 90/100;<br>K 70/300; K 70/400; K 80/300; K 80/400 |

\* In contact with the liquid





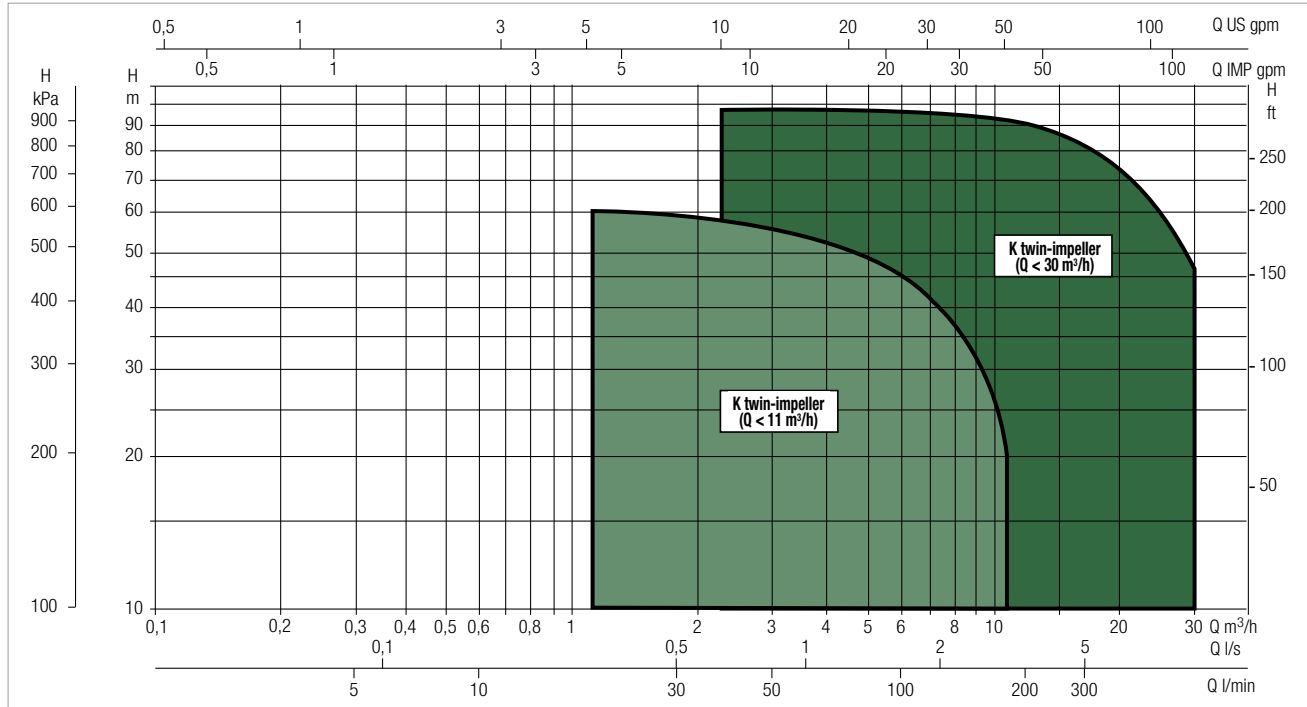
# K TWIN-IMPELLER RANGE

## ELECTRIC PUMPS

### PERFORMANCE RANGE

The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

### GRAPHIC SELECTION TABLE

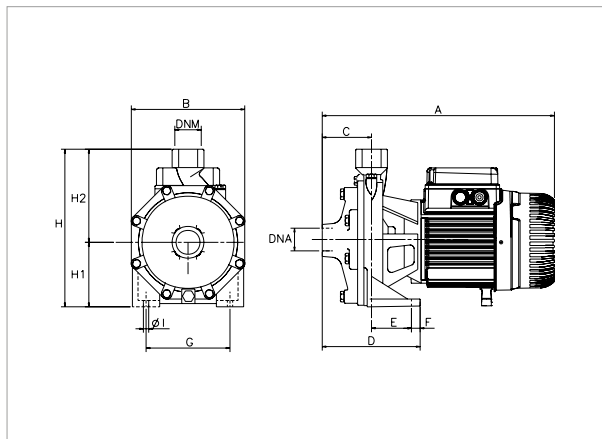


### SELECTION TABLE

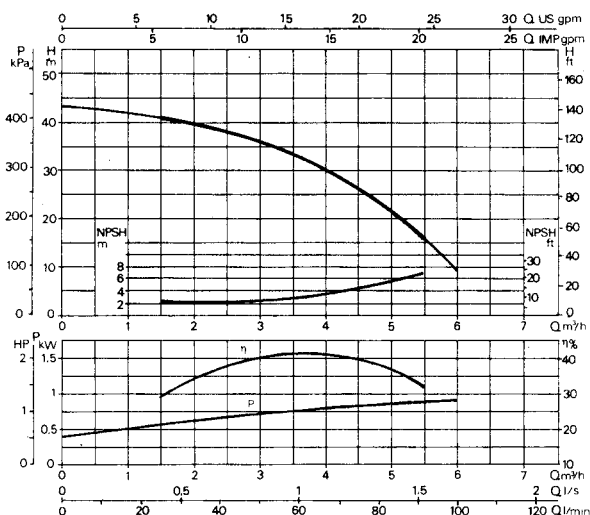
| MODEL          | Q=                | 0    | 1,2  | 1,8  | 2,4  | 3,6  | 4,8  | 6    | 7,2  | 9    | 9,6  | 10,8 | 12   | 15  | 18   | 24   | 30  |  |
|----------------|-------------------|------|------|------|------|------|------|------|------|------|------|------|------|-----|------|------|-----|--|
|                | m <sup>3</sup> /h | 0    | 20   | 30   | 40   | 60   | 80   | 100  | 120  | 150  | 160  | 180  | 200  | 250 | 300  | 400  | 500 |  |
|                | Q=                | 0    | 20   | 30   | 40   | 60   | 80   | 100  | 120  | 150  | 160  | 180  | 200  | 250 | 300  | 400  | 500 |  |
|                | l/min             | 0    | 20   | 30   | 40   | 60   | 80   | 100  | 120  | 150  | 160  | 180  | 200  | 250 | 300  | 400  | 500 |  |
| K 35/40 M - T  | H<br>(m)          | 43,5 | 41,5 | 40   | 38   | 33   | 23,5 |      |      |      |      |      |      |     |      |      |     |  |
| K 45/50 M - T  |                   | 51   | 49   | 47,5 | 46   | 42   | 37   | 30   |      |      |      |      |      |     |      |      |     |  |
| K 55/50 M - T  |                   | 62   | 60   | 58   | 57   | 52   | 45   | 34   |      |      |      |      |      |     |      |      |     |  |
| K 35/100 M - T |                   | 38,5 |      |      | 37,5 | 36,5 | 35   | 32   | 28,5 | 18,5 | 17,5 |      |      |     |      |      |     |  |
| K 40/100 M - T |                   | 44   |      |      | 43,4 | 42,5 | 41   | 39   | 35,7 | 29   | 26   | 18,5 |      |     |      |      |     |  |
| K 55/100 M - T |                   | 62   |      |      | 59,5 | 57   | 54,5 | 51   | 47   | 39   | 36   |      |      |     |      |      |     |  |
| K 66/100 M - T |                   | 73   |      |      | 70   | 67,5 | 64   | 60,5 | 57   | 49   | 47   |      |      |     |      |      |     |  |
| K 90/100 M - T |                   | 83,5 |      |      | 82   | 79,5 | 76,5 | 72,5 | 68   | 61   | 58   |      |      |     |      |      |     |  |
| K 70/300 T     |                   | 76   |      |      |      |      |      | 74   | 73   | 72   | 71,5 | 70   | 69   | 65  | 60,5 | 43,5 |     |  |
| K 80/300 T     |                   | 95   |      |      |      |      |      | 93   | 92,2 | 91   | 90,5 | 90   | 89,5 | 87  | 82   | 68   |     |  |
| K 70/400 T     |                   | 86   |      |      |      |      |      |      |      | 84   | 83,2 | 82,5 | 82   | 79  | 76   | 65   | 47  |  |
| K 80/400 T     |                   | 97   |      |      |      |      |      |      |      |      | 95   | 94,5 | 94   | 92  | 89   | 80   | 64  |  |

## K 35/40 - TWIN-IMPELLER PUMPS

Pumped liquid temperature range: from -10 °C to +50°C - Maximum ambient temperature: +40°C



The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

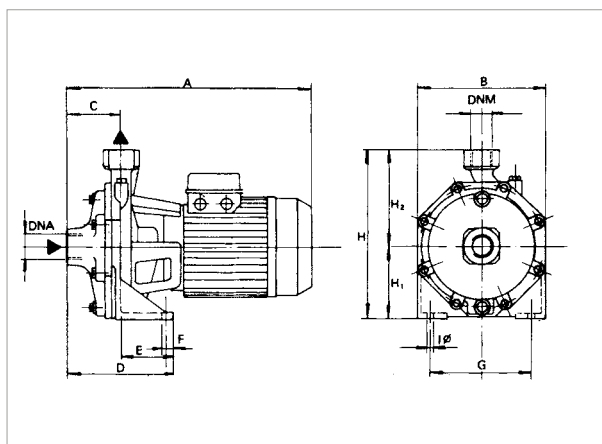


| MODEL     | POWER INPUT<br>50 Hz | P1<br>MAX kW | P2 NOMINAL |    | In<br>A | MOTOR<br>TYPE | Ist<br>A   | rpm<br>n. 1/min. | CAPACITOR |     |
|-----------|----------------------|--------------|------------|----|---------|---------------|------------|------------------|-----------|-----|
|           |                      |              | kW         | HP |         |               |            |                  | μF        | Vc  |
| K 35/40 M | 1 x 220 - 240 V ~    | 1,2          | 0,75       | 1  | 5,5     | -             | 20         | 2800             | 20        | 450 |
| K 35/40 T | 3 x 230 - 400 V ~    | 1,1          | 0,75       | 1  | 3,6/2,1 | IE3           | 15,2       | 2850             | -         | -   |
| K 35/40 T | 3 x 230 - 400 V ~    | 1,2          | 0,75       | 1  | 3,8/2,2 | IE2           | 22,14-12,8 | 2850             | -         | -   |

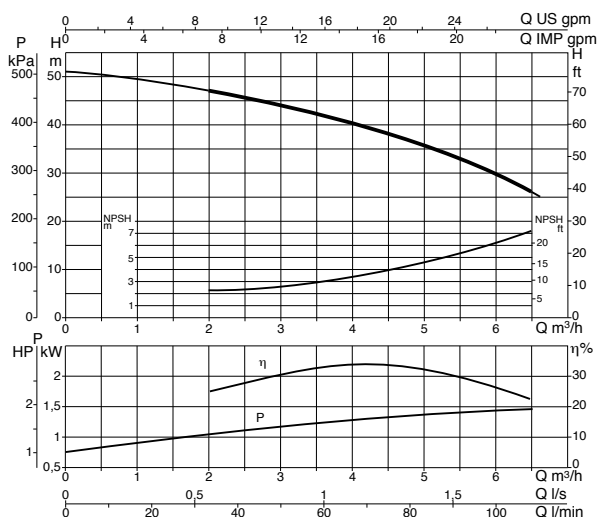
| MODEL     | MOTOR<br>TYPE | PACKING DIMENSIONS |     |    |     |    |    |     |     |     |     |     | VOLUME<br>(m <sup>3</sup> ) | WEIGHT<br>kg |     |     |     |       |      |
|-----------|---------------|--------------------|-----|----|-----|----|----|-----|-----|-----|-----|-----|-----------------------------|--------------|-----|-----|-----|-------|------|
|           |               | A                  | B   | C  | D   | E  | F  | G   | ØI  | H   | H1  | H2  |                             |              | DNA | DNM | L/A | L/B   | H    |
| K 35/40 M | -             | 342                | 180 | 76 | 148 | 72 | 15 | 148 | 9,5 | 235 | 100 | 135 | 1" G                        | 1" G         | 392 | 232 | 262 | 0,024 | 15,9 |
| K 35/40 T | IE3           | 342                | 180 | 76 | 148 | 72 | 15 | 148 | 9,5 | 235 | 100 | 135 | 1" G                        | 1" G         | 392 | 232 | 262 | 0,024 | 15   |
| K 35/40 T | IE2           | 342                | 180 | 76 | 148 | 72 | 15 | 148 | 9,5 | 235 | 100 | 135 | 1" G                        | 1" G         | 392 | 232 | 262 | 0,024 | 15   |

## K 45/50 - TWIN-IMPELLER PUMPS

Pumped liquid temperature range: from -10 °C to +50°C - Maximum ambient temperature: +40°C



The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

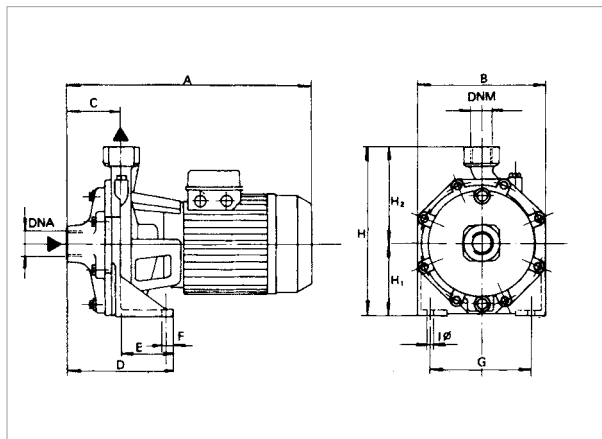


| MODEL     | POWER INPUT<br>50 Hz | P1<br>MAX kW | P2 NOMINAL |     | In<br>A | MOTOR<br>TYPE | Ist<br>A | rpm<br>n. 1/min. | CAPACITOR |     |
|-----------|----------------------|--------------|------------|-----|---------|---------------|----------|------------------|-----------|-----|
|           |                      |              | kW         | HP  |         |               |          |                  | μF        | Vc  |
| K 45/50 M | 1 x 220 - 240 V ~    | 1,86         | 1,1        | 1,5 | 8,3     | -             | 29       | 2800             | 31,5      | 450 |
| K 45/50 T | 3 x 230 - 400 V ~    | 1,8          | 1,1        | 1,5 | 5,9/3,4 | IE3           | 26,9     | 2850             | -         | -   |
| K 45/50 T | 3 x 230 - 400 V ~    | 2            | 1,1        | 1,5 | 7,2/4   | IE2           | 31,1-18  | 2850             | -         | -   |

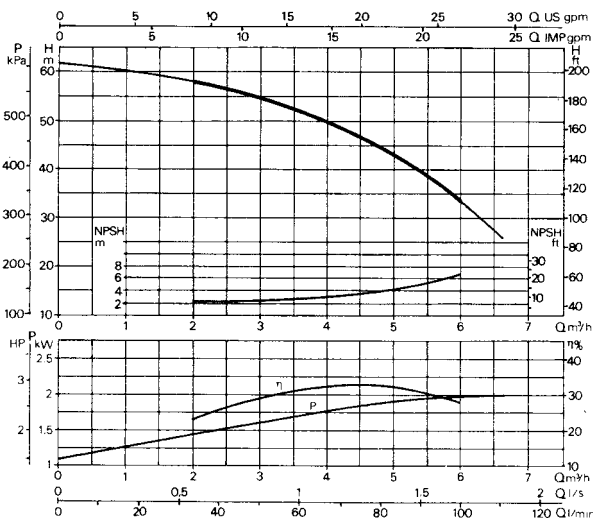
| MODEL     | MOTOR<br>TYPE | PACKING DIMENSIONS |     |    |     |    |    |     |      |     |     |     | VOLUME<br>(m <sup>3</sup> ) | WEIGHT<br>kg |     |     |     |       |      |
|-----------|---------------|--------------------|-----|----|-----|----|----|-----|------|-----|-----|-----|-----------------------------|--------------|-----|-----|-----|-------|------|
|           |               | A                  | B   | C  | D   | E  | F  | G   | ØI   | H   | H1  | H2  |                             |              | DNA | DNM | L/A | L/B   | H    |
| K 45/50 M | -             | 370                | 210 | 75 | 144 | 69 | 15 | 165 | 11,5 | 268 | 118 | 150 | 1 1/4" G                    | 1" G         | 415 | 234 | 295 | 0,028 | 23,3 |
| K 45/50 T | IE3           | 370                | 210 | 75 | 144 | 69 | 15 | 165 | 11,5 | 268 | 118 | 150 | 1 1/4" G                    | 1" G         | 415 | 234 | 295 | 0,028 | 22,5 |
| K 45/50 T | IE2           | 370                | 210 | 75 | 144 | 69 | 15 | 165 | 11,5 | 268 | 118 | 150 | 1 1/4" G                    | 1" G         | 415 | 234 | 295 | 0,028 | 22,5 |

## K 55/50 - TWIN-IMPELLER PUMPS

Pumped liquid temperature range: from -15 °C to +110 °C - Maximum ambient temperature: +40°C



The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

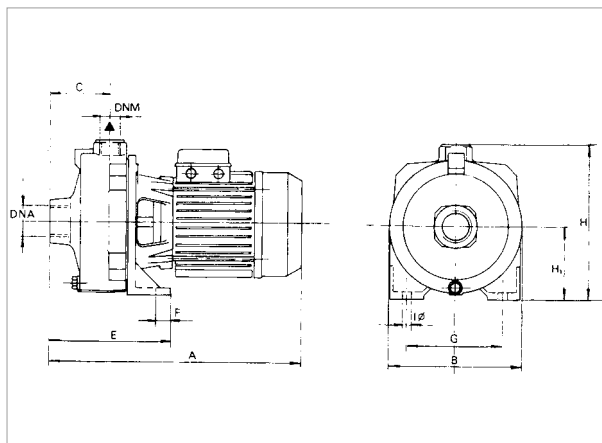


| MODEL     | POWER INPUT<br>50 Hz | P1<br>MAX kW | P2 NOMINAL |     | In<br>A | MOTOR<br>TYPE | Ist<br>A  | rpm<br>n. 1/min. | CAPACITOR |     |
|-----------|----------------------|--------------|------------|-----|---------|---------------|-----------|------------------|-----------|-----|
|           |                      |              | kW         | HP  |         |               |           |                  | μF        | Vc  |
| K 55/50 M | 1 x 220 - 240 V ~    | 2,7          | 1,85       | 2,5 | 12,8    | -             | 48        | 2850             | 40        | 450 |
| K 55/50 T | 3 x 220 - 400 V ~    | 2,4          | 1,85       | 2,5 | 7,4/4,3 | IE3           | 26,4      | 2850             | -         | -   |
| K 55/50 T | 3 x 230 - 400 V ~    | 2,5          | 1,85       | 2,5 | 8,4-4,8 | IE2           | 37,6-21,7 | 2850             | -         | -   |

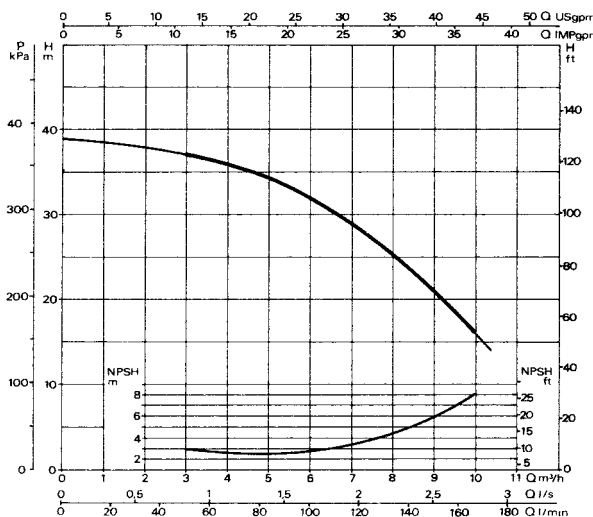
| MODEL     | MOTOR<br>TYPE | PACKING DIMENSIONS |     |    |     |    |    |     |      |     |     |     | VOLUME<br>(m <sup>3</sup> ) | WEIGHT<br>kg |     |     |     |       |      |
|-----------|---------------|--------------------|-----|----|-----|----|----|-----|------|-----|-----|-----|-----------------------------|--------------|-----|-----|-----|-------|------|
|           |               | A                  | B   | C  | D   | E  | F  | G   | ØI   | H   | H1  | H2  |                             |              | DNA | DNM | L/A | L/B   | H    |
| K 55/50 M | -             | 370                | 210 | 75 | 144 | 69 | 15 | 165 | 11,5 | 268 | 118 | 150 | 1 1/2" G                    | 1" G         | 415 | 234 | 295 | 0,032 | 27,2 |
| K 55/50 T | IE3           | 370                | 210 | 75 | 144 | 69 | 15 | 165 | 11,5 | 268 | 118 | 150 | 1 1/2" G                    | 1" G         | 415 | 234 | 295 | 0,032 | 23,9 |
| K 55/50 T | IE2           | 370                | 210 | 75 | 144 | 69 | 15 | 165 | 11,5 | 268 | 118 | 150 | 1 1/2" G                    | 1" G         | 415 | 234 | 295 | 0,032 | 23,9 |

## K 35/100 - TWIN-IMPELLER PUMPS

Pumped liquid temperature range: from -10 °C to +50°C - Maximum ambient temperature: +40°C



The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

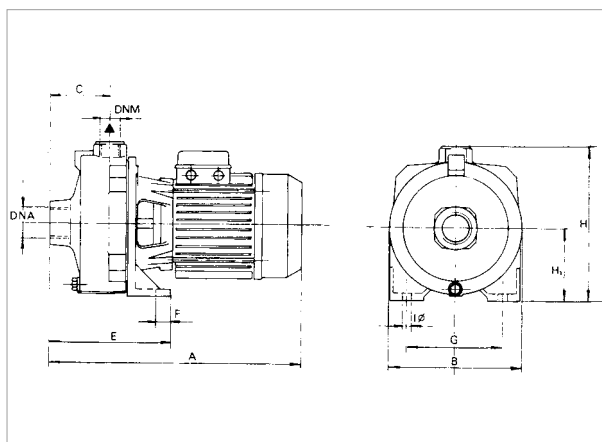


| MODEL      | POWER INPUT<br>50 Hz | P1<br>MAX kW | P2 NOMINAL |     | In<br>A | MOTOR<br>TYPE | Ist<br>A | rpm<br>n. 1/min. | CAPACITOR |     |
|------------|----------------------|--------------|------------|-----|---------|---------------|----------|------------------|-----------|-----|
|            |                      |              | kW         | HP  |         |               |          |                  | μF        | Vc  |
| K 35/100 M | 1 x 220 - 240 V ~    | 1,56         | 1,1        | 1,5 | 7,1     | -             | 33       | 2780             | 25        | 450 |
| K 35/100 T | 3 x 230 - 400 V ~    | 1,6          | 1,1        | 1,5 | 5,5/3,2 | IE3           | 26,4     | 2850             | -         | -   |
| K 35/100 T | 3 x 230 - 400 V ~    | 1,65         | 1,1        | 1,5 | 6,5-3,5 | IE2           | 28,9     | 2850             | -         | -   |

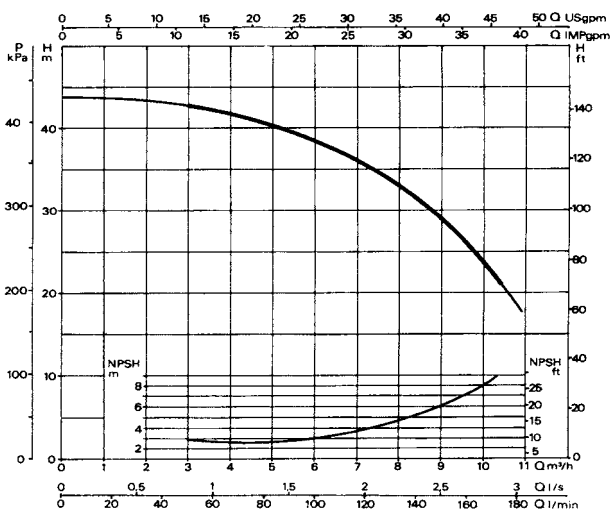
| MODEL      | MOTOR<br>TYPE | PACKING DIMENSIONS |     |    |     |    |     |    |     |     |     |     | VOLUME<br>(m <sup>3</sup> ) | WEIGHT<br>kg |     |     |     |       |    |
|------------|---------------|--------------------|-----|----|-----|----|-----|----|-----|-----|-----|-----|-----------------------------|--------------|-----|-----|-----|-------|----|
|            |               | A                  | B   | C  | E   | F  | G   | ØI | H   | H1  | DNA | DNM |                             |              | L/A | L/B | H   |       |    |
| K 35/100 M | -             | 387                | 205 | 88 | 169 | 20 | 145 | 11 | 233 | 108 | 108 | 110 | 1 1/2" G                    | 1" G         | 415 | 234 | 295 | 0,028 | 22 |
| K 35/100 T | IE3           | 387                | 205 | 88 | 169 | 20 | 145 | 11 | 233 | 108 | 108 | 110 | 1 1/2" G                    | 1" G         | 415 | 234 | 295 | 0,028 | 21 |
| K 35/100 T | IE2           | 387                | 205 | 88 | 169 | 20 | 145 | 11 | 233 | 108 | 108 | 110 | 1 1/2" G                    | 1" G         | 415 | 234 | 295 | 0,028 | 21 |

## K 40/100 - TWIN-IMPELLER PUMPS

Pumped liquid temperature range: from -10°C to 50°C - Maximum ambient temperature: +40°C



The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

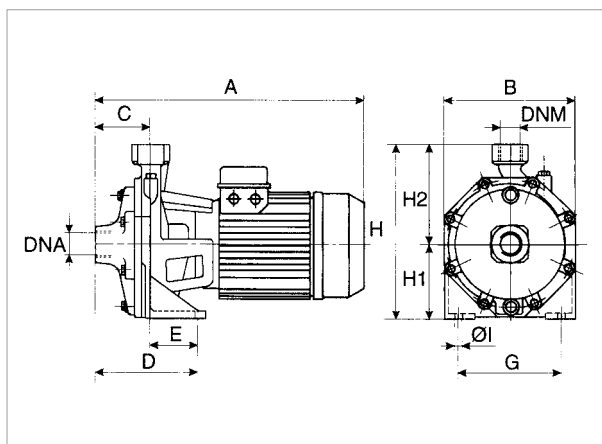


| MODEL      | POWER INPUT<br>50 Hz | P1<br>MAX kW | P2 NOMINAL |     | In<br>A | MOTOR<br>TYPE | Ist<br>A | rpm<br>n. 1/min. | CAPACITOR |     |
|------------|----------------------|--------------|------------|-----|---------|---------------|----------|------------------|-----------|-----|
|            |                      |              | kW         | HP  |         |               |          |                  | μF        | Vc  |
| K 40/100 M | 1 x 220 - 240 V ~    | 2            | 1,85       | 2,5 | 9       | -             | 45       | 2850             | 40        | 450 |
| K 40/100 T | 3 x 230 - 400 V ~    | 1,8          | 1,85       | 2,5 | 6/3,5   | IE3           | 26,4     | 2850             | -         | -   |
| K 40/100 T | 3 x 230 - 400 V ~    | 2            | 1,85       | 2,5 | 7/4     | IE2           | 28,9     | 2850             | -         | -   |

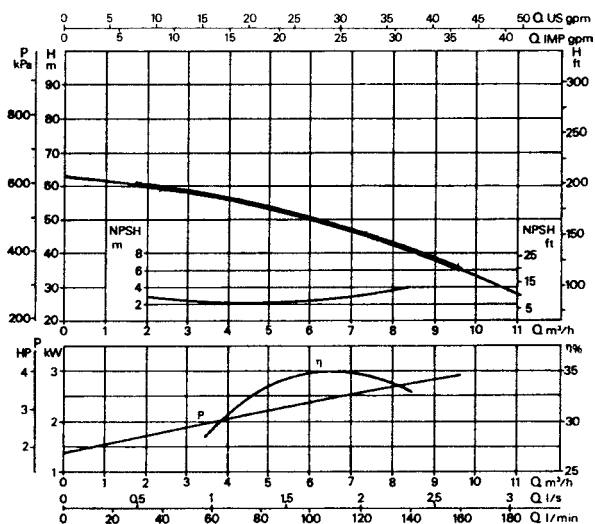
| MODEL      | MOTOR<br>TYPE | A   | B   | C  | D   | E  | F  | G   | ØI | H   | H1  | DNA      | DNM  | PACKING DIMENSIONS |     |     | VOLUME<br>(m <sup>3</sup> ) | WEIGHT<br>kg |
|------------|---------------|-----|-----|----|-----|----|----|-----|----|-----|-----|----------|------|--------------------|-----|-----|-----------------------------|--------------|
|            |               |     |     |    |     |    |    |     |    |     |     |          |      | L/A                | L/B | H   |                             |              |
| K 40/100 M | -             | 461 | 205 | 88 | 179 | 20 | 20 | 145 | 11 | 233 | 108 | 1 1/2" G | 1" G | 510                | 234 | 285 | 0,034                       | 25,9         |
| K 40/100 T | IE3           | 387 | 205 | 88 | 179 | 20 | 20 | 145 | 11 | 233 | 108 | 1 1/2" G | 1" G | 415                | 234 | 285 | 0,028                       | 22           |
| K 40/100 T | IE2           | 387 | 205 | 88 | 179 | 20 | 20 | 145 | 11 | 233 | 108 | 1 1/2" G | 1" G | 415                | 234 | 295 | 0,028                       | 22           |

## K 55/100 - TWIN-IMPELLER PUMPS

Pumped liquid temperature range: from -10 °C to +50°C - Maximum ambient temperature: +40°C



The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

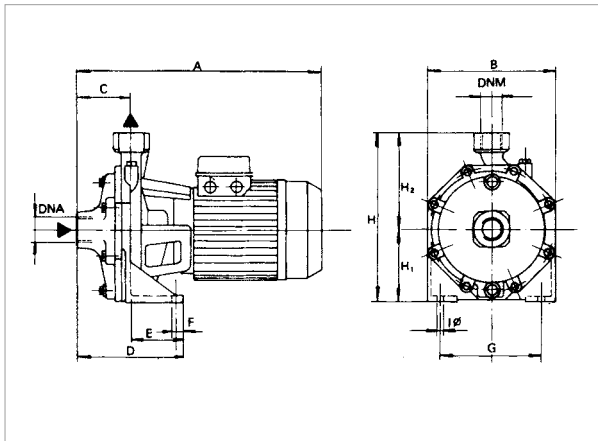


| MODEL      | POWER INPUT<br>50 Hz | P1<br>MAX kW | P2 NOMINAL |    | In<br>A  | MOTOR<br>TYPE | Ist<br>A | rpm<br>n. 1/min. | CAPACITOR |     |
|------------|----------------------|--------------|------------|----|----------|---------------|----------|------------------|-----------|-----|
|            |                      |              | kW         | HP |          |               |          |                  | μF        | Vc  |
| K 55/100 M | 1 x 220 - 240 V ~    | 3,4          | 2,2        | 3  | 14,9     | -             | 50       | 2900             | 80        | 450 |
| K 55/100 T | 3 x 230 - 400 V ~    | 3,7          | 2,2        | 3  | 11,4/6,6 | IE3           | 44,2     | 2850             | -         | -   |
| K 55/100 T | 3 x 230 - 400 V ~    | 3,9          | 2,2        | 3  | 13,7/7,9 | IE2           | 67,5-39  | 2850             | -         | -   |

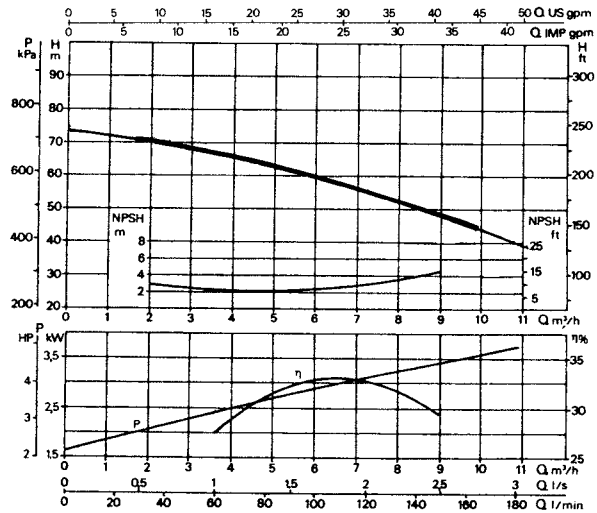
| MODEL      | MOTOR<br>TYPE | A   | B   | C  | D   | E  | F  | G   | ØI | H     | H1  | H2    | DNA      | DNM  | PACKING DIMENSIONS |     |     | VOLUME<br>(m <sup>3</sup> ) | WEIGHT<br>kg |
|------------|---------------|-----|-----|----|-----|----|----|-----|----|-------|-----|-------|----------|------|--------------------|-----|-----|-----------------------------|--------------|
|            |               |     |     |    |     |    |    |     |    |       |     |       |          |      | L/A                | L/B | H   |                             |              |
| K 55/100 M | -             | 450 | 256 | 88 | 160 | 72 | 18 | 200 | 14 | 312,5 | 140 | 172,5 | 1 1/2" G | 1" G | 500                | 274 | 333 | 0,045                       | 40           |
| K 55/100 T | IE3           | 450 | 256 | 88 | 160 | 72 | 18 | 200 | 14 | 312,5 | 140 | 172,5 | 1 1/2" G | 1" G | 500                | 274 | 333 | 0,045                       | 19           |
| K 55/100 T | IE2           | 450 | 256 | 88 | 160 | 72 | 18 | 200 | 14 | 312,5 | 140 | 172,5 | 1 1/2" G | 1" G | 500                | 274 | 333 | 0,045                       | 38,1         |

## K 66/100 - TWIN-IMPELLER PUMPS

Pumped liquid temperature range: from -15 °C to +110 °C - Maximum ambient temperature: +40°C



The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

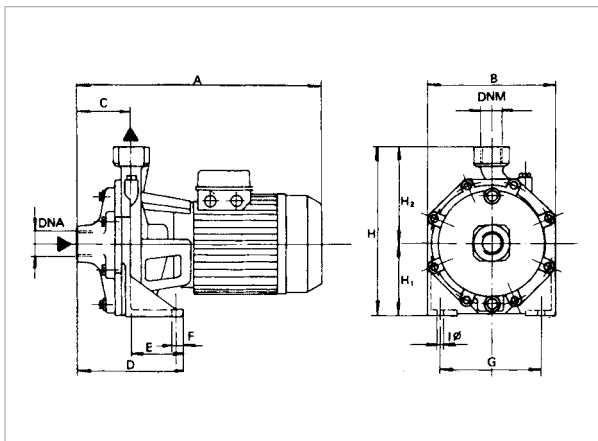


| MODEL      | POWER INPUT<br>50 Hz | P1<br>MAX kW | P2 NOMINAL |    | In<br>A  | MOTOR<br>TYPE | Ist<br>A | rpm<br>n. 1/min. | CAPACITOR |     |
|------------|----------------------|--------------|------------|----|----------|---------------|----------|------------------|-----------|-----|
|            |                      |              | kW         | HP |          |               |          |                  | μF        | Vc  |
| K 66/100 M | 1 x 220 - 240 V ~    | 4,4          | 3          | 4  | 19,5     | -             | 80       | 2900             | 160       | 450 |
| K 66/100 T | 3 x 230 - 400 V ~    | 4,7          | 3,7        | 5  | 14,7/8,5 | IE3           | 51,6     | 2850             | -         | -   |
| K 66/100 T | 3 x 230 - 400 V ~    | 4,7          | 3          | 4  | 14,6/8,4 | IE2           | 103,8-60 | 2850             | -         | -   |

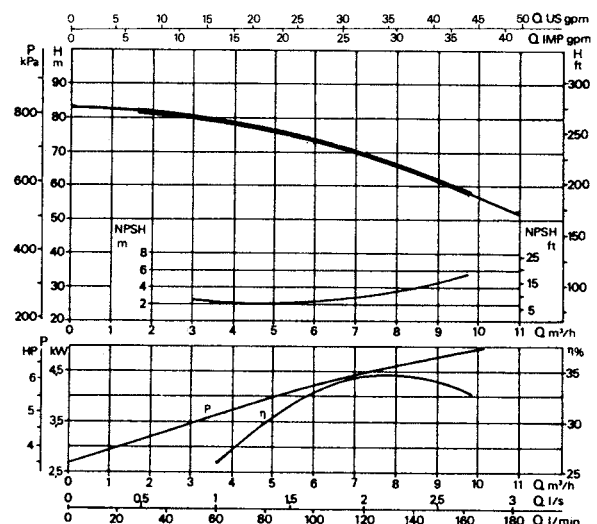
| MODEL      | MOTOR<br>TYPE | A   | B   | C  | D   | E  | F  | G   | ØI | H     | H1  | H2    | DNA   | DNM  | PACKING DIMENSIONS |     |     | VOLUME<br>(m <sup>3</sup> ) | WEIGHT<br>Kg |
|------------|---------------|-----|-----|----|-----|----|----|-----|----|-------|-----|-------|-------|------|--------------------|-----|-----|-----------------------------|--------------|
|            |               |     |     |    |     |    |    |     |    |       |     |       |       |      | L/A                | L/B | H   |                             |              |
| K 66/100 M | -             | 450 | 256 | 88 | 160 | 72 | 18 | 200 | 14 | 312,5 | 140 | 172,5 | 1½" G | 1" G | 500                | 274 | 333 | 0,045                       | 44           |
| K 66/100 T | IE3           | 450 | 256 | 88 | 160 | 72 | 18 | 200 | 14 | 312,5 | 140 | 172,5 | 1½" G | 1" G | 500                | 274 | 333 | 0,045                       | 40,7         |
| K 66/100 T | IE2           | 450 | 256 | 88 | 160 | 72 | 18 | 200 | 14 | 312,5 | 140 | 172,5 | 1½" G | 1" G | 500                | 274 | 333 | 0,045                       | 40,7         |

## K 90/100 - TWIN-IMPELLER PUMPS

Pumped liquid temperature range: from -15°C to +110°C - Maximum ambient temperature: +40°C



The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

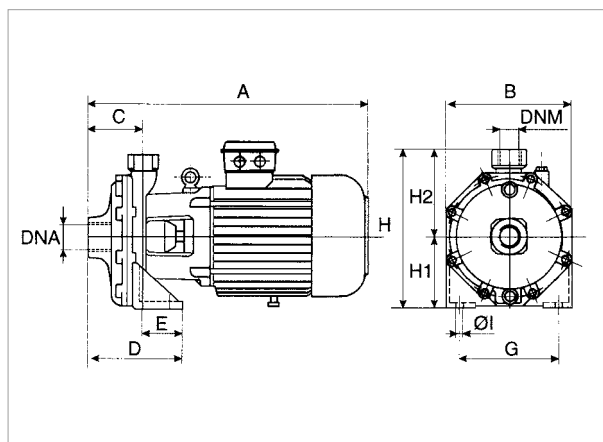


| MODEL      | POWER INPUT<br>50 Hz | P1<br>MAX kW | P2 NOMINAL |     | In<br>A  | MOTOR<br>TYPE | Ist<br>A | rpm<br>n. 1/min. | CAPACITOR |     |
|------------|----------------------|--------------|------------|-----|----------|---------------|----------|------------------|-----------|-----|
|            |                      |              | kW         | HP  |          |               |          |                  | μF        | Vc  |
| K 90/100 M | 1 x 220 - 240 V ~    | 5            | 4          | 5,5 | 21,9     | -             | 110      | 2900             | 160       | 450 |
| K 90/100 T | 3 x 230 - 400 V ~    | 5,6          | 3,7        | 5   | 16,8/9,7 | IE3           | 51,6     | 2850             | -         | -   |
| K 90/100 T | 3 x 230 - 400 V ~    | 5,4          | 4          | 5,5 | 16,5/9,5 | IE2           | 103,8-60 | 2850             | -         | -   |

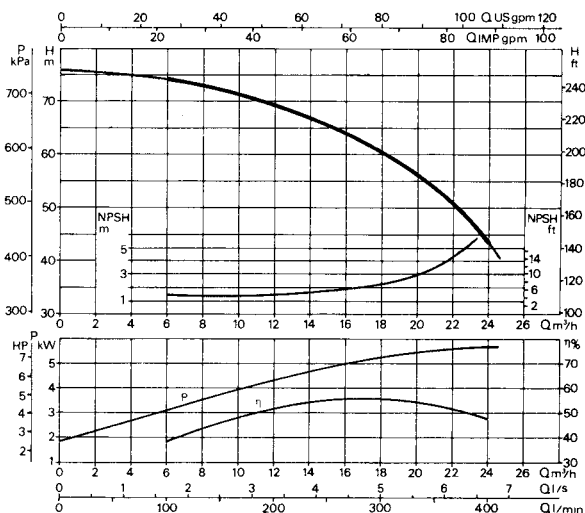
| MODEL      | MOTOR<br>TYPE | A   | B   | C  | D   | E  | F  | G   | ØI | H     | H1  | H2    | DNA   | DNM  | PACKING DIMENSIONS |     |     | VOLUME<br>(m <sup>3</sup> ) | WEIGHT<br>Kg |
|------------|---------------|-----|-----|----|-----|----|----|-----|----|-------|-----|-------|-------|------|--------------------|-----|-----|-----------------------------|--------------|
|            |               |     |     |    |     |    |    |     |    |       |     |       |       |      | L/A                | L/B | H   |                             |              |
| K 90/100 M | -             | 450 | 256 | 88 | 160 | 72 | 18 | 200 | 14 | 312,5 | 140 | 172,5 | 1½" G | 1" G | 500                | 274 | 333 | 0,045                       | 46           |
| K 90/100 T | IE3           | 450 | 256 | 88 | 160 | 72 | 18 | 200 | 14 | 312,5 | 140 | 172,5 | 1½" G | 1" G | 500                | 274 | 333 | 0,045                       | 44           |
| K 90/100 T | IE2           | 450 | 256 | 88 | 160 | 72 | 18 | 200 | 14 | 312,5 | 140 | 172,5 | 1½" G | 1" G | 500                | 274 | 333 | 0,045                       | 44           |

## K 70/300 - TWIN-IMPELLER PUMPS

Pumped liquid temperature range: from -15 °C to +110 °C - Maximum ambient temperature: +40°C



The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.



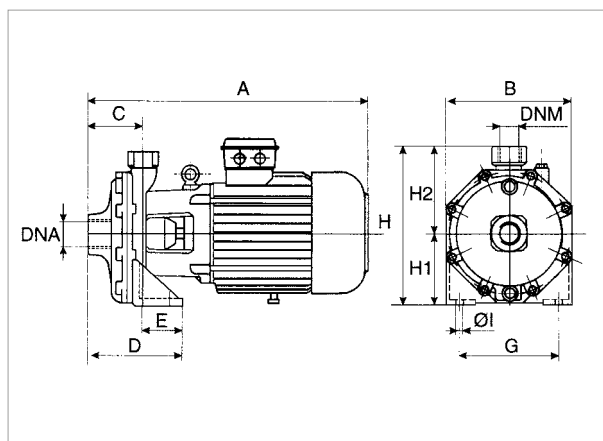
| MODEL             | POWER INPUT<br>50 Hz | P1<br>MAX kW | P2 NOMINAL |     | In<br>A | MOTOR<br>TYPE | Ist<br>A | rpm<br>n. 1/min. |
|-------------------|----------------------|--------------|------------|-----|---------|---------------|----------|------------------|
|                   |                      |              | kW         | HP  |         |               |          |                  |
| <b>K 70/300 T</b> | 3 x 400 V ~ 1        | 6,9          | 5,5        | 7,5 | 11,6    | IE3           | 77,9     | 2900             |

| MODEL             | A   | B   | C   | D   | E  | F  | G   | ØI | H   | H1  | H2  | DNA  | DNM      | PACKING DIMENSIONS |     |     | VOLUME<br>(m <sup>3</sup> ) | WEIGHT<br>Kg |
|-------------------|-----|-----|-----|-----|----|----|-----|----|-----|-----|-----|------|----------|--------------------|-----|-----|-----------------------------|--------------|
|                   |     |     |     |     |    |    |     |    |     |     |     |      |          | L/A                | L/B | H   |                             |              |
| <b>K 70/300 T</b> | 595 | 270 | 122 | 182 | 60 | 20 | 210 | 14 | 340 | 160 | 180 | 2" G | 1 1/4" G | 680                | 330 | 470 | 0,106                       | 72           |

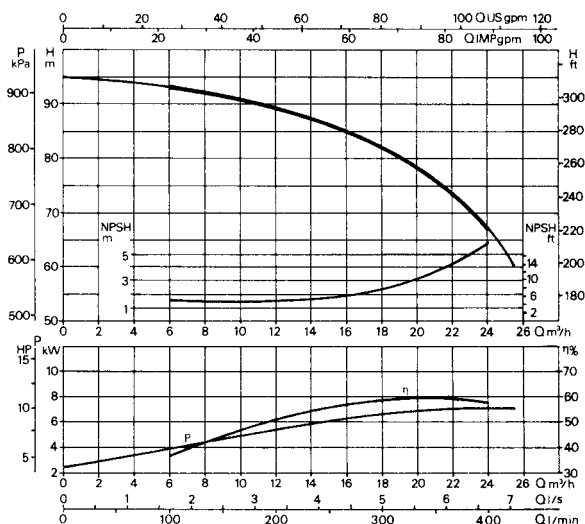
<sup>1</sup> star starting is possible (A)

## K 80/300 - TWIN-IMPELLER PUMPS

Pumped liquid temperature range: from -15 °C to +110 °C - Maximum ambient temperature: +40°C



The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.



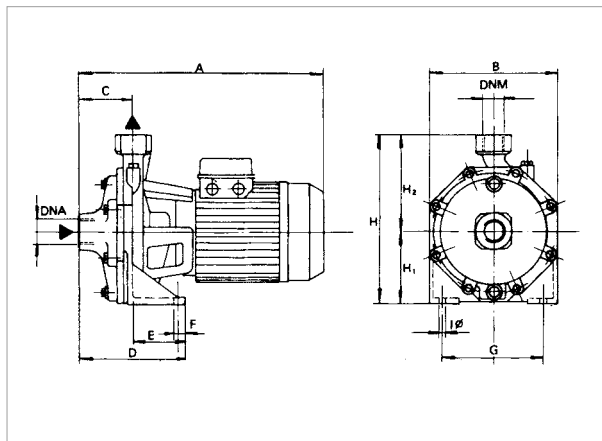
| MODEL             | POWER INPUT<br>50 Hz | P1<br>MAX kW | P2 NOMINAL |    | In<br>A | MOTOR<br>TYPE | Ist<br>A | rpm<br>n. 1/min. |
|-------------------|----------------------|--------------|------------|----|---------|---------------|----------|------------------|
|                   |                      |              | kW         | HP |         |               |          |                  |
| <b>K 80/300 T</b> | 3 x 400 V ~ 1        | 9,1          | 7,5        | 10 | 15,2    | IE3           | 112      | 2910             |

| MODEL             | A   | B   | C   | D   | E  | F  | G   | ØI | H   | H1  | H2  | DNA  | DNM      | PACKING DIMENSIONS |     |     | VOLUME<br>(m <sup>3</sup> ) | WEIGHT<br>Kg |
|-------------------|-----|-----|-----|-----|----|----|-----|----|-----|-----|-----|------|----------|--------------------|-----|-----|-----------------------------|--------------|
|                   |     |     |     |     |    |    |     |    |     |     |     |      |          | L/A                | L/B | H   |                             |              |
| <b>K 80/300 T</b> | 595 | 270 | 122 | 182 | 60 | 20 | 210 | 14 | 340 | 160 | 180 | 2" G | 1 1/4" G | 680                | 330 | 470 | 0,106                       | 78,5         |

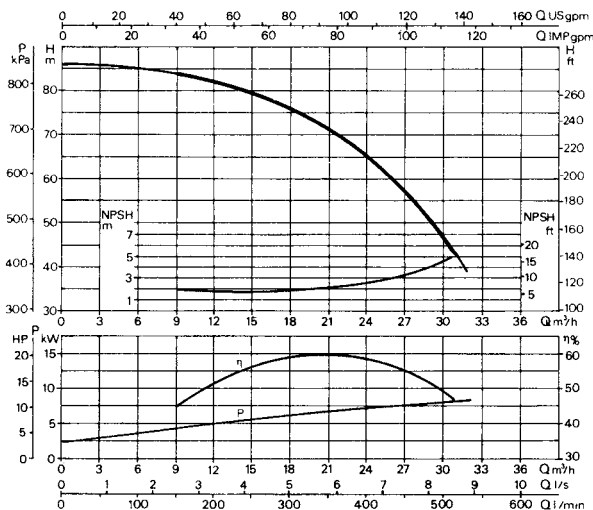
<sup>1</sup> star starting is possible (A)

## K 70/400 - TWIN-IMPELLER PUMPS

Pumped liquid temperature range: from -15 °C to +110 °C - Maximum ambient temperature: +40°C



The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.



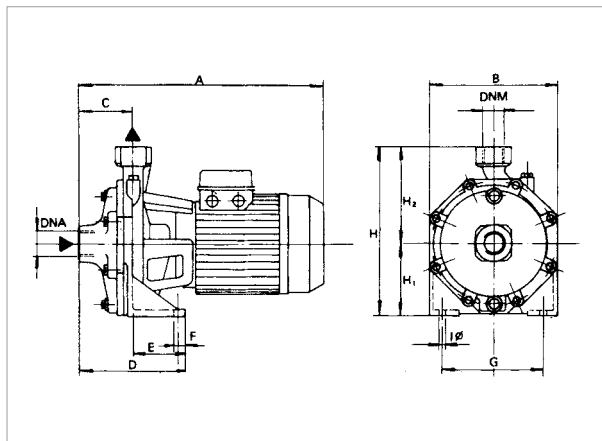
| MODEL             | POWER INPUT<br>50 Hz | P1<br>MAX kW | P2 NOMINAL |      | In<br>A | MOTOR<br>TYPE | Ist<br>A | rpm<br>n. 1/min. |
|-------------------|----------------------|--------------|------------|------|---------|---------------|----------|------------------|
|                   |                      |              | kW         | HP   |         |               |          |                  |
| <b>K 70/400 T</b> | 3 x 400 V ~ 1        | 9,2          | 9,2        | 12,5 | 15,5    | IE3           | 135      | 2930             |

| MODEL             | A   | B   | C   | D   | E  | F  | G   | Ø  | H   | H1  | H2  | DNA  | DNM      | PACKING DIMENSIONS |     |     | VOLUME<br>(m <sup>3</sup> ) | WEIGHT<br>Kg |
|-------------------|-----|-----|-----|-----|----|----|-----|----|-----|-----|-----|------|----------|--------------------|-----|-----|-----------------------------|--------------|
|                   |     |     |     |     |    |    |     |    |     |     |     |      |          | L/A                | L/B | H   |                             |              |
| <b>K 70/400 T</b> | 635 | 270 | 122 | 182 | 60 | 20 | 210 | 14 | 340 | 160 | 180 | 2" G | 1 1/4" G | 680                | 330 | 470 | 0,106                       | 74           |

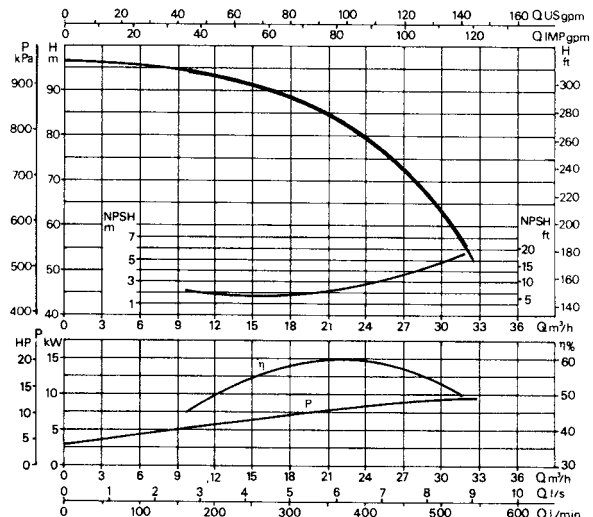
<sup>1</sup> star starting is possible (A)

## K 80/400 - TWIN-IMPELLER PUMPS

Pumped liquid temperature range: from -15°C to +110°C - Maximum ambient temperature: +40°C



The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.



| MODEL             | POWER INPUT<br>50 Hz | P1<br>MAX kW | P2 NOMINAL |    | In<br>A | MOTOR<br>TYPE | Ist<br>A | rpm<br>n. 1/min. |
|-------------------|----------------------|--------------|------------|----|---------|---------------|----------|------------------|
|                   |                      |              | kW         | HP |         |               |          |                  |
| <b>K 80/400 T</b> | 3 x 400 V ~ 1        | 10,8         | 11         | 15 | 18,5    | IE3           | 193      | 2940             |

| MODEL             | A   | B   | C   | D   | E  | F  | G   | Ø  | H   | H1  | H2  | DNA  | DNM      | PACKING DIMENSIONS |     |     | VOLUME<br>(m <sup>3</sup> ) | WEIGHT<br>Kg |
|-------------------|-----|-----|-----|-----|----|----|-----|----|-----|-----|-----|------|----------|--------------------|-----|-----|-----------------------------|--------------|
|                   |     |     |     |     |    |    |     |    |     |     |     |      |          | L/A                | L/B | H   |                             |              |
| <b>K 80/400 T</b> | 635 | 270 | 122 | 182 | 60 | 20 | 210 | 14 | 340 | 160 | 180 | 2" G | 1 1/4" G | 680                | 330 | 470 | 0,106                       | 79           |

<sup>1</sup> star starting is possible (A)



### TECHNICAL DATA

**Operating range:** from 3 to 45 m<sup>3</sup>/h  
**Maximum head:** 24 m  
**Maximum operating pressure:** 6.5 bar  
**Pumped liquid temperature range:** from -10 to +55 °C  
**Maximum glycol percentage:** up to 40 %  
**Maximum ambient temperature:** 65 °C  
**Motor protection:** IP55  
**Insulation class:** F (copper wire with H class insulation)  
**Standard voltage:** three-phase 230-400 V / 50 Hz  
**Installation:** fixed or portable, horizontal position  
**Special versions on request:**  
 other power input voltages and/or frequencies

### APPLICATIONS

Pumping of water or other non-aggressive, non-explosive liquids, free from solid particles or fibres. Particularly suited for pumping water containing glycol for air conditioning systems.

### PLUS

**Versatile:** thanks to the high quality construction materials used and the oversized motors, the KC and KCV range can be used in environments with temperatures up to 65 °C, and glycol percentages of up to 40% of the pumped liquid.

**Reliable:** all the components have been sized to guarantee a minimum life time of at least 50,000 hours of operation (with the exception of the bearings and the mechanical seals, for which the average life guaranteed is 25,000 hours in the most demanding conditions).

**Rust-proof:** all the components in contact with the liquid are made of thermoplastic material (polypropylene or noryl reinforced), and the pump shaft is made of stainless steel (AISI 304).

**Flexible:** possibility of rotating the pump body at 90 °C for better installation flexibility. Complete hydraulics (pump body, seal holder flange, impeller, diffuser) made of fibreglass reinforced technopolymer, shaft extension in contact with the liquid made of AISI 304 stainless steel.

### CONSTRUCTION FEATURES OF THE PUMP

Silicon carbide/graphite mechanical seal, EPDM O rings

### CONSTRUCTION FEATURES OF THE MOTOR

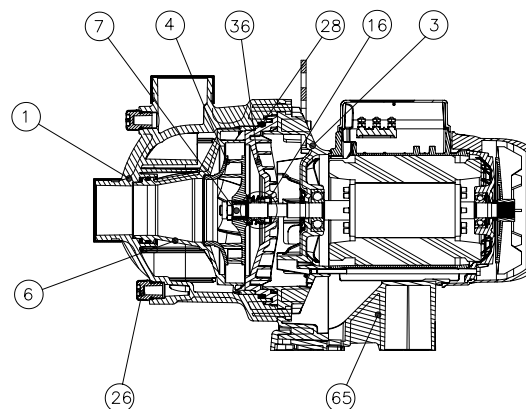
- Continuous service external ventilation asynchronous motor (S1), 2 poles  
 - Maximum ambient temperature: 65 °C

- Sealed ball bearings, resistant to water and humidity  
 - Motor construction in accordance with EN 60335-2-41.

## MATERIALS

| N. | PARTS*            | MATERIALS                          |
|----|-------------------|------------------------------------|
| 1  | PUMP BODY         | FIBREGLASS REINFORCED TECHNOPLYMER |
| 3  | SUPPORT           | DIE-CAST ALUMINIUM ALLOY           |
| 4  | IMPELLER          | FIBREGLASS REINFORCED TECHNOPLYMER |
| 6  | DIFFUSER          | FIBREGLASS REINFORCED TECHNOPLYMER |
| 7  | SHAFT             | AISI 304 STAINLESS STEEL           |
| 16 | MECHANICAL SEAL   | SILICON CARBIDE/GRAPHITE           |
| 26 | CAP               | FIBREGLASS REINFORCED TECHNOPLYMER |
| 28 | O-RING            | EPDM                               |
| 36 | SEAL HOLDING DISC | FIBREGLASS REINFORCED TECHNOPLYMER |
| 65 | BASE              | FIBREGLASS REINFORCED TECHNOPLYMER |

\* In contact with the liquid



– Denomination index:  
 (example)

KCV 300 T

KC = 2" M-GAS threaded ports  
 KCV = 2" Victaulic threaded ports

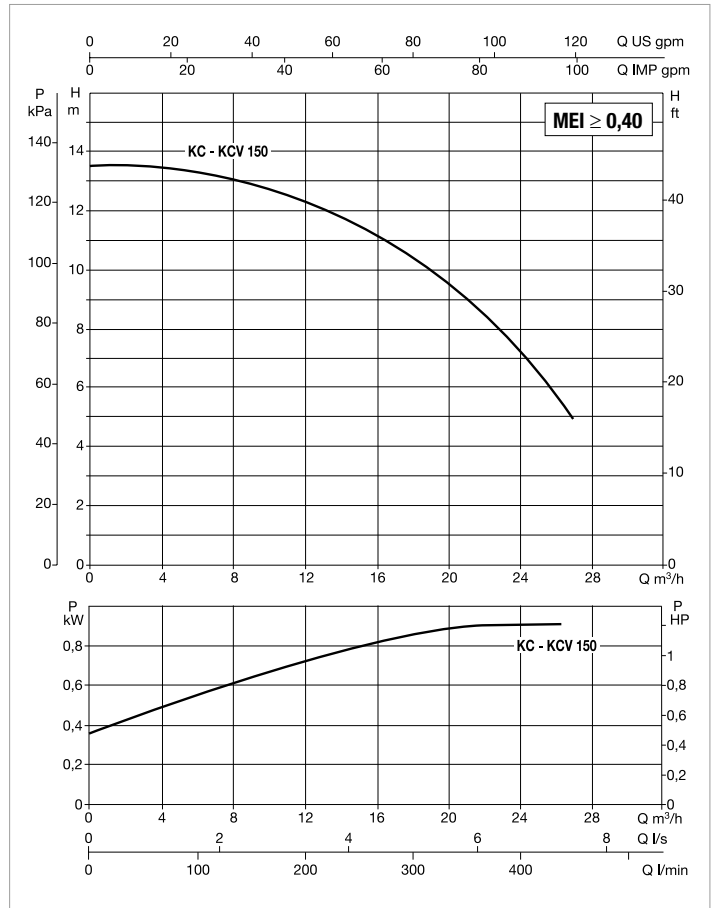
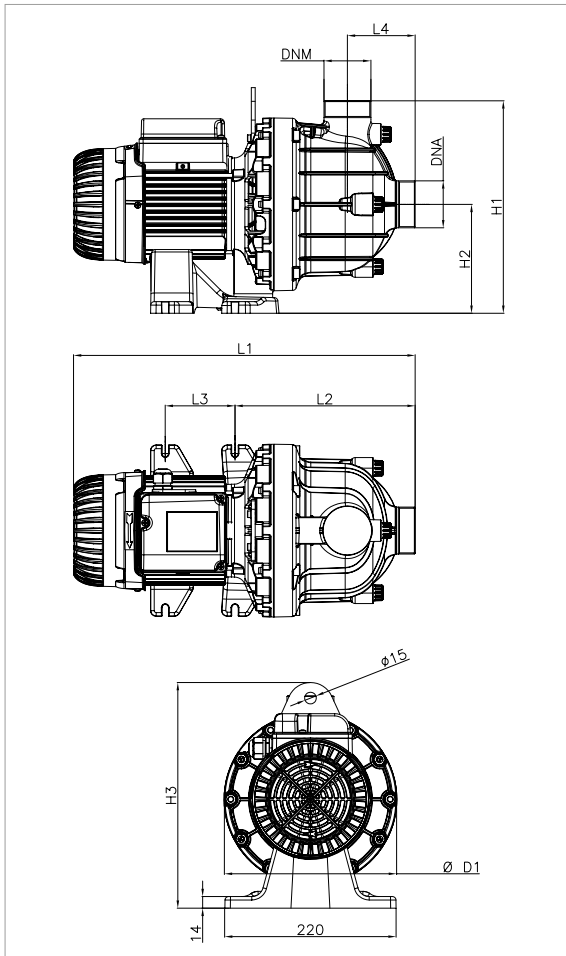
Nominal power in hp x 100

Three-phase motor



# KC / KCV 150 - COMPOSITE MATERIAL PUMPS

Pumped liquid temperature range: from -10 °C to +55 °C - Maximum ambient temperature: +65 °C



The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

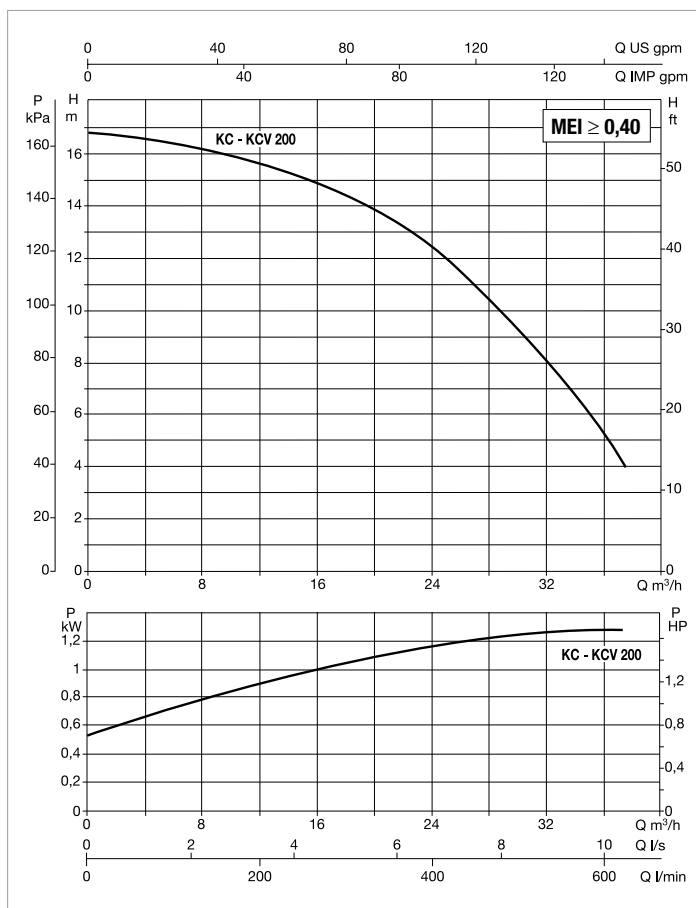
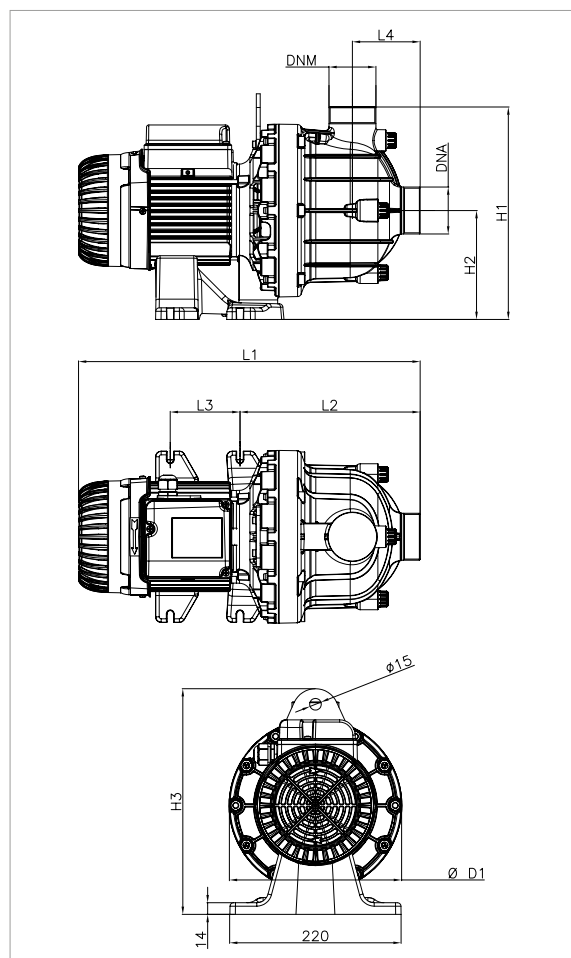
| MODEL                 | Q=m³h   | 0    | 10   | 15   | 20  | 25  |
|-----------------------|---------|------|------|------|-----|-----|
|                       | Q=l/min | 0    | 167  | 250  | 333 | 417 |
| <b>KC / KCV 150 T</b> | H (m)   | 13,6 | 12,8 | 11,5 | 9,5 | 6,5 |

| MODEL            | ELECTRICAL DATA      |             |                  |         |                                   |
|------------------|----------------------|-------------|------------------|---------|-----------------------------------|
|                  | POWER INPUT<br>50 Hz | P1 MAX<br>W | P2 NOMINAL<br>kW | In<br>A | MOTOR STARTER<br>RESISTANCE (Ohm) |
| <b>KC 150 T</b>  | 3 x 230 - 400 V ~    | 1,06        | 0,87             | 3,5/2   | 6,28                              |
| <b>KCV 150 T</b> | 3 x 230 - 400 V ~    | 1,06        | 0,87             | 3,5/2   | 6,28                              |

| MODEL            | L1  | L2  | L3 | L4 | H1  | H2  | H3  | D1  | DNA          | DNM          | PACKING DIMENSIONS |     |     | VOLUME<br>(m³) | WEIGHT<br>Kg |
|------------------|-----|-----|----|----|-----|-----|-----|-----|--------------|--------------|--------------------|-----|-----|----------------|--------------|
|                  |     |     |    |    |     |     |     |     |              |              | L/A                | L/B | H   |                |              |
| <b>KC 150 T</b>  | 439 | 231 | 90 | 87 | 273 | 140 | 290 | 222 | 2" M-GAS     | 2" M-GAS     | 510                | 300 | 320 | 0,049          | 14           |
| <b>KCV 150 T</b> | 439 | 231 | 90 | 87 | 273 | 140 | 290 | 222 | 2" Victaulic | 2" Victaulic | 510                | 300 | 320 | 0,049          | 14           |

## KC / KCV 200 - COMPOSITE MATERIAL PUMPS

Pumped liquid temperature range: from -10 °C to +55 °C - Maximum ambient temperature: +65 °C



The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

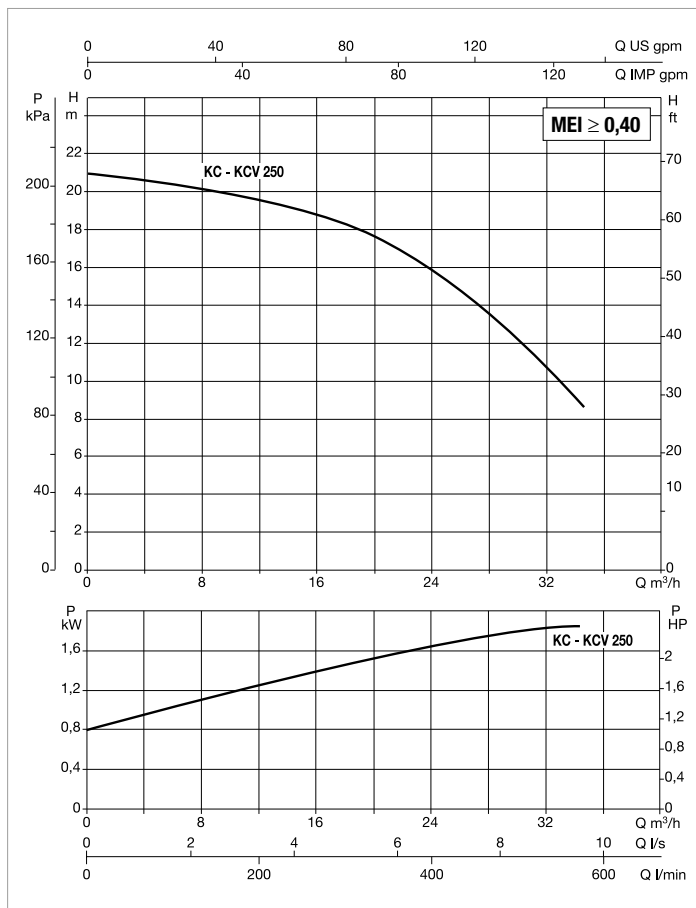
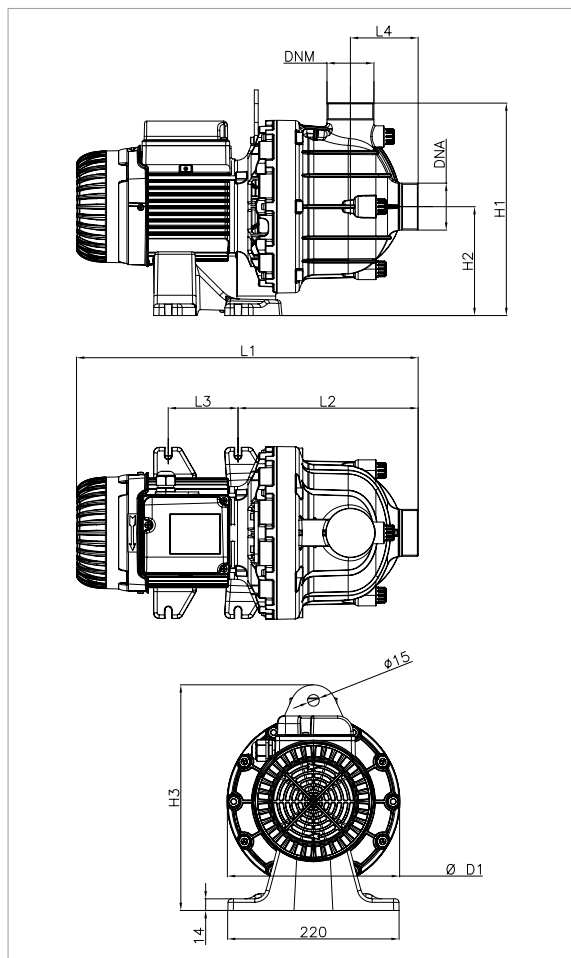
| MODEL          | Q=m <sup>3</sup> h | 0    | 10   | 15  | 20  | 25   | 30  |
|----------------|--------------------|------|------|-----|-----|------|-----|
|                | Q=l/min            | 0    | 167  | 250 | 333 | 417  | 500 |
| KC / KCV 200 T | H (m)              | 16,8 | 15,7 | 15  | 14  | 11,8 | 9   |

| MODEL     | ELECTRICAL DATA      |             |            |  |                                   |
|-----------|----------------------|-------------|------------|--|-----------------------------------|
|           | POWER INPUT<br>50 Hz | P1 MAX<br>W | P2 NOMINAL |  | MOTOR STARTER<br>RESISTANCE (Ohm) |
|           |                      |             | W          |  |                                   |
| KC 200 T  | 3 x 230 - 400 V ~    | 1,6         | 1,26       |  | 5,3/3,1                           |
| KCV 200 T | 3 x 230 - 400 V ~    | 1,6         | 1,26       |  | 5,3/3,1                           |

| MODEL     | L1  | L2  | L3 | L4 | H1  | H2  | H3  | D1  | DNA          | DNM          | PACKING DIMENSIONS |     |     | VOLUME<br>(m <sup>3</sup> ) | WEIGHT<br>Kg |
|-----------|-----|-----|----|----|-----|-----|-----|-----|--------------|--------------|--------------------|-----|-----|-----------------------------|--------------|
|           |     |     |    |    |     |     |     |     |              |              | L/A                | L/B | H   |                             |              |
| KC 200 T  | 439 | 231 | 74 | 87 | 273 | 140 | 290 | 222 | 2" M-GAS     | 2" M-GAS     | 510                | 300 | 320 | 0,049                       | 16           |
| KCV 200 T | 439 | 231 | 74 | 87 | 273 | 140 | 290 | 222 | 2" Victaulic | 2" Victaulic | 510                | 300 | 320 | 0,049                       | 16           |

# KC / KCV 250 - COMPOSITE MATERIAL PUMPS

Pumped liquid temperature range: from -10 °C to +55 °C - Maximum ambient temperature: +65 °C



The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

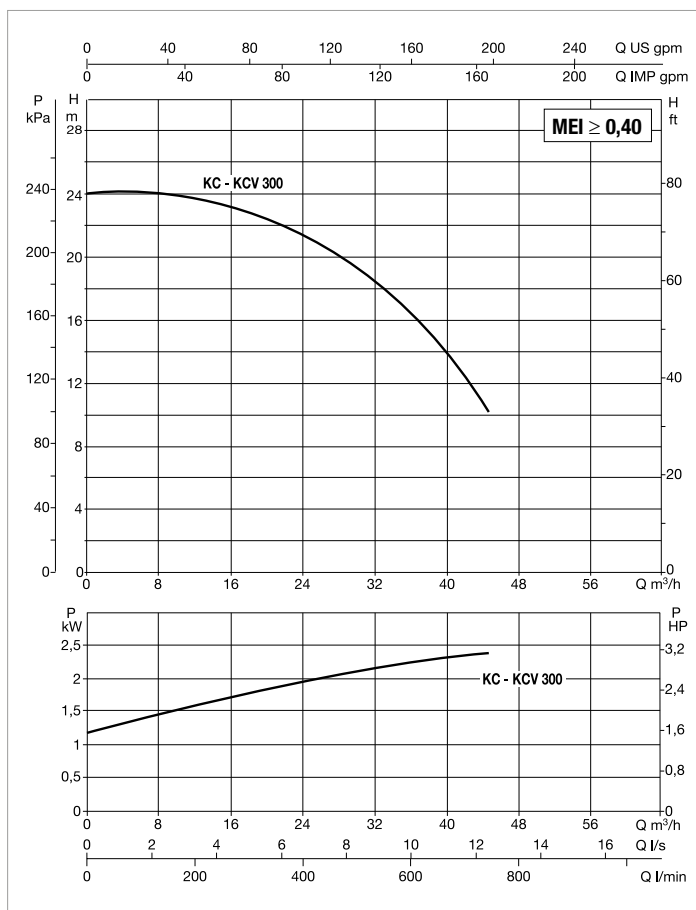
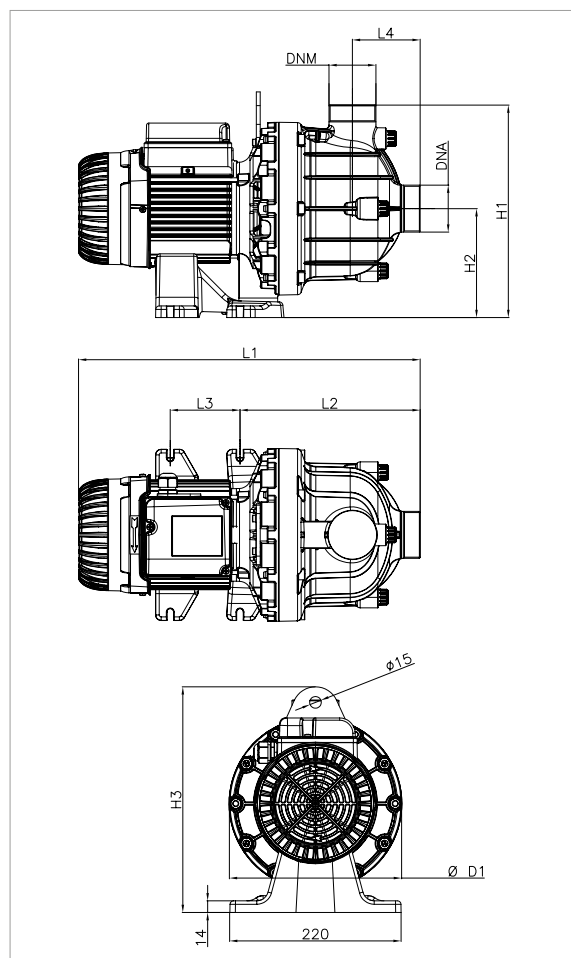
| MODEL          | Q=m³h   | 0  | 10  | 15   | 20   | 25   | 30  |
|----------------|---------|----|-----|------|------|------|-----|
|                | Q=l/min | 0  | 167 | 250  | 333  | 417  | 500 |
| KC / KCV 250 T | H (m)   | 21 | 20  | 19,1 | 17,7 | 15,5 | 12  |

| MODEL     | ELECTRICAL DATA      |             |            |         |                                   |
|-----------|----------------------|-------------|------------|---------|-----------------------------------|
|           | POWER INPUT<br>50 Hz | P1 MAX<br>W | P2 NOMINAL |         | MOTOR STARTER<br>RESISTANCE (Ohm) |
|           |                      |             | W          | In<br>A |                                   |
| KC 250 T  | 3 x 230 - 400 V ~    | 2,4         | 1,9        | 7,3/4,2 | 2,55                              |
| KCV 250 T | 3 x 230 - 400 V ~    | 2,4         | 1,9        | 7,3/4,2 | 2,55                              |

| MODEL     | L1  | L2  | L3 | L4 | H1  | H2  | H3  | D1  | DNA          | DNM          | PACKING DIMENSIONS |     |     | VOLUME<br>(mc) | WEIGHT<br>Kg |
|-----------|-----|-----|----|----|-----|-----|-----|-----|--------------|--------------|--------------------|-----|-----|----------------|--------------|
|           |     |     |    |    |     |     |     |     |              |              | L/A                | L/B | H   |                |              |
| KC 250 T  | 513 | 231 | 74 | 87 | 273 | 140 | 290 | 222 | 2" M-GAS     | 2" M-GAS     | 600                | 300 | 450 | 0,08           | 19           |
| KCV 250 T | 513 | 231 | 74 | 87 | 273 | 140 | 290 | 222 | 2" Victaulic | 2" Victaulic | 600                | 300 | 450 | 0,08           | 19           |

## KC / KCV 300 - COMPOSITE MATERIAL PUMPS

Pumped liquid temperature range: from -10 °C to +55 °C - Maximum ambient temperature: +65 °C



The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

| MODEL          | Q=m <sup>3</sup> h | 0    | 15   | 20   | 25   | 30   | 40   |
|----------------|--------------------|------|------|------|------|------|------|
|                | Q=l/min            | 0    | 250  | 333  | 417  | 500  | 667  |
| KC / KCV 300 T | H (m)              | 24,3 | 23,4 | 22,5 | 21,3 | 19,5 | 13,9 |

| MODEL     | ELECTRICAL DATA      |             |                 |                     |                                   |
|-----------|----------------------|-------------|-----------------|---------------------|-----------------------------------|
|           | POWER INPUT<br>50 Hz | P1 MAX<br>W | P2 NOMINAL<br>W | I <sub>n</sub><br>A | MOTOR STARTER<br>RESISTANCE (Ohm) |
| KC 300 T  | 3 x 230 - 400 V ~    | 2,9         | 2,56            | 8,6/5               | 1,72                              |
| KCV 300 T | 3 x 230 - 400 V ~    | 2,9         | 2,56            | 8,6/5               | 1,72                              |

| MODEL     | L1  | L2  | L3  | L4  | H1  | H2  | H3  | D1  | DNA          | DNM          | PACKING DIMENSIONS |     |     | VOLUME<br>(mc) | WEIGHT<br>Kg |
|-----------|-----|-----|-----|-----|-----|-----|-----|-----|--------------|--------------|--------------------|-----|-----|----------------|--------------|
|           |     |     |     |     |     |     |     |     |              |              | L/A                | L/B | H   |                |              |
| KC 300 T  | 563 | 282 | 177 | 114 | 355 | 170 | 320 | 300 | 2" M-GAS     | 2" M-GAS     | 700                | 400 | 520 | 0,15           | 23           |
| KCV 300 T | 563 | 282 | 177 | 114 | 355 | 170 | 320 | 300 | 2" Victaulic | 2" Victaulic | 700                | 400 | 520 | 0,15           | 23           |

# NKP-G / NKM-G

## STANDARDISED MONOBLOC PUMPS



IE3 ≥ 0,75 kW

### TECHNICAL DATA

**Rotation speed:** 1450 - 2900 1/min

**Operating range:** from 1 to 460 m<sup>3</sup>/h with head of up to 96 metres

**Pumped liquid:** clean, free of solids and abrasives, non-viscous, non-aggressive, non-crystallised and chemically neutral, with properties similar to water

**Pumped liquid temperature range:** from -10°C to +140°C

**Maximum ambient temperature:** +40 °C

**Maximum operating pressure:** 16 bar - 1600 kPa (for DN 200 max 10 bar)

**Flanging:** PN 16 DIN 2533 - PN 10 DIN 2532 for DN 200

**Protection class:** IP55

**Insulation class:** F

**Standard voltage:** 230/400 V 50 Hz up to 2,2 kW included  
400 V Δ 50 Hz above 2,2 kW

**Installation:** normally in horizontal or vertical position, provided that the motor is always above the pump

**Special executions on requests:** pumps for liquids other than water  
Other voltages and/or frequencies

### APPLICATIONS

Standardised centrifugal monobloc electric pumps with coupling, designed for a wide range of applications, such as:

- Water supply.
- Hot water circulation for the heating system.
- Circulation of cold water for air conditioning and refrigeration systems.
- Transfer of liquids in agricultural, horticultural, and industrial environments.
- Installation of pumping assemblies.

### CONSTRUCTION FEATURES OF THE PUMP

Cast iron single stage spiral body complying with DIN-EN 733 (formerly DIN 24255), cast iron support, flanges complying with DIN 2533, and DIN 2532 for DN 200. Cast iron impeller, closed and dynamically balanced, with compensation of the axial thrust through balancing holes, operation on interchangeable wear rings (on request). AISI 304 stainless steel pump shaft.

Seal device: standardised mechanical seal according to DIN 24960 in carbon/silicon carbide with EPDM OR rings.

### CONSTRUCTION FEATURES OF THE MOTOR

Closed asynchronous type motor with external ventilation, B3/B5 construction, two poles for NKP and four poles for NKM. Rotor running on ball bearings, largely oversized to ensure low noise and durability. For the protection of the motor, we recommend the use of remote overload cut-outs, in compliance with current local regulations. For liquids with densities higher than water, motors with proportionally higher powers are required.

Construction according to the standard: CEI 2-3.

IE2 motors as standard from 0,75 kW - IE3 ≥ 7,5 kW (IE2 ≥ 7,5 kW only outside the EU)

# NKP-G / NKM-G

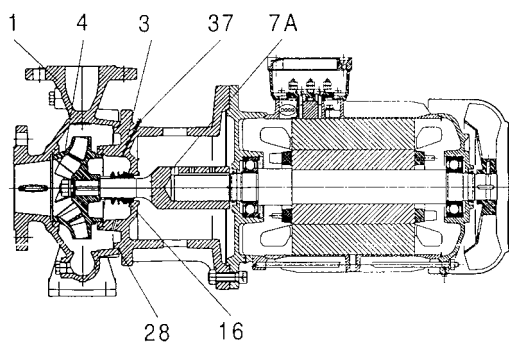
## STANDARDISED MONOBLOC PUMPS

### MATERIALS

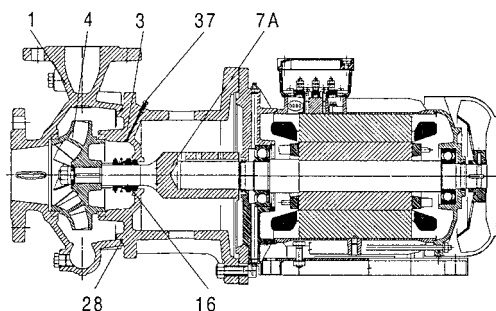
| No. | PARTS             | MATERIALS (standard version)           |
|-----|-------------------|--|
| 1   | PUMP BODY         | CAST IRON 250 UNI ISO 185              |
| 3   | SUPPORT           | CAST IRON 250 UNI ISO 185              |
| 4   | IMPELLER          | CAST IRON 250 UNI ISO 185              |
| 7A  | PUMP SHAFT        | AISI 304 STAINLESS STEEL - UNI 6900/71 |
| 16  | MECHANICAL SEAL   | CARBON/SILICON CARBIDE - EPDM          |
| 28  | OR RING           | EPDM                                   |
| 31  | SEAL SPACER       | AISI 304 STAINLESS STEEL - UNI 6900/71 |
| 36  | SEAL HOLDING DISC | CAST IRON 250 UNI ISO 185              |
| 37  | BLEED COCK        | AISI 304 STAINLESS STEEL - UNI 6900/71 |

| No. | PARTS           | MATERIALS (version on request)  |
|-----|-----------------|---|
| 4   | IMPELLER        | BRONZE GCuSn5Zn5Pb5 UNI 7013/8a-72  |
| 16  | MECHANICAL SEAL | SILICON CARBIDE/SILICON CARBIDE - EPDM<br>SILICON CARBIDE/SILICON CARBIDE - VITON<br>CARBON/SILICON CARBIDE - VITON |

VERSION WITH MOTOR UP TO 7,5 KW INCLUDED

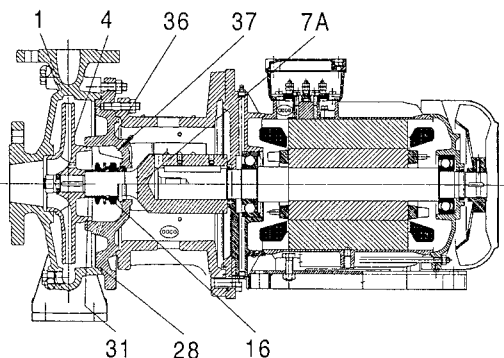


VERSION WITH MOTOR OVER 7,5 KW



VERSION FOR MODELS:

NKM-G 65-315/309/11 /4  
 NKM-G 100-315/316/22 /4, NKM-G125-250/243/15 /4,  
 NKM-G 80-200/200/4 /4,  
 NKM-G 80-250/270/11 /4, NKM-G 80-315/305/15 /4,  
 NKM-G 80-315/320/18.5 /4, NKM-G 80-315/334/22 /4,  
 NKM-G 100-250/250/11 /4, NKM-G 150-200/218/11 /4



# NKP-G / NKM-G

## STANDARDISED MONOBLOC PUMPS

### FLANGE SIZES (mm)

|              |            | Nominal diameter (DN) |     |     |     |    |     |     | Nominal diameter (DN) |     |     |  |                |
|--------------|------------|-----------------------|-----|-----|-----|----|-----|-----|-----------------------|-----|-----|--|----------------|
|              |            | DIN 2533 PN 16        |     |     |     |    |     |     | DIN 2533 PN 16        |     |     |  | DIN 2533 PN 16 |
|              | <b>DN</b>  | 32                    | 40  | 50  | 65  |    | 80  | 100 | 125                   | 150 | 200 |  |                |
|              | <b>D2</b>  | 100                   | 110 | 125 | 145 |    | 160 | 180 | 210                   | 240 | 295 |  |                |
|              | <b>D3</b>  | 140                   | 150 | 165 | 185 |    | 200 | 220 | 250                   | 285 | 340 |  |                |
| <b>HOLES</b> | <b>Ø</b>   | 18                    |     |     |     | 18 |     |     |                       | 22  |     |  |                |
|              | <b>No.</b> | 4                     |     |     |     | 8  |     |     |                       | 8   |     |  |                |

### - Denomination index: (example)

|  | NKM | - | G | 100 | - | 200 | / | 198 | / | A | W | / | BAQE | / | 5.5 | / | 4 |
|--|-----|---|---|-----|---|-----|---|-----|---|---|---|---|------|---|-----|---|---|
| NKM = 4 poles<br>NKP = 2 poles   |     |   |   |     |   |     |   |     |   |   |   |   |      |   |     |   |   |
| G = with coupling  |     |   |   |     |   |     |   |     |   |   |   |   |      |   |     |   |   |
| Nominal diameter of the delivery port:                                 |     |   |   |     |   |     |   |     |   |   |   |   |      |   |     |   |   |
| Nominal diameter of the impeller:                                      |     |   |   |     |   |     |   |     |   |   |   |   |      |   |     |   |   |
| Actual diameter of the impeller:                                       |     |   |   |     |   |     |   |     |   |   |   |   |      |   |     |   |   |
| Material codes:<br>A = Cast iron<br>B = Cast iron with bronze impeller |     |   |   |     |   |     |   |     |   |   |   |   |      |   |     |   |   |
| Wear rings (only if present)   |     |   |   |     |   |     |   |     |   |   |   |   |      |   |     |   |   |
| Seal description   |     |   |   |     |   |     |   |     |   |   |   |   |      |   |     |   |   |
| Motor power in kW  |     |   |   |     |   |     |   |     |   |   |   |   |      |   |     |   |   |
| Number of poles<br>4 = 4 poles<br>2 = 2 poles                          |     |   |   |     |   |     |   |     |   |   |   |   |      |   |     |   |   |

### DESCRIPTION OF THE MECHANICAL SEAL

| Position | Code | Description of the seal       |
|----------|------|-------------------------------|
| 1        | A    | O-ring seal with fixed guide  |
|          | B    | Rubber bellows seal           |
|          | C    | O-ring seal with spring guide |
|          | D    | O-ring seal balanced          |
|          | M    | Rubber bellows seal           |
|          | X    | Metal bellows seal            |
| Position | Code | Materials                     |
| 2 & 3    | A    | Impregnated carbon/metal      |
|          | B    | Impregnated carbon/resin      |
|          | C    | Other carbon types            |
|          | S    | Chromium steel                |
|          | U    | Tungsten carbide              |
|          | Q    | Silicon carbide               |
|          | V    | Aluminium oxide (ceramic)     |
|          | X    | Other ceramic types           |
| Position | Code | Materials                     |
| 4        | P    | Nitrile rubber (NBR)          |
|          | S    | Silicon rubber                |
|          | T    | Teflon (PTFE)                 |
|          | E    | EPDM                          |
|          | V    | Viton                         |
|          | M    | PTFE coated O-ring            |
| Position | Code | Materials                     |
| 5        | V    | Reinforced                    |

# NKP-G / NKM-G

## STANDARDISED MONOBLOC PUMPS

### PRODUCT CODE DESCRIPTION

| NOMINAL DIAMETER OF THE IMPELLER | Cod. |
|----------------------------------|------|
| 125                              | 1    |
| 160                              | 2    |
| 200                              | 3    |
| 250                              | 4    |
| 315                              | 5    |
|                                  |      |
| 125.1                            | K    |
| 160.1                            | L    |
| 200.1                            | M    |

| PUMP TYPE | Cod. |
|-----------|------|
| 32        | 1    |
| 40        | 2    |
| 50        | 3    |
| 65        | 4    |
| 80        | 5    |
| 100       | 6    |
| 125       | 7    |
| 150       | 8    |

| IDENTIFICATION   | Cod. |
|------------------|------|
| DAB PUMPS S.p.A. | D    |

| IDENTIFICATION   | Cod. |
|------------------|------|
| DAB PUMPS S.p.A. | 1    |

| Cod. | PUMP/IMPELLER MATERIALS      |
|------|------------------------------|
| 1    | A (01) = cast iron/cast iron |
| 2    | B (03) = cast iron/bronze    |
| 5    | A (01) + Wr*                 |
| 6    | B (03) + Wr*                 |

\* With wear rings

| Cod. | SEAL DEVICE |
|------|-------------|
| 1    | BAQE        |
| 5    | BQQV*       |
| 7    | BAQV*       |
| G    | BQQE*       |

\* On request

| Cod. | CODE PUMP TYPE      |
|------|---------------------|
| B    | NKM-G / NKP-G 50 Hz |
| C    | NKM-G / NKP-G 60 Hz |

| Cod. | P2 NOMINAL KW |
|------|---------------|
| 1    | 0.37          |
| 2    | 0.55          |
| 3    | 0.75          |
| 4    | 1.1           |
| 5    | 1.5           |
| 6    | 2.2           |
| 7    | 3             |
| 8    | 4             |
| 9    | 5.5           |
| A    | 7.5           |
| B    | 11            |
| C    | 15            |
| D    | 18.5          |
| E    | 22            |
| F    | 30            |

| Cod. | VOLTAGE  | Poles |
|------|--|-------|
| 0    | Without motor  |       |
| 1    | 3 x 220-240/380-415 V 50 Hz (<0,75 kW) 3 x 220-277/380-480 V 60 Hz | 2     |
| 2    | 3 x 380-480 V 60 Hz  | 2     |
| 3    | 3 x 220-240/380-415 V 50 Hz (<0,75 kW) 3 x 220-277/380-480 V 60 Hz | 4     |
| 4    | 3 x 380-480 V 60 Hz  | 4     |
| A    | 3 x 220-240/380-415 V 50 Hz - IE2                                  | 2     |
| B    | 3 x 380-415 V 50 Hz - IE2  | 2     |
| C    | 3 x 220-240/380-415 V 50 Hz - IE2                                  | 4     |
| D    | 3 x 380-415 V 50 Hz - IE2  | 4     |
| U    | 3 x 220-240/380-415 V 50 Hz - IE3                                  | 2     |
| V    | 3 x 380-415 V 50 Hz - IE3  | 2     |
| W    | 3 x 220-240/380-415 V 50 Hz - IE3                                  | 4     |
| X    | 3 x 380-415 V 50 Hz - IE3  | 4     |

Product code

1 D 1 1 1 1 B 1 1



# NKP-G RANGE - 2 POLES

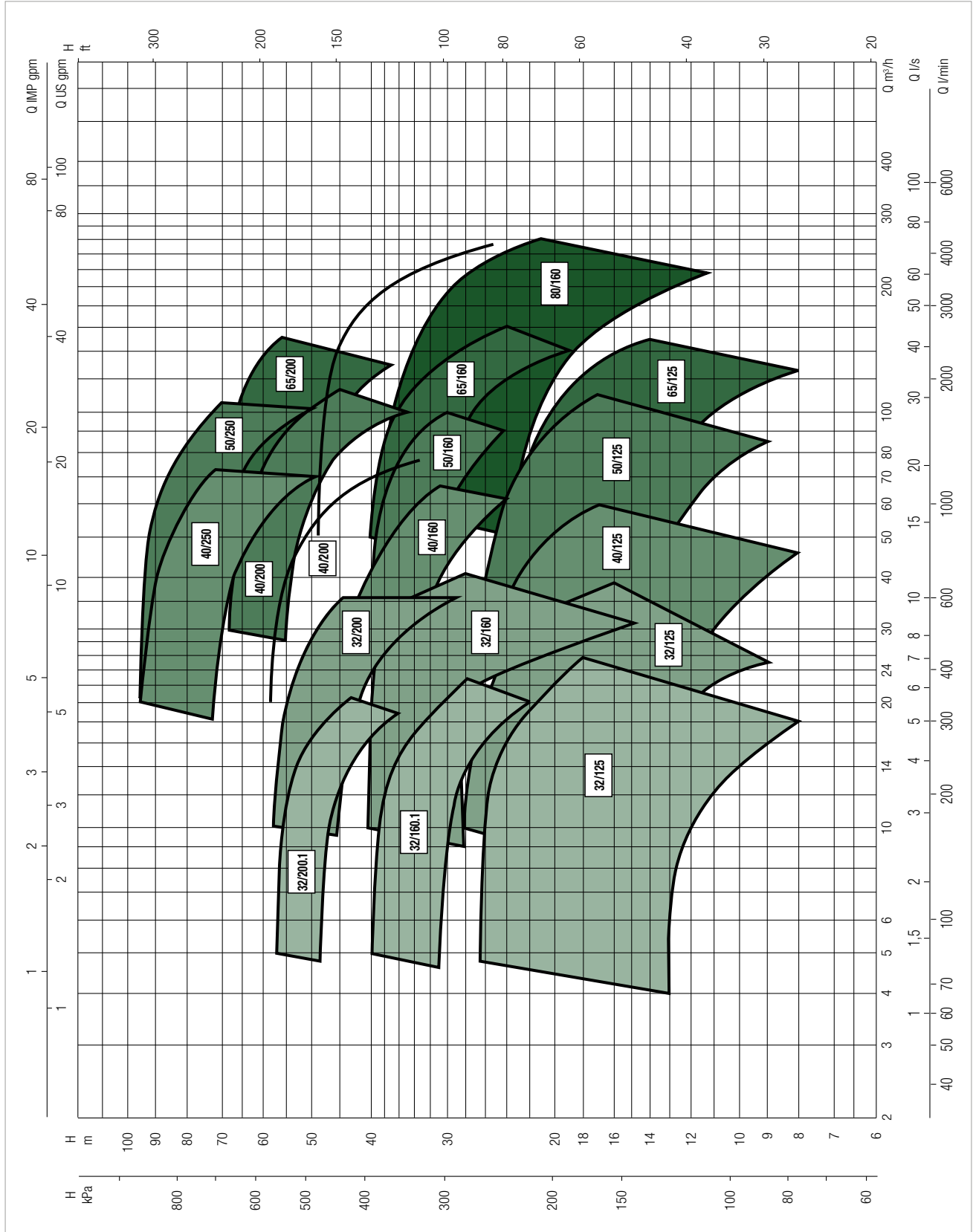
STANDARDISED MONOBLOC PUMPS

## PERFORMANCE RANGE

The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

### GRAPHIC SELECTION TABLE

≈ 2900 1/min



# NKP-G - 2 POLES

## STANDARDISED MONOBLOC PUMPS

### SELECTION TABLE - NKP-G 32

| MODEL                     | Q=m <sup>3</sup> /h | 0    | 6    | 12   | 18   | 24   | 30   | 36   | 42   |
|---------------------------|---------------------|------|------|------|------|------|------|------|------|
|                           | Q=l/min             | 0    | 100  | 200  | 300  | 400  | 500  | 600  | 700  |
| NKP-G 32-125.1/102/0,75/2 | H<br>(m)            | 13   | 12,5 | 11   | 8    |      |      |      |      |
| NKP-G 32-125.1/115/1,1/2  |                     | 17,2 | 17   | 15   | 12,5 |      |      |      |      |
| NKP-G 32-125.1/125/1,5/2  |                     | 21   | 20,8 | 19   | 16,8 |      |      |      |      |
| NKP-G 32-125.1/140/2,2/2  |                     | 27   | 26,9 | 25,9 | 23   | 19,5 |      |      |      |
| NKP-G 32-125/110/1,1/2    |                     | 15,8 | 15,2 | 14,5 | 12,9 | 9,9  |      |      |      |
| NKP-G 32-125/120/1,5/2    |                     | 19,3 | 18,9 | 18,2 | 16,8 | 14,5 |      |      |      |
| NKP-G 32-125/130/2,2/2    |                     | 23,6 | 23,1 | 23   | 21,6 | 19,6 | 16,8 |      |      |
| NKP-G 32-125/142/3/2      |                     | 28,6 | 28   | 27,6 | 26,5 | 24,6 | 21,8 | 17,9 |      |
| NKP-G 32-160.1/155/2,2/2  |                     | 31,7 | 32,4 | 31   | 26,7 |      |      |      |      |
| NKP-G 32-160.1/166/3/2    |                     | 36,7 | 37,3 | 36,3 | 32,8 | 27   |      |      |      |
| NKP-G 32-160.1/177/4/2    |                     | 42,7 | 43,4 | 42,6 | 38,5 | 33,9 |      |      |      |
| NKP-G 32-160/151/3/2      |                     | 30,5 | 30   | 29   | 27   | 24   | 19,5 |      |      |
| NKP-G 32-160/163/4/2      |                     | 36,2 | 36   | 35   | 33,5 | 30,5 | 27   | 22   |      |
| NKP-G 32-160/177/5,5/2    |                     | 43,5 | 43,2 | 42,6 | 41,5 | 39   | 36   | 31,5 | 25,5 |
| NKP-G 32-200.1/188/4/2    |                     | 45,3 | 44,4 | 40,8 | 34,4 | 26,8 |      |      |      |
| NKP-G 32-200.1/205/5,5/2  |                     | 56,6 | 55,7 | 52   | 45,8 | 36,2 |      |      |      |
| NKP-G 32-200/190/5,5/2    |                     | 46,9 | 46,5 | 45   | 43   | 40   | 35   | 29   |      |
| NKP-G 32-200/210/7,5/2    |                     | 58,8 | 58   | 57   | 56   | 53   | 49   | 44   |      |

### SELECTION TABLE - NKP-G 40

| MODEL                   | Q=m <sup>3</sup> /h | 0    | 6    | 12   | 18   | 24   | 30   | 36   | 42   | 48   | 54   | 60   | 66   | 72   |
|-------------------------|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|                         | Q=l/min             | 0    | 100  | 200  | 300  | 400  | 500  | 600  | 700  | 800  | 900  | 1000 | 1100 | 1200 |
| NKP-G 40-125/107/1,5/2  | H<br>(m)            | 14,7 | 14,5 | 14,3 | 13,8 | 13   | 11,8 | 10,5 | 8,6  | 7    |      |      |      |      |
| NKP-G 40-125/120/2,2/2  |                     | 19   | 18,7 | 18,4 | 17,8 | 17   | 15,9 | 14,6 | 13   | 11   |      |      |      |      |
| NKP-G 40-125/130/3/2    |                     | 22,8 | 22,5 | 22,3 | 22   | 21,2 | 20,2 | 19   | 17,4 | 15,5 | 13,5 |      |      |      |
| NKP-G 40-125/139/4/2    |                     | 26,4 | 26,2 | 26   | 25,6 | 25   | 24   | 23   | 21,5 | 19,5 | 17,5 | 15   |      |      |
| NKP-G 40-160/158/5,5/2  |                     | 33,7 |      |      | 34   | 33,4 | 32,4 | 31   | 29,5 | 27   | 24   |      |      |      |
| NKP-G 40-160/172/7,5/2  |                     | 40,7 |      |      | 40,2 | 40,1 | 39,8 | 38,5 | 37,5 | 35,5 | 33   | 30   | 26,5 |      |
| NKP-G 40-200/210/11/2   |                     | 57,1 | 57   | 57   | 56,8 | 56,5 | 56   | 55   | 53   | 50   | 47   | 43,5 | 39   |      |
| NKP-G 40-250/230/15/2   |                     | 72,5 |      |      | 72,5 | 72   | 70   | 68   | 66   | 62,5 | 60   | 56   | 51,5 |      |
| NKP-G 40-250/245/18,5/2 |                     | 83   |      |      | 83   | 82,5 | 81,5 | 80   | 77   | 74   | 71,5 | 67,5 | 63,5 | 58,5 |
| NKP-G 40-250/260/22/2   |                     | 96   |      |      | 95   | 94,5 | 93,5 | 92   | 90   | 87,5 | 84   | 81   | 76,5 | 71,5 |

# NKP-G - 2 POLES

## STANDARDISED MONOBLOC PUMPS

### SELECTION TABLE - NKP-G 50

| MODEL                   | Q=m <sup>3</sup> /h | 0    | 6   | 12  | 18  | 24   | 30   | 36   | 42   | 48   | 54   | 60   | 66   | 72   | 78   | 84   | 90   | 102  | 114  |
|-------------------------|---------------------|------|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|                         | Q=l/min             | 0    | 100 | 200 | 300 | 400  | 500  | 600  | 700  | 800  | 900  | 1000 | 1100 | 1200 | 1300 | 1400 | 1500 | 1700 | 1900 |
| NKP-G 50-125/115/3/2    | H<br>(m)            | 17   |     |     |     | 16,5 | 16   | 15,5 | 15   | 14,5 | 13,7 | 13   | 12   | 11   | 10   | 9    |      |      |      |
| NKP-G 50-125/125/4/2    |                     | 20,5 |     |     |     | 20   | 19,5 | 19,1 | 18,5 | 18   | 17,5 | 16,5 | 15,8 | 14,8 | 14   | 12,5 | 11,5 |      |      |
| NKP-G 50-125/135/5,5/2  |                     | 24   |     |     |     | 23,6 | 23,5 | 23,2 | 22,8 | 22,2 | 21,5 | 21   | 20   | 19,1 | 18,5 | 17,5 | 16,5 | 13,4 |      |
| NKP-G 50-125/144/7,5/2  |                     | 28   |     |     |     | 27,8 | 27,5 | 27,3 | 27   | 26,5 | 25,8 | 25,3 | 24,5 | 23,5 | 23   | 21,5 | 20,5 | 18   | 15,5 |
| NKP-G 50-160/153/7,5/2  |                     | 31,9 |     |     |     | 31,5 | 31,5 | 31,5 | 31,2 | 31   | 30,5 | 29,5 | 28,5 | 27,5 | 26   | 25   | 23,5 |      |      |
| NKP-G 50-160/169/11/2   |                     | 39,6 |     |     |     |      | 39,5 | 39,3 | 39,1 | 39   | 38,5 | 38   | 37,2 | 36,5 | 35   | 34   | 32,5 |      |      |
| NKP-G 50-200/200/15/2   |                     | 55,1 |     |     |     |      | 54,7 | 54,6 | 54   | 53,5 | 52   | 51   | 49   | 47,5 | 45,5 | 43   | 41   |      |      |
| NKP-G 50-200/210/18,5/2 |                     | 61,7 |     |     |     |      | 61,7 | 61,6 | 61,5 | 60,5 | 59   | 58   | 56,5 | 55   | 53   | 51   | 48,5 | 43   |      |
| NKP-G 50-200/219/22/2   |                     | 67,7 |     |     |     |      | 67,5 | 67,4 | 66,5 | 66   | 65,5 | 64   | 62,5 | 61   | 59,5 | 57   | 55   | 50   |      |
| NKP-G 50-250/230/22/2   |                     | 73,6 |     |     |     |      | 73,2 | 73,1 | 72,8 | 72   | 71   | 68,5 | 67   | 65   | 62,5 | 60   | 57   | 49   |      |
| NKP-G 50-250/257/30/2   |                     | 93   |     |     |     |      | 92,5 | 92,3 | 92   | 91,5 | 91   | 89   | 87,5 | 86   | 83   | 81   | 78   | 72   |      |

### SELECTION TABLE - NKP-G 65

| MODEL                    | Q=m <sup>3</sup> /h | 0    | 6   | 12  | 18  | 24  | 30  | 36   | 42   | 48   | 54   | 60   | 66   | 72   | 78   | 84   | 90   | 102  | 114  | 120  | 150  |
|--------------------------|---------------------|------|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|                          | Q=l/min             | 0    | 100 | 200 | 300 | 400 | 500 | 600  | 700  | 800  | 900  | 1000 | 1100 | 1200 | 1300 | 1400 | 1500 | 1700 | 1900 | 2200 | 2500 |
| NKP-G 65-125/120-110/4/2 | H<br>(m)            | 16   |     |     |     |     |     | 15   | 14,6 | 14,2 | 13,7 | 13,3 | 12,8 | 12,3 | 12   | 11,4 | 10   | 8,5  | 8    |      |      |
| NKP-G 65-125/127/5,5/2   |                     | 19,5 |     |     |     |     |     | 19   | 18,9 | 18,7 | 18,4 | 18,1 | 17,5 | 17,2 | 16,9 | 16,5 | 15,8 | 14,5 | 13   | 12   |      |
| NKP-G 65-125/137/7,5/2   |                     | 23,5 |     |     |     |     |     | 23,1 | 23   | 22,8 | 22,6 | 22,5 | 22   | 21,6 | 21,1 | 20,7 | 20,2 | 19   | 17,5 | 14,8 | 12   |
| NKP-G 65-160/157/11/2    |                     | 32,5 |     |     |     |     |     |      |      | 32,3 | 32   | 31,9 | 31,3 | 30,2 | 30   | 29,2 | 28,7 | 27   | 24,8 | 23,6 |      |
| NKP-G 65-160/173/15/2    |                     | 40,1 |     |     |     |     |     |      |      | 39,7 | 39,6 | 39,5 | 39,5 | 39   | 38,5 | 38,2 | 37,5 | 36   | 34,5 | 33,5 | 26,9 |
| NKP-G 65-200/190/18,5/2  |                     | 51,1 |     |     |     |     |     |      |      | 51   | 50,8 | 50,5 | 50   | 49   | 48,5 | 48   | 47,5 | 45   | 42,5 | 41   |      |
| NKP-G 65-200/200/22/2    |                     | 56,4 |     |     |     |     |     |      |      | 56,1 | 56,1 | 56   | 55,8 | 55,5 | 55   | 54,8 | 54,5 | 53   | 51   | 49   |      |
| NKP-G 65-200/219/30/2    |                     | 68,9 |     |     |     |     |     |      |      | 68,8 | 68,8 | 68,7 | 68,7 | 68,6 | 68,5 | 68,4 | 67,5 | 66   | 64   | 63,1 | 57   |

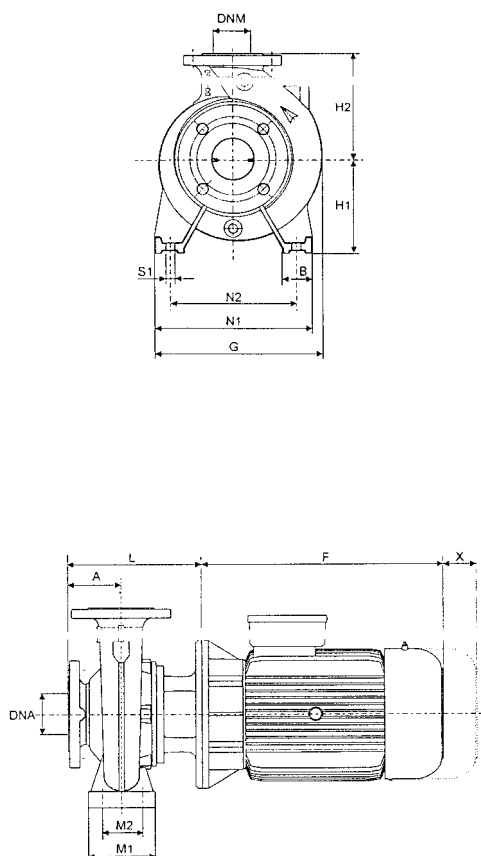
### SELECTION TABLE - NKP-G 80

| MODEL                     | Q=m <sup>3</sup> /h | 0    | 6   | 12  | 18  | 24  | 30  | 36  | 42  | 48  | 54  | 60   | 66   | 72   | 78   | 84   | 90   | 102  | 114  | 120  | 150  | 180  | 210  | 240  |    |
|---------------------------|---------------------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|----|
|                           | Q=l/min             | 0    | 100 | 200 | 300 | 400 | 500 | 600 | 700 | 800 | 900 | 1000 | 1100 | 1200 | 1300 | 1400 | 1500 | 1700 | 1900 | 2200 | 2500 | 3000 | 3500 | 4000 |    |
| NKP-G 80-160/147-127/11/2 | H<br>(m)            | 24   |     |     |     |     |     |     |     |     |     |      |      |      |      |      | 22   | 21,4 | 20,4 | 20   | 17,4 | 16,8 | 12   |      |    |
| NKP-G 80-160/153/15/2     |                     | 30,5 |     |     |     |     |     |     |     |     |     |      |      |      |      |      |      | 29   | 28,4 | 27,5 | 27   | 24,5 | 21,3 | 18,3 |    |
| NKP-G 80-160/163/18,5/2   |                     | 35,5 |     |     |     |     |     |     |     |     |     |      |      |      |      |      |      | 34,3 | 33,6 | 32,6 | 32,3 | 29,8 | 26,8 | 23,6 | 20 |
| NKP-G 80-160/169/22/2     |                     | 38,5 |     |     |     |     |     |     |     |     |     |      |      |      |      |      |      | 37,2 | 36,8 | 36   | 35,8 | 33,5 | 30,8 | 27,5 | 24 |
| NKP-G 80-200/190/30/2     |                     | 48,3 |     |     |     |     |     |     |     |     |     |      |      |      |      |      |      | 47,9 | 47,6 | 47,5 | 47,3 | 44,7 | 41   | 36   | 29 |

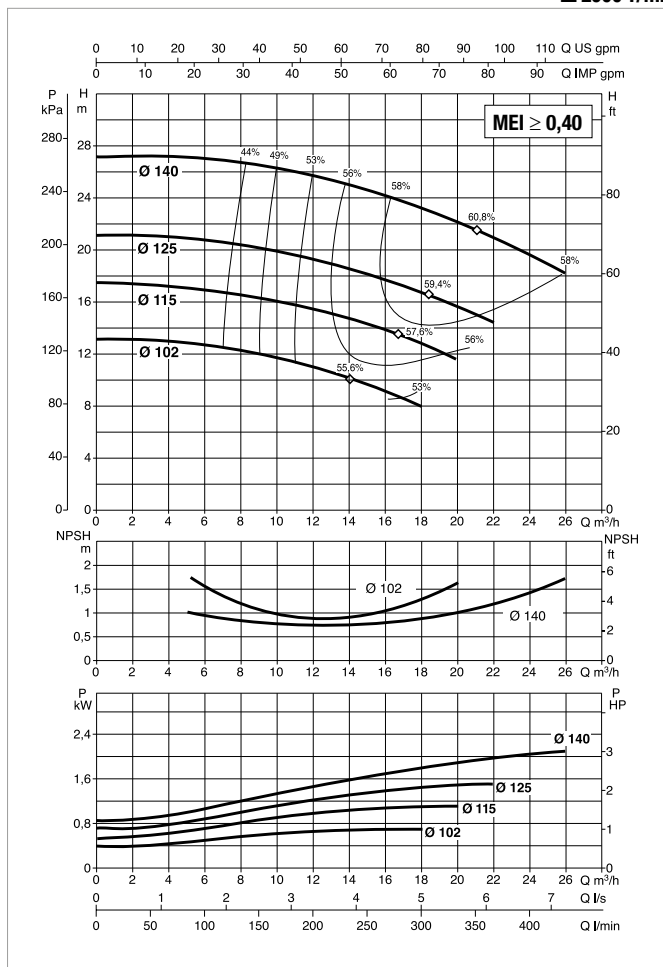
# NKP-G 32-125.1 - 2 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≅ 2900 1/min



Construction features of the motor: B5



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

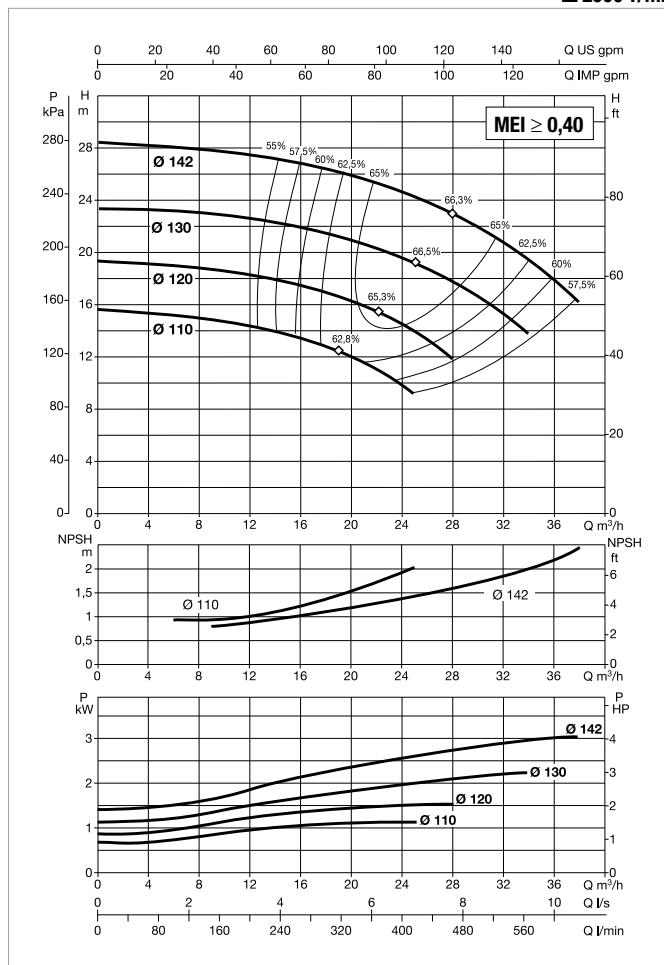
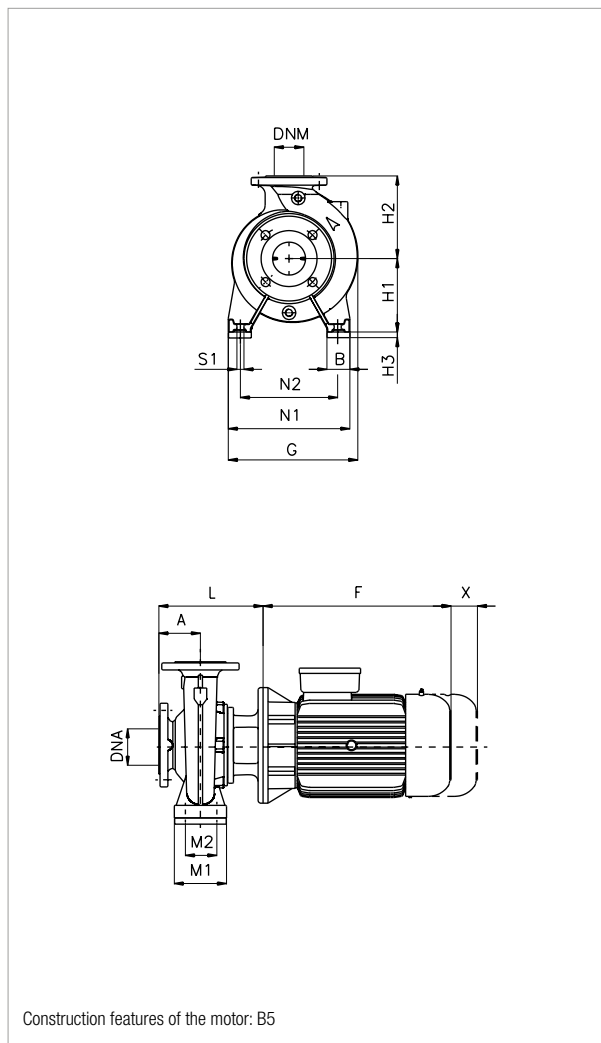
| MODEL                     | ELECTRICAL DATA |                   |            |     |       |       |            |
|---------------------------|-----------------|-------------------|------------|-----|-------|-------|------------|
|                           | MOTOR SIZE      | POWER INPUT 50 Hz | P2 NOMINAL |     | In A  |       | MOTOR TYPE |
|                           |                 |                   | kW         | HP  | 230 V | 400 V |            |
| NKP-G 32-125.1/102/0,75/2 | MEC 80          | 3 x 230 - 400 V ~ | 0,75       | 1   | 2,9   | 1,7   | IE3        |
| NKP-G 32-125.1/115/1,1/2  | MEC 80          | 3 x 230 - 400 V ~ | 1,1        | 1,5 | 4,2   | 2,4   | IE3        |
| NKP-G 32-125.1/125/1,5/2  | MEC 90 S        | 3 x 230 - 400 V ~ | 1,5        | 2   | 5,2   | 3     | IE3        |
| NKP-G 32-125.1/140/2,2/2  | MEC 90 L        | 3 x 230 - 400 V ~ | 2,2        | 3   | 7,97  | 4,6   | IE3        |

| MODEL                     | A  | B  | E | F     | G   | H1  | H2  | L   | M1  | M2 | N1  | N2  | N3 | S1  | S2 | W | X   | H3 | H4 | Ø (mm) Mech. seal | DNA | DNM | PACKING DIMENSIONS |     |     | VOLUME (m³) | WEIGHT Kg |
|---------------------------|----|----|---|-------|-----|-----|-----|-----|-----|----|-----|-----|----|-----|----|---|-----|----|----|-------------------|-----|-----|--------------------|-----|-----|-------------|-----------|
|                           |    |    |   |       |     |     |     |     |     |    |     |     |    |     |    |   |     |    |    |                   |     |     | L/A                | L/B | H   |             |           |
| NKP-G 32-125.1/102/0,75/2 | 80 | 50 | - | 232   | 234 | 112 | 140 | 226 | 100 | 70 | 190 | 140 | -  | M10 | -  | - | 100 | -  | -  | 28                | 50  | 32  | 620                | 370 | 480 | 0,11        | 30        |
| NKP-G 32-125.1/115/1,1/2  | 80 | 50 | - | 232   | 234 | 112 | 140 | 226 | 100 | 70 | 190 | 140 | -  | M10 | -  | - | 100 | -  | -  | 28                | 50  | 32  | 620                | 370 | 480 | 0,11        | 31        |
| NKP-G 32-125.1/125/1,5/2  | 80 | 50 | - | 287,5 | 234 | 112 | 140 | 226 | 100 | 70 | 190 | 140 | -  | M10 | -  | - | 100 | -  | -  | 28                | 50  | 32  | 620                | 370 | 480 | 0,11        | 33        |
| NKP-G 32-125.1/140/2,2/2  | 80 | 50 | - | 287,5 | 234 | 112 | 140 | 226 | 100 | 70 | 190 | 140 | -  | M10 | -  | - | 100 | -  | -  | 28                | 50  | 32  | 620                | 370 | 480 | 0,11        | 34        |

# NKP-G 32-125 - 2 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≅ 2900 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

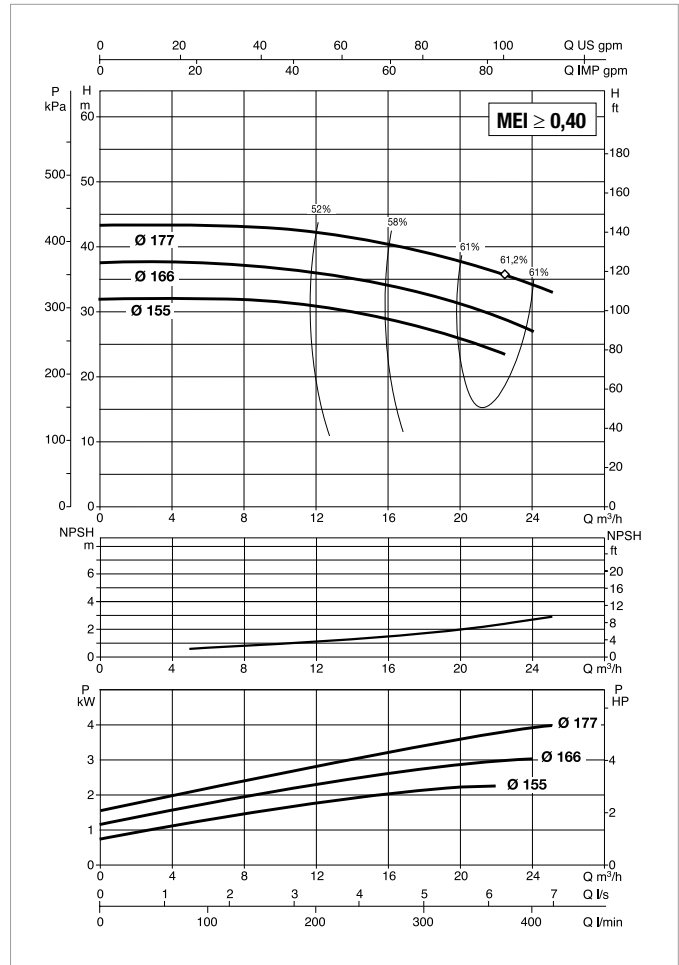
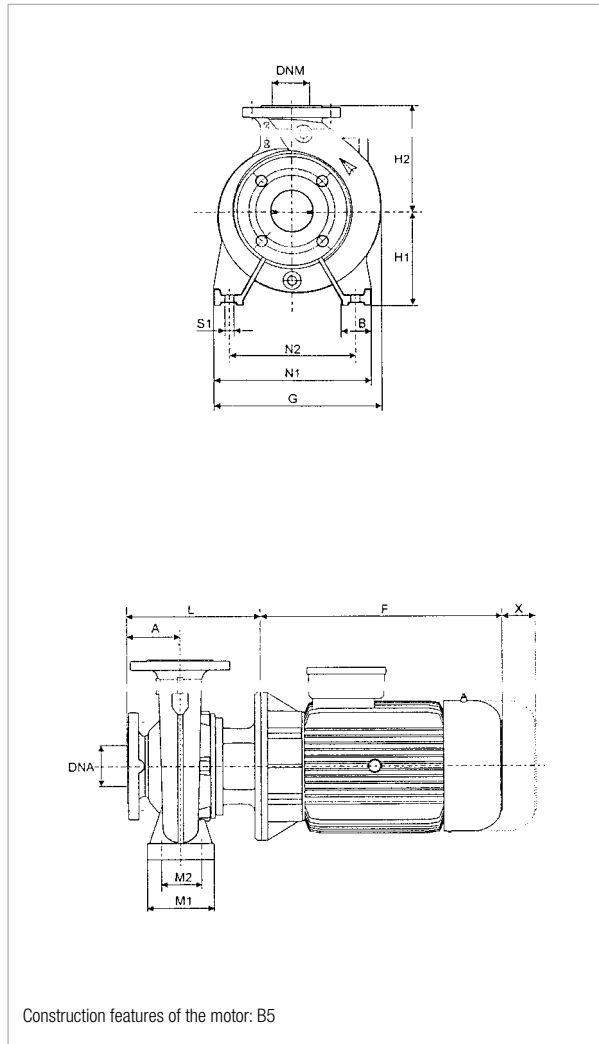
| MODEL                  | ELECTRICAL DATA |                   |            |     |       |       |            |
|------------------------|-----------------|-------------------|------------|-----|-------|-------|------------|
|                        | MOTOR SIZE      | POWER INPUT 50 Hz | P2 NOMINAL |     | In A  |       | MOTOR TYPE |
|                        |                 |                   | kW         | HP  | 230 V | 400 V |            |
| NKP-G 32-125/110/1,1/2 | MEC 80          | 3 x 230 - 400 V ~ | 1,1        | 1,5 | 4,2   | 2,4   | IE3        |
| NKP-G 32-125/120/1,5/2 | MEC 90 S        | 3 x 230 - 400 V ~ | 1,5        | 2   | 5,2   | 3     | IE3        |
| NKP-G 32-125/130/2,2/2 | MEC 90 L        | 3 x 230 - 400 V ~ | 2,2        | 3   | 7,97  | 4,6   | IE3        |
| NKP-G 32-125/142/3/2   | MEC 100 L       | 3 x 400 V ~       | 3          | 4   | -     | 5,6   | IE3        |

| MODEL                  | A  | B  | E | F     | G   | H1  | H2  | L   | M1  | M2 | N1  | N2  | N3 | S1  | S2 | W | X   | H3 | H4 | Ø (mm) Mech. seal | DNA | DNM | PACKING DIMENSIONS |     |     | VOLUME (m³) | WEIGHT Kg |
|------------------------|----|----|---|-------|-----|-----|-----|-----|-----|----|-----|-----|----|-----|----|---|-----|----|----|-------------------|-----|-----|--------------------|-----|-----|-------------|-----------|
|                        |    |    |   |       |     |     |     |     |     |    |     |     |    |     |    |   |     |    |    |                   |     |     | L/A                | L/B | H   |             |           |
| NKP-G 32-125/110/1,1/2 | 80 | 50 | - | 232   | 234 | 112 | 140 | 226 | 100 | 70 | 190 | 140 | -  | M10 | -  | - | 100 | -  | -  | 28                | 50  | 32  | 620                | 370 | 480 | 0,11        | 28        |
| NKP-G 32-125/120/1,5/2 | 80 | 50 | - | 287,5 | 234 | 112 | 140 | 226 | 100 | 70 | 190 | 140 | -  | M10 | -  | - | 100 | -  | -  | 28                | 50  | 32  | 620                | 370 | 480 | 0,11        | 32        |
| NKP-G 32-125/130/2,2/2 | 80 | 50 | - | 287,5 | 234 | 112 | 140 | 226 | 100 | 70 | 190 | 140 | -  | M10 | -  | - | 100 | -  | -  | 28                | 50  | 32  | 620                | 370 | 480 | 0,11        | 34        |
| NKP-G 32-125/142/3/2   | 80 | 50 | - | 319   | 250 | 112 | 140 | 254 | 100 | 70 | 190 | 140 | -  | M10 | -  | - | 100 | 20 | -  | 28                | 50  | 32  | 670                | 420 | 540 | 0,152       | 48        |

# NKP-G 32-160.1 - 2 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≅ 2900 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

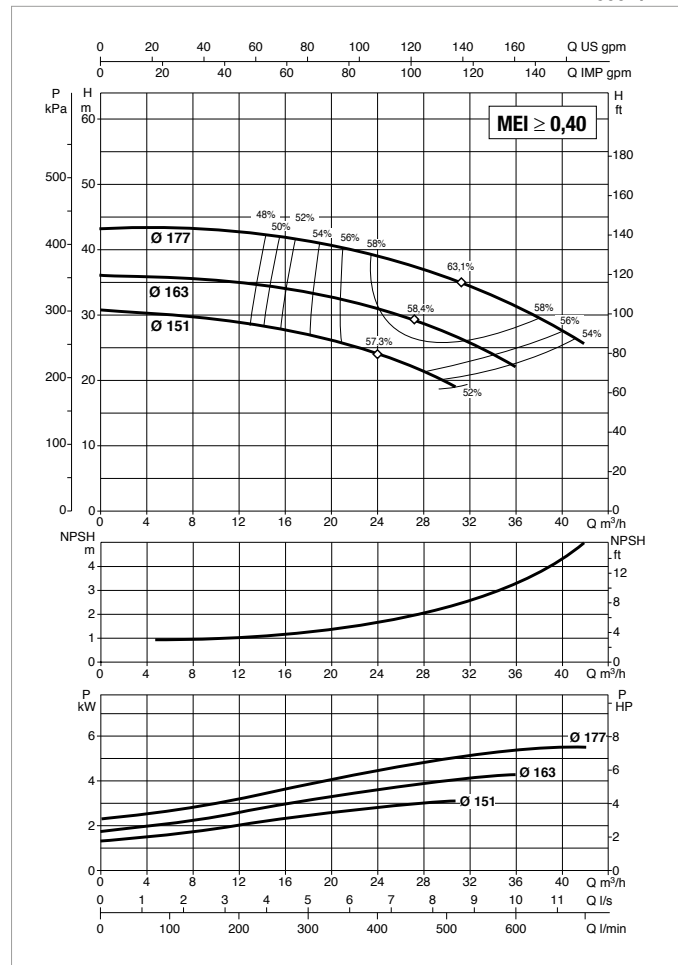
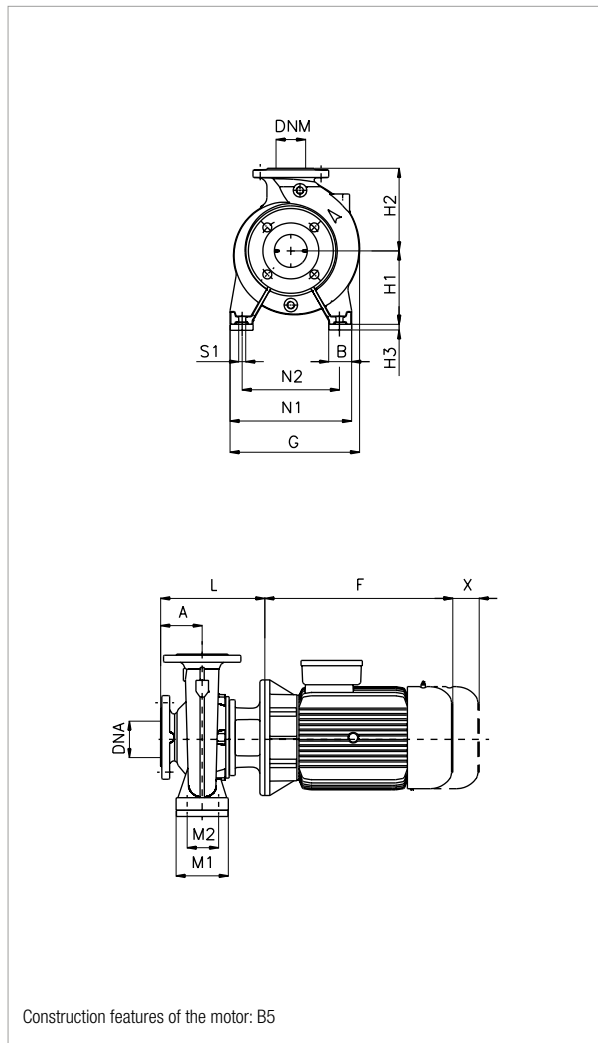
| MODEL                    | MOTOR SIZE | POWER INPUT 50 Hz | ELECTRICAL DATA |     |       |       | MOTOR TYPE |
|--------------------------|------------|-------------------|-----------------|-----|-------|-------|------------|
|                          |            |                   | P2 NOMINAL      |     | In A  |       |            |
|                          |            |                   | kW              | HP  | 230 V | 400 V |            |
| NKP-G 32-160.1/155/2,2/2 | MEC 90 L   | 3 x 230 - 400 V ~ | 2,2             | 3   | 7,97  | 4,6   | IE3        |
| NKP-G 32-160.1/166/3/2   | MEC 100 L  | 3 x 400 V ~       | 3               | 4   | -     | 5,6   | IE3        |
| NKP-G 32-160.1/177/4/2   | MEC 112 M  | 3 x 400 V ~       | 4               | 5,5 | -     | 8,2   | IE3        |

| MODEL                    | A  | B  | E | F     | G   | H1  | H2  | L   | M1  | M2 | N1  | N2  | N3 | S1  | S2 | W | X   | H3 | H4 | Ø (mm) Mech. seal | DNA | DNM | PACKING DIMENSIONS |     |     | VOLUME (m³) | WEIGHT Kg |
|--------------------------|----|----|---|-------|-----|-----|-----|-----|-----|----|-----|-----|----|-----|----|---|-----|----|----|-------------------|-----|-----|--------------------|-----|-----|-------------|-----------|
|                          |    |    |   |       |     |     |     |     |     |    |     |     |    |     |    |   |     |    |    |                   |     |     | L/A                | L/B | H   |             |           |
| NKP-G 32-160.1/155/2,2/2 | 80 | 50 | - | 287,5 | 245 | 132 | 160 | 226 | 100 | 70 | 240 | 190 | -  | M10 | -  | - | 100 | -  | -  | 28                | 50  | 32  | 620                | 370 | 480 | 0,11        | 35        |
| NKP-G 32-160.1/166/3/2   | 80 | 50 | - | 319   | 250 | 132 | 160 | 254 | 100 | 70 | 240 | 190 | -  | M10 | -  | - | 100 | -  | -  | 28                | 50  | 32  | 670                | 420 | 540 | 0,152       | 42        |
| NKP-G 32-160.1/177/4/2   | 80 | 50 | - | 306   | 250 | 132 | 160 | 254 | 100 | 70 | 240 | 190 | -  | M10 | -  | - | 100 | -  | -  | 28                | 50  | 32  | 670                | 420 | 540 | 0,152       | 59        |

# NKP-G 32-160 - 2 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≅ 2900 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

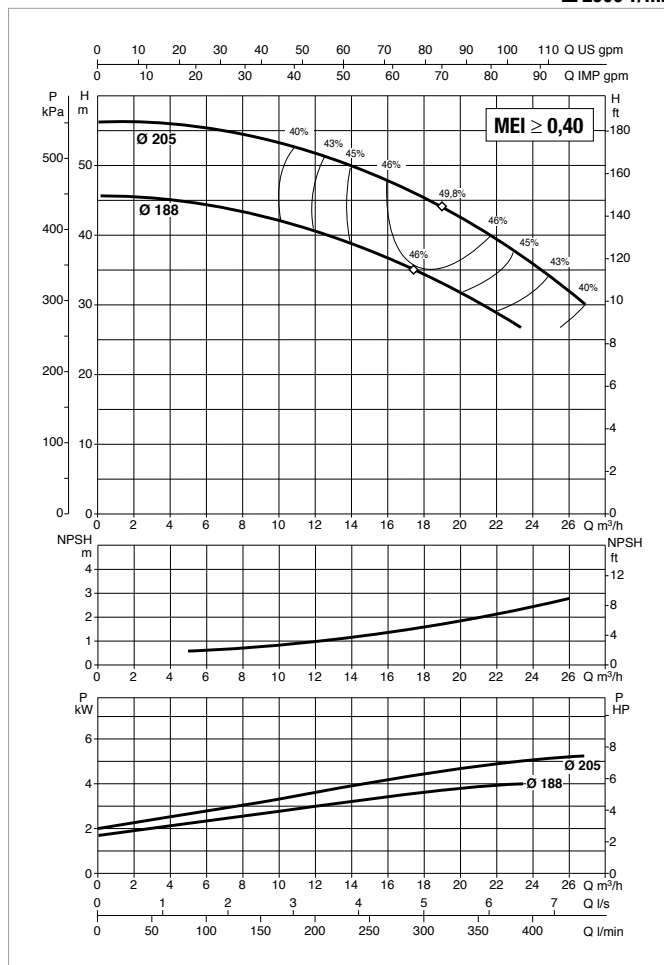
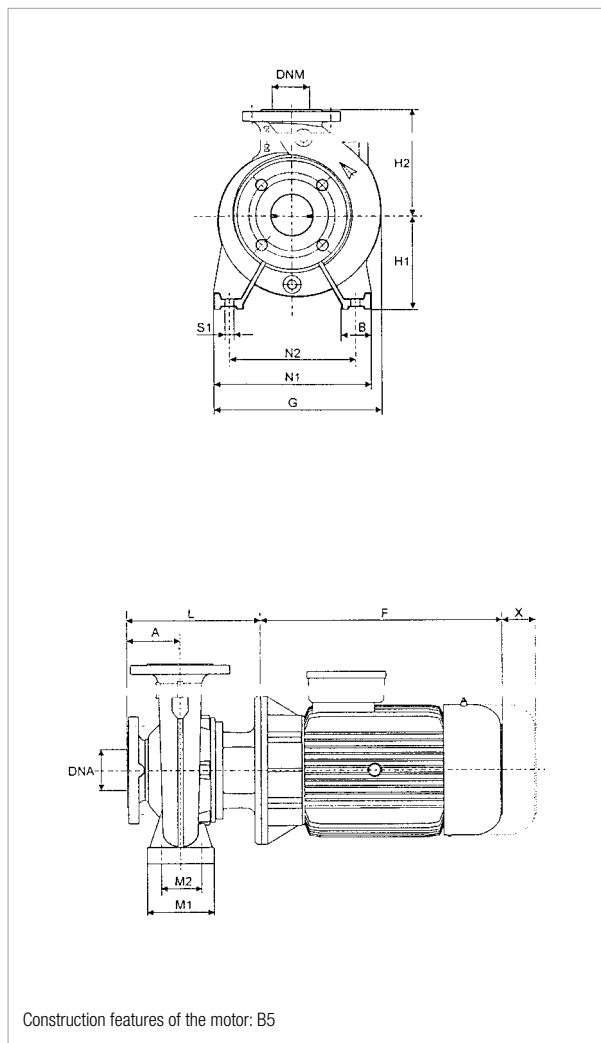
| MODEL                  | ELECTRICAL DATA |                   |            |     |       |       |            |
|------------------------|-----------------|-------------------|------------|-----|-------|-------|------------|
|                        | MOTOR SIZE      | POWER INPUT 50 Hz | P2 NOMINAL |     | In A  |       | MOTOR TYPE |
|                        |                 |                   | kW         | HP  | 230 V | 400 V |            |
| NKP-G 32-160/151/3/2   | MEC 100 L       | 3 x 400 V ~       | 3          | 4   | -     | 5,6   | IE3        |
| NKP-G 32-160/163/4/2   | MEC 112 M       | 3 x 400 V ~       | 4          | 5,5 | -     | 8,2   | IE3        |
| NKP-G 32-160/177/5,5/2 | MEC 132 S       | 3 x 400 V ~       | 5,5        | 7,5 | -     | 10,2  | IE3        |

| MODEL                  | A  | B  | E | F   | G   | H1  | H2  | L   | M1  | M2 | N1  | N2  | N3 | S1  | S2 | W | X   | H3 | H4 | Ø (mm) Mech. seal | DNA | DNM | PACKING DIMENSIONS |     |     | VOLUME (m³) | WEIGHT Kg |
|------------------------|----|----|---|-----|-----|-----|-----|-----|-----|----|-----|-----|----|-----|----|---|-----|----|----|-------------------|-----|-----|--------------------|-----|-----|-------------|-----------|
|                        |    |    |   |     |     |     |     |     |     |    |     |     |    |     |    |   |     |    |    |                   |     |     | L/A                | L/B | H   |             |           |
| NKP-G 32-160/151/3/2   | 80 | 50 | - | 319 | 250 | 132 | 160 | 254 | 100 | 70 | 240 | 190 | -  | M10 | -  | - | 100 | -  | -  | 28                | 50  | 32  | 670                | 420 | 540 | 0,152       | 45        |
| NKP-G 32-160/163/4/2   | 80 | 50 | - | 306 | 250 | 132 | 160 | 254 | 100 | 70 | 240 | 190 | -  | M10 | -  | - | 100 | -  | -  | 28                | 50  | 32  | 670                | 420 | 540 | 0,152       | 32        |
| NKP-G 32-160/177/5,5/2 | 80 | 50 | - | 328 | 300 | 132 | 160 | 293 | 100 | 70 | 240 | 190 | -  | M10 | -  | - | 100 | 20 | -  | 28                | 50  | 32  | 830                | 430 | 520 | 0,186       | 51        |

# NKP-G 32-200.1- 2 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≅ 2900 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

| MODEL                    | ELECTRICAL DATA |                   |            |     |       |       |            |
|--------------------------|-----------------|-------------------|------------|-----|-------|-------|------------|
|                          | MOTOR SIZE      | POWER INPUT 50 Hz | P2 NOMINAL |     | In A  |       | MOTOR TYPE |
|                          |                 |                   | kW         | HP  | 230 V | 400 V |            |
| NKP-G 32-200.1/188/4/2   | MEC 112 M       | 3 x 400 V ~       | 4          | 5,5 | -     | 8,2   | IE3        |
| NKP-G 32-200.1/205/5,5/2 | MEC 132 S       | 3 x 400 V ~       | 5,5        | 7,5 | -     | 10,2  | IE3        |

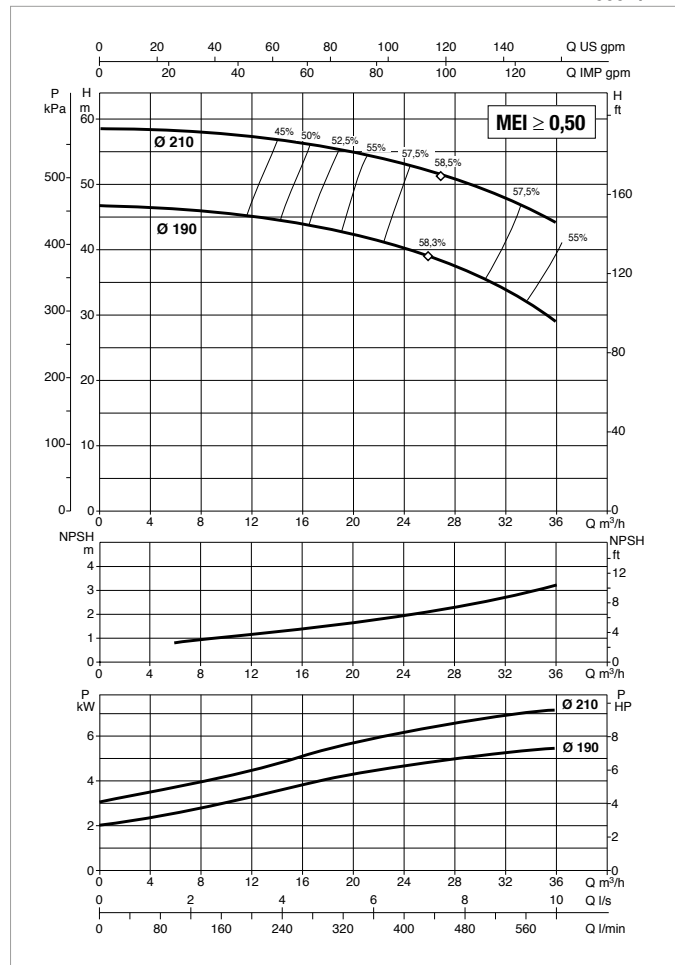
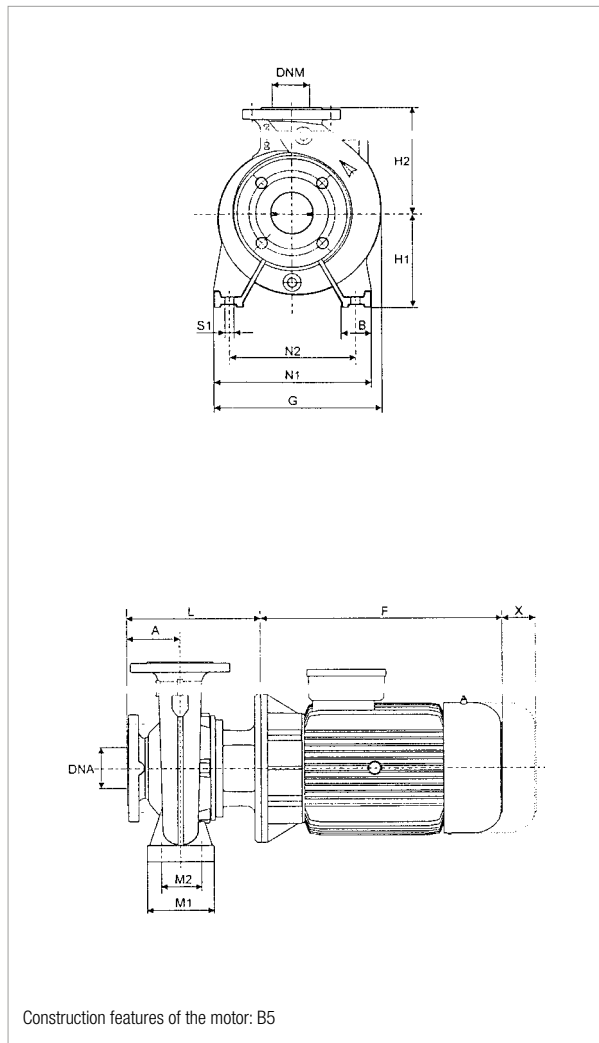
| MODEL                    | A  | B  | E | F   | G   | H1  | H2  | L   | M1  | M2 | N1  | N2  | N3 | S1  | S2 | W | X   | H3 | H4 | Ø (mm) Mech. seal | DNA | DNM | PACKING DIMENSIONS |     |     | VOLUME (m³) | WEIGHT Kg |
|--------------------------|----|----|---|-----|-----|-----|-----|-----|-----|----|-----|-----|----|-----|----|---|-----|----|----|-------------------|-----|-----|--------------------|-----|-----|-------------|-----------|
|                          |    |    |   |     |     |     |     |     |     |    |     |     |    |     |    |   |     |    |    |                   |     |     | L/A                | L/B | H   |             |           |
| NKP-G 32-200.1/188/4/2   | 80 | 50 | - | 306 | 279 | 160 | 180 | 254 | 100 | 70 | 240 | 190 | -  | M10 | -  | - | 100 | -  | -  | 28                | 50  | 32  | 670                | 420 | 540 | 0,152       | 38        |
| NKP-G 32-200.1/205/5,5/2 | 80 | 50 | - | 328 | 300 | 160 | 180 | 293 | 100 | 70 | 240 | 190 | -  | M10 | -  | - | 100 | -  | -  | 28                | 50  | 32  | 830                | 430 | 520 | 0,186       | 54        |



# NKP-G 32-200 - 2 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≈ 2900 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

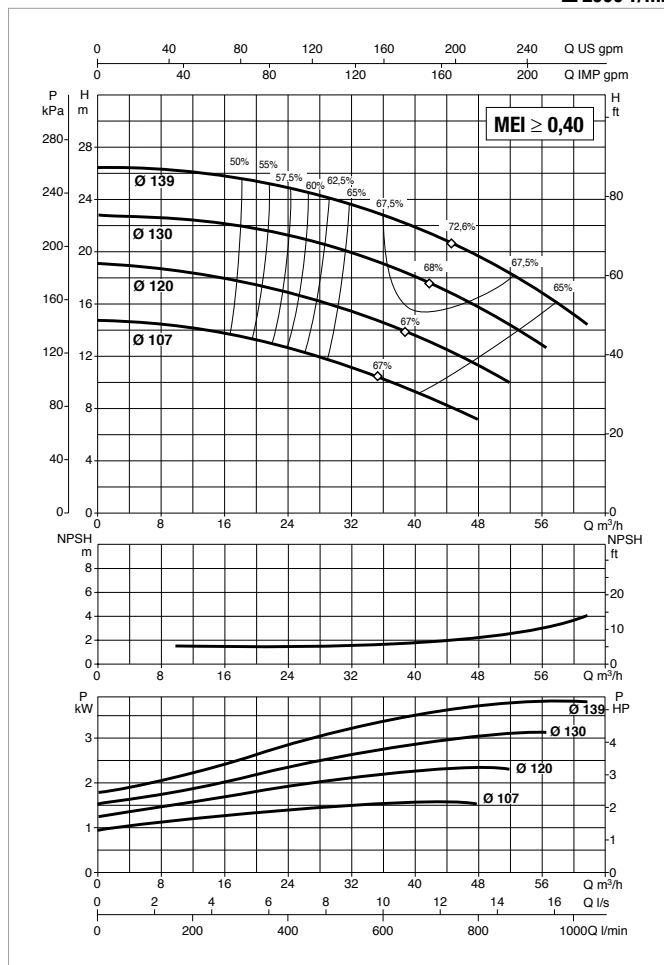
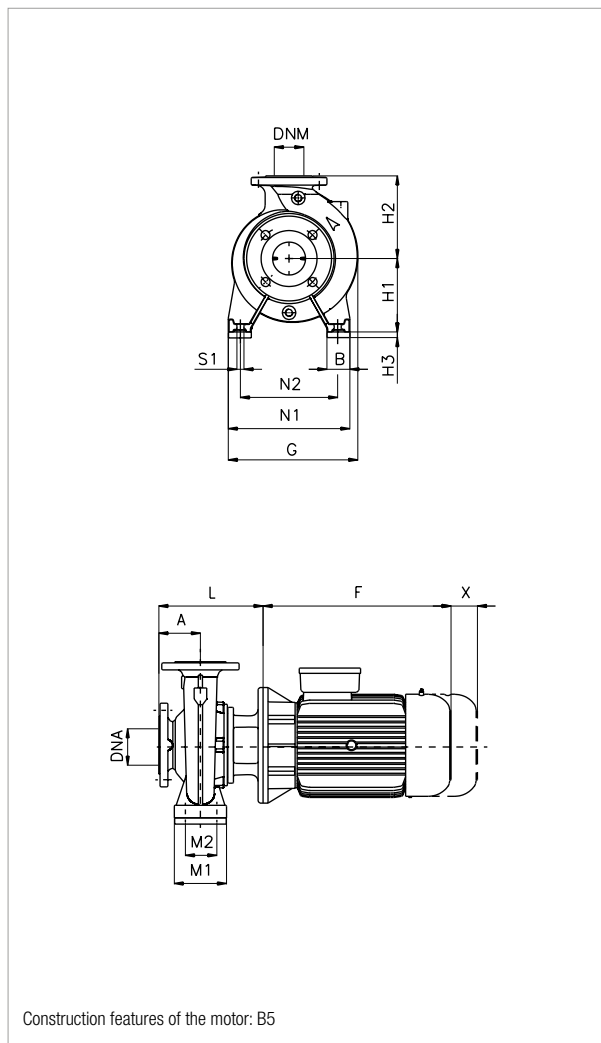
| MODEL                  | ELECTRICAL DATA |                   |            |     |       |       | MOTOR TYPE |
|------------------------|-----------------|-------------------|------------|-----|-------|-------|------------|
|                        | MOTOR SIZE      | POWER INPUT 50 Hz | P2 NOMINAL |     | In A  |       |            |
|                        |                 |                   | kW         | HP  | 230 V | 400 V |            |
| NKP-G 32-200/190/5,5/2 | MEC 132 S       | 3 x 400 V ~       | 5,5        | 7,5 | -     | 10,2  | IE3        |
| NKP-G 32-200/210/7,5/2 | MEC 132 S       | 3 x 400 V ~       | 7,5        | 10  | -     | 14,4  | IE3        |

| MODEL                  | A  | B  | E | F   | G   | H1  | H2  | L   | M1  | M2 | N1  | N2  | N3 | S1  | S2 | W | X   | H3 | H4 | Ø (mm) Mech. seal | DNA | DNM | PACKING DIMENSIONS |     |     | VOLUME (m³) | WEIGHT Kg |
|------------------------|----|----|---|-----|-----|-----|-----|-----|-----|----|-----|-----|----|-----|----|---|-----|----|----|-------------------|-----|-----|--------------------|-----|-----|-------------|-----------|
|                        |    |    |   |     |     |     |     |     |     |    |     |     |    |     |    |   |     |    |    |                   |     |     | L/A                | L/B | H   |             |           |
| NKP-G 32-200/190/5,5/2 | 80 | 50 | - | 328 | 300 | 160 | 180 | 293 | 100 | 70 | 240 | 190 | -  | M10 | -  | - | 100 | -  | -  | 28                | 50  | 32  | 830                | 430 | 520 | 0,186       | 57        |
| NKP-G 32-200/210/7,5/2 | 80 | 50 | - | 350 | 300 | 160 | 180 | 293 | 100 | 70 | 240 | 190 | -  | M10 | -  | - | 100 | -  | -  | 28                | 50  | 32  | 830                | 430 | 520 | 0,186       | 96        |

# NKP-G 40-125 - 2 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≅ 2900 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

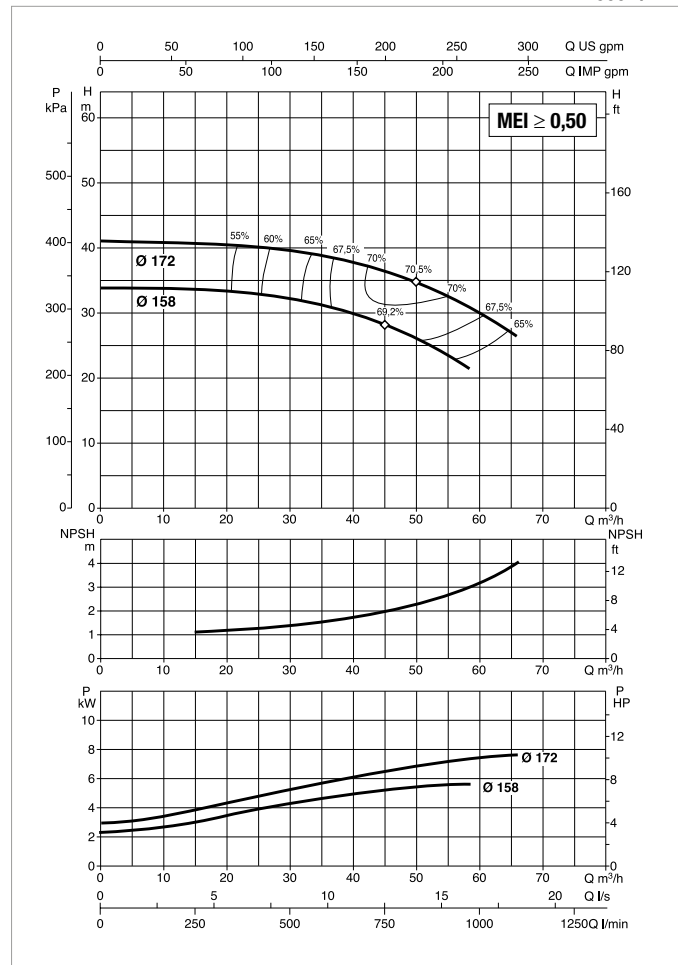
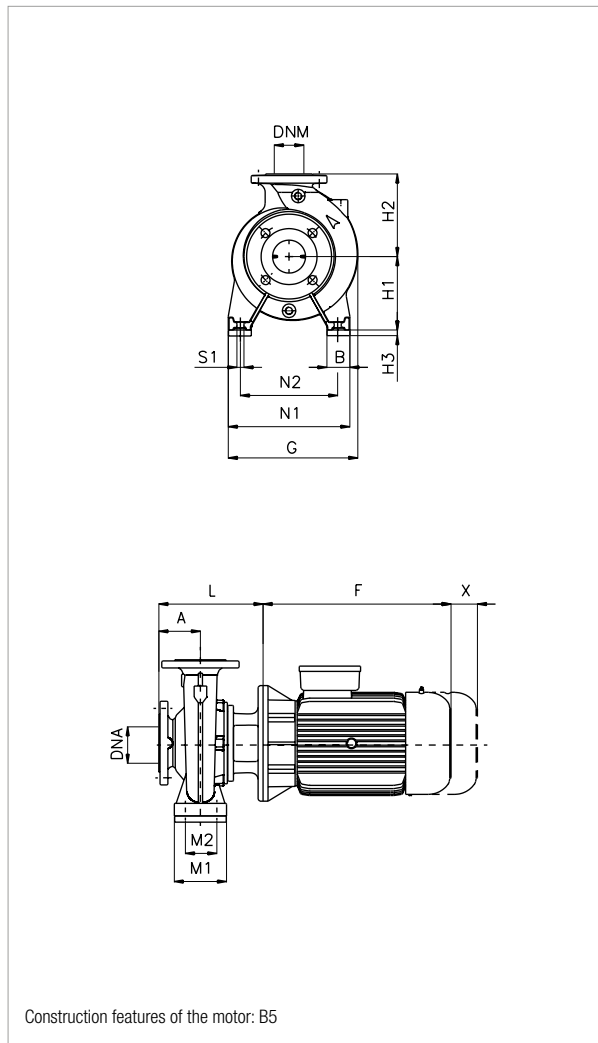
| MODEL                  | ELECTRICAL DATA |                   |            |     |       |       |            |
|------------------------|-----------------|-------------------|------------|-----|-------|-------|------------|
|                        | MOTOR SIZE      | POWER INPUT 50 Hz | P2 NOMINAL |     | In A  |       | MOTOR TYPE |
|                        |                 |                   | kW         | HP  | 230 V | 400 V |            |
| NKP-G 40-125/107/1,5/2 | MEC 90 S        | 3 x 230 - 400 V ~ | 1,5        | 2   | 5,2   | 3     | IE3        |
| NKP-G 40-125/120/2,2/2 | MEC 90 L        | 3 x 230 - 400 V ~ | 2,2        | 3   | 7,97  | 4,6   | IE3        |
| NKP-G 40-125/130/3/2   | MEC 100 L       | 3 x 400 V ~       | 3          | 4   | -     | 5,6   | IE3        |
| NKP-G 40-125/139/4/2   | MEC 112         | 3 x 400 V ~       | 4          | 5,5 | -     | 8,2   | IE3        |

| MODEL                  | A  | B  | E | F     | G   | H1  | H2  | L   | M1  | M2 | N1  | N2  | N3 | S1  | S2 | W | X   | H3 | H4 | Ø (mm) Mech. seal | DNA | DNM | PACKING DIMENSIONS |     |     | VOLUME (m³) | WEIGHT Kg |
|------------------------|----|----|---|-------|-----|-----|-----|-----|-----|----|-----|-----|----|-----|----|---|-----|----|----|-------------------|-----|-----|--------------------|-----|-----|-------------|-----------|
|                        |    |    |   |       |     |     |     |     |     |    |     |     |    |     |    |   |     |    |    |                   |     |     | L/A                | L/B | H   |             |           |
| NKP-G 40-125/107/1,5/2 | 80 | 50 | - | 287,5 | 234 | 112 | 140 | 226 | 100 | 70 | 210 | 160 | -  | M10 | -  | - | 100 | -  | -  | 28                | 65  | 40  | 620                | 370 | 480 | 0,11        | 34        |
| NKP-G 40-125/120/2,2/2 | 80 | 50 | - | 287,5 | 234 | 112 | 140 | 226 | 100 | 70 | 210 | 160 | -  | M10 | -  | - | 100 | -  | -  | 28                | 65  | 40  | 620                | 370 | 480 | 0,11        | 36        |
| NKP-G 40-125/130/3/2   | 80 | 50 | - | 319   | 300 | 112 | 140 | 254 | 100 | 70 | 210 | 160 | -  | M10 | -  | - | 100 | 20 | -  | 28                | 65  | 40  | 670                | 420 | 540 | 0,152       | 47        |
| NKP-G 40-125/139/4/2   | 80 | 50 | - | 306   | 300 | 112 | 140 | 254 | 100 | 70 | 210 | 160 | -  | M10 | -  | - | 100 | 20 | -  | 28                | 65  | 40  | 670                | 420 | 540 | 0,152       | 35        |

# NKP-G 40-160 - 2 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≈ 2900 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

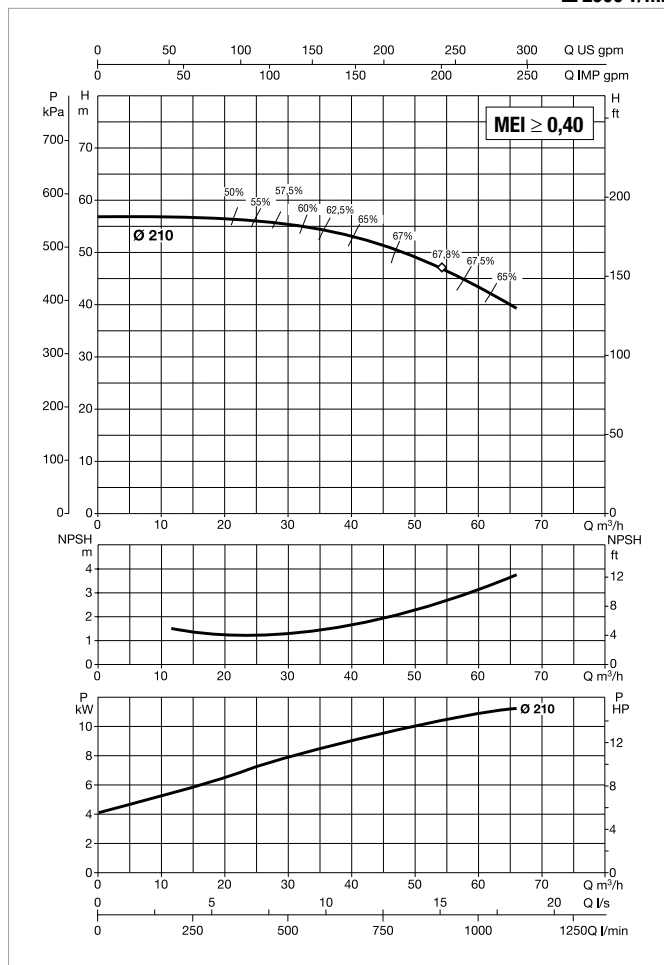
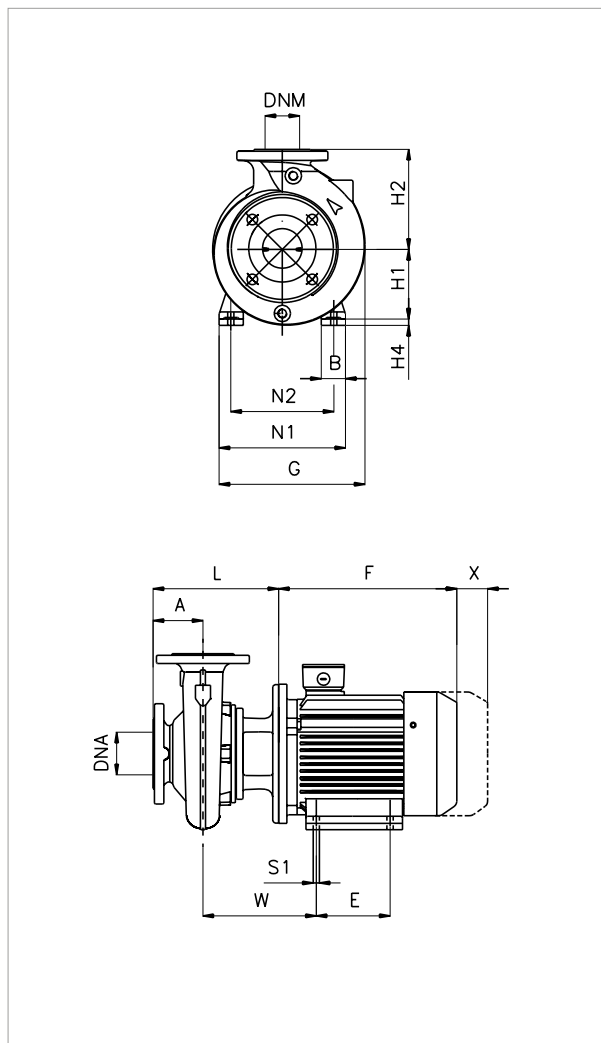
| MODEL                  | ELECTRICAL DATA |                   |            |     |       |       |            |
|------------------------|-----------------|-------------------|------------|-----|-------|-------|------------|
|                        | MOTOR SIZE      | POWER INPUT 50 Hz | P2 NOMINAL |     | In A  |       | MOTOR TYPE |
|                        |                 |                   | kW         | HP  | 230 V | 400 V |            |
| NKP-G 40-160/158/5,5/2 | MEC 132 S       | 3 x 400 V ~       | 5,5        | 7,5 | -     | 10,2  | IE3        |
| NKP-G 40-160/172/7,5/2 | MEC 132 S       | 3 x 400 V ~       | 7,5        | 10  | -     | 14,4  | IE3        |

| MODEL                  | A  | B  | E | F   | G   | H1  | H2  | L   | M1  | M2 | N1  | N2  | N3 | S1  | S2 | W | X   | H3 | H4 | Ø (mm) Mech. seal | DNA | DNM | PACKING DIMENSIONS |     |     | VOLUME (m³) | WEIGHT Kg |
|------------------------|----|----|---|-----|-----|-----|-----|-----|-----|----|-----|-----|----|-----|----|---|-----|----|----|-------------------|-----|-----|--------------------|-----|-----|-------------|-----------|
|                        |    |    |   |     |     |     |     |     |     |    |     |     |    |     |    |   |     |    |    |                   |     |     | L/A                | L/B | H   |             |           |
| NKP-G 40-160/158/5,5/2 | 80 | 50 | - | 328 | 300 | 132 | 160 | 293 | 100 | 70 | 240 | 190 | -  | M10 | -  | - | 100 | 20 | -  | 28                | 65  | 40  | 830                | 430 | 520 | 0,186       | 51        |
| NKP-G 40-160/172/7,5/2 | 80 | 50 | - | 350 | 300 | 132 | 160 | 293 | 100 | 70 | 240 | 190 | -  | M10 | -  | - | 100 | 20 | -  | 28                | 65  | 40  | 830                | 430 | 520 | 0,186       | 90        |

# NKP-G 40-200 - 2 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≈ 2900 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

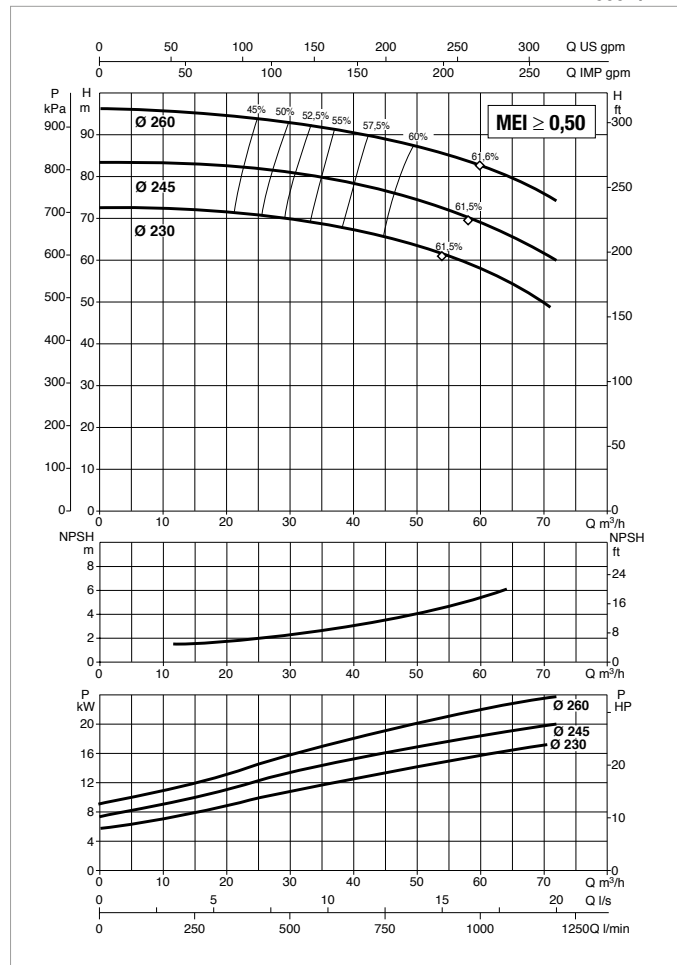
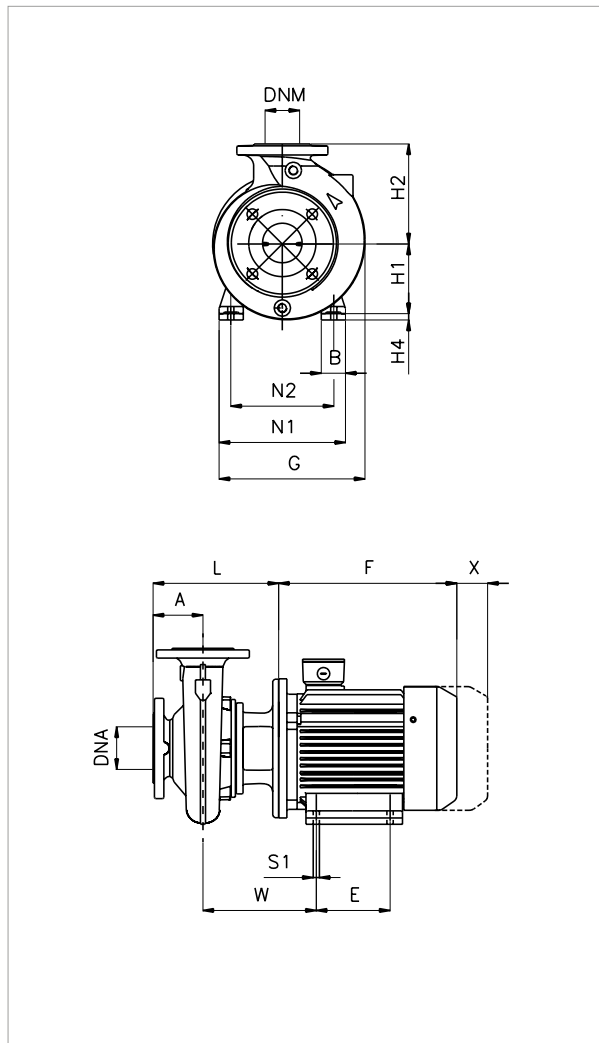
| MODEL                 | ELECTRICAL DATA |                   |            |    |       |       |            |
|-----------------------|-----------------|-------------------|------------|----|-------|-------|------------|
|                       | MOTOR SIZE      | POWER INPUT 50 Hz | P2 NOMINAL |    | In A  |       | MOTOR TYPE |
|                       |                 |                   | kW         | HP | 230 V | 400 V |            |
| NKP-G 40-200/210/11/2 | MEC 160 M       | 3 x 400 V ~       | 11         | 15 | -     | 19,7  | IE3        |

| MODEL                 | A   | B   | E   | F   | G   | H1  | H2  | L   | M1 | M2 | N1  | N2  | N3 | S1  | S2 | W   | X   | H3 | H4 | Ø (mm) Mech. seal | DNA | DNM | PACKING DIMENSIONS |     |     | VOLUME (m³) | WEIGHT Kg |
|-----------------------|-----|-----|-----|-----|-----|-----|-----|-----|----|----|-----|-----|----|-----|----|-----|-----|----|----|-------------------|-----|-----|--------------------|-----|-----|-------------|-----------|
|                       | L/A | L/B | H   |     |     |     |     |     |    |    |     |     |    |     |    |     |     |    |    |                   |     |     |                    |     |     |             |           |
| NKP-G 40-200/210/11/2 | 100 | 67  | 210 | 498 | 350 | 160 | 180 | 343 | -  | -  | 314 | 254 | -  | M12 | -  | 351 | 100 | -  | 20 | 28                | 65  | 40  | 1030               | 530 | 640 | 0,349       | 170       |

# NKP-G 40-250 - 2 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≅ 2900 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

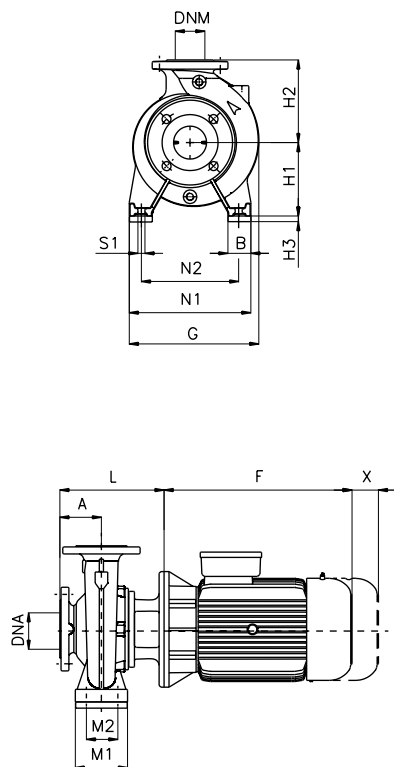
| MODEL                   | ELECTRICAL DATA |                   |            |    |       |       | MOTOR TYPE |
|-------------------------|-----------------|-------------------|------------|----|-------|-------|------------|
|                         | MOTOR SIZE      | POWER INPUT 50 Hz | P2 NOMINAL |    | In A  |       |            |
|                         |                 |                   | kW         | HP | 230 V | 400 V |            |
| NKP-G 40-250/230/15/2   | MEC 160 M       | 3 x 400 V ~       | 15         | 20 | -     | 26,7  | IE3        |
| NKP-G 40-250/245/18,5/2 | MEC 160 L       | 3 x 400 V ~       | 18,5       | 25 | -     | 33    | IE3        |
| NKP-G 40-250/260/22/2   | MEC 180 M       | 3 x 400 V ~       | 22         | 30 | -     | 38,1  | IE3        |

| MODEL                   | A   | B  | E   | F   | G   | H1  | H2  | L   | M1 | M2 | N1  | N2  | N3 | S1  | S2 | W   | X   | H3 | H4 | Ø (mm) Mech. seal | DNA | DNM | PACKING DIMENSIONS |     |     | VOLUME (m³) | WEIGHT Kg |
|-------------------------|-----|----|-----|-----|-----|-----|-----|-----|----|----|-----|-----|----|-----|----|-----|-----|----|----|-------------------|-----|-----|--------------------|-----|-----|-------------|-----------|
|                         |     |    |     |     |     |     |     |     |    |    |     |     |    |     |    |     |     |    |    |                   |     |     | L/A                | L/B | H   |             |           |
| NKP-G 40-250/230/15/2   | 100 | 67 | 210 | 498 | 350 | 160 | 225 | 343 | -  | -  | 314 | 254 | -  | M12 | -  | 351 | 100 | -  | 20 | 28                | 65  | 40  | 1030               | 530 | 640 | 0,349       | 180       |
| NKP-G 40-250/245/18,5/2 | 100 | 67 | 254 | 542 | 350 | 160 | 225 | 343 | -  | -  | 314 | 254 | -  | M12 | -  | 351 | 100 | -  | 20 | 28                | 65  | 40  | 1030               | 530 | 640 | 0,349       | 192       |
| NKP-G 40-250/260/22/2   | 100 | 74 | 241 | 577 | 350 | 180 | 225 | 343 | -  | -  | 345 | 279 | -  | M12 | -  | 364 | 100 | -  | -  | 28                | 65  | 40  | 1030               | 530 | 640 | 0,349       | 223       |

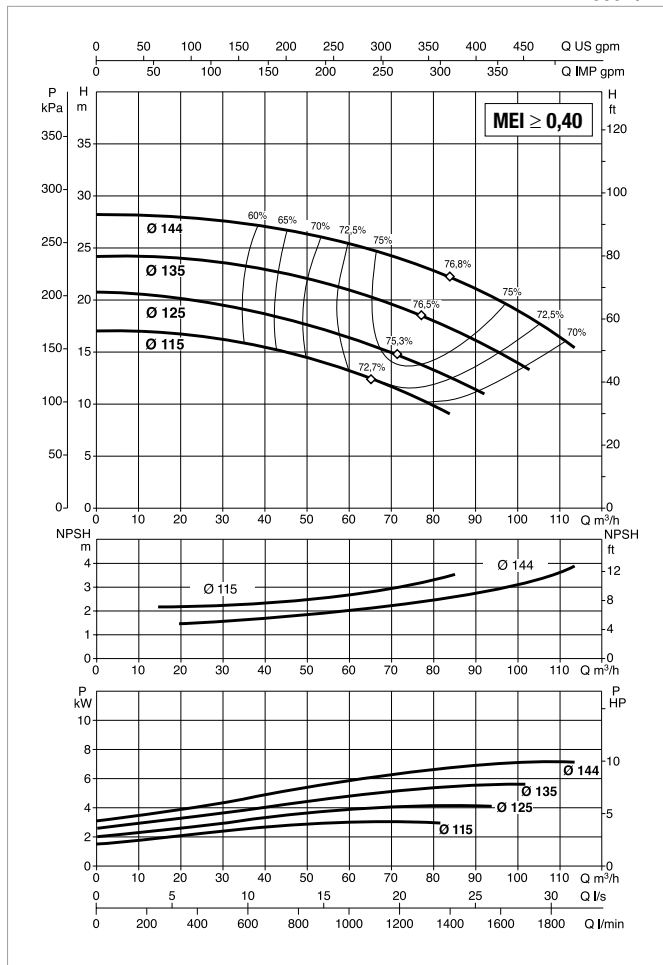
# NKP-G 50-125 - 2 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≅ 2900 1/min



Construction features of the motor: B5



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

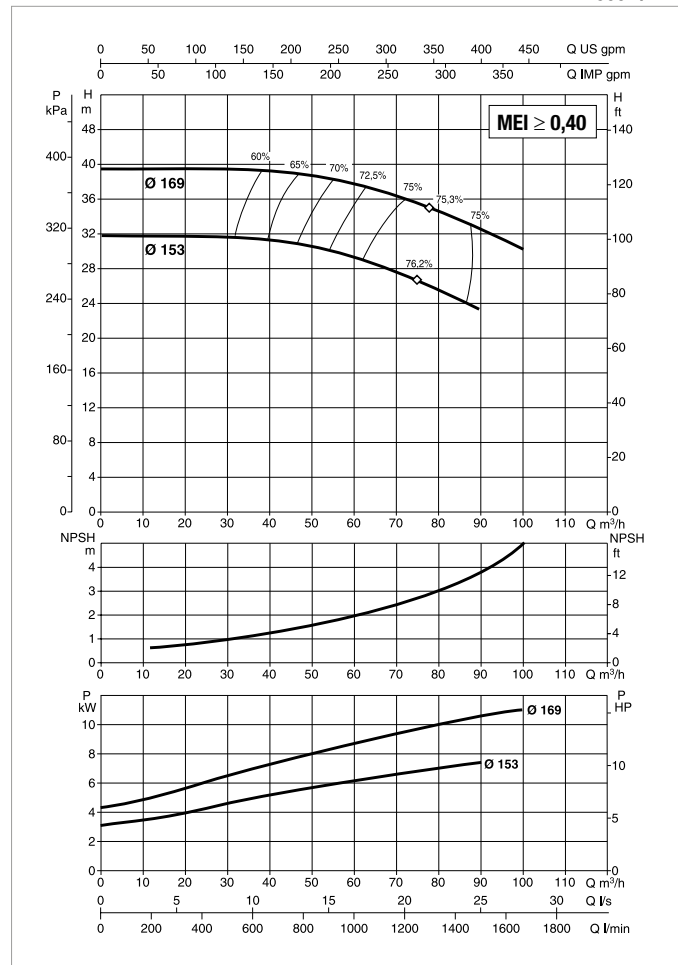
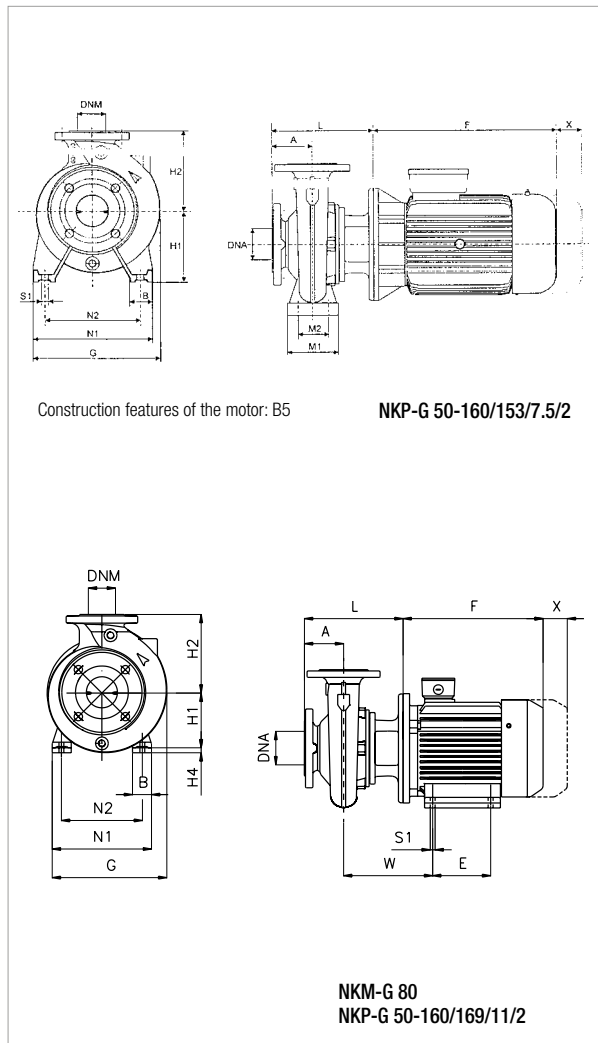
| MODEL                  | ELECTRICAL DATA |                   |            |     |       |       |            |
|------------------------|-----------------|-------------------|------------|-----|-------|-------|------------|
|                        | MOTOR SIZE      | POWER INPUT 50 Hz | P2 NOMINAL |     | In A  |       | MOTOR TYPE |
|                        |                 |                   | kW         | HP  | 230 V | 400 V |            |
| NKP-G 50-125/115/3/2   | MEC 100 L       | 3 x 400 V ~       | 3          | 4   | -     | 5,6   | IE3        |
| NKP-G 50-125/125/4/2   | MEC 112 M       | 3 x 400 V ~       | 4          | 5,5 | -     | 8,2   | IE3        |
| NKP-G 50-125/135/5,5/2 | MEC 132 S       | 3 x 400 V ~       | 5,5        | 7,5 | -     | 10,2  | IE3        |
| NKP-G 50-125/144/7,5/2 | MEC 132 S       | 3 x 400 V ~       | 7,5        | 10  | -     | 14,4  | IE3        |

| MODEL                  | A   | B  | E | F   | G   | H1  | H2  | L   | M1  | M2 | N1  | N2  | N3 | S1  | S2 | W | X   | H3 | H4 | Ø (mm) Mech. seal | DNA | DNM | PACKING DIMENSIONS |     |     | VOLUME (m³) | WEIGHT Kg |
|------------------------|-----|----|---|-----|-----|-----|-----|-----|-----|----|-----|-----|----|-----|----|---|-----|----|----|-------------------|-----|-----|--------------------|-----|-----|-------------|-----------|
|                        |     |    |   |     |     |     |     |     |     |    |     |     |    |     |    |   |     |    |    |                   |     |     | L/A                | L/B | H   |             |           |
| NKP-G 50-125/115/3/2   | 100 | 50 | - | 319 | 251 | 132 | 160 | 274 | 100 | 70 | 240 | 190 | -  | M10 | -  | - | 100 | -  | -  | 28                | 65  | 50  | 670                | 420 | 540 | 0,152       | 48        |
| NKP-G 50-125/125/4/2   | 100 | 50 | - | 306 | 251 | 132 | 160 | 274 | 100 | 70 | 240 | 190 | -  | M10 | -  | - | 100 | -  | -  | 28                | 65  | 50  | 670                | 420 | 540 | 0,152       | 42        |
| NKP-G 50-125/135/5,5/2 | 100 | 50 | - | 328 | 300 | 132 | 160 | 313 | 100 | 70 | 240 | 190 | -  | M10 | -  | - | 100 | 20 | -  | 28                | 65  | 50  | 830                | 430 | 520 | 0,186       | 53        |
| NKP-G 50-125/144/7,5/2 | 100 | 50 | - | 350 | 300 | 132 | 160 | 313 | 100 | 70 | 240 | 190 | -  | M10 | -  | - | 100 | 20 | -  | 28                | 65  | 50  | 830                | 430 | 520 | 0,186       | 87        |

# NKP-G 50-160 - 2 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≅ 2900 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

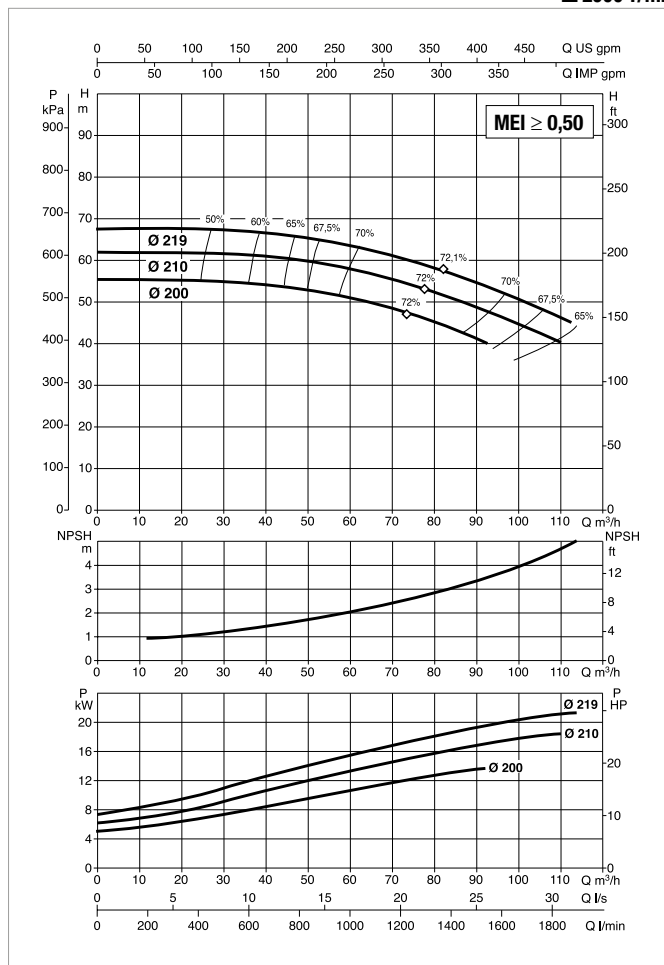
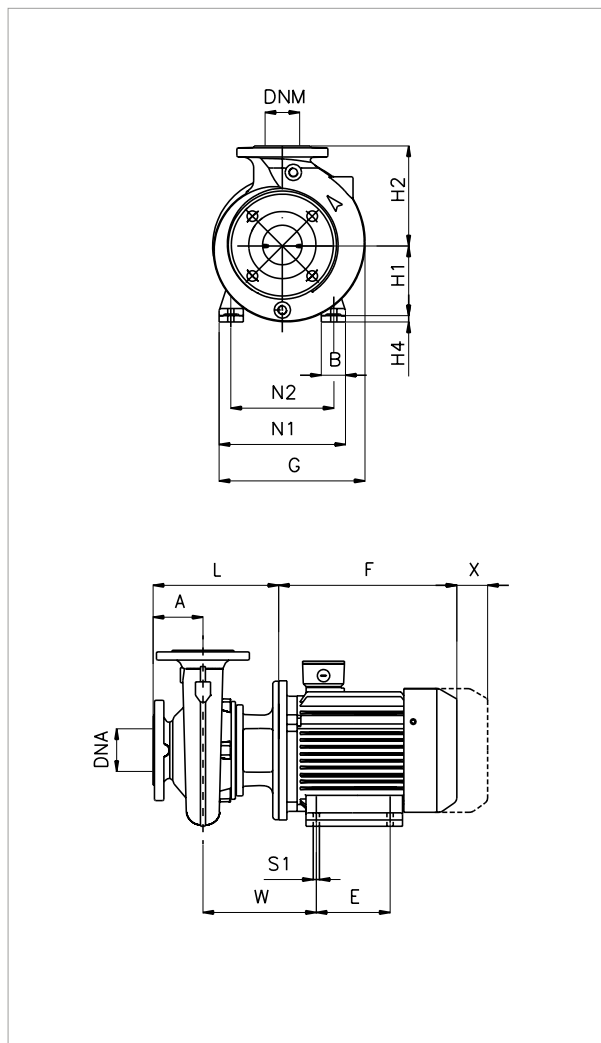
| MODEL                         | ELECTRICAL DATA |                   |            |    |       |       |            |
|-------------------------------|-----------------|-------------------|------------|----|-------|-------|------------|
|                               | MOTOR SIZE      | POWER INPUT 50 Hz | P2 NOMINAL |    | In A  |       | MOTOR TYPE |
|                               |                 |                   | kW         | HP | 230 V | 400 V |            |
| <b>NKP-G 50-160/153/7,5/2</b> | MEC 132 S       | 3 x 400 V ~       | 7,5        | 10 | -     | 14,4  | IE3        |
| <b>NKP-G 50-160/169/11/2</b>  | MEC 160 M       | 3 x 400 V ~       | 11         | 15 | -     | 19,7  | IE3        |

| MODEL                         | A   | B  | E   | F   | G   | H1  | H2  | L   | M1  | M2 | N1  | N2  | N3 | S1  | S2 | W   | X   | H3 | H4 | Ø (mm) Mech. seal | DNA | DNM | PACKING DIMENSIONS |     |     | VOLUME (m <sup>3</sup> ) | WEIGHT Kg |
|-------------------------------|-----|----|-----|-----|-----|-----|-----|-----|-----|----|-----|-----|----|-----|----|-----|-----|----|----|-------------------|-----|-----|--------------------|-----|-----|--------------------------|-----------|
|                               |     |    |     |     |     |     |     |     |     |    |     |     |    |     |    |     |     |    |    |                   |     |     | L/A                | L/B | H   |                          |           |
| <b>NKP-G 50-160/153/7,5/2</b> | 100 | 50 | -   | 350 | 300 | 160 | 180 | 313 | 100 | 70 | 265 | 212 | -  | M10 | -  | -   | 100 | -  | -  | 28                | 65  | 50  | 1030               | 530 | 640 | 0,349                    | 64        |
| <b>NKP-G 50-160/169/11/2</b>  | 100 | 67 | 210 | 498 | 350 | 160 | 180 | 343 | -   | -  | 314 | 254 | -  | M12 | -  | 351 | 100 | -  | 20 | 28                | 65  | 50  | 1030               | 530 | 640 | 0,349                    | 96        |

# NKP-G 50-200 - 2 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≅ 2900 1/min



For MEI index refer to the hydraulic efficiency section.  
The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

| MODEL                   | ELECTRICAL DATA |                   |            |    |       |       |            |
|-------------------------|-----------------|-------------------|------------|----|-------|-------|------------|
|                         | MOTOR SIZE      | POWER INPUT 50 Hz | P2 NOMINAL |    | In A  |       | MOTOR TYPE |
|                         |                 |                   | kW         | HP | 230 V | 400 V |            |
| NKP-G 50-200/200/15/2   | MEC 160 M       | 3 x 400 V ~       | 15         | 20 | -     | 26,7  | IE3        |
| NKP-G 50-200/210/18,5/2 | MEC 160 L       | 3 x 400 V ~       | 18,5       | 25 | -     | 33    | IE3        |
| NKP-G 50-200/219/22/2   | MEC 180 M       | 3 x 400 V ~       | 22         | 30 | -     | 38,1  | IE3        |

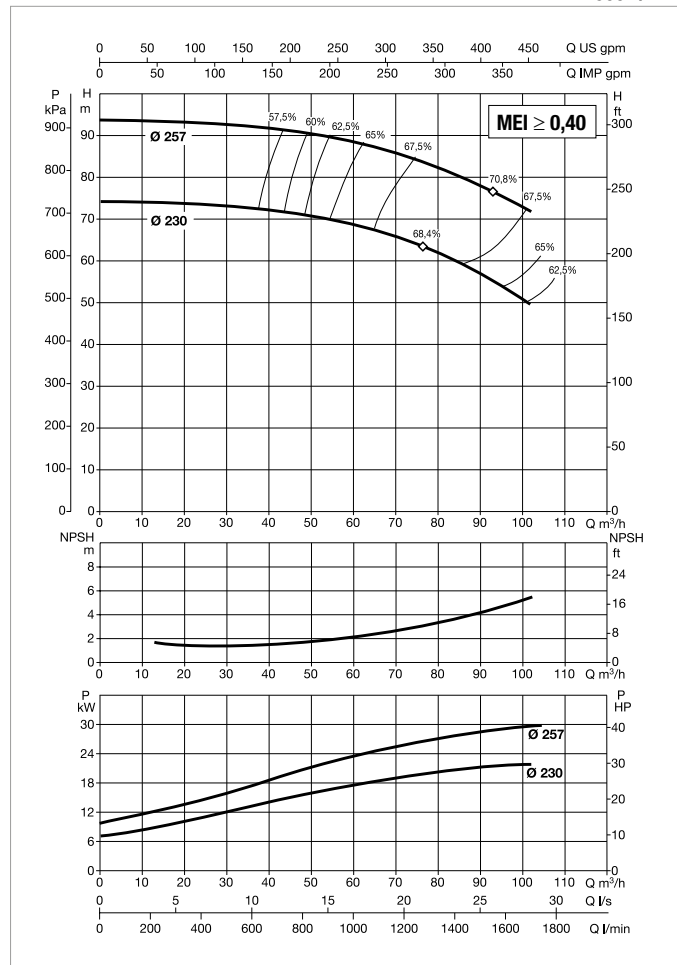
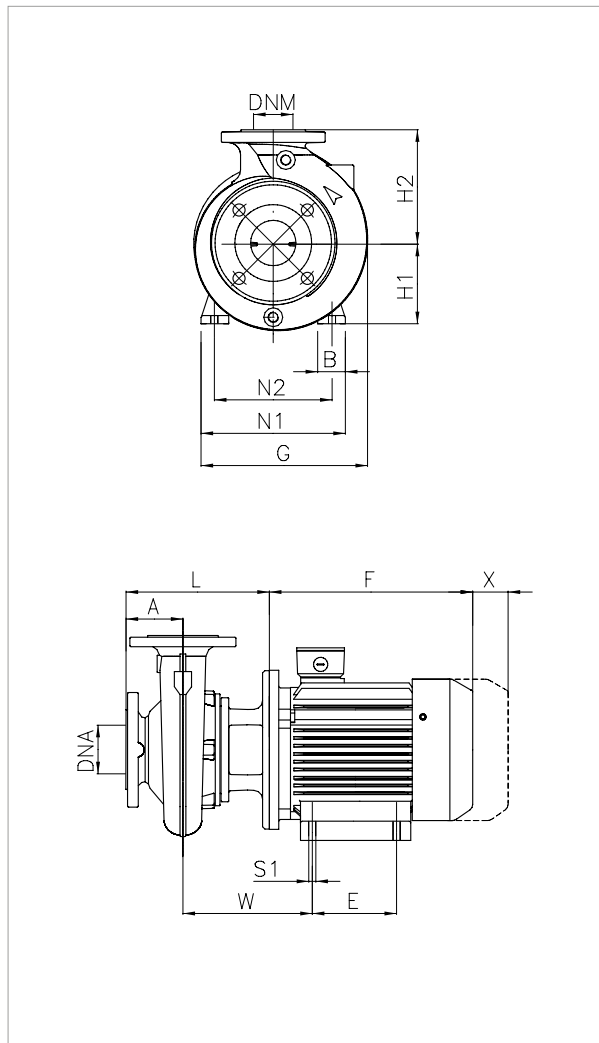
| MODEL                   | A   | B  | E   | F   | G   | H1  | H2  | L   | M1 | M2 | N1  | N2  | N3 | S1  | S2 | W   | X   | H3 | H4 | Ø (mm) Mech. seal | DNA | DNM | PACKING DIMENSIONS |     |     | VOLUME (m <sup>3</sup> ) | WEIGHT Kg |
|-------------------------|-----|----|-----|-----|-----|-----|-----|-----|----|----|-----|-----|----|-----|----|-----|-----|----|----|-------------------|-----|-----|--------------------|-----|-----|--------------------------|-----------|
|                         |     |    |     |     |     |     |     |     |    |    |     |     |    |     |    |     |     |    |    |                   |     |     | L/A                | L/B | H   |                          |           |
| NKP-G 50-200/200/15/2   | 100 | 67 | 210 | 498 | 350 | 160 | 200 | 343 | -  | -  | 314 | 254 | -  | M12 | -  | 351 | 100 | -  | 20 | 28                | 65  | 50  | 1030               | 530 | 640 | 0,349                    | 176       |
| NKP-G 50-200/210/18,5/2 | 100 | 67 | 254 | 542 | 350 | 160 | 200 | 343 | -  | -  | 314 | 254 | -  | M12 | -  | 351 | 100 | -  | 20 | 28                | 65  | 50  | 1030               | 530 | 640 | 0,349                    | 187       |
| NKP-G 50-200/219/22/2   | 100 | 74 | 241 | 577 | 350 | 160 | 200 | 343 | -  | -  | 345 | 279 | -  | M12 | -  | 364 | 100 | -  | -  | 28                | 65  | 50  | 1030               | 530 | 640 | 0,349                    | 218       |



# NKP-G 50-250 - 2 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≈ 2900 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

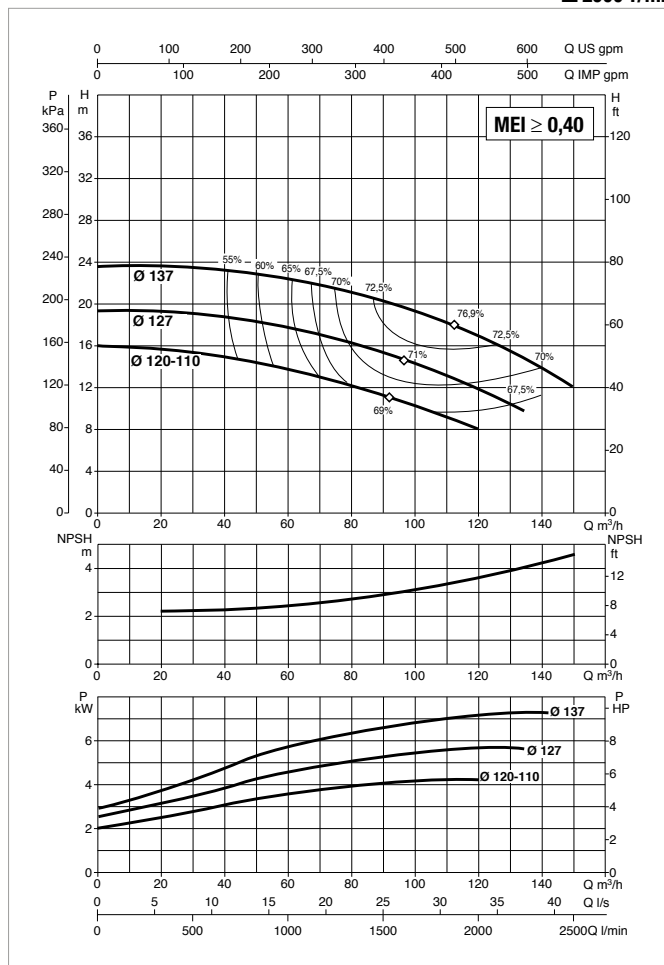
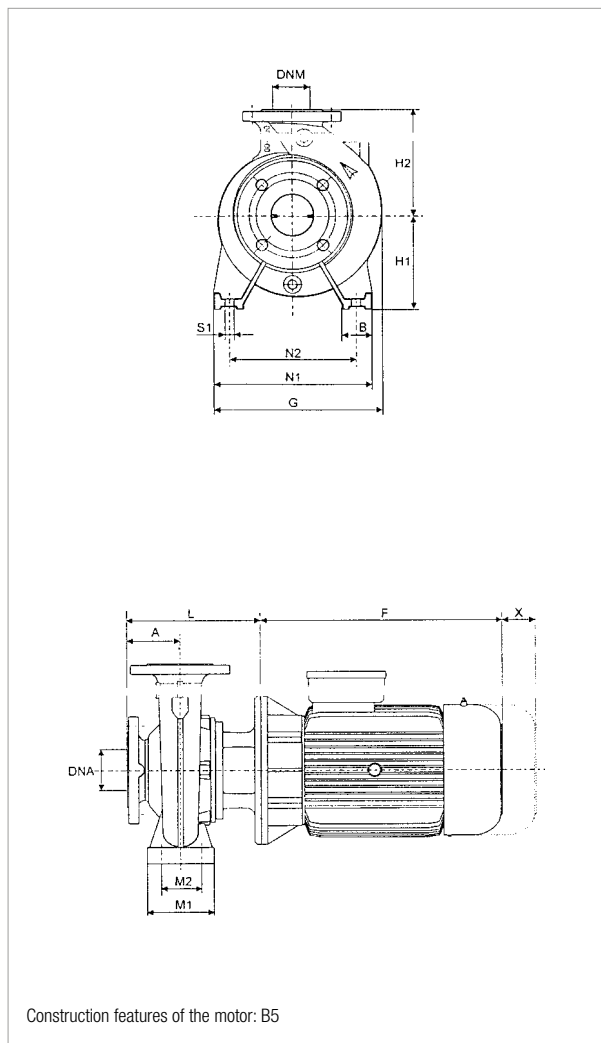
| MODEL                 | ELECTRICAL DATA |                   |            |    |       |       |            |
|-----------------------|-----------------|-------------------|------------|----|-------|-------|------------|
|                       | MOTOR SIZE      | POWER INPUT 50 Hz | P2 NOMINAL |    | In A  |       | MOTOR TYPE |
|                       |                 |                   | kW         | HP | 230 V | 400 V |            |
| NKP-G 50-250/230/22/2 | MEC 180 M       | 3 x 400 V ~       | 22         | 30 | -     | 38,1  | IE3        |
| NKP-G 50-250/257/30/2 | MEC 200 L       | 3 x 400 V ~       | 30         | 40 | -     | 52,1  | IE3        |

| MODEL                 | A   | B  | E   | F     | G   | H1  | H2  | L   | M1 | M2 | N1  | N2  | N3 | S1  | S2 | W   | X   | H3 | H4 | Ø (mm) Mech. seal | DNA | DNM | PACKING DIMENSIONS |     |     | VOLUME (m³) | WEIGHT Kg |
|-----------------------|-----|----|-----|-------|-----|-----|-----|-----|----|----|-----|-----|----|-----|----|-----|-----|----|----|-------------------|-----|-----|--------------------|-----|-----|-------------|-----------|
|                       |     |    |     |       |     |     |     |     |    |    |     |     |    |     |    |     |     |    |    |                   |     |     | L/A                | L/B | H   |             |           |
| NKP-G 50-250/230/22/2 | 100 | 74 | 241 | 577   | 350 | 180 | 225 | 343 | -  | -  | 345 | 279 | -  | M12 | -  | 364 | 100 | -  | -  | 28                | 65  | 50  | 1030               | 530 | 640 | 0,349       | 223       |
| NKP-G 50-250/257/30/2 | 100 | 85 | 305 | 658,5 | 400 | 200 | 225 | 343 | -  | -  | 388 | 318 | -  | M14 | -  | 376 | 100 | -  | -  | 28                | 65  | 50  | 1130               | 580 | 740 | 0,485       | 351       |

# NKP-G 65-125 - 2 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≅ 2900 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

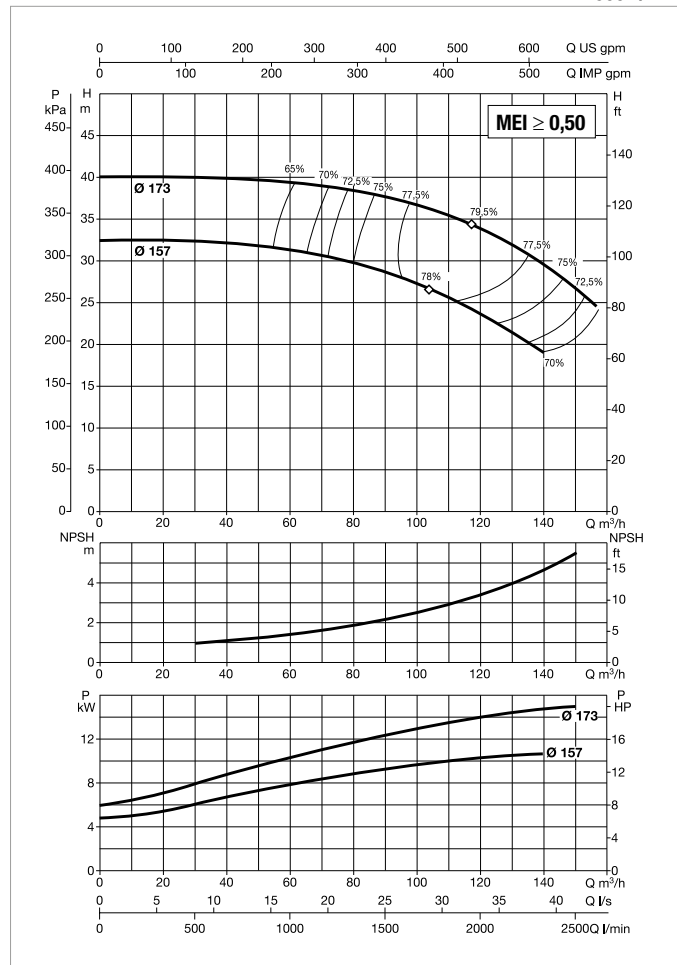
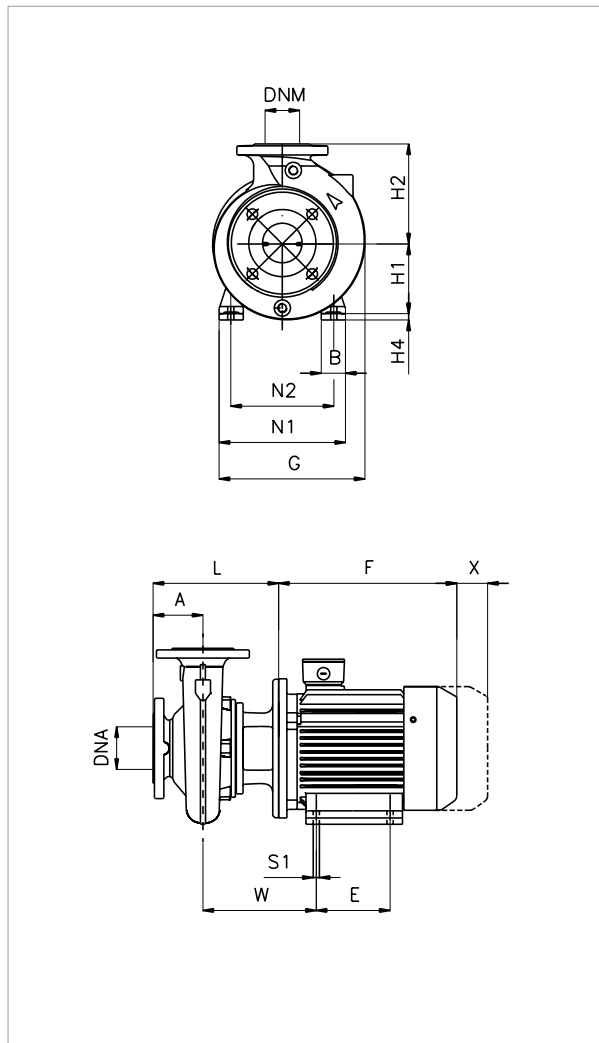
| MODEL                    | ELECTRICAL DATA |                   |            |     |       |       |            |
|--------------------------|-----------------|-------------------|------------|-----|-------|-------|------------|
|                          | MOTOR SIZE      | POWER INPUT 50 Hz | P2 NOMINAL |     | In A  |       | MOTOR TYPE |
|                          |                 |                   | kW         | HP  | 230 V | 400 V |            |
| NKP-G 65-125/120-110/4/2 | MEC 112         | 3 x 400 V ~       | 4          | 5,5 | -     | 8,2   | IE3        |
| NKP-G 65-125/127/5,5/2   | MEC 132 S       | 3 x 400 V ~       | 5,5        | 7,5 | -     | 10,2  | IE3        |
| NKP-G 65-125/137/7,5/2   | MEC 132 S       | 3 x 400 V ~       | 7,5        | 10  | -     | 14,4  | IE3        |

| MODEL                    | A   | B  | E | F   | G   | H1  | H2  | L   | M1  | M2 | N1  | N2  | N3 | S1  | S2 | W | X   | H3 | H4 | Ø (mm) Mech. seal | DNA | DNM | PACKING DIMENSIONS |     |     | VOLUME (m³) | WEIGHT Kg |
|--------------------------|-----|----|---|-----|-----|-----|-----|-----|-----|----|-----|-----|----|-----|----|---|-----|----|----|-------------------|-----|-----|--------------------|-----|-----|-------------|-----------|
|                          |     |    |   |     |     |     |     |     |     |    |     |     |    |     |    |   |     |    |    |                   |     |     | L/A                | L/B | H   |             |           |
| NKP-G 65-125/120-110/4/2 | 100 | 65 | - | 306 | 286 | 160 | 180 | 274 | 125 | 95 | 280 | 212 | -  | M10 | -  | - | 100 | -  | -  | 28                | 80  | 65  | 670                | 420 | 540 | 0,152       | 40        |
| NKP-G 65-125/127/5,5/2   | 100 | 65 | - | 328 | 300 | 160 | 180 | 313 | 125 | 95 | 280 | 212 | -  | M10 | -  | - | 100 | -  | -  | 28                | 80  | 65  | 830                | 430 | 520 | 0,186       | 55        |
| NKP-G 65-125/137/7,5/2   | 100 | 65 | - | 350 | 300 | 160 | 180 | 313 | 125 | 95 | 280 | 212 | -  | M10 | -  | - | 100 | -  | -  | 28                | 80  | 65  | 830                | 430 | 520 | 0,186       | 94        |

# NKP-G 65-160 - 2 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≈ 2900 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

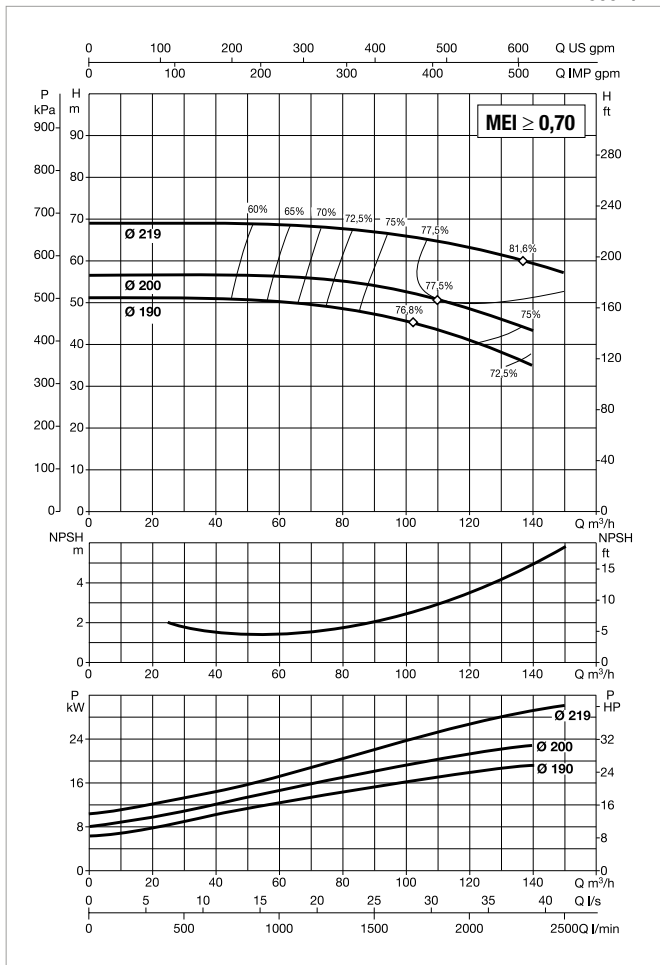
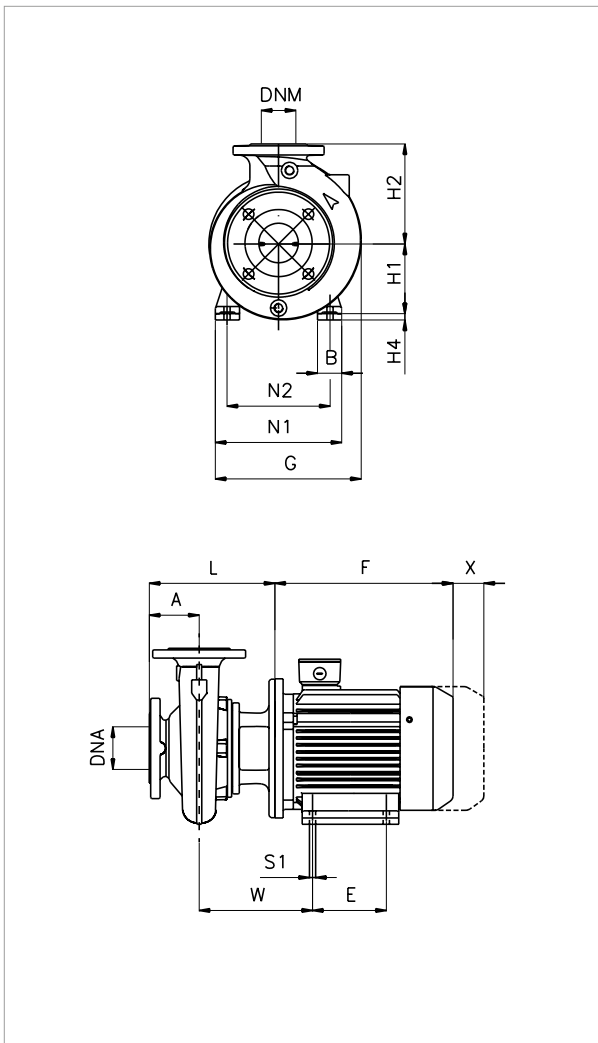
| MODEL                 | ELECTRICAL DATA |                   |            |    |       |       |            |
|-----------------------|-----------------|-------------------|------------|----|-------|-------|------------|
|                       | MOTOR SIZE      | POWER INPUT 50 Hz | P2 NOMINAL |    | In A  |       | MOTOR TYPE |
|                       |                 |                   | kW         | HP | 230 V | 400 V |            |
| NKP-G 65-160/157/11/2 | MEC 160 M       | 3 x 400 V ~       | 11         | 15 | -     | 19,7  | IE3        |
| NKP-G 65-160/173/15/2 | MEC 160 M       | 3 x 400 V ~       | 15         | 20 | -     | 26,7  | IE3        |

| MODEL                 | A   | B  | E   | F   | G   | H1  | H2  | L   | M1 | M2 | N1  | N2  | N3 | S1  | S2 | W   | X   | H3 | H4 | Ø (mm) Mech. seal | DNA | DNM | PACKING DIMENSIONS |     |     | VOLUME (m³) | WEIGHT Kg |
|-----------------------|-----|----|-----|-----|-----|-----|-----|-----|----|----|-----|-----|----|-----|----|-----|-----|----|----|-------------------|-----|-----|--------------------|-----|-----|-------------|-----------|
|                       |     |    |     |     |     |     |     |     |    |    |     |     |    |     |    |     |     |    |    |                   |     |     | L/A                | L/B | H   |             |           |
| NKP-G 65-160/157/11/2 | 100 | 67 | 210 | 498 | 350 | 160 | 200 | 343 | -  | -  | 314 | 254 | -  | M12 | -  | 351 | 100 | -  | 20 | 28                | 80  | 65  | 1030               | 530 | 640 | 0,349       | 166       |
| NKP-G 65-160/173/15/2 | 100 | 67 | 210 | 498 | 350 | 160 | 200 | 343 | -  | -  | 314 | 254 | -  | M12 | -  | 351 | 100 | -  | 20 | 28                | 80  | 65  | 1030               | 530 | 640 | 0,349       | 172       |

# NKP-G 65-200 - 2 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≅ 2900 1/min



For MEI index refer to the hydraulic efficiency section.  
The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

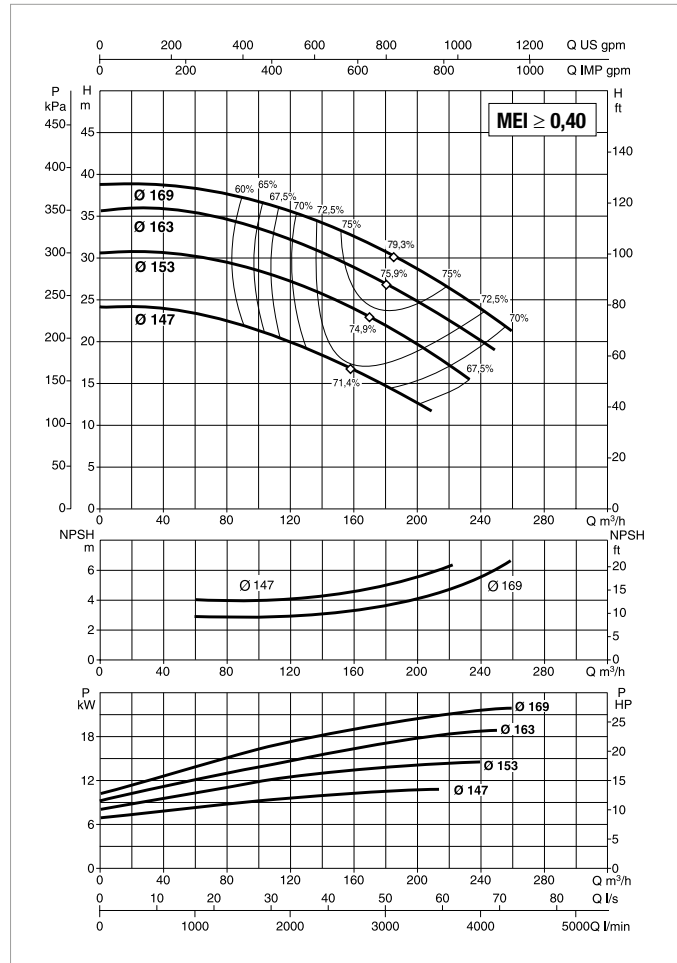
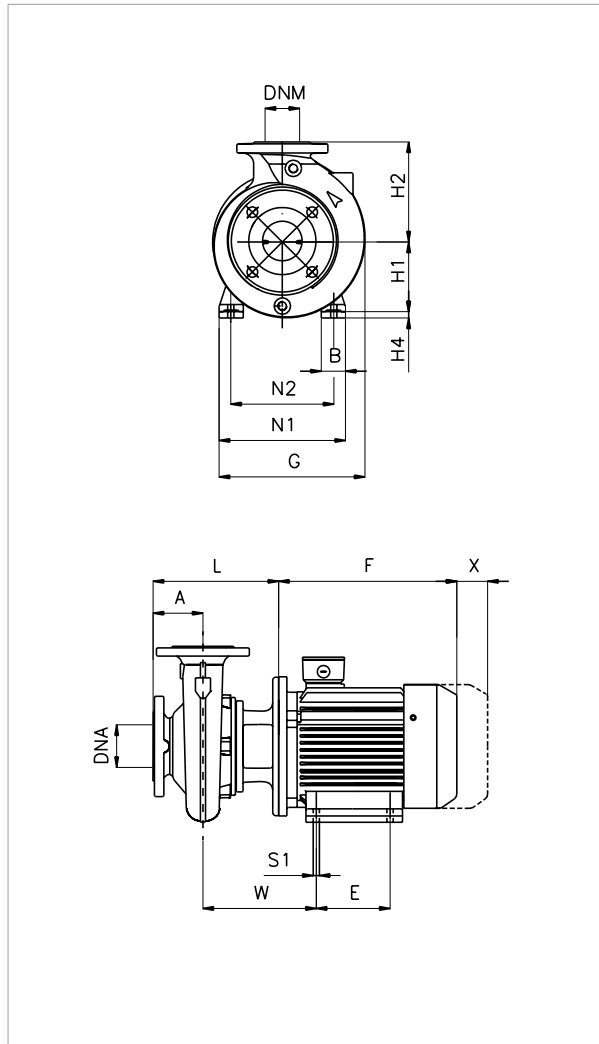
| MODEL                   | ELECTRICAL DATA |                   |            |    |       |       |            |
|-------------------------|-----------------|-------------------|------------|----|-------|-------|------------|
|                         | MOTOR SIZE      | POWER INPUT 50 Hz | P2 NOMINAL |    | In A  |       | MOTOR TYPE |
|                         |                 |                   | kW         | HP | 230 V | 400 V |            |
| NKP-G 65-200/190/18,5/2 | MEC 160 L       | 3 x 400 V ~       | 18,5       | 25 | -     | 33    | IE3        |
| NKP-G 65-200/200/22/2   | MEC 180 M       | 3 x 400 V ~       | 22         | 30 | -     | 38,1  | IE3        |
| NKP-G 65-200/219/30/2   | MEC 200 L       | 3 x 400 V ~       | 30         | 40 | -     | 52,1  | IE3        |

| MODEL                   | A   | B  | E   | F     | G   | H1  | H2  | L   | M1 | M2 | N1  | N2  | N3 | S1  | S2 | W   | X   | H3 | H4 | Ø (mm) Mech. seal | DNA | DNM | PACKING DIMENSIONS |     |     | VOLUME (m³) | WEIGHT Kg |
|-------------------------|-----|----|-----|-------|-----|-----|-----|-----|----|----|-----|-----|----|-----|----|-----|-----|----|----|-------------------|-----|-----|--------------------|-----|-----|-------------|-----------|
|                         |     |    |     |       |     |     |     |     |    |    |     |     |    |     |    |     |     |    |    |                   |     |     | L/A                | L/B | H   |             |           |
| NKP-G 65-200/190/18,5/2 | 100 | 67 | 254 | 542   | 350 | 160 | 225 | 343 | -  | -  | 314 | 254 | -  | M12 | -  | 351 | 100 | -  | 20 | 28                | 80  | 65  | 1030               | 530 | 640 | 0,349       | 192       |
| NKP-G 65-200/200/22/2   | 100 | 74 | 241 | 577   | 350 | 180 | 225 | 343 | -  | -  | 345 | 279 | -  | M12 | -  | 364 | 100 | -  | -  | 28                | 80  | 65  | 1030               | 530 | 640 | 0,349       | 223       |
| NKP-G 65-200/219/30/2   | 100 | 85 | 305 | 658,5 | 400 | 200 | 225 | 343 | -  | -  | 388 | 318 | -  | M14 | -  | 376 | 100 | -  | -  | 28                | 80  | 65  | 1130               | 580 | 740 | 0,485       | 351       |

# NKP-G 80-160 - 2 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≅ 2900 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

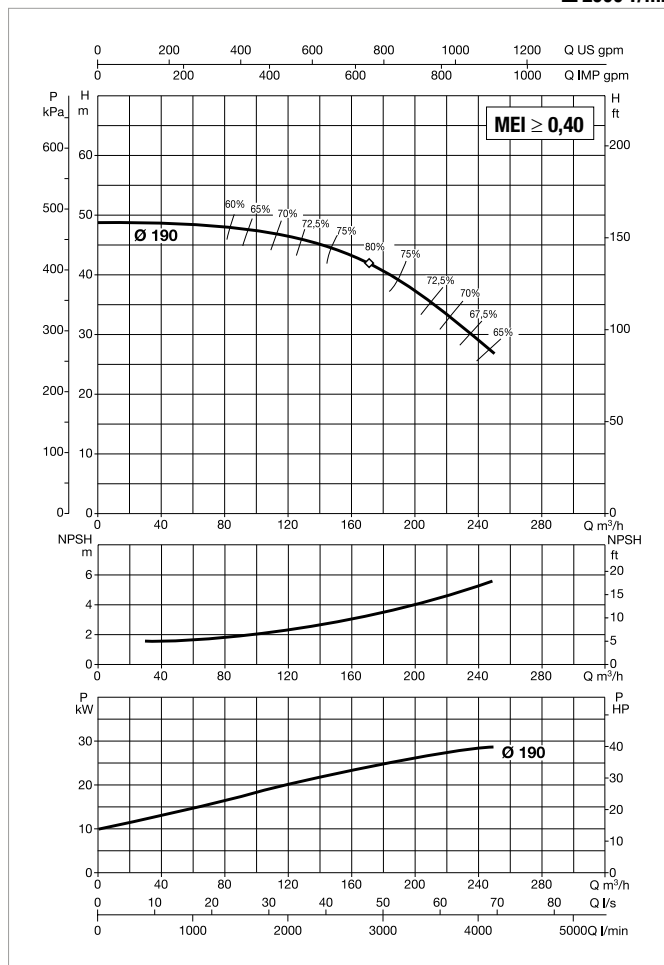
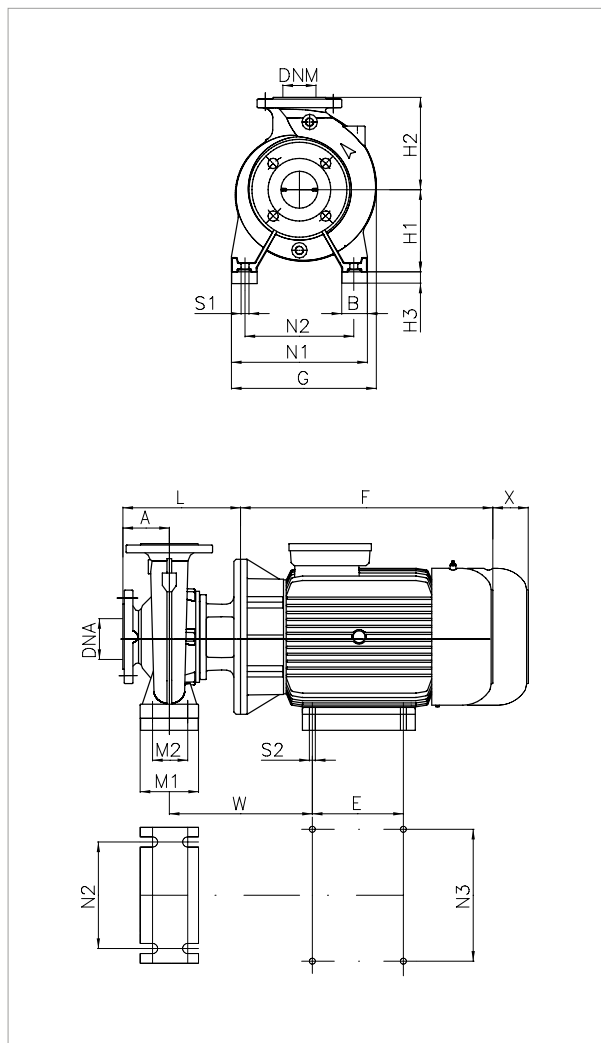
| MODEL                     | ELECTRICAL DATA |                   |            |    |       |       |            |
|---------------------------|-----------------|-------------------|------------|----|-------|-------|------------|
|                           | MOTOR SIZE      | POWER INPUT 50 Hz | P2 NOMINAL |    | In A  |       | MOTOR TYPE |
|                           |                 |                   | kW         | HP | 230 V | 400 V |            |
| NKP-G 80-160/147-127/11/2 | MEC 160 M       | 3 x 400 V ~       | 11         | 15 | -     | 19,7  | IE3        |
| NKP-G 80-160/153/15/2     | MEC 160 M       | 3 x 400 V ~       | 15         | 20 | -     | 26,7  | IE3        |
| NKP-G 80-160/163/18,5/2   | MEC 160 L       | 3 x 400 V ~       | 18,5       | 25 | -     | 33    | IE3        |
| NKP-G 80-160/169/22/2     | MEC 180 M       | 3 x 400 V ~       | 22         | 30 | -     | 38,1  | IE3        |

| MODEL                     | A   | B  | E   | F   | G   | H1  | H2  | L   | M1 | M2 | N1  | N2  | N3 | S1  | S2 | W   | X   | H3 | H4 | Ø (mm) Mech. seal | DNA | DNM | PACKING DIMENSIONS |     |     | VOLUME (m³) | WEIGHT Kg |
|---------------------------|-----|----|-----|-----|-----|-----|-----|-----|----|----|-----|-----|----|-----|----|-----|-----|----|----|-------------------|-----|-----|--------------------|-----|-----|-------------|-----------|
|                           |     |    |     |     |     |     |     |     |    |    |     |     |    |     |    |     |     |    |    |                   |     |     | L/A                | L/B | H   |             |           |
| NKP-G 80-160/147-127/11/2 | 125 | 67 | 210 | 498 | 350 | 160 | 225 | 368 | -  | -  | 314 | 254 | -  | M12 | -  | 351 | 140 | -  | 20 | 28                | 100 | 80  | 1030               | 530 | 640 | 0,349       | 179       |
| NKP-G 80-160/153/15/2     | 125 | 67 | 210 | 498 | 350 | 160 | 225 | 368 | -  | -  | 314 | 254 | -  | M12 | -  | 351 | 140 | -  | 20 | 28                | 100 | 80  | 1030               | 530 | 640 | 0,349       | 181       |
| NKP-G 80-160/163/18,5/2   | 125 | 67 | 254 | 542 | 350 | 160 | 225 | 368 | -  | -  | 314 | 254 | -  | M12 | -  | 351 | 140 | -  | 20 | 28                | 100 | 80  | 1030               | 530 | 640 | 0,349       | 192       |
| NKP-G 80-160/169/22/2     | 125 | 74 | 241 | 577 | 350 | 180 | 225 | 368 | -  | -  | 345 | 279 | -  | M12 | -  | 364 | 140 | -  | -  | 28                | 100 | 80  | 1130               | 580 | 740 | 0,485       | 221       |

# NKP-G 80-200 - 2 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≈ 2900 1/min



**For MEI index refer to the hydraulic efficiency section.**  
 The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

| MODEL                 | ELECTRICAL DATA |                   |            |    |       |       |            |
|-----------------------|-----------------|-------------------|------------|----|-------|-------|------------|
|                       | MOTOR SIZE      | POWER INPUT 50 Hz | P2 NOMINAL |    | In A  |       | MOTOR TYPE |
|                       |                 |                   | kW         | HP | 230 V | 400 V |            |
| NKP-G 80-200/190/30/2 | MEC 200 L       | 3 x 400 V ~       | 30         | 40 | -     | 52,1  | IE3        |

| MODEL                 | A   | B   | E   | F     | G   | H1  | H2  | L   | M1  | M2 | N1  | N2  | N3  | S1  | S2  | W   | X   | H3 | H4 | Ø (mm) Mech. seal | DNA | DNM | PACKING DIMENSIONS |     |     | VOLUME (m <sup>3</sup> ) | WEIGHT Kg |
|-----------------------|-----|-----|-----|-------|-----|-----|-----|-----|-----|----|-----|-----|-----|-----|-----|-----|-----|----|----|-------------------|-----|-----|--------------------|-----|-----|--------------------------|-----------|
|                       | L/A | L/B | H   |       |     |     |     |     |     |    |     |     |     |     |     |     |     |    |    |                   |     |     |                    |     |     |                          |           |
| NKP-G 80-200/190/30/2 | 125 | 65  | 305 | 658,5 | 400 | 180 | 250 | 398 | 125 | 95 | 345 | 280 | 318 | M10 | M16 | 406 | 140 | 20 | -  | 28                | 100 | 80  | 1130               | 580 | 740 | 0,485                    | 374       |

# NKP-G - 2 POLES

## STANDARDISED MONOBLOC PUMPS

### IE3 STANDARD MOTOR ELECTRIC DATA

=2900 1/min

| MOTOR TYPE | P2 NOMINAL kW | SPEED rpm | YIELD % | POWER FACTOR COS φ | POWER INPUT 50 Hz | In A |       |       | Start-up current Ia/In | Start-up torque Ma/Mn | Maximum torque M/k/Mn | POLES |
|------------|---------------|-----------|---------|--------------------|-------------------|------|-------|-------|------------------------|-----------------------|-----------------------|-------|
|            |               |           |         |                    |                   | 230V | 400V  | 690V  |                        |                       |                       |       |
| MEC 71     | 0,25          | 2790      | 69,81   | 0,778              | 3x230/400         | 1,16 | 0,67  |       | 5,06                   | 2,90                  | 3,01                  | 2     |
| MEC 71     | 0,37          | 2820      | 72,79   | 0,783              | 3x230/400         | 1,61 | 0,93  |       | 5,40                   | 2,69                  | 2,99                  | 2     |
| MEC 80     | 0,55          | 2810      | 76,97   | 0,800              | 3x230/400         | 2,23 | 1,29  |       | 6,41                   | 3,43                  | 3,13                  | 2     |
| MEC 80Z    | 0,75          | 2910      | 82,00   | 0,780              | 3x230/400         | 2,94 | 1,70  |       | 8,90                   | 4,70                  | 4,80                  | 2     |
| MEC 80Z    | 1,1           | 2870      | 82,70   | 0,760              | 3x230/400         | 4,16 | 2,40  |       | 9,30                   | 5,00                  | 5,30                  | 2     |
| MEC 90S    | 1,5           | 2875      | 84,20   | 0,850              | 3x230/400         | 5,20 | 3,00  |       | 8,40                   | 3,60                  | 3,80                  | 2     |
| MEC 90L    | 2,2           | 2880      | 86,50   | 0,820              | 3x230/400         | 7,97 | 4,60  |       | 9,20                   | 4,00                  | 4,20                  | 2     |
| MEC 100L   | 3             | 2900      | 87,10   | 0,890              | 3x400 Δ           |      | 5,60  | 3,23  | 8,80                   | 5,50                  | 4,50                  | 2     |
| MEC 112M   | 4             | 2920      | 88,10   | 0,810              | 3x400 Δ           |      | 8,20  | 4,73  | 10,90                  | 6,10                  | 5,70                  | 2     |
| MEC 132S   | 5,5           | 2935      | 89,20   | 0,870              | 3x400 Δ           |      | 10,20 | 5,89  | 11,20                  | 4,20                  | 4,30                  | 2     |
| MEC 132S   | 7,5           | 2930      | 90,10   | 0,840              | 3x400 Δ           |      | 14,40 | 8,31  | 10,40                  | 4,50                  | 4,60                  | 2     |
| MEC 160M   | 11            | 2950      | 91,20   | 0,890              | 3x400 Δ           |      | 19,70 | 11,37 | 9,10                   | 4,00                  | 4,20                  | 2     |
| MEC 160M   | 15            | 2940      | 91,90   | 0,890              | 3x400 Δ           |      | 26,70 | 15,42 | 9,70                   | 4,70                  | 4,80                  | 2     |
| MEC 160L   | 18,5          | 2950      | 92,40   | 0,880              | 3x400 Δ           |      | 33,00 | 19,05 | 10,70                  | 4,60                  | 4,70                  | 2     |
| MEC 180M   | 22            | 2955      | 92,70   | 0,900              | 3x400 Δ           |      | 38,10 | 22,00 | 8,20                   | 2,20                  | 2,30                  | 2     |
| MEC 200L   | 30            | 2960      | 93,30   | 0,890              | 3x400 Δ           |      | 52,10 | 30,08 | 7,50                   | 2,20                  | 2,30                  | 2     |
| MEC 200L   | 37            | 2960      | 93,70   | 0,910              | 3x400 Δ           |      | 62,60 | 36,14 | 7,50                   | 2,20                  | 2,30                  | 2     |

# NKM-G RANGE - 4 POLES

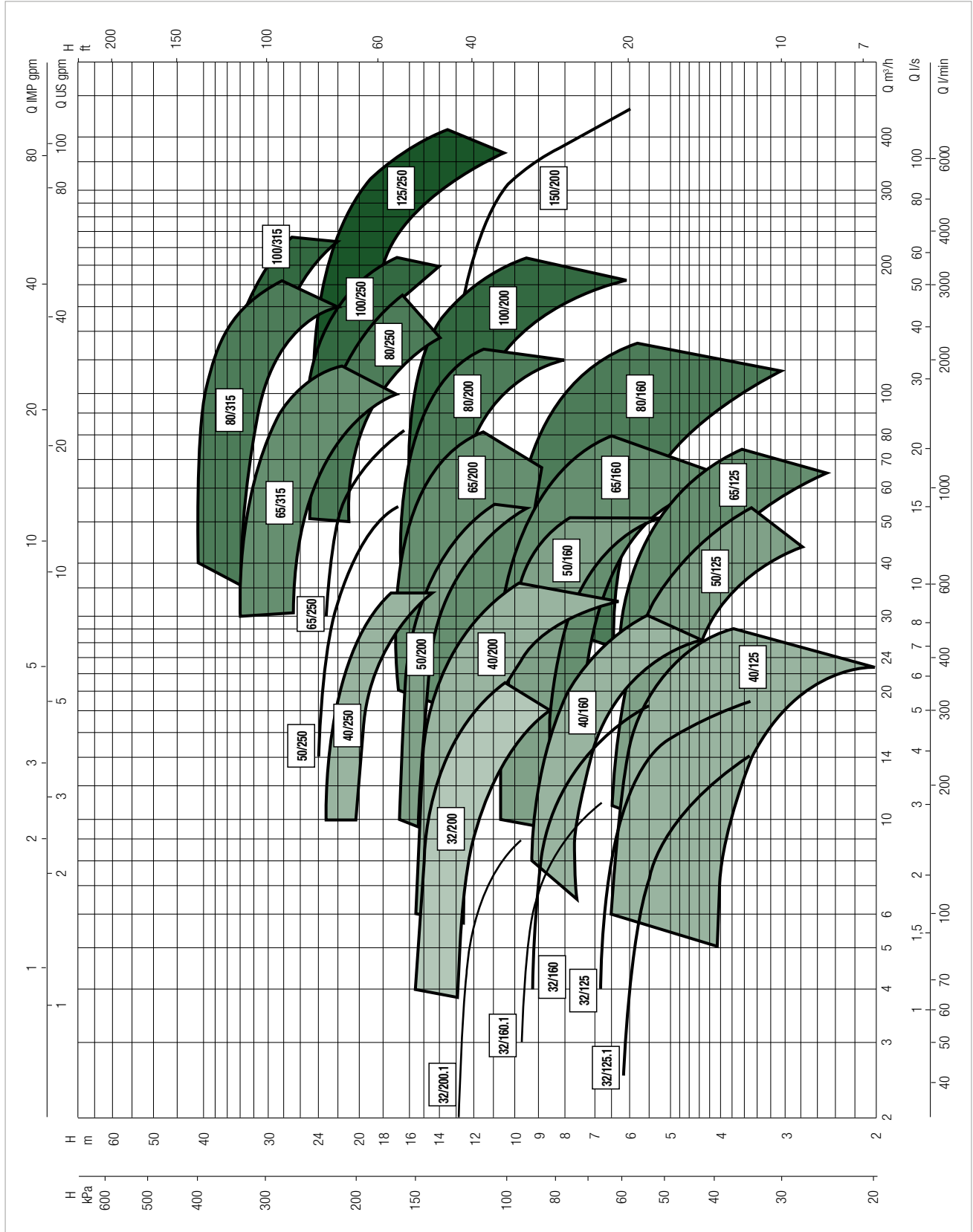
STANDARDISED MONOBLOC PUMPS

## PERFORMANCE RANGE

The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

### GRAPHIC SELECTION TABLE

≈ 1450 1/min





# NKM-G - 4 POLES

## STANDARDISED MONOBLOC PUMPS

### SELECTION TABLE - NKM-G

| MODEL                     | Q=                | 0    | 6    | 12   | 18   | 24   | 30   | 36   | 42   | 48   | 54   | 60   | 66   | 72   | 78   | 84   | 90   | 102  | 114  |      |
|---------------------------|-------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|                           | m <sup>3</sup> /h | 0    | 100  | 200  | 300  | 400  | 500  | 600  | 700  | 800  | 900  | 1000 | 1100 | 1200 | 1300 | 1400 | 1500 | 1700 | 1900 |      |
| NKM-G 32-125.1/140/0,25/4 | H<br>(m)          | 6,2  | 5,8  | 4,2  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| NKM-G 32-125/142/0,37/4   |                   | 7    | 6,75 | 5,85 | 4,2  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| NKM-G 32-160.1/169/0,37/4 |                   | 8,9  | 8,2  | 4,6  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| NKM-G 32-160/169/0,55/4   |                   | 9,4  | 9    | 7,9  | 5,6  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| NKM-G 32-200.1/200/0,55/4 |                   | 12,7 | 11,2 | 7,2  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| NKM-G 32-200/200/0,75/4   |                   | 13   | 12,5 | 11,1 | 8,45 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| NKM-G 32-200/219/1,1/4    |                   | 16   | 15,4 | 14,3 | 12,2 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| NKM-G 40-125/115/0,25/4   |                   | 4,2  | 4,1  | 3,7  | 3    | 2,1  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| NKM-G 40-125/130/0,37/4   |                   | 5,4  | 5,3  | 5    | 4,4  | 3,5  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| NKM-G 40-125/142/0,55/4   |                   | 6,6  | 6,5  | 6,2  | 5,7  | 4,8  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| NKM-G 40-160/153/0,55/4   |                   | 7,6  | 7,6  | 7,5  | 6,7  | 5,5  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| NKM-G 40-160/166/0,75/4   |                   | 9,2  | 9,2  | 9    | 8,4  | 7,4  | 5,7  |      |      |      |      |      |      |      |      |      |      |      |      |      |
| NKM-G 40-200/200/1,1/4    |                   | 12,5 | 12,5 | 12,3 | 11,2 | 9,7  | 7,7  |      |      |      |      |      |      |      |      |      |      |      |      |      |
| NKM-G 40-200/219/1,5/4    |                   | 15,6 | 15,6 | 15,3 | 14,7 | 13,4 | 11,8 | 9,8  |      |      |      |      |      |      |      |      |      |      |      |      |
| NKM-G 40-250/245/2,2/4    |                   | 20,6 | 20,5 | 20,1 | 19,2 | 17,8 | 16   |      |      |      |      |      |      |      |      |      |      |      |      |      |
| NKM-G 40-250/260/3/4      |                   | 23,3 | 23,1 | 22,8 | 22,2 | 20,8 | 19   |      |      |      |      |      |      |      |      |      |      |      |      |      |
| NKM-G 50-125/130/0,55/4   |                   | 5,5  |      | 5,2  | 5    | 4,7  | 4,3  | 3,9  | 3,3  | 2,6  |      |      |      |      |      |      |      |      |      |      |
| NKM-G 50-125/141/0,75/4   |                   | 6,5  |      | 6,3  | 6,1  | 5,8  | 5,5  | 5    | 4,5  | 3,9  |      |      |      |      |      |      |      |      |      |      |
| NKM-G 50-160/161/1,1/4    |                   | 8,6  |      | 8,6  | 8,5  | 8,2  | 7,8  | 7,3  | 6,7  | 5,7  |      |      |      |      |      |      |      |      |      |      |
| NKM-G 50-160/177/1,5/4    |                   | 10,7 |      | 10,7 | 10,7 | 10,5 | 10,2 | 9,8  | 9,2  | 8,3  |      |      |      |      |      |      |      |      |      |      |
| NKM-G 50-200/210/2,2/4    |                   | 15,3 |      | 15,3 | 15,2 | 14,8 | 14   | 13,3 | 12,1 | 10,8 | 9,4  |      |      |      |      |      |      |      |      |      |
| NKM-G 50-200/219/3/4      |                   | 16,8 |      | 16,8 | 16,5 | 16,1 | 15,5 | 14,6 | 13,6 | 12,4 | 10,9 |      |      |      |      |      |      |      |      |      |
| NKM-G 50-250/263/4/4      |                   | 23,8 |      | 23,8 | 23,8 | 23,4 | 22,7 | 21,6 | 20,4 | 19   | 17,1 |      |      |      |      |      |      |      |      |      |
| NKM-G 65-125/130/0,75/4   |                   | 5,1  |      | 4,9  | 4,8  | 4,75 | 4,7  | 4,4  | 4,2  | 3,8  | 3,4  | 3    | 2,5  |      |      |      |      |      |      |      |
| NKM-G 65-125/144/1,1/4    |                   | 6,5  |      | 6,4  | 6,4  | 6,3  | 6,2  | 6    | 5,75 | 5,5  | 5,1  | 4,65 | 4,2  | 3,75 |      |      |      |      |      |      |
| NKM-G 65-160/153/1,1/4    |                   | 7,4  |      | 7,4  | 7,3  | 7,15 | 6,9  | 6,65 | 6,25 | 5,8  | 5,3  | 4,4  |      |      |      |      |      |      |      |      |
| NKM-G 65-160/165/1,5/4    |                   | 8,9  |      |      | 8,8  | 8,7  | 8,6  | 8,3  | 8    | 7,6  | 7,15 | 6,6  | 6    |      |      |      |      |      |      |      |
| NKM-G 65-160/177/2,2/4    |                   | 10,5 |      |      |      | 10,4 | 10,3 | 10,2 | 9,9  | 9,6  | 9,2  | 8,75 | 8,2  | 7,4  | 6,6  |      |      |      |      |      |
| NKM-G 65-200/210/3/4      |                   | 15,3 |      |      |      | 15,2 | 15,2 | 15,1 | 14,6 | 14,1 | 13,5 | 12,9 | 12,2 | 11,3 |      |      |      |      |      |      |
| NKM-G 65-200/219/4/4      |                   | 17   |      |      |      | 17   | 16,9 | 16,8 | 16,4 | 16,2 | 15,8 | 15,2 | 14,3 | 13,8 | 12,6 |      |      |      |      |      |
| NKM-G 65-250/263/5,5/4    |                   | 24,1 |      |      |      | 23,8 | 23,6 | 23,3 | 22,8 | 22,3 | 21,5 | 20,8 | 19,7 | 18,6 | 17,3 |      |      |      |      |      |
| NKM-G 65-315/279/7,5/4    |                   | 27   |      |      |      |      |      |      | 26   | 25,5 | 25   | 24,5 | 23,6 | 22,7 | 21,5 | 20,2 | 19   |      |      |      |
| NKM-G 65-315/309/11/4     |                   | 34,2 |      |      |      |      |      |      |      | 33,2 | 33   | 32,5 | 32   | 31,5 | 30,7 | 29,8 | 29   | 28   | 25   | 21,7 |

# NKM-G - 4 POLES

## STANDARDISED MONOBLOC PUMPS

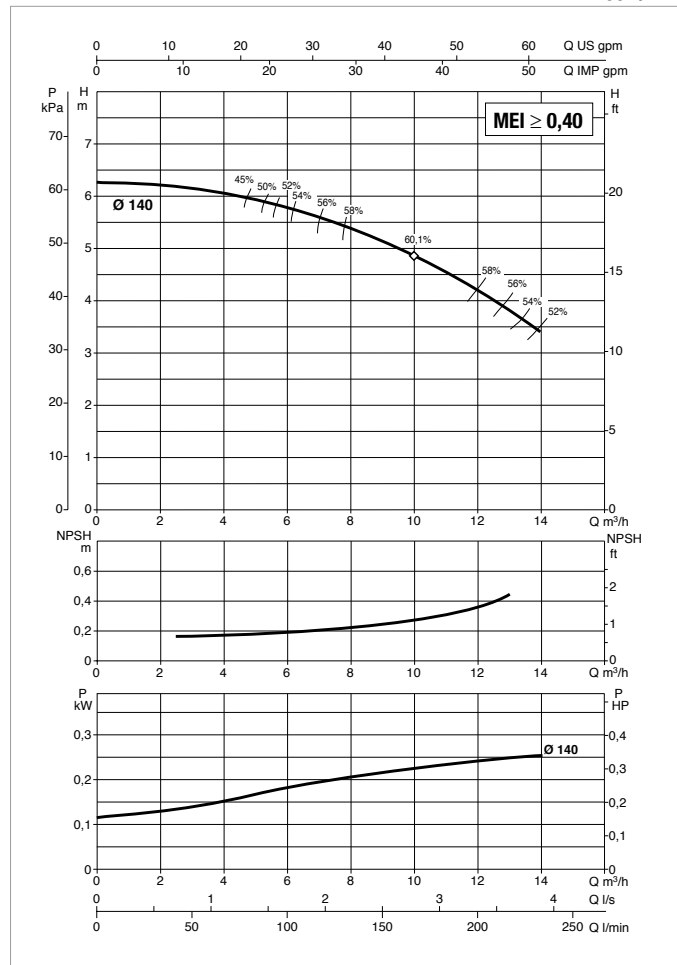
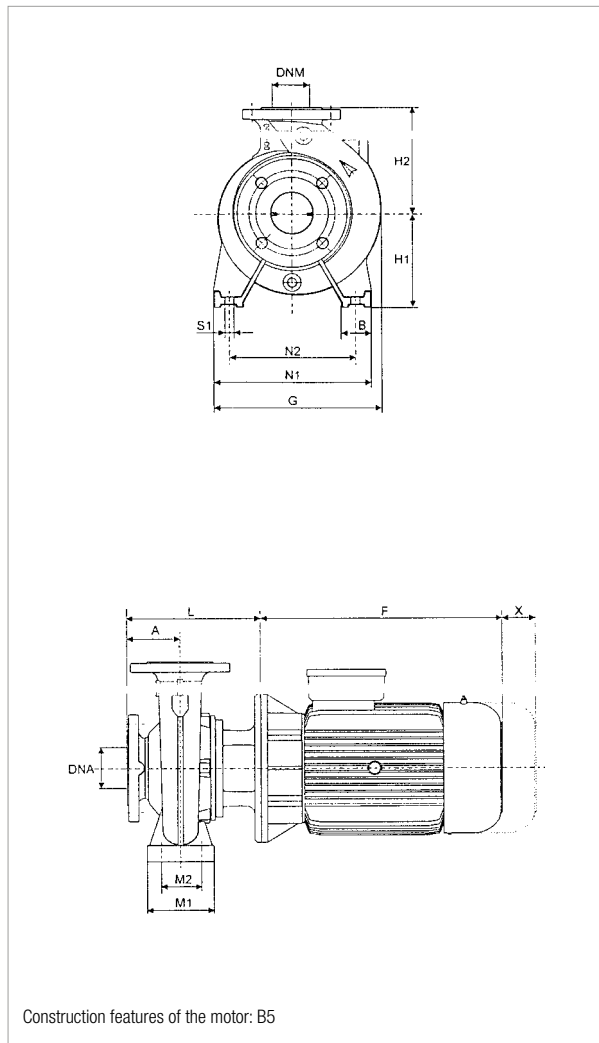
### SELECTION TABLE - NKM-G

| MODEL                      | Q=                | 0     | 30   | 36   | 42   | 48   | 54   | 60   | 66   | 72   | 78   | 84   | 90   | 102  | 114  | 120  | 150  | 180  | 210  | 240  | 270  | 300  | 330  | 360  | 390  | 420  |  |  |
|----------------------------|-------------------|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--|--|
|                            | m <sup>3</sup> /h | 0     | 500  | 600  | 700  | 800  | 900  | 1000 | 1100 | 1200 | 1300 | 1400 | 1500 | 1700 | 1900 | 2000 | 2500 | 3000 | 3500 | 4000 | 4500 | 5000 | 5500 | 6000 | 6500 | 7000 |  |  |
|                            | Q=                | H (m) |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |  |  |
|                            | l/min             |       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |  |  |
| NKM-G 80-160/153-136/1,5/4 |                   | 6,5   | 6,35 | 6,3  | 6,2  | 5,95 | 5,75 | 5,55 | 5,3  | 5    | 4,7  | 4,5  | 4,25 | 3,65 | 3    |      |      |      |      |      |      |      |      |      |      |      |  |  |
| NKM-G 80-160/163/2,2/4     |                   | 8,65  | 8,5  | 8,45 | 8,3  | 8,15 | 7,9  | 7,7  | 7,4  | 7,2  | 6,9  | 6,65 | 6,3  | 5,7  | 4,9  | 4,6  |      |      |      |      |      |      |      |      |      |      |  |  |
| NKM-G 80-160/177/3/4       |                   | 10,2  | 10,2 | 10,1 | 10   | 9,9  | 9,75 | 9,65 | 9,5  | 9,25 | 9    | 8,8  | 8,6  | 7,9  | 7,2  | 6,7  |      |      |      |      |      |      |      |      |      |      |  |  |
| NKM-G 80-200/200/4/4       |                   | 13,2  |      |      | 13,1 | 13   | 12,9 | 12,8 | 12,7 | 12,4 | 12   | 11,7 | 11,3 | 10,4 | 9,3  | 8,7  |      |      |      |      |      |      |      |      |      |      |  |  |
| NKM-G 80-200/222/5,5/4     |                   | 16,6  |      |      | 16,5 | 16,5 | 16,4 | 16,2 | 16,1 | 16   | 15,7 | 15,4 | 15   | 14,3 | 13,3 | 12,7 |      |      |      |      |      |      |      |      |      |      |  |  |
| NKM-G 80-250/240/7,5/4     |                   | 20,4  |      |      | 20,3 | 20,3 | 20,2 | 20,1 | 20   | 19,9 | 19,8 | 19,5 | 19   | 18   | 16,7 | 16   |      |      |      |      |      |      |      |      |      |      |  |  |
| NKM-G 80-250/270/11/4      |                   | 25,6  |      |      | 25,5 | 25,5 | 25,4 | 25,1 | 25   | 24,8 | 24,6 | 24,2 | 24   | 23   | 21,5 | 21   |      |      |      |      |      |      |      |      |      |      |  |  |
| NKM-G 80-315/305/15/4      |                   | 32,9  |      |      |      |      | 32,7 | 32,6 | 32,6 | 32,5 | 32,4 | 32   | 31,6 | 30,5 | 29,5 | 28,9 | 24   |      |      |      |      |      |      |      |      |      |  |  |
| NKM-G 80-315/320/18,5/4    |                   | 36,8  |      |      |      |      | 36,7 | 36,7 | 36,6 | 36,5 | 36,5 | 36,5 | 36,1 | 35,5 | 34,5 | 34   | 29,5 |      |      |      |      |      |      |      |      |      |  |  |
| NKM-G 80-315/334/22/4      |                   | 41    |      |      |      |      | 40,8 | 40,8 | 40,7 | 40,6 | 40,6 | 40,4 | 40,2 | 39,8 | 39   | 38,5 | 34,8 | 29   |      |      |      |      |      |      |      |      |  |  |
| NKM-G 100-200/200/5,5/4    |                   | 12,7  |      |      |      |      |      | 12,6 | 12,6 | 12,5 | 12,5 | 12,4 | 12,3 | 12   | 11,5 | 11,4 | 10,1 | 8,5  |      |      |      |      |      |      |      |      |  |  |
| NKM-G 100-200/214/7,5/4    |                   | 15,6  |      |      |      |      |      | 15,4 | 15,4 | 15,3 | 15,2 | 15,1 | 15   | 14,7 | 14,5 | 14,3 | 13,3 | 11,6 | 9,8  |      |      |      |      |      |      |      |  |  |
| NKM-G 100-250/250/11/4     |                   | 21,1  |      |      |      |      |      | 21   | 21   | 21   | 21   | 21   | 21   | 20,9 | 20   | 19,8 | 18   | 16   |      |      |      |      |      |      |      |      |  |  |
| NKM-G 100-250/270/15/4     |                   | 25,5  |      |      |      |      |      | 25,5 | 25,5 | 25,5 | 25,3 | 25,1 | 25,1 | 25   | 24,5 | 24   | 22,5 | 20,5 | 17,5 |      |      |      |      |      |      |      |  |  |
| NKM-G 100-315/300/18,5/4   |                   | 32    |      |      |      |      |      |      |      |      |      |      | 31,5 | 31,4 | 31   | 30,5 | 28,8 | 26   | 23   |      |      |      |      |      |      |      |  |  |
| NKM-G 100-315/316/22/4     |                   | 36    |      |      |      |      |      |      |      |      |      |      | 35,5 | 35,2 | 35   | 34,6 | 33,2 | 31   | 28   | 24   |      |      |      |      |      |      |  |  |
| NKM-G 125-250/243/15/4     |                   | 19,5  |      |      |      |      |      |      |      |      |      |      |      | 19,3 | 19,3 | 19,2 | 19,2 | 18,7 | 17,8 | 16,8 | 15,5 | 14,1 | 12,5 | 10,9 |      |      |  |  |
| NKM-G 125-250/256/18,5/4   |                   | 21,9  |      |      |      |      |      |      |      |      |      |      |      | 21,8 | 21,8 | 21,7 | 21,6 | 21,3 | 20,5 | 19,5 | 18,5 | 17,2 | 15,6 | 14   | 12   |      |  |  |
| NKM-G 125-250/266/22/4     |                   | 24,6  |      |      |      |      |      |      |      |      |      |      |      | 24,4 | 24,2 | 24,1 | 24   | 23,5 | 22,9 | 22   | 21   | 19,8 | 18,5 | 16,7 | 15   |      |  |  |
| NKM-G 150-200/218/11/4     |                   | 13,2  |      |      |      |      |      |      |      |      |      |      |      | 13,1 | 13   | 13   | 12,8 | 12,5 | 12,1 | 11,5 | 11   | 10,4 | 9,7  | 9    | 8    | 7    |  |  |

# NKM-G 32-125.1 - 4 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≈ 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

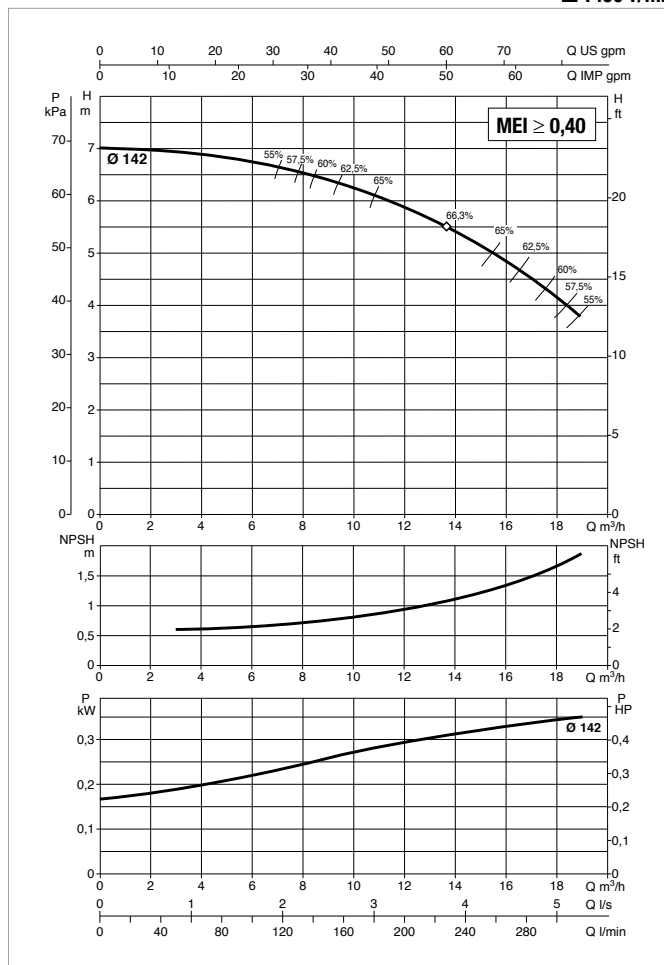
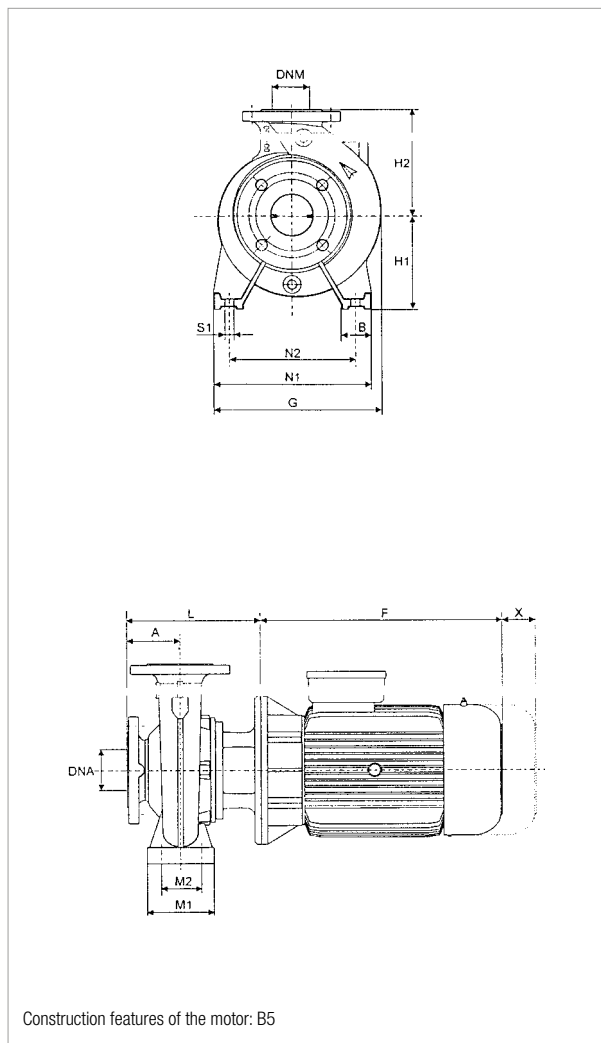
| MODEL                     | ELECTRICAL DATA |                   |            |      |       |       |            |
|---------------------------|-----------------|-------------------|------------|------|-------|-------|------------|
|                           | MOTOR SIZE      | POWER INPUT 50 Hz | P2 NOMINAL |      | In A  |       | TYPE MOTOR |
|                           |                 |                   | kW         | HP   | 230 V | 400 V |            |
| NKM-G 32-125.1/140/0,25/4 | MEC 71          | 3 x 230 - 400 V ~ | 0,25       | 0,33 | 1,56  | 0,9   | -          |

| MODEL                     | A   | B   | E | F   | G   | H1  | H2  | L   | M1  | M2 | N1  | N2  | N3 | S1  | S2 | W | X   | H3 | H4 | Ø (mm) Mech. seal | DNA | DNM | PACKING DIMENSIONS |     |     | VOLUME (m <sup>3</sup> ) | WEIGHT Kg |
|---------------------------|-----|-----|---|-----|-----|-----|-----|-----|-----|----|-----|-----|----|-----|----|---|-----|----|----|-------------------|-----|-----|--------------------|-----|-----|--------------------------|-----------|
|                           | L/A | L/B | H |     |     |     |     |     |     |    |     |     |    |     |    |   |     |    |    |                   |     |     |                    |     |     |                          |           |
| NKM-G 32-125.1/140/0,25/4 | 80  | 50  | - | 208 | 234 | 112 | 140 | 201 | 100 | 70 | 190 | 140 | -  | M10 | -  | - | 100 | -  | -  | 28                | 50  | 32  | 620                | 370 | 480 | 0,11                     | 32,8      |

# NKM-G 32-125 - 4 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≅ 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

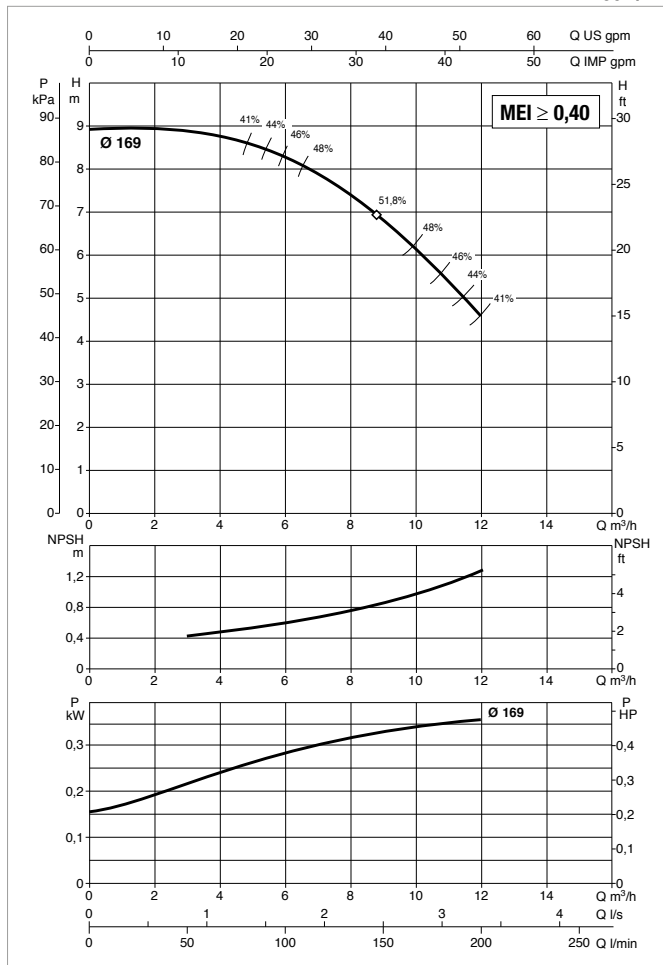
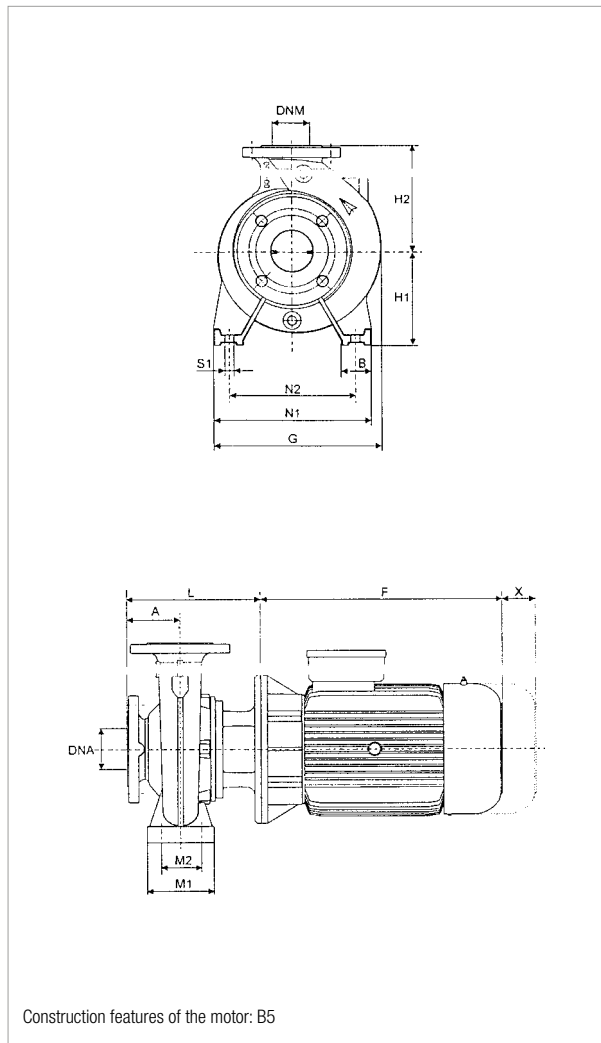
| MODEL                   | ELECTRICAL DATA |                   |            |     |       |       |            |
|-------------------------|-----------------|-------------------|------------|-----|-------|-------|------------|
|                         | MOTOR SIZE      | POWER INPUT 50 Hz | P2 NOMINAL |     | In A  |       | MOTOR TYPE |
|                         |                 |                   | kW         | HP  | 230 V | 400 V |            |
| NKM-G 32-125/142/0,37/4 | MEC 71          | 3 x 230 - 400 V ~ | 0,37       | 0,5 | 1,69  | 1     | -          |

| MODEL                   | A   | B   | E | F   | G   | H1  | H2  | L   | M1  | M2 | N1  | N2  | N3 | S1  | S2 | W | X   | H3 | H4 | Ø (mm) Mech. seal | DNA | DNM | PACKING DIMENSIONS |     |     | VOLUME (m³) | WEIGHT Kg |
|-------------------------|-----|-----|---|-----|-----|-----|-----|-----|-----|----|-----|-----|----|-----|----|---|-----|----|----|-------------------|-----|-----|--------------------|-----|-----|-------------|-----------|
|                         | L/A | L/B | H |     |     |     |     |     |     |    |     |     |    |     |    |   |     |    |    |                   |     |     |                    |     |     |             |           |
| NKM-G 32-125/142/0,37/4 | 80  | 50  | - | 208 | 234 | 112 | 140 | 201 | 100 | 70 | 190 | 140 | -  | M10 | -  | - | 100 | -  | -  | 28                | 50  | 32  | 620                | 370 | 480 | 0,11        | 33,5      |

# NKM-G 32-160.1 - 4 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≈ 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

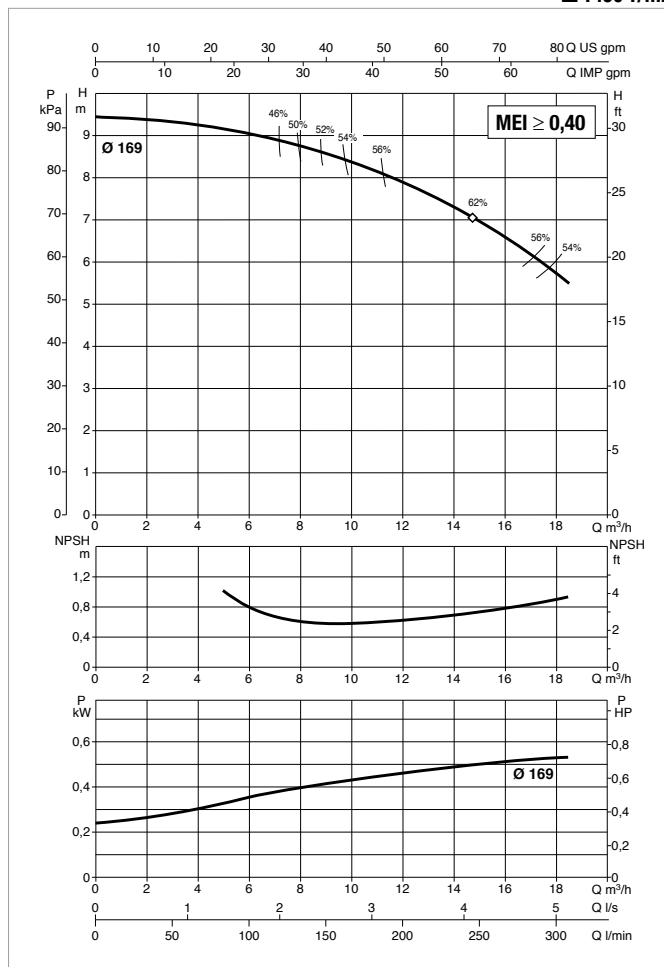
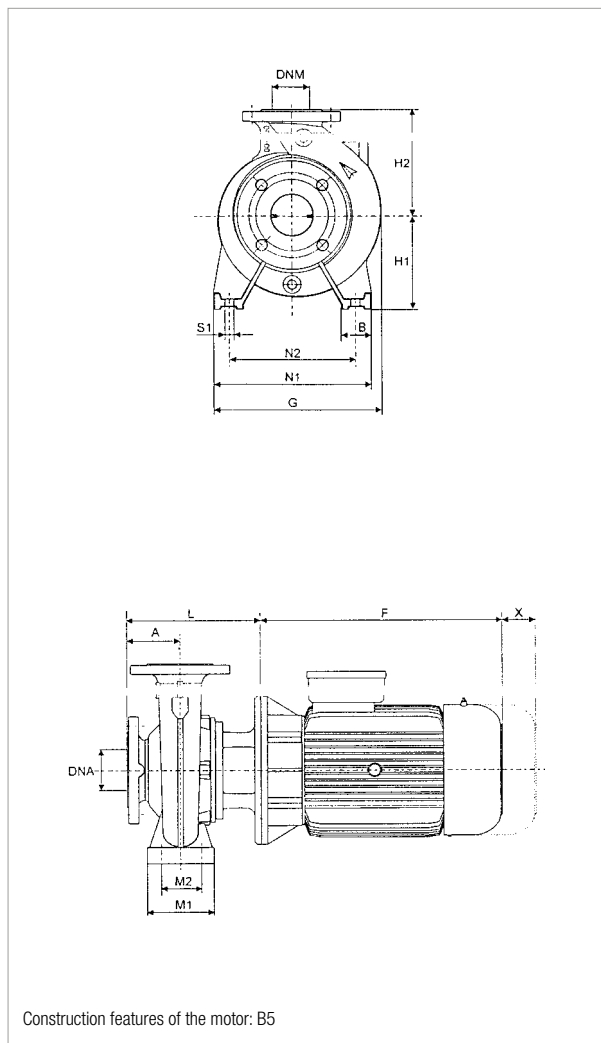
| MODEL                     | MOTOR SIZE | POWER INPUT 50 Hz | ELECTRICAL DATA |     |       |       | TYPE MOTOR |
|---------------------------|------------|-------------------|-----------------|-----|-------|-------|------------|
|                           |            |                   | P2 NOMINAL      |     | In A  |       |            |
|                           |            |                   | kW              | HP  | 230 V | 400 V |            |
| NKM-G 32-160.1/169/0,37/4 | MEC 71     | 3 x 230 - 400 V ~ | 0,37            | 0,5 | 1,69  | 1     | -          |

| MODEL                     | A  | B  | E | F   | G   | H1  | H2  | L   | M1  | M2 | N1  | N2  | N3 | S1  | S2 | W | X   | H3 | H4 | Ø (mm) Mech. seal | DNA | DNM | PACKING DIMENSIONS |     |     | VOLUME (m <sup>3</sup> ) | WEIGHT Kg |
|---------------------------|----|----|---|-----|-----|-----|-----|-----|-----|----|-----|-----|----|-----|----|---|-----|----|----|-------------------|-----|-----|--------------------|-----|-----|--------------------------|-----------|
|                           |    |    |   |     |     |     |     |     |     |    |     |     |    |     |    |   |     |    |    |                   |     |     | L/A                | L/B | H   |                          |           |
| NKM-G 32-160.1/169/0,37/4 | 80 | 50 | - | 208 | 245 | 132 | 160 | 201 | 100 | 70 | 240 | 190 | -  | M10 | -  | - | 100 | -  | -  | 28                | 50  | 32  | 620                | 370 | 480 | 0,11                     | 35,6      |

# NKM-G 32-160 - 4 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≅ 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

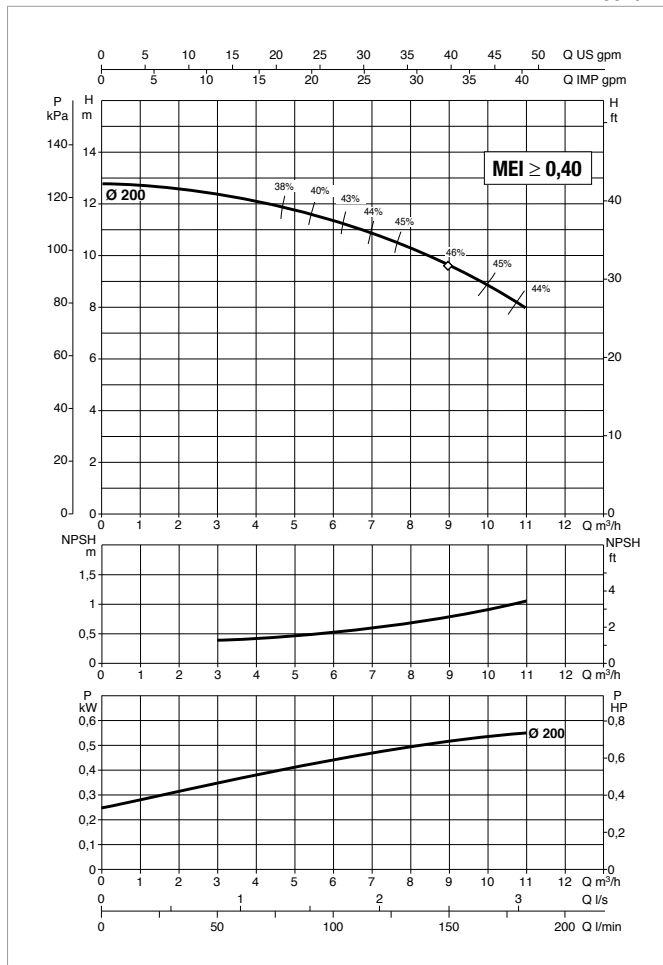
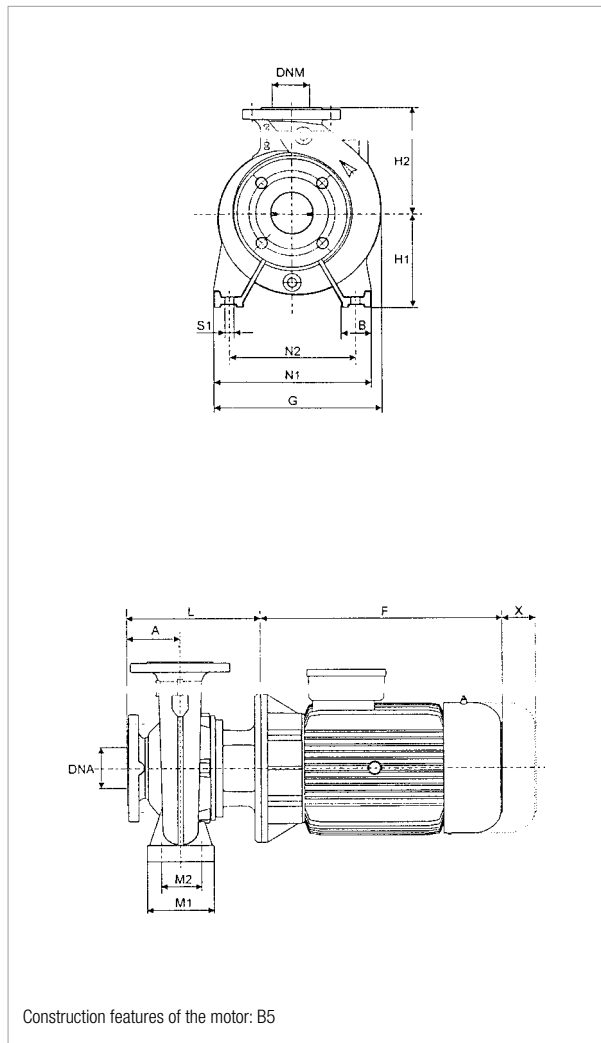
| MODEL                   | ELECTRICAL DATA |                   |            |      |       |       |            |
|-------------------------|-----------------|-------------------|------------|------|-------|-------|------------|
|                         | MOTOR SIZE      | POWER INPUT 50 Hz | P2 NOMINAL |      | In A  |       | MOTOR TYPE |
|                         |                 |                   | kW         | HP   | 230 V | 400 V |            |
| NKM-G 32-160/169/0,55/4 | MEC 80          | 3 x 230 - 400 V ~ | 0,55       | 0,75 | 2,6   | 1,5   | -          |

| MODEL                   | A  | B  | E | F   | G   | H1  | H2  | L   | M1  | M2 | N1  | N2  | N3 | S1  | S2 | W | X   | H3 | H4 | Ø (mm) Mech. seal | DNA | DNM | PACKING DIMENSIONS |     |     | VOLUME (m <sup>3</sup> ) | WEIGHT Kg |
|-------------------------|----|----|---|-----|-----|-----|-----|-----|-----|----|-----|-----|----|-----|----|---|-----|----|----|-------------------|-----|-----|--------------------|-----|-----|--------------------------|-----------|
|                         |    |    |   |     |     |     |     |     |     |    |     |     |    |     |    |   |     |    |    |                   |     |     | L/A                | L/B | H   |                          |           |
| NKM-G 32-160/169/0,55/4 | 80 | 50 | - | 234 | 245 | 132 | 160 | 226 | 100 | 70 | 240 | 190 | -  | M10 | -  | - | 100 | -  | -  | 28                | 50  | 32  | 620                | 370 | 480 | 0,11                     | 39,8      |

# NKM-G 32-200.1 - 4 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≅ 1450 1/min



For MEI index refer to the hydraulic efficiency section.  
The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

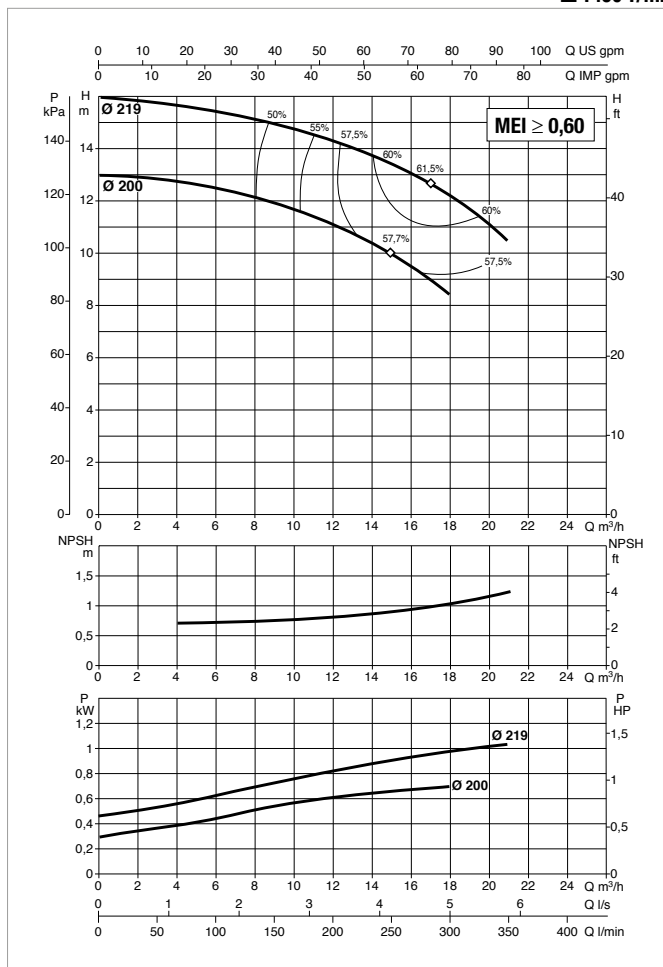
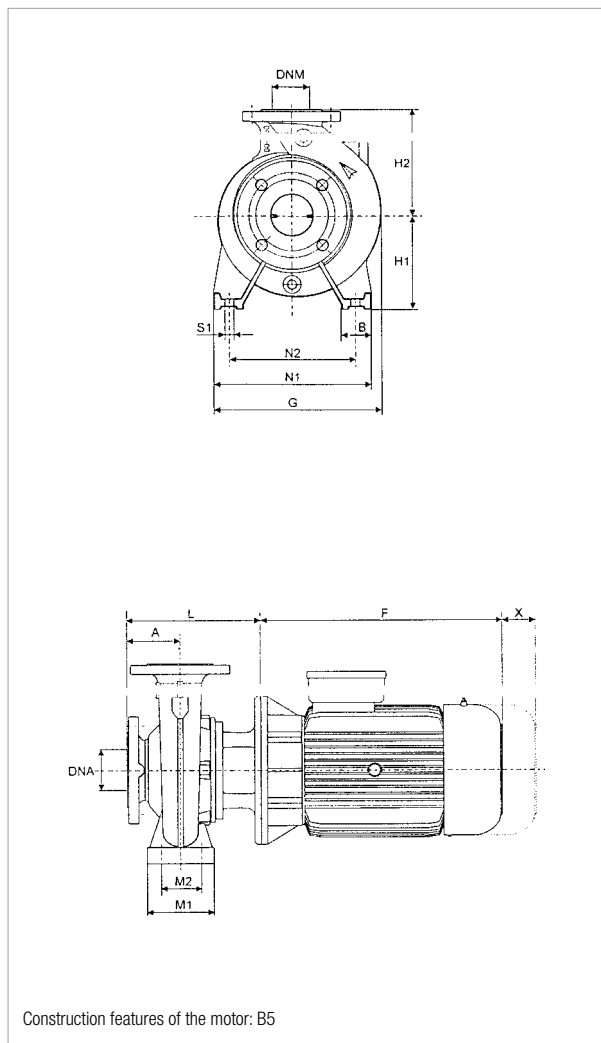
| MODEL                     | ELECTRICAL DATA |                   |            |      |       |       |            |
|---------------------------|-----------------|-------------------|------------|------|-------|-------|------------|
|                           | MOTOR SIZE      | POWER INPUT 50 Hz | P2 NOMINAL |      | In A  |       | MOTOR TYPE |
|                           |                 |                   | kW         | HP   | 230 V | 400 V |            |
| NKM-G 32-200.1/200/0,55/4 | MEC 80          | 3 x 230 - 400 V ~ | 0,55       | 0,75 | 2,6   | 1,5   | -          |

| MODEL                     | A  | B  | E | F   | G   | H1  | H2  | L   | M1  | M2 | N1  | N2  | N3 | S1  | S2 | W | X   | H3 | H4 | Ø (mm) Mech. seal | DNA | DNM | PACKING DIMENSIONS |     |     | VOLUME (m <sup>3</sup> ) | WEIGHT Kg |
|---------------------------|----|----|---|-----|-----|-----|-----|-----|-----|----|-----|-----|----|-----|----|---|-----|----|----|-------------------|-----|-----|--------------------|-----|-----|--------------------------|-----------|
|                           |    |    |   |     |     |     |     |     |     |    |     |     |    |     |    |   |     |    |    |                   |     |     | L/A                | L/B | H   |                          |           |
| NKM-G 32-200.1/200/0,55/4 | 80 | 50 | - | 234 | 279 | 160 | 180 | 226 | 100 | 70 | 240 | 190 | -  | M10 | -  | - | 100 | -  | -  | 28                | 50  | 32  | 620                | 370 | 480 | 0,11                     | 45        |

# NKM-G 32-200 - 4 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≅ 1450 1/min



For MEI index refer to the hydraulic efficiency section.  
The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

| MODEL                   | ELECTRICAL DATA |                   |            |     |       |       |            |
|-------------------------|-----------------|-------------------|------------|-----|-------|-------|------------|
|                         | MOTOR SIZE      | POWER INPUT 50 Hz | P2 NOMINAL |     | In A  |       | MOTOR TYPE |
|                         |                 |                   | kW         | HP  | 230 V | 400 V |            |
| NKM-G 32-200/200/0,75/4 | MEC 80          | 3 x 230 - 400 V ~ | 0,75       | 1   | 3,1   | 1,8   | IE3        |
| NKM-G 32-200/219/1,1/4  | MEC 90 S        | 3 x 230 - 400 V ~ | 1,1        | 1,5 | 4,3   | 2,5   | IE3        |

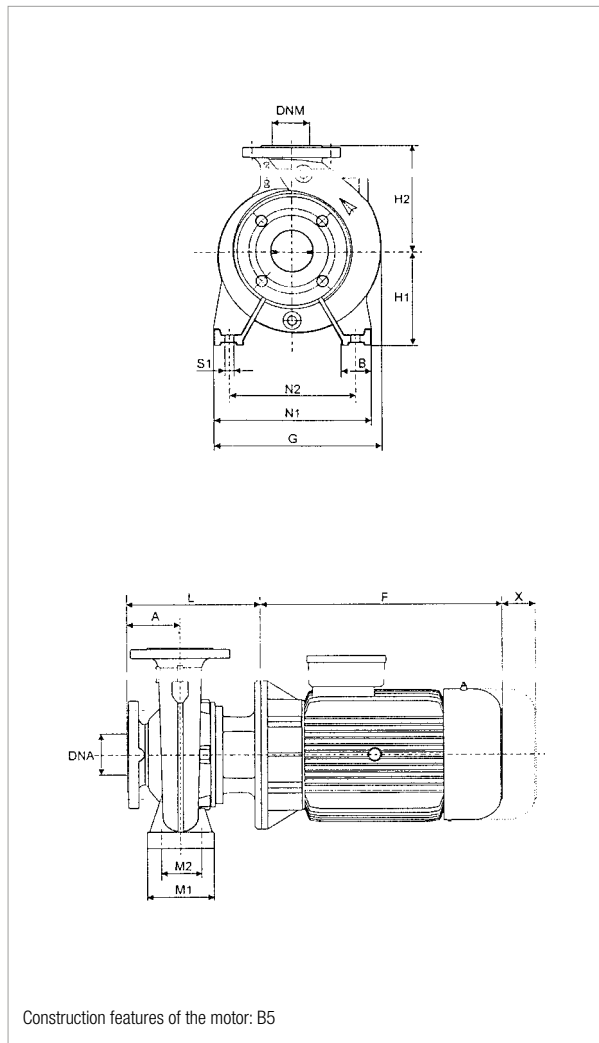
| MODEL                   | A  | B  | E | F     | G   | H1  | H2  | L   | M1  | M2 | N1  | N2  | N3 | S1  | S2 | W | X   | H3 | H4 | Ø (mm) Mech. seal | DNA | DNM | PACKING DIMENSIONS |     |     | VOLUME (m <sup>3</sup> ) | WEIGHT Kg |
|-------------------------|----|----|---|-------|-----|-----|-----|-----|-----|----|-----|-----|----|-----|----|---|-----|----|----|-------------------|-----|-----|--------------------|-----|-----|--------------------------|-----------|
|                         |    |    |   |       |     |     |     |     |     |    |     |     |    |     |    |   |     |    |    |                   |     |     | L/A                | L/B | H   |                          |           |
| NKM-G 32-200/200/0,75/4 | 80 | 50 | - | 232   | 279 | 160 | 180 | 226 | 100 | 70 | 240 | 190 | -  | M10 | -  | - | 100 | -  | -  | 28                | 50  | 32  | 620                | 370 | 480 | 0,11                     | 42        |
| NKM-G 32-200/219/1,1/4  | 80 | 50 | - | 287,5 | 279 | 160 | 180 | 226 | 100 | 70 | 240 | 190 | -  | M10 | -  | - | 100 | -  | -  | 28                | 50  | 32  | 620                | 370 | 480 | 0,11                     | 41        |



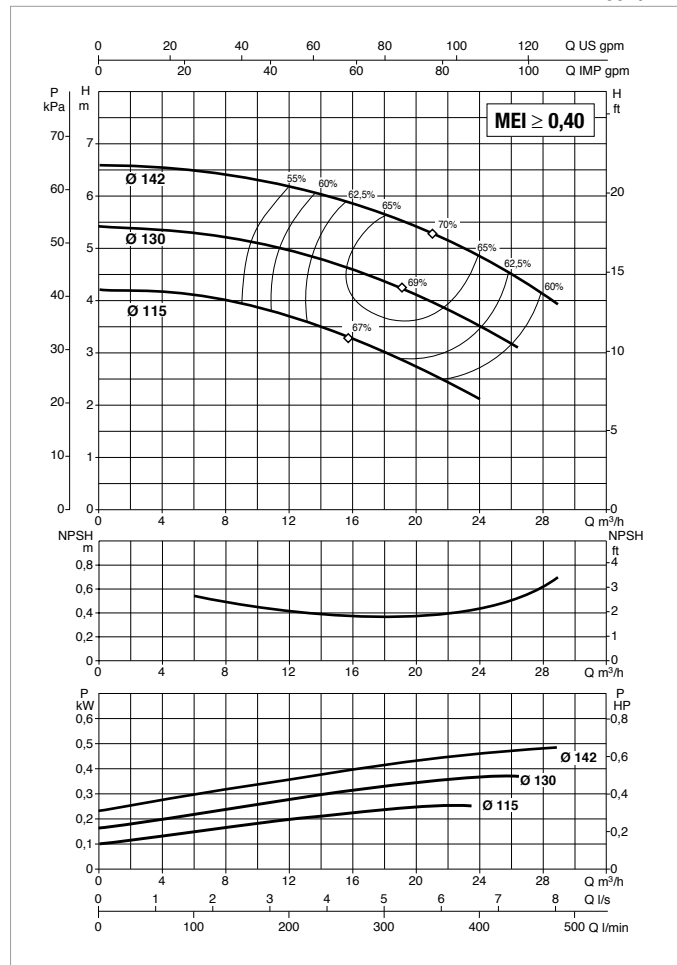
# NKM-G 40-125 - 4 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≅ 1450 1/min



Construction features of the motor: B5



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

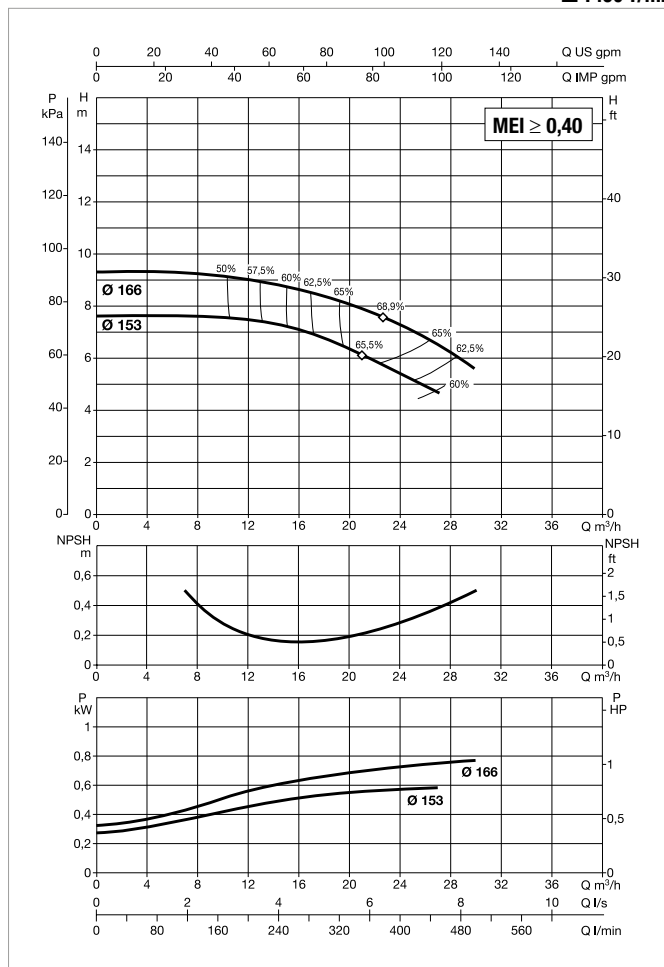
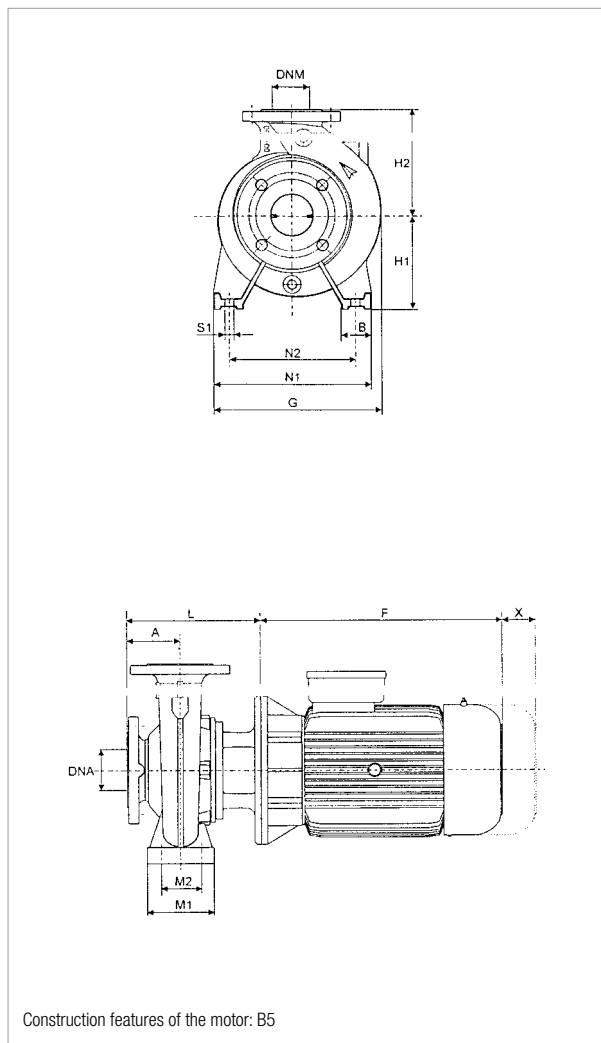
| MODEL                   | ELECTRICAL DATA |                   |            |      |       |       |            |
|-------------------------|-----------------|-------------------|------------|------|-------|-------|------------|
|                         | MOTOR SIZE      | POWER INPUT 50 Hz | P2 NOMINAL |      | In A  |       | MOTOR TYPE |
|                         |                 |                   | kW         | HP   | 230 V | 400 V |            |
| NKM-G 40-125/115/0,25/4 | MEC 71          | 3 x 230 - 400 V ~ | 0,25       | 0,33 | 1,56  | 0,9   | -          |
| NKM-G 40-125/130/0,37/4 | MEC 71          | 3 x 230 - 400 V ~ | 0,37       | 0,5  | 1,69  | 1     | -          |
| NKM-G 40-125/142/0,55/4 | MEC 80          | 3 x 230 - 400 V ~ | 0,55       | 0,75 | 2,6   | 1,5   | -          |

| MODEL                   | A  | B  | E | F   | G   | H1  | H2  | L   | M1  | M2 | N1  | N2  | N3 | S1  | S2 | W | X   | H3 | H4 | Ø (mm) Mech. seal | DNA | DNM | PACKING DIMENSIONS |     |     | VOLUME (m³) | WEIGHT Kg |
|-------------------------|----|----|---|-----|-----|-----|-----|-----|-----|----|-----|-----|----|-----|----|---|-----|----|----|-------------------|-----|-----|--------------------|-----|-----|-------------|-----------|
|                         |    |    |   |     |     |     |     |     |     |    |     |     |    |     |    |   |     |    |    |                   |     |     | L/A                | L/B | H   |             |           |
| NKM-G 40-125/115/0,25/4 | 80 | 50 | - | 208 | 235 | 112 | 140 | 201 | 100 | 70 | 210 | 160 | -  | M10 | -  | - | 100 | -  | -  | 28                | 65  | 40  | 620                | 370 | 480 | 0,11        | 34,2      |
| NKM-G 40-125/130/0,37/4 | 80 | 50 | - | 208 | 235 | 112 | 140 | 201 | 100 | 70 | 210 | 160 | -  | M10 | -  | - | 100 | -  | -  | 28                | 65  | 40  | 620                | 370 | 480 | 0,11        | 35,3      |
| NKM-G 40-125/142/0,55/4 | 80 | 50 | - | 234 | 235 | 112 | 140 | 201 | 100 | 70 | 210 | 160 | -  | M10 | -  | - | 100 | -  | -  | 28                | 65  | 40  | 620                | 370 | 480 | 0,11        | 39,4      |

# NKM-G 40-160 - 4 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≅ 1450 1/min



**For MEI index refer to the hydraulic efficiency section.**  
 The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

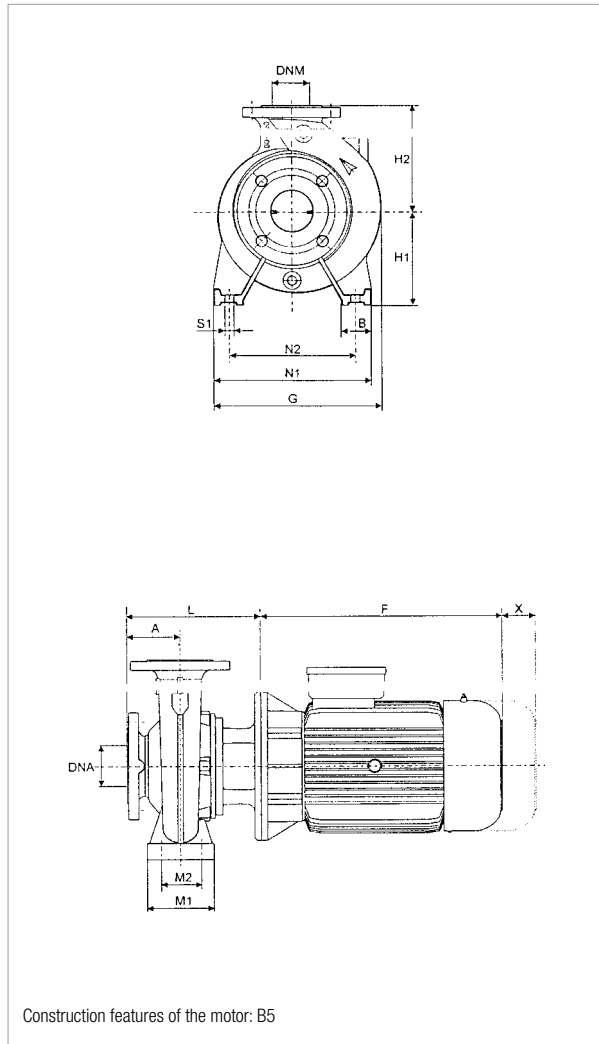
| MODEL                   | ELECTRICAL DATA |                   |            |      |       |       |            |
|-------------------------|-----------------|-------------------|------------|------|-------|-------|------------|
|                         | MOTOR SIZE      | POWER INPUT 50 Hz | P2 NOMINAL |      | In A  |       | MOTOR TYPE |
|                         |                 |                   | kW         | HP   | 230 V | 400 V |            |
| NKM-G 40-160/153/0,55/4 | MEC 80          | 3 x 230 - 400 V ~ | 0,55       | 0,75 | 2,6   | 1,5   | -          |
| NKM-G 40-160/166/0,75/4 | MEC 80          | 3 x 230 - 400 V ~ | 0,75       | 1    | 3,1   | 1,8   | IE3        |

| MODEL                   | A  | B  | E | F   | G   | H1  | H2  | L   | M1  | M2 | N1  | N2  | N3 | S1  | S2 | W | X   | H3 | H4 | Ø (mm) Mech. seal | DNA | DNM | PACKING DIMENSIONS |     |     | VOLUME (m <sup>3</sup> ) | WEIGHT Kg |
|-------------------------|----|----|---|-----|-----|-----|-----|-----|-----|----|-----|-----|----|-----|----|---|-----|----|----|-------------------|-----|-----|--------------------|-----|-----|--------------------------|-----------|
|                         |    |    |   |     |     |     |     |     |     |    |     |     |    |     |    |   |     |    |    |                   |     |     | L/A                | L/B | H   |                          |           |
| NKM-G 40-160/153/0,55/4 | 80 | 50 | - | 234 | 253 | 132 | 160 | 226 | 100 | 70 | 240 | 190 | -  | M10 | -  | - | 100 | -  | -  | 28                | 65  | 40  | 620                | 370 | 480 | 0,11                     | 40        |
| NKM-G 40-160/166/0,75/4 | 80 | 50 | - | 232 | 253 | 132 | 160 | 226 | 100 | 70 | 240 | 190 | -  | M10 | -  | - | 100 | -  | -  | 28                | 65  | 40  | 620                | 370 | 480 | 0,11                     | 35        |

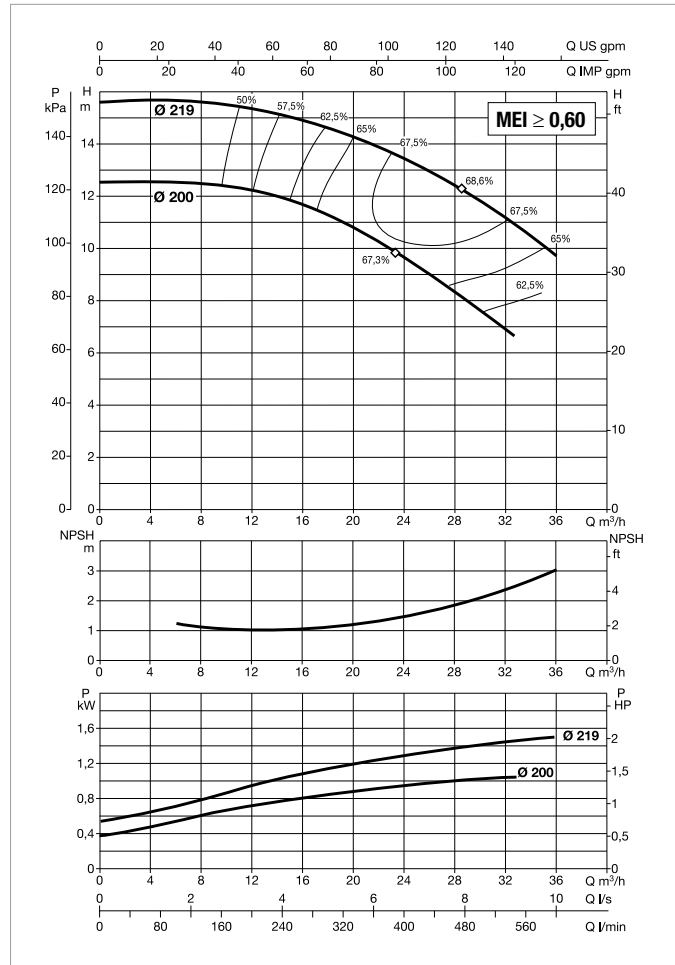
# NKM-G 40-200 - 4 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≈ 1450 1/min



Construction features of the motor: B5



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

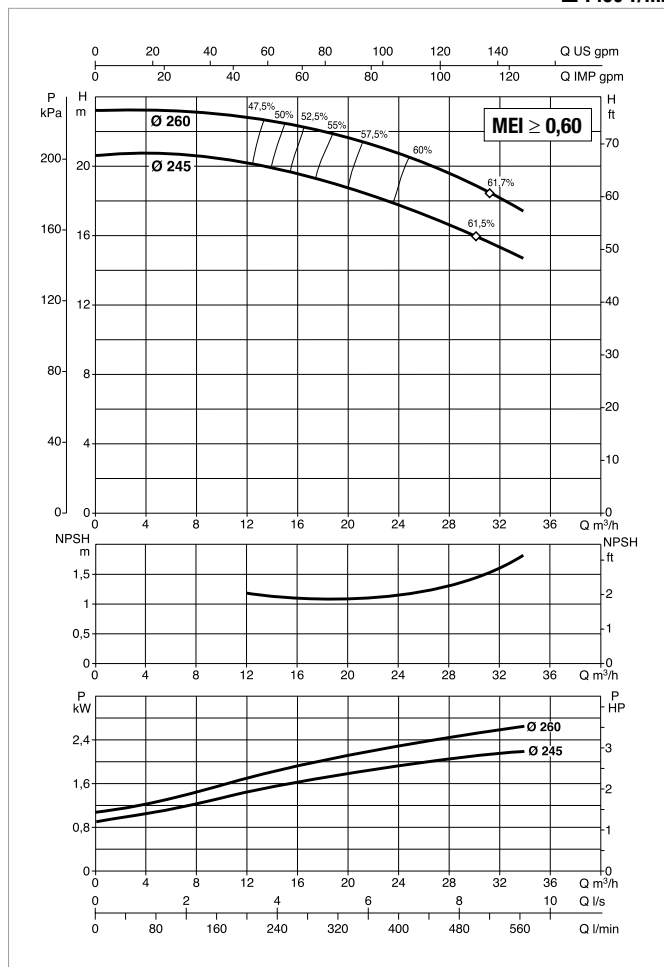
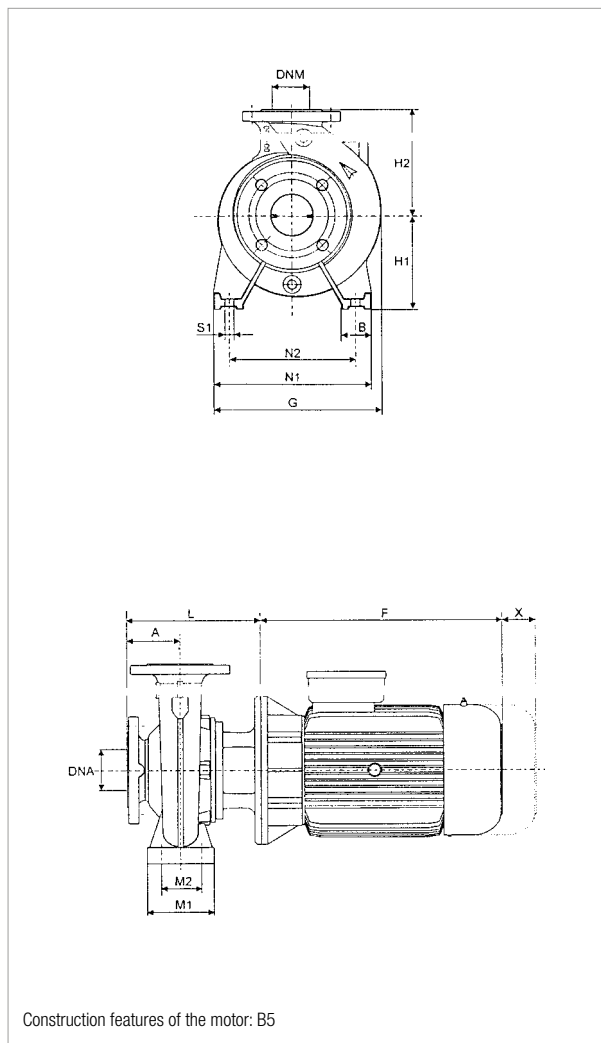
| MODEL                  | MOTOR SIZE | POWER INPUT 50 Hz | ELECTRICAL DATA |     |       |       | MOTOR TYPE |
|------------------------|------------|-------------------|-----------------|-----|-------|-------|------------|
|                        |            |                   | P2 NOMINAL      |     | In A  |       |            |
|                        |            |                   | kW              | HP  | 230 V | 400 V |            |
| NKM-G 40-200/200/1,1/4 | MEC 90 S   | 3 x 230 - 400 V ~ | 1,1             | 1,5 | 4,3   | 2,5   | IE3        |
| NKM-G 40-200/219/1,5/4 | MEC 90 L   | 3 x 230 - 400 V ~ | 1,5             | 2   | 6,2   | 3,6   | IE3        |

| MODEL                  | A   | B  | E | F     | G   | H1  | H2  | L   | M1  | M2 | N1  | N2  | N3 | S1  | S2 | W | X   | H3 | H4 | Ø (mm) Mech. seal | DNA | DNM | PACKING DIMENSIONS |     |     | VOLUME (m³) | WEIGHT Kg |
|------------------------|-----|----|---|-------|-----|-----|-----|-----|-----|----|-----|-----|----|-----|----|---|-----|----|----|-------------------|-----|-----|--------------------|-----|-----|-------------|-----------|
|                        |     |    |   |       |     |     |     |     |     |    |     |     |    |     |    |   |     |    |    |                   |     |     | L/A                | L/B | H   |             |           |
| NKM-G 40-200/200/1,1/4 | 100 | 50 | - | 287,5 | 296 | 160 | 180 | 246 | 100 | 70 | 265 | 212 | -  | M10 | -  | - | 100 | -  | -  | 28                | 65  | 40  | 620                | 370 | 480 | 0,11        | 41        |
| NKM-G 40-200/219/1,5/4 | 100 | 50 | - | 287,5 | 296 | 160 | 180 | 246 | 100 | 70 | 265 | 212 | -  | M10 | -  | - | 100 | -  | -  | 28                | 65  | 40  | 620                | 370 | 480 | 0,11        | 42        |

# NKM-G 40-250 - 4 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≅ 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

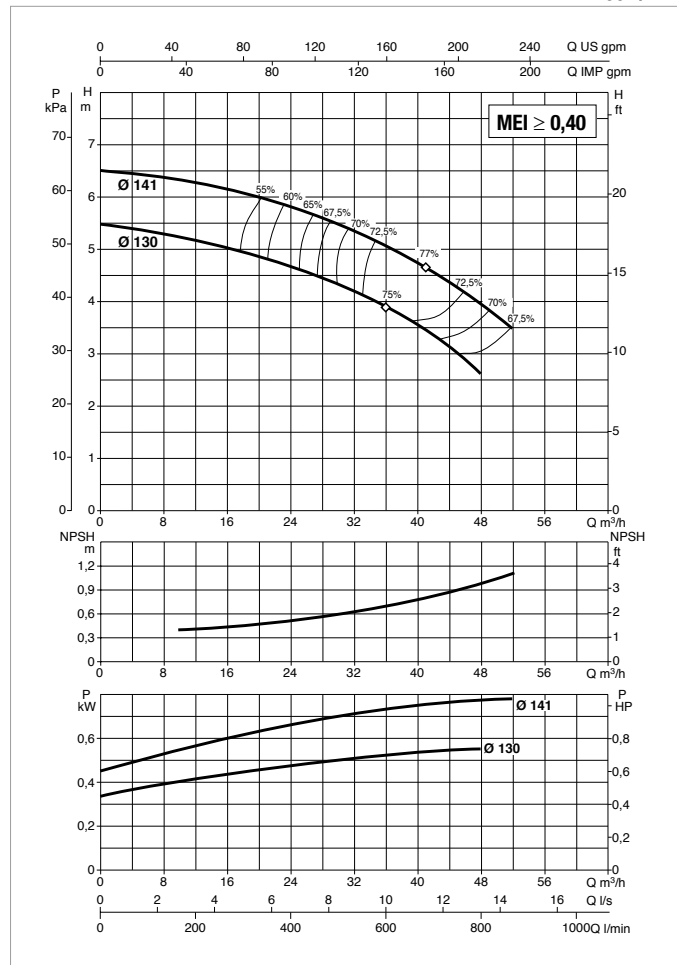
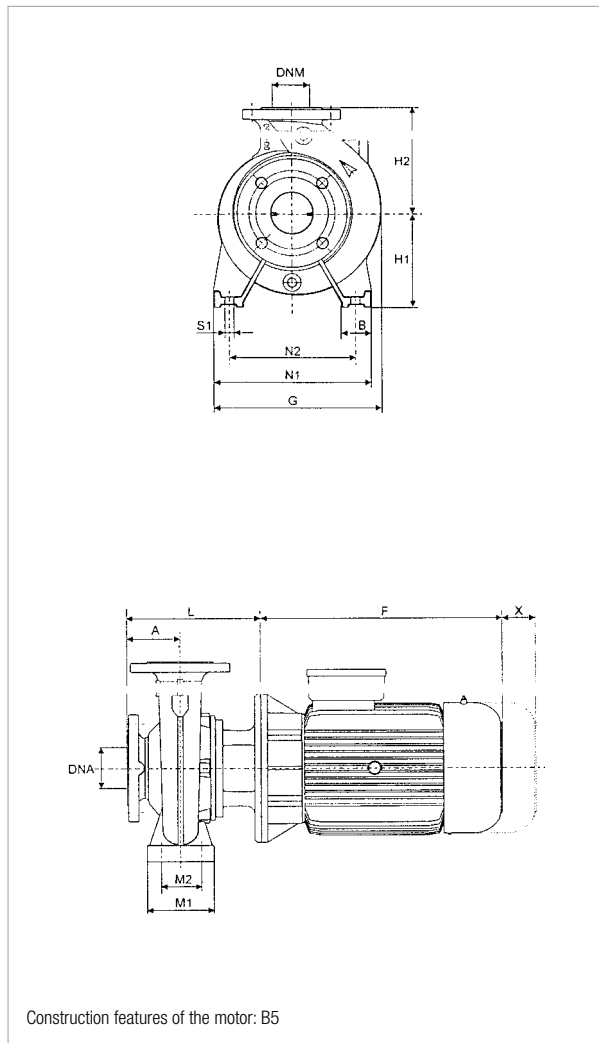
| MODEL                  | ELECTRICAL DATA |                   |            |    |       |       |            |
|------------------------|-----------------|-------------------|------------|----|-------|-------|------------|
|                        | MOTOR SIZE      | POWER INPUT 50 Hz | P2 NOMINAL |    | In A  |       | MOTOR TYPE |
|                        |                 |                   | kW         | HP | 230 V | 400 V |            |
| NKM-G 40-250/245/2,2/4 | MEC 100 L       | 3 x 230 - 400 V ~ | 2,2        | 3  | 10,2  | 5,9   | IE3        |
| NKM-G 40-250/260/3/4   | MEC 100 L       | 3 x 400 V ~       | 3          | 4  | -     | 6,8   | IE3        |

| MODEL                  | A   | B  | E | F   | G   | H1  | H2  | L   | M1  | M2 | N1  | N2  | N3 | S1  | S2 | W | X   | H3 | H4 | Ø (mm) Mech. seal | DNA | DNM | PACKING DIMENSIONS |     |     | VOLUME (m³) | WEIGHT Kg |
|------------------------|-----|----|---|-----|-----|-----|-----|-----|-----|----|-----|-----|----|-----|----|---|-----|----|----|-------------------|-----|-----|--------------------|-----|-----|-------------|-----------|
|                        |     |    |   |     |     |     |     |     |     |    |     |     |    |     |    |   |     |    |    |                   |     |     | L/A                | L/B | H   |             |           |
| NKM-G 40-250/245/2,2/4 | 100 | 65 | - | 319 | 336 | 180 | 225 | 274 | 125 | 95 | 320 | 250 | -  | M10 | -  | - | 100 | -  | -  | 28                | 65  | 40  | 670                | 420 | 540 | 0,152       | 63        |
| NKM-G 40-250/260/3/4   | 100 | 65 | - | 321 | 336 | 180 | 225 | 274 | 125 | 95 | 320 | 250 | -  | M10 | -  | - | 100 | -  | -  | 28                | 65  | 40  | 670                | 420 | 540 | 0,152       | 59        |

# NKM-G 50-125 - 4 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≈ 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

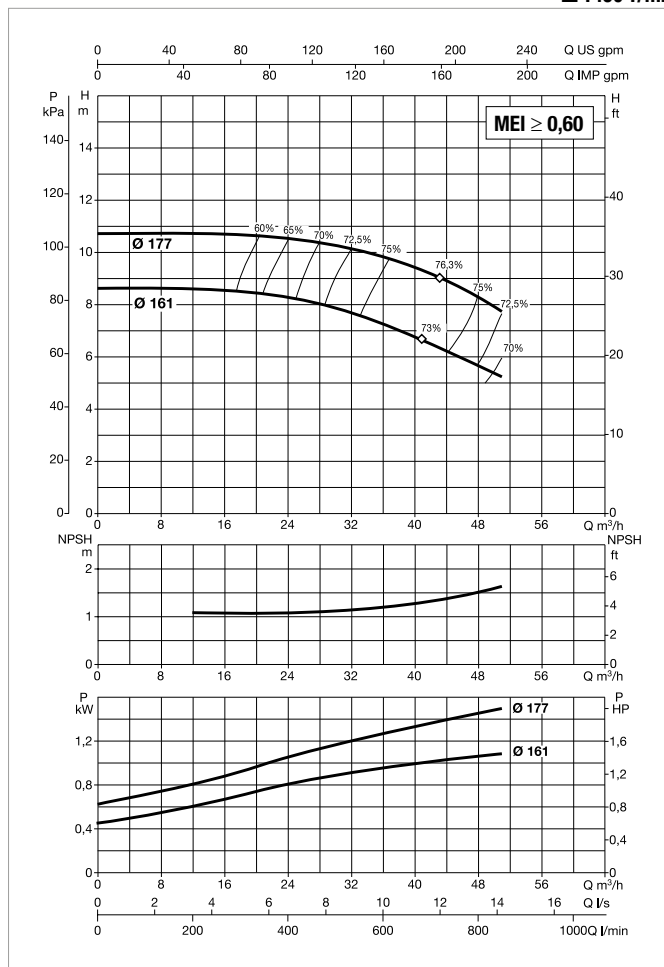
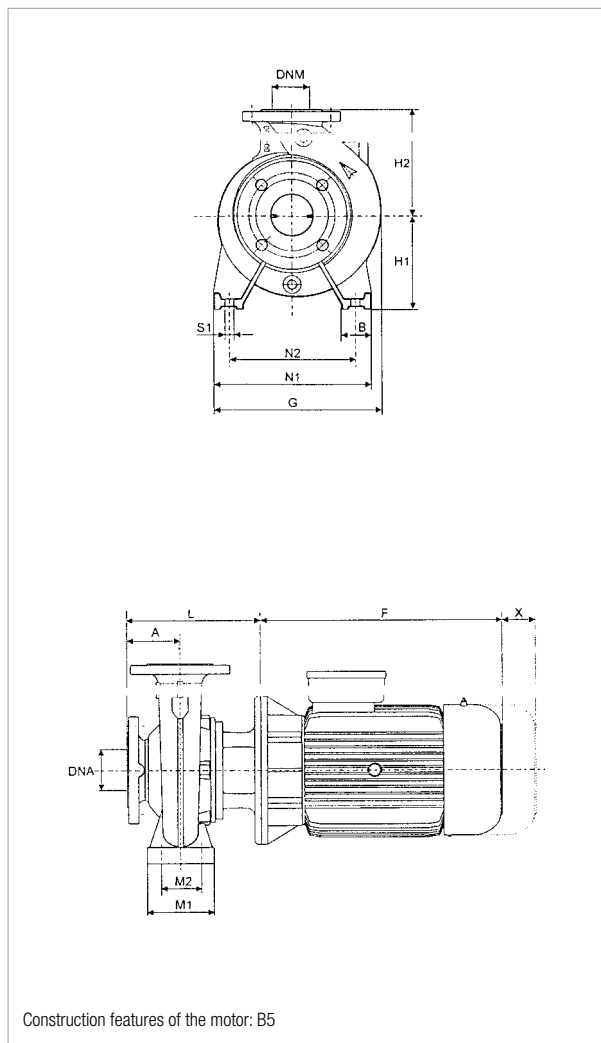
| MODEL                   | ELECTRICAL DATA |                   |            |      |       |       |            |
|-------------------------|-----------------|-------------------|------------|------|-------|-------|------------|
|                         | MOTOR SIZE      | POWER INPUT 50 Hz | P2 NOMINAL |      | In A  |       | MOTOR TYPE |
|                         |                 |                   | kW         | HP   | 230 V | 400 V |            |
| NKM-G 50-125/130/0,55/4 | MEC 71          | 3 x 230 - 400 V ~ | 0,55       | 0,75 | 2,6   | 1,5   | -          |
| NKM-G 50-125/141/0,75/4 | MEC 80          | 3 x 230 - 400 V ~ | 0,75       | 1    | 3,1   | 1,8   | IE3        |

| MODEL                   | A   | B  | E | F   | G   | H1  | H2  | L   | M1  | M2 | N1  | N2  | N3 | S1  | S2 | W | X   | H3 | H4 | Ø (mm) Mech. seal | DNA | DNM | PACKING DIMENSIONS |     |     | VOLUME (m³) | WEIGHT Kg |
|-------------------------|-----|----|---|-----|-----|-----|-----|-----|-----|----|-----|-----|----|-----|----|---|-----|----|----|-------------------|-----|-----|--------------------|-----|-----|-------------|-----------|
|                         |     |    |   |     |     |     |     |     |     |    |     |     |    |     |    |   |     |    |    |                   |     |     | L/A                | L/B | H   |             |           |
| NKM-G 50-125/130/0,55/4 | 100 | 50 | - | 234 | 250 | 132 | 160 | 246 | 100 | 70 | 240 | 190 | -  | M10 | -  | - | 100 | -  | -  | 28                | 65  | 50  | 620                | 370 | 480 | 0,11        | 43        |
| NKM-G 50-125/141/0,75/4 | 100 | 50 | - | 232 | 250 | 132 | 160 | 246 | 100 | 70 | 240 | 190 | -  | M10 | -  | - | 100 | -  | -  | 28                | 65  | 50  | 620                | 370 | 480 | 0,11        | 38        |

# NKM-G 50-160 - 4 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≅ 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

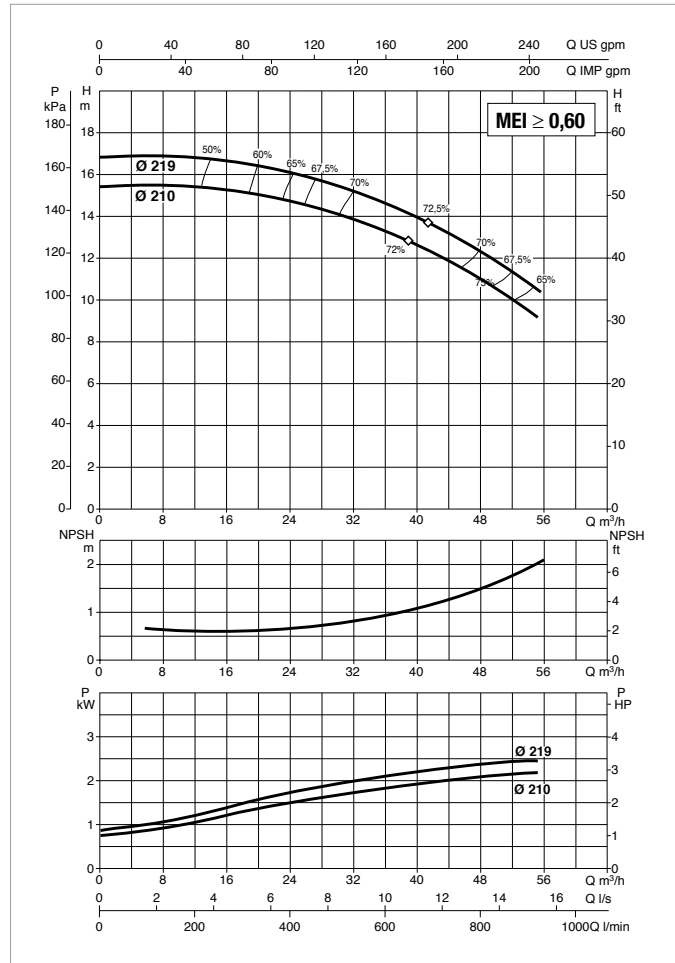
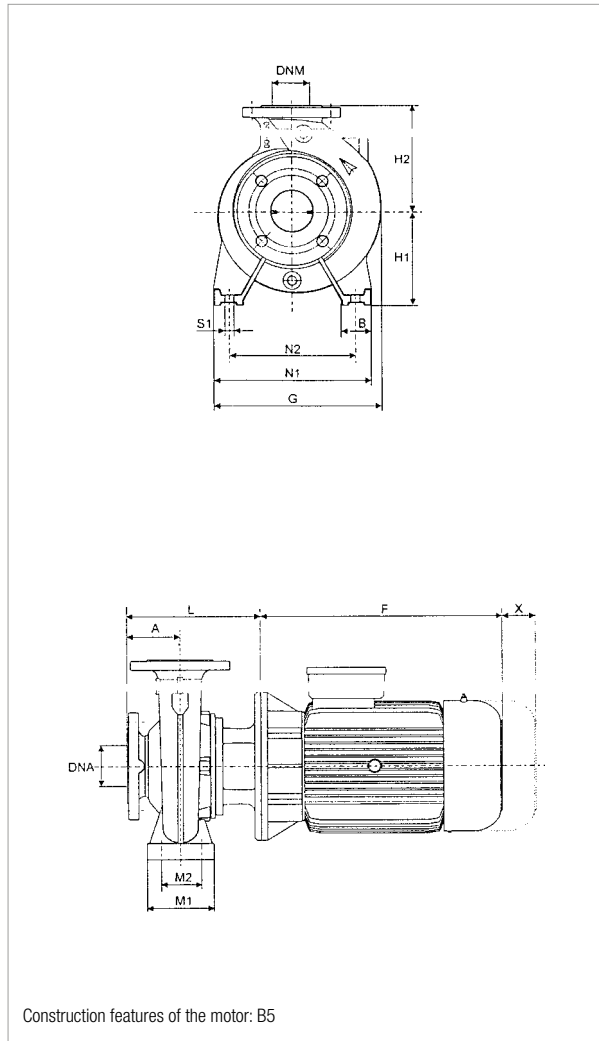
| MODEL                  | ELECTRICAL DATA |                   |            |     |       |       |            |
|------------------------|-----------------|-------------------|------------|-----|-------|-------|------------|
|                        | MOTOR SIZE      | POWER INPUT 50 Hz | P2 NOMINAL |     | In A  |       | MOTOR TYPE |
|                        |                 |                   | kW         | HP  | 230 V | 400 V |            |
| NKM-G 50-160/161/1,1/4 | MEC 90 S        | 3 x 230 - 400 V ~ | 1,1        | 1,5 | 4,3   | 2,5   | IE3        |
| NKM-G 50-160/177/1,5/4 | MEC 90 L        | 3 x 230 - 400 V ~ | 1,5        | 2   | 6,2   | 3,6   | IE3        |

| MODEL                  | A   | B  | E | F     | G   | H1  | H2  | L   | M1  | M2 | N1  | N2  | N3 | S1  | S2 | W | X   | H3 | H4 | Ø (mm) Mech. seal | DNA | DNM | PACKING DIMENSIONS |     |     | VOLUME (m <sup>3</sup> ) | WEIGHT Kg |
|------------------------|-----|----|---|-------|-----|-----|-----|-----|-----|----|-----|-----|----|-----|----|---|-----|----|----|-------------------|-----|-----|--------------------|-----|-----|--------------------------|-----------|
|                        |     |    |   |       |     |     |     |     |     |    |     |     |    |     |    |   |     |    |    |                   |     |     | L/A                | L/B | H   |                          |           |
| NKM-G 50-160/161/1,1/4 | 100 | 50 | - | 287,5 | 282 | 160 | 180 | 274 | 100 | 70 | 265 | 212 | -  | M10 | -  | - | 100 | -  | -  | 28                | 65  | 50  | 620                | 370 | 480 | 0,11                     | 37        |
| NKM-G 50-160/177/1,5/4 | 100 | 50 | - | 287,5 | 282 | 160 | 180 | 274 | 100 | 70 | 265 | 212 | -  | M10 | -  | - | 100 | -  | -  | 28                | 65  | 50  | 620                | 370 | 480 | 0,11                     | 35        |

# NKM-G 50-200 - 4 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≅ 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

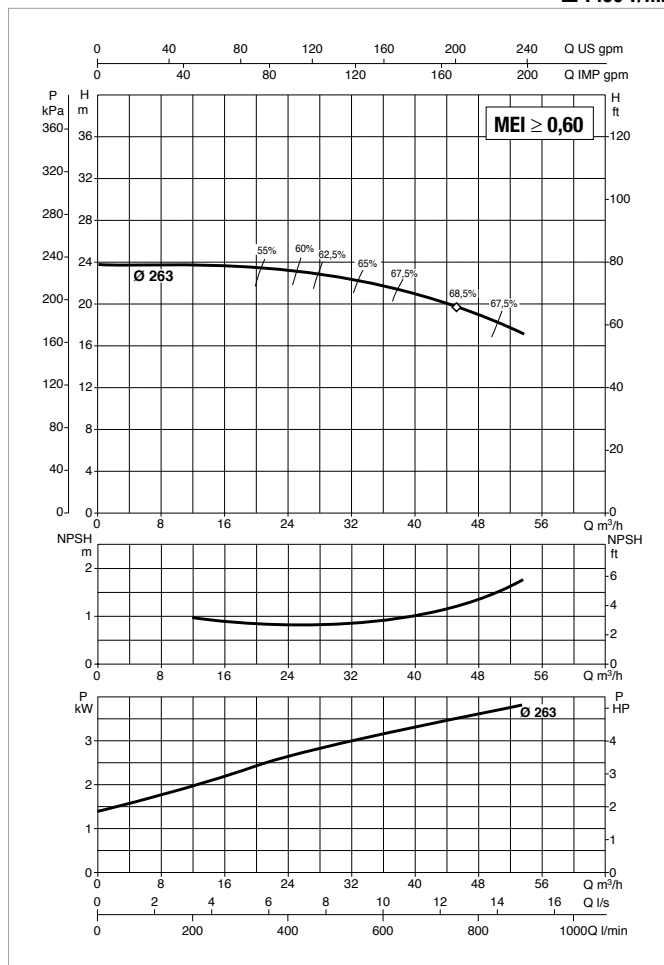
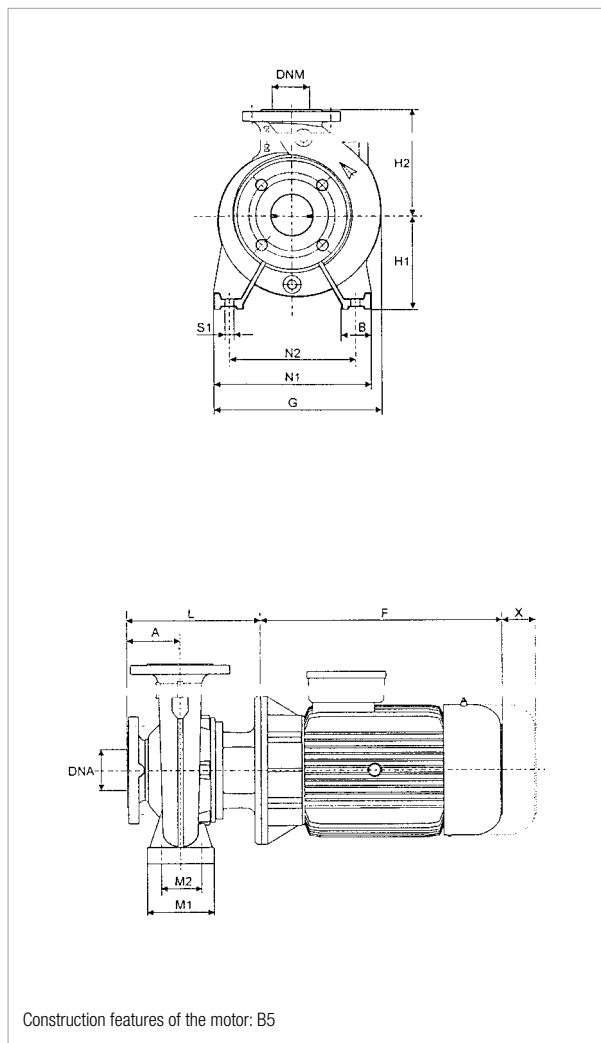
| MODEL                  | MOTOR SIZE | POWER INPUT 50 Hz | ELECTRICAL DATA |    |       |       | MOTOR TYPE |
|------------------------|------------|-------------------|-----------------|----|-------|-------|------------|
|                        |            |                   | P2 NOMINAL      |    | In A  |       |            |
|                        |            |                   | kW              | HP | 230 V | 400 V |            |
| NKM-G 50-200/210/2,2/4 | MEC 100 L  | 3 x 230 - 400 V ~ | 2,2             | 3  | 10,2  | 5,9   | IE3        |
| NKM-G 50-200/219/3/4   | MEC 100 L  | 3 x 400 V ~       | 3               | 4  | -     | 6,8   | IE3        |

| MODEL                  | A   | B  | E | F   | G   | H1  | H2  | L   | M1  | M2 | N1  | N2  | N3 | S1  | S2 | W | X   | H3 | H4 | Ø (mm) Mech. seal | DNA | DNM | PACKING DIMENSIONS |     |     | VOLUME (m³) | WEIGHT Kg |
|------------------------|-----|----|---|-----|-----|-----|-----|-----|-----|----|-----|-----|----|-----|----|---|-----|----|----|-------------------|-----|-----|--------------------|-----|-----|-------------|-----------|
|                        |     |    |   |     |     |     |     |     |     |    |     |     |    |     |    |   |     |    |    |                   |     |     | L/A                | L/B | H   |             |           |
| NKM-G 50-200/210/2,2/4 | 100 | 50 | - | 319 | 302 | 160 | 200 | 274 | 100 | 70 | 265 | 212 | -  | M10 | -  | - | 100 | -  | -  | 28                | 65  | 50  | 670                | 420 | 540 | 0,152       | 55        |
| NKM-G 50-200/219/3/4   | 100 | 50 | - | 321 | 302 | 160 | 200 | 274 | 100 | 70 | 265 | 212 | -  | M10 | -  | - | 100 | -  | -  | 28                | 65  | 50  | 670                | 420 | 540 | 0,152       | 52        |

# NKM-G 50-250 - 4 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≅ 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

| MODEL                | ELECTRICAL DATA |                   |            |     |       |       |            |
|----------------------|-----------------|-------------------|------------|-----|-------|-------|------------|
|                      | MOTOR SIZE      | POWER INPUT 50 Hz | P2 NOMINAL |     | In A  |       | MOTOR TYPE |
|                      |                 |                   | kW         | HP  | 230 V | 400 V |            |
| NKM-G 50-250/263/4/4 | MEC 112 M       | 3 x 400 V ~       | 4          | 5,5 | -     | 8,2   | IE3        |

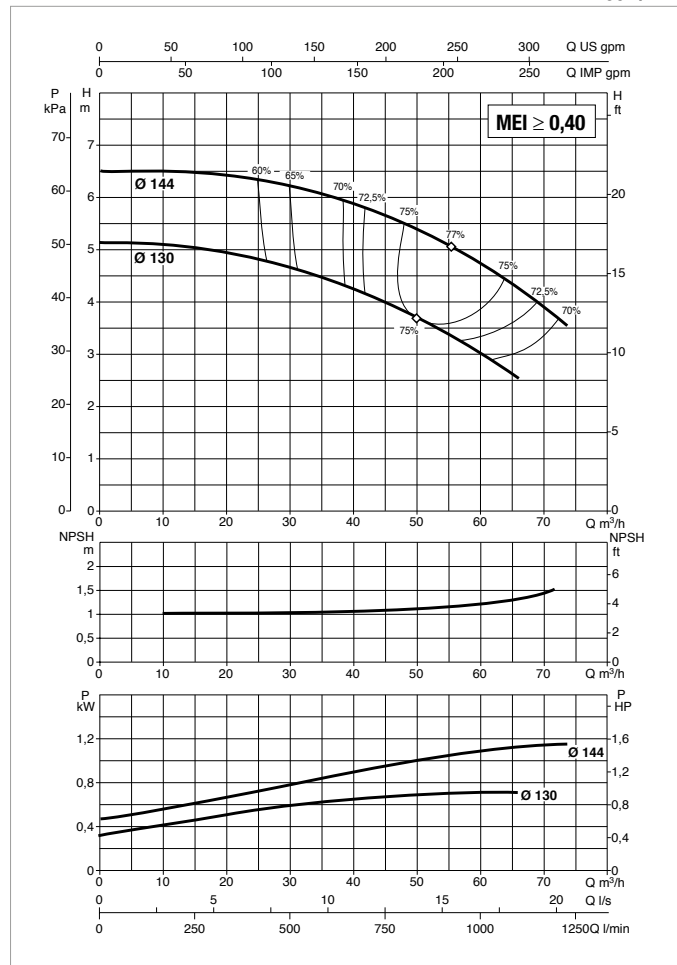
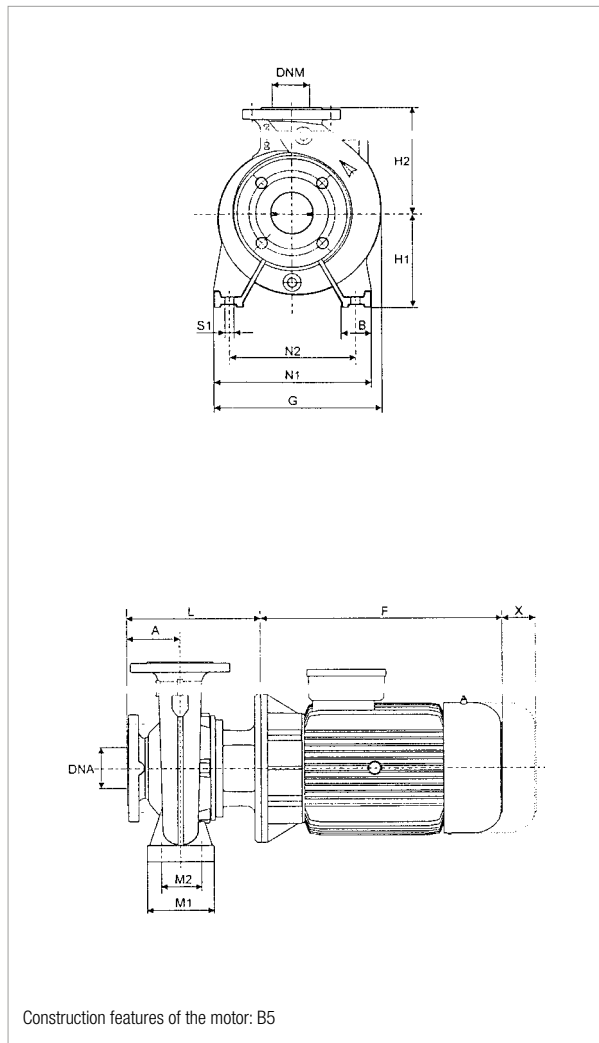
| MODEL                | A   | B   | E | F   | G   | H1  | H2  | L   | M1  | M2 | N1  | N2  | N3 | S1  | S2 | W | X   | H3 | H4 | Ø (mm) Mech. seal | DNa | DNM | PACKING DIMENSIONS |     |     | VOLUME (m³) | WEIGHT Kg |
|----------------------|-----|-----|---|-----|-----|-----|-----|-----|-----|----|-----|-----|----|-----|----|---|-----|----|----|-------------------|-----|-----|--------------------|-----|-----|-------------|-----------|
|                      | L/A | L/B | H |     |     |     |     |     |     |    |     |     |    |     |    |   |     |    |    |                   |     |     |                    |     |     |             |           |
| NKM-G 50-250/263/4/4 | 100 | 65  | - | 328 | 343 | 180 | 225 | 274 | 125 | 95 | 320 | 250 | -  | M10 | -  | - | 100 | -  | -  | 28                | 65  | 50  | 670                | 420 | 540 | 0,152       | 56        |



# NKM-G 65-125 - 4 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≈ 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

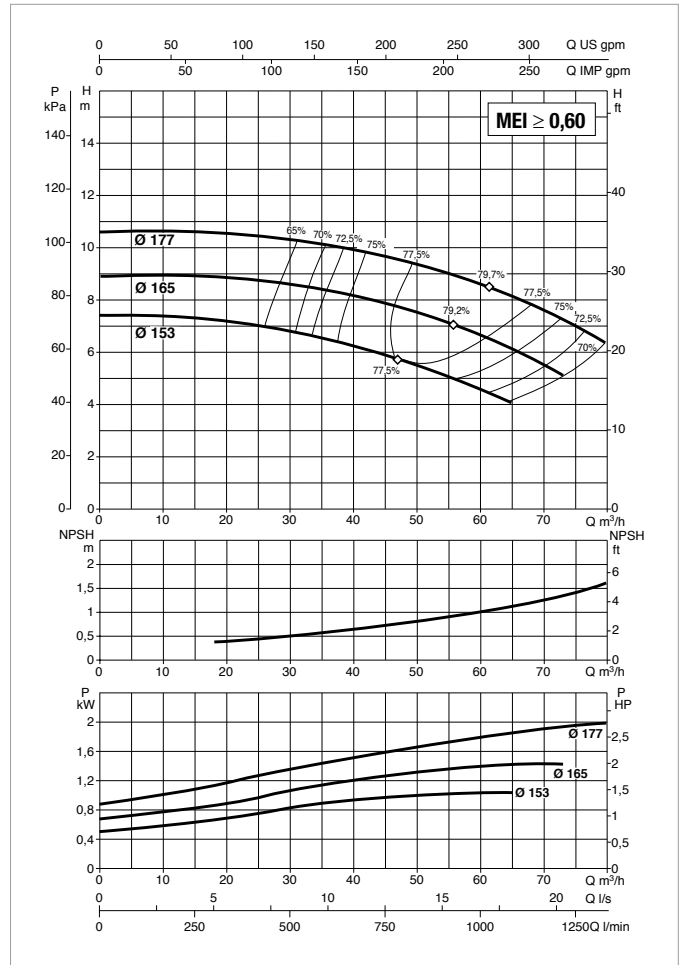
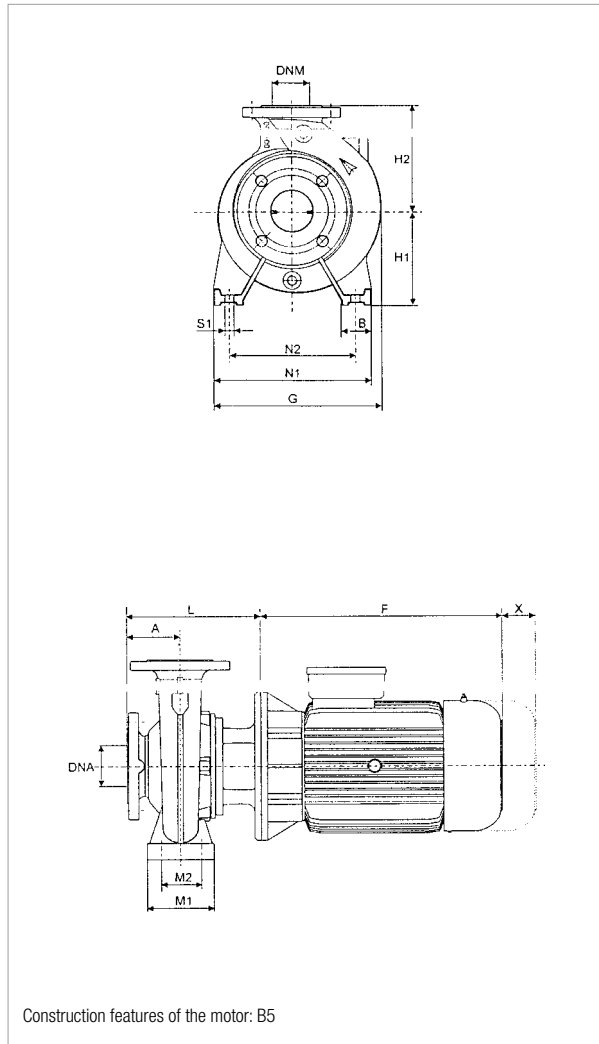
| MODEL                   | ELECTRICAL DATA |                   |            |     |       |       |            |
|-------------------------|-----------------|-------------------|------------|-----|-------|-------|------------|
|                         | MOTOR SIZE      | POWER INPUT 50 Hz | P2 NOMINAL |     | In A  |       | MOTOR TYPE |
|                         |                 |                   | kW         | HP  | 230 V | 400 V |            |
| NKM-G 65-125/130/0,75/4 | MEC 80          | 3 x 230 - 400 V ~ | 0,75       | 1   | 3,1   | 1,8   | IE3        |
| NKM-G 65-125/144/1,1/4  | MEC 90 S        | 3 x 230 - 400 V ~ | 1,1        | 1,5 | 4,3   | 2,5   | IE3        |

| MODEL                   | A   | B  | E | F     | G   | H1  | H2  | L   | M1  | M2 | N1  | N2  | N3 | S1  | S2 | W | X   | H3 | H4 | Ø (mm) Mech. seal | DNA | DNM | PACKING DIMENSIONS |     |     | VOLUME (m <sup>3</sup> ) | WEIGHT Kg |
|-------------------------|-----|----|---|-------|-----|-----|-----|-----|-----|----|-----|-----|----|-----|----|---|-----|----|----|-------------------|-----|-----|--------------------|-----|-----|--------------------------|-----------|
|                         |     |    |   |       |     |     |     |     |     |    |     |     |    |     |    |   |     |    |    |                   |     |     | L/A                | L/B | H   |                          |           |
| NKM-G 65-125/130/0,75/4 | 100 | 65 | - | 232   | 286 | 160 | 180 | 246 | 125 | 95 | 280 | 212 | -  | M10 | -  | - | 100 | -  | -  | 28                | 80  | 65  | 620                | 370 | 480 | 0,11                     | 52        |
| NKM-G 65-125/144/1,1/4  | 100 | 65 | - | 287,5 | 286 | 160 | 180 | 246 | 125 | 95 | 280 | 212 | -  | M10 | -  | - | 100 | -  | -  | 28                | 80  | 65  | 620                | 370 | 480 | 0,11                     | 39        |

# NKM-G 65-160 - 4 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≅ 1450 1/min



For MEI index refer to the hydraulic efficiency section.  
The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

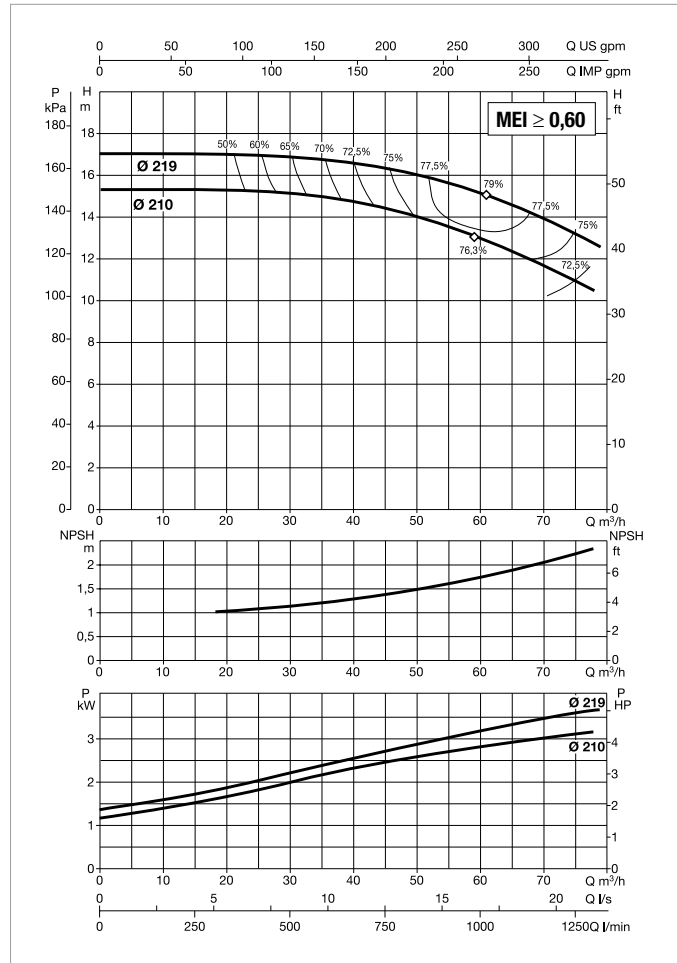
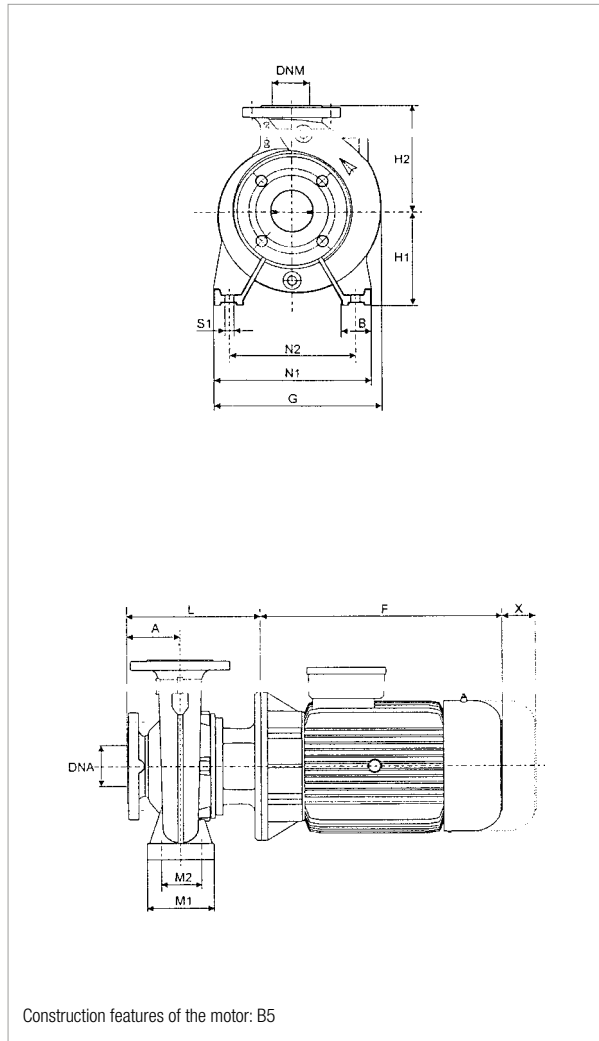
| MODEL                  | MOTOR SIZE | POWER INPUT 50 Hz | ELECTRICAL DATA |     |       |       | MOTOR TYPE |
|------------------------|------------|-------------------|-----------------|-----|-------|-------|------------|
|                        |            |                   | P2 NOMINAL      |     | In A  |       |            |
|                        |            |                   | kW              | HP  | 230 V | 400 V |            |
| NKM-G 65-160/153/1,1/4 | MEC 90 S   | 3 x 230 - 400 V ~ | 1,1             | 1,5 | 4,3   | 2,5   | IE3        |
| NKM-G 65-160/165/1,5/4 | MEC 90 L   | 3 x 230 - 400 V ~ | 1,5             | 2   | 6,2   | 3,6   | IE3        |
| NKM-G 65-160/177/2,2/4 | MEC 100 L  | 3 x 230 - 400 V ~ | 2,2             | 3   | 10,2  | 5,9   | IE3        |

| MODEL                  | A   | B  | E | F     | G   | H1  | H2  | L   | M1  | M2 | N1  | N2  | N3 | S1  | S2 | W | X   | H3 | H4 | Ø (mm) Mech. seal | DNA | DNM | PACKING DIMENSIONS |     |     | VOLUME (m³) | WEIGHT Kg |
|------------------------|-----|----|---|-------|-----|-----|-----|-----|-----|----|-----|-----|----|-----|----|---|-----|----|----|-------------------|-----|-----|--------------------|-----|-----|-------------|-----------|
|                        |     |    |   |       |     |     |     |     |     |    |     |     |    |     |    |   |     |    |    |                   |     |     | L/A                | L/B | H   |             |           |
| NKM-G 65-160/153/1,1/4 | 100 | 65 | - | 287,5 | 302 | 160 | 200 | 246 | 125 | 95 | 280 | 212 | -  | M10 | -  | - | 100 | -  | -  | 28                | 80  | 65  | 670                | 420 | 540 | 0,152       | 42        |
| NKM-G 65-160/165/1,5/4 | 100 | 65 | - | 287,5 | 302 | 160 | 200 | 246 | 125 | 95 | 280 | 212 | -  | M10 | -  | - | 100 | -  | -  | 28                | 80  | 65  | 670                | 420 | 540 | 0,152       | 40        |
| NKM-G 65-160/177/2,2/4 | 100 | 65 | - | 319   | 302 | 160 | 200 | 274 | 125 | 95 | 280 | 212 | -  | M10 | -  | - | 100 | -  | -  | 28                | 80  | 65  | 670                | 420 | 540 | 0,152       | 52        |

# NKM-G 65-200 - 4 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≅ 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

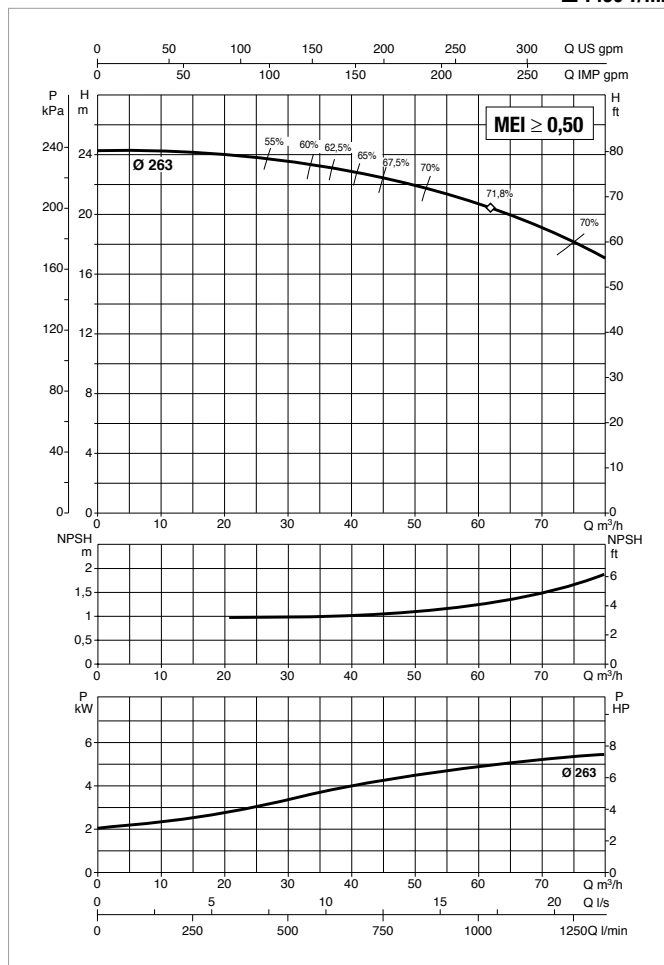
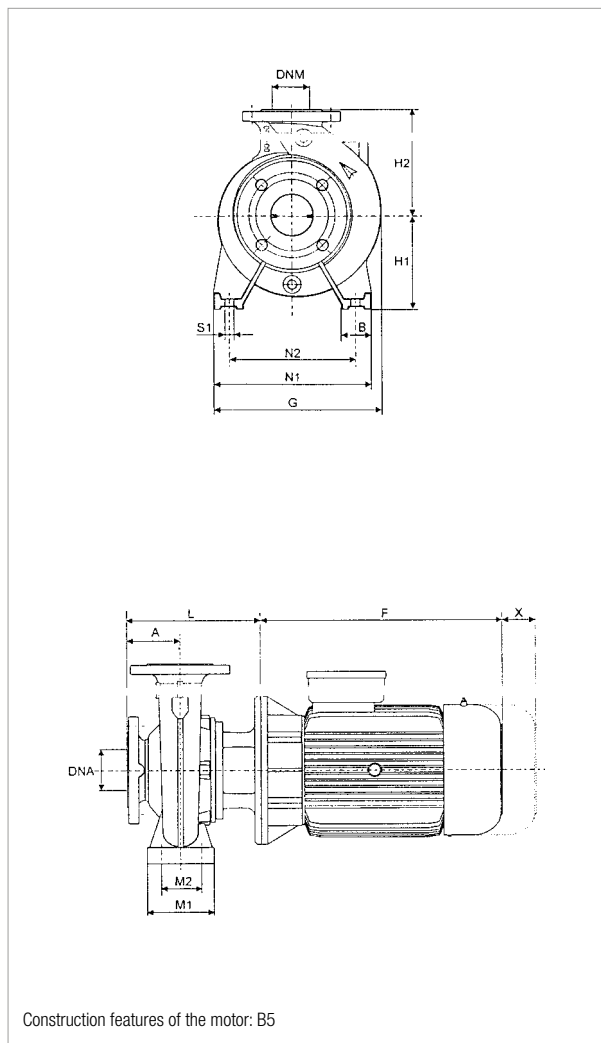
| MODEL                | ELECTRICAL DATA |                   |            |     |       |       |            |
|----------------------|-----------------|-------------------|------------|-----|-------|-------|------------|
|                      | MOTOR SIZE      | POWER INPUT 50 Hz | P2 NOMINAL |     | In A  |       | MOTOR TYPE |
|                      |                 |                   | kW         | HP  | 230 V | 400 V |            |
| NKM-G 65-200/210/3/4 | MEC 100 L       | 3 x 400 V ~       | 3          | 4   | -     | 6,8   | IE3        |
| NKM-G 65-200/219/4/4 | MEC 112 M       | 3 x 400 V ~       | 4          | 5,5 | -     | 8,2   | IE3        |

| MODEL                | A   | B  | E | F   | G   | H1  | H2  | L   | M1  | M2 | N1  | N2  | N3 | S1  | S2 | W | X   | H3 | H4 | Ø (mm) Mech. seal | DNA | DNM | PACKING DIMENSIONS |     |     | VOLUME (m³) | WEIGHT Kg |
|----------------------|-----|----|---|-----|-----|-----|-----|-----|-----|----|-----|-----|----|-----|----|---|-----|----|----|-------------------|-----|-----|--------------------|-----|-----|-------------|-----------|
|                      |     |    |   |     |     |     |     |     |     |    |     |     |    |     |    |   |     |    |    |                   |     |     | L/A                | L/B | H   |             |           |
| NKM-G 65-200/210/3/4 | 100 | 65 | - | 321 | 333 | 180 | 225 | 274 | 125 | 95 | 320 | 250 | -  | M10 | -  | - | 140 | -  | -  | 28                | 80  | 65  | 670                | 420 | 540 | 0,152       | 56        |
| NKM-G 65-200/219/4/4 | 100 | 65 | - | 328 | 333 | 180 | 225 | 274 | 125 | 95 | 320 | 250 | -  | M10 | -  | - | 140 | -  | -  | 28                | 80  | 65  | 670                | 420 | 540 | 0,152       | 58        |

# NKM-G 65-250 - 4 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≅ 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

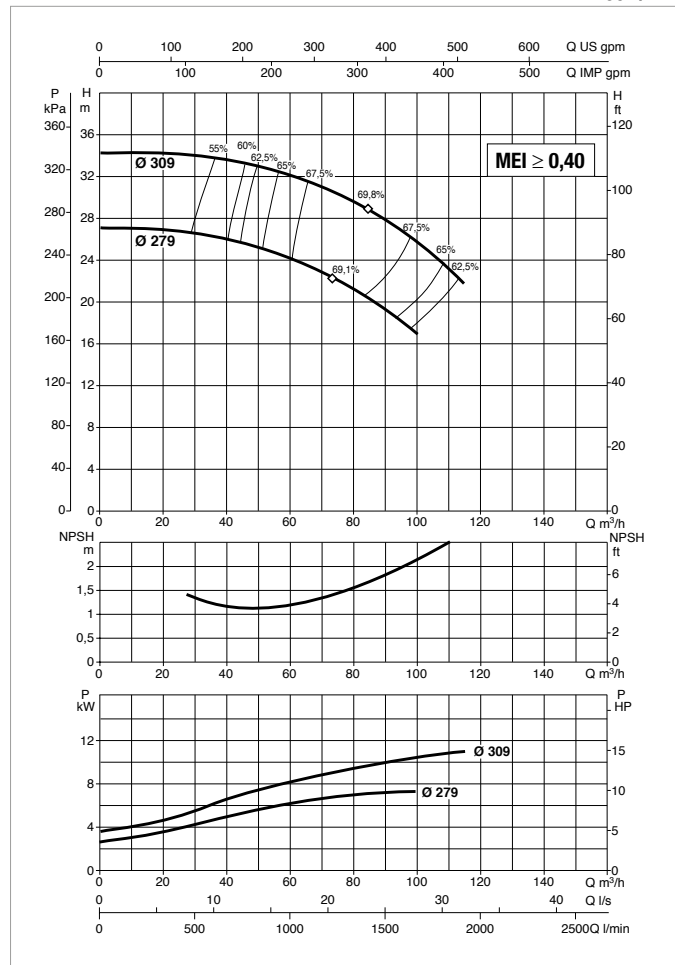
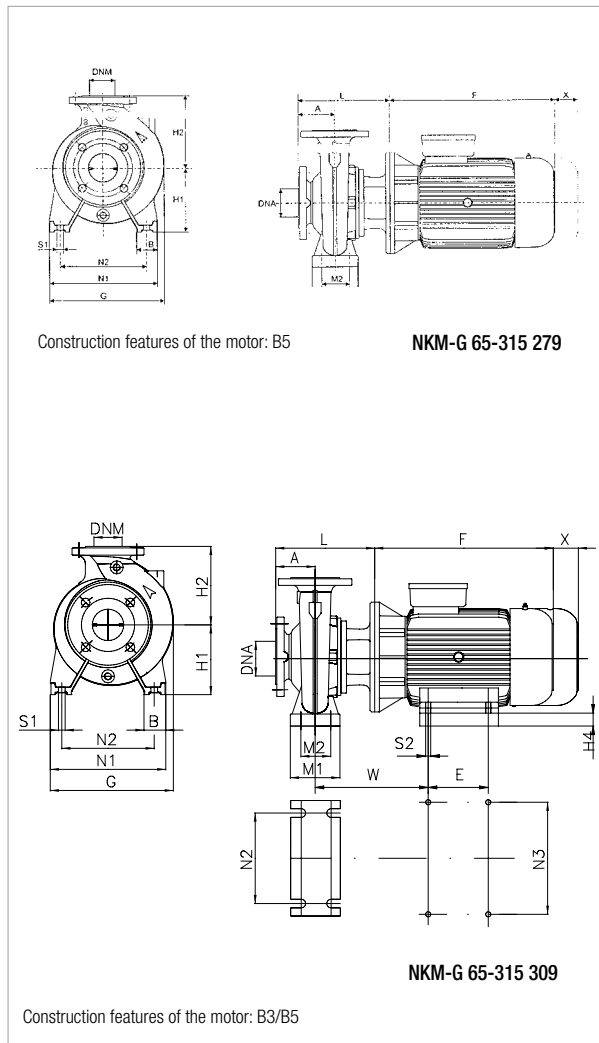
| MODEL                  | ELECTRICAL DATA |                   |            |     |       |       |            |
|------------------------|-----------------|-------------------|------------|-----|-------|-------|------------|
|                        | MOTOR SIZE      | POWER INPUT 50 Hz | P2 NOMINAL |     | In A  |       | MOTOR TYPE |
|                        |                 |                   | kW         | HP  | 230 V | 400 V |            |
| NKM-G 65-250/263/5,5/4 | MEC 132 S       | 3 x 400 V ~       | 5,5        | 7,5 | -     | 10,6  | IE3        |

| MODEL                  | A   | B   | E | F   | G   | H1  | H2  | L   | M1  | M2  | N1  | N2  | N3 | S1  | S2 | W | X   | H3 | H4 | Ø (mm) Mech. seal | DNA | DNM | PACKING DIMENSIONS |     |     | VOLUME (m³) | WEIGHT Kg |
|------------------------|-----|-----|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|-----|----|---|-----|----|----|-------------------|-----|-----|--------------------|-----|-----|-------------|-----------|
|                        | L/A | L/B | H |     |     |     |     |     |     |     |     |     |    |     |    |   |     |    |    |                   |     |     |                    |     |     |             |           |
| NKM-G 65-250/263/5,5/4 | 100 | 80  | - | 365 | 370 | 200 | 250 | 343 | 160 | 120 | 360 | 280 | -  | M14 | -  | - | 140 | -  | -  | 38                | 80  | 65  | 1030               | 530 | 640 | 0,349       | 142       |

# NKM-G 65-315 - 4 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≈ 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

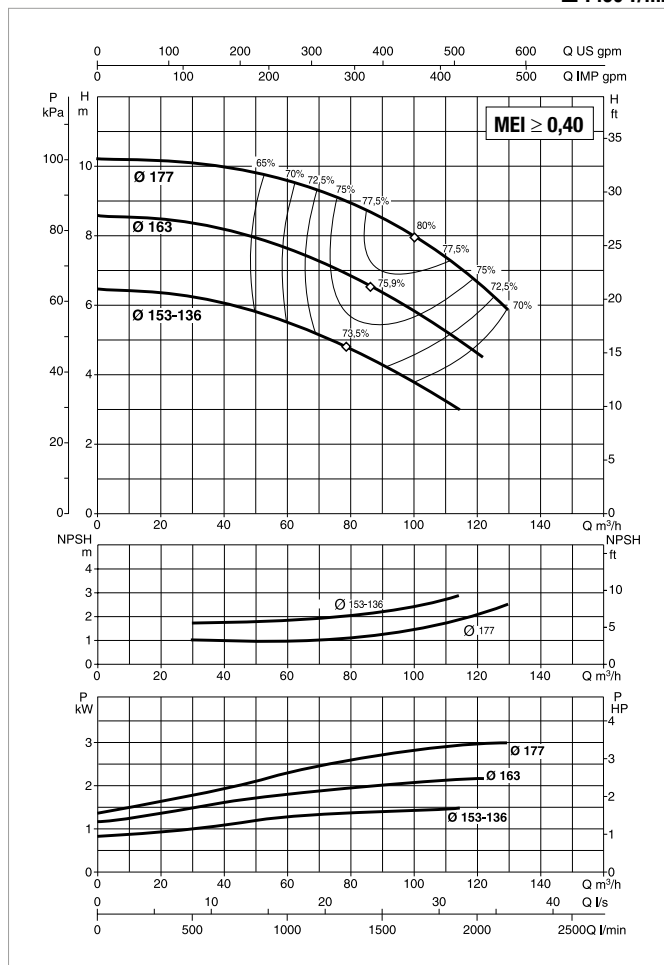
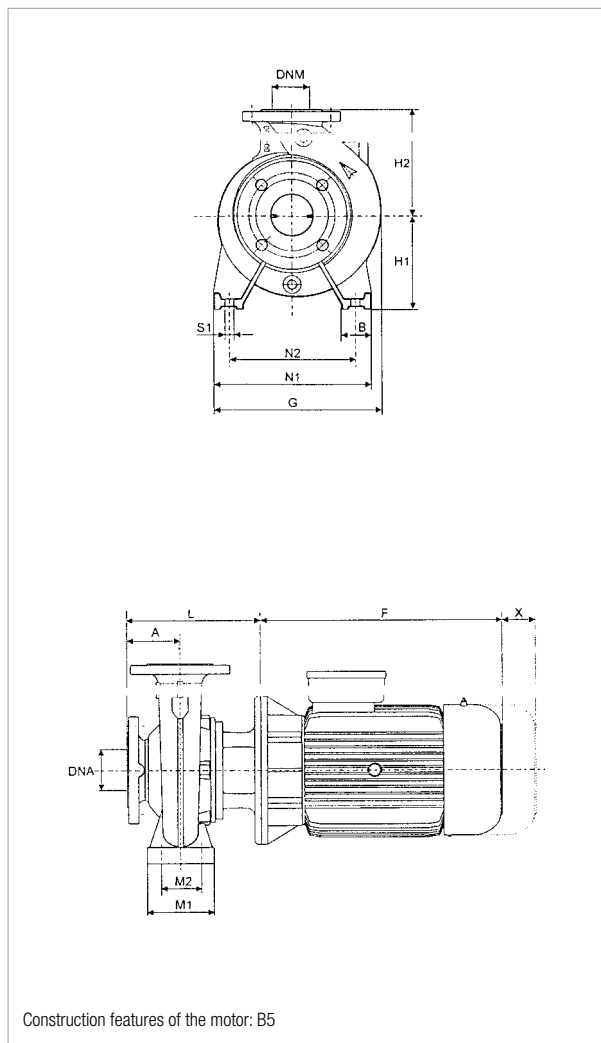
| MODEL                         | ELECTRICAL DATA |                   |            |    |       |       | MOTOR TYPE |
|-------------------------------|-----------------|-------------------|------------|----|-------|-------|------------|
|                               | MOTOR SIZE      | POWER INPUT 50 Hz | P2 NOMINAL |    | In A  |       |            |
|                               |                 |                   | kW         | HP | 230 V | 400 V |            |
| <b>NKM-G 65-315/279/7,5/4</b> | MEC 132 M       | 3 x 400 V ~       | 7,5        | 10 | -     | 14,4  | IE3        |
| <b>NKM-G 65-315/309/11/4</b>  | MEC 160 M       | 3 x 400 V ~       | 11         | 15 | -     | 22,4  | IE3        |

| MODEL                         | A   | B  | E   | F   | G   | H1  | H2  | L   | M1  | M2  | N1  | N2  | N3  | S1  | S2  | W   | X   | H3 | H4 | Ø (mm) Mech. seal | DNA | DNM | PACKING DIMENSIONS |     |     | VOLUME (m³) | WEIGHT Kg |
|-------------------------------|-----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|-------------------|-----|-----|--------------------|-----|-----|-------------|-----------|
|                               |     |    |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |    |                   |     |     | L/A                | L/B | H   |             |           |
| <b>NKM-G 65-315/279/7,5/4</b> | 125 | 80 | -   | 350 | 429 | 225 | 280 | 368 | 160 | 120 | 400 | 315 | -   | M14 | -   | -   | 140 | -  | -  | 38                | 80  | 65  | 1030               | 530 | 640 | 0,349       | 163       |
| <b>NKM-G 65-315/309/11/4</b>  | 125 | 80 | 210 | 498 | 429 | 225 | 280 | 398 | 160 | 120 | 400 | 315 | 254 | M14 | M12 | 402 | 140 | -  | 65 | 38                | 80  | 65  | 1030               | 530 | 640 | 0,349       | 231       |

# NKM-G 80-160 - 4 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≅ 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

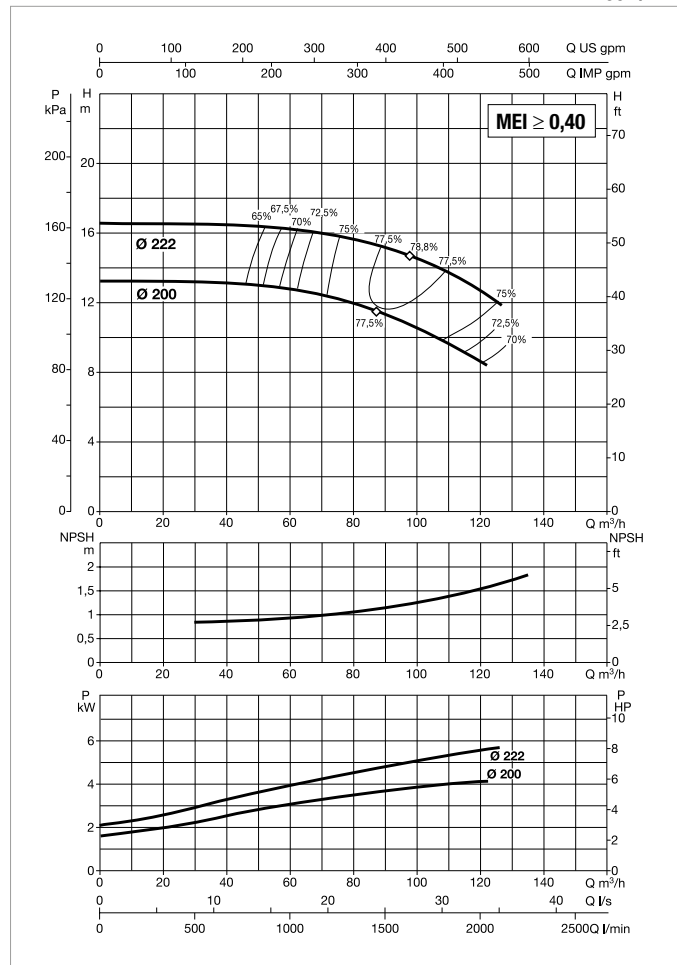
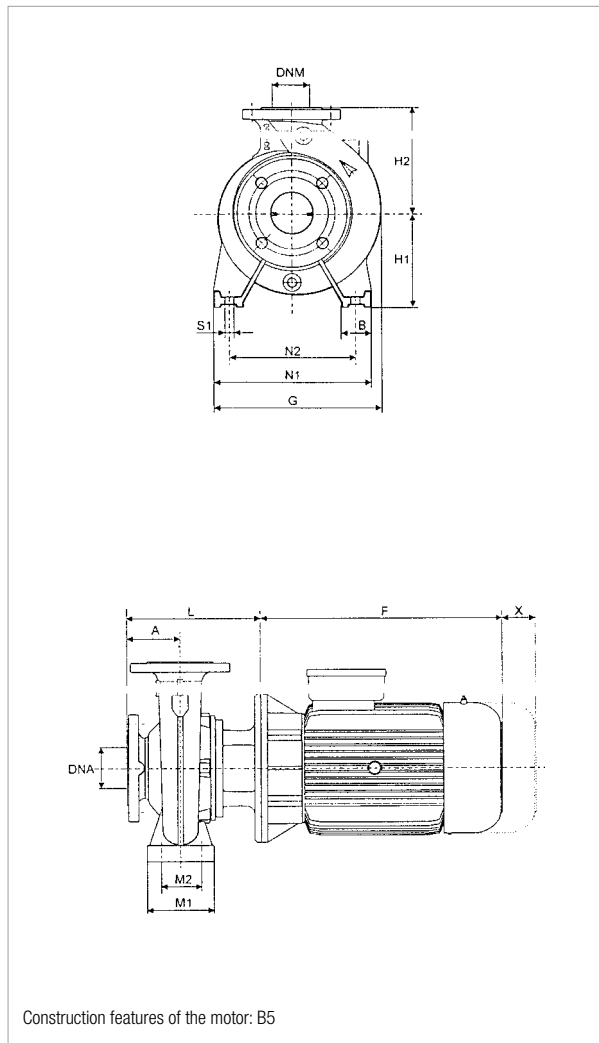
| MODEL                      | ELECTRICAL DATA |                   |            |    |       |       |            |
|----------------------------|-----------------|-------------------|------------|----|-------|-------|------------|
|                            | MOTOR SIZE      | POWER INPUT 50 Hz | P2 NOMINAL |    | In A  |       | MOTOR TYPE |
|                            |                 |                   | kW         | HP | 230 V | 400 V |            |
| NKM-G 80-160/153-136/1,5/4 | MEC 90 L        | 3 x 230 - 400 V ~ | 1,5        | 2  | 6,2   | 3,6   | IE3        |
| NKM-G 80-160/163/2,2/4     | MEC 100 L       | 3 x 230 - 400 V ~ | 2,2        | 3  | 10,2  | 5,9   | IE3        |
| NKM-G 80-160/177/3/4       | MEC 100 L       | 3 x 400 V ~       | 3          | 4  | -     | 6,8   | IE3        |

| MODEL                      | A   | B  | E | F     | G   | H1  | H2  | L   | M1  | M2 | N1  | N2  | N3 | S1  | S2 | W | X   | H3 | H4 | Ø (mm) Mech. seal | DNa | DNM | PACKING DIMENSIONS |     |     | VOLUME (m³) | WEIGHT Kg |
|----------------------------|-----|----|---|-------|-----|-----|-----|-----|-----|----|-----|-----|----|-----|----|---|-----|----|----|-------------------|-----|-----|--------------------|-----|-----|-------------|-----------|
|                            |     |    |   |       |     |     |     |     |     |    |     |     |    |     |    |   |     |    |    |                   |     |     | L/A                | L/B | H   |             |           |
| NKM-G 80-160/153-136/1,5/4 | 125 | 65 | - | 287,5 | 342 | 180 | 225 | 299 | 125 | 95 | 320 | 250 | -  | M10 | -  | - | 140 | -  | -  | 28                | 100 | 80  | 670                | 420 | 540 | 0,152       | 46        |
| NKM-G 80-160/163/2,2/4     | 125 | 65 | - | 319   | 342 | 180 | 225 | 299 | 125 | 95 | 320 | 250 | -  | M10 | -  | - | 140 | -  | -  | 28                | 100 | 80  | 670                | 420 | 540 | 0,152       | 61        |
| NKM-G 80-160/177/3/4       | 125 | 65 | - | 321   | 342 | 180 | 225 | 299 | 125 | 95 | 320 | 250 | -  | M10 | -  | - | 140 | -  | -  | 28                | 100 | 80  | 670                | 420 | 540 | 0,152       | 58        |

# NKM-G 80-200 - 4 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≅ 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

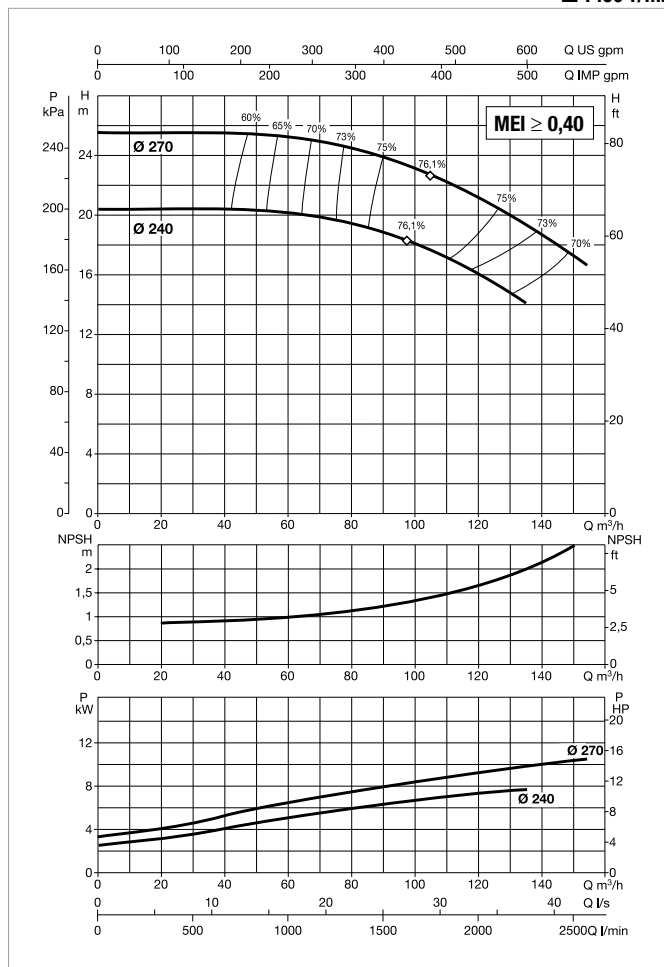
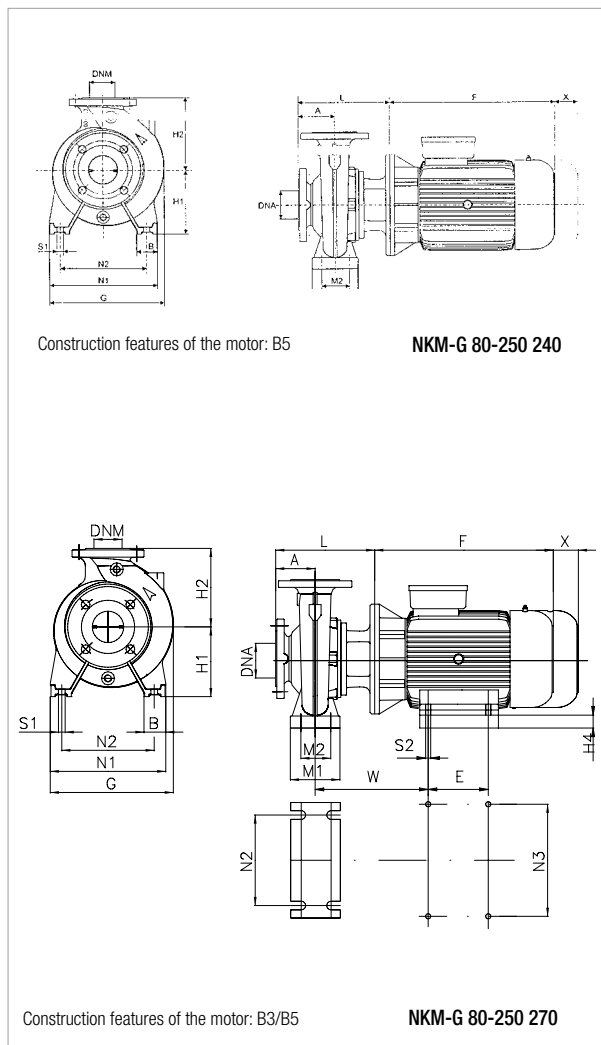
| MODEL                  | MOTOR SIZE | POWER INPUT<br>50 Hz | ELECTRICAL DATA |     |       |       | MOTOR TYPE |
|------------------------|------------|----------------------|-----------------|-----|-------|-------|------------|
|                        |            |                      | P2 NOMINAL      |     | In A  |       |            |
|                        |            |                      | kW              | HP  | 230 V | 400 V |            |
| NKM-G 80-200/200/4/4   | MEC 112 M  | 3 x 400 V ~          | 4               | 5,5 | -     | 8,2   | IE3        |
| NKM-G 80-200/222/5,5/4 | MEC 132 S  | 3 x 400 V ~          | 5,5             | 7,5 | -     | 10,6  | IE3        |

| MODEL                  | A   | B  | E | F   | G   | H1  | H2  | L   | M1  | M2 | N1  | N2  | N3 | S1  | S2 | W | X   | H3 | H4 | Ø (mm)<br>Mech. seal | DNA | DNM | PACKING DIMENSIONS |     |     | VOLUME<br>(m³) | WEIGHT<br>Kg |
|------------------------|-----|----|---|-----|-----|-----|-----|-----|-----|----|-----|-----|----|-----|----|---|-----|----|----|----------------------|-----|-----|--------------------|-----|-----|----------------|--------------|
|                        |     |    |   |     |     |     |     |     |     |    |     |     |    |     |    |   |     |    |    |                      |     |     | L/A                | L/B | H   |                |              |
| NKM-G 80-200/200/4/4   | 125 | 65 | - | 328 | 365 | 180 | 250 | 368 | 125 | 95 | 345 | 280 | -  | M10 | -  | - | 140 | -  | -  | 38                   | 100 | 80  | 1030               | 530 | 640 | 0,349          | 84           |
| NKM-G 80-200/222/5,5/4 | 125 | 65 | - | 365 | 365 | 180 | 250 | 368 | 125 | 95 | 345 | 280 | -  | M10 | -  | - | 140 | -  | -  | 38                   | 100 | 80  | 1030               | 530 | 640 | 0,349          | 130          |

# NKM-G 80-250 - 4 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≅ 1450 1/min



For MEI index refer to the hydraulic efficiency section.  
The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

| MODEL                         | ELECTRICAL DATA |                   |            |    |       |       |            |
|-------------------------------|-----------------|-------------------|------------|----|-------|-------|------------|
|                               | MOTOR SIZE      | POWER INPUT 50 Hz | P2 NOMINAL |    | In A  |       | MOTOR TYPE |
|                               |                 |                   | kW         | HP | 230 V | 400 V |            |
| <b>NKM-G 80-250/240/7,5/4</b> | MEC 132 M       | 3 x 400 V ~       | 7,5        | 10 | -     | 14,4  | IE3        |
| <b>NKM-G 80-250/270/11/4</b>  | MEC 160 M       | 3 x 400 V ~       | 11         | 15 | -     | 22,4  | IE3        |

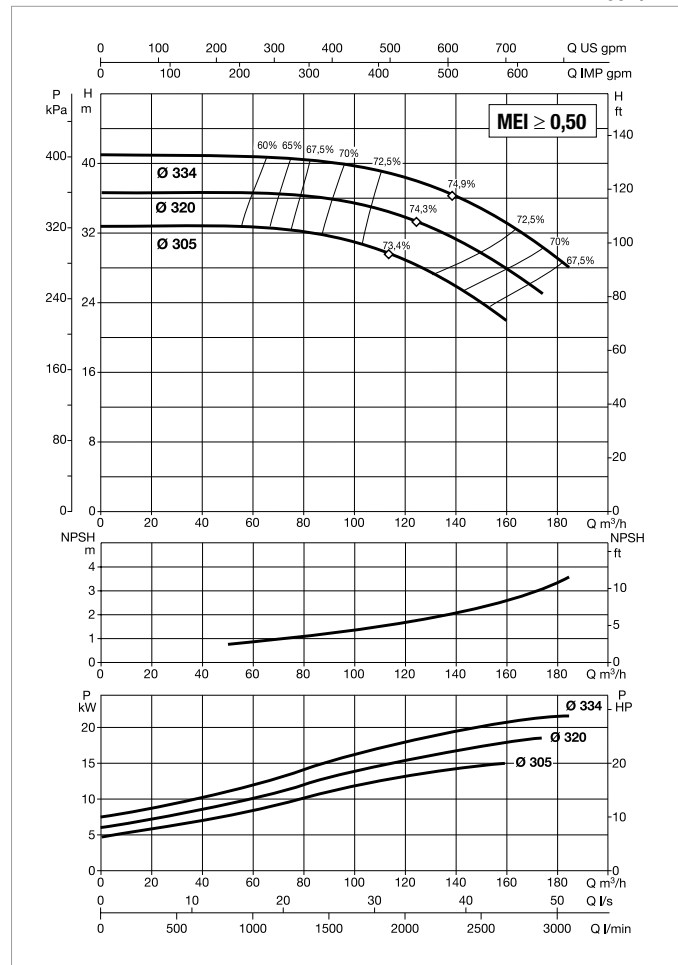
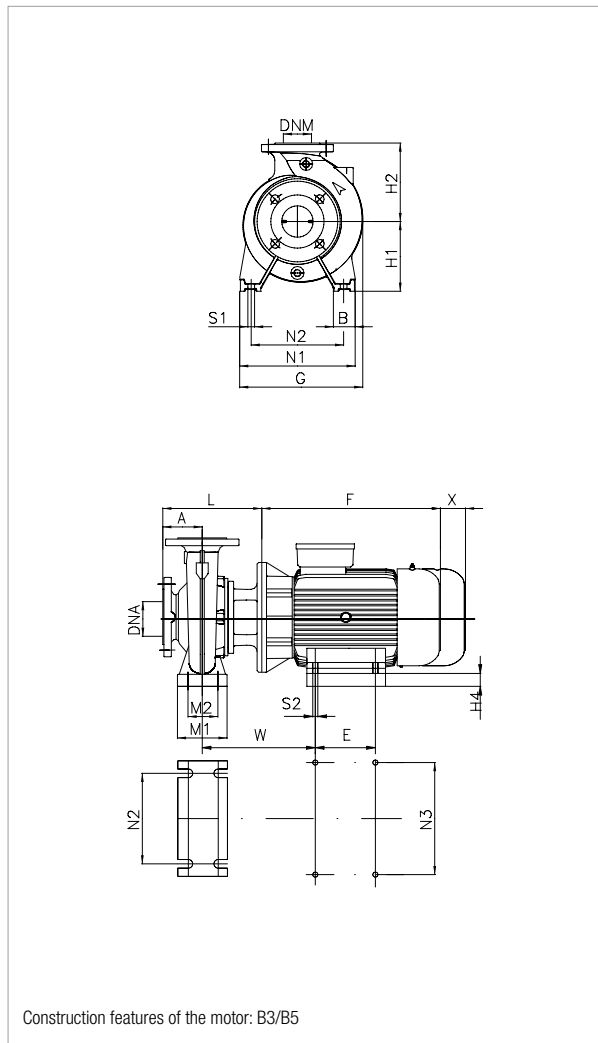
| MODEL                         | A   | B  | E   | F   | G   | H1  | H2  | L   | M1  | M2  | N1  | N2  | N3  | S1  | S2  | W   | X   | H3 | H4 | Ø (mm) Mech. seal | DNA | DNM | PACKING DIMENSIONS |     |     | VOLUME (m <sup>3</sup> ) | WEIGHT Kg |
|-------------------------------|-----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|-------------------|-----|-----|--------------------|-----|-----|--------------------------|-----------|
|                               |     |    |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |    |                   |     |     | L/A                | L/B | H   |                          |           |
| <b>NKM-G 80-250/240/7,5/4</b> | 125 | 80 | -   | 350 | 410 | 200 | 280 | 368 | 160 | 120 | 400 | 315 | -   | M14 | -   | -   | 140 | -  | -  | 38                | 100 | 80  | 1030               | 530 | 640 | 0,349                    | 153       |
| <b>NKM-G 80-250/270/11/4</b>  | 125 | 80 | 210 | 498 | 410 | 200 | 280 | 398 | 160 | 120 | 400 | 315 | 254 | M14 | M12 | 381 | 140 | -  | 40 | 38                | 100 | 80  | 1030               | 530 | 640 | 0,349                    | 205       |



# NKM-G 80-315 - 4 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≈ 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

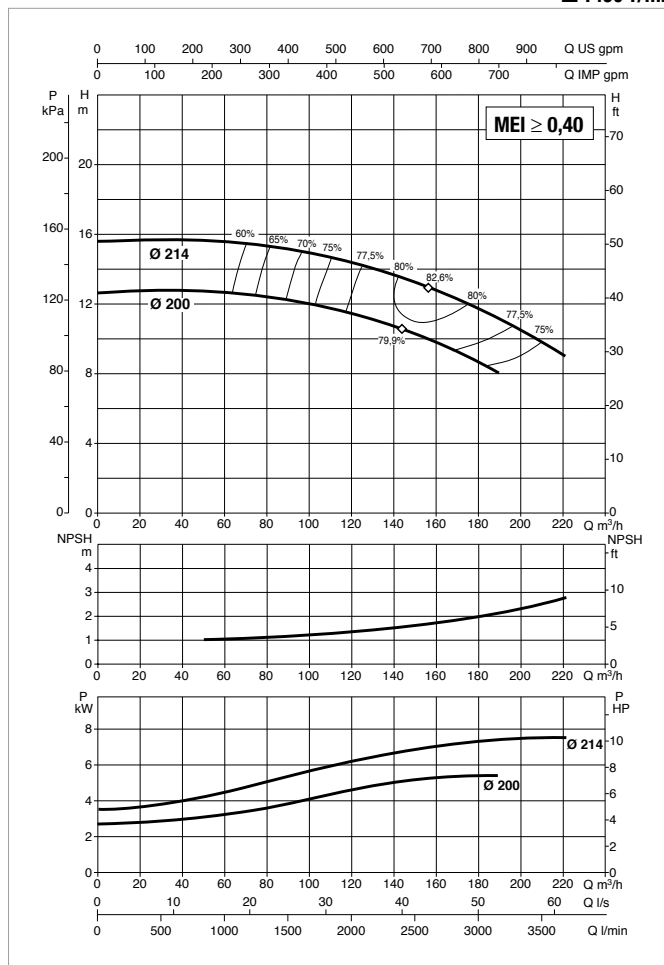
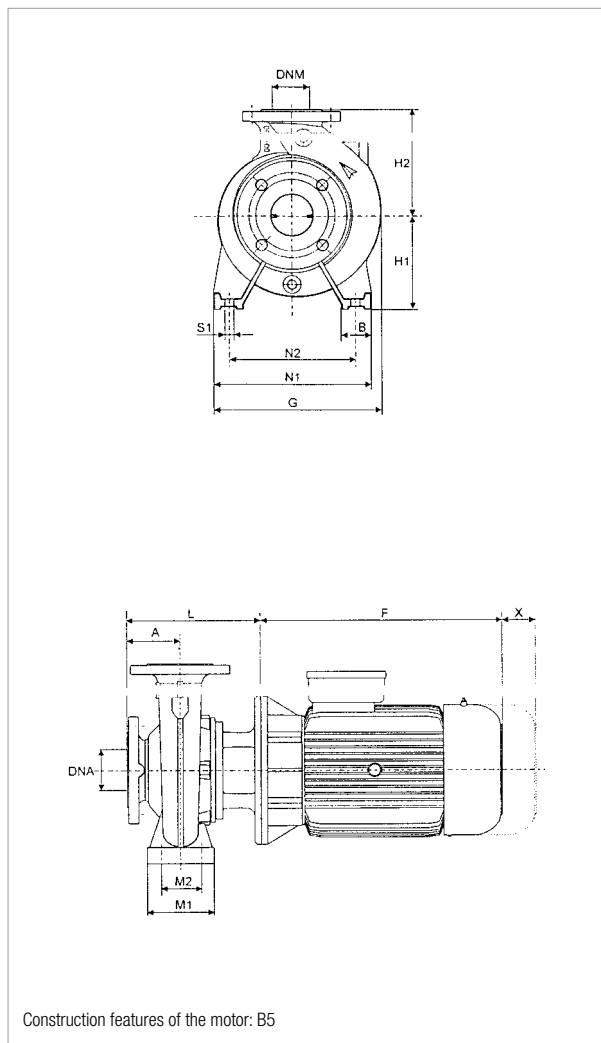
| MODEL                   | MOTOR SIZE | POWER INPUT 50 Hz | ELECTRICAL DATA |    |       |       | MOTOR TYPE |
|-------------------------|------------|-------------------|-----------------|----|-------|-------|------------|
|                         |            |                   | P2 NOMINAL      |    | In A  |       |            |
|                         |            |                   | kW              | HP | 230 V | 400 V |            |
| NKM-G 80-315/305/15/4   | MEC 160 L  | 3 x 400 V ~       | 15              | 20 | -     | 30,5  | IE3        |
| NKM-G 80-315/320/18,5/4 | MEC 180 M  | 3 x 400 V ~       | 18,5            | 25 | -     | 34,3  | IE3        |
| NKM-G 80-315/334/22/4   | MEC 180 L  | 3 x 400 V ~       | 22              | 30 | -     | 40,2  | IE3        |

| MODEL                   | A   | B  | E   | F   | G   | H1  | H2  | L   | M1  | M2  | N1  | N2  | N3  | S1  | S2  | W   | X   | H3 | H4 | Ø (mm) Mech. seal | DNA | DNM | PACKING DIMENSIONS |     |     | VOLUME (m³) | WEIGHT Kg |
|-------------------------|-----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|-------------------|-----|-----|--------------------|-----|-----|-------------|-----------|
|                         |     |    |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |    |                   |     |     | L/A                | L/B | H   |             |           |
| NKM-G 80-315/305/15/4   | 125 | 80 | 254 | 542 | 460 | 250 | 315 | 398 | 160 | 120 | 400 | 315 | 254 | M14 | M12 | 402 | 140 | -  | 90 | 38                | 100 | 80  | 1130               | 580 | 740 | 0,485       | 263       |
| NKM-G 80-315/320/18,5/4 | 125 | 80 | 241 | 577 | 460 | 250 | 315 | 398 | 160 | 120 | 400 | 315 | 279 | M14 | M12 | 429 | 140 | -  | 70 | 38                | 100 | 80  | 1130               | 580 | 740 | 0,485       | 275       |
| NKM-G 80-315/334/22/4   | 125 | 80 | 279 | 615 | 460 | 250 | 315 | 398 | 160 | 120 | 400 | 315 | 279 | M14 | M12 | 415 | 140 | -  | 70 | 38                | 100 | 80  | 1130               | 580 | 740 | 0,485       | 298       |

# NKM-G 100-200 - 4 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≅ 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

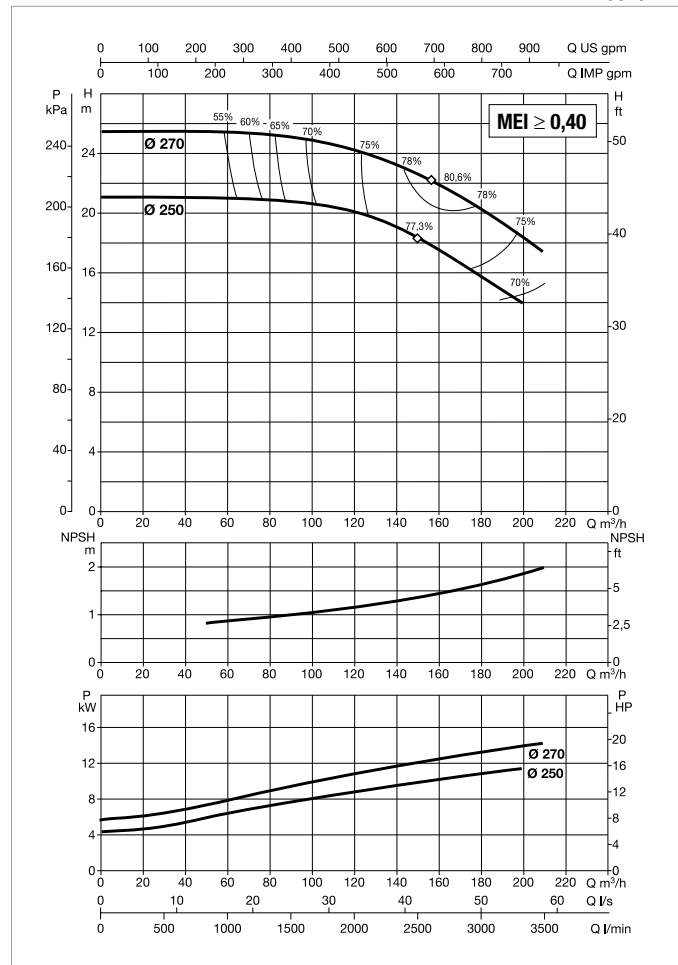
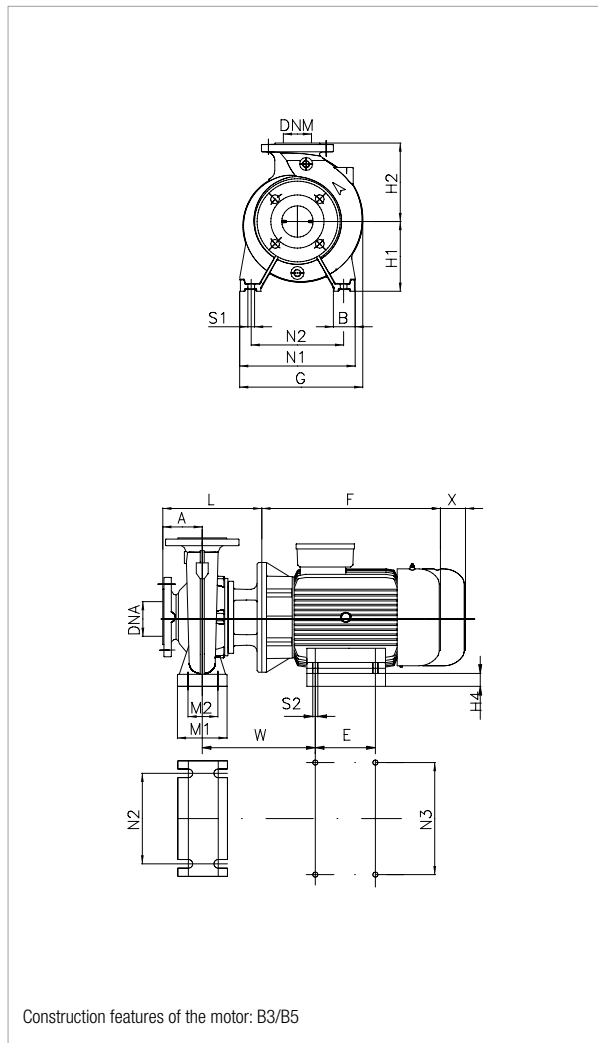
| MODEL                   | ELECTRICAL DATA |                   |            |     |       |       |            |
|-------------------------|-----------------|-------------------|------------|-----|-------|-------|------------|
|                         | MOTOR SIZE      | POWER INPUT 50 Hz | P2 NOMINAL |     | In A  |       | MOTOR TYPE |
|                         |                 |                   | kW         | HP  | 230 V | 400 V |            |
| NKM-G 100-200/200/5,5/4 | MEC 132 S       | 3 x 400 V ~       | 5,5        | 7,5 | -     | 10,6  | IE3        |
| NKM-G 100-200/214/7,5/4 | MEC 132 M       | 3 x 400 V ~       | 7,5        | 10  | -     | 14,4  | IE3        |

| MODEL                   | A   | B  | E | F   | G   | H1  | H2  | L   | M1  | M2  | N1  | N2  | N3 | S1  | S2 | W | X   | H3 | H4 | Ø (mm) Mech. seal | DNa | DNM | PACKING DIMENSIONS |     |     | VOLUME (m <sup>3</sup> ) | WEIGHT Kg |
|-------------------------|-----|----|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|-----|----|---|-----|----|----|-------------------|-----|-----|--------------------|-----|-----|--------------------------|-----------|
|                         |     |    |   |     |     |     |     |     |     |     |     |     |    |     |    |   |     |    |    |                   |     |     | L/A                | L/B | H   |                          |           |
| NKM-G 100-200/200/5,5/4 | 125 | 80 | - | 365 | 392 | 200 | 280 | 368 | 160 | 120 | 360 | 280 | -  | M14 | -  | - | 140 | -  | -  | 38                | 125 | 100 | 1030               | 530 | 640 | 0,349                    | 142       |
| NKM-G 100-200/214/7,5/4 | 125 | 80 | - | 350 | 392 | 200 | 280 | 368 | 160 | 120 | 360 | 280 | -  | M14 | -  | - | 140 | -  | -  | 38                | 125 | 100 | 1030               | 530 | 640 | 0,349                    | 149       |

# NKM-G 100-250 - 4 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≈ 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

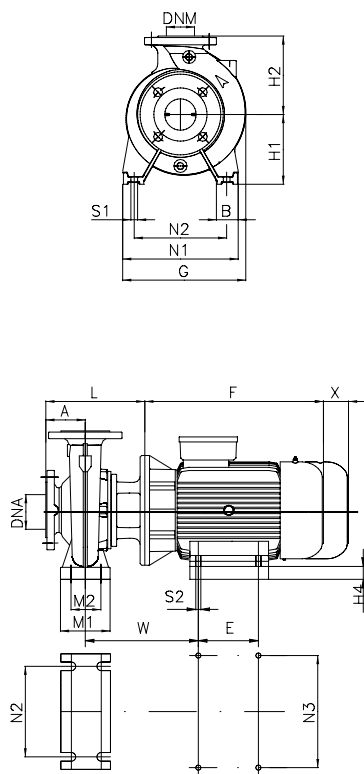
| MODEL                  | ELECTRICAL DATA |                   |            |    |       |       |            |
|------------------------|-----------------|-------------------|------------|----|-------|-------|------------|
|                        | MOTOR SIZE      | POWER INPUT 50 Hz | P2 NOMINAL |    | In A  |       | MOTOR TYPE |
|                        |                 |                   | kW         | HP | 230 V | 400 V |            |
| NKM-G 100-250/250/11/4 | MEC 160 M       | 3 x 400 V ~       | 11         | 15 | -     | 22,4  | IE3        |
| NKM-G 100-250/270/15/4 | MEC 160 L       | 3 x 400 V ~       | 15         | 20 | -     | 30,5  | IE3        |

| MODEL                  | A   | B  | E   | F   | G   | H1  | H2  | L   | M1  | M2  | N1  | N2  | N3  | S1  | S2  | W   | X   | H3 | H4 | Ø (mm) Mech. seal | DNA | DNM | PACKING DIMENSIONS |     |     | VOLUME (m³) | WEIGHT Kg |
|------------------------|-----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|-------------------|-----|-----|--------------------|-----|-----|-------------|-----------|
|                        |     |    |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |    |                   |     |     | L/A                | L/B | H   |             |           |
| NKM-G 100-250/250/11/4 | 140 | 80 | 210 | 498 | 424 | 225 | 280 | 413 | 160 | 120 | 400 | 315 | 254 | M14 | M12 | 381 | 140 | -  | 65 | 38                | 125 | 100 | 1030               | 530 | 640 | 0,349       | 213       |
| NKM-G 100-250/270/15/4 | 140 | 80 | 254 | 542 | 424 | 225 | 280 | 413 | 160 | 120 | 400 | 315 | 254 | M14 | M12 | 381 | 140 | -  | 65 | 38                | 125 | 100 | 1030               | 530 | 640 | 0,485       | 237       |

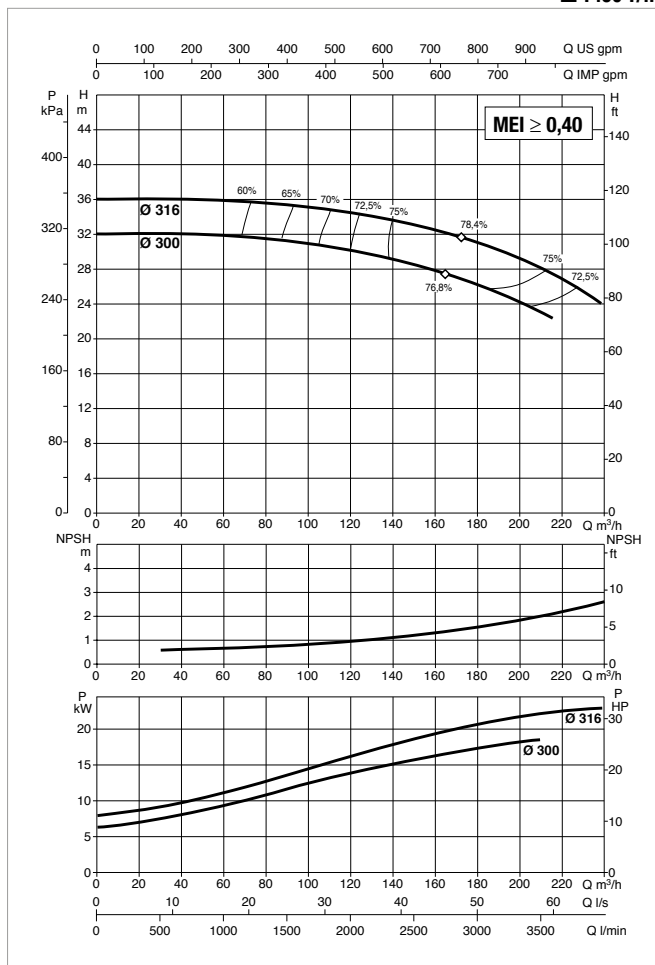
# NKM-G 100-315 - 4 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≅ 1450 1/min



Construction features of the motor: B3/B5



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

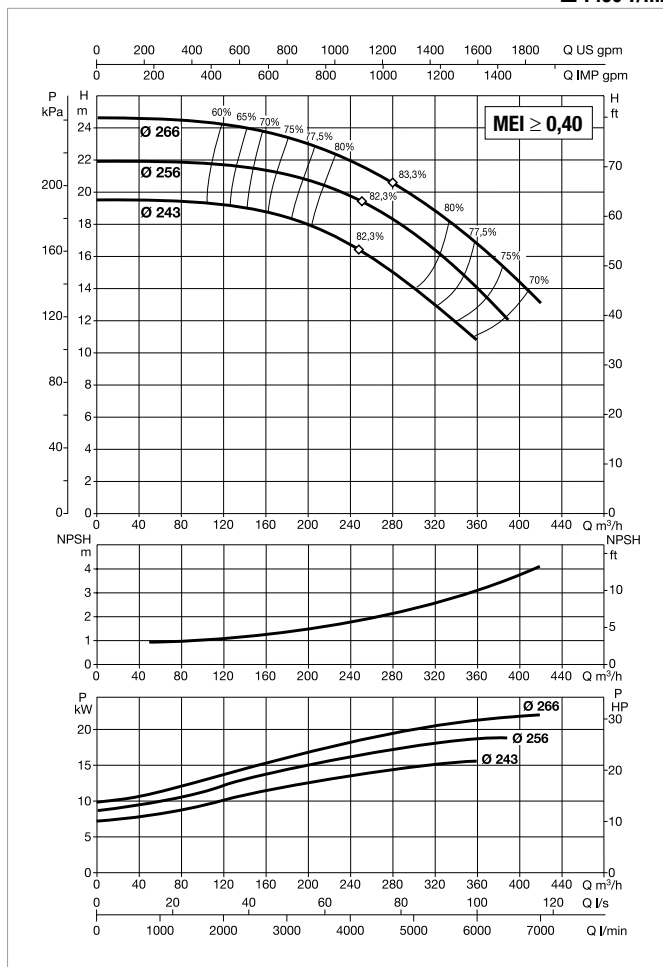
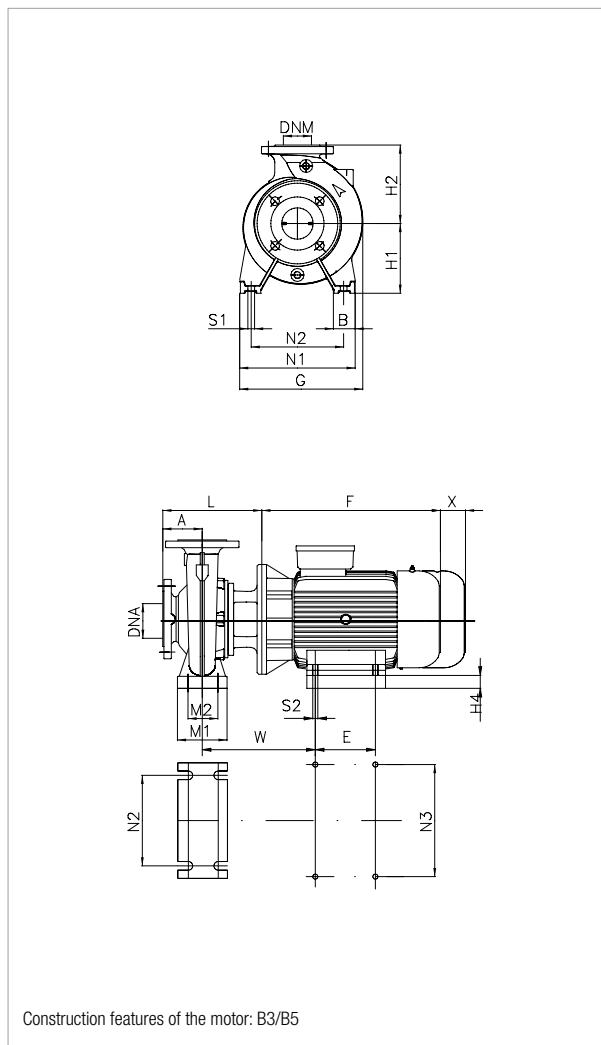
| MODEL                    | ELECTRICAL DATA |                   |            |    |       |       |            |
|--------------------------|-----------------|-------------------|------------|----|-------|-------|------------|
|                          | MOTOR SIZE      | POWER INPUT 50 Hz | P2 NOMINAL |    | In A  |       | MOTOR TYPE |
|                          |                 |                   | kW         | HP | 230 V | 400 V |            |
| NKM-G 100-315/300/18,5/4 | MEC 180 M       | 3 x 400 V ~       | 18,5       | 25 | -     | 34,3  | IE3        |
| NKM-G 100-315/316/22/4   | MEC 180 L       | 3 x 400 V ~       | 22         | 30 | -     | 40,2  | IE3        |

| MODEL                    | A   | B  | E   | F   | G   | H1  | H2  | L   | M1  | M2  | N1  | N2  | N3  | S1  | S2  | W   | X   | H3 | H4 | Ø (mm) Mech. seal | DNA | DNM | PACKING DIMENSIONS |     |     | VOLUME (m <sup>3</sup> ) | WEIGHT Kg |
|--------------------------|-----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|-------------------|-----|-----|--------------------|-----|-----|--------------------------|-----------|
|                          |     |    |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |    |                   |     |     | L/A                | L/B | H   |                          |           |
| NKM-G 100-315/300/18,5/4 | 140 | 80 | 241 | 577 | 478 | 250 | 315 | 413 | 160 | 120 | 400 | 315 | 279 | M14 | M12 | 529 | 140 | -  | 70 | 38                | 125 | 100 | 1030               | 530 | 640 | 0,485                    | 257       |
| NKM-G 100-315/316/22/4   | 140 | 80 | 279 | 615 | 478 | 250 | 315 | 413 | 160 | 120 | 400 | 315 | 279 | M14 | M12 | 415 | 140 | -  | 70 | 38                | 125 | 100 | 1030               | 530 | 640 | 0,485                    | 272       |

# NKM-G 125-250 - 4 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≈ 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

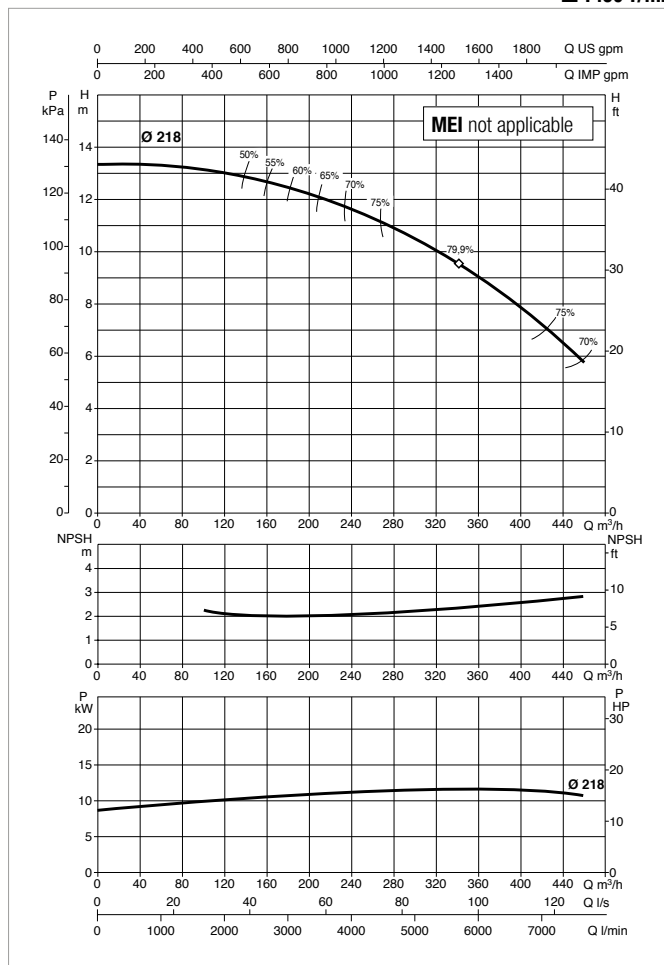
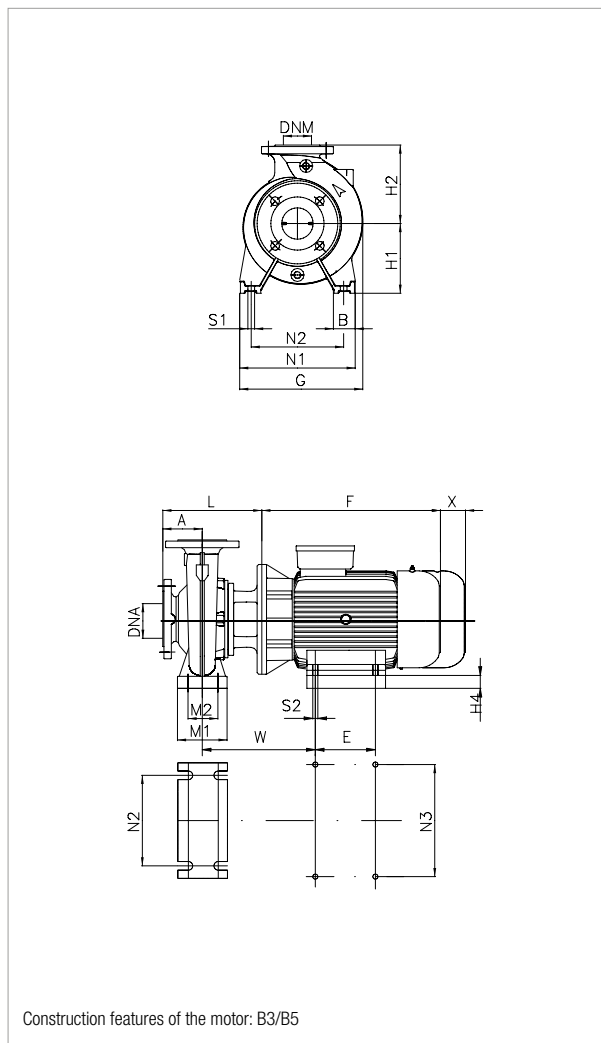
| MODEL                    | ELECTRICAL DATA |                   |            |    |       |       |            |
|--------------------------|-----------------|-------------------|------------|----|-------|-------|------------|
|                          | MOTOR SIZE      | POWER INPUT 50 Hz | P2 NOMINAL |    | In A  |       | MOTOR TYPE |
|                          |                 |                   | kW         | HP | 230 V | 400 V |            |
| NKM-G 125-250/243/15/4   | MEC 160 L       | 3 x 400 V ~       | 15         | 20 | -     | 30,5  | IE3        |
| NKM-G 125-250/256/18,5/4 | MEC 180 M       | 3 x 400 V ~       | 18,5       | 25 | -     | 34,3  | IE3        |
| NKM-G 125-250/266/22/4   | MEC 180 L       | 3 x 400 V ~       | 22         | 30 | -     | 40,2  | IE3        |

| MODEL                    | A   | B  | E   | F   | G   | H1  | H2  | L   | M1  | M2  | N1  | N2  | N3  | S1  | S2  | W   | X   | H3 | H4 | Ø (mm) Mech. seal | DNA | DNM | PACKING DIMENSIONS |     |     | VOLUME (m³) | WEIGHT Kg |
|--------------------------|-----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|-------------------|-----|-----|--------------------|-----|-----|-------------|-----------|
|                          |     |    |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |    |                   |     |     | L/A                | L/B | H   |             |           |
| NKM-G 125-250/243/15/4   | 140 | 80 | 254 | 542 | 472 | 250 | 355 | 413 | 160 | 120 | 400 | 315 | 254 | M14 | M12 | 381 | 140 | -  | 90 | 38                | 150 | 125 | 1130               | 580 | 740 | 0,485       | 274       |
| NKM-G 125-250/256/18,5/4 | 140 | 80 | 241 | 577 | 472 | 250 | 355 | 413 | 160 | 120 | 400 | 315 | 279 | M14 | M12 | 394 | 140 | -  | 70 | 38                | 150 | 125 | 1130               | 580 | 740 | 0,485       | 290       |
| NKM-G 125-250/266/22/4   | 140 | 80 | 279 | 615 | 472 | 250 | 355 | 413 | 160 | 120 | 400 | 315 | 279 | M14 | M12 | 394 | 140 | -  | 70 | 38                | 150 | 125 | 1130               | 580 | 740 | 0,485       | 309       |

# NKM-G 150-200 - 4 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≅ 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

| MODEL                  | ELECTRICAL DATA |                   |            |    |       |       |            |
|------------------------|-----------------|-------------------|------------|----|-------|-------|------------|
|                        | MOTOR SIZE      | POWER INPUT 50 Hz | P2 NOMINAL |    | In A  |       | MOTOR TYPE |
|                        |                 |                   | kW         | HP | 230 V | 400 V |            |
| NKM-G 150-200/218/11/4 | MEC 160 M       | 3 x 400 V ~       | 11         | 15 | -     | 22,4  | IE3        |

| MODEL                  | A   | B   | E   | F   | G   | H1  | H2  | L   | M1  | M2  | N1  | N2  | N3  | S1  | S2 | W   | X   | H3 | H4  | Ø (mm) Mech. seal | DNA | DNM | PACKING DIMENSIONS |     |     | VOLUME (m³) | WEIGHT Kg |
|------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|-----|-----|----|-----|-------------------|-----|-----|--------------------|-----|-----|-------------|-----------|
|                        | L/A | L/B | H   |     |     |     |     |     |     |     |     |     |     |     |    |     |     |    |     |                   |     |     |                    |     |     |             |           |
| NKM-G 150-200/218/11/4 | 160 | 100 | 210 | 498 | 593 | 280 | 400 | 433 | 200 | 150 | 550 | 450 | 254 | M20 | -  | 381 | 140 | -  | 120 | 38                | 200 | 150 | 1130               | 650 | 900 | 0,661       | 280       |

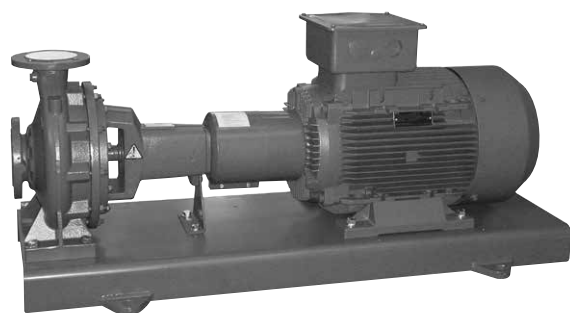
# NKM-G - 4 POLES

## STANDARDISED MONOBLOC PUMPS

### IE3 STANDARD MOTOR ELECTRIC DATA

=1450 1/min

| MOTOR TYPE | P2 NOMINAL kW | SPEED rpm | YIELD % | POWER FACTOR COS φ | POWER INPUT 50 Hz | In A  |       |       | Start-up current Ia/In | Start-up torque Ma/Mn | Maximum torque M/k/Mn | POLES |
|------------|---------------|-----------|---------|--------------------|-------------------|-------|-------|-------|------------------------|-----------------------|-----------------------|-------|
|            |               |           |         |                    |                   | 230V  | 400V  | 690V  |                        |                       |                       |       |
| MEC 71     | 0,25          | 1400      | 60,00   | 0,710              | 3x230/400         | 1,56  | 0,90  |       | 2,88                   | 2,15                  | 2,26                  | 4     |
| MEC 71     | 0,37          | 1340      | 67,00   | 0,780              | 3x230/400         | 1,70  | 0,98  |       | 4,75                   | 2,84                  | 2,64                  | 4     |
| MEC 80     | 0,55          | 1410      | 71,00   | 0,720              | 3x230/400         | 2,60  | 1,50  |       | 5,33                   | 2,78                  | 2,89                  | 4     |
| MEC 80Z    | 0,75          | 1435      | 82,50   | 0,740              | 3x230/400         | 3,12  | 1,80  |       | 5,50                   | 2,70                  | 2,80                  | 4     |
| MEC 90S    | 1,1           | 1440      | 84,10   | 0,750              | 3x230/400         | 4,33  | 2,50  |       | 7,10                   | 4,30                  | 4,30                  | 4     |
| MEC 90L    | 1,5           | 1430      | 85,30   | 0,720              | 3x230/400         | 6,24  | 3,60  |       | 6,60                   | 4,30                  | 4,40                  | 4     |
| MEC 100L   | 2,2           | 1455      | 86,70   | 0,630              | 3x230/400         | 10,22 | 5,90  |       | 5,90                   | 3,70                  | 3,90                  | 4     |
| MEC 100L   | 3             | 1440      | 87,70   | 0,730              | 3x400 Δ           |       | 6,80  | 3,93  | 8,10                   | 4,10                  | 4,10                  | 4     |
| MEC 112M   | 4             | 1450      | 88,60   | 0,800              | 3x400 Δ           |       | 8,20  | 4,73  | 8,50                   | 2,70                  | 3,50                  | 4     |
| MEC 132S   | 5,5           | 1450      | 89,60   | 0,840              | 3x400 Δ           |       | 10,60 | 6,12  | 8,70                   | 3,70                  | 4,30                  | 4     |
| MEC 132S   | 7,5           | 2930      | 90,10   | 0,840              | 3x400 Δ           |       | 14,40 | 8,31  | 10,40                  | 4,50                  | 4,60                  | 4     |
| MEC 160M   | 11            | 1465      | 91,40   | 0,770              | 3x400 Δ           |       | 22,40 | 12,93 | 10,10                  | 2,50                  | 3,10                  | 4     |
| MEC 160L   | 15            | 1465      | 92,10   | 0,780              | 3x400 Δ           |       | 30,50 | 17,61 | 8,90                   | 3,20                  | 2,80                  | 4     |
| MEC 180M   | 18,5          | 1470      | 92,60   | 0,840              | 3x400 Δ           |       | 34,30 | 19,80 | 7,50                   | 2,20                  | 2,30                  | 4     |
| MEC 180L   | 22            | 1470      | 93,00   | 0,850              | 3x400 Δ           |       | 40,20 | 23,21 | 7,70                   | 2,20                  | 2,30                  | 4     |
| MEC 200L   | 30            | 1475      | 93,60   | 0,860              | 3x400 Δ           |       | 53,70 | 31,00 | 7,80                   | 2,20                  | 2,30                  | 4     |



IE3 ≥ 0,75 kW

## TECHNICAL DATA

**Rotation speed:** 1450 - 2900 1/min

**Operating range:**

from 1 to 470 m<sup>3</sup>/h with head up to 143 metres

**Pumped liquid:** clean, free of solids and abrasives, non-viscous, non-aggressive, non-crystallised and chemically neutral, with properties similar to water

**Pumped liquid temperature range:** from -10°C to +140°C

**Maximum ambient temperature:** +40 °C

**Maximum operating pressure:**

16 bar - 1600 kPa (for DN 200 max 10 bar)

**Flanging:** PN 16 DIN 2533

PN 10 DIN 2532 for DN 200

**Installation:** normally in the horizontal position

**Special executions on requests:** pumps for liquids other than water

Packing (also externally powered)

Other voltages and/or frequencies

## APPLICATIONS

Standardised centrifugal single-stage pumps, designed for a wide range of applications, such as:

Water supply.

Hot water circulation for the heating system.

Circulation of cold water for air conditioning and refrigeration systems.

Transfer of liquids in agricultural, horticultural, and industrial environments.

Installation of pumping assemblies.

They can be coupled, using an elastic joint (standard or spacer), to a 2-pole or 4-pole electric motor, and installed on a formed metal sheet base in accordance with UNI EN 23661.

## CONSTRUCTION FEATURES OF THE PUMP

Cast iron single stage spiral body complying with DIN-EN 733 (formerly DIN 24255), seal holder cover and cast iron motor support, flanges complying with DIN 2533 (DIN 2532 for DN 200). Cast iron impeller, closed and dynamically balanced, with compensation of the axial thrust through balancing holes, operation on interchangeable wear rings (on request). Stainless steel pump shaft supported by two permanently lubricated oversized ball bearings, housed inside an appropriate chamber in the support.

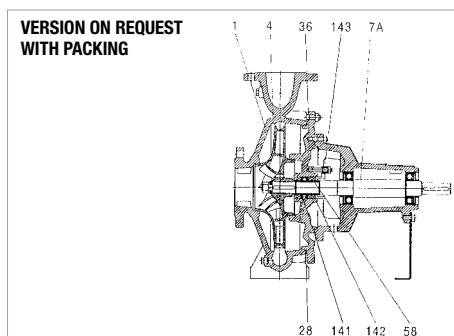
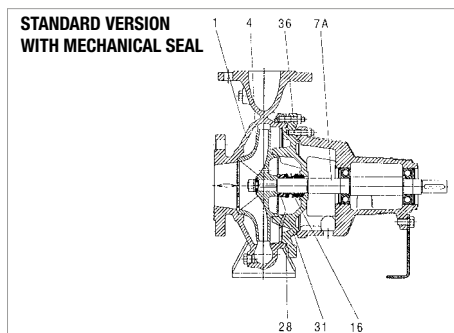
Standard seal device: standardised mechanical seal according to DIN 24960 in carbon/silicon carbide with EPDM OR rings.

Packing with lubricating hydraulic ring and stuffing box in two easily removable parts available on request.

## MATERIALS

| No. | PARTS             | MATERIALS                            |
|-----|-------------------|--------------------------------------|
| 1   | PUMP BODY         | CAST IRON 250 UNI ISO 185            |
| 4   | IMPELLER          | CAST IRON 200 UNI ISO 185            |
| 7A  | PUMP SHAFT        | AISI 420 STAINLESS STEEL UNI 6900/71 |
| 28  | OR RING           | VITON                                |
| 36  | SEAL HOLDING DISC | CAST IRON 250 UNI ISO 185            |
| 16  | MECHANICAL SEAL   | CARBON/SILICON CARBIDE               |
| 31  | SEAL SPACER       | AISI 304 STAINLESS STEEL UNI 6900/71 |

| No. | PARTS          | MATERIALS                            |
|-----|----------------|--------------------------------------|
| 58  | SEAL BUSHING   | AISI 420 STAINLESS STEEL UNI 6900/71 |
| 141 | HYDRAULIC RING | AISI 304 STAINLESS STEEL UNI 6900/71 |
| 142 | STUFFING BOX   | RAMIE IMPREGNATED PTFE               |



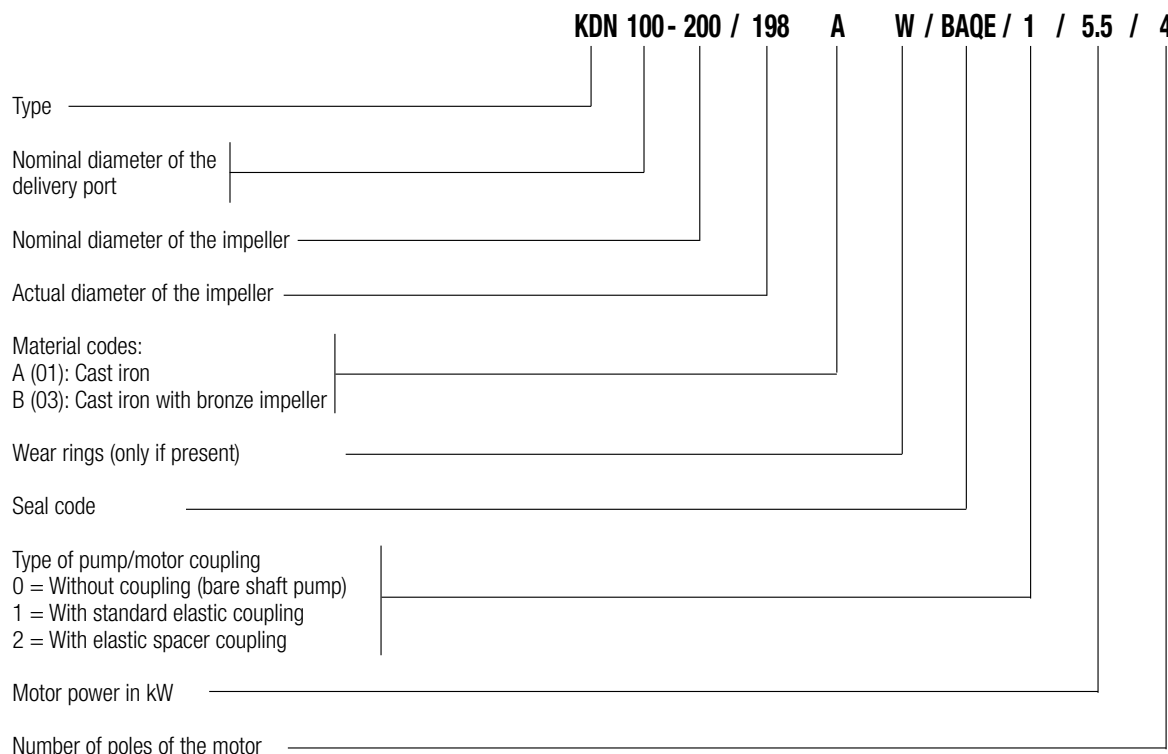


### DENOMINATION INDEX

In the description of the bare shaft pump no mention is made of the coupling or motor data.

In the description of the pumps mounted on a base without a motor, the motor data are not mentioned.

The example given describes an NK 100-200 type pump with a cast iron 198 Ø impeller, with BAQE type mechanics, standard coupling and 4-poles 5,5 kW motor running on 380-415 V 50 Hz.



### PUMP MATERIAL CODES

| Component        | VERSION              |                                       |
|------------------|----------------------|---------------------------------------|
|                  | A (01) cast iron     | B (03) cast iron with bronze impeller |
| Pump body        | GG25                 | GG25                                  |
| SEAL HOLDER DISC | GG25                 | GG25                                  |
| Stuffing box     | OT Cu 62 Si1         | OT Cu 62 Si1                          |
| Impeller         | GG25                 | GCuSn5Zn5Pb5<br>UNI 7013/8a-72        |
| Wear rings*      | GG20                 | GG20                                  |
| Pump shaft       | AISI 420 UNI 6900/71 |                                       |
| Shaft sleeve*    | AISI 420 UNI 6900/71 |                                       |

### PACKING CODES

| Position | Code | Description of the packing |
|----------|------|----------------------------|
| 1        | S    | Stuffing box type          |
| Position | Code | Cooling                    |
| 2        | N    | Stuffing box not cooled    |
|          | K    | Stuffing box cooled        |
| Position | Code | Sealing liquid             |
| 3        | E    | With internal liquid       |
|          | F    | With external liquid       |
|          | O    | Without hydraulic ring     |

\* On request

\*\* Only for packing or balanced mechanical seal.

### DESCRIPTION OF THE MECHANICAL SEAL

| Position | Code | Description of the seal       |
|----------|------|-------------------------------|
| 1        | A    | O-ring seal with fixed guide  |
|          | B    | Rubber bellows seal           |
|          | C    | O-ring seal with spring guide |
|          | D    | O-ring seal balanced          |
|          | M    | Rubber bellows seal           |
|          | X    | Metal bellows seal            |
| Position | Code | Materials                     |
| 2 & 3    | A    | Impregnated carbon/metal      |
|          | B    | Impregnated carbon/resin      |
|          | C    | Other carbon types            |
|          | S    | Chromium steel                |
|          | U    | Tungsten carbide              |
|          | Q    | Silicon carbide               |
|          | V    | Aluminium oxide (ceramic)     |
|          | X    | Other ceramic types           |
| Position | Code | Materials                     |
| 4        | P    | Nitrile rubber (NBR)          |
|          | S    | Silicon rubber                |
|          | T    | Teflon (PTFE)                 |
|          | E    | EPDM                          |
|          | V    | Viton                         |
|          | M    | PTFE coated O-ring            |
| Position | Code | Materials                     |
| 5        | v    | Reinforced                    |

### PRODUCT CODE DESCRIPTION

| NOMINAL DIAMETER OF THE IMPELLER | Cod. |
|----------------------------------|------|
| 125                              | 1    |
| 160                              | 2    |
| 200                              | 3    |
| 250                              | 4    |
| 315                              | 5    |
|                                  |      |
| 125.1                            | K    |
| 160.1                            | L    |
| 200.1                            | M    |

| PUMP TYPE | Cod. |
|-----------|------|
| KDN 32    | 1    |
| KDN 40    | 2    |
| KDN 50    | 3    |
| KDN 65    | 4    |
| KDN 80    | 5    |
| KDN 100   | 6    |
| KDN 125   | 7    |
| KDN 150   | 8    |

| IDENTIFICATION   | Cod. |
|------------------|------|
| DAB PUMPS S.p.A. | D    |

|                  | Cod. |
|------------------|------|
|                  |      |
| DAB PUMPS S.p.A. | 1    |

| Cod. | PUMP/IMPELLER MATERIALS      |
|------|------------------------------|
| 1    | A (01) = cast iron/cast iron |
| 2    | B (03) = cast iron/bronze    |
| 3    |                              |
| 4    |                              |
| 5    | A (01) + Wr*                 |
| 6    | B (03) + Wr*                 |
| 7    |                              |
| 8    |                              |

| Cod. | SEAL DEVICE |
|------|-------------|
| 1    | BAQE        |
| 2    | BAQE-RMG12  |
| 5    | BQQV*       |
| 7    | BAQV*       |
| A    | SNE*        |
| B    | SNO*        |
| C    | SNF*        |
| G    | BQQE*       |

\* On request

| Cod. | JOINT                          |
|------|--------------------------------|
| 0    | Without joint                  |
| 1    | With standard elastic coupling |
| 2    | With elastic spacer coupling   |

\* Bare shaft pump

| Cod. | P2 NOMINAL |
|------|------------|
| 0    | bare shaft |
| 1    | 0.37       |
| 2    | 0.55       |
| 3    | 0.75       |
| 4    | 1.1        |
| 5    | 1.5        |
| 6    | 2.2        |
| 7    | 3          |
| 8    | 4          |
| 9    | 5.5        |
| A    | 7.5        |
| B    | 11         |
| C    | 15         |
| D    | 18.5       |
| E    | 22         |
| F    | 30         |
| G    | 37         |
| H    | 45         |
| K    | 55         |
| L    | 75         |
| M    | 90         |
| N    | 110        |
| P    | 132        |

| Cod. | VOLTAGE   | PO-LES |
|------|---|--------|
| 0    | Without motor   |        |
| 1    | 3 x 220-240/380-415 V 50 Hz(<0,75 kW) 3 x 220-277/380-480 V 60 Hz | 2      |
| 2    | 3 x 380-480 V 60 Hz   | 2      |
| 3    | 3 x 220-240/380-415 V 50 Hz(<0,75 kW) 3 x 220-277/380-480 V 60 Hz | 4      |
| 4    | 3 x 380-480 V 60 Hz   | 4      |
| A    | 3 x 220-240/380-415 V 50 Hz - IE2                                 | 2      |
| B    | 3 x 380-415 V 50 Hz - IE2   | 2      |
| C    | 3 x 220-240/380-415 V 50 Hz - IE2                                 | 4      |
| D    | 3 x 380-415 V 50 Hz - IE2   | 4      |
| U    | 3 x 220-240/380-415 V 50 Hz - IE3                                 | 2      |
| V    | 3 x 380-415 V 50 Hz - IE3   | 2      |
| W    | 3 x 220-240/380-415 V 50 Hz - IE3                                 | 4      |
| X    | 3 x 380-415 V 50 Hz - IE3   | 4      |

Product code

|   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|
| 1 | D | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|---|---|---|---|---|---|---|---|---|

← Bare shaft pump → 0 0 0  
 ← Pump with base without motor → 0  
 ← Complete electric pump with base →

### GENERAL DATA

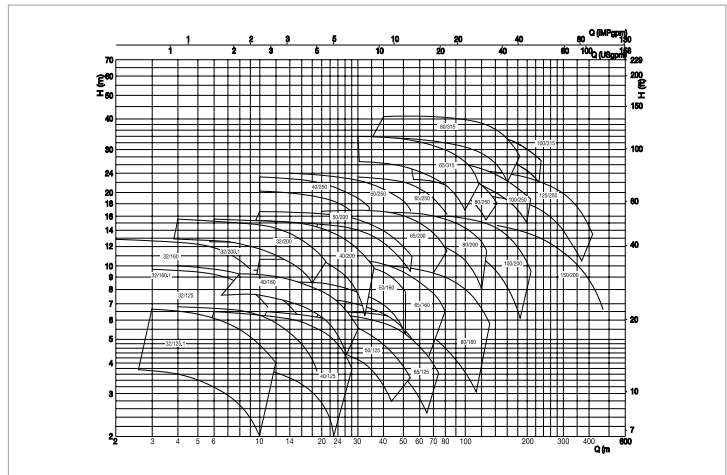
Supplied with closed asynchronous type motor, external ventilation cooling, 2 or 4 poles.

Rotor running on ball bearings, largely oversized to ensure low noise and durability.

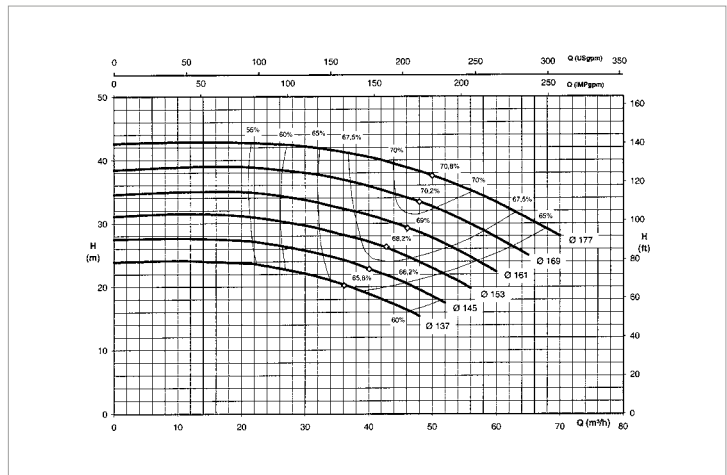
Electrical protection: in compliance with the EEC 89/336 ELECTROMAGNETIC COMPATIBILITY DIRECTIVE and subsequent amendments, the EEC 73/23 LOW VOLTAGE DIRECTIVE and subsequent amendments, as well as CEI 2-3 standards.

### INSTRUCTIONS FOR THE IDENTIFICATION OF THE PUMP AND MOTOR REQUIRED.

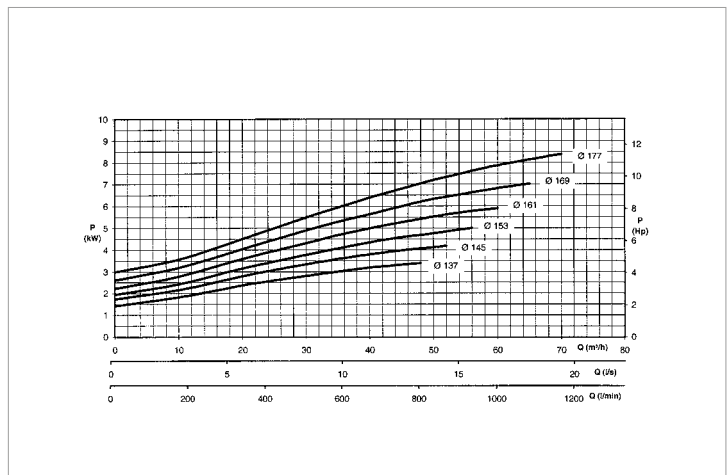
1. On the general chart supplied, find the family pump that indicatively offers the required flow rate and head characteristics.



2. Look for the most appropriate characteristic on the characteristic curves for each family.



3. On the power chart, identify the power required by the pump in order to operate at the required level.



4. Due to the possibility of variations in the pumped liquid flow rate, which can cause an oscillation of the point of operation, a higher power absorption may occur. When selecting the motor, allow for the following safety margins:

### Safety margin according to ISO 5199

| REQUIRED PUMP SHAFT POWER (kW) | POWER OF THE MOTOR TO USE P2 (kW) |
|--------------------------------|-----------------------------------|
| 322                            | 355                               |
| 286                            | 315                               |
| 227                            | 250                               |
| 181                            | 200                               |
| 145                            | 160                               |
| 120                            | 132                               |
| 100                            | 110                               |
| 81                             | 90                                |
| 68                             | 75                                |
| 49                             | 55                                |
| 40                             | 45                                |
| 32.5                           | 37                                |
| 26                             | 30                                |
| 19                             | 22                                |
| 15.9                           | 18.5                              |
| 12.8                           | 15                                |
| 9.1                            | 11                                |
| 6.1                            | 7.5                               |
| 4.3                            | 5.5                               |
| 3.2                            | 4                                 |
| 2.3                            | 3                                 |
| 1.7                            | 2.2                               |
| 1.1                            | 1.5                               |
| 0.81                           | 1.1                               |
| 0.55                           | 0.75                              |
| 0.40                           | 0.55                              |
| 0.27                           | 0.37                              |
| 0.18                           | 0.25                              |

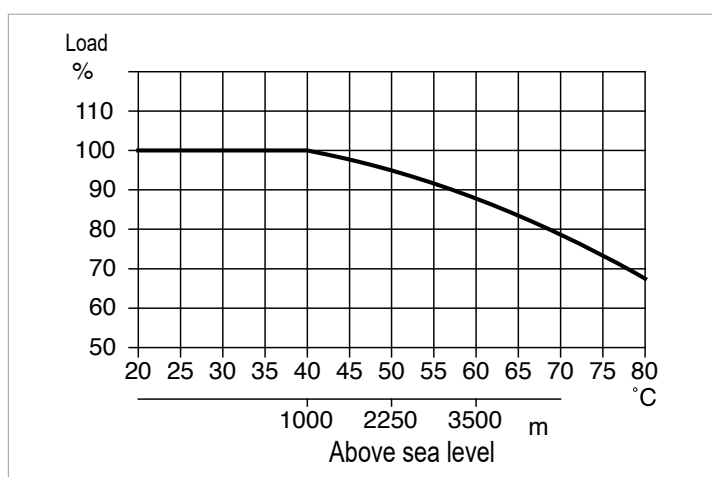
If the pump is to be used with liquids with fairly high specific weight and viscosity values, apply any required corrections to the power of the motor to be installed (check the suitability of the construction materials in contact with the liquid).

5. With the name of the pump and the power of the motor, look through the following technical data to find the name of the most suitable base (complete with motor, spacer coupling, and coupling cover).
6. The pump and base required will be delivered already assembled and aligned, although an alignment check is always required after installation (see INSTRUCTION MANUAL).

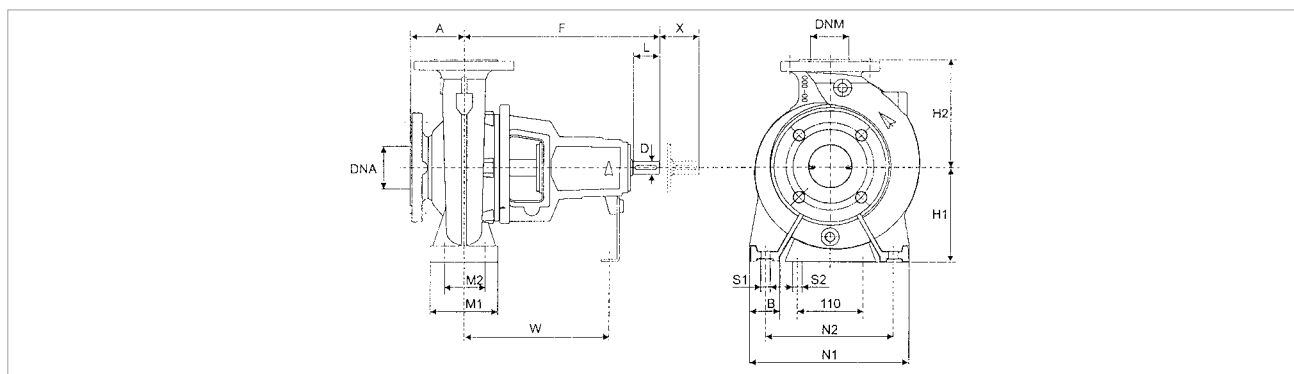
### Ambient temperature

From -30 °C to +40 °C

Due to the low density, and therefore low cooling effect of the air, operation at an ambient temperature above 40 °C, or at an altitude exceeding 1000 m above sea level, requires a reduction of the rated motor load in accordance with this table.



### DIMENSIONS OF BARE SHAFT PUMPS



| MODEL        | η MAX<br>1450 min <sup>-1</sup> |        | η MAX<br>2900 min <sup>-1</sup> |        | FLANGE<br>DIMENSIONS |     | PUMP DIMENSIONS |     |     |     | BASE DIMENSIONS |     |     |     |     | BOLT HOLES |     | SHAFT END |    | X  | WEIGHT<br>kg |     |
|--------------|---------------------------------|--------|---------------------------------|--------|----------------------|-----|-----------------|-----|-----|-----|-----------------|-----|-----|-----|-----|------------|-----|-----------|----|----|--------------|-----|
|              | Q<br>m <sup>3</sup> /h          | H<br>m | Q<br>m <sup>3</sup> /h          | H<br>m | DNA                  | DNM | A               | F   | H1  | H2  | B               | M1  | M2  | N1  | N2  | W          | S1  | S2        | D  |    |              | L   |
| KDN 32-125.1 | 10.5                            | 5.5    | 20.9                            | 22     | 50                   | 32  | 80              | 360 | 112 | 140 | 50              | 100 | 70  | 190 | 140 | 260        | M12 | M12       | 24 | 50 | 100          | 37  |
| KDN 32-125   | 13.6                            | 5.8    | 28                              | 22.8   | 50                   | 32  | 80              | 360 | 112 | 140 | 50              | 100 | 70  | 190 | 140 | 260        | M12 | M12       | 24 | 50 | 100          | 36  |
| KDN 32-160.1 | 8.7                             | 8.3    | 17.5                            | 33     | 50                   | 32  | 80              | 360 | 132 | 160 | 50              | 100 | 70  | 240 | 190 | 260        | M12 | M12       | 24 | 50 | 100          | 38  |
| KDN 32-160   | 15.9                            | 8.6    | 31                              | 34     | 50                   | 32  | 80              | 360 | 132 | 160 | 50              | 100 | 70  | 240 | 190 | 260        | M12 | M12       | 24 | 50 | 100          | 38  |
| KDN 32-200.1 | 8.5                             | 11.4   | 18                              | 45     | 50                   | 32  | 80              | 360 | 160 | 180 | 50              | 100 | 70  | 240 | 190 | 260        | M12 | M12       | 24 | 50 | 100          | 46  |
| KDN 32-200   | 17.7                            | 13.2   | 35.5                            | 52.5   | 50                   | 32  | 80              | 360 | 160 | 180 | 50              | 100 | 70  | 240 | 190 | 260        | M12 | M12       | 24 | 50 | 100          | 46  |
| KDN 40-125   | 21.8                            | 5.6    | 46                              | 21.5   | 65                   | 40  | 80              | 360 | 112 | 140 | 50              | 100 | 70  | 210 | 160 | 260        | M12 | M12       | 24 | 50 | 100          | 39  |
| KDN 40-160   | 25.8                            | 9.2    | 50                              | 37.2   | 65                   | 40  | 80              | 360 | 132 | 160 | 50              | 100 | 70  | 240 | 190 | 260        | M12 | M12       | 24 | 50 | 100          | 41  |
| KDN 40-200   | 29                              | 12.6   | 57                              | 51     | 65                   | 40  | 100             | 360 | 160 | 180 | 50              | 100 | 70  | 265 | 212 | 260        | M12 | M12       | 24 | 50 | 100          | 49  |
| KDN 40-250   | 31                              | 19.1   | 62                              | 77     | 65                   | 40  | 100             | 360 | 180 | 225 | 65              | 125 | 95  | 320 | 250 | 260        | M12 | M12       | 24 | 50 | 100          | 57  |
| KDN 50-125   | 41                              | 5.4    | 83                              | 21.5   | 65                   | 50  | 100             | 360 | 132 | 160 | 50              | 100 | 70  | 240 | 190 | 260        | M12 | M12       | 24 | 50 | 100          | 42  |
| KDN 50-160   | 43.3                            | 9.3    | 87.5                            | 37     | 65                   | 50  | 100             | 360 | 160 | 180 | 50              | 100 | 70  | 265 | 212 | 260        | M12 | M12       | 24 | 50 | 100          | 44  |
| KDN 50-200   | 41                              | 14     | 81                              | 56     | 65                   | 50  | 100             | 360 | 160 | 200 | 50              | 100 | 70  | 265 | 212 | 260        | M12 | M12       | 24 | 50 | 100          | 51  |
| KDN 50-250   | 49                              | 19.1   | 100                             | 76     | 65                   | 50  | 100             | 360 | 180 | 225 | 65              | 125 | 95  | 320 | 250 | 260        | M12 | M12       | 24 | 50 | 100          | 59  |
| KDN 65-125   | 57                              | 5.2    | 114                             | 21     | 80                   | 65  | 100             | 360 | 160 | 180 | 65              | 125 | 95  | 280 | 212 | 260        | M12 | M12       | 24 | 50 | 100          | 46  |
| KDN 65-160   | 61                              | 8.6    | 121                             | 34.5   | 80                   | 65  | 100             | 360 | 160 | 200 | 65              | 125 | 95  | 280 | 212 | 260        | M12 | M12       | 24 | 50 | 100          | 47  |
| KDN 65-200   | 62                              | 14.8   | 123                             | 59     | 80                   | 65  | 100             | 360 | 180 | 225 | 65              | 125 | 95  | 320 | 250 | 260        | M12 | M12       | 24 | 50 | 140          | 66  |
| KDN 65-250   | 65.4                            | 20     | 129                             | 81     | 80                   | 65  | 100             | 470 | 200 | 250 | 80              | 160 | 120 | 360 | 280 | 340        | M16 | M12       | 32 | 80 | 140          | 93  |
| KDN 65-315   | 84                              | 31.5   | -                               | -      | 80                   | 65  | 125             | 470 | 225 | 280 | 80              | 160 | 120 | 400 | 315 | 340        | M16 | M12       | 32 | 80 | 140          | 112 |
| KDN 80-160   | 101                             | 8.1    | 195                             | 33.5   | 100                  | 80  | 125             | 360 | 180 | 225 | 65              | 125 | 95  | 320 | 250 | 260        | M12 | M12       | 24 | 50 | 140          | 55  |
| KDN 80-200   | 101                             | 14.4   | 200                             | 57.5   | 100                  | 80  | 125             | 470 | 180 | 250 | 65              | 125 | 95  | 345 | 280 | 340        | M12 | M12       | 32 | 80 | 140          | 84  |
| KDN 80-250   | 103                             | 23     | 215                             | 88     | 100                  | 80  | 125             | 470 | 200 | 280 | 80              | 160 | 120 | 400 | 315 | 340        | M16 | M12       | 32 | 80 | 140          | 104 |
| KDN 80-315   | 136                             | 35     | -                               | -      | 100                  | 80  | 125             | 470 | 250 | 315 | 80              | 160 | 120 | 400 | 315 | 340        | M16 | M12       | 32 | 80 | 140          | 122 |
| KDN 100-200  | 163                             | 13.4   | 315                             | 53     | 125                  | 100 | 125             | 470 | 200 | 280 | 80              | 160 | 120 | 360 | 280 | 340        | M16 | M12       | 32 | 80 | 140          | 96  |
| KDN 100-250  | 159                             | 21.8   | 313                             | 87     | 125                  | 100 | 140             | 470 | 225 | 280 | 80              | 160 | 120 | 400 | 315 | 340        | M16 | M12       | 32 | 80 | 140          | 111 |
| KDN 100-315  | 187                             | 34.1   | -                               | -      | 125                  | 100 | 140             | 470 | 250 | 315 | 80              | 160 | 120 | 400 | 315 | 340        | M16 | M12       | 32 | 80 | 140          | 126 |
| KDN 125-250  | 289                             | 20.5   | -                               | -      | 150                  | 125 | 140             | 470 | 250 | 355 | 80              | 160 | 120 | 400 | 315 | 340        | M16 | M12       | 32 | 80 | 140          | 135 |
| KDN 150-200  | 378                             | 10     | -                               | -      | 200                  | 150 | 160             | 470 | 280 | 400 | 100             | 200 | 150 | 550 | 450 | 340        | M20 | M12       | 32 | 80 | 140          | 178 |

### FLANGE DIMENSIONS (mm)

|              | Nominal diameter (DN) |     |     |     |     |     |     |     |     |
|--------------|-----------------------|-----|-----|-----|-----|-----|-----|-----|-----|
|              | DIN 2533 PN 16        |     |     |     |     |     |     |     |     |
|              | 32                    | 40  | 50  | 65  | 80  | 100 | 125 | 150 | 200 |
| D(           | 32                    | 40  | 50  | 65  | 80  | 100 | 125 | 150 | 200 |
| D)           | 100                   | 110 | 125 | 145 | 160 | 180 | 210 | 240 | 295 |
| D[           | 140                   | 150 | 165 | 185 | 200 | 220 | 250 | 285 | 340 |
| S            | 18                    | 18  | 18  | 18  | 18  | 18  | 18  | 22  | 22  |
| NO. OF HOLES | 4                     | 4   | 4   | 4   | 8   | 8   | 8   | 8   | 8   |

# KDN - 2 POLE RANGE

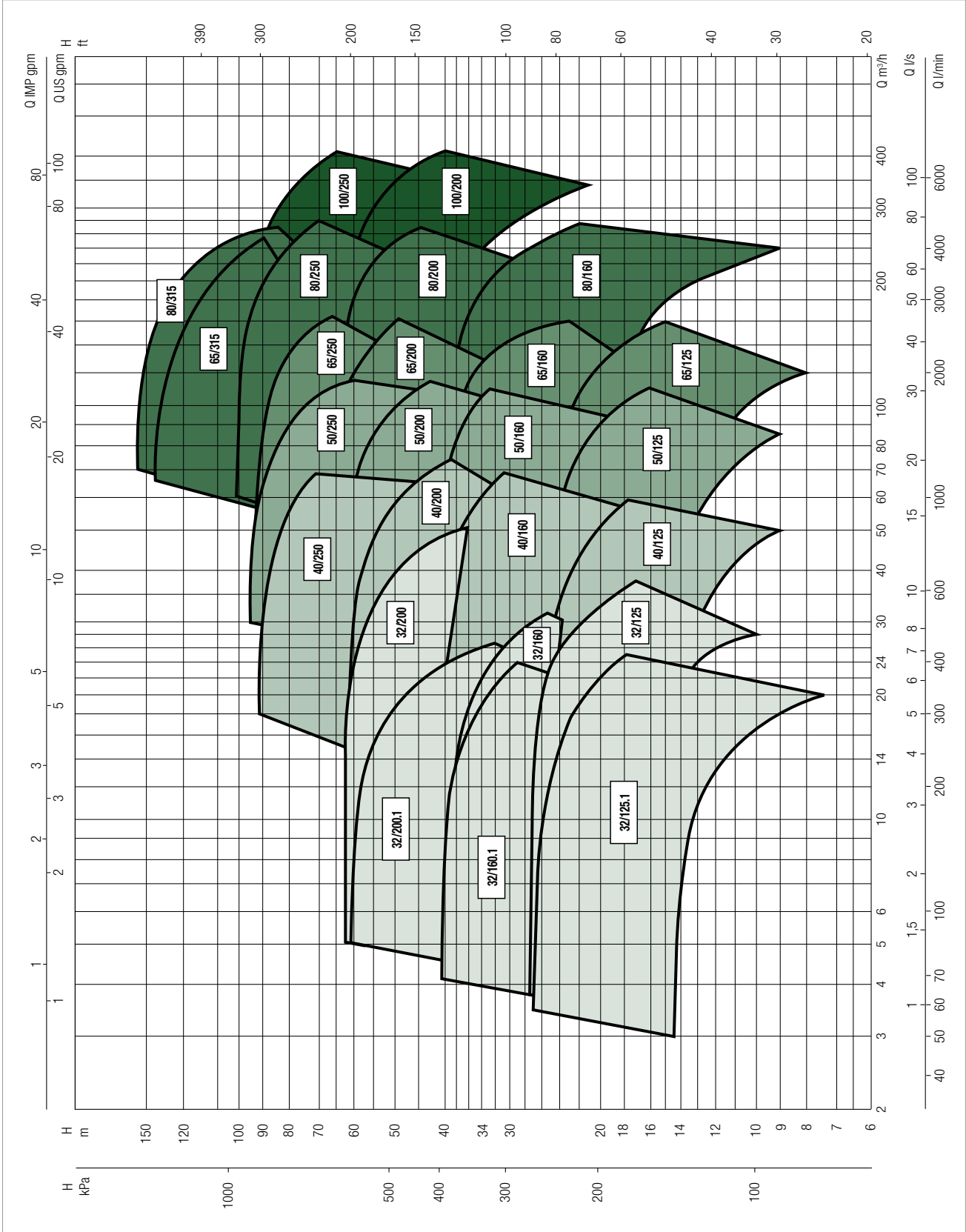
STANDARDISED PUMPS

## PERFORMANCE RANGE

The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

### GRAPHIC SELECTION TABLE

= 2900 1/min



# KDN - 2 POLES

## STANDARDISED PUMPS

### SELECTION TABLE - KDN 32

| MODEL            | Q=m <sup>3</sup> /h | 0    | 6    | 12   | 18   | 24   | 30   | 36   | 42   | 48  |
|------------------|---------------------|------|------|------|------|------|------|------|------|-----|
|                  | Q=l/min             | 0    | 100  | 200  | 300  | 400  | 500  | 600  | 700  | 800 |
| KDN 32-125.1/105 | H<br>(m)            | 13,8 | 13,6 | 12,3 | 9,7  |      |      |      |      |     |
| KDN 32-125.1/110 |                     | 15,5 | 15,2 | 13,9 | 11,5 |      |      |      |      |     |
| KDN 32-125.1/115 |                     | 17,1 | 16,8 | 15,5 | 13,2 |      |      |      |      |     |
| KDN 32-125.1/120 |                     | 18,8 | 18,5 | 17,3 | 15,1 |      |      |      |      |     |
| KDN 32-125.1/125 |                     | 20,5 | 20,3 | 19,1 | 17   |      |      |      |      |     |
| KDN 32-125.1/130 |                     | 22,3 | 22,2 | 21,3 | 19   |      |      |      |      |     |
| KDN 32-125.1/135 |                     | 24,4 | 24,1 | 23,3 | 21,1 | 17,8 |      |      |      |     |
| KDN 32-125.1/140 |                     | 26,5 | 26,4 | 25,6 | 23,4 | 20,1 |      |      |      |     |
| KDN 32-125/115   |                     | 17,3 |      | 16,5 | 15,1 | 12,9 |      |      |      |     |
| KDN 32-125/120   |                     | 19   |      | 18,2 | 17   | 14,9 | 11,1 |      |      |     |
| KDN 32-125/125   |                     | 20,9 |      | 20,1 | 18,9 | 16,9 | 13,5 |      |      |     |
| KDN 32-125/130   |                     | 22,9 |      | 22   | 21   | 19,1 | 16,2 |      |      |     |
| KDN 32-125/135   |                     | 24,9 |      | 24   | 22,1 | 21,5 | 18,5 | 14,7 |      |     |
| KDN 32-125/142   |                     | 27,8 |      | 27   | 26,1 | 24,5 | 21,7 | 18   |      |     |
| KDN 32-160.1/137 |                     | 21,5 | 21,2 | 19,3 |      |      |      |      |      |     |
| KDN 32-160.1/145 |                     | 24,7 | 24,5 | 22,3 | 16,5 |      |      |      |      |     |
| KDN 32-160.1/153 |                     | 28,3 | 28   | 26   | 20,5 |      |      |      |      |     |
| KDN 32-160.1/161 |                     | 32   | 31,8 | 30   | 25   |      |      |      |      |     |
| KDN 32-160.1/169 |                     | 36   | 35,7 | 34,4 | 29,5 |      |      |      |      |     |
| KDN 32-160.1/177 |                     | 39,5 | 39,3 | 38,2 | 34,5 | 26   |      |      |      |     |
| KDN 32-160/137   |                     | 23,7 |      | 22,6 | 20,7 | 17,6 |      |      |      |     |
| KDN 32-160/145   |                     | 27   |      | 25,8 | 23,9 | 21,2 | 16,9 |      |      |     |
| KDN 32-160/153   |                     | 30,4 |      | 29,5 | 27,7 | 25,8 | 21,2 |      |      |     |
| KDN 32-160/161   |                     | 34   |      | 33   | 31,7 | 29,1 | 25,5 |      |      |     |
| KDN 32-160/169   |                     | 38   |      | 37,3 | 36   | 33,6 | 35,7 | 26,5 |      |     |
| KDN 32-160/177   |                     | 41,8 |      | 41,5 | 40,5 | 38,4 | 35,3 | 31,4 |      |     |
| KDN 32-200.1/170 |                     | 34,3 | 34,2 | 31,9 | 23,5 |      |      |      |      |     |
| KDN 32-200.1/180 |                     | 39,4 | 39,2 | 36,7 | 30   |      |      |      |      |     |
| KDN 32-200.1/190 |                     | 45,3 | 44,7 | 41,5 | 35,5 |      |      |      |      |     |
| KDN 32-200.1/200 |                     | 51,5 | 51   | 47,3 | 41   | 35   |      |      |      |     |
| KDN 32-200.1/207 |                     | 55,3 | 55   | 51,8 | 46,4 | 37   |      |      |      |     |
| KDN 32-200/170   |                     | 34   |      | 33   | 31   | 27   | 21   |      |      |     |
| KDN 32-200/180   | 39                  |      | 38,5 | 36,5 | 32,5 | 28   |      |      |      |     |
| KDN 32-200/190   | 45                  |      | 43,5 | 42   | 39   | 34   | 28,5 |      |      |     |
| KDN 32-200/200   | 51                  |      | 49   | 48   | 45   | 40,5 | 35   |      |      |     |
| KDN 32-200/210   | 57                  |      | 56   | 55   | 52,5 | 48,5 | 43   | 36   |      |     |
| KDN 32-200/219   | 63                  |      | 62   | 61   | 59   | 56,5 | 52,5 | 46,5 | 39,5 |     |

CENTRIFUGAL PUMPS

### SELECTION TABLE - KDN 40

| MODEL          | Q=m <sup>3</sup> /h | 0    | 6   | 12   | 18   | 24   | 30   | 36   | 42   | 48   | 54   | 60   | 66   | 72   |
|----------------|---------------------|------|-----|------|------|------|------|------|------|------|------|------|------|------|
|                | Q=l/min             | 0    | 100 | 200  | 300  | 400  | 500  | 600  | 700  | 800  | 900  | 1000 | 1100 | 1200 |
| KDN 40-125/115 | H<br>(m)            | 16,8 |     | 13,3 | 15,6 | 15   | 14,3 | 13,2 | 12,6 | 9,8  |      |      |      |      |
| KDN 40-125/120 |                     | 18,5 |     | 18   | 17,5 | 17   | 16   | 15   | 13,5 | 11,8 |      |      |      |      |
| KDN 40-125/125 |                     | 20,4 |     | 20   | 19,5 | 19   | 18   | 16,7 | 15,3 | 13,5 |      |      |      |      |
| KDN 40-125/130 |                     | 22   |     | 21,8 | 21,5 | 21   | 20   | 19   | 17,5 | 15,7 | 14   |      |      |      |
| KDN 40-125/135 |                     | 24,1 |     | 24   | 23,9 | 23,4 | 22,5 | 21,5 | 20   | 18,3 | 16,4 |      |      |      |
| KDN 40-125/142 |                     | 26,8 |     | 26,6 | 26,4 | 26   | 25,3 | 24,4 | 23   | 21,4 | 19,4 | 17   |      |      |
| KDN 40-160/137 |                     | 23,9 |     |      | 23,8 | 23   | 22   | 20,5 | 18   | 15   |      |      |      |      |
| KDN 40-160/145 |                     | 27,5 |     |      | 27,4 | 27   | 25,7 | 24,2 | 22,1 | 19,5 |      |      |      |      |
| KDN 40-160/153 |                     | 31,1 |     |      | 31   | 30,5 | 29,5 | 28   | 26,5 | 24   | 21   |      |      |      |
| KDN 40-160/161 |                     | 34,5 |     |      | 34,5 | 34,4 | 33,7 | 32,3 | 30,5 | 28,5 | 25,8 | 22,5 |      |      |
| KDN 40-160/169 |                     | 38,4 |     |      | 38,4 | 38,2 | 38   | 37   | 35   | 33,5 | 31   | 28   |      |      |
| KDN 40-160/177 |                     | 42,6 |     |      | 42,5 | 42,4 | 42   | 41,5 | 40   | 38,5 | 35   | 33   | 30   |      |
| KDN 40-200/170 |                     | 33,6 |     |      | 33   | 32,6 | 32   | 30   | 26,5 | 22,5 |      |      |      |      |
| KDN 40-200/180 |                     | 38,8 |     |      | 38,5 | 38   | 37   | 35   | 32,5 | 29   | 25   |      |      |      |
| KDN 40-200/190 |                     | 43,4 |     |      | 43,1 | 43   | 42,7 | 41   | 38   | 35   | 31,5 | 27   |      |      |
| KDN 40-200/200 |                     | 48,7 |     |      | 48,4 | 48,2 | 47,5 | 46,5 | 44   | 41,5 | 38,5 | 34,5 |      |      |
| KDN 40-200/210 |                     | 54,3 |     |      | 54,1 | 54   | 53,6 | 53   | 51   | 48,5 | 46   | 42,5 | 38   |      |
| KDN 40-200/219 |                     | 60   |     |      | 59,8 | 59,7 | 59,4 | 59   | 57   | 55   | 52,5 | 49,5 | 46   | 40   |
| KDN 40-250/220 |                     | 63,1 |     |      | 62,8 | 62,5 | 61   | 59   | 57   | 55   | 52   | 48   |      |      |
| KDN 40-250/230 |                     | 69,5 |     |      | 69,3 | 68,5 | 67,8 | 66   | 63,5 | 61   | 58   | 55   | 51   |      |
| KDN 40-250/240 |                     | 76,3 |     |      | 76   | 75,8 | 75   | 73   | 70,5 | 68   | 65   | 62   | 58,5 |      |
| KDN 40-250/250 |                     | 82,8 |     |      | 82,5 | 82   | 81,8 | 80   | 78   | 75,5 | 72,5 | 69   | 66   |      |
| KDN 40-250/260 |                     | 91   |     |      | 90,5 | 90   | 89,5 | 88,5 | 86,5 | 84   | 81   | 78   | 74   |      |



# KDN - 2 POLES

## STANDARDISED PUMPS

### SELECTION TABLE - KDN 50

| MODEL          | Q=m <sup>3</sup> /h | 0    | 6   | 12  | 18  | 24  | 30   | 36   | 42   | 48   | 54   | 60   | 66   | 72   | 78   | 84   | 90   | 102  | 114  |    |
|----------------|---------------------|------|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|----|
|                | Q=l/min             | 0    | 100 | 200 | 300 | 400 | 500  | 600  | 700  | 800  | 900  | 1000 | 1100 | 1200 | 1300 | 1400 | 1500 | 1700 | 1900 |    |
| KDN 50-125/115 | H<br>(m)            | 17,1 |     |     |     |     | 15,9 | 15,5 | 15   | 14,3 | 13,6 | 13   | 12,2 | 11,5 | 10,4 | 9    |      |      |      |    |
| KDN 50-125/120 |                     | 18,2 |     |     |     |     |      | 17,5 | 17   | 16,5 | 16   | 15,3 | 14,7 | 14   | 13,2 | 12   | 11,2 | 10   |      |    |
| KDN 50-125/125 |                     | 19,8 |     |     |     |     |      | 19,4 | 19   | 18,5 | 17,9 | 17,4 | 16,6 | 16   | 15,1 | 14   | 13   | 11,8 |      |    |
| KDN 50-125/130 |                     | 21,5 |     |     |     |     |      | 21,1 | 20,8 | 20,5 | 19,8 | 19,2 | 18,5 | 17,8 | 17   | 16,5 | 15,2 | 14   |      |    |
| KDN 50-125/135 |                     | 23,2 |     |     |     |     |      | 23   | 22,6 | 22,3 | 21,8 | 21,2 | 20,6 | 19,9 | 19,3 | 18,4 | 17,5 | 16,3 | 13,7 |    |
| KDN 50-125/139 |                     | 24,7 |     |     |     |     |      | 24,5 | 24,3 | 24   | 23,5 | 23   | 22,4 | 21,6 | 20,8 | 20   | 19,2 | 18   | 15,5 |    |
| KDN 50-125/144 |                     | 25,9 |     |     |     |     |      | 26,5 | 26,4 | 26,1 | 25,6 | 25,1 | 24,5 | 24   | 23,2 | 22,3 | 21,5 | 20,5 | 17,8 | 15 |
| KDN 50-160/137 |                     | 24,2 |     |     |     |     |      | 23,8 | 23,7 | 23,5 | 22,5 | 22   | 21   | 20,3 | 19   | 18   | 16,8 | 15   |      |    |
| KDN 50-160/145 |                     | 27,2 |     |     |     |     |      | 27   | 26,9 | 26,6 | 26,4 | 25,5 | 25   | 23,8 | 23   | 21,5 | 20,5 | 19   |      |    |
| KDN 50-160/153 |                     | 30,3 |     |     |     |     |      | 30,3 | 30,2 | 30   | 29,9 | 29,5 | 28,5 | 27,7 | 26,5 | 25,5 | 24,5 | 23   |      |    |
| KDN 50-160/161 |                     | 33,8 |     |     |     |     |      | 33,7 | 33,7 | 33,6 | 33,6 | 33,3 | 32,5 | 31,8 | 31   | 29,8 | 28,5 | 27,5 |      |    |
| KDN 50-160/169 |                     | 37,7 |     |     |     |     |      | 37,7 | 37,5 | 37,5 | 37,4 | 37   | 36,2 | 35,7 | 35,5 | 34,2 | 33   | 31,5 | 29   |    |
| KDN 50-160/177 |                     | 41,6 |     |     |     |     |      | 41,5 | 41,5 | 41,3 | 41,2 | 41   | 40,6 | 40,5 | 39,5 | 38,8 | 38   | 36,7 | 33,5 |    |
| KDN 50-200/170 |                     | 37,9 |     |     |     |     |      | 37   | 36,8 | 36,4 | 35   | 34   | 32   | 30   | 27   | 25   |      |      |      |    |
| KDN 50-200/180 |                     | 42,5 |     |     |     |     |      | 42   | 41,7 | 41,4 | 40,5 | 39,5 | 38   | 36   | 34   | 32   | 29   |      |      |    |
| KDN 50-200/190 |                     | 47,2 |     |     |     |     |      | 46,8 | 46,6 | 46   | 45,7 | 44,5 | 43,5 | 42   | 40   | 38   | 35,5 | 33   |      |    |
| KDN 50-200/200 |                     | 52,4 |     |     |     |     |      | 52,2 | 52   | 18   | 51,5 | 50,5 | 49   | 47,5 | 46   | 44,5 | 42   | 40   |      |    |
| KDN 50-200/210 |                     | 58,4 |     |     |     |     |      | 58,4 | 58,2 | 58   | 57,5 | 56,5 | 55,5 | 54   | 52,5 | 51   | 49   | 46,5 | 41,5 |    |
| KDN 50-200/219 |                     | 64   |     |     |     |     |      | 64   | 64   | 64   | 63,5 | 62,5 | 61,5 | 60   | 58,5 | 57   | 55   | 53   | 48,5 |    |
| KDN 50-250/220 |                     | 63,7 |     |     |     |     |      | 63,3 | 63,1 | 63   | 62   | 61   | 59   | 57,5 | 55   | 53   | 50   | 46,5 | 36   |    |
| KDN 50-250/230 |                     | 69,6 |     |     |     |     |      | 69,3 | 69   | 68,8 | 68,5 | 68   | 66   | 64   | 62   | 60   | 57   | 54   | 45   |    |
| KDN 50-250/240 |                     | 76   |     |     |     |     |      | 75,8 | 75,5 | 75,3 | 75   | 74,5 | 73   | 71,5 | 69   | 67   | 65   | 62   | 55   |    |
| KDN 50-250/250 |                     | 83,2 |     |     |     |     |      | 83   | 82,9 | 82,8 | 83,5 | 82   | 80,5 | 78,5 | 77   | 75   | 72,5 | 70   | 64   |    |
| KDN 50-250/263 |                     | 92,1 |     |     |     |     |      | 92   | 91,8 | 91,6 | 91,5 | 91,3 | 89,9 | 88,5 | 86,5 | 84,5 | 82,5 | 80   | 75   | 61 |

CENTRIFUGAL PUMPS

# KDN - 2 POLES

## STANDARDISED PUMPS

### SELECTION TABLE - KDN 65

| MODEL              | Q=m <sup>3</sup> /h | 0     | 48   | 54   | 60   | 66    | 72    | 78    | 84    | 90    | 102   | 114   | 120   | 150   | 180   | 210   | 240  |
|--------------------|---------------------|-------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
|                    | Q=l/min             | 0     | 800  | 900  | 1000 | 1100  | 1200  | 1300  | 1400  | 1500  | 1700  | 1900  | 2000  | 2500  | 3000  | 3500  | 4000 |
| KDN 65-125/120/110 | H<br>(m)            | 16    | 14,4 | 14   | 13,6 | 13,1  | 12,8  | 12,2  | 11,9  | 11,4  | 10,2  | 8,7   | 8     |       |       |       |      |
| KDN 65-125/120     |                     | 17,8  | 16   | 15,8 | 15,3 | 17,9  | 14,4  | 13,9  | 13,4  | 13    | 11,5  | 10,3  | 9,4   |       |       |       |      |
| KDN 65-125/125     |                     | 19,4  | 17,8 | 17,5 | 17,1 | 16,8  | 16,4  | 16    | 15,4  | 15    | 13,5  | 12,2  | 11,4  |       |       |       |      |
| KDN 65-125/130     |                     | 21    | 19,6 | 19,5 | 19,1 | 18,9  | 18,5  | 18    | 17,5  | 17    | 15,7  | 14,2  | 13,2  |       |       |       |      |
| KDN 65-125/135     |                     | 22,6  | 21,8 | 21,5 | 21,3 | 21    | 20,5  | 20,1  | 19,6  | 19,2  | 18    | 16,5  | 15,6  |       |       |       |      |
| KDN 65-125/140     |                     | 24    | 23,6 | 23,6 | 23,4 | 23    | 22,8  | 22,3  | 22    | 21,4  | 20,3  | 18,9  | 18    | 13,8  |       |       |      |
| KDN 65-125/144     |                     | 25,6  | 25,5 | 25,4 | 25,2 | 25    | 24,6  | 24,3  | 24    | 23,4  | 22,5  | 21,1  | 20,2  | 16    |       |       |      |
| KDN 65-160/137     |                     | 23,1  | 22,4 | 22   | 21,7 | 21,3  | 20,5  | 19,7  | 19    | 18    | 16    |       |       |       |       |       |      |
| KDN 65-160/145     |                     | 26,2  | 25,7 | 25,5 | 25   | 24,6  | 24    | 23,5  | 22,7  | 22    | 20    | 17,8  | 16,5  |       |       |       |      |
| KDN 65-160/153     |                     | 29,1  | 28,8 | 28,5 | 28,6 | 28,5  | 28    | 27,5  | 26,6  | 26    | 24    | 22    | 21    |       |       |       |      |
| KDN 65-160/161     |                     | 32,6  | 32,5 | 32,4 | 32,3 | 32    | 31,7  | 31,3  | 30,5  | 30    | 28,5  | 26,5  | 25,5  |       |       |       |      |
| KDN 65-160/169     |                     | 36,4  | 36,3 | 36,2 | 36,1 | 36    | 35,7  | 35,3  | 34,7  | 34    | 32,7  | 31    | 30    |       |       |       |      |
| KDN 65-160/177     |                     | 40,1  | 39,9 | 39,8 | 39,7 | 40    | 39,8  | 39,5  | 39    | 38,5  | 37,2  | 35,5  | 34,7  | 28,5  |       |       |      |
| KDN 65-200/170     |                     | 37,2  | 36,8 | 36,7 | 36,6 | 36,5  | 36    | 35    | 34    | 32,5  | 30    | 27    | 25    |       |       |       |      |
| KDN 65-200/180     |                     | 41,7  | 41,4 | 41,3 | 41,2 | 41,1  | 41    | 40,5  | 40    | 39    | 36,5  | 34    | 32    |       |       |       |      |
| KDN 65-200/190     |                     | 48,3  | 48,2 | 48,1 | 48   | 47,9  | 47,5  | 47    | 41    | 45    | 43    | 40,5  | 39    |       |       |       |      |
| KDN 65-200/200     |                     | 53,2  | 53,1 | 52,9 | 52,8 | 52,7  | 52,5  | 52,3  | 52    | 51,8  | 50    | 48    | 46,5  |       |       |       |      |
| KDN 65-200/210     |                     | 59,2  | 59,1 | 59   | 58,9 | 58,8  | 58,7  | 58,5  | 58,2  | 58    | 56,5  | 54,5  | 53,5  |       |       |       |      |
| KDN 65-200/219     |                     | 64,9  | 64,9 | 64,8 | 64,5 | 64,3  | 64,1  | 64    | 63,8  | 62,5  | 62,4  | 61    | 60    | 52,5  |       |       |      |
| KDN 65-250/220     |                     | 63,2  | 62,8 | 62,5 | 62   | 61    | 60    | 59,5  | 58    | 57    | 54    | 50,5  | 48    |       |       |       |      |
| KDN 65-250/230     |                     | 69,5  | 69,5 | 69   | 68,5 | 68    | 67    | 66    | 65    | 64    | 63    | 58,5  | 56,5  |       |       |       |      |
| KDN 65-250/240     |                     | 76    | 75,7 | 75,5 | 75   | 75    | 74    | 73    | 72    | 71    | 69    | 66    | 64    |       |       |       |      |
| KDN 65-250/250     |                     | 83    | 82,3 | 82,3 | 82,2 | 82    | 81,5  | 81    | 80    | 79    | 76,5  | 73,5  | 72    | 60    |       |       |      |
| KDN 65-250/263     |                     | 92,6  | 91,8 | 91,8 | 91,7 | 91,5  | 91,5  | 91    | 90    | 89,5  | 87,5  | 85    | 83    | 72,5  |       |       |      |
| KDN 65-315/260     |                     | 92,8  |      |      |      | 92,7  | 91,9  | 90,9  | 89,7  | 88,5  | 85,5  | 81,9  | 79,9  | 67,8  |       |       |      |
| KDN 65-315/275     |                     | 105   |      |      |      | 104,5 | 103,9 | 103,1 | 102,1 | 101,1 | 98,5  | 95,5  | 93,8  | 83,3  | 69,5  |       |      |
| KDN 65-315/290     |                     | 117,1 |      |      |      | 117   | 116,5 | 115,9 | 115,1 | 114,3 | 112,2 | 109,7 | 108,3 | 99,4  | 87,6  |       |      |
| KDN 65-315/305     |                     | 130   |      |      |      | 129,5 | 129,2 | 128,7 | 128   | 127,3 | 125,5 | 123,2 | 121,9 | 113,8 | 103   | 89,6  |      |
| KDN 65-315/320     |                     | 143   |      |      |      | 142,9 | 142,6 | 142,1 | 171,6 | 140,9 | 139,3 | 137,3 | 136,2 | 128,9 | 119,1 | 106,8 | 92   |

### SELECTION TABLE - KDN 80

| MODEL              | Q=m <sup>3</sup> /h | 0    | 90    | 102   | 114   | 120   | 150   | 180   | 210   | 240  | 270  | 300  |
|--------------------|---------------------|------|-------|-------|-------|-------|-------|-------|-------|------|------|------|
|                    | Q=l/min             | 0    | 1500  | 1700  | 1900  | 2000  | 2500  | 3000  | 3500  | 4000 | 4500 | 5000 |
| KDN 80-160/147/127 | H<br>(m)            | 23   | 21,5  | 20,7  | 20    | 19,5  | 17    | 14,5  | 11,8  | 8,8  |      |      |
| KDN 80-160/153/136 |                     | 25,6 | 24,5  | 23,8  | 23    | 22,5  | 20,2  | 17,5  | 15    | 11,8 |      |      |
| KDN 80-160/153     |                     | 29,3 | 28    | 27,3  | 26,5  | 26    | 23,5  | 20,7  | 16,5  | 14,5 |      |      |
| KDN 80-160/161     |                     | 32,8 | 32    | 31,5  | 30,5  | 30    | 27,8  | 25    | 21,5  | 18,5 |      |      |
| KDN 80-160/169     |                     | 36,5 | 35,7  | 35,2  | 34,5  | 34,2  | 32    | 29,5  | 26,5  | 22,6 | 18,5 |      |
| KDN 80-160/177     |                     | 40   | 39,5  | 39,2  | 38,7  | 38,5  | 37    | 34,8  | 31,8  | 27,8 | 23   |      |
| KDN 80-200/170     |                     | 36,6 | 35,7  | 35,5  | 34,5  | 34    | 31    | 27    | 21,5  |      |      |      |
| KDN 80-200/180     |                     | 41   | 40,6  | 40,5  | 40    | 39,5  | 37    | 33    | 27,5  |      |      |      |
| KDN 80-200/190     |                     | 45,7 | 45,4  | 45    | 44,5  | 44    | 42    | 29    | 34    |      |      |      |
| KDN 80-200/200     |                     | 50,8 | 50,4  | 50,2  | 50    | 49,6  | 49    | 46,5  | 41    | 35   |      |      |
| KDN 80-200/210     |                     | 56,3 | 55,9  | 55,8  | 55,7  | 55,6  | 54,8  | 52    | 48    | 43   |      |      |
| KDN 80-200/222     |                     | 63,6 | 63,4  | 63,3  | 63,2  | 63,1  | 63    | 60    | 56,5  | 51,5 | 45   |      |
| KDN 80-250/220     |                     | 62,6 | 62,5  | 62,4  | 62    | 61,8  | 60    | 55,5  | 49    |      |      |      |
| KDN 80-250/230     |                     | 68,3 | 68,2  | 68,1  | 67,9  | 67,9  | 67    | 63    | 57    | 50   |      |      |
| KDN 80-250/240     |                     | 75,5 | 75,4  | 75,3  | 75,2  | 75    | 74,5  | 71    | 66,5  | 58,5 |      |      |
| KDN 80-250/250     |                     | 82,5 | 82,3  | 82    | 81,9  | 81,7  | 82    | 78,5  | 74    | 67,5 | 60,5 |      |
| KDN 80-250/260     |                     | 90   | 89,7  | 89,6  | 86,5  | 89,3  | 89    | 86,5  | 82    | 77   | 70   | 61,5 |
| KDN 80-250/270     |                     | 97,9 | 97,8  | 97,5  | 91,3  | 97    | 96,3  | 94    | 89    | 84   | 77   | 69   |
| KDN 80-315/275     |                     | 106  | 106,1 | 105,3 | 104,3 | 103,7 | 99,4  | 93,4  | 85,6  | 76   |      |      |
| KDN 80-315/290     |                     | 118  | 118,4 | 117,8 | 117,1 | 116,6 | 113,2 | 108,2 | 101,5 | 93,2 | 83,4 |      |

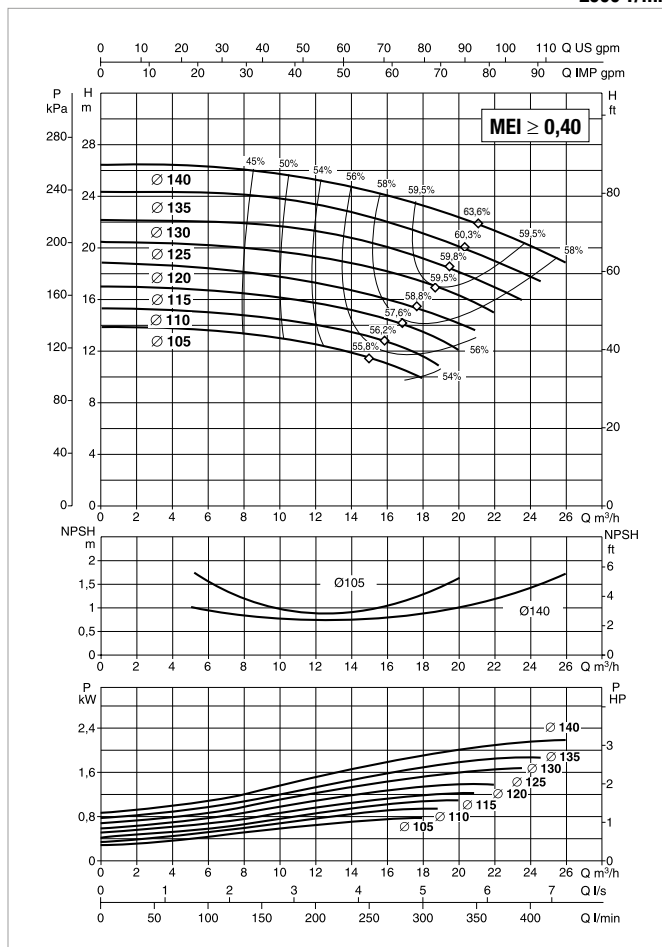
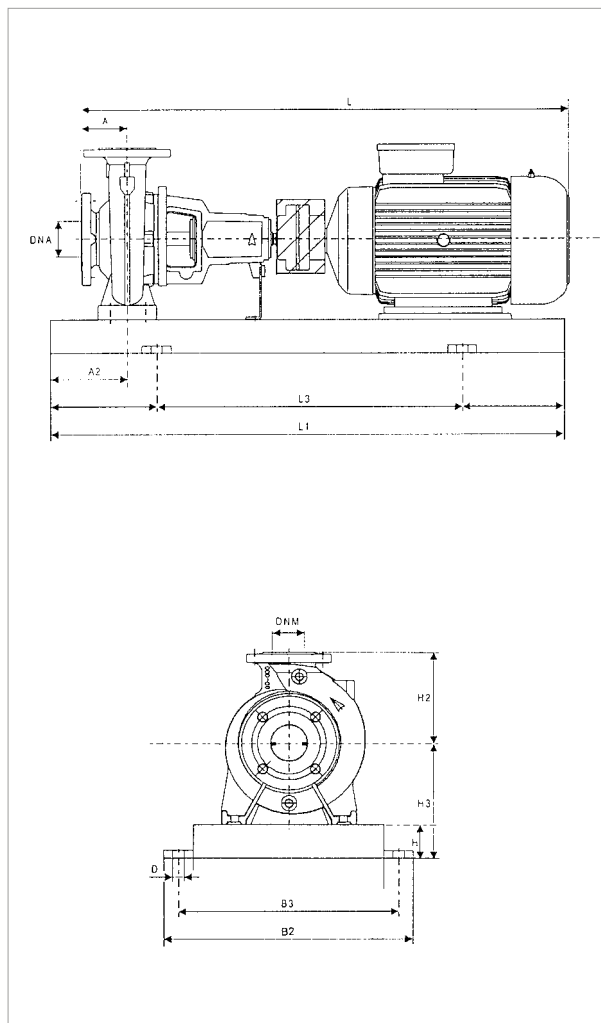
### SELECTION TABLE - KDN 100

| MODEL           | Q=m <sup>3</sup> /h | 0    | 150  | 180  | 210  | 240  | 270  | 300  | 330  | 360  | 390  | 420  |
|-----------------|---------------------|------|------|------|------|------|------|------|------|------|------|------|
|                 | Q=l/min             | 0    | 2500 | 3000 | 3500 | 4000 | 4500 | 4500 | 5500 | 6000 | 6500 | 7000 |
| KDN 100-200/180 | H<br>(m)            | 40,4 | 40   | 38   | 36   | 33   | 30,5 | 28   | 25   |      |      |      |
| KDN 100-200/190 |                     | 46,5 | 45   | 44   | 42   | 39   | 37   | 34,5 | 31   | 28   |      |      |
| KDN 100-200/200 |                     | 51,5 | 51   | 50   | 48,5 | 46   | 44   | 42   | 39   | 35   | 31,5 |      |
| KDN 100-200/210 |                     | 57,5 | 57   | 56   | 55   | 53   | 51   | 49   | 46   | 43   | 39   | 36   |
| KDN 100-200/219 |                     | 64   | 62,5 | 62   | 61   | 60   | 58   | 56   | 53   | 50   | 47   | 43   |
| KDN 100-250/220 |                     | 61,1 | 60   | 59,5 | 57   | 54   | 50,5 | 46,5 | 42   |      |      |      |
| KDN 100-250/230 |                     | 67,4 | 66,9 | 66,5 | 64   | 61   | 58   | 54   | 49   | 44   |      |      |
| KDN 100-250/240 |                     | 73,5 | 72,9 | 71   | 70,5 | 69   | 66   | 63   | 58,5 | 53   |      |      |
| KDN 100-250/250 |                     | 79,7 | 79,5 | 79   | 78,8 | 77   | 74   | 71   | 67   | 62,5 |      |      |
| KDN 100-250/260 |                     | 88,6 | 88,2 | 88,1 | 88   | 86   | 83   | 79,5 | 76   | 71,5 | 66   |      |

# KDN 32-125.1 - 2 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 2900 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

| MODEL        | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA          |         | MOTOR TYPE |
|--------------|------------|------------|--------------------------|---------|------------|
|              |            |            | POWER INPUT 50 Hz        | In A    |            |
| KDN 32-125.1 | 0,75       | MEC 80     | 3 x 230 - 400 V ~        | 2,9/1,7 | IE3        |
|              | 1,1        | MEC 80     | 3 x 230 - 400 V ~        | 4,2/2,4 | IE3        |
|              | 1,5        | MEC 90S    | 3 x 230 - 400 V ~        | 5,2/3   | IE3        |
|              | 2,2        | MEC 90L    | 3 x 230 - 400 V ~        | 8/4,6   | IE3        |
|              | 3          | MEC 100L   | 3 x 400 V ~ <sup>1</sup> | 5,6     | IE3        |
|              | 4          | MEC 112M   | 3 x 400 V ~ <sup>1</sup> | 7       | IE3        |

<sup>1</sup> Star start-up possible (A)

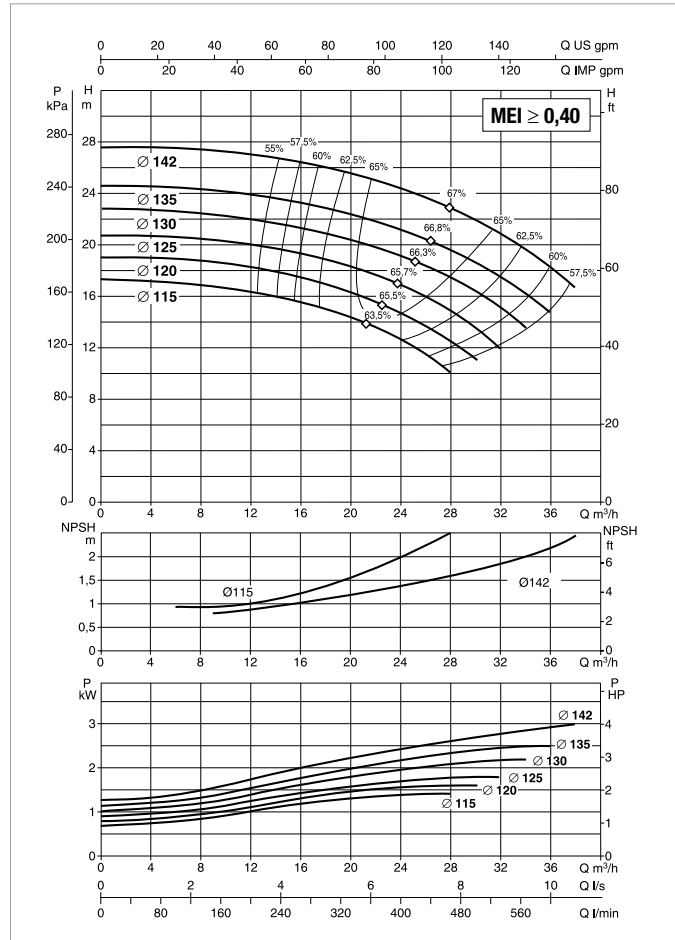
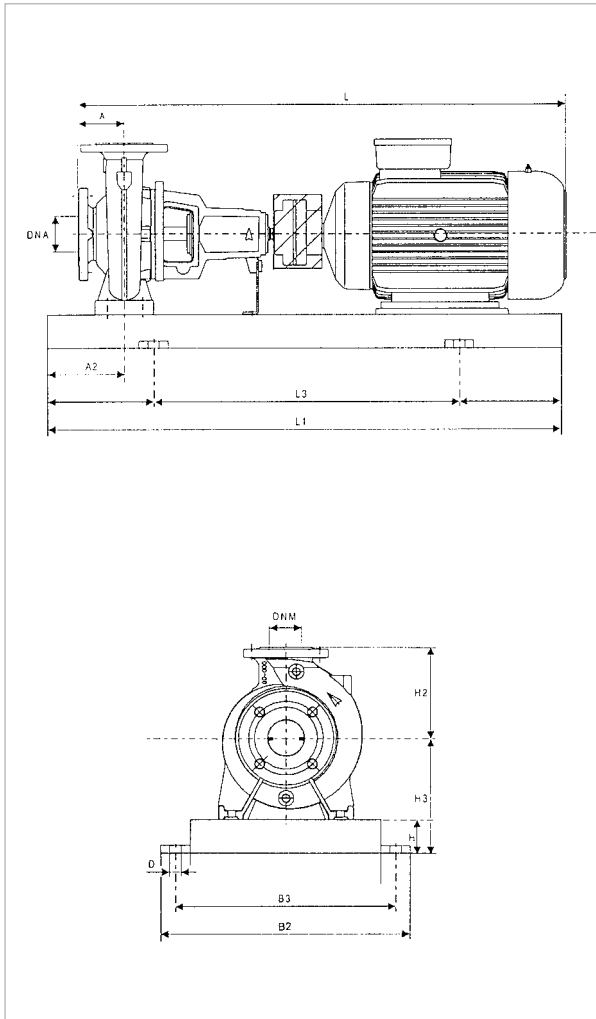
| MODEL        | POWER (kW) | UNIT DIMENSIONS (mm) |    |     |    |     |     |     |     |     |    | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |           | SPACER COUPLING |           |
|--------------|------------|----------------------|----|-----|----|-----|-----|-----|-----|-----|----|------------------------|-----|-------------------|-----------|-----------------|-----------|
|              |            | A                    | A2 | H2  | H  | H3  | L1  | L3  | B2  | B3  | D  | DNA                    | DNM | L                 | WEIGHT Kg | L               | WEIGHT Kg |
| KDN 32-125.1 | 0,75       | 80                   | 60 | 140 | 65 | 177 | 800 | 540 | 360 | 320 | 19 | 50                     | 32  | 717               | 79        | 817             | 84        |
|              | 1,1        | 80                   | 60 | 140 | 65 | 177 | 800 | 540 | 360 | 320 | 19 | 50                     | 32  | 717               | 79        | 817             | 84        |
|              | 1,5        | 80                   | 60 | 140 | 65 | 177 | 800 | 540 | 360 | 320 | 19 | 50                     | 32  | 762               | 87        | 862             | 92        |
|              | 2,2        | 80                   | 60 | 140 | 65 | 177 | 900 | 600 | 390 | 350 | 19 | 50                     | 32  | 762               | 92        | 862             | 97        |
|              | 3          | 80                   | 60 | 140 | 65 | 177 | 900 | 600 | 390 | 350 | 19 | 50                     | 32  | 811               | 91        | 911             | 96        |
|              | 4          | 80                   | 60 | 140 | 65 | 177 | 900 | 600 | 390 | 350 | 19 | 50                     | 32  | 833               | 84        | 933             | 89        |

Dimension and electrical data based on sizing definition following the instructions on page 105.

# KDN 32-125 - 2 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 2900 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

| MODEL      | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA          |         | MOTOR TYPE |
|------------|------------|------------|--------------------------|---------|------------|
|            |            |            | POWER INPUT 50 Hz        | In A    |            |
| KDN 32-125 | 1,1        | MEC 80     | 3 x 230 - 400 V ~        | 4,2/2,4 | IE3        |
|            | 1,5        | MEC 90S    | 3 x 230 - 400 V ~        | 5,2/3   | IE3        |
|            | 2,2        | MEC 90L    | 3 x 230 - 400 V ~        | 8/4,6   | IE3        |
|            | 3          | MEC 100L   | 3 x 400 V ~ <sup>1</sup> | 5,6     | IE3        |
|            | 4          | MEC 112M   | 3 x 400 V ~ <sup>1</sup> | 7       | IE3        |

<sup>1</sup> Star start-up possible (Δ)

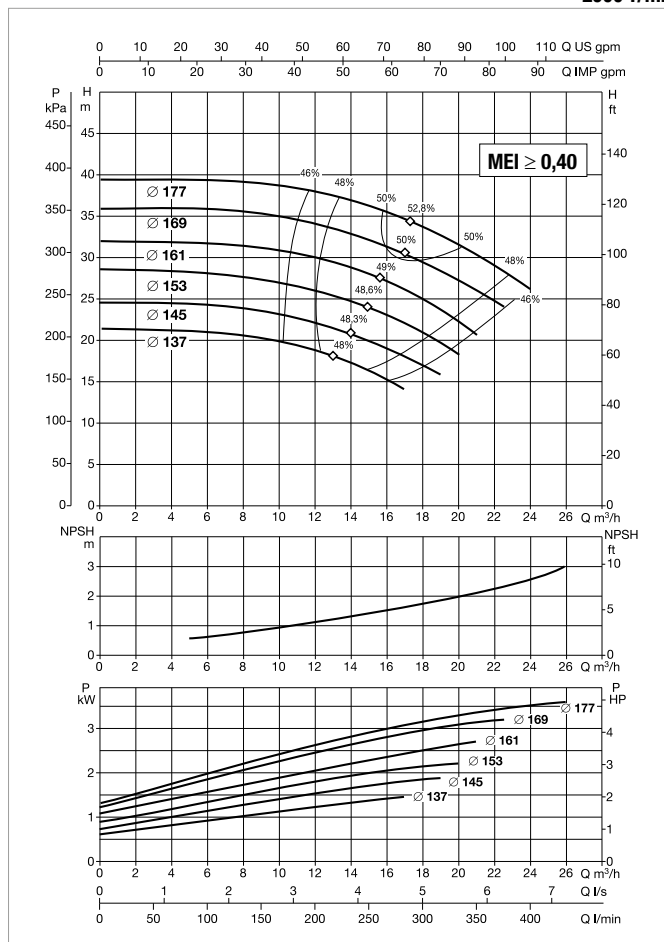
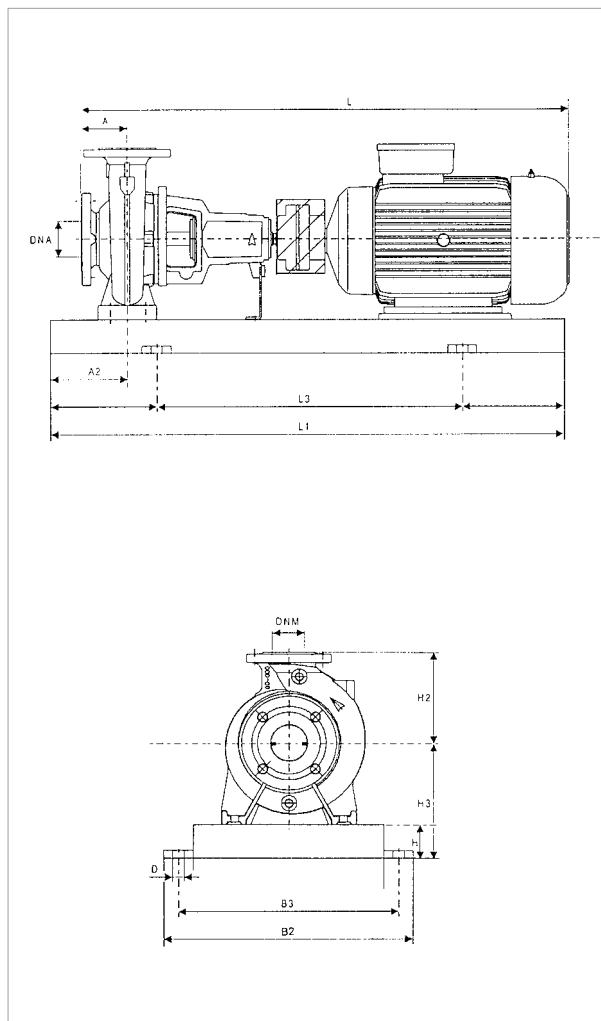
| MODEL      | POWER (kW) | UNIT DIMENSIONS (mm) |    |     |    |     |     |     |     |     |    | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |           | SPACER COUPLING |           |
|------------|------------|----------------------|----|-----|----|-----|-----|-----|-----|-----|----|------------------------|-----|-------------------|-----------|-----------------|-----------|
|            |            | A                    | A2 | H2  | H  | H3  | L1  | L3  | B2  | B3  | D  | DNA                    | DNM | L                 | WEIGHT Kg | L               | WEIGHT Kg |
| KDN 32-125 | 1,1        | 80                   | 60 | 140 | 65 | 177 | 800 | 540 | 360 | 320 | 19 | 50                     | 32  | 717               | 78        | 817             | 83        |
|            | 1,5        | 80                   | 60 | 140 | 65 | 177 | 800 | 540 | 360 | 320 | 19 | 50                     | 32  | 762               | 80        | 862             | 85        |
|            | 2,2        | 80                   | 60 | 140 | 65 | 177 | 900 | 600 | 390 | 350 | 19 | 50                     | 32  | 762               | 85        | 862             | 90        |
|            | 3          | 80                   | 60 | 140 | 65 | 177 | 900 | 600 | 390 | 350 | 19 | 50                     | 32  | 811               | 85        | 911             | 90        |
|            | 4          | 80                   | 60 | 140 | 65 | 177 | 900 | 600 | 390 | 350 | 19 | 50                     | 32  | 833               | 99        | 933             | 104       |

Dimension and electrical data based on sizing definition following the instructions on page 105.

# KDN 32-160.1 - 2 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 2900 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

| MODEL        | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA          |         | MOTOR TYPE |
|--------------|------------|------------|--------------------------|---------|------------|
|              |            |            | POWER INPUT 50 Hz        | In A    |            |
| KDN 32-160.1 | 1,1        | MEC 80     | 3 x 230 - 400 V ~        | 4,2/2,4 | IE3        |
|              | 1,5        | MEC 90S    | 3 x 230 - 400 V ~        | 5,2/3   | IE3        |
|              | 2,2        | MEC 90L    | 3 x 230 - 400 V ~        | 8/4,6   | IE3        |
|              | 3          | MEC 100L   | 3 x 400 V ~ <sup>1</sup> | 5,6     | IE3        |
|              | 4          | MEC 112M   | 3 x 400 V ~ <sup>1</sup> | 7       | IE3        |
|              | 5,5        | MEC 132S   | 3 x 400 V ~ <sup>1</sup> | 10      | IE3        |

<sup>1</sup> Star start-up possible (A)

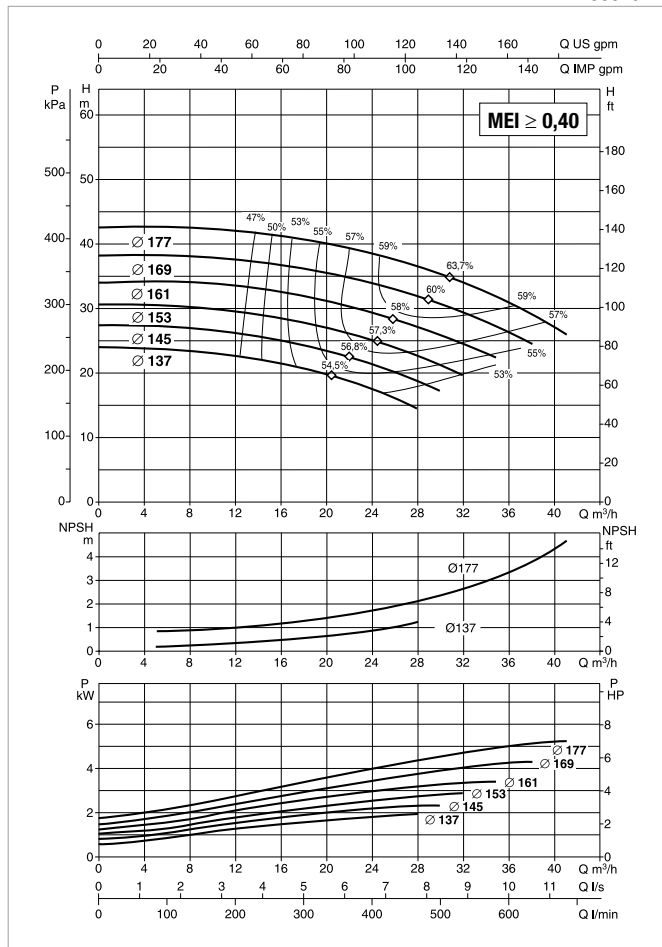
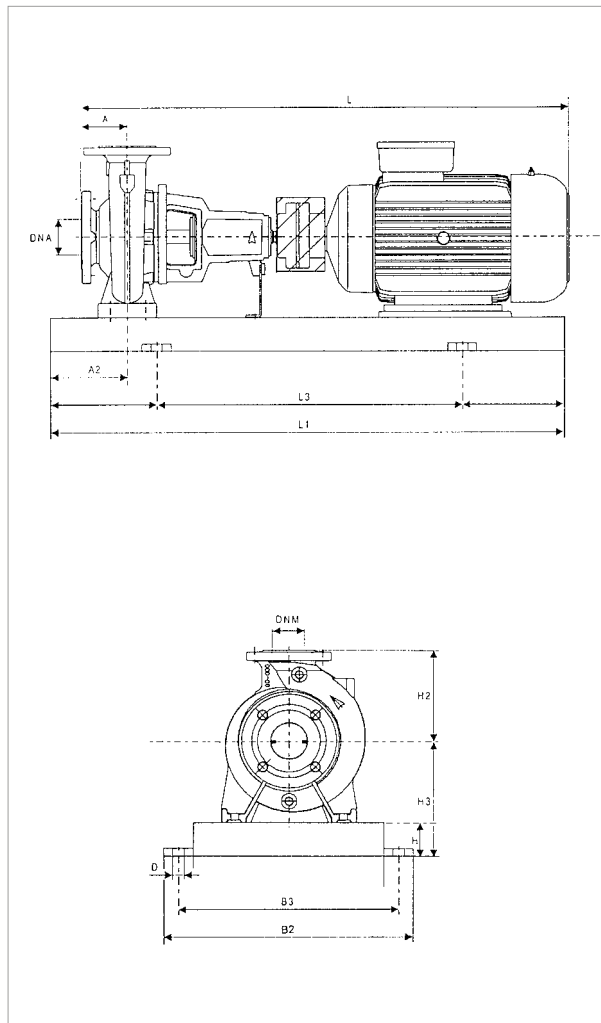
| MODEL        | POWER (kW) | UNIT DIMENSIONS (mm) |    |     |    |     |      |     |     |     |    | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |           | SPACER COUPLING |           |
|--------------|------------|----------------------|----|-----|----|-----|------|-----|-----|-----|----|------------------------|-----|-------------------|-----------|-----------------|-----------|
|              |            | A                    | A2 | H2  | H  | H3  | L1   | L3  | B2  | B3  | D  | DNA                    | DNM | L                 | WEIGHT Kg | L               | WEIGHT Kg |
| KDN 32-160.1 | 1,1        | 80                   | 60 | 160 | 65 | 197 | 800  | 540 | 360 | 320 | 19 | 50                     | 32  | 717               | 81        | 817             | 86        |
|              | 1,5        | 80                   | 60 | 160 | 65 | 197 | 800  | 540 | 360 | 320 | 19 | 50                     | 32  | 762               | 88        | 862             | 93        |
|              | 2,2        | 80                   | 60 | 160 | 65 | 197 | 900  | 600 | 390 | 350 | 19 | 50                     | 32  | 762               | 94        | 862             | 99        |
|              | 3          | 80                   | 60 | 160 | 65 | 197 | 900  | 600 | 390 | 350 | 19 | 50                     | 32  | 811               | 91        | 911             | 96        |
|              | 4          | 80                   | 60 | 160 | 65 | 197 | 900  | 600 | 390 | 350 | 19 | 50                     | 32  | 833               | 86        | 933             | 91        |
|              | 5,5        | 80                   | 60 | 160 | 80 | 212 | 1000 | 660 | 450 | 400 | 24 | 50                     | 32  | 890               | 117       | 990             | 122       |

Dimension and electrical data based on sizing definition following the instructions on page 105.

# KDN 32-160 - 2 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 2900 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

| MODEL      | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA          |       | MOTOR TYPE |
|------------|------------|------------|--------------------------|-------|------------|
|            |            |            | POWER INPUT 50 Hz        | In A  |            |
| KDN 32-160 | 2,2        | MEC 90L    | 3 x 230 - 400 V ~        | 8/4,6 | IE3        |
|            | 3          | MEC 100L   | 3 x 400 V ~ <sup>1</sup> | 5,6   | IE3        |
|            | 4          | MEC 112M   | 3 x 400 V ~ <sup>1</sup> | 7     | IE3        |
|            | 5,5        | MEC 132S   | 3 x 400 V ~ <sup>1</sup> | 10    | IE3        |
|            | 7,5        | MEC 132S   | 3 x 400 V ~ <sup>1</sup> | 13,1  | IE3        |

<sup>1</sup> Star start-up possible (Δ)

| MODEL      | POWER (kW) | UNIT DIMENSIONS (mm) |    |     |    |     |      |     |     |     |    | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |           | SPACER COUPLING |           |
|------------|------------|----------------------|----|-----|----|-----|------|-----|-----|-----|----|------------------------|-----|-------------------|-----------|-----------------|-----------|
|            |            | A                    | A2 | H2  | H  | H3  | L1   | L3  | B2  | B3  | D  | DNA                    | DNM | L                 | WEIGHT Kg | L               | WEIGHT Kg |
| KDN 32-160 | 2,2        | 80                   | 60 | 160 | 65 | 197 | 900  | 600 | 390 | 350 | 19 | 50                     | 32  | 762               | 84        | 862             | 92        |
|            | 3          | 80                   | 60 | 160 | 65 | 197 | 900  | 600 | 390 | 350 | 19 | 50                     | 32  | 811               | 91        | 911             | 96        |
|            | 4          | 80                   | 60 | 160 | 65 | 197 | 900  | 600 | 390 | 350 | 19 | 50                     | 32  | 833               | 86        | 933             | 91        |
|            | 5,5        | 80                   | 60 | 160 | 80 | 212 | 1000 | 660 | 450 | 400 | 24 | 50                     | 32  | 890               | 117       | 990             | 122       |
|            | 7,5        | 80                   | 60 | 160 | 80 | 212 | 1000 | 660 | 450 | 400 | 24 | 50                     | 32  | 910               | 140       | 1010            | 118       |

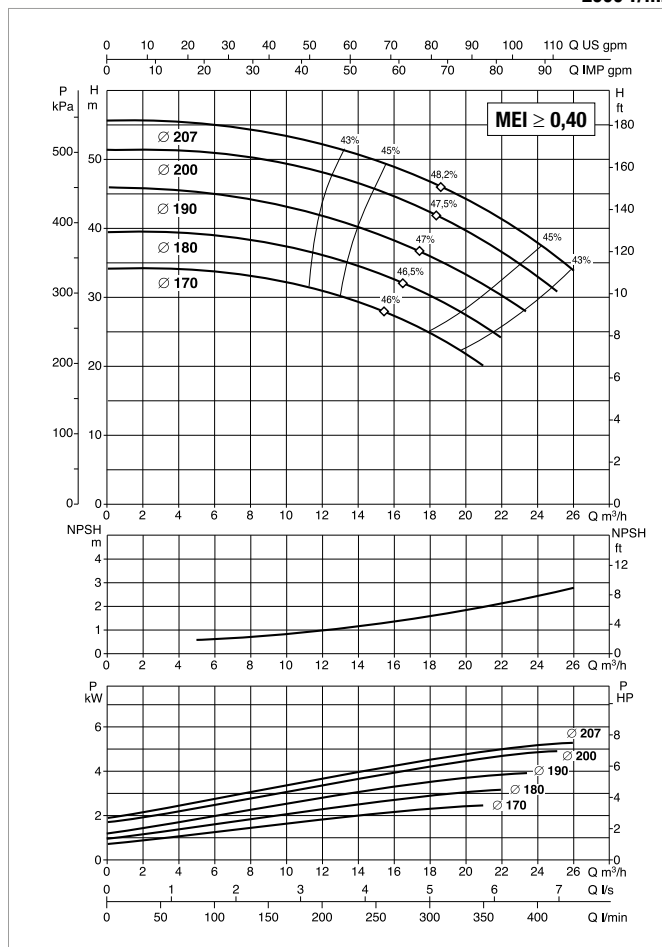
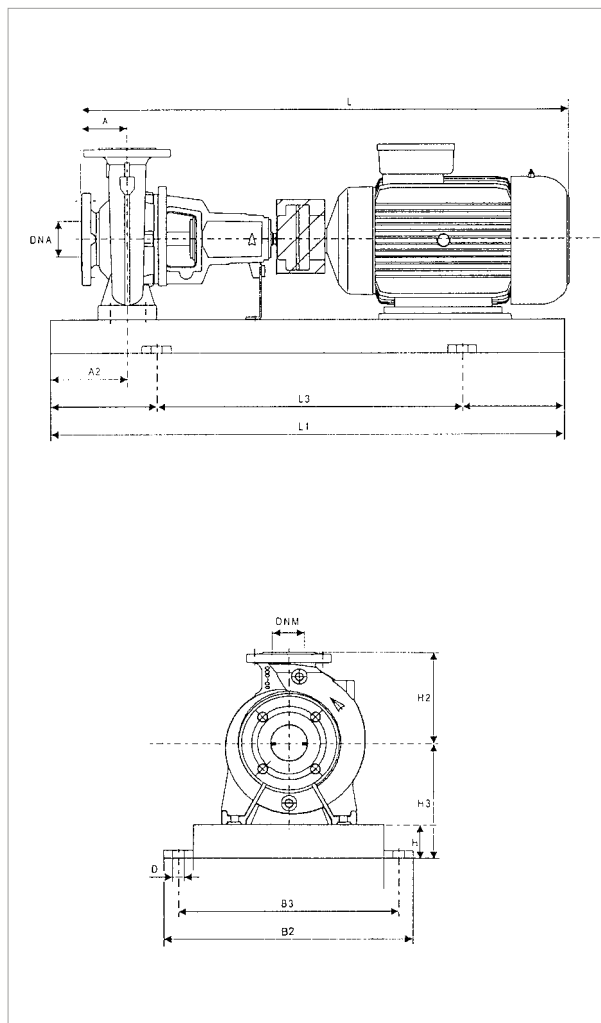
Dimension and electrical data based on sizing definition following the instructions on page 105.



# KDN 32-200.1 - 2 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 2900 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

| MODEL        | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA          |       | MOTOR TYPE |
|--------------|------------|------------|--------------------------|-------|------------|
|              |            |            | POWER INPUT 50 Hz        | In A  |            |
| KDN 32-200.1 | 2,2        | MEC 90L    | 3 x 230 - 400 V ~        | 8/4,6 | IE3        |
|              | 3          | MEC 100L   | 3 x 400 V ~ <sup>1</sup> | 5,6   | IE3        |
|              | 4          | MEC 112M   | 3 x 400 V ~ <sup>1</sup> | 7     | IE3        |
|              | 5,5        | MEC 132S   | 3 x 400 V ~ <sup>1</sup> | 10    | IE3        |
|              | 7,5        | MEC 132S   | 3 x 400 V ~ <sup>1</sup> | 13,1  | IE3        |

<sup>1</sup> Star start-up possible (Δ)

| MODEL        | POWER (kW) | UNIT DIMENSIONS (mm) |    |     |    |     |      |     |     |     |    | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |            | SPACER COUPLING |            |
|--------------|------------|----------------------|----|-----|----|-----|------|-----|-----|-----|----|------------------------|-----|-------------------|------------|-----------------|------------|
|              |            | A                    | A2 | H2  | H  | H3  | L1   | L3  | B2  | B3  | D  | DNA                    | DNM | L                 | WEIGHT Kg  | L               | WEIGHT Kg  |
| KDN 32-200.1 | 2,2        | 80                   | 60 | 180 | 65 | 225 | 900  | 600 | 390 | 350 | 19 | 50                     | 32  | 762               | 98         | 862             | 103        |
|              | 3          | 80                   | 60 | 180 | 65 | 225 | 900  | 600 | 390 | 350 | 19 | 50                     | 32  | 811               | 129        | 911             | 134        |
|              | 4          | 80                   | 60 | 180 | 65 | 225 | 900  | 600 | 390 | 350 | 19 | 50                     | 32  | 833               | 125        | 933             | 130        |
|              | 5,5        | 80                   | 60 | 180 | 80 | 240 | 1000 | 660 | 450 | 400 | 24 | 50                     | 32  | 890               | 124        | 990             | 129        |
|              | 7,5        | 80                   | 60 | 180 | 80 | 240 | 1000 | 660 | 450 | 400 | 24 | 50                     | 32  | 910               | 925<br>140 | 1010<br>1010    | 145<br>145 |

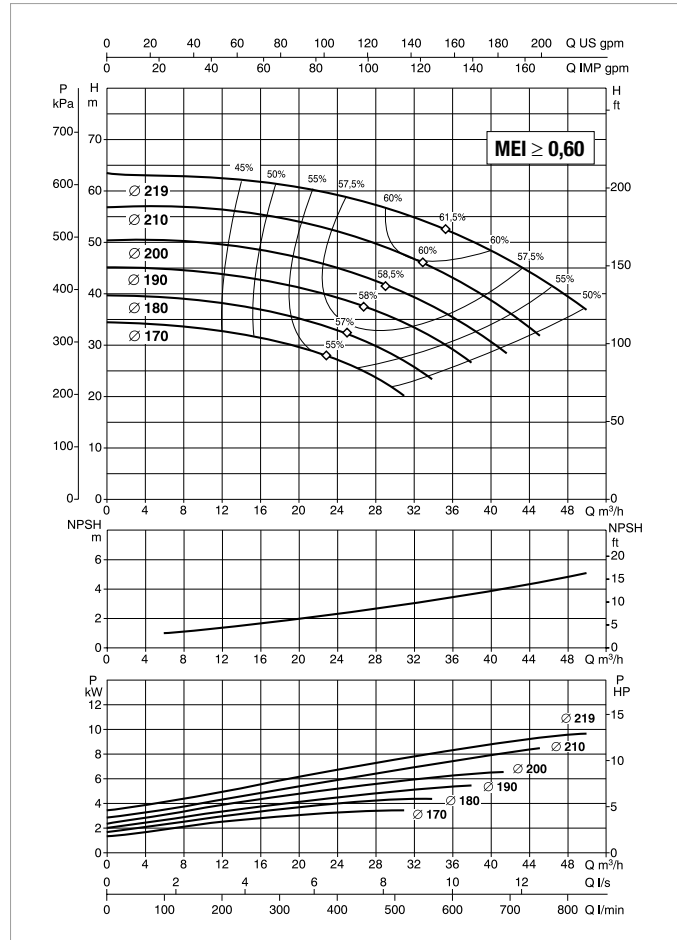
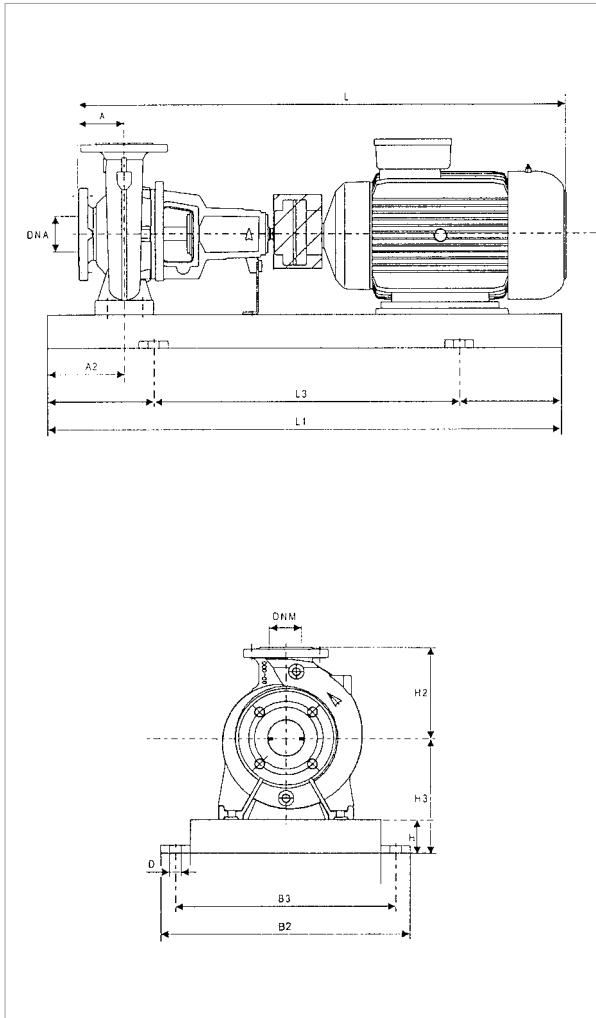
Dimension and electrical data based on sizing definition following the instructions on page 105.



# KDN 32-200 - 2 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 2900 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

| MODEL      | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA          |      | MOTOR TYPE |
|------------|------------|------------|--------------------------|------|------------|
|            |            |            | POWER INPUT 50 Hz        | In A |            |
| KDN 32-200 | 3          | MEC 100L   | 3 x 400 V ~ <sup>1</sup> | 5,6  | IE3        |
|            | 4          | MEC 112M   | 3 x 400 V ~ <sup>1</sup> | 7    | IE3        |
|            | 5,5        | MEC 132S   | 3 x 400 V ~ <sup>1</sup> | 10   | IE3        |
|            | 7,5        | MEC 132S   | 3 x 400 V ~ <sup>1</sup> | 13,1 | IE3        |
|            | 11         | MEC 160M   | 3 x 400 V ~ <sup>1</sup> | 19,7 | IE3        |
|            | 15         | MEC 160M   | 3 x 400 V ~ <sup>1</sup> | 26,7 | IE3        |

<sup>1</sup> Star start-up possible (Δ)

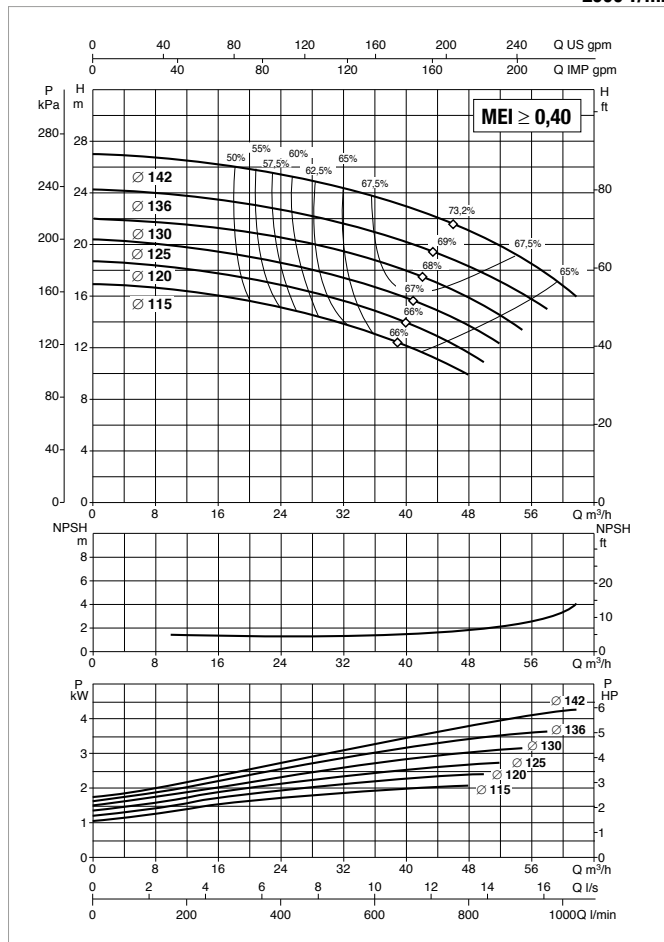
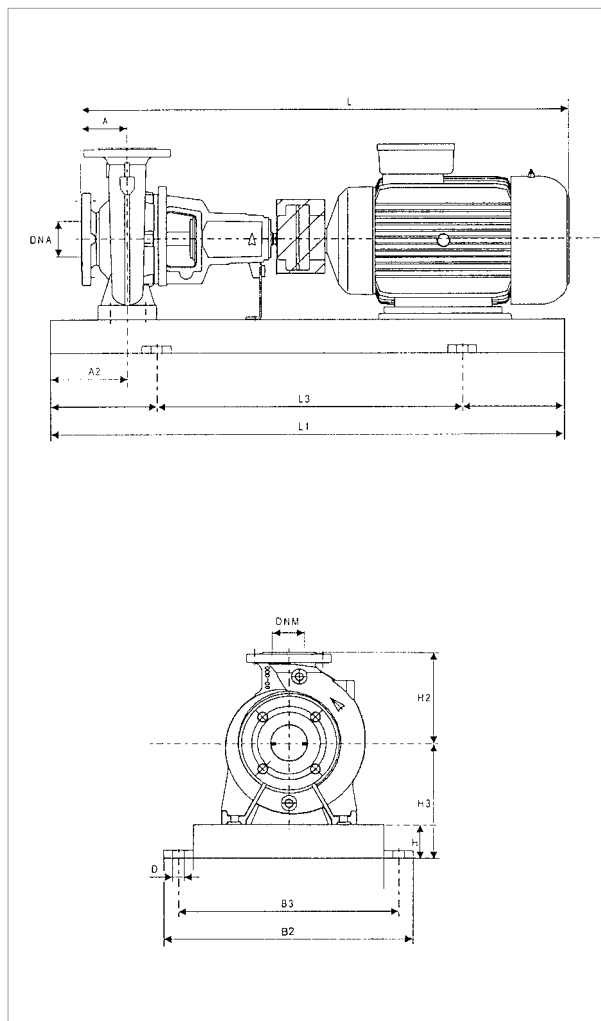
| MODEL      | POWER (kW) | UNIT DIMENSIONS (mm) |    |     |    |     |      |     |     |     |    | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |           | SPACER COUPLING |           |
|------------|------------|----------------------|----|-----|----|-----|------|-----|-----|-----|----|------------------------|-----|-------------------|-----------|-----------------|-----------|
|            |            | A                    | A2 | H2  | H  | H3  | L1   | L3  | B2  | B3  | D  | DNA                    | DNM | L                 | WEIGHT Kg | L               | WEIGHT Kg |
| KDN 32-200 | 3          | 80                   | 60 | 180 | 65 | 225 | 900  | 600 | 390 | 350 | 19 | 50                     | 32  | 811               | 92        | 911             | 97        |
|            | 4          | 80                   | 60 | 180 | 65 | 225 | 900  | 600 | 390 | 350 | 19 | 50                     | 32  | 833               | 86        | 933             | 91        |
|            | 5,5        | 80                   | 60 | 180 | 80 | 240 | 1000 | 660 | 450 | 400 | 24 | 50                     | 32  | 890               | 124       | 990             | 129       |
|            | 7,5        | 80                   | 60 | 180 | 80 | 240 | 1000 | 660 | 450 | 400 | 24 | 50                     | 32  | 910               | 151       | 1010            | 156       |
|            | 11         | 80                   | 60 | 180 | 80 | 240 | 1120 | 740 | 490 | 440 | 24 | 50                     | 32  | 1053              | 214       | 1153            | 219       |
|            | 15         | 80                   | 60 | 180 | 80 | 240 | 1120 | 740 | 490 | 440 | 24 | 50                     | 32  | 1053              | 221       | 1153            | 226       |

Dimension and electrical data based on sizing definition following the instructions on page 105.

# KDN 40-125 - 2 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

**= 2900 1/min**



**For MEI index refer to the hydraulic efficiency section.**

The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

| MODEL      | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA          |                  | MOTOR TYPE |
|------------|------------|------------|--------------------------|------------------|------------|
|            |            |            | POWER INPUT 50 Hz        | I <sub>n</sub> A |            |
| KDN 40-125 | 1,5        | MEC 90S    | 3 x 230 - 400 V ~        | 5,2/3            | IE3        |
|            | 2,2        | MEC 90L    | 3 x 230 - 400 V ~        | 8/4,6            | IE3        |
|            | 3          | MEC 100L   | 3 x 400 V ~ <sup>1</sup> | 5,6              | IE3        |
|            | 4          | MEC 112M   | 3 x 400 V ~ <sup>1</sup> | 7                | IE3        |
|            | 5,5        | MEC 132S   | 3 x 400 V ~ <sup>1</sup> | 10               | IE3        |
|            | 7,5        | MEC 132S   | 3 x 400 V ~ <sup>1</sup> | 13,1             | IE3        |

<sup>1</sup> Star start-up possible (Δ)

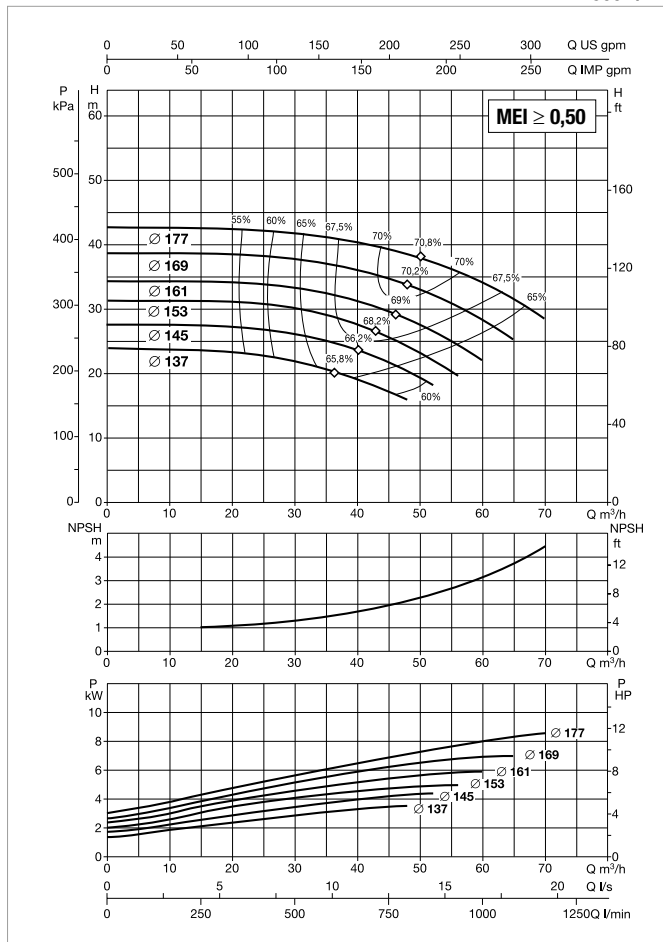
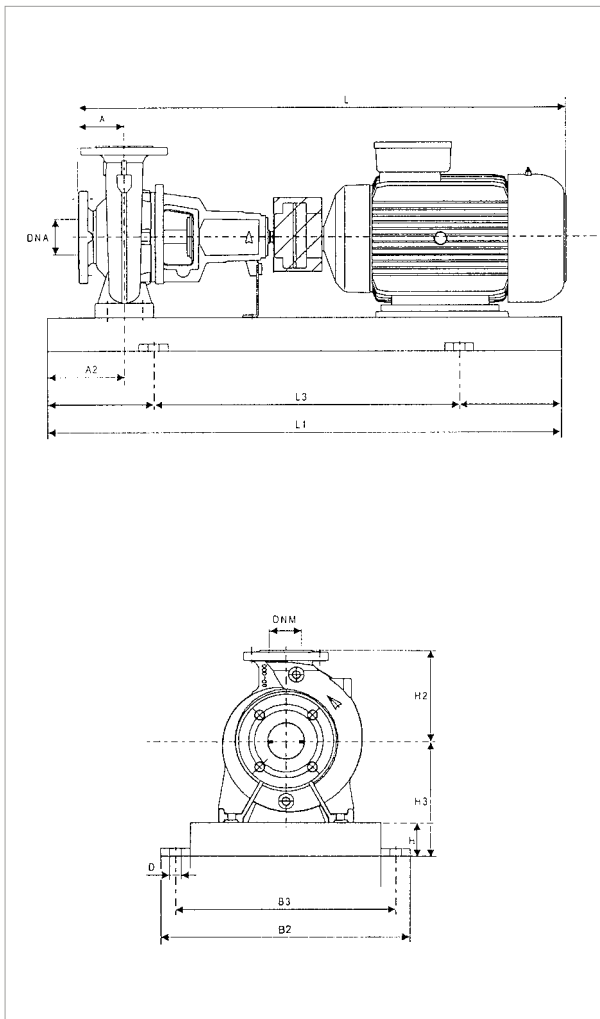
| MODEL      | POWER (kW) | UNIT DIMENSIONS (mm) |    |     |    |     |      |     |     |     |    | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |            | SPACER COUPLING |            |
|------------|------------|----------------------|----|-----|----|-----|------|-----|-----|-----|----|------------------------|-----|-------------------|------------|-----------------|------------|
|            |            | A                    | A2 | H2  | H  | H3  | L1   | L3  | B2  | B3  | D  | DNA                    | DNM | L                 | WEIGHT Kg  | L               | WEIGHT Kg  |
| KDN 40-125 | 1,5        | 80                   | 60 | 140 | 65 | 177 | 800  | 540 | 360 | 320 | 19 | 65                     | 40  | 762               | 80         | 862             | 85         |
|            | 2,2        | 80                   | 60 | 140 | 65 | 177 | 900  | 600 | 390 | 350 | 19 | 65                     | 40  | 762               | 83         | 862             | 88         |
|            | 3          | 80                   | 60 | 140 | 65 | 177 | 900  | 600 | 390 | 350 | 19 | 65                     | 40  | 811               | 80         | 911             | 85         |
|            | 4          | 80                   | 60 | 140 | 65 | 177 | 900  | 600 | 390 | 350 | 19 | 65                     | 40  | 833               | 84         | 933             | 89         |
|            | 5,5        | 80                   | 60 | 140 | 80 | 212 | 1000 | 660 | 450 | 400 | 24 | 65                     | 40  | 890               | 115        | 990             | 120        |
|            | 7,5        | 80                   | 60 | 140 | 80 | 212 | 1000 | 600 | 450 | 400 | 24 | 65                     | 40  | 910               | 925<br>111 | 1010<br>1010    | 116<br>116 |

Dimension and electrical data based on sizing definition following the instructions on page 105.

# KDN 40-160 - 2 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 2900 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

| MODEL      | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA          |      | MOTOR TYPE |
|------------|------------|------------|--------------------------|------|------------|
|            |            |            | POWER INPUT 50 Hz        | In A |            |
| KDN 40-160 | 3          | MEC 100L   | 3 x 400 V ~ <sup>1</sup> | 5,6  | IE3        |
|            | 4          | MEC 112M   | 3 x 400 V ~ <sup>1</sup> | 7    | IE3        |
|            | 5,5        | MEC 132S   | 3 x 400 V ~ <sup>1</sup> | 10   | IE3        |
|            | 7,5        | MEC 132S   | 3 x 400 V ~ <sup>1</sup> | 13,1 | IE3        |
|            | 11         | MEC 160M   | 3 x 400 V ~ <sup>1</sup> | 19,7 | IE3        |
|            | 15         | MEC 160M   | 3 x 400 V ~ <sup>1</sup> | 26,7 | IE3        |

<sup>1</sup> Star start-up possible (A)

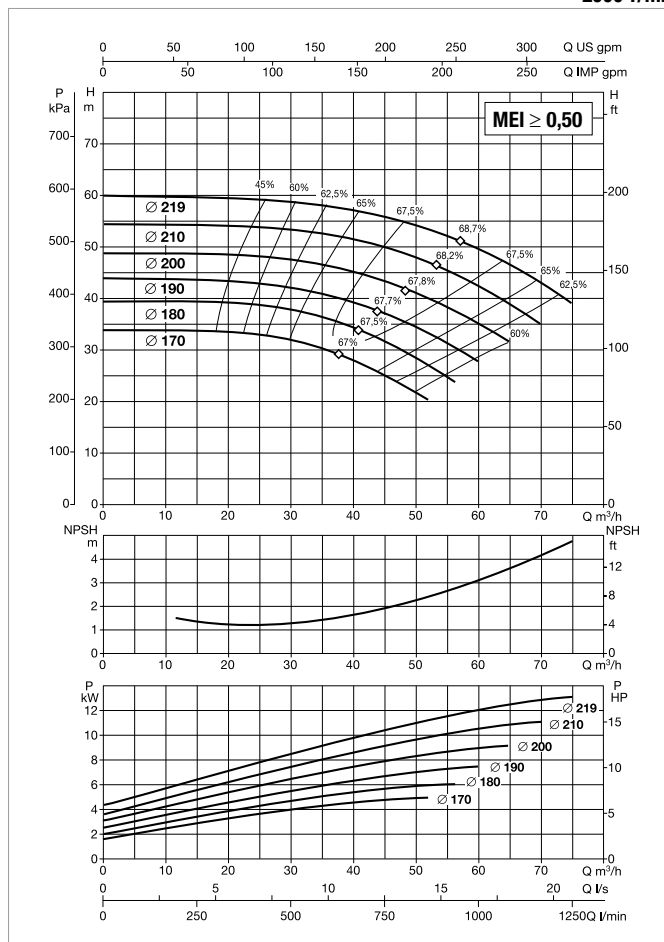
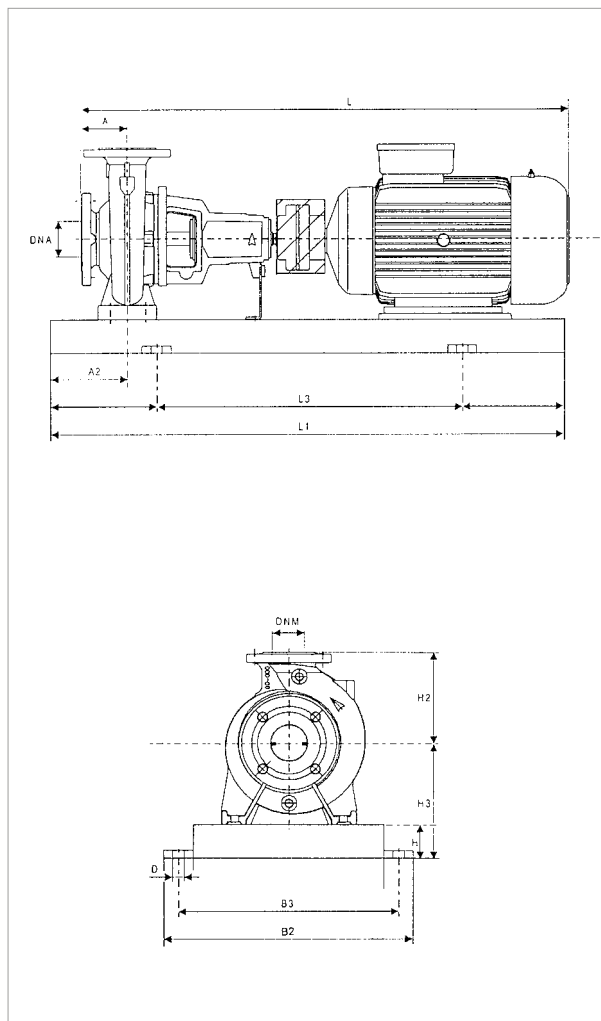
| MODEL      | POWER (kW) | UNIT DIMENSIONS (mm) |    |     |    |     |      |     |     |     |    | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |           | SPACER COUPLING |           |
|------------|------------|----------------------|----|-----|----|-----|------|-----|-----|-----|----|------------------------|-----|-------------------|-----------|-----------------|-----------|
|            |            | A                    | A2 | H2  | H  | H3  | L1   | L3  | B2  | B3  | D  | DNA                    | DNM | L                 | WEIGHT Kg | L               | WEIGHT Kg |
| KDN 40-160 | 3          | 80                   | 60 | 160 | 65 | 197 | 900  | 600 | 390 | 350 | 19 | 65                     | 40  | 811               | 91        | 911             | 96        |
|            | 4          | 80                   | 60 | 160 | 65 | 197 | 900  | 600 | 390 | 350 | 19 | 65                     | 40  | 833               | 86        | 933             | 91        |
|            | 5,5        | 80                   | 60 | 160 | 80 | 212 | 1000 | 660 | 450 | 400 | 24 | 65                     | 40  | 890               | 141       | 990             | 146       |
|            | 7,5        | 80                   | 60 | 160 | 80 | 212 | 1000 | 660 | 450 | 400 | 24 | 65                     | 40  | 910               | 139       | 1010            | 144       |
|            | 11         | 80                   | 60 | 160 | 80 | 240 | 1120 | 740 | 490 | 440 | 24 | 65                     | 40  | 1053              | 150       | 1153            | 155       |
|            | 15         | 80                   | 60 | 160 | 80 | 240 | 1120 | 740 | 490 | 440 | 24 | 65                     | 40  | 1053              | 146       | 1153            | 151       |

Dimension and electrical data based on sizing definition following the instructions on page 105.

# KDN 40-200 - 2 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 2900 1/min



**For MEI index refer to the hydraulic efficiency section.**

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

| MODEL      | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA          |      | MOTOR TYPE |
|------------|------------|------------|--------------------------|------|------------|
|            |            |            | POWER INPUT 50 Hz        | In A |            |
| KDN 40-200 | 4          | MEC 112M   | 3 x 400 V ~ <sup>1</sup> | 7    | IE3        |
|            | 5,5        | MEC 132S   | 3 x 400 V ~ <sup>1</sup> | 10   | IE3        |
|            | 7,5        | MEC 132S   | 3 x 400 V ~ <sup>1</sup> | 13,1 | IE3        |
|            | 11         | MEC 160M   | 3 x 400 V ~ <sup>1</sup> | 19,7 | IE3        |
|            | 15         | MEC 160M   | 3 x 400 V ~ <sup>1</sup> | 26,7 | IE3        |
|            | 18,5       | MEC 160L   | 3 x 400 V ~ <sup>1</sup> | 33   | IE3        |

<sup>1</sup> Star start-up possible (A)

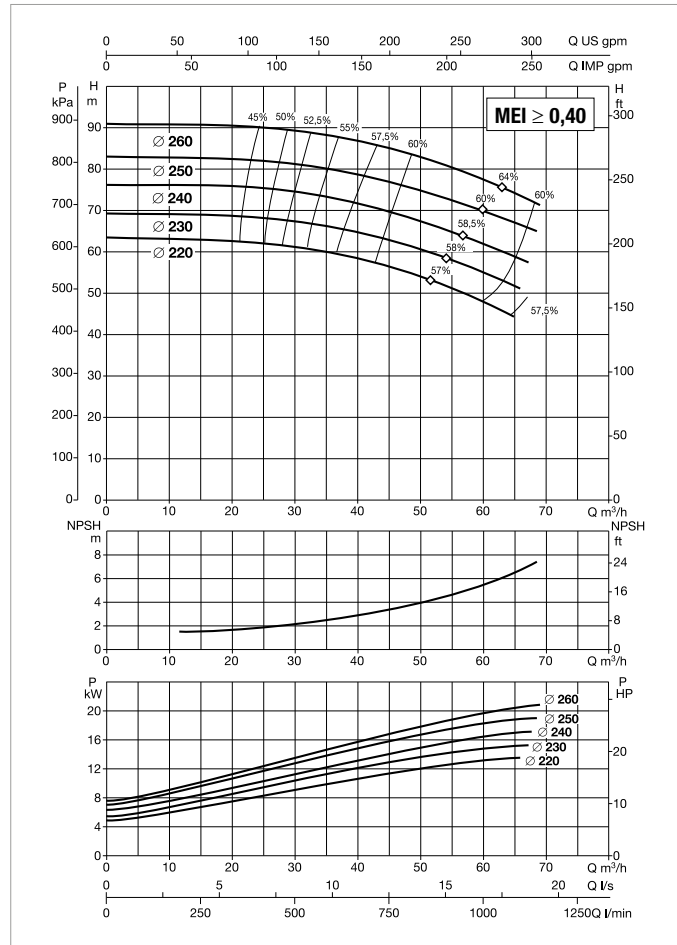
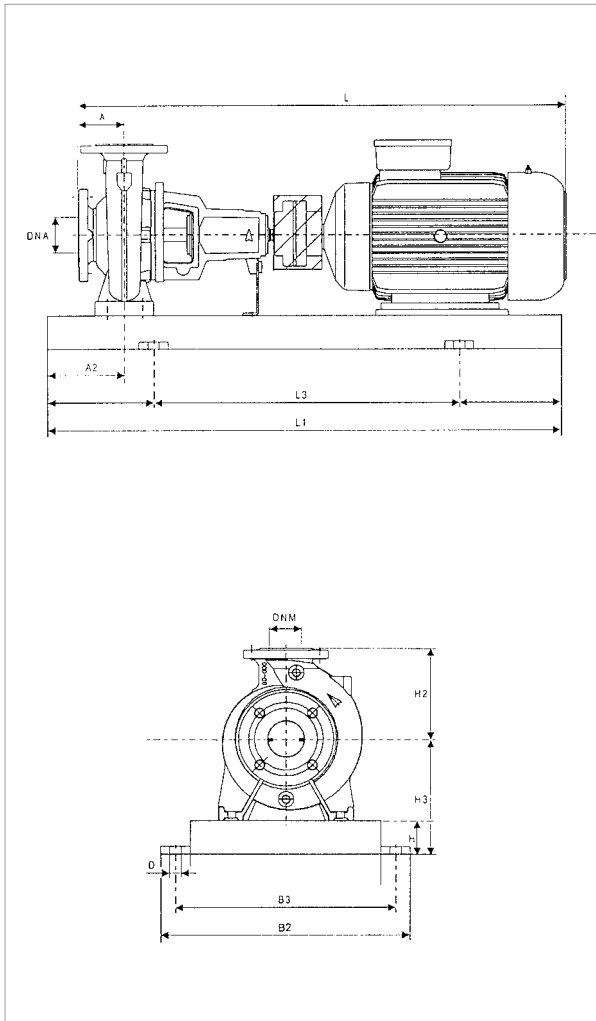
| MODEL      | POWER (kW) | UNIT DIMENSIONS (mm) |    |     |    |     |      |     |     |     |    | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |           | SPACER COUPLING |           |
|------------|------------|----------------------|----|-----|----|-----|------|-----|-----|-----|----|------------------------|-----|-------------------|-----------|-----------------|-----------|
|            |            | A                    | A2 | H2  | H  | H3  | L1   | L3  | B2  | B3  | D  | DNA                    | DNM | L                 | WEIGHT Kg | L               | WEIGHT Kg |
| KDN 40-200 | 4          | 100                  | 60 | 180 | 65 | 225 | 900  | 600 | 390 | 350 | 19 | 65                     | 40  | 853               | 117       | 953             | 122       |
|            | 5,5        | 100                  | 60 | 180 | 80 | 240 | 1000 | 660 | 450 | 400 | 24 | 65                     | 40  | 910               | 127       | 1010            | 132       |
|            | 7,5        | 100                  | 60 | 180 | 80 | 240 | 1000 | 660 | 450 | 400 | 24 | 65                     | 40  | 930               | 121       | 1030            | 126       |
|            | 11         | 100                  | 60 | 180 | 80 | 240 | 1120 | 740 | 490 | 440 | 24 | 65                     | 40  | 1073              | 198       | 1173            | 203       |
|            | 15         | 100                  | 60 | 180 | 80 | 240 | 1120 | 740 | 490 | 440 | 24 | 65                     | 40  | 1073              | 204       | 1173            | 209       |
|            | 18,5       | 100                  | 60 | 180 | 80 | 240 | 1120 | 740 | 490 | 440 | 24 | 65                     | 40  | 1117              | 199       | 1217            | 204       |

Dimension and electrical data based on sizing definition following the instructions on page 105.

# KDN 40-250 - 2 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 2900 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

| MODEL      | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA          |      | MOTOR TYPE |
|------------|------------|------------|--------------------------|------|------------|
|            |            |            | POWER INPUT 50 Hz        | In A |            |
| KDN 40-250 | 11         | MEC 160M   | 3 x 400 V ~ <sup>1</sup> | 19,7 | IE3        |
|            | 15         | MEC 160M   | 3 x 400 V ~ <sup>1</sup> | 26,7 | IE3        |
|            | 18,5       | MEC 160L   | 3 x 400 V ~ <sup>1</sup> | 33   | IE3        |
|            | 22         | MEC 180M   | 3 x 400 V ~ <sup>1</sup> | 38,1 | IE3        |
|            | 30         | MEC 200L   | 3 x 400 V ~ <sup>1</sup> | 52,1 | IE3        |

<sup>1</sup> Star start-up possible (Δ)

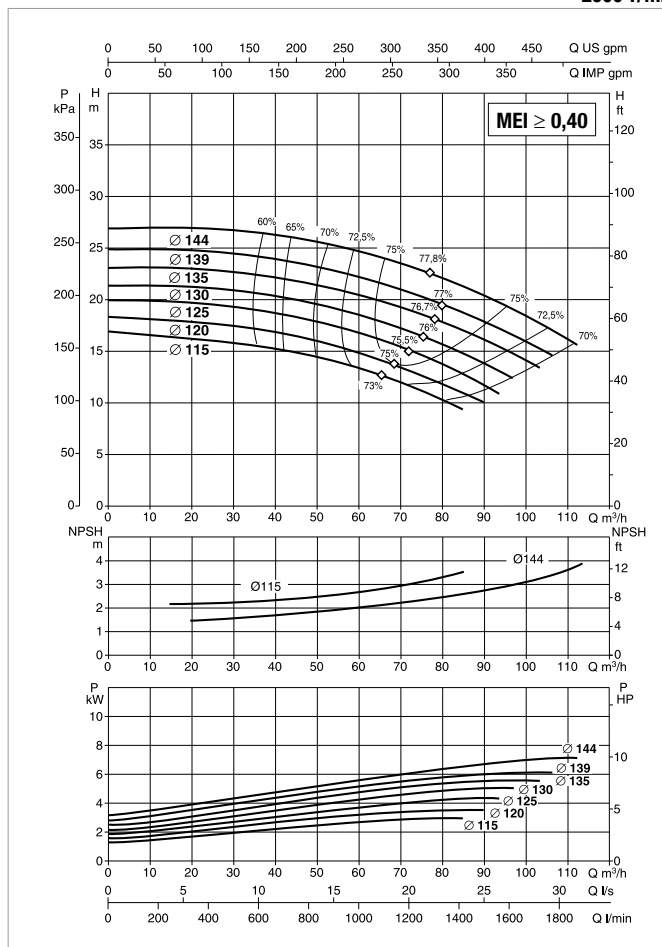
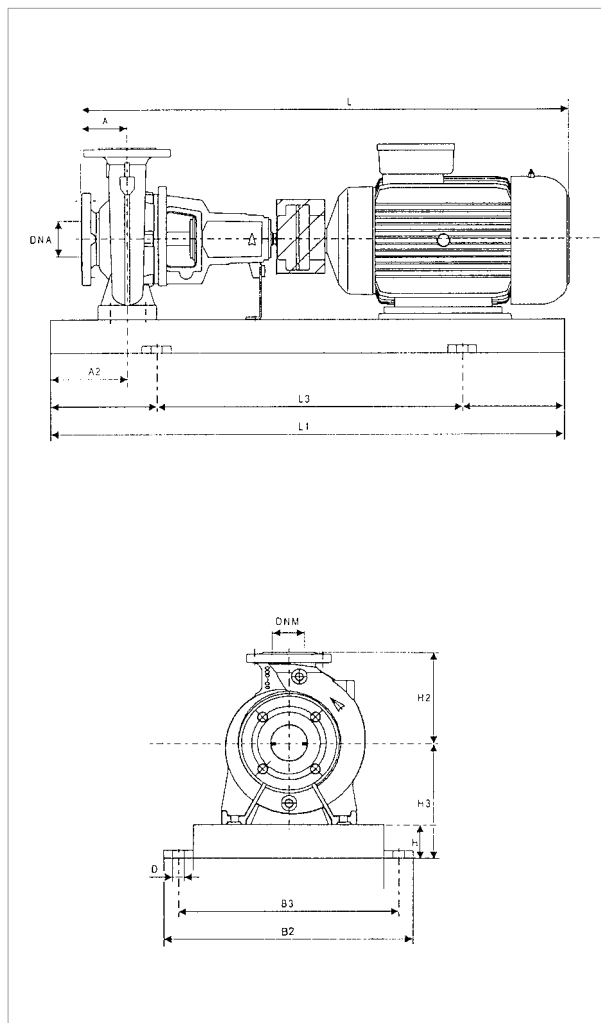
| MODEL      | POWER (kW) | UNIT DIMENSIONS (mm) |    |     |     |     |      |     |     |     |    | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |           | SPACER COUPLING |           |
|------------|------------|----------------------|----|-----|-----|-----|------|-----|-----|-----|----|------------------------|-----|-------------------|-----------|-----------------|-----------|
|            |            | A                    | A2 | H2  | H   | H3  | L1   | L3  | B2  | B3  | D  | DNA                    | DNM | L                 | WEIGHT Kg | L               | WEIGHT Kg |
| KDN 40-250 | 11         | 100                  | 75 | 225 | 80  | 260 | 1250 | 840 | 540 | 490 | 24 | 65                     | 40  | 1073              | 213       | 1173            | 218       |
|            | 15         | 100                  | 75 | 225 | 80  | 260 | 1250 | 840 | 540 | 490 | 24 | 65                     | 40  | 1073              | 251       | 1173            | 256       |
|            | 18,5       | 100                  | 75 | 225 | 80  | 260 | 1250 | 840 | 540 | 490 | 24 | 65                     | 40  | 1117              | 266       | 1217            | 271       |
|            | 22         | 100                  | 75 | 225 | 80  | 260 | 1250 | 840 | 540 | 490 | 24 | 65                     | 40  | 1152              | 278       | 1252            | 283       |
|            | 30         | 100                  | 75 | 225 | 100 | 300 | 1400 | 940 | 610 | 550 | 28 | 65                     | 40  | 1234              | 332       | 1334            | 337       |

Dimension and electrical data based on sizing definition following the instructions on page 105.

# KDN 50-125 - 2 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 2900 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

| MODEL      | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA          |      | MOTOR TYPE |
|------------|------------|------------|--------------------------|------|------------|
|            |            |            | POWER INPUT 50 Hz        | In A |            |
| KDN 50-125 | 3          | MEC 100L   | 3 x 400 V ~ <sup>1</sup> | 5,6  | IE3        |
|            | 4          | MEC 112M   | 3 x 400 V ~ <sup>1</sup> | 7    | IE3        |
|            | 5,5        | MEC 132S   | 3 x 400 V ~ <sup>1</sup> | 10   | IE3        |
|            | 7,5        | MEC 132S   | 3 x 400 V ~ <sup>1</sup> | 13,1 | IE3        |
|            | 11         | MEC 160M   | 3 x 400 V ~ <sup>1</sup> | 19,7 | IE3        |

<sup>1</sup> Star start-up possible (A)

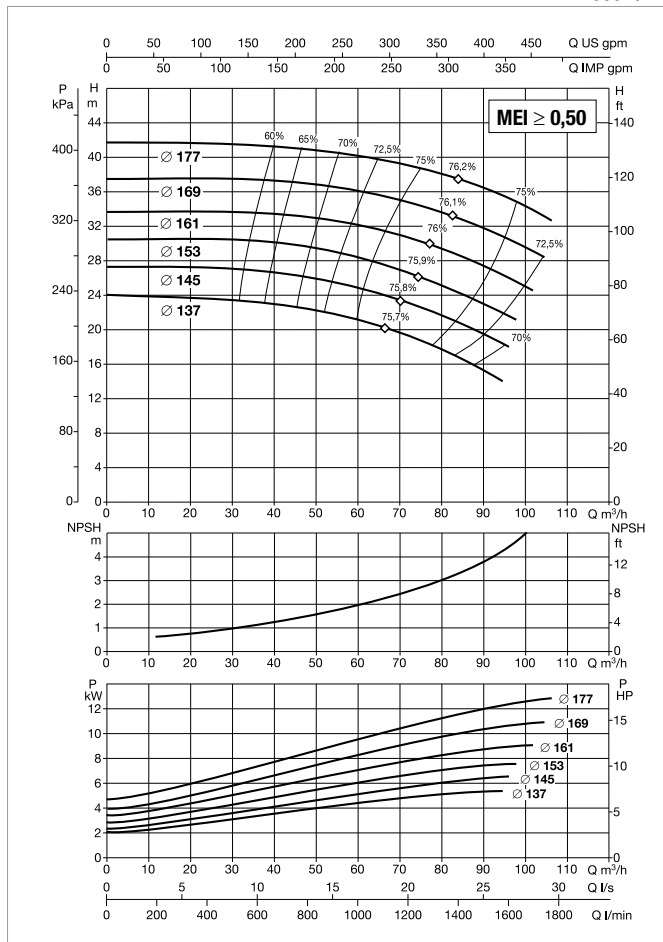
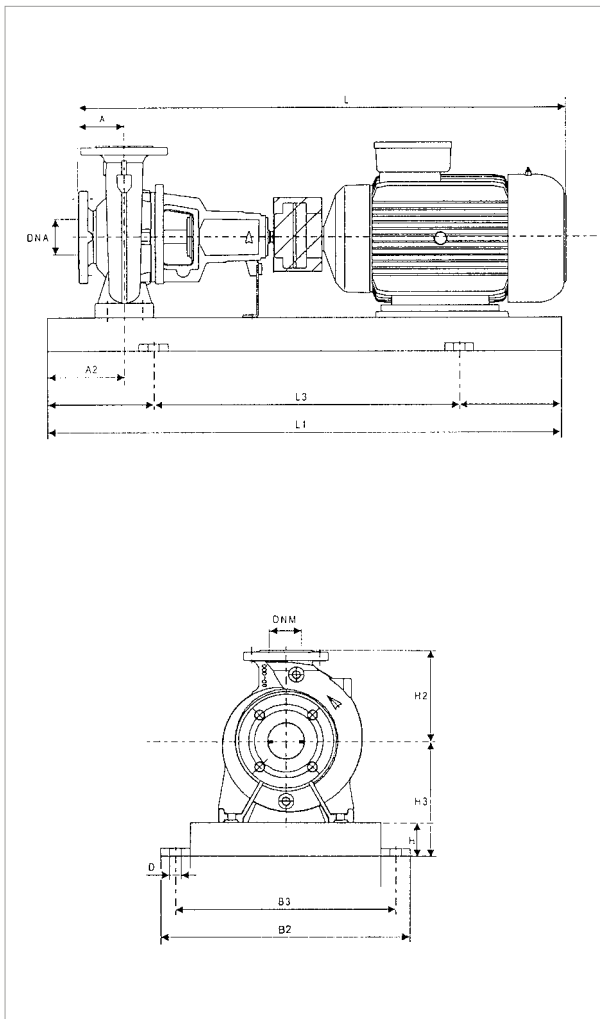
| MODEL      | POWER (kW) | UNIT DIMENSIONS (mm) |    |     |    |     |      |     |     |     |    | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |           | SPACER COUPLING |           |
|------------|------------|----------------------|----|-----|----|-----|------|-----|-----|-----|----|------------------------|-----|-------------------|-----------|-----------------|-----------|
|            |            | A                    | A2 | H2  | H  | H3  | L1   | L3  | B2  | B3  | D  | DNA                    | DNM | L                 | WEIGHT Kg | L               | WEIGHT Kg |
| KDN 50-125 | 3          | 100                  | 60 | 160 | 65 | 197 | 900  | 600 | 390 | 350 | 19 | 65                     | 50  | 831               | 94        | 931             | 99        |
|            | 4          | 100                  | 60 | 160 | 65 | 197 | 900  | 600 | 390 | 350 | 19 | 65                     | 50  | 853               | 91        | 953             | 96        |
|            | 5,5        | 100                  | 60 | 160 | 80 | 212 | 1000 | 660 | 450 | 400 | 24 | 65                     | 50  | 910               | 143       | 1010            | 148       |
|            | 7,5        | 100                  | 60 | 160 | 80 | 212 | 1000 | 660 | 450 | 400 | 24 | 65                     | 50  | 930               | 117       | 1030            | 122       |
|            | 11         | 100                  | 60 | 160 | 80 | 240 | 1120 | 740 | 490 | 400 | 24 | 65                     | 50  | 1073              | 120       | 1173            | 125       |

Dimension and electrical data based on sizing definition following the instructions on page 105.

# KDN 50-160 - 2 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 2900 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

| MODEL      | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA          |      | MOTOR TYPE |
|------------|------------|------------|--------------------------|------|------------|
|            |            |            | POWER INPUT 50 Hz        | In A |            |
| KDN 50-160 | 4          | MEC 112M   | 3 x 400 V ~ <sup>1</sup> | 7    | IE3        |
|            | 5,5        | MEC 132S   | 3 x 400 V ~ <sup>1</sup> | 10   | IE3        |
|            | 7,5        | MEC 132S   | 3 x 400 V ~ <sup>1</sup> | 13,1 | IE3        |
|            | 11         | MEC 160M   | 3 x 400 V ~ <sup>1</sup> | 19,7 | IE3        |
|            | 15         | MEC 160M   | 3 x 400 V ~ <sup>1</sup> | 26,7 | IE3        |
|            | 18,5       | MEC 160L   | 3 x 400 V ~ <sup>1</sup> | 33   | IE3        |

<sup>1</sup> Star start-up possible (A)

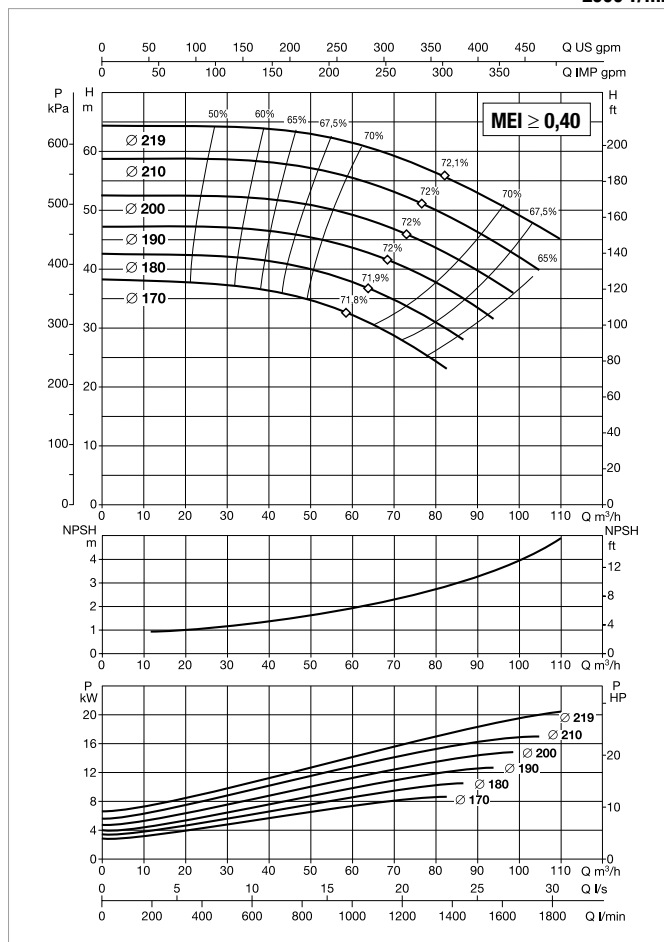
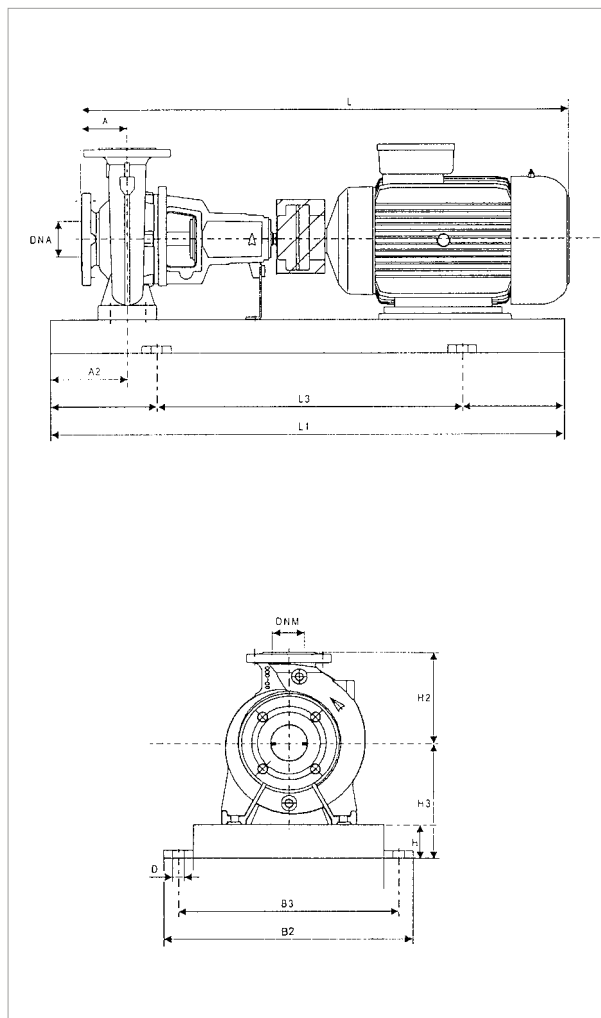
| MODEL      | POWER (kW) | UNIT DIMENSIONS (mm) |    |     |    |     |      |     |     |     |    | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |           | SPACER COUPLING |           |
|------------|------------|----------------------|----|-----|----|-----|------|-----|-----|-----|----|------------------------|-----|-------------------|-----------|-----------------|-----------|
|            |            | A                    | A2 | H2  | H  | H3  | L1   | L3  | B2  | B3  | D  | DNA                    | DNM | L                 | WEIGHT Kg | L               | WEIGHT Kg |
| KDN 50-160 | 4          | 100                  | 60 | 180 | 65 | 225 | 900  | 600 | 390 | 350 | 19 | 65                     | 50  | 853               | 114       | 953             | 119       |
|            | 5,5        | 100                  | 60 | 180 | 80 | 240 | 1000 | 660 | 450 | 400 | 24 | 65                     | 50  | 910               | 124       | 1010            | 129       |
|            | 7,5        | 100                  | 60 | 180 | 80 | 240 | 1000 | 660 | 450 | 400 | 24 | 65                     | 50  | 930               | 151       | 1030            | 156       |
|            | 11         | 100                  | 60 | 180 | 80 | 240 | 1120 | 740 | 490 | 440 | 24 | 65                     | 50  | 1073              | 165       | 1173            | 170       |
|            | 15         | 100                  | 60 | 180 | 80 | 240 | 1120 | 740 | 490 | 440 | 24 | 65                     | 50  | 1073              | 173       | 1173            | 178       |
|            | 18,5       | 100                  | 60 | 180 | 80 | 240 | 1120 | 740 | 490 | 440 | 24 | 65                     | 50  | 1117              | 170       | 1217            | 175       |

Dimension and electrical data based on sizing definition following the instructions on page 105.

# KDN 50-200 - 2 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 2900 1/min



**For MEI index refer to the hydraulic efficiency section.**

The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

| MODEL      | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA          |      | MOTOR TYPE |
|------------|------------|------------|--------------------------|------|------------|
|            |            |            | POWER INPUT 50 Hz        | In A |            |
| KDN 50-200 | 7,5        | MEC 132S   | 3 x 400 V ~ <sup>1</sup> | 13,1 | IE3        |
|            | 11         | MEC 160M   | 3 x 400 V ~ <sup>1</sup> | 19,7 | IE3        |
|            | 15         | MEC 160M   | 3 x 400 V ~ <sup>1</sup> | 26,7 | IE3        |
|            | 18,5       | MEC 160L   | 3 x 400 V ~ <sup>1</sup> | 33   | IE3        |
|            | 22         | MEC 180M   | 3 x 400 V ~ <sup>1</sup> | 38,1 | IE3        |
|            | 30         | MEC 200L   | 3 x 400 V ~ <sup>1</sup> | 52,1 | IE3        |

<sup>1</sup> Star start-up possible (A)

| MODEL      | POWER (kW) | UNIT DIMENSIONS (mm) |    |     |    |     |      |     |     |     |    | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |           | SPACER COUPLING |           |
|------------|------------|----------------------|----|-----|----|-----|------|-----|-----|-----|----|------------------------|-----|-------------------|-----------|-----------------|-----------|
|            |            | A                    | A2 | H2  | H  | H3  | L1   | L3  | B2  | B3  | D  | DNA                    | DNM | L                 | WEIGHT Kg | L               | WEIGHT Kg |
| KDN 50-200 | 7,5        | 100                  | 60 | 200 | 80 | 240 | 1000 | 600 | 450 | 400 | 24 | 65                     | 50  | 930               | 150       | 1030            | 155       |
|            | 11         | 100                  | 60 | 200 | 80 | 240 | 1120 | 740 | 490 | 440 | 24 | 65                     | 50  | 1073              | 163       | 1173            | 168       |
|            | 15         | 100                  | 60 | 200 | 80 | 240 | 1120 | 740 | 490 | 400 | 24 | 65                     | 50  | 1073              | 253       | 1173            | 258       |
|            | 18,5       | 100                  | 60 | 200 | 80 | 240 | 1120 | 740 | 490 | 440 | 24 | 65                     | 50  | 1117              | 251       | 1217            | 256       |
|            | 22         | 100                  | 60 | 200 | 80 | 260 | 1120 | 740 | 490 | 440 | 24 | 65                     | 50  | 1152              | 248       | 1252            | 253       |
|            | 30         | 100                  | 60 | 200 | 80 | 280 | 1250 | 840 | 540 | 490 | 24 | 65                     | 50  | 1234              | 302       | 1334            | 307       |

Dimension and electrical data based on sizing definition following the instructions on page 105.

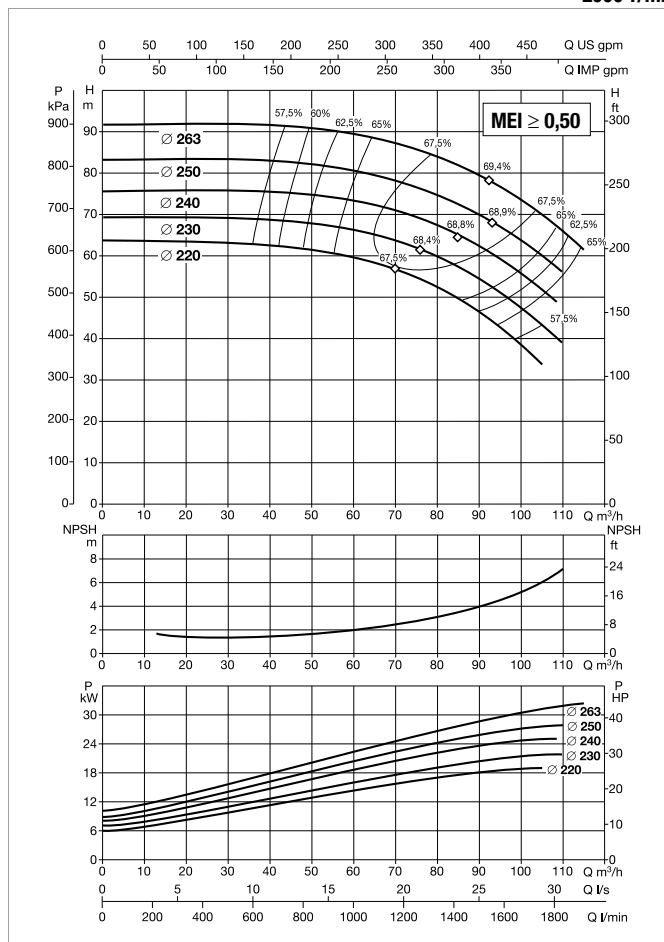
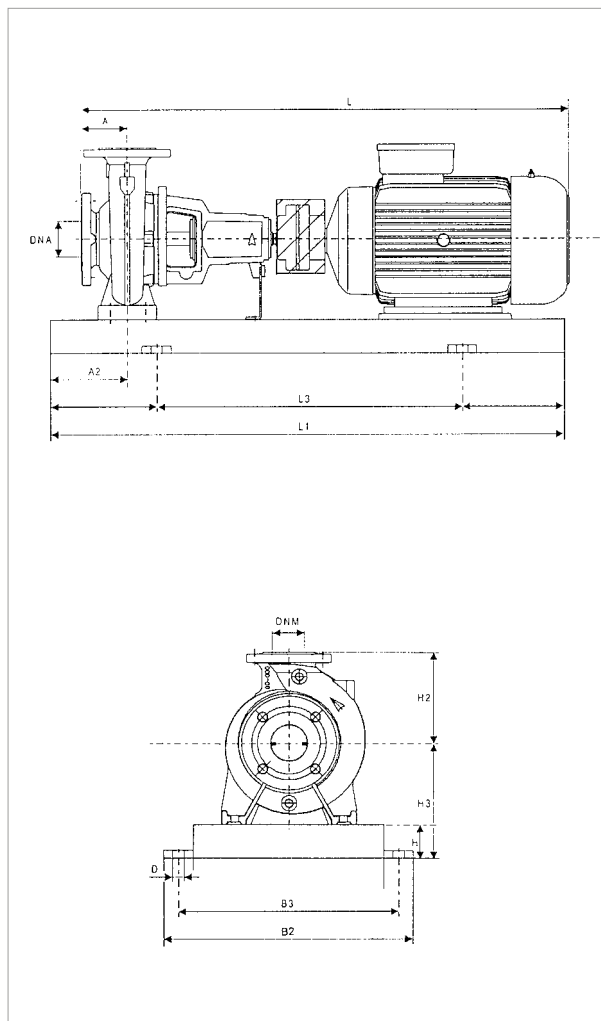




# KDN 50-250 - 2 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 2900 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

| MODEL      | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA          |      | MOTOR TYPE |
|------------|------------|------------|--------------------------|------|------------|
|            |            |            | POWER INPUT 50 Hz        | In A |            |
| KDN 50-250 | 15         | MEC 160M   | 3 x 400 V ~ <sup>1</sup> | 26,7 | IE3        |
|            | 18,5       | MEC 160L   | 3 x 400 V ~ <sup>1</sup> | 33   | IE3        |
|            | 22         | MEC 180M   | 3 x 400 V ~ <sup>1</sup> | 38,1 | IE3        |
|            | 30         | MEC 200L   | 3 x 400 V ~ <sup>1</sup> | 52,1 | IE3        |
|            | 37         | MEC 200L   | 3 x 400 V ~ <sup>1</sup> | 62,6 | IE3        |
|            | 45         | MEC 225M   | 3 x 400 V ~ <sup>1</sup> | 78,4 | IE3        |

<sup>1</sup> Star start-up possible (A)

| MODEL      | POWER (kW) | UNIT DIMENSIONS (mm) |    |     |     |     |      |     |     |     |    | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |           | SPACER COUPLING |           |
|------------|------------|----------------------|----|-----|-----|-----|------|-----|-----|-----|----|------------------------|-----|-------------------|-----------|-----------------|-----------|
|            |            | A                    | A2 | H2  | H   | H3  | L1   | L3  | B2  | B3  | D  | DNA                    | DNM | L                 | WEIGHT Kg | L               | WEIGHT Kg |
| KDN 50-250 | 15         | 100                  | 75 | 225 | 80  | 260 | 1250 | 840 | 540 | 490 | 24 | 65                     | 50  | 1073              | 233       | 1173            | 238       |
|            | 18,5       | 100                  | 75 | 225 | 80  | 260 | 1250 | 840 | 540 | 490 | 24 | 65                     | 50  | 1117              | 257       | 1217            | 262       |
|            | 22         | 100                  | 75 | 225 | 80  | 260 | 1250 | 840 | 540 | 490 | 24 | 65                     | 50  | 1152              | 277       | 1252            | 282       |
|            | 30         | 100                  | 75 | 225 | 100 | 300 | 1400 | 940 | 610 | 550 | 28 | 65                     | 50  | 1234              | 419       | 1334            | 424       |
|            | 37         | 100                  | 75 | 225 | 100 | 300 | 1400 | 940 | 610 | 550 | 28 | 65                     | 50  | 1234              | 358       | 1334            | 363       |
|            | 45         | 100                  | 75 | 225 | 100 | 325 | 1400 | 940 | 610 | 550 | 28 | 65                     | 50  | 1270              | 413       | 1370            | 418       |

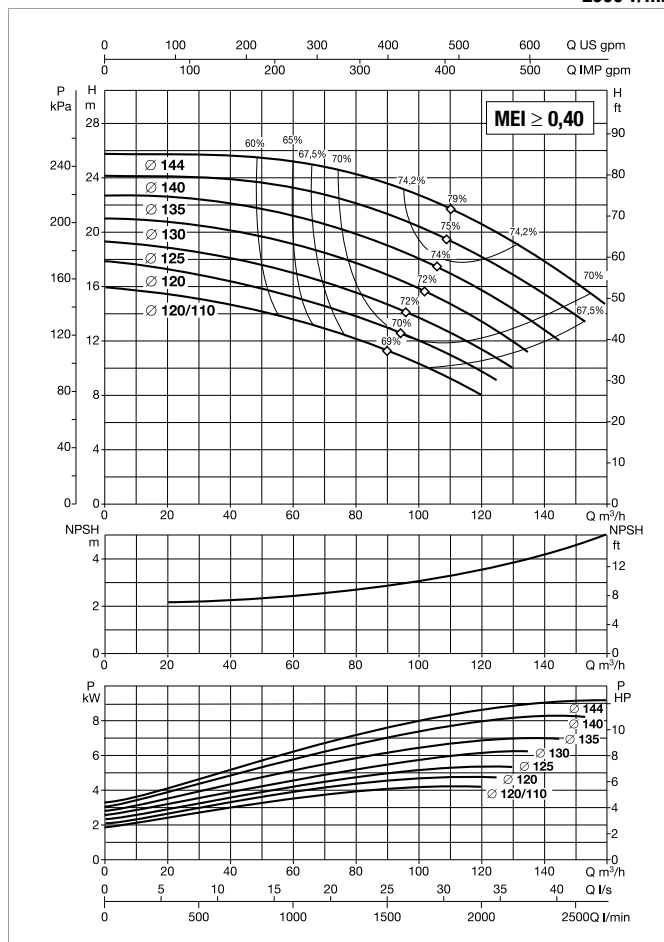
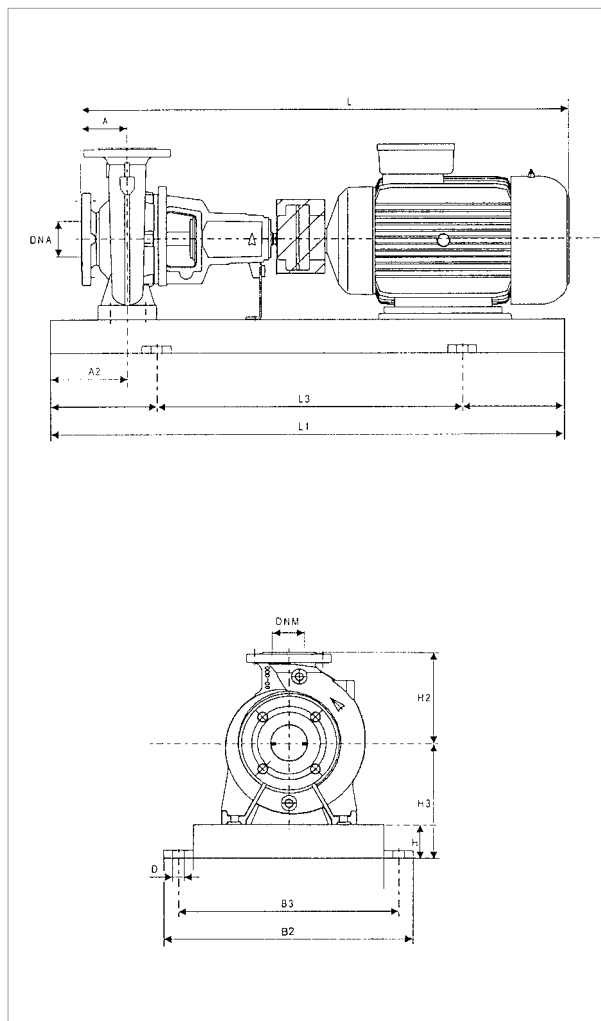
Dimension and electrical data based on sizing definition following the instructions on page 105.



# KDN 65-125 - 2 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 2900 1/min



**For MEI index refer to the hydraulic efficiency section.**  
 The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

| MODEL      | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA          |      | MOTOR TYPE |
|------------|------------|------------|--------------------------|------|------------|
|            |            |            | POWER INPUT 50 Hz        | In A |            |
| KDN 65-125 | 4          | MEC 112M   | 3 x 400 V ~ <sup>1</sup> | 7    | IE3        |
|            | 5,5        | MEC 132S   | 3 x 400 V ~ <sup>1</sup> | 10   | IE3        |
|            | 7,5        | MEC 132S   | 3 x 400 V ~ <sup>1</sup> | 13,1 | IE3        |
|            | 11         | MEC 160M   | 3 x 400 V ~ <sup>1</sup> | 19,7 | IE3        |
|            | 15         | MEC 160M   | 3 x 400 V ~ <sup>1</sup> | 26,7 | IE3        |

<sup>1</sup> Star start-up possible (Δ)

| MODEL      | POWER (kW) | UNIT DIMENSIONS (mm) |    |     |    |     |      |     |     |     |    | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |           | SPACER COUPLING |           |
|------------|------------|----------------------|----|-----|----|-----|------|-----|-----|-----|----|------------------------|-----|-------------------|-----------|-----------------|-----------|
|            |            | A                    | A2 | H2  | H  | H3  | L1   | L3  | B2  | B3  | D  | DNA                    | DNM | L                 | WEIGHT Kg | L               | WEIGHT Kg |
| KDN 65-125 | 4          | 100                  | 60 | 180 | 65 | 225 | 900  | 600 | 390 | 350 | 19 | 80                     | 65  | 853               | 114       | 953             | 119       |
|            | 5,5        | 100                  | 60 | 180 | 80 | 240 | 1000 | 660 | 450 | 400 | 24 | 80                     | 65  | 910               | 124       | 1010            | 129       |
|            | 7,5        | 100                  | 60 | 180 | 80 | 240 | 1000 | 660 | 450 | 400 | 24 | 80                     | 65  | 930               | 120       | 1030            | 125       |
|            | 11         | 100                  | 60 | 180 | 80 | 240 | 1120 | 740 | 490 | 440 | 24 | 80                     | 65  | 1073              | 152       | 1173            | 157       |
|            | 15         | 100                  | 60 | 180 | 80 | 240 | 1120 | 740 | 490 | 440 | 24 | 80                     | 65  | 1073              | 153       | 1173            | 158       |

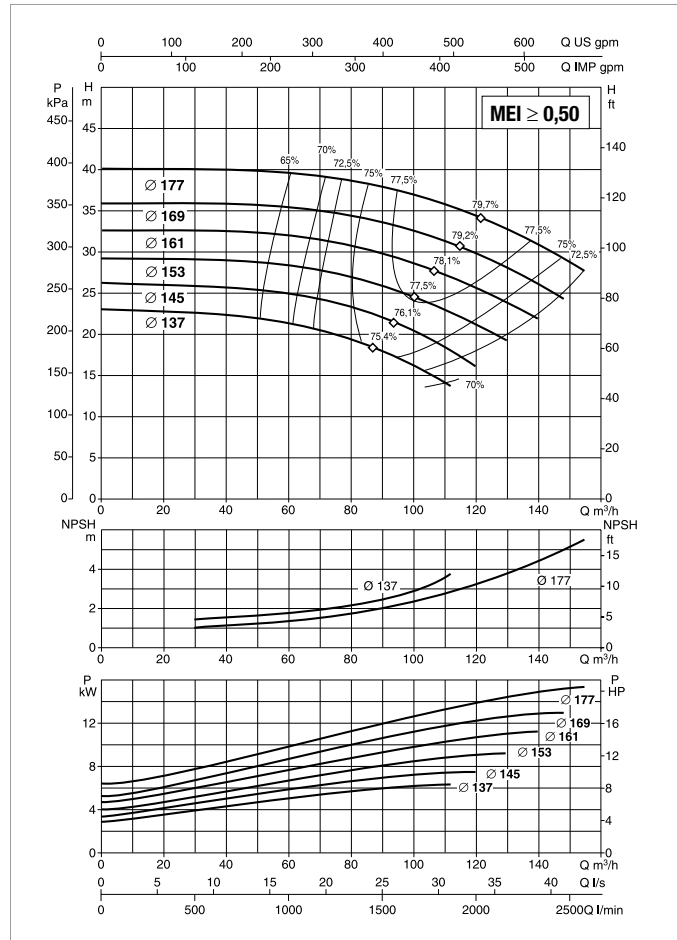
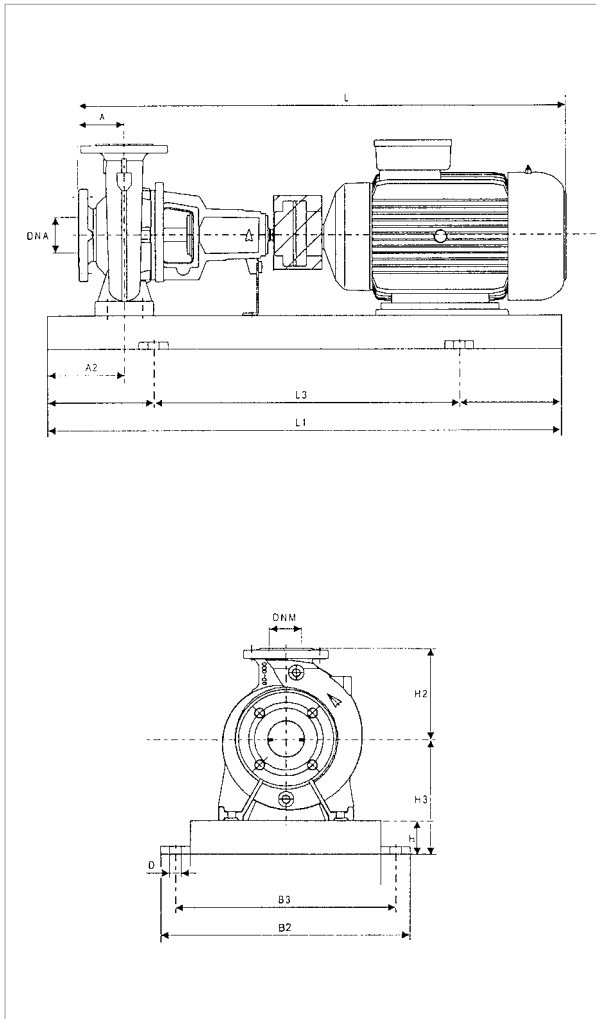
Dimension and electrical data based on sizing definition following the instructions on page 105.



# KDN 65-160 - 2 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 2900 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

| MODEL      | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA          |      | MOTOR TYPE |
|------------|------------|------------|--------------------------|------|------------|
|            |            |            | POWER INPUT 50 Hz        | In A |            |
| KDN 65-160 | 5,5        | MEC 132S   | 3 x 400 V ~ <sup>1</sup> | 10   | IE3        |
|            | 7,5        | MEC 132S   | 3 x 400 V ~ <sup>1</sup> | 13,1 | IE3        |
|            | 11         | MEC 160M   | 3 x 400 V ~ <sup>1</sup> | 19,7 | IE3        |
|            | 15         | MEC 160M   | 3 x 400 V ~ <sup>1</sup> | 26,7 | IE3        |
|            | 18,5       | MEC 160L   | 3 x 400 V ~ <sup>1</sup> | 33   | IE3        |
|            | 22         | MEC 180M   | 3 x 400 V ~ <sup>1</sup> | 38,1 | IE3        |

<sup>1</sup> Star start-up possible (Δ)

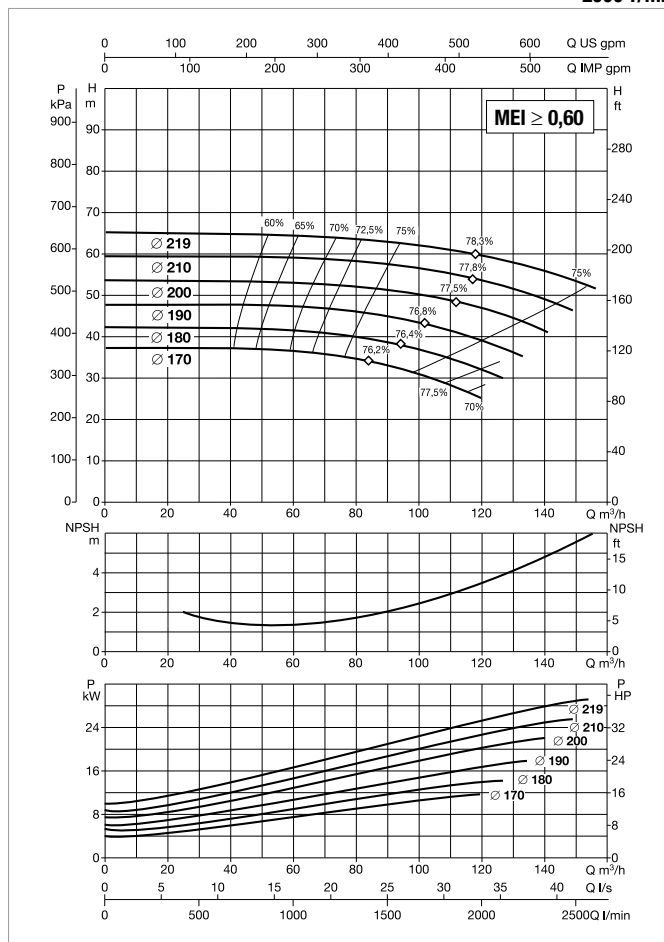
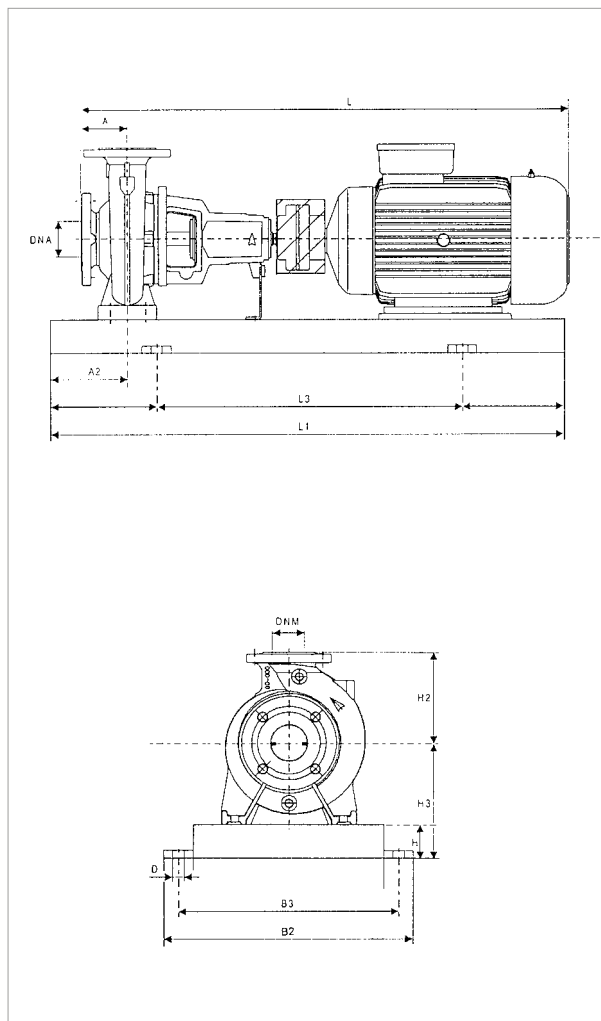
| MODEL      | POWER (kW) | UNIT DIMENSIONS (mm) |    |     |    |     |      |     |     |     |    | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |           | SPACER COUPLING |           |
|------------|------------|----------------------|----|-----|----|-----|------|-----|-----|-----|----|------------------------|-----|-------------------|-----------|-----------------|-----------|
|            |            | A                    | A2 | H2  | H  | H3  | L1   | L3  | B2  | B3  | D  | DNA                    | DNM | L                 | WEIGHT Kg | L               | WEIGHT Kg |
| KDN 65-160 | 5,5        | 100                  | 60 | 200 | 80 | 240 | 1000 | 660 | 450 | 400 | 24 | 80                     | 65  | 910               | 130       | 1010            | 135       |
|            | 7,5        | 100                  | 60 | 200 | 80 | 240 | 1000 | 660 | 450 | 400 | 24 | 80                     | 65  | 930               | 147       | 1030            | 152       |
|            | 11         | 100                  | 60 | 200 | 80 | 240 | 1120 | 740 | 490 | 440 | 24 | 80                     | 65  | 1073              | 160       | 1173            | 165       |
|            | 15         | 100                  | 60 | 200 | 80 | 240 | 1120 | 740 | 490 | 440 | 24 | 80                     | 65  | 1073              | 193       | 1173            | 198       |
|            | 18,5       | 100                  | 60 | 200 | 80 | 240 | 1120 | 740 | 490 | 440 | 24 | 80                     | 65  | 1117              | 188       | 1217            | 193       |
|            | 22         | 100                  | 60 | 200 | 80 | 260 | 1120 | 740 | 490 | 440 | 24 | 80                     | 65  | 1152              | 178       | 1252            | 183       |

Dimension and electrical data based on sizing definition following the instructions on page 105.

# KDN 65-200 - 2 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 2900 1/min



**For MEI index refer to the hydraulic efficiency section.**

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

| MODEL      | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA          |      | MOTOR TYPE |
|------------|------------|------------|--------------------------|------|------------|
|            |            |            | POWER INPUT 50 Hz        | In A |            |
| KDN 65-200 | 11         | MEC 160M   | 3 x 400 V ~ <sup>1</sup> | 19,7 | IE3        |
|            | 15         | MEC 160M   | 3 x 400 V ~ <sup>1</sup> | 26,7 | IE3        |
|            | 18,5       | MEC 160L   | 3 x 400 V ~ <sup>1</sup> | 33   | IE3        |
|            | 22         | MEC 180M   | 3 x 400 V ~ <sup>1</sup> | 38,1 | IE3        |
|            | 30         | MEC 200L   | 3 x 400 V ~ <sup>1</sup> | 52,1 | IE3        |
|            | 37         | MEC 200L   | 3 x 400 V ~ <sup>1</sup> | 62,6 | IE3        |

<sup>1</sup> Star start-up possible (Δ)

| MODEL      | POWER (kW) | UNIT DIMENSIONS (mm) |    |     |     |     |      |     |     |     |    | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |           | SPACER COUPLING |           |
|------------|------------|----------------------|----|-----|-----|-----|------|-----|-----|-----|----|------------------------|-----|-------------------|-----------|-----------------|-----------|
|            |            | A                    | A2 | H2  | H   | H3  | L1   | L3  | B2  | B3  | D  | DNA                    | DNM | L                 | WEIGHT Kg | L               | WEIGHT Kg |
| KDN 65-200 | 11         | 100                  | 75 | 225 | 80  | 260 | 1250 | 840 | 540 | 490 | 24 | 80                     | 65  | 1073              | 244       | 1213            | 249       |
|            | 15         | 100                  | 75 | 225 | 80  | 260 | 1250 | 840 | 540 | 490 | 24 | 80                     | 65  | 1073              | 252       | 1213            | 257       |
|            | 18,5       | 100                  | 75 | 225 | 80  | 260 | 1250 | 840 | 540 | 490 | 24 | 80                     | 65  | 1117              | 257       | 1257            | 262       |
|            | 22         | 100                  | 75 | 225 | 80  | 260 | 1250 | 840 | 540 | 490 | 24 | 80                     | 65  | 1152              | 290       | 1292            | 295       |
|            | 30         | 100                  | 75 | 225 | 100 | 300 | 1400 | 940 | 610 | 550 | 28 | 80                     | 65  | 1234              | 418       | 1374            | 423       |
|            | 37         | 100                  | 75 | 225 | 100 | 300 | 1400 | 940 | 610 | 550 | 28 | 80                     | 65  | 1234              | 431       | 1374            | 436       |

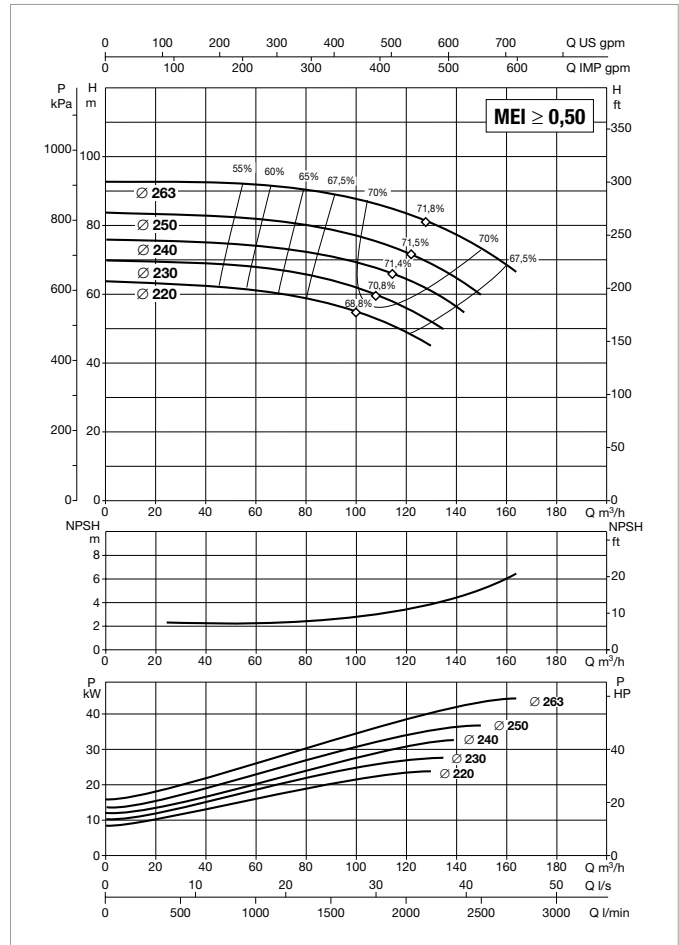
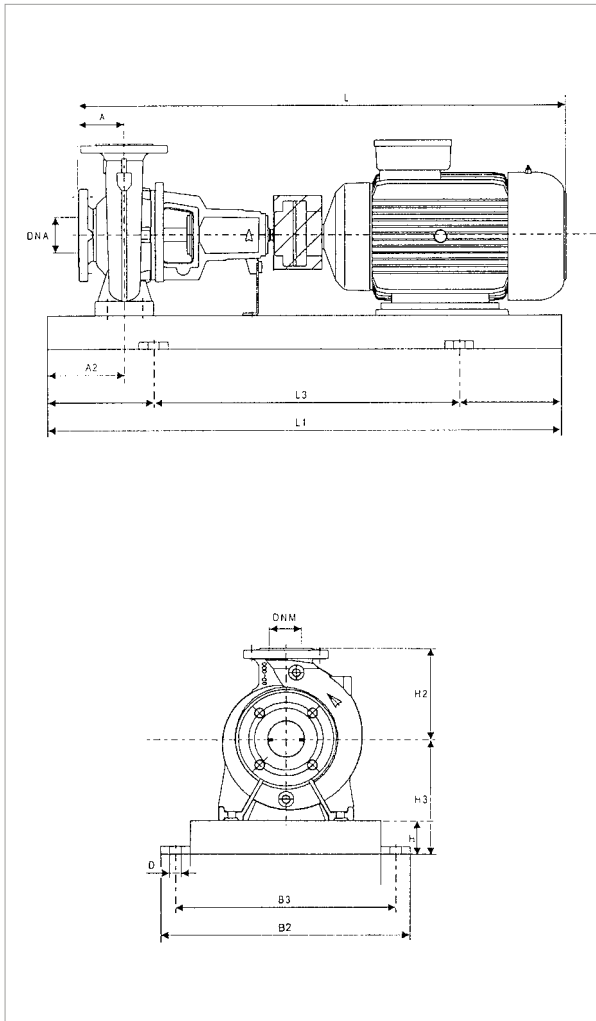
Dimension and electrical data based on sizing definition following the instructions on page 105.



# KDN 65-250 - 2 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 2900 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

| MODEL      | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA   |      | MOTOR TYPE |
|------------|------------|------------|-------------------|------|------------|
|            |            |            | POWER INPUT 50 Hz | In A |            |
| KDN 65-250 | 22         | MEC 180M   | 3 x 400 V ~ 1     | 38,1 | IE3        |
|            | 30         | MEC 200L   | 3 x 400 V ~ 1     | 52,1 | IE3        |
|            | 37         | MEC 200L   | 3 x 400 V ~ 1     | 62,6 | IE3        |
|            | 45         | MEC 225M   | 3 x 400 V ~ 1     | 78,4 | IE3        |
|            | 55         | MEC 250M   | 3 x 400 V ~ 1     | 94,6 | IE3        |

\* Star start-up possible (A)

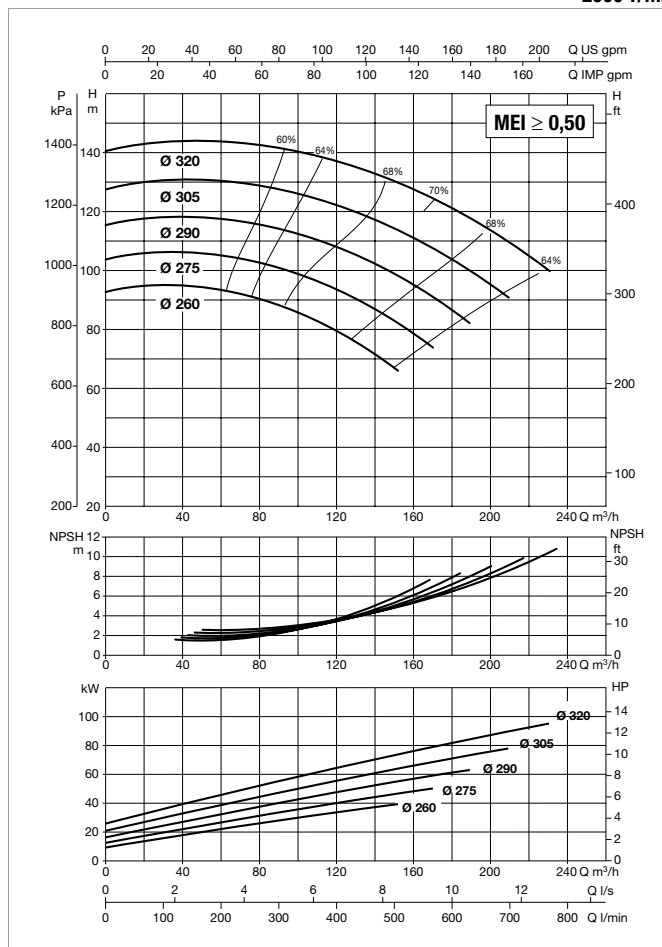
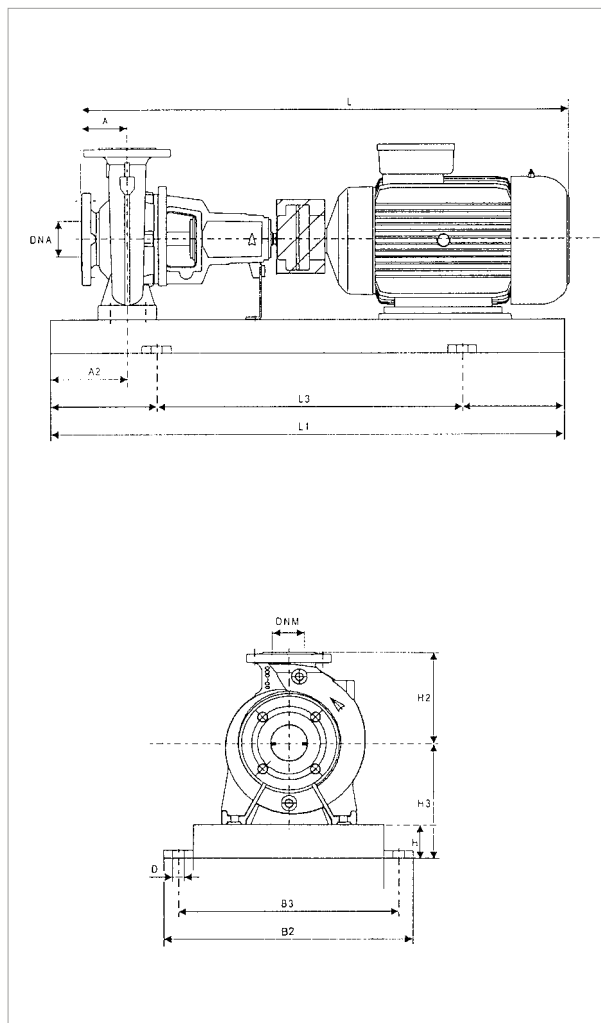
| MODEL      | POWER (kW) | UNIT DIMENSIONS (mm) |    |     |    |     |      |      |     |     |    | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |           | SPACER COUPLING |           |
|------------|------------|----------------------|----|-----|----|-----|------|------|-----|-----|----|------------------------|-----|-------------------|-----------|-----------------|-----------|
|            |            | A                    | A2 | H2  | H  | H3  | L1   | L3   | B2  | B3  | D  | DNA                    | DNM | L                 | WEIGHT Kg | L               | WEIGHT Kg |
| KDN 65-250 | 22         | 100                  | 90 | 250 | 80 | 280 | 1250 | 840  | 540 | 490 | 24 | 80                     | 65  | 1262              | 277       | 1402            | 285       |
|            | 30         | 100                  | 90 | 250 | 80 | 300 | 1400 | 940  | 610 | 550 | 28 | 80                     | 65  | 1344              | 472       | 1484            | 480       |
|            | 37         | 100                  | 90 | 250 | 80 | 300 | 1400 | 940  | 610 | 550 | 28 | 80                     | 65  | 1344              | 502       | 1484            | 510       |
|            | 45         | 100                  | 90 | 250 | 80 | 325 | 1400 | 940  | 610 | 550 | 28 | 80                     | 65  | 1380              | 589       | 1520            | 597       |
|            | 55         | 100                  | 90 | 250 | 80 | 350 | 1600 | 1060 | 660 | 600 | 24 | 80                     | 65  | 1493              | 717       | 1633            | 725       |

Dimension and electrical data based on sizing definition following the instructions on page 105.

# KDN 65-315 - 2 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 2900 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

| MODEL      | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA          |      | MOTOR TYPE |
|------------|------------|------------|--------------------------|------|------------|
|            |            |            | POWER INPUT 50 Hz        | In A |            |
| KDN 65-315 | 45         | MEC 225M   | 3 x 400 V ~ <sup>1</sup> | 78,4 | IE3        |
|            | 55         | MEC 250M   | 3 x 400 V ~ <sup>1</sup> | 94,6 | IE3        |
|            | 75         | MEC 280S   | 3 x 400 V ~ <sup>1</sup> | 127  | IE3        |
|            | 90         | MEC 280M   | 3 x 400 V ~ <sup>1</sup> | 153  | IE3        |
|            | 110        | MEC 315S   | 3 x 400 V ~ <sup>1</sup> | 185  | IE3        |

<sup>1</sup> Star start-up possible (Δ)

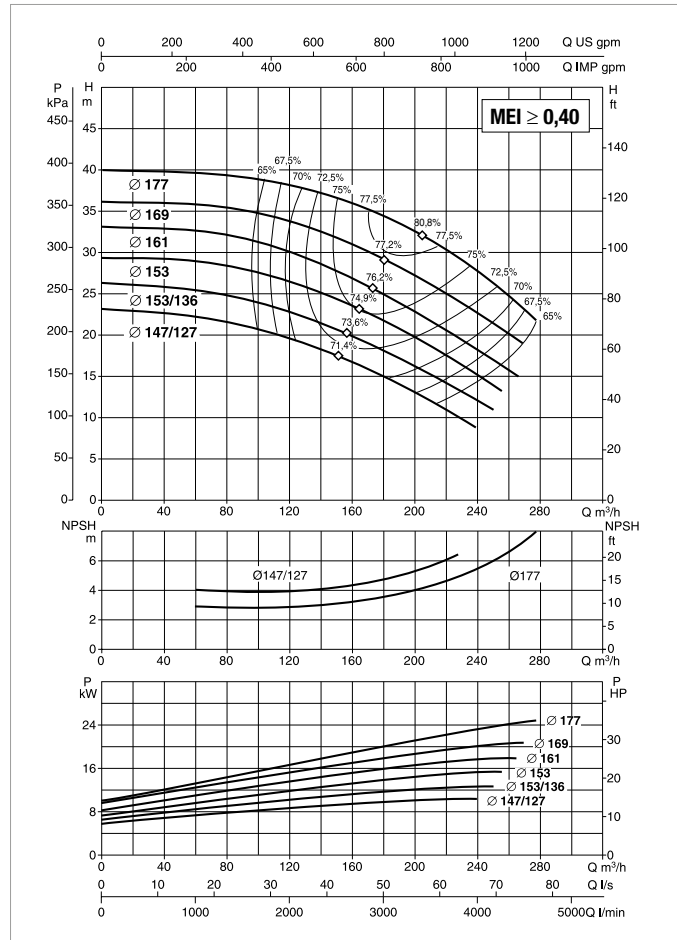
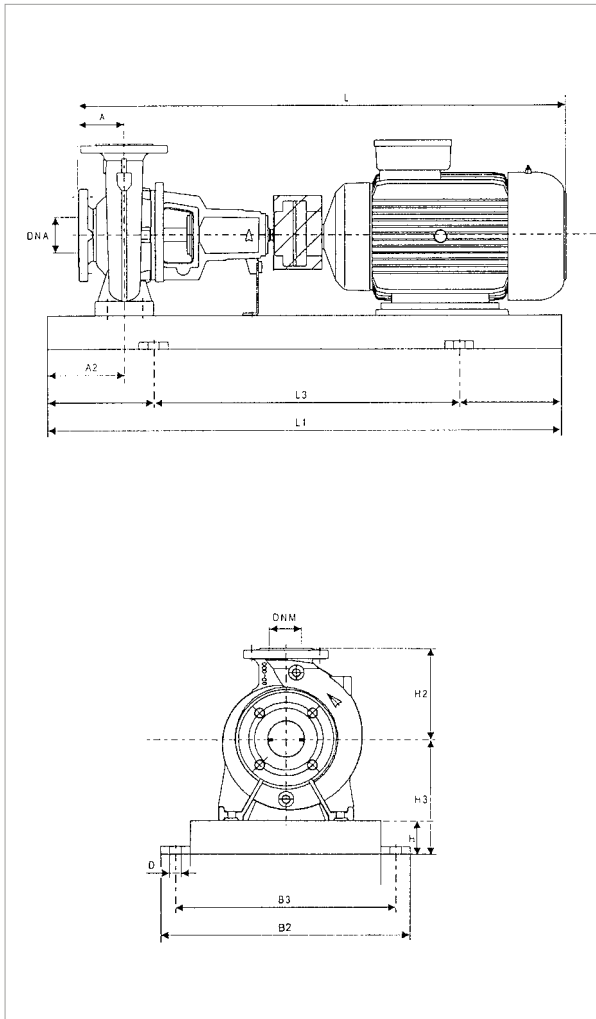
| MODEL      | POWER (kW) | UNIT DIMENSIONS (mm) |    |     |     |     |      |      |     |     |    | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |           | SPACER COUPLING |           |
|------------|------------|----------------------|----|-----|-----|-----|------|------|-----|-----|----|------------------------|-----|-------------------|-----------|-----------------|-----------|
|            |            | A                    | A2 | H2  | H   | H3  | L1   | L3   | B2  | B3  | D  | DNA                    | DNM | L                 | WEIGHT Kg | L               | WEIGHT Kg |
| KDN 65-315 | 45         | 125                  | 90 | 280 | 100 | 325 | 1600 | 1060 | 660 | 600 | 28 | 80                     | 65  | 1405              | 734       | 1545            | 742       |
|            | 55         | 125                  | 90 | 280 | 100 | 325 | 1600 | 1060 | 660 | 600 | 28 | 80                     | 65  | 1518              | 740       | 1658            | 748       |
|            | 75         | 125                  | 90 | 280 | 100 | 325 | 1800 | 1200 | 730 | 670 | 28 | 80                     | 65  | 1584              | 849       | 1724            | 857       |
|            | 90         | 125                  | 90 | 280 | 100 | 325 | 1800 | 1200 | 730 | 670 | 28 | 80                     | 65  | 1632              | 651       | 1772            | 659       |
|            | 110        | 125                  | 90 | 280 | 100 | 325 | 2000 | 1340 | 910 | 830 | 28 | 80                     | 65  | 1955              | 1219      | 2095            | 1227      |

Dimension and electrical data based on sizing definition following the instructions on page 105.

# KDN 80-160 - 2 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 2900 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

| MODEL      | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA   |      | MOTOR TYPE |
|------------|------------|------------|-------------------|------|------------|
|            |            |            | POWER INPUT 50 Hz | In A |            |
| KDN 80-160 | 7,5        | MEC 132S   | 3 x 400 V ~ 1     | 13,1 | IE3        |
|            | 11         | MEC 160M   | 3 x 400 V ~ 1     | 19,7 | IE3        |
|            | 15         | MEC 160M   | 3 x 400 V ~ 1     | 26,7 | IE3        |
|            | 18,5       | MEC 160L   | 3 x 400 V ~ 1     | 33   | IE3        |
|            | 22         | MEC 180M   | 3 x 400 V ~ 1     | 38,1 | IE3        |
|            | 30         | MEC 200L   | 3 x 400 V ~ 1     | 52,1 | IE3        |
|            | 37         | MEC 200L   | 3 x 400 V ~ 1     | 62,6 | IE3        |

† Star start-up possible (A)

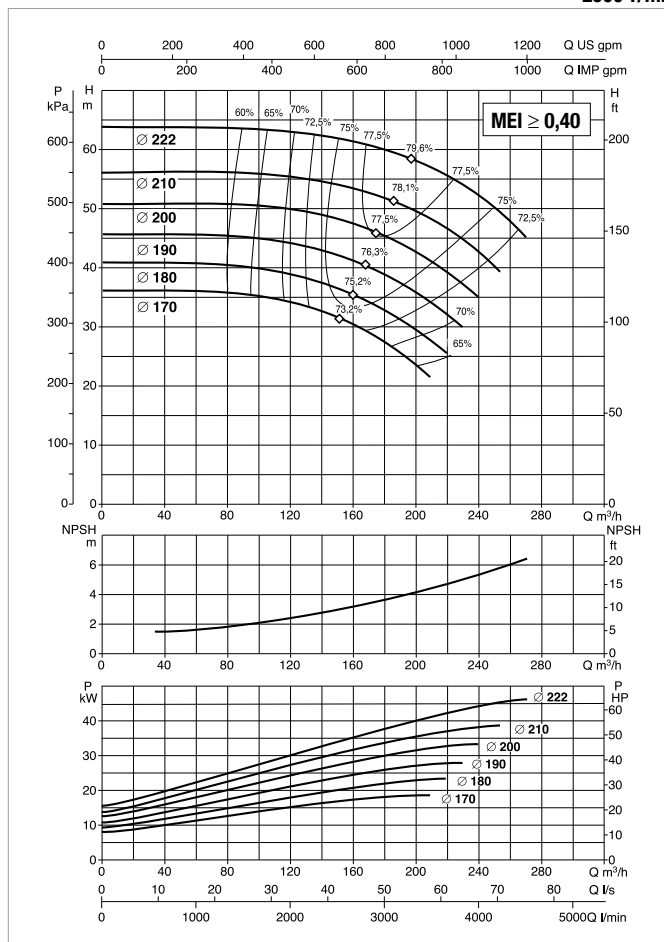
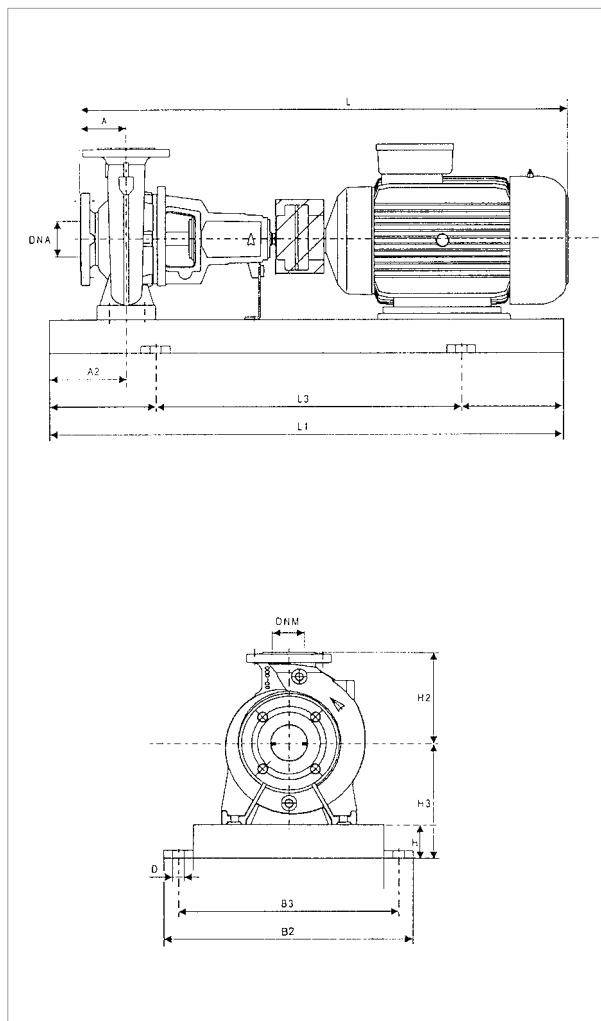
| MODEL      | POWER (kW) | UNIT DIMENSIONS (mm) |    |     |    |     |      |     |     |     |    | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |           | SPACER COUPLING |           |
|------------|------------|----------------------|----|-----|----|-----|------|-----|-----|-----|----|------------------------|-----|-------------------|-----------|-----------------|-----------|
|            |            | A                    | A2 | H2  | H  | H3  | L1   | L3  | B2  | B3  | D  | DNA                    | DNM | L                 | WEIGHT Kg | L               | WEIGHT Kg |
| KDN 80-160 | 7,5        | 125                  | 75 | 225 | 80 | 260 | 1120 | 740 | 490 | 440 | 24 | 100                    | 80  | 955               | 163       | 1095            | 171       |
|            | 11         | 125                  | 75 | 225 | 80 | 260 | 1250 | 840 | 540 | 490 | 24 | 100                    | 80  | 1098              | 275       | 1238            | 283       |
|            | 15         | 125                  | 75 | 225 | 80 | 260 | 1250 | 840 | 540 | 490 | 24 | 100                    | 80  | 1098              | 271       | 1238            | 279       |
|            | 18,5       | 125                  | 75 | 225 | 80 | 260 | 1250 | 840 | 540 | 490 | 24 | 100                    | 80  | 1142              | 266       | 1282            | 274       |
|            | 22         | 125                  | 75 | 225 | 80 | 260 | 1250 | 840 | 540 | 490 | 24 | 100                    | 80  | 1177              | 211       | 1317            | 219       |
|            | 30         | 125                  | 75 | 225 | 80 | 260 | 1400 | 940 | 610 | 550 | 28 | 100                    | 80  | 1259              | 316       | 1399            | 324       |
|            | 37         | 125                  | 75 | 225 | 80 | 260 | 1400 | 940 | 610 | 550 | 28 | 100                    | 80  | 1259              | 408       | 1399            | 416       |

Dimension and electrical data based on sizing definition following the instructions on page 105.

# KDN 80-200 - 2 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 2900 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

| MODEL      | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA          |      | MOTOR TYPE |
|------------|------------|------------|--------------------------|------|------------|
|            |            |            | POWER INPUT 50 Hz        | In A |            |
| KDN 80-200 | 18,5       | MEC 160L   | 3 x 400 V ~ <sup>1</sup> | 33   | IE3        |
|            | 22         | MEC 180M   | 3 x 400 V ~ <sup>1</sup> | 38,1 | IE3        |
|            | 30         | MEC 200L   | 3 x 400 V ~ <sup>1</sup> | 52,1 | IE3        |
|            | 37         | MEC 200L   | 3 x 400 V ~ <sup>1</sup> | 62,6 | IE3        |
|            | 45         | MEC 225M   | 3 x 400 V ~ <sup>1</sup> | 78,4 | IE3        |
|            | 55         | MEC 250M   | 3 x 400 V ~ <sup>1</sup> | 94,6 | IE3        |
|            | 75         | MEC 280S   | 3 x 400 V ~ <sup>1</sup> | 127  | IE3        |

<sup>1</sup> Star start-up possible (A)

| MODEL      | POWER (kW) | UNIT DIMENSIONS (mm) |    |     |     |     |      |      |     |     |    | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |           | SPACER COUPLING |           |
|------------|------------|----------------------|----|-----|-----|-----|------|------|-----|-----|----|------------------------|-----|-------------------|-----------|-----------------|-----------|
|            |            | A                    | A2 | H2  | H   | H3  | L1   | L3   | B2  | B3  | D  | DNA                    | DNM | L                 | WEIGHT Kg | L               | WEIGHT Kg |
| KDN 80-200 | 18,5       | 125                  | 75 | 250 | 80  | 260 | 1250 | 840  | 540 | 490 | 24 | 100                    | 80  | 1252              | 207       | 1392            | 215       |
|            | 22         | 125                  | 75 | 250 | 80  | 260 | 1250 | 840  | 540 | 490 | 24 | 100                    | 80  | 1287              | 233       | 1427            | 241       |
|            | 30         | 125                  | 75 | 250 | 100 | 300 | 1400 | 940  | 610 | 550 | 28 | 100                    | 80  | 1369              | 444       | 1509            | 452       |
|            | 37         | 125                  | 75 | 250 | 100 | 300 | 1400 | 940  | 610 | 550 | 28 | 100                    | 80  | 1369              | 480       | 1509            | 488       |
|            | 45         | 125                  | 75 | 250 | 100 | 325 | 1400 | 940  | 610 | 550 | 28 | 100                    | 80  | 1405              | 587       | 1545            | 595       |
|            | 55         | 125                  | 75 | 250 | 100 | 350 | 1600 | 1060 | 660 | 600 | 28 | 100                    | 80  | 1518              | 539       | 1658            | 547       |
|            | 75         | 125                  | 75 | 250 | 100 | 380 | 1800 | 1200 | 730 | 670 | 28 | 100                    | 80  | 1584              | 609       | 1724            | 617       |

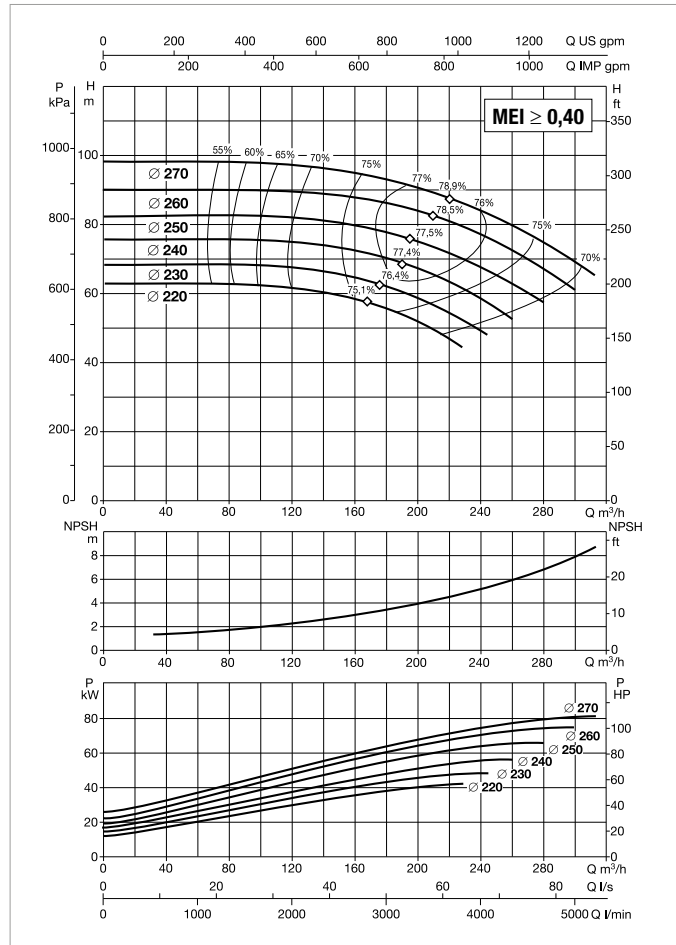
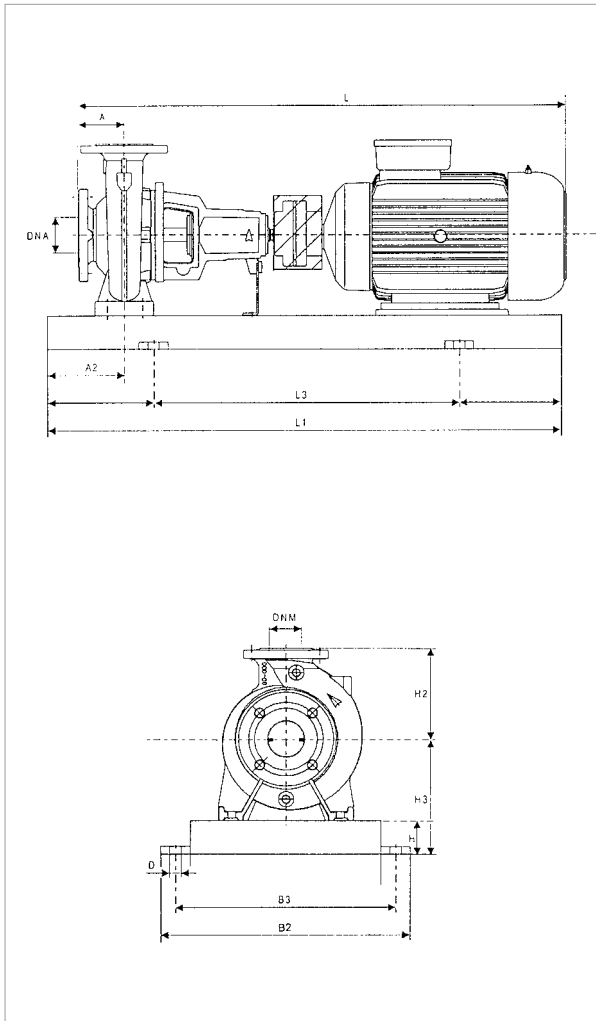
Dimension and electrical data based on sizing definition following the instructions on page 105.



# KDN 80-250 - 2 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 2900 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

| MODEL      | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA          |      | MOTOR TYPE |
|------------|------------|------------|--------------------------|------|------------|
|            |            |            | POWER INPUT 50 Hz        | In A |            |
| KDN 80-250 | 37         | MEC 200L   | 3 x 400 V ~ <sup>1</sup> | 62,6 | IE3        |
|            | 45         | MEC 225M   | 3 x 400 V ~ <sup>1</sup> | 78,4 | IE3        |
|            | 55         | MEC 250M   | 3 x 400 V ~ <sup>1</sup> | 94,6 | IE3        |
|            | 75         | MEC 280S   | 3 x 400 V ~ <sup>1</sup> | 127  | IE3        |
|            | 90         | MEC 280M   | 3 x 400 V ~ <sup>1</sup> | 153  | IE3        |

<sup>1</sup> Star start-up possible (Δ)

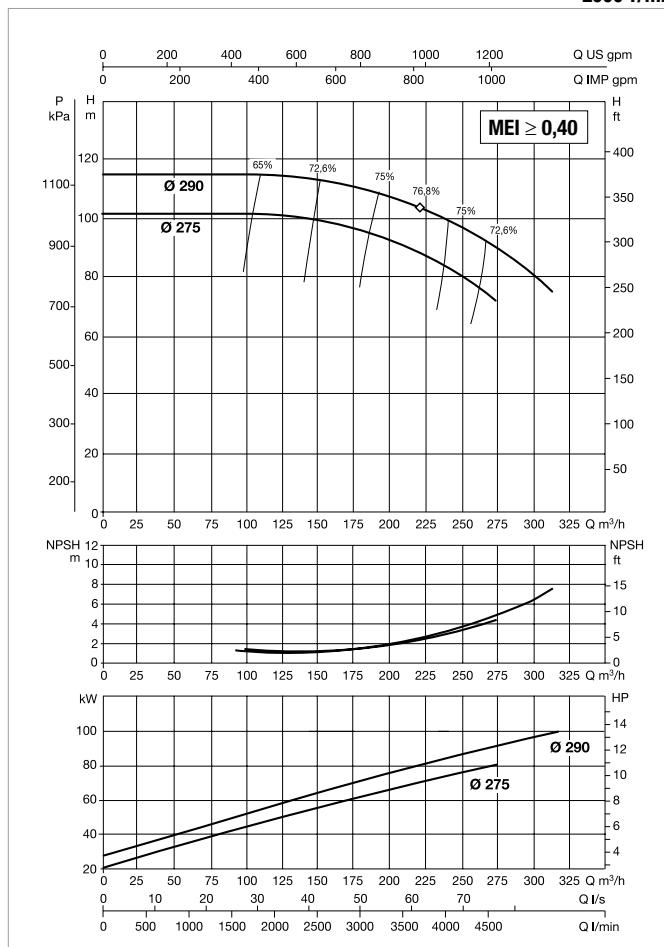
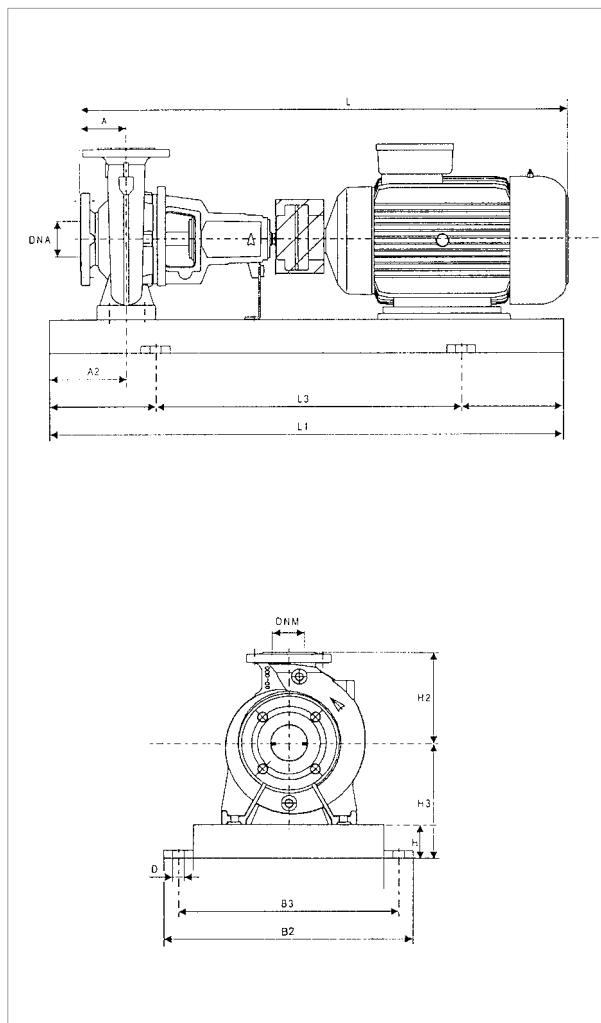
| MODEL      | POWER (kW) | UNIT DIMENSIONS (mm) |    |     |     |     |      |      |     |     |    | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |           | SPACER COUPLING |           |
|------------|------------|----------------------|----|-----|-----|-----|------|------|-----|-----|----|------------------------|-----|-------------------|-----------|-----------------|-----------|
|            |            | A                    | A2 | H2  | H   | H3  | L1   | L3   | B2  | B3  | D  | DNA                    | DNM | L                 | WEIGHT Kg | L               | WEIGHT Kg |
| KDN 80-250 | 37         | 125                  | 90 | 280 | 100 | 300 | 1400 | 940  | 610 | 550 | 28 | 100                    | 80  | 1369              | 496       | 1509            | 504       |
|            | 45         | 125                  | 90 | 280 | 100 | 300 | 1400 | 940  | 610 | 550 | 28 | 100                    | 80  | 1405              | 584       | 1545            | 592       |
|            | 55         | 125                  | 90 | 280 | 100 | 300 | 1600 | 1060 | 660 | 600 | 28 | 100                    | 80  | 1518              | 695       | 1658            | 703       |
|            | 75         | 125                  | 90 | 280 | 100 | 300 | 1800 | 1200 | 730 | 670 | 28 | 100                    | 80  | 1584              | 641       | 1724            | 649       |
|            | 90         | 125                  | 90 | 280 | 100 | 300 | 1800 | 1200 | 730 | 670 | 28 | 100                    | 80  | 1632              | 891       | 1772            | 899       |

Dimension and electrical data based on sizing definition following the instructions on page 105.

# KDN 80-315 - 2 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 2900 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

| MODEL      | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA          |      | MOTOR TYPE |
|------------|------------|------------|--------------------------|------|------------|
|            |            |            | POWER INPUT 50 Hz        | In A |            |
| KDN 80-315 | 55         | MEC 250M   | 3 x 400 V ~ <sup>1</sup> | 94,6 | IE3        |
|            | 75         | MEC 280S   | 3 x 400 V ~ <sup>1</sup> | 127  | IE3        |
|            | 90         | MEC 280M   | 3 x 400 V ~ <sup>1</sup> | 153  | IE3        |
|            | 110        | MEC 315S   | 3 x 400 V ~ <sup>1</sup> | 185  | IE3        |

<sup>1</sup> Star start-up possible (Δ)

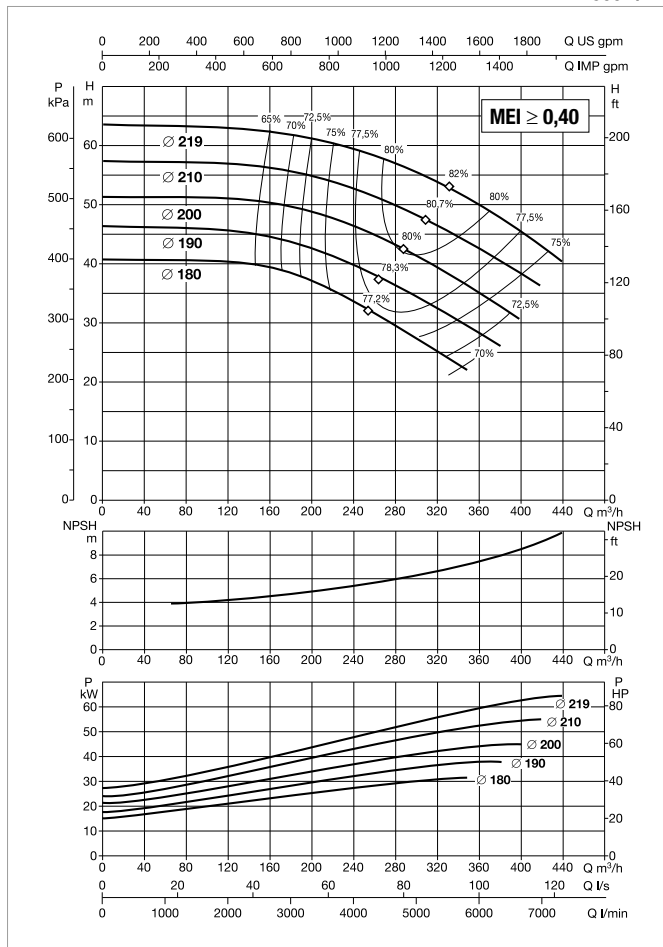
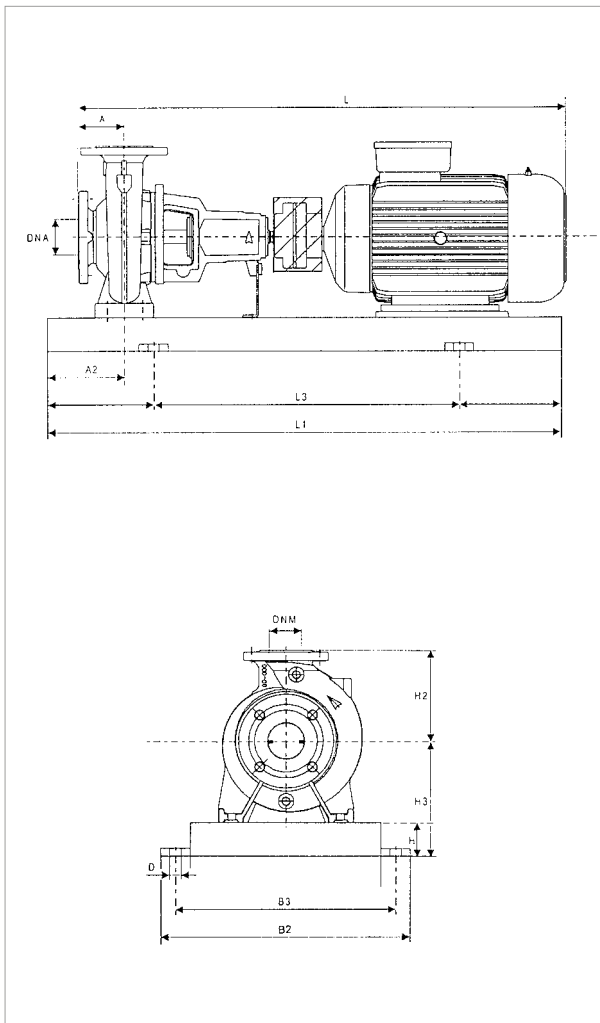
| MODEL      | POWER (kW) | UNIT DIMENSIONS (mm) |    |     |     |     |      |      |     |     |    | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |           | SPACER COUPLING |           |
|------------|------------|----------------------|----|-----|-----|-----|------|------|-----|-----|----|------------------------|-----|-------------------|-----------|-----------------|-----------|
|            |            | A                    | A2 | H2  | H   | H3  | L1   | L3   | B2  | B3  | D  | DNA                    | DNM | L                 | WEIGHT Kg | L               | WEIGHT Kg |
| KDN 80-315 | 55         | 125                  | 90 | 315 | 100 | 350 | 1600 | 1060 | 660 | 600 | 28 | 100                    | 80  | 1518              | 720       | 1658            | 728       |
|            | 75         | 125                  | 90 | 315 | 100 | 350 | 1800 | 1200 | 730 | 670 | 28 | 100                    | 80  | 1584              | 840       | 1724            | 848       |
|            | 90         | 125                  | 90 | 315 | 100 | 350 | 1800 | 1200 | 730 | 670 | 28 | 100                    | 80  | 1632              | 663       | 1772            | 671       |
|            | 110        | 125                  | 90 | 315 | 120 | 370 | 2000 | 1340 | 910 | 830 | 28 | 100                    | 80  | 1955              | 1231      | 2095            | 1239      |

Dimension and electrical data based on sizing definition following the instructions on page 105.

# KDN 100-200 - 2 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 2900 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

| MODEL       | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA          |      | MOTOR TYPE |
|-------------|------------|------------|--------------------------|------|------------|
|             |            |            | POWER INPUT 50 Hz        | In A |            |
| KDN 100-200 | 30         | MEC 200L   | 3 x 400 V ~ <sup>1</sup> | 52,1 | IE3        |
|             | 37         | MEC 200L   | 3 x 400 V ~ <sup>1</sup> | 62,6 | IE3        |
|             | 45         | MEC 225M   | 3 x 400 V ~ <sup>1</sup> | 78,4 | IE3        |
|             | 55         | MEC 250M   | 3 x 400 V ~ <sup>1</sup> | 94,6 | IE3        |
|             | 75         | MEC 280S   | 3 x 400 V ~ <sup>1</sup> | 127  | IE3        |
|             | 90         | MEC 280M   | 3 x 400 V ~ <sup>1</sup> | 153  | IE3        |

<sup>1</sup> Star start-up possible (A)

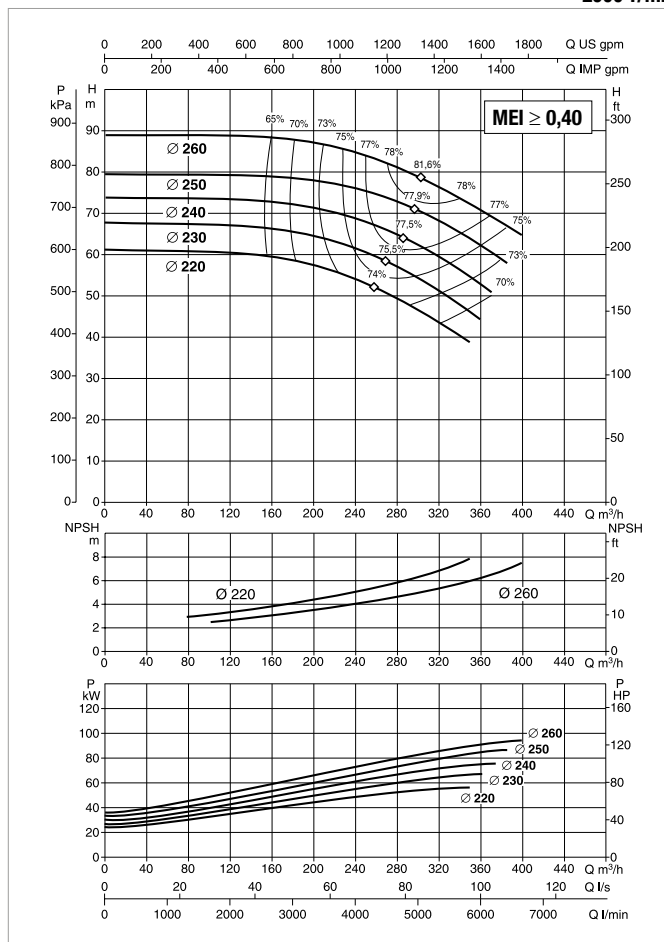
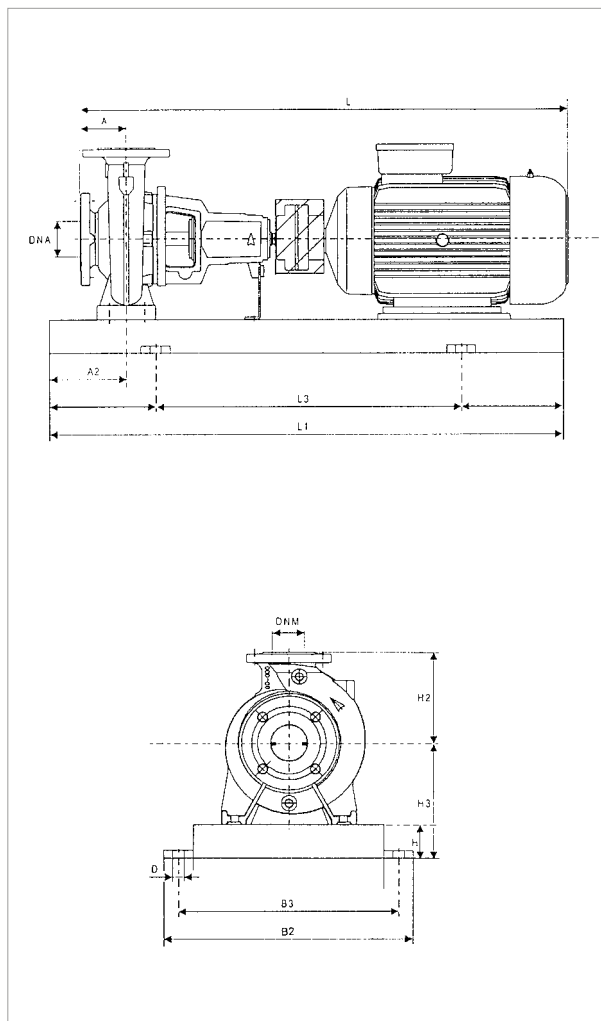
| MODEL       | POWER (kW) | UNIT DIMENSIONS (mm) |    |     |     |     |      |      |     |     |    | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |           | SPACER COUPLING |           |
|-------------|------------|----------------------|----|-----|-----|-----|------|------|-----|-----|----|------------------------|-----|-------------------|-----------|-----------------|-----------|
|             |            | A                    | A2 | H2  | H   | H3  | L1   | L3   | B2  | B3  | D  | DNA                    | DNM | L                 | WEIGHT Kg | L               | WEIGHT Kg |
| KDN 100-200 | 30         | 125                  | 90 | 280 | 100 | 300 | 1400 | 940  | 610 | 550 | 28 | 125                    | 100 | 1369              | 466       | 1509            | 474       |
|             | 37         | 125                  | 90 | 280 | 100 | 300 | 1400 | 940  | 610 | 550 | 28 | 125                    | 100 | 1369              | 427       | 1509            | 435       |
|             | 45         | 125                  | 90 | 280 | 100 | 325 | 1400 | 940  | 610 | 550 | 28 | 125                    | 100 | 1405              | 588       | 1545            | 596       |
|             | 55         | 125                  | 90 | 280 | 100 | 350 | 1600 | 1060 | 660 | 600 | 28 | 125                    | 100 | 1518              | 668       | 1658            | 676       |
|             | 75         | 125                  | 90 | 280 | 100 | 380 | 1800 | 1200 | 730 | 670 | 28 | 125                    | 100 | 1584              | 621       | 1724            | 629       |
|             | 90         | 125                  | 90 | 280 | 100 | 380 | 1800 | 1200 | 730 | 670 | 28 | 125                    | 100 | 1632              | 603       | 1772            | 611       |

Dimension and electrical data based on sizing definition following the instructions on page 105.

# KDN 100-250 - 2 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 2900 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

| MODEL       | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA          |      | MOTOR TYPE |
|-------------|------------|------------|--------------------------|------|------------|
|             |            |            | POWER INPUT 50 Hz        | In A |            |
| KDN 100-250 | 45         | MEC 225M   | 3 x 400 V ~ <sup>1</sup> | 78,4 | IE3        |
|             | 55         | MEC 250M   | 3 x 400 V ~ <sup>1</sup> | 94,6 | IE3        |
|             | 75         | MEC 280S   | 3 x 400 V ~ <sup>1</sup> | 127  | IE3        |
|             | 90         | MEC 280M   | 3 x 400 V ~ <sup>1</sup> | 153  | IE3        |
|             | 110        | MEC 315S   | 3 x 400 V ~ <sup>1</sup> | 185  | IE3        |

<sup>1</sup> Star start-up possible (Δ)

| MODEL       | POWER (kW) | UNIT DIMENSIONS (mm) |    |     |     |     |      |      |     |     |    | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |           | SPACER COUPLING |              |
|-------------|------------|----------------------|----|-----|-----|-----|------|------|-----|-----|----|------------------------|-----|-------------------|-----------|-----------------|--------------|
|             |            | A                    | A2 | H2  | H   | H3  | L1   | L3   | B2  | B3  | D  | DNA                    | DNM | L                 | WEIGHT Kg | L               | WEIGHT Kg    |
| KDN 100-250 | 45         | 125                  | 90 | 280 | 100 | 325 | 1600 | 1060 | 660 | 600 | 28 | 125                    | 100 | 1405              | 735       | 1545            | 743          |
|             | 55         | 125                  | 90 | 280 | 100 | 325 | 1600 | 1060 | 600 | 600 | 28 | 125                    | 100 | 1518              | 741       | 1658            | 749          |
|             | 75         | 125                  | 90 | 280 | 100 | 380 | 1800 | 1200 | 730 | 670 | 28 | 125                    | 100 | 1584              | 850       | 1724            | 858          |
|             | 90         | 125                  | 90 | 280 | 100 | 380 | 1800 | 1200 | 730 | 670 | 28 | 125                    | 100 | 1632              | 652       | 1772            | 660          |
|             | 110        | 125                  | 90 | 280 | 100 | 435 | 2000 | 1340 | 910 | 830 | 28 | 125                    | 100 | 1955              | 1220      | 2095            | 1128<br>1228 |

Dimension and electrical data based on sizing definition following the instructions on page 105.

# KDN - 2 POLES

## STANDARDISED PUMPS

### IE3 STANDARD MOTOR ELECTRIC DATA

=2900 1/min

| MOTOR TYPE | P2 NOMINAL kW | SPEED rpm | YIELD % | POWER FACTOR COS $\phi$ | POWER INPUT 50 Hz | In A |        |        | Start-up current Ia/In | Start-up torque Ma/Mn | Maximum torque M/k/Mn | POLES |
|------------|---------------|-----------|---------|-------------------------|-------------------|------|--------|--------|------------------------|-----------------------|-----------------------|-------|
|            |               |           |         |                         |                   | 230V | 400V   | 690V   |                        |                       |                       |       |
| MEC 71     | 0,25          | 2790      | 69,81   | 0,778                   | 3x230/400         | 1,16 | 0,67   |        | 5,06                   | 2,90                  | 3,01                  | 2     |
| MEC 71     | 0,37          | 2820      | 72,79   | 0,783                   | 3x230/400         | 1,61 | 0,93   |        | 5,40                   | 2,69                  | 2,99                  | 2     |
| MEC 80     | 0,55          | 2810      | 76,97   | 0,800                   | 3x230/400         | 2,23 | 1,29   |        | 6,41                   | 3,43                  | 3,13                  | 2     |
| MEC 80     | 0,75          | 2910      | 82,00   | 0,780                   | 3x230/400         | 2,94 | 1,70   |        | 8,90                   | 4,70                  | 4,80                  | 2     |
| MEC 80     | 1,1           | 2870      | 82,70   | 0,760                   | 3x230/400         | 4,16 | 2,40   |        | 9,30                   | 5,00                  | 5,30                  | 2     |
| MEC 90S    | 1,5           | 2875      | 84,20   | 0,850                   | 3x230/400         | 5,20 | 3,00   |        | 8,40                   | 3,60                  | 3,80                  | 2     |
| MEC 90L    | 2,2           | 2880      | 86,50   | 0,820                   | 3x230/400         | 7,97 | 4,60   |        | 9,20                   | 4,00                  | 4,20                  | 2     |
| MEC 100L   | 3             | 2900      | 87,10   | 0,890                   | 3x400 $\Delta$    |      | 5,60   | 3,23   | 8,80                   | 5,50                  | 4,50                  | 2     |
| MEC 112M   | 4             | 2910      | 88,10   | 0,930                   | 3x400 $\Delta$    |      | 7,00   | 4,04   | 9,60                   | 3,60                  | 4,00                  | 2     |
| MEC 132S   | 5,5           | 2920      | 89,20   | 0,900                   | 3x400 $\Delta$    |      | 10,00  | 5,77   | 8,90                   | 3,00                  | 3,60                  | 2     |
| MEC 132S   | 7,5           | 2910      | 90,10   | 0,920                   | 3x400 $\Delta$    |      | 13,10  | 7,56   | 8,90                   | 3,00                  | 3,60                  | 2     |
| MEC 160M   | 11            | 2950      | 91,20   | 0,890                   | 3x400 $\Delta$    |      | 19,70  | 11,37  | 9,10                   | 4,00                  | 4,20                  | 2     |
| MEC 160M   | 15            | 2940      | 91,90   | 0,890                   | 3x400 $\Delta$    |      | 26,70  | 15,42  | 9,70                   | 4,70                  | 4,80                  | 2     |
| MEC 160L   | 18,5          | 2950      | 92,40   | 0,880                   | 3x400 $\Delta$    |      | 33,00  | 19,05  | 10,70                  | 4,60                  | 4,70                  | 2     |
| MEC 180M   | 22            | 2955      | 92,70   | 0,900                   | 3x400 $\Delta$    |      | 38,10  | 22,00  | 8,20                   | 2,20                  | 2,30                  | 2     |
| MEC 200L   | 30            | 2960      | 93,30   | 0,890                   | 3x400 $\Delta$    |      | 52,10  | 30,08  | 7,50                   | 2,20                  | 2,30                  | 2     |
| MEC 200L   | 37            | 2960      | 93,70   | 0,910                   | 3x400 $\Delta$    |      | 62,60  | 36,14  | 7,50                   | 2,20                  | 2,30                  | 2     |
| MEC 225M   | 45            | 2965      | 94,00   | 0,880                   | 3x400 $\Delta$    |      | 78,40  | 45,26  | 7,60                   | 2,20                  | 2,30                  | 2     |
| MEC 250M   | 55            | 2970      | 94,30   | 0,890                   | 3x400 $\Delta$    |      | 94,60  | 54,62  | 7,60                   | 2,20                  | 2,30                  | 2     |
| MEC 280S   | 75            | 2975      | 94,70   | 0,900                   | 3x400 $\Delta$    |      | 127,00 | 73,32  | 6,90                   | 2,00                  | 2,30                  | 2     |
| MEC 280M   | 90            | 2975      | 95,00   | 0,890                   | 3x400 $\Delta$    |      | 153,00 | 88,33  | 7,00                   | 2,00                  | 2,30                  | 2     |
| MEC 315S   | 110           | 2978      | 95,20   | 0,900                   | 3x400 $\Delta$    |      | 185,00 | 106,81 | 7,10                   | 2,00                  | 2,20                  | 2     |
| MEC 315M   | 132           | 2978      | 95,40   | 0,900                   | 3x400 $\Delta$    |      | 222,00 | 128,17 | 7,10                   | 2,00                  | 2,20                  | 2     |
| MEC 315L   | 160           | 2980      | 95,60   | 0,900                   | 3x400 $\Delta$    |      | 268,00 | 154,73 | 7,10                   | 2,00                  | 2,20                  | 2     |
| MEC 315L   | 200           | 2980      | 95,80   | 0,920                   | 3x400 $\Delta$    |      | 330,00 | 190,75 | 6,10                   | 1,80                  | 2,60                  | 2     |
| MEC 355M   | 250           | 2980      | 95,80   | 0,920                   | 3x400 $\Delta$    |      | 410,00 | 236,99 | 6,90                   | 2,00                  | 2,90                  | 2     |
| MEC 355L   | 315           | 2980      | 95,80   | 0,920                   | 3x400 $\Delta$    |      | 520,00 | 300,58 | 5,70                   | 1,70                  | 2,40                  | 2     |

# KDN - 4 POLE RANGE

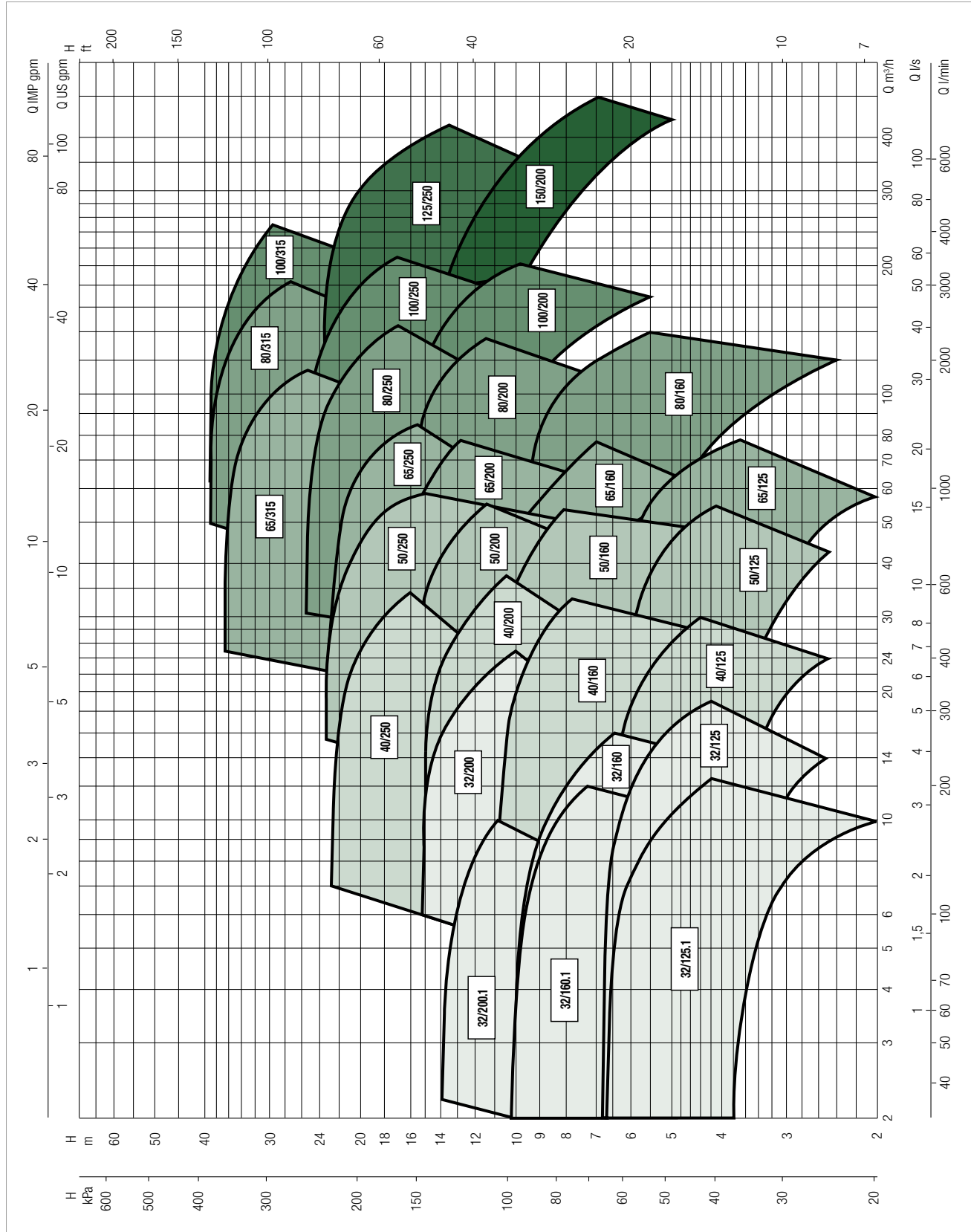
## STANDARDISED PUMPS

### PERFORMANCE RANGE

The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

### GRAPHIC SELECTION TABLE

= 1450 1/min



# KDN - 4 POLES

## STANDARDISED PUMPS

### SELECTION TABLE - KDN 32

| MODEL            | Q=m <sup>3</sup> /h | 0    | 3    | 6    | 12   | 18   | 24  |
|------------------|---------------------|------|------|------|------|------|-----|
|                  | Q=l/min             | 0    | 50   | 100  | 200  | 300  | 400 |
| KDN 32-125.1/105 | H<br>(m)            | 3,5  | 3,4  | 3,1  |      |      |     |
| KDN 32-125.1/110 |                     | 3,9  | 3,8  | 3,5  |      |      |     |
| KDN 32-125.1/115 |                     | 4,25 | 4,2  | 3,9  |      |      |     |
| KDN 32-125.1/120 |                     | 4,7  | 4,6  | 4,3  |      |      |     |
| KDN 32-125.1/125 |                     | 5,1  | 5,1  | 4,8  |      |      |     |
| KDN 32-125.1/130 |                     | 5,6  | 5,6  | 5,3  |      |      |     |
| KDN 32-125.1/135 |                     | 6,1  | 6    | 5,8  | 4,4  |      |     |
| KDN 32-125.1/140 |                     | 6,6  | 6,6  | 6,4  | 5,1  |      |     |
| KDN 32-125/115   |                     | 4,3  |      | 4,1  | 3,2  |      |     |
| KDN 32-125/120   |                     | 4,75 |      | 4,6  | 3,75 |      |     |
| KDN 32-125/125   |                     | 5,2  |      | 5,05 | 4,2  |      |     |
| KDN 32-125/130   |                     | 5,7  |      | 5,5  | 4,8  |      |     |
| KDN 32-125/135   |                     | 6,2  |      | 6    | 5,3  | 3,65 |     |
| KDN 32-125/142   |                     | 6,9  |      | 6,75 | 6,15 | 4,5  |     |
| KDN 32-160.1/137 |                     | 5,3  | 5,3  | 4,7  |      |      |     |
| KDN 32-160.1/145 |                     | 6,2  | 6,1  | 5    |      |      |     |
| KDN 32-160.1/153 |                     | 7    | 7    | 6,6  |      |      |     |
| KDN 32-160.1/161 |                     | 8    | 7,9  | 7,6  |      |      |     |
| KDN 32-160.1/169 |                     | 8,9  | 8,9  | 8,6  | 5,5  |      |     |
| KDN 32-160.1/177 |                     | 9    | 9,8  | 9,5  | 6,6  |      |     |
| KDN 32-160/137   |                     | 5,9  |      | 5,6  | 4,4  |      |     |
| KDN 32-160/145   |                     | 6,7  |      | 6,5  | 5,3  |      |     |
| KDN 32-160/153   |                     | 7,6  |      | 7,4  | 6,25 |      |     |
| KDN 32-160/161   |                     | 8,5  |      | 8,25 | 7,25 |      |     |
| KDN 32-160/169   |                     | 9,5  |      | 9,3  | 8,4  | 6,6  |     |
| KDN 32-160/177   |                     | 10,5 |      | 10,4 | 9,6  | 7,8  |     |
| KDN 32-200.1/170 |                     | 8,6  | 8,5  | 7,2  |      |      |     |
| KDN 32-200.1/180 |                     | 9,8  | 9,8  | 9    |      |      |     |
| KDN 32-200.1/190 |                     | 11,3 | 11,1 | 10,5 |      |      |     |
| KDN 32-200.1/200 |                     | 12,8 | 12,7 | 11,7 | 8,3  |      |     |
| KDN 32-200.1/207 |                     | 13,8 | 13,8 | 13   | 8,9  |      |     |
| KDN 32-200/170   |                     | 8,6  |      | 8,2  | 6,7  |      |     |
| KDN 32-200/180   |                     | 9,9  |      | 9,6  | 8,2  |      |     |
| KDN 32-200/190   |                     | 11,2 |      | 10,9 | 9,7  | 7    |     |
| KDN 32-200/200   |                     | 12,6 |      | 12,3 | 11,1 | 8,7  |     |
| KDN 32-200/210   |                     | 14,3 |      | 14   | 13,1 | 10,7 |     |
| KDN 32-200/219   |                     | 15,7 |      | 15,4 | 14,8 | 13   | 9,8 |

### SELECTION TABLE - KDN 40

| MODEL          | Q=m <sup>3</sup> /h | 0    | 6    | 12   | 18   | 24   | 30   | 36   |
|----------------|---------------------|------|------|------|------|------|------|------|
|                | Q=l/min             | 0    | 100  | 200  | 300  | 400  | 500  | 600  |
| KDN 40-125/115 | H<br>(m)            | 4,2  | 4,1  | 3,8  | 3,2  | 2,4  |      |      |
| KDN 40-125/120 |                     | 4,6  | 4,5  | 4,2  | 3,7  | 2,9  |      |      |
| KDN 40-125/125 |                     | 5,1  | 4,9  | 4,7  | 4,1  | 3,3  |      |      |
| KDN 40-125/130 |                     | 5,5  | 5,4  | 5,2  | 4,7  | 3,9  |      |      |
| KDN 40-125/135 |                     | 6    | 5,9  | 5,8  | 5,3  | 4,6  |      |      |
| KDN 40-125/142 |                     | 6,7  | 6,6  | 6,5  | 6    | 5,3  | 4,1  |      |
| KDN 40-160/137 |                     | 5,9  | 5,8  | 5,8  | 5    | 3,7  |      |      |
| KDN 40-160/145 |                     | 6,7  | 6,6  | 6,5  | 6    | 4,8  |      |      |
| KDN 40-160/153 |                     | 7,6  | 7,6  | 7,5  | 7    | 6,8  |      |      |
| KDN 40-160/161 |                     | 8,6  | 8,5  | 8,4  | 8    | 7,1  | 5,6  |      |
| KDN 40-160/169 |                     | 9,6  | 9,5  | 9,5  | 9,1  | 8,3  | 7    |      |
| KDN 40-160/177 |                     | 10,7 | 10,7 | 10,6 | 10,2 | 9,5  | 8,3  |      |
| KDN 40-200/170 |                     | 8,4  | 8,4  | 8,2  | 7,4  | 5,7  |      |      |
| KDN 40-200/180 |                     | 9,7  | 9,7  | 9,4  | 8,8  | 7,2  |      |      |
| KDN 40-200/190 |                     | 10,9 | 10,8 | 10,7 | 10,2 | 8,8  | 6,8  |      |
| KDN 40-200/200 |                     | 12,2 | 12,1 | 12   | 11,7 | 10,4 | 8,6  |      |
| KDN 40-200/210 |                     | 13,6 | 13,5 | 13,5 | 13,2 | 12,1 | 10,6 |      |
| KDN 40-200/219 |                     | 15   | 15   | 15   | 14,7 | 13,8 | 12,4 | 10,4 |
| KDN 40-250/220 |                     | 15,8 |      | 15,6 | 14,8 | 13,6 | 12   |      |
| KDN 40-250/230 |                     | 17,4 |      | 17,2 | 16,5 | 15,3 | 13,7 |      |
| KDN 40-250/240 | 19,1                |      | 19   | 18,2 | 17   | 15,5 |      |      |
| KDN 40-250/250 | 20,7                |      | 20,6 | 20   | 18,9 | 17,5 |      |      |
| KDN 40-250/260 | 22,7                |      | 22,6 | 22,1 | 21   | 19,5 |      |      |



# KDN - 4 POLES

## STANDARDISED PUMPS

### SELECTION TABLE - KDN 50

| MODEL          | Q=m <sup>3</sup> /h | 0    | 12   | 18   | 24   | 30   | 36   | 42   | 48   | 54   |
|----------------|---------------------|------|------|------|------|------|------|------|------|------|
|                | Q=l/min             | 0    | 200  | 300  | 400  | 500  | 600  | 700  | 800  | 900  |
| KDN 50-125/115 | H<br>(m)            | 4,2  | 4,1  | 3,9  | 3,6  | 3,3  | 2,9  | 2,3  |      |      |
| KDN 50-125/120 |                     | 4,6  | 4,4  | 4,3  | 4    | 3,7  | 3,3  | 2,8  |      |      |
| KDN 50-125/125 |                     | 5    | 4,9  | 4,7  | 4,5  | 4,2  | 3,7  | 3,3  |      |      |
| KDN 50-125/130 |                     | 5,6  | 5,4  | 5,2  | 5    | 4,7  | 4,2  | 3,8  | 3,2  |      |
| KDN 50-125/135 |                     | 6    | 5,8  | 5,7  | 5,5  | 5,2  | 4,8  | 4,3  | 3,8  |      |
| KDN 50-125/139 |                     | 6,3  | 6,2  | 6,1  | 5,9  | 5,6  | 5,2  | 4,8  | 4,2  |      |
| KDN 50-125/144 |                     | 6,7  | 6,7  | 6,6  | 6,4  | 6,2  | 5,8  | 5,3  | 4,8  | 4,1  |
| KDN 50-160/137 |                     | 6    | 6    | 5,9  | 5,6  | 5,2  | 4,8  |      |      |      |
| KDN 50-160/145 |                     | 6,8  | 6,7  | 6,7  | 6,5  | 6,2  | 5,8  |      |      |      |
| KDN 50-160/153 |                     | 7,6  | 7,6  | 7,5  | 7,4  | 7,2  | 6,7  |      |      |      |
| KDN 50-160/161 |                     | 8,4  | 8,4  | 8,3  | 8,2  | 8,1  | 7,7  |      |      |      |
| KDN 50-160/169 |                     | 9,4  | 9,3  | 9,2  | 9,2  | 9,1  | 8,8  |      |      |      |
| KDN 50-160/177 |                     | 10,4 | 10,3 | 10,3 | 10,2 | 10,1 | 9,95 |      |      |      |
| KDN 50-200/170 |                     | 9,5  | 9,3  | 9,2  | 8,8  | 8    | 6,85 |      |      |      |
| KDN 50-200/180 |                     | 10,6 | 10,6 | 10,5 | 10,1 | 9,5  | 8,6  | 7,3  |      |      |
| KDN 50-200/190 |                     | 11,8 | 11,7 | 11,6 | 11,4 | 10,8 | 10,1 | 8,9  |      |      |
| KDN 50-200/200 |                     | 13,1 | 13   | 13   | 12,8 | 12,3 | 11,6 | 10,6 | 9,4  |      |
| KDN 50-200/210 |                     | 14,6 | 14,6 | 14,5 | 14,4 | 13,9 | 13,2 | 12,2 | 11   |      |
| KDN 50-200/219 |                     | 16   | 16   | 16   | 15,9 | 15,4 | 14,2 | 13,8 | 12,7 | 11,4 |
| KDN 50-250/220 |                     | 15,9 | 15,7 | 15,6 | 15,4 | 14,9 | 13,8 | 12,4 | 10,5 |      |
| KDN 50-250/230 |                     | 17,4 | 17,3 | 17,2 | 17   | 16,5 | 15,5 | 14,2 | 12,6 | 10,3 |
| KDN 50-250/240 |                     | 19   | 19   | 19   | 18,8 | 18,2 | 17,4 | 16,2 | 14,7 | 12,4 |
| KDN 50-250/250 |                     | 20,8 | 20,8 | 20,7 | 20,6 | 20,1 | 19,2 | 18,1 | 17   | 14,8 |
| KDN 50-250/263 | 23                  | 23   | 22,9 | 22,8 | 22,5 | 21,7 | 20,6 | 19,4 | 17,5 |      |

# KDN - 4 POLES

## STANDARDISED PUMPS

### SELECTION TABLE - KDN 65

| MODEL              | Q=m <sup>3</sup> /h | 0    | 18   | 24   | 30   | 36   | 42   | 48   | 54   | 60   | 66   | 72   | 78   | 84   | 90   | 102  | 114  |  |
|--------------------|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--|
|                    | Q=l/min             | 0    | 300  | 400  | 500  | 600  | 700  | 800  | 900  | 1000 | 1100 | 1200 | 1300 | 1400 | 1500 | 1700 | 1900 |  |
| KDN 65-125/120/110 | H<br>(m)            | 3,75 |      | 3,5  | 3,3  | 3,2  | 2,9  | 2,7  | 2,3  | 1,9  |      |      |      |      |      |      |      |  |
| KDN 65-125/120     |                     | 4,25 |      | 3,9  | 3,8  | 3,6  | 3,3  | 3,1  | 2,7  | 2,3  |      |      |      |      |      |      |      |  |
| KDN 65-125/125     |                     | 4,7  |      | 4,4  | 4,25 | 4,1  | 3,8  | 3,6  | 3,25 | 2,8  |      |      |      |      |      |      |      |  |
| KDN 65-125/130     |                     | 5,1  |      | 4,9  | 4,75 | 4,6  | 4,3  | 4,1  | 3,8  | 3,3  | 2,8  |      |      |      |      |      |      |  |
| KDN 65-125/135     |                     | 5,6  |      | 5,4  | 5,3  | 5,2  | 4,9  | 4,7  | 4,3  | 3,9  | 3,5  | 3    |      |      |      |      |      |  |
| KDN 65-125/140     |                     | 6    |      | 5,9  | 5,8  | 5,7  | 5,5  | 5,2  | 4,9  | 4,5  | 4,1  | 3,6  |      |      |      |      |      |  |
| KDN 65-125/144     |                     | 6,4  |      | 6,35 | 6,25 | 6,2  | 5,9  | 5,7  | 5,4  | 5    | 4,65 | 4,2  | 3,7  |      |      |      |      |  |
| KDN 65-160/137     |                     | 5,8  |      | 5,7  | 5,4  | 5,2  | 4,75 | 4,3  | 3,7  |      |      |      |      |      |      |      |      |  |
| KDN 65-160/145     |                     | 6,5  |      | 6,5  | 6,3  | 6    | 5,7  | 5,3  | 4,75 | 4,1  |      |      |      |      |      |      |      |  |
| KDN 65-160/153     |                     | 7,3  |      | 7,2  | 7,2  | 6,9  | 6,7  | 6,3  | 5,8  | 5,25 |      |      |      |      |      |      |      |  |
| KDN 65-160/161     |                     | 8,2  |      | 8,1  | 8,1  | 7,9  | 7,7  | 7,3  | 6,85 | 6,3  | 5,8  |      |      |      |      |      |      |  |
| KDN 65-160/169     |                     | 9,1  |      | 9,1  | 9    | 8,9  | 8,7  | 8,4  | 8    | 7,6  | 7,1  | 6,4  |      |      |      |      |      |  |
| KDN 65-160/177     |                     | 10   |      | 10   | 9,9  | 9,8  | 9,7  | 9,45 | 9,1  | 8,7  | 8,2  | 7,5  |      |      |      |      |      |  |
| KDN 65-200/170     |                     | 9,3  | 9,3  | 9,2  | 9,2  | 9    | 8,5  | 7,9  | 7,1  | 6,3  |      |      |      |      |      |      |      |  |
| KDN 65-200/180     |                     | 10,4 | 10,4 | 10,4 | 10,3 | 10,2 | 10   | 9,5  | 8,8  | 8,1  |      |      |      |      |      |      |      |  |
| KDN 65-200/190     |                     | 12,1 | 12   | 12   | 12   | 11,9 | 11,5 | 11,1 | 10,5 | 9,8  | 8,8  |      |      |      |      |      |      |  |
| KDN 65-200/200     |                     | 13,3 | 13,3 | 13,3 | 13,2 | 13,1 | 13   | 12,8 | 12,3 | 11,6 | 10,8 |      |      |      |      |      |      |  |
| KDN 65-200/210     |                     | 14,8 | 14,7 | 14,7 | 14,7 | 14,6 | 14,6 | 14,3 | 13,8 | 13,4 | 12,7 | 12   |      |      |      |      |      |  |
| KDN 65-200/219     |                     | 16,2 | 16,2 | 16,2 | 16,1 | 16   | 15,9 | 15,8 | 15,4 | 15   | 14,4 | 13,5 | 12,7 |      |      |      |      |  |
| KDN 65-250/220     |                     | 15,8 |      | 15,8 | 15,5 | 15,1 | 14,5 | 14   | 13,2 | 12   | 10,7 |      |      |      |      |      |      |  |
| KDN 65-250/230     |                     | 17,4 |      | 17,4 | 17,2 | 16,8 | 16,3 | 15,7 | 15   | 14,1 | 12,7 | 11,4 |      |      |      |      |      |  |
| KDN 65-250/240     |                     | 19   |      | 19   | 18,9 | 18,5 | 18,1 | 17,5 | 16,8 | 16   | 14,7 | 13,6 |      |      |      |      |      |  |
| KDN 65-250/250     |                     | 20,7 |      | 20,7 | 20,6 | 20,4 | 20   | 19,5 | 18,8 | 18   | 17   | 15,9 | 14,5 |      |      |      |      |  |
| KDN 65-250/263     |                     | 23,2 |      | 23   | 23   | 22,9 | 22,5 | 22,2 | 21,6 | 20,8 | 19,8 | 18,6 | 17,4 | 16   |      |      |      |  |
| KDN 65-315/260     |                     | 22,3 |      | 22,2 | 22,1 | 22   | 21,5 | 21   | 20,5 | 20   | 19,2 | 18,4 | 17   | 16   | 15   |      |      |  |
| KDN 65-315/275     |                     | 25,1 |      | 25,1 | 25   | 24,8 | 24,6 | 24,1 | 23,5 | 23   | 22,5 | 21,5 | 20,5 | 19,4 | 18,1 |      |      |  |
| KDN 65-315/290     |                     | 28,2 |      | 28,2 | 28,1 | 28   | 27,8 | 27,3 | 27   | 26,5 | 25,5 | 25   | 24   | 23,1 | 22   | 19,5 |      |  |
| KDN 65-315/305     |                     | 31,7 |      | 31,5 | 31,4 | 31,4 | 31,3 | 31,2 | 30,8 | 30,4 | 29,6 | 29   | 28   | 27,2 | 26,1 | 23,5 |      |  |
| KDN 65-315/320     |                     | 35,7 |      | 35,4 | 35,3 | 35,2 | 35,1 | 35   | 34,8 | 34,5 | 33,8 | 33,5 | 32,5 | 31,5 | 30,8 | 28   | 24,8 |  |

# KDN - 4 POLES

## STANDARDISED PUMPS

### SELECTION TABLE - KDN 80

| MODEL              | Q=m <sup>3</sup> /h | 0    | 42   | 48   | 54   | 60   | 66   | 72   | 78   | 84   | 90   | 102  | 114  | 120  | 150  | 180  |
|--------------------|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|                    | Q=l/min             | 0    | 700  | 800  | 900  | 1000 | 1100 | 1200 | 1300 | 1400 | 1500 | 1700 | 1900 | 2000 | 2500 | 3000 |
| KDN 80-160/147/127 | H<br>(m)            | 5,7  | 5,4  | 5,25 | 5,05 | 4,8  | 4,6  | 4,35 | 4,15 | 3,85 | 3,6  | 3,1  | 2,5  | 2,2  |      |      |
| KDN 80-160/153/136 |                     | 6,4  | 6,2  | 6,05 | 5,85 | 5,7  | 5,4  | 5,15 | 4,8  | 4,65 | 4,4  | 3,85 | 3,3  | 3    |      |      |
| KDN 80-160/153     |                     | 7,3  | 7,1  | 6,9  | 6,7  | 6,5  | 6,3  | 6    | 5,75 | 5,4  | 5,2  | 4,55 | 3,9  | 3,6  |      |      |
| KDN 80-160/161     |                     | 8,2  | 8    | 7,9  | 7,75 | 7,5  | 7,3  | 7,05 | 6,8  | 6,5  | 6,25 | 5,6  | 4,9  | 4,6  |      |      |
| KDN 80-160/169     |                     | 9,1  | 9    | 8,85 | 8,7  | 8,6  | 8,35 | 8,1  | 7,85 | 7,6  | 7,3  | 6,75 | 6    | 5,7  |      |      |
| KDN 80-160/177     |                     | 10   | 9,9  | 9,85 | 9,8  | 9,7  | 9,5  | 9,3  | 9,1  | 8,85 | 8,7  | 8,1  | 7,25 | 6,9  |      |      |
| KDN 80-200/170     |                     | 9,2  | 9,1  | 9    | 8,7  | 8,5  | 8,2  | 7,8  | 7,5  | 7,1  | 6,7  | 5,6  |      |      |      |      |
| KDN 80-200/180     |                     | 10,3 | 10,2 | 10,2 | 10   | 9,9  | 9,6  | 9,2  | 9    | 8,6  | 8,2  | 7,2  |      |      |      |      |
| KDN 80-200/190     |                     | 11,4 | 11,4 | 11,3 | 11,2 | 11,1 | 11   | 10,7 | 10,5 | 10,1 | 9,8  | 8,7  | 6,8  |      |      |      |
| KDN 80-200/200     |                     | 12,7 | 12,6 | 12,6 | 12,6 | 12,5 | 12,4 | 12,3 | 12   | 11,6 | 11,4 | 10,5 | 9,4  | 8,8  |      |      |
| KDN 80-200/210     |                     | 14,1 | 14   | 14   | 14   | 13,9 | 13,8 | 13,7 | 13,6 | 13,3 | 13,1 | 12,1 | 11,2 | 10,6 |      |      |
| KDN 80-200/222     |                     | 15,9 | 15,9 | 15,8 | 15,7 | 15,6 | 15,6 | 15,5 | 15,4 | 15,3 | 15   | 14,3 | 13,4 | 12,8 |      |      |
| KDN 80-250/220     |                     | 16   | 15,9 | 15,8 | 15,7 | 15,6 | 15,5 | 15,2 | 14,9 | 14,5 | 13,9 | 12,8 |      |      |      |      |
| KDN 80-250/230     |                     | 17,3 | 17,3 | 17,2 | 17,1 | 17   | 16,9 | 16,8 | 16,5 | 16   | 15,5 | 14,3 | 12,4 |      |      |      |
| KDN 80-250/240     |                     | 19   | 19   | 19   | 18,9 | 18,8 | 18,7 | 18,6 | 18,4 | 18   | 17,6 | 16,6 | 15,3 | 14,6 |      |      |
| KDN 80-250/250     |                     | 20,8 | 20,7 | 20,7 | 20,7 | 20,6 | 20,5 | 20,4 | 20,3 | 19,9 | 19,6 | 18,6 | 17,4 | 16,8 |      |      |
| KDN 80-250/260     |                     | 22,6 | 22,5 | 22,5 | 22,4 | 22,3 | 22,2 | 22,1 | 22   | 21,8 | 21,4 | 20,6 | 19,6 | 19   | 15,1 |      |
| KDN 80-250/270     |                     | 24,5 | 24,4 | 24,4 | 24,4 | 24,3 | 24,2 | 24,1 | 24   | 23,7 | 23,3 | 22,4 | 21,4 | 20,7 | 16,3 |      |
| KDN 80-315/275     |                     | 24,8 |      | 24,8 | 24,8 | 24,7 | 24,6 | 24,5 | 24,4 | 24,3 | 24   | 23   | 21,4 | 20,5 |      |      |
| KDN 80-315/290     |                     | 27,8 |      | 27,8 | 27,8 | 27,7 | 27,7 | 27,6 | 27,6 | 27,5 | 27,4 | 26,5 | 25   | 24,6 | 19,1 |      |
| KDN 80-315/305     | 31,4                |      | 31,4 | 31,3 | 31,2 | 31,2 | 31,2 | 31,2 | 31,2 | 30,9 | 30   | 29   | 28,5 | 24   |      |      |
| KDN 80-315/320     | 34,8                |      | 34,7 | 34,6 | 34,6 | 34,5 | 34,4 | 34,3 | 34   | 33,9 | 33,8 | 33,2 | 32,8 | 28,8 |      |      |
| KDN 80-315/334     | 38,3                |      | 38,2 | 38,2 | 38,2 | 38,2 | 38,2 | 38,1 | 38   | 37,9 | 37,6 | 37   | 36,9 | 33,1 | 28   |      |

### SELECTION TABLE - KDN 100

| MODEL           | Q=m <sup>3</sup> /h | 0    | 60   | 66   | 72   | 78   | 84   | 90   | 102  | 114  | 120  | 150  | 180  | 210  | 240  |
|-----------------|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|                 | Q=l/min             | 0    | 1000 | 1100 | 1200 | 1300 | 1400 | 1500 | 1700 | 1900 | 2000 | 2500 | 3000 | 3500 | 4000 |
| KDN 100-200/180 | H<br>(m)            | 10.1 | 10.1 | 10.1 | 10   | 9.9  | 9.7  | 9.5  | 9.1  | 8.5  | 8.3  | 7    | 5.4  |      |      |
| KDN 100-200/190 |                     | 11.6 | 11.5 | 11.4 | 11.3 | 11.2 | 11.1 | 11   | 10.5 | 10.1 | 10   | 8.6  | 7    |      |      |
| KDN 100-200/200 |                     | 12.9 | 12.8 | 12.8 | 12.8 | 12.7 | 12.6 | 12.5 | 12.2 | 11.8 | 11.6 | 10.4 | 8.8  |      |      |
| KDN 100-200/210 |                     | 14.3 | 14.2 | 14.2 | 14.2 | 14.2 | 14.1 | 14   | 13.8 | 13.5 | 13.3 | 12.3 | 10.7 | 9    |      |
| KDN 100-200/219 |                     | 16   | 15.7 | 15.7 | 15.6 | 15.6 | 15.5 | 15.5 | 15.3 | 15.1 | 15   | 14   | 12.5 | 10.8 |      |
| KDN 100-250/220 |                     | 15.2 | 14.9 | 14.9 | 14.9 | 14.8 | 14.7 | 14.6 | 14.3 | 13.7 | 13.4 | 11.4 |      |      |      |
| KDN 100-250/230 |                     | 16.9 | 16.7 | 16.7 | 16.6 | 16.5 | 16.4 | 16.3 | 16.1 | 15.7 | 15.3 | 13.6 | 11.1 |      |      |
| KDN 100-250/240 |                     | 18.5 | 18.3 | 18.3 | 18.3 | 18.2 | 18.1 | 18   | 17.9 | 17.6 | 17.4 | 15.7 | 13.3 |      |      |
| KDN 100-250/250 |                     | 20.1 | 20   | 20   | 19.9 | 19.8 | 19.7 | 19.6 | 19.5 | 19.4 | 19.2 | 17.6 | 15.4 |      |      |
| KDN 100-250/260 |                     | 22.3 | 22.1 | 22.1 | 22.1 | 22   | 21.9 | 21.8 | 21.7 | 21.5 | 21.4 | 19.8 | 17.7 | 15.1 |      |
| KDN 100-250/270 |                     | 24.3 | 24.3 | 24.3 | 24.3 | 24.3 | 24.3 | 24.2 | 24.1 | 23.7 | 23.5 | 22.1 | 20.1 | 17.3 |      |
| KDN 100-315/275 |                     | 25.1 | 25   | 25   | 25   | 24.9 | 24.8 | 24.7 | 24.6 | 24.4 | 24   | 22   | 19   |      |      |
| KDN 100-315/290 |                     | 28   | 27.9 | 27.9 | 27.9 | 27.9 | 27.8 | 27.7 | 27.6 | 27.5 | 27   | 25.5 | 23   |      |      |
| KDN 100-315/305 |                     | 31.3 | 31.1 | 31.1 | 31.1 | 31   | 30.9 | 30.8 | 30.7 | 30.6 | 30.5 | 29   | 27   | 24   |      |
| KDN 100-315/320 |                     | 34.5 | 34.4 | 34.4 | 34.4 | 34.4 | 34.4 | 34.3 | 34.2 | 34.1 | 34   | 33   | 31   | 28.1 |      |
| KDN 100-315/334 |                     | 38.2 | 38.2 | 38.1 | 38.1 | 38.1 | 38   | 38   | 37.7 | 37.5 | 37.3 | 36.5 | 34.8 | 32   | 28.8 |

### SELECTION TABLE - KDN 125

| MODEL           | Q=m <sup>3</sup> /h | 0    | 102  | 114  | 120  | 150  | 180  | 210  | 240  | 270  | 300  | 330  | 360  | 390  | 420  |
|-----------------|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|                 | Q=l/min             | 0    | 1700 | 1900 | 2000 | 2500 | 3000 | 3500 | 4000 | 4500 | 5000 | 5500 | 6000 | 6500 | 7000 |
| KDN 125-250/220 | H<br>(m)            | 15   | 14.9 | 14.9 | 14.8 | 14.5 | 14   | 13   | 11.8 | 10.5 | 9.2  |      |      |      |      |
| KDN 125-250/230 |                     | 16.6 | 16.6 | 16.6 | 16.5 | 16.3 | 15.6 | 14.8 | 13.8 | 12.5 | 12.3 | 9.5  |      |      |      |
| KDN 125-250/240 |                     | 18.2 | 18.1 | 18.1 | 18.1 | 18   | 17.7 | 16.8 | 15.8 | 14.5 | 13.3 | 11.6 | 10.1 |      |      |
| KDN 125-250/250 |                     | 19.9 | 19.8 | 19.8 | 19.7 | 19.6 | 19.4 | 18.7 | 17.8 | 16.6 | 15.5 | 14   | 12.3 |      |      |
| KDN 125-250/260 |                     | 21.7 | 21.7 | 21.6 | 21.5 | 21.4 | 21.3 | 20.6 | 19.9 | 18   | 17.7 | 16.3 | 14.6 | 13   |      |
| KDN 125-250/269 |                     | 23.9 | 23.9 | 23.9 | 23.8 | 23.6 | 23.2 | 22.7 | 22.1 | 22.2 | 20.2 | 19   | 17.5 | 15.6 | 14   |

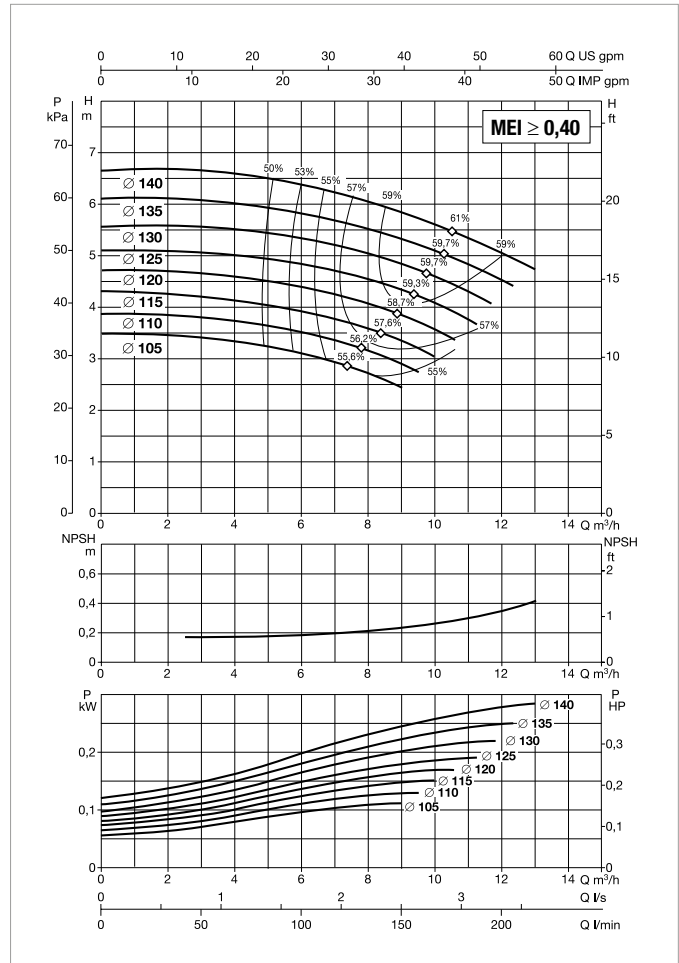
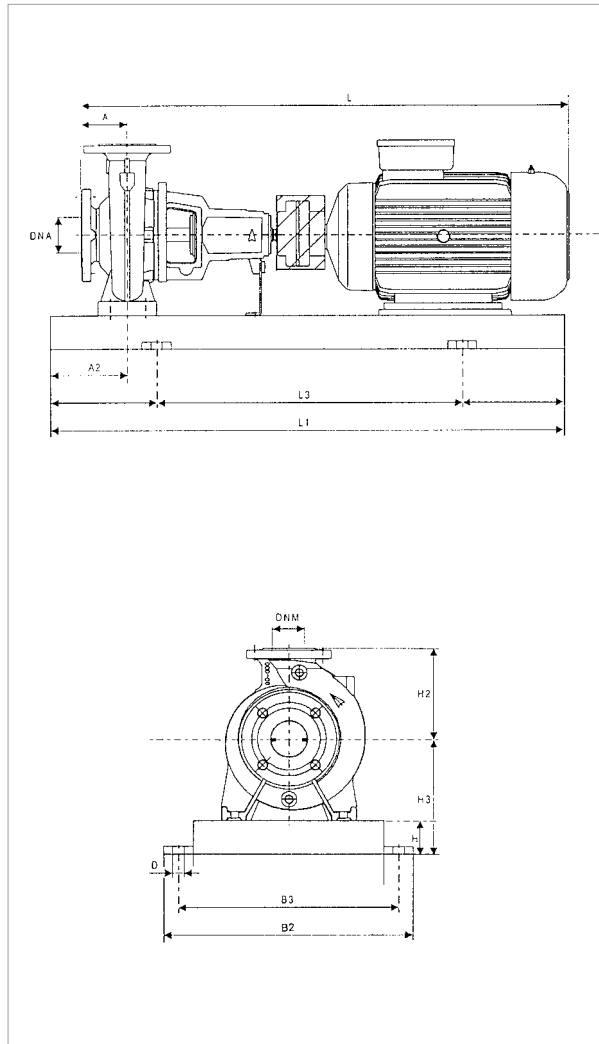
### SELECTION TABLE - KDN 150

| MODEL               | Q=m <sup>3</sup> /h | 0    | 102  | 114  | 120  | 150  | 180  | 210  | 240  | 270  | 300  | 330  | 360  | 390  | 420  |
|---------------------|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|                     | Q=l/min             | 0    | 1700 | 1900 | 2000 | 2500 | 3000 | 3500 | 4000 | 4500 | 5000 | 5500 | 6000 | 6500 | 7000 |
| KDN 150-200/210/170 | H<br>(m)            | 8.9  | 8.9  | 8.9  | 8.8  | 8.7  | 8.6  | 8.3  | 7.9  | 7.4  | 6.8  | 6.2  | 5.4  | 4.5  |      |
| KDN 150-200/218/182 |                     | 10.4 | 10.4 | 10.4 | 10.3 | 10.2 | 9.9  | 9.5  | 9.1  | 8.6  | 8.1  | 7.4  | 6.6  | 5.8  |      |
| KDN 150-200/218/200 |                     | 11.4 | 11.4 | 11.4 | 11.4 | 11.2 | 10.9 | 10.6 | 10.1 | 9.7  | 9.2  | 8.5  | 7.8  | 6.9  | 5.9  |
| KDN 150-200/218     |                     | 12.9 | 12.7 | 12.7 | 12.6 | 12.4 | 12.1 | 11.7 | 11.2 | 10.7 | 10.2 | 9.6  | 8.8  | 8    | 7.1  |
| KDN 150-200/224     |                     | 13.8 | 13.6 | 13.6 | 13.5 | 13.3 | 13   | 12.6 | 12.2 | 11.7 | 11.2 | 10.6 | 9.9  | 9.2  | 8.2  |

# KDN 32-125.1 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

**= 1450 1/min**



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

| MODEL        | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA   |           | MOTOR TYPE |
|--------------|------------|------------|-------------------|-----------|------------|
|              |            |            | POWER INPUT 50 Hz | In A      |            |
| KDN 32-125.1 | 0,37       | MEC 71     | 3 x 230 - 400 V ~ | 1,7/0,975 | -          |
|              | 0,55       | MEC 80     | 3 x 230 - 400 V ~ | 2,6/1,5   | -          |

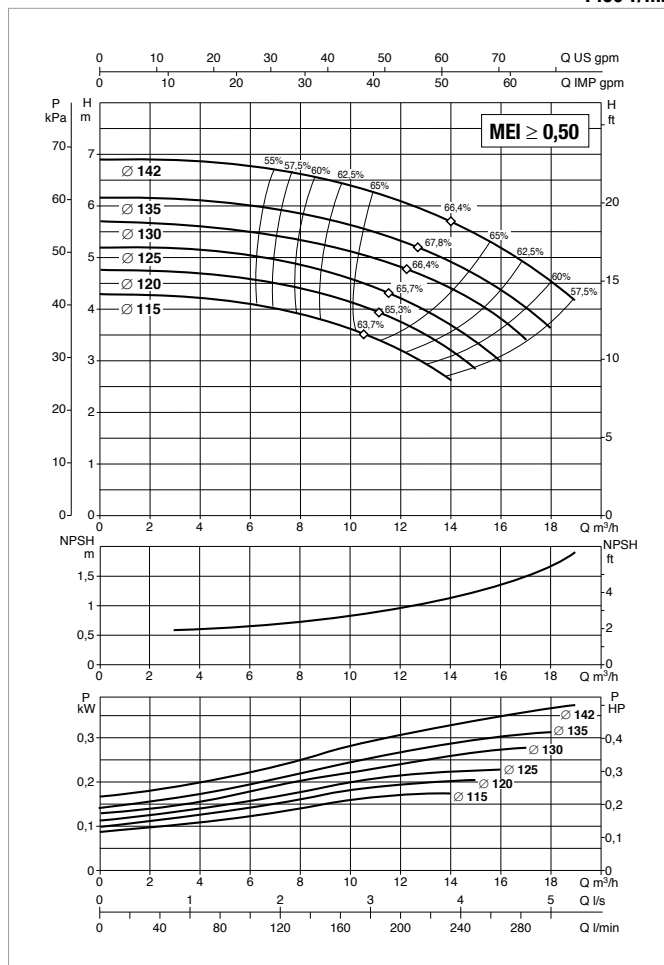
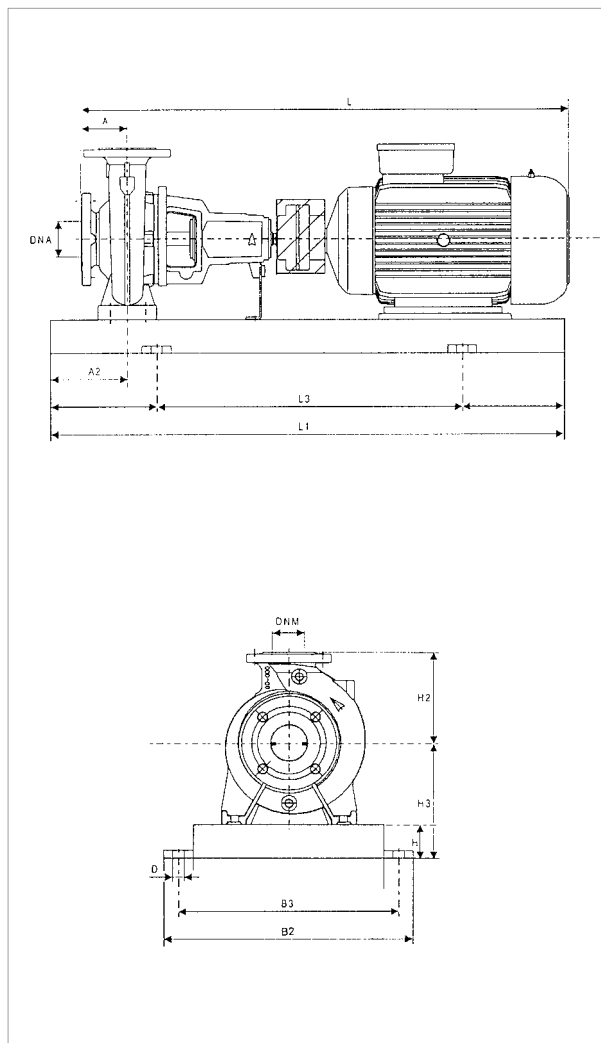
| MODEL        | POWER (kW) | UNIT DIMENSIONS (mm) |    |     |    |     |     |     |     |     |    | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |           | SPACER COUPLING |           |
|--------------|------------|----------------------|----|-----|----|-----|-----|-----|-----|-----|----|------------------------|-----|-------------------|-----------|-----------------|-----------|
|              |            | A                    | A2 | H2  | H  | H3  | L1  | L3  | B2  | B3  | D  | DNA                    | DNM | L                 | WEIGHT Kg | L               | WEIGHT Kg |
| KDN 32-125.1 | 0,37       | 80                   | 60 | 140 | 65 | 177 | 800 | 540 | 360 | 320 | 19 | 50                     | 32  | 730               | 81        | 830             | 86        |
|              | 0,55       | 80                   | 60 | 140 | 65 | 177 | 800 | 540 | 360 | 320 | 19 | 50                     | 32  | 730               | 83        | 830             | 88        |

Dimension and electrical data based on sizing definition following the instructions on page 105.

# KDN 32-125 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 1450 1/min



For MEI index refer to the hydraulic efficiency section.  
The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

| MODEL      | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA   |           | MOTOR TYPE |
|------------|------------|------------|-------------------|-----------|------------|
|            |            |            | POWER INPUT 50 Hz | In A      |            |
| KDN 32-125 | 0,37       | MEC 71     | 3 x 230 - 400 V ~ | 1,7/0,975 | -          |
|            | 0,55       | MEC 80     | 3 x 230 - 400 V ~ | 2,6/1,5   | -          |
|            | 0,75       | MEC 80     | 3 x 230 - 400 V ~ | 3,1/1,8   | IE3        |

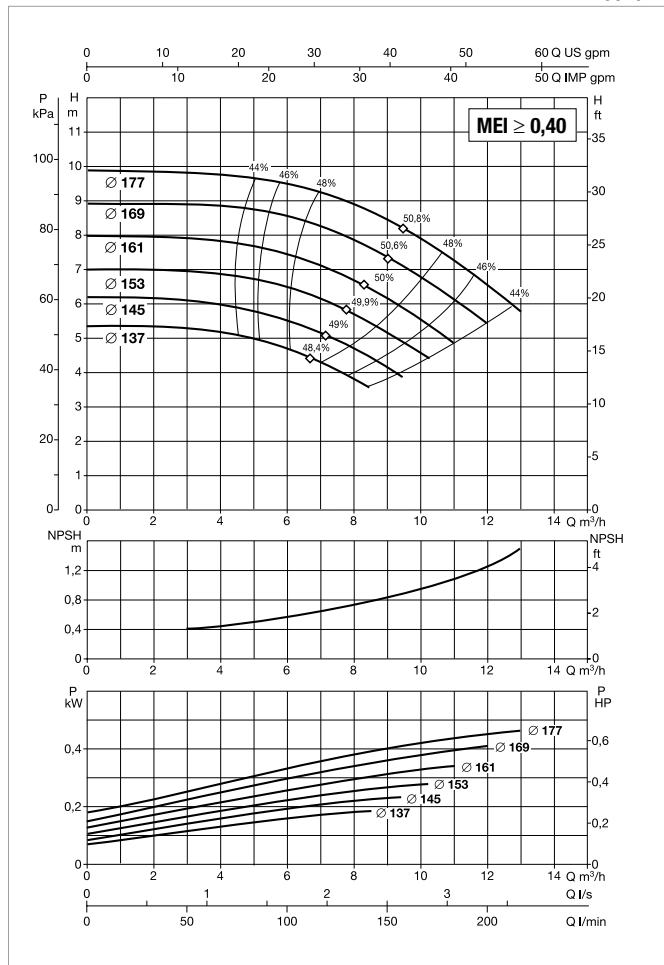
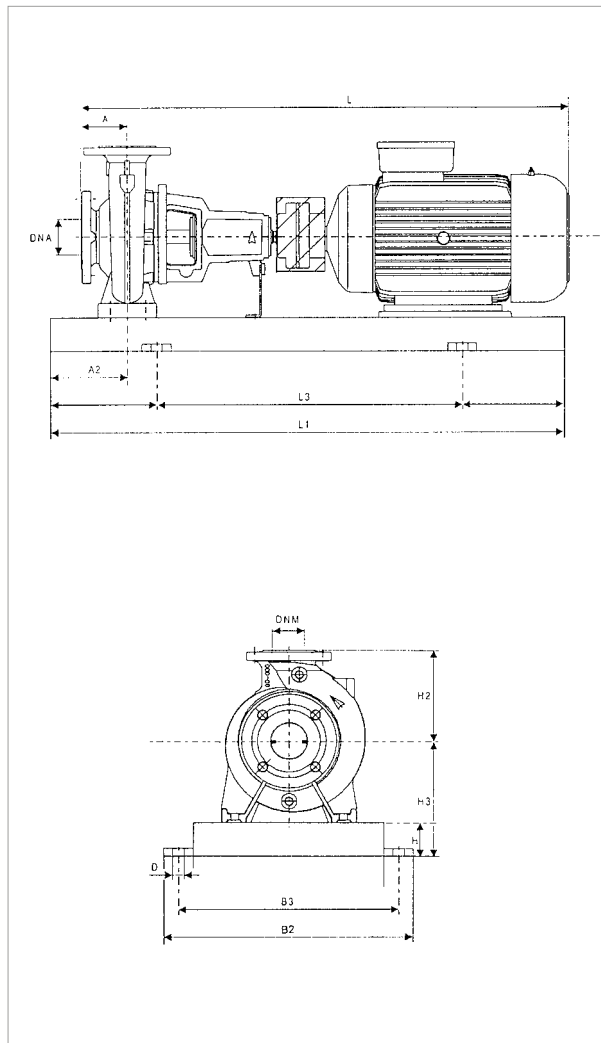
| MODEL      | POWER (kW) | UNIT DIMENSIONS (mm) |    |     |    |     |     |     |     |     |    | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |           | SPACER COUPLING |           |
|------------|------------|----------------------|----|-----|----|-----|-----|-----|-----|-----|----|------------------------|-----|-------------------|-----------|-----------------|-----------|
|            |            | A                    | A2 | H2  | H  | H3  | L1  | L3  | B2  | B3  | D  | DNA                    | DNM | L                 | WEIGHT Kg | L               | WEIGHT Kg |
| KDN 32-125 | 0,37       | 80                   | 60 | 140 | 65 | 177 | 800 | 540 | 360 | 320 | 19 | 50                     | 32  | 730               | 81        | 830             | 86        |
|            | 0,55       | 80                   | 60 | 140 | 65 | 177 | 800 | 540 | 360 | 320 | 19 | 50                     | 32  | 730               | 83        | 830             | 88        |
|            | 0,75       | 80                   | 60 | 140 | 65 | 177 | 800 | 540 | 360 | 320 | 19 | 50                     | 32  | 717               | 78        | 817             | 83        |

Dimension and electrical data based on sizing definition following the instructions on page 105.

# KDN 32-160.1 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

| MODEL        | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA   |           | MOTOR TYPE |
|--------------|------------|------------|-------------------|-----------|------------|
|              |            |            | POWER INPUT 50 Hz | In A      |            |
| KDN 32-160.1 | 0,37       | MEC 71     | 3 x 230 - 400 V ~ | 1,7/0,975 | -          |
|              | 0,55       | MEC 80     | 3 x 230 - 400 V ~ | 2,6/1,5   | -          |
|              | 0,75       | MEC 80     | 3 x 230 - 400 V ~ | 3,1/1,8   | IE3        |

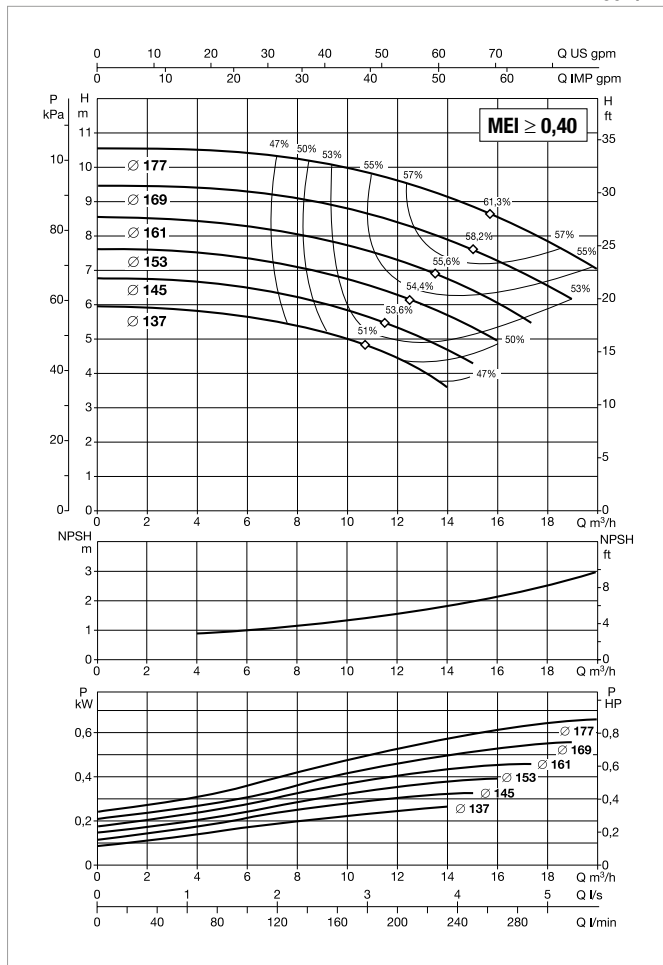
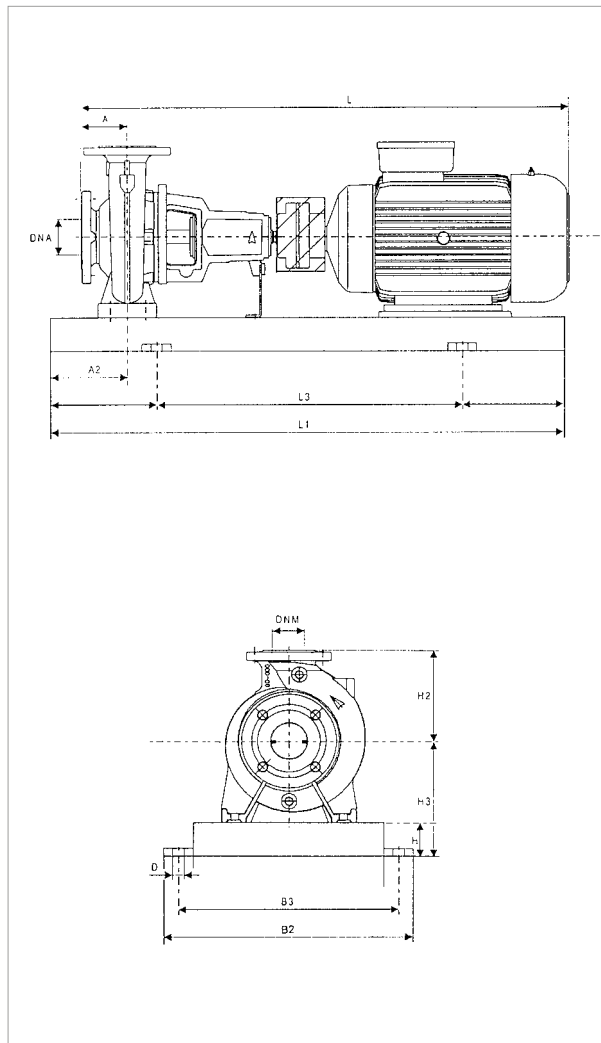
| MODEL        | POWER (kW) | UNIT DIMENSIONS (mm) |    |     |    |     |     |     |     |     |    | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |           | SPACER COUPLING |           |
|--------------|------------|----------------------|----|-----|----|-----|-----|-----|-----|-----|----|------------------------|-----|-------------------|-----------|-----------------|-----------|
|              |            | A                    | A2 | H2  | H  | H3  | L1  | L3  | B2  | B3  | D  | DNA                    | DNM | L                 | WEIGHT Kg | L               | WEIGHT Kg |
| KDN 32-160.1 | 0,37       | 80                   | 60 | 160 | 65 | 197 | 800 | 540 | 360 | 320 | 19 | 50                     | 32  | 730               | 83        | 830             | 88        |
|              | 0,55       | 80                   | 60 | 160 | 65 | 197 | 800 | 540 | 360 | 320 | 19 | 50                     | 32  | 730               | 86        | 830             | 91        |
|              | 0,75       | 80                   | 60 | 160 | 65 | 197 | 800 | 540 | 360 | 320 | 19 | 50                     | 32  | 717               | 80        | 817             | 85        |

Dimension and electrical data based on sizing definition following the instructions on page 105.

# KDN 32-160 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 1450 1/min



For MEI index refer to the hydraulic efficiency section.  
The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

| MODEL      | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA   |           | MOTOR TYPE |
|------------|------------|------------|-------------------|-----------|------------|
|            |            |            | POWER INPUT 50 Hz | In A      |            |
| KDN 32-160 | 0,37       | MEC 71     | 3 x 230 - 400 V ~ | 1,7/0,975 | -          |
|            | 0,55       | MEC 80     | 3 x 230 - 400 V ~ | 2,6/1,5   | -          |
|            | 0,75       | MEC 80     | 3 x 230 - 400 V ~ | 3,1/1,8   | IE3        |
|            | 1,1        | MEC 90S    | 3 x 230 - 400 V ~ | 4,3/2,5   | IE3        |

| MODEL      | POWER (kW) | UNIT DIMENSIONS (mm) |    |     |    |     |     |     |     |     |    | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |           | SPACER COUPLING |           |
|------------|------------|----------------------|----|-----|----|-----|-----|-----|-----|-----|----|------------------------|-----|-------------------|-----------|-----------------|-----------|
|            |            | A                    | A2 | H2  | H  | H3  | L1  | L3  | B2  | B3  | D  | DNA                    | DNM | L                 | WEIGHT Kg | L               | WEIGHT Kg |
| KDN 32-160 | 0,37       | 80                   | 60 | 160 | 65 | 197 | 800 | 540 | 360 | 320 | 19 | 50                     | 32  | 730               | 83        | 830             | 88        |
|            | 0,55       | 80                   | 60 | 160 | 65 | 197 | 800 | 540 | 360 | 320 | 19 | 50                     | 32  | 730               | 85        | 830             | 90        |
|            | 0,75       | 80                   | 60 | 160 | 65 | 197 | 800 | 540 | 360 | 320 | 19 | 50                     | 32  | 717               | 80        | 817             | 85        |
|            | 1,1        | 80                   | 60 | 160 | 65 | 197 | 800 | 540 | 360 | 320 | 19 | 50                     | 32  | 762               | 78        | 862             | 83        |

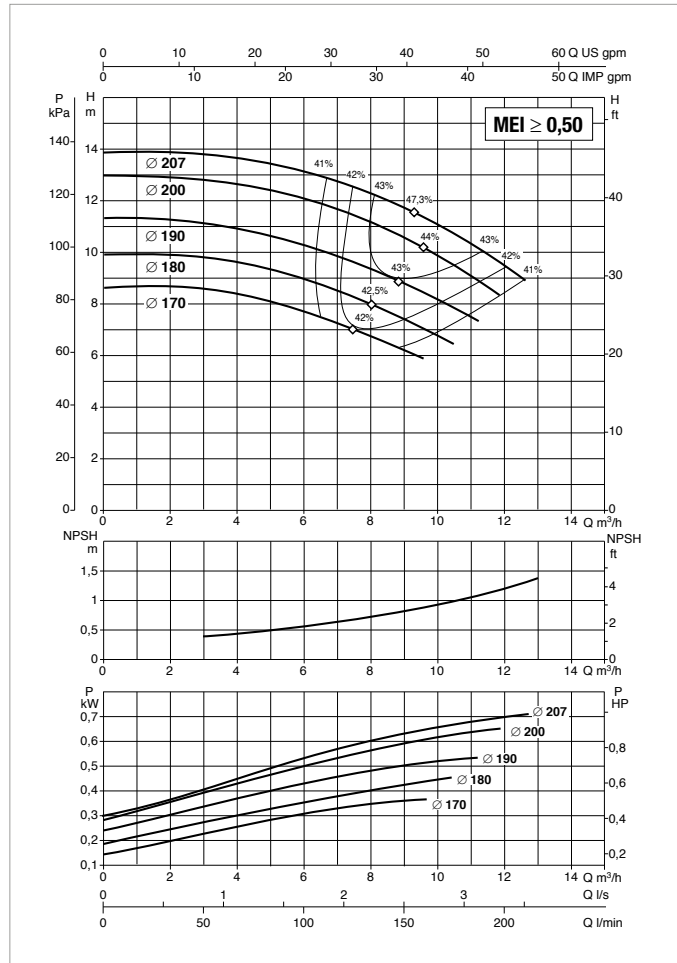
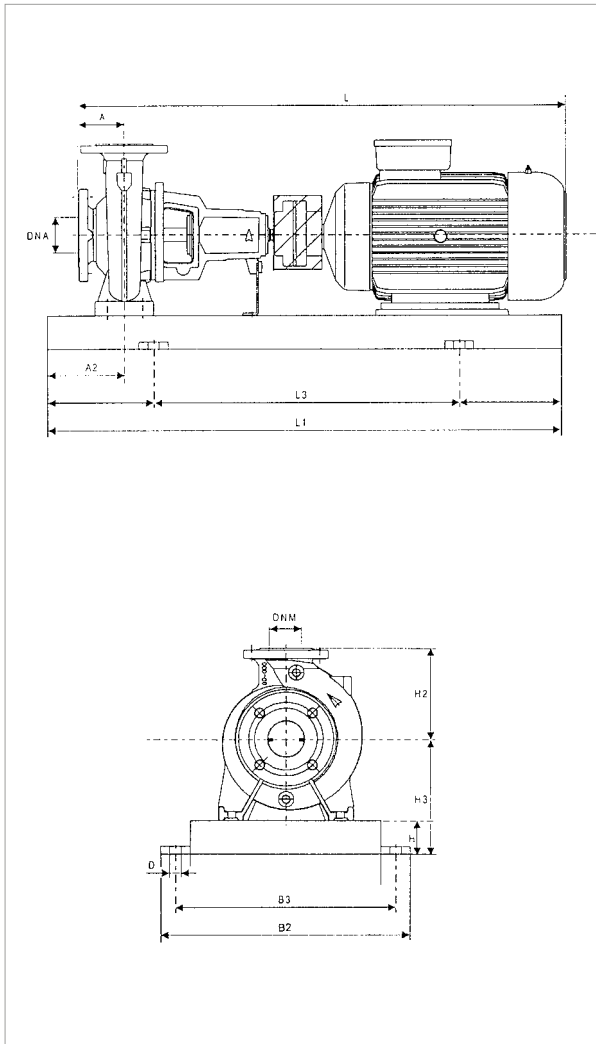
Dimension and electrical data based on sizing definition following the instructions on page 105.



# KDN 32-200.1 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 1450 1/min



For MEI index refer to the hydraulic efficiency section.  
The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

| MODEL        | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA   |           | MOTOR TYPE |
|--------------|------------|------------|-------------------|-----------|------------|
|              |            |            | POWER INPUT 50 Hz | In A      |            |
| KDN 32-200.1 | 0,37       | MEC 71     | 3 x 230 - 400 V ~ | 1,7/0,975 | -          |
|              | 0,55       | MEC 80     | 3 x 230 - 400 V ~ | 2,6/1,5   | -          |
|              | 0,75       | MEC 80     | 3 x 230 - 400 V ~ | 3,1/1,8   | IE3        |
|              | 1,1        | MEC 90S    | 3 x 230 - 400 V ~ | 4,3/2,5   | IE3        |

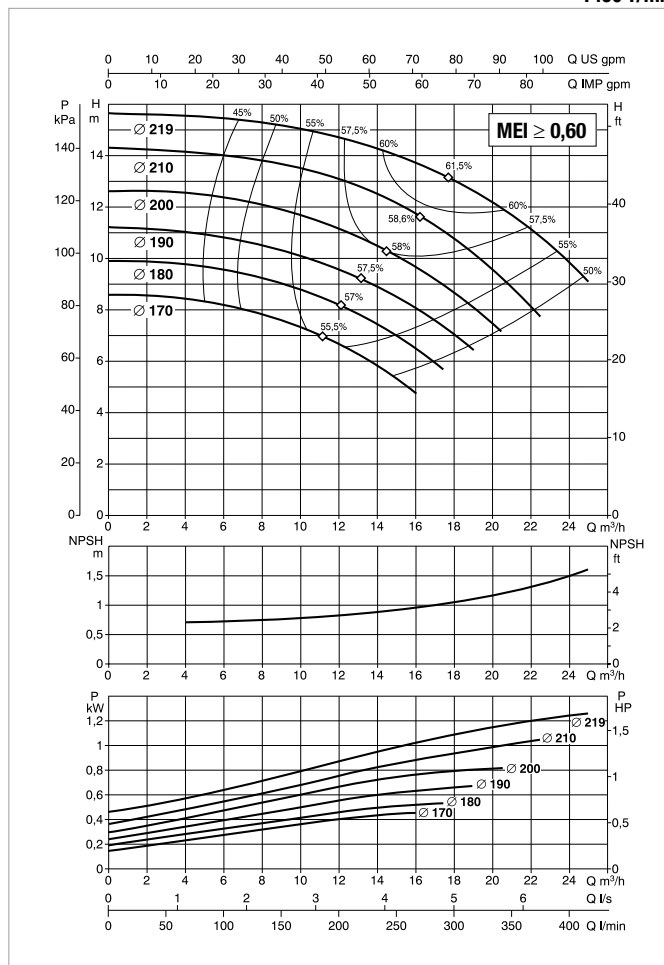
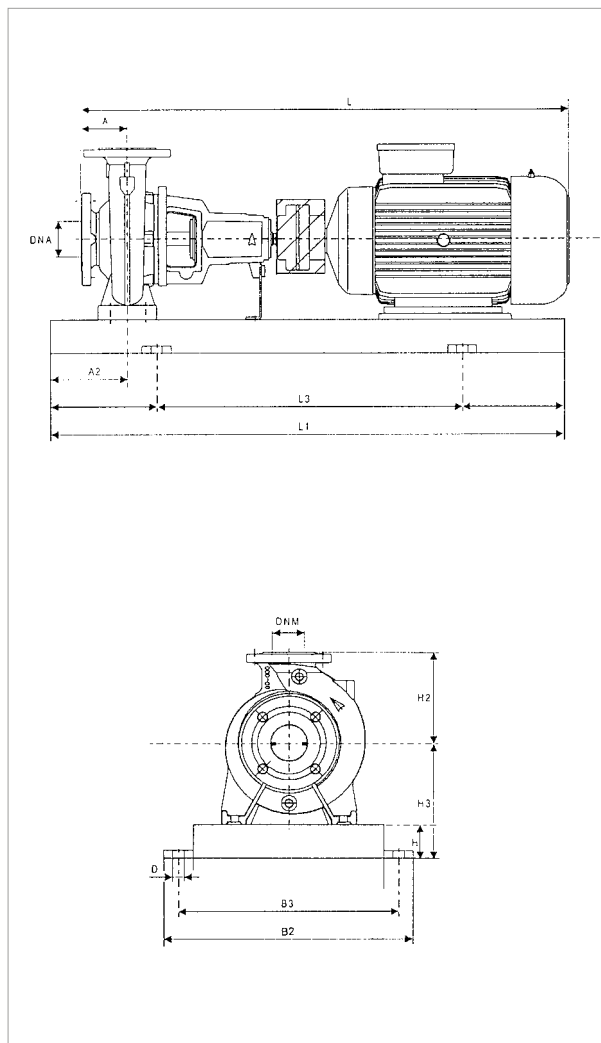
| MODEL        | POWER (kW) | UNIT DIMENSIONS (mm) |    |     |    |     |     |     |     |     |    | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |           | SPACER COUPLING |           |
|--------------|------------|----------------------|----|-----|----|-----|-----|-----|-----|-----|----|------------------------|-----|-------------------|-----------|-----------------|-----------|
|              |            | A                    | A2 | H2  | H  | H3  | L1  | L3  | B2  | B3  | D  | DNA                    | DNM | L                 | WEIGHT Kg | L               | WEIGHT Kg |
| KDN 32-200.1 | 0,37       | 80                   | 60 | 180 | 65 | 225 | 800 | 540 | 360 | 320 | 19 | 50                     | 32  | 730               | 87        | 830             | 92        |
|              | 0,55       | 80                   | 60 | 180 | 65 | 225 | 800 | 540 | 360 | 320 | 19 | 50                     | 32  | 730               | 89        | 830             | 94        |
|              | 0,75       | 80                   | 60 | 180 | 65 | 225 | 800 | 540 | 360 | 320 | 19 | 50                     | 32  | 717               | 95        | 817             | 100       |
|              | 1,1        | 80                   | 60 | 180 | 65 | 225 | 800 | 540 | 360 | 320 | 19 | 50                     | 32  | 762               | 96        | 862             | 101       |

Dimension and electrical data based on sizing definition following the instructions on page 105.

# KDN 32-200 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 1450 1/min



For MEI index refer to the hydraulic efficiency section.  
The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

| MODEL      | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA   |           | MOTOR TYPE |
|------------|------------|------------|-------------------|-----------|------------|
|            |            |            | POWER INPUT 50 Hz | In A      |            |
| KDN 32-200 | 0,37       | MEC 71     | 3 x 230 - 400 V ~ | 1,7/0,975 | -          |
|            | 0,55       | MEC 80     | 3 x 230 - 400 V ~ | 2,6/1,5   | -          |
|            | 0,75       | MEC 80     | 3 x 230 - 400 V ~ | 3,1/1,8   | IE3        |
|            | 1,1        | MEC 90S    | 3 x 230 - 400 V ~ | 4,3/2,5   | IE3        |
|            | 1,5        | MEC 90L    | 3 x 230 - 400 V ~ | 6,2/3,6   | IE3        |
|            | 2,2        | MEC 100L   | 3 x 230 - 400 V ~ | 10,2/5,9  | IE3        |

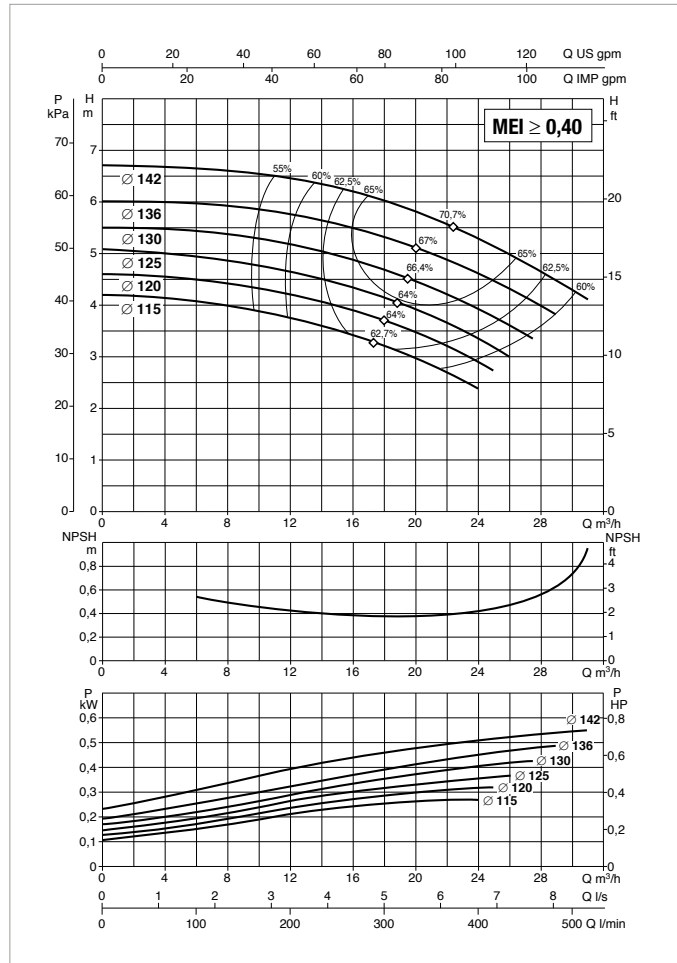
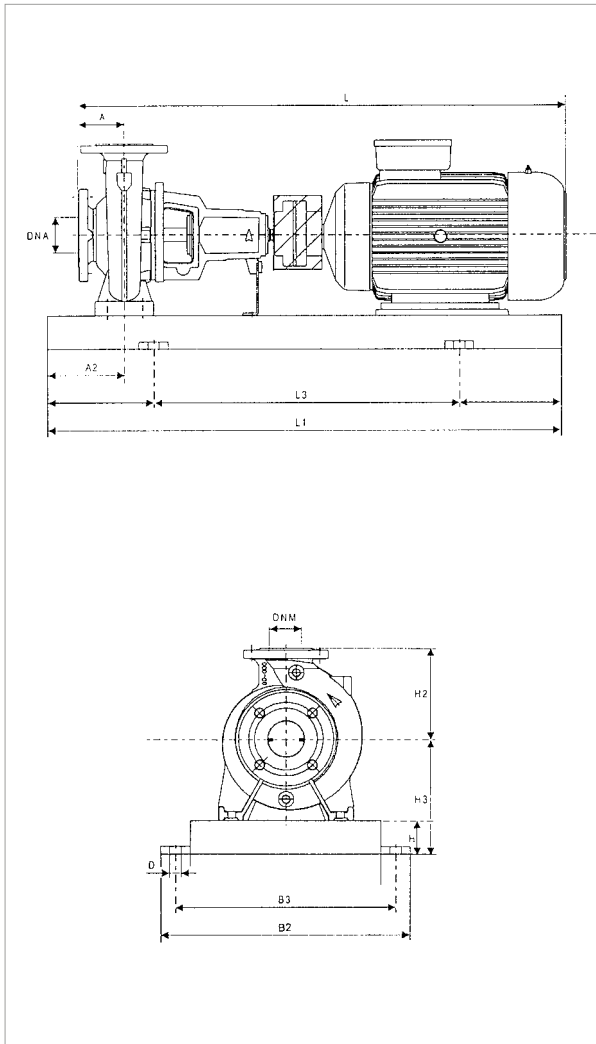
| MODEL      | POWER (kW) | UNIT DIMENSIONS (mm) |    |     |    |     |     |     |     |     |    | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |           | SPACER COUPLING |           |
|------------|------------|----------------------|----|-----|----|-----|-----|-----|-----|-----|----|------------------------|-----|-------------------|-----------|-----------------|-----------|
|            |            | A                    | A2 | H2  | H  | H3  | L1  | L3  | B2  | B3  | D  | DNA                    | DNM | L                 | WEIGHT Kg | L               | WEIGHT Kg |
| KDN 32-200 | 0,37       | 80                   | 60 | 180 | 65 | 225 | 800 | 540 | 360 | 320 | 19 | 50                     | 32  | 730               | 87        | 830             | 92        |
|            | 0,55       | 80                   | 60 | 180 | 65 | 225 | 800 | 540 | 360 | 320 | 19 | 50                     | 32  | 730               | 89        | 830             | 94        |
|            | 0,75       | 80                   | 60 | 180 | 65 | 225 | 800 | 540 | 360 | 320 | 19 | 50                     | 32  | 717               | 84        | 817             | 89        |
|            | 1,1        | 80                   | 60 | 180 | 65 | 225 | 800 | 540 | 360 | 320 | 19 | 50                     | 32  | 762               | 91        | 862             | 96        |
|            | 1,5        | 80                   | 60 | 180 | 65 | 225 | 900 | 600 | 390 | 350 | 19 | 50                     | 32  | 762               | 87        | 862             | 92        |
|            | 2,2        | 80                   | 60 | 180 | 65 | 225 | 900 | 600 | 390 | 350 | 19 | 50                     | 32  | 811               | 92        | 911             | 97        |

Dimension and electrical data based on sizing definition following the instructions on page 105.

# KDN 40-125 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

| MODEL      | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA   |           | MOTOR TYPE |
|------------|------------|------------|-------------------|-----------|------------|
|            |            |            | POWER INPUT 50 Hz | In A      |            |
| KDN 40-125 | 0,37       | MEC 71     | 3 x 230 - 400 V ~ | 1,7/0,975 | -          |
|            | 0,55       | MEC 80     | 3 x 230 - 400 V ~ | 2,6/1,5   | -          |
|            | 0,75       | MEC 80     | 3 x 230 - 400 V ~ | 3,1/1,8   | IE3        |
|            | 1,1        | MEC 90S    | 3 x 230 - 400 V ~ | 4,3/2,5   | IE3        |

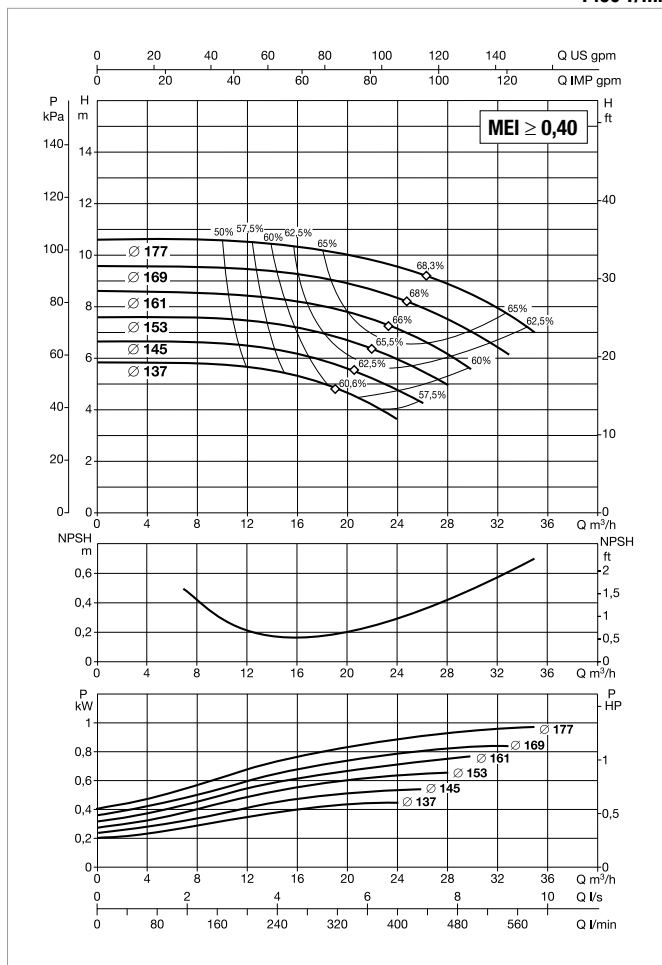
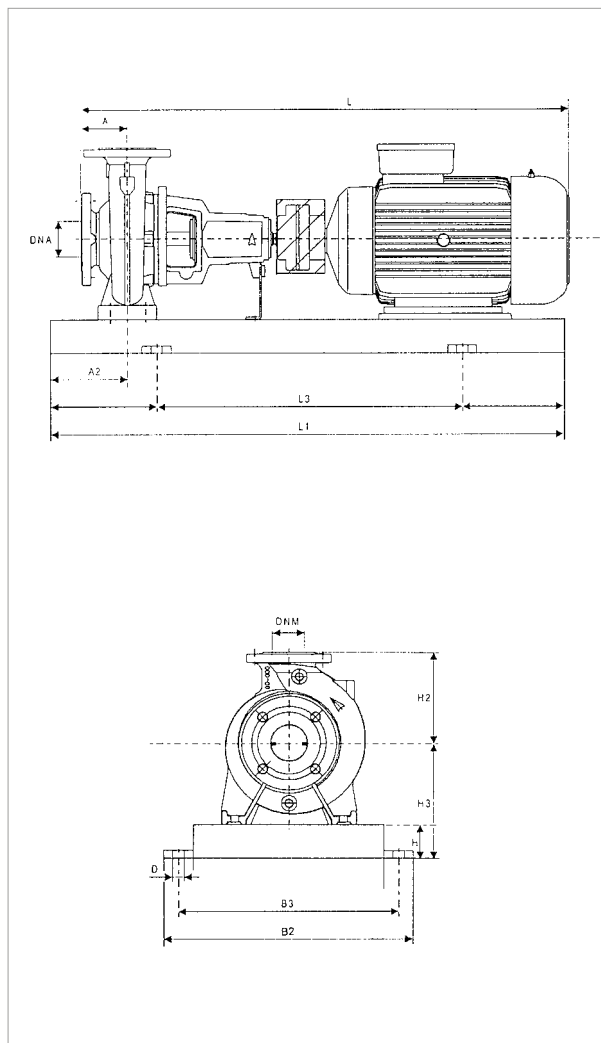
| MODEL      | POWER (kW) | UNIT DIMENSIONS (mm) |    |     |    |     |     |     |     |     |    | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |           | SPACER COUPLING |           |
|------------|------------|----------------------|----|-----|----|-----|-----|-----|-----|-----|----|------------------------|-----|-------------------|-----------|-----------------|-----------|
|            |            | A                    | A2 | H2  | H  | H3  | L1  | L3  | B2  | B3  | D  | DNA                    | DNM | L                 | WEIGHT Kg | L               | WEIGHT Kg |
| KDN 40-125 | 0,37       | 80                   | 60 | 140 | 65 | 177 | 800 | 540 | 360 | 320 | 19 | 65                     | 40  | 730               | 81        | 830             | 86        |
|            | 0,55       | 80                   | 60 | 140 | 65 | 177 | 800 | 540 | 360 | 320 | 19 | 65                     | 40  | 730               | 83        | 830             | 88        |
|            | 0,75       | 80                   | 60 | 140 | 65 | 177 | 800 | 540 | 360 | 320 | 19 | 65                     | 40  | 717               | 78        | 817             | 83        |
|            | 1,1        | 80                   | 60 | 140 | 65 | 177 | 800 | 540 | 360 | 320 | 19 | 65                     | 40  | 762               | 76        | 862             | 71        |

Dimension and electrical data based on sizing definition following the instructions on page 105.

# KDN 40-160 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 1450 1/min



For MEI index refer to the hydraulic efficiency section.  
 The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

| MODEL      | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA   |           | MOTOR TYPE |
|------------|------------|------------|-------------------|-----------|------------|
|            |            |            | POWER INPUT 50 Hz | In A      |            |
| KDN 40-160 | 0,37       | MEC 71     | 3 x 230 - 400 V ~ | 1,7/0,975 | -          |
|            | 0,55       | MEC 80     | 3 x 230 - 400 V ~ | 2,6/1,5   | -          |
|            | 0,75       | MEC 80     | 3 x 230 - 400 V ~ | 3,1/1,8   | IE3        |
|            | 1,1        | MEC 90S    | 3 x 230 - 400 V ~ | 4,3/2,5   | IE3        |
|            | 1,5        | MEC 90L    | 3 x 230 - 400 V ~ | 6,2/3,6   | IE3        |

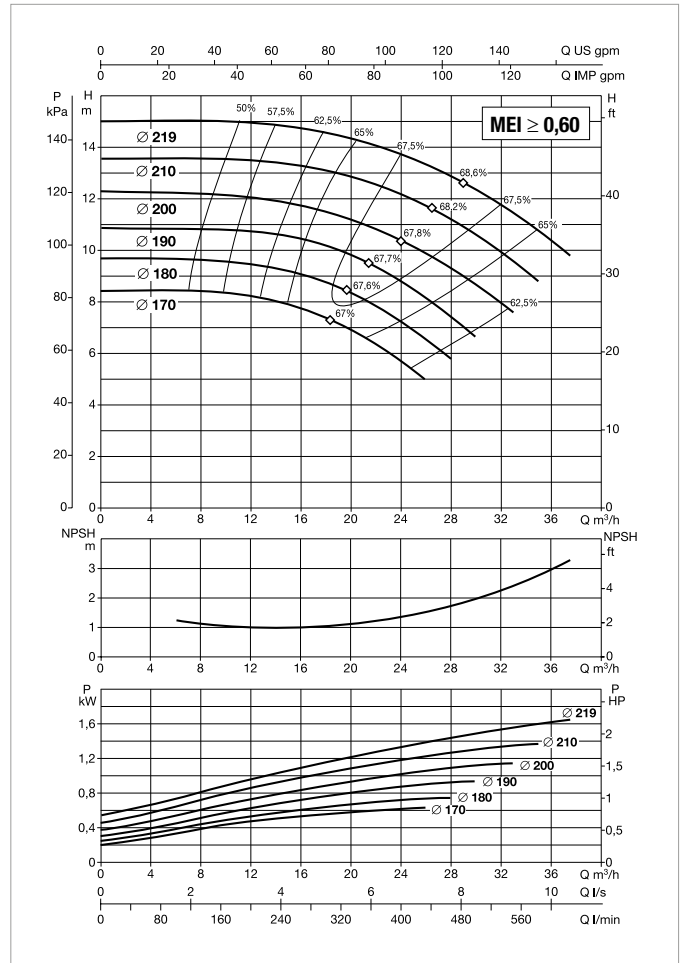
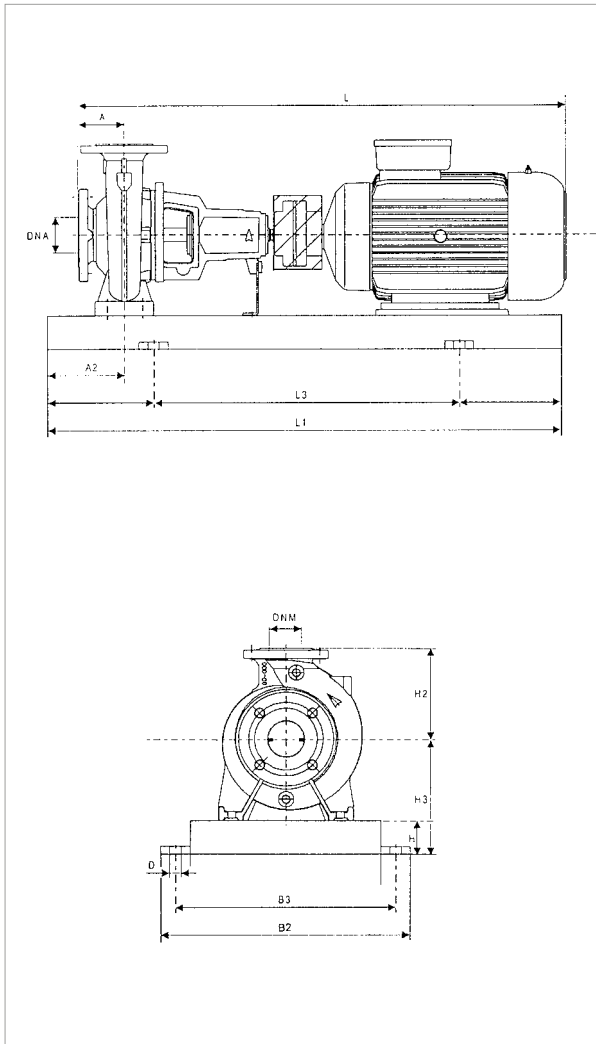
| MODEL      | POWER (kW) | UNIT DIMENSIONS (mm) |    |     |    |     |     |     |     |     |    | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |           | SPACER COUPLING |           |
|------------|------------|----------------------|----|-----|----|-----|-----|-----|-----|-----|----|------------------------|-----|-------------------|-----------|-----------------|-----------|
|            |            | A                    | A2 | H2  | H  | H3  | L1  | L3  | B2  | B3  | D  | DNA                    | DNM | L                 | WEIGHT Kg | L               | WEIGHT Kg |
| KDN 40-160 | 0,37       | 80                   | 60 | 160 | 65 | 197 | 800 | 540 | 360 | 320 | 19 | 65                     | 40  | 730               | 85        | 830             | 90        |
|            | 0,55       | 80                   | 60 | 160 | 65 | 197 | 800 | 540 | 360 | 320 | 19 | 65                     | 40  | 730               | 89        | 830             | 94        |
|            | 0,75       | 80                   | 60 | 160 | 65 | 197 | 800 | 540 | 360 | 320 | 19 | 65                     | 40  | 717               | 83        | 817             | 88        |
|            | 1,1        | 80                   | 60 | 160 | 65 | 197 | 800 | 540 | 360 | 320 | 19 | 65                     | 40  | 762               | 81        | 862             | 86        |
|            | 1,5        | 80                   | 60 | 160 | 65 | 197 | 900 | 600 | 390 | 350 | 19 | 65                     | 40  | 762               | 87        | 862             | 92        |

Dimension and electrical data based on sizing definition following the instructions on page 105.

# KDN 40-200 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

| MODEL      | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA          |          | MOTOR TYPE |
|------------|------------|------------|--------------------------|----------|------------|
|            |            |            | POWER INPUT 50 Hz        | In A     |            |
| KDN 40-200 | 0,55       | MEC 80     | 3 x 230 - 400 V ~        | 2,6/1,5  | -          |
|            | 0,75       | MEC 80     | 3 x 230 - 400 V ~        | 3,1/1,8  | IE3        |
|            | 1,1        | MEC 90S    | 3 x 230 - 400 V ~        | 4,3/2,5  | IE3        |
|            | 1,5        | MEC 90L    | 3 x 230 - 400 V ~        | 6,2/3,6  | IE3        |
|            | 2,2        | MEC 100L   | 3 x 230 - 400 V ~        | 10,2/5,9 | IE3        |
|            | 3          | MEC 100L   | 3 x 400 V ~ <sup>1</sup> | 6,8      | IE3        |

<sup>1</sup> Star start-up possible (Δ)

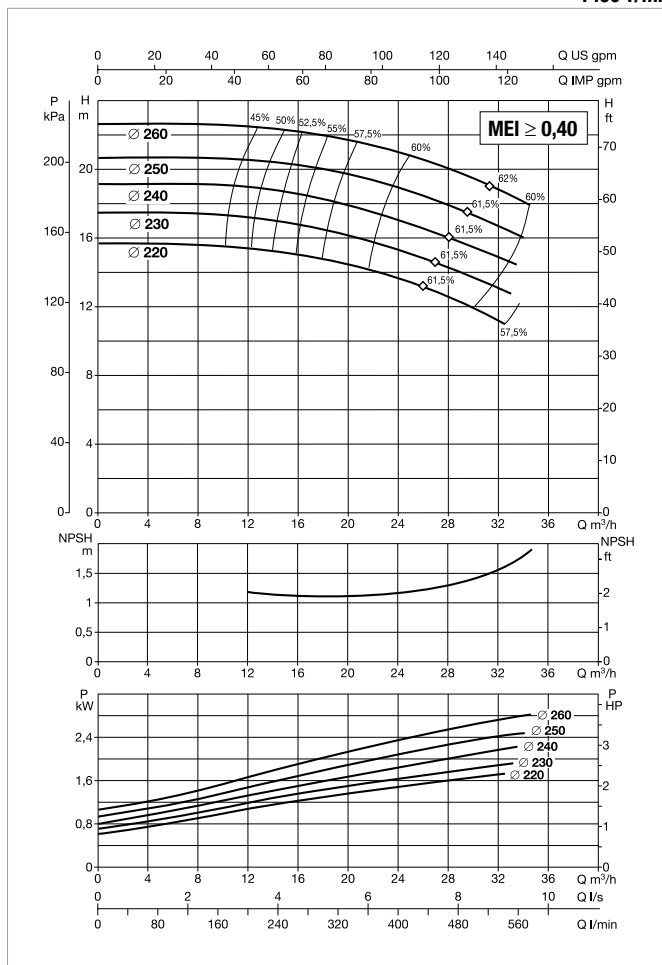
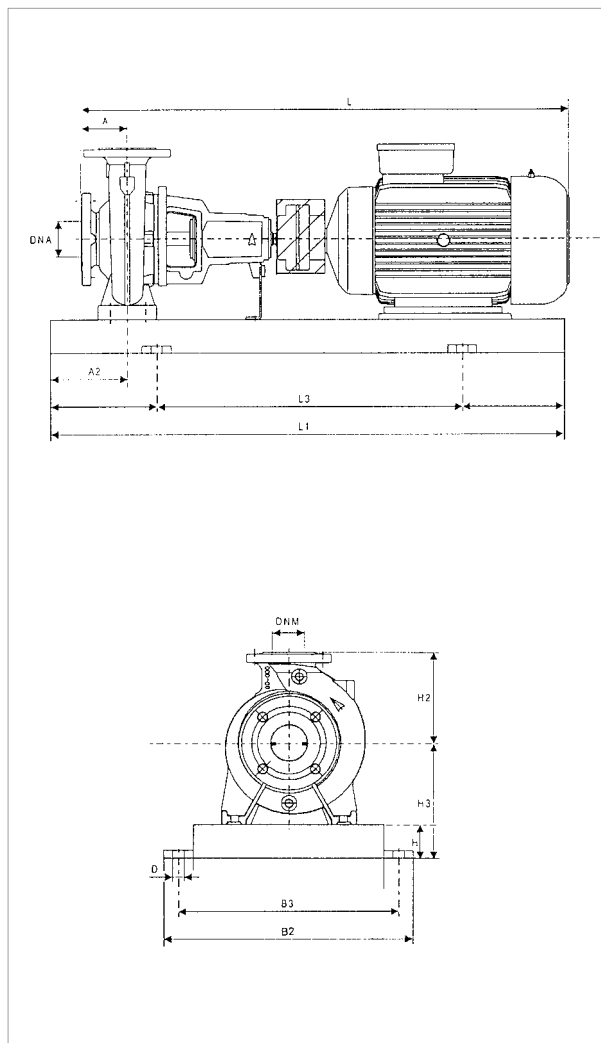
| MODEL      | POWER (kW) | UNIT DIMENSIONS (mm) |    |     |    |     |     |     |     |     |    | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |           | SPACER COUPLING |           |
|------------|------------|----------------------|----|-----|----|-----|-----|-----|-----|-----|----|------------------------|-----|-------------------|-----------|-----------------|-----------|
|            |            | A                    | A2 | H2  | H  | H3  | L1  | L3  | B2  | B3  | D  | DNA                    | DNM | L                 | WEIGHT Kg | L               | WEIGHT Kg |
| KDN 40-200 | 0,55       | 100                  | 60 | 180 | 65 | 225 | 900 | 600 | 390 | 350 | 19 | 65                     | 40  | 750               | 98        | 850             | 103       |
|            | 0,75       | 100                  | 60 | 180 | 65 | 225 | 900 | 600 | 390 | 350 | 19 | 65                     | 40  | 737               | 92        | 837             | 97        |
|            | 1,1        | 100                  | 60 | 180 | 65 | 225 | 900 | 600 | 390 | 350 | 19 | 65                     | 40  | 782               | 91        | 882             | 96        |
|            | 1,5        | 100                  | 60 | 180 | 65 | 225 | 900 | 600 | 390 | 350 | 19 | 65                     | 40  | 782               | 91        | 882             | 96        |
|            | 2,2        | 100                  | 60 | 180 | 65 | 225 | 900 | 600 | 390 | 350 | 19 | 65                     | 40  | 831               | 101       | 931             | 106       |
|            | 3          | 100                  | 60 | 180 | 65 | 225 | 900 | 600 | 390 | 350 | 19 | 65                     | 40  | 846               | 104       | 946             | 109       |

Dimension and electrical data based on sizing definition following the instructions on page 105.

# KDN 40-250 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

**= 1450 1/min**



**For MEI index refer to the hydraulic efficiency section.**  
 The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

| MODEL      | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA          |          | MOTOR TYPE |
|------------|------------|------------|--------------------------|----------|------------|
|            |            |            | POWER INPUT 50 Hz        | In A     |            |
| KDN 40-250 | 1,5        | MEC 90L    | 3 x 230 - 400 V ~        | 6,2/3,6  | IE3        |
|            | 2,2        | MEC 100L   | 3 x 230 - 400 V ~        | 10,2/5,9 | IE3        |
|            | 3          | MEC 100L   | 3 x 400 V ~ <sup>1</sup> | 6,8      | IE3        |
|            | 4          | MEC 112M   | 3 x 400 V ~ <sup>1</sup> | 8,2      | IE3        |

<sup>1</sup> Star start-up possible (A)

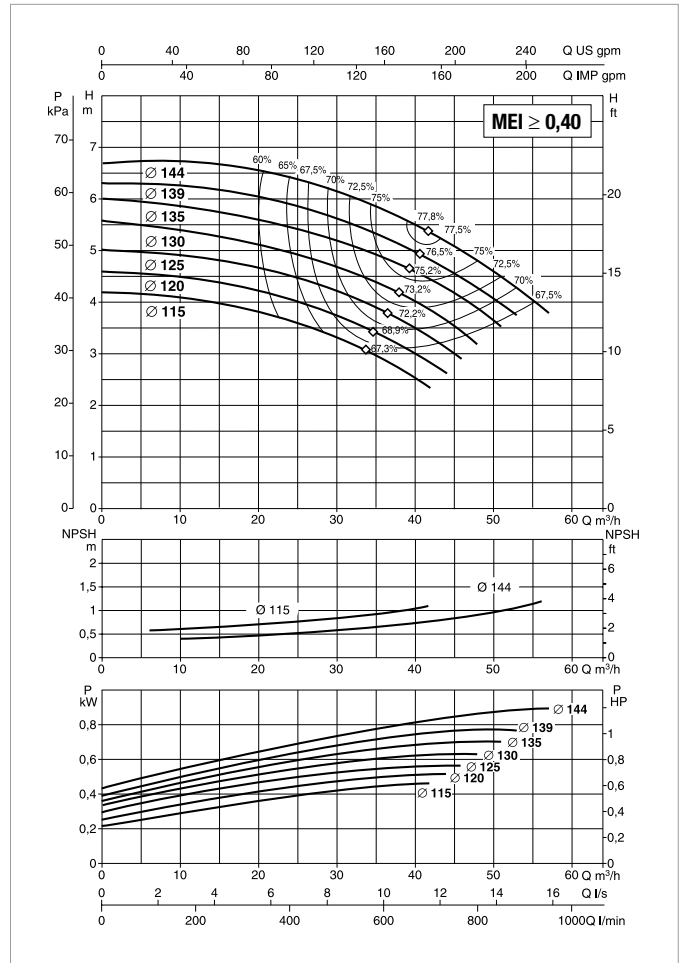
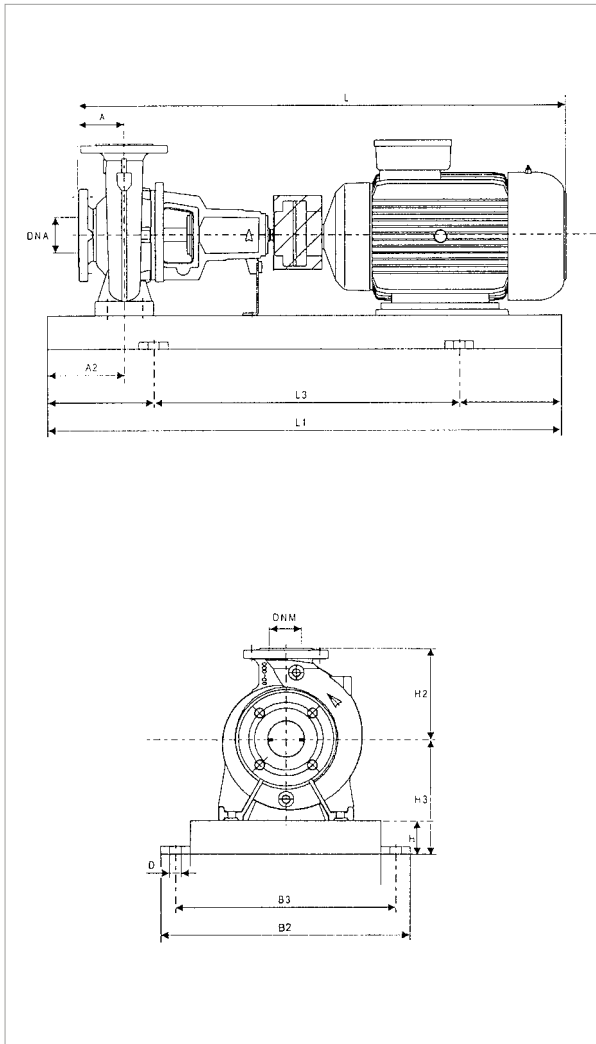
| MODEL      | POWER (kW) | UNIT DIMENSIONS (mm) |    |     |    |     |      |     |     |     |    | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |           | SPACER COUPLING |           |
|------------|------------|----------------------|----|-----|----|-----|------|-----|-----|-----|----|------------------------|-----|-------------------|-----------|-----------------|-----------|
|            |            | A                    | A2 | H2  | H  | H3  | L1   | L3  | B2  | B3  | D  | DNA                    | DNM | L                 | WEIGHT Kg | L               | WEIGHT Kg |
| KDN 40-250 | 1,5        | 100                  | 75 | 225 | 80 | 260 | 1000 | 660 | 450 | 400 | 24 | 65                     | 40  | 782               | 111       | 882             | 116       |
|            | 2,2        | 100                  | 75 | 225 | 80 | 260 | 1000 | 660 | 450 | 400 | 24 | 65                     | 40  | 831               | 119       | 931             | 124       |
|            | 3          | 100                  | 75 | 225 | 80 | 260 | 1000 | 660 | 450 | 400 | 24 | 65                     | 40  | 846               | 135       | 946             | 140       |
|            | 4          | 100                  | 75 | 225 | 80 | 260 | 1000 | 660 | 450 | 400 | 24 | 65                     | 40  | 853               | 179       | 953             | 184       |

Dimension and electrical data based on sizing definition following the instructions on page 105.

# KDN 50-125 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

**= 1450 1/min**



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

| MODEL      | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA   |           | MOTOR TYPE |
|------------|------------|------------|-------------------|-----------|------------|
|            |            |            | POWER INPUT 50 Hz | In A      |            |
| KDN 50-125 | 0,37       | MEC 71     | 3 x 230 - 400 V ~ | 1,7/0,975 | -          |
|            | 0,55       | MEC 80     | 3 x 230 - 400 V ~ | 2,6/1,5   | -          |
|            | 0,75       | MEC 80     | 3 x 230 - 400 V ~ | 3,1/1,8   | IE3        |
|            | 1,1        | MEC 90S    | 3 x 230 - 400 V ~ | 4,3/2,5   | IE3        |
|            | 1,5        | MEC 90L    | 3 x 230 - 400 V ~ | 6,2/3,6   | IE3        |

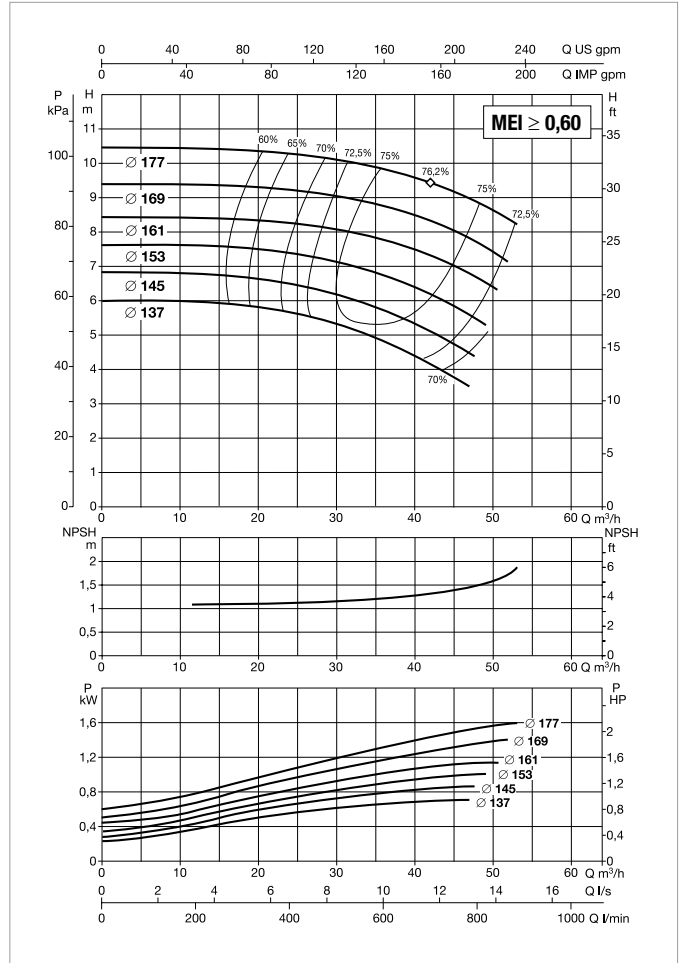
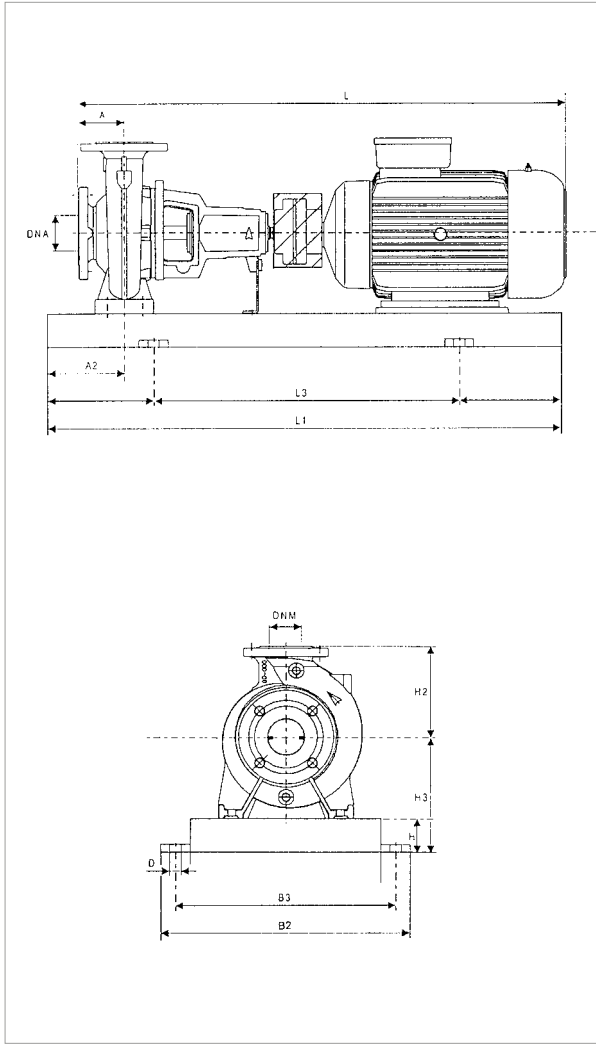
| MODEL      | POWER (kW) | UNIT DIMENSIONS (mm) |    |     |    |     |     |     |     |     |    | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |           | SPACER COUPLING |           |
|------------|------------|----------------------|----|-----|----|-----|-----|-----|-----|-----|----|------------------------|-----|-------------------|-----------|-----------------|-----------|
|            |            | A                    | A2 | H2  | H  | H3  | L1  | L3  | B2  | B3  | D  | DNA                    | DNM | L                 | WEIGHT Kg | L               | WEIGHT Kg |
| KDN 50-125 | 0,37       | 100                  | 60 | 160 | 65 | 197 | 800 | 540 | 360 | 320 | 19 | 65                     | 50  | 750               | 87        | 850             | 92        |
|            | 0,55       | 100                  | 60 | 160 | 65 | 197 | 800 | 540 | 360 | 320 | 19 | 65                     | 50  | 750               | 90        | 850             | 95        |
|            | 0,75       | 100                  | 60 | 160 | 65 | 197 | 800 | 540 | 360 | 320 | 19 | 65                     | 50  | 737               | 85        | 837             | 90        |
|            | 1,1        | 100                  | 60 | 160 | 65 | 197 | 800 | 540 | 360 | 320 | 19 | 65                     | 50  | 782               | 83        | 882             | 88        |
|            | 1,5        | 100                  | 60 | 160 | 65 | 197 | 900 | 600 | 390 | 350 | 19 | 65                     | 50  | 782               | 87        | 882             | 92        |

Dimension and electrical data based on sizing definition following the instructions on page 105.

# KDN 50-160 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 1450 1/min



For MEI index refer to the hydraulic efficiency section.  
The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

| MODEL      | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA          |          | MOTOR TYPE |
|------------|------------|------------|--------------------------|----------|------------|
|            |            |            | POWER INPUT 50 Hz        | In A     |            |
| KDN 50-160 | 0,55       | MEC 80     | 3 x 230 - 400 V ~        | 2,6/1,5  | -          |
|            | 0,75       | MEC 80     | 3 x 230 - 400 V ~        | 3,1/1,8  | IE3        |
|            | 1,1        | MEC 90S    | 3 x 230 - 400 V ~        | 4,3/2,5  | IE3        |
|            | 1,5        | MEC 90L    | 3 x 230 - 400 V ~        | 6,2/3,6  | IE3        |
|            | 2,2        | MEC 100L   | 3 x 230 - 400 V ~        | 10,2/5,9 | IE3        |
|            | 3          | MEC 100L   | 3 x 400 V ~ <sup>1</sup> | 6,8      | IE3        |

<sup>1</sup> Star start-up possible (A)

| MODEL      | POWER (kW) | UNIT DIMENSIONS (mm) |    |     |    |     |     |     |     |     |    | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |           | SPACER COUPLING |           |
|------------|------------|----------------------|----|-----|----|-----|-----|-----|-----|-----|----|------------------------|-----|-------------------|-----------|-----------------|-----------|
|            |            | A                    | A2 | H2  | H  | H3  | L1  | L3  | B2  | B3  | D  | DNA                    | DNM | L                 | WEIGHT Kg | L               | WEIGHT Kg |
| KDN 50-160 | 0,55       | 100                  | 60 | 180 | 65 | 225 | 900 | 600 | 390 | 350 | 19 | 65                     | 50  | 750               | 97        | 850             | 102       |
|            | 0,75       | 100                  | 60 | 180 | 65 | 225 | 900 | 600 | 390 | 350 | 19 | 65                     | 50  | 737               | 92        | 837             | 97        |
|            | 1,1        | 100                  | 60 | 180 | 65 | 225 | 900 | 600 | 390 | 350 | 19 | 65                     | 50  | 782               | 90        | 882             | 95        |
|            | 1,5        | 100                  | 60 | 180 | 65 | 225 | 900 | 600 | 390 | 350 | 19 | 65                     | 50  | 782               | 89        | 882             | 94        |
|            | 2,2        | 100                  | 60 | 180 | 65 | 225 | 900 | 600 | 390 | 350 | 19 | 65                     | 50  | 831               | 97        | 931             | 102       |
|            | 3          | 100                  | 60 | 180 | 65 | 225 | 900 | 600 | 390 | 350 | 19 | 65                     | 50  | 846               | 96        | 946             | 101       |

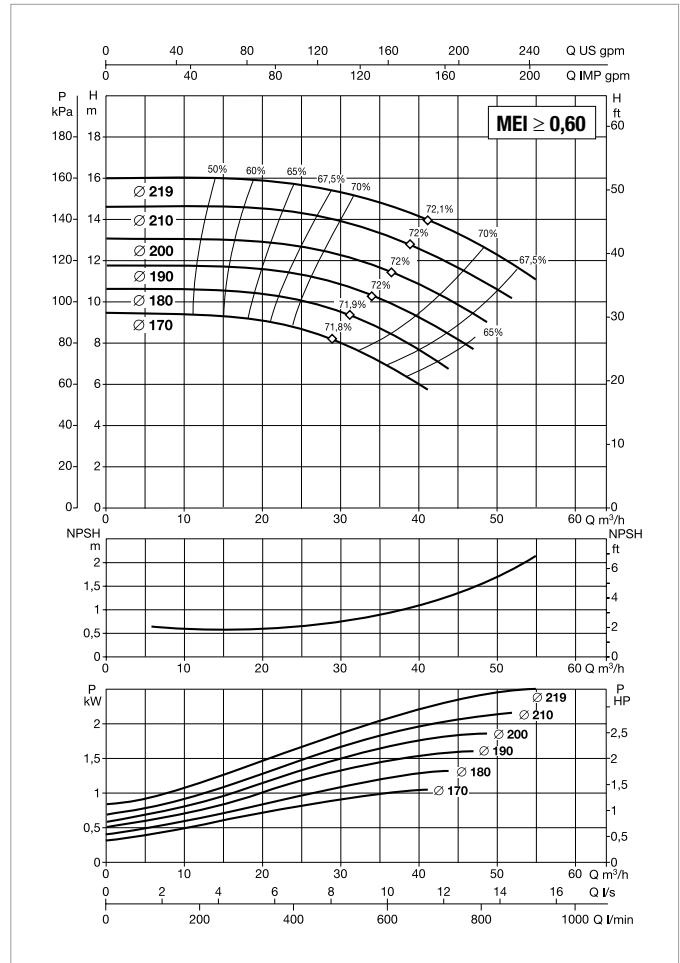
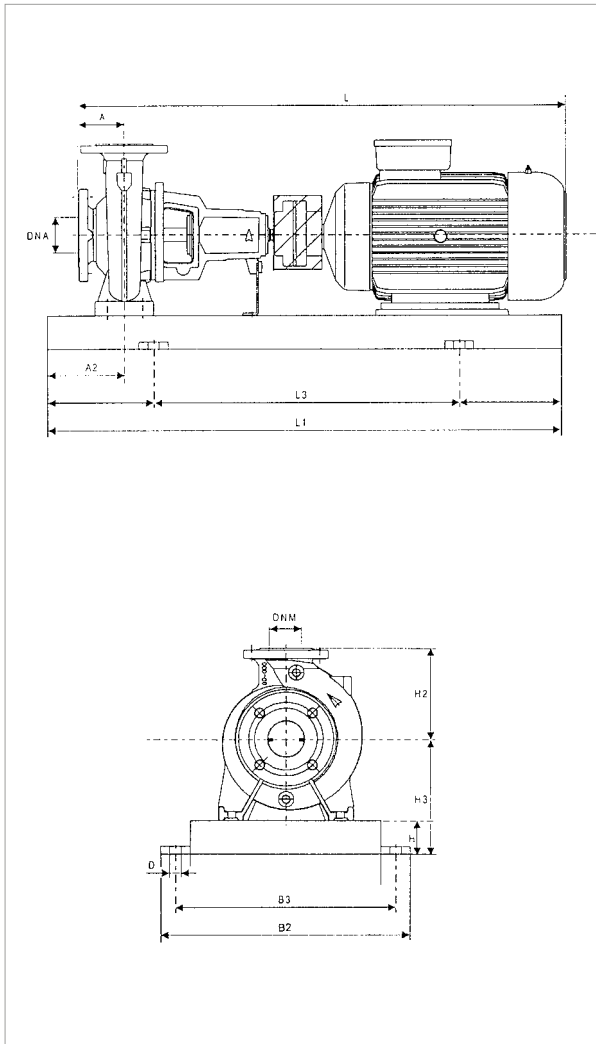
Dimension and electrical data based on sizing definition following the instructions on page 105.



# KDN 50-200 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 1450 1/min



For MEI index refer to the hydraulic efficiency section.  
The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

| MODEL      | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA          |          | MOTOR TYPE |
|------------|------------|------------|--------------------------|----------|------------|
|            |            |            | POWER INPUT 50 Hz        | In A     |            |
| KDN 50-200 | 0,75       | MEC 80     | 3 x 230 - 400 V ~        | 3,1/1,8  | IE3        |
|            | 1,1        | MEC 90S    | 3 x 230 - 400 V ~        | 4,3/2,5  | IE3        |
|            | 1,5        | MEC 90L    | 3 x 230 - 400 V ~        | 6,2/3,6  | IE3        |
|            | 2,2        | MEC 100L   | 3 x 230 - 400 V ~        | 10,2/5,9 | IE3        |
|            | 3          | MEC 100L   | 3 x 400 V ~ <sup>1</sup> | 6,8      | IE3        |
|            | 4          | MEC 112M   | 3 x 400 V ~ <sup>1</sup> | 8,2      | IE3        |

<sup>1</sup> Star start-up possible (A)

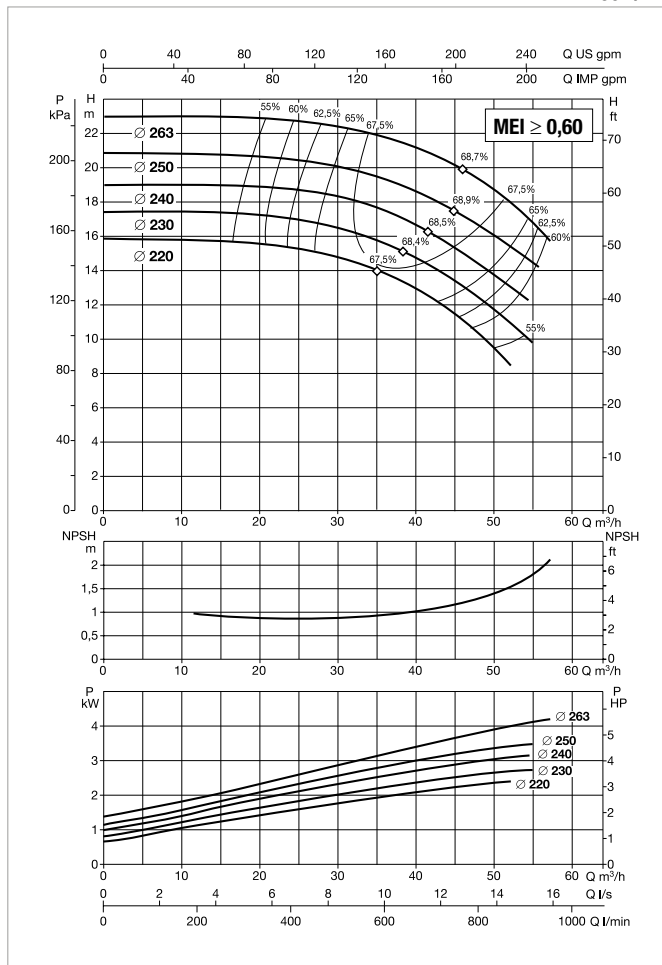
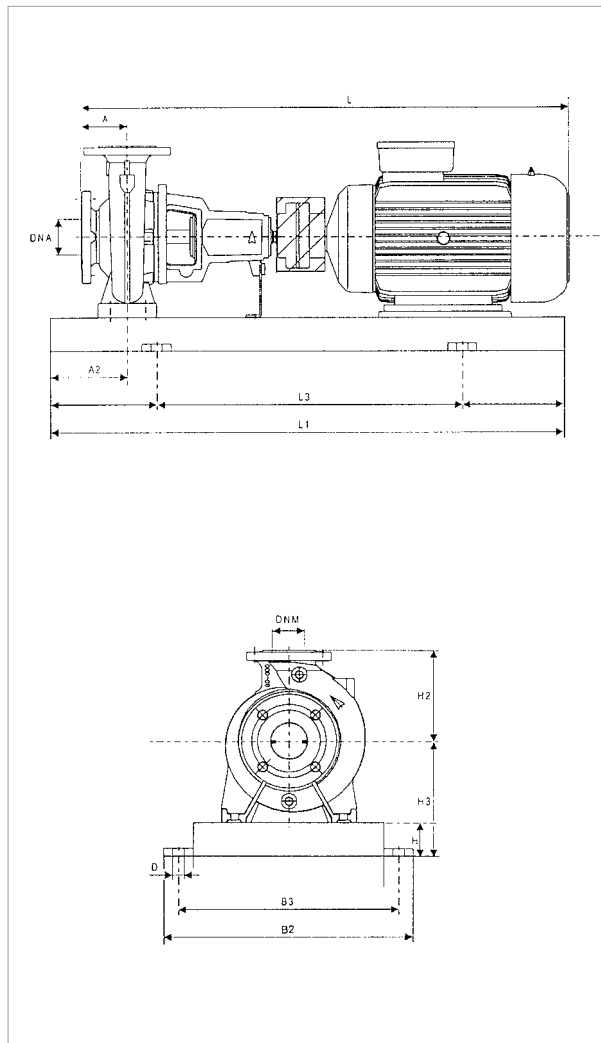
| MODEL      | POWER (kW) | UNIT DIMENSIONS (mm) |    |     |    |     |     |     |     |     |    | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |           | SPACER COUPLING |           |
|------------|------------|----------------------|----|-----|----|-----|-----|-----|-----|-----|----|------------------------|-----|-------------------|-----------|-----------------|-----------|
|            |            | A                    | A2 | H2  | H  | H3  | L1  | L3  | B2  | B3  | D  | DNA                    | DNM | L                 | WEIGHT Kg | L               | WEIGHT Kg |
| KDN 50-200 | 0,75       | 100                  | 60 | 200 | 65 | 225 | 900 | 600 | 390 | 350 | 19 | 65                     | 50  | 737               | 98        | 837             | 103       |
|            | 1,1        | 100                  | 60 | 200 | 65 | 225 | 900 | 600 | 390 | 350 | 19 | 65                     | 50  | 782               | 97        | 882             | 102       |
|            | 1,5        | 100                  | 60 | 200 | 65 | 225 | 900 | 600 | 390 | 350 | 19 | 65                     | 50  | 782               | 100       | 882             | 105       |
|            | 2,2        | 100                  | 60 | 200 | 65 | 225 | 900 | 600 | 390 | 350 | 19 | 65                     | 50  | 831               | 113       | 931             | 118       |
|            | 3          | 100                  | 60 | 200 | 65 | 225 | 900 | 600 | 390 | 350 | 19 | 65                     | 50  | 846               | 108       | 946             | 113       |
|            | 4          | 100                  | 60 | 200 | 65 | 225 | 900 | 600 | 390 | 350 | 19 | 65                     | 50  | 853               | 101       | 953             | 106       |

Dimension and electrical data based on sizing definition following the instructions on page 105.

# KDN 50-250 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

**= 1450 1/min**



**For MEI index refer to the hydraulic efficiency section.**  
 The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

| MODEL      | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA          |          | MOTOR TYPE |
|------------|------------|------------|--------------------------|----------|------------|
|            |            |            | POWER INPUT 50 Hz        | In A     |            |
| KDN 50-250 | 2,2        | MEC 100L   | 3 x 230 - 400 V ~        | 10,2/5,9 | IE3        |
|            | 3          | MEC 100L   | 3 x 400 V ~ <sup>1</sup> | 6,8      | IE3        |
|            | 4          | MEC 112M   | 3 x 400 V ~ <sup>1</sup> | 8,2      | IE3        |
|            | 5,5        | MEC 132S   | 3 x 400 V ~ <sup>1</sup> | 10,6     | IE3        |

<sup>1</sup> Star start-up possible (Δ)

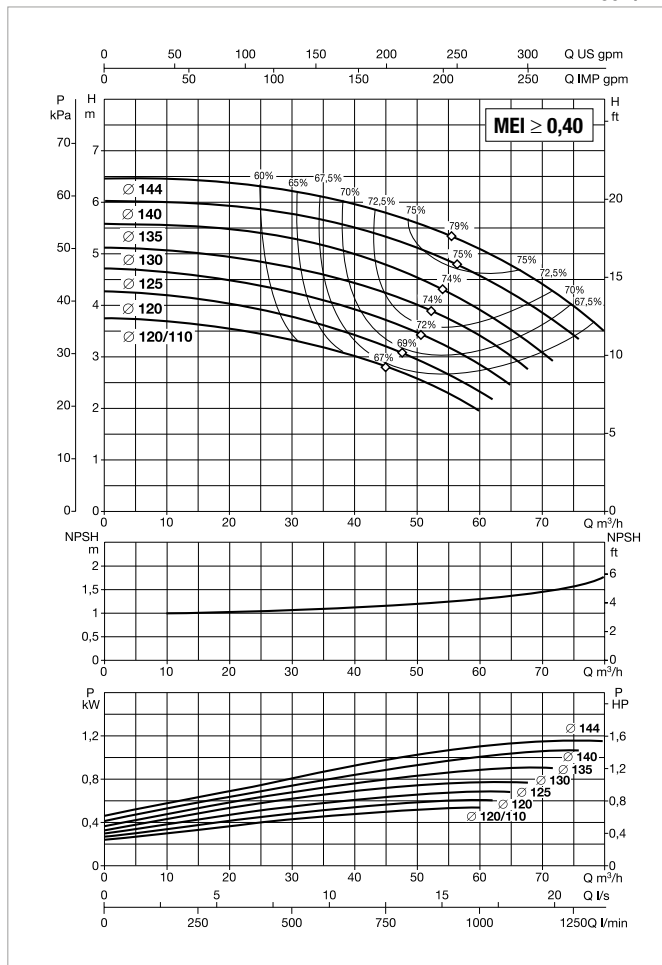
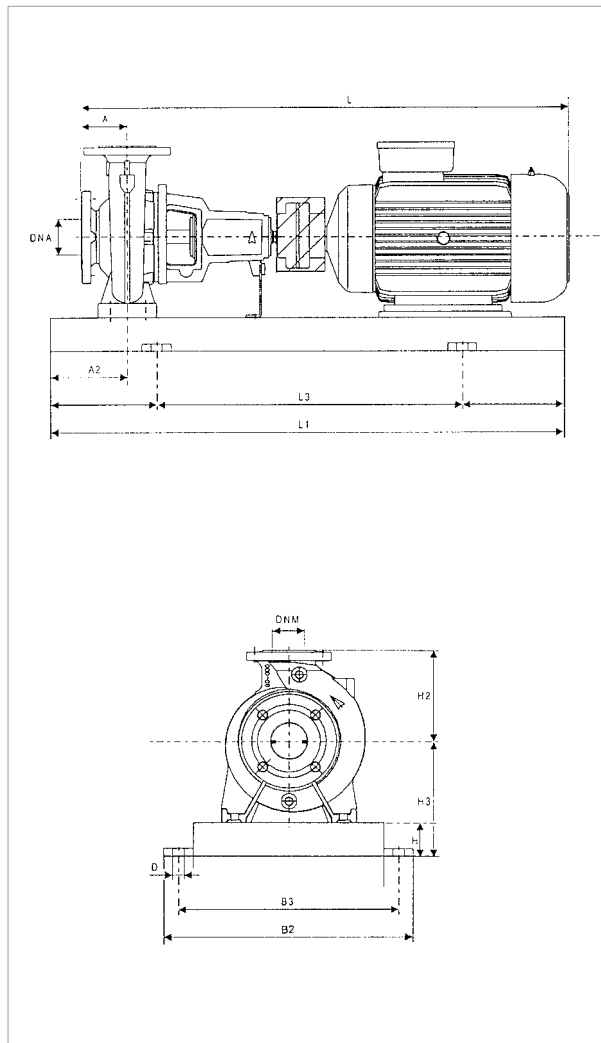
| MODEL      | POWER (kW) | UNIT DIMENSIONS (mm) |    |     |    |     |      |     |     |     |    | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |           | SPACER COUPLING |           |
|------------|------------|----------------------|----|-----|----|-----|------|-----|-----|-----|----|------------------------|-----|-------------------|-----------|-----------------|-----------|
|            |            | A                    | A2 | H2  | H  | H3  | L1   | L3  | B2  | B3  | D  | DNA                    | DNM | L                 | WEIGHT Kg | L               | WEIGHT Kg |
| KDN 50-250 | 2,2        | 100                  | 75 | 225 | 80 | 260 | 1000 | 660 | 450 | 400 | 24 | 65                     | 50  | 831               | 125       | 931             | 130       |
|            | 3          | 100                  | 75 | 225 | 80 | 260 | 1000 | 660 | 450 | 400 | 24 | 65                     | 50  | 846               | 124       | 946             | 129       |
|            | 4          | 100                  | 75 | 225 | 80 | 260 | 1000 | 660 | 450 | 400 | 24 | 65                     | 50  | 853               | 144       | 953             | 149       |
|            | 5,5        | 100                  | 75 | 225 | 80 | 260 | 1120 | 740 | 490 | 440 | 24 | 65                     | 50  | 910               | 165       | 1010            | 170       |

Dimension and electrical data based on sizing definition following the instructions on page 105.

# KDN 65-125 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

| MODEL      | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA   |           | MOTOR TYPE |
|------------|------------|------------|-------------------|-----------|------------|
|            |            |            | POWER INPUT 50 Hz | In A      |            |
| KDN 65-125 | 0,37       | MEC 71     | 3 x 230 - 400 V ~ | 1,7/0,975 | -          |
|            | 0,55       | MEC 80     | 3 x 230 - 400 V ~ | 2,6/1,5   | -          |
|            | 0,75       | MEC 80     | 3 x 230 - 400 V ~ | 3,1/1,8   | IE3        |
|            | 1,1        | MEC 90S    | 3 x 230 - 400 V ~ | 4,3/2,5   | IE3        |
|            | 1,5        | MEC 90L    | 3 x 230 - 400 V ~ | 6,2/3,6   | IE3        |
|            | 2,2        | MEC 100L   | 3 x 230 - 400 V ~ | 10,2/5,9  | IE3        |

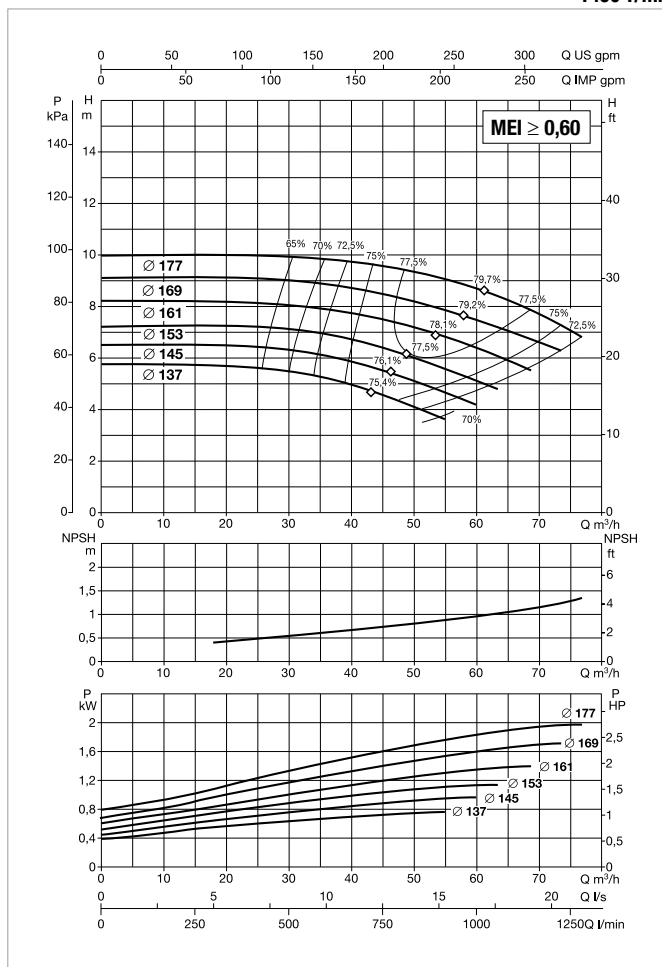
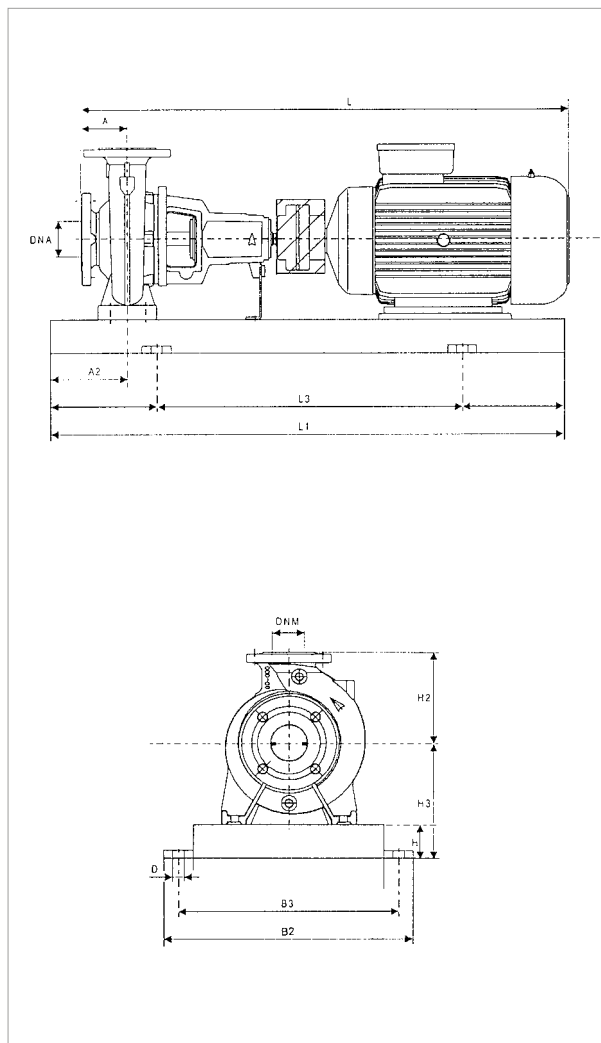
| MODEL      | POWER (kW) | UNIT DIMENSIONS (mm) |    |     |    |     |     |     |     |     |    | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |           | SPACER COUPLING |           |
|------------|------------|----------------------|----|-----|----|-----|-----|-----|-----|-----|----|------------------------|-----|-------------------|-----------|-----------------|-----------|
|            |            | A                    | A2 | H2  | H  | H3  | L1  | L3  | B2  | B3  | D  | DNA                    | DNM | L                 | WEIGHT Kg | L               | WEIGHT Kg |
| KDN 65-125 | 0,37       | 100                  | 60 | 180 | 65 | 225 | 900 | 600 | 390 | 350 | 19 | 80                     | 65  | 714               | 94        | 814             | 99        |
|            | 0,55       | 100                  | 60 | 180 | 65 | 225 | 900 | 600 | 390 | 350 | 19 | 80                     | 65  | 757               | 97        | 857             | 102       |
|            | 0,75       | 100                  | 60 | 180 | 65 | 225 | 900 | 600 | 390 | 350 | 19 | 80                     | 65  | 737               | 92        | 837             | 97        |
|            | 1,1        | 100                  | 60 | 180 | 65 | 225 | 900 | 600 | 390 | 350 | 19 | 80                     | 65  | 782               | 90        | 882             | 95        |
|            | 1,5        | 100                  | 60 | 180 | 65 | 225 | 900 | 600 | 390 | 350 | 19 | 80                     | 65  | 782               | 89        | 882             | 94        |
|            | 2,2        | 100                  | 60 | 180 | 65 | 225 | 900 | 600 | 390 | 350 | 19 | 80                     | 65  | 831               | 97        | 931             | 102       |

Dimension and electrical data based on sizing definition following the instructions on page 105.

# KDN 65-160 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 1450 1/min



For MEI index refer to the hydraulic efficiency section.  
The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

| MODEL      | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA          |          | MOTOR TYPE |
|------------|------------|------------|--------------------------|----------|------------|
|            |            |            | POWER INPUT 50 Hz        | In A     |            |
| KDN 65-160 | 0,75       | MEC 80     | 3 x 230 - 400 V ~        | 3,1/1,8  | IE3        |
|            | 1,1        | MEC 90S    | 3 x 230 - 400 V ~        | 4,3/2,5  | IE3        |
|            | 1,5        | MEC 90L    | 3 x 230 - 400 V ~        | 6,2/3,6  | IE3        |
|            | 2,2        | MEC 100L   | 3 x 230 - 400 V ~        | 10,2/5,9 | IE3        |
|            | 3          | MEC 100L   | 3 x 400 V ~ <sup>1</sup> | 6,8      | IE3        |

<sup>1</sup> Star start-up possible (A)

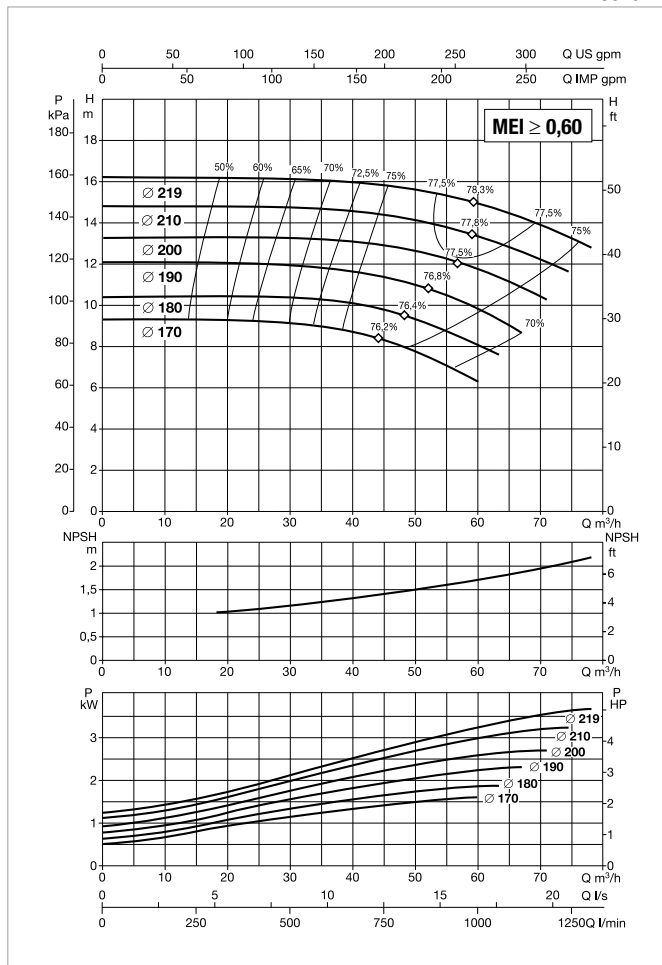
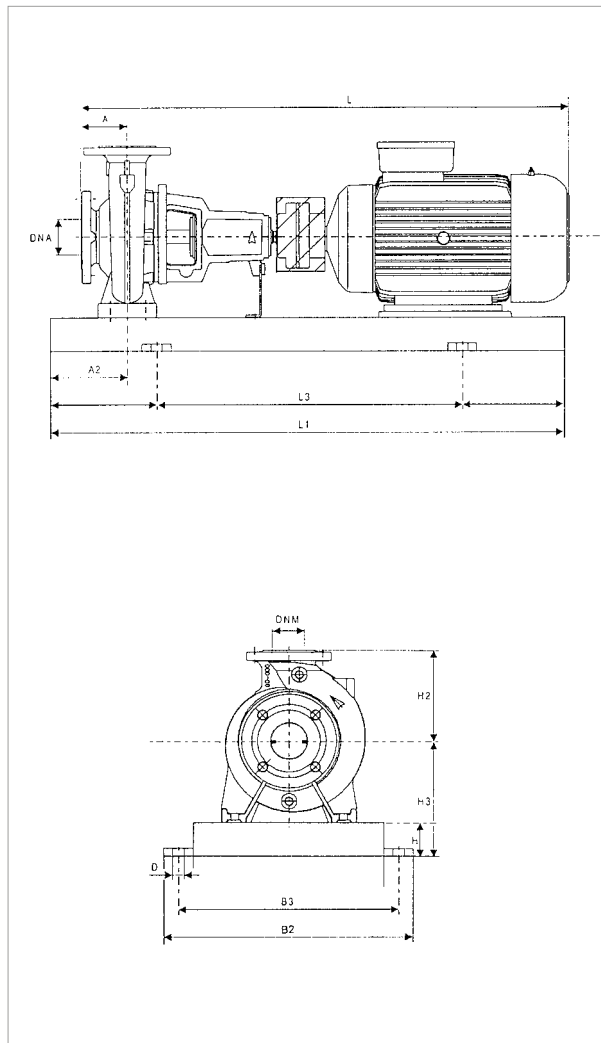
| MODEL      | POWER (kW) | UNIT DIMENSIONS (mm) |    |     |    |     |     |     |     |     |    | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |           | SPACER COUPLING |           |
|------------|------------|----------------------|----|-----|----|-----|-----|-----|-----|-----|----|------------------------|-----|-------------------|-----------|-----------------|-----------|
|            |            | A                    | A2 | H2  | H  | H3  | L1  | L3  | B2  | B3  | D  | DNa                    | DNm | L                 | WEIGHT Kg | L               | WEIGHT Kg |
| KDN 65-160 | 0,75       | 100                  | 60 | 200 | 65 | 225 | 900 | 600 | 390 | 350 | 19 | 80                     | 65  | 737               | 95        | 837             | 100       |
|            | 1,1        | 100                  | 60 | 200 | 65 | 225 | 900 | 600 | 390 | 350 | 19 | 80                     | 65  | 782               | 93        | 882             | 98        |
|            | 1,5        | 100                  | 60 | 200 | 65 | 225 | 900 | 600 | 390 | 350 | 19 | 80                     | 65  | 782               | 100       | 882             | 105       |
|            | 2,2        | 100                  | 60 | 200 | 65 | 225 | 900 | 600 | 390 | 350 | 19 | 80                     | 65  | 831               | 104       | 931             | 109       |
|            | 3          | 100                  | 60 | 200 | 65 | 225 | 900 | 600 | 390 | 350 | 19 | 80                     | 65  | 846               | 134       | 946             | 139       |

Dimension and electrical data based on sizing definition following the instructions on page 105.

# KDN 65-200 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

| MODEL      | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA          |          | MOTOR TYPE |
|------------|------------|------------|--------------------------|----------|------------|
|            |            |            | POWER INPUT 50 Hz        | In A     |            |
| KDN 65-200 | 1,1        | MEC 90S    | 3 x 230 - 400 V ~        | 4,3/2,5  | IE3        |
|            | 1,5        | MEC 90L    | 3 x 230 - 400 V ~        | 6,2/3,6  | IE3        |
|            | 2,2        | MEC 100L   | 3 x 230 - 400 V ~        | 10,2/5,9 | IE3        |
|            | 3          | MEC 100L   | 3 x 400 V ~ <sup>1</sup> | 6,8      | IE3        |
|            | 4          | MEC 112M   | 3 x 400 V ~ <sup>1</sup> | 8,2      | IE3        |
|            | 5,5        | MEC 132S   | 3 x 400 V ~ <sup>1</sup> | 10,6     | IE3        |

<sup>1</sup> Star start-up possible (A)

| MODEL      | POWER (kW) | UNIT DIMENSIONS (mm) |    |     |    |     |      |     |     |     |    | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |           | SPACER COUPLING |           |
|------------|------------|----------------------|----|-----|----|-----|------|-----|-----|-----|----|------------------------|-----|-------------------|-----------|-----------------|-----------|
|            |            | A                    | A2 | H2  | H  | H3  | L1   | L3  | B2  | B3  | D  | DNA                    | DNM | L                 | WEIGHT Kg | L               | WEIGHT Kg |
| KDN 65-200 | 1,1        | 100                  | 75 | 225 | 80 | 260 | 1000 | 660 | 450 | 400 | 24 | 80                     | 65  | 782               | 131       | 922             | 136       |
|            | 1,5        | 100                  | 75 | 225 | 80 | 260 | 1000 | 660 | 450 | 400 | 24 | 80                     | 65  | 782               | 129       | 922             | 134       |
|            | 2,2        | 100                  | 75 | 225 | 80 | 260 | 1120 | 740 | 490 | 440 | 24 | 80                     | 65  | 831               | 137       | 971             | 142       |
|            | 3          | 100                  | 75 | 225 | 80 | 260 | 1120 | 740 | 490 | 440 | 24 | 80                     | 65  | 846               | 136       | 986             | 141       |
|            | 4          | 100                  | 75 | 225 | 80 | 260 | 1120 | 740 | 490 | 440 | 24 | 80                     | 65  | 853               | 129       | 993             | 134       |
|            | 5,5        | 100                  | 75 | 225 | 80 | 260 | 1120 | 740 | 490 | 440 | 24 | 80                     | 65  | 910               | 192       | 1050            | 197       |

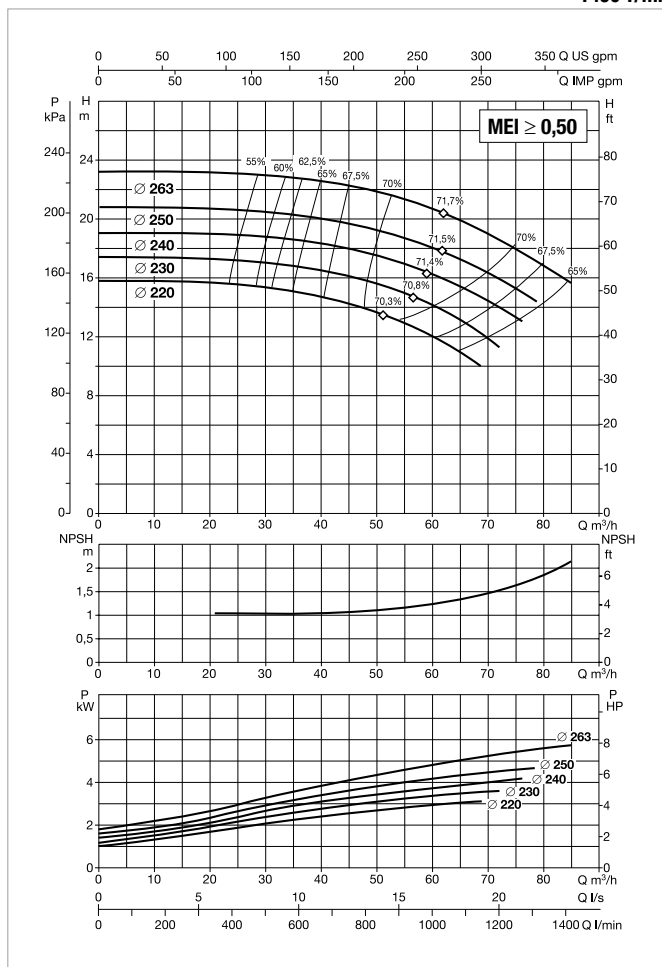
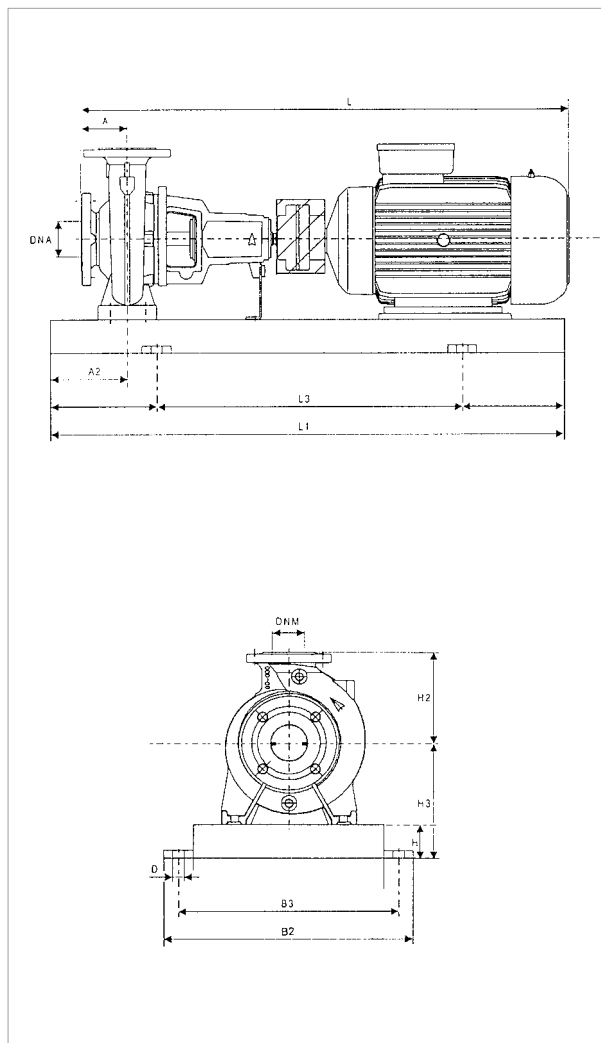
Dimension and electrical data based on sizing definition following the instructions on page 105.



# KDN 65-250 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 1450 1/min



For MEI index refer to the hydraulic efficiency section.  
 The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

| MODEL      | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA          |      | MOTOR TYPE |
|------------|------------|------------|--------------------------|------|------------|
|            |            |            | POWER INPUT 50 Hz        | In A |            |
| KDN 65-250 | 3          | MEC 100L   | 3 x 400 V ~ <sup>1</sup> | 6,8  | IE3        |
|            | 4          | MEC 112M   | 3 x 400 V ~ <sup>1</sup> | 8,2  | IE3        |
|            | 5,5        | MEC 132S   | 3 x 400 V ~ <sup>1</sup> | 10,6 | IE3        |
|            | 7,5        | MEC 132M   | 3 x 400 V ~ <sup>1</sup> | 15,3 | IE3        |
|            | 11         | MEC 160M   | 3 x 400 V ~ <sup>1</sup> | 22,4 | IE3        |

<sup>1</sup> Star start-up possible (A)

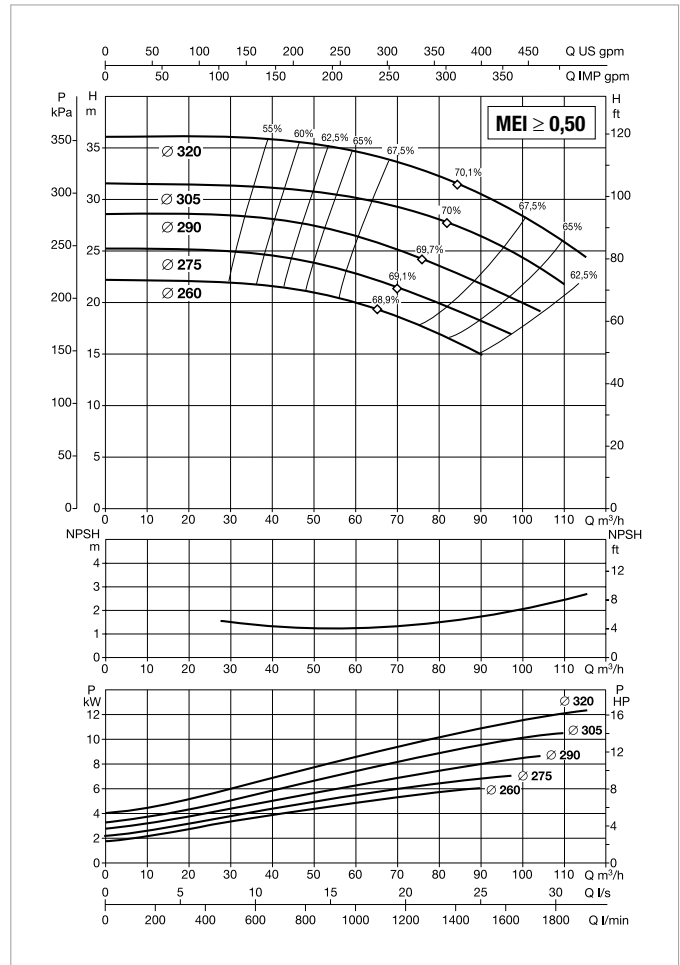
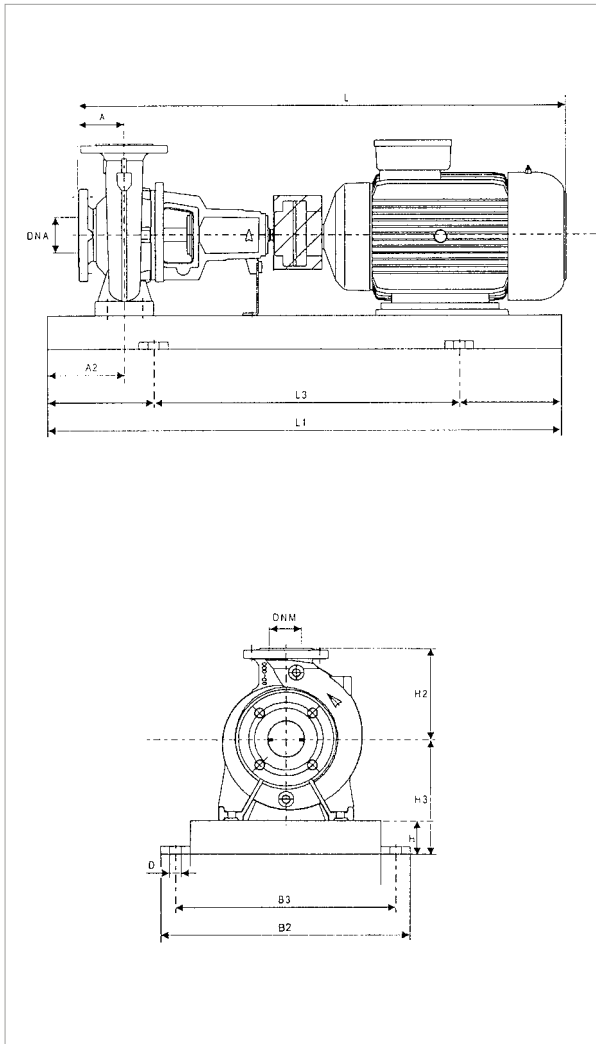
| MODEL      | POWER (kW) | UNIT DIMENSIONS (mm) |    |     |    |     |      |     |     |     |    | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |           | SPACER COUPLING |           |
|------------|------------|----------------------|----|-----|----|-----|------|-----|-----|-----|----|------------------------|-----|-------------------|-----------|-----------------|-----------|
|            |            | A                    | A2 | H2  | H  | H3  | L1   | L3  | B2  | B3  | D  | DNA                    | DNM | L                 | WEIGHT Kg | L               | WEIGHT Kg |
| KDN 65-250 | 3          | 100                  | 90 | 250 | 80 | 280 | 1120 | 740 | 490 | 440 | 24 | 80                     | 65  | 956               | 164       | 1096            | 172       |
|            | 4          | 100                  | 90 | 250 | 80 | 280 | 1120 | 740 | 490 | 440 | 24 | 80                     | 65  | 963               | 164       | 1103            | 172       |
|            | 5,5        | 100                  | 90 | 250 | 80 | 280 | 1120 | 740 | 490 | 440 | 24 | 80                     | 65  | 1020              | 193       | 1160            | 201       |
|            | 7,5        | 100                  | 90 | 250 | 80 | 280 | 1120 | 740 | 490 | 440 | 24 | 80                     | 65  | 1020              | 238       | 1160            | 246       |
|            | 11         | 100                  | 90 | 250 | 80 | 280 | 1250 | 840 | 540 | 490 | 24 | 80                     | 65  | 1183              | 277       | 1323            | 285       |

Dimension and electrical data based on sizing definition following the instructions on page 105.

# KDN 65-315 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 1450 1/min



For MEI index refer to the hydraulic efficiency section.  
The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

| MODEL      | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA          |      | MOTOR TYPE |
|------------|------------|------------|--------------------------|------|------------|
|            |            |            | POWER INPUT 50 Hz        | In A |            |
| KDN 65-315 | 5,5        | MEC 132S   | 3 x 400 V ~ <sup>1</sup> | 10,6 | IE3        |
|            | 7,5        | MEC 132M   | 3 x 400 V ~ <sup>1</sup> | 15,3 | IE3        |
|            | 11         | MEC 160M   | 3 x 400 V ~ <sup>1</sup> | 22,4 | IE3        |
|            | 15         | MEC 160L   | 3 x 400 V ~ <sup>1</sup> | 30,5 | IE3        |
|            | 18,5       | MEC 180M   | 3 x 400 V ~ <sup>1</sup> | 34,3 | IE3        |

<sup>1</sup> Star start-up possible (A)

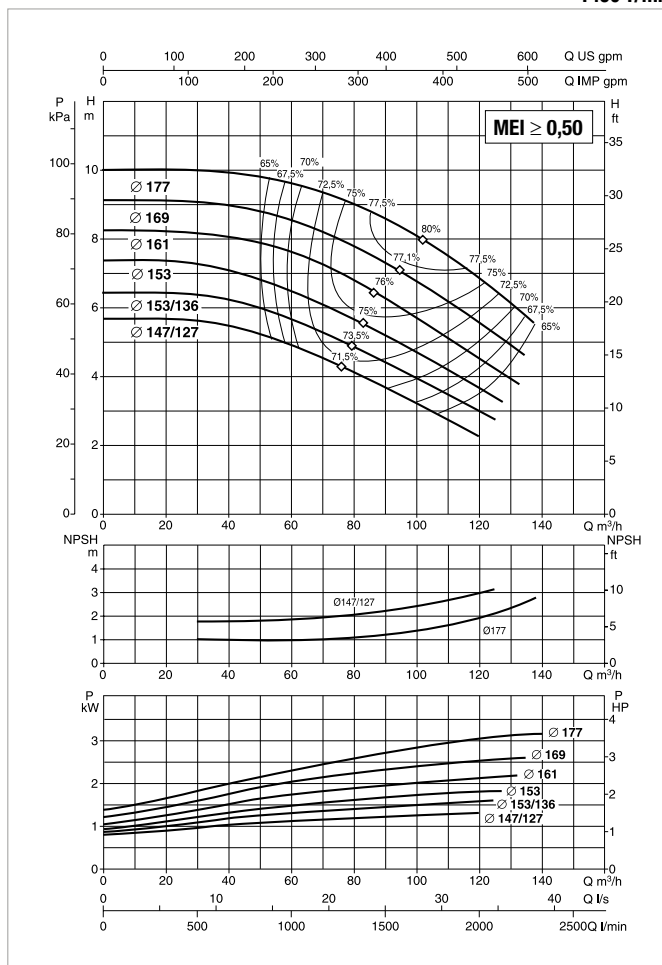
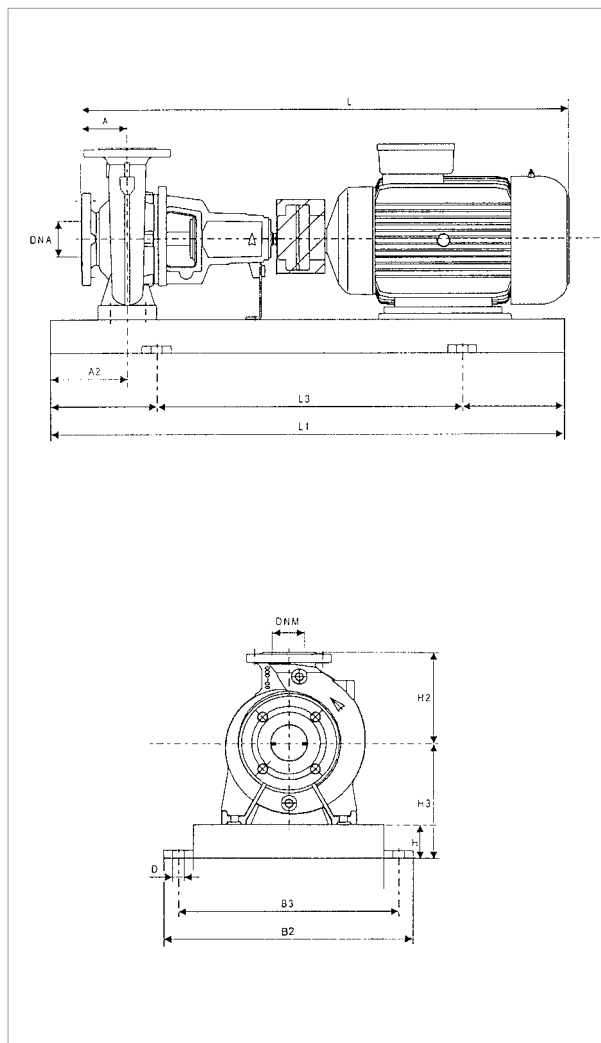
| MODEL      | POWER (kW) | UNIT DIMENSIONS (mm) |    |     |     |     |      |     |     |     |    | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |           | SPACER COUPLING |           |
|------------|------------|----------------------|----|-----|-----|-----|------|-----|-----|-----|----|------------------------|-----|-------------------|-----------|-----------------|-----------|
|            |            | A                    | A2 | H2  | H   | H3  | L1   | L3  | B2  | B3  | D  | DNa                    | DNm | L                 | WEIGHT Kg | L               | WEIGHT Kg |
| KDN 65-315 | 5,5        | 125                  | 90 | 280 | 80  | 305 | 1250 | 840 | 540 | 490 | 24 | 80                     | 65  | 1045              | 251       | 1185            | 259       |
|            | 7,5        | 125                  | 90 | 280 | 80  | 305 | 1250 | 840 | 540 | 490 | 24 | 80                     | 65  | 1045              | 273       | 1185            | 281       |
|            | 11         | 125                  | 90 | 280 | 80  | 305 | 1250 | 840 | 540 | 490 | 24 | 80                     | 65  | 1208              | 271       | 1348            | 279       |
|            | 15         | 125                  | 90 | 280 | 100 | 325 | 1400 | 940 | 610 | 550 | 28 | 80                     | 65  | 1252              | 272       | 1392            | 280       |
|            | 18,5       | 125                  | 90 | 280 | 100 | 325 | 1400 | 940 | 610 | 550 | 28 | 80                     | 65  | 1287              | 291       | 1427            | 299       |

Dimension and electrical data based on sizing definition following the instructions on page 105.

# KDN 80-160 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

**= 1450 1/min**



**For MEI index refer to the hydraulic efficiency section.**  
 The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

| MODEL      | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA          |          | MOTOR TYPE |
|------------|------------|------------|--------------------------|----------|------------|
|            |            |            | POWER INPUT 50 Hz        | In A     |            |
| KDN 80-160 | 1,1        | MEC 90S    | 3 x 230 - 400 V ~        | 4,3/2,5  | IE3        |
|            | 1,5        | MEC 90L    | 3 x 230 - 400 V ~        | 6,2/3,6  | IE3        |
|            | 2,2        | MEC 100L   | 3 x 230 - 400 V ~        | 10,2/5,9 | IE3        |
|            | 3          | MEC 100L   | 3 x 400 V ~ <sup>1</sup> | 6,8      | IE3        |
|            | 4          | MEC 112M   | 3 x 400 V ~ <sup>1</sup> | 8,2      | IE3        |
|            | 5,5        | MEC 132S   | 3 x 400 V ~ <sup>1</sup> | 10,6     | IE3        |

<sup>1</sup> Star start-up possible (A)

| MODEL      | POWER (kW) | UNIT DIMENSIONS (mm) |    |     |    |     |      |     |     |     |    | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |           | SPACER COUPLING |           |
|------------|------------|----------------------|----|-----|----|-----|------|-----|-----|-----|----|------------------------|-----|-------------------|-----------|-----------------|-----------|
|            |            | A                    | A2 | H2  | H  | H3  | L1   | L3  | B2  | B3  | D  | DNA                    | DNM | L                 | WEIGHT Kg | L               | WEIGHT Kg |
| KDN 80-160 | 1,1        | 125                  | 75 | 225 | 80 | 260 | 1000 | 660 | 450 | 400 | 24 | 100                    | 80  | 807               | 115       | 947             | 123       |
|            | 1,5        | 125                  | 75 | 225 | 80 | 260 | 1000 | 660 | 450 | 400 | 24 | 100                    | 80  | 807               | 113       | 947             | 121       |
|            | 2,2        | 125                  | 75 | 225 | 80 | 260 | 1000 | 660 | 450 | 400 | 24 | 100                    | 80  | 856               | 129       | 996             | 137       |
|            | 3          | 125                  | 75 | 225 | 80 | 260 | 1000 | 660 | 450 | 400 | 24 | 100                    | 80  | 871               | 124       | 1011            | 132       |
|            | 4          | 125                  | 75 | 225 | 80 | 260 | 1000 | 660 | 450 | 400 | 24 | 100                    | 80  | 878               | 117       | 1018            | 125       |
|            | 5,5        | 125                  | 75 | 225 | 80 | 260 | 1120 | 740 | 490 | 440 | 24 | 100                    | 80  | 935               | 155       | 1075            | 163       |

Dimension and electrical data based on sizing definition following the instructions on page 105.

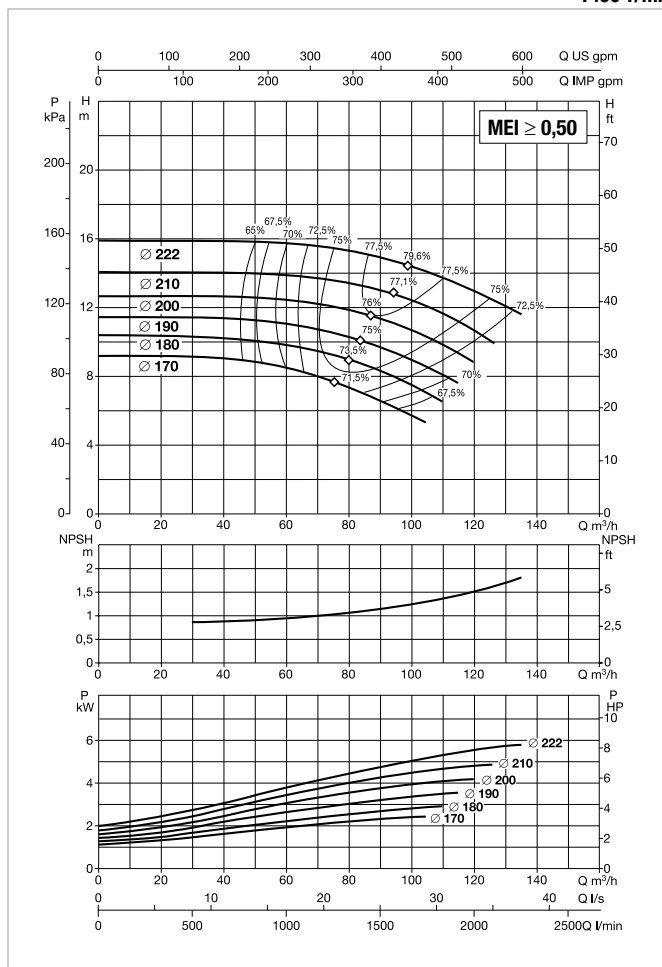
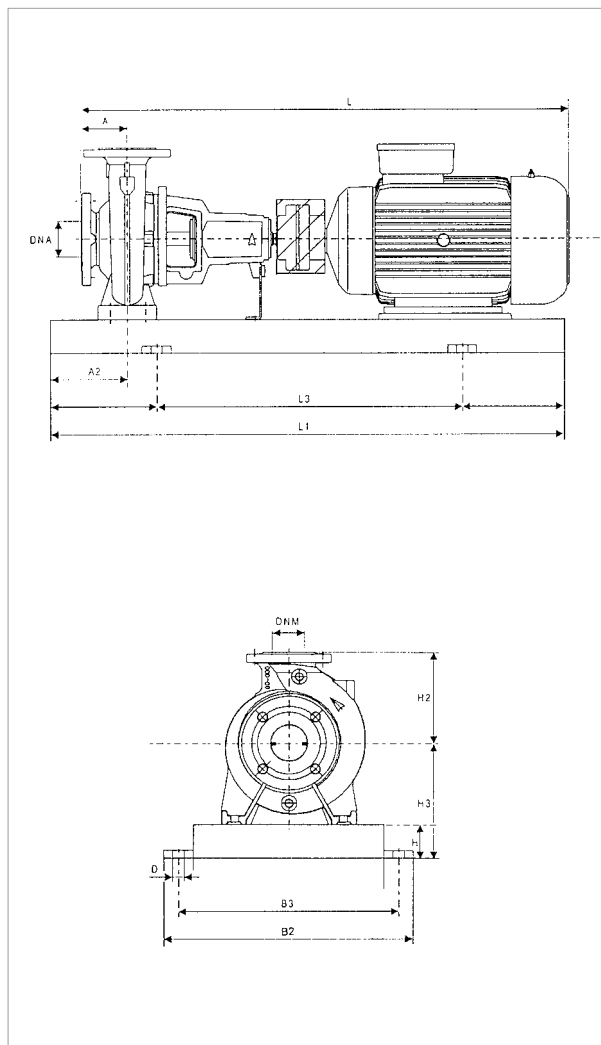




# KDN 80-200 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

| MODEL      | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA          |          | MOTOR TYPE |
|------------|------------|------------|--------------------------|----------|------------|
|            |            |            | POWER INPUT 50 Hz        | In A     |            |
| KDN 80-200 | 1,5        | MEC 90L    | 3 x 230 - 400 V ~        | 6,2/3,6  | IE3        |
|            | 2,2        | MEC 100L   | 3 x 230 - 400 V ~        | 10,2/5,9 | IE3        |
|            | 3          | MEC 100L   | 3 x 400 V ~ <sup>1</sup> | 6,8      | IE3        |
|            | 4          | MEC 112M   | 3 x 400 V ~ <sup>1</sup> | 8,2      | IE3        |
|            | 5,5        | MEC 132S   | 3 x 400 V ~ <sup>1</sup> | 10,6     | IE3        |
|            | 7,5        | MEC 132M   | 3 x 400 V ~ <sup>1</sup> | 15,3     | IE3        |
|            | 11         | MEC 160M   | 3 x 400 V ~ <sup>1</sup> | 22,4     | IE3        |

<sup>1</sup> Star start-up possible (Δ)

| MODEL      | POWER (kW) | UNIT DIMENSIONS (mm) |    |     |    |     |      |     |     |     |    | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |           | SPACER COUPLING |           |
|------------|------------|----------------------|----|-----|----|-----|------|-----|-----|-----|----|------------------------|-----|-------------------|-----------|-----------------|-----------|
|            |            | A                    | A2 | H2  | H  | H3  | L1   | L3  | B2  | B3  | D  | DNA                    | DNM | L                 | WEIGHT Kg | L               | WEIGHT Kg |
| KDN 80-200 | 1,5        | 125                  | 75 | 250 | 80 | 260 | 1120 | 740 | 490 | 440 | 24 | 100                    | 80  | 917               | 147       | 1057            | 155       |
|            | 2,2        | 125                  | 75 | 250 | 80 | 260 | 1120 | 740 | 490 | 440 | 24 | 100                    | 80  | 966               | 156       | 1106            | 164       |
|            | 3          | 125                  | 75 | 250 | 80 | 260 | 1120 | 740 | 490 | 440 | 24 | 100                    | 80  | 981               | 154       | 1121            | 162       |
|            | 4          | 125                  | 75 | 250 | 80 | 260 | 1120 | 740 | 490 | 440 | 24 | 100                    | 80  | 988               | 167       | 1128            | 175       |
|            | 5,5        | 125                  | 75 | 250 | 80 | 260 | 1120 | 740 | 490 | 440 | 24 | 100                    | 80  | 1045              | 180       | 1185            | 188       |
|            | 7,5        | 125                  | 75 | 250 | 80 | 260 | 1120 | 740 | 490 | 440 | 24 | 100                    | 80  | 1045              | 169       | 1185            | 177       |
|            | 11         | 125                  | 75 | 250 | 80 | 260 | 1250 | 840 | 540 | 490 | 24 | 100                    | 80  | 1208              | 171       | 1348            | 179       |

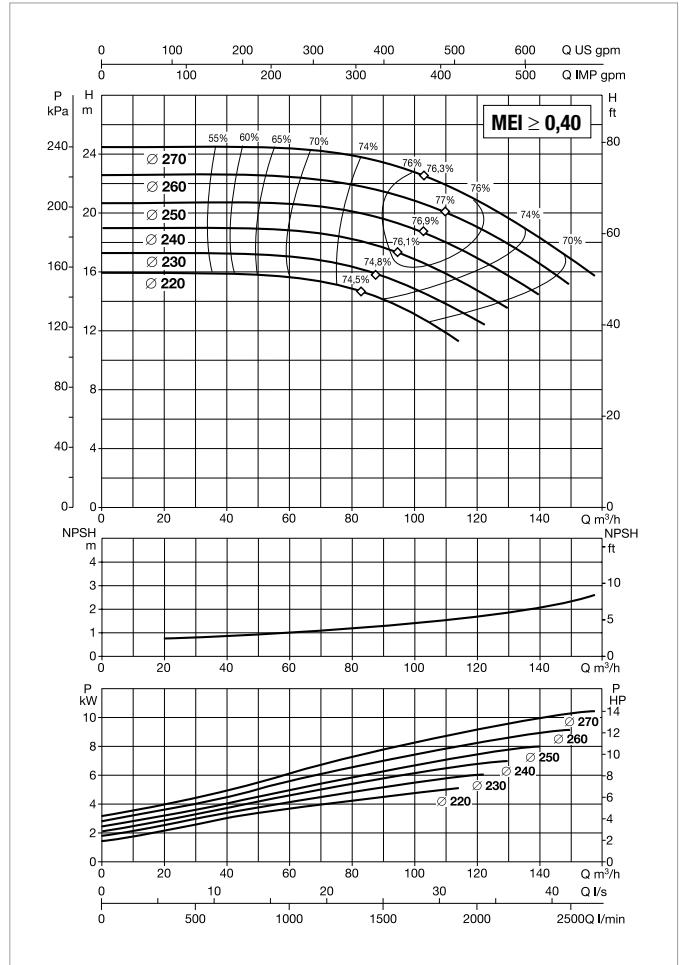
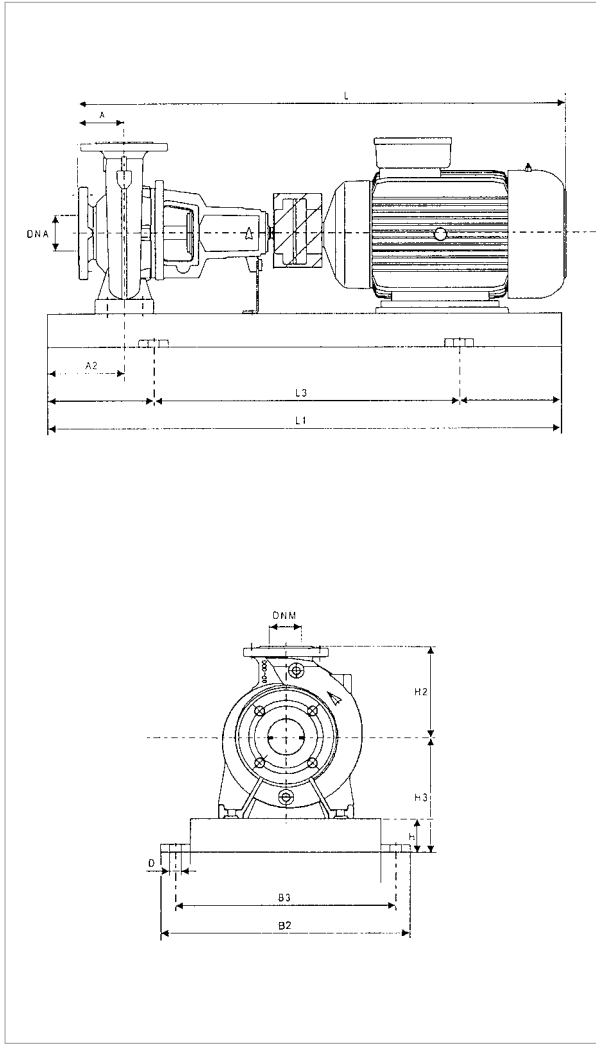
Dimension and electrical data based on sizing definition following the instructions on page 105.



# KDN 80-250 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

| MODEL      | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA          |      | MOTOR TYPE |
|------------|------------|------------|--------------------------|------|------------|
|            |            |            | POWER INPUT 50 Hz        | In A |            |
| KDN 80-250 | 4          | MEC 112M   | 3 x 400 V ~ <sup>1</sup> | 8,2  | IE3        |
|            | 5,5        | MEC 132S   | 3 x 400 V ~ <sup>1</sup> | 10,6 | IE3        |
|            | 7,5        | MEC 132M   | 3 x 400 V ~ <sup>1</sup> | 15,3 | IE3        |
|            | 11         | MEC 160M   | 3 x 400 V ~ <sup>1</sup> | 22,4 | IE3        |
|            | 15         | MEC 160L   | 3 x 400 V ~ <sup>1</sup> | 30,5 | IE3        |

<sup>1</sup> Star start-up possible (A)

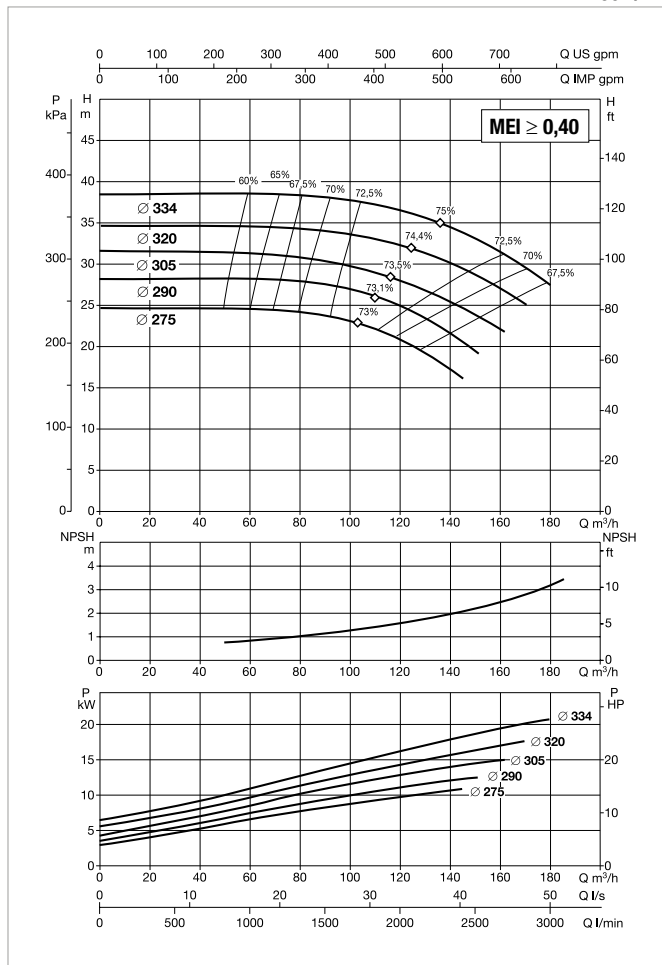
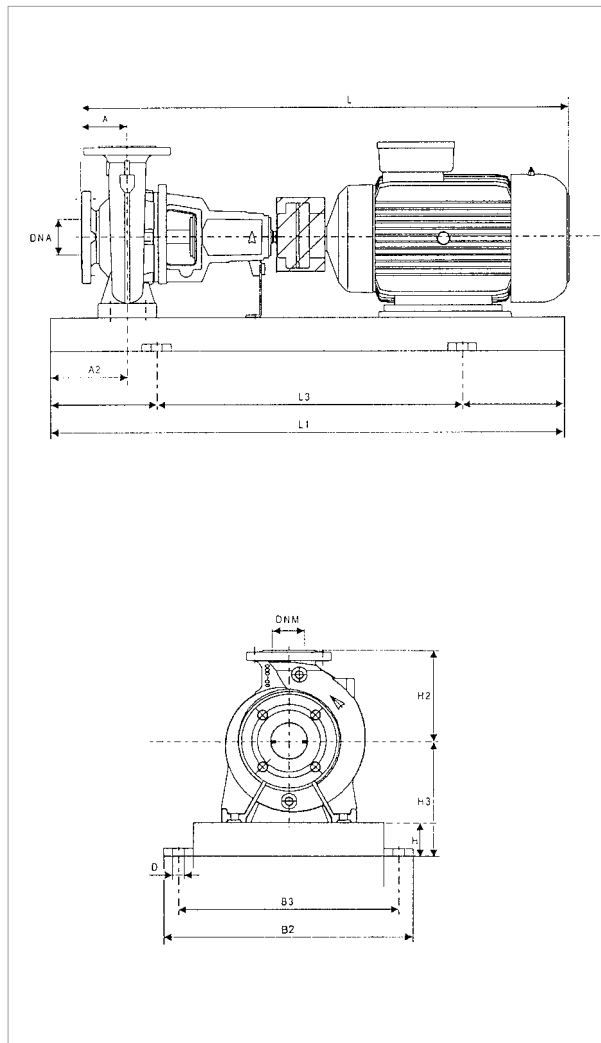
| MODEL      | POWER (kW) | UNIT DIMENSIONS (mm) |    |     |    |     |      |     |     |     |    | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |           | SPACER COUPLING |           |
|------------|------------|----------------------|----|-----|----|-----|------|-----|-----|-----|----|------------------------|-----|-------------------|-----------|-----------------|-----------|
|            |            | A                    | A2 | H2  | H  | H3  | L1   | L3  | B2  | B3  | D  | DNA                    | DNM | L                 | WEIGHT Kg | L               | WEIGHT Kg |
| KDN 80-250 | 4          | 125                  | 90 | 280 | 80 | 280 | 1250 | 840 | 540 | 490 | 24 | 100                    | 80  | 988               | 198       | 1128            | 206       |
|            | 5,5        | 125                  | 90 | 280 | 80 | 280 | 1250 | 840 | 540 | 490 | 24 | 100                    | 80  | 1045              | 211       | 1185            | 219       |
|            | 7,5        | 125                  | 90 | 280 | 80 | 280 | 1250 | 840 | 540 | 490 | 24 | 100                    | 80  | 1045              | 200       | 1185            | 208       |
|            | 11         | 125                  | 90 | 280 | 80 | 280 | 1250 | 840 | 540 | 490 | 24 | 100                    | 80  | 1208              | 232       | 1348            | 240       |
|            | 15         | 125                  | 90 | 280 | 80 | 280 | 1250 | 840 | 540 | 490 | 24 | 100                    | 80  | 1252              | 252       | 1392            | 260       |

Dimension and electrical data based on sizing definition following the instructions on page 105.

# KDN 80-315 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 1450 1/min



For MEI index refer to the hydraulic efficiency section.  
The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

| MODEL      | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA          |      | MOTOR TYPE |
|------------|------------|------------|--------------------------|------|------------|
|            |            |            | POWER INPUT 50 Hz        | In A |            |
| KDN 80-315 | 7,5        | MEC 132M   | 3 x 400 V ~ <sup>1</sup> | 15,3 | IE3        |
|            | 11         | MEC 160M   | 3 x 400 V ~ <sup>1</sup> | 22,4 | IE3        |
|            | 15         | MEC 160L   | 3 x 400 V ~ <sup>1</sup> | 30,5 | IE3        |
|            | 18,5       | MEC 180M   | 3 x 400 V ~ <sup>1</sup> | 34,3 | IE3        |
|            | 22         | MEC 180L   | 3 x 400 V ~ <sup>1</sup> | 40,2 | IE3        |
|            | 30         | MEC 200L   | 3 x 400 V ~ <sup>1</sup> | 53,7 | IE3        |

<sup>1</sup> Star start-up possible (A)

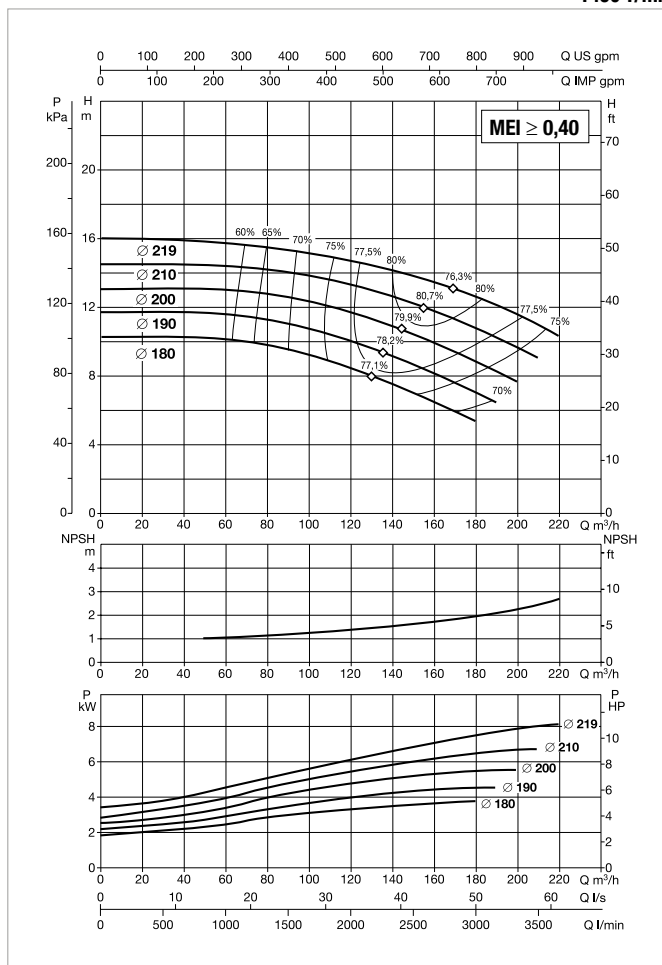
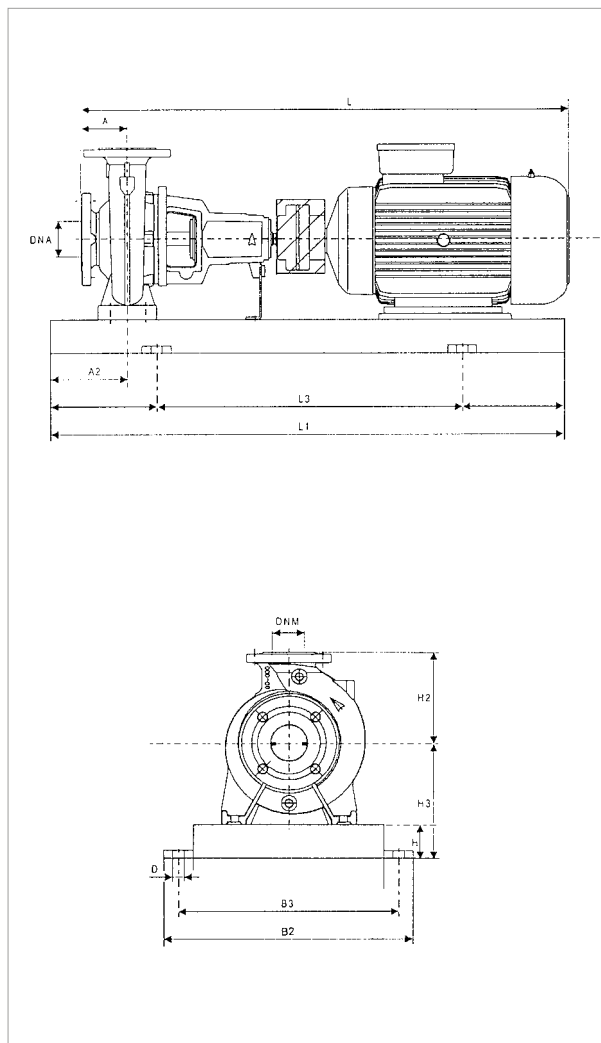
| MODEL      | POWER (kW) | UNIT DIMENSIONS (mm) |    |     |     |     |      |     |     |     |    | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |           | SPACER COUPLING |           |
|------------|------------|----------------------|----|-----|-----|-----|------|-----|-----|-----|----|------------------------|-----|-------------------|-----------|-----------------|-----------|
|            |            | A                    | A2 | H2  | H   | H3  | L1   | L3  | B2  | B3  | D  | DNA                    | DNM | L                 | WEIGHT Kg | L               | WEIGHT Kg |
| KDN 80-315 | 7,5        | 125                  | 90 | 315 | 80  | 330 | 1250 | 840 | 540 | 490 | 24 | 100                    | 80  | 1045              | 371       | 1185            | 379       |
|            | 11         | 125                  | 90 | 315 | 80  | 330 | 1250 | 840 | 540 | 490 | 24 | 100                    | 80  | 1208              | 364       | 1348            | 372       |
|            | 15         | 125                  | 90 | 315 | 100 | 350 | 1400 | 940 | 610 | 550 | 28 | 100                    | 80  | 1252              | 365       | 1392            | 373       |
|            | 18,5       | 125                  | 90 | 315 | 100 | 350 | 1400 | 940 | 610 | 550 | 28 | 100                    | 80  | 1287              | 378       | 1427            | 386       |
|            | 22         | 125                  | 90 | 315 | 100 | 350 | 1400 | 940 | 610 | 550 | 28 | 100                    | 80  | 1325              | 318       | 1465            | 326       |
|            | 30         | 125                  | 90 | 315 | 100 | 350 | 1400 | 940 | 610 | 550 | 28 | 100                    | 80  | 1369              | 384       | 1509            | 392       |

Dimension and electrical data based on sizing definition following the instructions on page 105.

# KDN 100-200 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 1450 1/min



For MEI index refer to the hydraulic efficiency section.  
The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

| MODEL       | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA          |      | MOTOR TYPE |
|-------------|------------|------------|--------------------------|------|------------|
|             |            |            | POWER INPUT 50 Hz        | In A |            |
| KDN 100-200 | 3          | MEC 100L   | 3 x 400 V ~ <sup>1</sup> | 6,8  | IE3        |
|             | 4          | MEC 112M   | 3 x 400 V ~ <sup>1</sup> | 8,2  | IE3        |
|             | 5,5        | MEC 132S   | 3 x 400 V ~ <sup>1</sup> | 10,6 | IE3        |
|             | 7,5        | MEC 132M   | 3 x 400 V ~ <sup>1</sup> | 15,3 | IE3        |
|             | 11         | MEC 160M   | 3 x 400 V ~ <sup>1</sup> | 22,4 | IE3        |
|             | 15         | MEC 160L   | 3 x 400 V ~ <sup>1</sup> | 30,5 | IE3        |

<sup>1</sup> Star start-up possible (A)

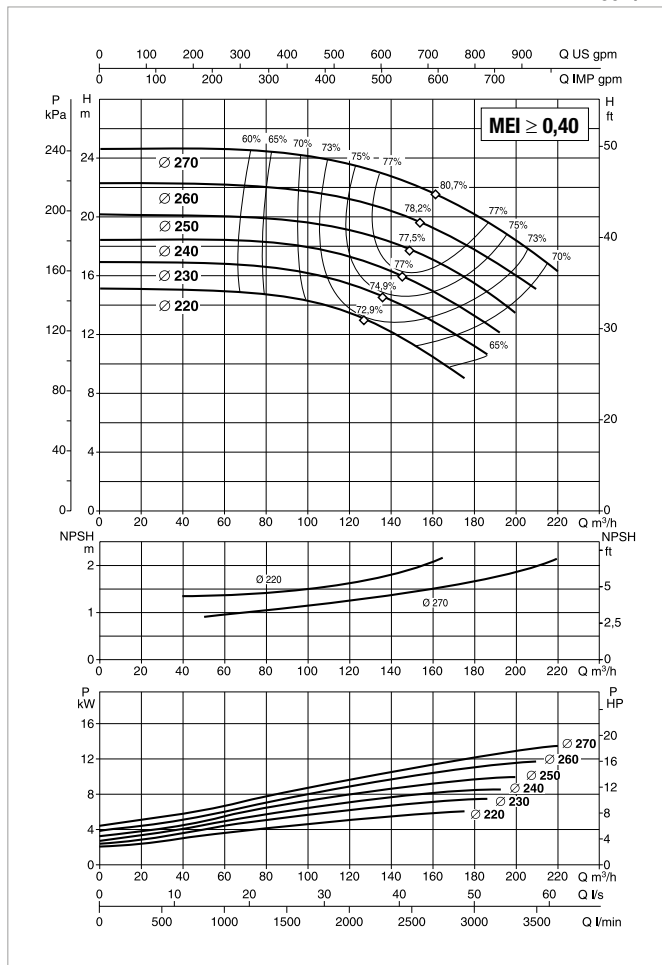
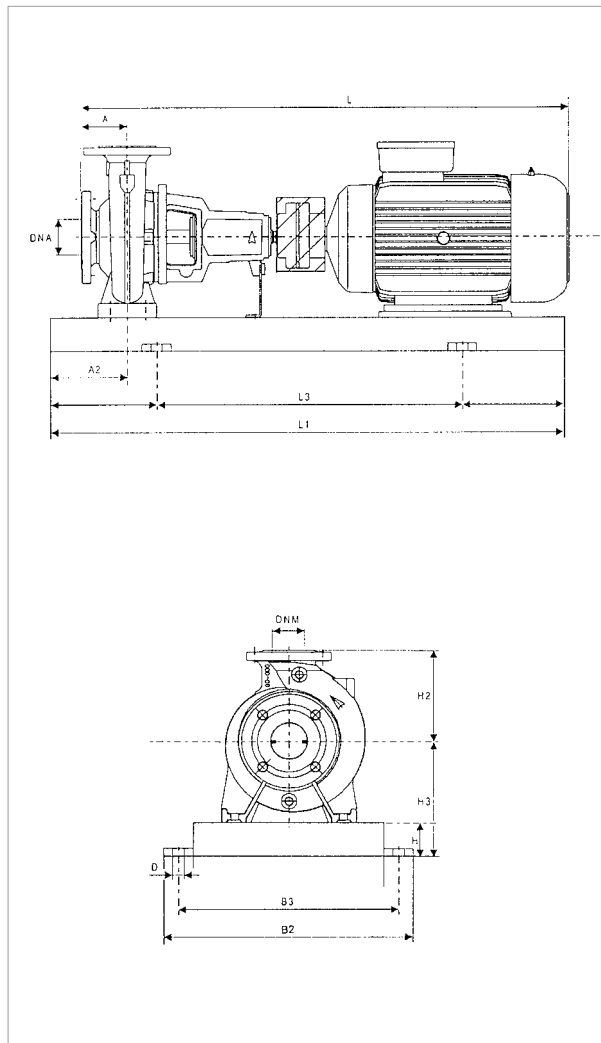
| MODEL       | POWER (kW) | UNIT DIMENSIONS (mm) |    |     |    |     |      |     |     |     |    | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |           | SPACER COUPLING |           |
|-------------|------------|----------------------|----|-----|----|-----|------|-----|-----|-----|----|------------------------|-----|-------------------|-----------|-----------------|-----------|
|             |            | A                    | A2 | H2  | H  | H3  | L1   | L3  | B2  | B3  | D  | DNA                    | DNM | L                 | WEIGHT Kg | L               | WEIGHT Kg |
| KDN 100-200 | 3          | 125                  | 90 | 280 | 80 | 280 | 1120 | 740 | 490 | 440 | 24 | 125                    | 100 | 981               | 167       | 1121            | 175       |
|             | 4          | 100                  | 90 | 280 | 80 | 280 | 1120 | 740 | 490 | 440 | 24 | 125                    | 100 | 963               | 167       | 1103            | 175       |
|             | 5,5        | 100                  | 90 | 280 | 80 | 280 | 1120 | 740 | 490 | 440 | 24 | 125                    | 100 | 1020              | 206       | 1160            | 214       |
|             | 7,5        | 100                  | 90 | 280 | 80 | 280 | 1120 | 740 | 490 | 440 | 24 | 125                    | 100 | 1020              | 190       | 1160            | 198       |
|             | 11         | 100                  | 90 | 280 | 80 | 280 | 1250 | 840 | 540 | 490 | 24 | 125                    | 100 | 1183              | 281       | 1323            | 289       |
|             | 15         | 100                  | 90 | 280 | 80 | 280 | 1250 | 840 | 540 | 490 | 24 | 125                    | 100 | 1227              | 355       | 1367            | 363       |

Dimension and electrical data based on sizing definition following the instructions on page 105.

# KDN 100-250 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

| MODEL       | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA          |      | MOTOR TYPE |
|-------------|------------|------------|--------------------------|------|------------|
|             |            |            | POWER INPUT 50 Hz        | In A |            |
| KDN 100-250 | 5,5        | MEC 132S   | 3 x 400 V ~ <sup>1</sup> | 10,6 | IE3        |
|             | 7,5        | MEC 132M   | 3 x 400 V ~ <sup>1</sup> | 15,3 | IE3        |
|             | 11         | MEC 160M   | 3 x 400 V ~ <sup>1</sup> | 22,4 | IE3        |
|             | 15         | MEC 160L   | 3 x 400 V ~ <sup>1</sup> | 30,5 | IE3        |
|             | 18,5       | MEC 180M   | 3 x 400 V ~ <sup>1</sup> | 34,3 | IE3        |

<sup>1</sup> Star start-up possible (Δ)

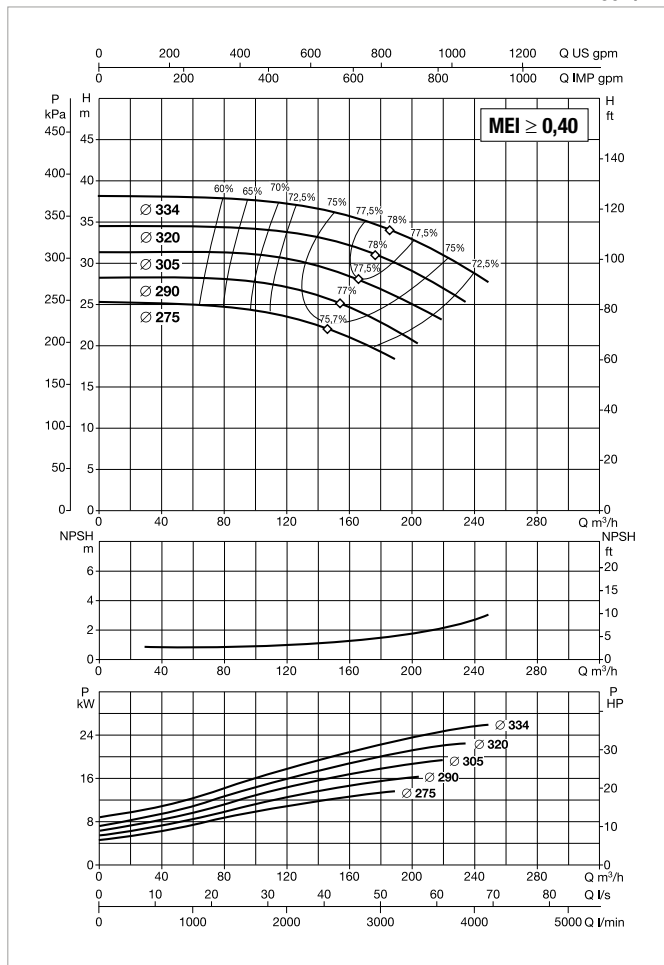
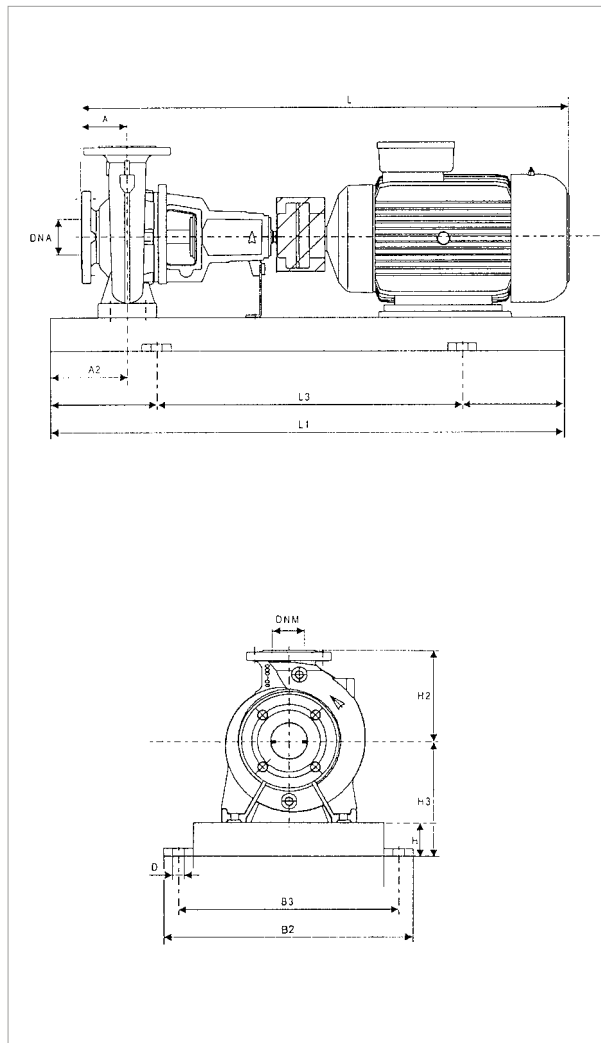
| MODEL       | POWER (kW) | UNIT DIMENSIONS (mm) |    |     |     |     |      |     |     |     |    | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |           | SPACER COUPLING |           |
|-------------|------------|----------------------|----|-----|-----|-----|------|-----|-----|-----|----|------------------------|-----|-------------------|-----------|-----------------|-----------|
|             |            | A                    | A2 | H2  | H   | H3  | L1   | L3  | B2  | B3  | D  | DNA                    | DNM | L                 | WEIGHT Kg | L               | WEIGHT Kg |
| KDN 100-250 | 5,5        | 140                  | 90 | 280 | 80  | 305 | 1250 | 840 | 540 | 490 | 24 | 125                    | 100 | 1060              | 233       | 1200            | 241       |
|             | 7,5        | 140                  | 90 | 280 | 80  | 305 | 1250 | 840 | 540 | 490 | 24 | 125                    | 100 | 1060              | 231       | 1200            | 239       |
|             | 11         | 140                  | 90 | 280 | 80  | 305 | 1250 | 840 | 540 | 490 | 24 | 125                    | 100 | 1223              | 266       | 1363            | 274       |
|             | 15         | 140                  | 90 | 280 | 100 | 325 | 1400 | 940 | 610 | 550 | 28 | 125                    | 100 | 1267              | 275       | 1407            | 283       |
|             | 18,5       | 140                  | 90 | 280 | 100 | 325 | 1400 | 940 | 610 | 550 | 28 | 125                    | 100 | 1302              | 547       | 1442            | 555       |

Dimension and electrical data based on sizing definition following the instructions on page 105.

# KDN 100-315 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

| MODEL       | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA          |      | MOTOR TYPE |
|-------------|------------|------------|--------------------------|------|------------|
|             |            |            | POWER INPUT 50 Hz        | In A |            |
| KDN 100-315 | 11         | MEC 160M   | 3 x 400 V ~ <sup>1</sup> | 22,4 | IE3        |
|             | 15         | MEC 160L   | 3 x 400 V ~ <sup>1</sup> | 30,5 | IE3        |
|             | 18,5       | MEC 180M   | 3 x 400 V ~ <sup>1</sup> | 34,3 | IE3        |
|             | 22         | MEC 180L   | 3 x 400 V ~ <sup>1</sup> | 40,2 | IE3        |
|             | 30         | MEC 200L   | 3 x 400 V ~ <sup>1</sup> | 53,7 | IE3        |
|             | 37         | MEC 225S   | 3 x 400 V ~ <sup>1</sup> | 66,1 | IE3        |

<sup>1</sup> Star start-up possible (A)

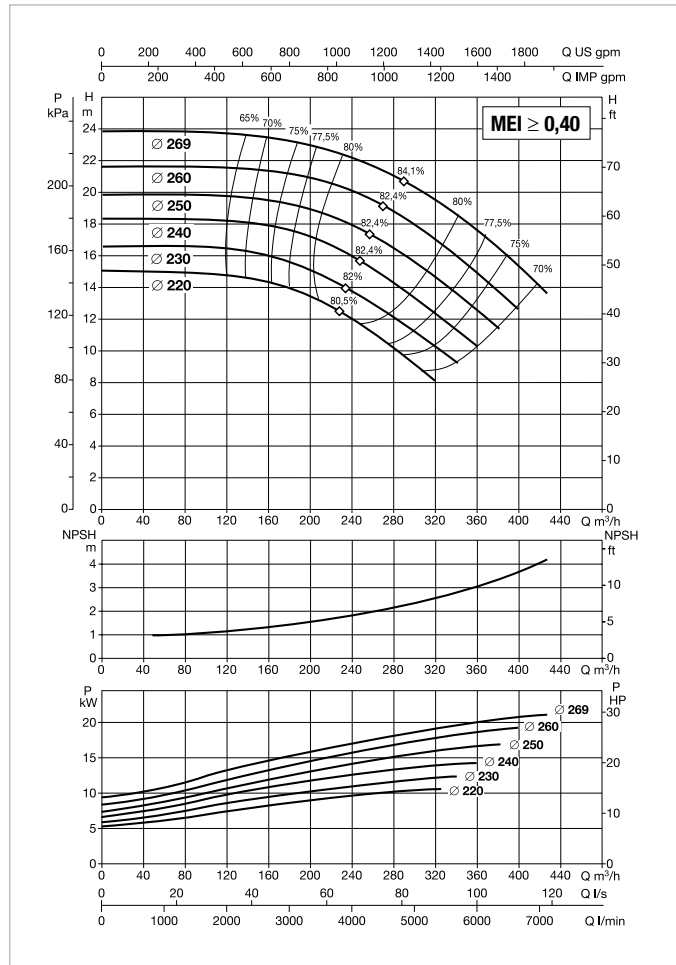
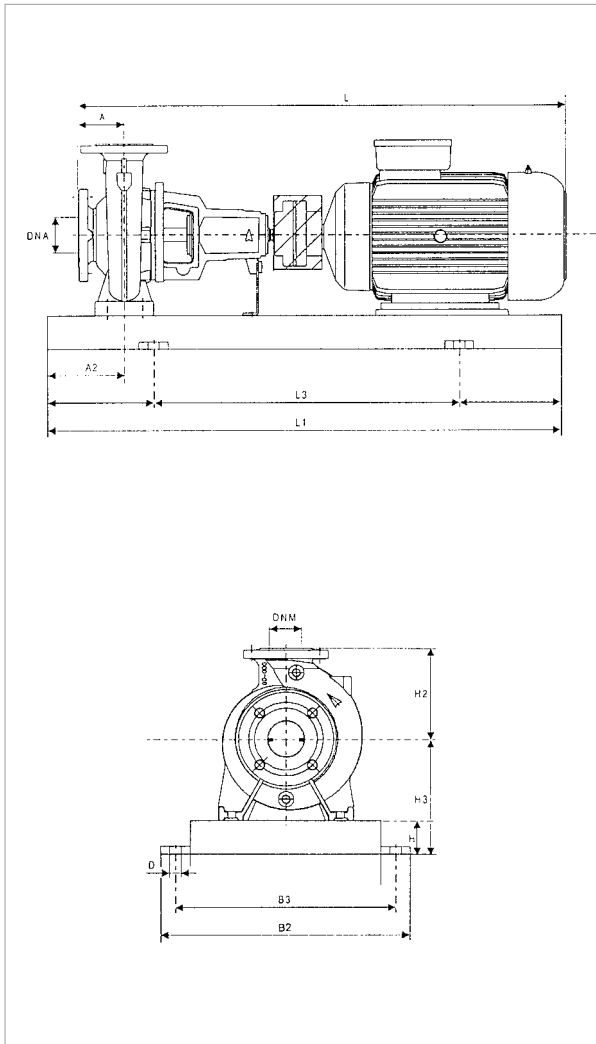
| MODEL       | POWER (kW) | UNIT DIMENSIONS (mm) |    |     |     |     |      |     |     |     |    | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |           | SPACER COUPLING |            |
|-------------|------------|----------------------|----|-----|-----|-----|------|-----|-----|-----|----|------------------------|-----|-------------------|-----------|-----------------|------------|
|             |            | A                    | A2 | H2  | H   | H3  | L1   | L3  | B2  | B3  | D  | DNA                    | DNM | L                 | WEIGHT Kg | L               | WEIGHT Kg  |
| KDN 100-315 | 11         | 140                  | 90 | 315 | 80  | 330 | 1250 | 840 | 540 | 490 | 24 | 125                    | 100 | 1223              | 287       | 1363            | 295        |
|             | 15         | 140                  | 90 | 315 | 100 | 350 | 1400 | 940 | 610 | 550 | 28 | 125                    | 100 | 1267              | 275       | 1407            | 283        |
|             | 18,5       | 140                  | 90 | 315 | 100 | 350 | 1400 | 940 | 610 | 550 | 28 | 125                    | 100 | 1302              | 315       | 1442            | 323        |
|             | 22         | 140                  | 90 | 315 | 100 | 350 | 1400 | 940 | 610 | 550 | 28 | 125                    | 100 | 1340              | 342       | 1480            | 250<br>350 |
|             | 30         | 140                  | 90 | 315 | 100 | 350 | 1400 | 940 | 610 | 550 | 28 | 125                    | 100 | 1384              | 458       | 1524            | 466        |
|             | 37         | 140                  | 90 | 315 | 100 | 350 | 1400 | 940 | 610 | 550 | 28 | 125                    | 100 | 1429              | 524       | 1569            | 532        |

Dimension and electrical data based on sizing definition following the instructions on page 105.

# KDN 125-250 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 1450 1/min



For MEI index refer to the hydraulic efficiency section.  
The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

| MODEL       | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA          |      | MOTOR TYPE |
|-------------|------------|------------|--------------------------|------|------------|
|             |            |            | POWER INPUT 50 Hz        | In A |            |
| KDN 125-250 | 7,5        | MEC 132M   | 3 x 400 V ~ <sup>1</sup> | 15,3 | IE3        |
|             | 11         | MEC 160M   | 3 x 400 V ~ <sup>1</sup> | 22,4 | IE3        |
|             | 15         | MEC 160L   | 3 x 400 V ~ <sup>1</sup> | 30,5 | IE3        |
|             | 18,5       | MEC 180M   | 3 x 400 V ~ <sup>1</sup> | 34,3 | IE3        |
|             | 22         | MEC 180L   | 3 x 400 V ~ <sup>1</sup> | 40,2 | IE3        |
|             | 30         | MEC 200L   | 3 x 400 V ~ <sup>1</sup> | 53,7 | IE3        |

<sup>1</sup> Star start-up possible (A)

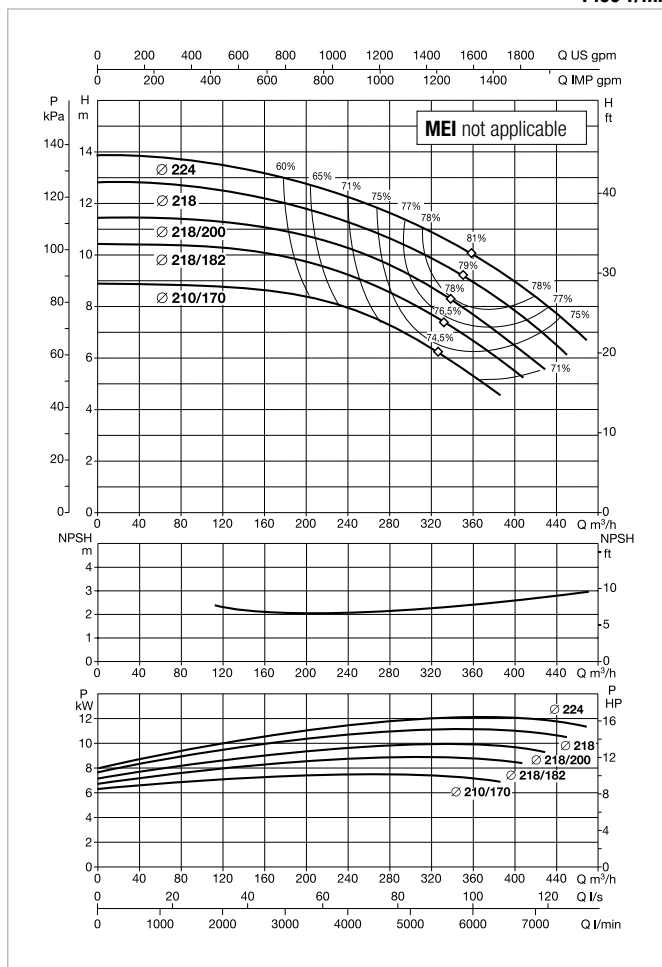
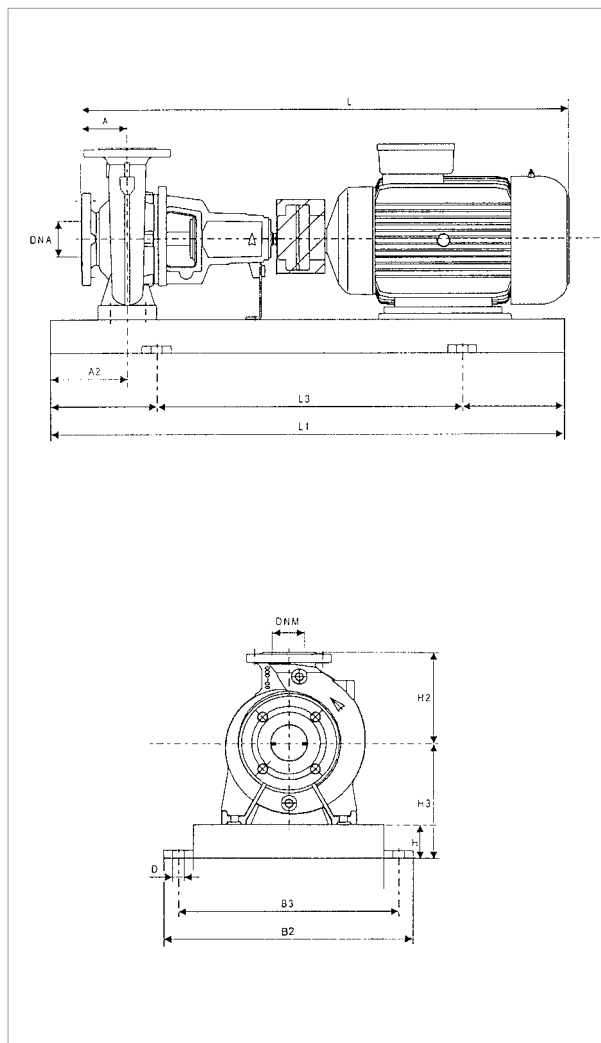
| MODEL       | POWER (kW) | UNIT DIMENSIONS (mm) |    |     |     |     |      |     |     |     |    | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |           | SPACER COUPLING |           |
|-------------|------------|----------------------|----|-----|-----|-----|------|-----|-----|-----|----|------------------------|-----|-------------------|-----------|-----------------|-----------|
|             |            | A                    | A2 | H2  | H   | H3  | L1   | L3  | B2  | B3  | D  | DNA                    | DNM | L                 | WEIGHT Kg | L               | WEIGHT Kg |
| KDN 125-250 | 7,5        | 140                  | 90 | 355 | 80  | 330 | 1250 | 840 | 540 | 490 | 24 | 150                    | 125 | 1060              | 291       | 1200            | 299       |
|             | 11         | 140                  | 90 | 355 | 80  | 330 | 1250 | 840 | 540 | 490 | 24 | 150                    | 125 | 1223              | 302       | 1363            | 310       |
|             | 15         | 140                  | 90 | 355 | 100 | 350 | 1400 | 940 | 610 | 550 | 28 | 150                    | 125 | 1267              | 391       | 1407            | 399       |
|             | 18,5       | 140                  | 90 | 355 | 100 | 350 | 1400 | 940 | 610 | 550 | 28 | 150                    | 125 | 1302              | 391       | 1442            | 399       |
|             | 22         | 140                  | 90 | 355 | 100 | 350 | 1400 | 940 | 610 | 550 | 28 | 150                    | 125 | 1340              | 433       | 1480            | 441       |
|             | 30         | 140                  | 90 | 355 | 100 | 350 | 1400 | 940 | 610 | 550 | 28 | 150                    | 125 | 1384              | 511       | 1524            | 519       |

Dimension and electrical data based on sizing definition following the instructions on page 105.

# KDN 150-200 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

**= 1450 1/min**



**For MEI index refer to the hydraulic efficiency section.**  
 The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

| MODEL       | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA          |      | MOTOR TYPE |
|-------------|------------|------------|--------------------------|------|------------|
|             |            |            | POWER INPUT 50 Hz        | In A |            |
| KDN 150-200 | 5,5        | MEC 132S   | 3 x 400 V ~ <sup>1</sup> | 10,6 | IE3        |
|             | 7,5        | MEC 132M   | 3 x 400 V ~ <sup>1</sup> | 15,3 | IE3        |
|             | 11         | MEC 160M   | 3 x 400 V ~ <sup>1</sup> | 22,4 | IE3        |
|             | 15         | MEC 160L   | 3 x 400 V ~ <sup>1</sup> | 30,5 | IE3        |
|             | 18,5       | MEC 180M   | 3 x 400 V ~ <sup>1</sup> | 34,3 | IE3        |

<sup>1</sup> Star start-up possible (A)

| MODEL       | POWER (kW) | UNIT DIMENSIONS (mm) |     |     |     |     |      |      |     |     |    | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |           | SPACER COUPLING |           |
|-------------|------------|----------------------|-----|-----|-----|-----|------|------|-----|-----|----|------------------------|-----|-------------------|-----------|-----------------|-----------|
|             |            | A                    | A2  | H2  | H   | H3  | L1   | L3   | B2  | B3  | D  | DNA                    | DNM | L                 | WEIGHT Kg | L               | WEIGHT Kg |
| KDN 150-200 | 5,5        | 160                  | 110 | 400 | 100 | 380 | 1800 | 1200 | 730 | 670 | 28 | 200                    | 150 | 1080              | 446       | 1220            | 454       |
|             | 7,5        | 160                  | 110 | 400 | 100 | 380 | 1800 | 1200 | 730 | 670 | 28 | 200                    | 150 | 1080              | 451       | 1220            | 459       |
|             | 11         | 160                  | 110 | 400 | 100 | 380 | 1800 | 1200 | 730 | 670 | 28 | 200                    | 150 | 1243              | 455       | 1383            | 463       |
|             | 15         | 160                  | 110 | 400 | 100 | 380 | 1800 | 1200 | 730 | 670 | 28 | 200                    | 150 | 1287              | 476       | 1427            | 484       |
|             | 18,5       | 160                  | 110 | 400 | 100 | 380 | 1800 | 1200 | 730 | 670 | 28 | 200                    | 150 | 1322              | 504       | 1462            | 512       |

Dimension and electrical data based on sizing definition following the instructions on page 105.



# KDN - 4 POLES

## STANDARDISED PUMPS

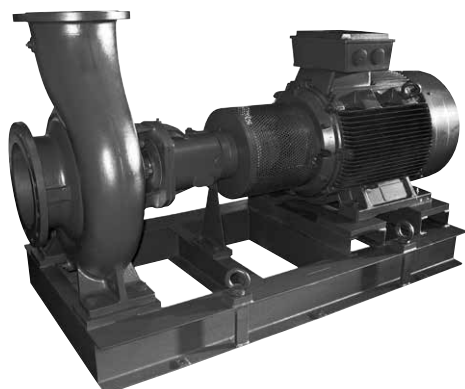
### IE3 STANDARD MOTOR ELECTRIC DATA

=1450 1/min

| MOTOR TYPE | P2 NOMINAL kW | SPEED rpm | YELD % | POWER FACTOR COS $\phi$ | POWER INPUT 50 Hz | In A  |        |        | Start-up current Ia/In | Start-up torque Ma/Mn | Maximum torque M/k/Mn | POLES |
|------------|---------------|-----------|--------|-------------------------|-------------------|-------|--------|--------|------------------------|-----------------------|-----------------------|-------|
|            |               |           |        |                         |                   | 230V  | 400V   | 690V   |                        |                       |                       |       |
| MEC 71     | 0,25          | 1400      | 60,00  | 0,710                   | 3x230/400         | 1,56  | 0,90   |        | 2,88                   | 2,15                  | 2,26                  | 4     |
| MEC 71     | 0,37          | 1340      | 67,00  | 0,780                   | 3x230/400         | 1,70  | 0,98   |        | 4,75                   | 2,84                  | 2,64                  | 4     |
| MEC 80     | 0,55          | 1410      | 71,00  | 0,720                   | 3x230/400         | 2,60  | 1,50   |        | 5,33                   | 2,78                  | 2,89                  | 4     |
| MEC 80     | 0,75          | 1435      | 82,50  | 0,740                   | 3x230/400         | 3,12  | 1,80   |        | 5,50                   | 2,70                  | 2,80                  | 4     |
| MEC 90S    | 1,1           | 1440      | 84,10  | 0,750                   | 3x230/400         | 4,33  | 2,50   |        | 7,10                   | 4,30                  | 4,30                  | 4     |
| MEC 90L    | 1,5           | 1430      | 85,30  | 0,720                   | 3x230/400         | 6,24  | 3,60   |        | 6,60                   | 4,30                  | 4,40                  | 4     |
| MEC 100L   | 2,2           | 1455      | 86,70  | 0,630                   | 3x230/400         | 24,94 | 14,40  |        | 5,90                   | 3,70                  | 3,90                  | 4     |
| MEC 100L   | 3             | 1440      | 87,70  | 0,730                   | 3x400 $\Delta$    |       | 6,80   | 3,93   | 8,10                   | 4,10                  | 4,10                  | 4     |
| MEC 112M   | 4             | 1450      | 88,60  | 0,800                   | 3x400 $\Delta$    |       | 8,20   | 4,73   | 8,50                   | 2,70                  | 3,50                  | 4     |
| MEC 132S   | 5,5           | 1450      | 89,60  | 0,840                   | 3x400 $\Delta$    |       | 10,60  | 6,12   | 8,70                   | 3,70                  | 4,30                  | 4     |
| MEC 132M   | 7,5           | 1465      | 90,40  | 0,780                   | 3x400 $\Delta$    |       | 15,30  | 8,83   | 8,20                   | 4,40                  | 5,10                  | 4     |
| MEC 160M   | 11            | 1465      | 91,40  | 0,770                   | 3x400 $\Delta$    |       | 22,40  | 12,93  | 10,10                  | 2,50                  | 3,10                  | 4     |
| MEC 160L   | 15            | 1465      | 92,10  | 0,780                   | 3x400 $\Delta$    |       | 30,50  | 17,61  | 8,90                   | 3,20                  | 2,80                  | 4     |
| MEC 180M   | 18,5          | 1470      | 92,60  | 0,840                   | 3x400 $\Delta$    |       | 34,30  | 19,80  | 7,50                   | 2,20                  | 2,30                  | 4     |
| MEC 180L   | 22            | 1470      | 93,00  | 0,850                   | 3x400 $\Delta$    |       | 40,20  | 23,21  | 7,70                   | 2,20                  | 2,30                  | 4     |
| MEC 200L   | 30            | 1475      | 93,60  | 0,860                   | 3x400 $\Delta$    |       | 53,70  | 31,00  | 7,80                   | 2,20                  | 2,30                  | 4     |
| MEC 225S   | 37            | 1485      | 93,90  | 0,860                   | 3x400 $\Delta$    |       | 66,10  | 38,16  | 7,20                   | 2,20                  | 2,30                  | 4     |
| MEC 225M   | 45            | 1485      | 94,20  | 0,870                   | 3x400 $\Delta$    |       | 79,10  | 45,67  | 7,30                   | 2,20                  | 2,30                  | 4     |
| MEC 250M   | 55            | 1485      | 94,60  | 0,870                   | 3x400 $\Delta$    |       | 96,20  | 55,54  | 7,40                   | 2,20                  | 2,30                  | 4     |
| MEC 280S   | 75            | 1486      | 95,00  | 0,870                   | 3x400 $\Delta$    |       | 131,00 | 75,63  | 7,40                   | 2,00                  | 2,30                  | 4     |
| MEC 280M   | 90            | 1486      | 95,20  | 0,870                   | 3x400 $\Delta$    |       | 157,00 | 90,64  | 6,70                   | 2,00                  | 2,30                  | 4     |
| MEC 315S   | 110           | 1488      | 95,40  | 0,880                   | 3x400 $\Delta$    |       | 189,00 | 109,12 | 6,90                   | 2,20                  | 2,20                  | 4     |
| MEC 315M   | 132           | 1488      | 95,60  | 0,880                   | 3x400 $\Delta$    |       | 226,00 | 130,48 | 6,90                   | 2,20                  | 2,20                  | 4     |
| MEC 315L   | 160           | 1488      | 95,80  | 0,880                   | 3x400 $\Delta$    |       | 274,00 | 158,19 | 6,90                   | 2,20                  | 2,20                  | 4     |
| MEC 315L   | 200           | 1490      | 96,00  | 0,880                   | 3x400 $\Delta$    |       | 342,00 | 197,45 | 6,90                   | 2,20                  | 2,20                  | 4     |
| MEC 355M   | 250           | 1490      | 96,00  | 0,890                   | 3x400 $\Delta$    |       | 420,00 | 242,77 | 7,70                   | 2,60                  | 2,70                  | 4     |
| MEC 355L   | 315           | 1490      | 96,00  | 0,890                   | 3x400 $\Delta$    |       | 530,00 | 306,36 | 7,80                   | 2,80                  | 2,70                  | 4     |

# KDN OVERSIZE

## STANDARDISED PUMPS



**IE3 ≥ 0,75 kW**

### TECHNICAL DATA

**Rotation speed:** 970 - 1450 - 2900 1/min

**Operating range:**

from 4 to 3200 m<sup>3</sup>/h with head up to 158 metres

**Pumped liquid:** clean, free of solids and abrasives, non-viscous, non-aggressive, non-crystallised and chemically neutral, with properties similar to water

**Pumped liquid temperature range:** from -20°C to +120°C

**Maximum ambient temperature:** +40 °C

**Maximum operating pressure:**

16 bar as standard up to DN 200, 10 bar for KDN 250 - 300 - 350

Optional PN 16 for KDN 250 - 300 - 350 in the spheroidal cast iron version (H)

**Installation:** normally in the horizontal position

**Special executions on requests:** pumps for liquids other than water  
Special materials and other voltages and/or frequencies

### APPLICATIONS

Standardised centrifugal monobloc electric pumps with coupling, designed for a wide range of applications, such as:

- Central heating
- Water supply
- Air conditioning
- Refrigeration
- Industry
- Fire fighting
- Environmental engineering

### CONSTRUCTION FEATURES OF THE PUMP

Non self-priming single stage spiral body centrifugal pump with axial suction port, radial delivery port and horizontal axis components, in compliance with ISO 2858/DIN 24256.

KDN pumps have PN 16 nominal sizes and performances.

The suction and delivery flanges are in compliance with EN 7005 PN 10 or 16. All the pumps are dynamically balanced according to ISO 1940 class 6.3; the impellers are hydraulically balanced.

Pump and motor are installed on a single base according to EN 23 661, made of fully welded steel.

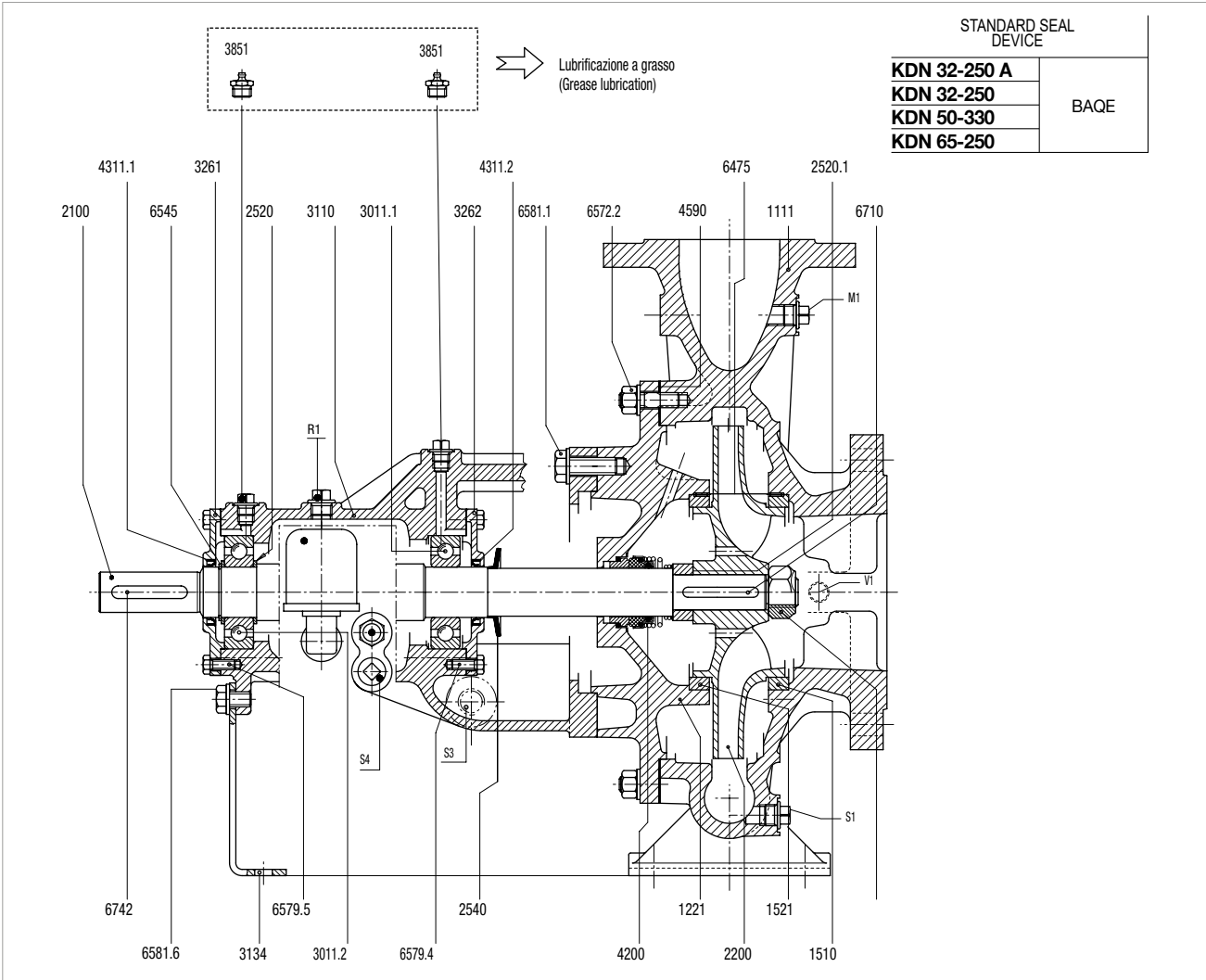
Oversize pumps have a base with welded steel profiles.

Thanks to the particular pump design, the bearings, the impeller, and the seal can be removed without detaching the pump body from the piping (back-pull-out design).

# KDN OVERSIZE

## STANDARDISED PUMPS

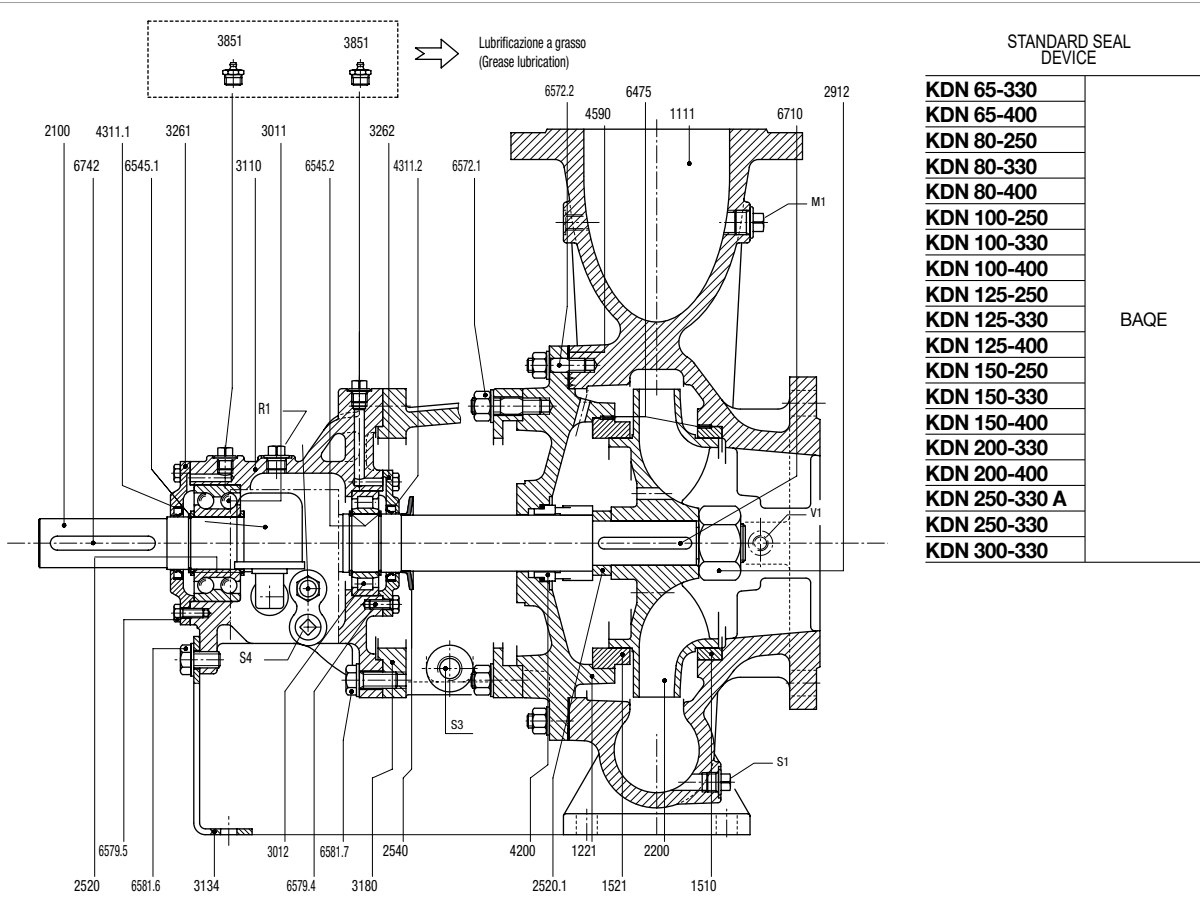
### MATERIALS



| No.    | PARTS                     | MATERIALS  |
|--------|---------------------------|--|
| 1111   | PUMP BODY                 | CAST IRON GG25   |
| 1221   | COVER                     | CAST IRON GG25   |
| 1510   | FRONT END WEAR RING       | CAST IRON GG25   |
| 1521   | REAR END WEAR RING        | CAST IRON GG25   |
| 2100   | SHAFT                     | AISI 420   |
| 2200   | IMPELLER                  | CAST IRON GG25<br>CAST IRON GS400<br>CAST IRON GS400<br>CF8M STEEL |
| 2520   | SHOULDER RING             | STEEL  |
| 2520.1 | SHOULDER RING             | STEEL  |
| 2540   | THROWER                   | RUBBER   |
| 2912   | IMPELLER NUT              | CAST IRON GG25   |
| 3011.1 | BALL BEARING              | NA   |
| 3011.2 | BALL BEARING              | NA   |
| 3110   | SUPPORT                   | CAST IRON GG25   |
| 3134   | SUPPORT FOOT              | STEEL  |
| 3261   | BEARING COVER, DRIVE SIDE | CAST IRON GG25   |
| 3262   | BEARING COVER, PUMP SIDE  | CAST IRON GG25   |
| 4200   | MECHANICAL SEAL           | CARBON/SILICON CARBIDE   |
| 4311.1 | SEAL RING                 | NBR  |
| 4311.2 | SEAL RING                 | NBR  |

| No.    | PARTS                                | MATERIALS |
|--------|--------------------------------------|-----------|
| 4590   | GASKET                               | NONAM     |
| 6475   | DOWEL                                | STEEL 8.8 |
| 6545   | SHAFT CIRCLIP                        | STEEL     |
| 6572.2 | STUD BOLT + WASHER + NUT             | STEEL     |
| 6579.4 | SCREW                                | STEEL 8.8 |
| 6579.5 | SCREW                                | STEEL 8.8 |
| 6581.1 | SCREW + WASHER                       | STEEL 8.8 |
| 6581.6 | SCREW + WASHER                       | STEEL 8.8 |
| 6710   | IMPELLER KEY                         | STEEL     |
| 6742   | COUPLING KEY                         | STEEL     |
| M1     | PRESSURE GAUGE CONNECTION            |           |
| R1     | OIL FILLING                          |           |
| S1     | PUMP DRAIN PLUG                      |           |
| S3     | MECH. SEAL /PACKING DRAIN CONNECTION |           |
| S4     | OIL DRAIN PLUG                       |           |
| V1     | VACUUM GAUGE CONNECTION              |           |
|        | <b>GREASE LUBRICATION</b>            |           |
| 3851   | GREASER                              |           |

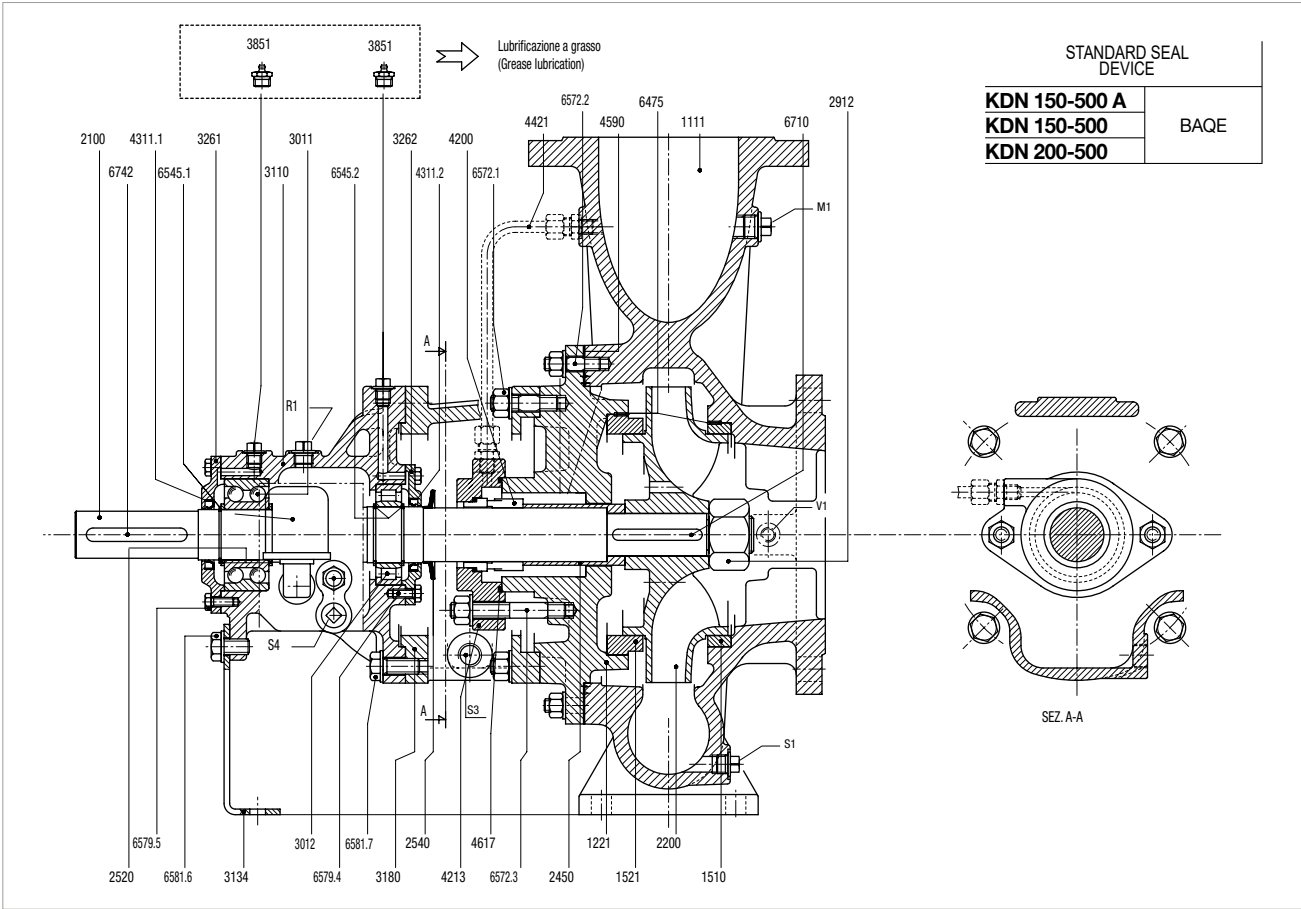
### MATERIALS



| No.    | PARTS                     | MATERIALS   |
|--------|---------------------------|---|
| 1111   | PUMP BODY                 | CAST IRON GG25  |
| 1221   | COVER                     | CAST IRON GG25  |
| 1510   | FRONT END WEAR RING       | CAST IRON GG25  |
| 1521   | REAR END WEAR RING        | CAST IRON GG25  |
| 2100   | SHAFT                     | AISI 420  |
| 2200   | IMPELLER                  | CAST IRON GG25<br>CAST IRON GS400<br>CF8M STEEL<br>CAST IRON GG25 |
| 2520   | SHOULDER RING             | STEEL   |
| 2520.1 | SHOULDER RING             | STEEL   |
| 2540   | THROWER                   | RUBBER  |
| 2912   | IMPELLER NUT              | CAST IRON GG25  |
| 3011   | BALL BEARING              | NA  |
| 3012   | ROLLER BEARING            | NA  |
| 3110   | SUPPORT                   | CAST IRON GG25  |
| 3134   | SUPPORT FOOT              | STEEL   |
| 3180   | SUPPORT                   | CAST IRON GG25  |
| 3261   | BEARING COVER, DRIVE SIDE | CAST IRON GG25  |
| 3262   | BEARING COVER, PUMP SIDE  | CAST IRON GG25  |
| 4200   | MECHANICAL SEAL           | TUNGSTEN CARBIDE/CARBON   |
| 4311.1 | SEAL RING                 | NBR   |
| 4311.2 | SEAL RING                 | NBR   |

| No.    | PARTS                               | MATERIALS |
|--------|-------------------------------------|-----------|
| 4590   | GASKET                              | NONAM     |
| 6475   | DOWEL                               | STEEL 8.8 |
| 6545.1 | SHAFT CIRCLIP                       | STEEL     |
| 6545.2 | SHAFT CIRCLIP                       | STEEL     |
| 6572.1 | STUD BOLT + WASHER + NUT            | STEEL     |
| 6572.2 | STUD BOLT + WASHER + NUT            | STEEL     |
| 6579.4 | SCREW                               | STEEL 8.8 |
| 6579.5 | SCREW                               | STEEL 8.8 |
| 6581.6 | SCREW + WASHER                      | STEEL 8.8 |
| 6581.7 | SCREW + WASHER                      | STEEL 8.8 |
| 6710   | IMPELLER KEY                        | STEEL     |
| 6742   | COUPLING KEY                        | STEEL     |
| M1     | PRESSURE GAUGE CONNECTION           |           |
| R1     | OIL FILLING                         |           |
| S1     | PUMP DRAIN PLUG                     |           |
| S3     | MECH. SEAL/PACKING DRAIN CONNECTION |           |
| V1     | VACUUM GAUGE CONNECTION             |           |
|        | <b>GREASE LUBRICATION</b>           |           |
| 3851   | GREASER                             |           |

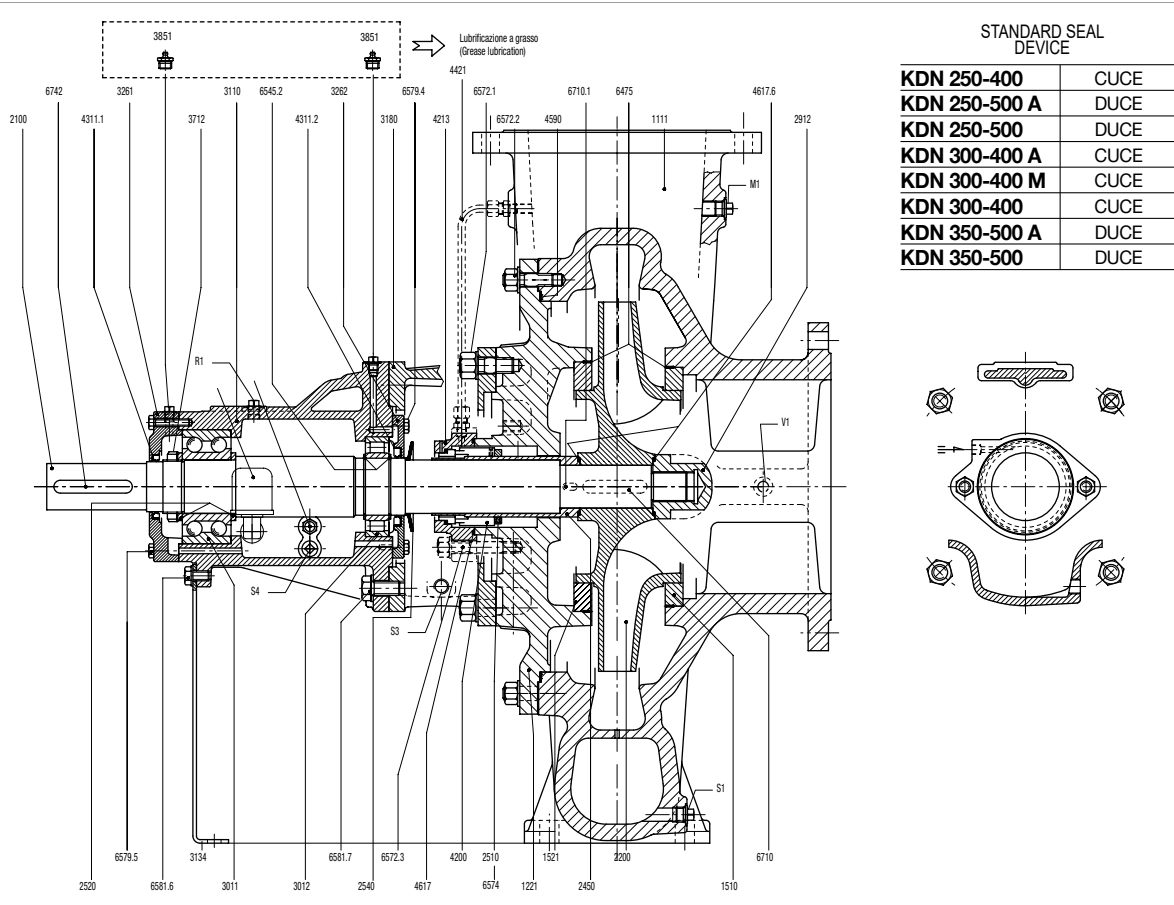
### MATERIALS



| No.    | PARTS                       | MATERIALS              |
|--------|-----------------------------|------------------------|
| 1111   | PUMP BODY                   | CAST IRON GG25         |
| 1221   | COVER                       | CAST IRON GG25         |
| 1510   | FRONT END WEAR RING         | CAST IRON GG25         |
| 1521   | REAR END WEAR RING          | CAST IRON GG25         |
| 2100   | SHAFT                       | AISI 420               |
| 2200   | IMPELLER                    | CAST IRON GG25         |
| 2450   | SHAFT SLEEVE                | AISI 303               |
| 2520   | SHOULDER RING               | STEEL                  |
| 2540   | THROWER                     | RUBBER                 |
| 2912   | IMPELLER NUT                | CAST IRON GG25         |
| 3011   | BALL BEARING                | NA                     |
| 3012   | ROLLER BEARING              | NA                     |
| 3110   | SUPPORT                     | CAST IRON GG25         |
| 3134   | SUPPORT FOOT                | STEEL                  |
| 3180   | SUPPORT                     | CAST IRON GG25         |
| 3261   | BEARING COVER, DRIVE SIDE   | CAST IRON GG25         |
| 3262   | BEARING COVER, PUMP SIDE    | CAST IRON GG25         |
| 4200   | MECHANICAL SEAL             | CARBON/SILICON CARBIDE |
| 4213   | CARRIER FOR MECHANICAL SEAL | CAST IRON GS400        |
| 4311.1 | SEAL RING                   | NBR                    |
| 4311.2 | SEAL RING                   | NBR                    |

| No.    | PARTS                                | MATERIALS |
|--------|--------------------------------------|-----------|
| 4421   | PIPE                                 | AISI 316  |
| 4590   | GASKET                               | NONAM     |
| 4617   | O-RING                               | NBR       |
| 6475   | DOWEL                                | STEEL 8.8 |
| 6545.1 | SHAFT CIRCLIP                        | STEEL     |
| 6545.2 | SHAFT CIRCLIP                        | STEEL     |
| 6572.1 | STUD BOLT + WASHER + NUT             | STEEL     |
| 6572.2 | STUD BOLT + WASHER + NUT             | STEEL     |
| 6572.3 | STUD BOLT + WASHER + NUT             | STEEL     |
| 6579.4 | SCREW                                | STEEL 8.8 |
| 6579.5 | SCREW                                | STEEL 8.8 |
| 6581.6 | SCREW + WASHER                       | STEEL 8.8 |
| 6710   | IMPELLER KEY                         | STEEL     |
| 6742   | COUPLING KEY                         | STEEL     |
| M1     | PRESSURE GAUGE CONNECTION            |           |
| R1     | OIL FILLING                          |           |
| S1     | PUMP DRAIN PLUG                      |           |
| S3     | MECH. SEAL /PACKING DRAIN CONNECTION |           |
| V1     | VACUUM GAUGE CONNECTION              |           |
|        | <b>GREASE LUBRICATION</b>            |           |
| 3851   | GREASER                              |           |

### MATERIALS



| No.    | PARTS                       | MATERIALS               |                 |
|--------|-----------------------------|-------------------------|-----------------|
| 1111   | PUMP BODY                   | CAST IRON GG25          | CAST IRON GS400 |
| 1221   | COVER                       | CAST IRON GG25          | CAST IRON GS400 |
| 1510   | FRONT END WEAR RING         | CAST IRON GG25          |                 |
| 1521   | REAR END WEAR RING          | CAST IRON GG25          |                 |
| 2100   | SHAFT                       | AISI 420                |                 |
| 2200   | IMPELLER                    | CAST IRON GG25          |                 |
| 2450   | SHAFT SLEEVE                | AISI 303                |                 |
| 2510   | SPACER RING                 | CAST IRON GG25          |                 |
| 2520   | SHOULDER RING               | STEEL                   |                 |
| 2540   | THROWER                     | RUBBER                  |                 |
| 2912   | IMPELLER NUT                | CAST IRON GG25          |                 |
| 3011   | BALL BEARING                | NA                      |                 |
| 3012   | ROLLER BEARING              | NA                      |                 |
| 3110   | SUPPORT                     | CAST IRON GG25          |                 |
| 3134   | SUPPORT FOOT                | STEEL                   |                 |
| 3180   | SUPPORT                     | CAST IRON GG25          |                 |
| 3261   | BEARING COVER, DRIVE SIDE   | CAST IRON GG25          |                 |
| 3262   | BEARING COVER, PUMP SIDE    | CAST IRON GG25          |                 |
| 3712   | BEARING NUT                 | STEEL                   |                 |
| 4200   | MECHANICAL SEAL             | TUNGSTEN CARBIDE/CARBON |                 |
| 4213   | CARRIER FOR MECHANICAL SEAL | CAST IRON GS400         |                 |
| 4311.1 | SEAL RING                   | NBR                     |                 |
| 4311.2 | SEAL RING                   | NBR                     |                 |
| 4421   | PIPE                        | AISI 316                |                 |
| 4590   | GASKET                      | NONAM                   | GRAPHITE        |

| No.    | PARTS                                | MATERIALS |
|--------|--------------------------------------|-----------|
| 4617   | O-RING                               | NBR       |
| 4617.6 | O-RING                               | NBR       |
| 6475   | DOWEL                                | STEEL 8.8 |
| 6545.2 | SHAFT CIRCLIP                        | STEEL     |
| 6572.1 | STUD BOLT + WASHER + NUT             | STEEL     |
| 6572.2 | STUD BOLT + WASHER + NUT             | STEEL     |
| 6572.3 | STUD BOLT + WASHER + NUT             | STEEL     |
| 6574   | SCREW                                | STEEL 8.8 |
| 6579.4 | SCREW                                | STEEL 8.8 |
| 6579.5 | SCREW                                | STEEL 8.8 |
| 6581.6 | SCREW + WASHER                       | STEEL 8.8 |
| 6581.7 | SCREW + WASHER                       | STEEL 8.8 |
| 6710   | IMPELLER KEY                         | STEEL     |
| 6710.1 | IMPELLER KEY                         | STEEL     |
| 6742   | COUPLING KEY                         | STEEL     |
| M1     | PRESSURE GAUGE CONNECTION            |           |
| R1     | OIL FILLING                          |           |
| S1     | PUMP DRAIN PLUG                      |           |
| S3     | MECH. SEAL /PACKING DRAIN CONNECTION |           |
| S4     | OIL DRAIN PLUG                       |           |
| V1     | VACUUM GAUGE CONNECTION              |           |
|        | <b>GREASE LUBRICATION</b>            |           |
| 3851   | GREASER                              |           |

# KDN OVERSIZE

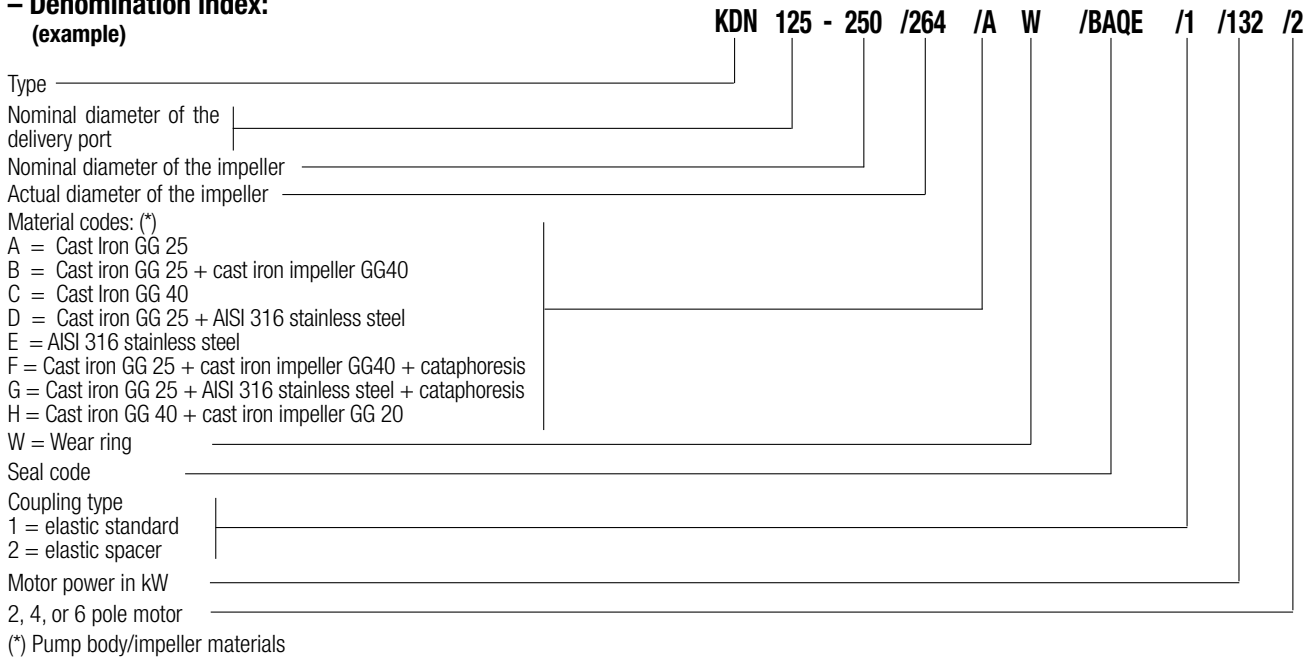
## STANDARDISED PUMPS

### PRODUCT DESCRIPTION

In the description of the pumps without a motor, the motor data are not mentioned. In the description of the bare shaft pump no mention is made of the coupling or motor data.

The example describes an KDN 125-250 with 264 mm. impeller, in cast iron with wear rings, with BAQE type mechanics, standard coupling, and a 132 kW 2-pole motor.

### – Denomination index: (example)



### PACKING CODES

| Position       | Code | Description of the seal |
|----------------|------|-------------------------|
| 1              | S    | Stuffing box type       |
| Cooling        |      |                         |
| 2              | N    | Stuffing box not cooled |
|                | K    | Stuffing box cooled     |
| Sealing liquid |      |                         |
|                | E    | With internal liquid    |
| 3              | F    | With external liquid    |
|                | O    | Without sealing liquid  |

### DESCRIPTION OF THE MECHANICAL SEAL

| Position  | Code                           | Description of the seal                     |
|-----------|--------------------------------|---|
| 1         | A                              | O-ring seal with fixed guide                |
|           | B                              | Rubber bellows seal                         |
|           | C                              | O-ring seal with spring guide               |
|           | D                              | O-ring seal balanced                        |
|           | G                              | Rubber bellows seal with reduced seal faces |
|           | M                              | Rubber bellows seal                         |
|           | X                              | Metal bellows seal                          |
| Materials |                                |   |
| 2 & 3     | A                              | Impregnated carbon/metal                    |
|           | B                              | Impregnated carbon/synthetic resin          |
|           | C                              | Other carbon types                          |
|           | S                              | Chromium steel                              |
|           | U                              | Tungsten carbide                            |
|           | Q                              | Silicon carbide                             |
|           | V                              | Aluminium oxide (ceramic)                   |
| X         | Other types of ceramic/carbide |   |
| Materials |                                |   |
| 4         | P                              | Nitrile rubber (NBR)                        |
|           | S                              | Silicon rubber                              |
|           | T                              | Teflon (PTFE)                               |
|           | E                              | EPDM  |
|           | V                              | FKM   |
|           | M                              | PTFE coated O-ring                          |

- Flow rate: max 3200 m<sup>3</sup>/h

- Head: max 157 m3/h

Pumped liquid temperature range: from -10 °C to +120 °C (other temperatures available on request)

- Operating pressure: 16 bar as standard up to DN 200, 10 bar for KDN 250 - 300 - 350

Optional PN 16 for KDN 250 - 300 - 350 in the spheroidal cast iron version (H).

### PRODUCT CODE DESCRIPTION

| NOMINAL DIAMETER OF THE IMPELLER | Cod. |
|----------------------------------|------|
| 250                              | 4    |
| 400                              | 8    |
| 500                              | 9    |
| 330A                             | A    |
| 330                              | B    |
| 500A                             | D    |
| 400M                             | E    |
| 400A                             | F    |
| 250A                             | G    |

| Cod. | PUMP/IMPELLER MATERIALS                        |
|------|--|
| A    | Spheroidal cast iron + cast iron impeller + W* |
| 5    | Cast iron/cast iron + W*                       |
| 6    | Cast iron/spheroidal cast iron + W*            |
| 7    | Full spheroidal cast iron + W*                 |
| 8    | Cast iron/AISI 316 impeller + W*               |
| 9    | Full AISI 316 + W*                             |
| P    | 6 + Cataphoresis                               |
| R    | 8 + Cataphoresis                               |

\* With wear rings

| Cod. | JOINT                  |
|------|------------------------|
| 0    | Without coupling *)    |
| 1    | With standard coupling |
| 2    | With spacer coupling   |

| Cod. | P2 NOMINAL |
|------|------------|
| 0    | bare shaft |
| 1    | 0.37       |
| 2    | 0.55       |
| 3    | 0.75       |
| 4    | 1.1        |
| 5    | 1.5        |
| 6    | 2.2        |
| 7    | 3          |
| 8    | 4          |
| 9    | 5.5        |
| A    | 7.5        |
| B    | 11         |
| C    | 15         |
| D    | 18.5       |
| E    | 22         |
| F    | 30         |
| G    | 37         |
| H    | 45         |
| K    | 55         |
| L    | 75         |
| M    | 90         |
| N    | 110        |
| P    | 132        |
| Q    | 160        |
| R    | 200        |
| S    | 250        |
| T    | 315        |
| U    | 355        |
| V    | 400        |
| W    | 450        |
| Z    | 500        |

| PUMP TYPE    | Cod. |
|--------------|------|
| 32 oversize  | L    |
| 65 oversize  | A    |
| 80 oversize  | B    |
| 100 oversize | C    |
| 125 oversize | D    |
| 150 oversize | H    |
| 200 oversize | E    |
| 250 oversize | F    |
| 300 oversize | G    |
| 350 oversize | I    |

| Cod. | SEAL (1)     |
|------|--------------|
| 1    | BAQE         |
| 2    | BAQE (RMG12) |
| 5    | BQQV         |
| 7    | BAQV         |
| A    | SNE          |
| B    | SNO          |
| C    | SNF          |
| D    | SKO          |
| E    | GQQE         |
| F    | GQQV         |
| G    | BQQE         |
| S    | DUCE         |
| T    | CUCE         |

(1) For standard seals see the Technical Data section

Product code

1 F 1 K 1 1 B X 3

— Bare shaft pump — 0 0 0  
 — Pump with base without motor — 0  
 — Complete electric pump with base —

| Cod. | VOLTAGE  | PO-LES |
|------|--|--------|
| 0    | Without motor  |        |
| 1    | 3 x 220-240/380-415 V 50 Hz (<0,75 kW) 3 x 220-277/380-480 V 60 Hz | 2      |
| 2    | 3 x 380-480 V 60 Hz  | 2      |
| 3    | 3 x 220-240/380-415 V 50 Hz (<0,75 kW) 3 x 220-277/380-480 V 60 Hz | 4      |
| 4    | 3 x 380-480 V 60 Hz  | 4      |
| 7    | 3 x 220-240/380-415 V 50 Hz (<0,75 kW) 3 x 220-277/380-480 V 60 Hz | 6      |
| 8    | 3 x 380-480 V 60 Hz  | 6      |
| A    | 3 x 220-240/380-415 V 50 Hz - IE2                                  | 2      |
| B    | 3 x 380-415 V 50 Hz - IE2  | 2      |
| C    | 3 x 220-240/380-415 V 50 Hz - IE2                                  | 4      |
| D    | 3 x 380-415 V 50 Hz - IE2  | 4      |
| E    | 3 x 220-240/380-415 V 50 Hz - IE2                                  | 6      |
| F    | 3 x 380-415 V; 50 Hz; e45; IE2                                     | 6      |
| U    | 3 x 220-240/380-415 V 50 Hz - IE3                                  | 2      |
| V    | 3 x 380-415 V 50 Hz - IE3  | 2      |
| W    | 3 x 220-240/380-415 V 50 Hz - IE3                                  | 4      |
| X    | 3 x 380-415 V 50 Hz - IE3  | 4      |
| Y    | 3 x 220-240/380-415 V 50 Hz - IE3                                  | 6      |
| Z    | 3 x 380-415 V 50 Hz - IE3  | 6      |



# KDN OVERSIZE

## STANDARDISED PUMPS

### GENERAL DATA

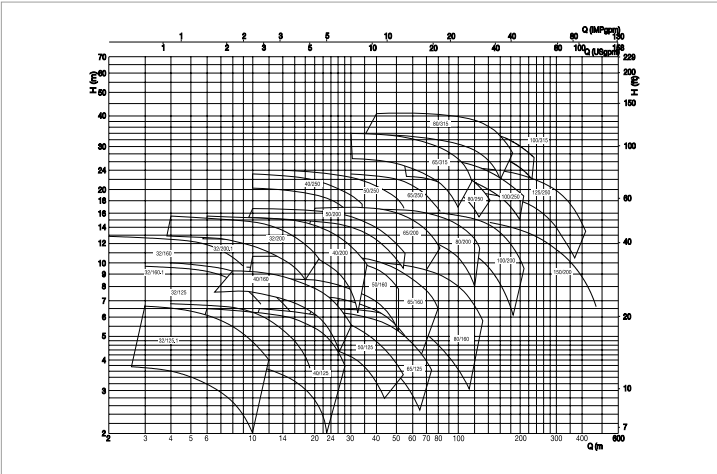
Supplied with closed asynchronous type motor, external ventilation cooling, 2 or 4 poles.

Rotor running on ball bearings, largely oversized to ensure low noise and durability.

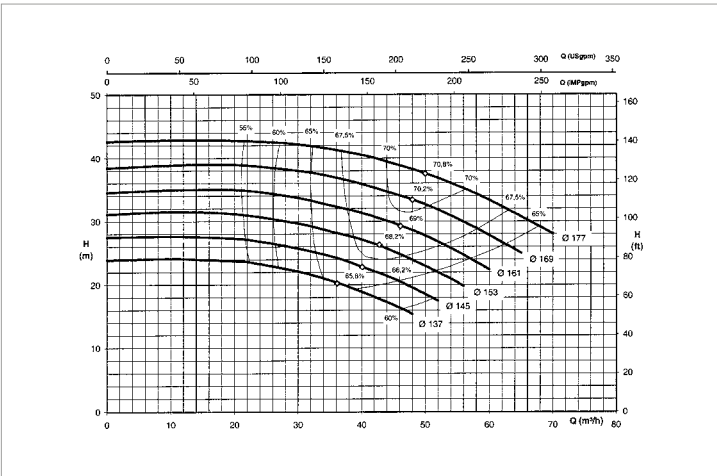
Electrical protection: in compliance with the EEC 89/336 ELECTROMAGNETIC COMPATIBILITY DIRECTIVE and subsequent amendments, the EEC 73/23 LOW VOLTAGE DIRECTIVE and subsequent amendments, as well as CEI 2-3 standards.

### INSTRUCTIONS FOR THE IDENTIFICATION OF THE PUMP AND MOTOR REQUIRED.

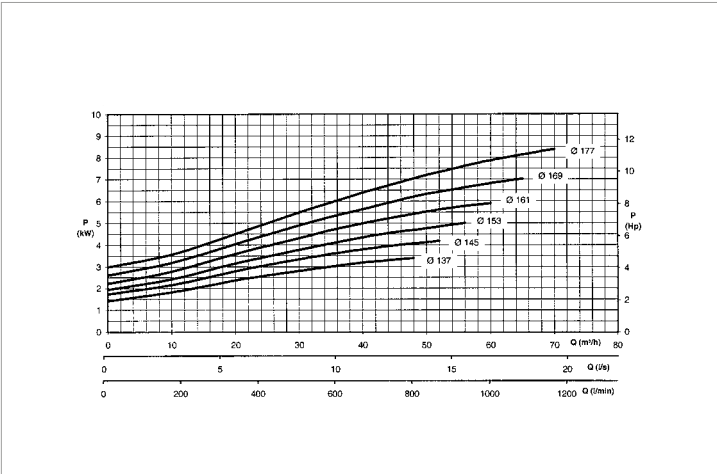
1. On the general chart supplied, find the family pump that indicatively offers the required flow rate and head characteristics.



2. Look for the most appropriate characteristic on the characteristic curves for each family.



3. On the power chart, identify the power required by the pump in order to operate at the required level.



4. Due to the possibility of variations in the pumped liquid flow rate, which can cause an oscillation of the point of operation, a higher power absorption may occur. When selecting the motor, allow for the following safety margins:

### Safety margin according to ISO 5199

| REQUIRED PUMP SHAFT POWER (kW) | POWER OF THE MOTOR TO USE P2 (kW) |
|--------------------------------|-----------------------------------|
| 322                            | 355                               |
| 286                            | 315                               |
| 227                            | 250                               |
| 181                            | 200                               |
| 145                            | 160                               |
| 120                            | 132                               |
| 100                            | 110                               |
| 81                             | 90                                |
| 68                             | 75                                |
| 49                             | 55                                |
| 40                             | 45                                |
| 32.5                           | 37                                |
| 26                             | 30                                |
| 19                             | 22                                |
| 15.9                           | 18.5                              |
| 12.8                           | 15                                |
| 9.1                            | 11                                |
| 6.1                            | 7.5                               |
| 4.3                            | 5.5                               |
| 3.2                            | 4                                 |
| 2.3                            | 3                                 |
| 1.7                            | 2.2                               |
| 1.1                            | 1.5                               |
| 0.81                           | 1.1                               |
| 0.55                           | 0.75                              |
| 0.40                           | 0.55                              |
| 0.27                           | 0.37                              |
| 0.18                           | 0.25                              |

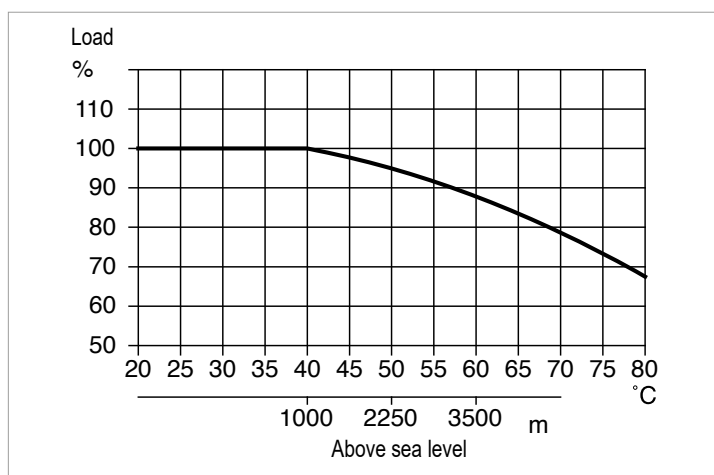
If the pump is to be used with liquids with fairly high specific weight and viscosity values, apply any required corrections to the power of the motor to be installed (check the suitability of the construction materials in contact with the liquid).

5. With the name of the pump and the power of the motor, look through the following technical data to find the name of the most suitable base (complete with motor, spacer coupling, and coupling cover).
6. The pump and base required will be delivered already assembled and aligned, although an alignment check is always required after installation (see INSTRUCTION MANUAL).

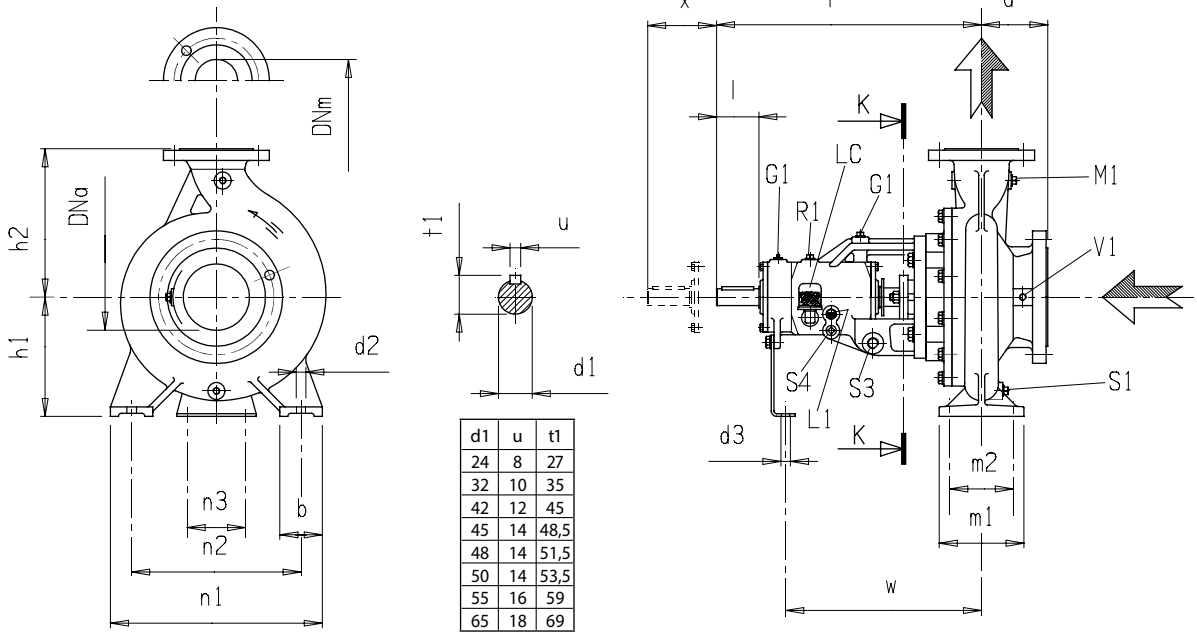
### Ambient temperature

From -30 °C to +40 °C

Due to the low density, and therefore low cooling effect of the air, operation at an ambient temperature above 40 °C, or at an altitude exceeding 1000 m above sea level, requires a reduction of the rated motor load in accordance with this table.



### DIMENSIONS OF BARE SHAFT PUMPS

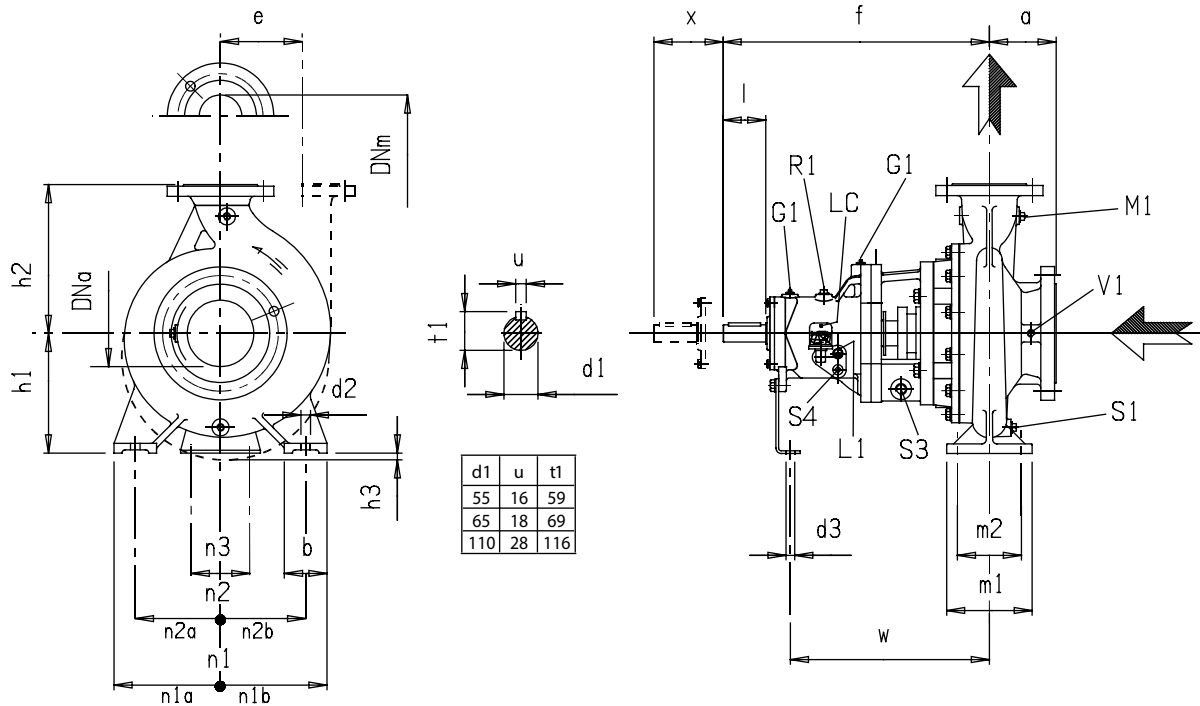


|    |                               | Grease lubrication |         | Oil lubrication |                         |
|----|-------------------------------|--------------------|---------|-----------------|-------------------------|
| M1 | Pressure gauge connection     | G1                 | Greaser | R1              | Oil filling 3/8"        |
| S1 | Drain plug                    |                    |         | L1              | Oil level 3/8"          |
| S3 | Packing drain connection 1/2" |                    |         | S4              | Oil drain plug 3/8"     |
| V1 | Vacuum gauge connection       |                    |         | LC              | Constant level oil 1/4" |

| TYPE         | Supp | DNA | DNM | a   | f   | h1  | h2  | b   | m1  | m2  | n1  | n2  | d2 | n3  | d3 | w   | x   | d1  | l   | M1   | S1   | V1   | kg  |
|--------------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|-----|----|-----|-----|-----|-----|------|------|------|-----|
| KDN 32-250A  | 2    | 50  | 32  | 100 | 500 | 180 | 225 | 65  | 125 | 95  | 320 | 250 | 14 | 110 | 14 | 370 | 100 | 32  | 80  | 3/8" | 1/4" | 1/4" | 78  |
| KDN 32-250   | 2    | 50  | 32  | 100 | 500 | 180 | 225 | 65  | 125 | 95  | 320 | 250 | 14 | 110 | 14 | 370 | 100 | 32  | 80  | 3/8" | 1/4" | 1/4" | 78  |
| KDN 50-330   | 2    | 80  | 50  | 125 | 500 | 225 | 280 | 65  | 125 | 95  | 345 | 280 | 14 | 110 | 14 | 370 | 100 | 32  | 80  | 3/8" | 1/4" | 1/4" | 116 |
| KDN 65-250   | 2    | 100 | 65  | 125 | 500 | 200 | 250 | 80  | 160 | 120 | 360 | 280 | 18 | 110 | 14 | 370 | 140 | 32  | 80  | 3/8" | 1/4" | 1/4" | 88  |
| KDN 65-330   | 3    | 100 | 65  | 125 | 530 | 225 | 280 | 80  | 160 | 120 | 400 | 315 | 18 | 110 | 14 | 370 | 140 | 42  | 110 | 3/8" | 1/4" | 1/4" | 152 |
| KDN 65-400   | 3    | 100 | 65  | 125 | 530 | 280 | 355 | 80  | 160 | 120 | 435 | 355 | 18 | 110 | 14 | 370 | 140 | 42  | 110 | 3/8" | 1/4" | 1/4" | 180 |
| KDN 80-250   | 2    | 125 | 80  | 125 | 500 | 225 | 280 | 80  | 160 | 120 | 400 | 315 | 18 | 110 | 14 | 370 | 140 | 32  | 80  | 3/8" | 3/8" | 3/8" | 100 |
| KDN 80-330   | 3    | 125 | 80  | 125 | 530 | 250 | 315 | 80  | 160 | 120 | 400 | 315 | 18 | 110 | 14 | 370 | 140 | 42  | 110 | 3/8" | 3/8" | 3/8" | 155 |
| KDN 80-400   | 3    | 125 | 80  | 125 | 530 | 280 | 355 | 80  | 160 | 120 | 435 | 355 | 18 | 110 | 14 | 370 | 140 | 42  | 110 | 3/8" | 3/8" | 3/8" | 185 |
| KDN 100-250  | 3    | 125 | 100 | 140 | 530 | 225 | 280 | 80  | 160 | 120 | 400 | 315 | 18 | 110 | 14 | 370 | 140 | 42  | 110 | 3/8" | 3/8" | 3/8" | 130 |
| KDN 100-330  | 3    | 125 | 100 | 140 | 530 | 250 | 315 | 80  | 160 | 120 | 400 | 315 | 18 | 110 | 14 | 370 | 140 | 42  | 110 | 3/8" | 3/8" | 3/8" | 170 |
| KDN 100-400  | 3    | 125 | 100 | 140 | 530 | 280 | 355 | 100 | 200 | 150 | 500 | 400 | 23 | 110 | 14 | 370 | 140 | 42  | 110 | 3/8" | 3/8" | 3/8" | 200 |
| KDN 125-250  | 3    | 150 | 125 | 140 | 530 | 250 | 355 | 80  | 160 | 120 | 400 | 315 | 18 | 110 | 14 | 370 | 140 | 42  | 110 | 1/2" | 3/8" | 3/8" | 140 |
| KDN 125-330  | 3    | 150 | 125 | 140 | 530 | 280 | 355 | 100 | 200 | 150 | 500 | 400 | 23 | 110 | 14 | 370 | 140 | 42  | 110 | 1/2" | 3/8" | 3/8" | 190 |
| KDN 125-400  | 3    | 150 | 125 | 140 | 530 | 315 | 400 | 100 | 200 | 150 | 500 | 400 | 23 | 110 | 14 | 370 | 140 | 42  | 110 | 1/2" | 3/8" | 3/8" | 220 |
| KDN 150-250  | 3    | 200 | 150 | 160 | 530 | 280 | 375 | 100 | 200 | 150 | 500 | 400 | 23 | 110 | 14 | 370 | 180 | 42  | 110 | 1/2" | 1/2" | 3/8" | 180 |
| KDN 150-330  | 4    | 200 | 150 | 160 | 670 | 315 | 400 | 100 | 200 | 150 | 550 | 450 | 22 | 140 | 18 | 500 | 180 | 55* | 110 | 1/2" | 1/2" | 3/8" | 255 |
| KDN 150-400  | 4    | 200 | 150 | 160 | 670 | 315 | 450 | 100 | 200 | 150 | 550 | 450 | 22 | 140 | 18 | 500 | 180 | 55* | 110 | 1/2" | 1/2" | 3/8" | 298 |
| KDN 150-500A | 4    | 200 | 150 | 180 | 670 | 355 | 500 | 100 | 200 | 150 | 550 | 450 | 22 | 140 | 18 | 500 | 180 | 55  | 110 | 1/2" | 1/2" | 3/8" | 410 |
| KDN 150-500  | 4    | 200 | 150 | 180 | 670 | 355 | 500 | 100 | 200 | 150 | 550 | 450 | 22 | 140 | 18 | 500 | 180 | 55  | 110 | 1/2" | 1/2" | 3/8" | 410 |

<sup>1)</sup> Size d1 Ø 48 on request for pumps according to DIN 24256 - ISO 2858

### DIMENSIONS OF BARE SHAFT PUMPS



|    |  | Grease lubrication |         | Oil lubrication |                                    |
|----|--|--------------------|---------|-----------------|------------------------------------|
| M1 | Pressure gauge connection                | G1                 | Greaser | R1              | Oil filling $\frac{3}{8}$ "        |
| S1 | Drain plug                               |                    |         | L1              | Oil level $\frac{3}{8}$ "          |
| S3 | Packing drain connection $\frac{1}{2}$ " |                    |         | S4              | Oil drain plug $\frac{3}{8}$ "     |
| V1 | Vacuum gauge connection                  |                    |         | LC              | Constant level oil $\frac{1}{4}$ " |

| TYPE         | Supp | DNA | DNM | a   | f    | h1  | h2  | b   | m1  | m2  | n1   | n1a | n1b | n2  | n2a | n2b | d2 | n3  | d3 | h3 | e   | w   | x   | d1  | l   | M1   | S1   | V1   | kg   |
|--------------|------|-----|-----|-----|------|-----|-----|-----|-----|-----|------|-----|-----|-----|-----|-----|----|-----|----|----|-----|-----|-----|-----|-----|------|------|------|------|
| KDN 200-330  | 4    | 250 | 200 | 200 | 670  | 355 | 450 | 100 | 200 | 150 | 550  | 275 | 275 | 450 | 225 | 225 | 22 | 140 | 18 |    |     | 500 | 180 | 55  | 110 | 1/2" | 1/2" | 3/8" | 360  |
| KDN 200-400  | 4    | 250 | 200 | 185 | 670  | 355 | 500 | 100 | 200 | 150 | 550  | 275 | 275 | 450 | 225 | 225 | 22 | 140 | 18 |    |     | 500 | 180 | 55  | 110 | 1/2" | 1/2" | 3/8" | 390  |
| KDN 200-500  | 4    | 250 | 200 | 185 | 670  | 400 | 580 | 140 | 250 | 190 | 800  | 400 | 400 | 660 | 330 | 330 | 27 | 140 | 18 | 15 |     | 500 | 180 | 55  | 110 | 1/2" | 1/2" | 3/8" | 400  |
| KDN 250-330A | 4    | 300 | 250 | 250 | 670  | 400 | 525 | 140 | 250 | 190 | 700  | 350 | 350 | 560 | 280 | 280 | 27 | 140 | 18 |    |     | 500 | 240 | 55  | 110 | 1/2" | 1/2" | 3/8" | 410  |
| KDN 250-330  | 4    | 300 | 250 | 250 | 670  | 400 | 525 | 140 | 250 | 190 | 700  | 350 | 350 | 560 | 280 | 280 | 27 | 140 | 18 |    |     | 500 | 240 | 55  | 110 | 1/2" | 1/2" | 3/8" | 410  |
| KDN 250-400  | 5    | 300 | 250 | 225 | 780  | 400 | 600 | 125 | 250 | 190 | 690  | 345 | 345 | 560 | 280 | 280 | 27 | 140 | 18 |    |     | 545 | 180 | 65  | 140 | 1/2" | 1/2" | 3/8" | 650  |
| KDN 250-500A | 5    | 300 | 250 | 300 | 800  | 500 | 500 | 130 | 260 | 190 | 830  | 380 | 450 | 710 | 320 | 390 | 27 | 140 | 18 |    | 425 | 565 | 250 | 65  | 140 | 1/2" | 1/2" | 3/8" | 700  |
| KDN 250-500  | 5    | 300 | 250 | 300 | 800  | 500 | 500 | 130 | 260 | 190 | 830  | 380 | 450 | 710 | 320 | 390 | 27 | 140 | 18 |    | 425 | 565 | 250 | 65  | 140 | 1/2" | 1/2" | 3/8" | 700  |
| KDN 300-330  | 4    | 350 | 300 | 300 | 720  | 500 | 670 | 150 | 360 | 280 | 900  | 450 | 450 | 750 | 375 | 375 | 27 | 140 | 18 |    |     | 550 | 240 | 55  | 110 | 1/2" | 1/2" | 3/8" | 780  |
| KDN 300-400M | 5    | 350 | 300 | 300 | 845  | 500 | 670 | 150 | 360 | 280 | 900  | 450 | 450 | 750 | 375 | 375 | 27 | 140 | 18 |    |     | 610 | 240 | 65  | 140 | 1/2" | 1/2" | 3/8" | 900  |
| KDN 300-400A | 5    | 350 | 300 | 325 | 790  | 400 | 640 | 125 | 250 | 190 | 690  | 345 | 345 | 560 | 280 | 280 | 27 | 140 | 18 |    |     | 555 | 240 | 65  | 140 | 1/2" | 1/2" | 3/8" | 800  |
| KDN 300-400  | 5    | 350 | 300 | 325 | 790  | 400 | 640 | 125 | 250 | 190 | 690  | 345 | 345 | 560 | 280 | 280 | 27 | 140 | 18 |    |     | 555 | 240 | 65  | 140 | 1/2" | 1/2" | 3/8" | 800  |
| KDN 350-500A | 6    | 400 | 350 | 380 | 1150 | 600 | 600 | 150 | 400 | 300 | 1000 | 450 | 550 | 850 | 375 | 475 | 27 | 140 | 18 |    | 450 | 800 | 380 | 110 | 210 | 1/2" | 1/2" | 3/8" | 1080 |
| KDN 350-500  | 6    | 400 | 350 | 380 | 1150 | 600 | 600 | 150 | 400 | 300 | 1000 | 450 | 550 | 850 | 375 | 475 | 27 | 140 | 18 |    | 450 | 800 | 380 | 110 | 210 | 1/2" | 1/2" | 3/8" | 1080 |

# KDN OVERSIZE - 2 POLE RANGE

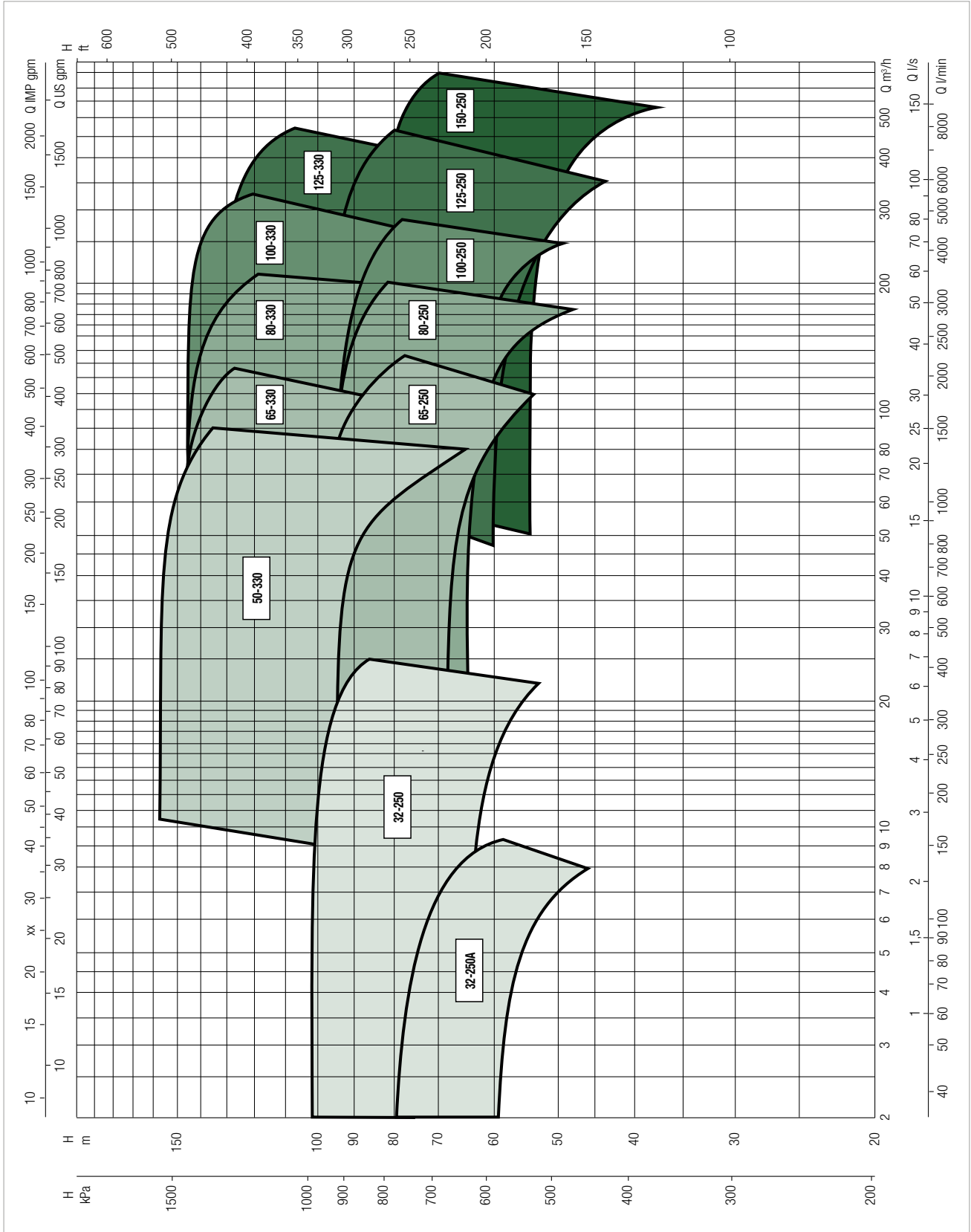
STANDARDISED PUMPS

## PERFORMANCE RANGE

The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

### GRAPHIC SELECTION TABLE

= 2900 1/min



# KDN OVERSIZE - 2 POLES

## STANDARDISED PUMPS

### SELECTION TABLE - KDN 32

| MODEL              | Q=m <sup>3</sup> /h | 0   | 2  | 4   | 6   | 8   | 10  | 12  | 16  | 20  | 24  |
|--------------------|---------------------|-----|----|-----|-----|-----|-----|-----|-----|-----|-----|
|                    | Q=l/min             | 0   | 33 | 67  | 100 | 133 | 167 | 200 | 267 | 333 | 400 |
| KDN 32-250 A / 244 | H<br>(m)            | 61  | 59 | 57  | 53  | 46  |     |     |     |     |     |
| KDN 32-250 A / 254 |                     | 68  | 66 | 63  | 59  | 53  |     |     |     |     |     |
| KDN 32-250 A / 259 |                     | 75  | 73 | 69  | 65  | 60  | 52  |     |     |     |     |
| KDN 32-250 A / 264 |                     | 81  | 79 | 76  | 72  | 68  | 60  |     |     |     |     |
| KDN 32-250 / 224   |                     | 63  |    | 63  | 63  | 63  | 62  | 62  | 59  | 55  |     |
| KDN 32-250 / 234   |                     | 71  |    | 71  | 71  | 71  | 70  | 70  | 68  | 64  |     |
| KDN 32-250 / 244   |                     | 81  |    | 81  | 81  | 80  | 80  | 80  | 79  | 76  | 68  |
| KDN 32-250 / 254   |                     | 91  |    | 91  | 91  | 91  | 90  | 90  | 89  | 85  | 78  |
| KDN 32-250 / 264   |                     | 100 |    | 100 | 100 | 100 | 100 | 100 | 98  | 95  | 87  |

### SELECTION TABLE - KDN 50

| MODEL            | Q=m <sup>3</sup> /h | 0   | 2  | 4  | 6   | 8   | 10  | 12  | 16  | 20  | 24  | 40  | 60   | 80   | 100  |
|------------------|---------------------|-----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
|                  | Q=l/min             | 0   | 33 | 67 | 100 | 133 | 167 | 200 | 267 | 333 | 400 | 667 | 1000 | 1333 | 1667 |
| KDN 50-330 / 270 | H<br>(m)            | 95  |    |    |     |     |     |     |     | 95  | 94  | 93  | 85   | 64   |      |
| KDN 50-330 / 290 |                     | 115 |    |    |     |     |     |     |     | 115 | 114 | 113 | 106  | 88   |      |
| KDN 50-330 / 310 |                     | 132 |    |    |     |     |     |     |     | 132 | 132 | 132 | 128  | 114  | 100  |
| KDN 50-330 / 328 |                     | 157 |    |    |     |     |     |     |     | 157 | 156 | 156 | 154  | 145  | 137  |

### SELECTION TABLE - KDN 65

| MODEL            | Q=m <sup>3</sup> /h | 0   | 2  | 4  | 6   | 8   | 10  | 12  | 16  | 20  | 24  | 40  | 60   | 80   | 100  | 120  | 130  |
|------------------|---------------------|-----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|
|                  | Q=l/min             | 0   | 33 | 67 | 100 | 133 | 167 | 200 | 267 | 333 | 400 | 667 | 1000 | 1333 | 1667 | 2000 | 2167 |
| KDN 65-250 / 224 | H<br>(m)            | 67  |    |    |     |     |     |     |     | 66  | 66  | 66  | 64   | 61   | 56   |      |      |
| KDN 65-250 / 234 |                     | 74  |    |    |     |     |     |     |     | 73  | 73  | 73  | 71   | 67   | 62   | 55   |      |
| KDN 65-250 / 244 |                     | 81  |    |    |     |     |     |     |     | 81  | 80  | 80  | 79   | 76   | 71   | 65   |      |
| KDN 65-250 / 254 |                     | 89  |    |    |     |     |     |     |     | 89  | 89  | 89  | 88   | 85   | 81   | 75   | 71   |
| KDN 65-250 / 264 |                     | 100 |    |    |     |     |     |     |     | 100 | 99  | 99  | 98   | 95   | 91   | 85   | 80   |
| KDN 65-330 / 270 |                     | 92  |    |    |     |     |     |     |     | 92  | 91  | 91  | 89   | 83   | 74   |      |      |
| KDN 65-330 / 290 |                     | 110 |    |    |     |     |     |     |     | 110 | 109 | 108 | 105  | 100  | 92   |      |      |
| KDN 65-330 / 310 |                     | 128 |    |    |     |     |     |     |     | 128 | 128 | 128 | 125  | 122  | 116  | 105  |      |
| KDN 65-330 / 328 |                     | 150 |    |    |     |     |     |     |     | 150 | 149 | 149 | 148  | 144  | 139  | 128  |      |

### SELECTION TABLE - KDN 80

| MODEL            | Q=m <sup>3</sup> /h | 0   | 2  | 4  | 6   | 8   | 10  | 12  | 16  | 20  | 24  | 40  | 60   | 80   | 100  | 120  | 130  | 150  | 180  | 200  |
|------------------|---------------------|-----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|
|                  | Q=l/min             | 0   | 33 | 67 | 100 | 133 | 167 | 200 | 267 | 333 | 400 | 667 | 1000 | 1333 | 1667 | 2000 | 2167 | 2500 | 3000 | 3333 |
| KDN 80-250 / 224 | H<br>(m)            | 65  |    |    |     |     |     |     |     |     |     | 64  | 64   | 64   | 62   | 60   | 58   | 54   |      |      |
| KDN 80-250 / 234 |                     | 71  |    |    |     |     |     |     |     |     |     | 71  | 71   | 71   | 69   | 67   | 65   | 61   | 55   |      |
| KDN 80-250 / 244 |                     | 79  |    |    |     |     |     |     |     |     |     | 79  | 78   | 78   | 77   | 74   | 72   | 69   | 62   |      |
| KDN 80-250 / 254 |                     | 87  |    |    |     |     |     |     |     |     |     | 87  | 86   | 86   | 85   | 83   | 80   | 78   | 72   |      |
| KDN 80-250 / 264 |                     | 98  |    |    |     |     |     |     |     |     |     | 97  | 97   | 96   | 95   | 94   | 92   | 90   | 86   | 81   |
| KDN 80-330 / 270 |                     | 93  |    |    |     |     |     |     |     |     |     | 92  | 92   | 90   | 89   | 86   | 84   | 80   | 68   |      |
| KDN 80-330 / 290 |                     | 108 |    |    |     |     |     |     |     |     |     | 107 | 107  | 106  | 105  | 102  | 100  | 96   | 85   |      |
| KDN 80-330 / 310 |                     | 127 |    |    |     |     |     |     |     |     |     | 126 | 126  | 125  | 125  | 123  | 122  | 120  | 111  |      |
| KDN 80-330 / 328 |                     | 148 |    |    |     |     |     |     |     |     |     | 147 | 147  | 146  | 146  | 143  | 142  | 139  | 130  | 123  |

# KDN OVERSIZE - 2 POLES

## STANDARDISED PUMPS

### SELECTION TABLE - KDN 100

| MODEL             | Q=m <sup>3</sup> /h | 0   | 2  | 4  | 6   | 8   | 10  | 12  | 16  | 20  | 24  | 40  | 60   | 80   | 100  | 120  | 130  | 150  | 180  | 200  | 260  | 280  | 300  |     |
|-------------------|---------------------|-----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|------|-----|
|                   | Q=l/min             | 0   | 33 | 67 | 100 | 133 | 167 | 200 | 267 | 333 | 400 | 667 | 1000 | 1333 | 1667 | 2000 | 2167 | 2500 | 3000 | 3333 | 4333 | 4667 | 5000 |     |
| KDN 100-250 / 224 | H<br>(m)            | 63  |    |    |     |     |     |     |     |     |     | 63  | 63   | 63   | 62   | 62   | 61   | 61   | 59   | 57   |      |      |      |     |
| KDN 100-250 / 234 |                     | 71  |    |    |     |     |     |     |     |     |     |     | 71   | 71   | 71   | 70   | 70   | 70   | 69   | 68   | 65   | 55   |      |     |
| KDN 100-250 / 244 |                     | 77  |    |    |     |     |     |     |     |     |     |     | 77   | 77   | 77   | 77   | 77   | 76   | 76   | 75   | 72   | 63   |      |     |
| KDN 100-250 / 254 |                     | 86  |    |    |     |     |     |     |     |     |     |     | 86   | 86   | 86   | 86   | 85   | 85   | 84   | 83   | 81   | 74   | 70   |     |
| KDN 100-250 / 264 |                     | 94  |    |    |     |     |     |     |     |     |     |     | 94   | 94   | 93   | 93   | 93   | 92   | 92   | 91   | 89   | 84   | 80   |     |
| KDN 100-330 / 270 |                     | 93  |    |    |     |     |     |     |     |     |     |     |      |      |      | 92   | 92   | 91   | 90   | 88   | 85   | 70   |      |     |
| KDN 100-330 / 290 |                     | 110 |    |    |     |     |     |     |     |     |     |     |      |      |      | 109  | 109  | 108  | 107  | 105  | 102  | 90   | 85   |     |
| KDN 100-330 / 310 |                     | 129 |    |    |     |     |     |     |     |     |     |     |      |      |      | 128  | 128  | 127  | 127  | 125  | 123  | 112  | 107  | 102 |
| KDN 100-330 / 328 |                     | 148 |    |    |     |     |     |     |     |     |     |     |      |      |      | 148  | 148  | 147  | 147  | 146  | 145  | 137  | 135  | 120 |

### SELECTION TABLE - KDN 125

| MODEL             | Q=m <sup>3</sup> /h | 0   | 2  | 4  | 6   | 8   | 10  | 12  | 16  | 20  | 24  | 40  | 60   | 80   | 100  | 120  | 130  | 150  | 180  | 200  | 260  | 280  | 300  | 400  | 450  |
|-------------------|---------------------|-----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|
|                   | Q=l/min             | 0   | 33 | 67 | 100 | 133 | 167 | 200 | 267 | 333 | 400 | 667 | 1000 | 1333 | 1667 | 2000 | 2167 | 2500 | 3000 | 3333 | 4333 | 4667 | 5000 | 6667 | 7500 |
| KDN 125-250 / 220 | H<br>(m)            | 60  |    |    |     |     |     |     |     |     |     |     |      |      | 59   | 59   | 59   | 58   | 57   | 56   | 55   | 53   | 49   |      |      |
| KDN 125-250 / 235 |                     | 72  |    |    |     |     |     |     |     |     |     |     |      |      | 71   | 71   | 71   | 70   | 70   | 69   | 68   | 66   | 62   |      |      |
| KDN 125-250 / 250 |                     | 83  |    |    |     |     |     |     |     |     |     |     |      |      | 82   | 82   | 82   | 82   | 82   | 81   | 80   | 79   | 77   | 68   |      |
| KDN 125-250 / 264 |                     | 97  |    |    |     |     |     |     |     |     |     |     |      |      | 97   | 97   | 97   | 97   | 97   | 96   | 95   | 94   | 93   | 86   |      |
| KDN 125-330 / 270 |                     | 96  |    |    |     |     |     |     |     |     |     |     |      |      | 96   | 96   | 96   | 96   | 95   | 94   | 93   | 90   | 87   | 68   |      |
| KDN 125-330 / 290 |                     | 112 |    |    |     |     |     |     |     |     |     |     |      |      | 112  | 112  | 111  | 111  | 110  | 110  | 109  | 107  | 104  | 92   |      |
| KDN 125-330 / 300 |                     | 122 |    |    |     |     |     |     |     |     |     |     |      |      | 122  | 122  | 121  | 121  | 121  | 120  | 119  | 118  | 117  | 106  | 98   |
| KDN 125-330 / 310 |                     | 132 |    |    |     |     |     |     |     |     |     |     |      |      | 132  | 132  | 132  | 132  | 131  | 131  | 130  | 130  | 128  | 120  | 110  |

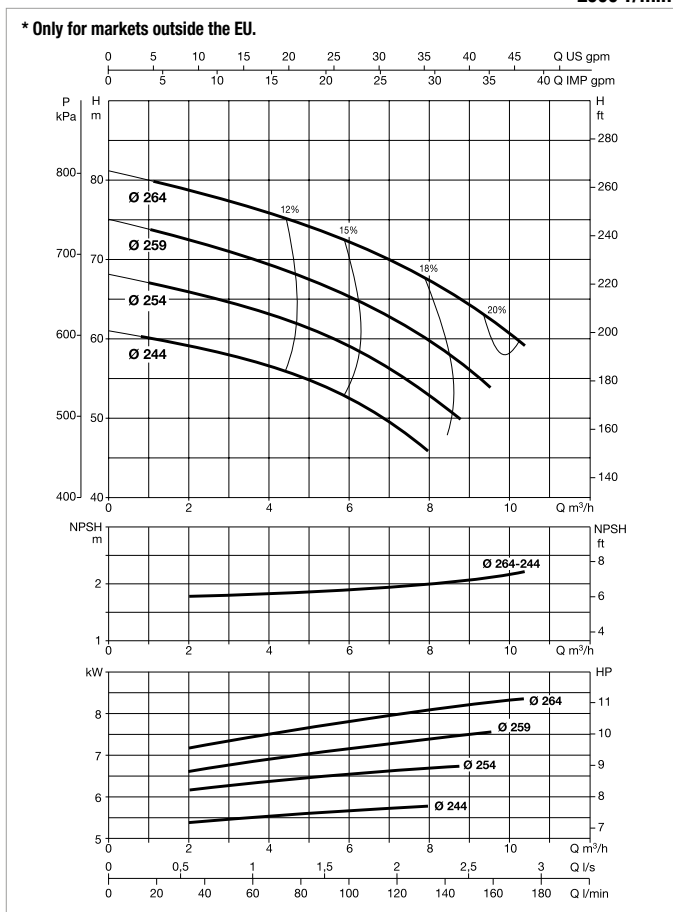
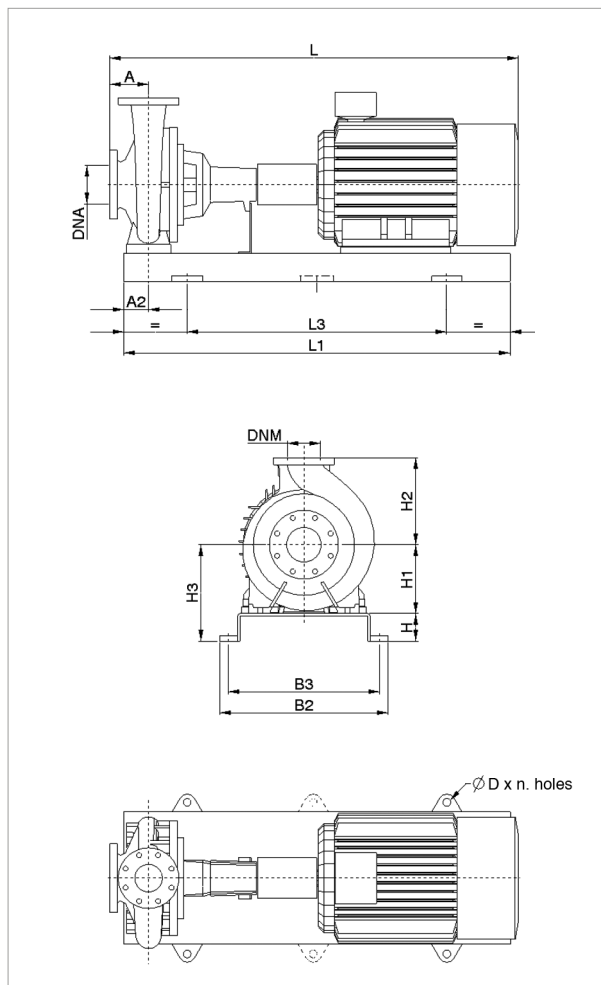
### SELECTION TABLE - KDN 150

| MODEL             | Q=m <sup>3</sup> /h | 0  | 2  | 4  | 6   | 8   | 10  | 12  | 16  | 20  | 24  | 40  | 60   | 80   | 100  | 120  | 130  | 150  | 180  | 200  | 260  | 280  | 300  | 400  | 450  | 500  | 600   |
|-------------------|---------------------|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
|                   | Q=l/min             | 0  | 33 | 67 | 100 | 133 | 167 | 200 | 267 | 333 | 400 | 667 | 1000 | 1333 | 1667 | 2000 | 2167 | 2500 | 3000 | 3333 | 4333 | 4667 | 5000 | 6667 | 7500 | 8334 | 10000 |
| KDN 150-250 / 220 | H<br>(m)            | 54 |    |    |     |     |     |     |     |     |     |     |      | 54   | 53   | 53   | 53   | 53   | 53   | 53   | 52   | 51   | 47   | 45   | 43   |      |       |
| KDN 150-250 / 235 |                     | 62 |    |    |     |     |     |     |     |     |     |     |      | 62   | 62   | 61   | 61   | 61   | 61   | 61   | 60   | 59   | 56   | 54   | 51   |      |       |
| KDN 150-250 / 250 |                     | 72 |    |    |     |     |     |     |     |     |     |     |      | 72   | 72   | 72   | 72   | 72   | 72   | 72   | 71   | 71   | 68   | 67   | 64   | 56   |       |
| KDN 150-250 / 264 |                     | 87 |    |    |     |     |     |     |     |     |     |     |      | 87   | 87   | 86   | 86   | 86   | 86   | 86   | 85   | 85   | 83   | 81   | 79   | 74   |       |

# KDN 32-250A - 2 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

**= 2900 1/min**



**For MEI index refer to the hydraulic efficiency section.**  
 The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

| MODEL       | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA   |             | MOTOR TYPE |
|-------------|------------|------------|-------------------|-------------|------------|
|             |            |            | POWER INPUT 50 Hz | In A        |            |
| KDN 32-250A | 1,5        | 90S        | 3 x 230 - 400 V ~ | 5,80 - 3,35 | IE3        |
|             | 2,2        | 90L        | 3 x 230 - 400 V ~ | 8,23 - 4,75 | IE3        |
|             | 3          | 100L       | 3 x 400 V ~ Δ     | 5,85        | IE3        |
|             | 5,5        | 132S       | 3 x 400 V ~ Δ     | 10,4        | IE3        |
|             | 7,5        | 132S       | 3 x 400 V ~ Δ     | 13,4        | IE3        |
|             | 11         | 160M       | 3 x 400 V ~ Δ     | 19,4        | IE3        |

| MODEL       | POWER (kW) | UNIT DIMENSIONS (mm) |    |    |     |     |     |      |     |     |     | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |        | SPACER COUPLING |        |           |
|-------------|------------|----------------------|----|----|-----|-----|-----|------|-----|-----|-----|------------------------|-----|-------------------|--------|-----------------|--------|-----------|
|             |            | A                    | A2 | H  | H1  | H2  | H3  | L1   | L3  | B2  | B3  | D                      | DNA | DNM               | L (mm) | WEIGHT Kg       | L (mm) | WEIGHT Kg |
| KDN 32-250A | 1,5        | 100                  | 75 | 80 | 180 | 225 | 260 | 1000 | 660 | 450 | 400 | 24x4                   | 50  | 32                | 924    | 140             | 1025   | 142       |
|             | 2,2        | 100                  | 75 | 80 | 180 | 225 | 260 | 1000 | 660 | 450 | 400 | 24x4                   | 50  | 32                | 949    | 144             | 1050   | 146       |
|             | 3          | 100                  | 75 | 80 | 180 | 225 | 260 | 1000 | 660 | 450 | 400 | 24x4                   | 50  | 32                | 989    | 154             | 1090   | 156       |
|             | 5,5        | 100                  | 75 | 80 | 180 | 225 | 260 | 1120 | 740 | 490 | 440 | 24x4                   | 50  | 32                | 1074   | 194             | 1175   | 196       |
|             | 7,5        | 100                  | 75 | 80 | 180 | 225 | 260 | 1120 | 740 | 490 | 440 | 24x4                   | 50  | 32                | 1124   | 174             | 1225   | 193       |
|             | 11         | 100                  | 75 | 80 | 180 | 225 | 260 | 1250 | 840 | 540 | 490 | 24x4                   | 50  | 32                | 1269   | 236             | 1370   | 251       |

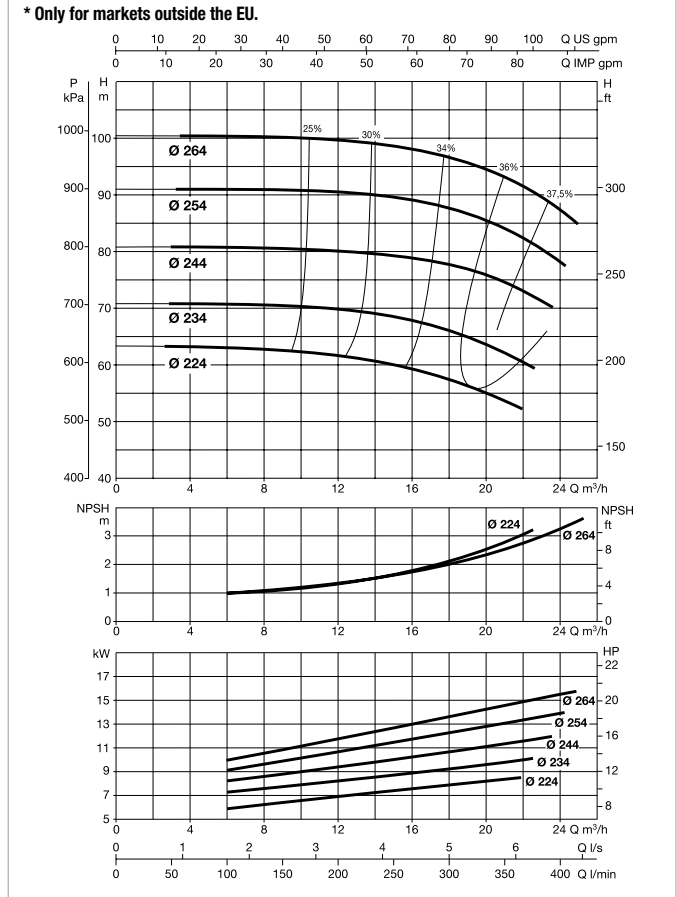
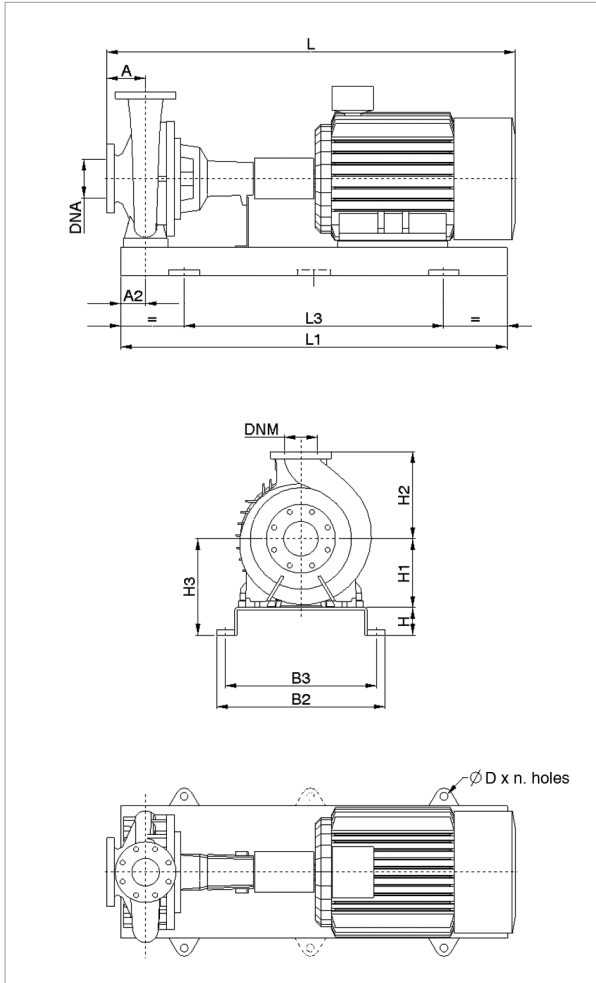
Dimension and electrical data based on sizing definition following the instructions on page 183.



# KDN 32-250 - 2 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 2900 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

| MODEL      | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA   |             | MOTOR TYPE |
|------------|------------|------------|-------------------|-------------|------------|
|            |            |            | POWER INPUT 50 Hz | In A        |            |
| KDN 32-250 | 1,5        | 90S        | 3 x 230 - 400 V ~ | 5,80 - 3,35 | IE3        |
|            | 2,2        | 90L        | 3 x 230 - 400 V ~ | 8,23 - 4,75 | IE3        |
|            | 3          | 100L       | 3 x 400 V ~ Δ     | 5,85        | IE3        |
|            | 5,5        | 132S       | 3 x 400 V ~ Δ     | 10,4        | IE3        |
|            | 7,5        | 132S       | 3 x 400 V ~ Δ     | 13,4        | IE3        |
|            | 11         | 160M       | 3 x 400 V ~ Δ     | 19,4        | IE3        |
|            | 15         | 160M       | 3 x 400 V ~ Δ     | 26,5        | IE3        |
|            | 18,5       | 160L       | 3 x 400 V ~ Δ     | 32          | IE3        |

| MODEL      | POWER (kW) | UNIT DIMENSIONS (mm) |    |    |     |     |     |      |     |     |     | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |        | SPACER COUPLING |        |           |
|------------|------------|----------------------|----|----|-----|-----|-----|------|-----|-----|-----|------------------------|-----|-------------------|--------|-----------------|--------|-----------|
|            |            | A                    | A2 | H  | H1  | H2  | H3  | L1   | L3  | B2  | B3  | D                      | DNA | DNM               | L (mm) | WEIGHT Kg       | L (mm) | WEIGHT Kg |
| KDN 32-250 | 1,5        | 100                  | 75 | 80 | 180 | 225 | 260 | 1000 | 660 | 450 | 400 | 24x4                   | 50  | 32                | 924    | 140             | 1025   | 142       |
|            | 2,2        | 100                  | 75 | 80 | 180 | 225 | 260 | 1000 | 660 | 450 | 400 | 24x4                   | 50  | 32                | 949    | 144             | 1050   | 146       |
|            | 3          | 100                  | 75 | 80 | 180 | 225 | 260 | 1000 | 660 | 450 | 400 | 24x4                   | 50  | 32                | 989    | 154             | 1090   | 156       |
|            | 5,5        | 100                  | 75 | 80 | 180 | 225 | 260 | 1120 | 740 | 490 | 440 | 24x4                   | 50  | 32                | 1074   | 191             | 1175   | 191       |
|            | 7,5        | 100                  | 75 | 80 | 180 | 225 | 260 | 1120 | 740 | 490 | 440 | 24x4                   | 50  | 32                | 1124   | 174             | 1225   | 193       |
|            | 11         | 100                  | 75 | 80 | 180 | 225 | 260 | 1250 | 840 | 540 | 490 | 24x4                   | 50  | 32                | 1269   | 236             | 1370   | 251       |
|            | 15         | 100                  | 75 | 80 | 180 | 225 | 260 | 1250 | 840 | 540 | 490 | 24x4                   | 50  | 32                | 1269   | 246             | 1370   | 261       |
|            | 18,5       | 100                  | 75 | 80 | 180 | 225 | 260 | 1250 | 840 | 540 | 490 | 24x4                   | 50  | 32                | 1324   | 263             | 1425   | 278       |

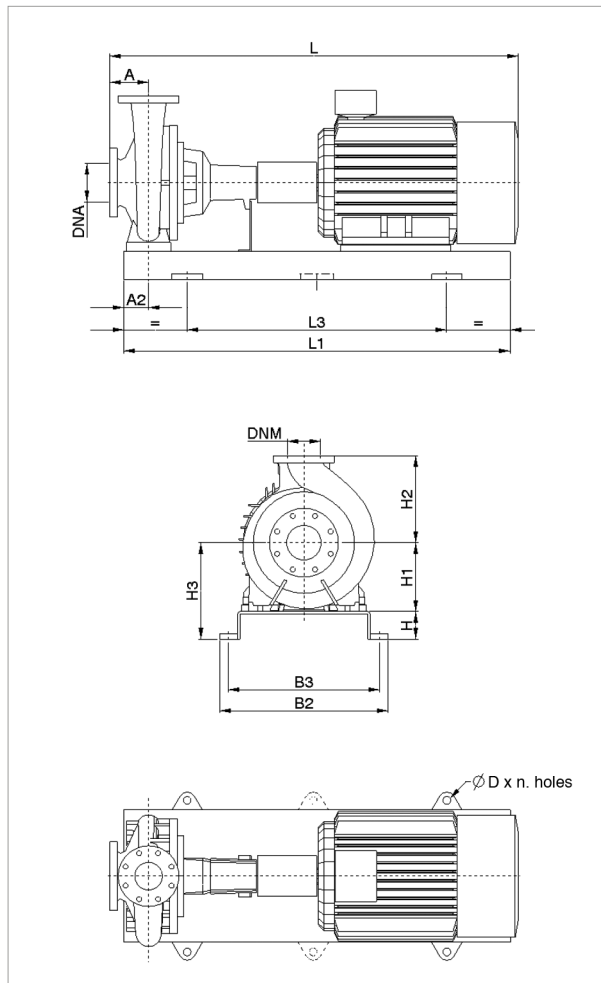
Dimension and electrical data based on sizing definition following the instructions on page 183.



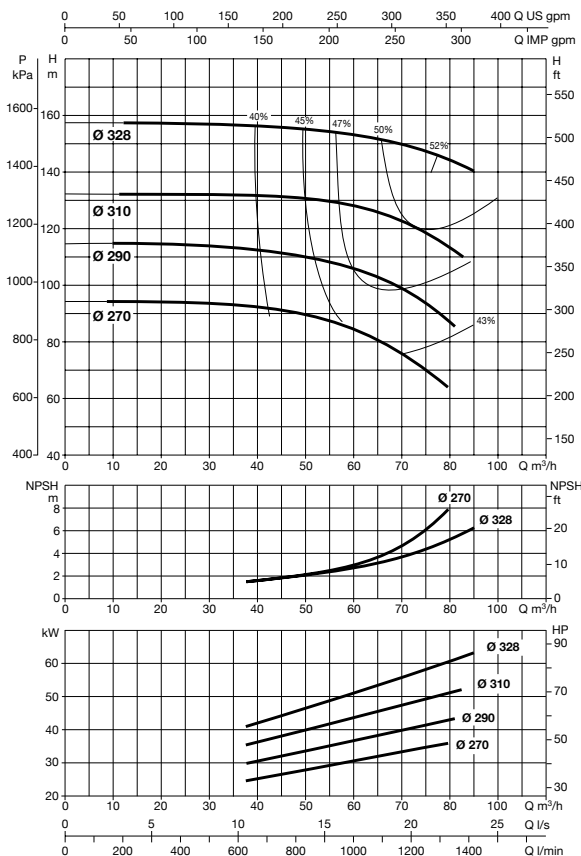
# KDN 50-330 - 2 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 2900 1/min



\* Only for markets outside the EU.



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

| MODEL      | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA    |      | MOTOR TYPE |
|------------|------------|------------|--------------------|------|------------|
|            |            |            | POWER INPUT. 50 Hz | In A |            |
| KDN 50-330 | 22         | 180M       | 3 x 400 V ~ Δ      | 38   | IE3        |
|            | 30         | 200L       | 3 x 400 V ~ Δ      | 52   | IE3        |
|            | 37         | 200L       | 3 x 400 V ~ Δ      | 63   | IE3        |
|            | 45         | 225M       | 3 x 400 V ~ Δ      | 76   | IE3        |
|            | 55         | 250M       | 3 x 400 V ~ Δ      | 95   | IE3        |
|            | 75         | 280S       | 3 x 400 V ~ Δ      | 124  | IE3        |
|            | 90         | 280M       | 3 x 400 V ~ Δ      | 148  | IE3        |

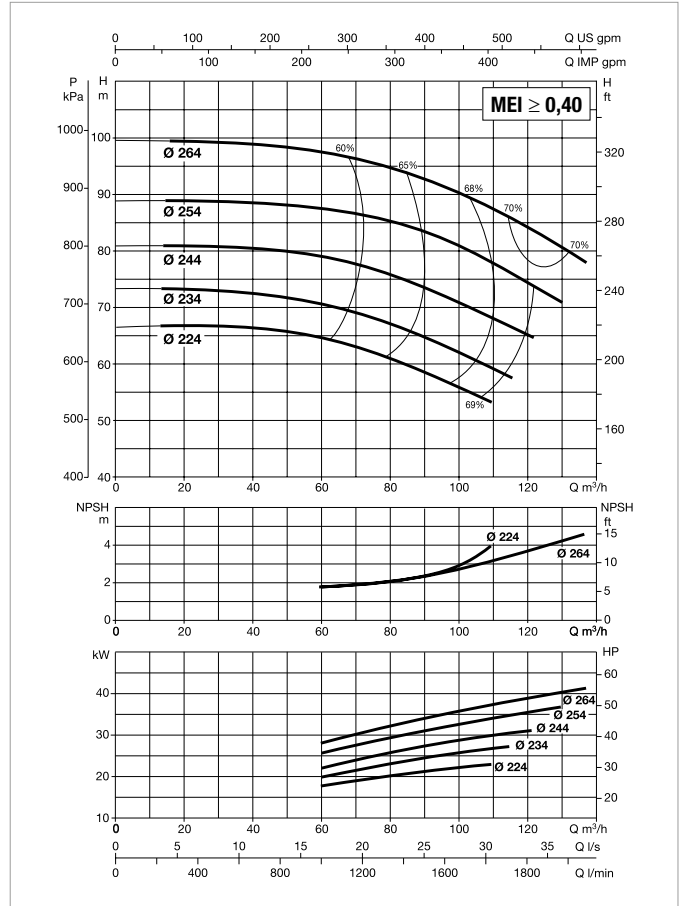
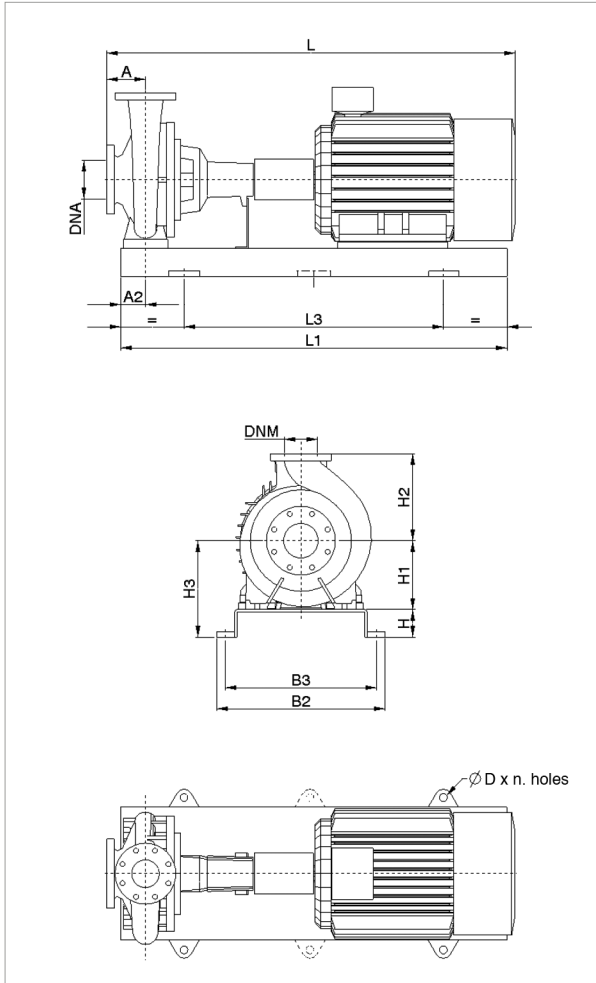
| MODEL      | POWER (kW) | UNIT DIMENSIONS (mm) |    |     |     |     |     |      |      |     |     | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |        | SPACER COUPLING |        |           |
|------------|------------|----------------------|----|-----|-----|-----|-----|------|------|-----|-----|------------------------|-----|-------------------|--------|-----------------|--------|-----------|
|            |            | A                    | A2 | H   | H1  | H2  | H3  | L1   | L3   | B2  | B3  | D                      | DNA | DNM               | L (mm) | WEIGHT Kg       | L (mm) | WEIGHT Kg |
| KDN 50-330 | 22         | 125                  | 75 | 80  | 225 | 280 | 305 | 1250 | 840  | 540 | 190 | 24x4                   | 80  | 50                | 1369   | 322             | 1470   | 337       |
|            | 30         | 125                  | 75 | 100 | 225 | 280 | 325 | 1400 | 940  | 610 | 550 | 28x4                   | 80  | 50                | 1449   | 441             | 1550   | 456       |
|            | 37         | 125                  | 75 | 100 | 225 | 280 | 325 | 1400 | 940  | 610 | 550 | 28x4                   | 80  | 50                | 1449   | 471             | 1550   | 486       |
|            | 45         | 125                  | 75 | 100 | 225 | 280 | 325 | 1400 | 940  | 610 | 550 | 28x4                   | 80  | 50                | 1545   | 541             | 1646   | 556       |
|            | 55         | 125                  | 75 | 100 | 250 | 280 | 350 | 1600 | 1060 | 660 | 600 | 28x4                   | 80  | 50                | 1475   | 663             | 1576   | 678       |
|            | 75         | 125                  | 75 | 100 | 280 | 280 | 380 | 1800 | 1200 | 730 | 670 | 28x4                   | 80  | 50                | 1670   | 839             | 1771   | 854       |
|            | 90         | 125                  | 75 | 100 | 280 | 280 | 380 | 1800 | 1200 | 730 | 670 | 28x4                   | 80  | 50                | 1720   | 874             | 1821   | 889       |

Dimension and electrical data based on sizing definition following the instructions on page 183.

# KDN 65-250 - 2 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 2900 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

| MODEL      | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA   |      | MOTOR TYPE |
|------------|------------|------------|-------------------|------|------------|
|            |            |            | POWER INPUT 50 Hz | In A |            |
| KDN 65-250 | 22         | 180M       | 3 x 400 V ~ Δ     | 38   | IE3        |
|            | 30         | 200L       | 3 x 400 V ~ Δ     | 52   | IE3        |
|            | 37         | 200L       | 3 x 400 V ~ Δ     | 63   | IE3        |
|            | 45         | 225M       | 3 x 400 V ~ Δ     | 76   | IE3        |
|            | 55         | 250M       | 3 x 400 V ~ Δ     | 95   | IE3        |

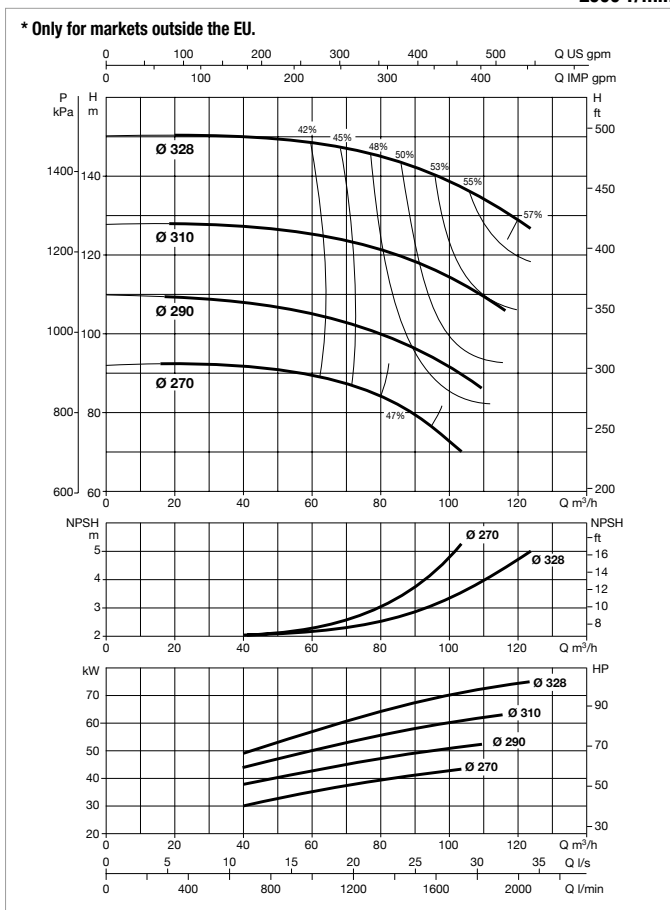
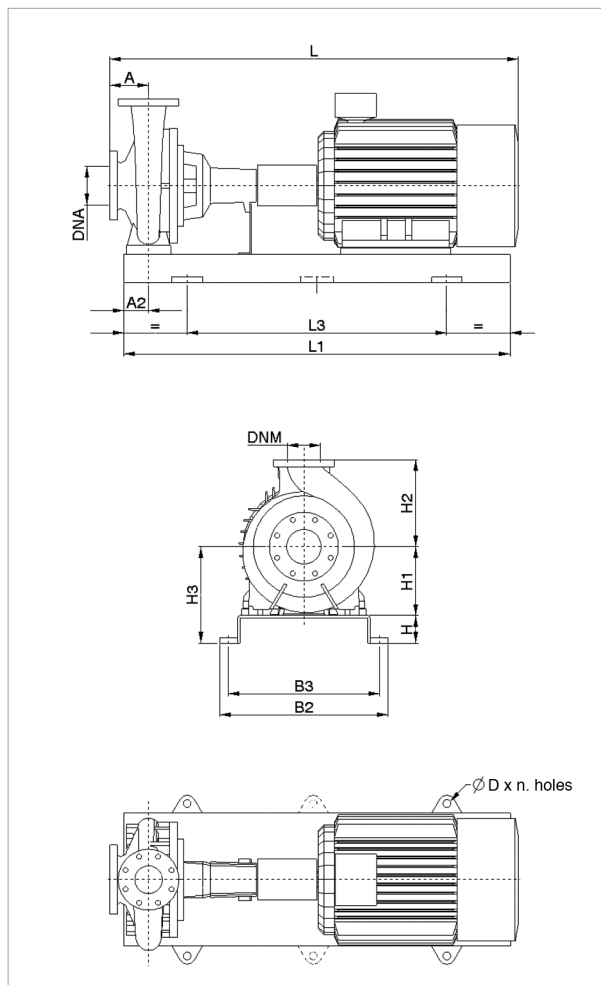
| MODEL      | POWER (kW) | UNIT DIMENSIONS (mm) |    |     |     |     |     |      |      |     |     |      | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |           | SPACER COUPLING |           |
|------------|------------|----------------------|----|-----|-----|-----|-----|------|------|-----|-----|------|------------------------|-----|-------------------|-----------|-----------------|-----------|
|            |            | A                    | A2 | H   | H1  | H2  | H3  | L1   | L3   | B2  | B3  | D    | DNA                    | DNM | L (mm)            | WEIGHT Kg | L (mm)          | WEIGHT Kg |
| KDN 65-250 | 22         | 125                  | 90 | 80  | 200 | 250 | 280 | 1250 | 840  | 540 | 490 | 24x4 | 100                    | 65  | 1369              | 294       | 1510            | 309       |
|            | 30         | 125                  | 90 | 100 | 200 | 250 | 300 | 1400 | 940  | 610 | 550 | 28x4 | 100                    | 65  | 1449              | 413       | 1590            | 428       |
|            | 37         | 125                  | 90 | 100 | 200 | 250 | 300 | 1400 | 940  | 610 | 550 | 28x4 | 100                    | 65  | 1449              | 443       | 1590            | 458       |
|            | 45         | 125                  | 90 | 100 | 225 | 250 | 325 | 1400 | 940  | 610 | 550 | 28x4 | 100                    | 65  | 1545              | 513       | 1686            | 528       |
|            | 55         | 125                  | 90 | 100 | 250 | 250 | 350 | 1600 | 1060 | 660 | 600 | 28x4 | 100                    | 65  | 1475              | 635       | 1616            | 650       |

Dimension and electrical data based on sizing definition following the instructions on page 183.

# KDN 65-330 - 2 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 2900 1/min



**For MEI index refer to the hydraulic efficiency section.**

The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

| MODEL      | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA   |      | MOTOR TYPE |
|------------|------------|------------|-------------------|------|------------|
|            |            |            | POWER INPUT 50 Hz | In A |            |
| KDN 65-330 | 22         | 180M       | 3 x 400 V ~ Δ     | 38   | IE3        |
|            | 30         | 200L       | 3 x 400 V ~ Δ     | 52   | IE3        |
|            | 37         | 200L       | 3 x 400 V ~ Δ     | 63   | IE3        |
|            | 45         | 225M       | 3 x 400 V ~ Δ     | 76   | IE3        |
|            | 55         | 250M       | 3 x 400 V ~ Δ     | 95   | IE3        |
|            | 75         | 280S       | 3 x 400 V ~ Δ     | 124  | IE3        |
|            | 90         | 280M       | 3 x 400 V ~ Δ     | 148  | IE3        |
|            | 110        | 315S       | 3 x 400 V ~ Δ     | 184  | IE3        |

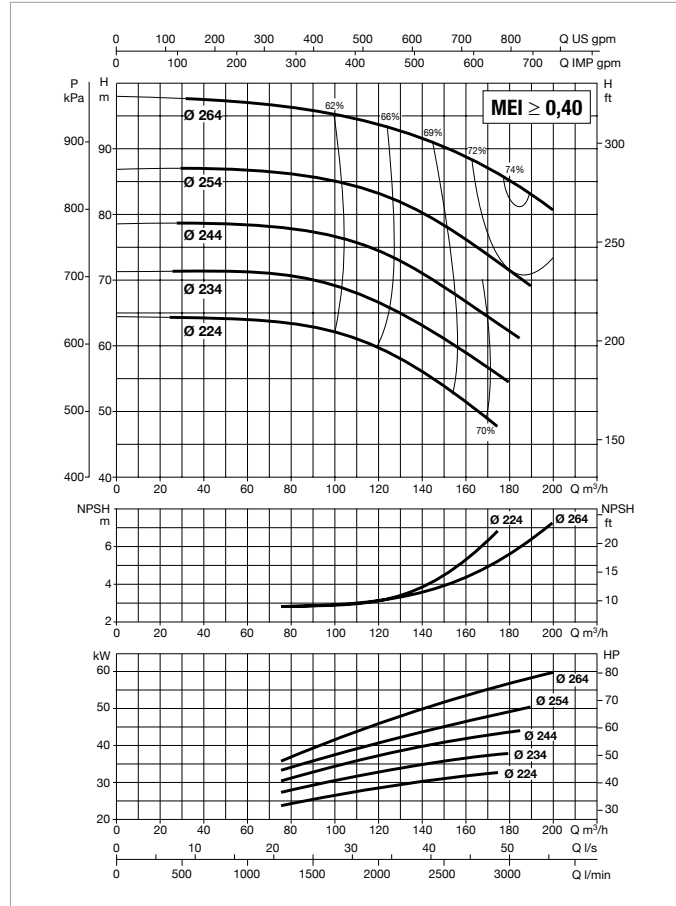
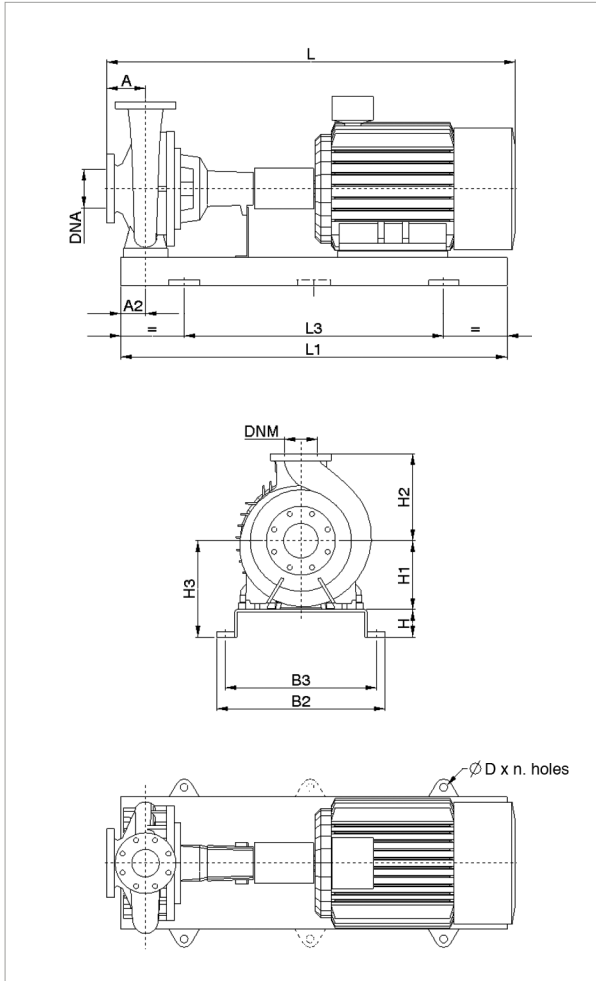
| MODEL      | POWER (kW) | UNIT DIMENSIONS (mm) |    |     |     |     |     |      |      |     |     |      | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |           | SPACER COUPLING |           |
|------------|------------|----------------------|----|-----|-----|-----|-----|------|------|-----|-----|------|------------------------|-----|-------------------|-----------|-----------------|-----------|
|            |            | A                    | A2 | H   | H1  | H2  | H3  | L1   | L3   | B2  | B3  | D    | DNA                    | DNM | L (mm)            | WEIGHT Kg | L (mm)          | WEIGHT Kg |
| KDN 65-330 | 22         | 125                  | 90 | 100 | 225 | 280 | 325 | 1400 | 940  | 610 | 550 | 28x4 | 100                    | 65  | 1399              | 377       | 1540            | 392       |
|            | 30         | 125                  | 90 | 100 | 225 | 280 | 325 | 1400 | 940  | 610 | 550 | 28x4 | 100                    | 65  | 1479              | 477       | 1620            | 492       |
|            | 37         | 125                  | 90 | 100 | 225 | 280 | 325 | 1400 | 940  | 610 | 550 | 28x4 | 100                    | 65  | 1479              | 507       | 1620            | 522       |
|            | 45         | 125                  | 90 | 100 | 225 | 280 | 325 | 1600 | 1060 | 660 | 600 | 28x4 | 100                    | 65  | 1575              | 594       | 1716            | 609       |
|            | 55         | 125                  | 90 | 100 | 250 | 280 | 350 | 1600 | 1060 | 660 | 600 | 28x4 | 100                    | 65  | 1505              | 699       | 1646            | 714       |
|            | 75         | 125                  | 90 | 100 | 280 | 280 | 380 | 1800 | 1200 | 730 | 670 | 28x4 | 100                    | 65  | 1700              | 892       | 1841            | 907       |
|            | 90         | 125                  | 90 | 100 | 280 | 280 | 380 | 1800 | 1200 | 730 | 670 | 28x4 | 100                    | 65  | 1750              | 996       | 1891            | 1011      |
|            | 110        | 125                  | 90 | 120 | 315 | 280 | 435 | 2000 | 1340 | 910 | 830 | 28x4 | 100                    | 65  | 1987              | 1419      | 2128            | 1434      |

Dimension and electrical data based on sizing definition following the instructions on page 183.

# KDN 80-250 - 2 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 2900 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

| MODEL      | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA   |      | MOTOR TYPE |
|------------|------------|------------|-------------------|------|------------|
|            |            |            | POWER INPUT 50 Hz | In A |            |
| KDN 80-250 | 30         | 200L       | 3 x 400 V ~ Δ     | 52   | IE3        |
|            | 37         | 200L       | 3 x 400 V ~ Δ     | 63   | IE3        |
|            | 45         | 225M       | 3 x 400 V ~ Δ     | 76   | IE3        |
|            | 55         | 250M       | 3 x 400 V ~ Δ     | 95   | IE3        |
|            | 75         | 280S       | 3 x 400 V ~ Δ     | 124  | IE3        |
|            | 90         | 280M       | 3 x 400 V ~ Δ     | 148  | IE3        |

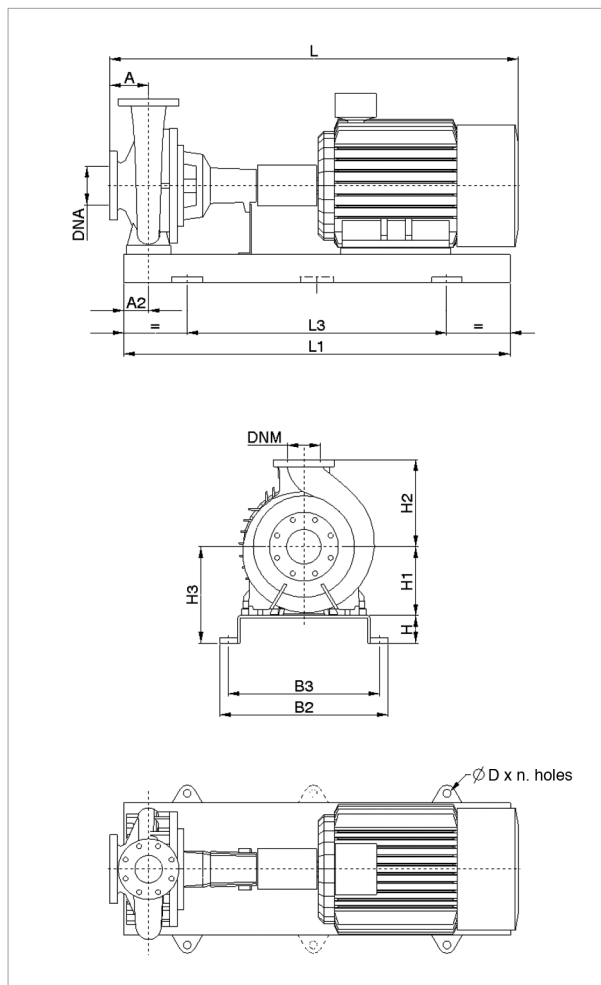
| MODEL      | POWER (kW) | UNIT DIMENSIONS (mm) |    |     |     |     |     |      |      |     |     | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |        | SPACER COUPLING |        |           |
|------------|------------|----------------------|----|-----|-----|-----|-----|------|------|-----|-----|------------------------|-----|-------------------|--------|-----------------|--------|-----------|
|            |            | A                    | A2 | H   | H1  | H2  | H3  | L1   | L3   | B2  | B3  | D                      | DNA | DNM               | L (mm) | WEIGHT Kg       | L (mm) | WEIGHT Kg |
| KDN 80-250 | 30         | 125                  | 90 | 100 | 225 | 280 | 325 | 1400 | 940  | 610 | 550 | 28x4                   | 125 | 80                | 1449   | 425             | 1590   | 440       |
|            | 37         | 125                  | 90 | 100 | 225 | 280 | 325 | 1400 | 940  | 610 | 550 | 28x4                   | 125 | 80                | 1470   | 455             | 1611   | 470       |
|            | 45         | 125                  | 90 | 100 | 225 | 280 | 325 | 1400 | 940  | 610 | 550 | 28x4                   | 125 | 80                | 1545   | 525             | 1686   | 540       |
|            | 55         | 125                  | 90 | 100 | 250 | 280 | 350 | 1600 | 1060 | 660 | 600 | 28x4                   | 125 | 80                | 1475   | 647             | 1616   | 662       |
|            | 75         | 125                  | 90 | 100 | 280 | 280 | 380 | 1800 | 1200 | 730 | 670 | 28x4                   | 125 | 80                | 1670   | 840             | 1811   | 855       |
|            | 90         | 125                  | 90 | 100 | 280 | 280 | 380 | 1800 | 1200 | 730 | 670 | 28x4                   | 125 | 80                | 1720   | 944             | 1861   | 959       |

Dimension and electrical data based on sizing definition following the instructions on page 183.

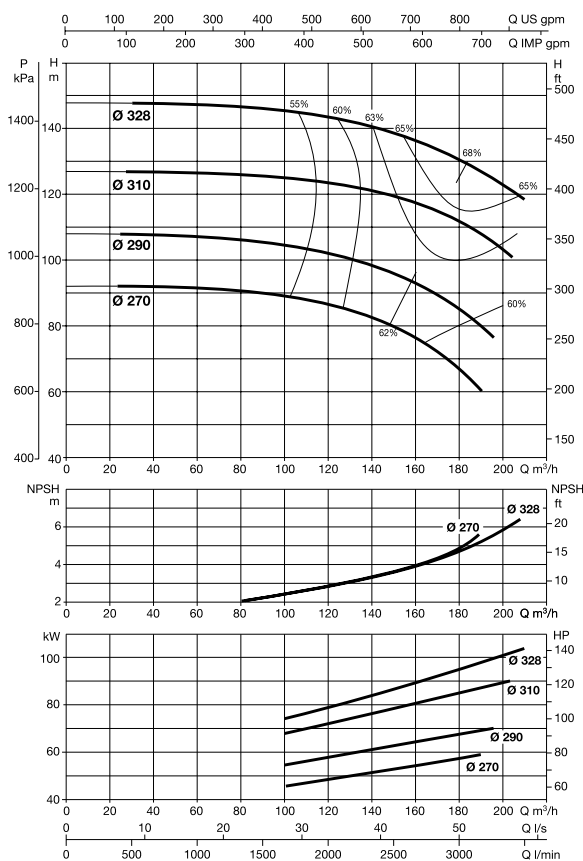
# KDN 80-330 - 2 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 2900 1/min



\* Only for markets outside the EU.



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

| MODEL      | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA   |      | MOTOR TYPE |
|------------|------------|------------|-------------------|------|------------|
|            |            |            | POWER INPUT 50 Hz | In A |            |
| KDN 80-330 | 30         | 200L       | 3 x 400 V ~ Δ     | 52   | IE3        |
|            | 37         | 200L       | 3 x 400 V ~ Δ     | 63   | IE3        |
|            | 45         | 225M       | 3 x 400 V ~ Δ     | 76   | IE3        |
|            | 55         | 250M       | 3 x 400 V ~ Δ     | 95   | IE3        |
|            | 75         | 280S       | 3 x 400 V ~ Δ     | 124  | IE3        |
|            | 90         | 280M       | 3 x 400 V ~ Δ     | 148  | IE3        |
|            | 110        | 315S       | 3 x 400 V ~ Δ     | 184  | IE3        |
|            | 132        | 315M       | 3 x 400 V ~ Δ     | 220  | IE3        |
|            | 160        | 315L       | 3 x 400 V ~ Δ     | 265  | IE3        |

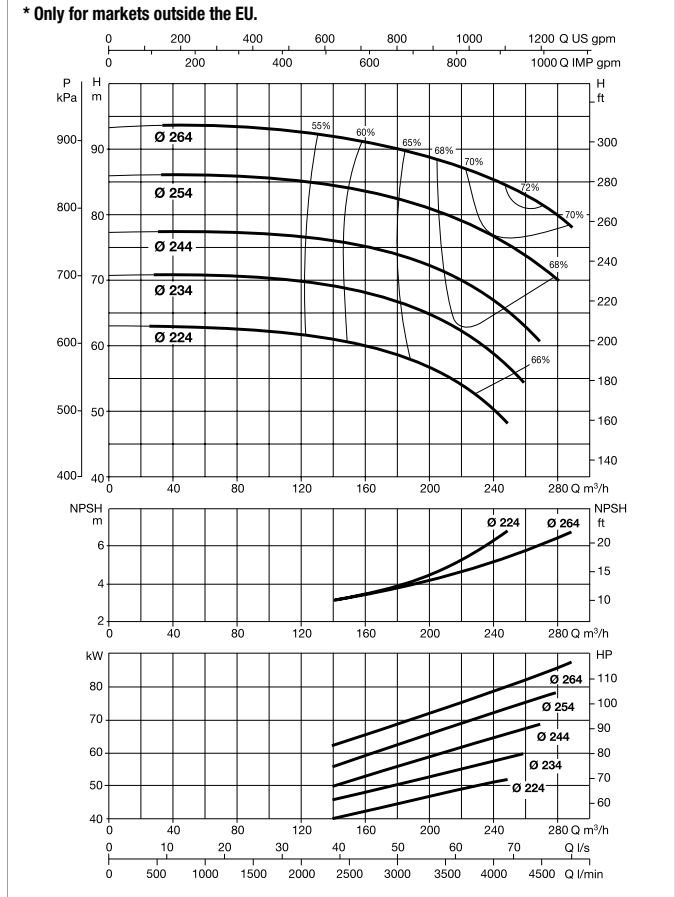
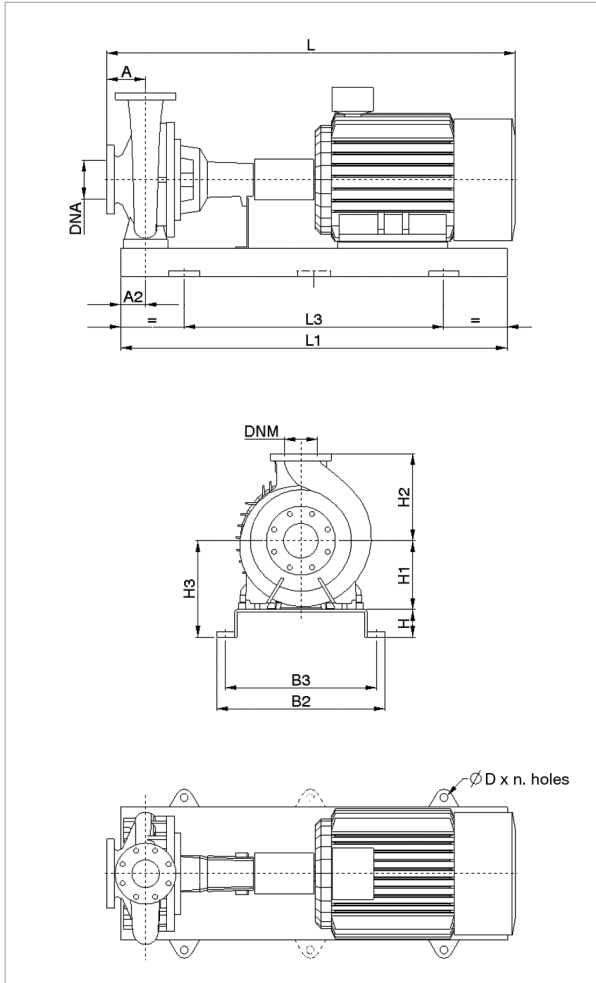
| MODEL      | POWER (kW) | UNIT DIMENSIONS (mm) |     |     |     |     |      |      |      |     |      | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |        | SPACER COUPLING |        |           |
|------------|------------|----------------------|-----|-----|-----|-----|------|------|------|-----|------|------------------------|-----|-------------------|--------|-----------------|--------|-----------|
|            |            | A                    | A2  | H   | H1  | H2  | H3   | L1   | L3   | B2  | B3   | D                      | DNA | DNM               | L (mm) | WEIGHT Kg       | L (mm) | WEIGHT Kg |
| KDN 80-330 | 30         | 125                  | 90  | 100 | 250 | 315 | 350  | 1400 | 940  | 610 | 550  | 28x4                   | 125 | 80                | 1479   | 480             | 1620   | 495       |
|            | 37         | 125                  | 90  | 100 | 250 | 315 | 350  | 1400 | 940  | 610 | 550  | 28x4                   | 125 | 80                | 1500   | 510             | 1641   | 525       |
|            | 45         | 125                  | 90  | 100 | 250 | 315 | 350  | 1600 | 1600 | 660 | 600  | 28x4                   | 125 | 80                | 1575   | 597             | 1716   | 612       |
|            | 55         | 125                  | 90  | 100 | 250 | 315 | 350  | 1600 | 1600 | 660 | 600  | 28x4                   | 125 | 80                | 1505   | 702             | 1646   | 717       |
|            | 75         | 125                  | 90  | 100 | 280 | 315 | 380  | 1800 | 1800 | 730 | 670  | 28x4                   | 125 | 80                | 1700   | 895             | 1841   | 910       |
|            | 90         | 125                  | 90  | 100 | 280 | 315 | 380  | 1800 | 1800 | 730 | 670  | 28x4                   | 125 | 80                | 1750   | 999             | 1891   | 1014      |
|            | 110        | 125                  | 90  | 120 | 315 | 315 | 435  | 2000 | 2000 | 910 | 830  | 28x4                   | 125 | 80                | 1987   | 1422            | 2128   | 1437      |
|            | 132        | 125                  | 95  | 190 | 315 | 315 | 505  | 1550 | 1550 | 680 | 635  | 20x4                   | 125 | 80                | 2127   | 1405            | 2268   | 1420      |
| 160        | 125        | 95                   | 190 | 315 | 315 | 505 | 1550 | 1550 | 680  | 635 | 20x4 | 125                    | 80  | 2127              | 1545   | 2268            | 1560   |           |

Dimension and electrical data based on sizing definition following the instructions on page 183.

# KDN 100-250 - 2 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 2900 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

| MODEL       | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA   |      | MOTOR TYPE |
|-------------|------------|------------|-------------------|------|------------|
|             |            |            | POWER INPUT 50 Hz | In A |            |
| KDN 100-250 | 30         | 200L       | 3 x 400 V ~ Δ     | 52   | IE3        |
|             | 37         | 200L       | 3 x 400 V ~ Δ     | 63   | IE3        |
|             | 45         | 225M       | 3 x 400 V ~ Δ     | 76   | IE3        |
|             | 55         | 250M       | 3 x 400 V ~ Δ     | 95   | IE3        |
|             | 75         | 280S       | 3 x 400 V ~ Δ     | 124  | IE3        |
|             | 90         | 280M       | 3 x 400 V ~ Δ     | 148  | IE3        |
|             | 110        | 315S       | 3 x 400 V ~ Δ     | 184  | IE3        |
|             | 132        | 315M       | 3 x 400 V ~ Δ     | 220  | IE3        |

| MODEL       | POWER (kW) | UNIT DIMENSIONS (mm) |     |     |     |     |     |      |      |     |     |      | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |           | SPACER COUPLING |           |
|-------------|------------|----------------------|-----|-----|-----|-----|-----|------|------|-----|-----|------|------------------------|-----|-------------------|-----------|-----------------|-----------|
|             |            | A                    | A2  | H   | H1  | H2  | H3  | L1   | L3   | B2  | B3  | D    | DNA                    | DNM | L (mm)            | WEIGHT Kg | L (mm)          | WEIGHT Kg |
| KDN 100-250 | 30         | 140                  | 90  | 100 | 225 | 280 | 325 | 1400 | 940  | 610 | 550 | 28x4 | 125                    | 100 | 1494              | 455       | 1635            | 470       |
|             | 37         | 140                  | 90  | 100 | 225 | 280 | 325 | 1400 | 940  | 610 | 550 | 28x4 | 125                    | 100 | 1515              | 485       | 1656            | 500       |
|             | 45         | 140                  | 90  | 100 | 225 | 280 | 325 | 1600 | 1060 | 660 | 600 | 28x4 | 125                    | 100 | 1590              | 572       | 1731            | 587       |
|             | 55         | 140                  | 90  | 100 | 250 | 280 | 350 | 1600 | 1060 | 660 | 600 | 28x4 | 125                    | 100 | 1520              | 677       | 1661            | 692       |
|             | 75         | 140                  | 90  | 100 | 280 | 280 | 380 | 1800 | 1200 | 730 | 670 | 28x4 | 125                    | 100 | 1715              | 870       | 1856            | 885       |
|             | 90         | 140                  | 90  | 100 | 280 | 280 | 380 | 1800 | 1200 | 730 | 670 | 28x4 | 125                    | 100 | 1765              | 974       | 1906            | 989       |
|             | 110        | 140                  | 90  | 120 | 315 | 280 | 435 | 2000 | 1340 | 910 | 830 | 28x4 | 125                    | 100 | 2002              | 1397      | 2143            | 1412      |
|             | 132        | 140                  | 110 | 165 | 315 | 280 | 480 | 1550 | 1250 | 680 | 635 | 20x4 | 125                    | 100 | 2142              | 1380      | 2283            | 1395      |

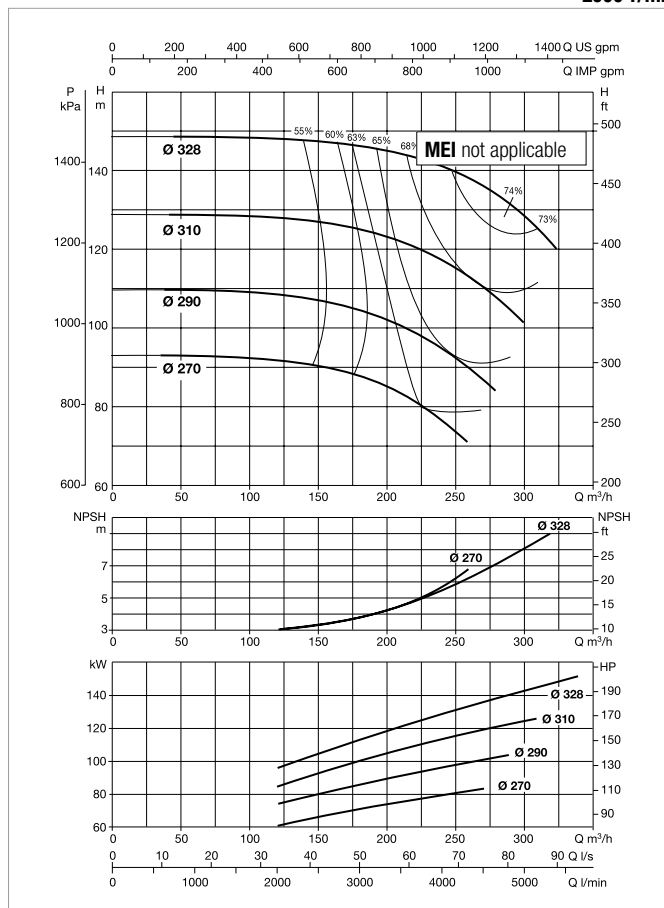
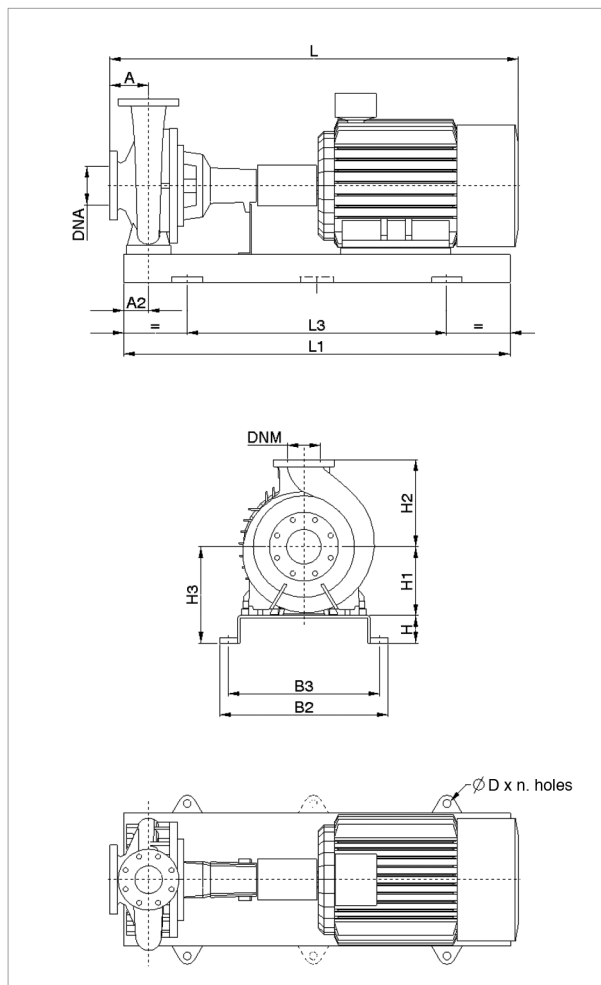
Dimension and electrical data based on sizing definition following the instructions on page 183.



# KDN 100-330 - 2 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 2900 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

| MODEL       | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA   |      | MOTOR TYPE |
|-------------|------------|------------|-------------------|------|------------|
|             |            |            | POWER INPUT 50 Hz | In A |            |
| KDN 100-330 | 45         | 225M       | 3 x 400 V ~ Δ     | 76   | IE3        |
|             | 55         | 250M       | 3 x 400 V ~ Δ     | 95   | IE3        |
|             | 75         | 280S       | 3 x 400 V ~ Δ     | 124  | IE3        |
|             | 90         | 280M       | 3 x 400 V ~ Δ     | 148  | IE3        |
|             | 110        | 315S       | 3 x 400 V ~ Δ     | 184  | IE3        |
|             | 132        | 315M       | 3 x 400 V ~ Δ     | 220  | IE3        |
|             | 160        | 315L       | 3 x 400 V ~ Δ     | 265  | IE3        |
|             | 200        | 315L       | 3 x 400 V ~ Δ     | 330  | IE3        |

| MODEL       | POWER (kW) | UNIT DIMENSIONS (mm) |    |     |     |     |     |      |      |     |     | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |        | SPACER COUPLING |        |           |
|-------------|------------|----------------------|----|-----|-----|-----|-----|------|------|-----|-----|------------------------|-----|-------------------|--------|-----------------|--------|-----------|
|             |            | A                    | A2 | H   | H1  | H2  | H3  | L1   | L3   | B2  | B3  | D                      | DNA | DNM               | L (mm) | WEIGHT Kg       | L (mm) | WEIGHT Kg |
| KDN 100-330 | 45         | 140                  | 90 | 100 | 250 | 315 | 350 | 1600 | 1060 | 660 | 600 | 28x4                   | 125 | 100               | 1590   | 612             | 1731   | 627       |
|             | 55         | 140                  | 90 | 100 | 250 | 315 | 350 | 1600 | 1060 | 660 | 600 | 28x4                   | 125 | 100               | 1520   | 717             | 1661   | 732       |
|             | 75         | 140                  | 90 | 100 | 280 | 315 | 380 | 1800 | 1200 | 730 | 670 | 28x4                   | 125 | 100               | 1715   | 910             | 1856   | 925       |
|             | 90         | 140                  | 90 | 100 | 280 | 315 | 380 | 1800 | 1200 | 730 | 670 | 28x4                   | 125 | 100               | 1765   | 1014            | 1906   | 1029      |
|             | 110        | 140                  | 90 | 120 | 315 | 315 | 435 | 2000 | 1340 | 910 | 830 | 28x4                   | 125 | 100               | 2002   | 1437            | 2143   | 1452      |
|             | 132        | 140                  | 95 | 190 | 315 | 315 | 505 | 1550 | 1250 | 680 | 635 | 20x4                   | 125 | 100               | 2142   | 1420            | 2283   | 1435      |
|             | 160        | 140                  | 95 | 190 | 315 | 315 | 505 | 1550 | 1250 | 680 | 635 | 20x4                   | 125 | 100               | 2142   | 1560            | 2283   | 1575      |
|             | 200        | 140                  | 95 | 190 | 315 | 315 | 505 | 1550 | 1250 | 680 | 635 | 20x4                   | 125 | 100               | 2142   | 1600            | 2283   | 1615      |

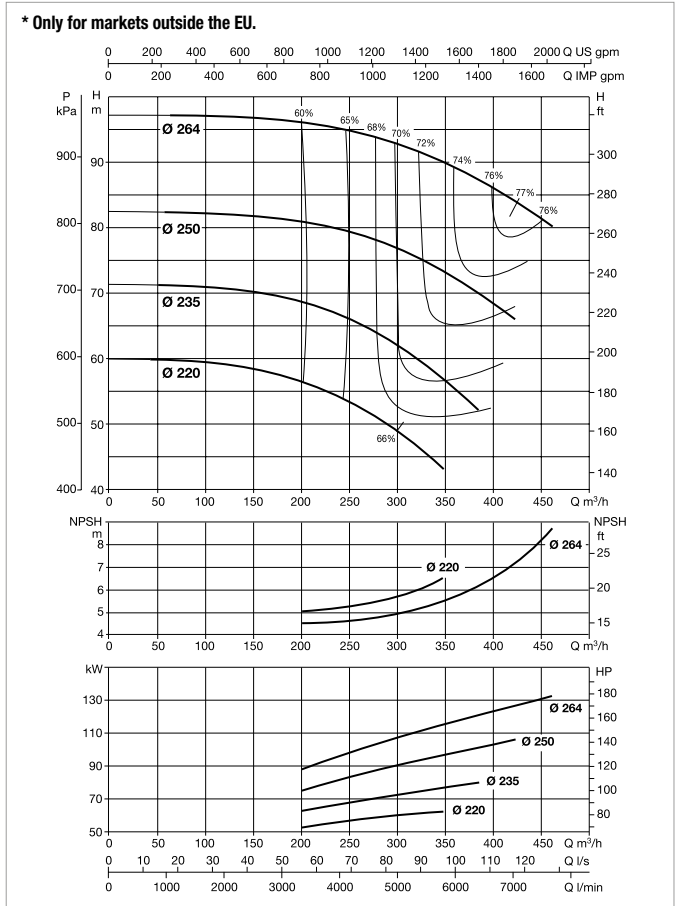
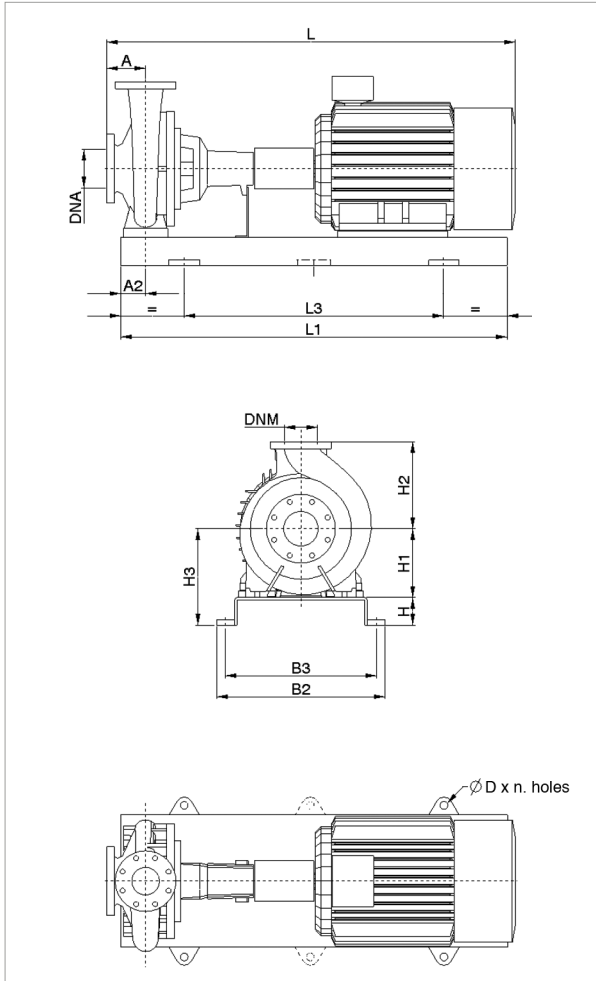
Dimension and electrical data based on sizing definition following the instructions on page 183.



# KDN 125-250 - 2 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 2900 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

| MODEL       | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA   |      | MOTOR TYPE |
|-------------|------------|------------|-------------------|------|------------|
|             |            |            | POWER INPUT 50 Hz | In A |            |
| KDN 125-250 | 55         | 250M       | 3 x 400 V ~ Δ     | 95   | IE3        |
|             | 75         | 280S       | 3 x 400 V ~ Δ     | 124  | IE3        |
|             | 90         | 280M       | 3 x 400 V ~ Δ     | 148  | IE3        |
|             | 110        | 315S       | 3 x 400 V ~ Δ     | 184  | IE3        |
|             | 132        | 315M       | 3 x 400 V ~ Δ     | 220  | IE3        |
|             | 160        | 315L       | 3 x 400 V ~ Δ     | 265  | IE3        |

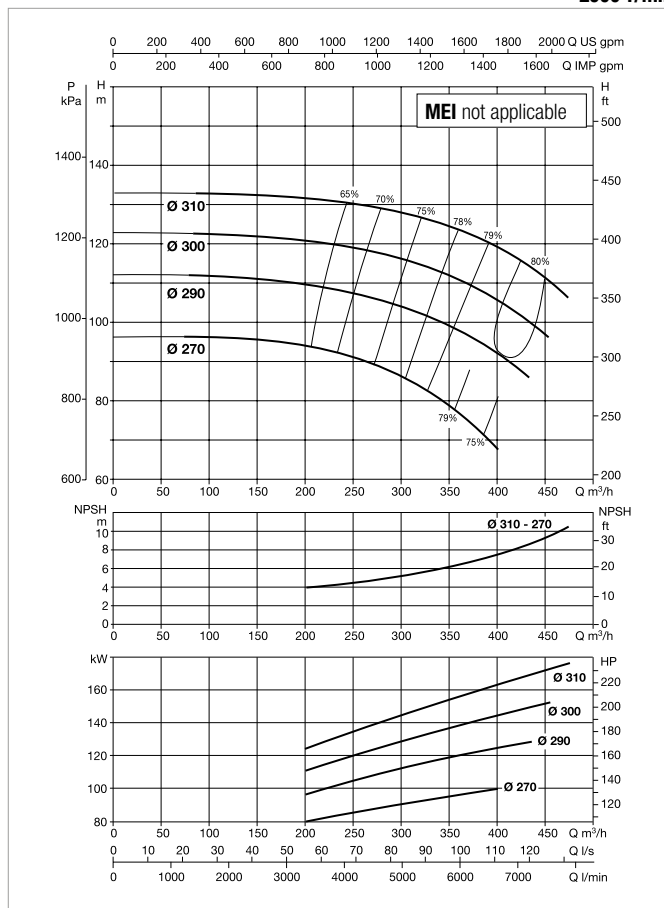
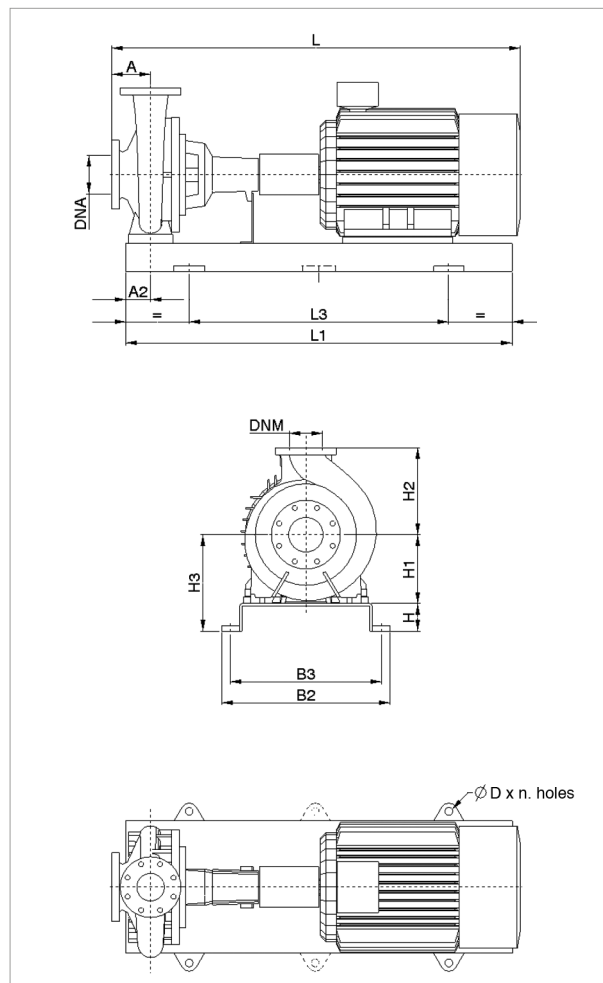
| MODEL       | POWER (kW) | UNIT DIMENSIONS (mm) |    |     |     |     |     |      |      |     |     | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |        | SPACER COUPLING |        |           |
|-------------|------------|----------------------|----|-----|-----|-----|-----|------|------|-----|-----|------------------------|-----|-------------------|--------|-----------------|--------|-----------|
|             |            | A                    | A2 | H   | H1  | H2  | H3  | L1   | L3   | B2  | B3  | D                      | DNA | DNM               | L (mm) | WEIGHT Kg       | L (mm) | WEIGHT Kg |
| KDN 125-250 | 55         | 140                  | 90 | 100 | 250 | 355 | 350 | 1600 | 1060 | 660 | 600 | 28x4                   | 150 | 125               | 1520   | 687             | 1661   | 702       |
|             | 75         | 140                  | 90 | 100 | 280 | 355 | 380 | 1800 | 1200 | 730 | 670 | 28x4                   | 150 | 125               | 1715   | 880             | 1856   | 895       |
|             | 90         | 140                  | 90 | 100 | 280 | 355 | 380 | 1800 | 1200 | 730 | 670 | 28x4                   | 150 | 125               | 1765   | 984             | 1906   | 999       |
|             | 110        | 140                  | 90 | 120 | 315 | 355 | 435 | 2000 | 1340 | 910 | 830 | 28x4                   | 150 | 125               | 2002   | 1407            | 2143   | 1422      |
|             | 132        | 140                  | 95 | 190 | 315 | 355 | 505 | 1550 | 1250 | 680 | 635 | 20x4                   | 150 | 125               | 2142   | 1390            | 2283   | 1405      |
|             | 160        | 140                  | 95 | 190 | 315 | 355 | 505 | 1550 | 1250 | 680 | 635 | 20x4                   | 150 | 125               | 2142   | 1530            | 2283   | 1545      |

Dimension and electrical data based on sizing definition following the instructions on page 183.

# KDN 125-330 - 2 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 2900 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

| MODEL       | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA   |      | MOTOR TYPE |
|-------------|------------|------------|-------------------|------|------------|
|             |            |            | POWER INPUT 50 Hz | In A |            |
| KDN 125-330 | 75         | 280S       | 3 x 400 V ~ Δ     | 124  | IE3        |
|             | 90         | 280M       | 3 x 400 V ~ Δ     | 148  | IE3        |
|             | 110        | 315S       | 3 x 400 V ~ Δ     | 184  | IE3        |
|             | 132        | 315M       | 3 x 400 V ~ Δ     | 220  | IE3        |
|             | 160        | 315L       | 3 x 400 V ~ Δ     | 265  | IE3        |
|             | 200        | 315L       | 3 x 400 V ~ Δ     | 330  | IE3        |

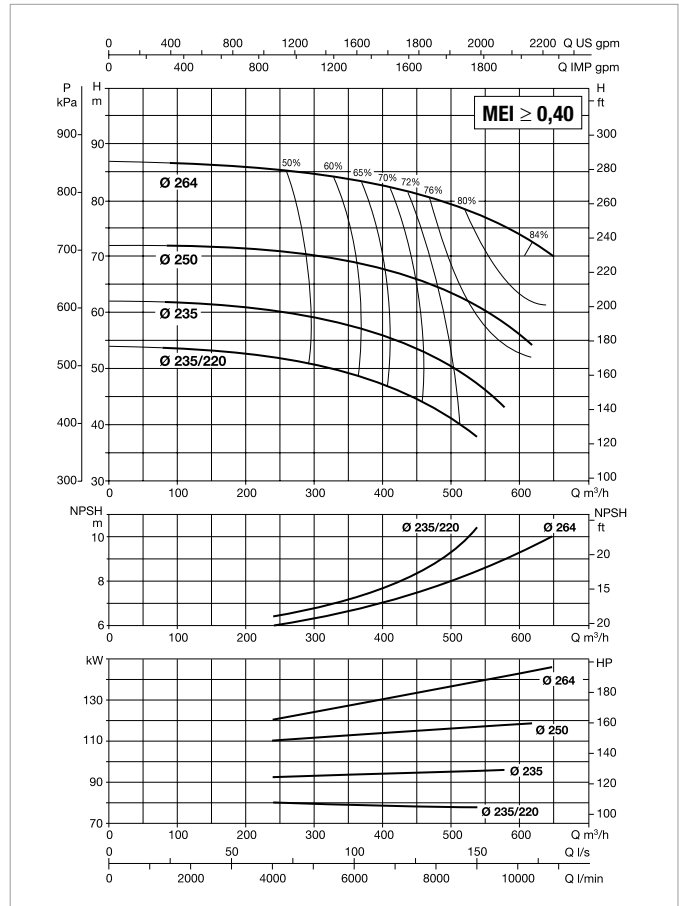
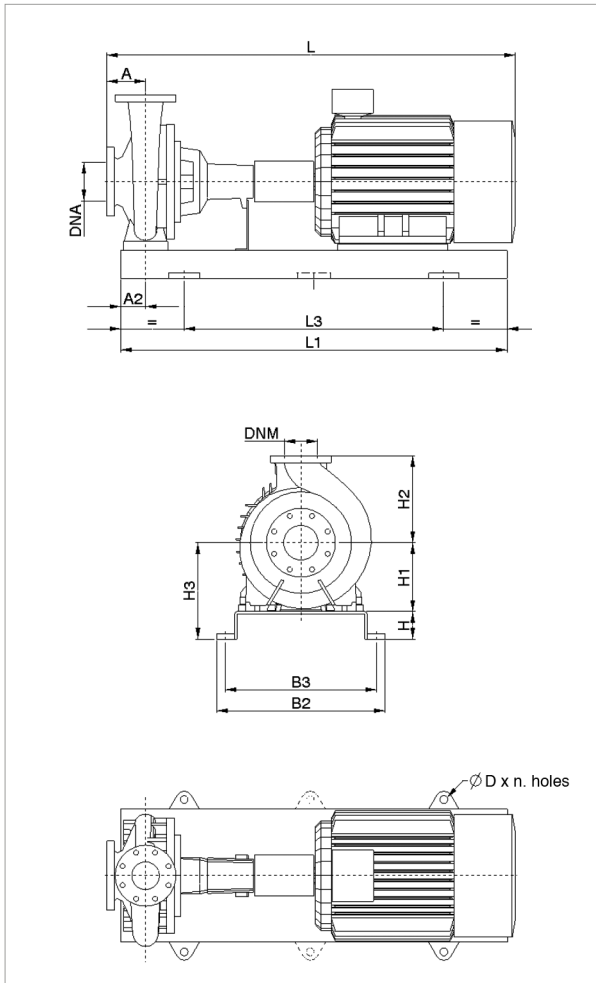
| MODEL       | POWER (kW) | UNIT DIMENSIONS (mm) |     |     |     |     |     |      |      |     |     |      | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |           | SPACER COUPLING |           |
|-------------|------------|----------------------|-----|-----|-----|-----|-----|------|------|-----|-----|------|------------------------|-----|-------------------|-----------|-----------------|-----------|
|             |            | A                    | A2  | H   | H1  | H2  | H3  | L1   | L3   | B2  | B3  | D    | DNA                    | DNM | L (mm)            | WEIGHT Kg | L (mm)          | WEIGHT Kg |
| KDN 125-330 | 75         | 140                  | 110 | 100 | 280 | 355 | 380 | 1800 | 1200 | 730 | 670 | 28x4 | 150                    | 125 | 1715              | 930       | 1856            | 945       |
|             | 90         | 140                  | 110 | 100 | 280 | 355 | 380 | 1800 | 1200 | 730 | 670 | 28x4 | 150                    | 125 | 1765              | 1034      | 1906            | 1049      |
|             | 110        | 140                  | 110 | 120 | 315 | 355 | 435 | 2000 | 1340 | 910 | 830 | 28x4 | 150                    | 125 | 2002              | 1457      | 2143            | 1472      |
|             | 132        | 140                  | 115 | 220 | 315 | 355 | 535 | 1570 | 1270 | 680 | 635 | 20x4 | 150                    | 125 | 2142              | 1480      | 2283            | 1495      |
|             | 160        | 140                  | 115 | 220 | 315 | 355 | 535 | 1570 | 1270 | 680 | 635 | 20x4 | 150                    | 125 | 2142              | 1620      | 2283            | 1635      |
|             | 200        | 140                  | 115 | 220 | 315 | 355 | 535 | 1570 | 1270 | 680 | 635 | 20x4 | 150                    | 125 | 2142              | 1660      | 2283            | 1675      |

Dimension and electrical data based on sizing definition following the instructions on page 183.

# KDN 150-250 - 2 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 2900 /min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

| MODEL       | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA   |      | MOTOR TYPE |
|-------------|------------|------------|-------------------|------|------------|
|             |            |            | POWER INPUT 50 Hz | In A |            |
| KDN 150-250 | 75         | 280S       | 3 x 400 V ~ Δ     | 124  | IE3        |
|             | 90         | 280M       | 3 x 400 V ~ Δ     | 148  | IE3        |
|             | 110        | 315S       | 3 x 400 V ~ Δ     | 184  | IE3        |
|             | 132        | 315M       | 3 x 400 V ~ Δ     | 220  | IE3        |
|             | 160        | 315L       | 3 x 400 V ~ Δ     | 265  | IE3        |
|             | 200        | 315L       | 3 x 400 V ~ Δ     | 330  | IE3        |

| MODEL       | POWER (kW) | UNIT DIMENSIONS (mm) |     |     |     |     |     |      |      |     |     | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |        | SPACER COUPLING |        |           |
|-------------|------------|----------------------|-----|-----|-----|-----|-----|------|------|-----|-----|------------------------|-----|-------------------|--------|-----------------|--------|-----------|
|             |            | A                    | A2  | H   | H1  | H2  | H3  | L1   | L3   | B2  | B3  | D                      | DNA | DNM               | L (mm) | WEIGHT Kg       | L (mm) | WEIGHT Kg |
| KDN 150-250 | 75         | 160                  | 110 | 100 | 280 | 375 | 380 | 1800 | 1200 | 730 | 670 | 28x4                   | 200 | 150               | 1735   | 920             | 1916   | 935       |
|             | 90         | 160                  | 110 | 100 | 280 | 375 | 380 | 1800 | 1200 | 730 | 670 | 28x4                   | 200 | 150               | 1785   | 1024            | 1966   | 1039      |
|             | 110        | 160                  | 110 | 120 | 315 | 375 | 435 | 2000 | 1340 | 910 | 830 | 28x4                   | 200 | 150               | 2022   | 1447            | 2203   | 1462      |
|             | 132        | 160                  | 115 | 220 | 315 | 375 | 535 | 1570 | 1270 | 680 | 635 | 20x4                   | 200 | 150               | 2162   | 1470            | 2343   | 1485      |
|             | 160        | 160                  | 115 | 220 | 315 | 375 | 535 | 1570 | 1270 | 680 | 635 | 20x4                   | 200 | 150               | 2162   | 1610            | 2343   | 1625      |
|             | 200        | 160                  | 115 | 220 | 315 | 375 | 535 | 1570 | 1270 | 680 | 635 | 20x4                   | 200 | 150               | 2162   | 1650            | 2343   | 1665      |

Dimension and electrical data based on sizing definition following the instructions on page 183.

# KDN OVERSIZE - 2 POLES

STANDARDISED PUMPS

## IE3 STANDARD MOTOR ELECTRIC DATA

=2900 1/min

| MOTOR TYPE | P2 NOMINAL kW | SPEED rpm | YIELD % | POWER FACTOR COS $\phi$ | POWER INPUT 50 Hz | In A |        |        | Start-up current Ia/In | Start-up torque Ma/Mn | Maximum torque M/k/Mn | POLES |
|------------|---------------|-----------|---------|-------------------------|-------------------|------|--------|--------|------------------------|-----------------------|-----------------------|-------|
|            |               |           |         |                         |                   | 230V | 400V   | 690V   |                        |                       |                       |       |
| MEC 71     | 0,25          | 2790      | 69,81   | 0,778                   | 3x230/400         | 1,16 | 0,67   |        | 5,06                   | 2,90                  | 3,01                  | 2     |
| MEC 71     | 0,37          | 2820      | 72,79   | 0,783                   | 3x230/400         | 1,61 | 0,93   |        | 5,40                   | 2,69                  | 2,99                  | 2     |
| MEC 80     | 0,55          | 2810      | 76,97   | 0,800                   | 3x230/400         | 2,23 | 1,29   |        | 6,41                   | 3,43                  | 3,13                  | 2     |
| MEC 80     | 0,75          | 2910      | 82,00   | 0,780                   | 3x230/400         | 2,94 | 1,70   |        | 8,90                   | 4,70                  | 4,80                  | 2     |
| MEC 80     | 1,1           | 2870      | 82,70   | 0,760                   | 3x230/400         | 4,16 | 2,40   |        | 9,30                   | 5,00                  | 5,30                  | 2     |
| MEC 90S    | 1,5           | 2875      | 84,20   | 0,850                   | 3x230/400         | 5,20 | 3,00   |        | 8,40                   | 3,60                  | 3,80                  | 2     |
| MEC 90L    | 2,2           | 2880      | 86,50   | 0,820                   | 3x230/400         | 7,97 | 4,60   |        | 9,20                   | 4,00                  | 4,20                  | 2     |
| MEC 100L   | 3             | 2900      | 87,10   | 0,890                   | 3x400 $\Delta$    |      | 5,60   | 3,23   | 8,80                   | 5,50                  | 4,50                  | 2     |
| MEC 112M   | 4             | 2910      | 88,10   | 0,930                   | 3x400 $\Delta$    |      | 7,00   | 4,04   | 9,60                   | 3,60                  | 4,00                  | 2     |
| MEC 132S   | 5,5           | 2920      | 89,20   | 0,900                   | 3x400 $\Delta$    |      | 10,00  | 5,77   | 8,90                   | 3,00                  | 3,60                  | 2     |
| MEC 132S   | 7,5           | 2910      | 90,10   | 0,920                   | 3x400 $\Delta$    |      | 13,10  | 7,56   | 8,90                   | 3,00                  | 3,60                  | 2     |
| MEC 160M   | 11            | 2950      | 91,20   | 0,890                   | 3x400 $\Delta$    |      | 19,70  | 11,37  | 9,10                   | 4,00                  | 4,20                  | 2     |
| MEC 160M   | 15            | 2940      | 91,90   | 0,890                   | 3x400 $\Delta$    |      | 26,70  | 15,42  | 9,70                   | 4,70                  | 4,80                  | 2     |
| MEC 160L   | 18,5          | 2950      | 92,40   | 0,880                   | 3x400 $\Delta$    |      | 33,00  | 19,05  | 10,70                  | 4,60                  | 4,70                  | 2     |
| MEC 180M   | 22            | 2955      | 92,70   | 0,900                   | 3x400 $\Delta$    |      | 38,10  | 22,00  | 8,20                   | 2,20                  | 2,30                  | 2     |
| MEC 200L   | 30            | 2960      | 93,30   | 0,890                   | 3x400 $\Delta$    |      | 52,10  | 30,08  | 7,50                   | 2,20                  | 2,30                  | 2     |
| MEC 200L   | 37            | 2960      | 93,70   | 0,910                   | 3x400 $\Delta$    |      | 62,60  | 36,14  | 7,50                   | 2,20                  | 2,30                  | 2     |
| MEC 225M   | 45            | 2965      | 94,00   | 0,880                   | 3x400 $\Delta$    |      | 78,40  | 45,26  | 7,60                   | 2,20                  | 2,30                  | 2     |
| MEC 250M   | 55            | 2970      | 94,30   | 0,890                   | 3x400 $\Delta$    |      | 94,60  | 54,62  | 7,60                   | 2,20                  | 2,30                  | 2     |
| MEC 280S   | 75            | 2975      | 94,70   | 0,900                   | 3x400 $\Delta$    |      | 127,00 | 73,32  | 6,90                   | 2,00                  | 2,30                  | 2     |
| MEC 280M   | 90            | 2975      | 95,00   | 0,890                   | 3x400 $\Delta$    |      | 153,00 | 88,33  | 7,00                   | 2,00                  | 2,30                  | 2     |
| MEC 315S   | 110           | 2978      | 95,20   | 0,900                   | 3x400 $\Delta$    |      | 185,00 | 106,81 | 7,10                   | 2,00                  | 2,20                  | 2     |
| MEC 315M   | 132           | 2978      | 95,40   | 0,900                   | 3x400 $\Delta$    |      | 222,00 | 128,17 | 7,10                   | 2,00                  | 2,20                  | 2     |
| MEC 315L   | 160           | 2980      | 95,60   | 0,900                   | 3x400 $\Delta$    |      | 268,00 | 154,73 | 7,10                   | 2,00                  | 2,20                  | 2     |
| MEC 315L   | 200           | 2980      | 95,80   | 0,920                   | 3x400 $\Delta$    |      | 330,00 | 190,75 | 6,10                   | 1,80                  | 2,60                  | 2     |
| MEC 355M   | 250           | 2980      | 95,80   | 0,920                   | 3x400 $\Delta$    |      | 410,00 | 236,99 | 6,90                   | 2,00                  | 2,90                  | 2     |
| MEC 355L   | 315           | 2980      | 95,80   | 0,920                   | 3x400 $\Delta$    |      | 520,00 | 300,58 | 5,70                   | 1,70                  | 2,40                  | 2     |

# KDN OVERSIZE - 4 POLE RANGE

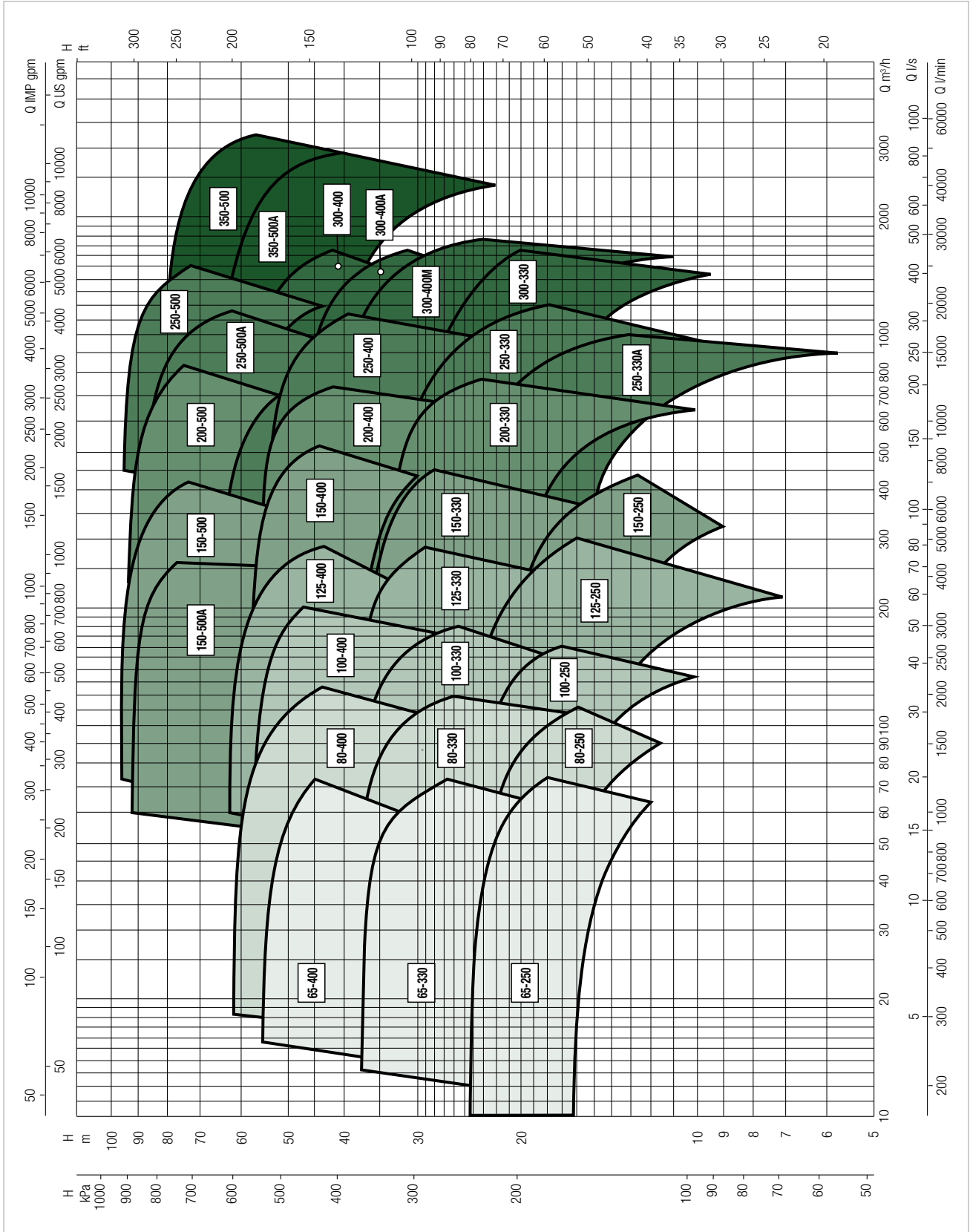
STANDARDISED PUMPS

## PERFORMANCE RANGE

The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

### GRAPHIC SELECTION TABLE

= 1450 1/min



# KDN OVERSIZE - 4 POLES

STANDARDISED PUMPS

## SELECTION TABLE - KDN 65

| MODEL            | Q=m <sup>3</sup> /h | 0  | 10  | 20  | 30  | 40  | 50  | 60   | 70   | 80   |
|------------------|---------------------|----|-----|-----|-----|-----|-----|------|------|------|
|                  | Q=l/min             | 0  | 167 | 333 | 500 | 667 | 833 | 1000 | 1167 | 1333 |
| KDN 65-250 / 224 | H<br>(m)            | 16 | 16  | 16  | 15  | 15  | 14  |      |      |      |
| KDN 65-250 / 244 |                     | 21 | 21  | 20  | 20  | 19  | 18  | 16   |      |      |
| KDN 65-250 / 264 |                     | 25 | 25  | 25  | 24  | 24  | 23  | 21   | 19   | 17   |
| KDN 65-330 / 270 |                     | 23 | 23  | 23  | 22  | 21  | 19  | 15   |      |      |
| KDN 65-330 / 290 |                     | 28 | 27  | 27  | 26  | 25  | 23  | 20   |      |      |
| KDN 65-330 / 310 |                     | 32 | 32  | 32  | 32  | 31  | 29  | 26   | 22   |      |
| KDN 65-330 / 328 |                     | 38 | 38  | 38  | 37  | 36  | 35  | 33   | 29   |      |
| KDN 65-400 / 350 |                     | 38 | 38  | 38  | 37  | 36  | 34  | 31   |      |      |
| KDN 65-400 / 370 |                     | 44 | 43  | 43  | 43  | 42  | 40  | 38   |      |      |
| KDN 65-400 / 390 |                     | 50 | 50  | 50  | 49  | 48  | 46  | 44   | 42   |      |
| KDN 65-400 / 408 |                     | 55 | 55  | 54  | 54  | 53  | 51  | 49   | 46   |      |

## SELECTION TABLE - KDN 80

| MODEL            | Q=m <sup>3</sup> /h | 0  | 10  | 20  | 30  | 40  | 50  | 60   | 70   | 80   | 100  | 120  |
|------------------|---------------------|----|-----|-----|-----|-----|-----|------|------|------|------|------|
|                  | Q=l/min             | 0  | 167 | 333 | 500 | 667 | 833 | 1000 | 1167 | 1333 | 1667 | 2000 |
| KDN 80-250 / 224 | H<br>(m)            | 16 |     | 16  | 16  | 16  | 16  | 15   | 14   | 13   |      |      |
| KDN 80-250 / 244 |                     | 19 |     | 19  | 19  | 19  | 19  | 18   | 17   | 17   | 14   |      |
| KDN 80-250 / 264 |                     | 23 |     | 23  | 23  | 23  | 22  | 22   | 21   | 21   | 18   |      |
| KDN 80-330 / 270 |                     | 24 |     | 24  | 24  | 24  | 23  | 23   | 21   | 19   | 15   |      |
| KDN 80-330 / 290 |                     | 28 |     | 28  | 28  | 28  | 27  | 26   | 25   | 24   | 19   |      |
| KDN 80-330 / 310 |                     | 33 |     | 33  | 33  | 33  | 33  | 33   | 32   | 31   | 27   |      |
| KDN 80-330 / 328 |                     | 38 |     | 38  | 38  | 38  | 38  | 38   | 37   | 36   | 32   | 26   |
| KDN 80-400 / 330 |                     | 37 |     | 37  | 37  | 37  | 37  | 36   | 35   | 33   | 28   |      |
| KDN 80-400 / 350 |                     | 43 |     | 43  | 43  | 43  | 43  | 42   | 41   | 39   | 34   |      |
| KDN 80-400 / 370 |                     | 48 |     | 49  | 49  | 48  | 48  | 47   | 46   | 44   | 39   |      |
| KDN 80-400 / 390 |                     | 55 |     | 54  | 54  | 54  | 54  | 53   | 52   | 51   | 47   | 41   |
| KDN 80-400 / 408 |                     | 62 |     | 61  | 61  | 61  | 61  | 60   | 59   | 57   | 52   | 46   |

## SELECTION TABLE - KDN 100

| MODEL             | Q=m <sup>3</sup> /h | 0  | 10  | 20  | 30  | 40  | 50  | 60   | 70   | 80   | 100  | 120  | 150  | 180  | 200  |
|-------------------|---------------------|----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|
|                   | Q=l/min             | 0  | 167 | 333 | 500 | 667 | 833 | 1000 | 1167 | 1333 | 1667 | 2000 | 2500 | 3000 | 3333 |
| KDN 100-250 / 224 | H<br>(m)            | 16 |     |     | 16  | 16  | 16  | 15   | 15   | 15   | 14   | 13   |      |      |      |
| KDN 100-250 / 244 |                     | 19 |     |     | 19  | 19  | 19  | 19   | 19   | 19   | 19   | 18   | 17   |      |      |
| KDN 100-250 / 264 |                     | 23 |     |     | 23  | 23  | 23  | 23   | 23   | 23   | 23   | 22   | 21   | 19   |      |
| KDN 100-330 / 270 |                     | 23 |     |     | 23  | 23  | 23  | 23   | 23   | 23   | 23   | 21   | 19   |      |      |
| KDN 100-330 / 290 |                     | 27 |     |     | 27  | 27  | 27  | 27   | 27   | 27   | 27   | 26   | 24   | 19   |      |
| KDN 100-330 / 310 |                     | 32 |     |     | 32  | 32  | 32  | 32   | 32   | 32   | 32   | 31   | 30   | 25   |      |
| KDN 100-330 / 328 |                     | 37 |     |     | 37  | 37  | 37  | 37   | 37   | 37   | 37   | 36   | 35   | 32   | 26   |
| KDN 100-400 / 330 |                     | 37 |     |     | 37  | 36  | 36  | 36   | 36   | 35   | 35   | 34   | 32   | 28   |      |
| KDN 100-400 / 350 |                     | 41 |     |     | 41  | 41  | 41  | 41   | 41   | 40   | 40   | 39   | 37   | 33   |      |
| KDN 100-400 / 370 |                     | 47 |     |     | 47  | 47  | 47  | 47   | 47   | 46   | 46   | 45   | 43   | 40   | 36   |
| KDN 100-400 / 390 |                     | 53 |     |     | 53  | 53  | 53  | 53   | 53   | 52   | 52   | 51   | 50   | 47   | 44   |
| KDN 100-400 / 408 |                     | 59 |     |     | 59  | 59  | 59  | 59   | 58   | 58   | 58   | 57   | 57   | 54   | 51   |

# KDN OVERSIZE - 4 POLES

## STANDARDISED PUMPS

### SELECTION TABLE - KDN 125

| MODEL             | Q=m <sup>3</sup> /h | 0  | 10  | 20  | 30  | 40  | 50  | 60   | 70   | 80   | 100  | 120  | 150  | 180  | 200  | 250  | 300  |    |
|-------------------|---------------------|----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|----|
|                   | Q=l/min             | 0  | 167 | 333 | 500 | 667 | 833 | 1000 | 1167 | 1333 | 1667 | 2000 | 2500 | 3000 | 3333 | 4167 | 5000 |    |
| KDN 125-250 / 220 | H<br>(m)            | 15 |     |     |     | 15  | 15  | 14   | 14   | 14   | 14   | 13   | 12   | 11   | 9    |      |      |    |
| KDN 125-250 / 235 |                     | 18 |     |     |     | 18  | 18  | 18   | 17   | 17   | 17   | 17   | 16   | 14   | 13   | 10   |      |    |
| KDN 125-250 / 250 |                     | 21 |     |     |     | 21  | 21  | 21   | 21   | 21   | 21   | 20   | 20   | 19   | 18   | 17   | 14   |    |
| KDN 125-250 / 264 |                     | 24 |     |     |     | 24  | 24  | 24   | 24   | 24   | 24   | 24   | 24   | 23   | 23   | 22   | 19   | 16 |
| KDN 125-330 / 270 |                     | 25 |     |     |     | 24  | 24  | 24   | 24   | 24   | 24   | 24   | 23   | 22   | 19   | 17   |      |    |
| KDN 125-330 / 290 |                     | 28 |     |     |     | 28  | 28  | 28   | 28   | 28   | 28   | 28   | 27   | 26   | 25   | 23   |      |    |
| KDN 125-330 / 310 |                     | 34 |     |     |     | 33  | 33  | 33   | 33   | 33   | 33   | 33   | 33   | 32   | 31   | 30   | 25   |    |
| KDN 125-330 / 328 |                     | 38 |     |     |     | 38  | 38  | 38   | 38   | 38   | 38   | 38   | 38   | 38   | 37   | 36   | 33   |    |
| KDN 125-400 / 330 |                     | 40 |     |     |     | 40  | 40  | 40   | 40   | 40   | 40   | 39   | 39   | 37   | 34   | 31   |      |    |
| KDN 125-400 / 350 |                     | 44 |     |     |     | 44  | 44  | 44   | 44   | 44   | 44   | 44   | 44   | 42   | 39   | 37   |      |    |
| KDN 125-400 / 370 |                     | 50 |     |     |     | 50  | 50  | 50   | 49   | 49   | 49   | 49   | 49   | 48   | 45   | 43   | 33   |    |
| KDN 125-400 / 390 |                     | 55 |     |     |     | 55  | 55  | 55   | 55   | 55   | 55   | 55   | 55   | 54   | 52   | 51   | 42   |    |
| KDN 125-400 / 408 |                     | 61 |     |     |     | 61  | 61  | 61   | 61   | 61   | 61   | 61   | 61   | 60   | 59   | 57   | 51   | 41 |

### SELECTION TABLE - KDN 150

| MODEL              | Q=m <sup>3</sup> /h | 0  | 10  | 20  | 30  | 40  | 50  | 60   | 70   | 80   | 100  | 120  | 150  | 180  | 200  | 250  | 300  | 350  | 400  | 450  | 500  |  |
|--------------------|---------------------|----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--|
|                    | Q=l/min             | 0  | 167 | 333 | 500 | 667 | 833 | 1000 | 1167 | 1333 | 1667 | 2000 | 2500 | 3000 | 3333 | 4167 | 5000 | 5833 | 6667 | 7500 | 8334 |  |
| KDN 150-250 / 220  | H<br>(m)            | 14 |     |     |     |     | 14  | 14   | 14   | 13   | 13   | 13   | 13   | 13   | 11   | 10   |      |      |      |      |      |  |
| KDN 150-250 / 235  |                     | 16 |     |     |     |     | 16  | 16   | 16   | 16   | 16   | 16   | 15   | 15   | 15   | 13   | 12   | 10   |      |      |      |  |
| KDN 150-250 / 250  |                     | 19 |     |     |     |     | 18  | 18   | 18   | 18   | 18   | 18   | 18   | 17   | 16   | 15   | 13   |      |      |      |      |  |
| KDN 150-250 / 264  |                     | 22 |     |     |     |     | 21  | 21   | 21   | 21   | 21   | 21   | 21   | 20   | 20   | 19   | 18   | 17   | 14   |      |      |  |
| KDN 150-330 / 260  |                     | 22 |     |     |     |     | 22  | 22   | 22   | 21   | 21   | 21   | 21   | 21   | 21   | 20   | 18   | 15   |      |      |      |  |
| KDN 150-330 / 280  |                     | 26 |     |     |     |     | 26  | 26   | 26   | 26   | 26   | 26   | 25   | 25   | 25   | 24   | 23   | 21   |      |      |      |  |
| KDN 150-330 / 300  |                     | 30 |     |     |     |     | 30  | 30   | 30   | 30   | 30   | 30   | 30   | 29   | 29   | 28   | 27   | 25   | 23   |      |      |  |
| KDN 150-330 / 315  |                     | 34 |     |     |     |     | 34  | 33   | 33   | 33   | 33   | 33   | 33   | 33   | 33   | 32   | 31   | 29   | 27   |      |      |  |
| KDN 150-330 / 328  |                     | 37 |     |     |     |     | 37  | 37   | 37   | 37   | 37   | 37   | 36   | 36   | 36   | 35   | 35   | 33   | 31   | 28   |      |  |
| KDN 150-400 / 330  |                     | 37 |     |     |     |     | 37  | 37   | 37   | 37   | 37   | 37   | 37   | 37   | 37   | 36   | 35   | 34   | 31   |      |      |  |
| KDN 150-400 / 350  |                     | 42 |     |     |     |     | 42  | 42   | 42   | 42   | 42   | 42   | 42   | 42   | 42   | 42   | 41   | 39   | 37   | 33   |      |  |
| KDN 150-400 / 370  |                     | 47 |     |     |     |     | 47  | 47   | 47   | 47   | 47   | 47   | 47   | 47   | 47   | 46   | 45   | 44   | 41   | 38   |      |  |
| KDN 150-400 / 390  |                     | 54 |     |     |     |     | 53  | 53   | 53   | 53   | 53   | 53   | 53   | 53   | 53   | 52   | 51   | 50   | 47   | 44   |      |  |
| KDN 150-400 / 408  |                     | 60 |     |     |     |     | 60  | 60   | 60   | 60   | 60   | 60   | 60   | 60   | 59   | 59   | 58   | 56   | 53   | 49   | 44   |  |
| KDN 150-500A / 440 |                     | 65 |     |     |     |     | 65  | 64   | 64   | 64   | 63   | 62   | 60   | 58   | 51   |      |      |      |      |      |      |  |
| KDN 150-500A / 460 |                     | 72 |     |     |     |     | 71  | 71   | 71   | 71   | 70   | 69   | 68   | 65   | 57   |      |      |      |      |      |      |  |
| KDN 150-500A / 480 |                     | 78 |     |     |     |     | 78  | 77   | 77   | 77   | 76   | 75   | 73   | 71   | 63   |      |      |      |      |      |      |  |
| KDN 150-500A / 500 |                     | 85 |     |     |     |     | 84  | 84   | 84   | 84   | 83   | 82   | 81   | 79   | 70   |      |      |      |      |      |      |  |
| KDN 150-500A / 518 |                     | 91 |     |     |     |     | 91  | 91   | 91   | 91   | 91   | 90   | 88   | 86   | 79   |      |      |      |      |      |      |  |
| KDN 150-500 / 440  |                     | 68 |     |     |     |     |     |      |      | 68   | 68   | 68   | 67   | 66   | 63   | 57   | 48   |      |      |      |      |  |
| KDN 150-500 / 460  |                     | 74 |     |     |     |     |     |      |      | 74   | 74   | 73   | 72   | 69   | 64   | 56   |      |      |      |      |      |  |
| KDN 150-500 / 480  |                     | 82 |     |     |     |     |     |      |      | 81   | 81   | 81   | 80   | 79   | 72   | 66   | 58   |      |      |      |      |  |
| KDN 150-500 / 500  |                     | 89 |     |     |     |     |     |      |      | 89   | 89   | 88   | 88   | 87   | 85   | 81   | 76   | 68   |      |      |      |  |
| KDN 150-500 / 518  |                     | 96 |     |     |     |     |     |      |      | 96   | 96   | 96   | 95   | 95   | 93   | 89   | 84   | 75   |      |      |      |  |

# KDN OVERSIZE - 4 POLES

STANDARDISED PUMPS

## SELECTION TABLE - KDN 200

| MODEL             | Q=m <sup>3</sup> /h | 0  | 10  | 20  | 30  | 40  | 50  | 60   | 70   | 80   | 100  | 120  | 150  | 180  | 200  | 250  | 300  | 350  | 400  | 450  | 500  | 600   | 700   | 800   |    |  |  |
|-------------------|---------------------|----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|-------|----|--|--|
|                   | Q=l/min             | 0  | 167 | 333 | 500 | 667 | 833 | 1000 | 1167 | 1333 | 1667 | 2000 | 2500 | 3000 | 3333 | 4167 | 5000 | 5833 | 6667 | 7500 | 8334 | 10000 | 11667 | 13334 |    |  |  |
| KDN 200-330 / 270 | H<br>(m)            | 20 |     |     |     |     |     |      |      |      | 20   | 20   | 20   | 20   | 20   | 20   | 19   | 19   | 18   | 17   | 16   | 12    |       |       |    |  |  |
| KDN 200-330 / 290 |                     | 24 |     |     |     |     |     |      |      |      |      | 24   | 24   | 24   | 24   | 24   | 24   | 24   | 23   | 23   | 22   | 22    | 19    |       |    |  |  |
| KDN 200-330 / 310 |                     | 29 |     |     |     |     |     |      |      |      |      | 29   | 29   | 29   | 29   | 29   | 29   | 29   | 29   | 28   | 28   | 27    | 25    | 21    |    |  |  |
| KDN 200-330 / 328 |                     | 34 |     |     |     |     |     |      |      |      |      | 34   | 34   | 33   | 33   | 33   | 33   | 33   | 33   | 33   | 33   | 32    | 31    | 27    |    |  |  |
| KDN 200-400 / 330 |                     | 32 |     |     |     |     |     |      |      |      |      | 32   | 32   | 32   | 32   | 32   | 31   | 31   | 31   | 30   | 29   | 28    | 23    |       |    |  |  |
| KDN 200-400 / 350 |                     | 38 |     |     |     |     |     |      |      |      |      | 38   | 38   | 38   | 38   | 38   | 38   | 37   | 37   | 37   | 36   | 35    | 31    |       |    |  |  |
| KDN 200-400 / 370 |                     | 43 |     |     |     |     |     |      |      |      |      | 43   | 43   | 43   | 43   | 43   | 43   | 43   | 43   | 42   | 42   | 42    | 41    | 37    |    |  |  |
| KDN 200-400 / 390 |                     | 48 |     |     |     |     |     |      |      |      |      | 48   | 48   | 48   | 48   | 48   | 48   | 48   | 48   | 48   | 48   | 47    | 45    | 37    |    |  |  |
| KDN 200-400 / 408 |                     | 54 |     |     |     |     |     |      |      |      |      | 54   | 54   | 54   | 54   | 54   | 54   | 54   | 54   | 53   | 53   | 53    | 51    | 46    |    |  |  |
| KDN 200-500 / 430 |                     | 65 |     |     |     |     |     |      |      |      |      | 65   | 65   | 65   | 65   | 65   | 65   | 65   | 64   | 64   | 63   | 62    | 60    | 56    | 51 |  |  |
| KDN 200-500 / 450 |                     | 72 |     |     |     |     |     |      |      |      |      | 72   | 72   | 72   | 72   | 71   | 71   | 71   | 71   | 70   | 69   | 67    | 62    | 58    |    |  |  |
| KDN 200-500 / 470 |                     | 76 |     |     |     |     |     |      |      |      |      | 76   | 77   | 77   | 77   | 76   | 76   | 76   | 76   | 75   | 74   | 72    | 68    | 63    |    |  |  |
| KDN 200-500 / 490 |                     | 82 |     |     |     |     |     |      |      |      |      | 82   | 83   | 82   | 82   | 82   | 82   | 82   | 82   | 81   | 80   | 79    | 76    | 71    | 65 |  |  |
| KDN 200-500 / 508 |                     | 94 |     |     |     |     |     |      |      |      |      | 94   | 94   | 94   | 94   | 94   | 93   | 93   | 92   | 92   | 91   | 89    | 86    | 81    | 75 |  |  |

## SELECTION TABLE - KDN 250

| MODEL                  | Q=m <sup>3</sup> /h | 0  | 250  | 300  | 350  | 400  | 450  | 500  | 600   | 700   | 800   | 900   | 1000  | 1100  | 1200  | 1400  | 1500  |  |  |
|------------------------|---------------------|----|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|--|
|                        | Q=l/min             | 0  | 4167 | 5000 | 5833 | 6667 | 7500 | 8334 | 10000 | 11667 | 13334 | 15000 | 16667 | 18334 | 20000 | 23334 | 25001 |  |  |
| KDN 250-330A / 275/32° | H<br>(m)            | 17 | 16   | 15   | 15   | 15   | 14   | 14   | 12    | 11    | 8     | 6     |       |       |       |       |       |  |  |
| KDN 250-330A / 275/16° |                     | 20 | 19   | 18   | 18   | 18   | 17   | 17   | 16    | 14    | 11    | 8     |       |       |       |       |       |  |  |
| KDN 250-330A / 275     |                     | 23 | 22   | 21   | 21   | 21   | 20   | 20   | 18    | 17    | 14    | 11    |       |       |       |       |       |  |  |
| KDN 250-330A / 285     |                     | 26 | 24   | 24   | 23   | 23   | 23   | 22   | 21    | 19    | 17    | 14    |       |       |       |       |       |  |  |
| KDN 250-330A / 295     |                     | 28 |      | 26   | 26   | 25   | 25   | 24   | 23    | 22    | 20    | 17    | 13    |       |       |       |       |  |  |
| KDN 250-330 / 310/16°  |                     | 23 |      | 20   | 19   | 19   | 18   | 18   | 17    | 15    | 13    | 11    |       |       |       |       |       |  |  |
| KDN 250-330 / 310/290  |                     | 26 |      | 24   | 24   | 23   | 23   | 22   | 20    | 18    | 17    | 14    | 12    |       |       |       |       |  |  |
| KDN 250-330 / 310/300  |                     | 28 |      | 26   | 25   | 25   | 24   | 24   | 23    | 21    | 18    | 17    | 13    |       |       |       |       |  |  |
| KDN 250-330 / 310      |                     | 30 |      | 28   | 27   | 27   | 26   | 26   | 25    | 23    | 22    | 19    | 17    |       |       |       |       |  |  |
| KDN 250-330 / 320      |                     | 32 |      | 30   | 30   | 30   | 29   | 29   | 28    | 26    | 25    | 23    | 21    |       |       |       |       |  |  |
| KDN 250-330 / 328      |                     | 35 |      | 33   | 33   | 33   | 32   | 32   | 30    | 29    | 28    | 26    | 24    |       |       |       |       |  |  |
| KDN 250-400 / 330      |                     | 33 |      | 33   | 32   | 32   | 31   | 31   | 29    | 27    | 25    | 22    |       |       |       |       |       |  |  |
| KDN 250-400 / 350      |                     | 39 |      | 38   | 38   | 37   | 37   | 36   | 35    | 33    | 31    | 29    | 26    |       |       |       |       |  |  |
| KDN 250-400 / 370      |                     | 44 |      | 43   | 43   | 43   | 43   | 42   | 41    | 40    | 38    | 35    | 32    |       |       |       |       |  |  |
| KDN 250-400 / 390      |                     | 50 |      | 50   | 50   | 50   | 49   | 49   | 48    | 47    | 45    | 43    | 40    | 36    |       |       |       |  |  |
| KDN 250-400 / 408      |                     | 54 |      | 54   | 54   | 54   | 54   | 54   | 53    | 52    | 50    | 48    | 45    | 41    |       |       |       |  |  |
| KDN 250-500A / 440     |                     | 61 |      | 61   | 61   | 61   | 61   | 60   | 58    | 55    | 51    | 45    |       |       |       |       |       |  |  |
| KDN 250-500A / 460     |                     | 68 |      | 68   | 68   | 68   | 67   | 67   | 65    | 62    | 58    | 53    | 46    |       |       |       |       |  |  |
| KDN 250-500A / 480     |                     | 76 |      | 75   | 75   | 75   | 75   | 74   | 73    | 70    | 67    | 62    | 57    |       |       |       |       |  |  |
| KDN 250-500A / 500     |                     | 82 |      | 82   | 82   | 82   | 82   | 82   | 81    | 79    | 76    | 72    | 67    | 60    |       |       |       |  |  |
| KDN 250-500A / 518     |                     | 89 |      | 89   | 89   | 89   | 89   | 88   | 87    | 85    | 82    | 78    | 74    | 68    |       |       |       |  |  |
| KDN 250-500 / 440      |                     | 60 |      |      |      |      |      | 60   | 59    | 57    | 56    | 55    | 54    | 50    | 44    |       |       |  |  |
| KDN 250-500 / 460      |                     | 66 |      |      |      |      |      | 66   | 66    | 66    | 65    | 64    | 61    | 58    | 53    |       |       |  |  |
| KDN 250-500 / 480      |                     | 75 |      |      |      |      |      | 75   | 75    | 75    | 74    | 73    | 72    | 69    | 65    |       |       |  |  |
| KDN 250-500 / 500      |                     | 84 |      |      |      |      |      | 84   | 84    | 84    | 83    | 83    | 82    | 80    | 76    | 66    |       |  |  |
| KDN 250-500 / 518      |                     | 94 |      |      |      |      |      | 94   | 94    | 94    | 94    | 93    | 92    | 90    | 87    | 79    | 72    |  |  |



# KDN OVERSIZE - 4 POLES

## STANDARDISED PUMPS

### SELECTION TABLE - KDN 300

| MODEL                  | Q=m <sup>3</sup> /h | 0  | 250  | 300  | 350  | 400  | 450  | 500  | 600   | 700   | 800   | 900   | 1000  | 1100  | 1200  | 1400  | 1500  | 1600  |    |  |
|------------------------|---------------------|----|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----|--|
|                        | Q=l/min             | 0  | 4167 | 5000 | 5833 | 6667 | 7500 | 8334 | 10000 | 11667 | 13334 | 15000 | 16667 | 18334 | 20000 | 23334 | 25001 | 26667 |    |  |
| KDN 300-330 / 325/36°  | H<br>(m)            | 19 |      |      |      |      |      | 18   | 18    | 17    | 16    | 16    | 15    | 14    | 13    | 10    |       |       |    |  |
| KDN 300-330 / 325/24°  |                     | 22 |      |      |      |      |      |      | 21    | 20    | 20    | 19    | 18    | 17    | 16    | 15    | 13    | 11    |    |  |
| KDN 300-330 / 325/12°  |                     | 24 |      |      |      |      |      |      | 23    | 23    | 22    | 21    | 20    | 20    | 19    | 17    | 15    | 13    |    |  |
| KDN 300-330 / 325      |                     | 28 |      |      |      |      |      |      | 26    | 25    | 25    | 24    | 23    | 22    | 21    | 20    | 18    | 16    |    |  |
| KDN 300-330 / 335      |                     | 30 |      |      |      |      |      |      | 28    | 27    | 27    | 26    | 25    | 25    | 24    | 23    | 21    | 19    | 17 |  |
| KDN 300-330 / 345      |                     | 32 |      |      |      |      |      |      | 30    | 30    | 29    | 29    | 28    | 27    | 27    | 26    | 23    | 22    | 21 |  |
| KDN 300-400M / 350     |                     | 25 |      |      |      |      |      |      | 24    | 23    | 23    | 22    | 21    | 20    | 19    | 18    | 16    | 14    | 11 |  |
| KDN 300-400M / 380     |                     | 32 |      |      |      |      |      |      | 31    | 31    | 31    | 30    | 29    | 29    | 28    | 27    | 25    | 22    | 20 |  |
| KDN 300-400M / 395     |                     | 37 |      |      |      |      |      |      | 36    | 36    | 35    | 35    | 34    | 34    | 33    | 32    | 29    | 27    | 25 |  |
| KDN 300-400M / 408     |                     | 41 |      |      |      |      |      |      | 40    | 40    | 40    | 39    | 38    | 37    | 37    | 36    | 34    | 31    | 29 |  |
| KDN 300-400A / 330/7°  |                     | 33 |      |      |      |      | 33   | 32   | 32    | 32    | 31    | 31    | 30    | 29    | 28    | 26    | 21    |       |    |  |
| KDN 300-400A / 370/340 |                     | 39 |      |      |      |      | 38   | 38   | 38    | 38    | 38    | 37    | 36    | 35    | 34    | 33    | 29    | 27    |    |  |
| KDN 300-400A / 370/355 |                     | 43 |      |      |      |      |      | 43   | 43    | 42    | 42    | 41    | 41    | 40    | 39    | 38    | 34    | 32    | 28 |  |
| KDN 300-400A / 370     |                     | 47 |      |      |      |      | 47   | 47   | 47    | 47    | 47    | 46    | 46    | 45    | 44    | 42    | 39    | 36    | 33 |  |
| KDN 300-400 / 340      |                     | 40 |      |      | 40   | 39   | 39   | 39   | 39    | 38    | 37    | 36    | 35    | 33    | 32    | 28    |       |       |    |  |
| KDN 300-400 / 370      |                     | 49 |      |      | 48   | 48   | 47   | 47   | 47    | 46    | 46    | 45    | 44    | 42    | 41    | 38    |       |       |    |  |
| KDN 300-400 / 390      |                     | 54 |      |      | 53   | 53   | 53   | 53   | 53    | 52    | 51    | 51    | 50    | 49    | 48    | 46    | 42    | 39    |    |  |
| KDN 300-400 / 408      |                     | 59 |      |      | 59   | 59   | 59   | 59   | 58    | 58    | 57    | 57    | 56    | 55    | 54    | 53    | 50    | 48    | 45 |  |

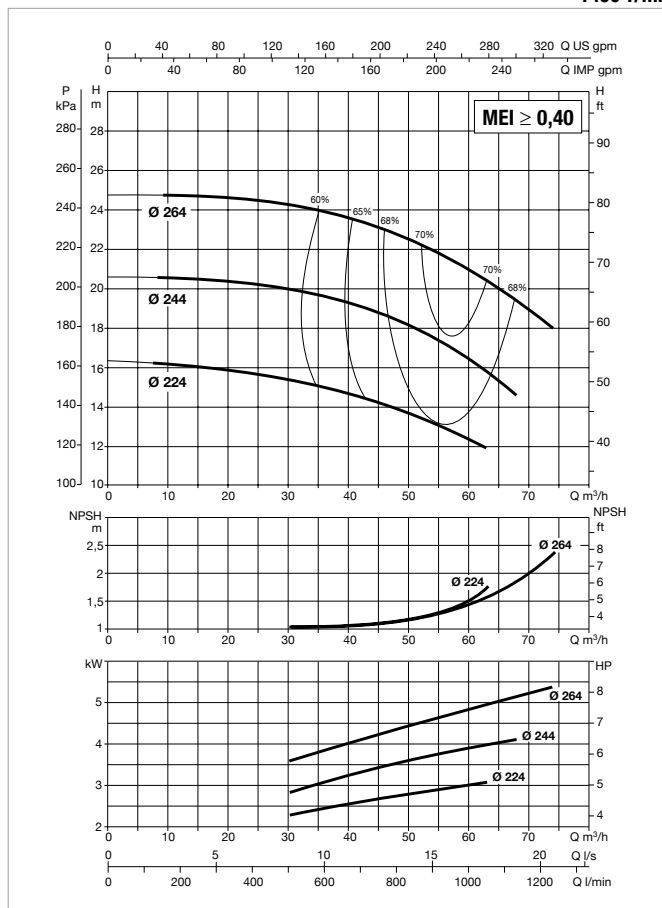
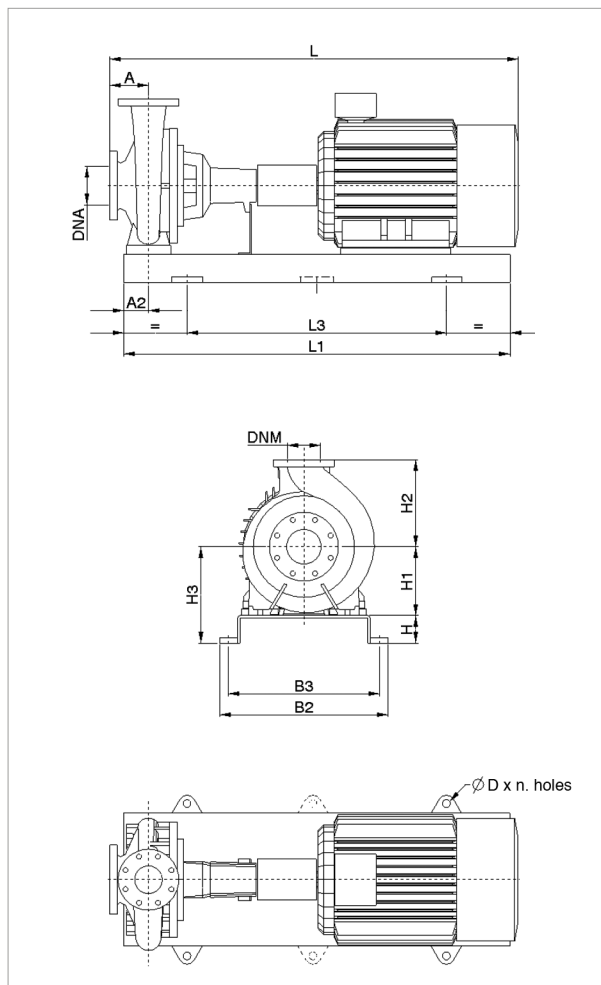
### SELECTION TABLE - KDN 350

| MODEL                  | Q=m <sup>3</sup> /h | 0  | 250  | 300  | 350  | 400  | 450  | 500  | 600   | 700   | 800   | 900   | 1000  | 1100  | 1200  | 1400  | 1500  | 1600  | 2000  | 2500  | 1600  | 3000  |  |  |
|------------------------|---------------------|----|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|--|
|                        | Q=l/min             | 0  | 4167 | 5000 | 5833 | 6667 | 7500 | 8334 | 10000 | 11667 | 13334 | 15000 | 16667 | 18334 | 20000 | 23334 | 25001 | 26667 | 33334 | 41668 | 46668 | 50001 |  |  |
| KDN 350-500A / 405/16° | H<br>(m)            | 41 |      |      |      |      | 41   | 41   | 40    | 40    | 40    | 40    | 40    | 40    | 39    | 38    | 38    | 37    | 32    |       |       |       |  |  |
| KDN 350-500A / 405     |                     | 50 |      |      |      |      | 50   | 50   | 50    | 50    | 50    | 50    | 49    | 49    | 49    | 49    | 48    | 47    | 43    | 33    |       |       |  |  |
| KDN 350-500A / 435     |                     | 57 |      |      |      |      | 57   | 57   | 57    | 57    | 57    | 57    | 57    | 57    | 57    | 56    | 56    | 55    | 51    | 42    | 34    |       |  |  |
| KDN 350-500A / 465     |                     | 65 |      |      |      |      | 64   | 64   | 64    | 64    | 64    | 64    | 64    | 64    | 64    | 63    | 63    | 62    | 59    | 51    | 44    |       |  |  |
| KDN 350-500 / 430      |                     | 49 |      |      |      |      | 48   | 48   | 48    | 48    | 48    | 47    | 47    | 47    | 47    | 46    | 46    | 45    | 42    | 36    |       |       |  |  |
| KDN 350-500 / 460      |                     | 61 |      |      |      |      | 61   | 61   | 60    | 60    | 60    | 59    | 59    | 59    | 58    | 58    | 57    | 56    | 54    | 47    | 40    |       |  |  |
| KDN 350-500 / 490      |                     | 70 |      |      |      |      | 70   | 70   | 69    | 69    | 69    | 69    | 69    | 69    | 69    | 68    | 67    | 66    | 63    | 58    | 52    | 48    |  |  |
| KDN 350-500 / 518      |                     | 81 |      |      |      |      | 81   | 81   | 81    | 80    | 80    | 80    | 80    | 80    | 80    | 80    | 79    | 78    | 76    | 71    | 66    | 63    |  |  |

# KDN 65-250 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

**= 1450 1/min**



**For MEI index refer to the hydraulic efficiency section.**

The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

| MODEL      | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA   |             | MOTOR TYPE |
|------------|------------|------------|-------------------|-------------|------------|
|            |            |            | POWER INPUT 50 Hz | In A        |            |
| KDN 65-250 | 2,2        | 100L       | 3 x 230 - 400 V ~ | 8,75 - 5,05 | IE3        |
|            | 3          | 100L       | 3 x 400 V ~ Δ     | 6,25        | IE3        |
|            | 4          | 112M       | 3 x 400 V ~ Δ     | 7,95        | IE3        |
|            | 5,5        | 132S       | 3 x 400 V ~ Δ     | 10,6        | IE3        |
|            | 7,5        | 132M       | 3 x 400 V ~ Δ     | 14,6        | IE3        |

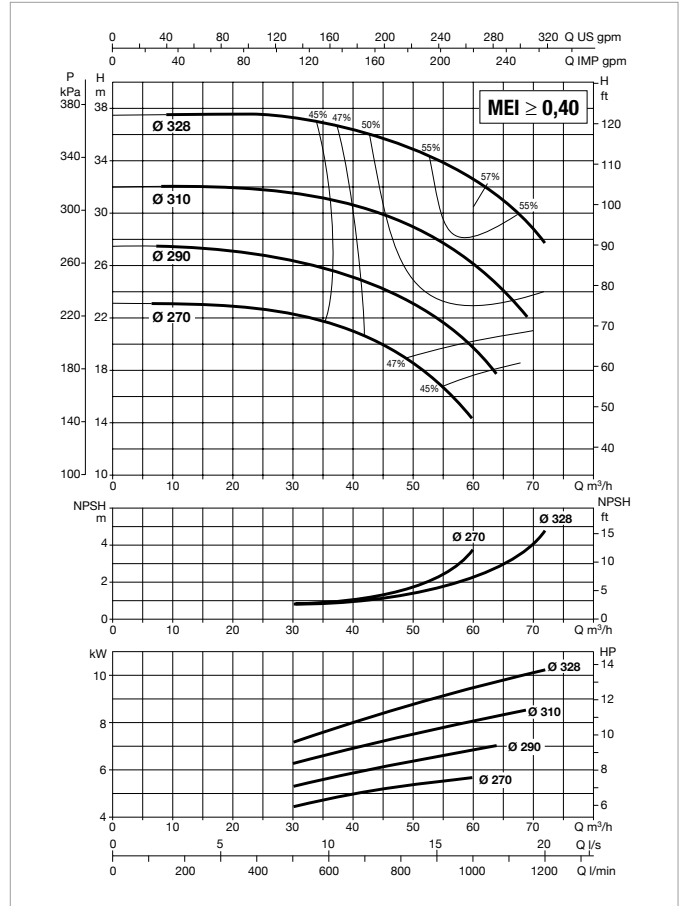
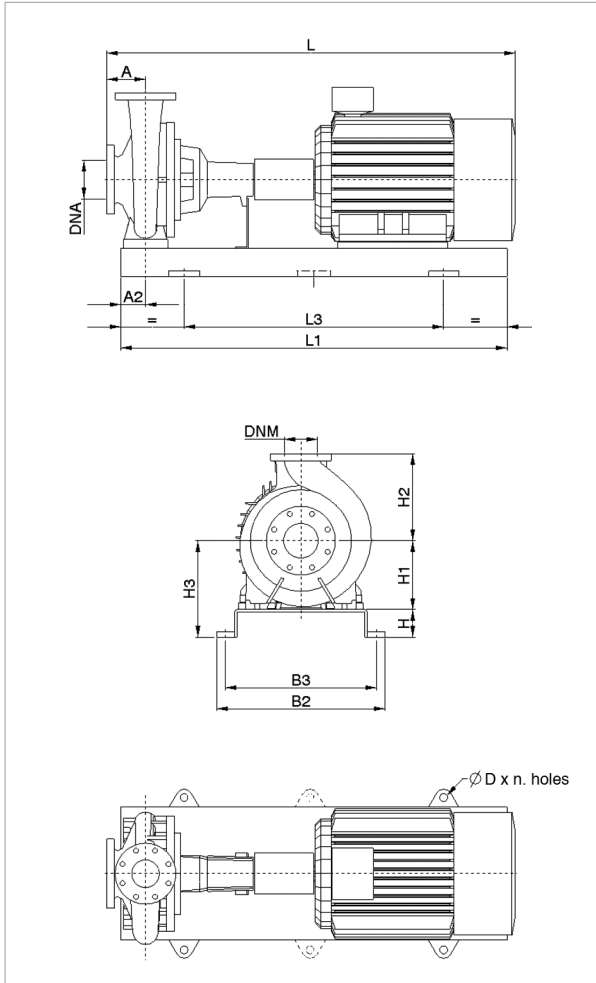
| MODEL      | POWER (kW) | UNIT DIMENSIONS (mm) |    |    |     |     |     |      |     |     |     | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |        | SPACER COUPLING |        |           |
|------------|------------|----------------------|----|----|-----|-----|-----|------|-----|-----|-----|------------------------|-----|-------------------|--------|-----------------|--------|-----------|
|            |            | A                    | A2 | H  | H1  | H2  | H3  | L1   | L3  | B2  | B3  | D                      | DNA | DNM               | L (mm) | WEIGHT Kg       | L (mm) | WEIGHT Kg |
| KDN 65-250 | 2,2        | 125                  | 90 | 80 | 200 | 250 | 280 | 1120 | 740 | 490 | 440 | 24x4                   | 100 | 65                | 1014   | 169             | 1155   | 169       |
|            | 3          | 125                  | 90 | 80 | 200 | 250 | 280 | 1120 | 740 | 490 | 440 | 24x4                   | 100 | 65                | 1014   | 177             | 1155   | 177       |
|            | 4          | 125                  | 90 | 80 | 200 | 250 | 280 | 1120 | 740 | 490 | 440 | 24x4                   | 100 | 65                | 1029   | 193             | 1170   | 193       |
|            | 5,5        | 125                  | 90 | 80 | 200 | 250 | 280 | 1120 | 740 | 490 | 440 | 24x4                   | 100 | 65                | 1099   | 209             | 1240   | 209       |
|            | 7,5        | 125                  | 90 | 80 | 200 | 250 | 280 | 1120 | 740 | 490 | 440 | 24x4                   | 100 | 65                | 1149   | 199             | 1290   | 214       |

Dimension and electrical data based on sizing definition following the instructions on page 183.

# KDN 65-330 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

| MODEL      | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA   |      | MOTOR TYPE |
|------------|------------|------------|-------------------|------|------------|
|            |            |            | POWER INPUT 50 Hz | In A |            |
| KDN 65-330 | 5,5        | 132S       | 3 x 400 V ~ Δ     | 10,6 | IE3        |
|            | 7,5        | 132M       | 3 x 400 V ~ Δ     | 14,6 | IE3        |
|            | 11         | 160M       | 3 x 400 V ~ Δ     | 20,5 | IE3        |
|            | 15         | 160L       | 3 x 400 V ~ Δ     | 28   | IE3        |

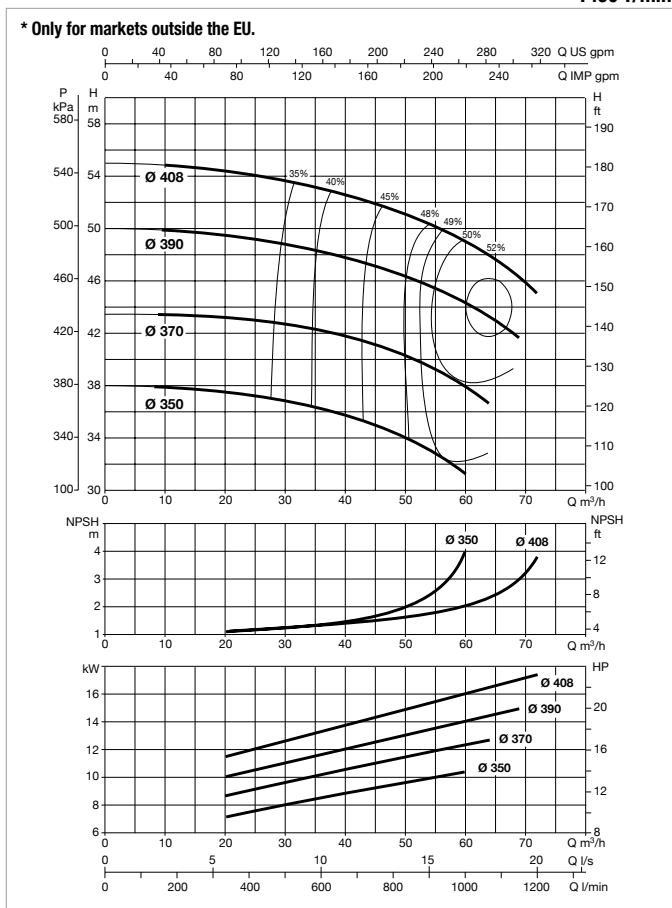
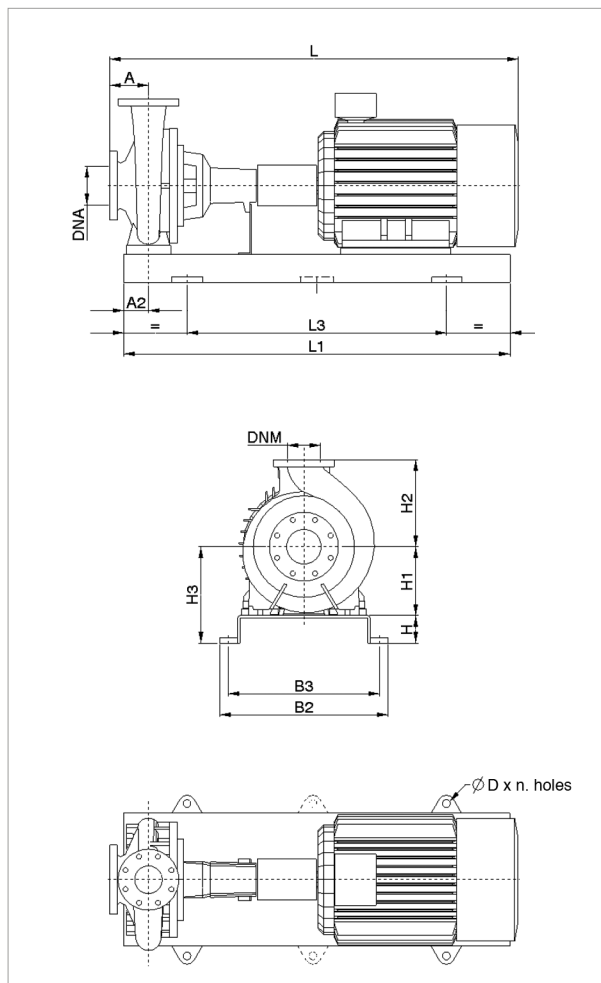
| MODEL      | POWER (kW) | UNIT DIMENSIONS (mm) |    |     |     |     |     |      |     |     |     |      | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |           | SPACER COUPLING |           |
|------------|------------|----------------------|----|-----|-----|-----|-----|------|-----|-----|-----|------|------------------------|-----|-------------------|-----------|-----------------|-----------|
|            |            | A                    | A2 | H   | H1  | H2  | H3  | L1   | L3  | B2  | B3  | D    | DNA                    | DNM | L (mm)            | WEIGHT Kg | L (mm)          | WEIGHT Kg |
| KDN 65-330 | 5,5        | 125                  | 90 | 80  | 225 | 280 | 305 | 1250 | 840 | 540 | 490 | 24x4 | 100                    | 65  | 1129              | 286       | 1270            | 286       |
|            | 7,5        | 125                  | 90 | 80  | 225 | 280 | 305 | 1250 | 840 | 540 | 490 | 24x4 | 100                    | 65  | 1179              | 276       | 1320            | 291       |
|            | 11         | 125                  | 90 | 80  | 225 | 280 | 305 | 1250 | 840 | 540 | 490 | 24x4 | 100                    | 65  | 1324              | 313       | 1465            | 328       |
|            | 15         | 125                  | 90 | 100 | 225 | 280 | 325 | 1400 | 940 | 610 | 550 | 28x4 | 100                    | 65  | 1379              | 349       | 1520            | 364       |

Dimension and electrical data based on sizing definition following the instructions on page 183.

# KDN 65-400 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

**= 1450 1/min**



**For MEI index refer to the hydraulic efficiency section.**  
 The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

| MODEL      | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA   |      | MOTOR TYPE |
|------------|------------|------------|-------------------|------|------------|
|            |            |            | POWER INPUT 50 Hz | In A |            |
| KDN 65-400 | 11         | 160M       | 3 x 400 V ~ Δ     | 20,5 | IE3        |
|            | 15         | 160L       | 3 x 400 V ~ Δ     | 28   | IE3        |
|            | 18,5       | 180M       | 3 x 400 V ~ Δ     | 34   | IE3        |
|            | 22         | 180L       | 3 x 400 V ~ Δ     | 40,5 | IE3        |

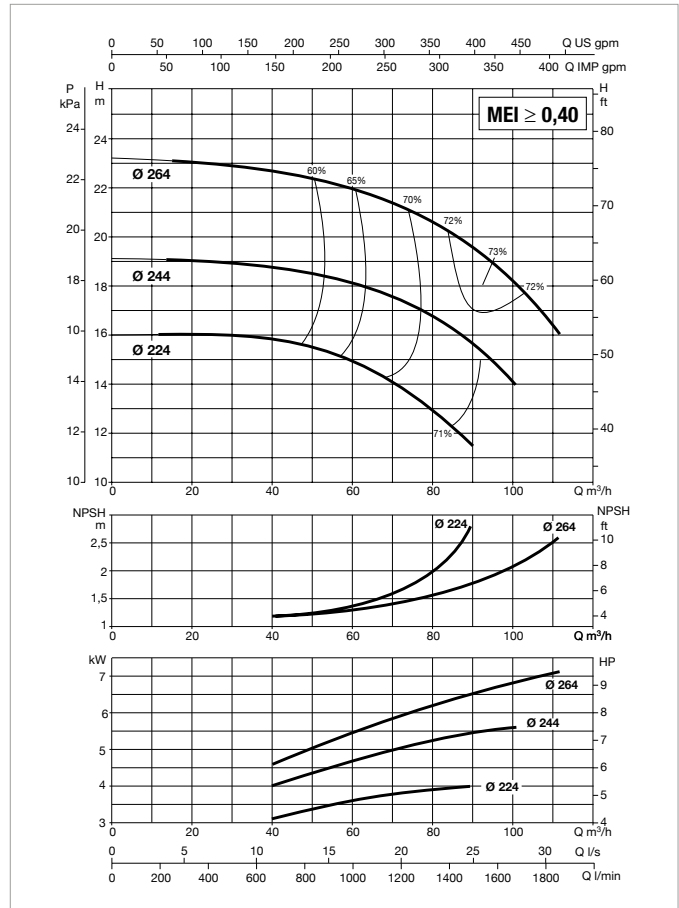
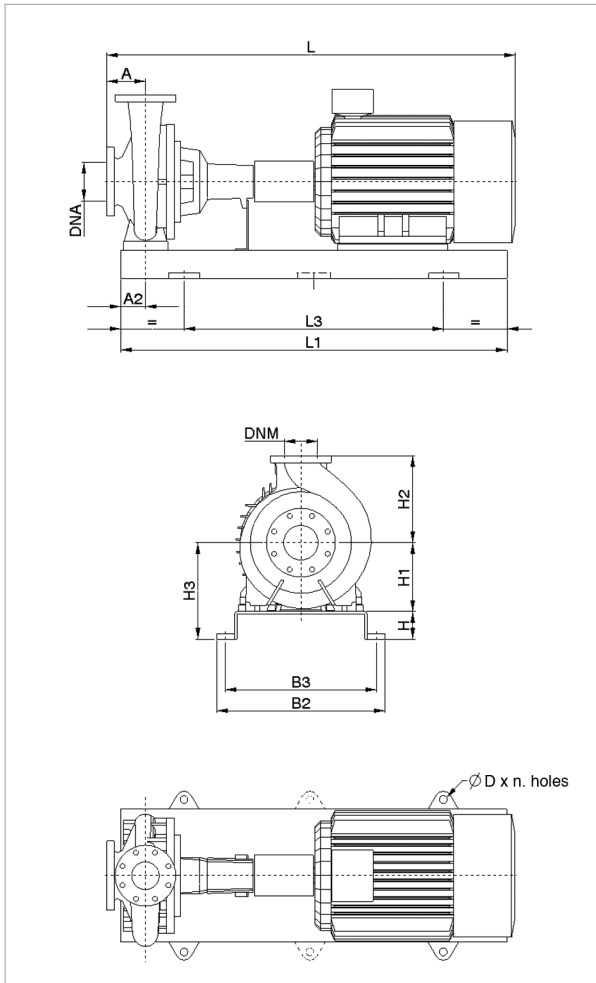
| MODEL      | POWER (kW) | UNIT DIMENSIONS (mm) |    |     |     |     |     |      |     |     |     | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |        | SPACER COUPLING |        |           |
|------------|------------|----------------------|----|-----|-----|-----|-----|------|-----|-----|-----|------------------------|-----|-------------------|--------|-----------------|--------|-----------|
|            |            | A                    | A2 | H   | H1  | H2  | H3  | L1   | L3  | B2  | B3  | D                      | DNA | DNM               | L (mm) | WEIGHT Kg       | L (mm) | WEIGHT Kg |
| KDN 65-400 | 11         | 125                  | 90 | 100 | 280 | 355 | 380 | 1400 | 940 | 610 | 550 | 28x4                   | 100 | 65                | 1324   | 360             | 1465   | 375       |
|            | 15         | 125                  | 90 | 100 | 280 | 355 | 380 | 1400 | 940 | 610 | 550 | 28x4                   | 100 | 65                | 1379   | 377             | 1520   | 392       |
|            | 18,5       | 125                  | 90 | 100 | 280 | 355 | 380 | 1400 | 940 | 610 | 550 | 28x4                   | 100 | 65                | 1399   | 412             | 1540   | 427       |
|            | 22         | 125                  | 90 | 100 | 280 | 355 | 380 | 1400 | 940 | 610 | 550 | 28x4                   | 100 | 65                | 1437   | 431             | 1578   | 446       |

Dimension and electrical data based on sizing definition following the instructions on page 183.

# KDN 80-250 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 1450 /min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

| MODEL      | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA   |      | MOTOR TYPE |
|------------|------------|------------|-------------------|------|------------|
|            |            |            | POWER INPUT 50 Hz | In A |            |
| KDN 80-250 | 4          | 112M       | 3 x 400 V ~ Δ     | 7,95 | IE3        |
|            | 5,5        | 132S       | 3 x 400 V ~ Δ     | 10,6 | IE3        |
|            | 7,5        | 132M       | 3 x 400 V ~ Δ     | 14,6 | IE3        |
|            | 11         | 160M       | 3 x 400 V ~ Δ     | 20,5 | IE3        |
|            | 15         | 160L       | 3 x 400 V ~ Δ     | 28   | IE3        |

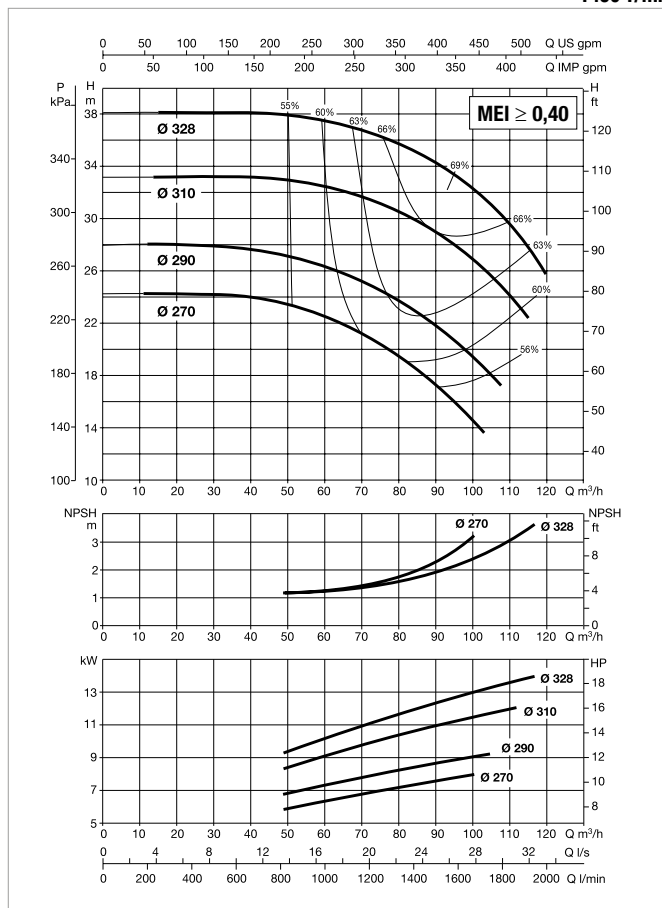
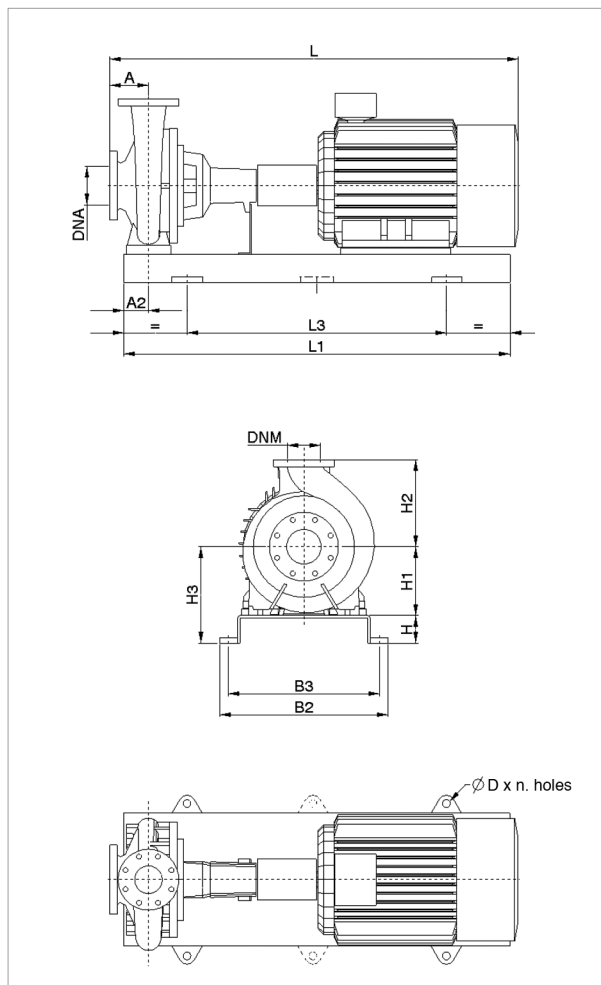
| MODEL      | POWER (kW) | UNIT DIMENSIONS (mm) |    |    |     |     |     |      |     |     |     |      | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |           | SPACER COUPLING |           |
|------------|------------|----------------------|----|----|-----|-----|-----|------|-----|-----|-----|------|------------------------|-----|-------------------|-----------|-----------------|-----------|
|            |            | A                    | A2 | H  | H1  | H2  | H3  | L1   | L3  | B2  | B3  | D    | DNA                    | DNM | L (mm)            | WEIGHT Kg | L (mm)          | WEIGHT Kg |
| KDN 80-250 | 4          | 125                  | 90 | 80 | 225 | 280 | 305 | 1250 | 840 | 540 | 490 | 24x4 | 125                    | 80  | 1029              | 218       | 1170            | 218       |
|            | 5,5        | 125                  | 90 | 80 | 225 | 280 | 305 | 1250 | 840 | 540 | 490 | 24x4 | 125                    | 80  | 1099              | 234       | 1240            | 234       |
|            | 7,5        | 125                  | 90 | 80 | 225 | 280 | 305 | 1250 | 840 | 540 | 490 | 24x4 | 125                    | 80  | 1149              | 224       | 1290            | 239       |
|            | 11         | 125                  | 90 | 80 | 225 | 280 | 305 | 1250 | 840 | 540 | 490 | 24x4 | 125                    | 80  | 1294              | 261       | 1435            | 276       |
|            | 15         | 125                  | 90 | 80 | 225 | 280 | 305 | 1250 | 840 | 540 | 490 | 24x4 | 125                    | 80  | 1349              | 278       | 1490            | 293       |

Dimension and electrical data based on sizing definition following the instructions on page 183.

# KDN 80-330 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

**= 1450 1/min**



**For MEI index refer to the hydraulic efficiency section.**

The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

| MODEL      | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA   |      | MOTOR TYPE |
|------------|------------|------------|-------------------|------|------------|
|            |            |            | POWER INPUT 50 Hz | In A |            |
| KDN 80-330 | 5,5        | 132S       | 3 x 400 V ~ Δ     | 10,6 | IE3        |
|            | 7,5        | 132M       | 3 x 400 V ~ Δ     | 14,6 | IE3        |
|            | 11         | 160M       | 3 x 400 V ~ Δ     | 20,5 | IE3        |
|            | 15         | 160L       | 3 x 400 V ~ Δ     | 28   | IE3        |
|            | 18,5       | 180M       | 3 x 400 V ~ Δ     | 34   | IE3        |

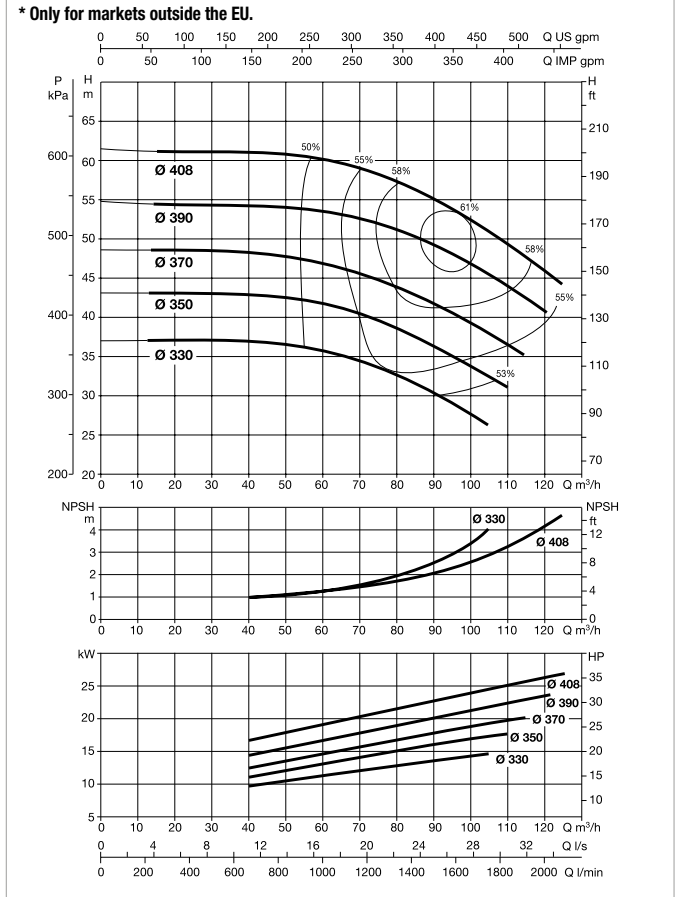
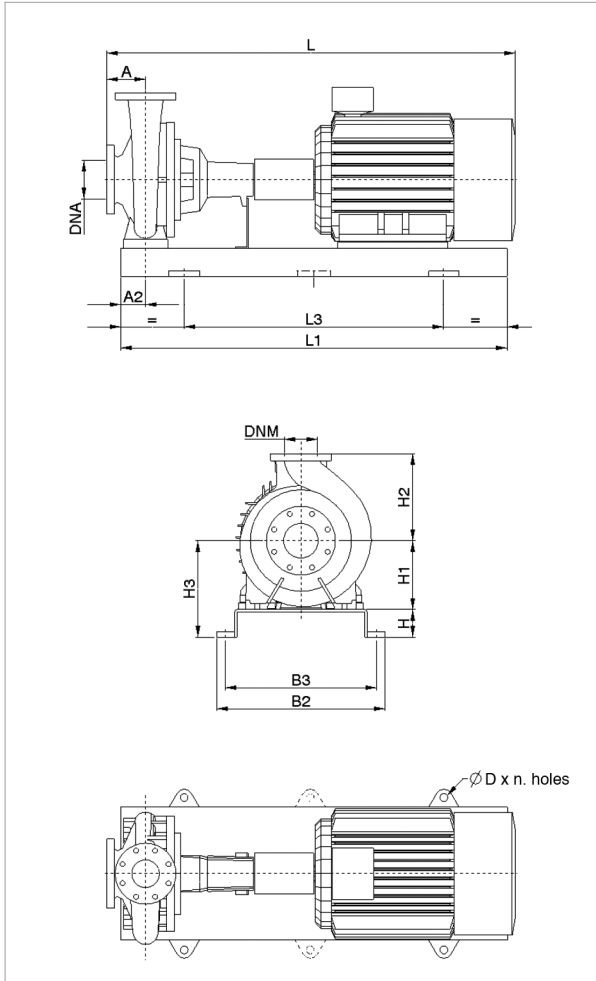
| MODEL      | POWER (kW) | UNIT DIMENSIONS (mm) |    |     |     |     |     |      |     |     |     | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |        | SPACER COUPLING |        |           |
|------------|------------|----------------------|----|-----|-----|-----|-----|------|-----|-----|-----|------------------------|-----|-------------------|--------|-----------------|--------|-----------|
|            |            | A                    | A2 | H   | H1  | H2  | H3  | L1   | L3  | B2  | B3  | D                      | DNA | DNM               | L (mm) | WEIGHT Kg       | L (mm) | WEIGHT Kg |
| KDN 80-330 | 5,5        | 125                  | 90 | 80  | 250 | 315 | 330 | 1250 | 840 | 540 | 490 | 24x4                   | 125 | 80                | 1129   | 289             | 1270   | 289       |
|            | 7,5        | 125                  | 90 | 80  | 250 | 315 | 330 | 1250 | 840 | 540 | 490 | 24x4                   | 125 | 80                | 1179   | 279             | 1320   | 294       |
|            | 11         | 125                  | 90 | 80  | 250 | 315 | 330 | 1250 | 840 | 540 | 490 | 24x4                   | 125 | 80                | 1324   | 316             | 1465   | 331       |
|            | 15         | 125                  | 90 | 100 | 250 | 315 | 350 | 1400 | 940 | 610 | 550 | 28x4                   | 125 | 80                | 1379   | 352             | 1520   | 367       |
|            | 18,5       | 125                  | 90 | 100 | 250 | 315 | 350 | 1400 | 940 | 610 | 550 | 28x4                   | 125 | 80                | 1399   | 387             | 1540   | 402       |

Dimension and electrical data based on sizing definition following the instructions on page 183.

# KDN 80-400 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

| MODEL      | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA   |      | MOTOR TYPE |
|------------|------------|------------|-------------------|------|------------|
|            |            |            | POWER INPUT 50 Hz | In A |            |
| KDN 80-400 | 11         | 160M       | 3 x 400 V ~ Δ     | 20,5 | IE3        |
|            | 15         | 160L       | 3 x 400 V ~ Δ     | 28   | IE3        |
|            | 18,5       | 180M       | 3 x 400 V ~ Δ     | 34   | IE3        |
|            | 22         | 180L       | 3 x 400 V ~ Δ     | 40,5 | IE3        |
|            | 30         | 200L       | 3 x 400 V ~ Δ     | 53,5 | IE3        |
|            | 37         | 225S       | 3 x 400 V ~ Δ     | 65   | IE3        |

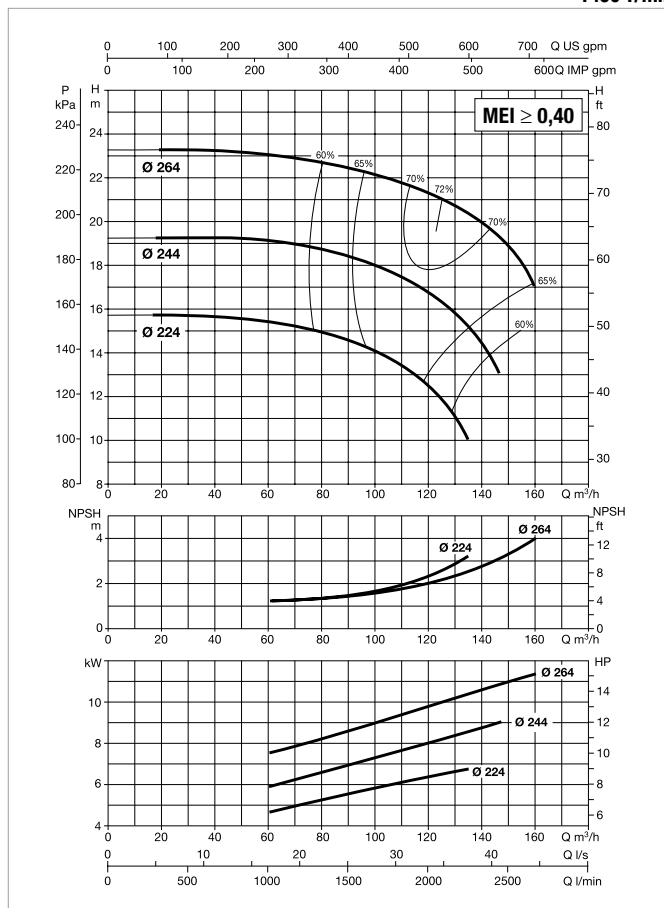
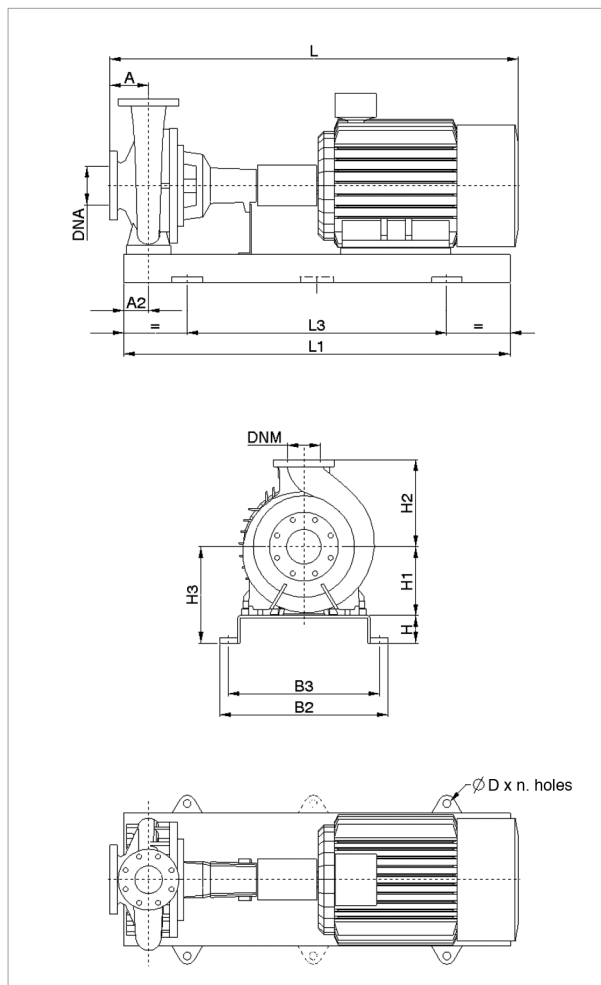
| MODEL      | POWER (kW) | UNIT DIMENSIONS (mm) |    |     |     |     |     |      |     |     |     | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |        | SPACER COUPLING |        |           |
|------------|------------|----------------------|----|-----|-----|-----|-----|------|-----|-----|-----|------------------------|-----|-------------------|--------|-----------------|--------|-----------|
|            |            | A                    | A2 | H   | H1  | H2  | H3  | L1   | L3  | B2  | B3  | D                      | DNA | DNM               | L (mm) | WEIGHT Kg       | L (mm) | WEIGHT Kg |
| KDN 80-400 | 11         | 125                  | 90 | 100 | 280 | 355 | 380 | 1400 | 940 | 610 | 550 | 28x4                   | 125 | 80                | 1324   | 365             | 1465   | 380       |
|            | 15         | 125                  | 90 | 100 | 280 | 355 | 380 | 1400 | 940 | 610 | 550 | 28x4                   | 125 | 80                | 1379   | 382             | 1520   | 397       |
|            | 18,5       | 125                  | 90 | 100 | 280 | 355 | 380 | 1400 | 940 | 610 | 550 | 28x4                   | 125 | 80                | 1399   | 417             | 1540   | 432       |
|            | 22         | 125                  | 90 | 100 | 280 | 355 | 380 | 1400 | 940 | 610 | 550 | 28x4                   | 125 | 80                | 1437   | 436             | 1578   | 451       |
|            | 30         | 125                  | 90 | 100 | 280 | 355 | 380 | 1400 | 940 | 610 | 550 | 28x4                   | 125 | 80                | 1479   | 530             | 1620   | 545       |
|            | 37         | 125                  | 90 | 100 | 280 | 355 | 380 | 1400 | 940 | 610 | 550 | 28x4                   | 125 | 80                | 1545   | 585             | 1686   | 600       |

Dimension and electrical data based on sizing definition following the instructions on page 183.

# KDN 100-250 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

| MODEL       | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA   |      | MOTOR TYPE |
|-------------|------------|------------|-------------------|------|------------|
|             |            |            | POWER INPUT 50 Hz | In A |            |
| KDN 100-250 | 5,5        | 132S       | 3 x 400 V ~ Δ     | 10,6 | IE3        |
|             | 7,5        | 132M       | 3 x 400 V ~ Δ     | 14,6 | IE3        |
|             | 11         | 160M       | 3 x 400 V ~ Δ     | 20,5 | IE3        |
|             | 15         | 160L       | 3 x 400 V ~ Δ     | 28   | IE3        |
|             | 18,5       | 180M       | 3 x 400 V ~ Δ     | 34   | IE3        |

| MODEL       | POWER (kW) | UNIT DIMENSIONS (mm) |    |     |     |     |     |      |     |     |     | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |        | SPACER COUPLING |        |           |
|-------------|------------|----------------------|----|-----|-----|-----|-----|------|-----|-----|-----|------------------------|-----|-------------------|--------|-----------------|--------|-----------|
|             |            | A                    | A2 | H   | H1  | H2  | H3  | L1   | L3  | B2  | B3  | D                      | DNA | DNM               | L (mm) | WEIGHT Kg       | L (mm) | WEIGHT Kg |
| KDN 100-250 | 5,5        | 140                  | 90 | 80  | 225 | 280 | 305 | 1250 | 840 | 540 | 490 | 24x4                   | 125 | 100               | 1144   | 264             | 1285   | 264       |
|             | 7,5        | 140                  | 90 | 80  | 225 | 280 | 305 | 1250 | 840 | 540 | 490 | 24x4                   | 125 | 100               | 1194   | 254             | 1335   | 269       |
|             | 11         | 140                  | 90 | 80  | 225 | 280 | 305 | 1250 | 840 | 540 | 490 | 24x4                   | 125 | 100               | 1339   | 291             | 1480   | 306       |
|             | 15         | 140                  | 90 | 100 | 225 | 280 | 325 | 1400 | 940 | 610 | 550 | 28x4                   | 125 | 100               | 1394   | 327             | 1535   | 342       |
|             | 18,5       | 140                  | 90 | 100 | 225 | 280 | 325 | 1400 | 940 | 610 | 550 | 28x4                   | 125 | 100               | 1414   | 362             | 1555   | 377       |

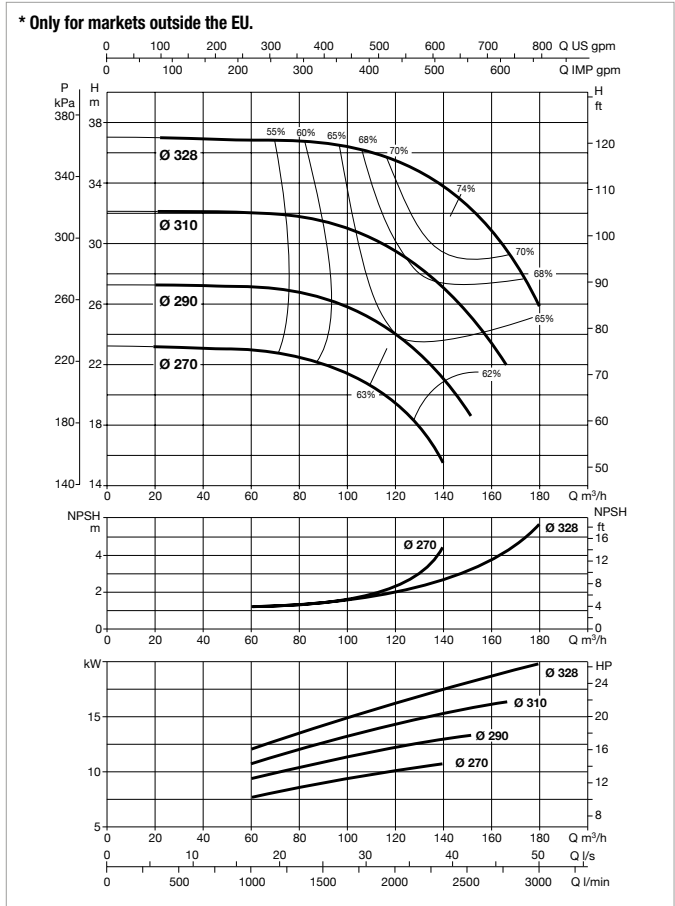
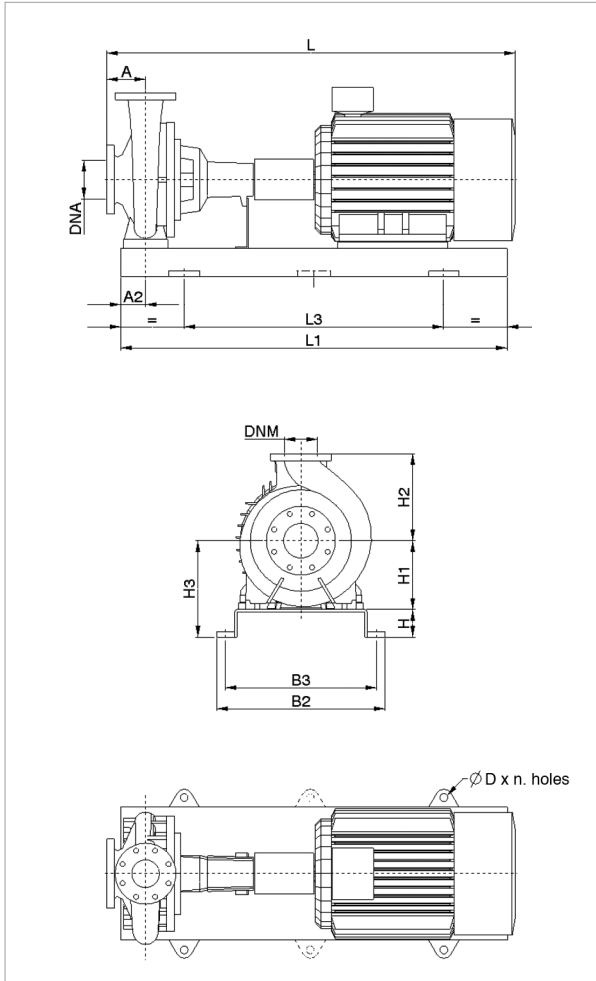
Dimension and electrical data based on sizing definition following the instructions on page 183.



# KDN 100-330 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

| MODEL       | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA   |      | MOTOR TYPE |
|-------------|------------|------------|-------------------|------|------------|
|             |            |            | POWER INPUT 50 Hz | In A |            |
| KDN 100-330 | 5,5        | 132S       | 3 x 400 V ~ Δ     | 10,6 | IE3        |
|             | 7,5        | 132M       | 3 x 400 V ~ Δ     | 14,6 | IE3        |
|             | 11         | 160M       | 3 x 400 V ~ Δ     | 20,5 | IE3        |
|             | 15         | 160L       | 3 x 400 V ~ Δ     | 28   | IE3        |
|             | 18,5       | 180M       | 3 x 400 V ~ Δ     | 34   | IE3        |
|             | 22         | 180L       | 3 x 400 V ~ Δ     | 40,5 | IE3        |
|             | 30         | 200L       | 3 x 400 V ~ Δ     | 53,5 | IE3        |

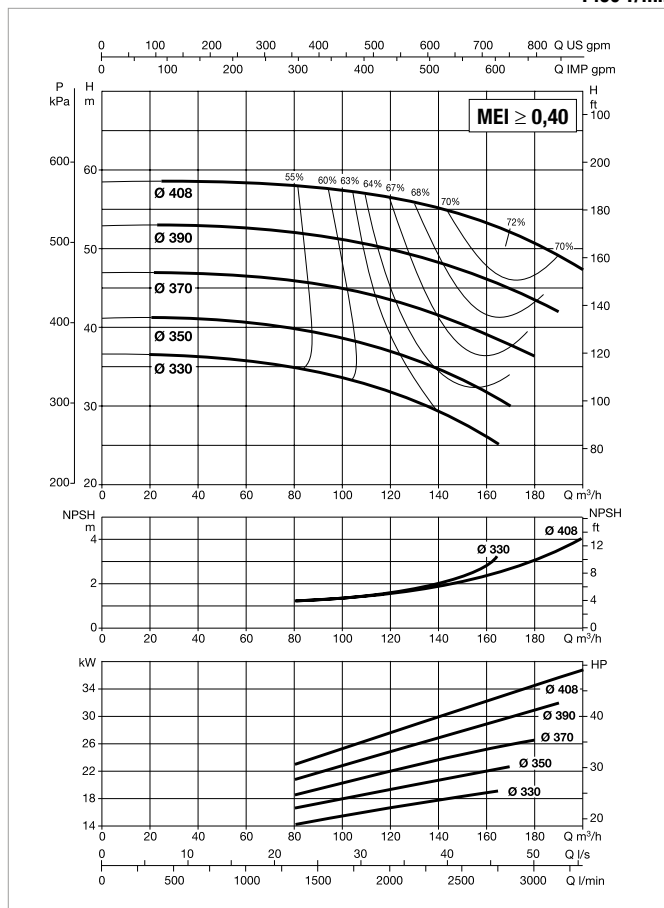
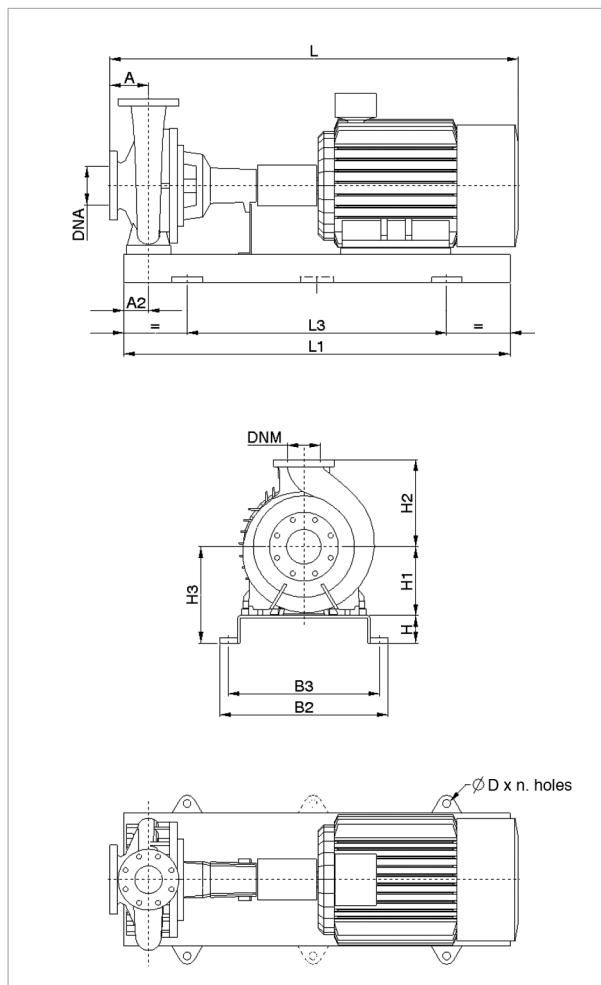
| MODEL       | POWER (kW) | UNIT DIMENSIONS (mm) |    |     |     |     |     |      |     |     |     | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |        | SPACER COUPLING |        |           |
|-------------|------------|----------------------|----|-----|-----|-----|-----|------|-----|-----|-----|------------------------|-----|-------------------|--------|-----------------|--------|-----------|
|             |            | A                    | A2 | H   | H1  | H2  | H3  | L1   | L3  | B2  | B3  | D                      | DNA | DNM               | L (mm) | WEIGHT Kg       | L (mm) | WEIGHT Kg |
| KDN 100-330 | 5,5        | 140                  | 90 | 80  | 250 | 315 | 330 | 1250 | 840 | 540 | 490 | 24x4                   | 125 | 100               | 1144   | 304             | 1285   | 304       |
|             | 7,5        | 140                  | 90 | 80  | 250 | 315 | 330 | 1250 | 840 | 540 | 490 | 24x4                   | 125 | 100               | 1194   | 294             | 1335   | 309       |
|             | 11         | 140                  | 90 | 80  | 250 | 315 | 330 | 1250 | 840 | 540 | 490 | 24x4                   | 125 | 100               | 1339   | 331             | 1480   | 346       |
|             | 15         | 140                  | 90 | 100 | 250 | 315 | 350 | 1400 | 940 | 610 | 550 | 28x4                   | 125 | 100               | 1394   | 367             | 1535   | 382       |
|             | 18,5       | 140                  | 90 | 100 | 250 | 315 | 350 | 1400 | 940 | 610 | 550 | 28x4                   | 125 | 100               | 1414   | 402             | 1555   | 417       |
|             | 22         | 140                  | 90 | 100 | 250 | 315 | 350 | 1400 | 940 | 610 | 550 | 28x4                   | 125 | 100               | 1452   | 421             | 1593   | 436       |
|             | 30         | 140                  | 90 | 100 | 250 | 315 | 350 | 1400 | 940 | 610 | 550 | 28x4                   | 125 | 100               | 1494   | 515             | 1635   | 530       |

Dimension and electrical data based on sizing definition following the instructions on page 183.

# KDN 100-400 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

| MODEL       | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA   |      | MOTOR TYPE |
|-------------|------------|------------|-------------------|------|------------|
|             |            |            | POWER INPUT 50 Hz | In A |            |
| KDN 100-400 | 11         | 160M       | 3 x 400 V ~ Δ     | 20,5 | IE3        |
|             | 15         | 160L       | 3 x 400 V ~ Δ     | 28   | IE3        |
|             | 18,5       | 180M       | 3 x 400 V ~ Δ     | 34   | IE3        |
|             | 22         | 180L       | 3 x 400 V ~ Δ     | 40,5 | IE3        |
|             | 30         | 200L       | 3 x 400 V ~ Δ     | 53,5 | IE3        |
|             | 37         | 225S       | 3 x 400 V ~ Δ     | 65   | IE3        |
|             | 45         | 225M       | 3 x 400 V ~ Δ     | 68,5 | IE3        |

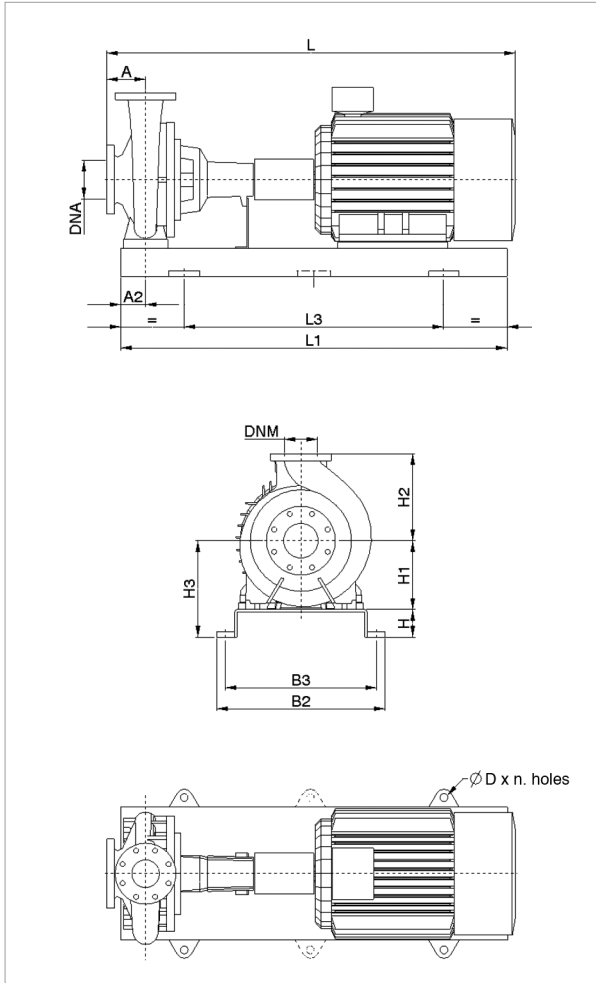
| MODEL       | POWER (kW) | UNIT DIMENSIONS (mm) |     |     |     |     |     |      |      |     |     | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |        | SPACER COUPLING |        |           |
|-------------|------------|----------------------|-----|-----|-----|-----|-----|------|------|-----|-----|------------------------|-----|-------------------|--------|-----------------|--------|-----------|
|             |            | A                    | A2  | H   | H1  | H2  | H3  | L1   | L3   | B2  | B3  | D                      | DNA | DNM               | L (mm) | WEIGHT Kg       | L (mm) | WEIGHT Kg |
| KDN 100-400 | 11         | 140                  | 110 | 100 | 280 | 355 | 380 | 1600 | 1060 | 660 | 600 | 28x4                   | 125 | 100               | 1339   | 397             | 1480   | 412       |
|             | 15         | 140                  | 110 | 100 | 280 | 355 | 380 | 1600 | 1060 | 660 | 600 | 28x4                   | 125 | 100               | 1394   | 414             | 1535   | 429       |
|             | 18,5       | 140                  | 110 | 100 | 280 | 355 | 380 | 1600 | 1060 | 660 | 600 | 28x4                   | 125 | 100               | 1414   | 449             | 1555   | 464       |
|             | 22         | 140                  | 110 | 100 | 280 | 355 | 380 | 1600 | 1060 | 660 | 600 | 28x4                   | 125 | 100               | 1452   | 468             | 1593   | 483       |
|             | 30         | 140                  | 110 | 100 | 280 | 355 | 380 | 1600 | 1060 | 660 | 600 | 28x4                   | 125 | 100               | 1494   | 562             | 1635   | 577       |
|             | 37         | 140                  | 110 | 100 | 280 | 355 | 380 | 1600 | 1060 | 660 | 600 | 28x4                   | 125 | 100               | 1560   | 617             | 1701   | 632       |
|             | 45         | 140                  | 110 | 100 | 280 | 355 | 380 | 1600 | 1060 | 660 | 600 | 28x4                   | 125 | 100               | 1590   | 647             | 1731   | 662       |

Dimension and electrical data based on sizing definition following the instructions on page 183.

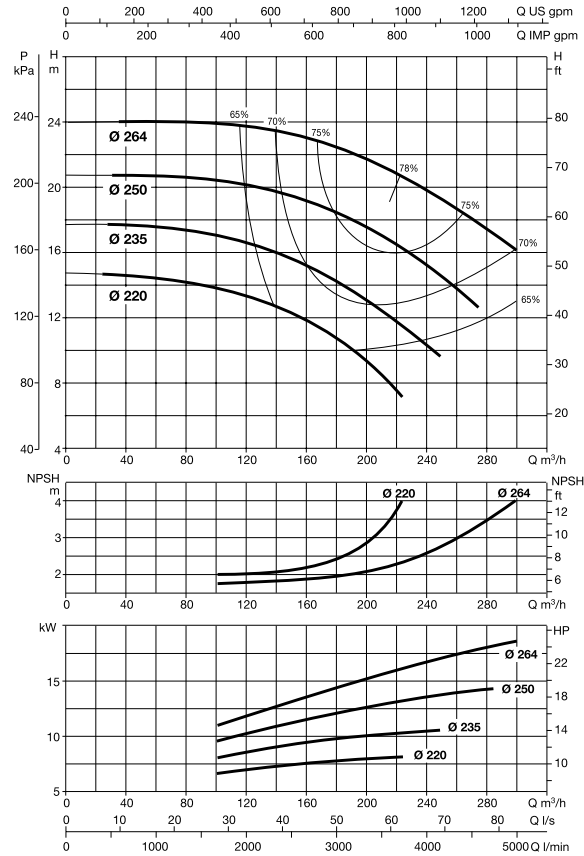
# KDN 125-250 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 1450 1/min



\* Only for markets outside the EU.



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

| MODEL       | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA   |      | MOTOR TYPE |
|-------------|------------|------------|-------------------|------|------------|
|             |            |            | POWER INPUT 50 Hz | In A |            |
| KDN 125-250 | 5,5        | 132S       | 3 x 400 V ~ Δ     | 10,6 | IE3        |
|             | 7,5        | 132M       | 3 x 400 V ~ Δ     | 14,6 | IE3        |
|             | 11         | 160M       | 3 x 400 V ~ Δ     | 20,5 | IE3        |
|             | 15         | 160L       | 3 x 400 V ~ Δ     | 28   | IE3        |
|             | 18,5       | 180M       | 3 x 400 V ~ Δ     | 34   | IE3        |
|             | 22         | 180L       | 3 x 400 V ~ Δ     | 40,5 | IE3        |

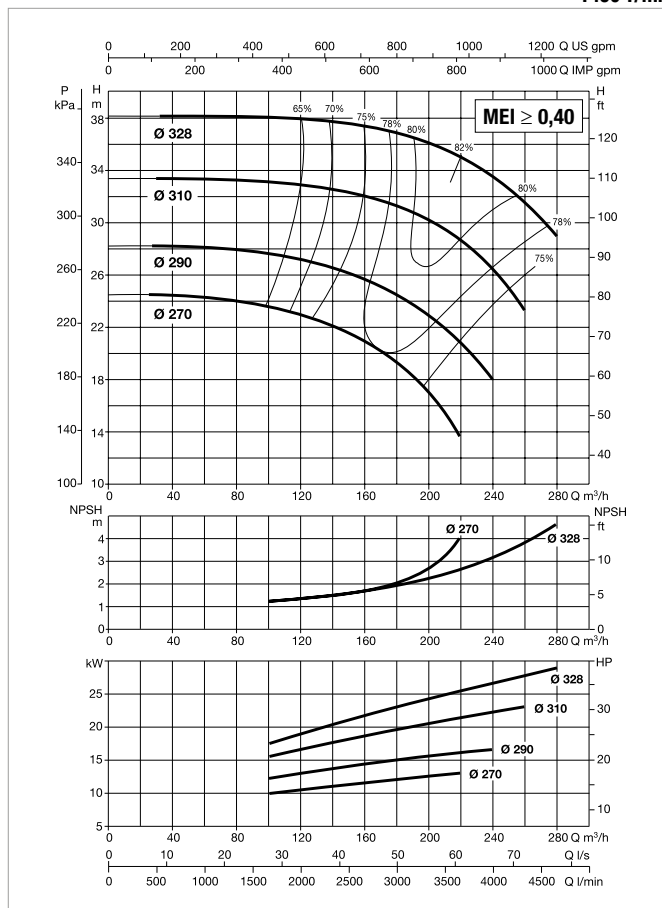
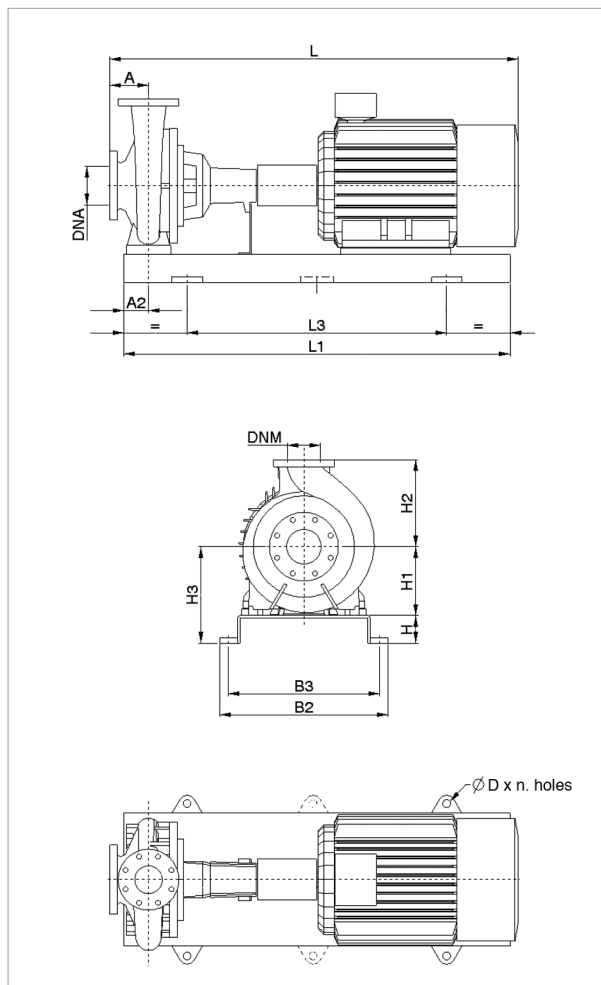
| MODEL       | POWER (kW) | UNIT DIMENSIONS (mm) |    |     |     |     |     |      |     |     |     |      | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |           | SPACER COUPLING |           |
|-------------|------------|----------------------|----|-----|-----|-----|-----|------|-----|-----|-----|------|------------------------|-----|-------------------|-----------|-----------------|-----------|
|             |            | A                    | A2 | H   | H1  | H2  | H3  | L1   | L3  | B2  | B3  | D    | DNA                    | DNM | L (mm)            | WEIGHT Kg | L (mm)          | WEIGHT Kg |
| KDN 125-250 | 5,5        | 140                  | 90 | 80  | 250 | 355 | 330 | 1250 | 840 | 540 | 490 | 24x4 | 150                    | 125 | 1144              | 274       | 1285            | 274       |
|             | 7,5        | 140                  | 90 | 80  | 250 | 355 | 330 | 1250 | 840 | 540 | 490 | 24x4 | 150                    | 125 | 1194              | 264       | 1335            | 279       |
|             | 11         | 140                  | 90 | 80  | 250 | 355 | 330 | 1250 | 840 | 540 | 490 | 24x4 | 150                    | 125 | 1339              | 301       | 1480            | 316       |
|             | 15         | 140                  | 90 | 100 | 250 | 355 | 350 | 1400 | 940 | 610 | 550 | 28x4 | 150                    | 125 | 1394              | 337       | 1535            | 352       |
|             | 18,5       | 140                  | 90 | 100 | 250 | 355 | 350 | 1400 | 940 | 610 | 550 | 28x4 | 150                    | 125 | 1414              | 372       | 1555            | 387       |
|             | 22         | 140                  | 90 | 100 | 250 | 355 | 350 | 1400 | 940 | 610 | 550 | 28x4 | 150                    | 125 | 1452              | 391       | 1593            | 406       |

Dimension and electrical data based on sizing definition following the instructions on page 183.

# KDN 125-330 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

| MODEL       | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA   |      | MOTOR TYPE |
|-------------|------------|------------|-------------------|------|------------|
|             |            |            | POWER INPUT 50 Hz | In A |            |
| KDN 125-330 | 11         | 160M       | 3 x 400 V ~ Δ     | 20,5 | IE3        |
|             | 15         | 160L       | 3 x 400 V ~ Δ     | 28   | IE3        |
|             | 18,5       | 180M       | 3 x 400 V ~ Δ     | 34   | IE3        |
|             | 22         | 180L       | 3 x 400 V ~ Δ     | 40,5 | IE3        |
|             | 30         | 200L       | 3 x 400 V ~ Δ     | 53,5 | IE3        |
|             | 37         | 225S       | 3 x 400 V ~ Δ     | 65   | IE3        |

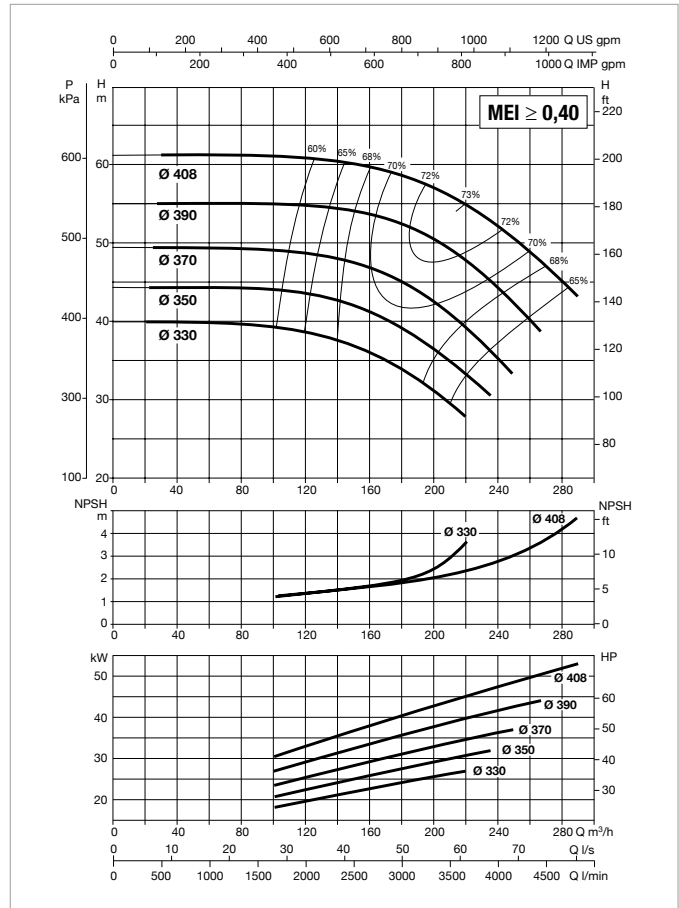
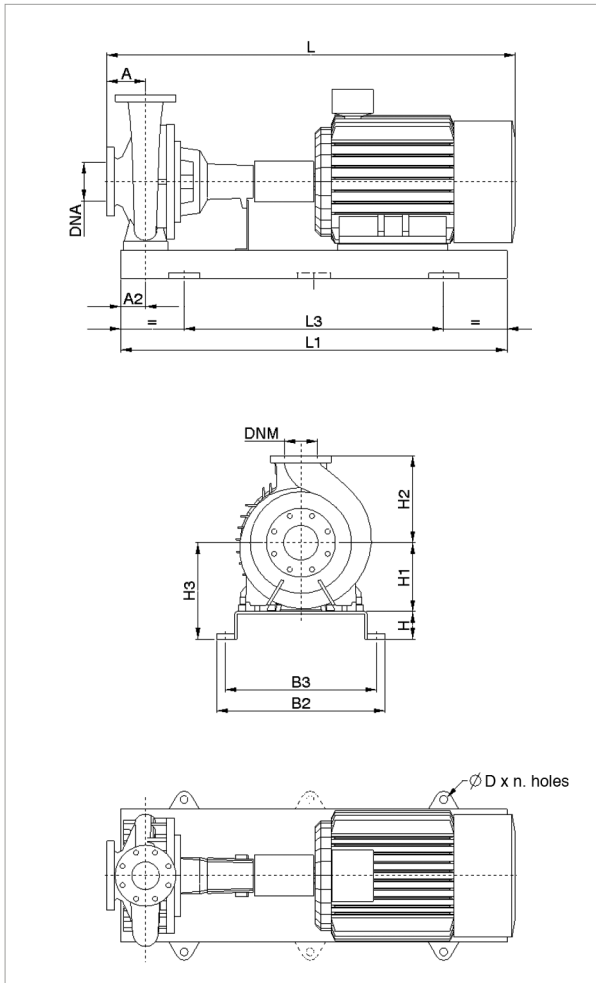
| MODEL       | POWER (kW) | UNIT DIMENSIONS (mm) |     |     |     |     |     |      |      |     |     | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |        | SPACER COUPLING |        |           |
|-------------|------------|----------------------|-----|-----|-----|-----|-----|------|------|-----|-----|------------------------|-----|-------------------|--------|-----------------|--------|-----------|
|             |            | A                    | A2  | H   | H1  | H2  | H3  | L1   | L3   | B2  | B3  | D                      | DNA | DNM               | L (mm) | WEIGHT Kg       | L (mm) | WEIGHT Kg |
| KDN 125-330 | 11         | 140                  | 110 | 100 | 280 | 355 | 380 | 1600 | 1060 | 660 | 600 | 28x4                   | 150 | 125               | 1339   | 387             | 1480   | 402       |
|             | 15         | 140                  | 110 | 100 | 280 | 355 | 380 | 1600 | 1060 | 660 | 600 | 28x4                   | 150 | 125               | 1394   | 404             | 1535   | 419       |
|             | 18,5       | 140                  | 110 | 100 | 280 | 355 | 380 | 1600 | 1060 | 660 | 600 | 28x4                   | 150 | 125               | 1414   | 439             | 1555   | 454       |
|             | 22         | 140                  | 110 | 100 | 280 | 355 | 380 | 1600 | 1060 | 660 | 600 | 28x4                   | 150 | 125               | 1452   | 458             | 1593   | 473       |
|             | 30         | 140                  | 110 | 100 | 280 | 355 | 380 | 1600 | 1060 | 660 | 600 | 28x4                   | 150 | 125               | 1494   | 552             | 1635   | 567       |
|             | 37         | 140                  | 110 | 100 | 280 | 355 | 380 | 1600 | 1060 | 660 | 600 | 28x4                   | 150 | 125               | 1560   | 607             | 1701   | 622       |

Dimension and electrical data based on sizing definition following the instructions on page 183.

# KDN 125-400 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

| MODEL       | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA   |      | MOTOR TYPE |
|-------------|------------|------------|-------------------|------|------------|
|             |            |            | POWER INPUT 50 Hz | In A |            |
| KDN 125-400 | 18,5       | 180M       | 3 x 400 V ~ Δ     | 34   | IE3        |
|             | 22         | 180L       | 3 x 400 V ~ Δ     | 40,5 | IE3        |
|             | 30         | 200L       | 3 x 400 V ~ Δ     | 53,5 | IE3        |
|             | 37         | 225S       | 3 x 400 V ~ Δ     | 65   | IE3        |
|             | 45         | 225M       | 3 x 400 V ~ Δ     | 78,5 | IE3        |
|             | 55         | 250M       | 3 x 400 V ~ Δ     | 96   | IE3        |
|             | 75         | 280S       | 3 x 400 V ~ Δ     | 130  | IE3        |

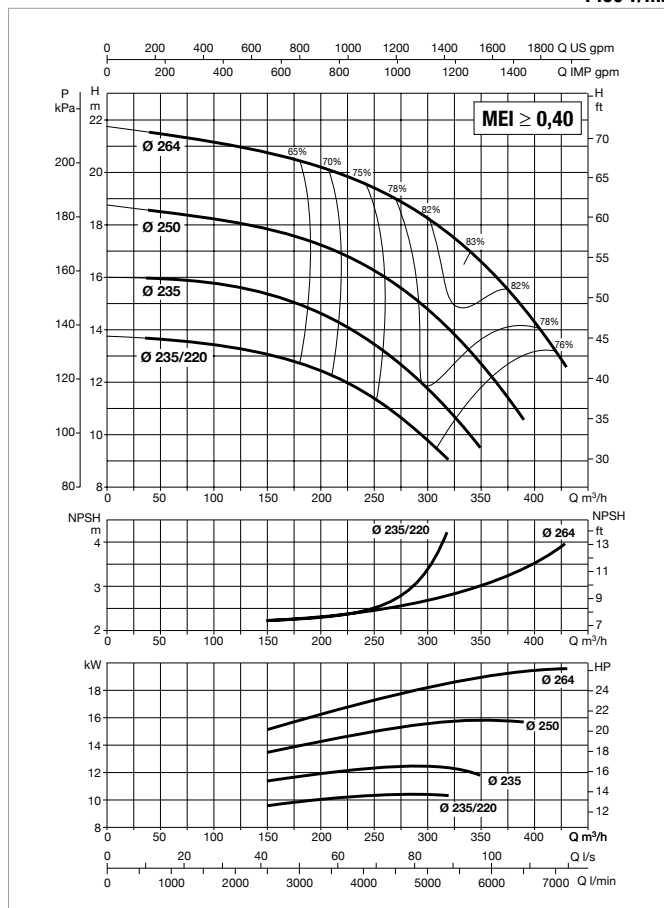
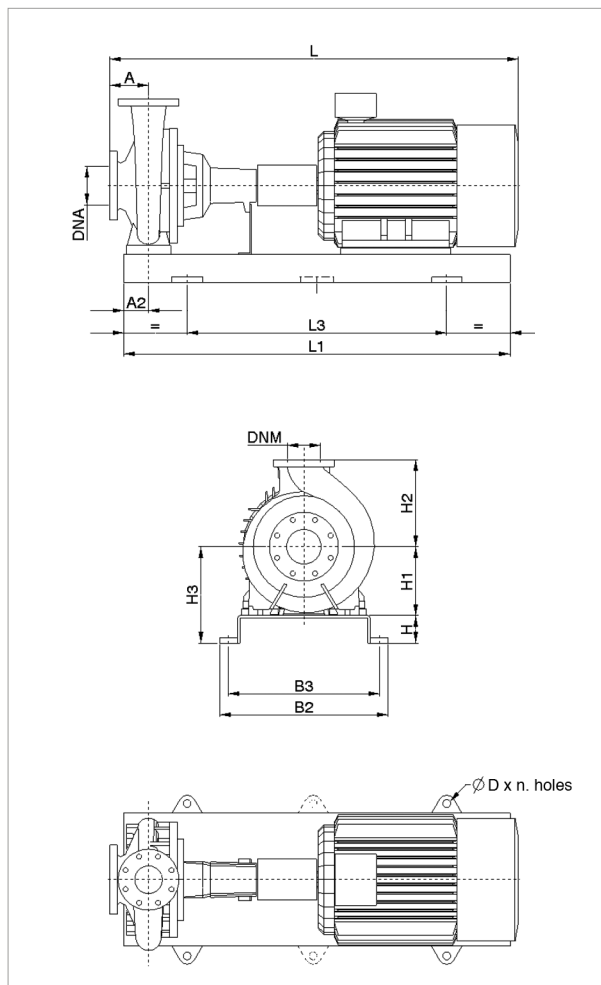
| MODEL       | POWER (kW) | UNIT DIMENSIONS (mm) |     |     |     |     |     |      |      |     |     | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |        | SPACER COUPLING |        |           |
|-------------|------------|----------------------|-----|-----|-----|-----|-----|------|------|-----|-----|------------------------|-----|-------------------|--------|-----------------|--------|-----------|
|             |            | A                    | A2  | H   | H1  | H2  | H3  | L1   | L3   | B2  | B3  | D                      | DNA | DNM               | L (mm) | WEIGHT Kg       | L (mm) | WEIGHT Kg |
| KDN 125-400 | 18,5       | 140                  | 110 | 100 | 315 | 400 | 415 | 1600 | 1060 | 660 | 600 | 28x4                   | 150 | 125               | 1414   | 469             | 1555   | 484       |
|             | 22         | 140                  | 110 | 100 | 315 | 400 | 415 | 1600 | 1060 | 660 | 600 | 28x4                   | 150 | 125               | 1452   | 488             | 1593   | 503       |
|             | 30         | 140                  | 110 | 100 | 315 | 400 | 415 | 1600 | 1060 | 660 | 600 | 28x4                   | 150 | 125               | 1494   | 582             | 1635   | 597       |
|             | 37         | 140                  | 110 | 100 | 315 | 400 | 415 | 1600 | 1060 | 660 | 600 | 28x4                   | 150 | 125               | 1560   | 637             | 1701   | 652       |
|             | 45         | 140                  | 110 | 100 | 315 | 400 | 415 | 1600 | 1060 | 660 | 600 | 28x4                   | 150 | 125               | 1590   | 667             | 1731   | 682       |
|             | 55         | 140                  | 110 | 100 | 315 | 400 | 415 | 1600 | 1060 | 660 | 600 | 28x4                   | 150 | 125               | 1660   | 774             | 1801   | 789       |
|             | 75         | 140                  | 110 | 100 | 315 | 400 | 415 | 1800 | 1200 | 730 | 670 | 28x4                   | 150 | 125               | 1715   | 962             | 1856   | 977       |

Dimension and electrical data based on sizing definition following the instructions on page 183.

# KDN 150-250 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

| MODEL       | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA   |      | MOTOR TYPE |
|-------------|------------|------------|-------------------|------|------------|
|             |            |            | POWER INPUT 50 Hz | In A |            |
| KDN 150-250 | 11         | 160M       | 3 x 400 V ~ Δ     | 20,5 | IE3        |
|             | 15         | 160L       | 3 x 400 V ~ Δ     | 28   | IE3        |
|             | 18,5       | 180M       | 3 x 400 V ~ Δ     | 34   | IE3        |
|             | 22         | 180L       | 3 x 400 V ~ Δ     | 40,5 | IE3        |
|             | 30         | 200L       | 3 x 400 V ~ Δ     | 53,5 | IE3        |

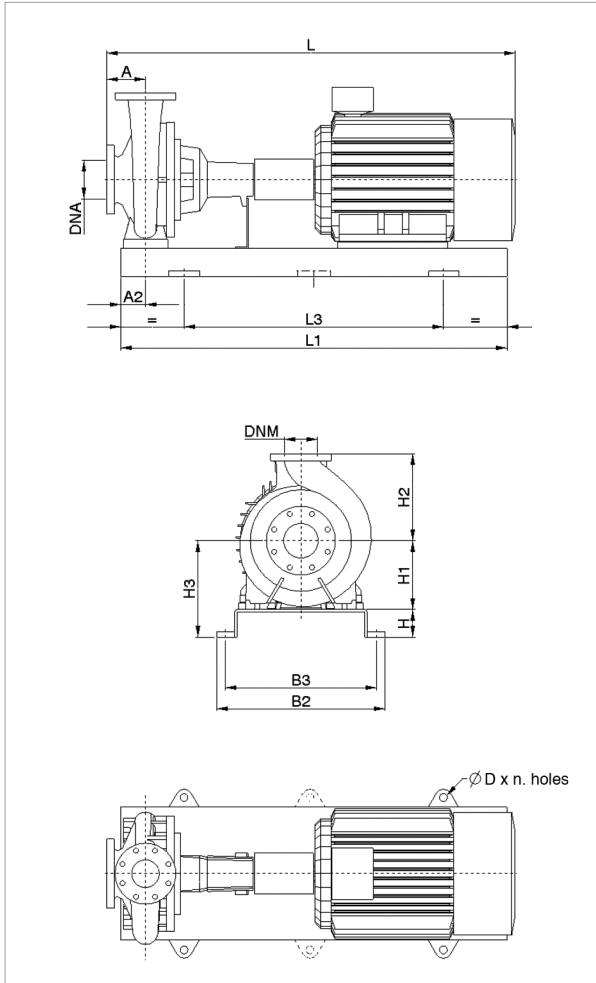
| MODEL       | POWER (kW) | UNIT DIMENSIONS (mm) |     |     |     |     |     |      |      |     |     | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |        | SPACER COUPLING |        |           |
|-------------|------------|----------------------|-----|-----|-----|-----|-----|------|------|-----|-----|------------------------|-----|-------------------|--------|-----------------|--------|-----------|
|             |            | A                    | A2  | H   | H1  | H2  | H3  | L1   | L3   | B2  | B3  | D                      | DNA | DNM               | L (mm) | WEIGHT Kg       | L (mm) | WEIGHT Kg |
| KDN 150-250 | 11         | 160                  | 110 | 100 | 280 | 375 | 380 | 1600 | 1060 | 660 | 600 | 28x4                   | 200 | 150               | 1359   | 377             | 1540   | 392       |
|             | 15         | 160                  | 110 | 100 | 280 | 375 | 380 | 1600 | 1060 | 660 | 600 | 28x4                   | 200 | 150               | 1414   | 394             | 1595   | 409       |
|             | 18,5       | 160                  | 110 | 100 | 280 | 375 | 380 | 1600 | 1060 | 660 | 600 | 28x4                   | 200 | 150               | 1434   | 429             | 1615   | 444       |
|             | 22         | 160                  | 110 | 100 | 280 | 375 | 380 | 1600 | 1060 | 660 | 600 | 28x4                   | 200 | 150               | 1472   | 448             | 1653   | 463       |
|             | 30         | 160                  | 110 | 100 | 280 | 375 | 380 | 1600 | 1060 | 660 | 600 | 28x4                   | 200 | 150               | 1514   | 542             | 1695   | 557       |

Dimension and electrical data based on sizing definition following the instructions on page 183.

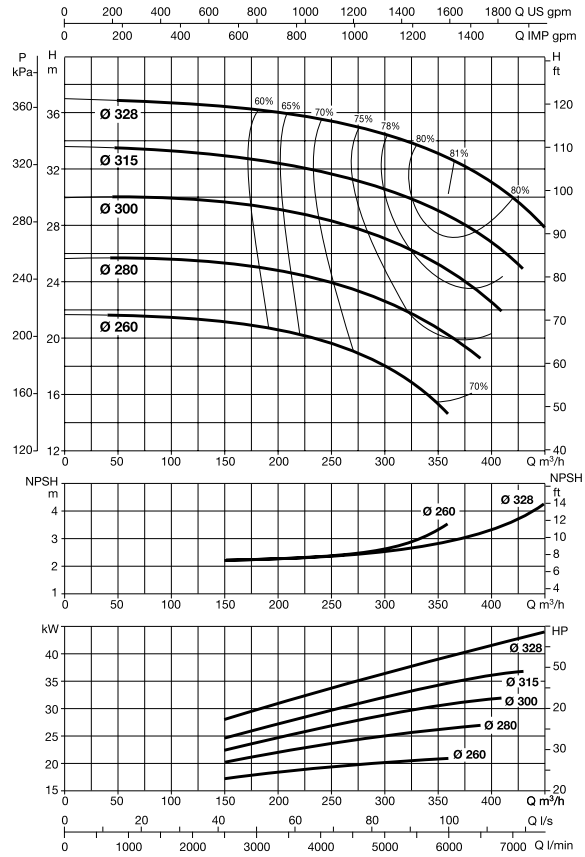
# KDN 150-330 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 1450 1/min



\* Only for markets outside the EU.



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

| MODEL       | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA   |      | MOTOR TYPE |
|-------------|------------|------------|-------------------|------|------------|
|             |            |            | POWER INPUT 50 Hz | In A |            |
| KDN 150-330 | 18,5       | 180M       | 3 x 400 V ~ Δ     | 34   | IE3        |
|             | 22         | 180L       | 3 x 400 V ~ Δ     | 40,5 | IE3        |
|             | 30         | 200L       | 3 x 400 V ~ Δ     | 53,5 | IE3        |
|             | 37         | 225S       | 3 x 400 V ~ Δ     | 65   | IE3        |
|             | 45         | 225M       | 3 x 400 V ~ Δ     | 78,5 | IE3        |
|             | 55         | 250M       | 3 x 400 V ~ Δ     | 96   | IE3        |

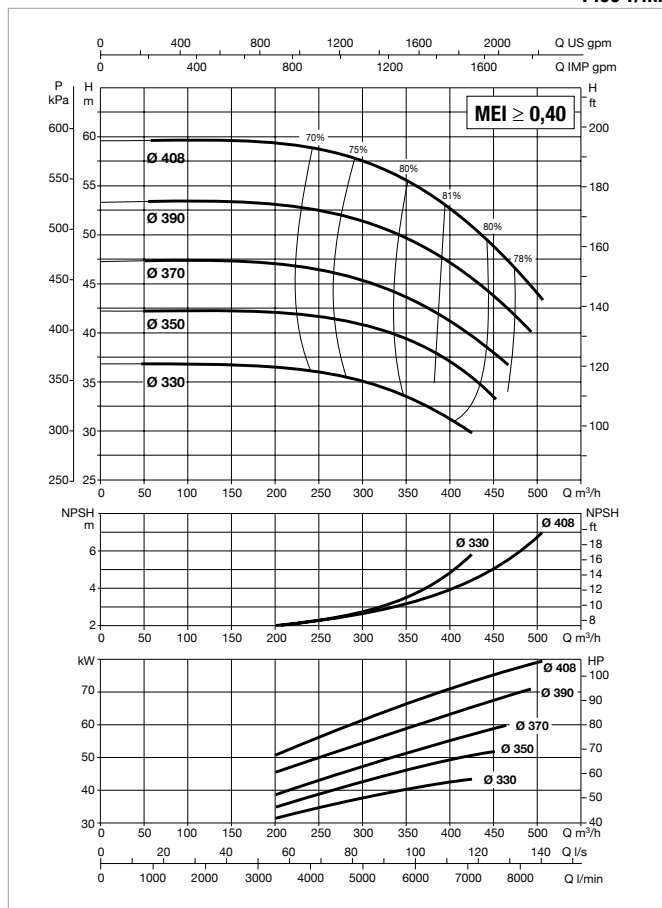
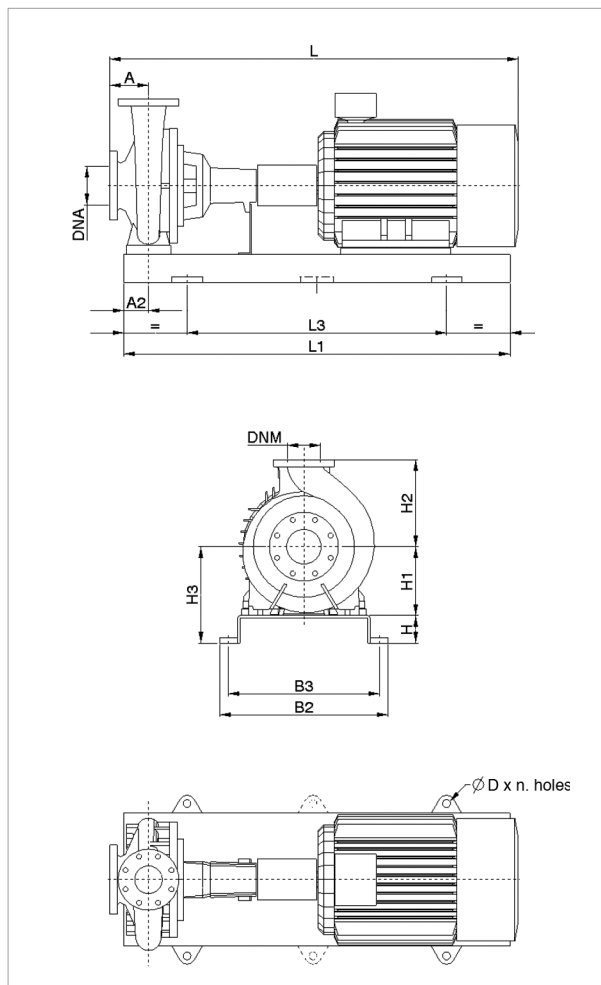
| MODEL       | POWER (kW) | UNIT DIMENSIONS (mm) |     |     |     |     |     |      |      |     |     | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |        | SPACER COUPLING |        |           |
|-------------|------------|----------------------|-----|-----|-----|-----|-----|------|------|-----|-----|------------------------|-----|-------------------|--------|-----------------|--------|-----------|
|             |            | A                    | A2  | H   | H1  | H2  | H3  | L1   | L3   | B2  | B3  | D                      | DNA | DNM               | L (mm) | WEIGHT Kg       | L (mm) | WEIGHT Kg |
| KDN 150-330 | 18,5       | 160                  | 110 | 100 | 315 | 400 | 415 | 1800 | 1200 | 730 | 670 | 28x4                   | 200 | 150               | 1574   | 590             | 1755   | 605       |
|             | 22         | 160                  | 110 | 100 | 315 | 400 | 415 | 1800 | 1200 | 730 | 670 | 28x4                   | 200 | 150               | 1612   | 609             | 1793   | 624       |
|             | 30         | 160                  | 110 | 100 | 315 | 400 | 415 | 1800 | 1200 | 730 | 670 | 28x4                   | 200 | 150               | 1654   | 703             | 1835   | 718       |
|             | 37         | 160                  | 110 | 100 | 315 | 400 | 415 | 1800 | 1200 | 730 | 670 | 28x4                   | 200 | 150               | 1720   | 758             | 1901   | 773       |
|             | 45         | 160                  | 110 | 100 | 315 | 400 | 415 | 1800 | 1200 | 730 | 670 | 28x4                   | 200 | 150               | 1750   | 788             | 1931   | 803       |
|             | 55         | 160                  | 110 | 100 | 315 | 400 | 415 | 1800 | 1200 | 730 | 670 | 28x4                   | 200 | 150               | 1820   | 895             | 2001   | 910       |

Dimension and electrical data based on sizing definition following the instructions on page 183.

# KDN 150-400 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

**= 1450 1/min**



**For MEI index refer to the hydraulic efficiency section.**

The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

| MODEL       | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA   |      | MOTOR TYPE |
|-------------|------------|------------|-------------------|------|------------|
|             |            |            | POWER INPUT 50 Hz | In A |            |
| KDN 150-400 | 37         | 225S       | 3 x 400 V ~ Δ     | 65   | IE3        |
|             | 45         | 225M       | 3 x 400 V ~ Δ     | 78,5 | IE3        |
|             | 55         | 250M       | 3 x 400 V ~ Δ     | 96   | IE3        |
|             | 75         | 280S       | 3 x 400 V ~ Δ     | 130  | IE3        |
|             | 90         | 280M       | 3 x 400 V ~ Δ     | 156  | IE3        |
|             | 110        | 315S       | 3 x 400 V ~ Δ     | 190  | IE3        |

| MODEL       | POWER (kW) | UNIT DIMENSIONS (mm) |     |     |     |     |     |      |      |     |     | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |        | STANDARD COUPLING |        |           |
|-------------|------------|----------------------|-----|-----|-----|-----|-----|------|------|-----|-----|------------------------|-----|-------------------|--------|-------------------|--------|-----------|
|             |            | A                    | A2  | H   | H1  | H2  | H3  | L1   | L3   | B2  | B3  | D                      | DNA | DNM               | L (mm) | WEIGHT Kg         | L (mm) | WEIGHT Kg |
| KDN 150-400 | 37         | 160                  | 110 | 100 | 315 | 450 | 415 | 1800 | 1200 | 730 | 670 | 28x4                   | 200 | 150               | 1720   | 801               | 1901   | 816       |
|             | 45         | 160                  | 110 | 100 | 315 | 450 | 415 | 1800 | 1200 | 730 | 670 | 28x4                   | 200 | 150               | 1750   | 831               | 1931   | 846       |
|             | 55         | 160                  | 110 | 100 | 315 | 450 | 415 | 1800 | 1200 | 730 | 670 | 28x4                   | 200 | 150               | 1820   | 938               | 2001   | 953       |
|             | 75         | 160                  | 110 | 100 | 315 | 450 | 415 | 1800 | 1200 | 730 | 670 | 28x4                   | 200 | 150               | 1875   | 1040              | 2056   | 1055      |
|             | 90         | 160                  | 110 | 100 | 315 | 450 | 415 | 1800 | 1200 | 730 | 670 | 28x4                   | 200 | 150               | 1925   | 1145              | 2106   | 1160      |
|             | 110        | 160                  | 110 | 120 | 315 | 450 | 435 | 2000 | 1340 | 910 | 830 | 28x4                   | 200 | 150               | 2175   | 1595              | 2356   | 1610      |

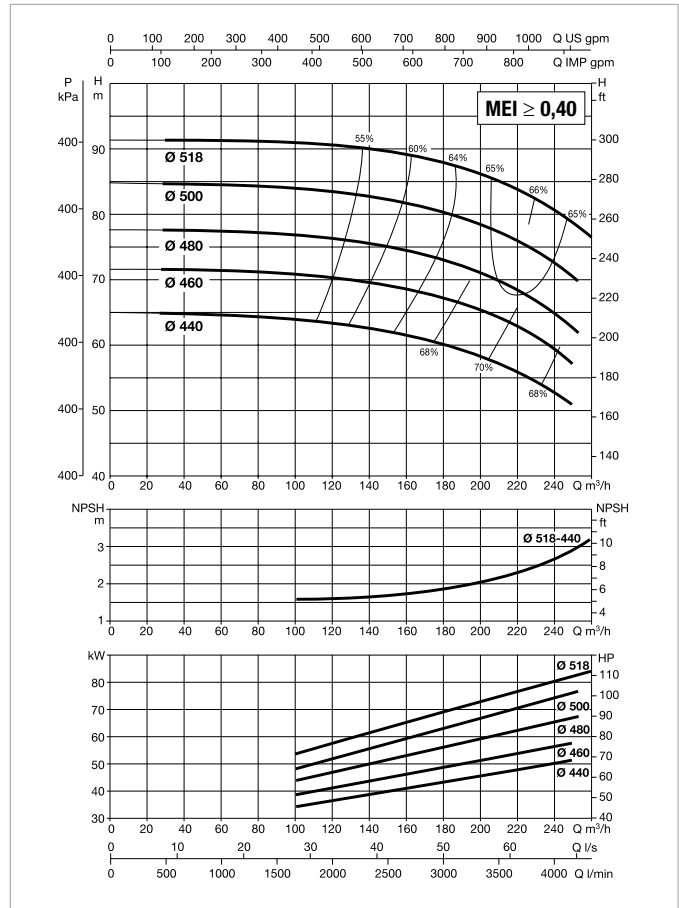
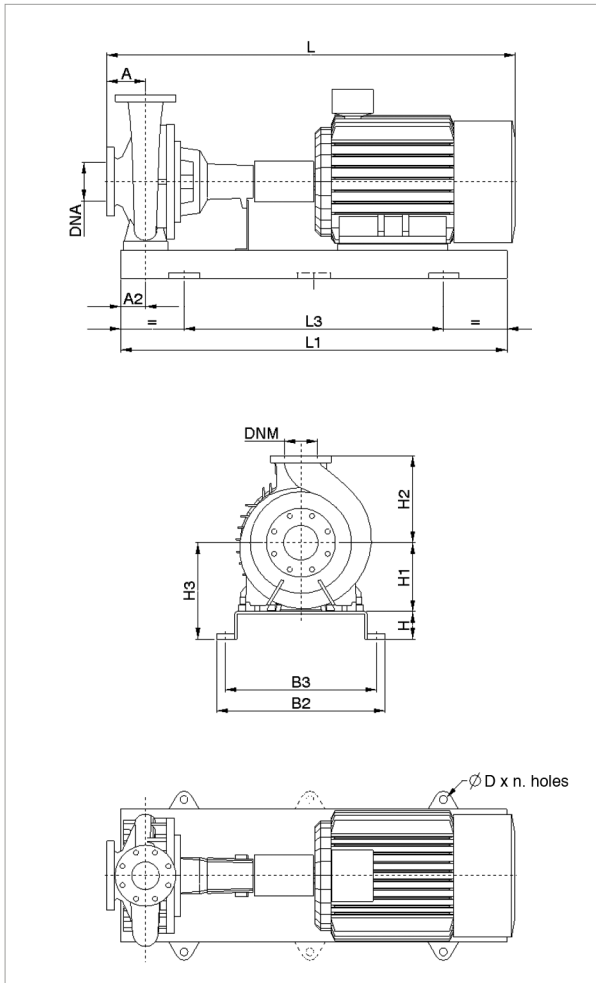
Dimension and electrical data based on sizing definition following the instructions on page 183.



# KDN 150-550A - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 1450 /min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

| MODEL        | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA   |      | MOTOR TYPE |
|--------------|------------|------------|-------------------|------|------------|
|              |            |            | POWER INPUT 50 Hz | In A |            |
| KDN 150-500A | 37         | 225S       | 3 x 400 V ~ Δ     | 65   | IE3        |
|              | 45         | 225M       | 3 x 400 V ~ Δ     | 78,5 | IE3        |
|              | 55         | 250M       | 3 x 400 V ~ Δ     | 96   | IE3        |
|              | 75         | 280S       | 3 x 400 V ~ Δ     | 130  | IE3        |
|              | 90         | 280M       | 3 x 400 V ~ Δ     | 156  | IE3        |
|              | 110        | 315S       | 3 x 400 V ~ Δ     | 190  | IE3        |

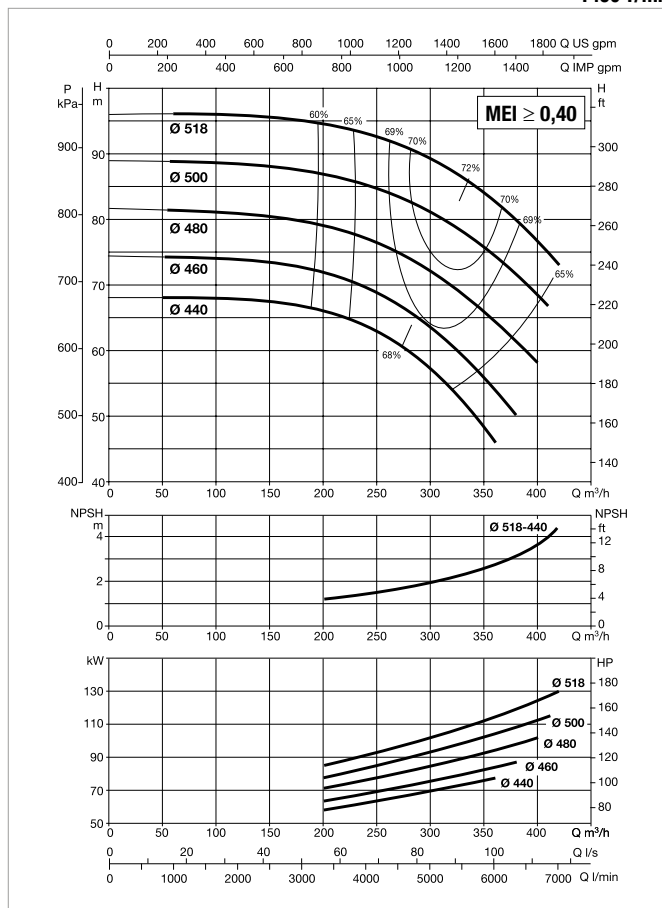
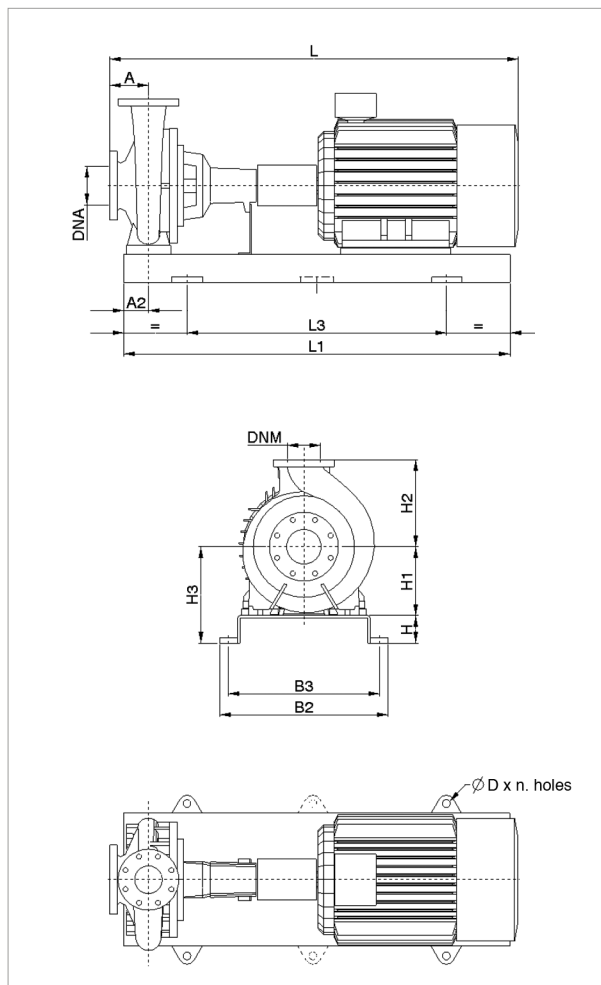
| MODEL        | POWER (kW) | UNIT DIMENSIONS (mm) |     |     |     |     |     |      |      |     |     | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |        | SPACER COUPLING |        |           |
|--------------|------------|----------------------|-----|-----|-----|-----|-----|------|------|-----|-----|------------------------|-----|-------------------|--------|-----------------|--------|-----------|
|              |            | A                    | A2  | H   | H1  | H2  | H3  | L1   | L3   | B2  | B3  | D                      | DNA | DNM               | L (mm) | WEIGHT Kg       | L (mm) | WEIGHT Kg |
| KDN 150-500A | 37         | 180                  | 110 | 100 | 355 | 500 | 455 | 1800 | 1200 | 730 | 670 | 28x4                   | 200 | 150               | 1740   | 913             | 1921   | 928       |
|              | 45         | 180                  | 110 | 100 | 355 | 500 | 455 | 1800 | 1200 | 730 | 670 | 28x4                   | 200 | 150               | 1770   | 943             | 1951   | 958       |
|              | 55         | 180                  | 110 | 100 | 355 | 500 | 455 | 1800 | 1200 | 730 | 670 | 28x4                   | 200 | 150               | 1840   | 1050            | 2021   | 1065      |
|              | 75         | 180                  | 110 | 100 | 355 | 500 | 455 | 1800 | 1200 | 730 | 670 | 28x4                   | 200 | 150               | 1895   | 1152            | 2076   | 1167      |
|              | 90         | 180                  | 110 | 100 | 355 | 500 | 455 | 1800 | 1200 | 730 | 670 | 28x4                   | 200 | 150               | 1945   | 1257            | 2126   | 1272      |
|              | 110        | 180                  | 110 | 120 | 355 | 500 | 475 | 2000 | 1340 | 910 | 830 | 28x4                   | 200 | 150               | 2195   | 1707            | 2376   | 1722      |

Dimension and electrical data based on sizing definition following the instructions on page 183.

# KDN 150-500 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

**= 1450 1/min**



**For MEI index refer to the hydraulic efficiency section.**

The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

| MODEL       | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA   |      | MOTOR TYPE |
|-------------|------------|------------|-------------------|------|------------|
|             |            |            | POWER INPUT 50 Hz | In A |            |
| KDN 150-500 | 75         | 280S       | 3 x 400 V ~ Δ     | 130  | IE3        |
|             | 90         | 280M       | 3 x 400 V ~ Δ     | 156  | IE3        |
|             | 110        | 315S       | 3 x 400 V ~ Δ     | 190  | IE3        |
|             | 132        | 315M       | 3 x 400 V ~ Δ     | 230  | IE3        |
|             | 160        | 315L       | 3 x 400 V ~ Δ     | 275  | IE3        |
|             | 200        | 315L       | 3 x 400 V ~ Δ     | 340  | IE3        |
|             | 250        | 355        | 3 x 400 V ~ Δ     | 420  | IE3        |

| MODEL       | POWER (kW) | UNIT DIMENSION (mm) |     |     |     |     |     |      |      |     |     | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |        | SPACER COUPLING |        |           |
|-------------|------------|---------------------|-----|-----|-----|-----|-----|------|------|-----|-----|------------------------|-----|-------------------|--------|-----------------|--------|-----------|
|             |            | A                   | A2  | H   | H1  | H2  | H3  | L1   | L3   | B2  | B3  | D                      | DNA | DNM               | L (mm) | WEIGHT Kg       | L (mm) | WEIGHT Kg |
| KDN 150-500 | 75         | 180                 | 110 | 100 | 355 | 500 | 455 | 1800 | 1200 | 730 | 670 | 28x4                   | 200 | 150               | 1895   | 1152            | 2076   | 1167      |
|             | 90         | 180                 | 110 | 100 | 355 | 500 | 455 | 1800 | 1200 | 730 | 670 | 28x4                   | 200 | 150               | 1945   | 1257            | 2126   | 1272      |
|             | 110        | 180                 | 110 | 120 | 355 | 500 | 475 | 2000 | 1340 | 910 | 830 | 28x4                   | 200 | 150               | 2212   | 1707            | 2393   | 1722      |
|             | 132        | 180                 | 120 | 205 | 355 | 500 | 560 | 1770 | 1170 | 715 | 670 | 20x4                   | 200 | 150               | 2322   | 1780            | 2503   | 1795      |
|             | 160        | 180                 | 120 | 205 | 355 | 500 | 560 | 1770 | 1170 | 715 | 670 | 20x4                   | 200 | 150               | 2322   | 1860            | 2503   | 1875      |
|             | 200        | 180                 | 120 | 205 | 355 | 500 | 560 | 1770 | 1170 | 715 | 670 | 20x4                   | 200 | 150               | 2322   | 1955            | 2503   | 1970      |
|             | 250        | 180                 | 120 | 205 | 355 | 500 | 560 | 2000 | 1400 | 960 | 915 | 20x4                   | 200 | 150               | 2442   | (*)             | 2623   | (*)       |

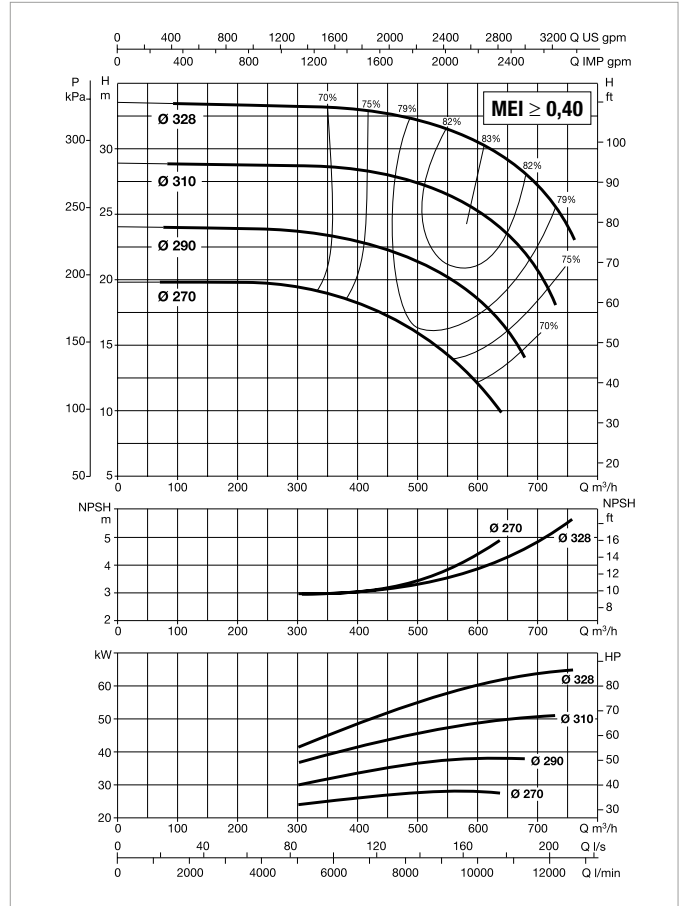
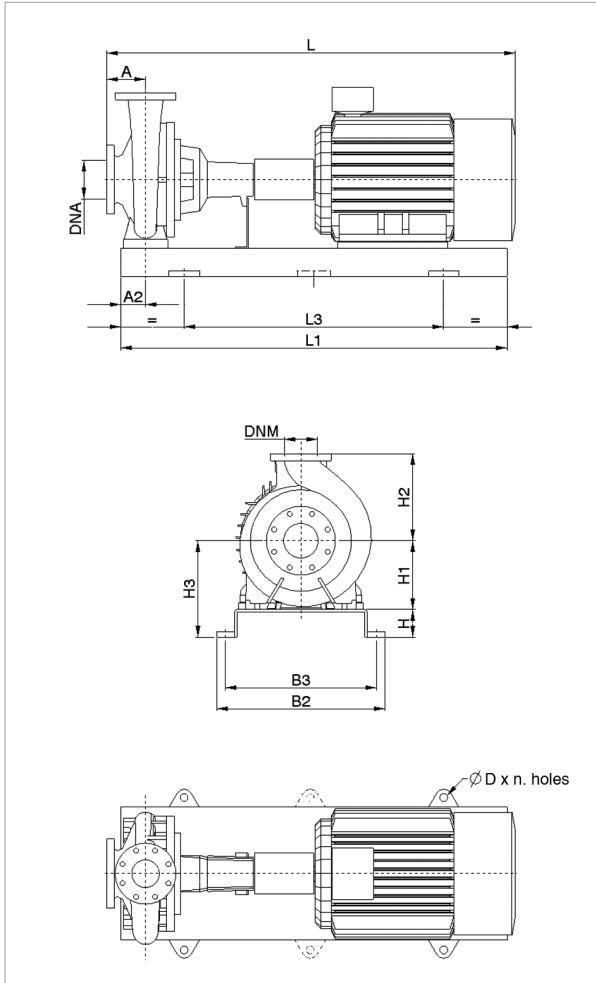
Dimension and electrical data based on sizing definition following the instructions on page 183.

(\*) Data on request.

# KDN 200-330 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 1450 /min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

| MODEL       | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA   |      | MOTOR TYPE |
|-------------|------------|------------|-------------------|------|------------|
|             |            |            | POWER INPUT 50 Hz | In A |            |
| KDN 200-330 | 30         | 200L       | 3 x 400 V ~ Δ     | 53,5 | IE3        |
|             | 37         | 225S       | 3 x 400 V ~ Δ     | 65   | IE3        |
|             | 45         | 225M       | 3 x 400 V ~ Δ     | 78,5 | IE3        |
|             | 55         | 250M       | 3 x 400 V ~ Δ     | 96   | IE3        |
|             | 75         | 280S       | 3 x 400 V ~ Δ     | 130  | IE3        |
|             | 90         | 280M       | 3 x 400 V ~ Δ     | 156  | IE3        |

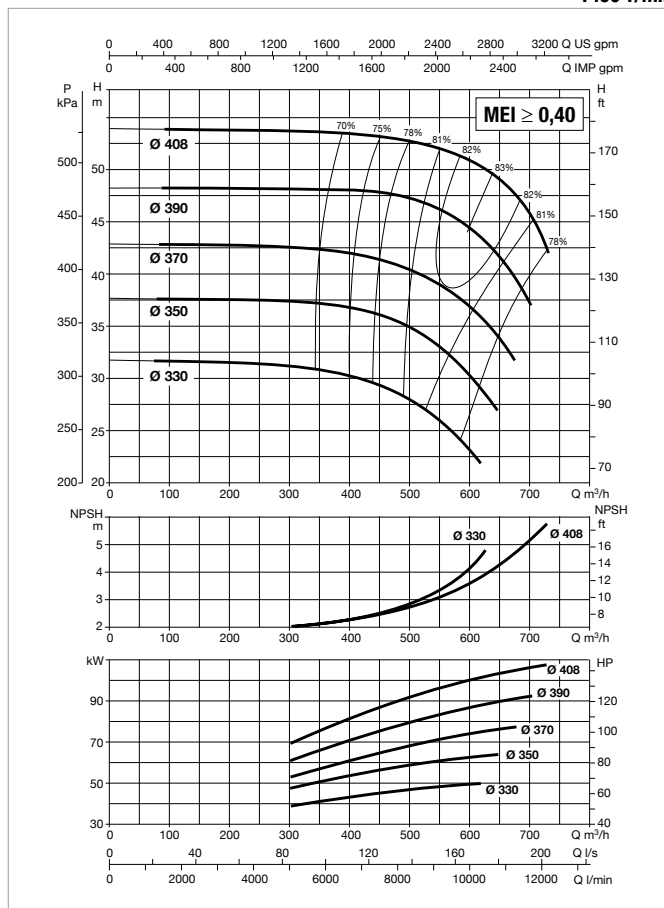
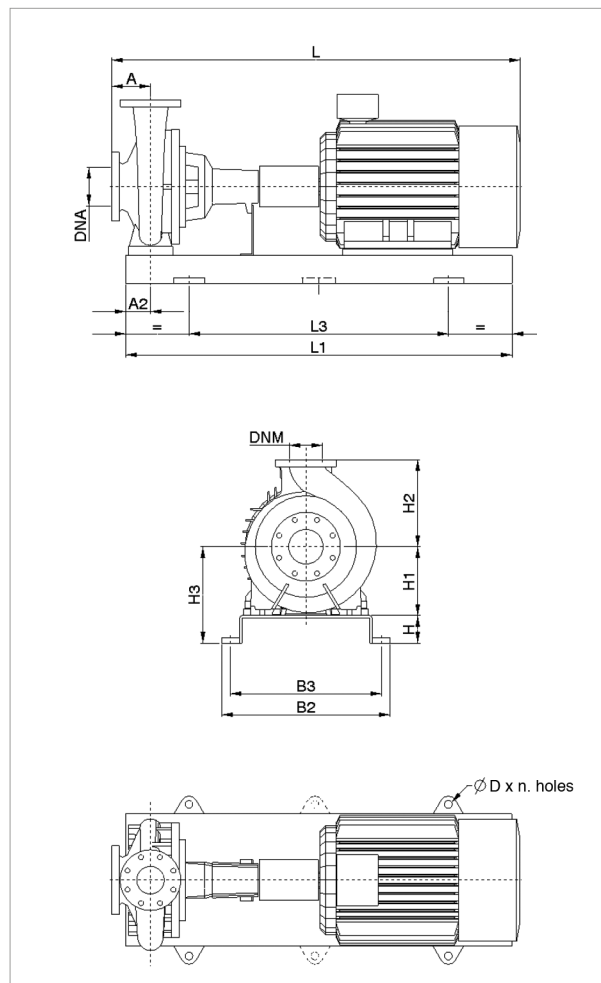
| MODEL       | POWER (kW) | UNIT DIMENSIONS (mm) |     |     |     |     |     |      |      |     |     | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |        | SPACER COUPLING |        |           |
|-------------|------------|----------------------|-----|-----|-----|-----|-----|------|------|-----|-----|------------------------|-----|-------------------|--------|-----------------|--------|-----------|
|             |            | A                    | A2  | H   | H1  | H2  | H3  | L1   | L3   | B2  | B3  | D                      | DNA | DNM               | L (mm) | WEIGHT Kg       | L (mm) | WEIGHT Kg |
| KDN 200-330 | 30         | 200                  | 110 | 100 | 355 | 450 | 455 | 1800 | 1200 | 730 | 670 | 28x4                   | 250 | 200               | 1694   | 808             | 1875   | 823       |
|             | 37         | 200                  | 110 | 100 | 355 | 450 | 455 | 1800 | 1200 | 730 | 670 | 28x4                   | 250 | 200               | 1760   | 814             | 1941   | 829       |
|             | 45         | 200                  | 110 | 100 | 355 | 450 | 455 | 1800 | 1200 | 730 | 670 | 28x4                   | 250 | 200               | 1790   | 877             | 1971   | 892       |
|             | 55         | 200                  | 110 | 100 | 355 | 450 | 455 | 1800 | 1200 | 730 | 670 | 28x4                   | 250 | 200               | 1860   | 888             | 2041   | 903       |
|             | 75         | 200                  | 110 | 100 | 355 | 450 | 455 | 1800 | 1200 | 730 | 670 | 28x4                   | 250 | 200               | 1915   | 985             | 2096   | 1000      |
|             | 90         | 200                  | 110 | 100 | 355 | 450 | 455 | 1800 | 1200 | 730 | 670 | 28x4                   | 250 | 200               | 1965   | 1087            | 2146   | 1102      |

Dimension and electrical data based on sizing definition following the instructions on page 183.

# KDN 200-400 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

| MODEL       | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA   |      | MOTOR TYPE |
|-------------|------------|------------|-------------------|------|------------|
|             |            |            | POWER INPUT 50 Hz | In A |            |
| KDN 200-400 | 37         | 225S       | 3 x 400 V ~ Δ     | 66   | IE3        |
|             | 45         | 225M       | 3 x 400 V ~ Δ     | 78,5 | IE3        |
|             | 55         | 250M       | 3 x 400 V ~ Δ     | 96   | IE3        |
|             | 75         | 280S       | 3 x 400 V ~ Δ     | 130  | IE3        |
|             | 90         | 280M       | 3 x 400 V ~ Δ     | 156  | IE3        |
|             | 110        | 315S       | 3 x 400 V ~ Δ     | 190  | IE3        |
|             | 132        | 315M       | 3 x 400 V ~ Δ     | 230  | IE3        |

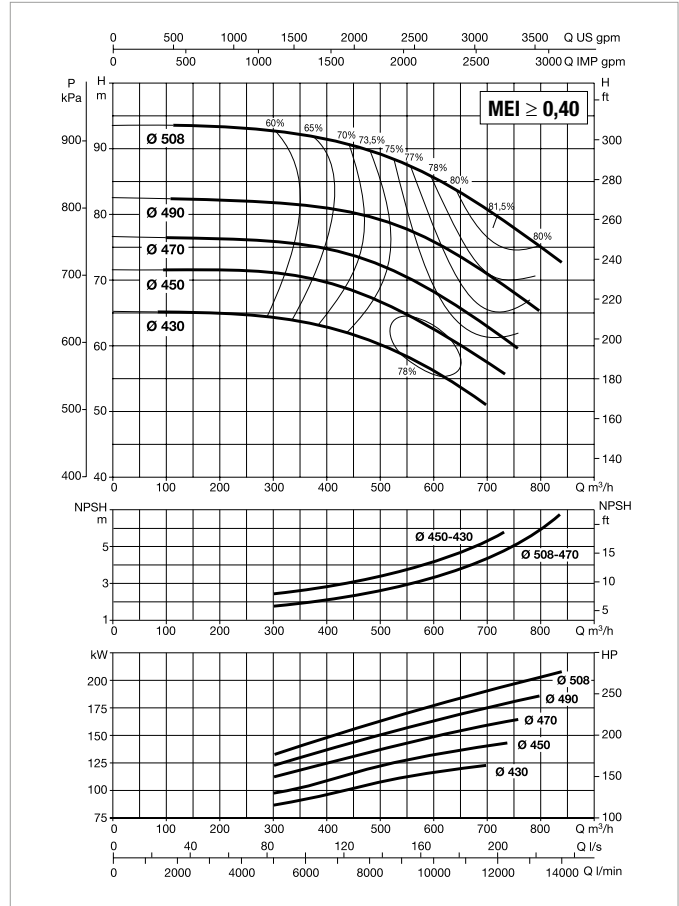
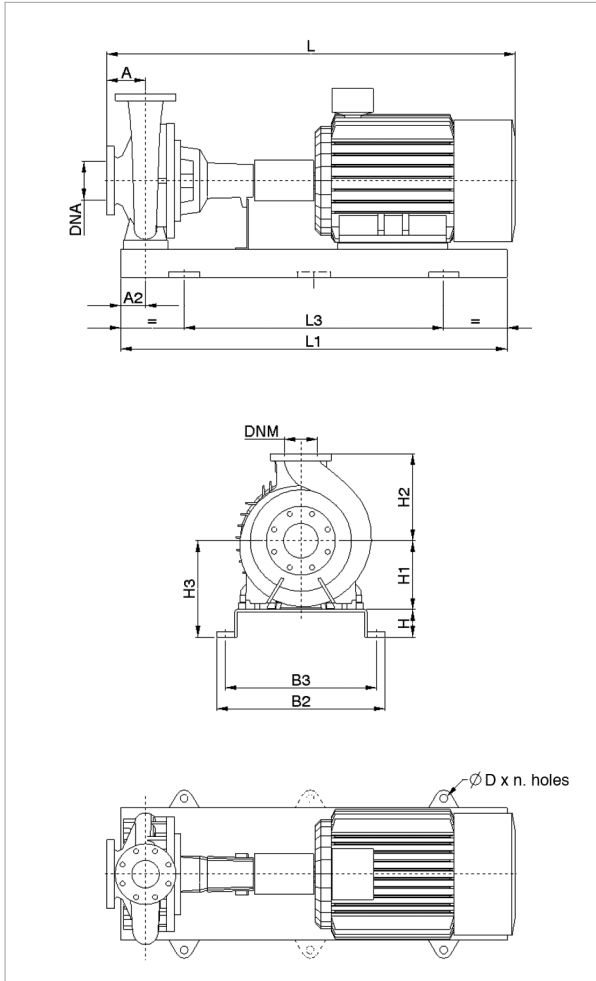
| MODEL       | POWER (kW) | UNIT DIMENSIONS (mm) |     |     |     |     |     |      |      |     |     | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |        | SPACER COUPLING |        |           |
|-------------|------------|----------------------|-----|-----|-----|-----|-----|------|------|-----|-----|------------------------|-----|-------------------|--------|-----------------|--------|-----------|
|             |            | A                    | A2  | H   | H1  | H2  | H3  | L1   | L3   | B2  | B3  | D                      | DNA | DNM               | L (mm) | WEIGHT Kg       | L (mm) | WEIGHT Kg |
| KDN 200-400 | 37         | 185                  | 110 | 100 | 355 | 500 | 455 | 1800 | 1200 | 730 | 670 | 28x4                   | 250 | 200               | 1745   | 893             | 1926   | 908       |
|             | 45         | 185                  | 110 | 100 | 355 | 500 | 455 | 1800 | 1200 | 730 | 670 | 28x4                   | 250 | 200               | 1775   | 923             | 1956   | 938       |
|             | 55         | 185                  | 110 | 100 | 355 | 500 | 455 | 1800 | 1200 | 730 | 670 | 28x4                   | 250 | 200               | 1845   | 1030            | 2026   | 1045      |
|             | 75         | 185                  | 110 | 100 | 355 | 500 | 455 | 1800 | 1200 | 730 | 670 | 28x4                   | 250 | 200               | 1900   | 1132            | 2081   | 1147      |
|             | 90         | 185                  | 110 | 100 | 355 | 500 | 455 | 1800 | 1200 | 730 | 670 | 28x4                   | 250 | 200               | 1950   | 1237            | 2131   | 1252      |
|             | 110        | 185                  | 110 | 120 | 355 | 500 | 475 | 2000 | 1340 | 910 | 830 | 28x4                   | 250 | 200               | 2217   | 1687            | 2398   | 1702      |
|             | 132        | 185                  | 125 | 205 | 355 | 500 | 560 | 1770 | 1170 | 715 | 670 | 20x4                   | 250 | 200               | 2327   | 1510            | 2508   | 1525      |

Dimension and electrical data based on sizing definition following the instructions on page 183.

# KDN 200-500 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

| MODEL       | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA   |      | MOTOR TYPE |
|-------------|------------|------------|-------------------|------|------------|
|             |            |            | POWER INPUT 50 Hz | In A |            |
| KDN 200-500 | 75         | 280S       | 3 x 400 V ~ Δ     | 130  | IE3        |
|             | 90         | 280M       | 3 x 400 V ~ Δ     | 156  | IE3        |
|             | 110        | 315S       | 3 x 400 V ~ Δ     | 190  | IE3        |
|             | 132        | 315M       | 3 x 400 V ~ Δ     | 230  | IE3        |
|             | 160        | 315L       | 3 x 400 V ~ Δ     | 175  | IE3        |
|             | 200        | 315L       | 3 x 400 V ~ Δ     | 340  | IE3        |
|             | 250        | 355        | 3 x 400 V ~ Δ     | 420  | IE3        |

| MODEL       | POWER (kW) | UNIT DIMENSIONS (mm) |     |     |     |     |     |      |      |     |     | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |        | SPACER COUPLING |        |           |
|-------------|------------|----------------------|-----|-----|-----|-----|-----|------|------|-----|-----|------------------------|-----|-------------------|--------|-----------------|--------|-----------|
|             |            | A                    | A2  | H   | H1  | H2  | H3  | L1   | L3   | B2  | B3  | D                      | DNA | DNM               | L (mm) | WEIGHT Kg       | L (mm) | WEIGHT Kg |
| KDN 200-500 | 75         | 185                  | 145 | 185 | 400 | 580 | 585 | 1650 | 1050 | 960 | 915 | 20x4                   | 250 | 200               | 2006   | 1120            | 2186   | 1135      |
|             | 90         | 185                  | 145 | 185 | 400 | 580 | 585 | 1650 | 1050 | 960 | 915 | 20x4                   | 250 | 200               | 2006   | 1105            | 2186   | 1120      |
|             | 110        | 185                  | 145 | 205 | 400 | 580 | 605 | 1800 | 1200 | 960 | 915 | 20x4                   | 250 | 200               | 2113   | 1735            | 2293   | 1750      |
|             | 132        | 185                  | 145 | 205 | 400 | 580 | 605 | 1800 | 1200 | 960 | 915 | 20x4                   | 250 | 200               | 2113   | 1675            | 2293   | 1690      |
|             | 160        | 185                  | 145 | 205 | 400 | 580 | 605 | 1800 | 1200 | 960 | 915 | 20x4                   | 250 | 200               | 2113   | 1665            | 2293   | 1680      |
|             | 200        | 185                  | 145 | 205 | 400 | 580 | 605 | 1800 | 1200 | 960 | 915 | 20x4                   | 250 | 200               | 2113   | 1600            | 2293   | 1615      |
|             | 250        | 185                  | 145 | 205 | 400 | 580 | 605 | 2050 | 1450 | 960 | 915 | 20x4                   | 250 | 200               | (*)    | (*)             | (*)    | (*)       |

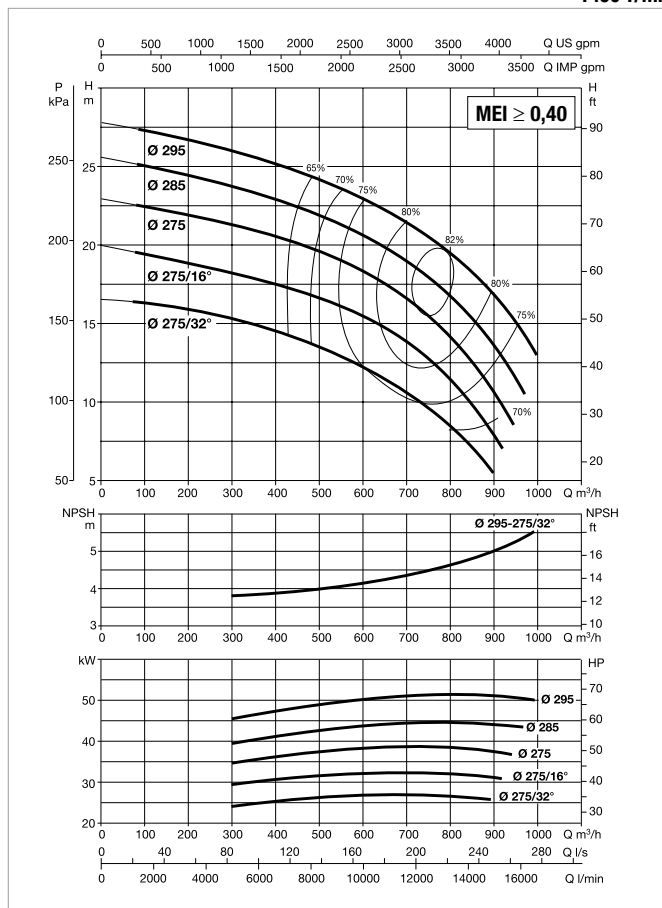
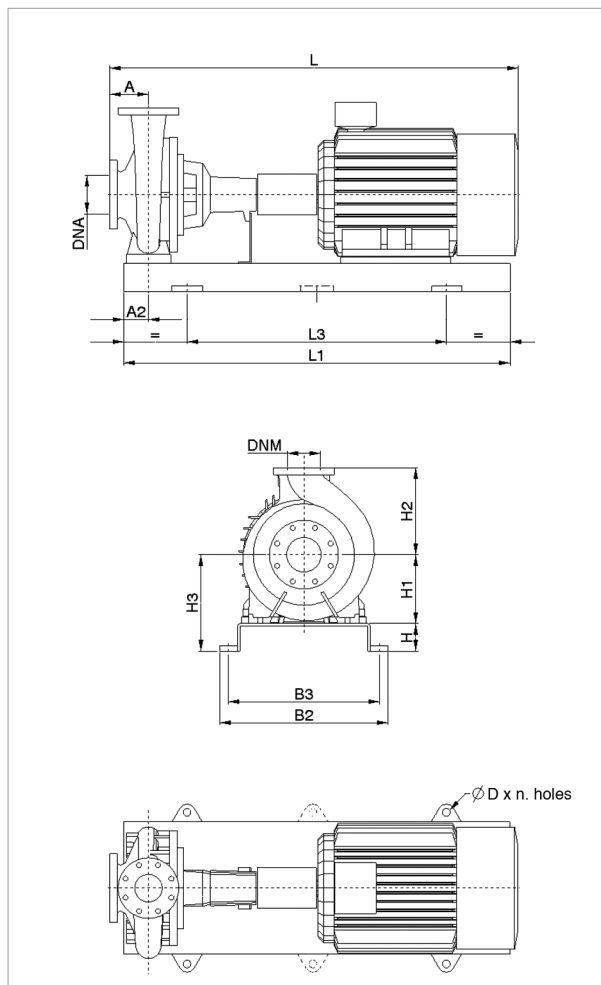
Dimension and electrical data based on sizing definition following the instructions on page 183.

(\*) Data on request.

# KDN 250-330A - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

**= 1450 1/min**



**For MEI index refer to the hydraulic efficiency section.**

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

| MODEL        | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA   |      | MOTOR TYPE |
|--------------|------------|------------|-------------------|------|------------|
|              |            |            | POWER INPUT 50 Hz | In A |            |
| KDN 250-330A | 30         | 200L       | 3 x 400 V ~ Δ     | 53,5 | IE3        |
|              | 37         | 225S       | 3 x 400 V ~ Δ     | 65   | IE3        |
|              | 45         | 225M       | 3 x 400 V ~ Δ     | 78,5 | IE3        |
|              | 55         | 250M       | 3 x 400 V ~ Δ     | 96   | IE3        |
|              | 75         | 280S       | 3 x 400 V ~ Δ     | 130  | IE3        |

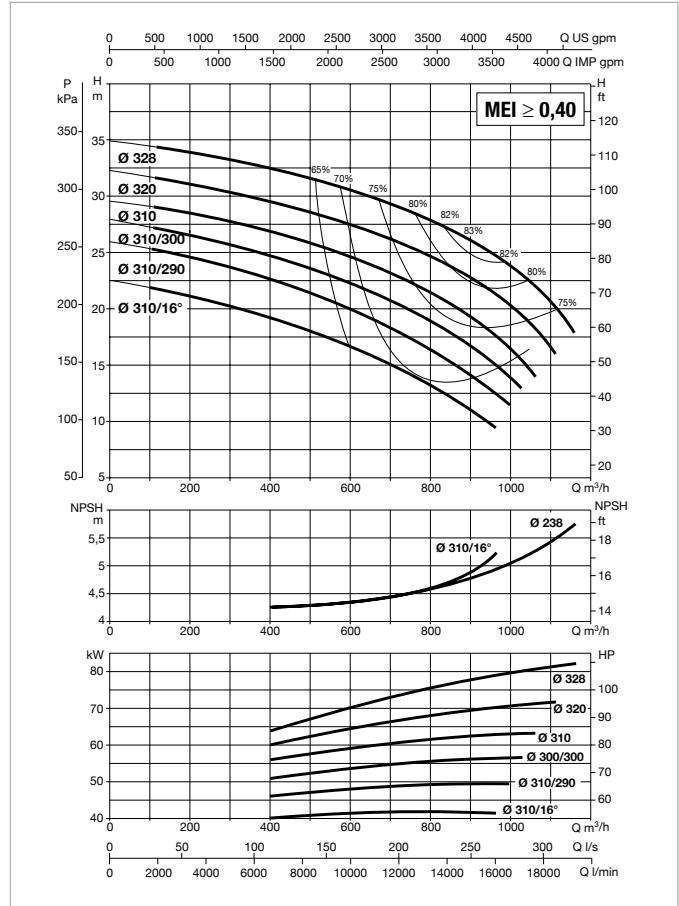
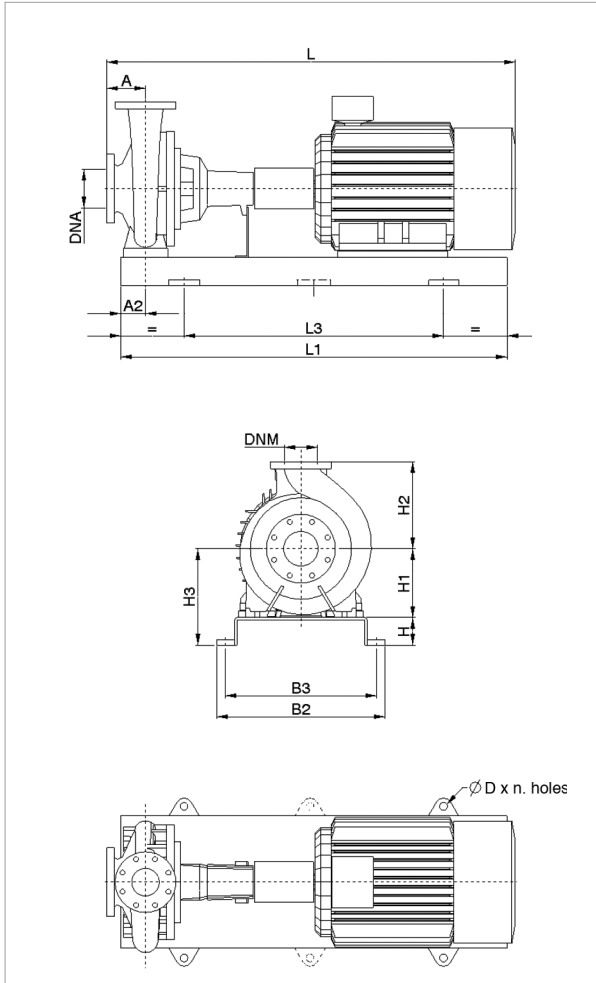
| MODEL        | POWER (kW) | UNIT DIMENSIONS (mm) |     |     |     |     |     |      |      |     |     |      | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |           | SPACER COUPLING |           |
|--------------|------------|----------------------|-----|-----|-----|-----|-----|------|------|-----|-----|------|------------------------|-----|-------------------|-----------|-----------------|-----------|
|              |            | A                    | A2  | H   | H1  | H2  | H3  | L1   | L3   | B2  | B3  | D    | DNA                    | DNM | L (mm)            | WEIGHT Kg | L (mm)          | WEIGHT Kg |
| KDN 250-330A | 30         | 250                  | 135 | 120 | 400 | 525 | 520 | 2000 | 1340 | 910 | 830 | 28x4 | 300                    | 250 | 1744              | 912       | 1985            | 927       |
|              | 37         | 250                  | 135 | 120 | 400 | 525 | 520 | 2000 | 1340 | 910 | 830 | 28x4 | 300                    | 250 | 1810              | 918       | 2051            | 933       |
|              | 45         | 250                  | 135 | 120 | 400 | 525 | 520 | 2000 | 1340 | 910 | 830 | 28x4 | 300                    | 250 | 1840              | 981       | 2081            | 996       |
|              | 55         | 250                  | 135 | 120 | 400 | 525 | 520 | 2000 | 1340 | 910 | 830 | 28x4 | 300                    | 250 | 1910              | 992       | 2151            | 1007      |
|              | 75         | 250                  | 135 | 120 | 400 | 525 | 520 | 2000 | 1340 | 910 | 830 | 28x4 | 300                    | 250 | 1965              | 1089      | 2206            | 1104      |

Dimension and electrical data based on sizing definition following the instructions on page 183.

# KDN 250-330 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 1450 /min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

| MODEL       | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA   |      | MOTOR TYPE |
|-------------|------------|------------|-------------------|------|------------|
|             |            |            | POWER INPUT 50 Hz | In A |            |
| KDN 250-330 | 30         | 200L       | 3 x 400 V ~ Δ     | 53,5 | IE3        |
|             | 37         | 225S       | 3 x 400 V ~ Δ     | 65   | IE3        |
|             | 45         | 225M       | 3 x 400 V ~ Δ     | 78,5 | IE3        |
|             | 55         | 250M       | 3 x 400 V ~ Δ     | 96   | IE3        |
|             | 75         | 280S       | 3 x 400 V ~ Δ     | 130  | IE3        |
|             | 90         | 280M       | 3 x 400 V ~ Δ     | 156  | IE3        |
|             | 110        | 315S       | 3 x 400 V ~ Δ     | 190  | IE3        |

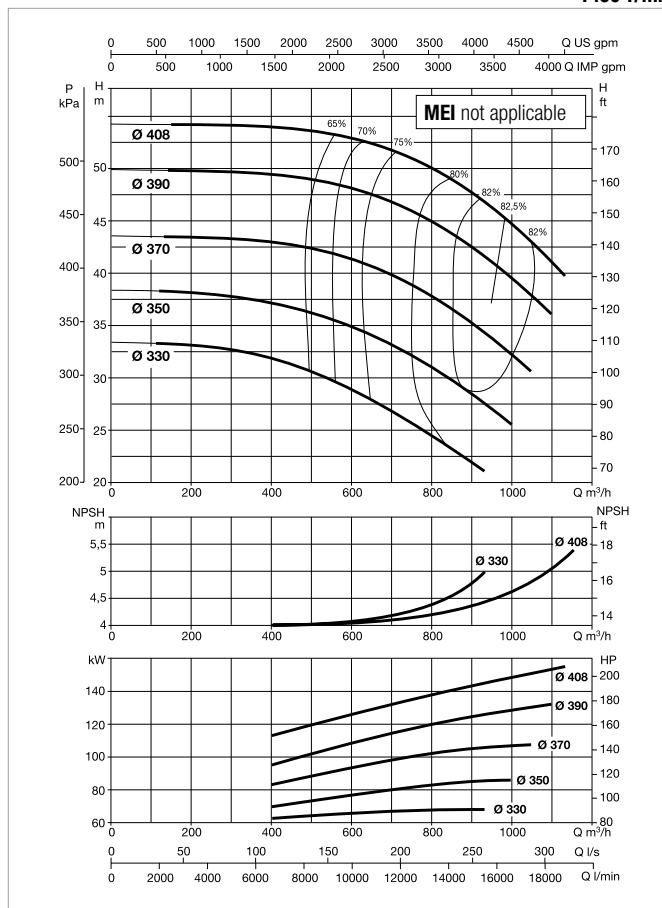
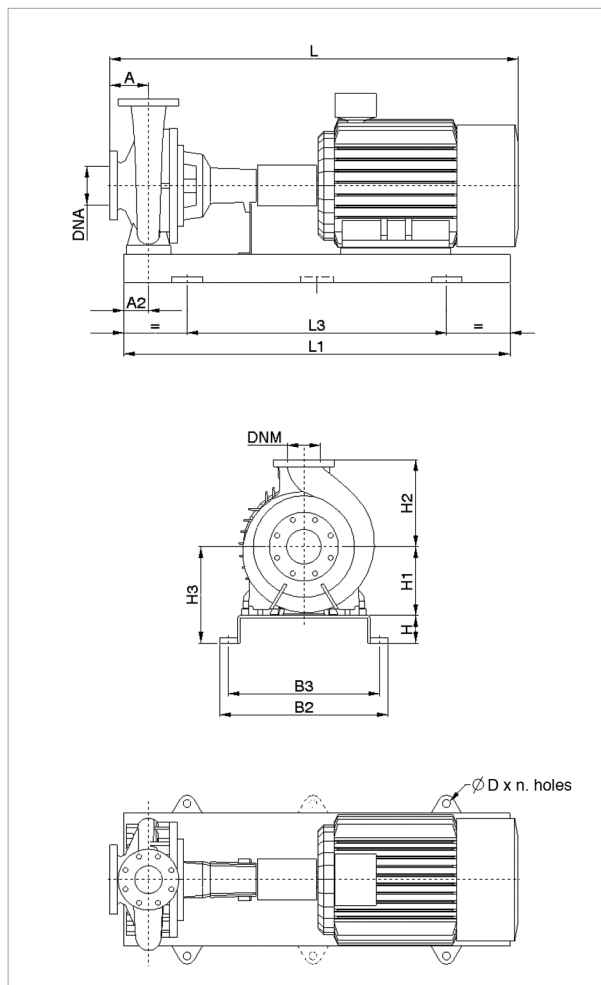
| MODEL       | POWER (kW) | UNIT DIMENSIONS (mm) |     |     |     |     |     |      |      |     |     | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |        | SPACER COUPLING |        |           |
|-------------|------------|----------------------|-----|-----|-----|-----|-----|------|------|-----|-----|------------------------|-----|-------------------|--------|-----------------|--------|-----------|
|             |            | A                    | A2  | H   | H1  | H2  | H3  | L1   | L3   | B2  | B3  | D                      | DNA | DNM               | L (mm) | WEIGHT Kg       | L (mm) | WEIGHT Kg |
| KDN 250-330 | 30         | 250                  | 135 | 120 | 400 | 525 | 520 | 2000 | 1340 | 910 | 830 | 28x4                   | 300 | 250               | 1744   | 912             | 1985   | 927       |
|             | 37         | 250                  | 135 | 120 | 400 | 525 | 520 | 2000 | 1340 | 910 | 830 | 28x4                   | 300 | 250               | 1810   | 967             | 2051   | 982       |
|             | 45         | 250                  | 135 | 120 | 400 | 525 | 520 | 2000 | 1340 | 910 | 830 | 28x4                   | 300 | 250               | 1840   | 997             | 2081   | 1012      |
|             | 55         | 250                  | 135 | 120 | 400 | 525 | 520 | 2000 | 1340 | 910 | 830 | 28x4                   | 300 | 250               | 1910   | 1104            | 2151   | 1119      |
|             | 75         | 250                  | 135 | 120 | 400 | 525 | 520 | 2000 | 1340 | 910 | 830 | 28x4                   | 300 | 250               | 1965   | 1206            | 2206   | 1221      |
|             | 90         | 250                  | 135 | 120 | 400 | 525 | 520 | 2000 | 1340 | 910 | 830 | 28x4                   | 300 | 250               | 2015   | 1311            | 2256   | 1326      |
|             | 110        | 250                  | 135 | 120 | 400 | 525 | 520 | 2000 | 1340 | 910 | 830 | 28x4                   | 300 | 250               | 2282   | 1707            | 2523   | 1722      |

Dimension and electrical data based on sizing definition following the instructions on page 183.

# KDN 250-400 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

**= 1450 1/min**



**For MEI index refer to the hydraulic efficiency section.**

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

| MODEL       | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA   |      | MOTOR TYPE |
|-------------|------------|------------|-------------------|------|------------|
|             |            |            | POWER INPUT 50 Hz | In A |            |
| KDN 250-400 | 75         | 280S       | 3 x 400 V ~ Δ     | 130  | IE3        |
|             | 90         | 280M       | 3 x 400 V ~ Δ     | 156  | IE3        |
|             | 110        | 315S       | 3 x 400 V ~ Δ     | 190  | IE3        |
|             | 132        | 315M       | 3 x 400 V ~ Δ     | 230  | IE3        |
|             | 160        | 315L       | 3 x 400 V ~ Δ     | 275  | IE3        |

| MODEL       | POWER (kW) | UNIT DIMENSIONS (mm) |     |     |     |     |     |      |      |     |     |      | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |           | SPACER COUPLING |           |
|-------------|------------|----------------------|-----|-----|-----|-----|-----|------|------|-----|-----|------|------------------------|-----|-------------------|-----------|-----------------|-----------|
|             |            | A                    | A2  | H   | H1  | H2  | H3  | L1   | L3   | B2  | B3  | D    | DNA                    | DNM | L (mm)            | WEIGHT Kg | L (mm)          | WEIGHT Kg |
| KDN 250-400 | 75         | 225                  | 135 | 120 | 400 | 600 | 520 | 2000 | 1340 | 910 | 830 | 28x4 | 300                    | 250 | 2050              | 1446      | 2231            | 1461      |
|             | 90         | 225                  | 135 | 120 | 400 | 600 | 520 | 2000 | 1340 | 910 | 830 | 28x4 | 300                    | 250 | 2100              | 1551      | 2281            | 1566      |
|             | 110        | 225                  | 135 | 120 | 400 | 600 | 520 | 2000 | 1340 | 910 | 830 | 28x4 | 300                    | 250 | 2367              | 1947      | 2548            | 1962      |
|             | 132        | 225                  | 155 | 210 | 400 | 600 | 610 | 1880 | 1280 | 995 | 950 | 20x6 | 300                    | 250 | 2477              | 1770      | 2658            | 1785      |
|             | 160        | 225                  | 155 | 210 | 400 | 600 | 610 | 1880 | 1280 | 995 | 950 | 20x6 | 300                    | 250 | 2477              | 1850      | 2658            | 1865      |

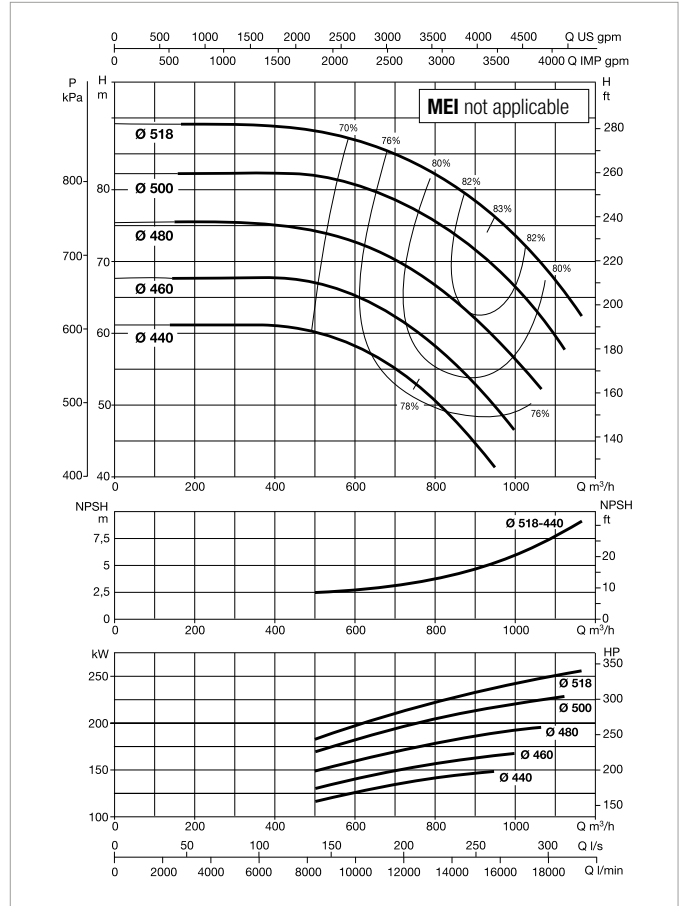
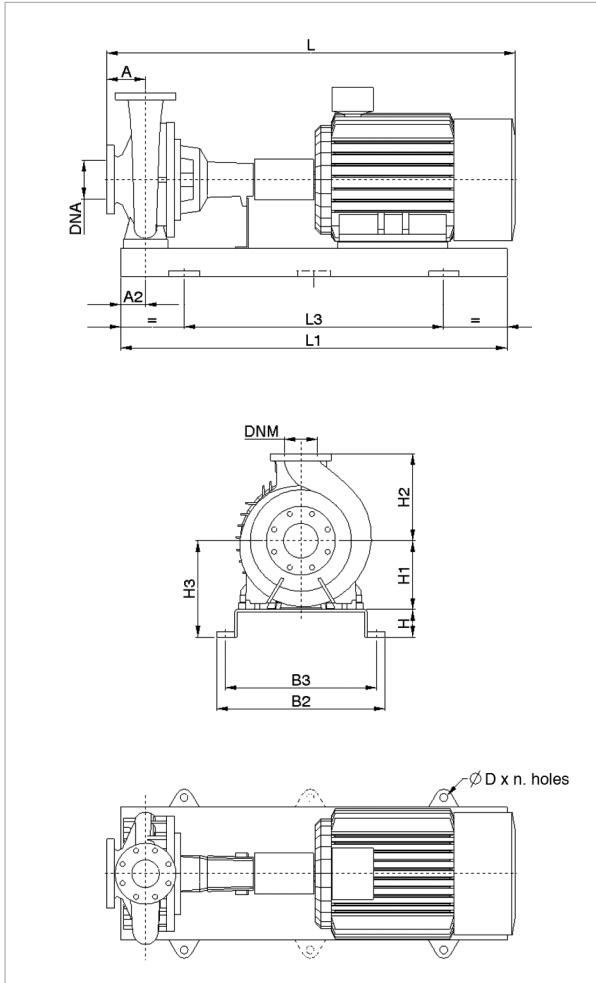
Dimension and electrical data based on sizing definition following the instructions on page 183.



# KDN 250-500A - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

| MODEL        | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA   |      | MOTOR TYPE |
|--------------|------------|------------|-------------------|------|------------|
|              |            |            | POWER INPUT 50 Hz | In A |            |
| KDN 250-500A | 132        | 315M       | 3 x 400 V ~ Δ     | 230  | IE3        |
|              | 160        | 315L       | 3 x 400 V ~ Δ     | 275  | IE3        |
|              | 200        | 315L       | 3 x 400 V ~ Δ     | 340  | IE3        |
|              | 250        | 355        | 3 x 400 V ~ Δ     | 420  | IE3        |
|              | 315        | 355        | 3 x 400 V ~ Δ     | 530  | IE3        |

| MODEL        | POWER (kW) | UNIT DIMENSIONS (mm) |     |     |     |     |     |      |      |      |      | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |        | SPACER COUPLING |        |           |
|--------------|------------|----------------------|-----|-----|-----|-----|-----|------|------|------|------|------------------------|-----|-------------------|--------|-----------------|--------|-----------|
|              |            | A                    | A2  | H   | H1  | H2  | H3  | L1   | L3   | B2   | B3   | D                      | DNA | DNM               | L (mm) | WEIGHT Kg       | L (mm) | WEIGHT Kg |
| KDN 250-500A | 132        | 300                  | 155 | 210 | 500 | 500 | 710 | 2250 | 1650 | 995  | 950  | 20x6                   | 300 | 250               | 2572   | 1820            | 2823   | 1835      |
|              | 160        | 300                  | 155 | 210 | 500 | 500 | 710 | 2250 | 1650 | 995  | 950  | 20x6                   | 300 | 250               | 2572   | 1900            | 2823   | 1915      |
|              | 200        | 300                  | 155 | 210 | 500 | 500 | 710 | 2250 | 1650 | 955  | 950  | 20x6                   | 300 | 250               | 2572   | 1995            | 2823   | 2010      |
|              | 250        | 300                  | 155 | 210 | 500 | 500 | (*) | (*)  | (*)  | (*)  | (*)  | (*)                    | 300 | 250               | (*)    | (*)             | (*)    | (*)       |
|              | 315        | 300                  | 155 | 210 | 500 | 500 | 710 | 2500 | 1900 | 1095 | 1050 | 20x6                   | 300 | 250               | (*)    | (*)             | (*)    | (*)       |

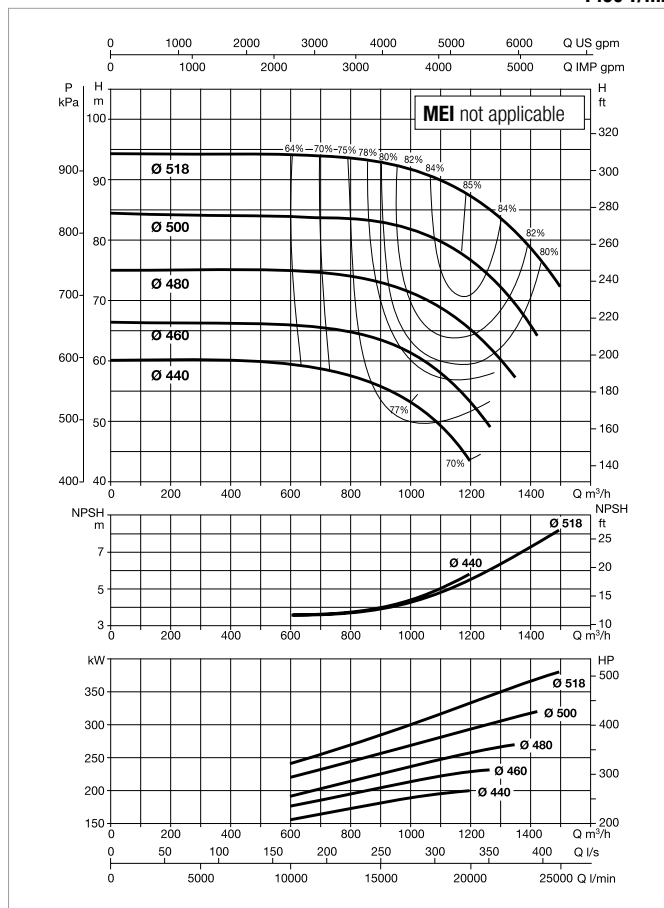
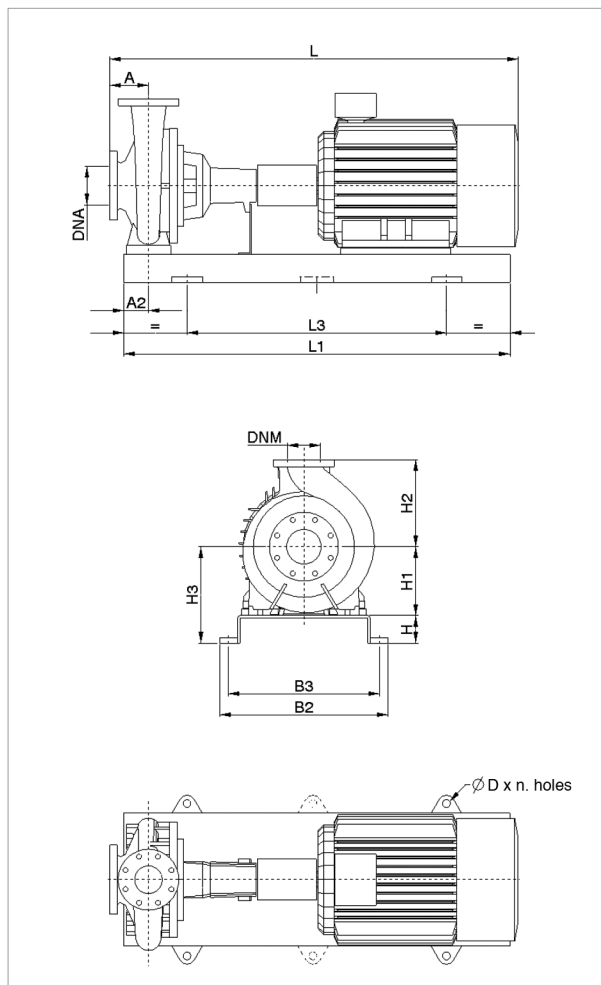
Dimension and electrical data based on sizing definition following the instructions on page 183.

(\*) Data on request.

# KDN 250-500 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

| MODEL       | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA   |      | MOTOR TYPE |
|-------------|------------|------------|-------------------|------|------------|
|             |            |            | POWER INPUT 50 Hz | In A |            |
| KDN 250-500 | 110        | 315S       | 3 x 400 V ~ Δ     | 190  | IE3        |
|             | 132        | 315M       | 3 x 400 V ~ Δ     | 230  | IE3        |
|             | 160        | 315L       | 3 x 400 V ~ Δ     | 275  | IE3        |
|             | 200        | 315L       | 3 x 400 V ~ Δ     | 340  | IE3        |
|             | 250        | 355        | 3 x 400 V ~ Δ     | 420  | IE3        |
|             | 315        | 355        | 3 x 400 V ~ Δ     | 530  | IE3        |
|             | 355        | 355        | 3 x 400 V ~ Δ     | (*)  | IE3        |
|             | 400        | 400        | 3 x 400 V ~ Δ     | (*)  | IE3        |

| MODEL       | POWER (kW) | UNIT DIMENSIONS (mm) |     |     |     |     |      |      |      |      |      | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |        | SPACER COUPLING |        |           |
|-------------|------------|----------------------|-----|-----|-----|-----|------|------|------|------|------|------------------------|-----|-------------------|--------|-----------------|--------|-----------|
|             |            | A                    | A2  | H   | H1  | H2  | H3   | L1   | L3   | B2   | B3   | D                      | DNA | DNM               | L (mm) | WEIGHT Kg       | L (mm) | WEIGHT Kg |
| KDN 250-500 | 110        | 300                  | 155 | 210 | 500 | 500 | 710  | 2250 | 1650 | 995  | 950  | 20x6                   | 300 | 250               | 2462   | 1760            | 2713   | 1775      |
|             | 132        | 300                  | 155 | 210 | 500 | 500 | 710  | 2250 | 1650 | 995  | 950  | 20x6                   | 300 | 250               | 2572   | 1820            | 2823   | 1835      |
|             | 160        | 300                  | 155 | 210 | 500 | 500 | 710  | 2250 | 1650 | 995  | 950  | 20x6                   | 300 | 250               | 2572   | 1900            | 2823   | 1915      |
|             | 200        | 300                  | 155 | 210 | 500 | 500 | 710  | 2250 | 1650 | 995  | 950  | 20x6                   | 300 | 250               | (*)    | 1995            | (*)    | 2010      |
|             | 250        | 300                  | 155 | 210 | 500 | 500 | 710  | 2500 | 1900 | 1095 | 1050 | 20x5                   | 300 | 250               | (*)    | (*)             | (*)    | (*)       |
|             | 315        | 300                  | 155 | 210 | 500 | 500 | 710  | 2500 | 1900 | 1095 | 1050 | 20x6                   | 300 | 250               | (*)    | (*)             | (*)    | (*)       |
|             | 355        | 300                  | 155 | 210 | 500 | 500 | 710  | 2500 | 1900 | 1095 | 1050 | 20x6                   | 300 | 250               | (*)    | (*)             | (*)    | (*)       |
| 400         | 300        | 155                  | 210 | 500 | 500 | 710 | 2650 | 2050 | 1200 | 1155 | 20x6 | 300                    | 250 | (*)               | (*)    | (*)             | (*)    |           |

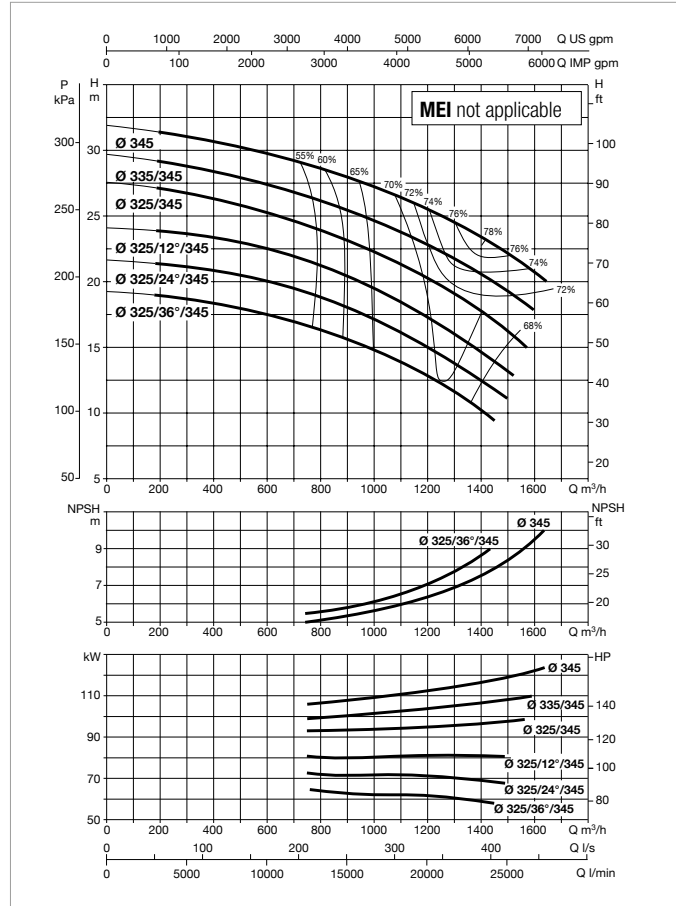
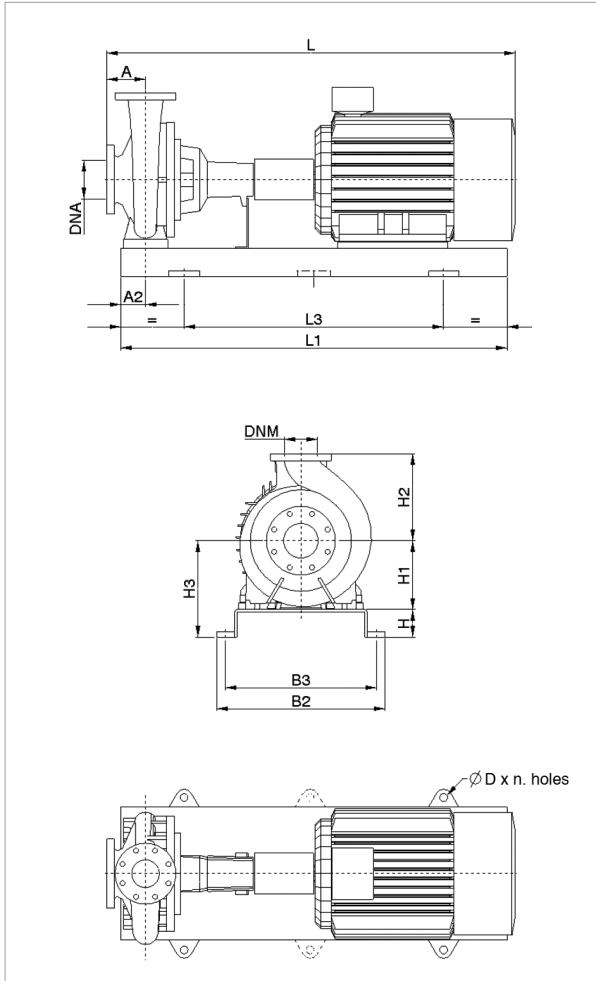
Dimension and electrical data based on sizing definition following the instructions on page 183.

(\*) Data on request.

# KDN 300-330 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

| MODEL       | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA   |      | MOTOR TYPE |
|-------------|------------|------------|-------------------|------|------------|
|             |            |            | POWER INPUT 50 Hz | In A |            |
| KDN 300-330 | 37         | 225S       | 3 x 400 V ~ Δ     | 65   | IE3        |
|             | 45         | 225M       | 3 x 400 V ~ Δ     | 78,5 | IE3        |
|             | 55         | 250M       | 3 x 400 V ~ Δ     | 96   | IE3        |
|             | 75         | 280S       | 3 x 400 V ~ Δ     | 130  | IE3        |
|             | 90         | 280M       | 3 x 400 V ~ Δ     | 156  | IE3        |
|             | 110        | 315S       | 3 x 400 V ~ Δ     | 190  | IE3        |
|             | 132        | 315M       | 3 x 400 V ~ Δ     | 230  | IE3        |

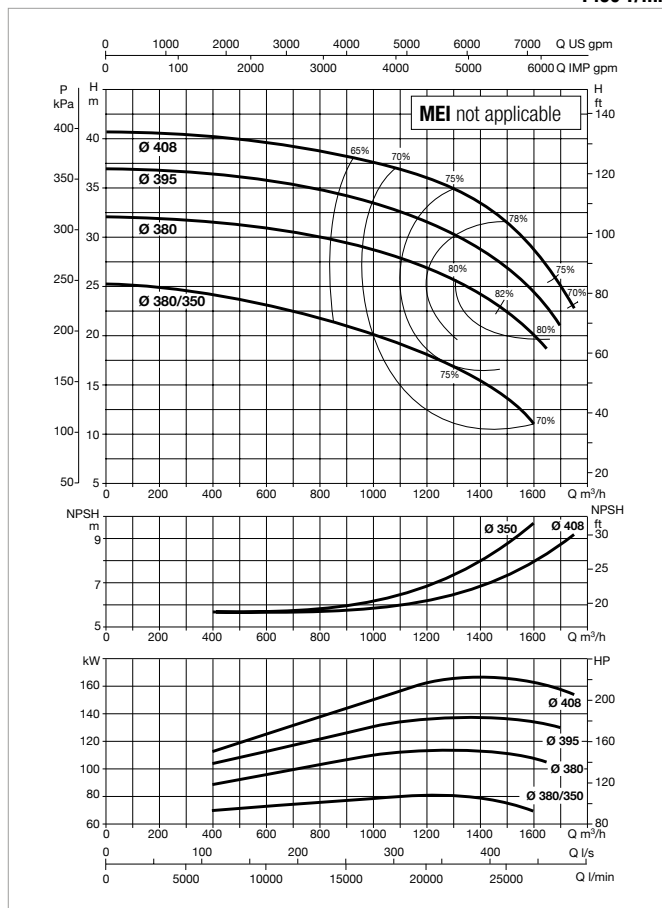
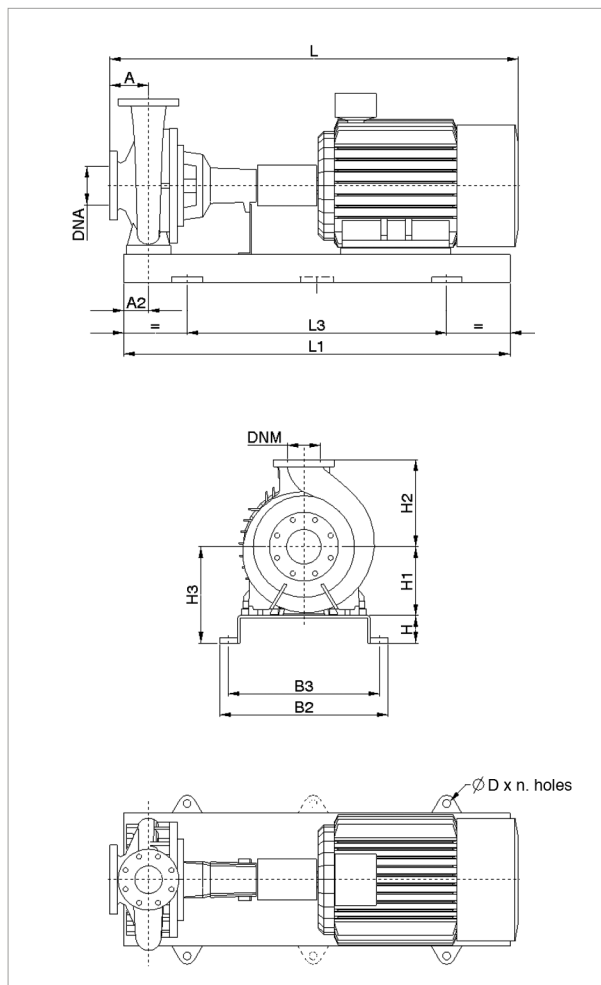
| MODEL       | POWER (kW) | UNIT DIMENSIONS (mm) |     |     |     |     |     |      |      |     |     | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |        | SPACER COUPLING |        |           |
|-------------|------------|----------------------|-----|-----|-----|-----|-----|------|------|-----|-----|------------------------|-----|-------------------|--------|-----------------|--------|-----------|
|             |            | A                    | A2  | H   | H1  | H2  | H3  | L1   | L3   | B2  | B3  | D                      | DNA | DNM               | L (mm) | WEIGHT Kg       | L (mm) | WEIGHT Kg |
| KDN 300-330 | 37         | 300                  | 230 | 185 | 500 | 670 | 685 | 1650 | 1050 | 960 | 915 | 16x4                   | 350 | 300               | 1910   | 1100            | 2151   | 1115      |
|             | 45         | 300                  | 230 | 185 | 500 | 670 | 685 | 1650 | 1050 | 960 | 915 | 16x4                   | 350 | 300               | 1940   | 1130            | 2181   | 1145      |
|             | 55         | 300                  | 230 | 185 | 500 | 670 | 685 | 1700 | 1100 | 960 | 915 | 16x4                   | 350 | 300               | 2010   | 1237            | 2251   | 1252      |
|             | 75         | 300                  | 230 | 185 | 500 | 670 | 685 | 1800 | 1200 | 960 | 915 | 20x4                   | 350 | 300               | 2065   | 1339            | 2306   | 1354      |
|             | 90         | 300                  | 230 | 185 | 500 | 670 | 685 | 1800 | 1200 | 960 | 915 | 20x4                   | 350 | 300               | 2115   | 1444            | 2356   | 1459      |
|             | 110        | 300                  | 230 | 205 | 500 | 670 | 705 | 1930 | 1330 | 960 | 915 | 20x4                   | 350 | 300               | 2382   | 1840            | 2623   | 1855      |
|             | 132        | 300                  | 230 | 205 | 500 | 670 | 705 | 1930 | 1330 | 960 | 915 | 20x4                   | 350 | 300               | 2492   | 1900            | 2733   | 1915      |

Dimension and electrical data based on sizing definition following the instructions on page 183.

# KDN 300-400M - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

**= 1450 1/min**



**For MEI index refer to the hydraulic efficiency section.**

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

| MODEL        | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA   |      | MOTOR TYPE |
|--------------|------------|------------|-------------------|------|------------|
|              |            |            | POWER INPUT 50 Hz | In A |            |
| KDN 300-400M | 110        | 315S       | 3 x 400 V ~ Δ     | 190  | IE3        |
|              | 132        | 315M       | 3 x 400 V ~ Δ     | 230  | IE3        |
|              | 160        | 315L       | 3 x 400 V ~ Δ     | 275  | IE3        |
|              | 200        | 315L       | 3 x 400 V ~ Δ     | 340  | IE3        |

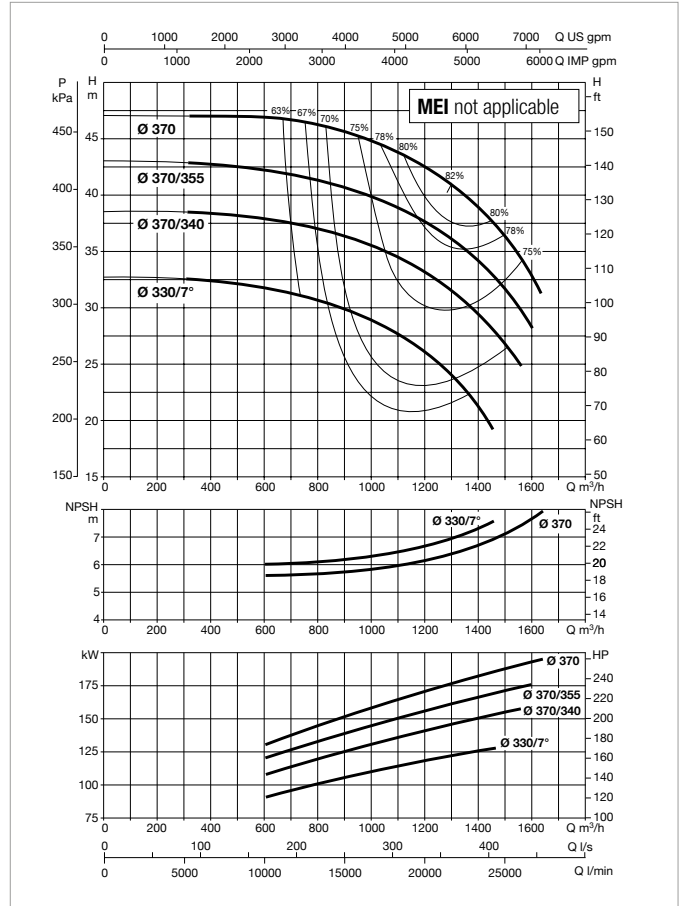
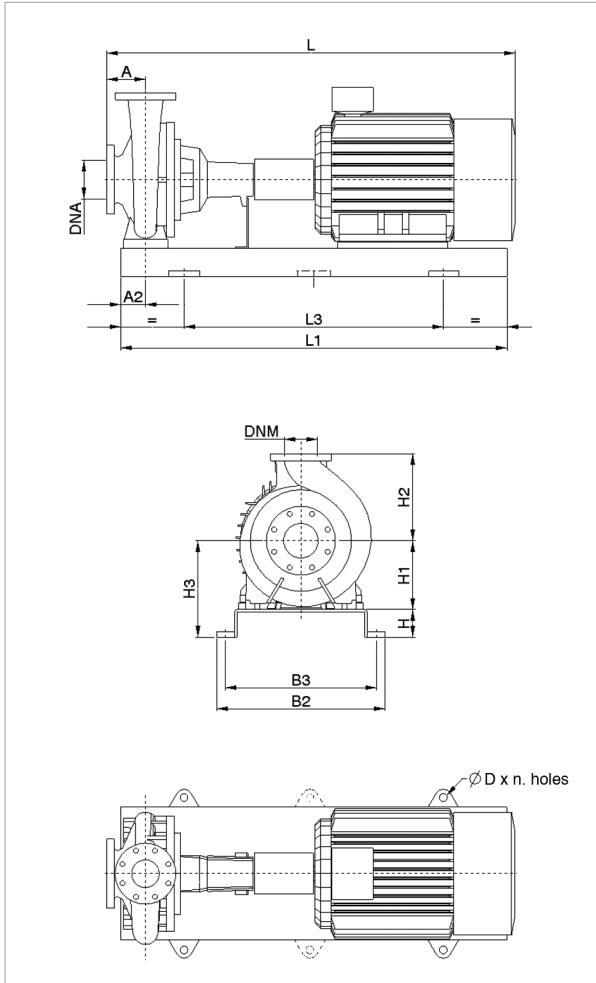
| MODEL        | POWER (kW) | UNIT DIMENSIONS (mm) |     |     |     |     |     |      |      |     |     |      | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |           | SPACER COUPLING |           |
|--------------|------------|----------------------|-----|-----|-----|-----|-----|------|------|-----|-----|------|------------------------|-----|-------------------|-----------|-----------------|-----------|
|              |            | A                    | A2  | H   | H1  | H2  | H3  | L1   | L3   | B2  | B3  | D    | DNA                    | DNM | L (mm)            | WEIGHT Kg | L (mm)          | WEIGHT Kg |
| KDN 300-400M | 110        | 325                  | 135 | 120 | 400 | 640 | 520 | 2000 | 1340 | 910 | 830 | 28x4 | 350                    | 300 | 2477              | 1860      | 2718            | 1875      |
|              | 132        | 325                  | 145 | 210 | 400 | 640 | 610 | 1880 | 1280 | 995 | 950 | 20x6 | 350                    | 300 | 2587              | 1920      | 2828            | 1935      |
|              | 160        | 325                  | 145 | 210 | 400 | 640 | 610 | 1880 | 1280 | 995 | 950 | 20x6 | 350                    | 300 | 2587              | 2000      | 2828            | 2015      |
|              | 200        | 325                  | 145 | 210 | 400 | 640 | 610 | 1880 | 1280 | 995 | 950 | 20x6 | 350                    | 300 | 2587              | 2095      | 2828            | 2110      |

Dimension and electrical data based on sizing definition following the instructions on page 183.

# KDN 300-400A - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 1450 /min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

| MODEL        | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA   |      | MOTOR TYPE |
|--------------|------------|------------|-------------------|------|------------|
|              |            |            | POWER INPUT 50 Hz | In A |            |
| KDN 300-400A | 110        | 315S       | 3 x 400 V ~ Δ     | 190  | IE3        |
|              | 132        | 315M       | 3 x 400 V ~ Δ     | 230  | IE3        |
|              | 160        | 315L       | 3 x 400 V ~ Δ     | 275  | IE3        |
|              | 200        | 315L       | 3 x 400 V ~ Δ     | 340  | IE3        |
|              | 250        | 355        | 3 x 400 V ~ Δ     | 420  | IE3        |

| MODEL        | POWER (kW) | UNIT DIMENSIONS (mm) |     |     |     |     |     |      |      |      |      |      | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |           | SPACER COUPLING |           |
|--------------|------------|----------------------|-----|-----|-----|-----|-----|------|------|------|------|------|------------------------|-----|-------------------|-----------|-----------------|-----------|
|              |            | A                    | A2  | H   | H1  | H2  | H3  | L1   | L3   | B2   | B3   | D    | DNA                    | DNM | L (mm)            | WEIGHT Kg | L (mm)          | WEIGHT Kg |
| KDN 300-400A | 110        | 325                  | 135 | 120 | 400 | 640 | 520 | 2000 | 1340 | 910  | 830  | 28x4 | 350                    | 300 | 2477              | 1860      | 2718            | 1875      |
|              | 132        | 325                  | 145 | 210 | 400 | 640 | 610 | 1880 | 1280 | 995  | 950  | 20x6 | 350                    | 300 | 2587              | 1920      | 2828            | 1935      |
|              | 160        | 325                  | 145 | 210 | 400 | 640 | 610 | 1880 | 1280 | 995  | 950  | 20x6 | 350                    | 300 | 2587              | 2000      | 2828            | 2015      |
|              | 200        | 325                  | 145 | 210 | 400 | 640 | 610 | 1880 | 1280 | 995  | 950  | 20x6 | 350                    | 300 | 2587              | 2095      | 2828            | 2110      |
|              | 250        | 325                  | 145 | 210 | 400 | 640 | 610 | 2250 | 1650 | 1095 | 1050 | 20x6 | 350                    | 300 | (*)               | (*)       | (*)             | (*)       |

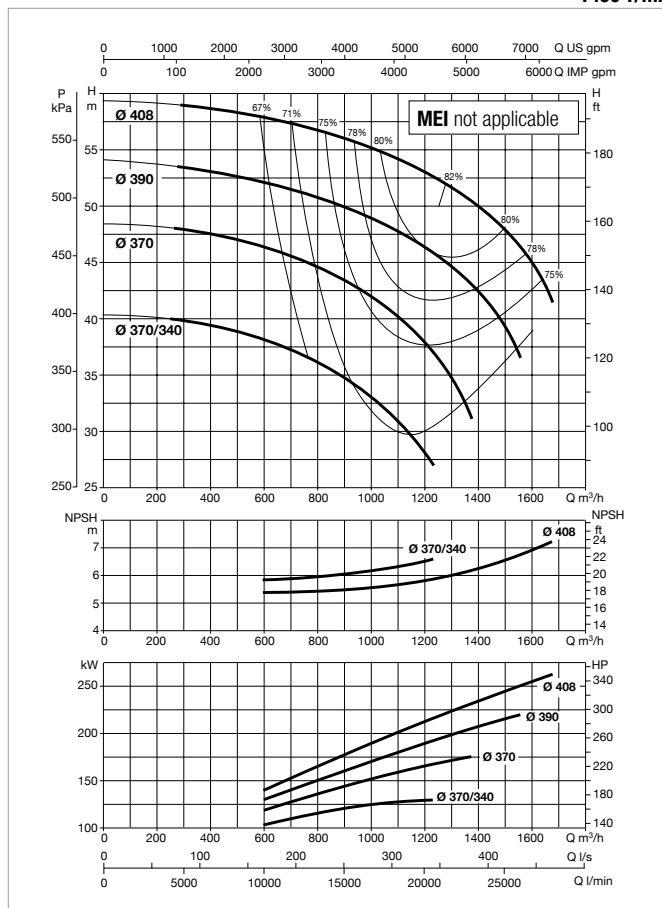
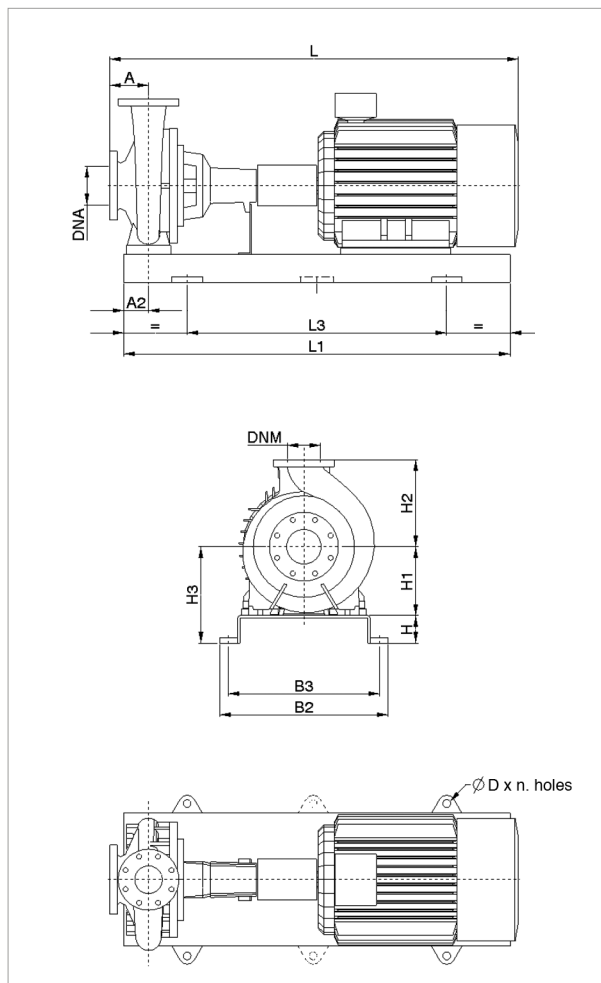
Dimension and electrical data based on sizing definition following the instructions on page 183.

(\*) Data on request.

# KDN 300-400 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

**= 1450 1/min**



**For MEI index refer to the hydraulic efficiency section.**

The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

| MODEL       | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA   |      | MOTOR TYPE |
|-------------|------------|------------|-------------------|------|------------|
|             |            |            | POWER INPUT 50 Hz | In A |            |
| KDN 300-400 | 110        | 315S       | 3 x 400 V ~ Δ     | 190  | IE3        |
|             | 132        | 315M       | 3 x 400 V ~ Δ     | 230  | IE3        |
|             | 160        | 315L       | 3 x 400 V ~ Δ     | 275  | IE3        |
|             | 200        | 315L       | 3 x 400 V ~ Δ     | 340  | IE3        |
|             | 250        | 355        | 3 x 400 V ~ Δ     | 420  | IE3        |
|             | 315        | 355        | 3 x 400 V ~ Δ     | 530  | IE3        |

| MODEL       | POWER (kW) | UNIT DIMENSIONS (mm) |     |     |     |     |     |      |      |      |      | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |        | SPACER COUPLING |        |           |
|-------------|------------|----------------------|-----|-----|-----|-----|-----|------|------|------|------|------------------------|-----|-------------------|--------|-----------------|--------|-----------|
|             |            | A                    | A2  | H   | H1  | H2  | H3  | L1   | L3   | B2   | B3   | D                      | DNA | DNM               | L (mm) | WEIGHT Kg       | L (mm) | WEIGHT Kg |
| KDN 300-400 | 110        | 325                  | 135 | 120 | 400 | 640 | 520 | 2000 | 1340 | 910  | 830  | 28x6                   | 350 | 300               | 2477   | 1860            | 2718   | 1875      |
|             | 132        | 325                  | 145 | 210 | 400 | 640 | 610 | 1880 | 1280 | 995  | 950  | 20x6                   | 350 | 300               | 2587   | 1920            | 2828   | 1935      |
|             | 160        | 325                  | 145 | 210 | 400 | 640 | 610 | 1880 | 1280 | 995  | 950  | 20x6                   | 350 | 300               | 2587   | 2000            | 2828   | 2015      |
|             | 200        | 325                  | 145 | 210 | 400 | 640 | 610 | 1880 | 1280 | 995  | 950  | 20x6                   | 350 | 300               | 2587   | 2095            | 2828   | 2110      |
|             | 250        | 325                  | 145 | 210 | 400 | 640 | 610 | 2250 | 1650 | 1095 | 1050 | 20x6                   | 350 | 300               | (*)    | (*)             | (*)    | (*)       |
|             | 315        | 325                  | 145 | 210 | 400 | 640 | 610 | 2250 | 1650 | 1095 | 1050 | 20x6                   | 350 | 300               | (*)    | (*)             | (*)    | (*)       |

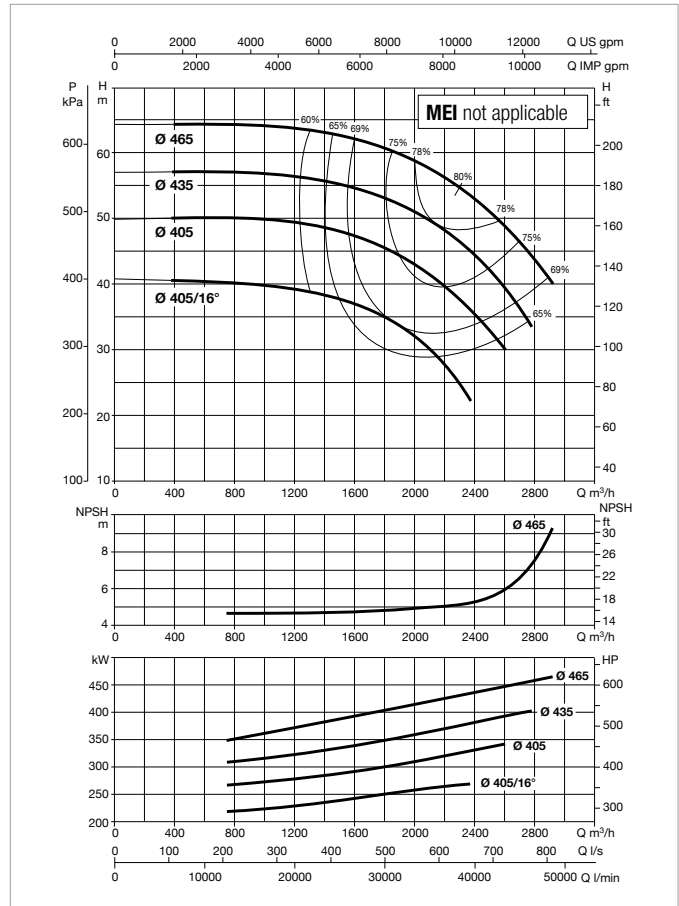
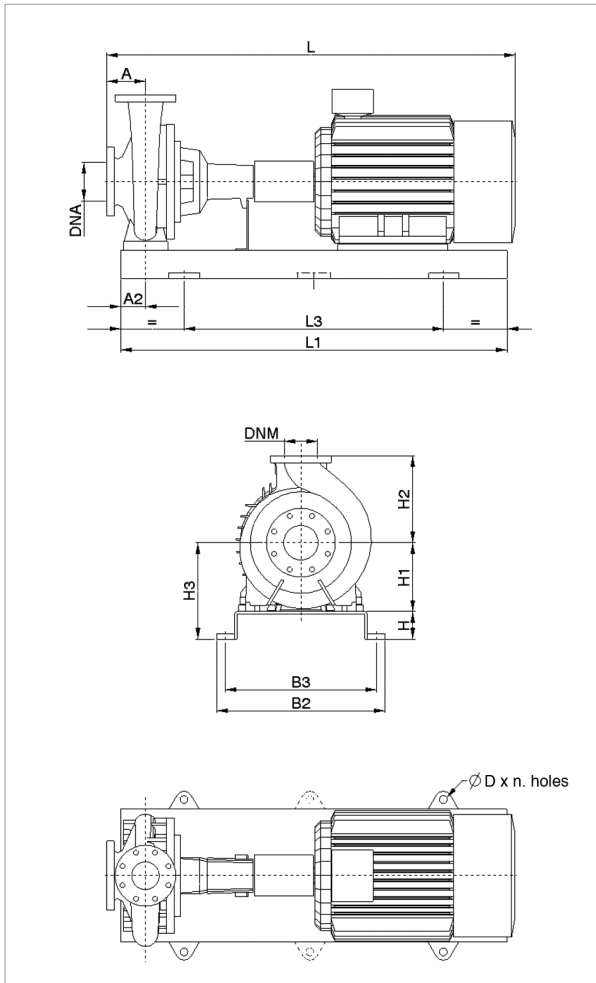
Dimension and electrical data based on sizing definition following the instructions on page 183.

(\*) Data on request.

# KDN 350-500A - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

| MODEL        | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA   |      | MOTOR TYPE |
|--------------|------------|------------|-------------------|------|------------|
|              |            |            | POWER INPUT 50 Hz | In A |            |
| KDN 350-500A | 315        | 355        | 3 x 400 V ~ Δ     | 530  | IE3        |
|              | 355        | 355        | 3 x 400 V ~ Δ     | (*)  | IE3        |
|              | 400        | 355        | 3 x 400 V ~ Δ     | (*)  | IE3        |
|              | 500        | 355        | 3 x 400 V ~ Δ     | (*)  | IE3        |

| MODEL        | POWER (kW) | UNIT DIMENSIONS (mm) |     |     |     |     |     |      |      |      |      | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |        | SPACER COUPLING |        |           |
|--------------|------------|----------------------|-----|-----|-----|-----|-----|------|------|------|------|------------------------|-----|-------------------|--------|-----------------|--------|-----------|
|              |            | A                    | A2  | H   | H1  | H2  | H3  | L1   | L3   | B2   | B3   | D                      | DNA | DNM               | L (mm) | WEIGHT Kg       | L (mm) | WEIGHT Kg |
| KDN 350-500A | 315        | 380                  | 295 | 240 | 600 | 600 | 840 | 2700 | 2100 | 1305 | 1260 | 20x6                   | 400 | 350               | (*)    | 1080            | (*)    | 1095      |
|              | 355        | 385                  | 300 | 240 | 600 | 615 | 840 | 3000 | 2100 | 1305 | 1260 | (*)                    | 400 | 350               | (*)    | 4250            | (*)    | 4250      |
|              | 400        | 380                  | (*) | (*) | 600 | 600 | 600 | (*)  | (*)  | (*)  | (*)  | (*)                    | 400 | 350               | (*)    | (*)             | (*)    | (*)       |
|              | 500        | 380                  | (*) | (*) | 600 | 600 | 600 | (*)  | (*)  | (*)  | (*)  | (*)                    | 400 | 350               | (*)    | (*)             | (*)    | (*)       |

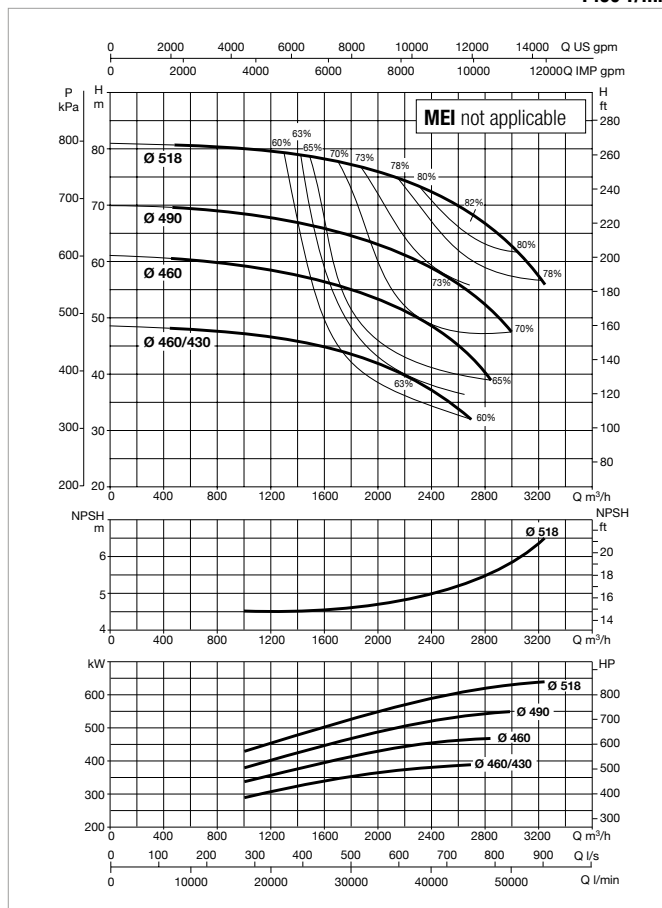
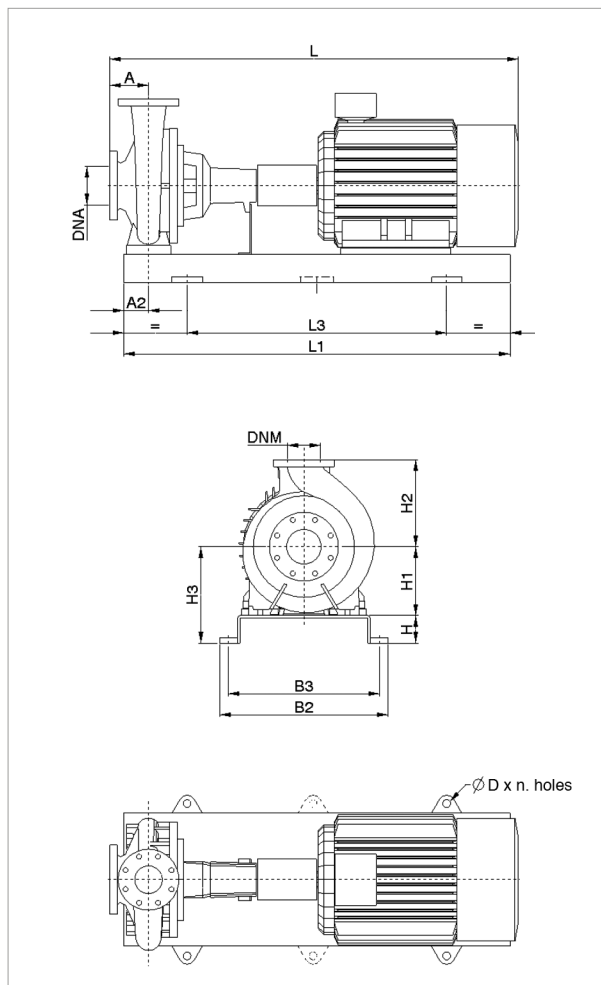
Dimension and electrical data based on sizing definition following the instructions on page 183.

(\*) Data on request.

# KDN 350-500 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

**= 1450 1/min**



**For MEI index refer to the hydraulic efficiency section.**

The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

| MODEL       | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA   |      | MOTOR TYPE |
|-------------|------------|------------|-------------------|------|------------|
|             |            |            | POWER INPUT 50 Hz | In A |            |
| KDN 350-500 | 355        | 355        | 3 x 400 V ~ Δ     | (*)  | IE3        |
|             | 400        | 355        | 3 x 400 V ~ Δ     | (*)  | IE3        |
|             | 500        | 355        | 3 x 400 V ~ Δ     | (*)  | IE3        |

| MODEL       | POWER (kW) | UNIT DIMENSIONS (mm) |     |     |     |     |     |     |     |     |     | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |        | SPACER COUPLING |        |           |
|-------------|------------|----------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------------------------|-----|-------------------|--------|-----------------|--------|-----------|
|             |            | A                    | A2  | H   | H1  | H2  | H3  | L1  | L3  | B2  | B3  | D                      | DNA | DNM               | L (mm) | WEIGHT Kg       | L (mm) | WEIGHT Kg |
| KDN 350-500 | 355        | 380                  | (*) | (*) | 600 | 600 | 600 | (*) | (*) | (*) | (*) | (*)                    | 400 | 350               | (*)    | (*)             | (*)    | (*)       |
|             | 400        | 380                  | (*) | (*) | 600 | 600 | 600 | (*) | (*) | (*) | (*) | (*)                    | 400 | 350               | (*)    | (*)             | (*)    | (*)       |
|             | 500        | 380                  | (*) | (*) | 600 | 600 | 600 | (*) | (*) | (*) | (*) | (*)                    | 400 | 350               | (*)    | (*)             | (*)    | (*)       |

Dimension and electrical data based on sizing definition following the instructions on page 183.

(\*) Data on request.



# KDN OVERSIZE - 4 POLES

## STANDARDISED PUMPS

### IE3 STANDARD MOTOR ELECTRIC DATA

=1450 1/min

| MOTOR TYPE | P2 NOMINAL kW | SPEED rpm | YELD % | POWER FACTOR COS φ | POWER INPUT 50 Hz | In A  |        |        | Start-up current Ia/In | Start-up torque Ma/Mn | Maximum torque M/k/Mn | POLES |
|------------|---------------|-----------|--------|--------------------|-------------------|-------|--------|--------|------------------------|-----------------------|-----------------------|-------|
|            |               |           |        |                    |                   | 230V  | 400V   | 690V   |                        |                       |                       |       |
| MEC 71     | 0,25          | 1400      | 60,00  | 0,710              | 3x230/400         | 1,56  | 0,90   |        | 2,88                   | 2,15                  | 2,26                  | 4     |
| MEC 71     | 0,37          | 1340      | 67,00  | 0,780              | 3x230/400         | 1,70  | 0,98   |        | 4,75                   | 2,84                  | 2,64                  | 4     |
| MEC 80     | 0,55          | 1410      | 71,00  | 0,720              | 3x230/400         | 2,60  | 1,50   |        | 5,33                   | 2,78                  | 2,89                  | 4     |
| MEC 80     | 0,75          | 1435      | 82,50  | 0,740              | 3x230/400         | 3,12  | 1,80   |        | 5,50                   | 2,70                  | 2,80                  | 4     |
| MEC 90S    | 1,1           | 1440      | 84,10  | 0,750              | 3x230/400         | 4,33  | 2,50   |        | 7,10                   | 4,30                  | 4,30                  | 4     |
| MEC 90L    | 1,5           | 1430      | 85,30  | 0,720              | 3x230/400         | 6,24  | 3,60   |        | 6,60                   | 4,30                  | 4,40                  | 4     |
| MEC 100L   | 2,2           | 1455      | 86,70  | 0,630              | 3x230/400         | 24,94 | 14,40  |        | 5,90                   | 3,70                  | 3,90                  | 4     |
| MEC 100L   | 3             | 1440      | 87,70  | 0,730              | 3x400 Δ           |       | 6,80   | 3,93   | 8,10                   | 4,10                  | 4,10                  | 4     |
| MEC 112M   | 4             | 1450      | 88,60  | 0,800              | 3x400 Δ           |       | 8,20   | 4,73   | 8,50                   | 2,70                  | 3,50                  | 4     |
| MEC 132S   | 5,5           | 1450      | 89,60  | 0,840              | 3x400 Δ           |       | 10,60  | 6,12   | 8,70                   | 3,70                  | 4,30                  | 4     |
| MEC 132M   | 7,5           | 1465      | 90,40  | 0,780              | 3x400 Δ           |       | 15,30  | 8,83   | 8,20                   | 4,40                  | 5,10                  | 4     |
| MEC 160M   | 11            | 1465      | 91,40  | 0,770              | 3x400 Δ           |       | 22,40  | 12,93  | 10,10                  | 2,50                  | 3,10                  | 4     |
| MEC 160L   | 15            | 1465      | 92,10  | 0,780              | 3x400 Δ           |       | 30,50  | 17,61  | 8,90                   | 3,20                  | 2,80                  | 4     |
| MEC 180M   | 18,5          | 1470      | 92,60  | 0,840              | 3x400 Δ           |       | 34,30  | 19,80  | 7,50                   | 2,20                  | 2,30                  | 4     |
| MEC 180L   | 22            | 1470      | 93,00  | 0,850              | 3x400 Δ           |       | 40,20  | 23,21  | 7,70                   | 2,20                  | 2,30                  | 4     |
| MEC 200L   | 30            | 1475      | 93,60  | 0,860              | 3x400 Δ           |       | 53,70  | 31,00  | 7,80                   | 2,20                  | 2,30                  | 4     |
| MEC 225S   | 37            | 1485      | 93,90  | 0,860              | 3x400 Δ           |       | 66,10  | 38,16  | 7,20                   | 2,20                  | 2,30                  | 4     |
| MEC 225M   | 45            | 1485      | 94,20  | 0,870              | 3x400 Δ           |       | 79,10  | 45,67  | 7,30                   | 2,20                  | 2,30                  | 4     |
| MEC 250M   | 55            | 1485      | 94,60  | 0,870              | 3x400 Δ           |       | 96,20  | 55,54  | 7,40                   | 2,20                  | 2,30                  | 4     |
| MEC 280S   | 75            | 1486      | 95,00  | 0,870              | 3x400 Δ           |       | 131,00 | 75,63  | 7,40                   | 2,00                  | 2,30                  | 4     |
| MEC 280M   | 90            | 1486      | 95,20  | 0,870              | 3x400 Δ           |       | 157,00 | 90,64  | 6,70                   | 2,00                  | 2,30                  | 4     |
| MEC 315S   | 110           | 1488      | 95,40  | 0,880              | 3x400 Δ           |       | 189,00 | 109,12 | 6,90                   | 2,20                  | 2,20                  | 4     |
| MEC 315M   | 132           | 1488      | 95,60  | 0,880              | 3x400 Δ           |       | 226,00 | 130,48 | 6,90                   | 2,20                  | 2,20                  | 4     |
| MEC 315L   | 160           | 1488      | 95,80  | 0,880              | 3x400 Δ           |       | 274,00 | 158,19 | 6,90                   | 2,20                  | 2,20                  | 4     |
| MEC 315L   | 200           | 1490      | 96,00  | 0,880              | 3x400 Δ           |       | 342,00 | 197,45 | 6,90                   | 2,20                  | 2,20                  | 4     |
| MEC 355M   | 250           | 1490      | 96,00  | 0,890              | 3x400 Δ           |       | 420,00 | 242,77 | 7,70                   | 2,60                  | 2,70                  | 4     |
| MEC 355L   | 315           | 1490      | 96,00  | 0,890              | 3x400 Δ           |       | 530,00 | 306,36 | 7,80                   | 2,80                  | 2,70                  | 4     |

# KDN OVERSIZE - 6 POLES RANGE

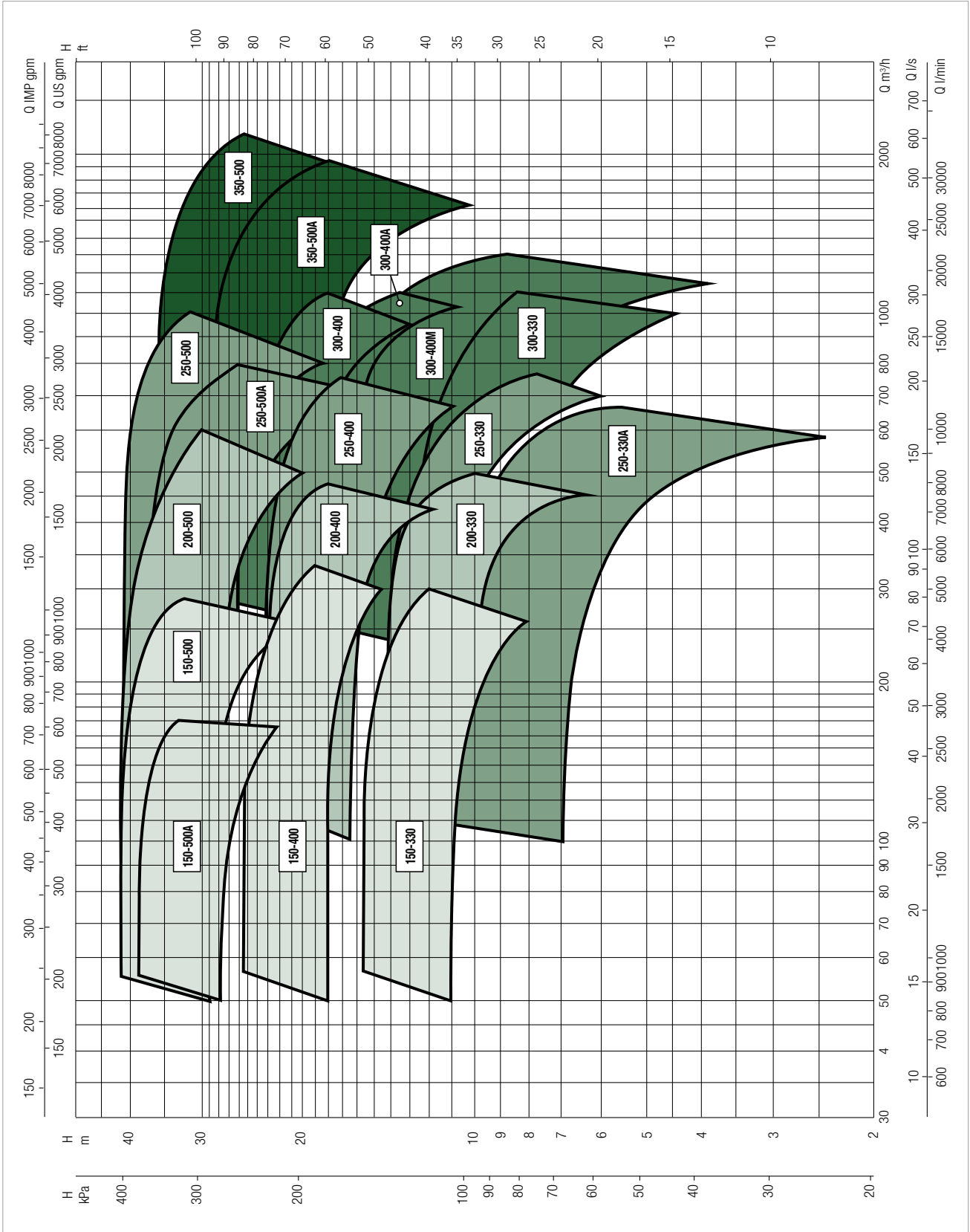
STANDARDISED PUMPS

## PERFORMANCE RANGE

The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

### GRAPHIC SELECTION TABLE

= 970 1/min



# KDN OVERSIZE - 6 POLES

STANDARDISED PUMPS

## SELECTION TABLE - KDN 150

| MODEL              | Q=m <sup>3</sup> /h | 0  | 50  | 100  | 150  | 200  | 250  | 300  |
|--------------------|---------------------|----|-----|------|------|------|------|------|
|                    | Q=l/min             | 0  | 833 | 1667 | 2500 | 3333 | 4167 | 5000 |
| KDN 150-330 / 280  | H<br>(m)            | 11 | 11  | 11   | 11   | 10   | 8    |      |
| KDN 150-330 / 300  |                     | 13 | 13  | 13   | 12   | 12   | 10   |      |
| KDN 150-330 / 315  |                     | 14 | 14  | 14   | 14   | 13   | 12   |      |
| KDN 150-330 / 328  |                     | 16 | 16  | 16   | 15   | 15   | 14   | 12   |
| KDN 150-400 / 350  |                     | 18 | 18  | 18   | 18   | 17   | 16   | 14   |
| KDN 150-400 / 370  |                     | 20 | 20  | 20   | 20   | 19   | 18   | 16   |
| KDN 150-400 / 390  |                     | 23 | 23  | 23   | 23   | 22   | 21   | 18   |
| KDN 150-400 / 408  |                     | 25 | 25  | 25   | 25   | 25   | 23   | 21   |
| KDN 150-500 / 440  |                     | 29 | 29  | 29   | 28   | 24   |      |      |
| KDN 150-500 / 480  |                     | 35 | 35  | 35   | 33   | 31   | 27   |      |
| KDN 150-500 / 518  |                     | 41 | 41  | 41   | 40   | 39   | 35   |      |
| KDN 150-500A / 440 |                     | 28 | 28  | 27   | 24   |      |      |      |
| KDN 150-500A / 480 |                     | 33 | 33  | 32   | 29   |      |      |      |
| KDN 150-500A / 518 |                     | 39 | 39  | 39   | 36   |      |      |      |

## SELECTION TABLE - KDN 200

| MODEL             | Q=m <sup>3</sup> /h | 0  | 50  | 100  | 150  | 200  | 250  | 300  | 400  | 450  | 500  | 600   |
|-------------------|---------------------|----|-----|------|------|------|------|------|------|------|------|-------|
|                   | Q=l/min             | 0  | 833 | 1667 | 2500 | 3333 | 4167 | 5000 | 6667 | 7500 | 8334 | 10000 |
| KDN 200-330 / 290 | H<br>(m)            | 10 |     | 10   | 10   | 10   | 10   | 10   | 8    | 6    |      |       |
| KDN 200-330 / 310 |                     | 12 |     | 12   | 12   | 12   | 12   | 12   | 11   | 8    |      |       |
| KDN 200-330 / 328 |                     | 14 |     | 14   | 14   | 14   | 14   | 14   | 13   | 12   | 10   |       |
| KDN 200-400 / 350 |                     | 16 |     | 16   | 16   | 16   | 16   | 16   | 13   |      |      |       |
| KDN 200-400 / 370 |                     | 18 |     | 18   | 18   | 18   | 18   | 18   | 16   |      |      |       |
| KDN 200-400 / 390 |                     | 21 |     | 21   | 21   | 21   | 20   | 20   | 19   | 17   |      |       |
| KDN 200-400 / 408 |                     | 23 |     | 23   | 23   | 23   | 23   | 23   | 22   | 20   |      |       |
| KDN 200-500 / 430 |                     | 28 |     | 28   | 28   | 28   | 27   | 27   | 24   | 22   | 20   |       |
| KDN 200-500 / 470 |                     | 34 |     | 34   | 34   | 34   | 33   | 33   | 30   | 28   | 26   |       |
| KDN 200-500 / 508 |                     | 41 |     | 41   | 41   | 41   | 40   | 40   | 37   | 36   | 34   | 30    |

## SELECTION TABLE - KDN 250

| MODEL                 | Q=m <sup>3</sup> /h | 0  | 50  | 100  | 150  | 200  | 250  | 300  | 400  | 450  | 500  | 600   | 700   | 800   | 1000  |
|-----------------------|---------------------|----|-----|------|------|------|------|------|------|------|------|-------|-------|-------|-------|
|                       | Q=l/min             | 0  | 833 | 1667 | 2500 | 3333 | 4167 | 5000 | 6667 | 7500 | 8334 | 10000 | 11667 | 13334 | 16667 |
| KDN 250-330 / 310     | H<br>(m)            | 13 |     | 12   | 12   | 12   | 12   | 11   | 11   | 10   | 10   | 8     | 6     |       |       |
| KDN 250-330 / 320     |                     | 14 |     | 13   | 13   | 13   | 13   | 13   | 12   | 12   | 11   | 10    | 8     |       |       |
| KDN 250-330 / 328     |                     | 15 |     | 15   | 15   | 14   | 14   | 14   | 13   | 13   | 13   | 11    | 10    |       |       |
| KDN 250-330 / 275/32° |                     | 7  |     | 7    | 7    | 7    | 6    | 6    | 5    | 5    | 4    | 2     |       |       |       |
| KDN 250-330 / 275     |                     | 10 |     | 10   | 9    | 9    | 9    | 9    | 8    | 7    | 7    |       |       |       |       |
| KDN 250-330 / 295     |                     | 12 |     | 12   | 12   | 11   | 11   | 11   | 10   | 9    | 9    | 7     |       |       |       |
| KDN 250-400 / 350     |                     | 16 |     | 16   | 16   | 16   | 16   | 16   | 15   | 15   | 14   | 12    |       |       |       |
| KDN 250-400 / 370     |                     | 19 |     | 19   | 19   | 19   | 18   | 18   | 18   | 18   | 17   | 15    | 13    |       |       |
| KDN 250-400 / 390     |                     | 22 |     | 22   | 22   | 21   | 21   | 21   | 21   | 21   | 20   | 18    |       |       |       |
| KDN 250-400 / 408     |                     | 23 |     | 23   | 23   | 23   | 23   | 23   | 23   | 23   | 22   | 21    | 18    |       |       |
| KDN 250-500 / 440     |                     | 26 |     |      |      | 26   | 26   | 26   | 25   | 25   | 25   | 24    | 22    | 19    |       |
| KDN 250-500 / 480     |                     | 32 |     |      |      | 32   | 32   | 32   | 32   | 32   | 32   | 31    | 30    | 28    |       |
| KDN 250-500 / 518     |                     | 40 |     |      |      | 40   | 40   | 40   | 40   | 40   | 40   | 40    | 39    | 38    | 31    |
| KDN 250-500A / 440    |                     | 27 |     |      |      | 27   | 27   | 26   | 25   | 24   | 23   | 20    |       |       |       |
| KDN 250-500A / 480    |                     | 33 |     |      |      | 33   | 33   | 33   | 32   | 31   | 30   | 27    | 23    |       |       |
| KDN 250-500A / 518    |                     | 39 |     |      |      | 39   | 39   | 38   | 38   | 37   | 36   | 34    | 31    | 26    |       |

# KDN OVERSIZE - 6 POLES

STANDARDISED PUMPS

## SELECTION TABLE - KDN 300

| MODEL                  | Q=m <sup>3</sup> /h | 0  | 50  | 100  | 150  | 200  | 250  | 300  | 400  | 450  | 500  | 600   | 700   | 800   | 1000  | 1200  |    |
|------------------------|---------------------|----|-----|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|----|
|                        | Q=l/min             | 0  | 833 | 1667 | 2500 | 3333 | 4167 | 5000 | 6667 | 7500 | 8334 | 10000 | 11667 | 13334 | 16667 | 20000 |    |
| KDN 300-330 / 325/24°  | H<br>(m)            | 9  |     |      |      | 9    | 9    | 9    | 9    | 9    | 8    | 8     | 7     | 6     | 5     |       |    |
| KDN 300-330 / 325      |                     | 12 |     |      |      |      | 11   | 11   | 11   | 11   | 11   | 10    | 10    | 9     | 9     | 7     |    |
| KDN 300-330 / 345      |                     | 14 |     |      |      |      | 13   | 13   | 13   | 13   | 13   | 12    | 12    | 12    | 11    | 9     |    |
| KDN 300-400 / 370      |                     | 20 |     |      |      |      | 20   | 20   | 20   | 20   | 20   | 20    | 19    | 18    | 16    |       |    |
| KDN 300-400 / 390      |                     | 23 |     |      |      |      | 23   | 23   | 23   | 22   | 22   | 22    | 21    | 21    | 20    | 17    |    |
| KDN 300-400 / 408      |                     | 26 |     |      |      |      | 25   | 25   | 25   | 25   | 25   | 25    | 24    | 24    | 23    | 20    |    |
| KDN 300-400A / 340     |                     | 17 |     |      |      |      |      | 17   | 16   | 16   | 16   | 16    | 16    | 15    | 14    | 11    |    |
| KDN 300-400A / 355     |                     | 18 |     |      |      |      | x    | 18   | 18   | 18   | 18   | 18    | 18    | 17    | 16    | 13    |    |
| KDN 300-400A / 370     |                     | 20 |     |      |      |      | x    | 20   | 20   | 20   | 20   | 20    | 20    | 19    | 18    | 16    |    |
| KDN 300-400M / 380/350 |                     | 10 |     |      |      |      | x    | 10   | 10   | 10   | 10   | 10    | 9     | 9     | 8     | 6     |    |
| KDN 300-400M / 380     |                     | 14 |     |      |      |      | x    | 14   | 14   | 14   | 14   | 14    | 13    | 13    | 12    | 10    | 6  |
| KDN 300-400M / 395     |                     | 16 |     |      |      |      | x    | 16   | 16   | 16   | 16   | 16    | 15    | 15    | 14    | 12    | 9  |
| KDN 300-400M / 408     |                     | 18 |     |      |      |      | x    | 18   | 18   | 18   | 18   | 18    | 17    | 17    | 16    | 15    | 11 |

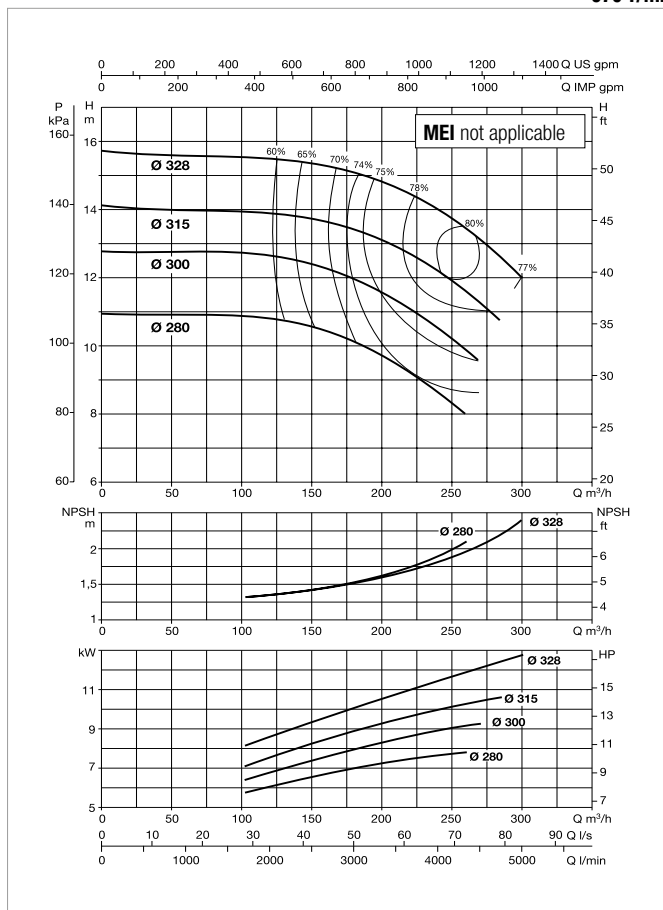
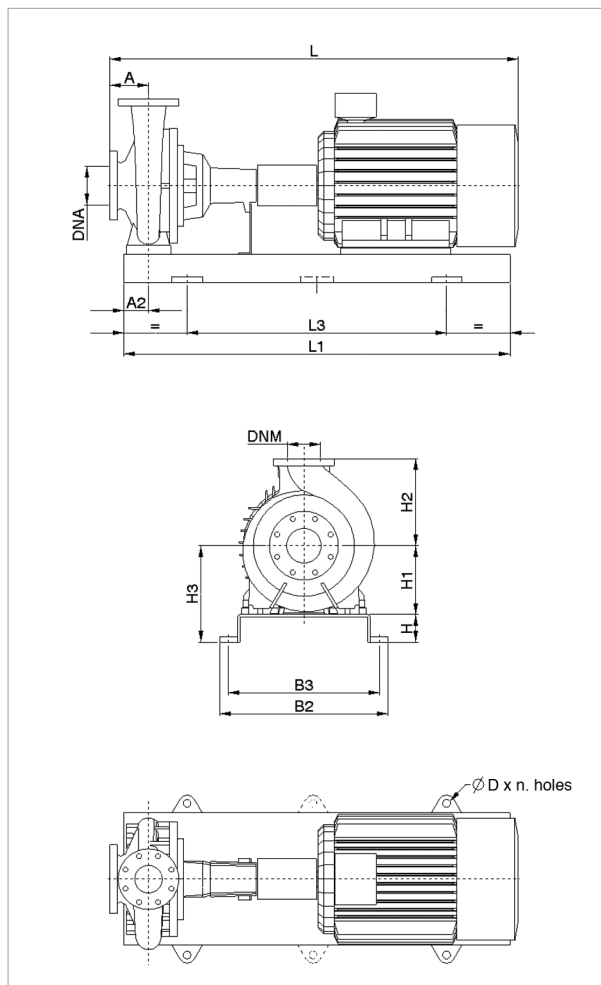
## SELECTION TABLE - KDN 350

| MODEL                  | Q=m <sup>3</sup> /h | 0  | 50  | 100  | 150  | 200  | 250  | 300  | 400  | 450  | 500  | 600   | 700   | 800   | 1000  | 1200  | 1600  | 1700  | 1800  | 1900  | 2000  |    |  |
|------------------------|---------------------|----|-----|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----|--|
|                        | Q=l/min             | 0  | 833 | 1667 | 2500 | 3333 | 4167 | 5000 | 6667 | 7500 | 8334 | 10000 | 11667 | 13334 | 16667 | 20000 | 26667 | 28334 | 30001 | 31667 | 33334 |    |  |
| KDN 350-500 / 460/430  | H<br>(m)            | 22 |     |      |      |      |      |      | 22   | 22   | 21   | 21    | 21    | 21    | 20    | 20    | 17    | 16    | 14    |       |       |    |  |
| KDN 350-500 / 460      |                     | 27 |     |      |      |      |      |      |      | 27   | 27   | 27    | 27    | 26    | 26    | 26    | 25    | 22    | 21    | 19    |       |    |  |
| KDN 350-500 / 490      |                     | 31 |     |      |      |      |      |      |      | 31   | 31   | 31    | 31    | 31    | 30    | 30    | 29    | 26    | 26    | 24    | 23    | 21 |  |
| KDN 350-500 / 518      |                     | 36 |     |      |      |      |      |      |      | 36   | 36   | 36    | 36    | 36    | 36    | 35    | 35    | 33    | 32    | 31    | 30    | 28 |  |
| KDN 350-500A / 405/16° |                     | 18 |     |      |      |      |      |      |      | 18   | 18   | 18    | 18    | 18    | 18    | 17    | 16    | 9     |       |       |       |    |  |
| KDN 350-500A / 405/435 |                     | 22 |     |      |      |      |      |      |      | 22   | 22   | 22    | 22    | 22    | 22    | 22    | 20    | 16    | 14    |       |       |    |  |
| KDN 350-500A / 435     |                     | 26 |     |      |      |      |      |      |      | 26   | 26   | 26    | 26    | 25    | 25    | 25    | 24    | 20    | 18    | 16    |       |    |  |
| KDN 350-500A / 465     |                     | 29 |     |      |      |      |      |      |      | 29   | 29   | 29    | 29    | 29    | 29    | 28    | 27    | 24    | 23    | 21    | 19    |    |  |

# KDN 150-330 - 6 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 970 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

| MODEL       | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA   |      | MOTOR TYPE |
|-------------|------------|------------|-------------------|------|------------|
|             |            |            | POWER INPUT 50 Hz | In A |            |
| KDN 150-330 | 7,5        | 160M       | 3 x 400 V ~ Δ     | 15,8 | IE3        |
|             | 11         | 160L       | 3 x 400 V ~ Δ     | 23,1 | IE3        |
|             | 15         | 180M       | 3 x 400 V ~ Δ     | 29,7 | IE3        |

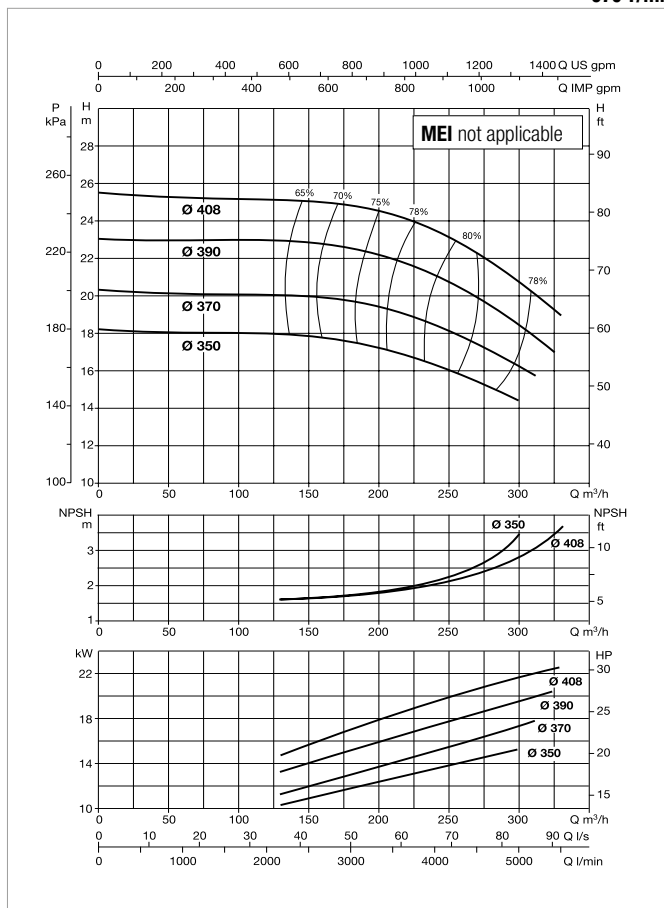
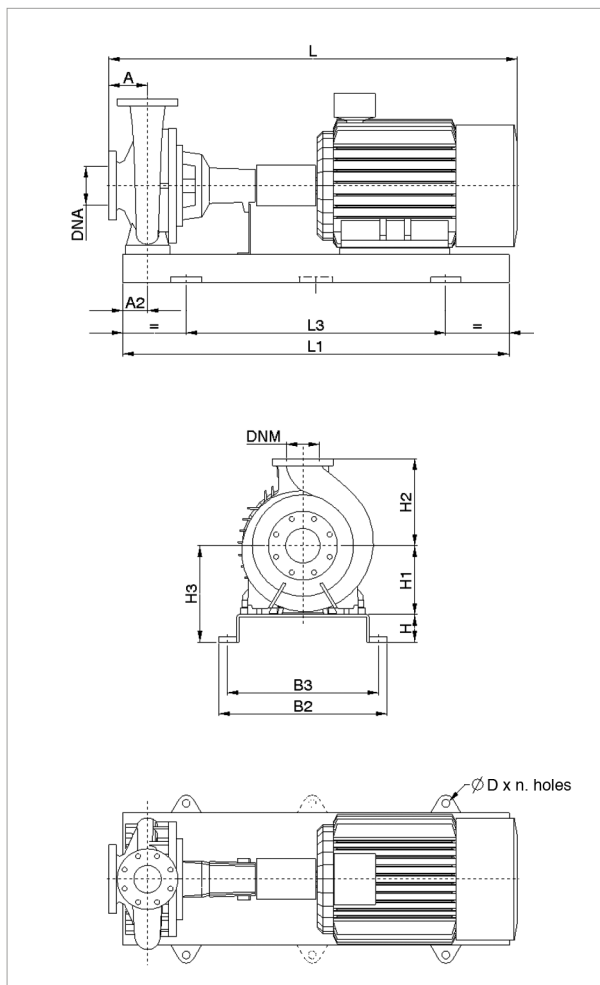
| MODEL       | POWER (kW) | UNIT DIMENSIONS (mm) |     |     |     |     |     |      |      |     |     | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |        | SPACER COUPLING |        |           |
|-------------|------------|----------------------|-----|-----|-----|-----|-----|------|------|-----|-----|------------------------|-----|-------------------|--------|-----------------|--------|-----------|
|             |            | A                    | A2  | H   | H1  | H2  | H3  | L1   | L3   | B2  | B3  | D                      | DNA | DNM               | L (mm) | WEIGHT Kg       | L (mm) | WEIGHT Kg |
| KDN 150-330 | 7,5        | 160                  | 110 | 100 | 315 | 400 | 415 | 1800 | 1200 | 730 | 670 | 28x4                   | 200 | 150               | 1554   | 438             | 1735   | 453       |
|             | 11         | 160                  | 110 | 100 | 315 | 400 | 415 | 1800 | 1200 | 730 | 670 | 28x4                   | 200 | 150               | 1554   | 438             | 1735   | 453       |
|             | 15         | 160                  | 110 | 100 | 315 | 400 | 415 | 1800 | 1200 | 730 | 670 | 28x4                   | 200 | 150               | 1612   | 438             | 1793   | 453       |

Dimension and electrical data based on sizing definition following the instructions on page 183.

# KDN 150-400 - 6 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 970 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

| MODEL       | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA   |      | MOTOR TYPE |
|-------------|------------|------------|-------------------|------|------------|
|             |            |            | POWER INPUT 50 Hz | In A |            |
| KDN 150-400 | 18,5       | 200L       | 3 x 400 V ~ Δ     | 36   | IE3        |
|             | 22         | 200L       | 3 x 400 V ~ Δ     | 42,5 | IE3        |
|             | 30         | 225M       | 3 x 400 V ~ Δ     | 54,8 | IE3        |

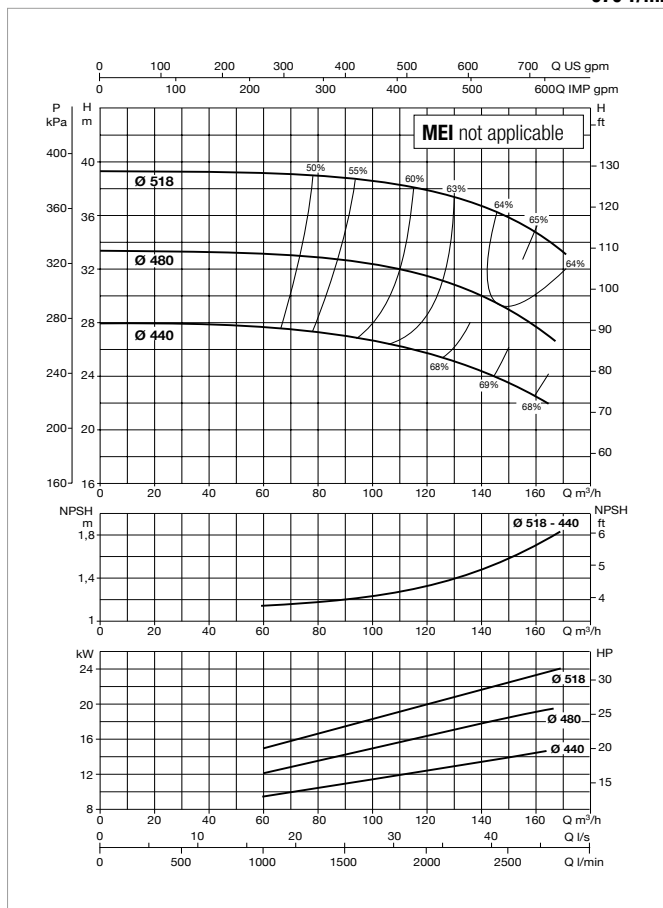
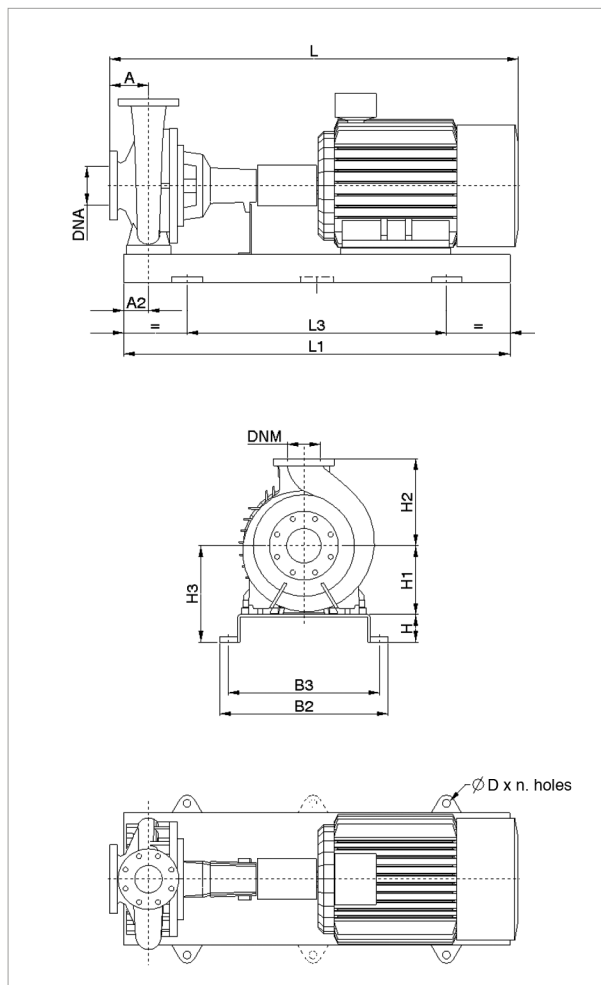
| MODEL       | POWER (kW) | UNIT DIMENSIONS (mm) |     |     |     |     |     |      |      |     |     | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |        | SPACER COUPLING |        |           |
|-------------|------------|----------------------|-----|-----|-----|-----|-----|------|------|-----|-----|------------------------|-----|-------------------|--------|-----------------|--------|-----------|
|             |            | A                    | A2  | H   | H1  | H2  | H3  | L1   | L3   | B2  | B3  | D                      | DNA | DNM               | L (mm) | WEIGHT Kg       | L (mm) | WEIGHT Kg |
| KDN 150-400 | 18,5       | 160                  | 110 | 100 | 315 | 450 | 415 | 1800 | 1200 | 730 | 670 | 28x4                   | 200 | 150               | 1654   | 481             | 1835   | 496       |
|             | 22         | 160                  | 110 | 100 | 315 | 450 | 415 | 1800 | 1200 | 730 | 670 | 28x4                   | 200 | 150               | 1654   | 481             | 1835   | 496       |
|             | 30         | 160                  | 110 | 100 | 315 | 450 | 415 | 1800 | 1200 | 730 | 670 | 28x4                   | 200 | 150               | 1729   | 481             | 1910   | 496       |

Dimension and electrical data based on sizing definition following the instructions on page 183.

# KDN 150-500A - 6 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 970 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

| MODEL        | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA   |      | MOTOR TYPE |
|--------------|------------|------------|-------------------|------|------------|
|              |            |            | POWER INPUT 50 Hz | In A |            |
| KDN 150-500A | 11         | 160L       | 3 x 400 V ~ Δ     | 23,1 | IE3        |
|              | 15         | 180L       | 3 x 400 V ~ Δ     | 29,7 | IE3        |
|              | 18,5       | 200L       | 3 x 400 V ~ Δ     | 36   | IE3        |
|              | 22         | 200L       | 3 x 400 V ~ Δ     | 42,5 | IE3        |
|              | 30         | 225M       | 3 x 400 V ~ Δ     | 54,8 | IE3        |

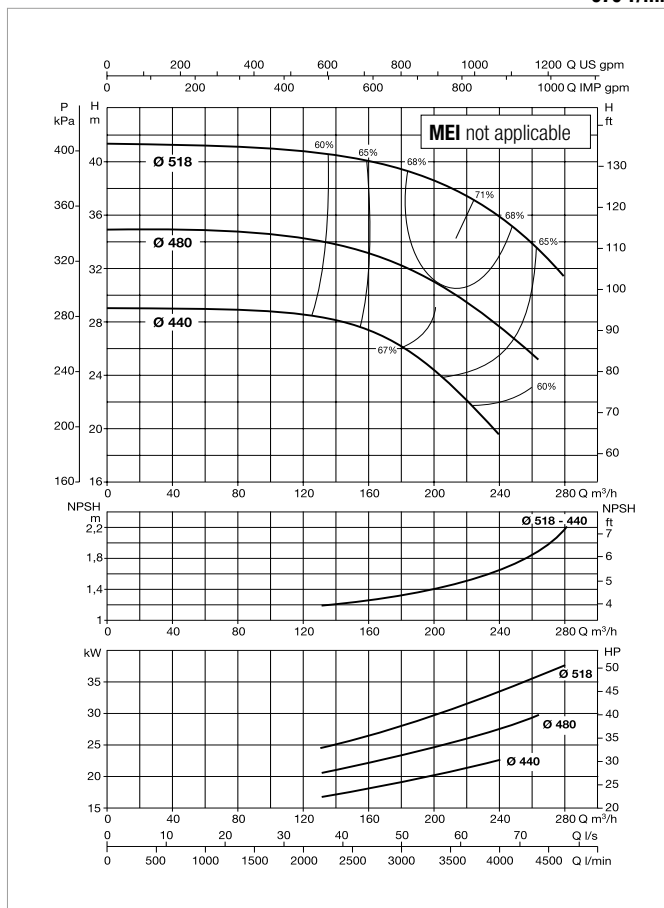
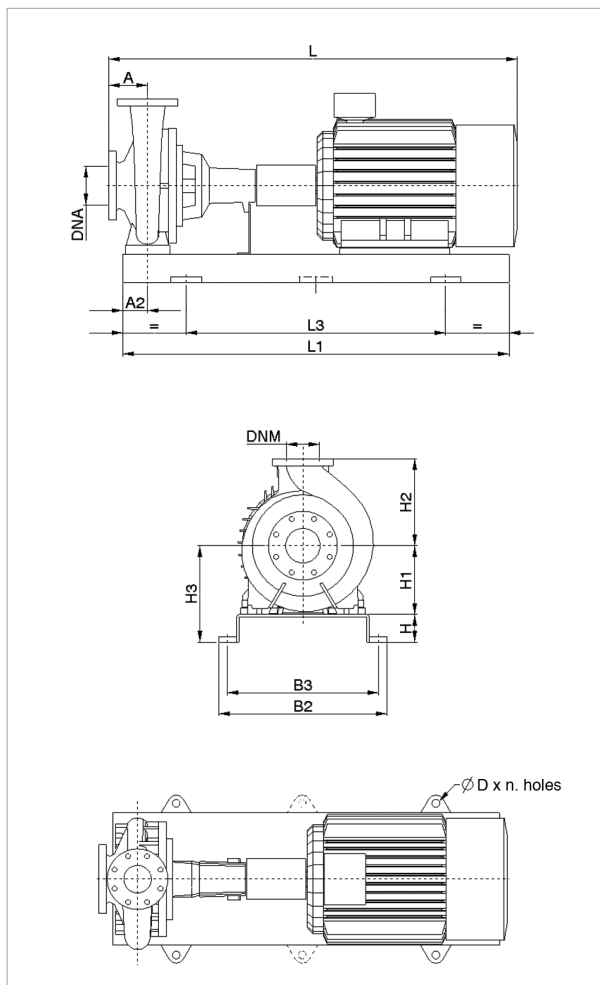
| MODEL        | POWER (kW) | UNIT DIMENSIONS (mm) |     |     |     |     |     |      |      |     |     | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |        | SPACER COUPLING |        |           |
|--------------|------------|----------------------|-----|-----|-----|-----|-----|------|------|-----|-----|------------------------|-----|-------------------|--------|-----------------|--------|-----------|
|              |            | A                    | A2  | H   | H1  | H2  | H3  | L1   | L3   | B2  | B3  | D                      | DNA | DNM               | L (mm) | WEIGHT Kg       | L (mm) | WEIGHT Kg |
| KDN 150-500A | 11         | 180                  | 110 | 100 | 355 | 500 | 455 | 1800 | 1200 | 730 | 670 | 28x4                   | 200 | 150               | 1574   | 593             | 1755   | 608       |
|              | 15         | 180                  | 110 | 100 | 355 | 500 | 455 | 1800 | 1200 | 730 | 670 | 28x4                   | 200 | 150               | 1632   | 593             | 1813   | 608       |
|              | 18,5       | 180                  | 110 | 100 | 355 | 500 | 455 | 1800 | 1200 | 730 | 670 | 28x4                   | 200 | 150               | 1674   | 593             | 1855   | 608       |
|              | 22         | 180                  | 110 | 100 | 355 | 500 | 455 | 1800 | 1200 | 730 | 670 | 28x4                   | 200 | 150               | 1674   | 593             | 1855   | 608       |
|              | 30         | 180                  | 110 | 100 | 355 | 500 | 455 | 1800 | 1200 | 730 | 670 | 28x4                   | 200 | 150               | 1749   | 593             | 1930   | 608       |

Dimension and electrical data based on sizing definition following the instructions on page 183.

# KDN 150-500 - 6 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 970 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

| MODEL       | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA   |      | MOTOR TYPE |
|-------------|------------|------------|-------------------|------|------------|
|             |            |            | POWER INPUT 50 Hz | In A |            |
| KDN 150-500 | 22         | 200L       | 3 x 400 V ~ Δ     | 42,5 | IE3        |
|             | 30         | 225M       | 3 x 400 V ~ Δ     | 54,8 | IE3        |
|             | 37         | 250M       | 3 x 400 V ~ Δ     | 66,6 | IE3        |
|             | 45         | 280S       | 3 x 400 V ~ Δ     | 80,6 | IE3        |

| MODEL       | POWER (kW) | UNIT DIMENSIONS (mm) |     |     |     |     |     |      |      |     |     | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |        | SPACER COUPLING |        |           |
|-------------|------------|----------------------|-----|-----|-----|-----|-----|------|------|-----|-----|------------------------|-----|-------------------|--------|-----------------|--------|-----------|
|             |            | A                    | A2  | H   | H1  | H2  | H3  | L1   | L3   | B2  | B3  | D                      | DNA | DNM               | L (mm) | WEIGHT Kg       | L (mm) | WEIGHT Kg |
| KDN 150-500 | 22         | 180                  | 110 | 100 | 355 | 500 | 455 | 1800 | 1200 | 730 | 670 | 28x4                   | 200 | 150               | 1674   | 593             | 1855   | 608       |
|             | 30         | 180                  | 110 | 100 | 355 | 500 | 455 | 1800 | 1200 | 730 | 670 | 28x4                   | 200 | 150               | 1749   | 593             | 1930   | 608       |
|             | 37         | 180                  | 110 | 100 | 355 | 500 | 455 | 1800 | 1200 | 730 | 670 | 28x4                   | 200 | 150               | 1840   | 593             | 2021   | 608       |
|             | 45         | 180                  | 110 | 100 | 355 | 500 | 455 | 1800 | 1200 | 730 | 670 | 28x4                   | 200 | 150               | 1895   | 593             | 2076   | 608       |

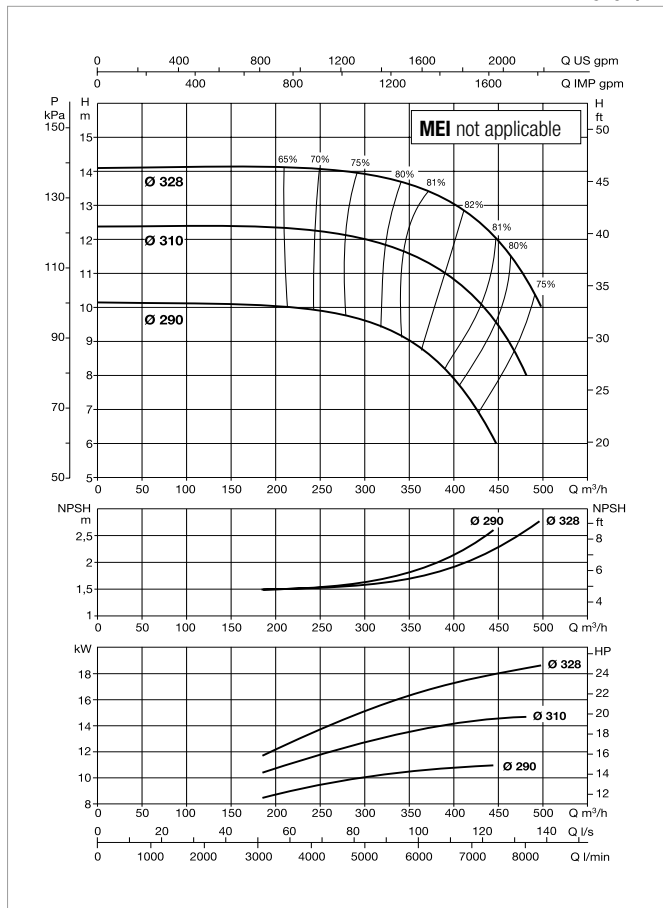
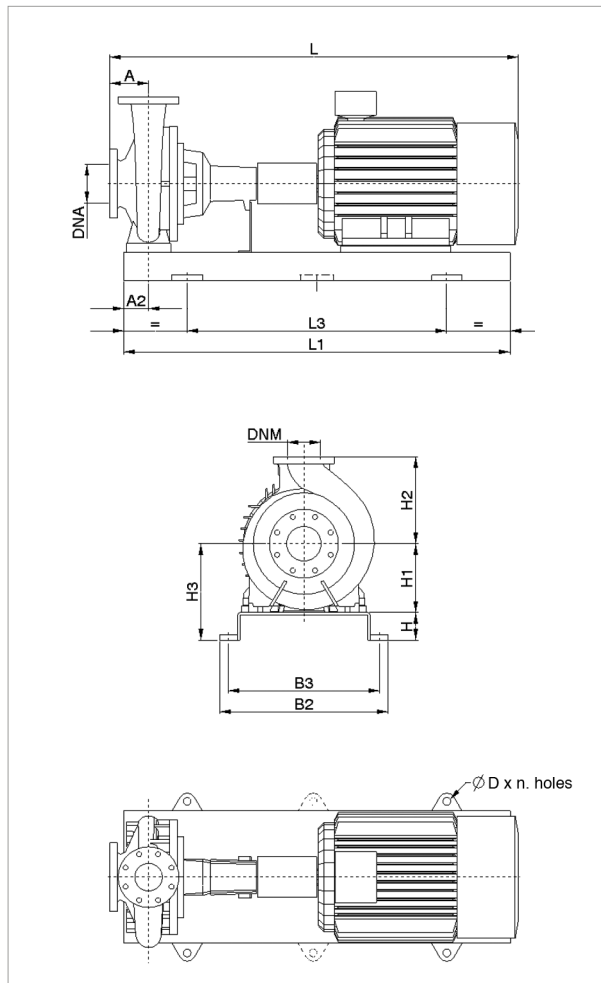
Dimension and electrical data based on sizing definition following the instructions on page 183.



# KDN 200-330 - 6 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 970 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

| MODEL       | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA   |      | MOTOR TYPE |
|-------------|------------|------------|-------------------|------|------------|
|             |            |            | POWER INPUT 50 Hz | In A |            |
| KDN 200-330 | 11         | 160L       | 3 x 400 V ~ Δ     | 23,1 | IE3        |
|             | 15         | 180L       | 3 x 400 V ~ Δ     | 29,7 | IE3        |
|             | 18,5       | 200L       | 3 x 400 V ~ Δ     | 36   | IE3        |
|             | 22         | 200L       | 3 x 400 V ~ Δ     | 42,5 | IE3        |
|             | 30         | 225M       | 3 x 400 V ~ Δ     | 54,8 | IE3        |

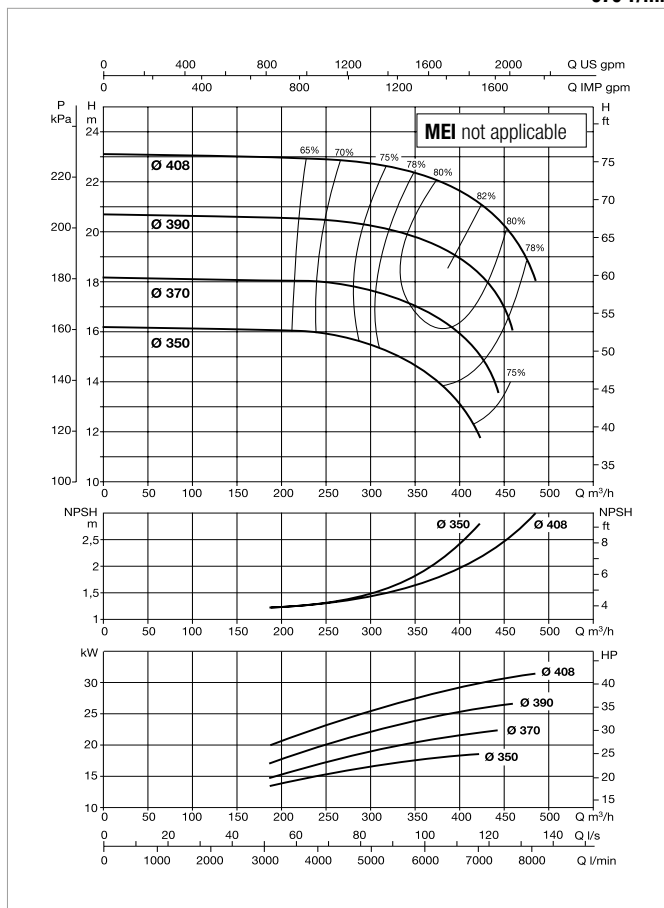
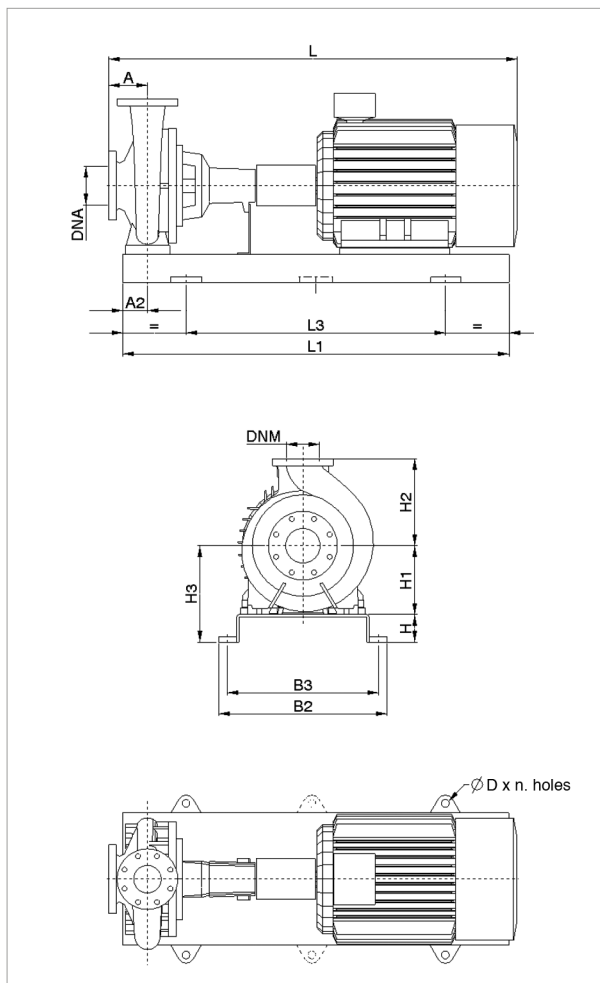
| MODEL       | POWER (kW) | UNIT DIMENSIONS (mm) |     |     |     |     |     |      |      |     |     | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |        | SPACER COUPLING |        |           |
|-------------|------------|----------------------|-----|-----|-----|-----|-----|------|------|-----|-----|------------------------|-----|-------------------|--------|-----------------|--------|-----------|
|             |            | A                    | A2  | H   | H1  | H2  | H3  | L1   | L3   | B2  | B3  | D                      | DNA | DNM               | L (mm) | WEIGHT Kg       | L (mm) | WEIGHT Kg |
| KDN 200-330 | 11         | 200                  | 110 | 100 | 355 | 450 | 455 | 1800 | 1200 | 730 | 670 | 28x4                   | 250 | 200               | 1594   | 543             | 1775   | 558       |
|             | 15         | 200                  | 110 | 100 | 355 | 450 | 455 | 1800 | 1200 | 730 | 670 | 28x4                   | 250 | 200               | 1652   | 543             | 1833   | 558       |
|             | 18,5       | 200                  | 110 | 100 | 355 | 450 | 455 | 1800 | 1200 | 730 | 670 | 28x4                   | 250 | 200               | 1694   | 543             | 1875   | 558       |
|             | 22         | 200                  | 110 | 100 | 355 | 450 | 455 | 1800 | 1200 | 730 | 670 | 28x4                   | 250 | 200               | 1694   | 543             | 1875   | 558       |
|             | 30         | 200                  | 110 | 100 | 355 | 450 | 455 | 1800 | 1200 | 730 | 670 | 28x4                   | 250 | 200               | 1769   | 543             | 1950   | 558       |

Dimension and electrical data based on sizing definition following the instructions on page 183.

# KDN 200-400 - 6 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 970 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

| MODEL       | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA   |      | MOTOR TYPE |
|-------------|------------|------------|-------------------|------|------------|
|             |            |            | POWER INPUT 50 Hz | In A |            |
| KDN 200-400 | 15         | 180L       | 3 x 400 V ~ Δ     | 29,7 | IE3        |
|             | 18,5       | 200L       | 3 x 400 V ~ Δ     | 36   | IE3        |
|             | 22         | 200L       | 3 x 400 V ~ Δ     | 42,5 | IE3        |
|             | 30         | 225M       | 3 x 400 V ~ Δ     | 54,8 | IE3        |
|             | 37         | 250M       | 3 x 400 V ~ Δ     | 66,6 | IE3        |

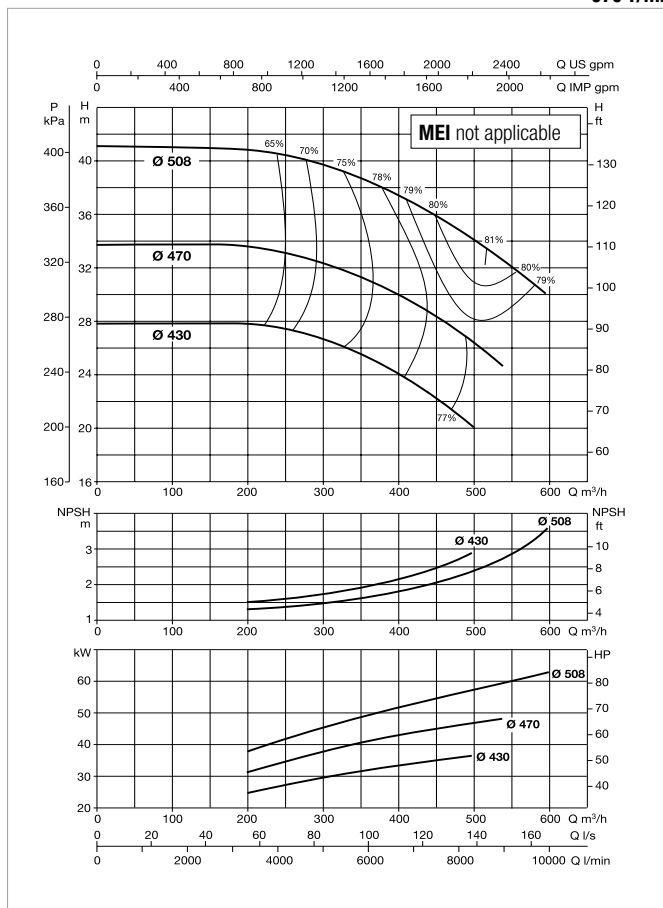
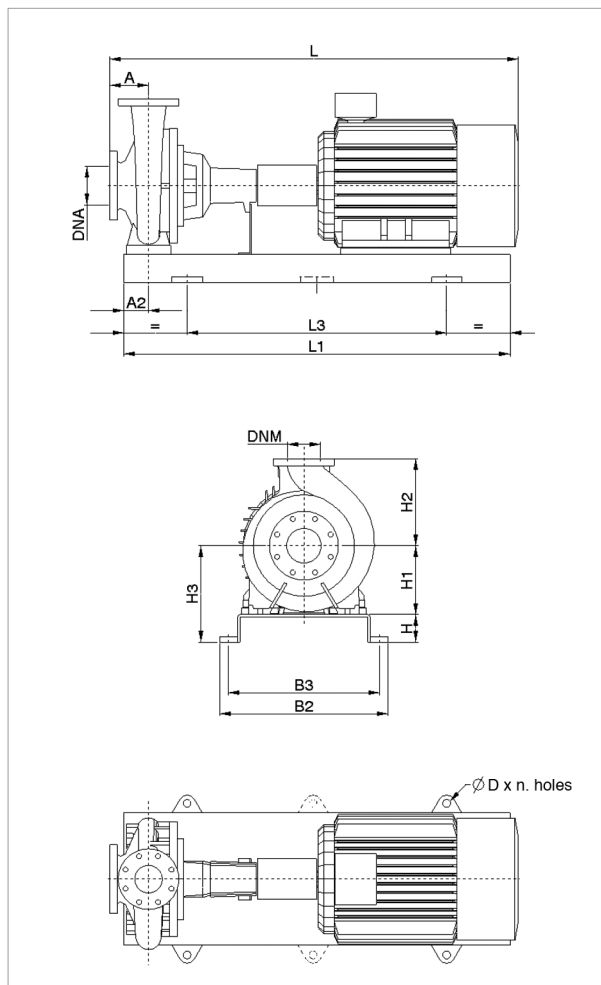
| MODEL       | POWER (kW) | UNIT DIMENSIONS (mm) |     |     |     |     |     |      |      |     |     | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |        | SPACER COUPLING |        |           |
|-------------|------------|----------------------|-----|-----|-----|-----|-----|------|------|-----|-----|------------------------|-----|-------------------|--------|-----------------|--------|-----------|
|             |            | A                    | A2  | H   | H1  | H2  | H3  | L1   | L3   | B2  | B3  | D                      | DNA | DNM               | L (mm) | WEIGHT Kg       | L (mm) | WEIGHT Kg |
| KDN 200-400 | 15         | 185                  | 110 | 100 | 355 | 500 | 455 | 1800 | 1200 | 730 | 670 | 28x4                   | 250 | 200               | 1637   | 573             | 1818   | 588       |
|             | 18,5       | 185                  | 110 | 100 | 355 | 500 | 455 | 1800 | 1200 | 730 | 670 | 28x4                   | 250 | 200               | 1679   | 573             | 1860   | 588       |
|             | 22         | 185                  | 110 | 100 | 355 | 500 | 455 | 1800 | 1200 | 730 | 670 | 28x4                   | 250 | 200               | 1679   | 573             | 1860   | 588       |
|             | 30         | 185                  | 110 | 100 | 355 | 500 | 455 | 1800 | 1200 | 730 | 670 | 28x4                   | 250 | 200               | 1754   | 573             | 1935   | 588       |
|             | 37         | 185                  | 110 | 100 | 355 | 500 | 455 | 1800 | 1200 | 730 | 670 | 28x4                   | 250 | 200               | 1845   | 573             | 2026   | 588       |

Dimension and electrical data based on sizing definition following the instructions on page 183.

# KDN 200-500 - 6 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 970 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

| MODEL       | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA   |      | MOTOR TYPE |
|-------------|------------|------------|-------------------|------|------------|
|             |            |            | POWER INPUT 50 Hz | In A |            |
| KDN 200-500 | 22         | 200L       | 3 x 400 V ~ Δ     | 42,5 | IE3        |
|             | 30         | 225M       | 3 x 400 V ~ Δ     | 54,8 | IE3        |
|             | 37         | 250M       | 3 x 400 V ~ Δ     | 66,6 | IE3        |
|             | 45         | 280S       | 3 x 400 V ~ Δ     | 80,6 | IE3        |
|             | 55         | 280M       | 3 x 400 V ~ Δ     | 98,1 | IE3        |
|             | 75         | 315S       | 3 x 400 V ~ Δ     | 135  | IE3        |

| MODEL       | POWER (kW) | UNIT DIMENSIONS (mm) |     |     |     |     |     |      |      |     |     | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |        | SPACER COUPLING |        |           |
|-------------|------------|----------------------|-----|-----|-----|-----|-----|------|------|-----|-----|------------------------|-----|-------------------|--------|-----------------|--------|-----------|
|             |            | A                    | A2  | H   | H1  | H2  | H3  | L1   | L3   | B2  | B3  | D                      | DNA | DNM               | L (mm) | WEIGHT Kg       | L (mm) | WEIGHT Kg |
| KDN 200-500 | 22         | 185                  | 145 | 185 | 400 | 580 | (*) | (*)  | (*)  | (*) | (*) | (*)                    | 250 | 200               | 1985   | 1010            | 2165   | 1037      |
|             | 30         | 185                  | 145 | 185 | 400 | 580 | (*) | (*)  | (*)  | (*) | (*) | (*)                    | 250 | 200               | 1985   | 1070            | 2165   | 1097      |
|             | 37         | 185                  | 145 | 185 | 400 | 580 | (*) | (*)  | (*)  | (*) | (*) | (*)                    | 250 | 200               | 2006   | 1105            | 2186   | 1132      |
|             | 45         | 185                  | 145 | 185 | 400 | 580 | 585 | 1650 | 1050 | 960 | 915 | 20x4                   | 250 | 200               | 2006   | 1120            | 2186   | 1135      |
|             | 55         | 185                  | 145 | 185 | 400 | 580 | 585 | 1650 | 1050 | 960 | 915 | 20x4                   | 250 | 200               | 2006   | 1120            | 2186   | 1135      |
|             | 75         | 185                  | 145 | 205 | 400 | 580 | 605 | 1800 | 1200 | 960 | 915 | 20x4                   | 250 | 200               | 2096   | 1600            | 2276   | 1615      |

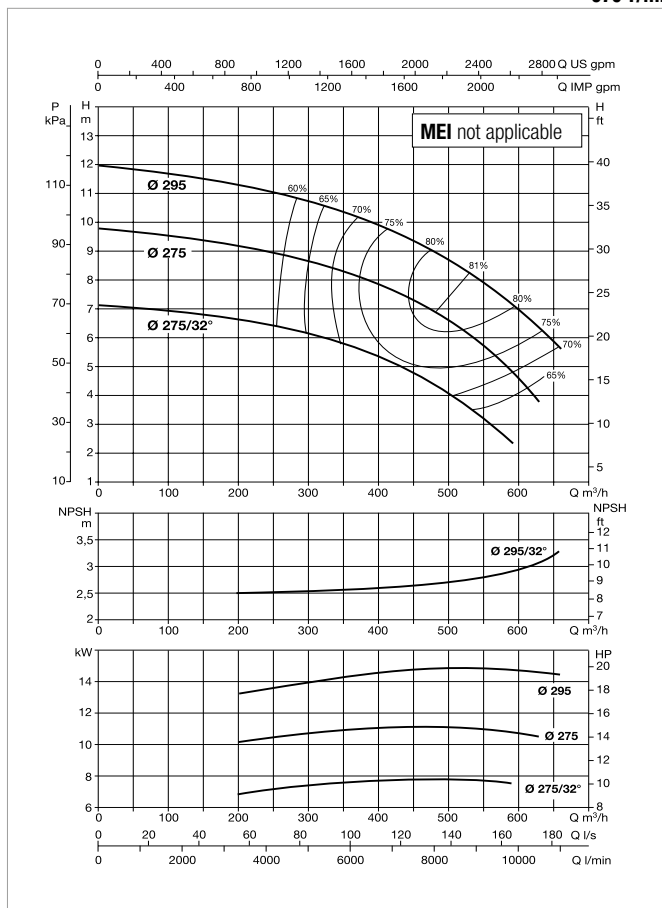
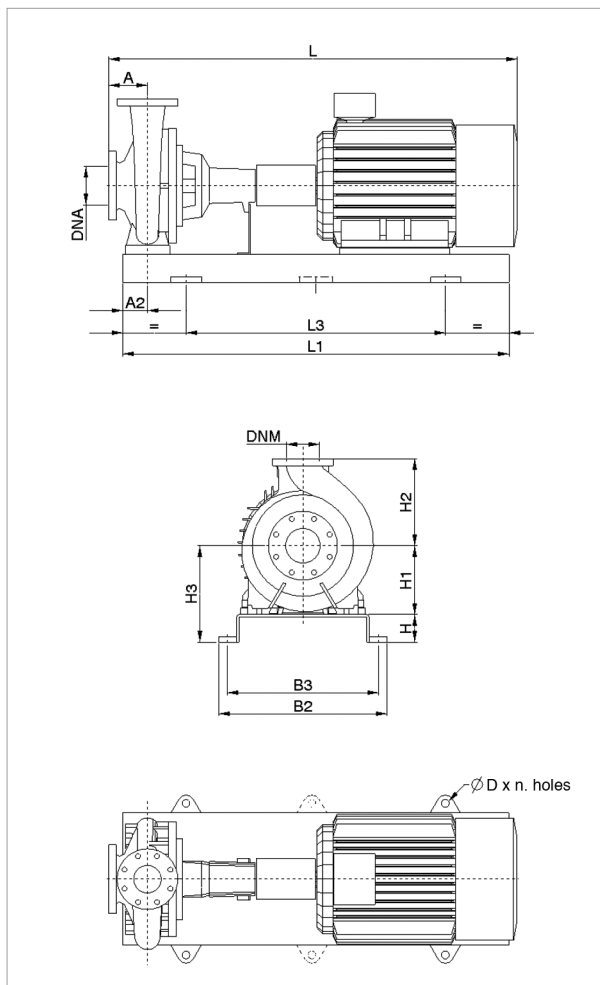
Dimension and electrical data based on sizing definition following the instructions on page 183.

(\*) Data on request.

# KDN 250-330A - 6 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 970 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

| MODEL        | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA   |      | MOTOR TYPE |
|--------------|------------|------------|-------------------|------|------------|
|              |            |            | POWER INPUT 50 Hz | In A |            |
| KDN 250-330A | 7,5        | 160M       | 3 x 400 V ~ Δ     | 15,8 | IE3        |
|              | 11         | 160L       | 3 x 400 V ~ Δ     | 23,1 | IE3        |
|              | 15         | 180L       | 3 x 400 V ~ Δ     | 29,7 | IE3        |

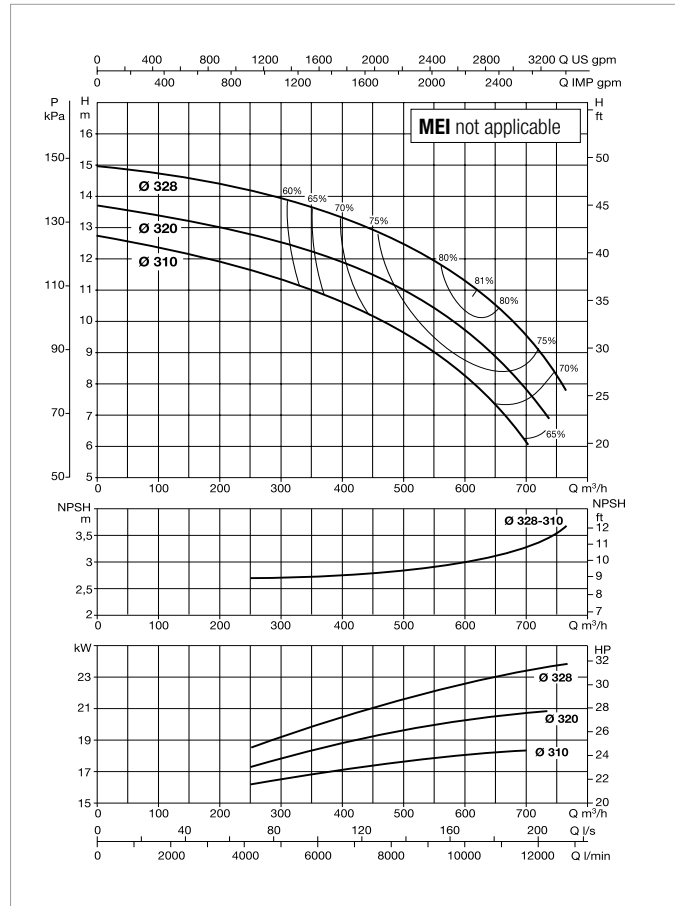
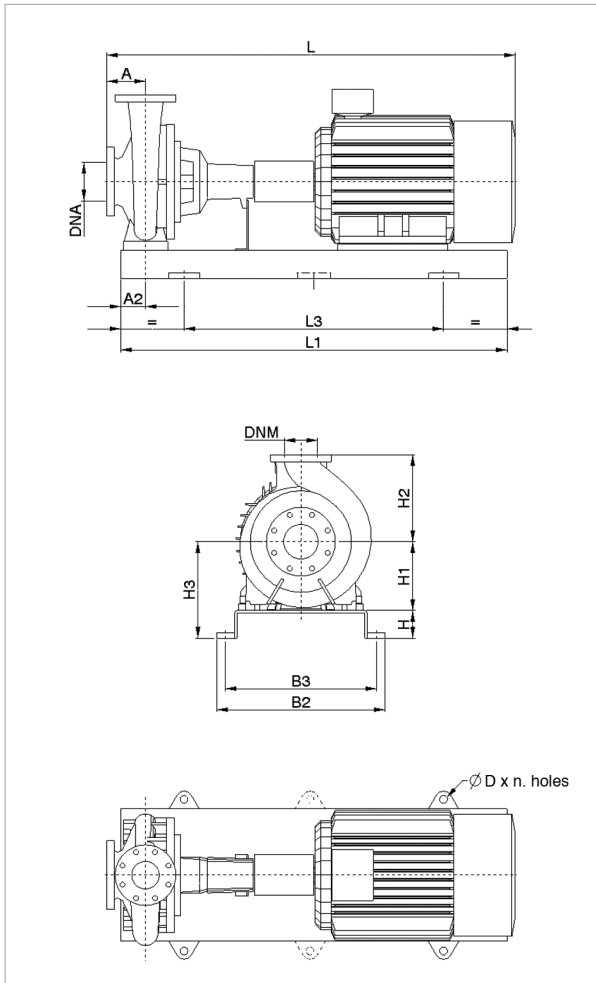
| MODEL        | POWER (kW) | UNIT DIMENSIONS (mm) |     |     |     |     |     |      |      |     |     | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |        | SPACER COUPLING |        |           |
|--------------|------------|----------------------|-----|-----|-----|-----|-----|------|------|-----|-----|------------------------|-----|-------------------|--------|-----------------|--------|-----------|
|              |            | A                    | A2  | H   | H1  | H2  | H3  | L1   | L3   | B2  | B3  | D                      | DNA | DNM               | L (mm) | WEIGHT Kg       | L (mm) | WEIGHT Kg |
| KDN 250-330A | 7,5        | 250                  | 135 | 120 | 400 | 525 | 520 | 2000 | 1340 | 910 | 830 | 28x4                   | 300 | 250               | 974    | 647             | 1215   | 662       |
|              | 11         | 250                  | 135 | 120 | 400 | 525 | 520 | 2000 | 1340 | 910 | 830 | 28x4                   | 300 | 250               | 974    | 647             | 1215   | 662       |
|              | 15         | 250                  | 135 | 120 | 400 | 525 | 520 | 2000 | 1340 | 910 | 830 | 28x4                   | 300 | 250               | 974    | 647             | 1215   | 662       |

Dimension and electrical data based on sizing definition following the instructions on page 183.

# KDN 250-330 - 6 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 970 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

| MODEL       | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA   |      | MOTOR TYPE |
|-------------|------------|------------|-------------------|------|------------|
|             |            |            | POWER INPUT 50 Hz | In A |            |
| KDN 250-330 | 15         | 180L       | 3 x 400 V ~ Δ     | 29,7 | IE3        |
|             | 18,5       | 200L       | 3 x 400 V ~ Δ     | 36   | IE3        |
|             | 22         | 200L       | 3 x 400 V ~ Δ     | 42,5 | IE3        |
|             | 30         | 225M       | 3 x 400 V ~ Δ     | 54,8 | IE3        |

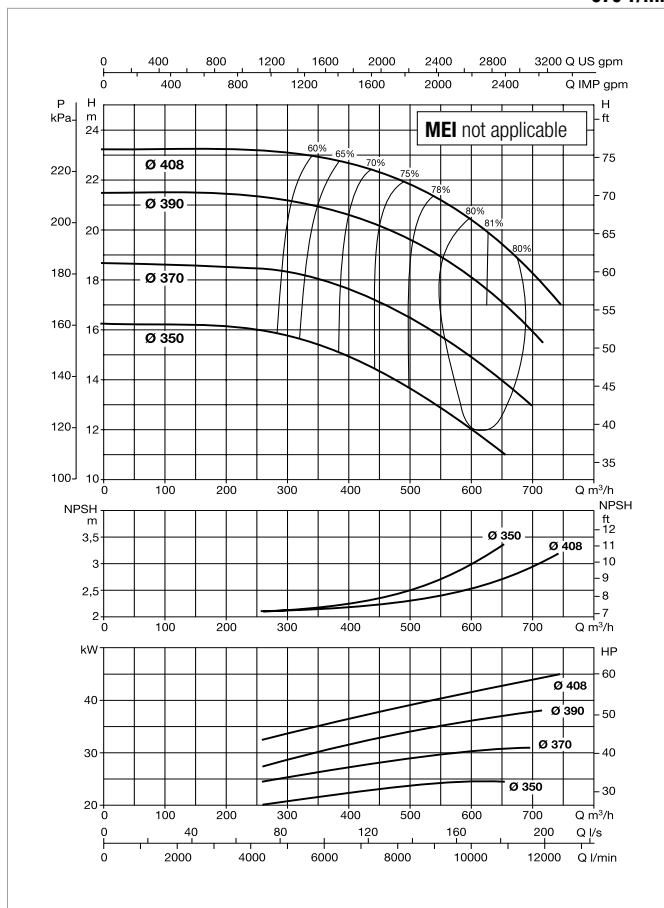
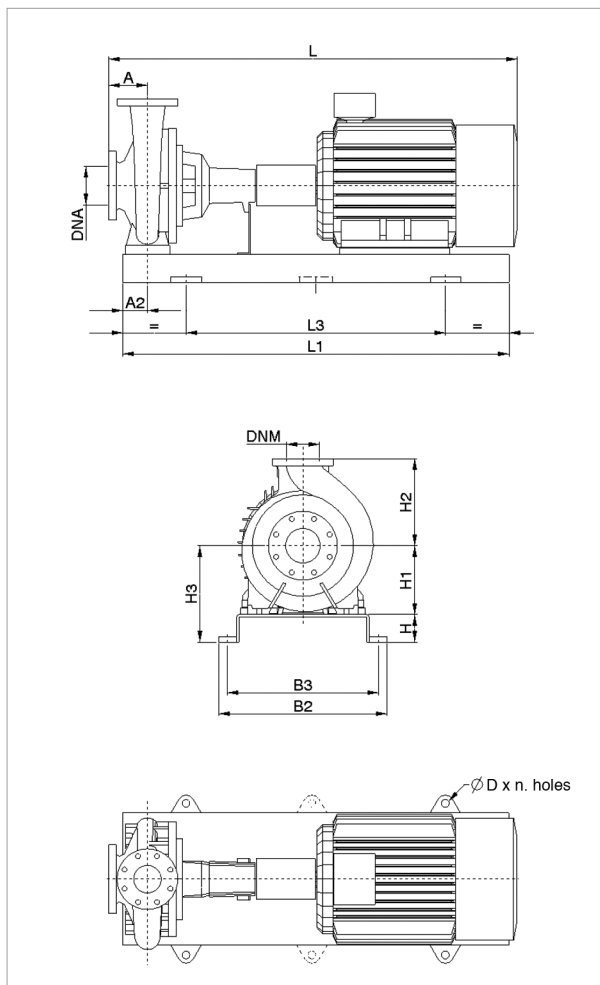
| MODEL       | POWER (kW) | UNIT DIMENSIONS (mm) |     |     |     |     |     |      |      |     |     |      | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |           | SPACER COUPLING |           |
|-------------|------------|----------------------|-----|-----|-----|-----|-----|------|------|-----|-----|------|------------------------|-----|-------------------|-----------|-----------------|-----------|
|             |            | A                    | A2  | H   | H1  | H2  | H3  | L1   | L3   | B2  | B3  | D    | DNA                    | DNM | L (mm)            | WEIGHT Kg | L (mm)          | WEIGHT Kg |
| KDN 250-330 | 15         | 250                  | 135 | 120 | 400 | 525 | 520 | 2000 | 1340 | 910 | 830 | 28x4 | 300                    | 250 | 974               | 647       | 1215            | 662       |
|             | 18,5       | 250                  | 135 | 120 | 400 | 525 | 520 | 2000 | 1340 | 910 | 830 | 28x4 | 300                    | 250 | 974               | 647       | 1215            | 662       |
|             | 22         | 250                  | 135 | 120 | 400 | 525 | 520 | 2000 | 1340 | 910 | 830 | 28x4 | 300                    | 250 | 974               | 647       | 1215            | 662       |
|             | 30         | 250                  | 135 | 120 | 400 | 525 | 520 | 2000 | 1340 | 910 | 830 | 28x4 | 300                    | 250 | 974               | 647       | 1215            | 662       |

Dimension and electrical data based on sizing definition following the instructions on page 183.

# KDN 250-400 - 6 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

**= 970 1/min**



**For MEI index refer to the hydraulic efficiency section.**

The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

| MODEL       | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA   |      | MOTOR TYPE |
|-------------|------------|------------|-------------------|------|------------|
|             |            |            | POWER INPUT 50 Hz | In A |            |
| KDN 250-400 | 37         | 250M       | 3 x 400 V ~ Δ     | 66,6 | IE3        |
|             | 45         | 280S       | 3 x 400 V ~ Δ     | 80,6 | IE3        |
|             | 55         | 280M       | 3 x 400 V ~ Δ     | 98,1 | IE3        |
|             | 75         | 315S       | 3 x 400 V ~ Δ     | 135  | IE3        |

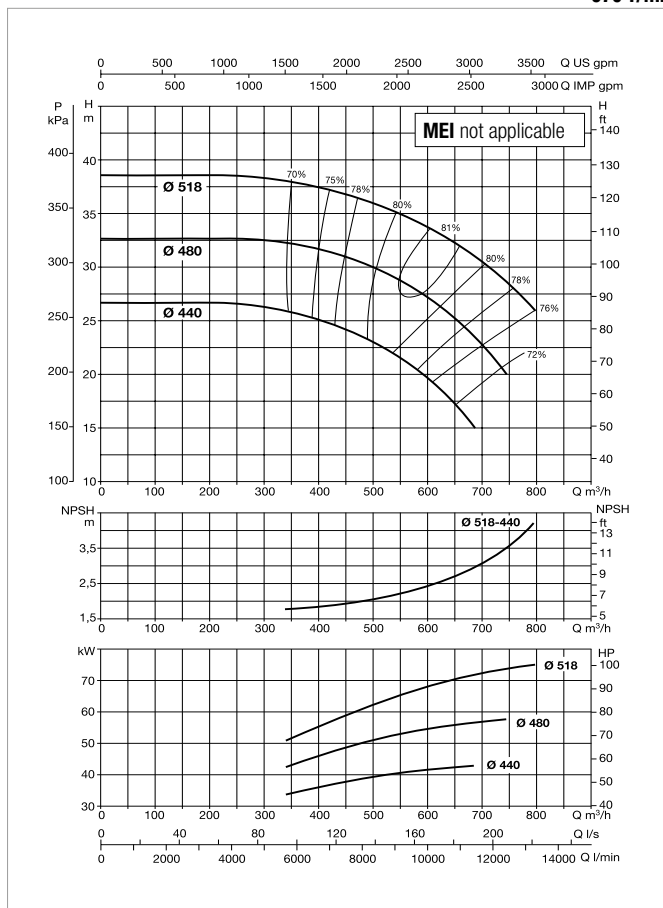
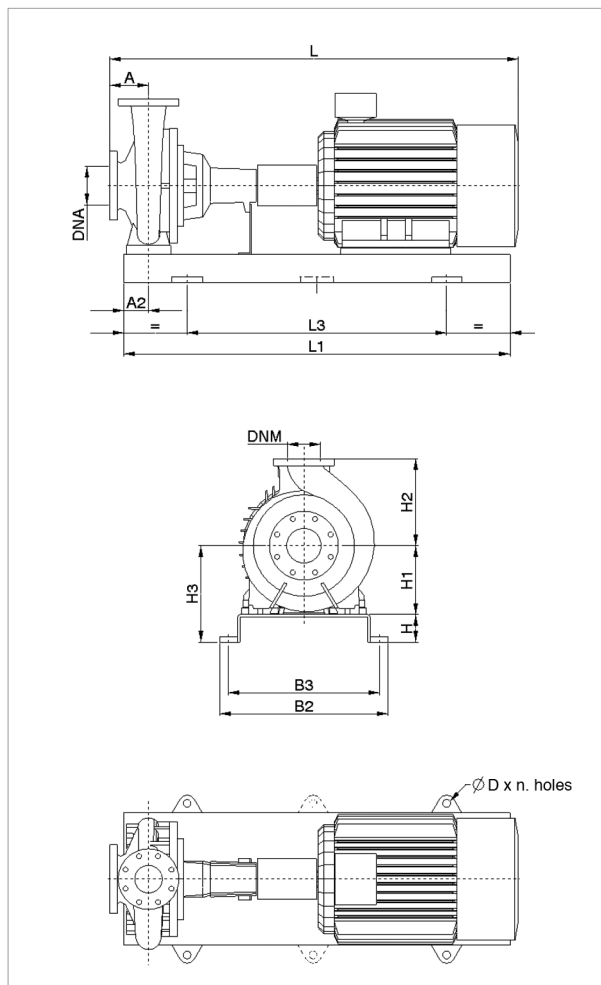
| MODEL       | POWER (kW) | UNIT DIMENSIONS (mm) |     |     |     |     |     |      |      |     |     | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |        | SPACER COUPLING |        |           |
|-------------|------------|----------------------|-----|-----|-----|-----|-----|------|------|-----|-----|------------------------|-----|-------------------|--------|-----------------|--------|-----------|
|             |            | A                    | A2  | H   | H1  | H2  | H3  | L1   | L3   | B2  | B3  | D                      | DNA | DNM               | L (mm) | WEIGHT Kg       | L (mm) | WEIGHT Kg |
| KDN 250-400 | 37         | 225                  | 135 | 120 | 400 | 600 | 520 | 2000 | 1340 | 910 | 830 | 28x4                   | 300 | 250               | 1080   | 887             | 1261   | 902       |
|             | 45         | 225                  | 135 | 120 | 400 | 600 | 520 | 2000 | 1340 | 910 | 830 | 28x4                   | 300 | 250               | 1080   | 887             | 1261   | 902       |
|             | 55         | 225                  | 135 | 120 | 400 | 600 | 520 | 2000 | 1340 | 910 | 830 | 28x4                   | 300 | 250               | 1080   | 887             | 1261   | 902       |
|             | 75         | 225                  | 135 | 120 | 400 | 600 | 520 | 2000 | 1340 | 910 | 830 | 28x4                   | 300 | 250               | 1080   | 887             | 1261   | 902       |

Dimension and electrical data based on sizing definition following the instructions on page 183.

# KDN 250-500A - 6 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 970 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

| MODEL        | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA   |      | MOTOR TYPE |
|--------------|------------|------------|-------------------|------|------------|
|              |            |            | POWER INPUT 50 Hz | In A |            |
| KDN 250-500A | 37         | 250M       | 3 x 400 V ~ Δ     | 66,6 | IE3        |
|              | 45         | 280S       | 3 x 400 V ~ Δ     | 80,6 | IE3        |
|              | 55         | 280M       | 3 x 400 V ~ Δ     | 98,1 | IE3        |
|              | 75         | 315S       | 3 x 400 V ~ Δ     | 135  | IE3        |
|              | 90         | 315M       | 3 x 400 V ~ Δ     | 159  | IE3        |

| MODEL        | POWER (kW) | UNIT DIMENSIONS (mm) |     |     |     |     |     |     |     |     |     | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |        | SPACER COUPLING |        |
|--------------|------------|----------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------------------------|-----|-------------------|--------|-----------------|--------|
|              |            | A                    | A2  | H   | H1  | H2  | H3  | L1  | L3  | B2  | B3  | D                      | DNA | DNM               | L (mm) | WEIGHT Kg       | L (mm) |
| KDN 250-500A | 37         | 300                  | 155 | 210 | 500 | 500 | (*) | (*) | (*) | (*) | (*) | 300                    | 250 | (*)               | (*)    | (*)             | (*)    |
|              | 45         | 300                  | 155 | 210 | 500 | 500 | (*) | (*) | (*) | (*) | (*) | 300                    | 250 | (*)               | (*)    | (*)             | (*)    |
|              | 55         | 300                  | 155 | 210 | 500 | 500 | (*) | (*) | (*) | (*) | (*) | 300                    | 250 | (*)               | (*)    | (*)             | (*)    |
|              | 75         | 300                  | 155 | 210 | 500 | 500 | (*) | (*) | (*) | (*) | (*) | 300                    | 250 | (*)               | (*)    | (*)             | (*)    |
|              | 90         | 300                  | 155 | 210 | 500 | 500 | (*) | (*) | (*) | (*) | (*) | 300                    | 250 | (*)               | (*)    | (*)             | (*)    |

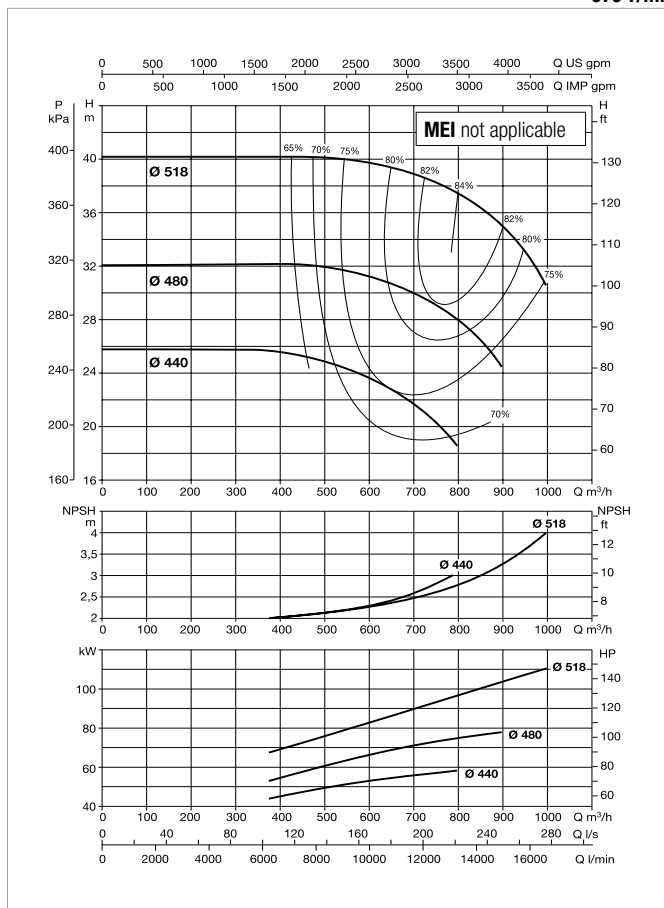
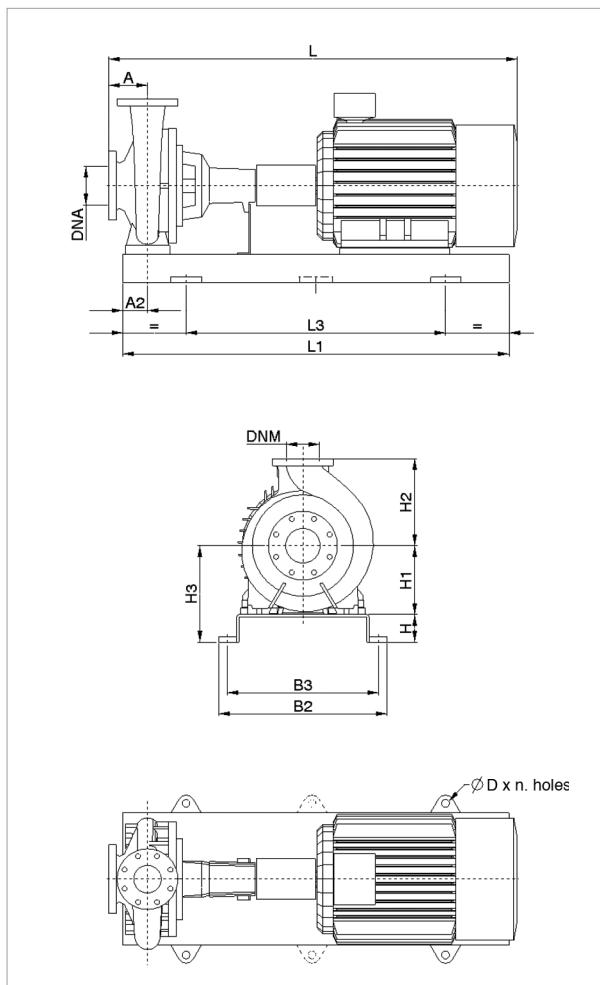
Dimension and electrical data based on sizing definition following the instructions on page 183.

(\*) Data on request.

# KDN 250-500 - 6 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 970 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

| MODEL       | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA   |      | MOTOR TYPE |
|-------------|------------|------------|-------------------|------|------------|
|             |            |            | POWER INPUT 50 Hz | In A |            |
| KDN 250-500 | 45         | 280S       | 3 x 400 V ~ Δ     | 80,6 | IE3        |
|             | 55         | 280M       | 3 x 400 V ~ Δ     | 98,1 | IE3        |
|             | 75         | 315S       | 3 x 400 V ~ Δ     | 135  | IE3        |
|             | 90         | 315M       | 3 x 400 V ~ Δ     | 159  | IE3        |
|             | 110        | 315M       | 3 x 400 V ~ Δ     | 192  | IE3        |
|             | 132        | 315L       | 3 x 400 V ~ Δ     | (*)  | IE3        |

| MODEL       | POWER (kW) | UNIT DIMENSIONS (mm) |     |     |     |     |     |      |     |     |     | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |        | SPACER COUPLING |        |           |
|-------------|------------|----------------------|-----|-----|-----|-----|-----|------|-----|-----|-----|------------------------|-----|-------------------|--------|-----------------|--------|-----------|
|             |            | A                    | A2  | H   | H1  | H2  | H3  | L1   | L3  | B2  | B3  | D                      | DNA | DNM               | L (mm) | WEIGHT Kg       | L (mm) | WEIGHT Kg |
| KDN 250-500 | 45         | 300                  | 155 | 210 | 500 | 500 | (*) | (*)  | (*) | (*) | (*) | (*)                    | 300 | 250               | (*)    | (*)             | (*)    | (*)       |
|             | 55         | 300                  | 155 | 210 | 500 | 500 | (*) | (*)  | (*) | (*) | (*) | (*)                    | 300 | 250               | (*)    | (*)             | (*)    | (*)       |
|             | 75         | 300                  | 155 | 210 | 500 | 500 | (*) | (*)  | (*) | (*) | (*) | (*)                    | 300 | 250               | (*)    | (*)             | (*)    | (*)       |
|             | 90         | 300                  | 155 | 210 | 500 | 500 | (*) | (*)  | (*) | (*) | (*) | (*)                    | 300 | 250               | (*)    | (*)             | (*)    | (*)       |
|             | 110        | 300                  | 155 | 210 | 500 | 500 | 710 | 2250 | 825 | 995 | 950 | 20x4                   | 300 | 250               | 2368   | (*)             | 2618   | (*)       |
|             | 132        | 300                  | 155 | 210 | 500 | 500 | (*) | (*)  | (*) | (*) | (*) | (*)                    | 300 | 250               | (*)    | (*)             | (*)    | (*)       |

Dimension and electrical data based on sizing definition following the instructions on page 183.

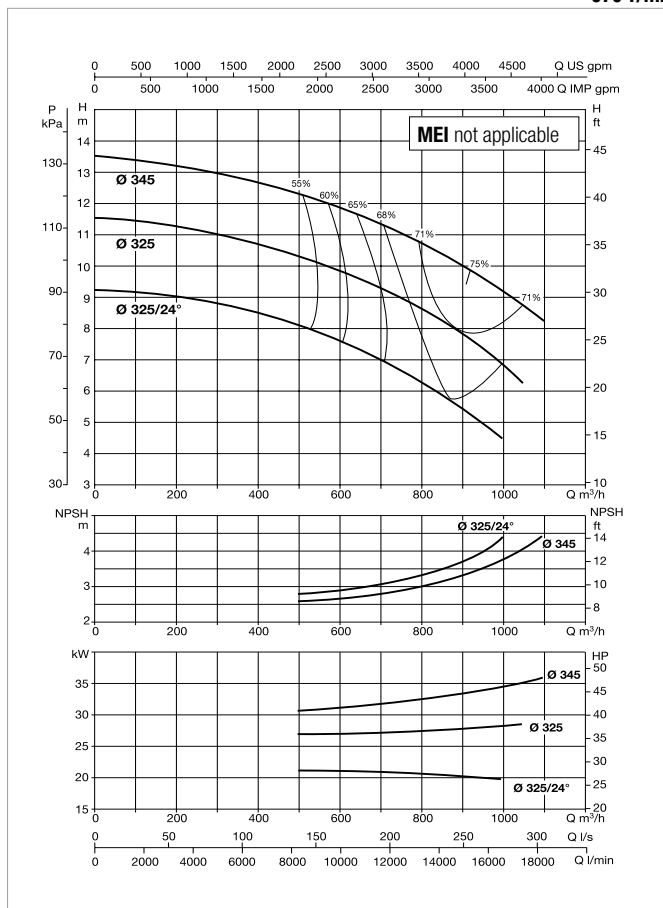
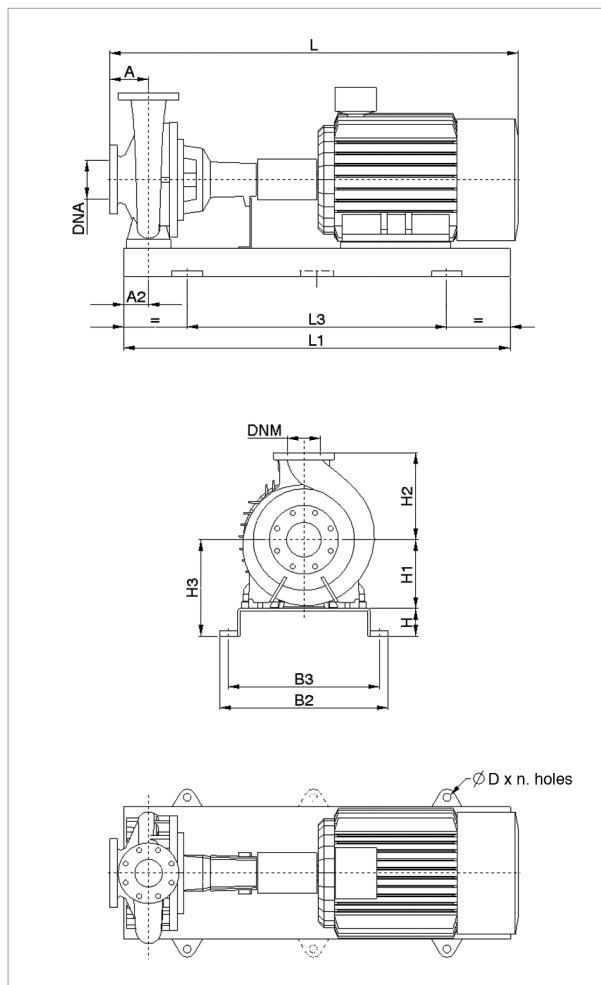
(\*) Data on request.



# KDN 300-330 - 6 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 970 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

| MODEL       | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA   |      | MOTOR TYPE |
|-------------|------------|------------|-------------------|------|------------|
|             |            |            | POWER INPUT 50 Hz | In A |            |
| KDN 300-330 | 22         | 200L       | 3 x 400 V ~ Δ     | 42,5 | IE3        |
|             | 30         | 225M       | 3 x 400 V ~ Δ     | 54,8 | IE3        |
|             | 37         | 250M       | 3 x 400 V ~ Δ     | 66,6 | IE3        |

| MODEL       | POWER (kW) | UNIT DIMENSIONS (mm) |     |     |     |     |     |     |     |     |     | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |        | SPACER COUPLING |        |           |
|-------------|------------|----------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------------------------|-----|-------------------|--------|-----------------|--------|-----------|
|             |            | A                    | A2  | H   | H1  | H2  | H3  | L1  | L3  | B2  | B3  | D                      | DNA | DNM               | L (mm) | WEIGHT Kg       | L (mm) | WEIGHT Kg |
| KDN 300-330 | 22         | 300                  | 230 | 185 | 500 | 670 | (*) | (*) | (*) | (*) | (*) | (*)                    | 350 | 300               | (*)    | (*)             | (*)    | (*)       |
|             | 30         | 300                  | 230 | 185 | 500 | 670 | (*) | (*) | (*) | (*) | (*) | (*)                    | 350 | 300               | (*)    | (*)             | (*)    | (*)       |
|             | 37         | 300                  | 230 | 185 | 500 | 670 | (*) | (*) | (*) | (*) | (*) | (*)                    | 350 | 300               | (*)    | (*)             | (*)    | (*)       |

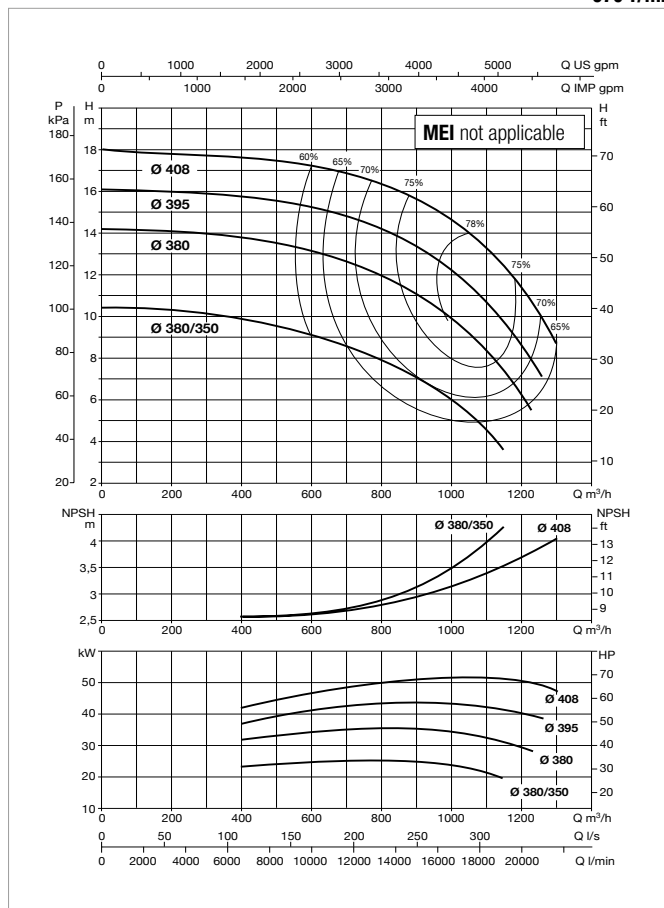
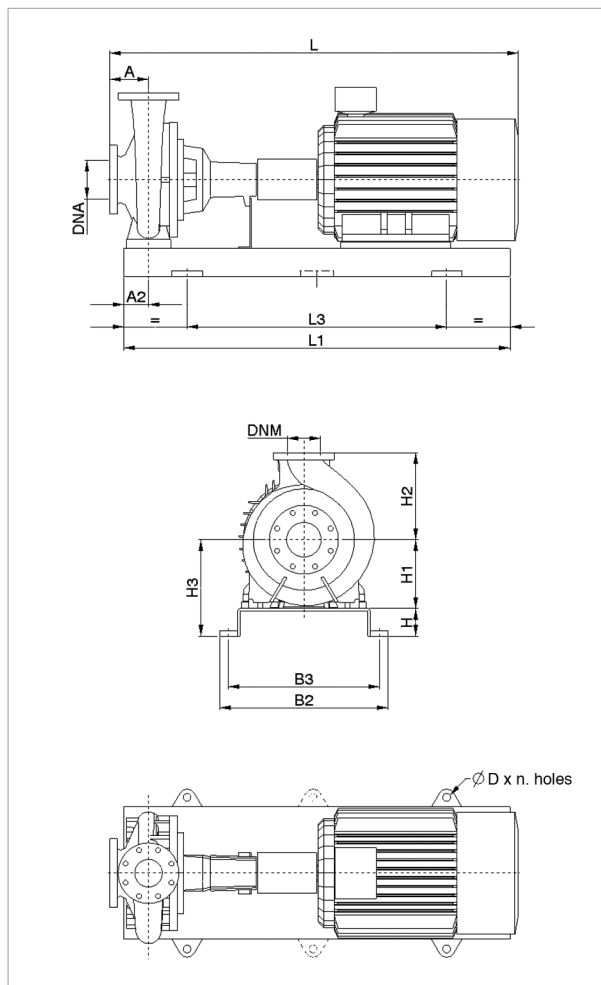
Dimension and electrical data based on sizing definition following the instructions on page 183.

(\*) Data on request.

# KDN 300-400M - 6 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 970 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

| MODEL        | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA   |      | MOTOR TYPE |
|--------------|------------|------------|-------------------|------|------------|
|              |            |            | POWER INPUT 50 Hz | In A |            |
| KDN 300-400M | 45         | 280S       | 3 x 400 V ~ Δ     | 80,6 | IE3        |
|              | 55         | 280M       | 3 x 400 V ~ Δ     | 98,1 | IE3        |
|              | 75         | 315S       | 3 x 400 V ~ Δ     | 135  | IE3        |
|              | 90         | 315M       | 3 x 400 V ~ Δ     | 159  | IE3        |

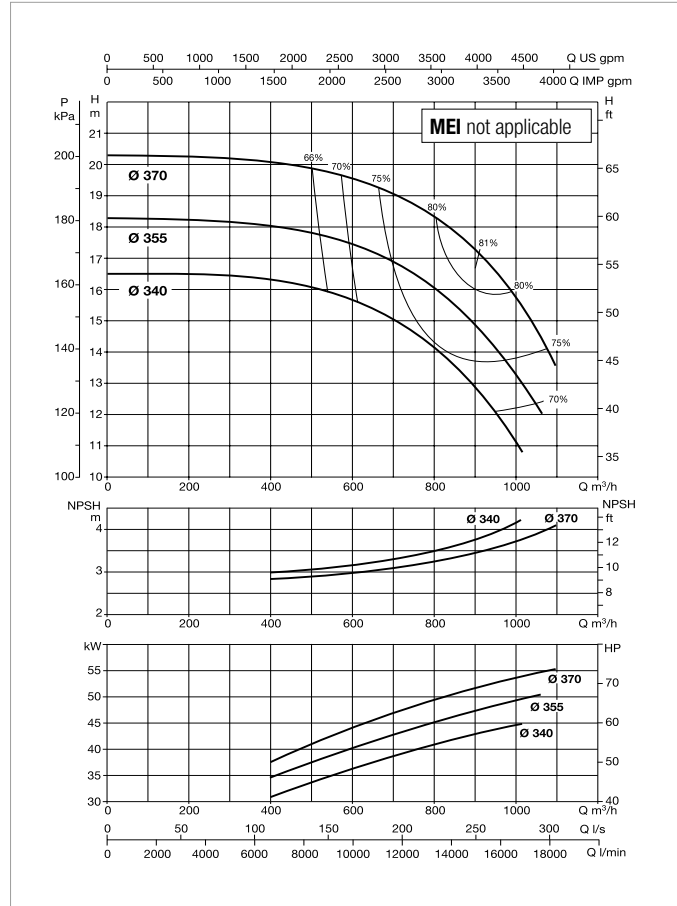
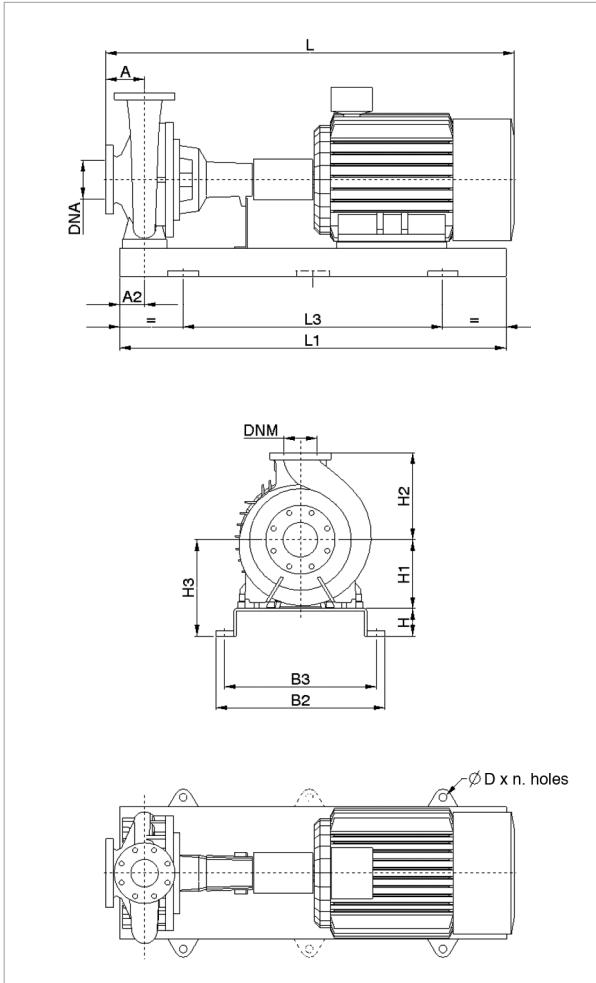
| MODEL        | POWER (kW) | UNIT DIMENSIONS (mm) |     |     |     |     |     |      |      |     |     |      | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |           | SPACER COUPLING |           |
|--------------|------------|----------------------|-----|-----|-----|-----|-----|------|------|-----|-----|------|------------------------|-----|-------------------|-----------|-----------------|-----------|
|              |            | A                    | A2  | H   | H1  | H2  | H3  | L1   | L3   | B2  | B3  | D    | DNA                    | DNM | L (mm)            | WEIGHT Kg | L (mm)          | WEIGHT Kg |
| KDN 300-400M | 45         | 325                  | 135 | 120 | 400 | 640 | 520 | 2000 | 1340 | 910 | 830 | 28x4 | 350                    | 300 | 1190              | 800       | 1431            | 815       |
|              | 55         | 325                  | 135 | 120 | 400 | 640 | 520 | 2000 | 1340 | 910 | 830 | 28x4 | 350                    | 300 | 1190              | 800       | 1431            | 815       |
|              | 75         | 325                  | 135 | 120 | 400 | 640 | 520 | 2000 | 1340 | 910 | 830 | 28x4 | 350                    | 300 | 1190              | 800       | 1431            | 815       |
|              | 90         | 325                  | 135 | 120 | 400 | 640 | 520 | 2000 | 1340 | 910 | 830 | 28x4 | 350                    | 300 | 1190              | 800       | 1431            | 815       |

Dimension and electrical data based on sizing definition following the instructions on page 183.

# KDN 300-400A - 6 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 970 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

| MODEL        | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA   |      | MOTOR TYPE |
|--------------|------------|------------|-------------------|------|------------|
|              |            |            | POWER INPUT 50 Hz | In A |            |
| KDN 300-400A | 45         | 280S       | 3 x 400 V ~ Δ     | 80,6 | IE3        |
|              | 55         | 280M       | 3 x 400 V ~ Δ     | 98,1 | IE3        |
|              | 75         | 315S       | 3 x 400 V ~ Δ     | 135  | IE3        |
|              | 90         | 315M       | 3 x 400 V ~ Δ     | 159  | IE3        |

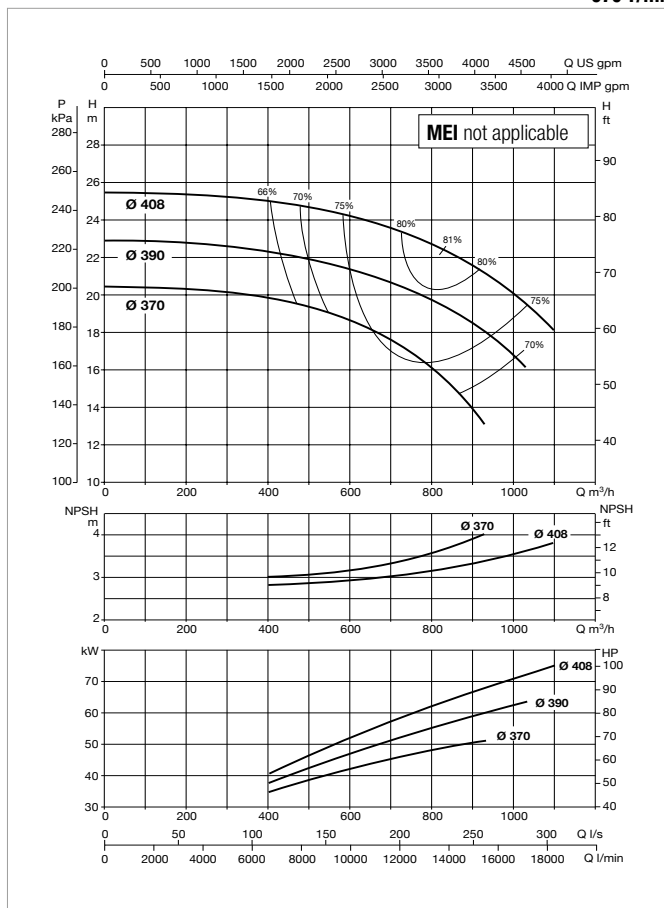
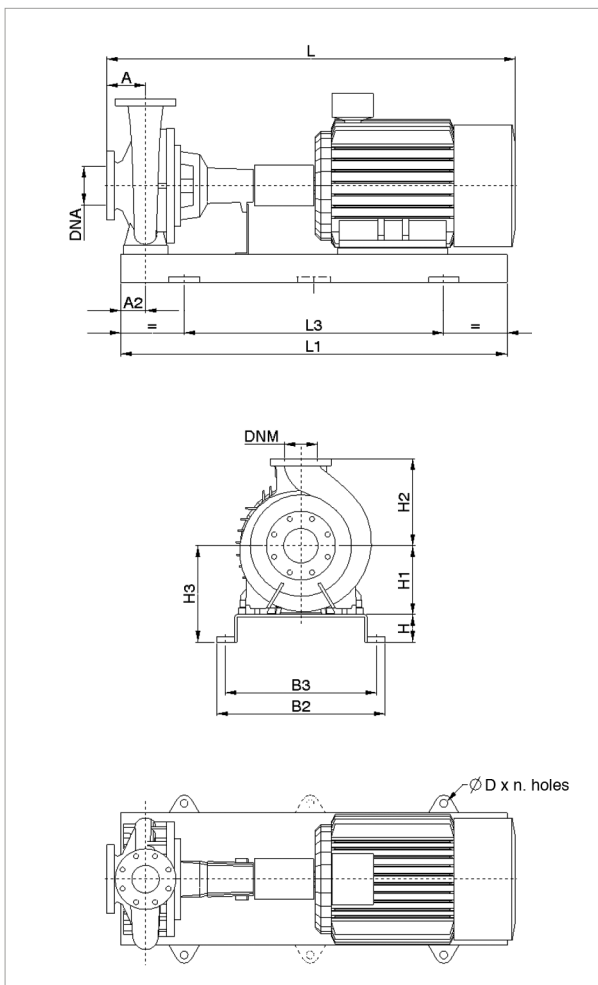
| MODEL        | POWER (kW) | UNIT DIMENSIONS (mm) |     |     |     |     |     |      |      |     |     | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |        | SPACER COUPLING |        |           |
|--------------|------------|----------------------|-----|-----|-----|-----|-----|------|------|-----|-----|------------------------|-----|-------------------|--------|-----------------|--------|-----------|
|              |            | A                    | A2  | H   | H1  | H2  | H3  | L1   | L3   | B2  | B3  | D                      | DNA | DNM               | L (mm) | WEIGHT Kg       | L (mm) | WEIGHT Kg |
| KDN 300-400A | 45         | 325                  | 135 | 120 | 400 | 640 | 520 | 2000 | 1340 | 910 | 830 | 28x4                   | 350 | 300               | 1190   | 800             | 1431   | 815       |
|              | 55         | 325                  | 135 | 120 | 400 | 640 | 520 | 2000 | 1340 | 910 | 830 | 28x4                   | 350 | 300               | 1190   | 800             | 1431   | 815       |
|              | 75         | 325                  | 135 | 120 | 400 | 640 | 520 | 2000 | 1340 | 910 | 830 | 28x4                   | 350 | 300               | 1190   | 800             | 1431   | 815       |
|              | 90         | 325                  | 135 | 120 | 400 | 640 | 520 | 2000 | 1340 | 910 | 830 | 28x4                   | 350 | 300               | 1190   | 800             | 1431   | 815       |

Dimension and electrical data based on sizing definition following the instructions on page 183.

# KDN 300-400 - 6 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 970 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

| MODEL       | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA   |      | MOTOR TYPE |
|-------------|------------|------------|-------------------|------|------------|
|             |            |            | POWER INPUT 50 Hz | In A |            |
| KDN 300-400 | 45         | 280S       | 3 x 400 V ~ Δ     | 80,6 | IE3        |
|             | 55         | 280M       | 3 x 400 V ~ Δ     | 98,1 | IE3        |
|             | 75         | 315S       | 3 x 400 V ~ Δ     | 135  | IE3        |
|             | 90         | 315M       | 3 x 400 V ~ Δ     | 159  | IE3        |
|             | 110        | 315M       | 3 x 400 V ~ Δ     | 192  | IE3        |

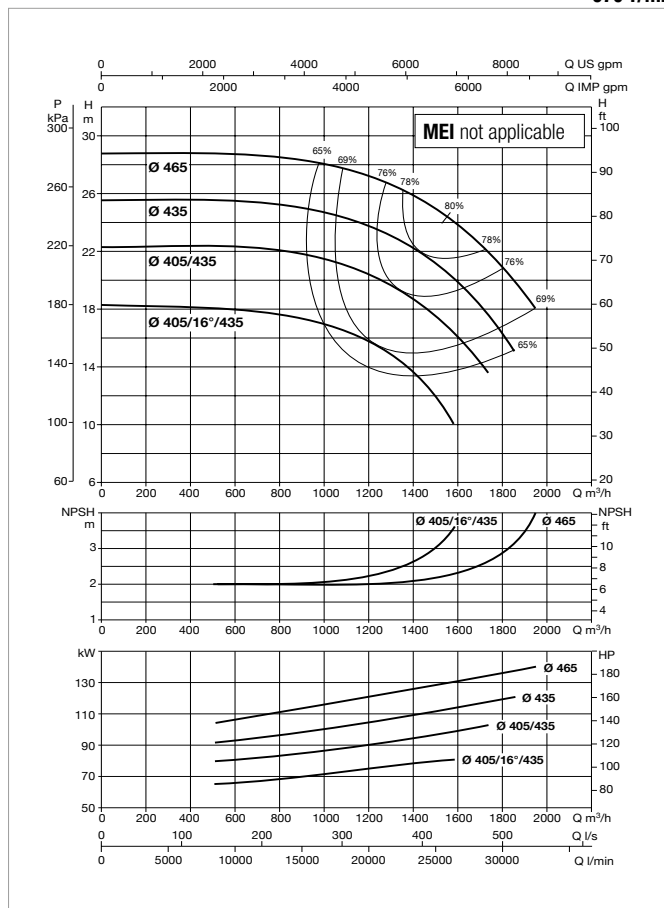
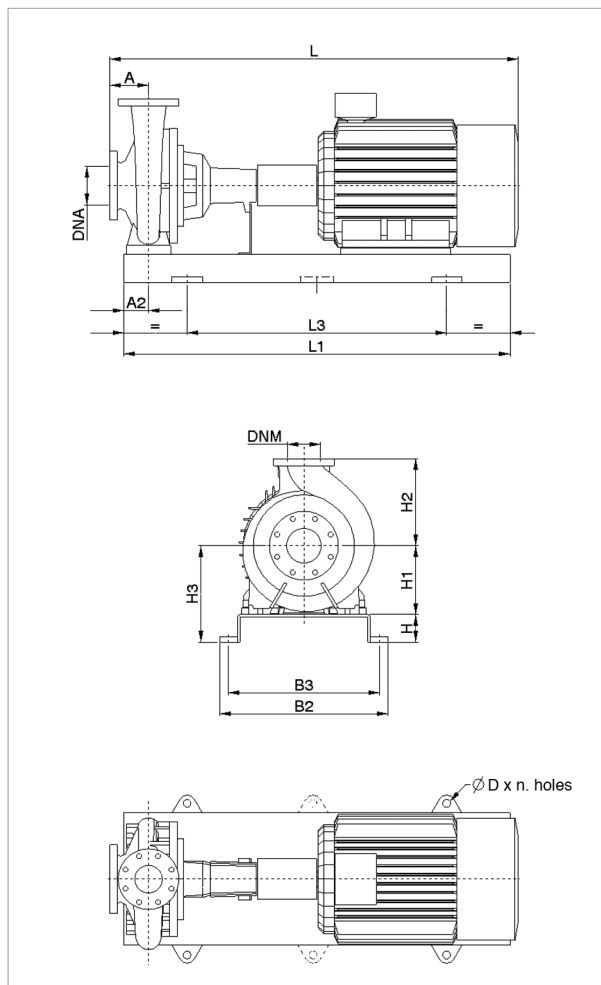
| MODEL       | POWER (kW) | UNIT DIMENSIONS (mm) |     |     |     |     |     |      |      |     |     | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |        | SPACER COUPLING |        |           |
|-------------|------------|----------------------|-----|-----|-----|-----|-----|------|------|-----|-----|------------------------|-----|-------------------|--------|-----------------|--------|-----------|
|             |            | A                    | A2  | H   | H1  | H2  | H3  | L1   | L3   | B2  | B3  | D                      | DNA | DNM               | L (mm) | WEIGHT Kg       | L (mm) | WEIGHT Kg |
| KDN 300-400 | 45         | 325                  | 135 | 120 | 400 | 640 | 520 | 2000 | 1340 | 910 | 830 | 28x4                   | 350 | 300               | 1190   | 800             | 1431   | 815       |
|             | 55         | 325                  | 135 | 120 | 400 | 640 | 520 | 2000 | 1340 | 910 | 830 | 28x4                   | 350 | 300               | 1190   | 800             | 1431   | 815       |
|             | 75         | 325                  | 135 | 120 | 400 | 640 | 520 | 2000 | 1340 | 910 | 830 | 28x4                   | 350 | 300               | 1190   | 800             | 1431   | 815       |
|             | 90         | 325                  | 135 | 120 | 400 | 640 | 520 | 2000 | 1340 | 910 | 830 | 28x4                   | 350 | 300               | 1190   | 800             | 1431   | 815       |
|             | 110        | 325                  | 135 | 120 | 400 | 640 | 520 | 2000 | 1340 | 910 | 830 | 28x4                   | 350 | 300               | 1207   | 800             | 1448   | 815       |

Dimension and electrical data based on sizing definition following the instructions on page 183.

# KDN 350-500A - 6 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 970 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

| MODEL        | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA   |      | MOTOR TYPE |
|--------------|------------|------------|-------------------|------|------------|
|              |            |            | POWER INPUT 50 Hz | In A |            |
| KDN 350-500A | 90         | 315M       | 3 x 400 V ~ Δ     | 159  | IE3        |
|              | 110        | 315M       | 3 x 400 V ~ Δ     | 192  | IE3        |
|              | 132        | 315L       | 3 x 400 V ~ Δ     | (*)  | IE3        |
|              | 160        | 315L       | 3 x 400 V ~ Δ     | (*)  | IE3        |

| MODEL        | POWER (kW) | UNIT DIMENSIONS (mm) |     |     |     |     |     |      |      |      |      | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |        | SPACER COUPLING |        |           |
|--------------|------------|----------------------|-----|-----|-----|-----|-----|------|------|------|------|------------------------|-----|-------------------|--------|-----------------|--------|-----------|
|              |            | A                    | A2  | H   | H1  | H2  | H3  | L1   | L3   | B2   | B3   | D                      | DNA | DNM               | L (mm) | WEIGHT Kg       | L (mm) | WEIGHT Kg |
| KDN 350-500A | 90         | 380                  | 295 | 240 | 600 | 600 | 840 | 2490 | 1890 | 1305 | 1260 | 20x6                   | 400 | 350               | 2658   | 1080            | 2659   | 1095      |
|              | 110        | 380                  | 295 | 240 | 600 | 600 | 840 | 2490 | 1890 | 1305 | 1260 | 20x6                   | 400 | 350               | 2675   | 1080            | 2676   | 1095      |
|              | 132        | 380                  | 295 | 240 | 600 | 600 | 840 | 2490 | 1890 | 1305 | 1260 | 20x6                   | 400 | 350               | 2675   | 1080            | 2676   | 1095      |
|              | 160        | 380                  | 295 | 240 | 600 | 600 | 840 | 2700 | 2100 | 1305 | 1260 | 20x6                   | 400 | 350               | 3202   | 1080            | 3203   | 1095      |

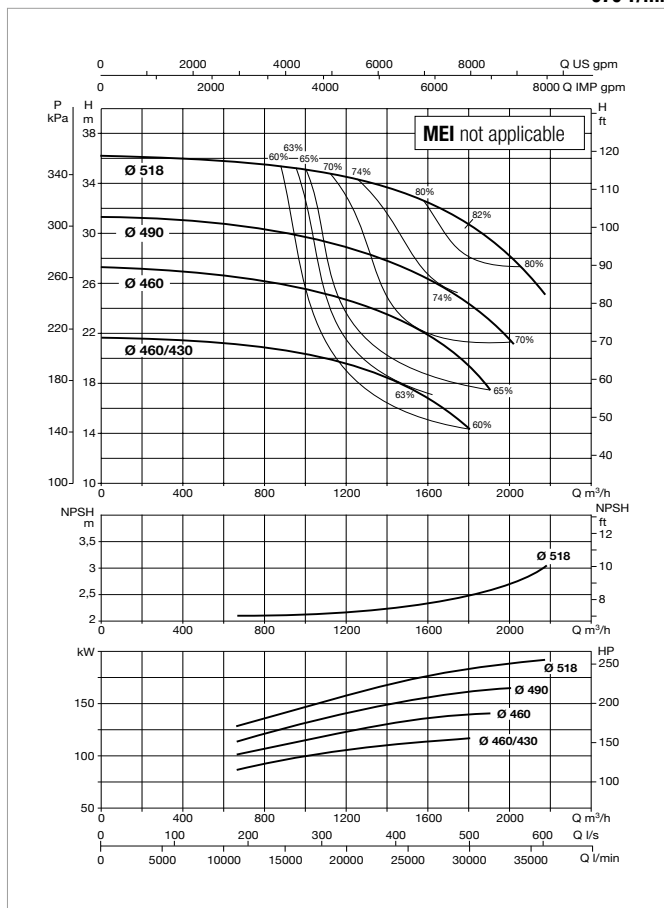
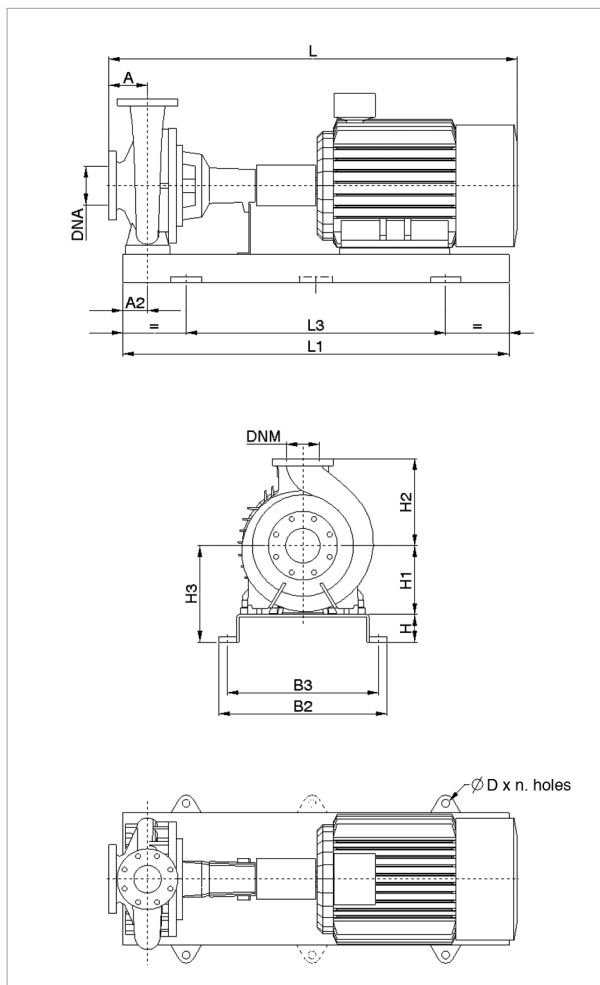
Dimension and electrical data based on sizing definition following the instructions on page 183.

(\*) Data on request.

# KDN 350-500 - 6 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 970 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

| MODEL       | POWER (kW) | MOTOR SIZE | ELECTRICAL DATA   |      | MOTOR TYPE |
|-------------|------------|------------|-------------------|------|------------|
|             |            |            | POWER INPUT 50 Hz | In A |            |
| KDN 350-500 | 110        | 315M       | 3 x 400 V ~ Δ     | 192  | IE3        |
|             | 132        | 315L       | 3 x 400 V ~ Δ     | (*)  | IE3        |
|             | 160        | 315L       | 3 x 400 V ~ Δ     | (*)  | IE3        |
|             | 200        | 355L       | 3 x 400 V ~ Δ     | (*)  | IE3        |
|             | 250        | 355L       | 3 x 400 V ~ Δ     | (*)  | IE3        |

| MODEL       | POWER (kW) | UNIT DIMENSIONS (mm) |     |     |     |     |     |      |      |      |      | FLANGE DIMENSIONS (mm) |     | STANDARD COUPLING |        | SPACER COUPLING |        |           |
|-------------|------------|----------------------|-----|-----|-----|-----|-----|------|------|------|------|------------------------|-----|-------------------|--------|-----------------|--------|-----------|
|             |            | A                    | A2  | H   | H1  | H2  | H3  | L1   | L3   | B2   | B3   | D                      | DNA | DNM               | L (mm) | WEIGHT Kg       | L (mm) | WEIGHT Kg |
| KDN 350-500 | 110        | 380                  | 295 | 240 | 600 | 600 | 840 | 2490 | 1890 | 1305 | 1260 | 20x6                   | 400 | 350               | 2675   | 1080            | 2676   | 1095      |
|             | 132        | 380                  | 295 | 240 | 600 | 600 | 840 | 2490 | 1890 | 1305 | 1260 | 20x6                   | 400 | 350               | 2675   | 1080            | 2676   | 1095      |
|             | 160        | 380                  | 295 | 240 | 600 | 600 | 840 | 2490 | 1890 | 1305 | 1260 | 20x6                   | 400 | 350               | 2675   | 1080            | 2676   | 1095      |
|             | 200        | 380                  | (*) | (*) | 600 | 600 | 600 | (*)  | (*)  | (*)  | (*)  | (*)                    | 400 | 350               | (*)    | (*)             | (*)    | (*)       |
|             | 250        | 380                  | (*) | (*) | 600 | 600 | 600 | (*)  | (*)  | (*)  | (*)  | (*)                    | 400 | 350               | (*)    | (*)             | (*)    | (*)       |

Dimension and electrical data based on sizing definition following the instructions on page 183.

(\*) Data on request.

# KDN OVERSIZE - 6 POLES

STANDARDISED PUMPS

## IE3 STANDARD MOTOR ELECTRIC DATA

=970 1/min

| MOTOR TYPE | P2 NOMINAL kW | SPEED rpm | YIELD % | POWER FACTOR COS $\phi$ | POWER INPUT 50 Hz | In A   |        | Start-up current Ia/In | Start-up torque Ma/Mn | Maximum torque M/k/Mn | POLES |
|------------|---------------|-----------|---------|-------------------------|-------------------|--------|--------|------------------------|-----------------------|-----------------------|-------|
|            |               |           |         |                         |                   | 400    | 690    |                        |                       |                       |       |
| MEC 132M   | 5,50          | 975       | 88,00   | 0,640                   | 3x400 $\Delta$    | 14,2   | 8,19   | 5,40                   | 2,10                  | 2,90                  | 6     |
| MEC 160M   | 7,50          | 970       | 89,10   | 0,770                   | 3x400 $\Delta$    | 15,80  | 9,13   | 6,00                   | 2,40                  | 2,40                  | 6     |
| MEC 160L   | 11,00         | 975       | 90,30   | 0,760                   | 3x400 $\Delta$    | 23,10  | 13,35  | 6,80                   | 2,90                  | 2,60                  | 6     |
| MEC 180L   | 15,00         | 980       | 91,20   | 0,800                   | 3x400 $\Delta$    | 29,70  | 17,17  | 7,80                   | 2,90                  | 3,30                  | 6     |
| MEC 200L   | 18,50         | 980       | 91,70   | 0,810                   | 3x400 $\Delta$    | 36,00  | 20,81  | 7,30                   | 2,80                  | 2,80                  | 6     |
| MEC 200L   | 22,00         | 980       | 92,20   | 0,810                   | 3x400 $\Delta$    | 42,50  | 24,57  | 7,70                   | 3,00                  | 2,90                  | 6     |
| MEC 225M   | 30,00         | 985       | 92,90   | 0,850                   | 3x400 $\Delta$    | 54,80  | 31,68  | 6,20                   | 2,10                  | 2,20                  | 6     |
| MEC 250M   | 37,00         | 985       | 93,30   | 0,860                   | 3x400 $\Delta$    | 66,60  | 38,50  | 8,30                   | 2,90                  | 3,40                  | 6     |
| MEC 280S   | 45,00         | 990       | 93,70   | 0,860                   | 3x400 $\Delta$    | 80,60  | 46,59  | 7,80                   | 2,70                  | 3,10                  | 6     |
| MEC 280M   | 55,00         | 990       | 94,10   | 0,860                   | 3x400 $\Delta$    | 98,10  | 56,71  | 8,20                   | 2,90                  | 3,20                  | 6     |
| MEC 315S   | 75,00         | 990       | 94,60   | 0,850                   | 3x400 $\Delta$    | 135,00 | 78,03  | 7,70                   | 2,40                  | 3,10                  | 6     |
| MEC 315M   | 90,00         | 990       | 94,90   | 0,860                   | 3x400 $\Delta$    | 159,00 | 91,91  | 7,40                   | 2,30                  | 3,00                  | 6     |
| MEC 315L   | 110,00        | 990       | 95,10   | 0,870                   | 3x400 $\Delta$    | 192,00 | 110,98 | 6,50                   | 2,00                  | 2,60                  | 6     |

# KVC - KVCX

## INTEGRAL SHAFT MULTISTAGE VERTICAL CENTRIFUGAL ELECTRIC PUMPS



KVC

KVCX

### TECHNICAL DATA

#### Operating range:

from 50 to 200 l/min with head up to 113 m

**Pumped liquid:** clean, free of solids and abrasives, non-viscous, non-aggressive, non-crystallised and chemically neutral, with properties similar to water

**Pumped liquid temperature range:** from 0 °C to +35 °C for domestic use (EN 60335-2-41 safety standards)

From 0°C to +40°C for other uses

**Maximum ambient temperature:** +40 °C

**Maximum operating pressure:** 12 bar (1200 kPa)

**Protection class:** IP 55

**Insulation class:** F

**Standard voltage:** single-phase 220-240 V / 50 Hz

three-phase 230-400 V / 50 Hz IE3 ≥ 0.75 kW for EU countries

IE2 ≥ 0.75 kW for extre EU countries

**Installation:** fixed, vertical or horizontal position, provided that the motor is always above the pump

**Special executions on requests:** alternative voltages and frequencies

### APPLICATIONS

Vertical multistage centrifugal pump suitable for small to medium user water systems. Suitable for pressurization units, filling of pressure vessels, sprinkler and watering systems, fire-fighting and washing systems, channelling of condensate and cooling water. Innovative and robust design.

### CONSTRUCTION FEATURES OF THE PUMP

KVC: Technopolymer delivery and suction bodies, and in-line suction and delivery ports with threaded metal insert.

KVCX: technopolymer suction body with threaded metal insert; stainless steel threaded delivery port on pump liner.

Impellers, diffuser bodies and diffusers in technopolymer, fully rust-proof. AISI 304 stainless steel pump liner, adjustment rings and seal disc. Silicon Carbide / Silicon mechanical seal, fitted on the AISI 303 stainless-steel drive shaft extension.

### CONSTRUCTION FEATURES OF THE MOTOR

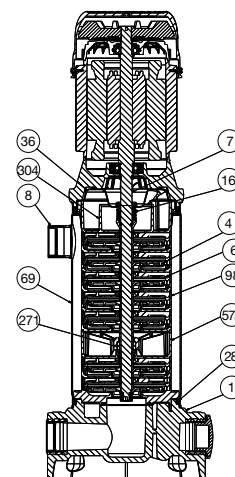
Closed asynchronous type, external ventilation cooling. Rotor running on permanently lubricated ball bearings, oversized to ensure low noise and durability. Standard built-in thermo-amperometric protection. Capacitor permanently fitted on single phase versions.

Overload protection to be provided by the user for the three-phase version. Construction according to CEI 2-3 / CEI 61-69 (EN 60335-2-41).

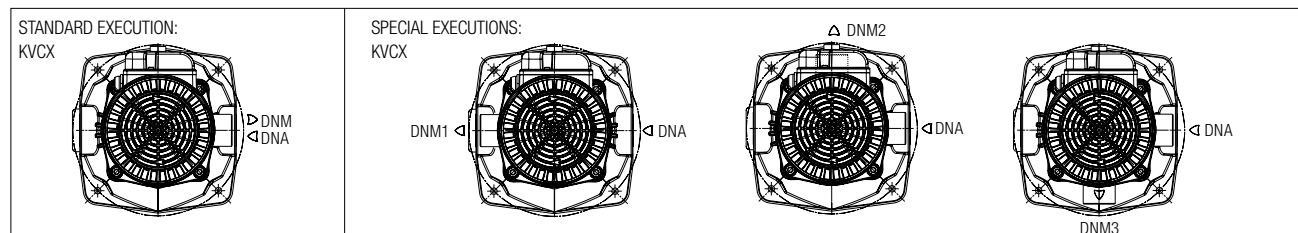
## MATERIALS

| No. | PARTS*                       | MATERIALS  |
|-----|------------------------------|--|
| 1   | PUMP BODY                    | TECHNOPOLYMER A                                      |
| 4   | IMPELLER                     | TECHNOPOLYMER B                                      |
| 6   | DIFFUSER                     | TECHNOPOLYMER B                                      |
| 7   | SHAFT WITH ROTOR             | AISI 303 STAINLESS STEEL X10 CrNi S 1089 UNI 6900/71 |
| 16  | MECHANICAL SEAL              | SILICON CARBIDE/SILICON                              |
| 28  | OR RING                      | EPDM RUBBER  |
| 36  | SEAL HOLDING DISC            | AISI 304 STAINLESS STEEL X5 CrNi 1810 UNI 6900/71    |
| 57a | INTERMEDIATE STAGE           | TECHNOPOLYMER B                                      |
| 69  | LINER                        | AISI 304 STAINLESS STEEL X5 CrNi 1810 UNI 6900/71    |
| 98  | DIFFUSER BODY                | TECHNOPOLYMER B                                      |
| 271 | CENTERING BUSHING            | BRONZE B14   |
| 304 | CONVEYOR                     | TECHNOPOLYMER B                                      |
| 8   | DNM (standard for KVCX only) |  |

\* In contact with the liquid.



### KVCX SUCTION AND DELIVERY PORT ORIENTATION





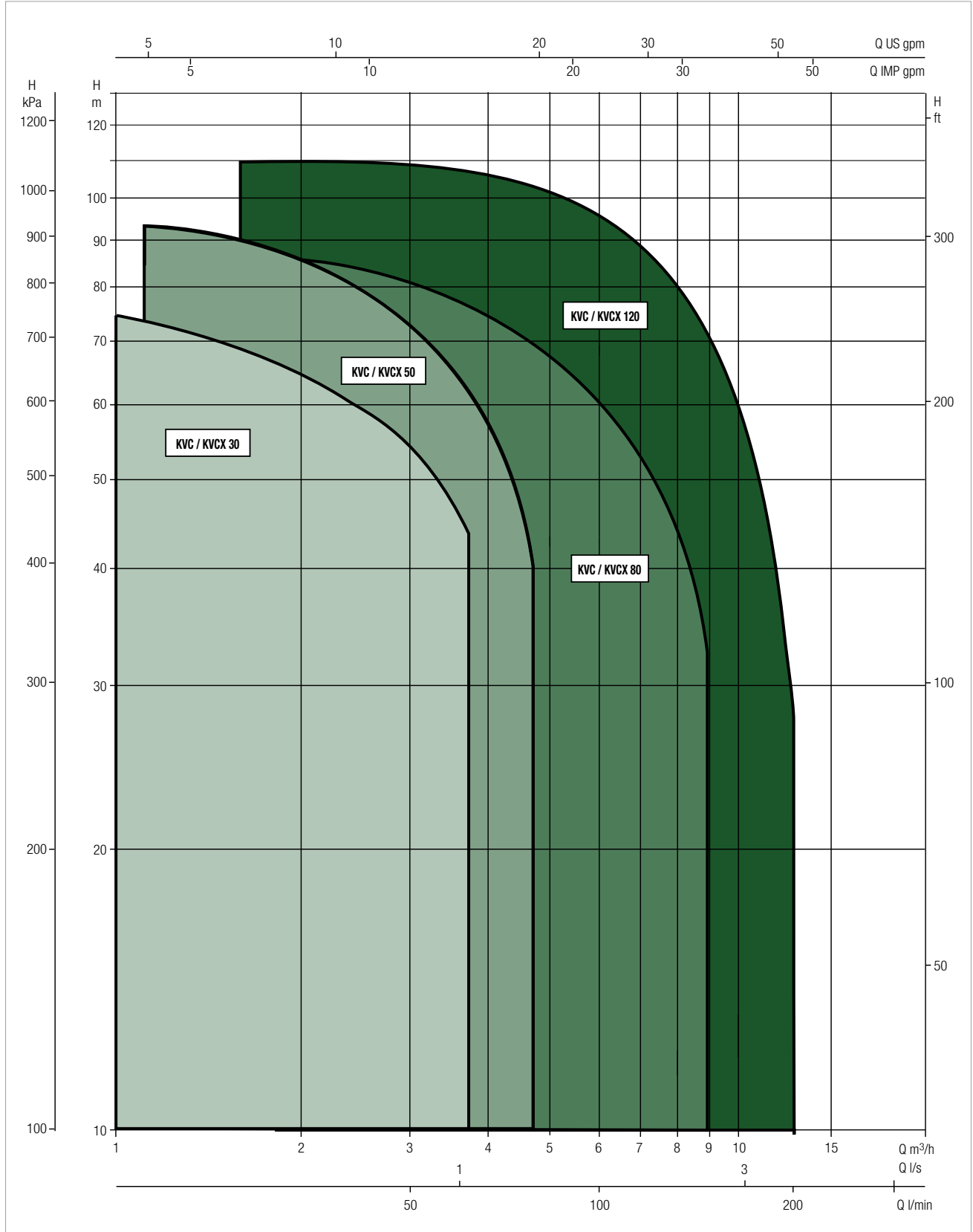
# KVC - KVCX RANGE

## INTEGRAL SHAFT MULTISTAGE VERTICAL CENTRIFUGAL ELECTRIC PUMPS

### PERFORMANCE RANGE

The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

### GRAPHIC SELECTION TABLE



**SELECTION TABLE - KVC / KVCX 30**

| MODEL                | Q=m <sup>3</sup> /h | 0    | 0,6  | 1,2  | 1,8  | 2,4  | 3,0  | 3,3  | 3,6  | 3,9  |
|----------------------|---------------------|------|------|------|------|------|------|------|------|------|
|                      | Q=l/min             | 0    | 10   | 20   | 30   | 40   | 50   | 55   | 60   | 65   |
| KVC/KVCX 15/30 M / T | H<br>(m)            | 21,5 | 21,3 | 20,5 | 19   | 16,9 | 14,2 | 12,6 | 10,8 | 8,9  |
| KVC/KVCX 25/30 M / T |                     | 29   | 28,6 | 27,4 | 25,3 | 22,4 | 18,5 | 16,3 | 13,6 | 10,7 |
| KVC/KVCX 35/30 M / T |                     | 40,2 | 39,3 | 37,3 | 34,1 | 29,8 | 24,3 | 21   | 17,4 | 13,5 |
| KVC/KVCX 45/30 M     |                     | 49,7 | 48,7 | 46,5 | 43,1 | 38,4 | 32,1 | 28,5 | 24,2 | 19,6 |
| KVC/KVCX 45/30 T     |                     | 47,1 | 45,9 | 43,5 | 39,8 | 34,7 | 28   | 24   | 19,6 | 14,7 |
| KVC/KVCX 50/30 M / T |                     | 61,5 | 59,9 | 56,8 | 52,2 | 46   | 38   | 33,5 | 28,3 | 22,7 |
| KVC/KVCX 60/30 M / T |                     | 69,6 | 67,6 | 64   | 58,5 | 51,1 | 41,8 | 36,2 | 30,3 | 23,8 |
| KVC/KVCX 65/30 M / T |                     | 78,4 | 76,8 | 73,5 | 68,4 | 61,2 | 51,9 | 46   | 40,1 | 33,3 |

**SELECTION TABLE - KVC / KVCX 50**

| MODEL                | Q=m <sup>3</sup> /h | 0    | 0,6  | 1,2  | 1,8  | 2,4  | 3,0  | 3,3  | 3,6 | 3,9  | 4,2 | 4,8  |
|----------------------|---------------------|------|------|------|------|------|------|------|-----|------|-----|------|
|                      | Q=l/min             | 0    | 10   | 20   | 30   | 40   | 50   | 55   | 60  | 65   | 70  | 80   |
| KVC/KVCX 20/50 M / T | H<br>(m)            | 27,4 | 26,9 | 26,0 | 24,9 | 23,1 | 21,1 | 19,8 | -   | 16,9 | -   | 11,4 |
| KVC/KVCX 30/50 M / T |                     | 41,1 | 40,3 | 39,0 | 37,3 | 34,7 | 31,6 | 29,7 | -   | 25,3 | -   | 17,1 |
| KVC/KVCX 40/50 M / T |                     | 54,9 | 53,7 | 52,0 | 49,7 | 46,3 | 42,1 | 39,6 | -   | 33,7 | -   | 22,9 |
| KVC/KVCX 55/50 M / T |                     | 68,6 | 67,1 | 65,0 | 62,1 | 57,9 | 52,7 | 49,5 | -   | 42,1 | -   | 28,6 |
| KVC/KVCX 65/50 M / T |                     | 82,3 | 80,6 | 78,0 | 74,6 | 69,4 | 63,2 | 59,4 | -   | 50,6 | -   | 34,3 |
| KVC/KVCX 75/50 M / T |                     | 96,0 | 94,0 | 91,0 | 87,0 | 81,0 | 73,8 | 69,3 | -   | 59,0 | -   | 40   |

**SELECTION TABLE - KVC / KVCX 80**

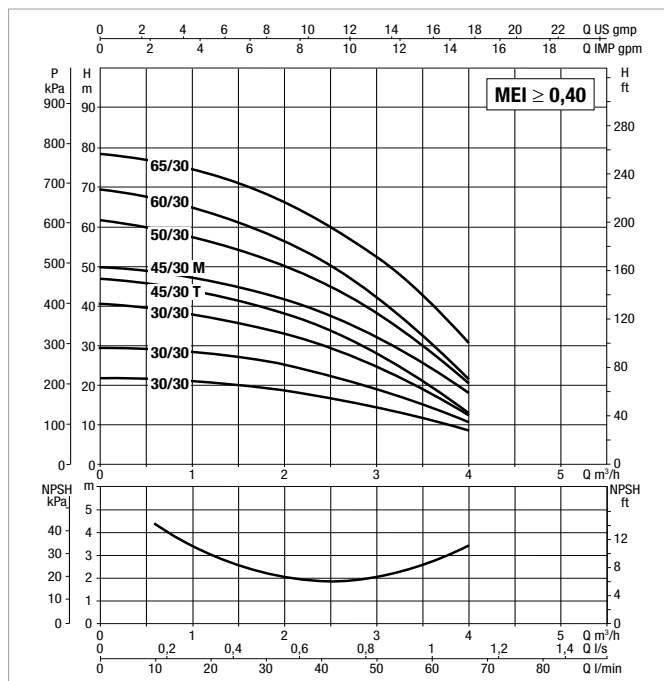
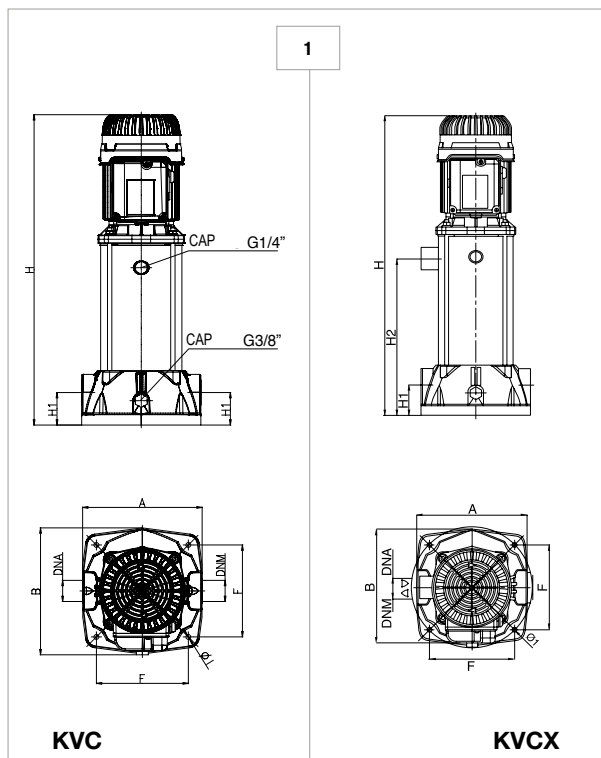
| MODEL           | Q=m <sup>3</sup> /h | 0    | 0,6  | 1,2  | 1,8  | 2,4  | 3,0  | 3,3  | 3,6  | 3,9  | 4,2  | 4,8  | 5,4  | 6    | 7,2  | 8,4  | 9,0  |
|-----------------|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|                 | Q=l/min             | 0    | 10   | 20   | 30   | 40   | 50   | 55   | 60   | 65   | 70   | 80   | 90   | 100  | 120  | 140  | 150  |
| KVC 20/80 M / T | H<br>(m)            | 25,0 | 24,8 | 24,4 | 23,8 | 23,1 | 22,3 | 21,5 | 21,3 | 20,5 | 20,1 | 19   | 17,3 | 16   | 11,9 | 7,4  | 4,8  |
| KVC 30/80 M / T |                     | 36,9 | 36,9 | 36,6 | 36,1 | 35,3 | 34,3 | 33,6 | 33,1 | 32,2 | 31,6 | 29,5 | 27,8 | 25,5 | 20,3 | 14,2 | 10,7 |
| KVC 40/80 M / T |                     | 50,1 | 49,7 | 49,0 | 48,0 | 46,7 | 45,1 | 44,2 | 43,2 | 42,0 | 41   | 38,5 | 35,7 | 32,5 | 25,5 | 17,1 | 12,5 |
| KVC 45/80 M / T |                     | 64,6 | 64,5 | 63,9 | 63,0 | 61,7 | 60,0 | 59,0 | 57,9 | 56,7 | 55,5 | 52,5 | 49,3 | 45   | 37,1 | 26,8 | 21,1 |
| KVC 55/80 M / T |                     | 76,1 | 75,8 | 75,1 | 73,9 | 72,2 | 70,0 | 68,5 | 67,4 | 66,0 | 64,3 | 60,5 | 56,7 | 52   | 41,8 | 29,5 | 22,7 |
| KVC 65/80 T     |                     | 88,6 | 88,0 | 86,9 | 85,5 | 83,5 | 81,2 | 80,0 | 78,3 | 76,5 | 75   | 71   | 67   | 62   | 51,1 | 37,9 | 30,5 |

**SELECTION TABLE - KVC / KVCX 120**

| MODEL                 | Q=m <sup>3</sup> /h | 0     | 0,6   | 1,2   | 1,8   | 2,4   | 3,0   | 3,3   | 3,9   | 4,8  | 5,4  | 6    | 7,2  | 8,4  | 9,0  | 9,6  | 10,8 | 12   |
|-----------------------|---------------------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|------|------|------|------|------|
|                       | Q=l/min             | 0     | 10    | 20    | 30    | 40    | 50    | 55    | 65    | 80   | 90   | 100  | 120  | 140  | 150  | 160  | 180  | 200  |
| KVC/KVCX 25/120 M / T | H<br>(m)            | 30,4  | 30,3  | 30,2  | 30,0  | 29,9  | 29,6  | 29,3  | 28,7  | 27,7 | 26,9 | 25,9 | 23,2 | 19,9 | 18,2 | 16,4 | 12   | 7    |
| KVC/KVCX 35/120 M / T |                     | 46,2  | 46,1  | 45,7  | 45,3  | 44,8  | 44,0  | 43,7  | 42,7  | 40,9 | 39,3 | 37,4 | 33,7 | 29,4 | 26,8 | 24,2 | 18   | 11   |
| KVC/KVCX 45/120 M / T |                     | 62,4  | 62,0  | 61,4  | 60,8  | 60,1  | 59,1  | 58,6  | 57,5  | 55,3 | 53,4 | 51,4 | 46,2 | 40,6 | 37,5 | 34   | 26,3 | 17   |
| KVC/KVCX 60/120 T     |                     | 78,0  | 77,5  | 76,7  | 75,9  | 75,1  | 73,9  | 73,3  | 71,5  | 68,3 | 65,9 | 63,2 | 58   | 51   | 47   | 43,4 | 35   | 24,5 |
| KVC/KVCX 70/120 T     |                     | 95,0  | 94,3  | 93,4  | 92,5  | 91,4  | 89,8  | 88,9  | 86,8  | 83,2 | 80,5 | 77,9 | 71,7 | 63,9 | 59,2 | 54,7 | 44   | 31   |
| KVC/KVCX 85/120 T     |                     | 112,7 | 111,6 | 110,3 | 109,0 | 107,6 | 105,7 | 104,5 | 101,9 | 97,5 | 94,1 | 89,9 | 81,6 | 72,1 | 66,7 | 61,2 | 48,9 | 34   |

# KVC / KVCX 30 - INTEGRAL SHAFT MULTISTAGE VERTICAL CENTRIFUGAL ELECTRIC PUMPS

Pumped liquid temperature range: from 0 °C to +35 °C for domestic use - from 0 °C to +40 °C for the other uses



For MEI index refer to the hydraulic efficiency section.

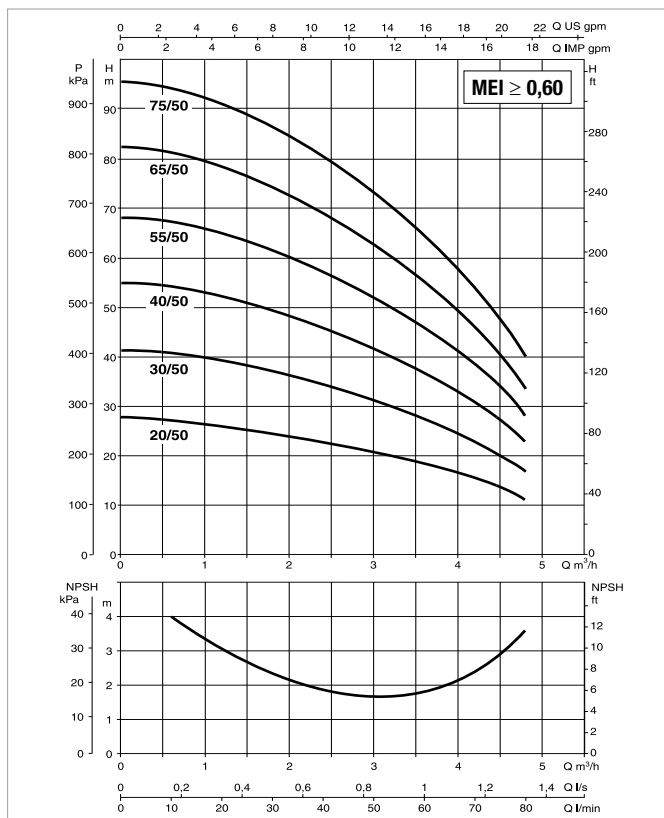
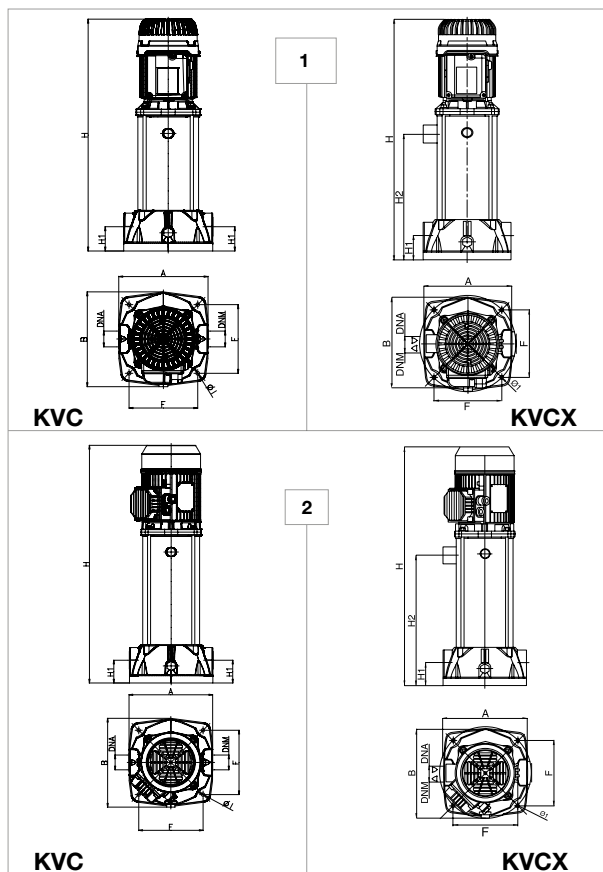
The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

| MODEL            | NO OF IMPELLERS | ELECTRICAL DATA      |              |            |      |           |               |           |        |           |     |
|------------------|-----------------|----------------------|--------------|------------|------|-----------|---------------|-----------|--------|-----------|-----|
|                  |                 | POWER INPUT<br>50 Hz | P1 MAX<br>KW | P2 NOMINAL |      | In<br>A   | MOTOR<br>TYPE | I st. A   | 1/min. | CAPACITOR |     |
|                  |                 |                      |              | kW         | HP   |           |               |           |        | µF        | Vc  |
| KVC-KVCX 15-30 M | 2               | 1 x 220 - 240V ~     | 0,56         | 0,25       | 0,34 | 2,8       | -             | 11,7      | 2800   | 14        | 450 |
| KVC-KVCX 15-30 T |                 | 3 x 230 / 400V ~     | 0,52         | 0,25       | 0,34 | 2,2 - 1,2 | -             | 3,1 - 1,8 | 2800   | -         | -   |
| KVC-KVCX 25-30 M | 3               | 1 x 220 - 240V ~     | 0,73         | 0,37       | 0,5  | 3,4       | -             | 11,8      | 2800   | 14        | 450 |
| KVC-KVCX 25-30 T |                 | 3 x 230 / 400V ~     | 0,67         | 0,37       | 0,5  | 2,4 - 1,4 | -             | 3,3 - 1,9 | 2800   | -         | -   |
| KVC-KVCX 35-30 M | 4               | 1 x 220 - 240V ~     | 0,89         | 0,45       | 0,6  | 4,1       | -             | 12,5      | 2800   | 14        | 450 |
| KVC-KVCX 35-30 T |                 | 3 x 230 / 400V ~     | 0,85         | 0,45       | 0,6  | 2,8 - 1,6 | -             | 3,6 - 2,1 | 2800   | -         | -   |
| KVC-KVCX 45-30 M | 5               | 1 x 220 - 240V ~     | 1,11         | 0,65       | 0,88 | 5,2       | -             | 19,3      | 2800   | 20        | 450 |
| KVC-KVCX 45-30 T |                 | 3 x 230 / 400V ~     | 0,97         | 0,65       | 0,88 | 3 - 1,7   | -             | 3,5 - 1,9 | 2800   | -         | -   |
| KVC-KVCX 50-30 M | 6               | 1 x 220 - 240V ~     | 1,29         | 0,75       | 1    | 5,9       | -             | 20,8      | 2800   | 20        | 450 |
| KVC-KVCX 50-30 T |                 | 3 x 230 / 400V ~     | 1,08         | 0,75       | 1    | 3,5 - 2   | IE3           | 5,2 - 3   | 2800   | -         | -   |
| KVC-KVCX 60-30 M | 7               | 1 x 220 - 240V ~     | 1,45         | 0,9        | 1,2  | 6,7       | -             | 24,3      | 2800   | 25        | 450 |
| KVC-KVCX 60-30 T |                 | 3 x 230 / 400V ~     | 1,22         | 0,9        | 1,2  | 3,8 - 2,2 | IE3           | 4,7 - 2,7 | 2800   | -         | -   |
| KVC-KVCX 65-30 M | 8               | 1 x 220 - 240V ~     | 1,56         | 1          | 1,36 | 7         | -             | 24,3      | 2800   | 25        | 450 |
| KVC-KVCX 65-30 T |                 | 3 x 230 / 400V ~     | 1,38         | 1          | 1,36 | 4,3 - 2,5 | IE3           | 4,5 - 2,6 | 2800   | -         | -   |

| MODEL            | EXTERNAL DESIGN | A   | B   | F   | H   | H1 | H2  | Ø I | DNA    | DNM    | PACKING DIMENSIONS |     |     | VOLUME (m <sup>3</sup> ) | WEIGHT Kg |
|------------------|-----------------|-----|-----|-----|-----|----|-----|-----|--------|--------|--------------------|-----|-----|--------------------------|-----------|
|                  |                 |     |     |     |     |    |     |     |        |        | L/A                | L/B | H   |                          |           |
| KVC 15-30 M - T  | 1               | 221 | 250 | 170 | 505 | 60 | -   | 9   | G 1" ¼ | G 1" ¼ | 300                | 360 | 600 | 0,065                    | 14,7      |
| KVC 25-30 M - T  | 1               | 221 | 250 | 170 | 505 | 60 | -   | 9   | G 1" ¼ | G 1" ¼ | 300                | 360 | 600 | 0,065                    | 14,7      |
| KVC 35-30 M - T  | 1               | 221 | 250 | 170 | 560 | 60 | -   | 9   | G 1" ¼ | G 1" ¼ | 300                | 360 | 600 | 0,065                    | 14,5      |
| KVC 45-30 M - T  | 1               | 221 | 250 | 170 | 560 | 60 | -   | 9   | G 1" ¼ | G 1" ¼ | 300                | 360 | 600 | 0,065                    | 14,9      |
| KVC 50-30 M - T  | 1               | 221 | 250 | 170 | 652 | 60 | -   | 9   | G 1" ¼ | G 1" ¼ | 300                | 360 | 745 | 0,08                     | 17,5      |
| KVC 60-30 M - T  | 1               | 221 | 250 | 170 | 652 | 60 | -   | 9   | G 1" ¼ | G 1" ¼ | 300                | 360 | 745 | 0,08                     | 17,3      |
| KVC 65-30 M      | 1               | 221 | 250 | 170 | 679 | 60 | -   | 9   | G 1" ¼ | G 1" ¼ | 300                | 360 | 745 | 0,08                     | 18,9      |
| KVC 65-30 T      | 1               | 221 | 250 | 170 | 679 | 60 | -   | 9   | G 1" ¼ | G 1" ¼ | 300                | 360 | 745 | 0,08                     | 18,5      |
| KVCX 15-30 M - T | 1               | 235 | 250 | 170 | 505 | 60 | 184 | 9   | G 1" ¼ | G 1" ¼ | 300                | 360 | 745 | 0,08                     | 14,7      |
| KVCX 25-30 M - T | 1               | 235 | 250 | 170 | 505 | 60 | 184 | 9   | G 1" ¼ | G 1" ¼ | 300                | 360 | 745 | 0,08                     | 14,7      |
| KVCX 35-30 M - T | 1               | 235 | 250 | 170 | 560 | 60 | 239 | 9   | G 1" ¼ | G 1" ¼ | 300                | 360 | 745 | 0,08                     | 14,5      |
| KVCX 45-30 M - T | 1               | 235 | 250 | 170 | 560 | 60 | 239 | 9   | G 1" ¼ | G 1" ¼ | 300                | 360 | 745 | 0,08                     | 14,9      |
| KVCX 50-30 M - T | 1               | 235 | 250 | 170 | 652 | 60 | 332 | 9   | G 1" ¼ | G 1" ¼ | 300                | 360 | 745 | 0,08                     | 17,5      |
| KVCX 60-30 M - T | 1               | 235 | 250 | 170 | 652 | 60 | 332 | 9   | G 1" ¼ | G 1" ¼ | 300                | 360 | 745 | 0,08                     | 17,3      |
| KVCX 65-30 M     | 1               | 235 | 250 | 170 | 679 | 60 | 358 | 9   | G 1" ¼ | G 1" ¼ | 300                | 360 | 745 | 0,08                     | 18,9      |
| KVCX 65-30 T     | 1               | 235 | 250 | 170 | 679 | 60 | 358 | 9   | G 1" ¼ | G 1" ¼ | 300                | 360 | 745 | 0,08                     | 18,5      |

# KVC / KVCX 50 - INTEGRAL SHAFT MULTISTAGE VERTICAL CENTRIFUGAL ELECTRIC PUMPS

Pumped liquid temperature range: from 0 °C to +35 °C for domestic use - from 0 °C to +40 °C for the other uses



For MEI index refer to the hydraulic efficiency section.

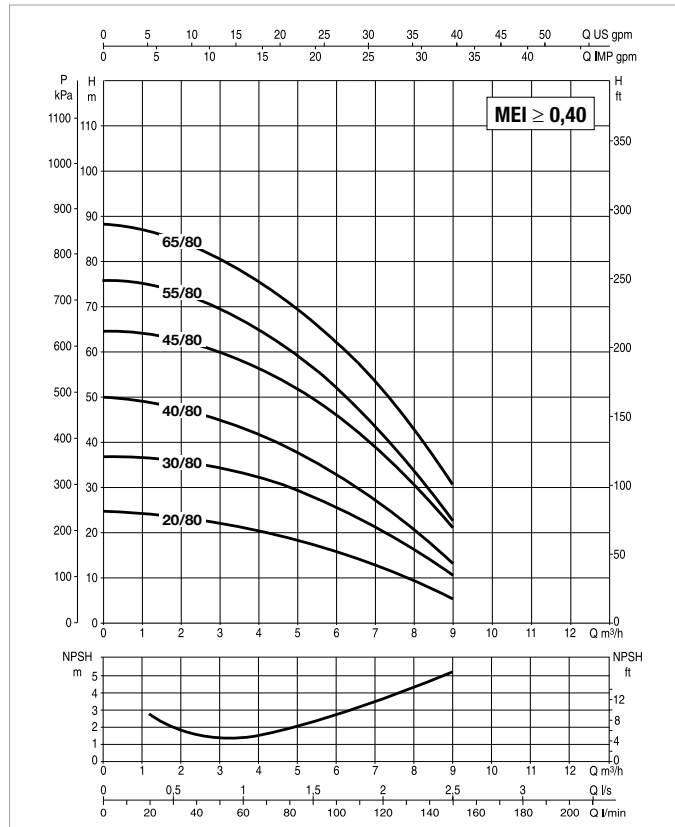
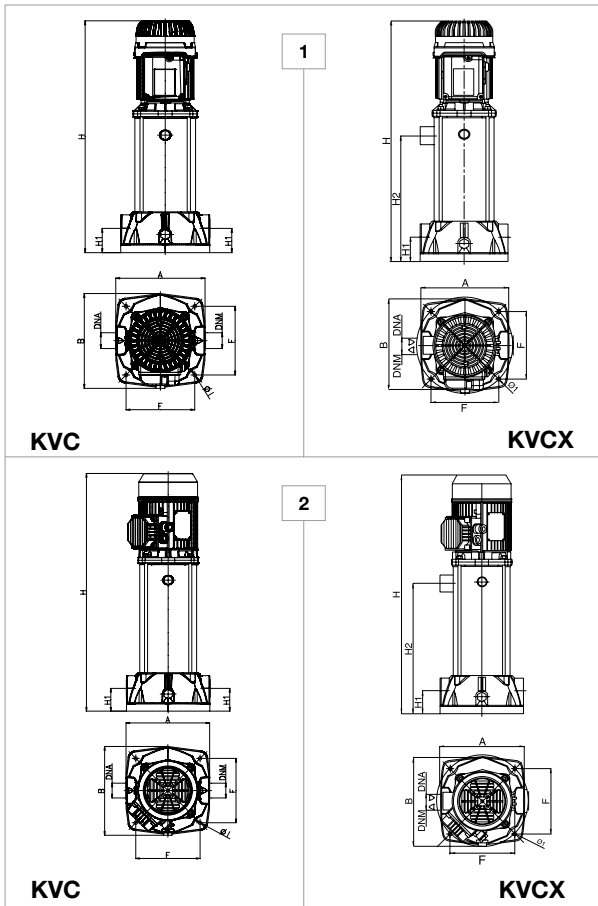
The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

| MODEL            | NO. OF IMPELLERS | ELECTRICAL DATA   |           |            |      |           |            |             |        |           |     |
|------------------|------------------|-------------------|-----------|------------|------|-----------|------------|-------------|--------|-----------|-----|
|                  |                  | POWER INPUT 50 Hz | P1 MAX kW | P2 NOMINAL |      | In A      | MOTOR TYPE | I st. A     | 1/min. | CAPACITOR |     |
|                  |                  |                   |           | kW         | HP   |           |            |             |        | µF        | Vc  |
| KVC-KVCX 20-50 M | 2                | 1 x 220 - 240 V ~ | 0,55      | 0,37       | 0,5  | 2,5       | -          | 13,7        | 2800   | 14        | 450 |
| KVC-KVCX 20-50 T |                  | 3 x 230 / 400 V ~ | 0,54      | 0,37       | 0,5  | 1,7 - 1   | -          | 15,9 - 9,2  | 2800   | -         | -   |
| KVC-KVCX 30-50 M | 3                | 1 x 220 - 240 V ~ | 0,9       | 0,55       | 0,75 | 4         | -          | 13,7        | 2800   | 14        | 450 |
| KVC-KVCX 30-50 T |                  | 3 x 230 / 400 V ~ | 0,75      | 0,55       | 0,75 | 2,4/1,4   | -          | 15,9 - 9,2  | 2800   | -         | -   |
| KVC-KVCX 40-50 M | 4                | 1 x 220 - 240 V ~ | 1,2       | 0,8        | 1,1  | 5,6       | -          | 28          | 2800   | 20        | 450 |
| KVC-KVCX 40-50 T |                  | 3 x 230 / 400 V ~ | 1,2       | 0,8        | 1,1  | 4,1 - 2,4 | IE3        | 23,1 - 13,5 | 2800   | -         | -   |
| KVC-KVCX 55-50 M | 5                | 1 x 220 - 240 V ~ | 1,4       | 1          | 1,36 | 6,4       | -          | 30          | 2800   | 25        | 450 |
| KVC-KVCX 55-50 T |                  | 3 x 230 / 400 V ~ | 1,5       | 1          | 1,36 | 4,7 - 2,7 | IE3        | 23,6 - 13,3 | 2800   | -         | -   |
| KVC-KVCX 65-50 M | 6                | 1 x 220 - 240 V ~ | 1,7       | 1,1        | 1,5  | 7,4       | -          | 29,2        | 2800   | 31,5      | 450 |
| KVC-KVCX 65-50 T |                  | 3 x 230 / 400 V ~ | 1,9       | 1,1        | 1,5  | 5,9 - 3,4 | IE3        | 30,9 - 17,8 | 2800   | -         | -   |
| KVC-KVCX 75-50 M | 7                | 1 x 220 - 240 V ~ | 2         | 1,5        | 2    | 9         | -          | 38          | 2800   | 31,5      | 450 |
| KVC-KVCX 75-50 T |                  | 3 x 230 / 400 V ~ | 2,1       | 1,5        | 2    | 6,6 - 3,8 | IE3        | 33,7 - 19,4 | 2800   | -         | -   |

| MODEL            | EXTERNAL DESIGN | A   | B   | F   | H   | H1 | H2  | Ø I | DNA    | DNM    | PACKING DIMENSIONS |     |     | VOLUME (m³) | WEIGHT Kg |
|------------------|-----------------|-----|-----|-----|-----|----|-----|-----|--------|--------|--------------------|-----|-----|-------------|-----------|
|                  |                 |     |     |     |     |    |     |     |        |        | L/A                | L/B | H   |             |           |
| KVC 20-50 M - T  | 1               | 221 | 235 | 170 | 450 | 60 | -   | 9   | G 1" ¼ | G 1" ¼ | 300                | 360 | 600 | 0,065       | 13,5      |
| KVC 30-50 M - T  | 1               | 221 | 235 | 170 | 478 | 60 | -   | 9   | G 1" ¼ | G 1" ¼ | 300                | 360 | 600 | 0,065       | 13,7      |
| KVC 40-50 M - T  | 1               | 221 | 235 | 170 | 505 | 60 | -   | 9   | G 1" ¼ | G 1" ¼ | 300                | 360 | 656 | 0,071       | 15,8      |
| KVC 55-50 M - T  | 1               | 221 | 235 | 170 | 533 | 60 | -   | 9   | G 1" ¼ | G 1" ¼ | 300                | 360 | 656 | 0,071       | 17        |
| KVC 65-50 M      | 2               | 221 | 235 | 170 | 600 | 60 | -   | 9   | G 1" ¼ | G 1" ¼ | 300                | 360 | 735 | 0,079       | 20,2      |
| KVC 65-50 T      | 2               | 221 | 235 | 170 | 600 | 60 | -   | 9   | G 1" ¼ | G 1" ¼ | 300                | 360 | 735 | 0,079       | 19,8      |
| KVC 75-50 M      | 2               | 221 | 235 | 170 | 627 | 60 | -   | 9   | G 1" ¼ | G 1" ¼ | 300                | 360 | 735 | 0,079       | 21,2      |
| KVC 75-50 T      | 2               | 221 | 235 | 170 | 627 | 60 | -   | 9   | G 1" ¼ | G 1" ¼ | 300                | 360 | 735 | 0,079       | 20,6      |
| KVCX 20-50 M - T | 1               | 221 | 235 | 170 | 450 | 60 | -   | 9   | G 1" ¼ | G 1" ¼ | 300                | 360 | 600 | 0,065       | 13,5      |
| KVCX 30-50 M - T | 1               | 221 | 235 | 170 | 478 | 60 | 184 | 9   | G 1" ¼ | G 1" ¼ | 300                | 360 | 600 | 0,065       | 13,7      |
| KVCX 40-50 M - T | 1               | 221 | 235 | 170 | 505 | 60 | 184 | 9   | G 1" ¼ | G 1" ¼ | 300                | 360 | 656 | 0,071       | 15,8      |
| KVCX 55-50 M - T | 1               | 221 | 235 | 170 | 533 | 60 | 239 | 9   | G 1" ¼ | G 1" ¼ | 300                | 360 | 656 | 0,071       | 17        |
| KVCX 65-50 M     | 2               | 221 | 235 | 170 | 600 | 60 | 239 | 9   | G 1" ¼ | G 1" ¼ | 300                | 360 | 735 | 0,079       | 20,2      |
| KVCX 65-50 T     | 2               | 221 | 235 | 170 | 600 | 60 | 239 | 9   | G 1" ¼ | G 1" ¼ | 300                | 360 | 735 | 0,079       | 19,8      |
| KVCX 75-50 M     | 2               | 221 | 235 | 170 | 627 | 60 | 332 | 9   | G 1" ¼ | G 1" ¼ | 300                | 360 | 735 | 0,079       | 21,2      |
| KVCX 75-50 T     | 2               | 221 | 235 | 170 | 627 | 60 | 332 | 9   | G 1" ¼ | G 1" ¼ | 300                | 360 | 735 | 0,079       | 20,6      |

# KVC / KVCX 80 - INTEGRAL SHAFT MULTISTAGE VERTICAL CENTRIFUGAL ELECTRIC PUMPS

Pumped liquid temperature range: from 0 °C to +35 °C for domestic use - from 0 °C to +40 °C for the other uses



For MEI index refer to the hydraulic efficiency section.

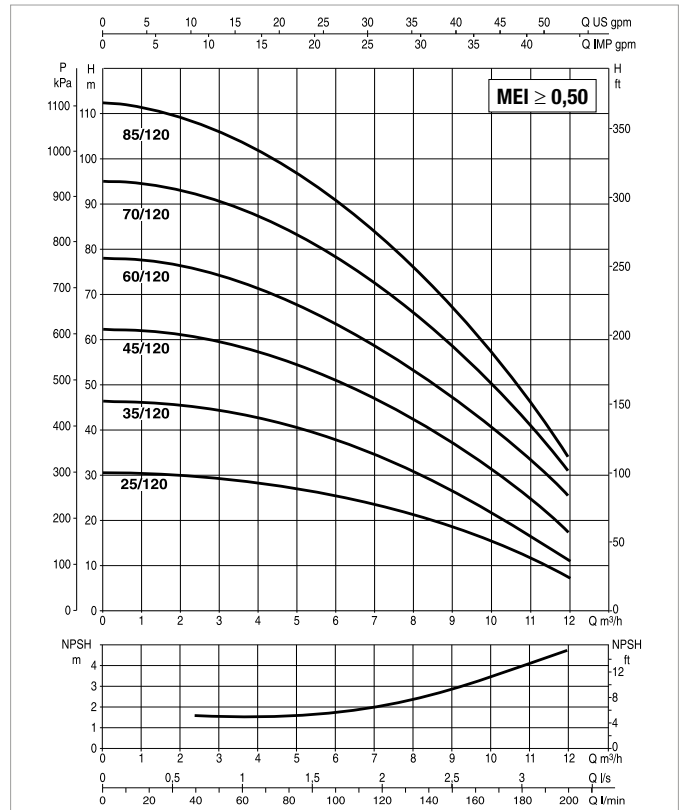
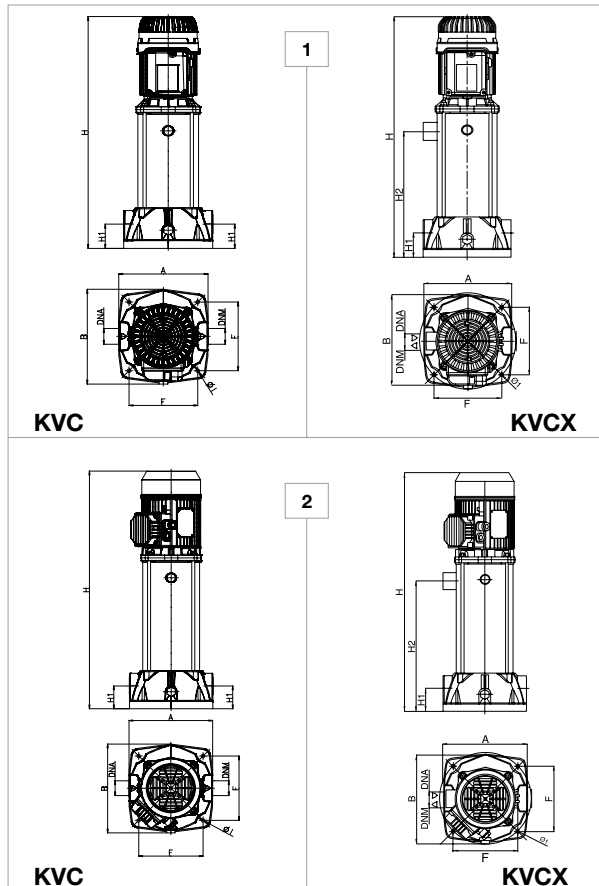
The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

| MODEL            | ELECTRICAL DATA  |                   |           |            |      |           |            |            |        |           |     |
|------------------|------------------|-------------------|-----------|------------|------|-----------|------------|------------|--------|-----------|-----|
|                  | NO. OF IMPELLERS | POWER INPUT 50 Hz | P1 MAX kW | P2 NOMINAL |      | In A      | MOTOR TYPE | I st. A    | 1/min. | CAPACITOR |     |
|                  |                  |                   |           | kW         | HP   |           |            |            |        | µF        | Vc  |
| KVC-KVCX 20-80 M | 2                | 1 x 220 - 240V ~  | 0,93      | 0,55       | 0,75 | 4,2       | -          | 15,3       | 2800   | 14        | 450 |
| KVC-KVCX 20-80 T |                  | 3 x 230 / 400V ~  | 0,89      | 0,55       | 0,75 | 2,8 - 1,6 | -          | 3,8 - 2,2  | 2800   | -         | -   |
| KVC-KVCX 30-80 M | 3                | 1 x 220 - 240V ~  | 1,4       | 0,9        | 1,2  | 6,5       | -          | 23,7       | 2800   | 25        | 450 |
| KVC-KVCX 30-80 T |                  | 3 x 230 / 400V ~  | 1,17      | 0,9        | 1,2  | 3,8 - 2,2 | IE3        | 5,1 - 3    | 2800   | -         | -   |
| KVC-KVCX 40-80 M | 4                | 1 x 220 - 240V ~  | 1,63      | 1,1        | 1,5  | 7,4       | -          | 23,7       | 2800   | 31,5      | 450 |
| KVC-KVCX 40-80 T |                  | 3 x 230 / 400V ~  | 1,49      | 1          | 1,36 | 4,5 - 2,6 | IE3        | 6 - 3,5    | 2800   | -         | -   |
| KVC-KVCX 45-80 M | 5                | 1 x 220 - 240V ~  | 2,1       | 1,5        | 2    | 9,6       | -          | 38,3       | 2800   | 40        | 450 |
| KVC-KVCX 45-80 T |                  | 3 x 230 / 400V ~  | 1,93      | 1,5        | 2    | 6 - 3,4   | IE3        | 9,3 - 5,4  | 2800   | -         | -   |
| KVC-KVCX 55-80 M | 6                | 1 x 220 - 240V ~  | 2,46      | 1,85       | 2,5  | 11,2      | -          | 37,7       | 2800   | 40        | 450 |
| KVC-KVCX 55-80 T |                  | 3 x 230 / 400V ~  | 2,28      | 1,85       | 2,5  | 6,8 - 3,9 | IE3        | 10,4 - 6   | 2800   | -         | -   |
| KVC-KVCX 65-80 T | 7                | 3 x 230 / 400V ~  | 2,66      | 2,2        | 3    | 7,7 - 4,4 | IE3        | 12,3 - 7,1 | 2800   | -         | -   |

| MODEL            | EXTERNAL DESIGN | A   | B   | F   | H   | H1 | H2  | Ø I | DnA    | DnM    | PACKING DIMENSIONS |     |     | VOLUME (m³) | WEIGHT Kg |
|------------------|-----------------|-----|-----|-----|-----|----|-----|-----|--------|--------|--------------------|-----|-----|-------------|-----------|
|                  |                 |     |     |     |     |    |     |     |        |        | L/A                | L/B | H   |             |           |
| KVC 20-80 M - T  | 1               | 221 | 250 | 170 | 505 | 60 | -   | 9   | G 1" ¼ | G 1" ¼ | 300                | 360 | 600 | 0,065       | 14,7      |
| KVC 30-80 M - T  | 1               | 221 | 250 | 170 | 505 | 60 | -   | 9   | G 1" ¼ | G 1" ¼ | 300                | 360 | 656 | 0,071       | 13,7      |
| KVC 40-80 M      | 2               | 221 | 250 | 170 | 560 | 60 | -   | 9   | G 1" ¼ | G 1" ¼ | 300                | 360 | 656 | 0,071       | 18        |
| KVC 40-80 T      | 2               | 221 | 250 | 170 | 560 | 60 | -   | 9   | G 1" ¼ | G 1" ¼ | 300                | 360 | 656 | 0,071       | 17,6      |
| KVC 45-80 M      | 2               | 221 | 250 | 170 | 634 | 60 | -   | 9   | G 1" ¼ | G 1" ¼ | 300                | 360 | 735 | 0,079       | 18        |
| KVC 45-80 T      | 2               | 221 | 250 | 170 | 634 | 60 | -   | 9   | G 1" ¼ | G 1" ¼ | 300                | 360 | 735 | 0,079       | 17,6      |
| KVC 55-80 M - T  | 2               | 221 | 250 | 170 | 727 | 60 | -   | 9   | G 1" ¼ | G 1" ¼ | 300                | 360 | 735 | 0,079       | 22        |
| KVC 65-80 T      | 2               | 221 | 250 | 170 | 727 | 60 | -   | 9   | G 1" ¼ | G 1" ¼ | 300                | 360 | 760 | 0,082       | 22,1      |
| KVCX 20-80 M - T | 1               | 221 | 250 | 170 | 505 | 60 | 184 | 9   | G 1" ¼ | G 1" ¼ | 300                | 360 | 600 | 0,065       | 14,7      |
| KVCX 30-80 M - T | 1               | 221 | 250 | 170 | 505 | 60 | 184 | 9   | G 1" ¼ | G 1" ¼ | 300                | 360 | 656 | 0,071       | 13,7      |
| KVCX 40-80 M     | 2               | 221 | 250 | 170 | 560 | 60 | 239 | 9   | G 1" ¼ | G 1" ¼ | 300                | 360 | 656 | 0,071       | 18        |
| KVCX 40-80 T     | 2               | 221 | 250 | 170 | 560 | 60 | 239 | 9   | G 1" ¼ | G 1" ¼ | 300                | 360 | 656 | 0,071       | 17,6      |
| KVCX 45-80 M     | 2               | 221 | 250 | 170 | 634 | 60 | 239 | 9   | G 1" ¼ | G 1" ¼ | 300                | 360 | 735 | 0,079       | 18        |
| KVCX 45-80 T     | 2               | 221 | 250 | 170 | 634 | 60 | 239 | 9   | G 1" ¼ | G 1" ¼ | 300                | 360 | 735 | 0,079       | 17,6      |
| KVCX 55-80 M     | 2               | 221 | 250 | 170 | 727 | 60 | 332 | 9   | G 1" ¼ | G 1" ¼ | 300                | 360 | 735 | 0,079       | 22        |
| KVCX 55-80 T     | 2               | 221 | 250 | 170 | 727 | 60 | 332 | 9   | G 1" ¼ | G 1" ¼ | 300                | 360 | 735 | 0,079       | 22,1      |
| KVCX 65-80 T     | 2               | 221 | 250 | 170 | 727 | 60 | 332 | 9   | G 1" ¼ | G 1" ¼ | 300                | 360 | 760 | 0,082       | 22,1      |

# KVC / KVCX 120 - INTEGRAL SHAFT MULTISTAGE VERTICAL CENTRIFUGAL ELECTRIC PUMPS

Pumped liquid temperature range: from 0 °C to +35 °C for domestic use - from 0 °C to +40 °C for the other uses



For MEI index refer to the hydraulic efficiency section.  
The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

| MODEL             | NO. OF IMPELLERS | POWER INPUT 50 Hz | P1 MAX kW | P2 NOMINAL        |      | In A       | MOTOR TYPE | I st. A      | 1/min. | CAPACITOR         |     |
|-------------------|------------------|-------------------|-----------|-------------------|------|------------|------------|--------------|--------|-------------------|-----|
|                   |                  |                   |           | kW                | HP   |            |            |              |        | μF                | Vc  |
|                   |                  |                   |           | KVC-KVCX 25-120 M | 2    |            |            |              |        | 1 x 220 - 240 V ~ | 1,5 |
| KVC-KVCX 25-120 T | 2                | 3 x 230 / 400 V ~ | 1,4       | 1                 | 1,36 | 5 - 2,9    | IE3        | 22,1 - 12,8  | 2800   | -                 | -   |
| KVC-KVCX 35-120 M | 3                | 1 x 220 - 240 V ~ | 1,9       | 1,1               | 1,5  | 7,4        | -          | 30           | 2800   | 31,5              | 450 |
| KVC-KVCX 35-120 T | 3                | 3 x 230 / 400 V ~ | 2         | 1,1               | 1,5  | 6,4 - 3,7  | IE3        | 32,6 - 18,8  | 2800   | -                 | -   |
| KVC-KVCX 45-120 M | 4                | 1 x 220 - 240 V ~ | 2,6       | 1,85              | 2,5  | 12         | -          | 54           | 2800   | 40                | 450 |
| KVC-KVCX 45-120 T | 4                | 3 x 230 / 400 V ~ | 2,6       | 1,85              | 2,5  | 7,6 - 4,4  | IE3        | 46,3 - 26,8  | 2800   | -                 | -   |
| KVC-KVCX 60-120 T | 5                | 3 x 230 / 400 V ~ | 3,1       | 2,2               | 3    | 9 - 5,2    | IE3        | 51,2 - 29,58 | 2800   | -                 | -   |
| KVC-KVCX 70-120 T | 6                | 3 x 230 / 400 V ~ | 3,8       | 3                 | 4    | 10,9 - 6,3 | IE3        | 71,9 - 41,5  | 2800   | -                 | -   |
| KVC-KVCX 85-120 T | 7                | 3 x 230 / 400 V ~ | 4,2       | 3                 | 4    | 12,3 - 7,1 | IE3        | 81,1 - 46,8  | 2800   | -                 | -   |

| MODEL               | EXTERNAL DESIGN | A   | B   | F   | H   | H1 | H2  | Ø I | DNA    | DNM    | PACKING DIMENSIONS |     |     | VOLUME (m³) | WEIGHT Kg |
|---------------------|-----------------|-----|-----|-----|-----|----|-----|-----|--------|--------|--------------------|-----|-----|-------------|-----------|
|                     |                 |     |     |     |     |    |     |     |        |        | L/A                | L/B | H   |             |           |
| KVC 25-120 M - T *  | 1               | 221 | 235 | 170 | 450 | 60 | -   | 9   | G 1" ¼ | G 1" ¼ | 300                | 360 | 585 | 0,063       | 17        |
| KVC 35-120 M *      | 2               | 221 | 235 | 170 | 480 | 60 | -   | 9   | G 1" ¼ | G 1" ¼ | 300                | 360 | 585 | 0,063       | 20,1      |
| KVC 35-120 T *      | 2               | 221 | 235 | 170 | 480 | 60 | -   | 9   | G 1" ¼ | G 1" ¼ | 300                | 360 | 585 | 0,063       | 20,2      |
| KVC 45-120 M *      | 2               | 221 | 235 | 170 | 507 | 60 | -   | 9   | G 1" ¼ | G 1" ¼ | 300                | 360 | 715 | 0,077       | 20,2      |
| KVC 45-120 T *      | 2               | 221 | 235 | 170 | 507 | 60 | -   | 9   | G 1" ¼ | G 1" ¼ | 300                | 360 | 715 | 0,077       | 21,9      |
| KVC 60-120 T        | 2               | 221 | 235 | 170 | 610 | 60 | -   | 9   | G 1" ¼ | G 1" ¼ | 300                | 360 | 715 | 0,077       | 21,6      |
| KVC 70-120 T        | 2               | 221 | 235 | 170 | 675 | 60 | -   | 9   | G 1" ¼ | G 1" ¼ | 300                | 360 | 810 | 0,087       | 24        |
| KVC 85-120 T        | 2               | 221 | 235 | 170 | 702 | 60 | -   | 9   | G 1" ¼ | G 1" ¼ | 300                | 360 | 810 | 0,087       | 25        |
| KVCX 25-120 M - T * | 1               | 221 | 235 | 170 | 450 | 60 | 184 | 9   | G 1" ¼ | G 1" ¼ | 300                | 360 | 585 | 0,063       | 17        |
| KVCX 35-120 M - T * | 2               | 221 | 235 | 170 | 480 | 60 | 184 | 9   | G 1" ¼ | G 1" ¼ | 300                | 360 | 585 | 0,063       | 20,1      |
| KVCX 45-120 M *     | 2               | 221 | 235 | 170 | 507 | 60 | 239 | 9   | G 1" ¼ | G 1" ¼ | 300                | 360 | 715 | 0,077       | 20,2      |
| KVCX 45-120 T *     | 2               | 221 | 235 | 170 | 507 | 60 | 239 | 9   | G 1" ¼ | G 1" ¼ | 300                | 360 | 715 | 0,077       | 21,9      |
| KVCX 60-120 T       | 2               | 221 | 235 | 170 | 610 | 60 | 239 | 9   | G 1" ¼ | G 1" ¼ | 300                | 360 | 715 | 0,077       | 21,6      |
| KVCX 70-120 T       | 2               | 221 | 235 | 170 | 675 | 60 | 332 | 9   | G 1" ¼ | G 1" ¼ | 300                | 360 | 810 | 0,087       | 24        |
| KVCX 85-120 T       | 2               | 221 | 235 | 170 | 702 | 60 | 332 | 9   | G 1" ¼ | G 1" ¼ | 300                | 360 | 810 | 0,087       | 25        |

\* H only valid for the three-phase version



### TECHNICAL DATA

**Operating range:**

NNKV 1, 3, 6, 10, 15, 20 S: from 1 m<sup>3</sup>/h to 30 m<sup>3</sup>/h with head up to 320 m  
 NKV 32, 45, 65, 95: from 1 m<sup>3</sup>/h to 120 m<sup>3</sup>/h with head up to 320 m

**Type of pumped liquid:** Clean, free from solid or abrasive substances, non-viscous, non-aggressive, non-crystallized and chemically neutral

**Maximum percentage of glycol:** 30%

**Supported liquid temperature min. and max.:** From -30 to +120°C (EPDM)  
 From -15°C to +120°C (Viton/FKM)

**Maximum ambient temperature:** +50° C

**Maximum operating pressure bar / kPa:**

NKV from 1 S to 20 S: 25 bar / 2500 kPa

NKV 32, 45: 32 bar / 3200 kPa

NKV 65, 95: 25 bar / 2500 kPa

**Degree of protection of the engine:** IP 55

**Engine insulation class:** F

**Impellers construction material:** AISI 304 stainless steel

On request X version with AISI 316 stainless steel

**Single phase power supply (on request):**

220 - 240 / 380 - 415 V at 50 Hz up to 2,2 kW

**Three-phase power supply:**

220 - 240 / 380 - 415 V at 50 Hz up to 2,2 kW

380 - 415 V at 50 Hz from 3 kW

**Power cord (m) and plug:** Not provided

**Type of installation possible:** Vertical position

**Special versions available on request:**

- different types of mechanical seals (for example for aggressive liquids)
- connections (round flanges, oval, Victaulic, clamp)
- parts in contact with the liquid in stainless steel AISI 316 (versions X)
- different voltages and frequencies
- ATEX version

**Certifications:** NKV from 1 S to 20 S or X: WRAS, ACS

NKV from 32 to 95 X version: WRAS, ACS

**IE3 ≥ 0,75 kW**

### APPLICATIONS

NKV are AISI 304 stainless steel multi-impeller vertical centrifugal pumps with coupling; designed for pressurization, conditioning and heating in civil and commercial environments, they can also be used in agriculture and in watering systems. The pumps can be used for the recirculation of water in heating and air conditioning systems.

#### CONSTRUCTION FEATURES OF THE PUMP - NKV 1-3-6-10-15-20 S

The use of advanced stainless steel processing technologies for the main hydraulic components helps to achieve very high performance levels. The pumps are also extremely versatile, thanks to the center distance of the in-line ports, designed to maximize interchangeability. The parts in contact with the liquid are made of AISI 304 stainless steel for NKV S models, or AISI 316 stainless steel for NKV X models (only available to special order). Round flanges as standard (oval, loose, virtual, clamp available on request). The mechanical seal is made of standard E1 = Graphite/Silicon Carbide/AISI 316/EPDM = BQGE. FKM/Viton available on request. Starting from 5.5 kW models, the seal can be removed without removing the motor. Rigid coupling

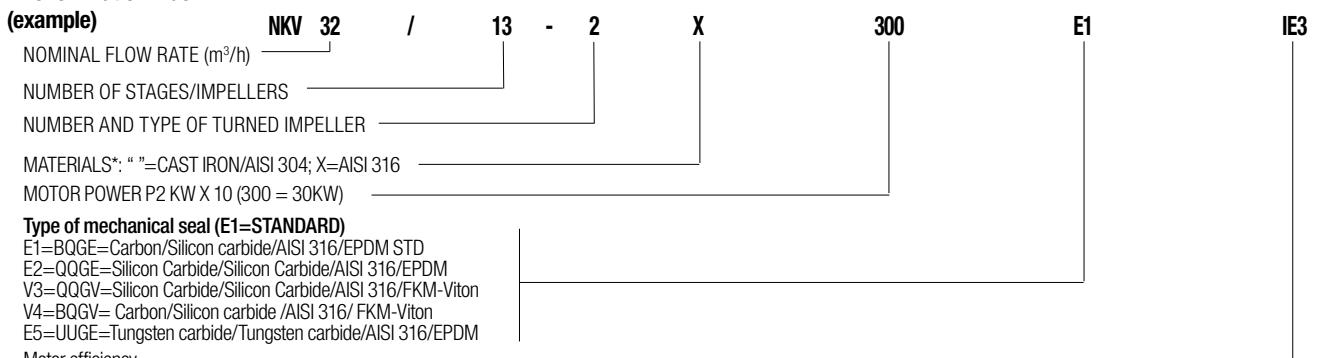
#### CONSTRUCTION FEATURES OF THE PUMP - NKV 32-45-65-95

The use of advanced stainless steel processing technologies for the main hydraulic components helps to achieve very high performance levels. They are extremely versatile, thanks to the center distance of the in-line ports, designed to maximize interchangeability. Their pump body and upper flange are in cataphoretic paint coated cast iron; impellers, diffusers and pump liner made of AISI 304 stainless steel (AISI 316 stainless steel available on request - X version). Round flanges as standard (oval, loose, virtual, clamp available on request). The mechanical seal is made of standard E1 = Graphite/Silicon Carbide/AISI 316/EPDM = BQGE. FKM/Viton available on request. Starting from 5.5 kW models, the seal can be removed without removing the motor. Rigid coupling.

#### CONSTRUCTION FEATURES OF THE MOTOR

Standard mechanical seal E1 (= Graphite/ Silicon Carbide/AISI 316/EPDM) and on request among the various custom seals there are also with FKM/Viton. The seal can be dismantled without removing the motor from 5.5 kW. Rigid coupling. Motor frame B14 up to 4 kW motor size and B5 from 5,5 kW motor size.

#### - Denomination index:



\*MATERIALS:

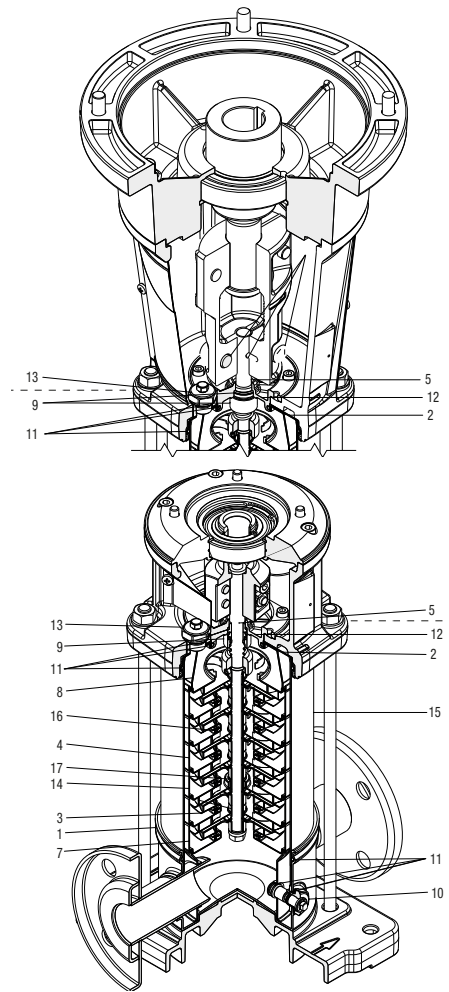
"S" version with pump body/impellers/diffusers in AISI 304 stainless steel - "X" version with pump body/impellers/diffusers in AISI 316 stainless steel

" " standard version with pump body in cast iron and impellers in AISI 304 stainless steel (for NKV 32-45-65-95)

### NKV 1-3-6-10-15-20 MATERIAL

| N° | PART                                       | MATERIAL*<br>(S VERSION - AISI 304)          | MATERIAL*<br>(X VERSION - AISI 316)          |
|----|--|--|--|
| 1  | Pump body                                  | Stainless Steel AISI 304                     | Stainless Steel AISI 316                     |
| 2  | Upper flange                               | Stainless Steel AISI 304                     | Stainless Steel AISI 316                     |
| 3  | Impeller                                   | Stainless Steel AISI 304                     | Stainless Steel AISI 316                     |
| 4  | Diffuser body and diffuser                 | Stainless Steel AISI 304                     | Stainless Steel AISI 316                     |
| 5  | Pump shaft                                 | Stainless Steel AISI 304                     | Stainless Steel AISI 316                     |
| 7  | Initial stage housing                      | Stainless Steel AISI 304                     | Stainless Steel AISI 316                     |
| 8  | Stage centering outlet                     | Stainless Steel AISI 304                     | Stainless Steel AISI 316                     |
| 9  | Mechanical seal                            | Carbon/Silicon carbide/AISI 316/<br>EPDM     | Carbon/Silicon carbide/AISI 316/<br>EPDM     |
| 10 | Discharge plug                             | Stainless Steel AISI 304                     | Stainless Steel AISI 316                     |
| 11 | O-ring                                     | EPDM   | EPDM   |
| 12 | Seal disk                                  | Stainless Steel AISI 304                     | Stainless Steel AISI 316                     |
| 13 | Filling plug                               | Stainless Steel AISI 304                     | Stainless Steel AISI 316                     |
| 14 | Stage housing and diffuser<br>with bearing | Stainless Steel AISI 304/Tungsten<br>carbide | Stainless Steel AISI 316/Tungsten<br>carbide |
| 15 | External sleeve                            | Stainless Steel AISI 304                     | Stainless Steel AISI 316                     |
| 16 | Floating wear ring                         | PPS  | PPS  |
| 17 | Intermediate bushing                       | Tungsten carbide                             | Tungsten carbide                             |

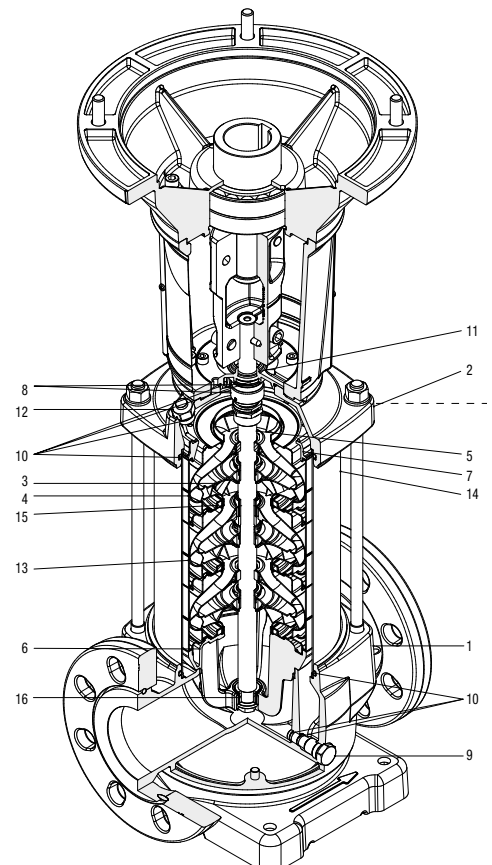
\* In contact with the liquid.



### NKV 32-45-65-95 MATERIAL

| N° | PART                                       | MATERIAL*<br>(STANDARD VERSION)              | MATERIAL*<br>(X VERSION - AISI 316)          |
|----|--|--|--|
| 1  | Pump body                                  | Cast iron with cataphoresis                  | Stainless Steel AISI 316                     |
| 2  | Upper flange                               | Stainless Steel AISI 304                     | Stainless Steel AISI 316                     |
| 3  | Impeller                                   | Stainless Steel AISI 304                     | Stainless Steel AISI 316                     |
| 4  | Diffuser body and diffuser                 | Stainless Steel AISI 304/Carbon              | Stainless Steel AISI 316/Carbon              |
| 5  | Pump shaft                                 | Stainless Steel AISI 431                     | Stainless Steel AISI 329                     |
| 6  | Stage centering inlet                      | Stainless Steel AISI 316                     | Stainless Steel AISI 316                     |
| 7  | Stage centering outlet                     | Stainless Steel AISI 304                     | Stainless Steel AISI 316                     |
| 8  | Mechanical seal                            | Carbon/Silicon carbide/AISI 316/<br>EPDM     | Carbon/Silicon carbide/AISI 316/<br>EPDM     |
| 9  | Discharge plug                             | Stainless Steel AISI 304                     | Stainless Steel AISI 316                     |
| 10 | O-ring                                     | EPDM   | EPDM   |
| 11 | Seal disk                                  | Stainless Steel AISI 304                     | Stainless Steel AISI 316                     |
| 12 | Filling plug                               | Stainless Steel AISI 304                     | Stainless Steel AISI 316                     |
| 13 | Stage housing and diffuser<br>with bearing | Stainless Steel AISI 304                     | Stainless Steel AISI 316                     |
| 14 | External sleeve                            | Stainless Steel AISI 304                     | Stainless Steel AISI 316                     |
| 15 | Floating wear ring                         | PTFE   | PTFE   |
| 16 | Intermediate bushing                       | Stainless Steel AISI 316/Tungsten<br>carbide | Stainless Steel AISI 316/Tungsten<br>carbide |

\* In contact with the liquid.





### MATERIAL TABLE SELECTION

| PUMP MODEL                                | IMPELLER / DIFFUSER | BASE      | FLANGES   |
|---|---------------------|-----------|-----------|
| NKV 32, 45, 65, 95                        | Inox 304            | Cast iron | Cast iron |
| NKV 1, 3, 6, 10, 15, 20 S                 | Inox 304            | Inox 304  | Inox 304  |
| NKV 1, 3, 6, 10, 15, 20, 32, 45, 65, 95 X | Inox 316            | Inox 316  | Inox 316  |

### LIQUID TABLE SELECTION

Type of mechanical seal (E1=STANDARD)

E1=BQGE=Carbon/Silicon carbide/AISI 316/EPDM STD

E2=QQGE=Silicon Carbide/Silicon Carbide/AISI 316/EPDM

V3=QQGV=Silicon Carbide/Silicon Carbide/AISI 316/FKM-Viton

V4=BQGV= Carbon/Silicon carbide /AISI 316/ FKM-Viton

E5=UUGE=Tungsten carbide/Tungsten carbide/AISI 316/EPDM

| LIQUID (WATER SOLUTION)        | CONCENTRATION [%] | MIN/MAX TEMPERATURE [°C] | NKV MODEL            |              |              |
|--------------------------------|-------------------|--------------------------|----------------------|--------------|--------------|
|                                |                   |                          | STANDARD (NKV 32-95) | S (NKV 1-20) | X (NKV 1-95) |
| Acetic acid                    | 10 ÷ 40           | +0/+70                   | -                    | -            | E1           |
| Citric Acid                    | 5                 | +5/+70                   | -                    | E1           | E1           |
| Hydrochloric Acid              | 2                 | +5/+25                   | -                    | -            | V3           |
| Formic Acid                    | 5                 | +5/+25                   | -                    | E1           | E1           |
| Phosphoric Acid                | 10                | +5/+30                   | -                    | -            | E1           |
| Nitric Acid                    | 40                | +5/+30                   | -                    | V3           | V3           |
| Sulfuric Acid                  | 2                 | +5/+25                   | -                    | -            | V4           |
| Tannic Acid                    | 20                | +5/+50                   | -                    | -            | E1           |
| Tartaric Acid                  | 50                | +5/+25                   | -                    | V3           | V3           |
| Deionized Water, Demineralized | 100               | +5/+110                  | E1                   | E1           | E1           |
| Sodium Bicarbonate             | 6                 | +5/+60                   | -                    | -            | E1           |
| Chloroform                     | 100               | -10/+30                  | V4                   | V4           | V4           |
| Oil In Water Emulsion          | 100               | +15/+90                  | V4                   | V4           | V4           |
| Phosphates, Polyphosphates     | 10                | +5/+90                   | -                    | V3           | V3           |
| Ethylene Glycol                | 10 ÷ 30           | -15/+120                 | -                    | E1           | E1           |
| Propylene Glycol               | 30                | -10/+100                 | V3                   | V3           | V3           |
| Sodium Hypochlorite            | 1                 | +5/+25                   | -                    | -            | V3           |
| Sodium Nitrate                 | 10                | +5/+60                   | -                    | V3           | V3           |
| Diathermic Oil                 | 100               | +90/+120                 | V4                   | V4           | V4           |
| Mineral Oil                    | 100               | +90/+120                 | V4                   | V4           | V4           |
| Vegetable Oil                  | 100               | +70/+100                 | E1                   | E1           | E1           |
| Perchloroethylene              | 100               | -10/+30                  | V4                   | V4           | V4           |
| Sodium Hydroxide               | 25                | +5/+70                   | E2                   | E2           | E2           |
| Aluminium Sulphate             | 10 ÷ 25           | +5/+50                   | -                    | -            | E2           |
| Ammonium Sulphate              | 10                | -10/+60                  | -                    | -            | E2           |
| Ferric Sulphate                | 10                | +5/+30                   | -                    | -            | E1           |
| Trichloroethylene              | 100               | -10/+40                  | V4                   | V4           | V4           |

For use with sea water, please consult the technical office. This table should be considered a general guide. It is important to consider the specific operating conditions, in particular the concentration in the pumped liquid, the specific weight and/or the viscosity, the temperature of the liquid and its pressure. All these conditions are essential for engine and pump performance. When pumping hazardous liquids, it is recommended to take safety precautions. You can contact us for more information.

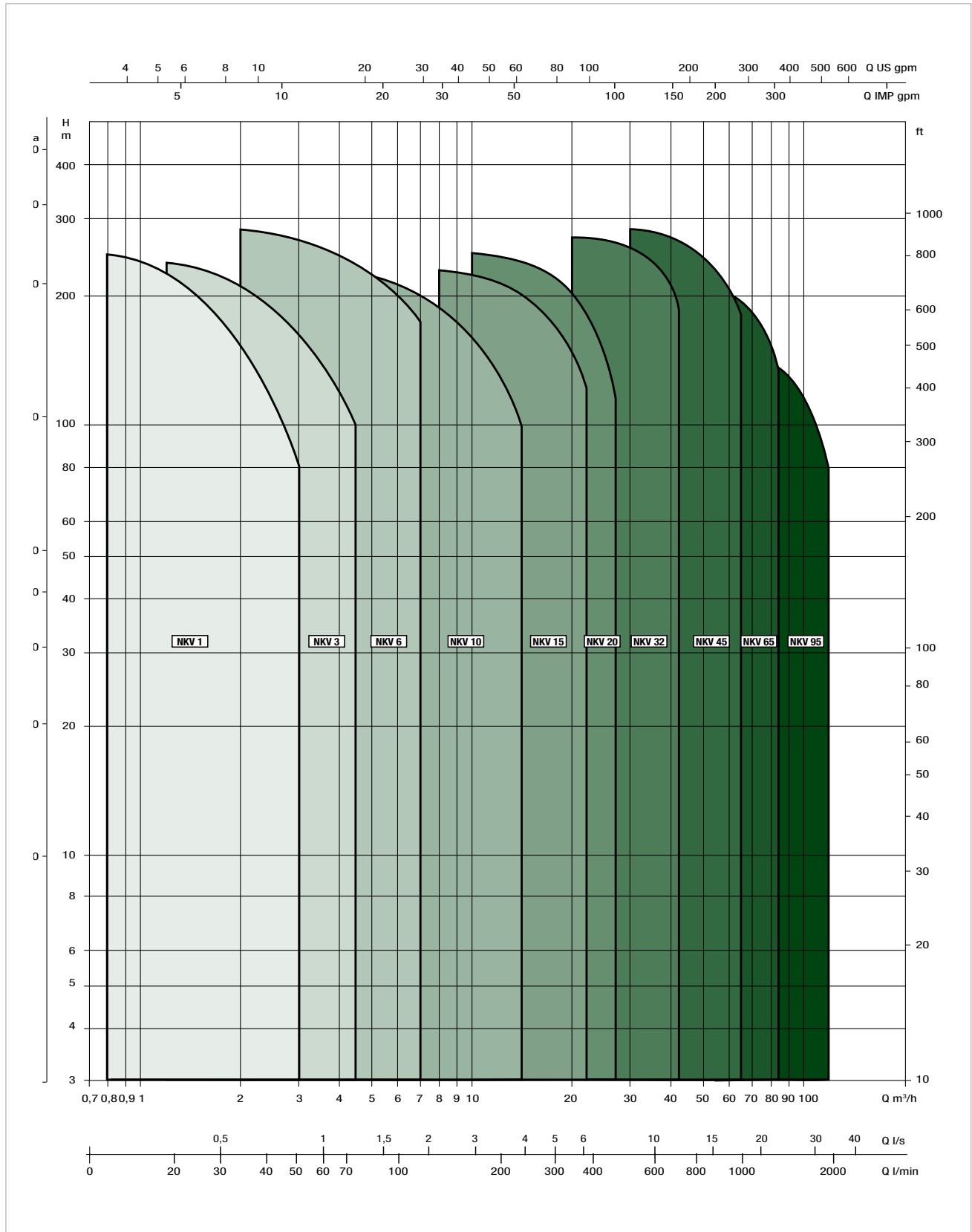
# NKV RANGE

## VERTICAL MULTISTAGE CENTRIFUGAL ELECTRIC PUMPS WITH COUPLING

### PERFORMANCE RANGE

The performance curves are based on the kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

### GRAPHIC SELECTION TABLE



### SELECTION TABLE - NKV 1

| MODEL          | Q=m³/h   | 0     | 0.5   | 1     | 1.5   | 2     | 2.5   |
|----------------|----------|-------|-------|-------|-------|-------|-------|
|                | Q=l/min  | 0     | 8.3   | 16.7  | 25.0  | 33.3  | 42    |
| NKV 1/2 T IE3  | H<br>(m) | 14.5  | 13.5  | 12.5  | 11.5  | 9.5   | 7.5   |
| NKV 1/3 T IE3  |          | 21.5  | 20    | 19    | 17    | 14    | 11    |
| NKV 1/4 T IE3  |          | 28    | 26.5  | 24.5  | 22    | 18.5  | 14    |
| NKV 1/5 T IE3  |          | 35    | 33    | 30.5  | 27    | 22.5  | 17    |
| NKV 1/6 T IE3  |          | 41.5  | 39    | 36    | 32    | 26.5  | 19.5  |
| NKV 1/7 T IE3  |          | 48    | 45    | 41.5  | 36.5  | 30    | 22    |
| NKV 1/8 T IE3  |          | 55    | 52    | 48    | 42.5  | 35    | 26    |
| NKV 1/9 T IE3  |          | 61.5  | 58    | 53    | 47    | 39    | 28.5  |
| NKV 1/10 T IE3 |          | 68    | 64    | 58.5  | 51.5  | 43    | 31.5  |
| NKV 1/11 T IE3 |          | 74.5  | 69.5  | 64    | 56.5  | 46.5  | 34    |
| NKV 1/12 T IE3 |          | 83    | 78.5  | 72    | 64    | 53    | 39.5  |
| NKV 1/13 T IE3 |          | 89.5  | 84.5  | 77.5  | 68.5  | 57    | 42    |
| NKV 1/14 T IE3 |          | 96    | 90.5  | 83    | 73    | 60.5  | 44.5  |
| NKV 1/15 T IE3 |          | 102.5 | 96    | 88    | 78    | 64    | 47    |
| NKV 1/17 T IE3 |          | 118   | 111.5 | 103   | 91.5  | 76    | 56.5  |
| NKV 1/19 T IE3 |          | 131   | 123.5 | 114   | 101   | 84    | 62    |
| NKV 1/22 T IE3 |          | 150.5 | 141.5 | 130   | 115   | 95    | 69.5  |
| NKV 1/23 T IE3 |          | 160.5 | 152   | 140   | 124.5 | 104   | 77.5  |
| NKV 1/25 T IE3 |          | 174   | 164   | 151.5 | 134.5 | 112   | 83.5  |
| NKV 1/27 T IE3 |          | 187   | 176.5 | 162.5 | 144   | 120   | 88.5  |
| NKV 1/30 T IE3 |          | 206.5 | 194.5 | 179   | 158   | 131   | 96.5  |
| NKV 1/32 T IE3 |          | 224.5 | 213   | 197   | 175.5 | 147.5 | 110.5 |
| NKV 1/34 T IE3 |          | 238   | 225.5 | 208.5 | 185.5 | 155.5 | 116.5 |
| NKV 1/37 T IE3 |          | 258   | 244   | 225.5 | 200.5 | 167.5 | 125   |

### SELECTION TABLE - NKV 3

| MODEL          | Q=m³/h   | 0     | 1     | 1.5   | 2     | 2.5   | 3     | 3.5   | 4     | 4.5  |
|----------------|----------|-------|-------|-------|-------|-------|-------|-------|-------|------|
|                | Q=l/min  | 0     | 16.7  | 25.0  | 33.3  | 42    | 50.0  | 58.3  | 67    | 75.0 |
| NKV 3/2 T IE3  | H<br>(m) | 15    | 15    | 14.5  | 13.5  | 12.5  | 11.5  | 10    | 8     | 6    |
| NKV 3/3 T IE3  |          | 22.5  | 22    | 21    | 20    | 18.5  | 17    | 14.5  | 12    | 8.5  |
| NKV 3/4 T IE3  |          | 30    | 28.5  | 27.5  | 26    | 24    | 21.5  | 18.5  | 15    | 10.5 |
| NKV 3/5 T IE3  |          | 37.5  | 36    | 34.5  | 32.5  | 30    | 27    | 23.5  | 18.5  | 13   |
| NKV 3/6 T IE3  |          | 44.5  | 42.5  | 40.5  | 38.5  | 35.5  | 32    | 27    | 21.5  | 15   |
| NKV 3/7 T IE3  |          | 52.5  | 50.5  | 48.5  | 46    | 43    | 38.5  | 33    | 26.5  | 19   |
| NKV 3/8 T IE3  |          | 59.5  | 57.5  | 55    | 52    | 48    | 43.5  | 37    | 29.5  | 21   |
| NKV 3/9 T IE3  |          | 67    | 64    | 61.5  | 58    | 53.5  | 48    | 41    | 32.5  | 22.5 |
| NKV 3/10 T IE3 |          | 75    | 72.5  | 70    | 66.5  | 61.5  | 55.5  | 48    | 38.5  | 27.5 |
| NKV 3/11 T IE3 |          | 82.5  | 79.5  | 76.5  | 72.5  | 67    | 60.5  | 52    | 42    | 29.5 |
| NKV 3/12 T IE3 |          | 89.5  | 86    | 83    | 78.5  | 72.5  | 65    | 56    | 45    | 31.5 |
| NKV 3/13 T IE3 |          | 96.5  | 93    | 89    | 84.5  | 78    | 70    | 60    | 47.5  | 33.5 |
| NKV 3/14 T IE3 |          | 105.5 | 102   | 98.5  | 93.5  | 86.5  | 78    | 67.5  | 54.5  | 39.5 |
| NKV 3/15 T IE3 |          | 112.5 | 109   | 105   | 99.5  | 92.5  | 83    | 71.5  | 58    | 41.5 |
| NKV 3/16 T IE3 |          | 120   | 115.5 | 111.5 | 105.5 | 98    | 88    | 76    | 61    | 43.5 |
| NKV 3/17 T IE3 |          | 127   | 122.5 | 118   | 111.5 | 103.5 | 93    | 80    | 64    | 45.5 |
| NKV 3/18 T IE3 |          | 136.5 | 132.5 | 128   | 121.5 | 113.5 | 102.5 | 89    | 72.5  | 53   |
| NKV 3/19 T IE3 |          | 144   | 139.5 | 134.5 | 128   | 119   | 107.5 | 93.5  | 76    | 55.5 |
| NKV 3/21 T IE3 |          | 158.5 | 153.5 | 148   | 140.5 | 130.5 | 118   | 102   | 83    | 60   |
| NKV 3/23 T IE3 |          | 173   | 167.5 | 161.5 | 153   | 142   | 128   | 110.5 | 89.5  | 64.5 |
| NKV 3/25 T IE3 |          | 187.5 | 181   | 174.5 | 165.5 | 153.5 | 138   | 119   | 96    | 68.5 |
| NKV 3/27 T IE3 |          | 205.5 | 199.5 | 193   | 184   | 171.5 | 155   | 135   | 110.5 | 81   |
| NKV 3/29 T IE3 |          | 220   | 213.5 | 206.5 | 196.5 | 183.5 | 166   | 144   | 117.5 | 86   |
| NKV 3/31 T IE3 |          | 235   | 228   | 220.5 | 209.5 | 195   | 176.5 | 153   | 124.5 | 91   |
| NKV 3/33 T IE3 |          | 249.5 | 242   | 234   | 222   | 206.5 | 187   | 162   | 131.5 | 95.5 |

### SELECTION TABLE - NKV 6

| MODEL          | Q=m³/h   | 0     | 2.5   | 3     | 3.5   | 4     | 4.5   | 5     | 5.4   | 6     | 7     |
|----------------|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|                | Q=l/min  | 0     | 42    | 50.0  | 58.3  | 67    | 75.0  | 83.3  | 90    | 100.0 | 116.7 |
| NKV 6/2 T IE3  | H<br>(m) | 15    | 14    | 13.5  | 13    | 12.5  | 12    | 11.5  | 11    | 10    | 8     |
| NKV 6/3 T IE3  |          | 22.5  | 20.5  | 19.5  | 19    | 18    | 17    | 16    | 15.5  | 14    | 11    |
| NKV 6/4 T IE3  |          | 29.5  | 27    | 26    | 25    | 24    | 22.5  | 21.5  | 20.5  | 18.5  | 14.5  |
| NKV 6/5 T IE3  |          | 37.5  | 34.5  | 33.5  | 32    | 30.5  | 29    | 27.5  | 26    | 24    | 19    |
| NKV 6/6 T IE3  |          | 44.5  | 41    | 39.5  | 37.5  | 36    | 34    | 32.5  | 30.5  | 28    | 22    |
| NKV 6/7 T IE3  |          | 52.5  | 49    | 47    | 45    | 43    | 41    | 39    | 37    | 34    | 27    |
| NKV 6/8 T IE3  |          | 59.5  | 55    | 53.5  | 51    | 48.5  | 46.5  | 44    | 42    | 38.5  | 30.5  |
| NKV 6/9 T IE3  |          | 67    | 61.5  | 59    | 56.5  | 54    | 51.5  | 48.5  | 46    | 42.5  | 33.5  |
| NKV 6/10 T IE3 |          | 75    | 70    | 67.5  | 65    | 62    | 59    | 56    | 53.5  | 49    | 39    |
| NKV 6/11 T IE3 |          | 82.5  | 76.5  | 73.5  | 71    | 67.5  | 64.5  | 61    | 58    | 53.5  | 42.5  |
| NKV 6/12 T IE3 |          | 89.5  | 83    | 80    | 76.5  | 73    | 69.5  | 65.5  | 62.5  | 57.5  | 45.5  |
| NKV 6/13 T IE3 |          | 97    | 89    | 86    | 82    | 78.5  | 74.5  | 70.5  | 67    | 61.5  | 48.5  |
| NKV 6/14 T IE3 |          | 105.5 | 99    | 95.5  | 92    | 88    | 83.5  | 79.5  | 76    | 70    | 56    |
| NKV 6/15 T IE3 |          | 113   | 105.5 | 102   | 98    | 93.5  | 89    | 84.5  | 80.5  | 74    | 59.5  |
| NKV 6/16 T IE3 |          | 120.5 | 112   | 108   | 104   | 99    | 94.5  | 89.5  | 85.5  | 78.5  | 62.5  |
| NKV 6/17 T IE3 |          | 127.5 | 118.5 | 114.5 | 109.5 | 105   | 99.5  | 94.5  | 90    | 83    | 66    |
| NKV 6/18 T IE3 |          | 135   | 125   | 120.5 | 115.5 | 110.5 | 105   | 99.5  | 94.5  | 87    | 69    |
| NKV 6/19 T IE3 |          | 142   | 131.5 | 126.5 | 121.5 | 115.5 | 110   | 104   | 99    | 91    | 72    |
| NKV 6/20 T IE3 |          | 152   | 142.5 | 138   | 133   | 127   | 121   | 115   | 110   | 101.5 | 82    |
| NKV 6/21 T IE3 |          | 159   | 149.5 | 144.5 | 139   | 133   | 127   | 120.5 | 115   | 106   | 85.5  |
| NKV 6/23 T IE3 |          | 174   | 163   | 157.5 | 151.5 | 144.5 | 138   | 131   | 125   | 115   | 92.5  |
| NKV 6/25 T IE3 |          | 189   | 175.5 | 170   | 164   | 157.5 | 150.5 | 142.5 | 135.5 | 123.5 | 98.5  |
| NKV 6/28 T IE3 |          | 214   | 200.5 | 194.5 | 188   | 181   | 173.5 | 164.5 | 156.5 | 143   | 115.5 |
| NKV 6/30 T IE3 |          | 229   | 214   | 207.5 | 200.5 | 193   | 184.5 | 175.5 | 167   | 152.5 | 122.5 |
| NKV 6/33 T IE3 |          | 251.5 | 234.5 | 227   | 219.5 | 211   | 201.5 | 191   | 182   | 166   | 133.5 |
| NKV 6/36 T IE3 |          | 275   | 257.5 | 249.5 | 241.5 | 232.5 | 222.5 | 211.5 | 201.5 | 184   | 148.5 |

### SELECTION TABLE - NKV 10

| MODEL           | Q=m³/h   | 0     | 6     | 7     | 8     | 9     | 10    | 11    | 14    |
|-----------------|----------|-------|-------|-------|-------|-------|-------|-------|-------|
|                 | Q=l/min  | 0     | 100.0 | 116.7 | 133   | 150.0 | 166.7 | 183   | 233.3 |
| NKV 10/2 T IE3  | H<br>(m) | 20    | 18.5  | 17.5  | 17    | 16    | 15    | 13.5  | 9     |
| NKV 10/3 T IE3  |          | 30    | 27.5  | 26.5  | 25.5  | 24    | 22.5  | 20.5  | 13.5  |
| NKV 10/4 T IE3  |          | 40.5  | 37    | 35.5  | 34    | 32.5  | 30.5  | 28    | 18    |
| NKV 10/5 T IE3  |          | 50.5  | 45.5  | 43.5  | 41.5  | 39.5  | 37    | 33.5  | 21.5  |
| NKV 10/6 T IE3  |          | 61    | 56    | 54    | 51.5  | 49    | 46    | 42    | 27.5  |
| NKV 10/7 T IE3  |          | 70.5  | 64.5  | 62    | 59.5  | 56    | 52.5  | 48    | 31    |
| NKV 10/8 T IE3  |          | 81.5  | 75.5  | 73    | 70    | 66.5  | 62.5  | 57.5  | 38    |
| NKV 10/9 T IE3  |          | 91.5  | 84.5  | 81.5  | 78    | 74    | 69.5  | 64    | 42    |
| NKV 10/10 T IE3 |          | 102.5 | 96    | 93    | 89    | 84.5  | 79.5  | 73.5  | 49    |
| NKV 10/11 T IE3 |          | 113   | 105   | 101.5 | 97.5  | 92.5  | 87    | 80.5  | 53.5  |
| NKV 10/12 T IE3 |          | 123   | 114   | 110   | 105.5 | 100.5 | 94    | 87    | 57.5  |
| NKV 10/13 T IE3 |          | 133   | 123   | 118.5 | 113.5 | 108   | 101   | 93.5  | 61.5  |
| NKV 10/15 T IE3 |          | 153.5 | 142.5 | 138   | 132   | 125.5 | 118   | 109   | 72    |
| NKV 10/17 T IE3 |          | 173.5 | 160.5 | 155   | 148.5 | 141   | 132.5 | 122   | 80.5  |
| NKV 10/19 T IE3 |          | 195   | 182   | 176   | 169   | 160.5 | 151   | 139.5 | 93    |
| NKV 10/21 T IE3 |          | 215.5 | 200   | 193.5 | 185.5 | 176.5 | 166   | 153   | 101.5 |
| NKV 10/23 T IE3 |          | 235.5 | 218.5 | 211   | 202   | 192   | 180.5 | 166.5 | 110   |
| NKV 10/24 T IE3 |          | 248   | 234   | 227   | 218   | 208   | 196   | 182   | 122.5 |

### SELECTION TABLE - NKV 15

| MODEL           | Q=m³/h   | 0     | 8     | 10    | 12    | 14    | 16    | 18    | 20    | 22    | 24    |
|-----------------|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|                 | Q=l/min  | 0     | 133   | 167   | 200   | 233   | 266   | 300   | 333   | 367   | 400   |
| NKV 15/1 T IE3  | H<br>(m) | 14.5  | 13    | 12.5  | 12    | 11.5  | 10.5  | 9.5   | 8.5   | 7     | 5.5   |
| NKV 15/2 T IE3  |          | 29    | 26    | 25    | 24    | 23    | 21.5  | 19.5  | 17    | 14    | 11    |
| NKV 15/3 T IE3  |          | 43.5  | 39    | 38    | 36.5  | 34.5  | 32.5  | 29.5  | 26    | 21.5  | 17    |
| NKV 15/4 T IE3  |          | 58    | 52.5  | 51    | 49    | 46.5  | 44    | 40.5  | 35.5  | 29.5  | 23.5  |
| NKV 15/5 T IE3  |          | 72.5  | 65.5  | 63.5  | 60.5  | 57.5  | 54.5  | 49.5  | 43    | 36    | 28.5  |
| NKV 15/6 T IE3  |          | 87.5  | 79.5  | 77    | 74    | 71    | 67    | 61.5  | 54    | 46    | 36.5  |
| NKV 15/7 T IE3  |          | 102   | 92    | 89    | 86    | 82    | 77.5  | 70.5  | 62    | 52.5  | 41.5  |
| NKV 15/8 T IE3  |          | 117   | 106.5 | 103   | 99.5  | 95    | 90    | 82.5  | 72.5  | 62    | 49    |
| NKV 15/9 T IE3  |          | 131.5 | 119   | 115.5 | 111   | 106   | 100.5 | 92    | 81    | 69    | 54.5  |
| NKV 15/10 T IE3 |          | 147.5 | 134.5 | 131   | 126.5 | 121   | 115   | 106   | 94    | 80.5  | 65    |
| NKV 15/11 T IE3 |          | 162   | 148   | 143.5 | 139   | 133   | 126.5 | 116.5 | 103   | 88.5  | 71    |
| NKV 15/12 T IE3 |          | 176.5 | 161   | 156.5 | 151   | 144.5 | 137.5 | 126.5 | 112   | 96    | 77    |
| NKV 15/13 T IE3 |          | 191   | 174.5 | 169   | 163.5 | 156.5 | 148.5 | 136.5 | 120.5 | 103   | 82.5  |
| NKV 15/14 T IE3 |          | 205.5 | 187.5 | 182   | 175.5 | 168   | 159   | 146   | 129   | 110.5 | 88    |
| NKV 15/15 T IE3 |          | 221   | 201   | 195.5 | 188.5 | 180.5 | 171.5 | 157.5 | 139.5 | 119.5 | 95.5  |
| NKV 15/16 T IE3 |          | 235.5 | 214   | 208   | 200.5 | 192   | 182.5 | 167.5 | 148   | 126.5 | 101.5 |
| NKV 15/17 T IE3 |          | 249.5 | 227.5 | 220.5 | 213   | 203.5 | 193   | 177.5 | 156.5 | 134   | 107   |

### SELECTION TABLE - NKV 20

| MODEL           | Q=m³/h   | 0     | 10    | 12    | 14    | 16    | 18    | 20    | 22    | 24    | 26    | 28    |
|-----------------|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|                 | Q=l/min  | 0     | 167   | 200   | 233   | 266   | 300   | 333   | 367   | 400   | 433.5 | 466.5 |
| NKV 20/1 T IE3  | H<br>(m) | 15.5  | 13.5  | 13    | 13    | 12.5  | 12    | 11    | 10    | 8.5   | 7.5   | 6     |
| NKV 20/2 T IE3  |          | 31    | 27.5  | 27    | 26    | 25    | 24    | 22.5  | 20.5  | 18    | 15    | 12    |
| NKV 20/3 T IE3  |          | 46.5  | 41.5  | 40.5  | 39.5  | 38    | 36.5  | 34.5  | 31    | 27.5  | 23    | 18.5  |
| NKV 20/4 T IE3  |          | 62.5  | 56    | 55    | 53.5  | 51.5  | 49.5  | 46.5  | 42.5  | 37    | 31.5  | 25.5  |
| NKV 20/5 T IE3  |          | 78    | 70    | 68.5  | 66.5  | 64.5  | 62    | 58    | 53    | 47    | 40    | 32.5  |
| NKV 20/6 T IE3  |          | 94.5  | 86.5  | 84.5  | 82.5  | 80    | 77.5  | 73.5  | 67.5  | 60    | 52    | 42.5  |
| NKV 20/7 T IE3  |          | 110   | 100.5 | 98    | 95.5  | 93    | 90    | 85    | 77.5  | 69    | 59.5  | 48.5  |
| NKV 20/8 T IE3  |          | 126.5 | 117   | 114   | 112   | 109   | 106   | 100.5 | 92.5  | 82.5  | 72    | 59.5  |
| NKV 20/9 T IE3  |          | 142.5 | 131   | 128   | 125.5 | 122   | 118.5 | 112.5 | 103.5 | 92.5  | 80.5  | 66.5  |
| NKV 20/10 T IE3 |          | 158   | 145.5 | 142   | 139   | 135   | 131.5 | 124.5 | 114   | 102   | 88.5  | 73    |
| NKV 20/11 T IE3 |          | 174   | 160   | 156.5 | 153   | 149   | 144.5 | 137   | 126   | 113   | 98    | 81    |
| NKV 20/12 T IE3 |          | 189.5 | 174.5 | 170.5 | 167   | 162   | 157.5 | 149   | 137   | 122.5 | 106.5 | 87.5  |
| NKV 20/13 T IE3 |          | 205   | 188.5 | 184   | 180   | 175   | 170   | 161   | 147.5 | 132   | 114.5 | 94    |
| NKV 20/14 T IE3 |          | 220.5 | 202.5 | 198   | 193.5 | 188   | 182.5 | 172.5 | 158   | 141   | 122   | 100.5 |
| NKV 20/15 T IE3 |          | 237   | 217.5 | 212.5 | 208   | 202   | 196   | 185.5 | 170.5 | 152   | 132   | 108.5 |
| NKV 20/16 T IE3 |          | 252.5 | 231.5 | 226   | 221   | 215   | 208.5 | 197   | 181   | 161.5 | 140   | 115   |
| NKV 20/17 T IE3 |          | 268   | 245.5 | 240   | 234.5 | 227.5 | 221   | 209   | 191.5 | 171   | 148   | 121.5 |

### SELECTION TABLE - NKV 32

| MODEL             | Q=m³/h   | 0     | 15    | 18    | 22    | 25    | 30    | 35    | 40    | 45    |
|-------------------|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|                   | Q=l/min  | 0     | 250   | 300   | 367   | 417   | 500   | 583   | 667   | 750   |
| NKV 32/2-2 T IE3  | H<br>(m) | 36    | 33,5  | 32,5  | 30,5  | 29,5  | 26,5  | 22,5  | 18    | 12,5  |
| NKV 32/2 T IE3    |          | 48,5  | 43,5  | 42,5  | 41    | 39,5  | 36,5  | 33,5  | 29    | 23,5  |
| NKV 32/3-2 T IE3  |          | 60    | 54,5  | 53    | 50,5  | 48    | 44    | 38    | 31,5  | 23,5  |
| NKV 32/3 T IE3    |          | 73    | 65    | 63,5  | 61    | 59    | 55    | 50    | 43,5  | 35,5  |
| NKV 32/4-2 T IE3  |          | 84,5  | 76,5  | 74    | 70,5  | 68    | 62    | 55    | 46    | 35    |
| NKV 32/4 T IE3    |          | 98    | 88    | 86    | 83    | 80,5  | 75    | 69    | 60    | 49,5  |
| NKV 32/5-2 T IE3  |          | 109,5 | 99,5  | 97    | 93    | 89,5  | 83    | 74    | 63    | 49,5  |
| NKV 32/5 T IE3    |          | 122,5 | 109,5 | 107   | 103,5 | 100   | 93,5  | 85,5  | 75    | 61,5  |
| NKV 32/6-2 T IE3  |          | 134   | 121,5 | 118,5 | 113,5 | 109,5 | 101,5 | 91    | 78    | 61,5  |
| NKV 32/6 T IE3    |          | 146,5 | 131   | 128   | 123,5 | 119,5 | 111,5 | 102   | 89    | 73    |
| NKV 32/7-2 T IE3  |          | 158   | 142,5 | 139   | 133,5 | 128,5 | 119   | 107   | 91,5  | 72,5  |
| NKV 32/7 T IE3    |          | 171   | 152,5 | 149   | 144   | 139,5 | 130   | 119   | 103,5 | 85    |
| NKV 32/8-2 T IE3  |          | 182,5 | 164,5 | 160   | 154   | 148,5 | 137,5 | 124   | 106   | 84,5  |
| NKV 32/8 T IE3    |          | 194,5 | 174   | 169,5 | 164   | 158,5 | 147,5 | 134,5 | 117   | 95,5  |
| NKV 32/9-2 T IE3  |          | 208,5 | 188,5 | 184   | 177   | 171   | 159   | 144   | 124,5 | 100,5 |
| NKV 32/9 T IE3    |          | 221   | 198   | 194   | 187,5 | 181,5 | 169,5 | 155,5 | 136   | 112   |
| NKV 32/10-2 T IE3 |          | 233   | 210   | 205   | 197,5 | 191   | 177,5 | 161   | 139   | 112   |
| NKV 32/10 T IE3   |          | 246,5 | 221,5 | 217   | 210   | 203,5 | 190,5 | 175   | 153,5 | 126,5 |
| NKV 32/11-2 T IE3 |          | 258   | 233,5 | 228,5 | 220,5 | 213   | 198,5 | 180,5 | 156,5 | 127   |
| NKV 32/11 T IE3   |          | 271   | 243,5 | 238   | 230,5 | 223,5 | 209   | 192   | 168   | 138,5 |
| NKV 32/12-2 T IE3 | 282,5    | 255,5 | 249,5 | 241   | 233   | 217   | 197,5 | 171   | 139   |       |
| NKV 32/12 T IE3   | 295      | 265,5 | 259,5 | 251   | 243   | 227,5 | 208,5 | 182,5 | 150,5 |       |
| NKV 32/13-2 T IE3 | 307      | 277,5 | 271   | 261,5 | 252,5 | 235,5 | 214   | 185,5 | 151   |       |
| NKV 32/13 T IE3   | 319,5    | 287   | 280,5 | 271,5 | 263   | 246   | 225,5 | 197   | 162,5 |       |

### SELECTION TABLE - NKV 45

| MODEL             | Q=m³/h   | 0     | 15    | 18    | 22    | 25    | 30    | 35    | 40    | 45    | 54    | 60    | 65    | 70   |
|-------------------|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
|                   | Q=l/min  | 0     | 250   | 300   | 367   | 417   | 500   | 583   | 667   | 750   | 900   | 1000  | 1083  | 1166 |
| NKV 45/2-2 T IE3  | H<br>(m) | 38,5  | 37,5  | 37    | 36,5  | 35,5  | 34,5  | 33    | 31    | 28,5  | 23    | 18,5  | 14,5  | 10   |
| NKV 45/2 T IE3    |          | 48,5  | 47,5  | 47    | 46    | 45,5  | 44    | 43    | 41,5  | 39    | 34    | 30,5  | 26,5  | 23   |
| NKV 45/3-2 T IE3  |          | 63    | 62    | 61,5  | 60,5  | 59,5  | 58    | 56    | 53,5  | 50    | 42    | 36    | 30    | 24   |
| NKV 45/3 T IE3    |          | 73,5  | 72    | 71    | 70    | 69    | 67    | 65,5  | 63    | 60    | 52,5  | 47    | 41    | 34   |
| NKV 45/4-2 T IE3  |          | 87,5  | 86    | 85    | 83,5  | 82    | 80    | 77,5  | 74    | 69,5  | 59,5  | 51    | 43    | 34   |
| NKV 45/4 T IE3    |          | 97,5  | 96    | 94,5  | 93    | 91,5  | 89    | 86,5  | 84    | 79,5  | 69,5  | 62    | 54,5  | 45   |
| NKV 45/5-2 T IE3  |          | 112   | 109,5 | 108,5 | 106,5 | 105   | 102   | 99    | 94,5  | 89    | 76,5  | 66    | 56    | 45   |
| NKV 45/5 T IE3    |          | 122   | 119,5 | 118   | 115,5 | 114   | 111   | 108   | 104,5 | 99    | 86,5  | 77    | 67,5  | 56   |
| NKV 45/6-2 T IE3  |          | 137,5 | 135   | 133,5 | 131   | 129   | 126   | 122   | 117,5 | 110,5 | 95,5  | 83,5  | 72    | 58   |
| NKV 45/6 T IE3    |          | 147,5 | 145   | 143,5 | 140,5 | 138,5 | 135   | 131,5 | 127   | 121   | 106   | 95    | 83,5  | 71   |
| NKV 45/7-2 T IE3  |          | 162,5 | 160   | 158   | 155,5 | 153   | 149,5 | 145   | 139,5 | 132   | 115   | 101   | 87,5  | 73   |
| NKV 45/7 T IE3    |          | 172,5 | 170   | 168   | 165   | 162,5 | 158,5 | 154,5 | 149,5 | 142,5 | 125,5 | 112   | 99    | 83   |
| NKV 45/8-2 T IE3  |          | 187   | 184   | 182   | 178,5 | 176   | 171,5 | 167   | 160,5 | 152   | 132   | 116,5 | 101   | 83   |
| NKV 45/8 T IE3    |          | 197   | 194   | 191,5 | 188   | 185,5 | 181   | 176,5 | 170,5 | 162,5 | 142,5 | 127,5 | 112,5 | 94   |
| NKV 45/9-2 T IE3  |          | 211,5 | 208   | 205,5 | 202   | 199   | 194   | 188,5 | 181,5 | 172   | 149,5 | 132   | 114,5 | 94   |
| NKV 45/9 T IE3    |          | 221,5 | 218   | 215,5 | 211,5 | 208   | 203   | 198   | 191,5 | 182   | 160   | 143   | 126   | 106  |
| NKV 45/10-2 T IE3 |          | 235,5 | 231,5 | 229   | 225   | 221,5 | 216   | 210   | 202   | 191,5 | 166,5 | 147   | 127,5 | 106  |
| NKV 45/10 T IE3   |          | 246   | 242   | 239   | 234   | 230,5 | 225   | 219   | 212   | 201,5 | 177   | 158   | 139   | 117  |
| NKV 45/11-2 T IE3 |          | 261   | 256,5 | 254   | 249   | 245,5 | 239,5 | 233   | 224,5 | 213   | 186   | 164,5 | 143,5 | 119  |
| NKV 45/11 T IE3   |          | 271   | 267   | 263,5 | 258,5 | 255   | 249   | 242,5 | 234,5 | 223,5 | 196,5 | 175,5 | 155   | 130  |
| NKV 45/12-2 T IE3 | 285,5    | 280,5 | 277,5 | 272,5 | 268,5 | 261,5 | 254,5 | 245,5 | 232,5 | 203   | 179,5 | 156,5 | 130   |      |
| NKV 45/12 T IE3   | 295,5    | 290,5 | 287,5 | 282   | 277,5 | 271   | 264   | 255,5 | 243   | 213,5 | 191   | 168,5 | 142   |      |
| NKV 45/13-2 T IE3 | 309,5    | 304,5 | 301   | 295,5 | 291   | 284   | 276   | 266   | 252,5 | 220,5 | 195   | 170   | 142   |      |

### SELECTION TABLE - NKV 65

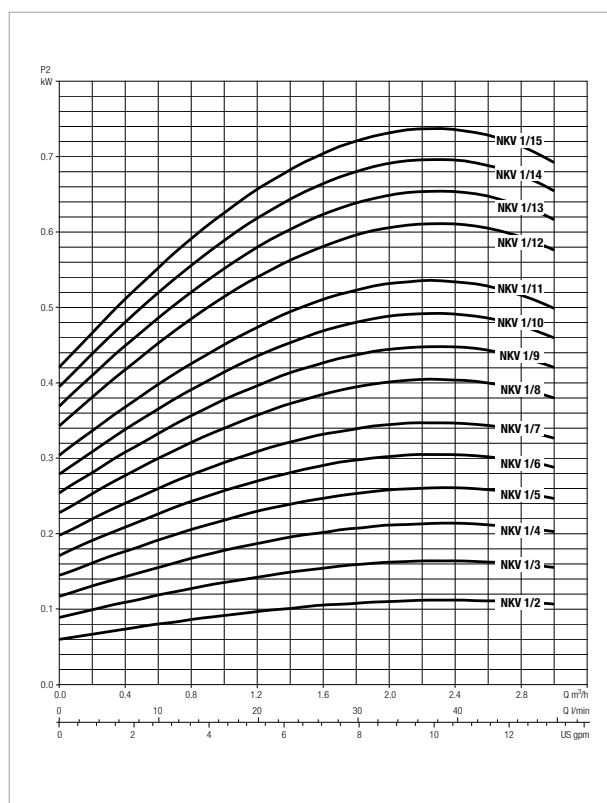
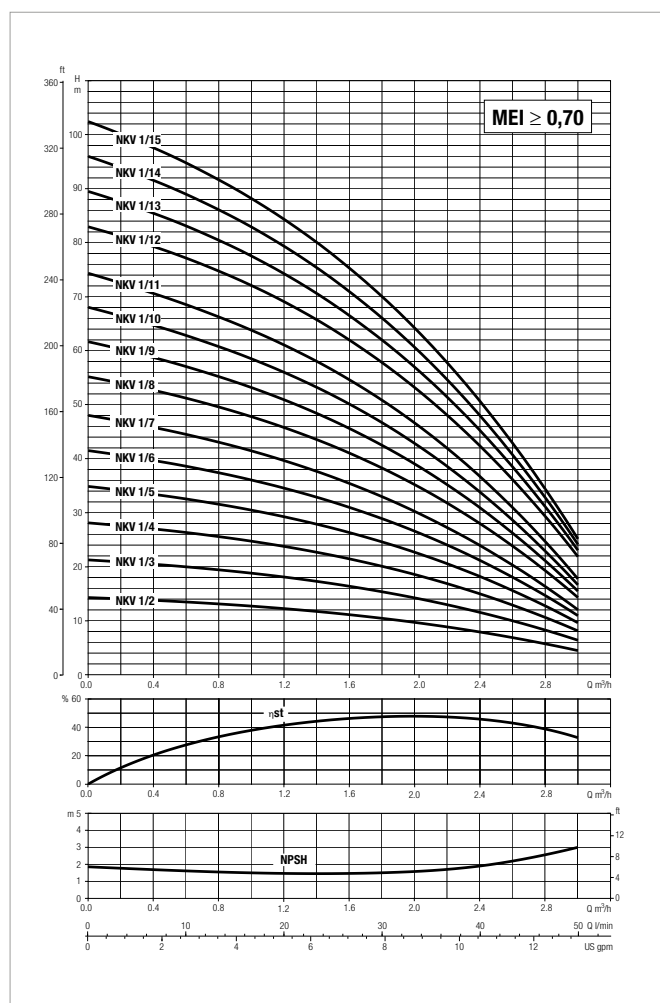
| MODEL            | Q=m <sup>3</sup> /h | 0     | 30    | 36    | 42    | 45    | 54    | 60    | 72    | 78    | 85    |
|------------------|---------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|                  | Q=l/min             | 0     | 500   | 600   | 700   | 750   | 900   | 1000  | 1200  | 1300  | 1417  |
| NKV 65/2-2 T IE3 | H<br>(m)            | 39    | 37,5  | 36,5  | 35,5  | 35    | 33    | 31    | 25    | 22    | 17,5  |
| NKV 65/2 T IE3   |                     | 56,5  | 51    | 49,5  | 48,5  | 48    | 46    | 45    | 41    | 38,5  | 34,5  |
| NKV 65/3-2 T IE3 |                     | 67,5  | 63,5  | 62    | 60,5  | 59,5  | 56,5  | 54    | 46,5  | 42    | 35,5  |
| NKV 65/3 T IE3   |                     | 84,5  | 76    | 74    | 72,5  | 71,5  | 69    | 67    | 61,5  | 57,5  | 51,5  |
| NKV 65/4-2 T IE3 |                     | 95,5  | 88,5  | 86    | 84    | 83    | 79    | 75,5  | 66    | 60,5  | 52    |
| NKV 65/4 T IE3   |                     | 113,5 | 102,5 | 100   | 97,5  | 96,5  | 92,5  | 90,5  | 83    | 78    | 70    |
| NKV 65/5-2 T IE3 |                     | 125   | 116   | 113   | 110,5 | 109   | 104,5 | 101   | 90    | 83    | 72,5  |
| NKV 65/5 T IE3   |                     | 142   | 129   | 125,5 | 122,5 | 121   | 116,5 | 114   | 105   | 98,5  | 88,5  |
| NKV 65/6-2 T IE3 |                     | 153   | 141,5 | 137,5 | 134,5 | 133   | 127,5 | 123   | 110   | 102   | 89,5  |
| NKV 65/6 T IE3   |                     | 170   | 154   | 150   | 147   | 145   | 139,5 | 136   | 125   | 117,5 | 105,5 |
| NKV 65/7-2 T IE3 |                     | 181,5 | 166,5 | 162,5 | 158,5 | 156,5 | 150   | 145   | 130,5 | 120,5 | 106,5 |
| NKV 65/7 T IE3   |                     | 199   | 180,5 | 175,5 | 172   | 169,5 | 163,5 | 159,5 | 147   | 138   | 124   |
| NKV 65/8-2 T IE3 |                     | 210   | 193   | 188   | 184   | 181,5 | 174   | 168,5 | 152   | 141,5 | 125   |
| NKV 65/8 T IE3   |                     | 227   | 206   | 200   | 196   | 193,5 | 186   | 181,5 | 167   | 157   | 141   |

### SELECTION TABLE - NKV 95

| MODEL            | Q=m <sup>3</sup> /h | 0     | 45    | 54    | 60    | 72    | 78    | 85    | 96    | 108  | 118  |
|------------------|---------------------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|
|                  | Q=l/min             | 0     | 750   | 900   | 1000  | 1200  | 1300  | 1417  | 1600  | 1800 | 1967 |
| NKV 95/2-2 T IE3 | H<br>(m)            | 44,5  | 43    | 42    | 41    | 38,5  | 36,5  | 34    | 28,5  | 21,5 | 15   |
| NKV 95/2 T IE3   |                     | 62    | 55,5  | 53    | 51,5  | 49    | 47,5  | 45    | 41    | 35   | 28,5 |
| NKV 95/3-2 T IE3 |                     | 75,5  | 70,5  | 68    | 66,5  | 62,5  | 59,5  | 56    | 48,5  | 38,5 | 28,5 |
| NKV 95/3 T IE3   |                     | 93,5  | 84    | 80,5  | 78    | 74    | 72    | 69    | 62,5  | 53,5 | 44   |
| NKV 95/4-2 T IE3 |                     | 108   | 100   | 97    | 94,5  | 89    | 85,5  | 81    | 71,5  | 59   | 46   |
| NKV 95/4 T IE3   |                     | 125,5 | 112,5 | 108   | 105   | 99,5  | 96,5  | 92,5  | 84    | 72   | 60   |
| NKV 95/5-2 T IE3 |                     | 139   | 127,5 | 123,5 | 120   | 113,5 | 109   | 103,5 | 92    | 76   | 60   |
| NKV 95/5 T IE3   |                     | 156   | 140   | 134,5 | 130,5 | 123,5 | 120   | 114,5 | 104,5 | 89   | 74   |
| NKV 95/6-2 T IE3 |                     | 170,5 | 156   | 150,5 | 146,5 | 138,5 | 134   | 127   | 113,5 | 94,5 | 75,5 |
| NKV 95/6 T IE3   |                     | 188   | 169   | 161,5 | 157   | 149   | 144,5 | 138,5 | 126   | 108  | 89,5 |

# NKV 1 - MULTISTAGE CENTRIFUGAL ELECTRIC PUMPS WITH VERTICAL AXIS

Liquid temperature range: from - 30°C to +120°C - Maximum working pressure: 25 bar (2500 kPa)



For MEI index refer to the hydraulic efficiency section.

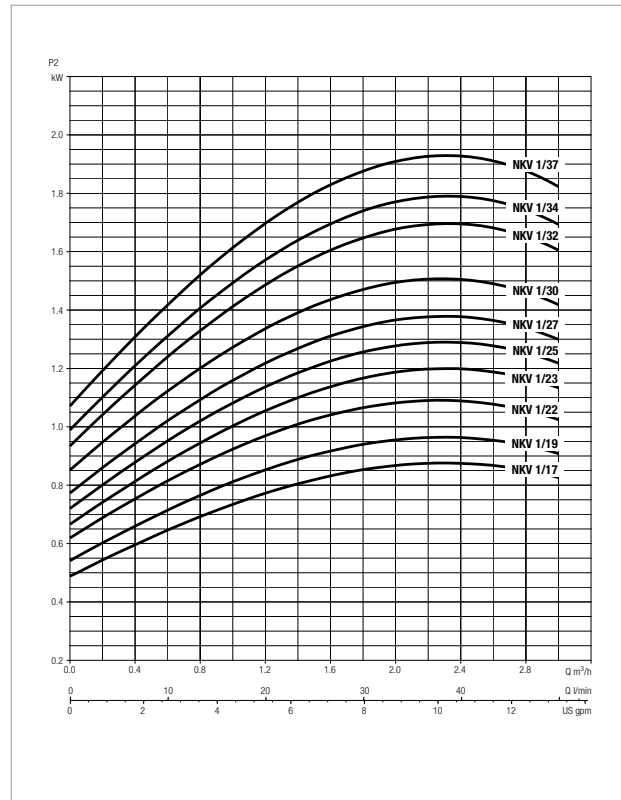
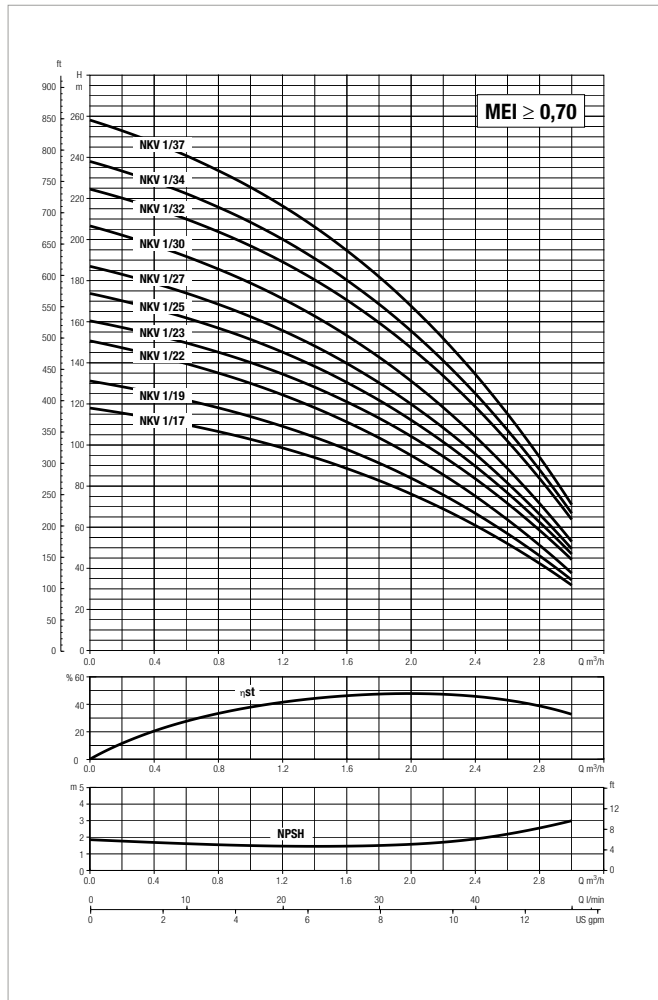
The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equivalent to 1000 kg/m<sup>3</sup>. Tolerance of curves to ISO 9906.

| MODEL          | VOLTAGE<br>50 Hz       | P2 NOMINAL |      | In A    | Ist A               | Motor<br>Frame | MEC<br>Motor | 1/min | $\eta$ max<br>Motor<br>% | cos $\phi$ |
|----------------|------------------------|------------|------|---------|---------------------|----------------|--------------|-------|--------------------------|------------|
|                |                        | kW         | HP   |         |                     |                |              |       |                          |            |
| NKV 1/2 T IE3  | 3 x 220-240Δ /380-415Y | 0,37       | 0,50 | 1,7/1,0 | 8,5-9,2/4,9-5,3     | B14            | 71           | 2800  | 78,5                     | 0,80-0,70  |
| NKV 1/3 T IE3  | 3 x 220-240Δ /380-415Y | 0,37       | 0,50 | 1,7/1,0 | 8,5-9,2/4,9-5,3     | B14            | 71           | 2800  | 78,5                     | 0,80-0,70  |
| NKV 1/4 T IE3  | 3 x 220-240Δ /380-415Y | 0,37       | 0,50 | 1,7/1,0 | 8,5-9,2/4,9-5,3     | B14            | 71           | 2800  | 78,5                     | 0,80-0,70  |
| NKV 1/5 T IE3  | 3 x 220-240Δ /380-415Y | 0,37       | 0,50 | 1,7/1,0 | 8,5-9,2/4,9-5,3     | B14            | 71           | 2800  | 78,5                     | 0,80-0,70  |
| NKV 1/6 T IE3  | 3 x 220-240Δ /380-415Y | 0,37       | 0,50 | 1,7/1,0 | 8,5-9,2/4,9-5,3     | B14            | 71           | 2800  | 78,5                     | 0,80-0,70  |
| NKV 1/7 T IE3  | 3 x 220-240Δ /380-415Y | 0,37       | 0,50 | 1,7/1,0 | 8,5-9,2/4,9-5,3     | B14            | 71           | 2800  | 78,5                     | 0,80-0,70  |
| NKV 1/8 T IE3  | 3 x 220-240Δ /380-415Y | 0,55       | 0,75 | 2,7/1,6 | 12-13/6,9-7,5       | B14            | 71           | 2830  | 80                       | 0,80-0,70  |
| NKV 1/9 T IE3  | 3 x 220-240Δ /380-415Y | 0,55       | 0,75 | 2,7/1,6 | 12-13/6,9-7,5       | B14            | 71           | 2830  | 80                       | 0,80-0,70  |
| NKV 1/10 T IE3 | 3 x 220-240Δ /380-415Y | 0,55       | 0,75 | 2,7/1,6 | 12-13/6,9-7,5       | B14            | 71           | 2830  | 80                       | 0,80-0,70  |
| NKV 1/11 T IE3 | 3 x 220-240Δ /380-415Y | 0,55       | 0,75 | 2,7/1,6 | 12-13/6,9-7,5       | B14            | 71           | 2830  | 80                       | 0,80-0,70  |
| NKV 1/12 T IE3 | 3 x 220-240Δ /380-415Y | 0,75       | 1,00 | 3,9/1,7 | 19,1-20,5/11,0-11,8 | B14            | 80S          | 2910  | 81                       | 0,81-0,71  |
| NKV 1/13 T IE3 | 3 x 220-240Δ /380-415Y | 0,75       | 1,00 | 3,9/1,7 | 19,1-20,5/11,0-11,8 | B14            | 80S          | 2910  | 81                       | 0,81-0,71  |
| NKV 1/14 T IE3 | 3 x 220-240Δ /380-415Y | 0,75       | 1,00 | 3,9/1,7 | 19,1-20,5/11,0-11,8 | B14            | 80S          | 2910  | 81                       | 0,81-0,71  |
| NKV 1/15 T IE3 | 3 x 220-240Δ /380-415Y | 0,75       | 1,00 | 3,9/1,7 | 19,1-20,5/11,0-11,8 | B14            | 80S          | 2910  | 81                       | 0,81-0,71  |



# NKV 1 - MULTISTAGE CENTRIFUGAL ELECTRIC PUMPS WITH VERTICAL AXIS

Liquid temperature range: from - 30°C to +120°C - Maximum working pressure: 25 bar (2500 kPa)

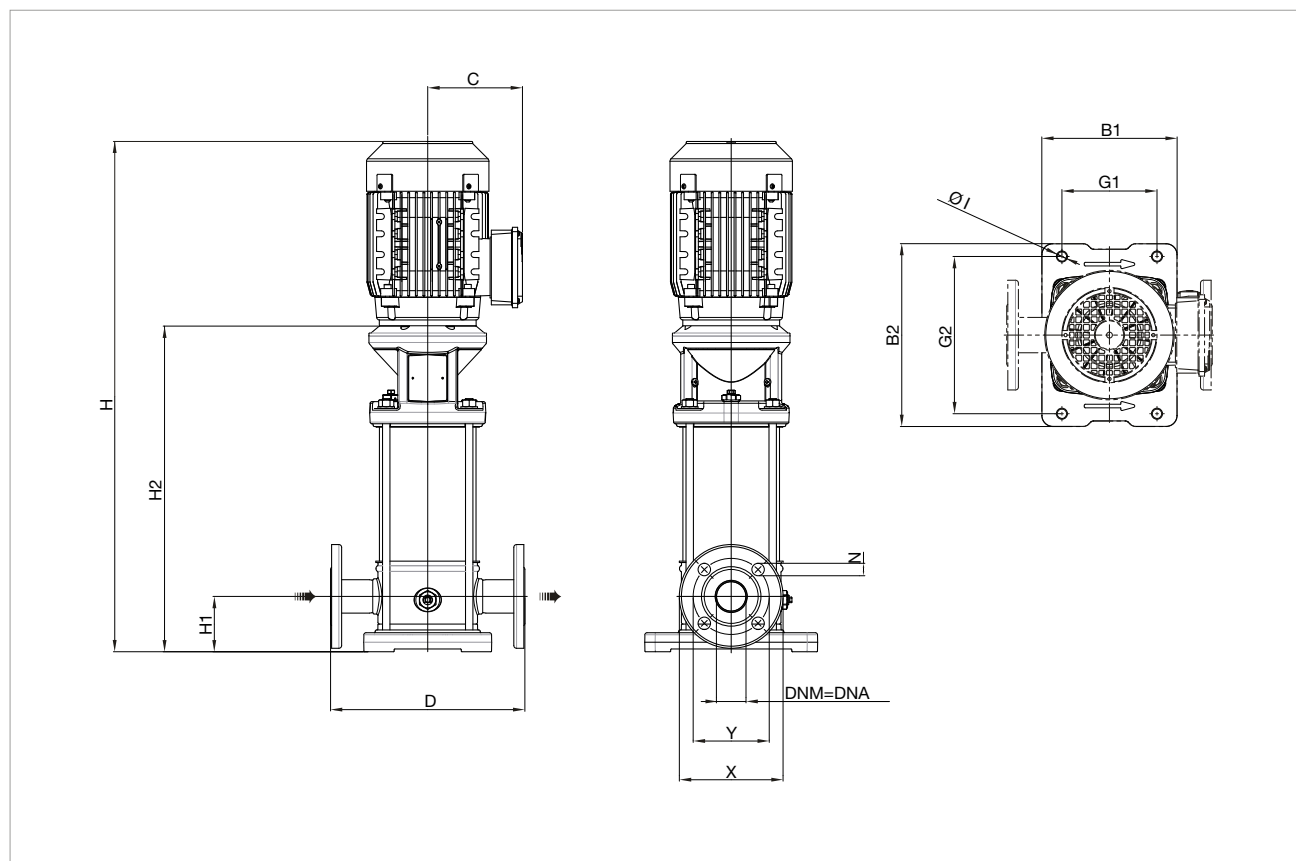


For MEI index refer to the hydraulic efficiency section.  
The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equivalent to 1000 kg/m<sup>3</sup>. Tolerance of curves to ISO 9906.

| MODEL          | VOLTAGE<br>50 Hz       | P2 NOMINAL |      | In A    | Ist A               | Motor<br>Frame | MEC<br>Motor | 1/min | η max<br>Motor<br>% | cos φ     |
|----------------|------------------------|------------|------|---------|---------------------|----------------|--------------|-------|---------------------|-----------|
|                |                        | kW         | HP   |         |                     |                |              |       |                     |           |
| NKV 1/17 T IE3 | 3 x 220-240Δ /380-415Y | 1,10       | 1,50 | 4,1/2,4 | 28,5-31,5/16,3/17,9 | B14            | 80M          | 2870  | 82,7                | 0,84-0,76 |
| NKV 1/19 T IE3 | 3 x 220-240Δ /380-415Y | 1,10       | 1,50 | 4,1/2,4 | 28,5-31,5/16,3/17,9 | B14            | 80M          | 2870  | 82,7                | 0,84-0,76 |
| NKV 1/22 T IE3 | 3 x 220-240Δ /380-415Y | 1,10       | 1,50 | 4,1/2,4 | 28,5-31,5/16,3/17,9 | B14            | 80M          | 2870  | 82,7                | 0,84-0,76 |
| NKV 1/23 T IE3 | 3 x 220-240Δ /380-415Y | 1,50       | 2,00 | 5,1/3,0 | 46,3-50,7/26,8-29,3 | B14            | 90S          | 2875  | 84,2                | 0,85-0,75 |
| NKV 1/25 T IE3 | 3 x 220-240Δ /380-415Y | 1,50       | 2,00 | 5,1/3,0 | 46,3-50,7/26,8-29,3 | B14            | 90S          | 2875  | 84,2                | 0,85-0,75 |
| NKV 1/27 T IE3 | 3 x 220-240Δ /380-415Y | 1,50       | 2,00 | 5,1/3,0 | 46,3-50,7/26,8-29,3 | B14            | 90S          | 2875  | 84,2                | 0,85-0,75 |
| NKV 1/30 T IE3 | 3 x 220-240Δ /380-415Y | 1,50       | 2,00 | 5,1/3,0 | 46,3-50,7/26,8-29,3 | B14            | 90S          | 2875  | 84,2                | 0,85-0,75 |
| NKV 1/32 T IE3 | 3 x 220-240Δ /380-415Y | 2,20       | 3,00 | 7,8-4,6 | 37,8-42,3           | B14            | 90L          | 2880  | 86,5                | 0,87-0,80 |
| NKV 1/34 T IE3 | 3 x 220-240Δ /380-415Y | 2,20       | 3,00 | 7,8-4,6 | 37,8-42,3           | B14            | 90L          | 2880  | 86,5                | 0,87-0,80 |
| NKV 1/37 T IE3 | 3 x 220-240Δ /380-415Y | 2,20       | 3,00 | 7,8-4,6 | 37,8-42,3           | B14            | 90L          | 2880  | 86,5                | 0,87-0,80 |

# NKV 1 - MULTISTAGE CENTRIFUGAL ELECTRIC PUMPS WITH VERTICAL AXIS

Liquid temperature range: from - 30°C to +120°C - Maximum working pressure: 25 bar (2500 kPa)

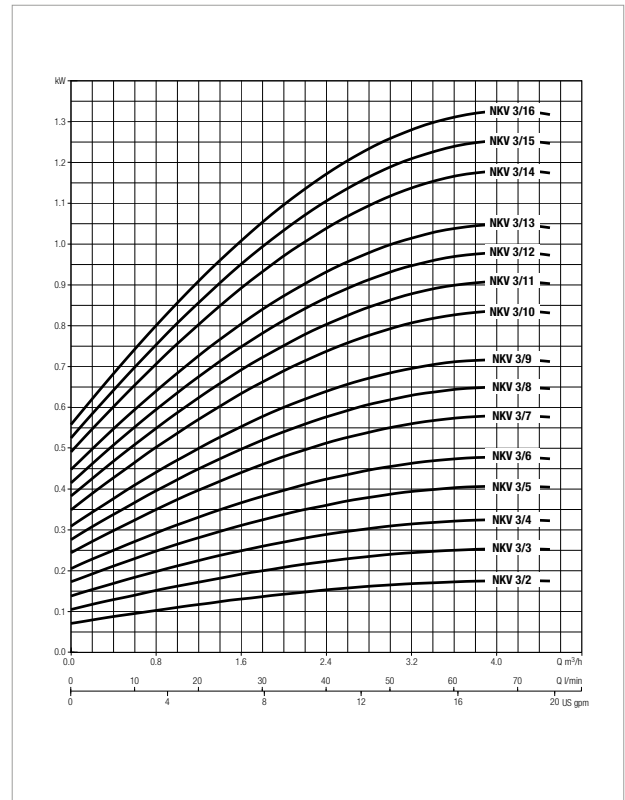
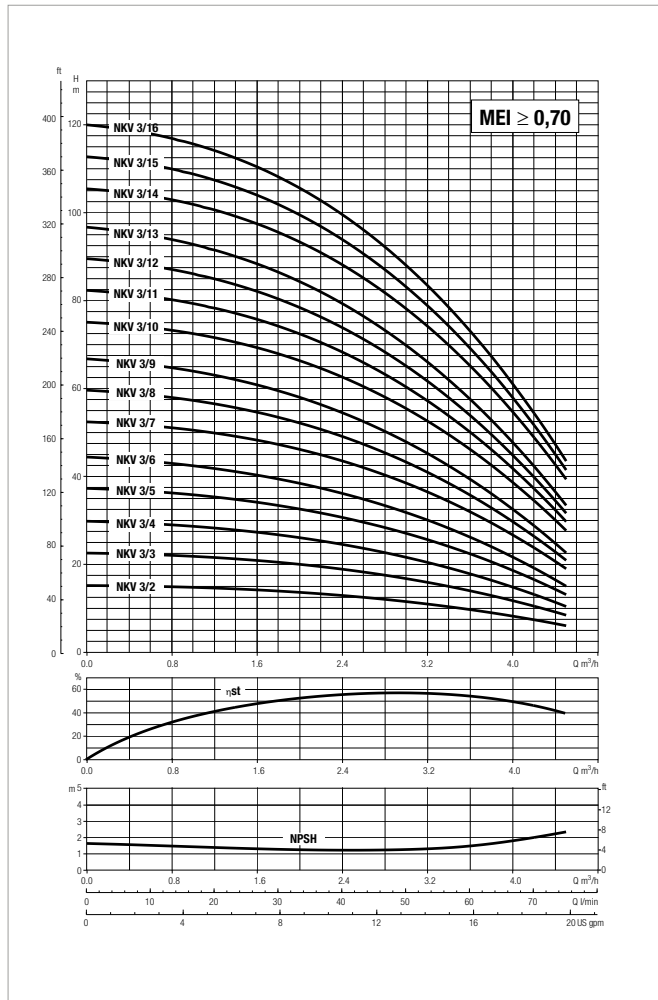


Version F: The pump is supplied without counter flanges (optional accessories, including joints and bolts).

| MODEL          | STAGE N° | B1  | B2  | G1  | G2  | Ø1 | C   | D   | H    | H1 | H2   | DNA = DNM (DN 25) |    |    | PACKING DIMENSIONS |     |     | VOL. mc | WEIGHT Kg |
|----------------|----------|-----|-----|-----|-----|----|-----|-----|------|----|------|-------------------|----|----|--------------------|-----|-----|---------|-----------|
|                |          |     |     |     |     |    |     |     |      |    |      | X                 | Y  | N  | L/A                | L/B | H   |         |           |
| NKV 1/2 T IE3  | 2        | 150 | 210 | 100 | 180 | 13 | 110 | 250 | 529  | 75 | 313  | 115               | 85 | 14 | 655                | 272 | 275 | 0,049   | 17,3      |
| NKV 1/3 T IE3  | 3        | 150 | 210 | 100 | 180 | 13 | 110 | 250 | 552  | 75 | 336  | 115               | 85 | 14 | 655                | 272 | 275 | 0,049   | 17,8      |
| NKV 1/4 T IE3  | 4        | 150 | 210 | 100 | 180 | 13 | 110 | 250 | 574  | 75 | 358  | 115               | 85 | 14 | 655                | 272 | 275 | 0,049   | 18,3      |
| NKV 1/5 T IE3  | 5        | 150 | 210 | 100 | 180 | 13 | 110 | 250 | 597  | 75 | 381  | 115               | 85 | 14 | 655                | 272 | 275 | 0,049   | 18,8      |
| NKV 1/6 T IE3  | 6        | 150 | 210 | 100 | 180 | 13 | 110 | 250 | 619  | 75 | 403  | 115               | 85 | 14 | 655                | 272 | 275 | 0,049   | 19,3      |
| NKV 1/7 T IE3  | 7        | 150 | 210 | 100 | 180 | 13 | 110 | 250 | 642  | 75 | 426  | 115               | 85 | 14 | 655                | 272 | 275 | 0,049   | 19,8      |
| NKV 1/8 T IE3  | 8        | 150 | 210 | 100 | 180 | 13 | 110 | 250 | 664  | 75 | 448  | 115               | 85 | 14 | 905                | 272 | 275 | 0,068   | 20,7      |
| NKV 1/9 T IE3  | 9        | 150 | 210 | 100 | 180 | 13 | 110 | 250 | 687  | 75 | 471  | 115               | 85 | 14 | 905                | 272 | 275 | 0,068   | 21,2      |
| NKV 1/10 T IE3 | 10       | 150 | 210 | 100 | 180 | 13 | 110 | 250 | 709  | 75 | 493  | 115               | 85 | 14 | 905                | 272 | 275 | 0,068   | 21,7      |
| NKV 1/11 T IE3 | 11       | 150 | 210 | 100 | 180 | 13 | 110 | 250 | 732  | 75 | 516  | 115               | 85 | 14 | 905                | 272 | 275 | 0,068   | 22,2      |
| NKV 1/12 T IE3 | 12       | 150 | 210 | 100 | 180 | 13 | 129 | 250 | 770  | 75 | 538  | 115               | 85 | 14 | 905                | 272 | 275 | 0,068   | 26,0      |
| NKV 1/13 T IE3 | 13       | 150 | 210 | 100 | 180 | 13 | 129 | 250 | 793  | 75 | 561  | 115               | 85 | 14 | 905                | 272 | 275 | 0,068   | 26,5      |
| NKV 1/14 T IE3 | 14       | 150 | 210 | 100 | 180 | 13 | 129 | 250 | 815  | 75 | 583  | 115               | 85 | 14 | 905                | 272 | 275 | 0,068   | 26,5      |
| NKV 1/15 T IE3 | 15       | 150 | 210 | 100 | 180 | 13 | 129 | 250 | 838  | 75 | 606  | 115               | 85 | 14 | 905                | 272 | 275 | 0,068   | 27,0      |
| NKV 1/17 T IE3 | 17       | 150 | 210 | 100 | 180 | 13 | 129 | 250 | 883  | 75 | 651  | 115               | 85 | 14 | 950                | 290 | 440 | 0,121   | 29,6      |
| NKV 1/19 T IE3 | 19       | 150 | 210 | 100 | 180 | 13 | 129 | 250 | 928  | 75 | 696  | 115               | 85 | 14 | 1220               | 280 | 430 | 0,147   | 30,6      |
| NKV 1/22 T IE3 | 22       | 150 | 210 | 100 | 180 | 13 | 129 | 250 | 995  | 75 | 763  | 115               | 85 | 14 | 1220               | 280 | 430 | 0,147   | 32,1      |
| NKV 1/23 T IE3 | 23       | 150 | 210 | 100 | 180 | 13 | 138 | 250 | 1063 | 75 | 796  | 115               | 85 | 14 | 1220               | 280 | 430 | 0,147   | 36,0      |
| NKV 1/25 T IE3 | 25       | 150 | 210 | 100 | 180 | 13 | 138 | 250 | 1108 | 75 | 841  | 115               | 85 | 14 | 1220               | 280 | 430 | 0,147   | 37,0      |
| NKV 1/27 T IE3 | 27       | 150 | 210 | 100 | 180 | 13 | 138 | 250 | 1153 | 75 | 886  | 115               | 85 | 14 | 1220               | 280 | 430 | 0,147   | 38,0      |
| NKV 1/30 T IE3 | 30       | 150 | 210 | 100 | 180 | 13 | 138 | 250 | 1220 | 75 | 953  | 115               | 85 | 14 | 1610               | 340 | 480 | 0,263   | 39,0      |
| NKV 1/32 T IE3 | 32       | 150 | 210 | 100 | 180 | 13 | 138 | 250 | 1265 | 75 | 998  | 115               | 85 | 14 | 1610               | 340 | 480 | 0,263   | 42,0      |
| NKV 1/34 T IE3 | 34       | 150 | 210 | 100 | 180 | 13 | 138 | 250 | 1310 | 75 | 1043 | 115               | 85 | 14 | 1610               | 340 | 480 | 0,263   | 43,0      |
| NKV 1/37 T IE3 | 37       | 150 | 210 | 100 | 180 | 13 | 138 | 250 | 1378 | 75 | 1111 | 115               | 85 | 14 | 1610               | 340 | 480 | 0,263   | 44,5      |

# NKV 3 - MULTISTAGE CENTRIFUGAL ELECTRIC PUMPS WITH VERTICAL AXIS

Liquid temperature range: from - 30°C to +120°C - Maximum working pressure: 25 bar (2500 kPa)

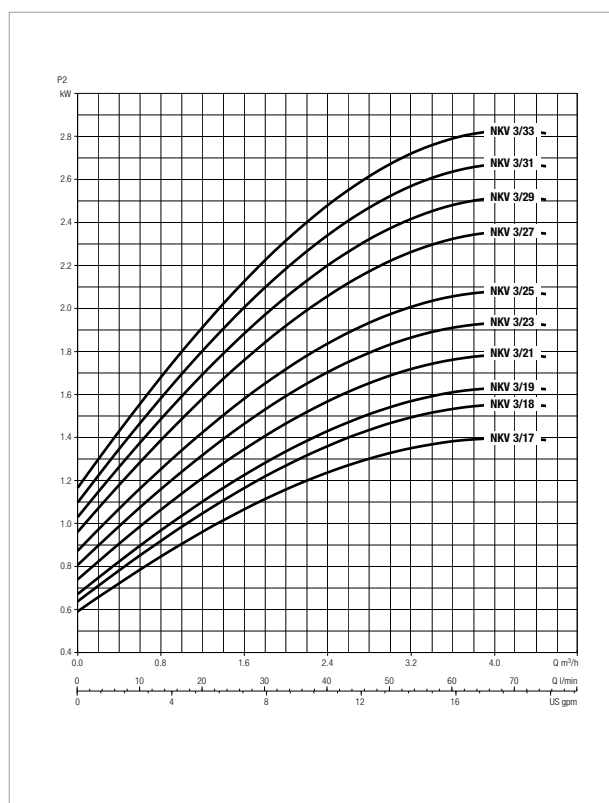
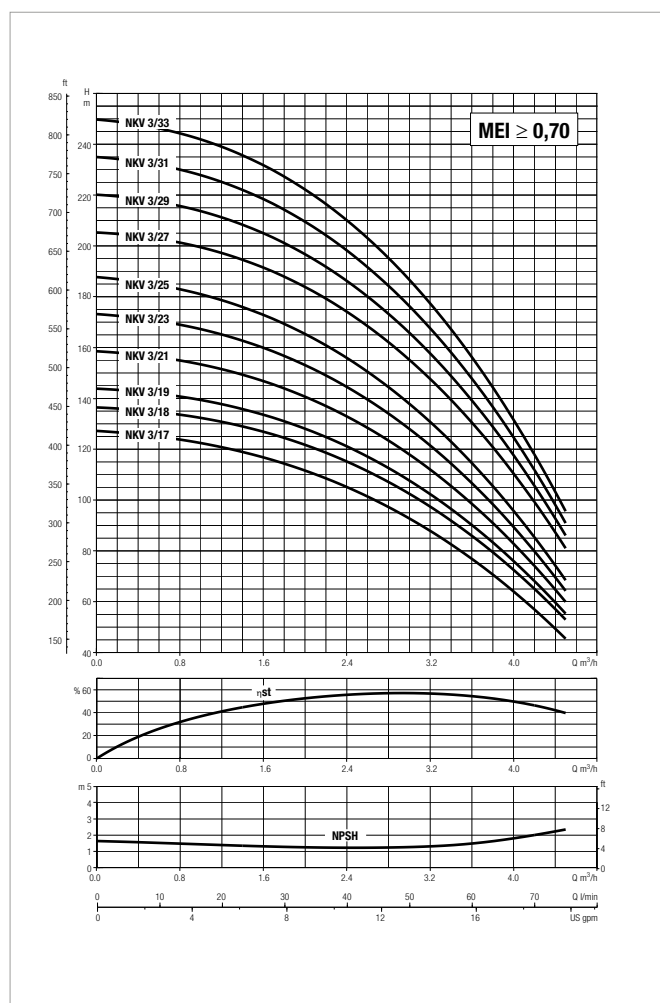


For MEI index refer to the hydraulic efficiency section.  
The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equivalent to 1000 kg/m<sup>3</sup>. Tolerance of curves to ISO 9906.

| MODEL          | VOLTAGE<br>50 Hz       | P2 NOMINAL |      | In A    | Ist A               | Motor<br>Frame | MEC<br>Motor | 1/min | η max<br>Motor<br>% | cos φ     |
|----------------|------------------------|------------|------|---------|---------------------|----------------|--------------|-------|---------------------|-----------|
|                |                        | kW         | HP   |         |                     |                |              |       |                     |           |
| NKV 3/2 T IE3  | 3 x 220-240Δ /380-415Y | 0,37       | 0,50 | 1,7/1,0 | 8,5-9,2/4,9-5,3     | B14            | 71           | 2800  | 78,5                | 0,80-0,70 |
| NKV 3/3 T IE3  | 3 x 220-240Δ /380-415Y | 0,37       | 0,50 | 1,7/1,0 | 8,5-9,2/4,9-5,3     | B14            | 71           | 2800  | 78,5                | 0,80-0,70 |
| NKV 3/4 T IE3  | 3 x 220-240Δ /380-415Y | 0,37       | 0,50 | 1,7/1,0 | 8,5-9,2/4,9-5,3     | B14            | 71           | 2800  | 78,5                | 0,80-0,70 |
| NKV 3/5 T IE3  | 3 x 220-240Δ /380-415Y | 0,55       | 0,75 | 2,7/1,6 | 12-13/6,9-7,5       | B14            | 71           | 2830  | 80                  | 0,80-0,70 |
| NKV 3/6 T IE3  | 3 x 220-240Δ /380-415Y | 0,55       | 0,75 | 2,7/1,6 | 12-13/6,9-7,5       | B14            | 71           | 2830  | 80                  | 0,80-0,70 |
| NKV 3/7 T IE3  | 3 x 220-240Δ /380-415Y | 0,75       | 1,00 | 3,9/1,7 | 19,1-20,5/11,0-11,8 | B14            | 80S          | 2910  | 81                  | 0,81-0,71 |
| NKV 3/8 T IE3  | 3 x 220-240Δ /380-415Y | 0,75       | 1,00 | 3,9/1,7 | 19,1-20,5/11,0-11,8 | B14            | 80S          | 2910  | 81                  | 0,81-0,71 |
| NKV 3/9 T IE3  | 3 x 220-240Δ /380-415Y | 0,75       | 1,00 | 3,9/1,7 | 19,1-20,5/11,0-11,8 | B14            | 80S          | 2910  | 81                  | 0,81-0,71 |
| NKV 3/10 T IE3 | 3 x 220-240Δ /380-415Y | 1,10       | 1,50 | 4,1/2,4 | 28,5-31,5/16,3/17,9 | B14            | 80M          | 2870  | 82,7                | 0,84-0,76 |
| NKV 3/11 T IE3 | 3 x 220-240Δ /380-415Y | 1,10       | 1,50 | 4,1/2,4 | 28,5-31,5/16,3/17,9 | B14            | 80M          | 2870  | 82,7                | 0,84-0,76 |
| NKV 3/12 T IE3 | 3 x 220-240Δ /380-415Y | 1,10       | 1,50 | 4,1/2,4 | 28,5-31,5/16,3/17,9 | B14            | 80M          | 2870  | 82,7                | 0,84-0,76 |
| NKV 3/13 T IE3 | 3 x 220-240Δ /380-415Y | 1,10       | 1,50 | 4,1/2,4 | 28,5-31,5/16,3/17,9 | B14            | 80M          | 2870  | 82,7                | 0,84-0,76 |
| NKV 3/14 T IE3 | 3 x 220-240Δ /380-415Y | 1,50       | 2,00 | 5,1/3,0 | 46,3-50,7/26,8-29,3 | B14            | 90S          | 2875  | 84,2                | 0,85-0,75 |
| NKV 3/15 T IE3 | 3 x 220-240Δ /380-415Y | 1,50       | 2,00 | 5,1/3,0 | 46,3-50,7/26,8-29,3 | B14            | 90S          | 2875  | 84,2                | 0,85-0,75 |
| NKV 3/16 T IE3 | 3 x 220-240Δ /380-415Y | 1,50       | 2,00 | 5,1/3,0 | 46,3-50,7/26,8-29,3 | B14            | 90S          | 2875  | 84,2                | 0,85-0,75 |

## NKV 3 - MULTISTAGE CENTRIFUGAL ELECTRIC PUMPS WITH VERTICAL AXIS

Liquid temperature range: from - 30°C to +120°C - Maximum working pressure: 25 bar (2500 kPa)

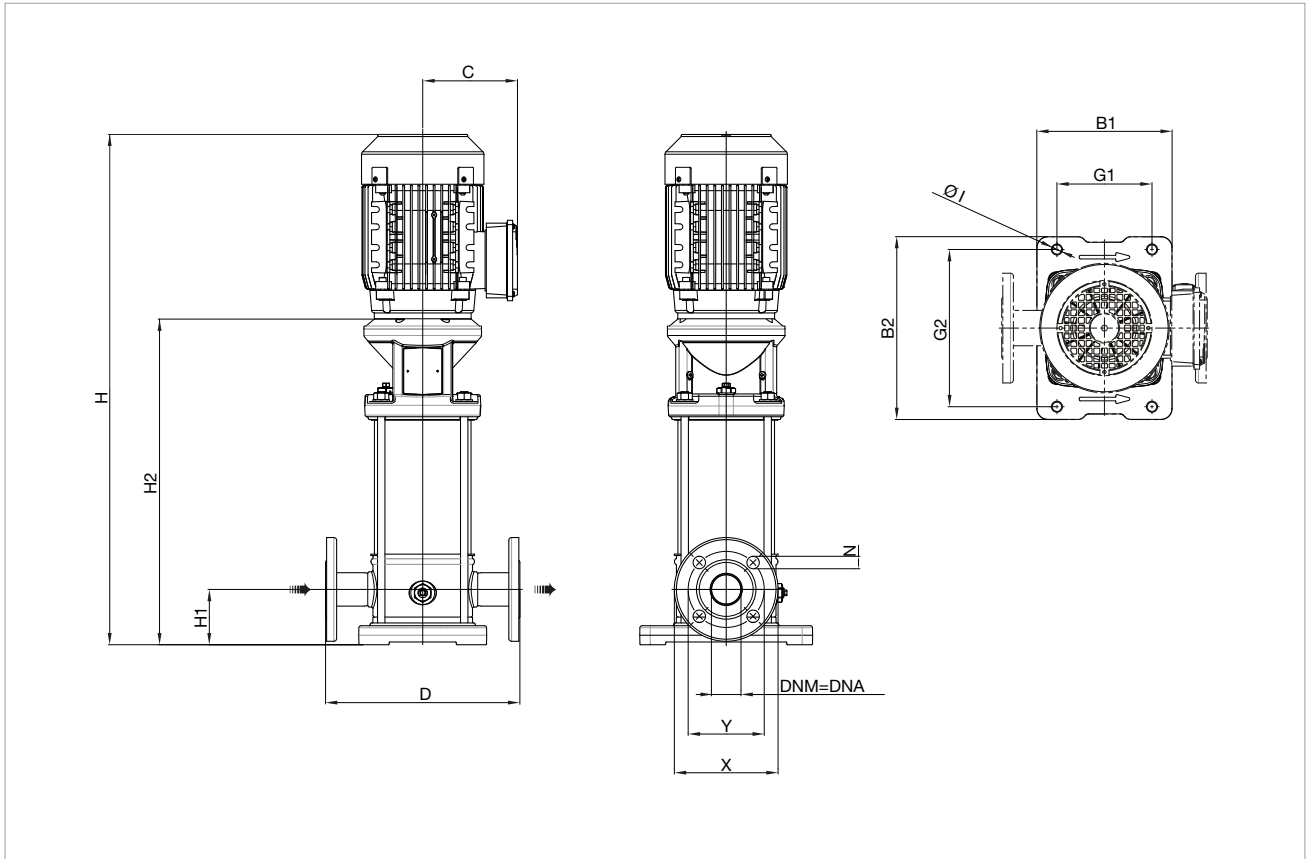


For MEI index refer to the hydraulic efficiency section.  
The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equivalent to 1000 kg/m<sup>3</sup>. Tolerance of curves to ISO 9906.

| MODEL          | VOLTAGE<br>50 Hz       | P2 NOMINAL |      | In A    | Ist A               | Motor<br>Frame | MEC<br>Motor | 1/min | η max<br>Motor<br>% | cos φ     |
|----------------|------------------------|------------|------|---------|---------------------|----------------|--------------|-------|---------------------|-----------|
|                |                        | kW         | HP   |         |                     |                |              |       |                     |           |
| NKV 3/17 T IE3 | 3 x 220-240Δ /380-415Y | 1,50       | 2,00 | 5,1/3,0 | 46,3-50,7/26,8-29,3 | B14            | 90S          | 2875  | 84,2                | 0,85-0,75 |
| NKV 3/18 T IE3 | 3 x 220-240Δ /380-415Y | 2,20       | 3,00 | 7,8-4,6 | 37,8-42,3           | B14            | 90L          | 2880  | 86,5                | 0,87-0,80 |
| NKV 3/19 T IE3 | 3 x 220-240Δ /380-415Y | 2,20       | 3,00 | 7,8-4,6 | 37,8-42,3           | B14            | 90L          | 2880  | 86,5                | 0,87-0,80 |
| NKV 3/21 T IE3 | 3 x 220-240Δ /380-415Y | 2,20       | 3,00 | 7,8-4,6 | 37,8-42,3           | B14            | 90L          | 2880  | 86,5                | 0,87-0,80 |
| NKV 3/23 T IE3 | 3 x 220-240Δ /380-415Y | 2,20       | 3,00 | 7,8-4,6 | 37,8-42,3           | B14            | 90L          | 2880  | 86,5                | 0,87-0,80 |
| NKV 3/25 T IE3 | 3 x 220-240Δ /380-415Y | 2,20       | 3,00 | 7,8-4,6 | 37,8-42,3           | B14            | 90L          | 2880  | 86,5                | 0,87-0,80 |
| NKV 3/27 T IE3 | 3 x 380-415Δ           | 3,00       | 4,00 | 5,6     | 52,9-58             | B14            | 100L         | 2900  | 87,1                | 0,89      |
| NKV 3/29 T IE3 | 3 x 380-415Δ           | 3,00       | 4,00 | 5,6     | 52,9-58             | B14            | 100L         | 2900  | 87,1                | 0,89      |
| NKV 3/31 T IE3 | 3 x 380-415Δ           | 3,00       | 4,00 | 5,6     | 52,9-58             | B14            | 100L         | 2900  | 87,1                | 0,89      |
| NKV 3/33 T IE3 | 3 x 380-415Δ           | 3,00       | 4,00 | 5,6     | 52,9-58             | B14            | 100L         | 2900  | 87,1                | 0,89      |

# NKV 3 - MULTISTAGE CENTRIFUGAL ELECTRIC PUMPS WITH VERTICAL AXIS

Liquid temperature range: from - 30°C to +120°C - Maximum working pressure: 25 bar (2500 kPa)

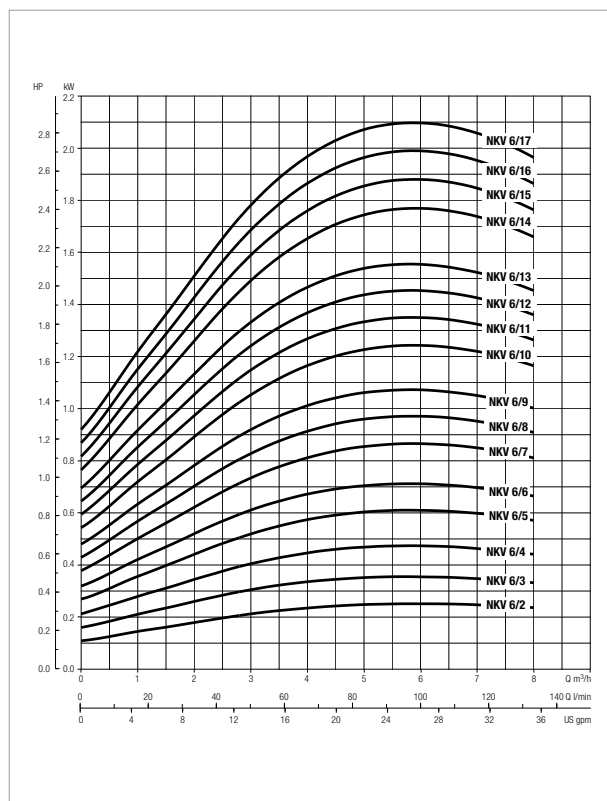
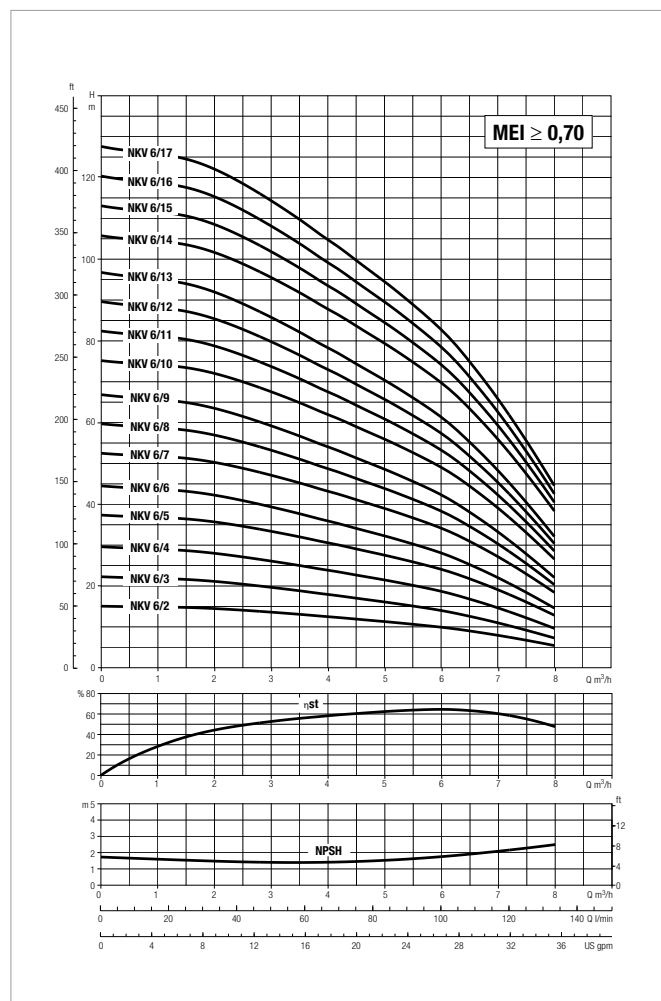


Version F: The pump is supplied without counter flanges (optional accessories, including joints and bolts).

| MODEL          | STAGE N° | B1  | B2  | G1  | G2  | Ø1 | C   | D   | H    | H1 | H2   | DNA = DNM (DN 25) |    |    | PACKING DIMENSIONS |     |     | VOL. mc | WEIGHT Kg |
|----------------|----------|-----|-----|-----|-----|----|-----|-----|------|----|------|-------------------|----|----|--------------------|-----|-----|---------|-----------|
|                |          |     |     |     |     |    |     |     |      |    |      | X                 | Y  | N  | L/A                | L/B | H   |         |           |
| NKV 3/2 T IE3  | 2        | 150 | 210 | 100 | 180 | 13 | 110 | 250 | 529  | 75 | 313  | 115               | 85 | 14 | 655                | 272 | 275 | 0,049   | 17,3      |
| NKV 3/3 T IE3  | 3        | 150 | 210 | 100 | 180 | 13 | 110 | 250 | 552  | 75 | 336  | 115               | 85 | 14 | 655                | 272 | 275 | 0,049   | 17,8      |
| NKV 3/4 T IE3  | 4        | 150 | 210 | 100 | 180 | 13 | 110 | 250 | 574  | 75 | 358  | 115               | 85 | 14 | 655                | 272 | 275 | 0,049   | 18,3      |
| NKV 3/5 T IE3  | 5        | 150 | 210 | 100 | 180 | 13 | 110 | 250 | 597  | 75 | 381  | 115               | 85 | 14 | 655                | 272 | 275 | 0,049   | 19,2      |
| NKV 3/6 T IE3  | 6        | 150 | 210 | 100 | 180 | 13 | 110 | 250 | 619  | 75 | 403  | 115               | 85 | 14 | 655                | 272 | 275 | 0,049   | 19,7      |
| NKV 3/7 T IE3  | 7        | 150 | 210 | 100 | 180 | 13 | 129 | 250 | 658  | 75 | 426  | 115               | 85 | 14 | 905                | 272 | 275 | 0,068   | 23,5      |
| NKV 3/8 T IE3  | 8        | 150 | 210 | 100 | 180 | 13 | 129 | 250 | 680  | 75 | 448  | 115               | 85 | 14 | 905                | 272 | 275 | 0,068   | 24,0      |
| NKV 3/9 T IE3  | 9        | 150 | 210 | 100 | 180 | 13 | 129 | 250 | 703  | 75 | 471  | 115               | 85 | 14 | 905                | 272 | 275 | 0,068   | 24,5      |
| NKV 3/10 T IE3 | 10       | 150 | 210 | 100 | 180 | 13 | 129 | 250 | 725  | 75 | 493  | 115               | 85 | 14 | 905                | 272 | 275 | 0,068   | 26,6      |
| NKV 3/11 T IE3 | 11       | 150 | 210 | 100 | 180 | 13 | 129 | 250 | 748  | 75 | 516  | 115               | 85 | 14 | 905                | 272 | 275 | 0,068   | 27,1      |
| NKV 3/12 T IE3 | 12       | 150 | 210 | 100 | 180 | 13 | 129 | 250 | 770  | 75 | 538  | 115               | 85 | 14 | 905                | 272 | 275 | 0,068   | 27,6      |
| NKV 3/13 T IE3 | 13       | 150 | 210 | 100 | 180 | 13 | 129 | 250 | 793  | 75 | 561  | 115               | 85 | 14 | 905                | 272 | 275 | 0,068   | 28,1      |
| NKV 3/14 T IE3 | 14       | 150 | 210 | 100 | 180 | 13 | 138 | 250 | 860  | 75 | 593  | 115               | 85 | 14 | 950                | 290 | 440 | 0,121   | 32,0      |
| NKV 3/15 T IE3 | 15       | 150 | 210 | 100 | 180 | 13 | 138 | 250 | 883  | 75 | 616  | 115               | 85 | 14 | 950                | 290 | 440 | 0,121   | 32,5      |
| NKV 3/16 T IE3 | 16       | 150 | 210 | 100 | 180 | 13 | 138 | 250 | 905  | 75 | 638  | 115               | 85 | 14 | 1220               | 280 | 430 | 0,147   | 32,5      |
| NKV 3/17 T IE3 | 17       | 150 | 210 | 100 | 180 | 13 | 138 | 250 | 928  | 75 | 661  | 115               | 85 | 14 | 1220               | 280 | 430 | 0,147   | 33,0      |
| NKV 3/18 T IE3 | 18       | 150 | 210 | 100 | 180 | 13 | 138 | 250 | 950  | 75 | 683  | 115               | 85 | 14 | 1220               | 280 | 430 | 0,147   | 35,5      |
| NKV 3/19 T IE3 | 19       | 150 | 210 | 100 | 180 | 13 | 138 | 250 | 973  | 75 | 706  | 115               | 85 | 14 | 1220               | 280 | 430 | 0,147   | 36,0      |
| NKV 3/21 T IE3 | 21       | 150 | 210 | 100 | 180 | 13 | 138 | 250 | 1018 | 75 | 751  | 115               | 85 | 14 | 1220               | 280 | 430 | 0,147   | 37,0      |
| NKV 3/23 T IE3 | 23       | 150 | 210 | 100 | 180 | 13 | 138 | 250 | 1063 | 75 | 796  | 115               | 85 | 14 | 1220               | 280 | 430 | 0,147   | 38,0      |
| NKV 3/25 T IE3 | 25       | 150 | 210 | 100 | 180 | 13 | 138 | 250 | 1108 | 75 | 841  | 115               | 85 | 14 | 1220               | 280 | 430 | 0,147   | 39,0      |
| NKV 3/27 T IE3 | 27       | 150 | 210 | 100 | 180 | 13 | 145 | 250 | 1202 | 75 | 896  | 115               | 85 | 14 | 1610               | 340 | 480 | 0,263   | 47,3      |
| NKV 3/29 T IE3 | 29       | 150 | 210 | 100 | 180 | 13 | 145 | 250 | 1247 | 75 | 941  | 115               | 85 | 14 | 1610               | 340 | 480 | 0,263   | 48,3      |
| NKV 3/31 T IE3 | 31       | 150 | 210 | 100 | 180 | 13 | 145 | 250 | 1292 | 75 | 986  | 115               | 85 | 14 | 1610               | 340 | 480 | 0,263   | 49,3      |
| NKV 3/33 T IE3 | 33       | 150 | 210 | 100 | 180 | 13 | 145 | 250 | 1337 | 75 | 1031 | 115               | 85 | 14 | 1610               | 340 | 480 | 0,263   | 50,3      |

## NKV 6 - MULTISTAGE CENTRIFUGAL ELECTRIC PUMPS WITH VERTICAL AXIS,

Liquid temperature range: from - 30°C to +120°C - Maximum working pressure: 25 bar (2500 kPa)

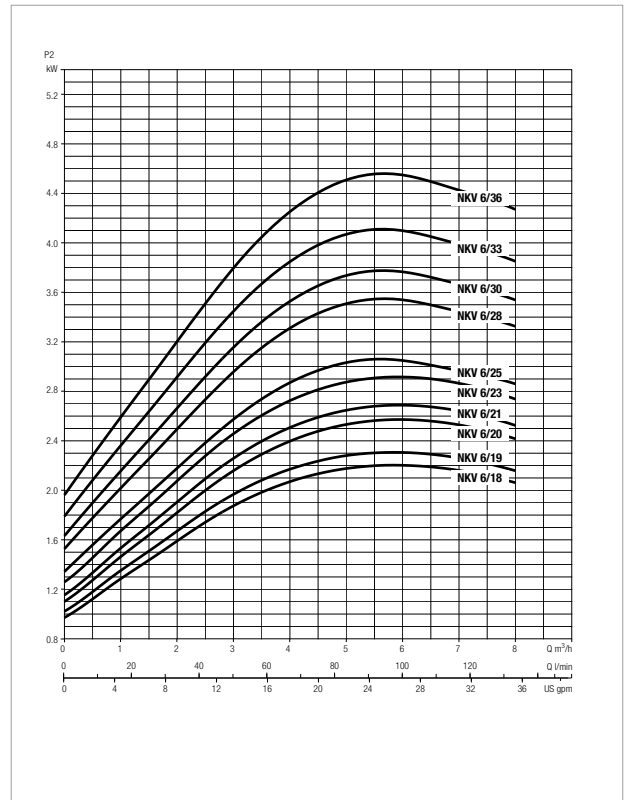
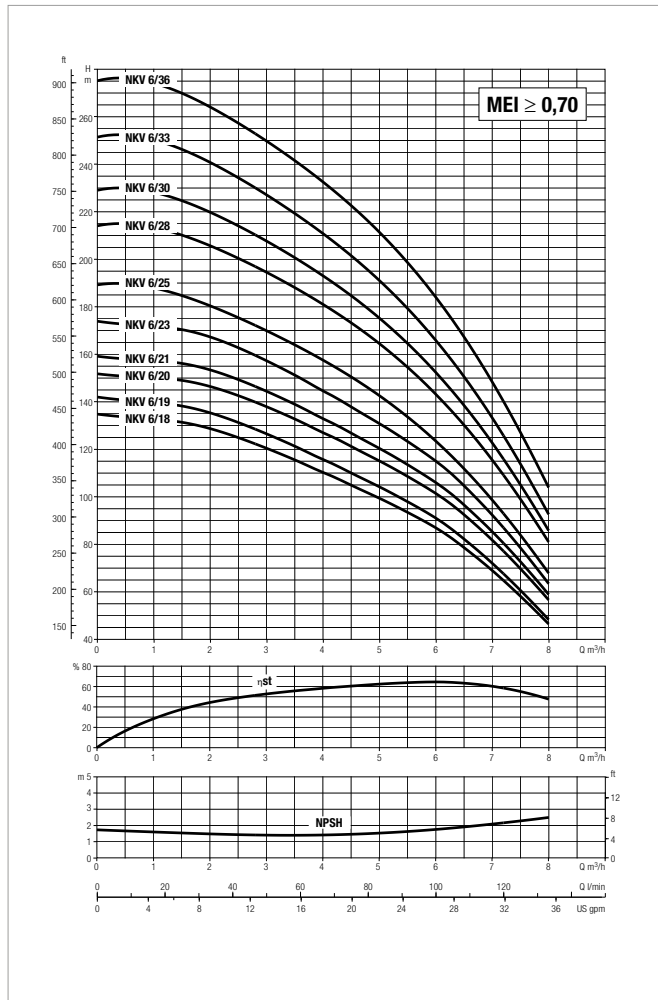


For MEI index refer to the hydraulic efficiency section.  
The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equivalent to 1000 kg/m<sup>3</sup>. Tolerance of curves to ISO 9906.

| MODEL          | VOLTAGE<br>50 Hz       | P2 NOMINAL |      | In A    | Ist A               | Motor<br>Frame | MEC<br>Motor | 1/min | η max<br>Motor<br>% | cos φ     |
|----------------|------------------------|------------|------|---------|---------------------|----------------|--------------|-------|---------------------|-----------|
|                |                        | kW         | HP   |         |                     |                |              |       |                     |           |
| NKV 6/2 T IE3  | 3 x 220-240Δ /380-415Y | 0,37       | 0,50 | 1,7/1,0 | 8,5-9,2/4,9-5,3     | B14            | 71           | 2800  | 78,5                | 0,80-0,70 |
| NKV 6/3 T IE3  | 3 x 220-240Δ /380-415Y | 0,37       | 0,50 | 1,7/1,0 | 8,5-9,2/4,9-5,3     | B14            | 71           | 2800  | 78,5                | 0,80-0,70 |
| NKV 6/4 T IE3  | 3 x 220-240Δ /380-415Y | 0,55       | 0,75 | 2,7/1,6 | 12-13/6,9-7,5       | B14            | 71           | 2830  | 80                  | 0,80-0,70 |
| NKV 6/5 T IE3  | 3 x 220-240Δ /380-415Y | 0,75       | 1,00 | 3,9/1,7 | 19,1-20,5/11,0-11,8 | B14            | 80S          | 2910  | 81                  | 0,81-0,71 |
| NKV 6/6 T IE3  | 3 x 220-240Δ /380-415Y | 0,75       | 1,00 | 3,9/1,7 | 19,1-20,5/11,0-11,8 | B14            | 80S          | 2910  | 81                  | 0,81-0,71 |
| NKV 6/7 T IE3  | 3 x 220-240Δ /380-415Y | 1,10       | 1,50 | 4,1/2,4 | 28,5-31,5/16,3/17,9 | B14            | 80M          | 2870  | 82,7                | 0,84-0,76 |
| NKV 6/8 T IE3  | 3 x 220-240Δ /380-415Y | 1,10       | 1,50 | 4,1/2,4 | 28,5-31,5/16,3/17,9 | B14            | 80M          | 2870  | 82,7                | 0,84-0,76 |
| NKV 6/9 T IE3  | 3 x 220-240Δ /380-415Y | 1,10       | 1,50 | 4,1/2,4 | 28,5-31,5/16,3/17,9 | B14            | 80M          | 2870  | 82,7                | 0,84-0,76 |
| NKV 6/10 T IE3 | 3 x 220-240Δ /380-415Y | 1,50       | 2,00 | 5,1/3,0 | 46,3-50,7/26,8-29,3 | B14            | 90S          | 2875  | 84,2                | 0,85-0,75 |
| NKV 6/11 T IE3 | 3 x 220-240Δ /380-415Y | 1,50       | 2,00 | 5,1/3,0 | 46,3-50,7/26,8-29,3 | B14            | 90S          | 2875  | 84,2                | 0,85-0,75 |
| NKV 6/12 T IE3 | 3 x 220-240Δ /380-415Y | 1,50       | 2,00 | 5,1/3,0 | 46,3-50,7/26,8-29,3 | B14            | 90S          | 2875  | 84,2                | 0,85-0,75 |
| NKV 6/13 T IE3 | 3 x 220-240Δ /380-415Y | 1,50       | 2,00 | 5,1/3,0 | 46,3-50,7/26,8-29,3 | B14            | 90S          | 2875  | 84,2                | 0,85-0,75 |
| NKV 6/14 T IE3 | 3 x 220-240Δ /380-415Y | 2,20       | 3,00 | 7,8-4,6 | 37,8-42,3           | B14            | 90L          | 2880  | 86,5                | 0,87-0,80 |
| NKV 6/15 T IE3 | 3 x 220-240Δ /380-415Y | 2,20       | 3,00 | 7,8-4,6 | 37,8-42,3           | B14            | 90L          | 2880  | 86,5                | 0,87-0,80 |
| NKV 6/16 T IE3 | 3 x 220-240Δ /380-415Y | 2,20       | 3,00 | 7,8-4,6 | 37,8-42,3           | B14            | 90L          | 2880  | 86,5                | 0,87-0,80 |
| NKV 6/17 T IE3 | 3 x 220-240Δ /380-415Y | 2,20       | 3,00 | 7,8-4,6 | 37,8-42,3           | B14            | 90L          | 2880  | 86,5                | 0,87-0,80 |

# NKV 6 - MULTISTAGE CENTRIFUGAL ELECTRIC PUMPS WITH VERTICAL AXIS

Liquid temperature range: from - 30°C to +120°C - Maximum working pressure: 25 bar (2500 kPa)

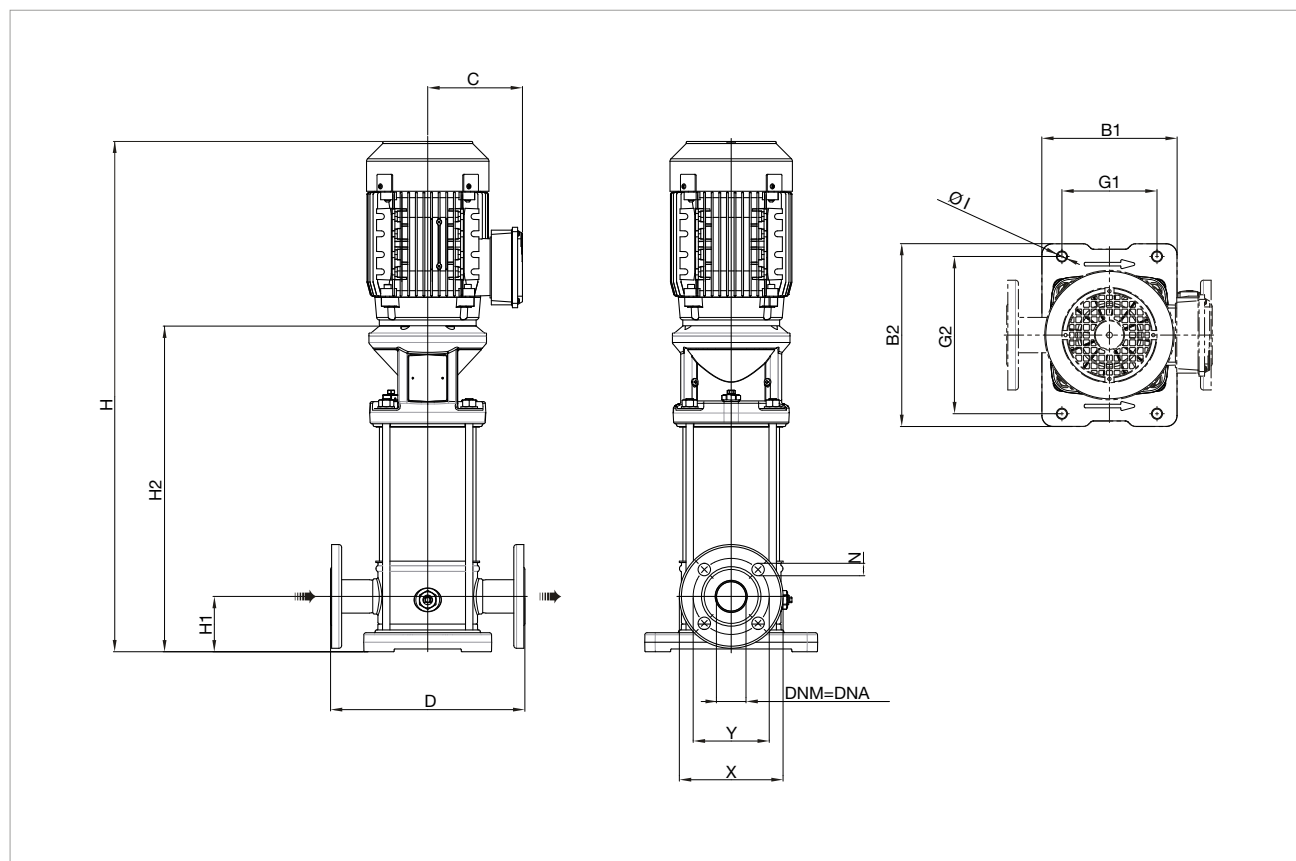


For MEI index refer to the hydraulic efficiency section.  
The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equivalent to 1000 kg/m<sup>3</sup>. Tolerance of curves to ISO 9906.

| MODEL          | VOLTAGE<br>50 Hz       | P2 NOMINAL |      | In A    | Ist A     | Motor<br>Frame | MEC<br>Motor | 1/min | η max<br>Motor<br>% | cos φ     |
|----------------|------------------------|------------|------|---------|-----------|----------------|--------------|-------|---------------------|-----------|
|                |                        | kW         | HP   |         |           |                |              |       |                     |           |
| NKV 6/18 T IE3 | 3 x 220-240Δ /380-415Y | 2,20       | 3,00 | 7,8-4,6 | 37,8-42,3 | B14            | 90L          | 2880  | 86,5                | 0,87-0,80 |
| NKV 6/19 T IE3 | 3 x 220-240Δ /380-415Y | 2,20       | 3,00 | 7,8-4,6 | 37,8-42,3 | B14            | 90L          | 2880  | 86,5                | 0,87-0,80 |
| NKV 6/20 T IE3 | 3 x 380-415Δ           | 3,00       | 4,00 | 5,6     | 52,9-58   | B14            | 100L         | 2900  | 87,1                | 0,89      |
| NKV 6/21 T IE3 | 3 x 380-415Δ           | 3,00       | 4,00 | 5,6     | 52,9-58   | B14            | 100L         | 2900  | 87,1                | 0,89      |
| NKV 6/23 T IE3 | 3 x 380-415Δ           | 3,00       | 4,00 | 5,6     | 52,9-58   | B14            | 100L         | 2900  | 87,1                | 0,89      |
| NKV 6/25 T IE3 | 3 x 380-415Δ           | 3,00       | 4,00 | 5,6     | 52,9-58   | B14            | 100L         | 2900  | 87,1                | 0,89      |
| NKV 6/28 T IE3 | 3 x 380-415Δ           | 4,00       | 5,50 | 8       | 89,6-98,4 | B14            | 112M         | 2920  | 88,1                | 0,81      |
| NKV 6/30 T IE3 | 3 x 380-415Δ           | 4,00       | 5,50 | 8       | 89,6-98,4 | B14            | 112M         | 2920  | 88,1                | 0,81      |
| NKV 6/33 T IE3 | 3 x 380-415Δ           | 4,00       | 5,50 | 8       | 89,6-98,4 | B14            | 112M         | 2920  | 88,1                | 0,81      |
| NKV 6/36 T IE3 | 3 x 380-415Δ           | 5,50       | 7,50 | 10,2    | 119,8-131 | B5             | 132S         | 2935  | 89,2                | 0,87      |

## NKV 6 - MULTISTAGE CENTRIFUGAL ELECTRIC PUMPS WITH VERTICAL AXIS

Liquid temperature range: from - 30°C to +120°C - Maximum working pressure: 25 bar (2500 kPa)



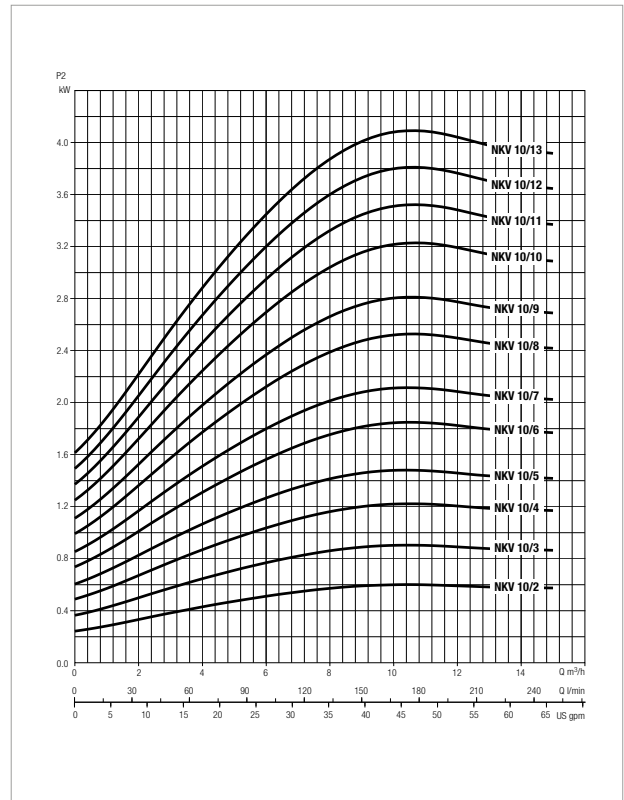
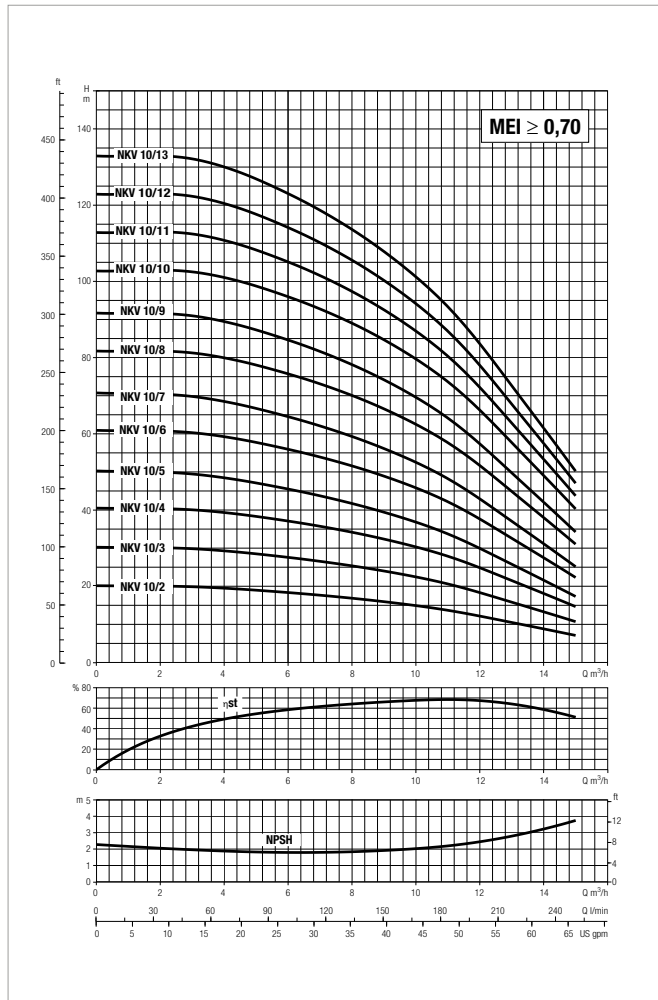
Version F: The pump is supplied without counter flanges (optional accessories, including joints and bolts).

| MODEL          | STAGE N° | B1  | B2  | G1  | G2  | Ø1 | C   | D   | H    | H1 | H2   | DNA = DNM (DN 32) |     |    | PACKING DIMENSIONS |     |     | VOL. mc | WEIGHT Kg |
|----------------|----------|-----|-----|-----|-----|----|-----|-----|------|----|------|-------------------|-----|----|--------------------|-----|-----|---------|-----------|
|                |          |     |     |     |     |    |     |     |      |    |      | X                 | Y   | N  | L/A                | L/B | H   |         |           |
| NKV 6/2 T IE3  | 2        | 150 | 210 | 100 | 180 | 13 | 110 | 250 | 536  | 75 | 320  | 140               | 100 | 19 | 655                | 272 | 275 | 0,049   | 17,8      |
| NKV 6/3 T IE3  | 3        | 150 | 210 | 100 | 180 | 13 | 110 | 250 | 562  | 75 | 346  | 140               | 100 | 19 | 655                | 272 | 275 | 0,049   | 18,3      |
| NKV 6/4 T IE3  | 4        | 150 | 210 | 100 | 180 | 13 | 110 | 250 | 588  | 75 | 372  | 140               | 100 | 19 | 655                | 272 | 275 | 0,049   | 19,2      |
| NKV 6/5 T IE3  | 5        | 150 | 210 | 100 | 180 | 13 | 129 | 250 | 630  | 75 | 398  | 140               | 100 | 19 | 655                | 272 | 275 | 0,049   | 23,0      |
| NKV 6/6 T IE3  | 6        | 150 | 210 | 100 | 180 | 13 | 129 | 250 | 656  | 75 | 424  | 140               | 100 | 19 | 905                | 272 | 275 | 0,068   | 23,5      |
| NKV 6/7 T IE3  | 7        | 150 | 210 | 100 | 180 | 13 | 129 | 250 | 682  | 75 | 450  | 140               | 100 | 19 | 905                | 272 | 275 | 0,068   | 25,6      |
| NKV 6/8 T IE3  | 8        | 150 | 210 | 100 | 180 | 13 | 129 | 250 | 708  | 75 | 476  | 140               | 100 | 19 | 905                | 272 | 275 | 0,068   | 26,1      |
| NKV 6/9 T IE3  | 9        | 150 | 210 | 100 | 180 | 13 | 129 | 250 | 734  | 75 | 502  | 140               | 100 | 19 | 905                | 272 | 275 | 0,068   | 26,6      |
| NKV 6/10 T IE3 | 10       | 150 | 210 | 100 | 180 | 13 | 138 | 250 | 805  | 75 | 538  | 140               | 100 | 19 | 950                | 290 | 440 | 0,121   | 30,5      |
| NKV 6/11 T IE3 | 11       | 150 | 210 | 100 | 180 | 13 | 138 | 250 | 831  | 75 | 564  | 140               | 100 | 19 | 950                | 290 | 440 | 0,121   | 31,5      |
| NKV 6/12 T IE3 | 12       | 150 | 210 | 100 | 180 | 13 | 138 | 250 | 857  | 75 | 590  | 140               | 100 | 19 | 950                | 290 | 440 | 0,121   | 32,0      |
| NKV 6/13 T IE3 | 13       | 150 | 210 | 100 | 180 | 13 | 138 | 250 | 883  | 75 | 616  | 140               | 100 | 19 | 950                | 290 | 440 | 0,121   | 32,5      |
| NKV 6/14 T IE3 | 14       | 150 | 210 | 100 | 180 | 13 | 138 | 250 | 909  | 75 | 642  | 140               | 100 | 19 | 1220               | 280 | 430 | 0,147   | 35,0      |
| NKV 6/15 T IE3 | 15       | 150 | 210 | 100 | 180 | 13 | 138 | 250 | 935  | 75 | 668  | 140               | 100 | 19 | 1220               | 280 | 430 | 0,147   | 35,5      |
| NKV 6/16 T IE3 | 16       | 150 | 210 | 100 | 180 | 13 | 138 | 250 | 961  | 75 | 694  | 140               | 100 | 19 | 1220               | 280 | 430 | 0,147   | 36,0      |
| NKV 6/17 T IE3 | 17       | 150 | 210 | 100 | 180 | 13 | 138 | 250 | 987  | 75 | 720  | 140               | 100 | 19 | 1220               | 280 | 430 | 0,147   | 36,5      |
| NKV 6/18 T IE3 | 18       | 150 | 210 | 100 | 180 | 13 | 138 | 250 | 1013 | 75 | 746  | 140               | 100 | 19 | 1220               | 280 | 430 | 0,147   | 37,0      |
| NKV 6/19 T IE3 | 19       | 150 | 210 | 100 | 180 | 13 | 138 | 250 | 1039 | 75 | 772  | 140               | 100 | 19 | 1220               | 280 | 430 | 0,147   | 37,5      |
| NKV 6/20 T IE3 | 20       | 150 | 210 | 100 | 180 | 13 | 145 | 250 | 1114 | 75 | 808  | 140               | 100 | 19 | 1220               | 280 | 430 | 0,147   | 45,3      |
| NKV 6/21 T IE3 | 21       | 150 | 210 | 100 | 180 | 13 | 145 | 250 | 1140 | 75 | 834  | 140               | 100 | 19 | 1220               | 280 | 430 | 0,147   | 45,8      |
| NKV 6/23 T IE3 | 23       | 150 | 210 | 100 | 180 | 13 | 145 | 250 | 1192 | 75 | 886  | 140               | 100 | 19 | 1610               | 340 | 480 | 0,263   | 46,8      |
| NKV 6/25 T IE3 | 25       | 150 | 210 | 100 | 180 | 13 | 145 | 250 | 1244 | 75 | 938  | 140               | 100 | 19 | 1610               | 340 | 480 | 0,263   | 47,8      |
| NKV 6/28 T IE3 | 28       | 150 | 210 | 100 | 180 | 13 | 145 | 250 | 1322 | 75 | 1016 | 140               | 100 | 19 | 1610               | 340 | 480 | 0,263   | 53,0      |
| NKV 6/30 T IE3 | 30       | 150 | 210 | 100 | 180 | 13 | 145 | 250 | 1374 | 75 | 1068 | 140               | 100 | 19 | 1610               | 340 | 480 | 0,263   | 54,5      |
| NKV 6/33 T IE3 | 33       | 150 | 210 | 100 | 180 | 13 | 145 | 250 | 1452 | 75 | 1146 | 140               | 100 | 19 | 1610               | 340 | 480 | 0,263   | 56,0      |
| NKV 6/36 T IE3 | 36       | 150 | 210 | 100 | 180 | 13 | 160 | 250 | 1728 | 75 | 1400 | 140               | 100 | 19 | 1820               | 500 | 630 | 0,573   | 84,1      |



# NKV 10 - MULTISTAGE CENTRIFUGAL ELECTRIC PUMPS WITH VERTICAL AXIS

Liquid temperature range: from - 30°C to +120°C - Maximum working pressure: 25 bar (2500 kPa)

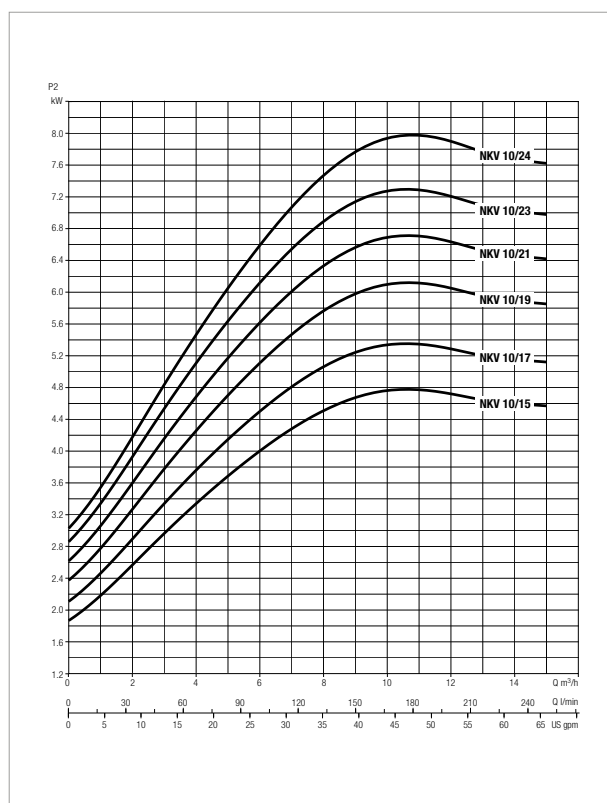
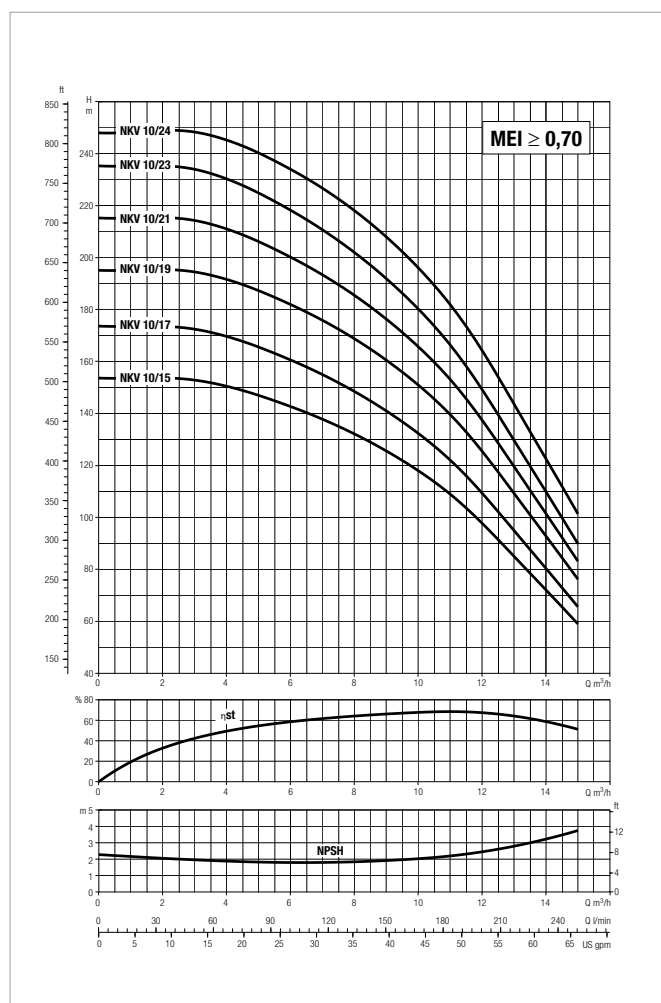


**For MEI index refer to the hydraulic efficiency section.**  
The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equivalent to 1000 kg/m<sup>3</sup>. Tolerance of curves to ISO 9906.

| MODEL           | VOLTAGE<br>50 Hz       | P2 NOMINAL |      | In A    | Ist A               | Motor<br>Frame | MEC<br>Motor | 1/min | η max<br>Motor<br>% | cos φ     |
|-----------------|------------------------|------------|------|---------|---------------------|----------------|--------------|-------|---------------------|-----------|
|                 |                        | kW         | HP   |         |                     |                |              |       |                     |           |
| NKV 10/2 T IE3  | 3 x 220-240Δ /380-415Y | 0,75       | 1,00 | 3,9/1,7 | 19,1-20,5/11,0-11,8 | B14            | 80S          | 2910  | 81                  | 0,81-0,71 |
| NKV 10/3 T IE3  | 3 x 220-240Δ /380-415Y | 1,10       | 1,50 | 4,1/2,4 | 28,5-31,5/16,3/17,9 | B14            | 80M          | 2870  | 82,7                | 0,84-0,76 |
| NKV 10/4 T IE3  | 3 x 220-240Δ /380-415Y | 1,50       | 2,00 | 5,1/3,0 | 46,3-50,7/26,8-29,3 | B14            | 90S          | 2875  | 84,2                | 0,85-0,75 |
| NKV 10/5 T IE3  | 3 x 220-240Δ /380-415Y | 1,50       | 2,00 | 5,1/3,0 | 46,3-50,7/26,8-29,3 | B14            | 90S          | 2875  | 84,2                | 0,85-0,75 |
| NKV 10/6 T IE3  | 3 x 220-240Δ /380-415Y | 2,20       | 3,00 | 7,8-4,6 | 37,8-42,3           | B14            | 90L          | 2880  | 86,5                | 0,87-0,80 |
| NKV 10/7 T IE3  | 3 x 220-240Δ /380-415Y | 2,20       | 3,00 | 7,8-4,6 | 37,8-42,3           | B14            | 90L          | 2880  | 86,5                | 0,87-0,80 |
| NKV 10/8 T IE3  | 3 x 380-415Δ           | 3,00       | 4,00 | 5,6     | 52,9-58             | B14            | 100L         | 2900  | 87,1                | 0,89      |
| NKV 10/9 T IE3  | 3 x 380-415Δ           | 3,00       | 4,00 | 5,6     | 52,9-58             | B14            | 100L         | 2900  | 87,1                | 0,89      |
| NKV 10/10 T IE3 | 3 x 380-415Δ           | 4,00       | 5,50 | 8       | 89,6-98,4           | B14            | 112M         | 2920  | 88,1                | 0,81      |
| NKV 10/11 T IE3 | 3 x 380-415Δ           | 4,00       | 5,50 | 8       | 89,6-98,4           | B14            | 112M         | 2920  | 88,1                | 0,81      |
| NKV 10/12 T IE3 | 3 x 380-415Δ           | 4,00       | 5,50 | 8       | 89,6-98,4           | B14            | 112M         | 2920  | 88,1                | 0,81      |
| NKV 10/13 T IE3 | 3 x 380-415Δ           | 4,00       | 5,50 | 8       | 89,6-98,4           | B14            | 112M         | 2920  | 88,1                | 0,81      |

# NKV 10 - MULTISTAGE CENTRIFUGAL ELECTRIC PUMPS WITH VERTICAL AXIS

Liquid temperature range: from - 30°C to +120°C - Maximum working pressure: 25 bar (2500 kPa)



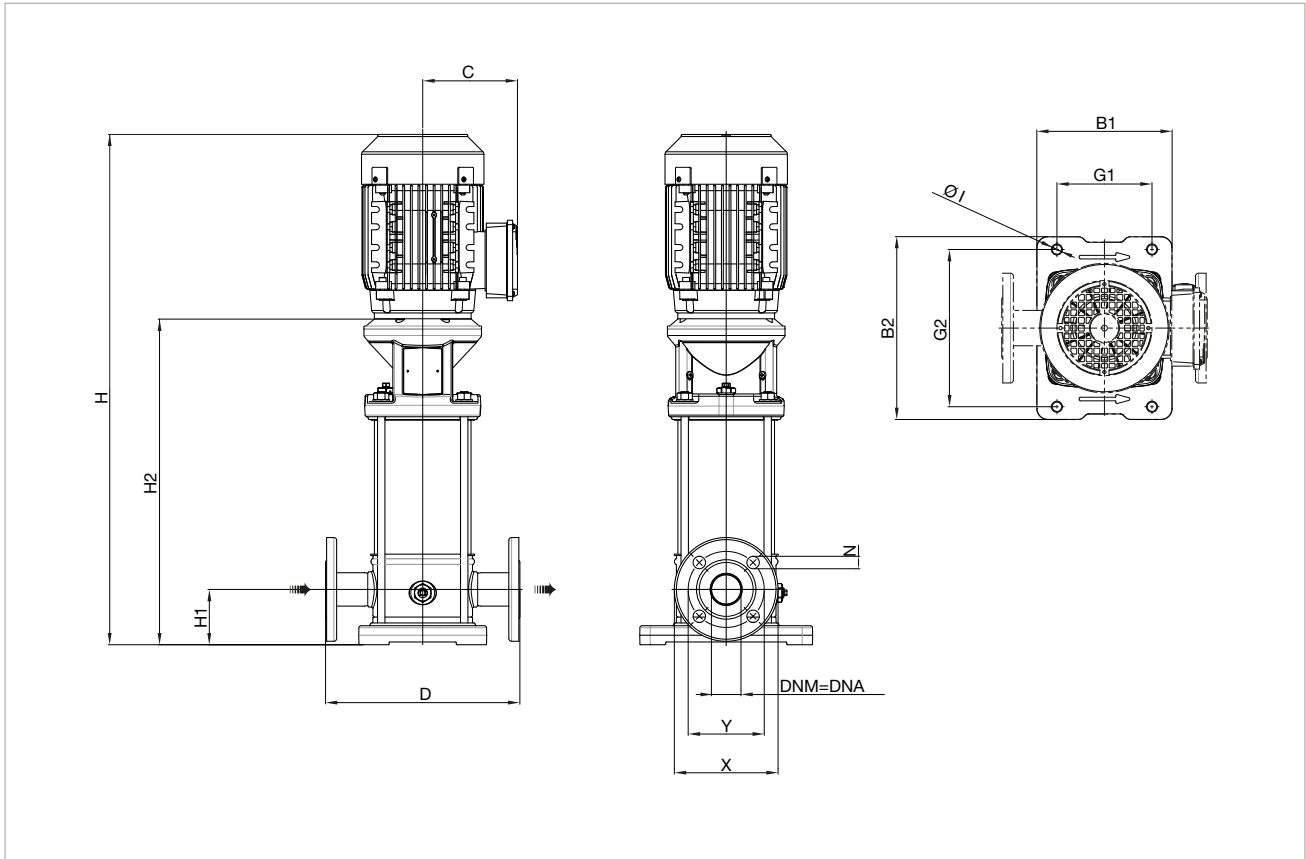
For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equivalent to 1000 kg/m³. Tolerance of curves to ISO 9906.

| MODEL           | VOLTAGE<br>50 Hz | P2 NOMINAL |       | In A | Ist A     | Motor<br>Frame | MEC<br>Motor | 1/min | η max<br>Motor<br>% | cos φ |
|-----------------|------------------|------------|-------|------|-----------|----------------|--------------|-------|---------------------|-------|
|                 |                  | kW         | HP    |      |           |                |              |       |                     |       |
| NKV 10/15 T IE3 | 3 x 380-415Δ     | 5,50       | 7,50  | 10,2 | 119,8-131 | B5             | 132S         | 2935  | 89,2                | 0,87  |
| NKV 10/17 T IE3 | 3 x 380-415Δ     | 5,50       | 7,50  | 10,2 | 119,8-131 | B5             | 132S         | 2935  | 89,2                | 0,87  |
| NKV 10/19 T IE3 | 3 x 380-415Δ     | 7,50       | 10,00 | 14,4 | 152-169   | B5             | 132S         | 2930  | 90,1                | 0,84  |
| NKV 10/21 T IE3 | 3 x 380-415Δ     | 7,50       | 10,00 | 14,4 | 152-169   | B5             | 132S         | 2930  | 90,1                | 0,84  |
| NKV 10/23 T IE3 | 3 x 380-415Δ     | 7,50       | 10,00 | 14,4 | 152-169   | B5             | 132S         | 2930  | 90,1                | 0,84  |
| NKV 10/24 T IE3 | 3 x 380-415Δ     | 11,00      | 15,00 | 19,7 | 156-171   | B5             | 160M         | 2950  | 91,2                | 0,89  |

# NKV 10 - MULTISTAGE CENTRIFUGAL ELECTRIC PUMPS WITH VERTICAL AXIS

Liquid temperature range: from - 30°C to +120°C - Maximum working pressure: 25 bar (2500 kPa)

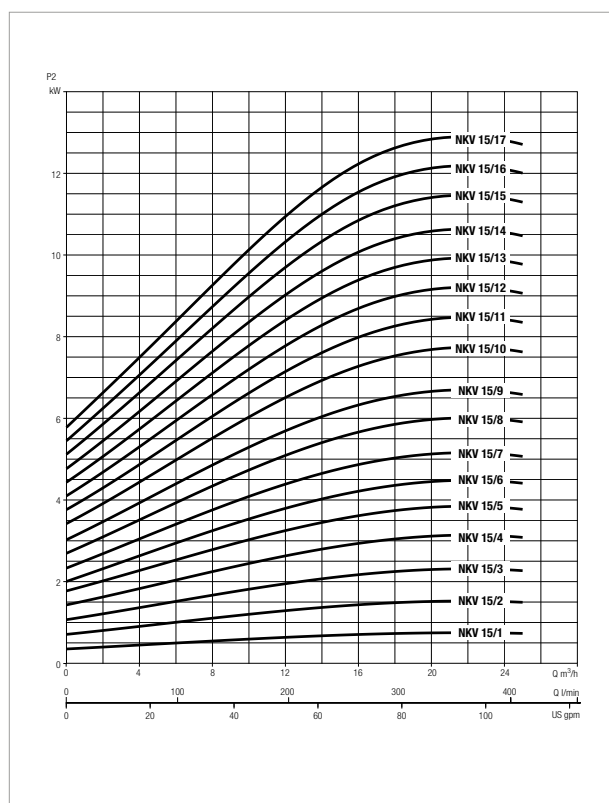
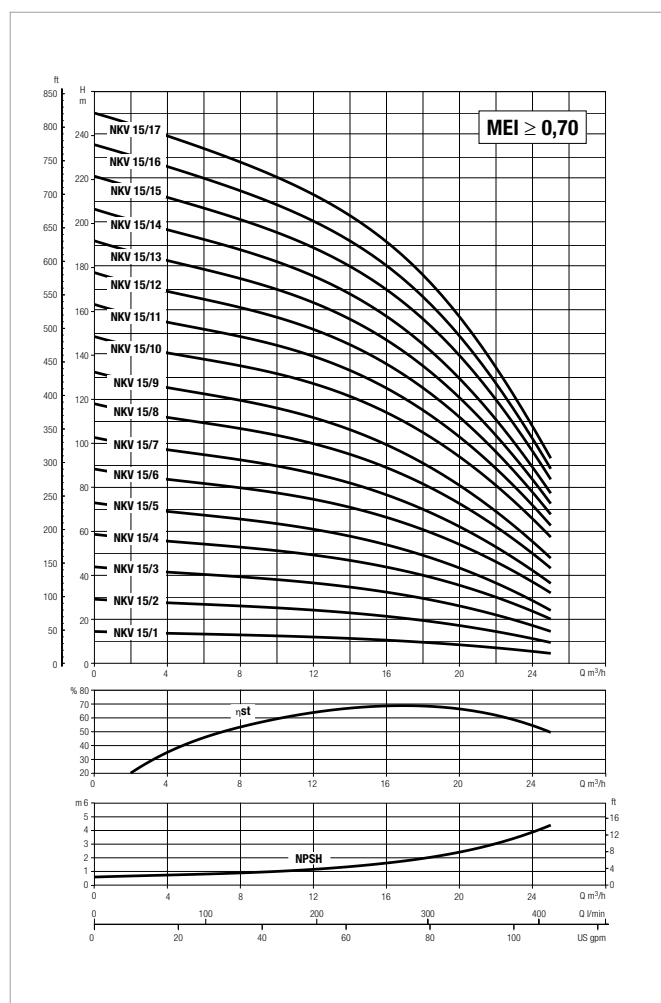


Version F: The pump is supplied without counter flanges (optional accessories, including joints and bolts).

| MODEL           | STAGE N° | B1  | B2  | G1  | G2  | Ø1 | C   | D   | H    | H1 | H2   | DNA = DNM (DN 40) |     |    | PACKING DIMENSIONS |     |     | VOL. mc | WEIGHT Kg |
|-----------------|----------|-----|-----|-----|-----|----|-----|-----|------|----|------|-------------------|-----|----|--------------------|-----|-----|---------|-----------|
|                 |          |     |     |     |     |    |     |     |      |    |      | X                 | Y   | N  | L/A                | L/B | H   |         |           |
| NKV 10/2 T IE3  | 2        | 185 | 250 | 130 | 215 | 13 | 129 | 280 | 573  | 80 | 341  | 150               | 110 | 18 | 655                | 272 | 275 | 0,049   | 22.5      |
| NKV 10/3 T IE3  | 3        | 185 | 250 | 130 | 215 | 13 | 129 | 280 | 603  | 80 | 371  | 150               | 110 | 18 | 655                | 272 | 275 | 0,049   | 25.1      |
| NKV 10/4 T IE3  | 4        | 185 | 250 | 130 | 215 | 13 | 138 | 280 | 678  | 80 | 411  | 150               | 110 | 18 | 1050               | 340 | 490 | 0,175   | 29.0      |
| NKV 10/5 T IE3  | 5        | 185 | 250 | 130 | 215 | 13 | 138 | 280 | 708  | 80 | 441  | 150               | 110 | 18 | 1050               | 340 | 490 | 0,175   | 29.5      |
| NKV 10/6 T IE3  | 6        | 185 | 250 | 130 | 215 | 13 | 138 | 280 | 738  | 80 | 471  | 150               | 110 | 18 | 1050               | 340 | 490 | 0,175   | 32.5      |
| NKV 10/7 T IE3  | 7        | 185 | 250 | 130 | 215 | 13 | 138 | 280 | 768  | 80 | 501  | 150               | 110 | 18 | 1050               | 340 | 490 | 0,175   | 33.0      |
| NKV 10/8 T IE3  | 8        | 185 | 250 | 130 | 215 | 13 | 145 | 280 | 847  | 80 | 541  | 150               | 110 | 18 | 1050               | 340 | 490 | 0,175   | 41.3      |
| NKV 10/9 T IE3  | 9        | 185 | 250 | 130 | 215 | 13 | 145 | 280 | 877  | 80 | 571  | 150               | 110 | 18 | 1050               | 340 | 490 | 0,175   | 41.8      |
| NKV 10/10 T IE3 | 10       | 185 | 250 | 130 | 215 | 13 | 145 | 280 | 907  | 80 | 601  | 150               | 110 | 18 | 1050               | 340 | 490 | 0,175   | 46.0      |
| NKV 10/11 T IE3 | 11       | 185 | 250 | 130 | 215 | 13 | 145 | 280 | 937  | 80 | 631  | 150               | 110 | 18 | 1050               | 340 | 490 | 0,175   | 46.5      |
| NKV 10/12 T IE3 | 12       | 185 | 250 | 130 | 215 | 13 | 145 | 280 | 967  | 80 | 661  | 150               | 110 | 18 | 1050               | 340 | 490 | 0,175   | 47.5      |
| NKV 10/13 T IE3 | 13       | 185 | 250 | 130 | 215 | 13 | 145 | 280 | 997  | 80 | 691  | 150               | 110 | 18 | 1412               | 377 | 530 | 0,282   | 48.0      |
| NKV 10/15 T IE3 | 15       | 185 | 250 | 130 | 215 | 13 | 160 | 280 | 1254 | 80 | 926  | 150               | 110 | 18 | 1412               | 377 | 530 | 0,282   | 76.1      |
| NKV 10/17 T IE3 | 17       | 185 | 250 | 130 | 215 | 13 | 160 | 280 | 1314 | 80 | 986  | 150               | 110 | 18 | 1412               | 377 | 530 | 0,282   | 77.1      |
| NKV 10/19 T IE3 | 19       | 185 | 250 | 130 | 215 | 13 | 160 | 280 | 1396 | 80 | 1046 | 150               | 110 | 18 | 1610               | 340 | 480 | 0,263   | 81.0      |
| NKV 10/21 T IE3 | 21       | 185 | 250 | 130 | 215 | 13 | 160 | 280 | 1456 | 80 | 1106 | 150               | 110 | 18 | 1610               | 340 | 480 | 0,263   | 82.5      |
| NKV 10/23 T IE3 | 23       | 185 | 250 | 130 | 215 | 13 | 160 | 280 | 1516 | 80 | 1166 | 150               | 110 | 18 | 1610               | 340 | 480 | 0,263   | 83.5      |
| NKV 10/24 T IE3 | 24       | 185 | 250 | 130 | 215 | 13 | 194 | 280 | 1641 | 80 | 1216 | 150               | 110 | 18 | 1820               | 500 | 630 | 0,573   | 109.5     |

# NKV 15 - MULTISTAGE CENTRIFUGAL ELECTRIC PUMPS WITH VERTICAL AXIS

Liquid temperature range: from - 30°C to +120°C - Maximum working pressure: 25 bar (2500 kPa)



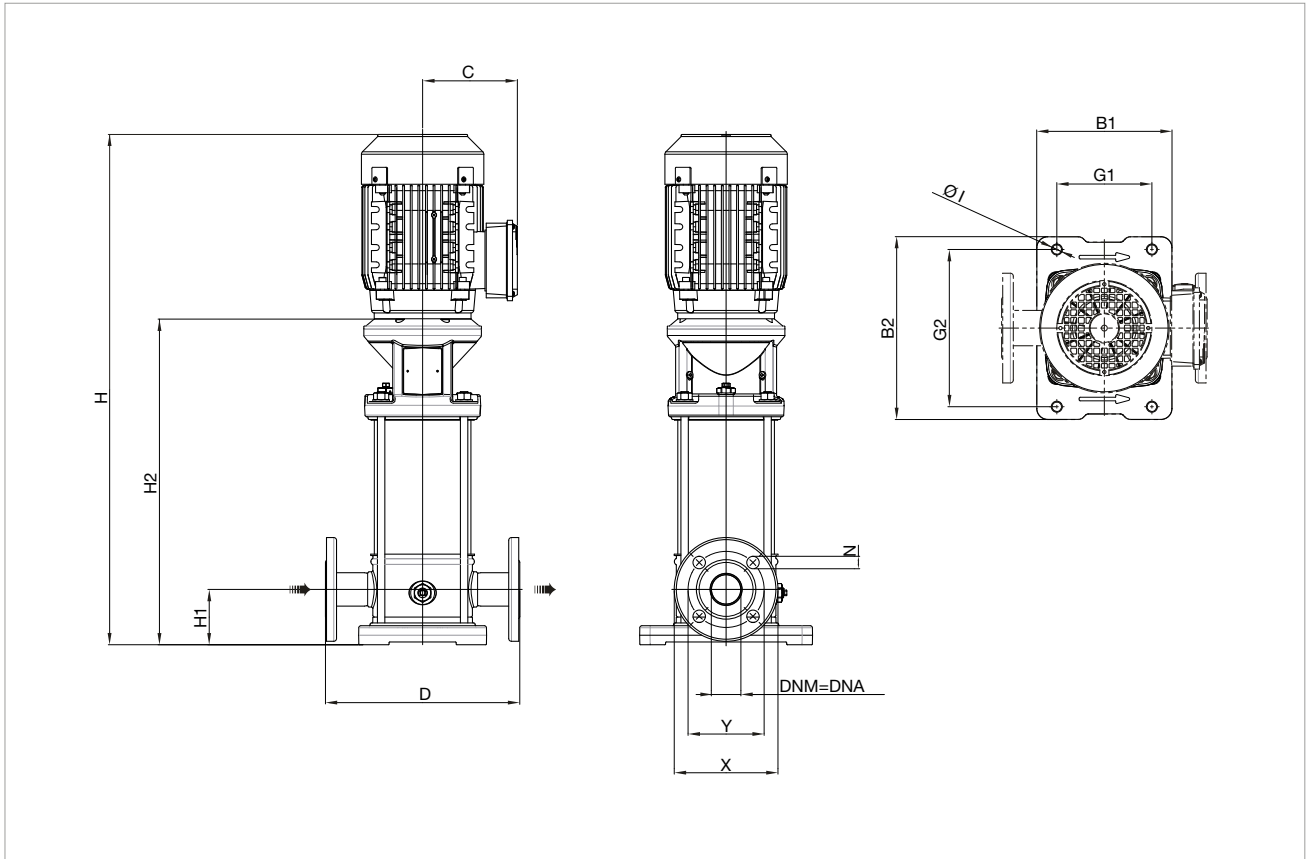
For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equivalent to 1000 kg/m<sup>3</sup>. Tolerance of curves to ISO 9906.

| MODEL           | VOLTAGE<br>50 Hz       | P2 NOMINAL |       | In A    | Ist A               | Motor<br>Frame | MEC<br>Motor | 1/min | η max<br>Motor<br>% | cos φ     |
|-----------------|------------------------|------------|-------|---------|---------------------|----------------|--------------|-------|---------------------|-----------|
|                 |                        | kW         | HP    |         |                     |                |              |       |                     |           |
| NKV 15/1 T IE3  | 3 x 220-240Δ /380-415Y | 1,10       | 1,50  | 4,1/2,4 | 28,5-31,5/16,3/17,9 | B14            | 80M          | 2870  | 82,7                | 0,84-0,76 |
| NKV 15/2 T IE3  | 3 x 220-240Δ /380-415Y | 2,20       | 3,00  | 7,8-4,6 | 37,8-42,3           | B14            | 90L          | 2880  | 86,5                | 0,87-0,80 |
| NKV 15/3 T IE3  | 3 x 380-415Δ           | 3,00       | 4,00  | 5,6     | 52,9-58             | B14            | 100L         | 2900  | 87,1                | 0,89      |
| NKV 15/4 T IE3  | 3 x 380-415Δ           | 4,00       | 5,50  | 8       | 89,6-98,4           | B14            | 112M         | 2920  | 88,1                | 0,81      |
| NKV 15/5 T IE3  | 3 x 380-415Δ           | 4,00       | 5,50  | 8       | 89,6-98,4           | B14            | 112M         | 2920  | 88,1                | 0,81      |
| NKV 15/6 T IE3  | 3 x 380-415Δ           | 5,50       | 7,50  | 10,2    | 119,8-131           | B5             | 132S         | 2935  | 89,2                | 0,87      |
| NKV 15/7 T IE3  | 3 x 380-415Δ           | 5,50       | 7,50  | 10,2    | 119,8-131           | B5             | 132S         | 2935  | 89,2                | 0,87      |
| NKV 15/8 T IE3  | 3 x 380-415Δ           | 7,50       | 10,00 | 14,4    | 152-169             | B5             | 132S         | 2930  | 90,1                | 0,84      |
| NKV 15/9 T IE3  | 3 x 380-415Δ           | 7,50       | 10,00 | 14,4    | 152-169             | B5             | 132S         | 2930  | 90,1                | 0,84      |
| NKV 15/10 T IE3 | 3 x 380-415Δ           | 11,00      | 15,00 | 19,7    | 156-171             | B5             | 160M         | 2950  | 91,2                | 0,89      |
| NKV 15/11 T IE3 | 3 x 380-415Δ           | 11,00      | 15,00 | 19,7    | 156-171             | B5             | 160M         | 2950  | 91,2                | 0,89      |
| NKV 15/12 T IE3 | 3 x 380-415Δ           | 11,00      | 15,00 | 19,7    | 156-171             | B5             | 160M         | 2950  | 91,2                | 0,89      |
| NKV 15/13 T IE3 | 3 x 380-415Δ           | 11,00      | 15,00 | 19,7    | 156-171             | B5             | 160M         | 2950  | 91,2                | 0,89      |
| NKV 15/14 T IE3 | 3 x 380-415Δ           | 11,00      | 15,00 | 19,7    | 156-171             | B5             | 160M         | 2950  | 91,2                | 0,89      |
| NKV 15/15 T IE3 | 3 x 380-415Δ           | 15,00      | 20,00 | 26,7    | 185-106             | B5             | 160M         | 2940  | 91,9                | 0,89      |
| NKV 15/16 T IE3 | 3 x 380-415Δ           | 15,00      | 20,00 | 26,7    | 185-106             | B5             | 160M         | 2940  | 91,9                | 0,89      |
| NKV 15/17 T IE3 | 3 x 380-415Δ           | 15,00      | 20,00 | 26,7    | 185-106             | B5             | 160M         | 2940  | 91,9                | 0,89      |

# NKV 15 - MULTISTAGE CENTRIFUGAL ELECTRIC PUMPS WITH VERTICAL AXIS

Liquid temperature range: from - 30°C to +120°C - Maximum working pressure: 25 bar (2500 kPa)

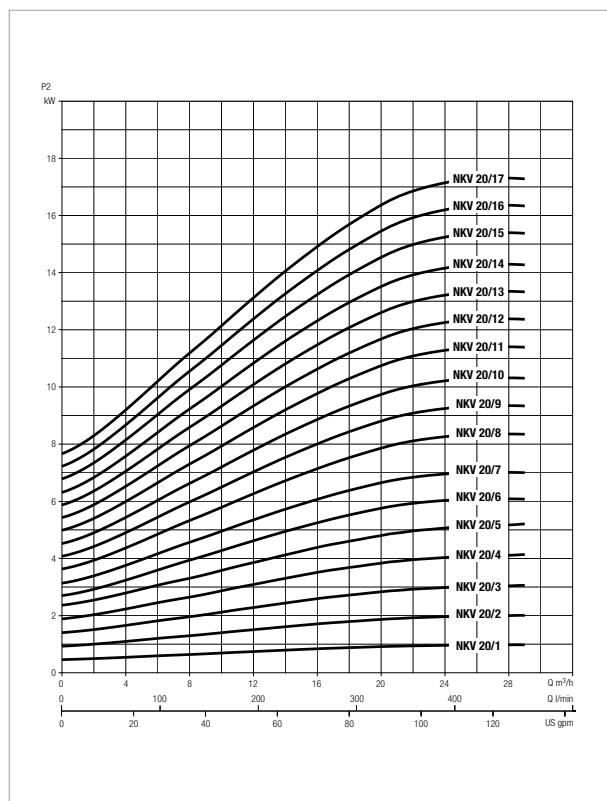
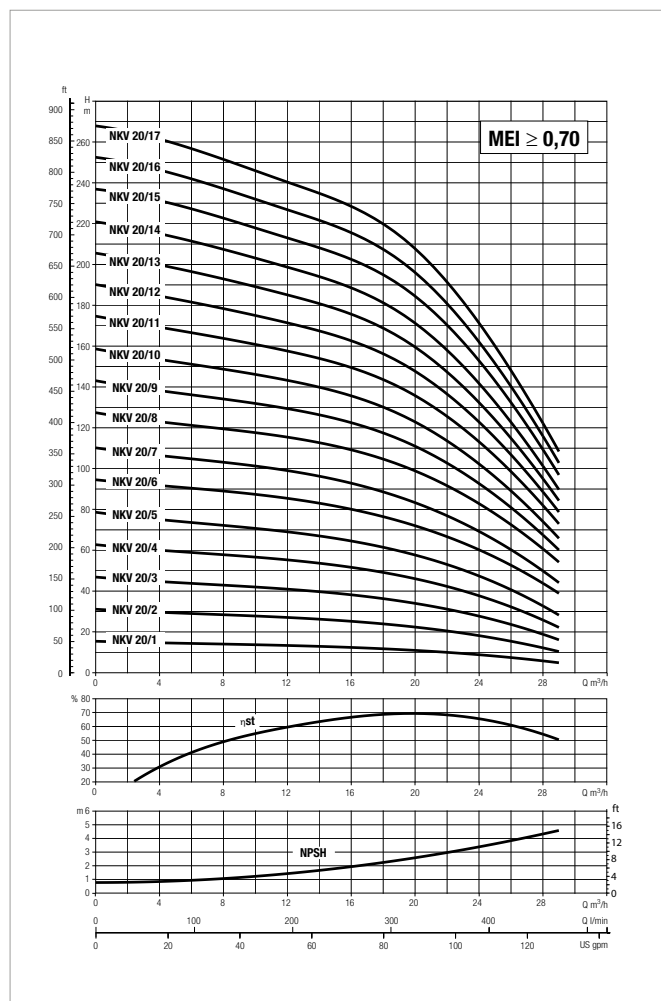


Version F: The pump is supplied without counter flanges (optional accessories, including joints and bolts).

| MODEL           | STAGE N° | B1  | B2  | G1  | G2  | Ø1 | C   | D   | H    | H1 | H2   | DNA = DNM (DN 50) |     |    | PACKING DIMENSIONS |     |     | VOL. mc | WEIGHT Kg |
|-----------------|----------|-----|-----|-----|-----|----|-----|-----|------|----|------|-------------------|-----|----|--------------------|-----|-----|---------|-----------|
|                 |          |     |     |     |     |    |     |     |      |    |      | X                 | Y   | N  | L/A                | L/B | H   |         |           |
| NKV 15/1 T IE3  | 1        | 185 | 250 | 130 | 215 | 13 | 129 | 300 | 633  | 90 | 401  | 165               | 127 | 19 | 1050               | 340 | 490 | 0,175   | 30.6      |
| NKV 15/2 T IE3  | 2        | 185 | 250 | 130 | 215 | 13 | 138 | 300 | 678  | 90 | 411  | 165               | 127 | 19 | 1050               | 340 | 490 | 0,175   | 37.0      |
| NKV 15/3 T IE3  | 3        | 185 | 250 | 130 | 215 | 13 | 145 | 300 | 775  | 90 | 469  | 165               | 127 | 19 | 1050               | 340 | 490 | 0,175   | 45.8      |
| NKV 15/4 T IE3  | 4        | 185 | 250 | 130 | 215 | 13 | 145 | 300 | 823  | 90 | 517  | 165               | 127 | 19 | 1050               | 340 | 490 | 0,175   | 51.0      |
| NKV 15/5 T IE3  | 5        | 185 | 250 | 130 | 215 | 13 | 145 | 300 | 871  | 90 | 565  | 165               | 127 | 19 | 1050               | 340 | 490 | 0,175   | 52.5      |
| NKV 15/6 T IE3  | 6        | 185 | 250 | 130 | 215 | 13 | 160 | 300 | 1128 | 90 | 800  | 165               | 127 | 19 | 1412               | 377 | 530 | 0,282   | 81.1      |
| NKV 15/7 T IE3  | 7        | 185 | 250 | 130 | 215 | 13 | 160 | 300 | 1176 | 90 | 848  | 165               | 127 | 19 | 1412               | 377 | 530 | 0,282   | 82.6      |
| NKV 15/8 T IE3  | 8        | 185 | 250 | 130 | 215 | 13 | 160 | 300 | 1246 | 90 | 896  | 165               | 127 | 19 | 1412               | 377 | 530 | 0,282   | 86.5      |
| NKV 15/9 T IE3  | 9        | 185 | 250 | 130 | 215 | 13 | 160 | 300 | 1294 | 90 | 944  | 165               | 127 | 19 | 1412               | 377 | 530 | 0,282   | 88.0      |
| NKV 15/10 T IE3 | 10       | 185 | 250 | 130 | 215 | 13 | 194 | 300 | 1437 | 90 | 1012 | 165               | 127 | 19 | 1820               | 500 | 630 | 0,573   | 115.0     |
| NKV 15/11 T IE3 | 11       | 185 | 250 | 130 | 215 | 13 | 194 | 300 | 1485 | 90 | 1060 | 165               | 127 | 19 | 1820               | 500 | 630 | 0,573   | 116.5     |
| NKV 15/12 T IE3 | 12       | 185 | 250 | 130 | 215 | 13 | 194 | 300 | 1533 | 90 | 1108 | 165               | 127 | 19 | 1820               | 500 | 630 | 0,573   | 118.0     |
| NKV 15/13 T IE3 | 13       | 185 | 250 | 130 | 215 | 13 | 194 | 300 | 1581 | 90 | 1156 | 165               | 127 | 19 | 1820               | 500 | 630 | 0,573   | 119.5     |
| NKV 15/14 T IE3 | 14       | 185 | 250 | 130 | 215 | 13 | 194 | 300 | 1629 | 90 | 1204 | 165               | 127 | 19 | 1820               | 500 | 630 | 0,573   | 121.0     |
| NKV 15/15 T IE3 | 15       | 185 | 250 | 130 | 215 | 13 | 194 | 300 | 1728 | 90 | 1252 | 165               | 127 | 19 | 1820               | 500 | 630 | 0,573   | 131.0     |
| NKV 15/16 T IE3 | 16       | 185 | 250 | 130 | 215 | 13 | 194 | 300 | 1776 | 90 | 1300 | 165               | 127 | 19 | 2550               | 500 | 750 | 0,956   | 132.5     |
| NKV 15/17 T IE3 | 17       | 185 | 250 | 130 | 215 | 13 | 194 | 300 | 1824 | 90 | 1348 | 165               | 127 | 19 | 2550               | 500 | 750 | 0,956   | 134.0     |

# NKV 20 - MULTISTAGE CENTRIFUGAL ELECTRIC PUMPS WITH VERTICAL AXIS

Liquid temperature range: from - 30°C to +120°C - Maximum working pressure: 25 bar (2500 kPa)



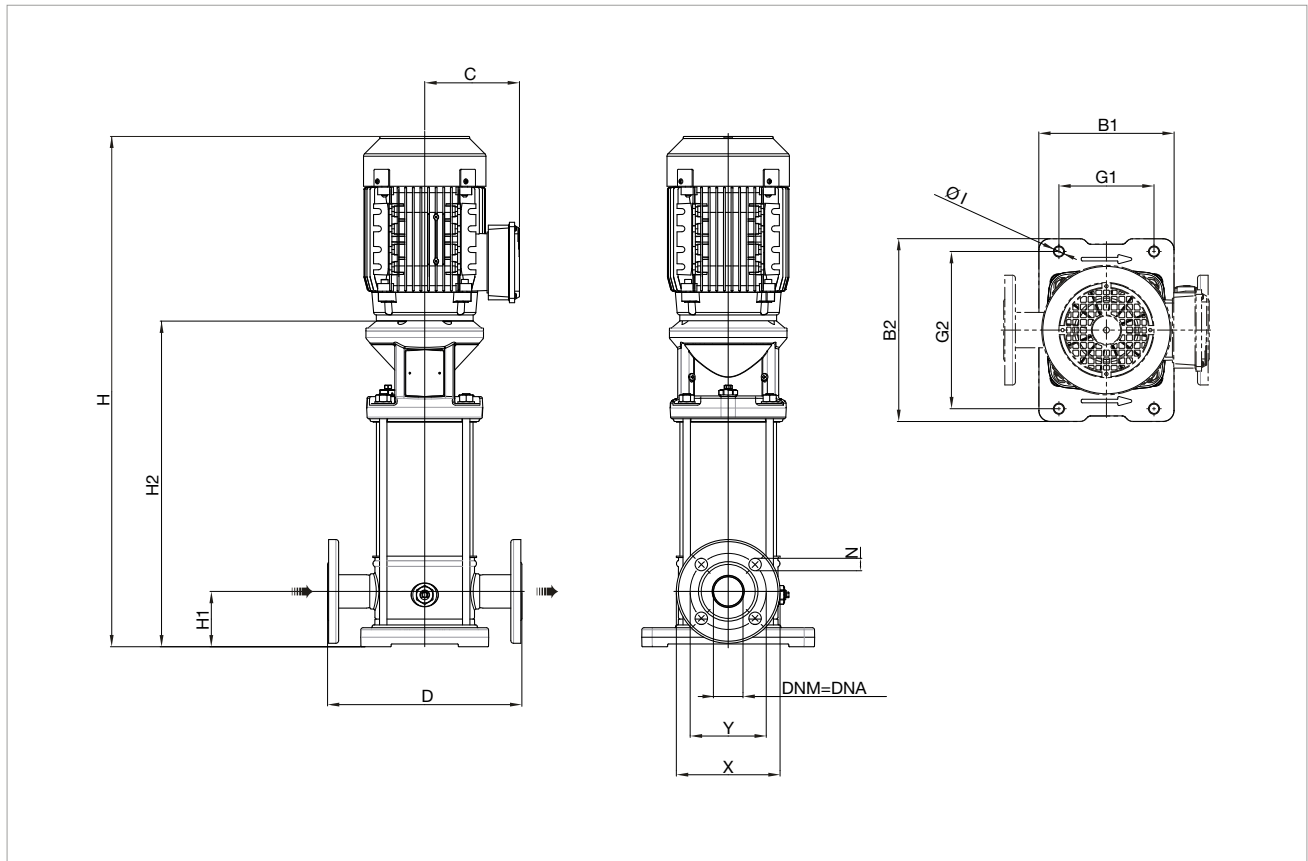
For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equivalent to 1000 kg/m³. Tolerance of curves to ISO 9906.

| MODEL           | VOLTAGE<br>50 Hz      | P2 NOMINAL |       | In A    | Ist A               | Motor<br>Frame | MEC<br>Motor | 1/min | $\eta$ max<br>Motor<br>% | cos $\phi$ |
|-----------------|-----------------------|------------|-------|---------|---------------------|----------------|--------------|-------|--------------------------|------------|
|                 |                       | kW         | HP    |         |                     |                |              |       |                          |            |
| NKV 20/1 T IE3  | 3 x 220-240Δ/380-415Y | 1,10       | 1,50  | 4,1/2,4 | 28,5-31,5/16,3/17,9 | B14            | 80M          | 2870  | 82,7                     | 0,84-0,76  |
| NKV 20/2 T IE3  | 3 x 220-240Δ/380-415Y | 2,20       | 3,00  | 7,8-4,6 | 37,8-42,3           | B14            | 90L          | 2880  | 86,5                     | 0,87-0,80  |
| NKV 20/3 T IE3  | 3 x 380-415Δ          | 3,00       | 4,00  | 5,6     | 52,9-58             | B14            | 100L         | 2900  | 87,1                     | 0,89       |
| NKV 20/4 T IE3  | 3 x 380-415Δ          | 4,00       | 5,50  | 8       | 89,6-98,4           | B14            | 112M         | 2920  | 88,1                     | 0,81       |
| NKV 20/5 T IE3  | 3 x 380-415Δ          | 5,50       | 7,50  | 10,2    | 119,8-131           | B5             | 132S         | 2935  | 89,2                     | 0,87       |
| NKV 20/6 T IE3  | 3 x 380-415Δ          | 7,50       | 10,00 | 14,4    | 152-169             | B5             | 132S         | 2930  | 90,1                     | 0,84       |
| NKV 20/7 T IE3  | 3 x 380-415Δ          | 7,50       | 10,00 | 14,4    | 152-169             | B5             | 132S         | 2930  | 90,1                     | 0,84       |
| NKV 20/8 T IE3  | 3 x 380-415Δ          | 11,00      | 15,00 | 19,7    | 156-171             | B5             | 160M         | 2950  | 91,2                     | 0,89       |
| NKV 20/9 T IE3  | 3 x 380-415Δ          | 11,00      | 15,00 | 19,7    | 156-171             | B5             | 160M         | 2950  | 91,2                     | 0,89       |
| NKV 20/10 T IE3 | 3 x 380-415Δ          | 11,00      | 15,00 | 19,7    | 156-171             | B5             | 160M         | 2950  | 91,2                     | 0,89       |
| NKV 20/11 T IE3 | 3 x 380-415Δ          | 15,00      | 20,00 | 26,7    | 185-106             | B5             | 160M         | 2940  | 91,9                     | 0,89       |
| NKV 20/12 T IE3 | 3 x 380-415Δ          | 15,00      | 20,00 | 26,7    | 185-106             | B5             | 160M         | 2940  | 91,9                     | 0,89       |
| NKV 20/13 T IE3 | 3 x 380-415Δ          | 15,00      | 20,00 | 26,7    | 185-106             | B5             | 160M         | 2940  | 91,9                     | 0,89       |
| NKV 20/14 T IE3 | 3 x 380-415Δ          | 15,00      | 20,00 | 26,7    | 185-106             | B5             | 160M         | 2940  | 91,9                     | 0,89       |
| NKV 20/15 T IE3 | 3 x 380-415Δ          | 18,50      | 25,00 | 33      | 220-129             | B5             | 160L         | 2950  | 92,4                     | 0,88       |
| NKV 20/16 T IE3 | 3 x 380-415Δ          | 18,50      | 25,00 | 33      | 220-129             | B5             | 160L         | 2950  | 92,4                     | 0,88       |
| NKV 20/17 T IE3 | 3 x 380-415Δ          | 18,50      | 25,00 | 33      | 220-129             | B5             | 160L         | 2950  | 92,4                     | 0,88       |

# NKV 20 - MULTISTAGE CENTRIFUGAL ELECTRIC PUMPS WITH VERTICAL AXIS

Liquid temperature range: from - 30°C to +120°C - Maximum working pressure: 25 bar (2500 kPa)

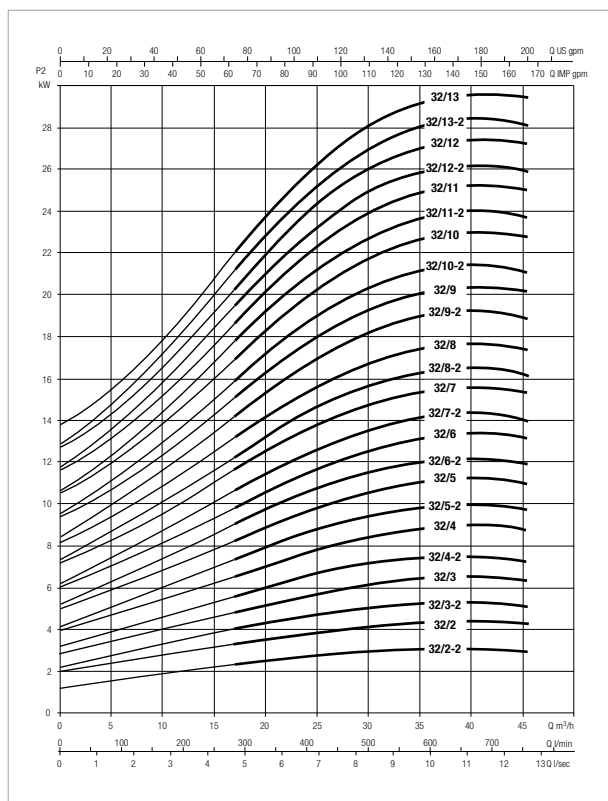
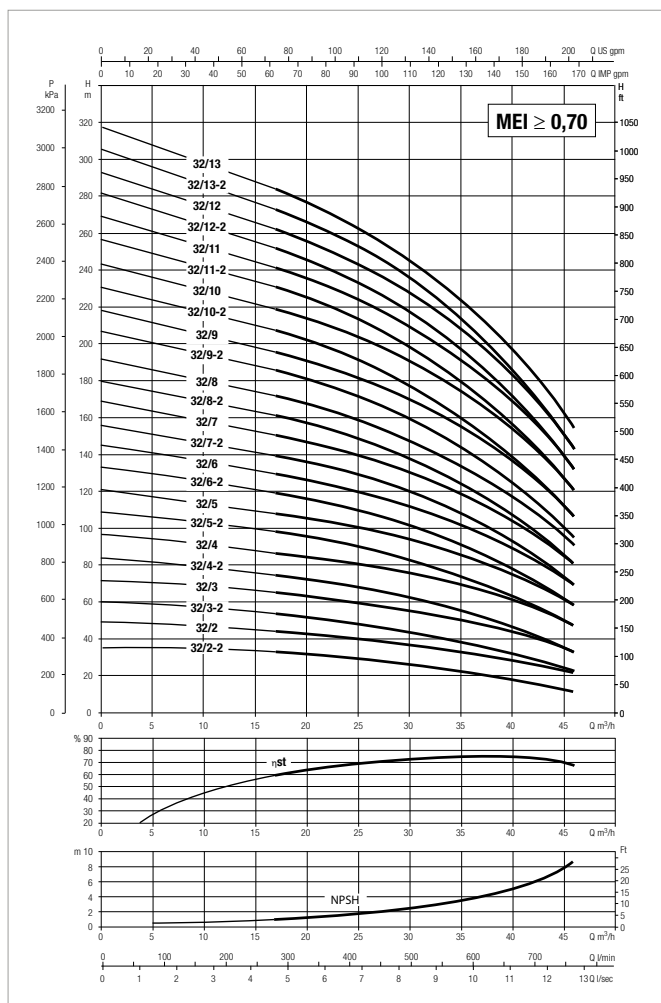


Version F: The pump is supplied without counter flanges (optional accessories, including joints and bolts).

| MODEL           | STAGE N° | B1  | B2  | G1  | G2  | Ø1 | C   | D   | H    | H1 | H2   | DNA = DNM (DN 40) |     |    | PACKING DIMENSIONS |     |     | VOL. mc | WEIGHT Kg |
|-----------------|----------|-----|-----|-----|-----|----|-----|-----|------|----|------|-------------------|-----|----|--------------------|-----|-----|---------|-----------|
|                 |          |     |     |     |     |    |     |     |      |    |      | X                 | Y   | N  | L/A                | L/B | H   |         |           |
| NKV 20/1 T IE3  | 1        | 185 | 250 | 130 | 215 | 13 | 129 | 300 | 633  | 90 | 401  | 165               | 127 | 19 | 1050               | 340 | 490 | 0,175   | 30,6      |
| NKV 20/2 T IE3  | 2        | 185 | 250 | 130 | 215 | 13 | 138 | 300 | 678  | 90 | 411  | 165               | 127 | 19 | 1050               | 340 | 490 | 0,175   | 37,0      |
| NKV 20/3 T IE3  | 3        | 185 | 250 | 130 | 215 | 13 | 145 | 300 | 775  | 90 | 469  | 165               | 127 | 19 | 1050               | 340 | 490 | 0,175   | 45,8      |
| NKV 20/4 T IE3  | 4        | 185 | 250 | 130 | 215 | 13 | 145 | 300 | 823  | 90 | 517  | 165               | 127 | 19 | 1412               | 377 | 530 | 0,282   | 51,0      |
| NKV 20/5 T IE3  | 5        | 185 | 250 | 130 | 215 | 13 | 160 | 300 | 1080 | 90 | 752  | 165               | 127 | 19 | 1412               | 377 | 530 | 0,282   | 80,1      |
| NKV 20/6 T IE3  | 6        | 185 | 250 | 130 | 215 | 13 | 160 | 300 | 1150 | 90 | 800  | 165               | 127 | 19 | 1412               | 377 | 530 | 0,282   | 84,0      |
| NKV 20/7 T IE3  | 7        | 185 | 250 | 130 | 215 | 13 | 160 | 300 | 1198 | 90 | 848  | 165               | 127 | 19 | 1412               | 377 | 530 | 0,282   | 85,0      |
| NKV 20/8 T IE3  | 8        | 185 | 250 | 130 | 215 | 13 | 194 | 300 | 1341 | 90 | 916  | 165               | 127 | 19 | 1820               | 500 | 630 | 0,573   | 112,5     |
| NKV 20/9 T IE3  | 9        | 185 | 250 | 130 | 215 | 13 | 194 | 300 | 1389 | 90 | 964  | 165               | 127 | 19 | 1820               | 500 | 630 | 0,573   | 114,0     |
| NKV 20/10 T IE3 | 10       | 185 | 250 | 130 | 215 | 13 | 194 | 300 | 1437 | 90 | 1012 | 165               | 127 | 19 | 1820               | 500 | 630 | 0,573   | 115,0     |
| NKV 20/11 T IE3 | 11       | 185 | 250 | 130 | 215 | 13 | 194 | 300 | 1536 | 90 | 1060 | 165               | 127 | 19 | 1820               | 500 | 630 | 0,573   | 125,5     |
| NKV 20/12 T IE3 | 12       | 185 | 250 | 130 | 215 | 13 | 194 | 300 | 1584 | 90 | 1108 | 165               | 127 | 19 | 1820               | 500 | 630 | 0,573   | 127,0     |
| NKV 20/13 T IE3 | 13       | 185 | 250 | 130 | 215 | 13 | 194 | 300 | 1632 | 90 | 1156 | 165               | 127 | 19 | 1820               | 500 | 630 | 0,573   | 128,5     |
| NKV 20/14 T IE3 | 14       | 185 | 250 | 130 | 215 | 13 | 194 | 300 | 1680 | 90 | 1204 | 165               | 127 | 19 | 1820               | 500 | 630 | 0,573   | 130,0     |
| NKV 20/15 T IE3 | 15       | 185 | 250 | 130 | 215 | 13 | 238 | 300 | 1794 | 90 | 1252 | 165               | 127 | 19 | 2550               | 500 | 750 | 0,956   | 167,0     |
| NKV 20/16 T IE3 | 16       | 185 | 250 | 130 | 215 | 13 | 238 | 300 | 1842 | 90 | 1300 | 165               | 127 | 19 | 2550               | 500 | 750 | 0,956   | 168,5     |
| NKV 20/17 T IE3 | 17       | 185 | 250 | 130 | 215 | 13 | 238 | 300 | 1890 | 90 | 1348 | 165               | 127 | 19 | 2550               | 500 | 750 | 0,956   | 170,0     |

# NKV 32 - MULTISTAGE CENTRIFUGAL ELECTRIC PUMPS WITH VERTICAL AXIS

Liquid temperature range: from - 30°C to +120°C - Maximum working pressure: 32 bar (3200 kPa)



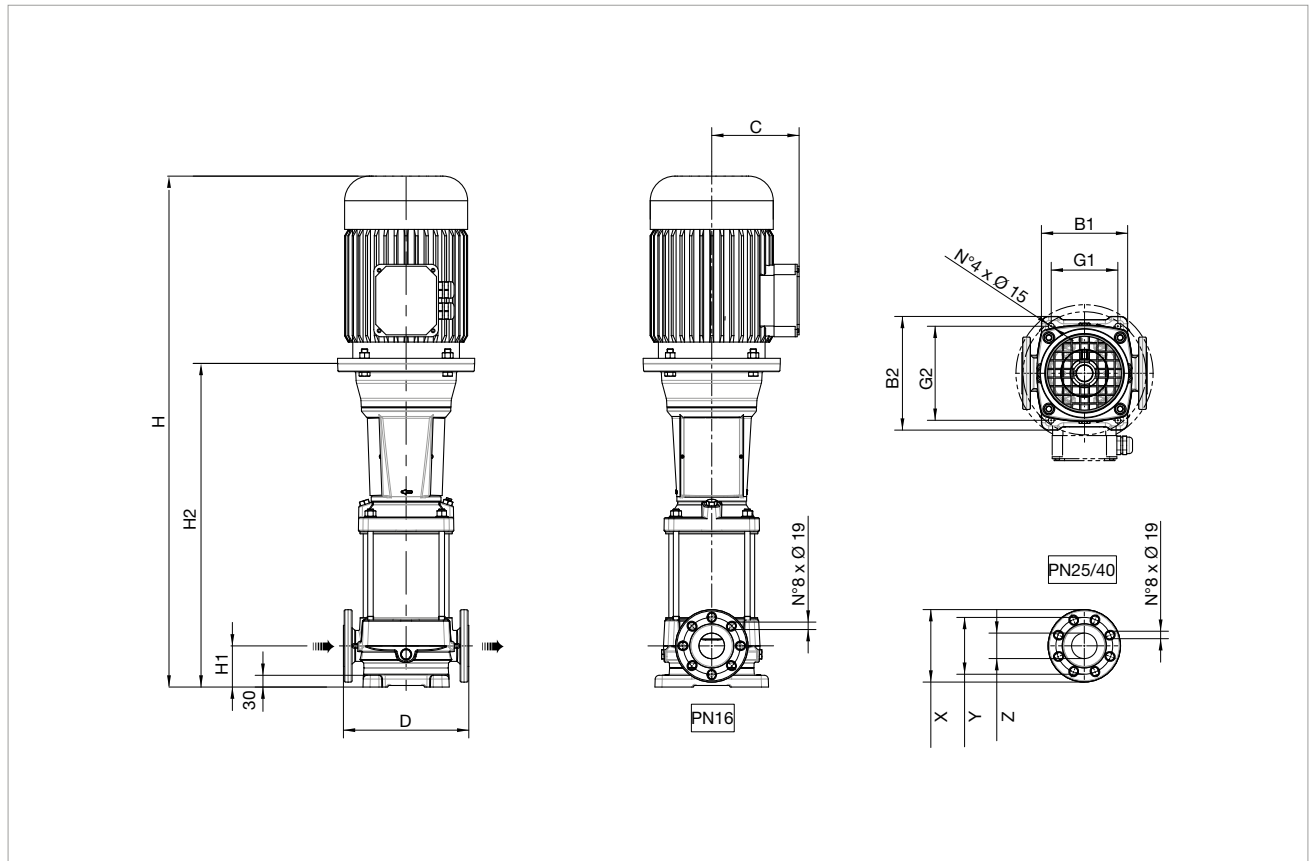
**For MEI index refer to the hydraulic efficiency section.**  
 The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equivalent to 1000 kg/m<sup>3</sup>. Tolerance of curves to ISO 9906.

| MODEL             | VOLTAGE<br>50 Hz | P2 NOMINAL |       | In A | Ist A     | Motor<br>Frame | MEC<br>Motor | 1/min | η max<br>Motor<br>% | cos φ | RPM  |      |
|-------------------|------------------|------------|-------|------|-----------|----------------|--------------|-------|---------------------|-------|------|------|
|                   |                  | kW         | HP    |      |           |                |              |       |                     |       | max  | min  |
| NKV 32/2-2 T IE3  | 3 x 400 V Δ      | 4,00       | 5,50  | 8    | 89,6-98,4 | B14            | 112M         | 2920  | 88,1                | 0,81  | 2980 | 2910 |
| NKV 32/2 T IE3    | 3 x 400 V Δ      | 5,50       | 7,50  | 10,2 | 119,8-131 | B5             | 132S         | 2935  | 89,2                | 0,87  | 2980 | 2910 |
| NKV 32/3-2 T IE3  | 3 x 400 V Δ      | 5,50       | 7,50  | 10,2 | 119,8-131 | B5             | 132S         | 2935  | 89,2                | 0,87  | 2980 | 2910 |
| NKV 32/3 T IE3    | 3 x 400 V Δ      | 7,50       | 10,00 | 14,4 | 152-169   | B5             | 132S         | 2930  | 90,1                | 0,84  | 2980 | 2900 |
| NKV 32/4-2 T IE3  | 3 x 400 V Δ      | 7,50       | 10,00 | 14,4 | 152-169   | B5             | 132S         | 2930  | 90,1                | 0,84  | 2980 | 2900 |
| NKV 32/4 T IE3    | 3 x 400 V Δ      | 11,00      | 15,00 | 19,7 | 156-171   | B5             | 160M         | 2950  | 91,2                | 0,89  | 2980 | 2930 |
| NKV 32/5-2 T IE3  | 3 x 400 V Δ      | 11,00      | 15,00 | 19,7 | 156-171   | B5             | 160M         | 2950  | 91,2                | 0,89  | 2980 | 2930 |
| NKV 32/5 T IE3    | 3 x 400 V Δ      | 15,00      | 20,00 | 26,7 | 185-106   | B5             | 160M         | 2940  | 91,9                | 0,89  | 2980 | 2940 |
| NKV 32/6-2 T IE3  | 3 x 400 V Δ      | 15,00      | 20,00 | 26,7 | 185-106   | B5             | 160M         | 2940  | 91,9                | 0,89  | 2980 | 2940 |
| NKV 32/6 T IE3    | 3 x 400 V Δ      | 15,00      | 20,00 | 26,7 | 185-106   | B5             | 160M         | 2940  | 91,9                | 0,89  | 2980 | 2940 |
| NKV 32/7-2 T IE3  | 3 x 400 V Δ      | 15,00      | 20,00 | 26,7 | 185-106   | B5             | 160M         | 2940  | 91,9                | 0,89  | 2980 | 2940 |
| NKV 32/7 T IE3    | 3 x 400 V Δ      | 18,50      | 25,00 | 33   | 220-129   | B5             | 160L         | 2950  | 92,4                | 0,88  | 2990 | 2940 |
| NKV 32/8-2 T IE3  | 3 x 400 V Δ      | 18,50      | 25,00 | 33   | 220-129   | B5             | 160L         | 2950  | 92,4                | 0,88  | 2990 | 2940 |
| NKV 32/8 T IE3    | 3 x 400 V Δ      | 18,50      | 25,00 | 33   | 220-129   | B5             | 160L         | 2950  | 92,4                | 0,88  | 2990 | 2940 |
| NKV 32/9-2 T IE3  | 3 x 400 V Δ      | 22,00      | 30,00 | 38,1 | 156-171   | B5             | 180M         | 2955  | 92,7                | 0,9   | 2990 | 2960 |
| NKV 32/9 T IE3    | 3 x 400 V Δ      | 22,00      | 30,00 | 38,1 | 156-171   | B5             | 180M         | 2955  | 92,7                | 0,9   | 2990 | 2960 |
| NKV 32/10-2 T IE3 | 3 x 400 V Δ      | 22,00      | 30,00 | 38,1 | 156-171   | B5             | 180M         | 2955  | 92,7                | 0,9   | 2990 | 2960 |
| NKV 32/10 T IE3   | 3 x 400 V Δ      | 30,00      | 40,00 | 52,1 | 185-106   | B5             | 200L         | 2960  | 93,3                | 0,89  | 2990 | 2950 |
| NKV 32/11-2 T IE3 | 3 x 400 V Δ      | 30,00      | 40,00 | 52,1 | 185-106   | B5             | 200L         | 2960  | 93,3                | 0,89  | 2990 | 2950 |
| NKV 32/11 T IE3   | 3 x 400 V Δ      | 30,00      | 40,00 | 52,1 | 185-106   | B5             | 200L         | 2960  | 93,3                | 0,89  | 2990 | 2950 |
| NKV 32/12-2 T IE3 | 3 x 400 V Δ      | 30,00      | 40,00 | 52,1 | 185-106   | B5             | 200L         | 2960  | 93,3                | 0,89  | 2990 | 2950 |
| NKV 32/12 T IE3   | 3 x 400 V Δ      | 30,00      | 40,00 | 52,1 | 185-106   | B5             | 200L         | 2960  | 93,3                | 0,89  | 2990 | 2950 |
| NKV 32/13-2 T IE3 | 3 x 400 V Δ      | 30,00      | 40,00 | 52,1 | 185-106   | B5             | 200L         | 2960  | 93,3                | 0,89  | 2990 | 2950 |
| NKV 32/13 T IE3   | 3 x 400 V Δ      | 30,00      | 40,00 | 52,1 | 185-106   | B5             | 200L         | 2960  | 93,3                | 0,89  | 2990 | 2950 |



# NKV 32 - MULTISTAGE CENTRIFUGAL ELECTRIC PUMPS WITH VERTICAL AXIS

Liquid temperature range: from - 30°C to +120°C - Maximum working pressure: 32 bar (3200 kPa)

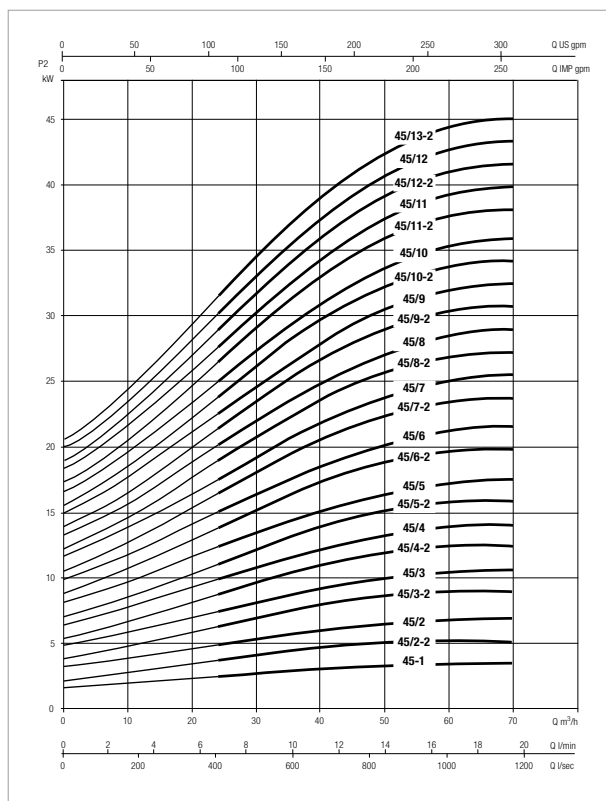
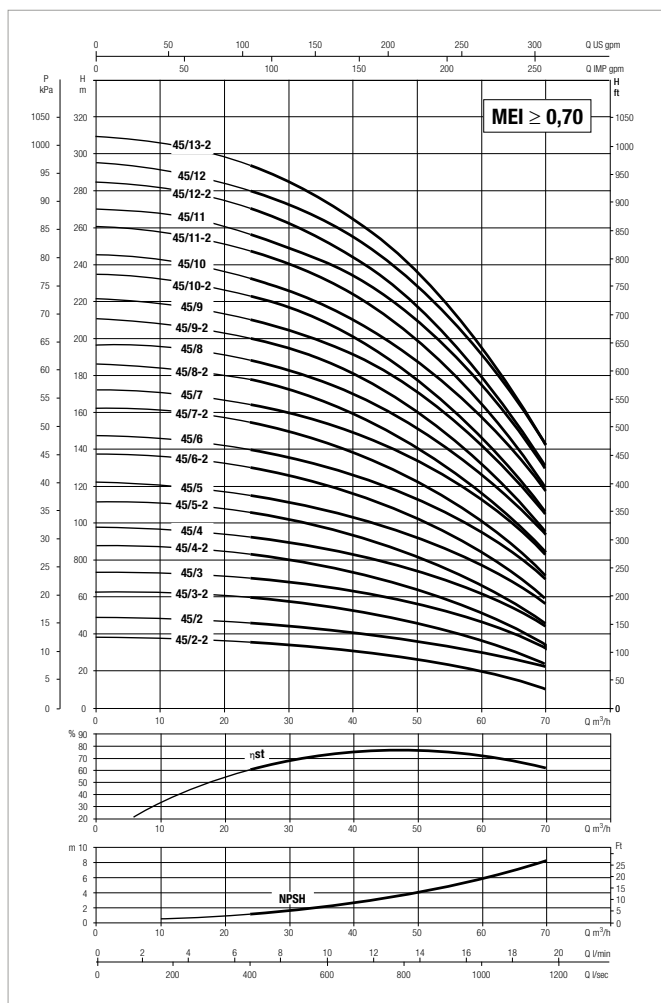


Version F: The pump is supplied without counter flanges (optional accessories, including joints and bolts).

| MODEL             | STAGE N° | B1  | B2  | G1  | G2  | C   | D   | H    | H1  | H2   | DNA = DNM (DN 65) |     |    | PACKING DIMENSIONS |     |     | WEIGHT Kg |
|-------------------|----------|-----|-----|-----|-----|-----|-----|------|-----|------|-------------------|-----|----|--------------------|-----|-----|-----------|
|                   |          |     |     |     |     |     |     |      |     |      | X                 | Y   | Z  | L/A                | L/B | H   |           |
| NKV 32/2-2 T IE3  | 2        | 220 | 290 | 170 | 240 | 190 | 320 | 947  | 105 | 537  | 185               | 145 | 65 | 1120               | 500 | 630 | 93        |
| NKV 32/2 T IE3    | 2        | 220 | 290 | 170 | 240 | 210 | 320 | 1114 | 105 | 724  | 185               | 145 | 65 | 1120               | 500 | 630 | 140       |
| NKV 32/3-2 T IE3  | 3        | 220 | 290 | 170 | 240 | 210 | 320 | 1196 | 105 | 806  | 185               | 145 | 65 | 1820               | 500 | 630 | 144       |
| NKV 32/3 T IE3    | 3        | 220 | 290 | 170 | 240 | 188 | 320 | 1243 | 105 | 806  | 185               | 145 | 65 | 1820               | 500 | 630 | 125       |
| NKV 32/4-2 T IE3  | 4        | 220 | 290 | 170 | 240 | 188 | 320 | 1325 | 105 | 888  | 185               | 145 | 65 | 1820               | 500 | 630 | 132       |
| NKV 32/4 T IE3    | 4        | 220 | 290 | 170 | 240 | 242 | 320 | 1345 | 105 | 908  | 185               | 145 | 65 | 1820               | 500 | 630 | 203       |
| NKV 32/5-2 T IE3  | 5        | 220 | 290 | 170 | 240 | 242 | 320 | 1427 | 105 | 990  | 185               | 145 | 65 | 1820               | 500 | 630 | 207       |
| NKV 32/5 T IE3    | 5        | 220 | 290 | 170 | 240 | 242 | 320 | 1495 | 105 | 990  | 185               | 145 | 65 | 1820               | 500 | 630 | 214       |
| NKV 32/6-2 T IE3  | 6        | 220 | 290 | 170 | 240 | 242 | 320 | 1577 | 105 | 1072 | 185               | 145 | 65 | 1820               | 500 | 630 | 218       |
| NKV 32/6 T IE3    | 6        | 220 | 290 | 170 | 240 | 242 | 320 | 1577 | 105 | 1072 | 185               | 145 | 65 | 1820               | 500 | 630 | 218       |
| NKV 32/7-2 T IE3  | 7        | 220 | 290 | 170 | 240 | 242 | 320 | 1659 | 105 | 1154 | 185               | 145 | 65 | 1820               | 500 | 630 | 222       |
| NKV 32/7 T IE3    | 7        | 220 | 290 | 170 | 240 | 242 | 320 | 1703 | 105 | 1154 | 185               | 145 | 65 | 1820               | 500 | 630 | 243       |
| NKV 32/8-2 T IE3  | 8        | 220 | 290 | 170 | 240 | 242 | 320 | 1785 | 105 | 1236 | 185               | 145 | 65 | 2550               | 500 | 750 | 247       |
| NKV 32/8 T IE3    | 8        | 220 | 290 | 170 | 240 | 242 | 320 | 1785 | 105 | 1236 | 185               | 145 | 65 | 2550               | 500 | 750 | 247       |
| NKV 32/9-2 T IE3  | 9        | 220 | 290 | 170 | 240 | 260 | 320 | 1898 | 105 | 1318 | 185               | 145 | 65 | 2550               | 500 | 750 | 283       |
| NKV 32/9 T IE3    | 9        | 220 | 290 | 170 | 240 | 260 | 320 | 1898 | 105 | 1318 | 185               | 145 | 65 | 2550               | 500 | 750 | 283       |
| NKV 32/10-2 T IE3 | 10       | 220 | 290 | 170 | 240 | 260 | 320 | 1980 | 105 | 1400 | 185               | 145 | 65 | 2550               | 500 | 750 | 290       |
| NKV 32/10 T IE3   | 10       | 220 | 290 | 170 | 240 | 292 | 320 | 2075 | 105 | 1405 | 185               | 145 | 65 | 2550               | 500 | 750 | 363       |
| NKV 32/11-2 T IE3 | 11       | 220 | 290 | 170 | 240 | 292 | 320 | 2157 | 105 | 1487 | 185               | 145 | 65 | 2550               | 500 | 750 | 367       |
| NKV 32/11 T IE3   | 11       | 220 | 290 | 170 | 240 | 292 | 320 | 2157 | 105 | 1487 | 185               | 145 | 65 | 2550               | 500 | 750 | 367       |
| NKV 32/12-2 T IE3 | 12       | 220 | 290 | 170 | 240 | 292 | 320 | 2239 | 105 | 1569 | 185               | 145 | 65 | 2550               | 500 | 750 | 371       |
| NKV 32/12 T IE3   | 12       | 220 | 290 | 170 | 240 | 292 | 320 | 2239 | 105 | 1569 | 185               | 145 | 65 | 2550               | 500 | 750 | 371       |
| NKV 32/13-2 T IE3 | 13       | 220 | 290 | 170 | 240 | 292 | 320 | 2321 | 105 | 1651 | 185               | 145 | 65 | 2550               | 500 | 750 | 375       |
| NKV 32/13 T IE3   | 13       | 220 | 290 | 170 | 240 | 292 | 320 | 2321 | 105 | 1651 | 185               | 145 | 65 | 2550               | 500 | 750 | 375       |

# NKV 45 - MULTISTAGE CENTRIFUGAL ELECTRIC PUMPS WITH VERTICAL AXIS

Liquid temperature range: from - 30°C to +120°C - Maximum working pressure: 32 bar (3200 kPa)

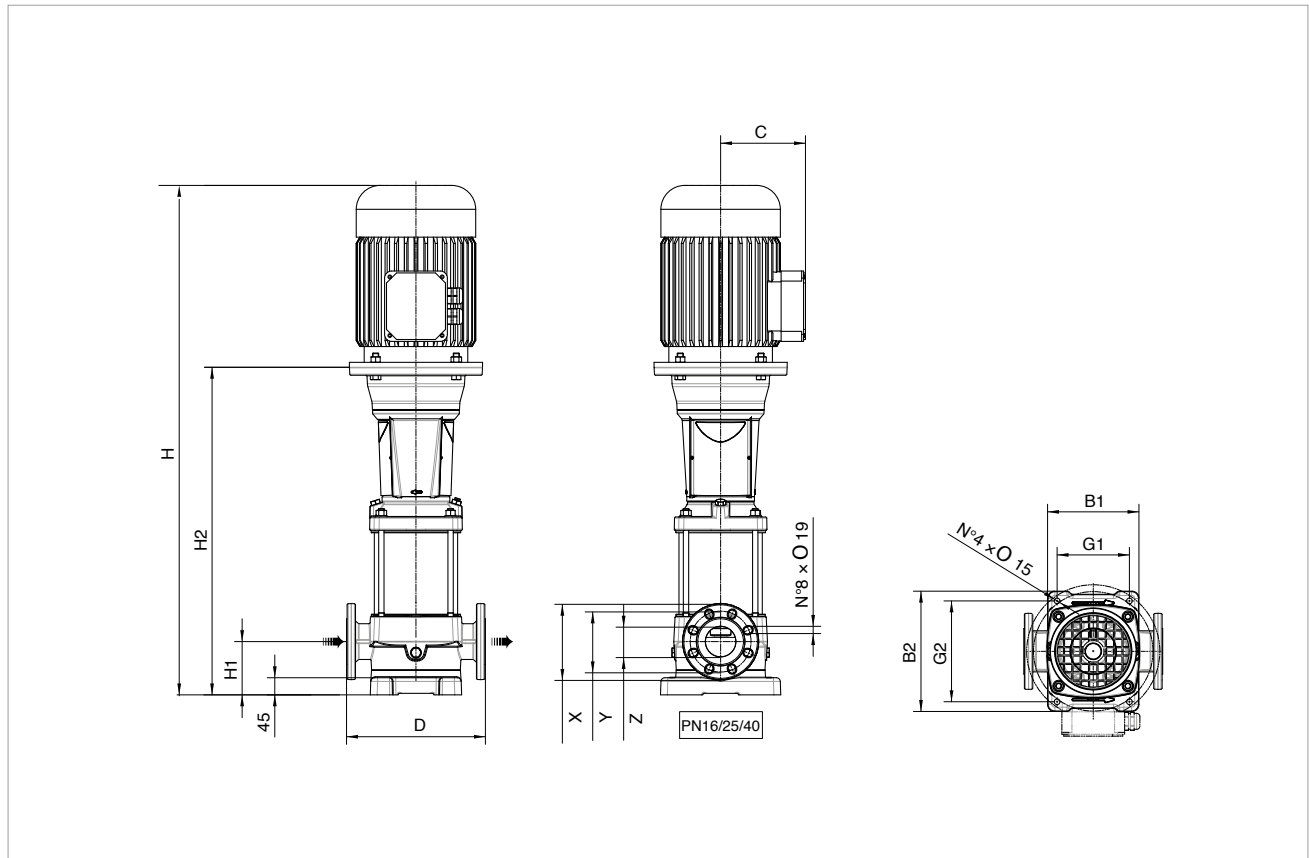


**For MEI index refer to the hydraulic efficiency section.**  
 The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equivalent to 1000 kg/m<sup>3</sup>. Tolerance of curves to ISO 9906.

| MODEL             | VOLTAGE<br>50 Hz | P2 NOMINAL |       | In A | Ist A     | Motor<br>Frame | MEC<br>Motor | 1/min | η max<br>Motor<br>% | cos φ | RPM  |      |
|-------------------|------------------|------------|-------|------|-----------|----------------|--------------|-------|---------------------|-------|------|------|
|                   |                  | kW         | HP    |      |           |                |              |       |                     |       | max  | min  |
| NKV 45/2-2 T IE3  | 3 x 400 V Δ      | 5,50       | 7,50  | 10,2 | 119,8-131 | B5             | 132S         | 2935  | 89,2                | 0,87  | 2980 | 2910 |
| NKV 45/2 T IE3    | 3 x 400 V Δ      | 7,50       | 10,00 | 14,4 | 152-169   | B5             | 132S         | 2930  | 90,1                | 0,84  | 2980 | 2900 |
| NKV 45/3-2 T IE3  | 3 x 400 V Δ      | 11,00      | 15,00 | 19,7 | 156-171   | B5             | 160M         | 2950  | 91,2                | 0,89  | 2980 | 2930 |
| NKV 45/3 T IE3    | 3 x 400 V Δ      | 11,00      | 15,00 | 19,7 | 156-171   | B5             | 160M         | 2950  | 91,2                | 0,89  | 2980 | 2930 |
| NKV 45/4-2 T IE3  | 3 x 400 V Δ      | 15,00      | 20,00 | 26,7 | 185-106   | B5             | 160M         | 2940  | 91,9                | 0,89  | 2980 | 2940 |
| NKV 45/4 T IE3    | 3 x 400 V Δ      | 15,00      | 20,00 | 26,7 | 185-106   | B5             | 160M         | 2940  | 91,9                | 0,89  | 2980 | 2940 |
| NKV 45/5-2 T IE3  | 3 x 400 V Δ      | 18,50      | 25,00 | 33   | 220-129   | B5             | 160L         | 2950  | 92,4                | 0,88  | 2990 | 2940 |
| NKV 45/5 T IE3    | 3 x 400 V Δ      | 18,50      | 25,00 | 33   | 220-129   | B5             | 160L         | 2950  | 92,4                | 0,88  | 2990 | 2940 |
| NKV 45/6-2 T IE3  | 3 x 400 V Δ      | 22,00      | 30,00 | 38,1 | 156-171   | B5             | 180M         | 2955  | 92,7                | 0,9   | 2990 | 2960 |
| NKV 45/6 T IE3    | 3 x 400 V Δ      | 22,00      | 30,00 | 38,1 | 156-171   | B5             | 180M         | 2955  | 92,7                | 0,9   | 2990 | 2960 |
| NKV 45/7-2 T IE3  | 3 x 400 V Δ      | 30,00      | 40,00 | 52,1 | 185-106   | B5             | 200L         | 2960  | 93,3                | 0,89  | 2990 | 2950 |
| NKV 45/7 T IE3    | 3 x 400 V Δ      | 30,00      | 40,00 | 52,1 | 185-106   | B5             | 200L         | 2960  | 93,3                | 0,89  | 2990 | 2950 |
| NKV 45/8-2 T IE3  | 3 x 400 V Δ      | 30,00      | 40,00 | 52,1 | 185-106   | B5             | 200L         | 2960  | 93,3                | 0,89  | 2990 | 2950 |
| NKV 45/8 T IE3    | 3 x 400 V Δ      | 30,00      | 40,00 | 52,1 | 185-106   | B5             | 200L         | 2960  | 93,3                | 0,89  | 2990 | 2950 |
| NKV 45/9-2 T IE3  | 3 x 400 V Δ      | 37,00      | 50,00 | 62,6 | 220-129   | B5             | 200L         | 2960  | 93,7                | 0,91  | 2990 | 2960 |
| NKV 45/9 T IE3    | 3 x 400 V Δ      | 37,00      | 50,00 | 62,6 | 220-129   | B5             | 200L         | 2960  | 93,7                | 0,91  | 2990 | 2960 |
| NKV 45/10-2 T IE3 | 3 x 400 V Δ      | 37,00      | 50,00 | 62,6 | 220-129   | B5             | 200L         | 2960  | 93,7                | 0,91  | 2990 | 2960 |
| NKV 45/10 T IE3   | 3 x 400 V Δ      | 37,00      | 50,00 | 62,6 | 220-129   | B5             | 200L         | 2960  | 93,7                | 0,91  | 2990 | 2960 |
| NKV 45/11-2 T IE3 | 3 x 400 V Δ      | 45,00      | 60,00 | 78,4 | 220-129   | B5             | 225M         | 2965  | 94                  | 0,88  | 2990 | 2960 |
| NKV 45/11 T IE3   | 3 x 400 V Δ      | 45,00      | 60,00 | 78,4 | 220-129   | B5             | 225M         | 2965  | 94                  | 0,88  | 2990 | 2960 |
| NKV 45/12-2 T IE3 | 3 x 400 V Δ      | 45,00      | 60,00 | 78,4 | 220-129   | B5             | 225M         | 2965  | 94                  | 0,88  | 2990 | 2960 |
| NKV 45/12 T IE3   | 3 x 400 V Δ      | 45,00      | 60,00 | 78,4 | 220-129   | B5             | 225M         | 2965  | 94                  | 0,88  | 2990 | 2960 |
| NKV 45/13-2 T IE3 | 3 x 400 V Δ      | 45,00      | 60,00 | 78,4 | 220-129   | B5             | 225M         | 2965  | 94                  | 0,88  | 2990 | 2960 |

# NKV 45 - MULTISTAGE CENTRIFUGAL ELECTRIC PUMPS WITH VERTICAL AXIS

Liquid temperature range: from - 30°C to +120°C - Maximum working pressure: 32 bar (3200 kPa)

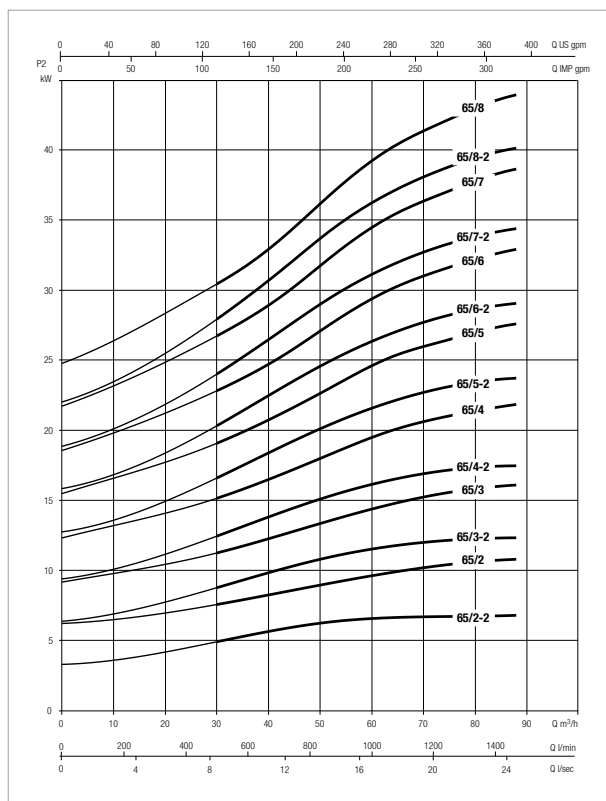
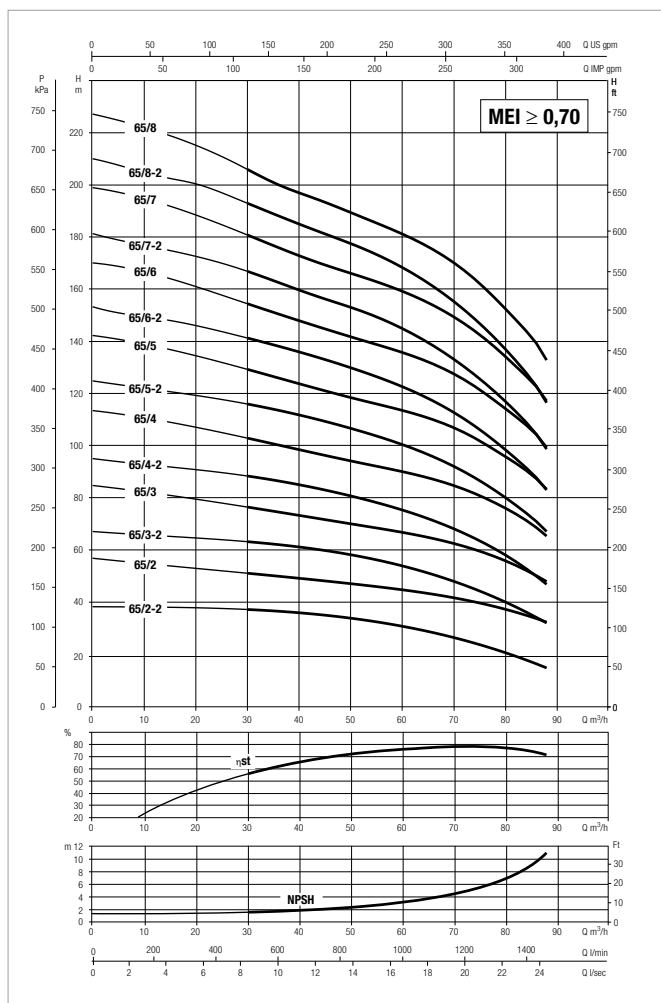


Version F: The pump is supplied without counter flanges (optional accessories, including joints and bolts).

| MODEL             | STAGE N° | B1  | B2  | G1  | G2  | C   | D   | H    | H1  | H2   | DNA = DNM (DN 80) |     |    | PACKING DIMENSIONS |     |     | WEIGHT Kg |
|-------------------|----------|-----|-----|-----|-----|-----|-----|------|-----|------|-------------------|-----|----|--------------------|-----|-----|-----------|
|                   |          |     |     |     |     |     |     |      |     |      | X                 | Y   | Z  | L/A                | L/B | H   |           |
| NKV 45/2-2 T IE3  | 2        | 240 | 316 | 190 | 265 | 161 | 365 | 1149 | 140 | 759  | 200               | 160 | 80 | 1820               | 500 | 630 | 146       |
| NKV 45/2 T IE3    | 2        | 240 | 316 | 190 | 265 | 188 | 365 | 1196 | 140 | 759  | 200               | 160 | 80 | 1820               | 500 | 630 | 127       |
| NKV 45/3-2 T IE3  | 3        | 240 | 316 | 190 | 265 | 242 | 365 | 1298 | 140 | 861  | 200               | 160 | 80 | 1820               | 500 | 630 | 205       |
| NKV 45/3 T IE3    | 3        | 240 | 316 | 190 | 265 | 242 | 365 | 1298 | 140 | 861  | 200               | 160 | 80 | 1820               | 500 | 630 | 205       |
| NKV 45/4-2 T IE3  | 4        | 240 | 316 | 190 | 265 | 242 | 365 | 1448 | 140 | 943  | 200               | 160 | 80 | 1820               | 500 | 630 | 216       |
| NKV 45/4 T IE3    | 4        | 240 | 316 | 190 | 265 | 242 | 365 | 1448 | 140 | 943  | 200               | 160 | 80 | 1820               | 500 | 630 | 216       |
| NKV 45/5-2 T IE3  | 5        | 240 | 316 | 190 | 265 | 242 | 365 | 1574 | 140 | 1025 | 200               | 160 | 80 | 1820               | 500 | 630 | 241       |
| NKV 45/5 T IE3    | 5        | 240 | 316 | 190 | 265 | 242 | 365 | 1574 | 140 | 1025 | 200               | 160 | 80 | 1820               | 500 | 630 | 241       |
| NKV 45/6-2 T IE3  | 6        | 240 | 316 | 190 | 265 | 260 | 365 | 1687 | 140 | 1107 | 200               | 160 | 80 | 1820               | 500 | 630 | 276       |
| NKV 45/6 T IE3    | 6        | 240 | 316 | 190 | 265 | 260 | 365 | 1687 | 140 | 1107 | 200               | 160 | 80 | 1820               | 500 | 630 | 276       |
| NKV 45/7-2 T IE3  | 7        | 240 | 316 | 190 | 265 | 292 | 365 | 1864 | 140 | 1194 | 200               | 160 | 80 | 2550               | 500 | 750 | 356       |
| NKV 45/7 T IE3    | 7        | 240 | 316 | 190 | 265 | 292 | 365 | 1864 | 140 | 1194 | 200               | 160 | 80 | 2550               | 500 | 750 | 356       |
| NKV 45/8-2 T IE3  | 8        | 240 | 316 | 190 | 265 | 292 | 365 | 1946 | 140 | 1276 | 200               | 160 | 80 | 2550               | 500 | 750 | 360       |
| NKV 45/8 T IE3    | 8        | 240 | 316 | 190 | 265 | 292 | 365 | 1946 | 140 | 1276 | 200               | 160 | 80 | 2550               | 500 | 750 | 360       |
| NKV 45/9-2 T IE3  | 9        | 240 | 316 | 190 | 265 | 292 | 365 | 2028 | 140 | 1358 | 200               | 160 | 80 | 2550               | 500 | 750 | 384       |
| NKV 45/9 T IE3    | 9        | 240 | 316 | 190 | 265 | 292 | 365 | 2028 | 140 | 1358 | 200               | 160 | 80 | 2550               | 500 | 750 | 384       |
| NKV 45/10-2 T IE3 | 10       | 240 | 316 | 190 | 265 | 292 | 365 | 2110 | 140 | 1440 | 200               | 160 | 80 | 2550               | 500 | 750 | 388       |
| NKV 45/10 T IE3   | 10       | 240 | 316 | 190 | 265 | 292 | 365 | 2110 | 140 | 1440 | 200               | 160 | 80 | 2550               | 500 | 750 | 388       |
| NKV 45/11-2 T IE3 | 11       | 240 | 316 | 190 | 265 | 315 | 365 | 2232 | 140 | 1522 | 200               | 160 | 80 | 2550               | 500 | 750 | 449       |
| NKV 45/11 T IE3   | 11       | 240 | 316 | 190 | 265 | 315 | 365 | 2232 | 140 | 1522 | 200               | 160 | 80 | 2550               | 500 | 750 | 449       |
| NKV 45/12-2 T IE3 | 12       | 240 | 316 | 190 | 265 | 315 | 365 | 2314 | 140 | 1604 | 200               | 160 | 80 | 2550               | 500 | 750 | 453       |
| NKV 45/12 T IE3   | 12       | 240 | 316 | 190 | 265 | 315 | 365 | 2314 | 140 | 1604 | 200               | 160 | 80 | 2550               | 500 | 750 | 453       |
| NKV 45/13-2 T IE3 | 13       | 240 | 316 | 190 | 265 | 315 | 365 | 2396 | 140 | 1686 | 200               | 160 | 80 | 2550               | 500 | 750 | 457       |

# NKV 65 - MULTISTAGE CENTRIFUGAL ELECTRIC PUMPS WITH VERTICAL AXIS

Liquid temperature range: from - 30°C to +120°C - Maximum working pressure: 25 bar (2500 kPa)

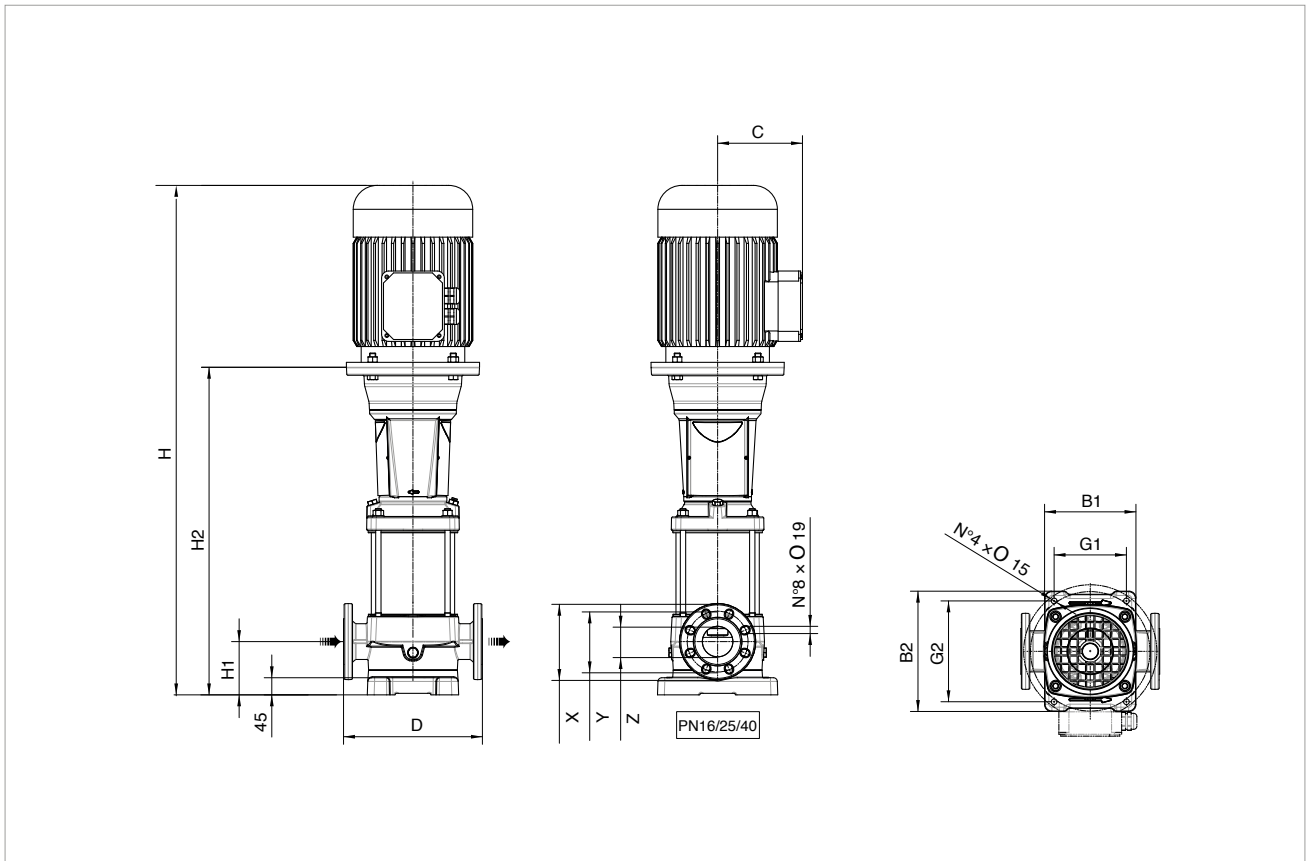


For MEI index refer to the hydraulic efficiency section.  
The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equivalent to 1000 kg/m<sup>3</sup>. Tolerance of curves to ISO 9906.

| MODEL            | VOLTAGE<br>50 Hz | P2 NOMINAL |       | In A | Ist A   | Motor<br>Frame | MEC<br>Motor | 1/min | η max<br>Motor<br>% | cos φ | RPM  |      |
|------------------|------------------|------------|-------|------|---------|----------------|--------------|-------|---------------------|-------|------|------|
|                  |                  | kW         | HP    |      |         |                |              |       |                     |       | max  | min  |
| NKV 65/2-2 T IE3 | 3 x 400 V Δ      | 7,50       | 10,00 | 14,4 | 152-169 | B5             | 132S         | 2930  | 90,1                | 0,84  | 2980 | 2900 |
| NKV 65/2 T IE3   | 3 x 400 V Δ      | 11,00      | 15,00 | 19,7 | 156-171 | B5             | 160M         | 2950  | 91,2                | 0,89  | 2980 | 2930 |
| NKV 65/3-2 T IE3 | 3 x 400 V Δ      | 15,00      | 20,00 | 26,7 | 185-106 | B5             | 160M         | 2940  | 91,9                | 0,89  | 2980 | 2940 |
| NKV 65/3 T IE3   | 3 x 400 V Δ      | 18,50      | 25,00 | 33   | 220-129 | B5             | 160L         | 2950  | 92,4                | 0,88  | 2990 | 2940 |
| NKV 65/4-2 T IE3 | 3 x 400 V Δ      | 18,50      | 25,00 | 33   | 220-129 | B5             | 160L         | 2950  | 92,4                | 0,88  | 2990 | 2940 |
| NKV 65/4 T IE3   | 3 x 400 V Δ      | 22,00      | 30,00 | 38,1 | 156-171 | B5             | 180M         | 2955  | 92,7                | 0,9   | 2990 | 2960 |
| NKV 65/5-2 T IE3 | 3 x 400 V Δ      | 30,00      | 40,00 | 52,1 | 185-106 | B5             | 200L         | 2960  | 93,3                | 0,89  | 2990 | 2950 |
| NKV 65/5 T IE3   | 3 x 400 V Δ      | 30,00      | 40,00 | 52,1 | 185-106 | B5             | 200L         | 2960  | 93,3                | 0,89  | 2990 | 2950 |
| NKV 65/6-2 T IE3 | 3 x 400 V Δ      | 30,00      | 40,00 | 52,1 | 185-106 | B5             | 200L         | 2960  | 93,3                | 0,89  | 2990 | 2950 |
| NKV 65/6 T IE3   | 3 x 400 V Δ      | 37,00      | 50,00 | 62,6 | 220-129 | B5             | 200L         | 2960  | 93,7                | 0,91  | 2990 | 2960 |
| NKV 65/7-2 T IE3 | 3 x 400 V Δ      | 37,00      | 50,00 | 62,6 | 220-129 | B5             | 200L         | 2960  | 93,7                | 0,91  | 2990 | 2960 |
| NKV 65/7 T IE3   | 3 x 400 V Δ      | 45,00      | 60,00 | 78,4 | 220-129 | B5             | 225M         | 2965  | 94                  | 0,88  | 2990 | 2960 |
| NKV 65/8-2 T IE3 | 3 x 400 V Δ      | 45,00      | 60,00 | 78,4 | 220-129 | B5             | 225M         | 2965  | 94                  | 0,88  | 2990 | 2960 |
| NKV 65/8 T IE3   | 3 x 400 V Δ      | 45,00      | 60,00 | 78,4 | 220-129 | B5             | 225M         | 2965  | 94                  | 0,88  | 2990 | 2960 |

# NKV 65 - MULTISTAGE CENTRIFUGAL ELECTRICPUMPS WITH VERTICAL AXIS

Liquid temperature range: from - 30°C to +120°C - Maximum working pressure: 25 bar (2500 kPa)

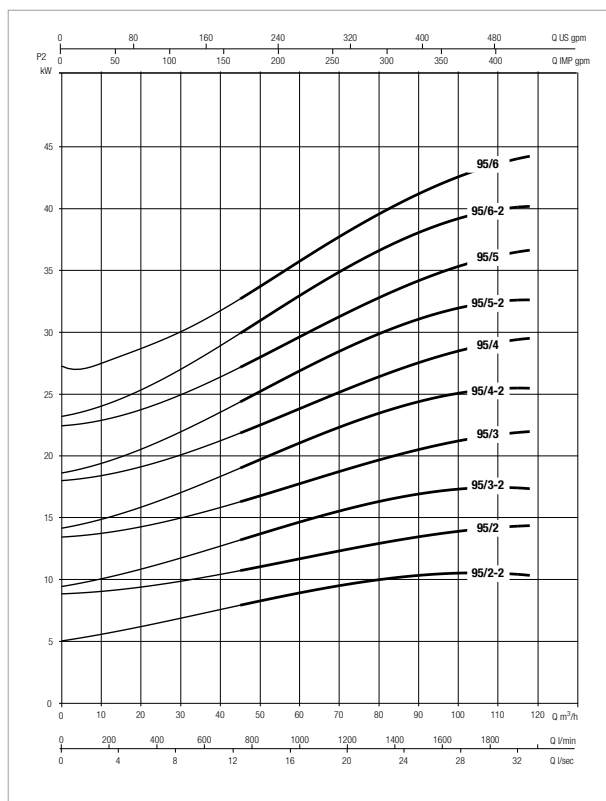
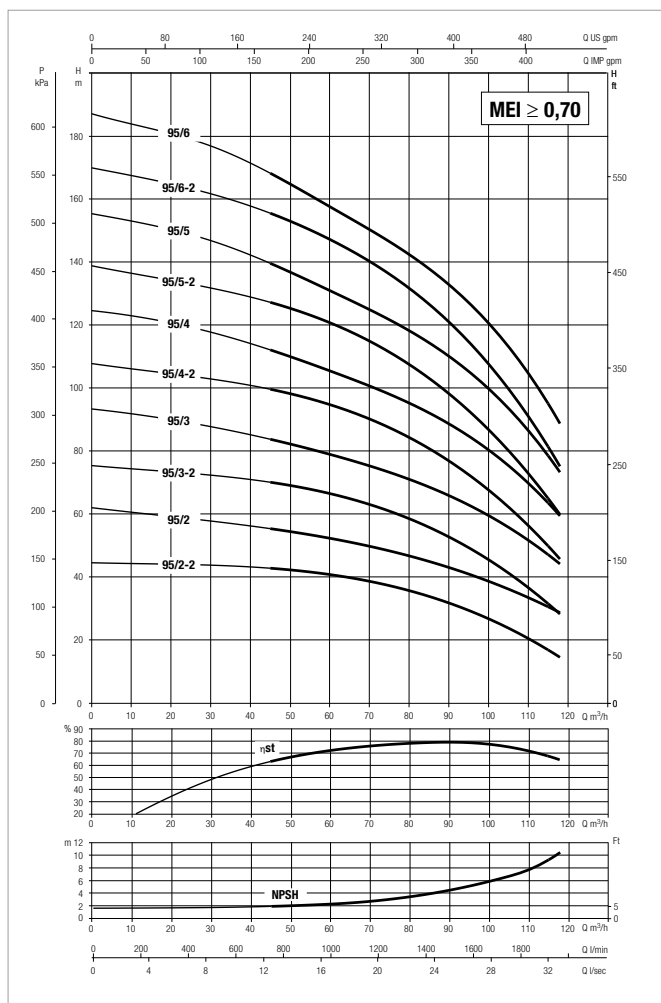


Version F: The pump is supplied without counter flanges (optional accessories, including joints and bolts).

| MODEL            | STAGE N° | B1  | B2  | G1  | G2  | C   | D   | H      | H1  | H2     | DNA = DNM (DN 100) |     |     | PACKING DIMENSIONS |     |     | WEIGHT Kg |
|------------------|----------|-----|-----|-----|-----|-----|-----|--------|-----|--------|--------------------|-----|-----|--------------------|-----|-----|-----------|
|                  |          |     |     |     |     |     |     |        |     |        | X                  | Y   | Z   | L/A                | L/B | H   |           |
| NKV 65/2-2 T IE3 | 2        | 240 | 316 | 190 | 265 | 161 | 365 | 1266,2 | 140 | 829,2  | 230                | 180 | 100 | 1820               | 500 | 630 | 84        |
| NKV 65/2 T IE3   | 2        | 240 | 316 | 190 | 265 | 198 | 365 | 1354,2 | 140 | 849,2  | 230                | 180 | 100 | 1820               | 500 | 630 | 155       |
| NKV 65/3-2 T IE3 | 3        | 240 | 316 | 190 | 265 | 198 | 365 | 1446,3 | 140 | 941,3  | 230                | 180 | 100 | 1820               | 500 | 630 | 171       |
| NKV 65/3 T IE3   | 3        | 240 | 316 | 190 | 265 | 235 | 365 | 1490,3 | 140 | 941,3  | 230                | 180 | 100 | 1820               | 500 | 630 | 213       |
| NKV 65/4-2 T IE3 | 4        | 240 | 316 | 190 | 265 | 235 | 365 | 1582,4 | 140 | 1033,4 | 230                | 180 | 100 | 1820               | 500 | 630 | 213       |
| NKV 65/4 T IE3   | 4        | 240 | 316 | 190 | 265 | 238 | 365 | 1613,4 | 140 | 1033,4 | 230                | 180 | 100 | 1820               | 500 | 630 | 255       |
| NKV 65/5-2 T IE3 | 5        | 240 | 316 | 190 | 265 | 300 | 365 | 1800,5 | 140 | 1130,5 | 230                | 180 | 100 | 2550               | 500 | 750 | 471       |
| NKV 65/5 T IE3   | 5        | 240 | 316 | 190 | 265 | 300 | 365 | 1800,5 | 140 | 1130,5 | 230                | 180 | 100 | 2550               | 500 | 750 | 471       |
| NKV 65/6-2 T IE3 | 6        | 240 | 316 | 190 | 265 | 300 | 365 | 1892,6 | 140 | 1222,6 | 230                | 180 | 100 | 2550               | 500 | 750 | 471       |
| NKV 65/6 T IE3   | 6        | 240 | 316 | 190 | 265 | 300 | 365 | 1892,6 | 140 | 1222,6 | 230                | 180 | 100 | 2550               | 500 | 750 | 517       |
| NKV 65/7-2 T IE3 | 7        | 240 | 316 | 190 | 265 | 300 | 365 | 1984,7 | 140 | 1314,7 | 230                | 180 | 100 | 2550               | 500 | 750 | 517       |
| NKV 65/7 T IE3   | 7        | 240 | 316 | 190 | 265 | 335 | 365 | 2024,7 | 140 | 1314,7 | 230                | 180 | 100 | 2550               | 500 | 750 | 653       |
| NKV 65/8-2 T IE3 | 8        | 240 | 316 | 190 | 265 | 335 | 365 | 2116,8 | 140 | 1406,8 | 230                | 180 | 100 | 2550               | 500 | 750 | 653       |
| NKV 65/8 T IE3   | 8        | 240 | 316 | 190 | 265 | 335 | 365 | 2116,8 | 140 | 1406,8 | 230                | 180 | 100 | 2550               | 500 | 750 | 653       |

# NKV 95 - MULTISTAGE CENTRIFUGAL ELECTRIC PUMPS WITH VERTICAL AXIS

Liquid temperature range: from - 30°C to +120°C - Maximum working pressure: 25 bar (2500 kPa)

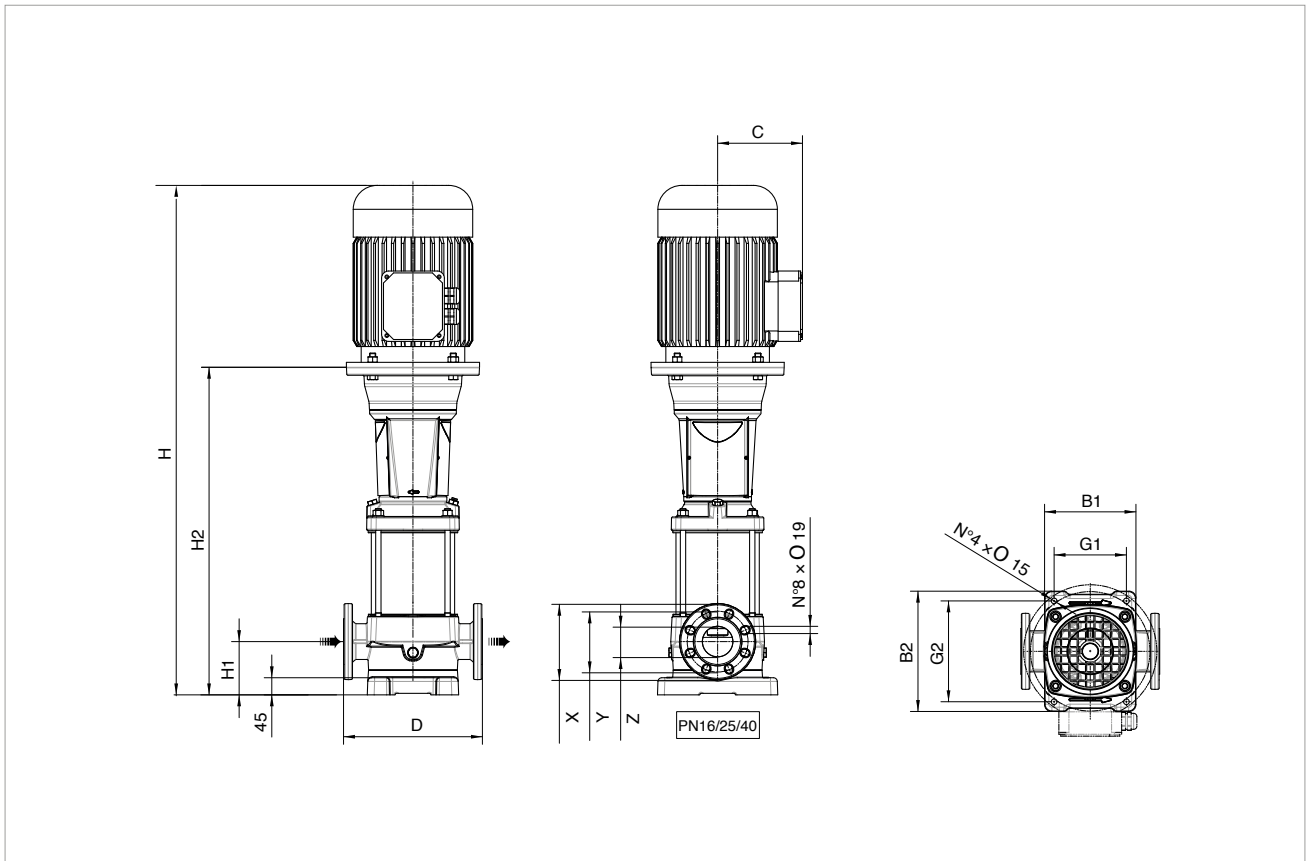


For MEI index refer to the hydraulic efficiency section.  
The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equivalent to 1000 kg/m<sup>3</sup>. Tolerance of curves to ISO 9906.

| MODEL            | VOLTAGE<br>50 Hz | P2 NOMINAL |       | In A | Ist A   | Motor<br>Frame | MEC<br>Motor | 1/min | η max<br>Motor<br>% | cos φ | RPM  |      |
|------------------|------------------|------------|-------|------|---------|----------------|--------------|-------|---------------------|-------|------|------|
|                  |                  | kW         | HP    |      |         |                |              |       |                     |       | max  | min  |
| NKV 95/2-2 T IE3 | 3 x 400 V Δ      | 11,00      | 15,00 | 19,7 | 156-171 | B5             | 160M         | 2950  | 91,2                | 0,89  | 2980 | 2930 |
| NKV 95/2 T IE3   | 3 x 400 V Δ      | 15,00      | 20,00 | 26,7 | 185-106 | B5             | 160M         | 2940  | 91,9                | 0,89  | 2980 | 2940 |
| NKV 95/3-2 T IE3 | 3 x 400 V Δ      | 18,50      | 25,00 | 33   | 220-129 | B5             | 160L         | 2950  | 92,4                | 0,88  | 2990 | 2940 |
| NKV 95/3 T IE3   | 3 x 400 V Δ      | 22,00      | 30,00 | 38,1 | 156-171 | B5             | 180M         | 2955  | 92,7                | 0,9   | 2990 | 2960 |
| NKV 95/4-2 T IE3 | 3 x 400 V Δ      | 30,00      | 40,00 | 52,1 | 185-106 | B5             | 200L         | 2960  | 93,3                | 0,89  | 2990 | 2950 |
| NKV 95/4 T IE3   | 3 x 400 V Δ      | 30,00      | 40,00 | 52,1 | 185-106 | B5             | 200L         | 2960  | 93,3                | 0,89  | 2990 | 2950 |
| NKV 95/5-2 T IE3 | 3 x 400 V Δ      | 37,00      | 50,00 | 62,6 | 220-129 | B5             | 200L         | 2960  | 93,7                | 0,91  | 2990 | 2960 |
| NKV 95/5 T IE3   | 3 x 400 V Δ      | 37,00      | 50,00 | 62,6 | 220-129 | B5             | 200L         | 2960  | 93,7                | 0,91  | 2990 | 2960 |
| NKV 95/6-2 T IE3 | 3 x 400 V Δ      | 45,00      | 60,00 | 78,4 | 220-129 | B5             | 225M         | 2965  | 94                  | 0,88  | 2990 | 2960 |
| NKV 95/6 T IE3   | 3 x 400 V Δ      | 45,00      | 60,00 | 78,4 | 220-129 | B5             | 225M         | 2965  | 94                  | 0,88  | 2990 | 2960 |

# NKV 95 - MULTISTAGE CENTRIFUGAL ELECTRIC PUMPS WITH VERTICAL AXIS

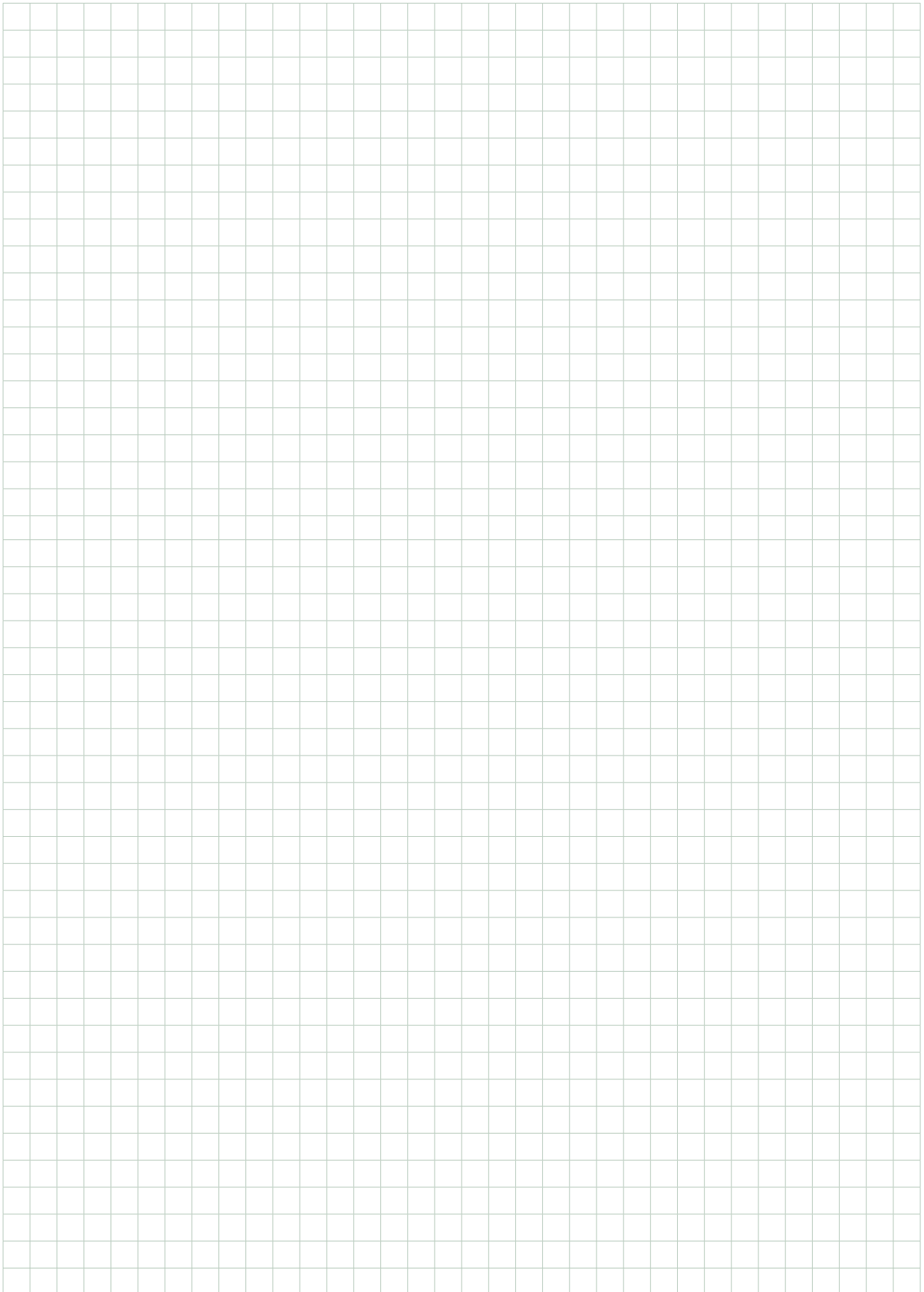
Liquid temperature range: from - 30°C to +120°C - Maximum working pressure: 25 bar (2500 kPa)



Version F: The pump is supplied without counter flanges (optional accessories, including joints and bolts).

| MODEL            | STAGE N° | B1  | B2  | G1  | G2  | C   | D   | H      | H1  | H2     | DNA = DNM (DN 100) |     |     | PACKING DIMENSIONS |     |     | WEIGHT Kg |
|------------------|----------|-----|-----|-----|-----|-----|-----|--------|-----|--------|--------------------|-----|-----|--------------------|-----|-----|-----------|
|                  |          |     |     |     |     |     |     |        |     |        | X                  | Y   | Z   | L/A                | L/B | H   |           |
| NKV 95/2-2 T IE3 | 2        | 260 | 341 | 199 | 280 | 198 | 380 | 1354,2 | 140 | 849,2  | 230                | 180 | 100 | 1820               | 500 | 630 | 186       |
| NKV 95/2 T IE3   | 2        | 260 | 341 | 199 | 280 | 198 | 380 | 1354,2 | 140 | 849,2  | 230                | 180 | 100 | 1820               | 500 | 630 | 196       |
| NKV 95/3-2 T IE3 | 3        | 260 | 341 | 199 | 280 | 235 | 380 | 1490,3 | 140 | 941,3  | 230                | 180 | 100 | 1820               | 500 | 630 | 217       |
| NKV 95/3 T IE3   | 3        | 260 | 341 | 199 | 280 | 238 | 380 | 1521,3 | 140 | 941,3  | 230                | 180 | 100 | 1820               | 500 | 630 | 238       |
| NKV 95/4-2 T IE3 | 4        | 260 | 341 | 199 | 280 | 300 | 380 | 1708,4 | 140 | 1038,4 | 230                | 180 | 100 | 1820               | 500 | 630 | 343       |
| NKV 95/4 T IE3   | 4        | 260 | 341 | 199 | 280 | 300 | 380 | 1708,4 | 140 | 1038,4 | 230                | 180 | 100 | 1820               | 500 | 630 | 343       |
| NKV 95/5-2 T IE3 | 5        | 260 | 341 | 199 | 280 | 300 | 380 | 1800,5 | 140 | 1130,5 | 230                | 180 | 100 | 2550               | 500 | 750 | 379       |
| NKV 95/5 T IE3   | 5        | 260 | 341 | 199 | 280 | 300 | 380 | 1800,5 | 140 | 1130,5 | 230                | 180 | 100 | 2550               | 500 | 750 | 379       |
| NKV 95/6-2 T IE3 | 6        | 260 | 341 | 199 | 280 | 335 | 380 | 1932,6 | 140 | 1222,6 | 230                | 180 | 100 | 2550               | 500 | 750 | 455       |
| NKV 95/6 T IE3   | 6        | 260 | 341 | 199 | 280 | 335 | 380 | 1932,6 | 140 | 1222,6 | 230                | 180 | 100 | 2550               | 500 | 750 | 455       |

# NOTE





# HYDRAULIC EFFICIENCY

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EU 547/2012 REGULATION - MEI

### GENERAL INFORMATION

The MEI index (Minimum Efficiency Index) was issued with the objective of defining a performance threshold value applicable to all the water pumps found on the market. The MEI index takes into account the size of the pump, its specific speed, and its speed of rotation.

The regulation applies to centrifugal pumps used for pumping clean waters included in the following categories:

- Axial suction pumps with support (ESOB - End Suction Own Bearings)
- Horizontal monobloc axial suction pumps (ESCC - End Suction Close Coupled)
- In-line monobloc axial suction pumps (ESCCI End Suction Close Coupled Inline)
- Multistage vertical pumps (MS-V - Vertical multistage)
- Multistage submerged pumps (MSS - Submersible multistage)

MEI is a dimensionless indicator for hydraulic performance, and a measure of the quality of the sizing of the pump in relation to the performance.

The higher the MEI value, the better is the sizing of the pump in relation to the performance, and the lower is the annual energy consumption due to the use of the pump. In theory, the upper limit of the MEI values is open, and only depends on physical and technological limitations.

**The minimum efficiency index (MEI) is based on the maximum diameter of the impeller. Multistage vertical water pumps must be tested in the 3-stage version.**

The value of reference for the more efficient water pumps is  $MEI \geq 0,70$ .

The efficiency of a pump with turned impeller is generally lower to that of a pump with full impeller diameter. The turning of the impeller adapts the pump to a fixed point of operation, resulting in lower energy consumption.

The operation of this water pump with variable operating points can be more efficient and economical if controlled, for example, by means of a variable speed motor adapting the operation of the pump to the system.

The information on the efficiency of reference can be found at the address: [www.dabpumps.com](http://www.dabpumps.com). In alternative contact your local sales representatives.

The  $MEI=0,7$  and  $MEI=0,4$  efficiency charts for the different types of pumps can be found at the website: [www.europump.org/efficiencycharts](http://www.europump.org/efficiencycharts)

| PUMP MODEL  | IMPELLER | MEI            |
|-------------|----------|----------------|
| K 20/41     | -        | not applicable |
| K 30/70     | -        |                |
| K 36/100    | Full     | $\geq 0,70$    |
| K 30/100    | Turned   | $\geq 0,70$    |
| K 12/200    | Full     | $\geq 0,70$    |
| K 55/200 T  | Full     | $\geq 0,70$    |
| K 36/200 T  | Turned   |                |
| K 40/200 T  | Turned   |                |
| K 14/400    | Full     | $\geq 0,40$    |
| K 28/500    | Full     | $\geq 0,70$    |
| K 11/500 T  | Turned   |                |
| K 18/500 T  | Turned   |                |
| K 50/400 T  | Full     | $\geq 0,50$    |
| K 40/400 T  | Turned   | $\geq 0,50$    |
| K 50/800 T  | Full     | $\geq 0,60$    |
| K 30/800 T  | Turned   |                |
| K 40/800 T  | Turned   |                |
| K 35/1200 T | Full     | $\geq 0,60$    |
| K 20/1200 T | Turned   |                |
| K 25/1200 T | Turned   |                |

| PUMP MODEL | IMPELLER | MEI         |
|------------|----------|-------------|
| KC/KCV 300 | Full     | $\geq 0,40$ |
| KC/KCV 250 | Full     |             |
| KC/KCV 200 | Turned   |             |
| KC/KCV 150 | Turned   |             |

| PUMP MODEL      | IMPELLER | MEI            |
|-----------------|----------|----------------|
| KI 30/90 M - T  | Full     | $\geq 0,40$    |
| KI 30/120 M - T | Full     |                |
| KI 40/120 M - T | -        | not applicable |

# HYDRAULIC EFFICIENCY

EU 547/2012 REGULATION - MEI

| PUMP MODEL                 | IMPELLER | MEI    |
|----------------------------|----------|--------|
| NKM-G 32-125.1/140 T 0,25  | Full     | ≥ 0,40 |
| NKP-G 32-125.1/140 T 2,2   | Full     | ≥ 0,40 |
| NKP-G 32-125.1/102 T 0,75  | Turned   |        |
| NKP-G 32-125.1/115 T 1,1   | Turned   |        |
| NKP-G 32-125.1/125 T 1,5   | Turned   |        |
| NKM-G 32-160.1/169 T 0,37  | Full     | ≥ 0,40 |
| NKP-G 32-160.1/177         | Full     | ≥ 0,40 |
| NKP-G 32-160.1/155 T 2,2   | Turned   |        |
| NKP-G 32-160.1/166 T 3     | Turned   |        |
| NKM-G 32-200.1/200 T 0,55  | Full     | ≥ 0,40 |
| NKP-G 32-200.1/205 T 5,5   | Full     | ≥ 0,40 |
| NKP-G 32-200.1/188 T 4     | Turned   |        |
| NKM-G 32-125/142 T 0,37    | Full     | ≥ 0,40 |
| NKP-G 32-125/142 T 3       | Full     | ≥ 0,40 |
| NKP-G 32-125/110 T 1,1     | Turned   |        |
| NKP-G 32-125/120 T 1,5     | Turned   |        |
| NKP-G 32-125/130 T 2,2     | Turned   |        |
| NKM-G 32-160/169 T 0,55    | Full     | ≥ 0,40 |
| NKP-G 32-160/177 T 5,5     | Full     | ≥ 0,40 |
| NKP-G 32-160/151 T 3       | Turned   |        |
| NKP-G 32-160/163 T 4       | Turned   |        |
| NKM-G 32-200/219 T 1,1     | Full     | ≥ 0,60 |
| NKM-G 32-200/200 T 0,75    | Turned   |        |
| NKP-G 32-200/210 T 7,5     | Full     | ≥ 0,50 |
| NKP-G 32-200/190 T 5,5     | Turned   |        |
| NKM-G 40-125/142 T 0,55    | Full     | ≥ 0,40 |
| NKM-G 40-125/115 T 0,25    | Turned   |        |
| NKM-G 40-125/130 T 0,37    | Turned   |        |
| NKP-G 40-125/139 1 A T 4   | Full     | ≥ 0,40 |
| NKP-G 40-125/107 7 A T 1,5 | Turned   |        |
| NKP-G 40-125/120 5 A T 2,2 | Turned   |        |
| NKP-G 40-125/130 3 A T 3   | Turned   |        |
| NKM-G 40-160/166 T 0,75    | Full     | ≥ 0,40 |
| NKM-G 40-160/153 T 0,55    | Turned   |        |
| NKP-G 40-160/172 T 7,5     | Full     | ≥ 0,50 |
| NKP-G 40-160/158 T 5,5     | Turned   |        |
| NKM-G 40-200/219 T 1,5     | Full     | ≥ 0,60 |
| NKM-G 40-200/200 T 1,1     | Turned   |        |
| NKP-G 40-200/210 T 11      | Full     | ≥ 0,40 |

| PUMP MODEL              | IMPELLER | MEI    |
|-------------------------|----------|--------|
| NKM-G 40-250/260 T 3    | Full     | ≥ 0,60 |
| NKM-G 40-250/245 T 2,2  | Turned   |        |
| NKP-G 40-250/260 T 22   | Full     | ≥ 0,50 |
| NKP-G 40-250/230 T 15   | Turned   |        |
| NKP-G 40-250/245 T 18,5 | Turned   |        |
| NKM-G 50-125/141 T 0,75 | Full     | ≥ 0,40 |
| NKM-G 50-125/130 T 0,55 | Turned   |        |
| NKP-G 50-125/144 T 6,9  | Full     | ≥ 0,40 |
| NKP-G 50-125/115 T 3    | Turned   |        |
| NKP-G 50-125/125 T 4    | Turned   |        |
| NKP-G 50-125/135 T 5,5  | Turned   |        |
| NKM-G 50-160/177 T 1,5  | Full     | ≥ 0,60 |
| NKM-G 50-160/161 T 1,1  | Turned   |        |
| NKP-G 50-160/169 T 11   | Full     | ≥ 0,40 |
| NKP-G 50-160/153 T 7,5  | Turned   |        |
| NKM-G 50-200/219 T 3    | Full     | ≥ 0,60 |
| NKM-G 50-200/210 T 2,2  | Turned   |        |
| NKP-G 50-200/219 T 22   | Full     | ≥ 0,50 |
| NKP-G 50-200/200 T 15   | Turned   |        |
| NKP-G 50-200/210 T 18,5 | Turned   |        |
| NKM-G 50-250/263 T 4    | Full     | ≥ 0,60 |
| NKP-G 50-250/257 T 30   | Full     | ≥ 0,40 |
| NKP-G 50-250/230 T 22   | Turned   |        |
| NKM-G 65-125/144 T 1,1  | Full     | ≥ 0,40 |
| NKM-G 65-125/130 T 0,75 | Turned   |        |
| NKP-G 65-125/137 T 7,5  | Full     | ≥ 0,40 |
| NKP-G 65-125/120 T 4    | Turned   |        |
| NKP-G 65-125/127 T 5,5  | Turned   |        |
| NKM-G 65-160/177 T 2,2  | Full     | ≥ 0,60 |
| NKM-G 65-160/153 T 1,1  | Turned   |        |
| NKM-G 65-160/165 T 1,5  | Turned   |        |
| NKP-G 65-160/173 T 15   | Full     | ≥ 0,50 |
| NKP-G 65-160/157 T 11   | Turned   |        |
| NKM-G 65-200/219 T 4    | Full     | ≥ 0,60 |
| NKM-G 65-200/210 T 3    | Turned   |        |
| NKP-G 65-200/219 T 30   | Full     | ≥ 0,70 |
| NKP-G 65-200/190 T 18,5 | Turned   |        |
| NKP-G 65-200/200 T 22   | Turned   |        |
| NKM-G 65-250/263 T 5,5  | Full     | ≥ 0,50 |
| NKM-G 65-315/309 T 11   | Full     | ≥ 0,40 |
| NKM-G 65-315/279 T 7,5  | Turned   |        |

# HYDRAULIC EFFICIENCY

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| PUMP MODEL                 | IMPELLER | MEI            |
|----------------------------|----------|----------------|
| NKM-G 80-160/177 T 3       | Full     | ≥ 0,40         |
| NKM-G 80-160/153-136 T 1,5 | Turned   |                |
| NKM-G 80-160/163 T 2,2     | Turned   |                |
| NKP-G 80-160/169 T 22      | Full     | ≥ 0,40         |
| NKP-G 80-160/147-127 T 11  | Turned   |                |
| NKP-G 80-160/153 T 15      | Turned   |                |
| NKP-G 80-160/163 T 18,5    | Turned   | ≥ 0,40         |
| NKM-G 80-200/222 T 5,5     | Full     |                |
| NKM-G 80-200/200 T 4       | Turned   | ≥ 0,40         |
| NKP-G 80-200/190 T 30      | Full     | ≥ 0,40         |
| NKM-G 80-250/270 T 11      | Full     | ≥ 0,40         |
| NKM-G 80-250/240 T 7,5     | Turned   |                |
| NKM-G 80-315/334 T 22      | Full     | ≥ 0,50         |
| NKM-G 80-315/305 T 15      | Turned   |                |
| NKM-G 80-315/320 T 18,5    | Turned   |                |
| NKM-G 100-200/214 T 7,5    | Full     | ≥ 0,40         |
| NKM-G 100-200/200 T 5,5    | Turned   |                |
| NKM-G 100-250/270 T 15     | Full     | ≥ 0,40         |
| NKM-G 100-250/250 T 11     | Turned   |                |
| NKM-G 100-315/316 T 22     | Full     | ≥ 0,40         |
| NKM-G 100-315/300 T 18,5   | Turned   |                |
| NKM-G 125-250/266 T 22     | Full     | ≥ 0,40         |
| NKM-G 125-250/243 T 15     | Turned   |                |
| NKM-G 125-250/256 T 18,5   | Turned   |                |
| NKM-G 150-200/218 T 11     | -        | not applicable |

| PUMP MODEL          | IMPELLER | MEI    |
|---------------------|----------|--------|
| KDN 32-125.1/140 4P | Full     | ≥ 0,40 |
| KDN 32-125.1/105 4P | Turned   |        |
| KDN 32-125.1/110 4P | Turned   |        |
| KDN 32-125.1/115 4P | Turned   |        |
| KDN 32-125.1/120 4P | Turned   |        |
| KDN 32-125.1/125 4P | Turned   |        |
| KDN 32-125.1/130 4P | Turned   | ≥ 0,40 |
| KDN 32-125.1/135 4P | Turned   |        |
| KDN 32-125.1/140 2P | Full     |        |
| KDN 32-125.1/105 2P | Turned   |        |
| KDN 32-125.1/110 2P | Turned   |        |
| KDN 32-125.1/115 2P | Turned   |        |
| KDN 32-125.1/120 2P | Turned   | ≥ 0,40 |
| KDN 32-125.1/125 2P | Turned   |        |
| KDN 32-125.1/130 2P | Turned   |        |
| KDN 32-125.1/135 2P | Turned   |        |
| KDN 32-160.1/177 4P | Full     |        |
| KDN 32-160.1/137 4P | Turned   |        |
| KDN 32-160.1/145 4P | Turned   | ≥ 0,40 |
| KDN 32-160.1/153 4P | Turned   |        |
| KDN 32-160.1/161 4P | Turned   |        |
| KDN 32-160.1/169 4P | Turned   |        |
| KDN 32-160.1/177 2P | Full     |        |
| KDN 32-160.1/137 2P | Turned   |        |
| KDN 32-160.1/145 2P | Turned   | ≥ 0,40 |
| KDN 32-160.1/153 2P | Turned   |        |
| KDN 32-160.1/161 2P | Turned   |        |
| KDN 32-160.1/169 2P | Turned   |        |
| KDN 32-200.1/207 4P | Full     |        |
| KDN 32-200.1/170 4P | Turned   |        |
| KDN 32-200.1/180 4P | Turned   | ≥ 0,50 |
| KDN 32-200.1/190 4P | Turned   |        |
| KDN 32-200.1/200 4P | Turned   |        |
| KDN 32-200.1/207 2P | Full     | ≥ 0,40 |
| KDN 32-200.1/170 2P | Turned   |        |
| KDN 32-200.1/180 2P | Turned   |        |
| KDN 32-200.1/190 2P | Turned   |        |
| KDN 32-200.1/200 2P | Turned   |        |

# HYDRAULIC EFFICIENCY

EU 547/2012 REGULATION - MEI

| PUMP MODEL        | IMPELLER | MEI    |
|-------------------|----------|--------|
| KDN 32-125/142 4P | Full     | ≥ 0,50 |
| KDN 32-125/115 4P | Turned   |        |
| KDN 32-125/120 4P | Turned   |        |
| KDN 32-125/125 4P | Turned   |        |
| KDN 32-125/130 4P | Turned   |        |
| KDN 32-125/135 4P | Turned   |        |
| KDN 32-125/142 2P | Full     | ≥ 0,40 |
| KDN 32-125/115 2P | Turned   |        |
| KDN 32-125/120 2P | Turned   |        |
| KDN 32-125/125 2P | Turned   |        |
| KDN 32-125/130 2P | Turned   |        |
| KDN 32-125/135 2P | Turned   |        |
| KDN 32-160/177 4P | Full     | ≥ 0,40 |
| KDN 32-160/137 4P | Turned   |        |
| KDN 32-160/145 4P | Turned   |        |
| KDN 32-160/153 4P | Turned   |        |
| KDN 32-160/161 4P | Turned   |        |
| KDN 32-160/169 4P | Turned   |        |
| KDN 32-160/177 2P | Full     | ≥ 0,40 |
| KDN 32-160/137 2P | Turned   |        |
| KDN 32-160/145 2P | Turned   |        |
| KDN 32-160/153 2P | Turned   |        |
| KDN 32-160/161 2P | Turned   |        |
| KDN 32-160/169 2P | Turned   |        |
| KDN 32-200/219 4P | Full     | ≥ 0,60 |
| KDN 32-200/170 4P | Turned   |        |
| KDN 32-200/180 4P | Turned   |        |
| KDN 32-200/190 4P | Turned   |        |
| KDN 32-200/200 4P | Turned   |        |
| KDN 32-200/210 4P | Turned   |        |
| KDN 32-200/219 2P | Full     | ≥ 0,60 |
| KDN 32-200/170 2P | Turned   |        |
| KDN 32-200/180 2P | Turned   |        |
| KDN 32-200/190 2P | Turned   |        |
| KDN 32-200/200 2P | Turned   |        |
| KDN 32-200/210 2P | Turned   |        |

| PUMP MODEL        | IMPELLER | MEI    |
|-------------------|----------|--------|
| KDN 40-125/142 4P | Full     | ≥ 0,40 |
| KDN 40-125/115 4P | Turned   |        |
| KDN 40-125/120 4P | Turned   |        |
| KDN 40-125/125 4P | Turned   |        |
| KDN 40-125/130 4P | Turned   |        |
| KDN 40-125/135 4P | Turned   |        |
| KDN 40-125/142 2P | Full     | ≥ 0,40 |
| KDN 40-125/115 2P | Turned   |        |
| KDN 40-125/120 2P | Turned   |        |
| KDN 40-125/125 2P | Turned   |        |
| KDN 40-125/130 2P | Turned   |        |
| KDN 40-125/135 2P | Turned   |        |
| KDN 40-160/177 4P | Full     | ≥ 0,40 |
| KDN 40-160/137 4P | Turned   |        |
| KDN 40-160/145 4P | Turned   |        |
| KDN 40-160/153 4P | Turned   |        |
| KDN 40-160/161 4P | Turned   |        |
| KDN 40-160/169 4P | Turned   |        |
| KDN 40-160/177 2P | Full     | ≥ 0,50 |
| KDN 40-160/137 2P | Turned   |        |
| KDN 40-160/145 2P | Turned   |        |
| KDN 40-160/153 2P | Turned   |        |
| KDN 40-160/161 2P | Turned   |        |
| KDN 40-160/169 2P | Turned   |        |
| KDN 40-200/219 4P | Full     | ≥ 0,60 |
| KDN 40-200/170 4P | Turned   |        |
| KDN 40-200/180 4P | Turned   |        |
| KDN 40-200/190 4P | Turned   |        |
| KDN 40-200/200 4P | Turned   |        |
| KDN 40-200/210 4P | Turned   |        |
| KDN 40-200/219 2P | Full     | ≥ 0,50 |
| KDN 40-200/170 2P | Turned   |        |
| KDN 40-200/180 2P | Turned   |        |
| KDN 40-200/190 2P | Turned   |        |
| KDN 40-200/200 2P | Turned   |        |
| KDN 40-200/210 2P | Turned   |        |

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| PUMP MODEL        | IMPELLER | MEI    |
|-------------------|----------|--------|
| KDN 40-250/260 4P | Full     | ≥ 0,40 |
| KDN 40-250/220 4P | Turned   |        |
| KDN 40-250/230 4P | Turned   |        |
| KDN 40-250/240 4P | Turned   |        |
| KDN 40-250/250 4P | Turned   |        |
| KDN 40-250/260 2P | Full     | ≥ 0,40 |
| KDN 40-250/220 2P | Turned   |        |
| KDN 40-250/230 2P | Turned   |        |
| KDN 40-250/240 2P | Turned   |        |
| KDN 40-250/250 2P | Turned   |        |
| KDN 50-125/144 4P | Full     | ≥ 0,40 |
| KDN 50-125/115 4P | Turned   |        |
| KDN 50-125/120 4P | Turned   |        |
| KDN 50-125/125 4P | Turned   |        |
| KDN 50-125/130 4P | Turned   |        |
| KDN 50-125/135 4P | Turned   | ≥ 0,40 |
| KDN 50-125/139 4P | Turned   |        |
| KDN 50-125/144 2P | Full     |        |
| KDN 50-125/115 2P | Turned   |        |
| KDN 50-125/120 2P | Turned   |        |
| KDN 50-125/125 2P | Turned   | ≥ 0,40 |
| KDN 50-125/130 2P | Turned   |        |
| KDN 50-125/135 2P | Turned   |        |
| KDN 50-125/139 2P | Turned   |        |
| KDN 50-160/177 4P | Full     |        |
| KDN 50-160/137 4P | Turned   |        |
| KDN 50-160/145 4P | Turned   |        |
| KDN 50-160/153 4P | Turned   |        |
| KDN 50-160/161 4P | Turned   |        |
| KDN 50-160/169 4P | Turned   | ≥ 0,50 |
| KDN 50-160/177 2P | Full     |        |
| KDN 50-160/137 2P | Turned   |        |
| KDN 50-160/145 2P | Turned   |        |
| KDN 50-160/153 2P | Turned   |        |
| KDN 50-160/161 2P | Turned   |        |
| KDN 50-160/169 2P | Turned   |        |

| PUMP MODEL            | IMPELLER | MEI    |
|-----------------------|----------|--------|
| KDN 50-200/219 4P     | Full     | ≥ 0,60 |
| KDN 50-200/170 4P     | Turned   |        |
| KDN 50-200/180 4P     | Turned   |        |
| KDN 50-200/190 4P     | Turned   |        |
| KDN 50-200/200 4P     | Turned   |        |
| KDN 50-200/210 4P     | Turned   | ≥ 0,40 |
| KDN 50-200/219 2P     | Full     |        |
| KDN 50-200/170 2P     | Turned   |        |
| KDN 50-200/180 2P     | Turned   |        |
| KDN 50-200/190 2P     | Turned   |        |
| KDN 50-200/200 2P     | Turned   | ≥ 0,60 |
| KDN 50-200/210 2P     | Turned   |        |
| KDN 50-250/263 4P     | Full     |        |
| KDN 50-250/220 4P     | Turned   |        |
| KDN 50-250/230 4P     | Turned   |        |
| KDN 50-250/240 4P     | Turned   | ≥ 0,50 |
| KDN 50-250/250 4P     | Turned   |        |
| KDN 50-250/263 2P     | Full     |        |
| KDN 50-250/220 2P     | Turned   |        |
| KDN 50-250/230 2P     | Turned   |        |
| KDN 50-250/240 2P     | Turned   | ≥ 0,40 |
| KDN 50-250/250 2P     | Turned   |        |
| KDN 65-125/144 4P     | Full     |        |
| KDN 65-125/120-110 4P | Turned   |        |
| KDN 65-125/120 4P     | Turned   |        |
| KDN 65-125/125 4P     | Turned   | ≥ 0,40 |
| KDN 65-125/130 4P     | Turned   |        |
| KDN 65-125/135 4P     | Turned   |        |
| KDN 65-125/140 4P     | Turned   |        |
| KDN 65-125/144 2P     | Full     |        |
| KDN 65-125/120-110 2P | Turned   |        |
| KDN 65-125/120 2P     | Turned   |        |
| KDN 65-125/125 2P     | Turned   |        |
| KDN 65-125/130 2P     | Turned   |        |
| KDN 65-125/135 2P     | Turned   |        |
| KDN 65-125/140 2P     | Turned   |        |

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| PUMP MODEL        | IMPELLER | MEI    |
|-------------------|----------|--------|
| KDN 65-160/177 4P | Full     | ≥ 0,60 |
| KDN 65-160/137 4P | Turned   |        |
| KDN 65-160/145 4P | Turned   |        |
| KDN 65-160/153 4P | Turned   |        |
| KDN 65-160/161 4P | Turned   |        |
| KDN 65-160/169 4P | Turned   |        |
| KDN 65-160/177 2P | Full     | ≥ 0,50 |
| KDN 65-160/137 2P | Turned   |        |
| KDN 65-160/145 2P | Turned   |        |
| KDN 65-160/153 2P | Turned   |        |
| KDN 65-160/161 2P | Turned   |        |
| KDN 65-160/169 2P | Turned   |        |
| KDN 65-200/219 4P | Full     | ≥ 0,60 |
| KDN 65-200/170 4P | Turned   |        |
| KDN 65-200/180 4P | Turned   |        |
| KDN 65-200/190 4P | Turned   |        |
| KDN 65-200/200 4P | Turned   |        |
| KDN 65-200/210 4P | Turned   |        |
| KDN 65-200/219 2P | Full     | ≥ 0,60 |
| KDN 65-200/170 2P | Turned   |        |
| KDN 65-200/180 2P | Turned   |        |
| KDN 65-200/190 2P | Turned   |        |
| KDN 65-200/200 2P | Turned   |        |
| KDN 65-200/210 2P | Turned   |        |
| KDN 65-250/263 4P | Full     | ≥ 0,50 |
| KDN 65-250/220 4P | Turned   |        |
| KDN 65-250/230 4P | Turned   |        |
| KDN 65-250/240 4P | Turned   |        |
| KDN 65-250/250 4P | Turned   |        |
| KDN 65-250/263 2P | Full     |        |
| KDN 65-250/220 2P | Turned   |        |
| KDN 65-250/230 2P | Turned   |        |
| KDN 65-250/240 2P | Turned   |        |
| KDN 65-250/250 2P | Turned   |        |
| KDN 65-250/263 2P | Full     | ≥ 0,50 |
| KDN 65-250/220 2P | Turned   |        |
| KDN 65-250/230 2P | Turned   |        |
| KDN 65-250/240 2P | Turned   |        |
| KDN 65-250/250 2P | Turned   |        |
| KDN 65-250/263 2P | Full     |        |

| PUMP MODEL            | IMPELLER | MEI    |
|-----------------------|----------|--------|
| KDN 65-315/320 4P     | Full     | ≥ 0,50 |
| KDN 65-315/260 4P     | Turned   |        |
| KDN 65-315/275 4P     | Turned   |        |
| KDN 65-315/290 4P     | Turned   |        |
| KDN 65-315/305 4P     | Turned   |        |
| KDN 65-315/320 2P     | Full     |        |
| KDN 65-315/260 2P     | Turned   |        |
| KDN 65-315/275 2P     | Turned   |        |
| KDN 65-315/290 2P     | Turned   |        |
| KDN 65-315/305 2P     | Turned   |        |
| KDN 80-160/177 4P     | Full     | ≥ 0,50 |
| KDN 80-160/147-127 4P | Turned   |        |
| KDN 80-160/153-136 4P | Turned   |        |
| KDN 80-160/153 4P     | Turned   |        |
| KDN 80-160/161 4P     | Turned   |        |
| KDN 80-160/169 4P     | Turned   |        |
| KDN 80-160/177 2P     | Full     | ≥ 0,40 |
| KDN 80-160/147-127 2P | Turned   |        |
| KDN 80-160/153-136 2P | Turned   |        |
| KDN 80-160/153 2P     | Turned   |        |
| KDN 80-160/161 2P     | Turned   |        |
| KDN 80-160/169 2P     | Turned   |        |
| KDN 80-200/222 4P     | Full     | ≥ 0,50 |
| KDN 80-200/170 4P     | Turned   |        |
| KDN 80-200/180 4P     | Turned   |        |
| KDN 80-200/190 4P     | Turned   |        |
| KDN 80-200/200 4P     | Turned   |        |
| KDN 80-200/210 4P     | Turned   |        |
| KDN 80-200/222 2P     | Full     | ≥ 0,40 |
| KDN 80-200/170 2P     | Turned   |        |
| KDN 80-200/180 2P     | Turned   |        |
| KDN 80-200/190 2P     | Turned   |        |
| KDN 80-200/200 2P     | Turned   |        |
| KDN 80-200/210 2P     | Turned   |        |

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| PUMP MODEL         | IMPELLER | MEI    |
|--------------------|----------|--------|
| KDN 80-250/270 4P  | Full     | ≥ 0,40 |
| KDN 80-250/220 4P  | Turned   |        |
| KDN 80-250/230 4P  | Turned   |        |
| KDN 80-250/240 4P  | Turned   |        |
| KDN 80-250/250 4P  | Turned   |        |
| KDN 80-250/260 4P  | Turned   |        |
| KDN 80-250/270 2P  | Full     | ≥ 0,40 |
| KDN 80-250/220 2P  | Turned   |        |
| KDN 80-250/230 2P  | Turned   |        |
| KDN 80-250/240 2P  | Turned   |        |
| KDN 80-250/250 2P  | Turned   |        |
| KDN 80-250/260 2P  | Turned   |        |
| KDN 80-315/334 4P  | Full     | ≥ 0,40 |
| KDN 80-315/275 4P  | Turned   |        |
| KDN 80-315/290 4P  | Turned   |        |
| KDN 80-315/305 4P  | Turned   |        |
| KDN 80-315/320 4P  | Turned   |        |
| KDN 80-315/290 2P  | Full     | ≥ 0,40 |
| KDN 80-315/275 2P  | Turned   |        |
| KDN 100-200/219 4P | Full     | ≥ 0,40 |
| KDN 100-200/180 4P | Turned   |        |
| KDN 100-200/190 4P | Turned   |        |
| KDN 100-200/200 4P | Turned   |        |
| KDN 100-200/210 4P | Turned   |        |
| KDN 100-200/219 2P | Full     | ≥ 0,40 |
| KDN 100-200/180 2P | Turned   |        |
| KDN 100-200/190 2P | Turned   |        |
| KDN 100-200/200 2P | Turned   |        |
| KDN 100-200/210 2P | Turned   |        |

| PUMP MODEL             | IMPELLER | MEI            |
|------------------------|----------|----------------|
| KDN 100-250/270 4P     | Full     | ≥ 0,40         |
| KDN 100-250/220 4P     | Turned   |                |
| KDN 100-250/230 4P     | Turned   |                |
| KDN 100-250/240 4P     | Turned   |                |
| KDN 100-250/250 4P     | Turned   |                |
| KDN 100-250/260 4P     | Turned   |                |
| KDN 100-250/260 2P     | Full     | ≥ 0,40         |
| KDN 100-250/220 2P     | Turned   |                |
| KDN 100-250/230 2P     | Turned   |                |
| KDN 100-250/240 2P     | Turned   |                |
| KDN 100-250/250 2P     | Turned   |                |
| KDN 100-315/334 4P     | Full     | ≥ 0,40         |
| KDN 100-315/275 4P     | Turned   |                |
| KDN 100-315/290 4P     | Turned   |                |
| KDN 100-315/305 4P     | Turned   |                |
| KDN 100-315/320 4P     | Turned   |                |
| KDN 125-250/269 4P     | Full     | ≥ 0,40         |
| KDN 125-250/220 4P     | Turned   |                |
| KDN 125-250/230 4P     | Turned   |                |
| KDN 125-250/240 4P     | Turned   |                |
| KDN 125-250/250 4P     | Turned   |                |
| KDN 125-250/260 4P     | Turned   |                |
| KDN 150-200/218 4P     | Full     | not applicable |
| KDN 150-200/210-170 4P | Turned   |                |
| KDN 150-200/218-182 4P | Turned   |                |
| KDN 150-200/218-200 4P | Turned   |                |



# HYDRAULIC EFFICIENCY

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| PUMP MODEL  | NUMBER OF STAGES | MEI         | $\eta_{PL}$ | $\eta_{BEP}$ | $\eta_{OL}$ |       |
|-------------|------------------|-------------|-------------|--------------|-------------|-------|
| KVC 25/30 M | 3                | $\geq 0,40$ | 31.30       | 34.00        | 33.56       |       |
| KVC 25/30 T |                  |             | 32.38       | 34.30        | 33.85       |       |
| KVC 15/30 M | 2                |             | 35.93       | 38.72        | 38.51       |       |
| KVC 15/30 T |                  |             | 29.86       | 31.50        | 31.20       |       |
| KVC 35/30 M | 4                |             | 35.95       | 38.50        | 37.99       |       |
| KVC 35/30 T |                  |             | 34.43       | 37.02        | 36.55       |       |
| KVC 45/30 M | 5                |             | 34.29       | 36.35        | 36.08       |       |
| KVC 45/30 T |                  |             | 35.00       | 37.44        | 37.00       |       |
| KVC 50/30 M | 6                |             | 29.03       | 30.86        | 30.56       |       |
| KVC 50/30 T |                  |             | 30.67       | 32.77        | 32.21       |       |
| KVC 60/30 M | 7                |             | 28.82       | 30.95        | 30.56       |       |
| KVC 60/30 T |                  |             | 30.25       | 32.28        | 31.96       |       |
| KVC 70/30 M | 8                |             | 35.16       | 37.89        | 37.32       |       |
| KVC 70/30 T |                  |             | 30.29       | 32.40        | 31.98       |       |
| KVC 30/50 M | 3                |             | $\geq 0,60$ | 40.75        | 43.10       | 42.76 |
| KVC 30/50 T |                  |             |             | 40.19        | 43.10       | 42.60 |
| KVC 20/50 M | 2                | 41.40       |             | 42.95        | 42.35       |       |
| KVC 20/50 T |                  | 38.53       |             | 41.47        | 41.04       |       |
| KVC 40/50 M | 4                | 40.73       |             | 43.34        | 42.91       |       |
| KVC 40/50 T |                  | 38.85       |             | 41.40        | 40.92       |       |
| KVC 55/50 M | 5                | 38.90       |             | 41.70        | 41.20       |       |
| KVC 55/50 T |                  | 38.97       |             | 41.61        | 41.15       |       |
| KVC 65/50 M | 6                | 37.53       |             | 39.21        | 38.75       |       |
| KVC 65/50 T |                  | 36.52       |             | 40.13        | 39.42       |       |
| KVC 75/50 M | 7                | 36.39       |             | 38.91        | 38.35       |       |
| KVC 75/50 T |                  | 36.51       |             | 39.61        | 39.05       |       |
| KVC 20/80 M | 3                | $\geq 0,40$ |             | 45.00        | 47.70       | 47.37 |
| KVC 20/80 T |                  |             |             | 45.45        | 47.80       | 47.29 |
| KVC 15/80 M | 2                |             |             | 43.13        | 46.70       | 45.99 |
| KVC 15/80 T |                  |             |             | 41.78        | 44.09       | 43.43 |
| KVC 30/80 M | 4                |             | 44.06       | 46.30        | 45.84       |       |
| KVC 30/80 T |                  |             | 42.16       | 45.10        | 44.44       |       |
| KVC 40/80 M | 5                |             | 43.43       | 46.97        | 46.80       |       |
| KVC 40/80 T |                  |             | 41.94       | 44.40        | 43.89       |       |
| KVC 45/80 M | 6                |             | 41.91       | 43.96        | 43.57       |       |
| KVC 45/80 T |                  |             | 41.06       | 43.74        | 43.31       |       |
| KVC 55/80 M | 7                |             | 41.05       | 43.00        | 42.63       |       |
| KVC 55/80 T |                  |             | 40.75       | 43.51        | 43.05       |       |
| KVC 65/80 T | 8                |             | 41.08       | 44.02        | 43.48       |       |

# HYDRAULIC EFFICIENCY

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| PUMP MODEL   | NUMBER OF STAGES | MEI         | $\eta_{PL}$ | $\eta_{BEP}$ | $\eta_{OL}$ |
|--------------|------------------|-------------|-------------|--------------|-------------|
| KVC 35/120 M | 3                | $\geq 0,50$ | 49.31       | 51.00        | 50.76       |
| KVC 35/120 T |                  |             | 49.83       | 51.80        | 51.38       |
| KVC 25/120 M | 2                |             | 45.13       | 46.90        | 46.75       |
| KVC 25/120 T |                  |             | 42.16       | 44.54        | 44.20       |
| KVC 45/120 M | 4                |             | 47.59       | 49.50        | 48.96       |
| KVC 45/120 T |                  |             | 47.47       | 49.30        | 49.00       |
| KVC 60/120 T | 5                |             | 47.81       | 49.44        | 48.97       |
| KVC 70/120 T | 6                |             | 47.58       | 49.00        | 48.61       |
| KVC 85/120 T | 7                |             | 49.23       | 50.84        | 50.20       |

| PUMP MODEL     | NUMBER OF STAGES | MEI         | $\eta_{PL}$ | $\eta_{BEP}$ | $\eta_{OL}$ |
|----------------|------------------|-------------|-------------|--------------|-------------|
| NKV 1/2 T IE3  | 2                | $\geq 0,70$ | 44,78       | 47,27        | 46,72       |
| NKV 1/3 T IE3  | 3                |             | 44,78       | 47,27        | 46,72       |
| NKV 1/4 T IE3  | 4                |             | 44,78       | 47,27        | 46,72       |
| NKV 1/5 T IE3  | 5                |             | 44,78       | 47,27        | 46,72       |
| NKV 1/6 T IE3  | 6                |             | 44,78       | 47,27        | 46,72       |
| NKV 1/7 T IE3  | 7                |             | 44,78       | 47,27        | 46,72       |
| NKV 1/8 T IE3  | 8                |             | 44,78       | 47,27        | 46,72       |
| NKV 1/9 T IE3  | 9                |             | 44,78       | 47,27        | 46,72       |
| NKV 1/10 T IE3 | 10               |             | 44,78       | 47,27        | 46,72       |
| NKV 1/11 T IE3 | 11               |             | 44,78       | 47,27        | 46,72       |
| NKV 1/12 T IE3 | 12               |             | 44,78       | 47,27        | 46,72       |
| NKV 1/13 T IE3 | 13               |             | 44,78       | 47,27        | 46,72       |
| NKV 1/14 T IE3 | 14               |             | 44,78       | 47,27        | 46,72       |
| NKV 1/15 T IE3 | 15               |             | 44,78       | 47,27        | 46,72       |
| NKV 1/17 T IE3 | 17               |             | 44,78       | 47,27        | 46,72       |
| NKV 1/19 T IE3 | 19               |             | 44,78       | 47,27        | 46,72       |
| NKV 1/22 T IE3 | 22               |             | 44,78       | 47,27        | 46,72       |
| NKV 1/23 T IE3 | 23               |             | 44,78       | 47,27        | 46,72       |
| NKV 1/25 T IE3 | 25               |             | 44,78       | 47,27        | 46,72       |
| NKV 1/27 T IE3 | 27               |             | 44,78       | 47,27        | 46,72       |
| NKV 1/30 T IE3 | 30               | 44,78       | 47,27       | 46,72        |             |
| NKV 1/32 T IE3 | 32               | 44,78       | 47,27       | 46,72        |             |
| NKV 1/34 T IE3 | 34               | 44,78       | 47,27       | 46,72        |             |
| NKV 1/37 T IE3 | 37               | 44,78       | 47,27       | 46,72        |             |

# HYDRAULIC EFFICIENCY

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| PUMP MODEL     | NUMBER OF STAGES | MEI         | $\eta_{PL}$ | $\eta_{BEP}$ | $\eta_{OL}$ |
|----------------|------------------|-------------|-------------|--------------|-------------|
| NKV 3/2 T IE3  | 2                | $\geq 0,70$ | 50,8        | 53,44        | 52,79       |
| NKV 3/3 T IE3  | 3                |             | 50,8        | 53,44        | 52,79       |
| NKV 3/4 T IE3  | 4                |             | 50,8        | 53,44        | 52,79       |
| NKV 3/5 T IE3  | 5                |             | 50,8        | 53,44        | 52,79       |
| NKV 3/6 T IE3  | 6                |             | 50,8        | 53,44        | 52,79       |
| NKV 3/7 T IE3  | 7                |             | 50,8        | 53,44        | 52,79       |
| NKV 3/8 T IE3  | 8                |             | 50,8        | 53,44        | 52,79       |
| NKV 3/9 T IE3  | 9                |             | 50,8        | 53,44        | 52,79       |
| NKV 3/10 T IE3 | 10               |             | 50,8        | 53,44        | 52,79       |
| NKV 3/11 T IE3 | 11               |             | 50,8        | 53,44        | 52,79       |
| NKV 3/12 T IE3 | 12               |             | 50,8        | 53,44        | 52,79       |
| NKV 3/13 T IE3 | 13               |             | 50,8        | 53,44        | 52,79       |
| NKV 3/14 T IE3 | 14               |             | 50,8        | 53,44        | 52,79       |
| NKV 3/15 T IE3 | 15               |             | 50,8        | 53,44        | 52,79       |
| NKV 3/16 T IE3 | 16               |             | 50,8        | 53,44        | 52,79       |
| NKV 3/17 T IE3 | 17               |             | 50,8        | 53,44        | 52,79       |
| NKV 3/18 T IE3 | 18               |             | 50,8        | 53,44        | 52,79       |
| NKV 3/19 T IE3 | 19               |             | 50,8        | 53,44        | 52,79       |
| NKV 3/21 T IE3 | 21               |             | 50,8        | 53,44        | 52,79       |
| NKV 3/23 T IE3 | 23               |             | 50,8        | 53,44        | 52,79       |
| NKV 3/25 T IE3 | 25               |             | 50,8        | 53,44        | 52,79       |
| NKV 3/27 T IE3 | 27               | 50,8        | 53,44       | 52,79        |             |
| NKV 3/29 T IE3 | 29               | 50,8        | 53,44       | 52,79        |             |
| NKV 3/31 T IE3 | 31               | 50,8        | 53,44       | 52,79        |             |
| NKV 3/33 T IE3 | 33               | 50,8        | 53,44       | 52,79        |             |

| PUMP MODEL     | NUMBER OF STAGES | MEI         | $\eta_{PL}$ | $\eta_{BEP}$ | $\eta_{OL}$ |
|----------------|------------------|-------------|-------------|--------------|-------------|
| NKV 6/2 T IE3  | 2                | $\geq 0,70$ | 60,47       | 64,55        | 62,87       |
| NKV 6/3 T IE3  | 3                |             | 60,47       | 64,55        | 62,87       |
| NKV 6/4 T IE3  | 4                |             | 60,47       | 64,55        | 62,87       |
| NKV 6/5 T IE3  | 5                |             | 60,47       | 64,55        | 62,87       |
| NKV 6/6 T IE3  | 6                |             | 60,47       | 64,55        | 62,87       |
| NKV 6/7 T IE3  | 7                |             | 60,47       | 64,55        | 62,87       |
| NKV 6/8 T IE3  | 8                |             | 60,47       | 64,55        | 62,87       |
| NKV 6/9 T IE3  | 9                |             | 60,47       | 64,55        | 62,87       |
| NKV 6/10 T IE3 | 10               |             | 60,47       | 64,55        | 62,87       |
| NKV 6/11 T IE3 | 11               |             | 60,47       | 64,55        | 62,87       |
| NKV 6/12 T IE3 | 12               |             | 60,47       | 64,55        | 62,87       |

# HYDRAULIC EFFICIENCY

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| PUMP MODEL     | NUMBER OF STAGES | MEI | $\eta_{PL}$ | $\eta_{BEP}$ | $\eta_{OL}$ |
|----------------|------------------|-----|-------------|--------------|-------------|
| NKV 6/13 T IE3 | 13               |     | 60,47       | 64,55        | 62,87       |
| NKV 6/14 T IE3 | 14               |     | 60,47       | 64,55        | 62,87       |
| NKV 6/15 T IE3 | 15               |     | 60,47       | 64,55        | 62,87       |
| NKV 6/16 T IE3 | 16               |     | 60,47       | 64,55        | 62,87       |
| NKV 6/17 T IE3 | 17               |     | 60,47       | 64,55        | 62,87       |
| NKV 6/18 T IE3 | 18               |     | 60,47       | 64,55        | 62,87       |
| NKV 6/19 T IE3 | 19               |     | 60,47       | 64,55        | 62,87       |
| NKV 6/20 T IE3 | 20               |     | 60,47       | 64,55        | 62,87       |
| NKV 6/21 T IE3 | 21               |     | 60,47       | 64,55        | 62,87       |
| NKV 6/23 T IE3 | 23               |     | 60,47       | 64,55        | 62,87       |
| NKV 6/25 T IE3 | 25               |     | 62,5        | 66,2         | 64,98       |
| NKV 6/28 T IE3 | 28               |     | 62,5        | 66,2         | 64,98       |
| NKV 6/30 T IE3 | 30               |     | 62,5        | 66,2         | 64,98       |
| NKV 6/33 T IE3 | 33               |     | 62,5        | 66,2         | 64,98       |
| NKV 6/36 T IE3 | 36               |     | 62,5        | 66,2         | 64,98       |

| PUMP MODEL      | NUMBER OF STAGES | MEI    | $\eta_{PL}$ | $\eta_{BEP}$ | $\eta_{OL}$ |
|-----------------|------------------|--------|-------------|--------------|-------------|
| NKV 10/2 T IE3  | 2                | ≥ 0,70 | 64,72       | 67,58        | 66,82       |
| NKV 10/3 T IE3  | 3                |        | 64,72       | 67,58        | 66,82       |
| NKV 10/4 T IE3  | 4                |        | 64,72       | 67,58        | 66,82       |
| NKV 10/5 T IE3  | 5                |        | 64,72       | 67,58        | 66,82       |
| NKV 10/6 T IE3  | 6                |        | 64,72       | 67,58        | 66,82       |
| NKV 10/7 T IE3  | 7                |        | 64,72       | 67,58        | 66,82       |
| NKV 10/8 T IE3  | 8                |        | 64,72       | 67,58        | 66,82       |
| NKV 10/9 T IE3  | 9                |        | 64,72       | 67,58        | 66,82       |
| NKV 10/10 T IE3 | 10               |        | 64,72       | 67,58        | 66,82       |
| NKV 10/11 T IE3 | 11               |        | 64,72       | 67,58        | 66,82       |
| NKV 10/12 T IE3 | 12               |        | 64,72       | 67,58        | 66,82       |
| NKV 10/13 T IE3 | 13               |        | 64,72       | 67,58        | 66,82       |
| NKV 10/15 T IE3 | 15               |        | 64,72       | 67,58        | 66,82       |
| NKV 10/17 T IE3 | 17               |        | 64,72       | 67,58        | 66,82       |
| NKV 10/19 T IE3 | 19               |        | 64,72       | 67,58        | 66,82       |
| NKV 10/21 T IE3 | 21               |        | 64,72       | 67,58        | 66,82       |
| NKV 10/23 T IE3 | 23               |        | 64,72       | 67,58        | 66,82       |
| NKV 10/24 T IE3 | 24               |        | 64,72       | 67,58        | 66,82       |

# HYDRAULIC EFFICIENCY

EU 547/2012 REGULATION - MEI

| PUMP MODEL      | NUMBER OF STAGES | MEI    | $\eta_{PL}$ | $\eta_{BEP}$ | $\eta_{OL}$ |
|-----------------|------------------|--------|-------------|--------------|-------------|
| NKV 15/1 T IE3  | 1                | ≥ 0,70 | 61,59       | 65,63        | 64,65       |
| NKV 15/2 T IE3  | 2                |        | 61,59       | 65,63        | 64,65       |
| NKV 15/3 T IE3  | 3                |        | 61,59       | 65,63        | 64,65       |
| NKV 15/4 T IE3  | 4                |        | 61,59       | 65,63        | 64,65       |
| NKV 15/5 T IE3  | 5                |        | 61,59       | 65,63        | 64,65       |
| NKV 15/6 T IE3  | 6                |        | 64,68       | 69,13        | 68,28       |
| NKV 15/7 T IE3  | 7                |        | 64,68       | 69,13        | 68,28       |
| NKV 15/8 T IE3  | 8                |        | 64,68       | 69,13        | 68,28       |
| NKV 15/9 T IE3  | 9                |        | 64,68       | 69,13        | 68,28       |
| NKV 15/10 T IE3 | 10               |        | 64,68       | 69,13        | 68,28       |
| NKV 15/11 T IE3 | 11               |        | 64,68       | 69,13        | 68,28       |
| NKV 15/12 T IE3 | 12               |        | 64,68       | 69,13        | 68,28       |
| NKV 15/13 T IE3 | 13               |        | 64,68       | 69,13        | 68,28       |
| NKV 15/14 T IE3 | 14               |        | 64,68       | 69,13        | 68,28       |
| NKV 15/15 T IE3 | 15               |        | 64,68       | 69,13        | 68,28       |
| NKV 15/16 T IE3 | 16               |        | 64,68       | 69,13        | 68,28       |
| NKV 15/17 T IE3 | 17               |        | 64,68       | 69,13        | 68,28       |

| PUMP MODEL      | NUMBER OF STAGES | MEI    | $\eta_{PL}$ | $\eta_{BEP}$ | $\eta_{OL}$ |
|-----------------|------------------|--------|-------------|--------------|-------------|
| NKV 20/1 T IE3  | 1                | ≥ 0,70 | 61,78       | 66,22        | 65,64       |
| NKV 20/2 T IE3  | 2                |        | 61,78       | 66,22        | 65,64       |
| NKV 20/3 T IE3  | 3                |        | 61,78       | 66,22        | 65,64       |
| NKV 20/4 T IE3  | 4                |        | 61,78       | 66,22        | 65,64       |
| NKV 20/5 T IE3  | 5                |        | 61,78       | 66,22        | 65,64       |
| NKV 20/6 T IE3  | 6                |        | 64,59       | 69,58        | 68,67       |
| NKV 20/7 T IE3  | 7                |        | 64,59       | 69,58        | 68,67       |
| NKV 20/8 T IE3  | 8                |        | 64,59       | 69,58        | 68,67       |
| NKV 20/9 T IE3  | 9                |        | 64,59       | 69,58        | 68,67       |
| NKV 20/10 T IE3 | 10               |        | 64,59       | 69,58        | 68,67       |
| NKV 20/11 T IE3 | 11               |        | 64,59       | 69,58        | 68,67       |
| NKV 20/12 T IE3 | 12               |        | 64,59       | 69,58        | 68,67       |
| NKV 20/13 T IE3 | 13               |        | 64,59       | 69,58        | 68,67       |
| NKV 20/14 T IE3 | 14               |        | 64,59       | 69,58        | 68,67       |
| NKV 20/15 T IE3 | 15               |        | 64,59       | 69,58        | 68,67       |
| NKV 20/16 T IE3 | 16               |        | 64,59       | 69,58        | 68,67       |
| NKV 20/17 T IE3 | 17               |        | 64,59       | 69,58        | 68,67       |

# HYDRAULIC EFFICIENCY

EU 547/2012 REGULATION - MEI

| PUMP MODEL  | NUMBER OF STAGES | MEI         | $\eta_{PL}$ | $\eta_{BEP}$ | $\eta_{OL}$ |
|-------------|------------------|-------------|-------------|--------------|-------------|
| NKV 32/3    | 3                | $\geq 0,70$ | 70,08       | 74,12        | 73,16       |
| NKV 32/2-2  | 2                |             | 65,89       | 69,98        | 69,26       |
| NKV 32/2    | 2                |             | 70,08       | 74,12        | 73,16       |
| NKV 32/3-2  | 3                |             | 67,38       | 71,10        | 70,20       |
| NKV 32/4-2  | 4                |             | 68,05       | 71,78        | 70,92       |
| NKV 32/4    | 4                |             | 70,08       | 74,12        | 73,16       |
| NKV 32/5-2  | 5                |             | 68,40       | 72,20        | 71,44       |
| NKV 32/5    | 5                |             | 70,08       | 74,12        | 73,16       |
| NKV 32/6-2  | 6                |             | 68,62       | 72,49        | 71,81       |
| NKV 32/6    | 6                |             | 70,08       | 74,12        | 73,16       |
| NKV 32/7-2  | 7                |             | 68,82       | 72,70        | 72,04       |
| NKV 32/7    | 7                |             | 70,08       | 74,12        | 73,16       |
| NKV 32/8-2  | 8                |             | 68,96       | 72,86        | 72,22       |
| NKV 32/8    | 8                |             | 70,08       | 74,12        | 73,16       |
| NKV 32/9-2  | 9                |             | 69,06       | 72,98        | 72,37       |
| NKV 32/9    | 9                |             | 70,08       | 74,12        | 73,16       |
| NKV 32/10-2 | 10               |             | 69,15       | 73,09        | 72,47       |
| NKV 32/10   | 10               |             | 70,08       | 74,12        | 73,16       |
| NKV 32/11-2 | 11               |             | 69,24       | 73,17        | 72,55       |
| NKV 32/11   | 11               |             | 70,08       | 74,12        | 73,16       |
| NKV 32/12-2 | 12               | 69,29       | 73,25       | 72,63        |             |
| NKV 32/12   | 12               | 70,08       | 74,12       | 73,16        |             |
| NKV 32/13-2 | 13               | 69,37       | 73,31       | 72,66        |             |
| NKV 32/13   | 13               | 70,08       | 74,12       | 73,16        |             |

| PUMP MODEL | NUMBER OF STAGES | MEI         | $\eta_{PL}$ | $\eta_{BEP}$ | $\eta_{OL}$ |
|------------|------------------|-------------|-------------|--------------|-------------|
| NKV 45/3   | 3                | $\geq 0,70$ | 73,47       | 76,37        | 75,25       |
| NKV 45/2-2 | 2                |             | 69,13       | 71,65        | 70,46       |
| NKV 45/2   | 2                |             | 73,47       | 76,37        | 75,25       |
| NKV 45/3-2 | 3                |             | 69,79       | 73,42        | 72,55       |
| NKV 45/4-2 | 4                |             | 70,11       | 74,21        | 73,56       |
| NKV 45/4   | 4                |             | 73,47       | 76,37        | 75,25       |
| NKV 45/5-2 | 5                |             | 70,36       | 74,67        | 74,14       |
| NKV 45/5   | 5                |             | 73,47       | 76,37        | 75,25       |
| NKV 45/6-2 | 6                |             | 70,50       | 74,96        | 74,52       |
| NKV 45/6   | 6                |             | 73,47       | 76,37        | 75,25       |
| NKV 45/7-2 | 7                |             | 70,56       | 75,16        | 74,80       |
| NKV 45/7   | 7                |             | 73,47       | 76,37        | 75,25       |
| NKV 45/8-2 | 8                |             | 70,67       | 75,32        | 75,00       |

# HYDRAULIC EFFICIENCY

EU 547/2012 REGULATION - MEI

| PUMP MODEL  | NUMBER OF STAGES | MEI | $\eta_{PL}$ | $\eta_{BEP}$ | $\eta_{OL}$ |
|-------------|------------------|-----|-------------|--------------|-------------|
| NKV 45/8    | 8                |     | 73,47       | 76,37        | 75,25       |
| NKV 45/9-2  | 9                |     | 70,70       | 75,43        | 75,16       |
| NKV 45/9    | 9                |     | 73,47       | 76,37        | 75,25       |
| NKV 45/10-2 | 10               |     | 70,73       | 75,52        | 75,28       |
| NKV 45/10   | 10               |     | 73,47       | 76,37        | 75,25       |
| NKV 45/11-2 | 11               |     | 70,82       | 75,60        | 75,38       |
| NKV 45/11   | 11               |     | 73,47       | 76,37        | 75,25       |
| NKV 45/12-2 | 12               |     | 70,84       | 75,66        | 75,46       |
| NKV 45/12   | 12               |     | 73,47       | 76,37        | 75,25       |
| NKV 45/13-2 | 13               |     | 70,85       | 75,71        | 75,54       |

| PUMP MODEL | N° STAGES | MEI    | $\eta_{PL}$ | $\eta_{BEP}$ | $\eta_{OL}$ |
|------------|-----------|--------|-------------|--------------|-------------|
| NKV 65/3   | 3         | ≥ 0,70 | 73,71       | 78,96        | 77,11       |
| NKV 65/2-2 | 2         |        | 70,92       | 77,97        | 77,08       |
| NKV 65/2   | 2         |        | 73,71       | 78,96        | 77,11       |
| NKV 65/3-2 | 3         |        | 72,27       | 77,22        | 76,17       |
| NKV 65/4-2 | 4         |        | 72,52       | 77,33        | 76,58       |
| NKV 65/4   | 4         |        | 73,71       | 78,96        | 77,11       |
| NKV 65/5-2 | 5         |        | 73,15       | 77,48        | 76,31       |
| NKV 65/5   | 5         |        | 73,71       | 78,96        | 77,11       |
| NKV 65/6-2 | 6         |        | 73,78       | 77,69        | 75,76       |
| NKV 65/6   | 6         |        | 73,71       | 78,96        | 77,11       |
| NKV 65/7-2 | 7         |        | 73,84       | 77,87        | 75,86       |
| NKV 65/7   | 7         |        | 73,71       | 78,96        | 77,11       |
| NKV 65/8-2 | 8         |        | 73,87       | 78,00        | 75,94       |
| NKV 65/8   | 8         |        | 73,71       | 78,96        | 77,11       |

| PUMP MODEL | NUMBER OF STAGES | MEI    | $\eta_{PL}$ | $\eta_{BEP}$ | $\eta_{OL}$ |
|------------|------------------|--------|-------------|--------------|-------------|
| NKV 95/3   | 3                | ≥ 0,70 | 74,38       | 79,43        | 77,94       |
| NKV 95/2-2 | 2                |        | 72,37       | 78,87        | 77,79       |
| NKV 95/2   | 2                |        | 74,38       | 79,43        | 77,94       |
| NKV 95/3-2 | 3                |        | 73,03       | 78,58        | 77,65       |
| NKV 95/4-2 | 4                |        | 73,56       | 78,64        | 77,44       |
| NKV 95/4   | 4                |        | 74,38       | 79,43        | 77,94       |
| NKV 95/5-2 | 5                |        | 73,82       | 78,74        | 77,41       |
| NKV 95/5   | 5                |        | 74,38       | 79,43        | 77,94       |
| NKV 95/6-2 | 6                |        | 73,90       | 78,83        | 77,51       |
| NKV 95/6   | 6                |        | 74,38       | 79,43        | 77,94       |






# ACCESSORIES

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# ACCESSORIES


## CENTRIFUGAL PUMPS

| COUNTER-FLANGE KIT   | MODEL                   | COUNTER FLANGES AND GASKETS | THREADED     | MATERIAL | PN               | NKM-G- NKP-G | KDN |
|--|-------------------------|-----------------------------|--------------|----------|------------------|--------------|-----|
|  <p>DN 32</p> | DN 32                   | 1 x DN 32 + 1 x DN 50       | Threaded     | STEEL    | 16               | •            | •   |
|  | DN 40                   | 1 x DN 40 + 1 x DN 65       | Threaded     | STEEL    | 16               | •            | •   |
|  | DN 50                   | 1 x DN 50 + 1 x DN 65       | Threaded     | STEEL    | 16               | •            | •   |
|  | DN 65                   | 1 x DN 65 + 1 x DN 80       | Threaded     | STEEL    | 16               | •            | •   |
|  | DN 32                   | 1 x DN 32 + 1 x DN 50       | To be welded | STEEL    | 16               | •            | •   |
|  | DN 40                   | 1 x DN 40 + 1 x DN 65       | To be welded | STEEL    | 16               | •            | •   |
|  | DN 50                   | 1 x DN 50 + 1 x DN 65       | To be welded | STEEL    | 16               | •            | •   |
|  | DN 50/1                 | 1 x DN 50 + 1 x DN 80       | To be welded | STEEL    | 16               |              | •   |
|  | DN 65                   | 1 x DN 65 + 1 x DN 80       | To be welded | STEEL    | 16               | •            | •   |
|  | DN 65/1                 | 1 x DN 65 + 1 x DN 100      | To be welded | STEEL    | 16               |              | •   |
|  | DN 80                   | 1 x DN 80 + 1 x DN 100      | To be welded | STEEL    | 16               | •            | •   |
|  | DN 80/1                 | 1 x DN 80 + 1 x DN 125      | To be welded | STEEL    | 16               |              | •   |
|  | DN 100                  | 1 x DN 100 + 1 x DN 125     | To be welded | STEEL    | 16               | •            | •   |
|  | DN 125                  | 1 x DN 125 + 1 x DN 150     | To be welded | STEEL    | 16               | •            | •   |
|  | DN 150                  | 1 x DN 150 + 1 x DN 200     | To be welded | STEEL    | 16 (10 x DN 200) | •            | •   |
|  | DN 200                  | 1 x DN 200 + 1 x DN 250     | To be welded | STEEL    | 16 (10 x DN 200) |              | •   |
|  | DN 250/1                | 1 x DN 250 + 1 x DN 300     | To be welded | STEEL    | 16               |              | •   |
| DN 300   | 1 x DN 300 + 1 x DN 350 | To be welded                | STEEL        | 16       |                  | •            |     |
| DN 350   | 1 x DN 350 + 1 x DN 400 | To be welded                | STEEL        | 16       |                  | •            |     |

The kit includes the suction and delivery counter-flanges with gaskets, screws and bolts required for the size of the relevant pump.

## ACCESSORIES - VERTICAL CENTRIFUGAL PUMPS

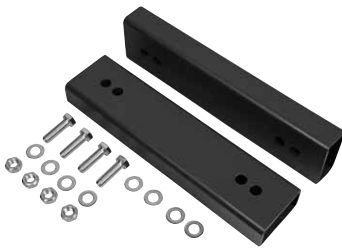
| COUNTER-FLANGE KIT   | MODEL  | COUNTER FLANGES AND GASKETS | THREADED | MATERIALE | PN | NKV 10 | NKV 15-20 | NKV 32 | NKV 45 | NKV 65 - 95 |
|--|--------|-----------------------------|----------|-----------|----|--------|-----------|--------|--------|-------------|
|  <p>DN 40</p> | DN 40  | 2 x DN 40                   | Threaded | STEEL     | 40 | •      |           |        |        |             |
|  | DN 50  | 2 x DN 50                   | Threaded | STEEL     | 40 |        | •         |        |        |             |
|  | DN 65  | 2 x DN 65                   | Threaded | STEEL     | 40 |        |           | •      |        |             |
|  | DN 80  | 2 x DN 80                   | Threaded | STEEL     | 40 |        |           |        | •      |             |
|  | DN 100 | 2 x DN 100                  | Threaded | STEEL     | 25 |        |           |        |        | •           |

| PORTS   | MODEL  | KVC | KVCX |
|---|--|-----|------|
|  | MT 1" 1/4 PORTS<br>(ONE FOR DNA AND ONE FOR DNM) | •   | •    |

Ports must be ordered separately, one for the suction, and one for the delivery

# ACCESSORIES

## CENTRIFUGAL PUMPS

| SPACER KIT   | MODEL                  | FOR PUMP TYPE           | P2 kW         | DIMENSIONS A x B x H mm | NKM-G 4 POLES | NKP-G 2 POLES |
|--|------------------------|-------------------------|---------------|-------------------------|---------------|---------------|
|  <p><b>SPACER KIT nr 5</b></p> | <b>SPACER KIT nr 1</b> | NKM-G 65-315/309/1¼     | 11            | 90 x 335 x 65           | •             |               |
|  | <b>SPACER KIT nr 5</b> | NKM-G 80-250/270/1¼     | 11            | 80 x 290 x 40           | •             |               |
|  | <b>SPACER KIT nr 2</b> | NKM-G 80-315/305/15/4   | 15            | 90 x 335 x 90           | •             |               |
|  | <b>SPACER KIT nr 3</b> | NKM-G 80-315/320/18,5/4 | 18.5          | 100 x 320 x 70          | •             |               |
|  |                        | NKM-G 80-315/334/22/4   | 22            |                         |               |               |
|  | <b>SPACER KIT nr 1</b> | NKM-G100-250/250/1¼     | 11            | 90 x 335 x 65           | •             |               |
|  |                        | NKM-G100-250/270/15/4   | 15            |                         |               |               |
|  | <b>SPACER KIT nr 3</b> | NKM-G100-315/300/18.5/4 | 18.5          | 100 x 320 x 70          | •             |               |
|  |                        | NKM-G100-315/316/22/4   | 22            |                         |               |               |
|  | <b>SPACER KIT nr 2</b> | NKM-G125-250/243/15/4   | 15            | 90 x 335 x 90           | •             |               |
|  | <b>SPACER KIT nr 3</b> | NKM-G125-250/256/18,5/4 | 18.5          | 100 x 320 x 70          | •             |               |
|  |                        | NKM-G125-250/266/22/4   | 22            |                         |               |               |
|  | <b>SPACER KIT nr 4</b> | NKM-G150-200/218/1¼     | 11            | 80 x 290 x 120          | •             |               |
|  | <b>SPACER KIT nr 6</b> | NKP-G 32-125/142/ 3/2   | 3             | 50 x 100 x 20           |               | •             |
|  |                        | NKP-G 32-160/177/5,5/2  | 5.5           |                         |               |               |
|  |                        | NKP-G 40-125/130/ 3/2   | 3             |                         |               |               |
|  |                        | NKP-G 40-125/139/ 4/2   | 4             |                         |               |               |
|  |                        | NKP-G 40-160/158/ 5,5/2 | 5.5           |                         |               |               |
|  |                        | NKP-G 40-160/172/ 7,5/2 | 7.5           |                         |               |               |
|  | <b>SPACER KIT nr 7</b> | NKP-G 40-200/210/1½     | 11            | 70 x 332 x 20           |               | •             |
|  |                        | NKP-G 40-250/230/15/2   | 15            |                         |               |               |
|  |                        | NKP-G 40-250/245/18,5/2 | 18.5          |                         |               |               |
|  | <b>SPACER KIT nr 6</b> | NKP-G 50-125/135/ 5,5/2 | 5.5           | 50 x 100 x 20           |               | •             |
|  |                        | NKP-G 50-125/144/ 7,5/2 | 7.5           |                         |               |               |
|  | <b>SPACER KIT nr 7</b> | NKP-G 50-160/169/1½     | 11            | 70 x 332 x 20           |               | •             |
|  |                        | NKP-G 50-200/200/15/2   | 15            |                         |               |               |
|  |                        | NKP-G 50-200/210/18,5/2 | 18.5          |                         |               |               |
| NKP-G 65-160/157/1½  |                        | 11                      |               |                         |               |               |
| NKP-G 65-160/173/15/2  |                        | 15                      |               |                         |               |               |
| NKP-G 65-200/190/18,5/2  |                        | 18.5                    |               |                         |               |               |
| NKP-G 80-160/147-127/1½  |                        | 11                      |               |                         |               |               |
| NKP-G 80-160/153/15/2  |                        | 15                      |               |                         |               |               |
| NKP-G 80-160/163/18,5/2  |                        | 18.5                    |               |                         |               |               |
| <b>SPACER KIT nr 8</b>   | NKP-G 80-200/190/30/2  | 30                      | 70 x 125 x 20 |                         | •             |               |

Available on request, separately from the pump. Used to place the pump in the horizontal position during installation, to compensate for the different pump / motor axis heights.

The kits include two spacers with sizes A (width), B (length), and H (height) as shown in the table.

Spacers with H size exceeding 20 mm are supplied with screws, nuts, and washers to secure the pump/motor to the spacer.



# TECHNICAL APPENDIX

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### CONVERSION TABLE FOR UNITS OF MEASURE

| CHARACTERISTIC    | SYSTEM UNIT OF MEASURE      | UNIT OF MEASURE   | SYMBOL  | CONVERSIONS  |  |   |
|-------------------|-----------------------------|---|---|--|--|---|
|                   |                             |   |   | SYSTEM   | INTERNATIONAL SYSTEM (SI)  | IMPERIAL SYSTEM   |
| LENGTH            | Technical and International | metre<br>decimetre<br>centimetre<br>millimetre  | m<br>dm<br>cm<br>mm                                       | 1 dm = 0,1 m<br>1 cm = 0,01 m<br>1 mm = 0,001 m  |  | 1 m = 3,28 ft<br>1 dm = 3,937 in<br>1 cm = 0,3937 in  |
|                   | Imperial                    | inch<br>foot<br>yard  | 1", in<br>1", ft<br>yd                                    | 1" = 25,4 mm<br>1" ft = 0,3048 m<br>1 yd = 0,9144 m  |  | 1 ft = 12"<br>1 yd = 3 ft = 26"   |
| AREA              | Technical and International | metres squared<br>centimetres squared<br>millimetres squared  | m <sup>2</sup><br>cm <sup>2</sup><br>mm <sup>2</sup>      | 1 cm <sup>2</sup> = 0,0001 m <sup>2</sup><br>1 mm <sup>2</sup> = 0,01 cm <sup>2</sup>  |  | 1 m <sup>2</sup> = 1,196 sq.yd<br>1 m <sup>2</sup> = 10,764 sq.ft<br>1 cm <sup>2</sup> = 0,155 sq.in                                      |
|                   | Imperial                    | square inch<br>square foot<br>square yard   | sq.in<br>sq.ft<br>sq.yd                                   | 1 sq.in = 6,45 cm <sup>2</sup><br>1 sq.ft = 0,0929 m <sup>2</sup><br>1 sq.yd = 0,836 m <sup>2</sup>  |  | 1 sq.ft = 144 sq.in<br>1 sq.yd = 1,296 sq.in<br>1 sq.yd = 9 sq.ft   |
| VOLUME            | Technical and International | metre cubed<br>decimetre cubed<br>centimetre cubed<br>litre cubed                                   | m <sup>3</sup><br>cm <sup>3</sup><br>mm <sup>3</sup><br>l | 1 m <sup>3</sup> = 1.000 dm <sup>3</sup><br>1 cm <sup>3</sup> = 0,001 m <sup>3</sup> = 1.000 cm <sup>3</sup><br>1 mm <sup>3</sup> = 0,001 dm <sup>3</sup><br>1 l = dm <sup>3</sup> |  | 1 dm <sup>3</sup> = 0,22 Imp.gal<br>1 dm <sup>3</sup> = 0,264 US.gal<br>1 dm <sup>3</sup> = 61,0 cu.in                                    |
|                   | Imperial                    | cubic inch<br>cubic feet<br>Imperial gallons<br>U.S. gallons  | cu.in<br>cu.ft<br>Imp.gal<br>USA.gal                      | 1 cu.in = 16,39 cm <sup>3</sup><br>1 cu.ft = 28,34 m <sup>3</sup><br>1 Imp.gal = 4,546 m <sup>3</sup><br>1 US.gal = 3,785 dm <sup>3</sup>  |  | 1 Imp.gal = 1,201 US.gal<br>1 US.gal = 0,833 Imp.gal  |
| TEMPERATURE       | Technical and International | degrees Centigrade<br>degrees Kelvin  | °C<br>°K  | °C = °K - 273<br>°K = °C + 273   |  | °C = 5/9 x (°F - 32)<br>°K = 5/9 x (°F - 32) + 273  |
|                   | Imperial                    | degrees Fahrenheit  | °F  | °F = 9/5 x °C + 32   |  | -   |
|                   |                             | freezing point of water at atmospheric pressure:<br>boiling point of water at atmospheric pressure: |   | 0°C = 273 °K = 032 °F<br>100°C = 373 °K = 212 °F   |  |   |
| WEIGHT and FORCE  | Technical                   | kilogram  | kg  | -  | 1 kg = 9,81 N  | 1 kg = 2,203 lb   |
|                   | International               | Newton  | N   | 1 N = 0,102 kg   | -  | 1 N = 0,22546 lb  |
|                   | Imperial                    | pound   | lb  | 1 lb = 0,454 kg  | 1 lb = 4,452 N   | -   |
| SPECIFIC WEIGHT   | Technical                   | kilogram per decimetre cubed  | kg/dm <sup>3</sup>  | -  | 1 kg/dm <sup>3</sup> = 9,807 N/dm <sup>3</sup>                         | 1 kg/dm <sup>3</sup> = 62,46 lb/cu.ft   |
|                   | International               | Newton per decimetre cubed  | N/dm <sup>3</sup>   | 1 N/dm <sup>3</sup> = 0,102 kg/dm <sup>3</sup>   | -  | 1 N/dm <sup>3</sup> = 6,36 lb/cu.ft   |
|                   | Imperial                    | pound per cubic foot  | lb/dm <sup>3</sup>  | 1 lb/cu.ft = 0,01600 kg/dm <sup>3</sup>  | 1 lb/cu.ft = 0,160 N/dm <sup>3</sup>                                   | -   |
| PRESSURE          | Technical                   | atmospheres   | kg/cm <sup>2</sup>  | -  | 1 kg/cm <sup>2</sup> = 98,067 kPa<br>1 kg/cm <sup>2</sup> = 0,9807 bar | 1 kg/cm <sup>2</sup> = 14,22 psi  |
|                   | International               | Pascal<br>kiloPascal<br>bar   | Pa<br>kPa<br>bar  | 1 kPa = 0,0102 kg/cm <sup>2</sup><br>1 bar = 1,02 kg/cm <sup>2</sup>   | 1 kPa = 1.000 Pa<br>1 bar = 100.000 Pa                                 | 1 kPa = 0,145 psi<br>1 bar = 14,50 psi  |
|                   | Imperial                    | pounds per square inch  | psi   | 1 psi = 0,0703 kg/cm <sup>2</sup>  | 1 psi = 0,06895 bar<br>1 psi = 6,894 kPa                               | -   |
| FLOW              | Technical                   | litres per minute<br>litres per second<br>metres cubed per hour                                     | l/min<br>l/s<br>m <sup>3</sup> /h                         | 1 l/min = 0,0167 l/s<br>1 l/s = 3,6 m <sup>3</sup> /h<br>1 m <sup>3</sup> /h = 16,667 l/min  | 1 l/s = 0,001 m <sup>3</sup> /s  | 1 l/min = 0,22 imp.g.p.m.<br>1 l/min = 0,264 US.g.p.m.<br>1 m <sup>3</sup> /h = 3,666 imp.g.p.m.<br>1 m <sup>3</sup> /h = 4,403 US.g.p.m. |
|                   | International               | metres cubed per second   | m <sup>3</sup> /s   | 1 m <sup>3</sup> /s = 1.000 l/s<br>1 m <sup>3</sup> /s = 3.600 m <sup>3</sup> /h   | -  | 1 m <sup>3</sup> /s = 13,198 imp.g.p.m.<br>1 m <sup>3</sup> /s = 15,852 US.g.p.m.   |
|                   | Imperial                    | imperial gallons per minute<br>U.S. gallons per minute  | Imp.g.p.m.<br>US.g.p.m.                                   | 1 Imp.g.p.m. = 4,546 l/min<br>1 Imp.g.p.m. = 0,273 m <sup>3</sup> /h<br>1 US.g.p.m. = 3,785 l/min<br>1 US.g.p.m. = 0,227 m <sup>3</sup> /h   | -  | 1 Imp.g.p.m. = 1,201 US.g.p.m.<br>1 US.g.p.m. = 0,833 Imp.g.p.m.  |
| TORQUE            | Technical                   | kilogram metre  | kgm   | -  | 1 kgm = 9,807 Nm   | 1 kgm = 7,233 ft.lb   |
|                   | International               | Newton metre  | Nm  | 1 Nm = 0,102 kgm   | -  | 1 Nm = 0,7376 ft.lb   |
|                   | Imperial                    | foot pound  | ft.lb   | 1 ft.lb = 0,138 kgm  | 1 ft.lb = 1,358 Nm   | -   |
| WORK and ENERGY   | Technical                   | kilogram metre vapour-horsepower hour   | kgm CVh   |  | 1 kgm = 9,807 J<br>1 CVh = 0,736 kWh                                   | 1 kgm = 7,233 ft.lb<br>1 Nm = 0,986 HP.hr.  |
|                   | International               | Joule<br>kiloWatt hour  | J<br>kWhq   | 1 J = 0,102 kgm<br>kWh = 1,36 CVh  | -  | 1 Nm = 0,7376 ft.lb<br>1 Nm = 0,7376 ft.lb  |
|                   | Imperial                    | foot pound<br>Horsepower hour   | ft.lb<br>HP.hr.   | 1 ft.lb = 0,138 kgm<br>1 HP.hr. = 1,014 CVh  | 1 ft.lb = 0,358 Nm<br>1 HP.hr. = 0,746 kWh                             | -   |
| POWER             | Technical                   | Horse power   | HP  | 1 HP = 0,736 kW  | 1 HP = 736 W   | -   |
|                   | International               | Watt<br>kiloWatt  | W<br>kW   | 1 W = 0,00136 Hp<br>1 kW = 1,36 Hp   | 1 kW = 1.000 W   | -   |
| KINETIC VISCOSITY | Technical                   | stokes<br>centistokes   | 1 St<br>1 cSt   | 1 St = 1 cm <sup>2</sup> /s<br>1 cSt = 0,01 St   | 1 St = 0.0001 m <sup>2</sup> /s  | 1 St = 0.00107 ft <sup>2</sup> /s   |
|                   | International               | m <sup>2</sup> /s   | m <sup>2</sup> /s   | 1 m <sup>2</sup> /s = 10.000 St  | 1 m <sup>2</sup> /s = 10.000 cm <sup>2</sup> /s                        | 1 m <sup>2</sup> /s = 10.764 ft <sup>2</sup> /s   |
|                   | Imperial                    | square foot per second  | ft <sup>2</sup> /s  | 1 ft <sup>2</sup> /s = 929 St  | 1 ft <sup>2</sup> /s = 0.0929 m <sup>2</sup> /s                        | -   |

### GENERAL INFORMATION

#### FUNDAMENTAL TERMS USED IN PUMPS

The following is a list of fundamental terms used in pumps and an explanation of their meanings. Their knowledge is necessary in order to discuss hydraulic pumps. All measurements are given in Technical units. Reference should be made to the chart for their international and Anglo-Saxon equivalents.

#### HEAD

Head means height, difference in level, gradient. For example if a pump has a flow of Q litres per second and a head of 30 metres, it means that it is capable of raising Q litres of liquid by 30 metres every second (therefore achieving a 30 metre gradient). For each given pump, the head is determined by its construction, such as the external diameter of the impeller and the speed of rotation, but it is not affected by the pumped liquid. This means that the pump as such can raise by 30 metres Q litres per second of water, petrol, mercury, etc.; the only difference in the three cases will be the power of the motor required.

#### SPECIFIC WEIGHT OF A LIQUID OR FLUID

The specific weight of a liquid or fluid is the weight per unit volume of the liquid/fluid. Specific weight is usually measured in kg/dm<sup>3</sup> or kg/l, remembering that 1 dm<sup>3</sup> equals 1 litre.

#### PRESSURE

Pressure means weight per unit of area (e.g. kg/cm<sup>2</sup>), and it should not be confused with head. In the case of liquids, the pressure that the liquid exerts on a surface is given by the product of the head (or height) of the liquid, multiplied by its specific weight. For this reason, the column of several km of air on the earth's surface produces at sea level a pressure of about 1kg/cm<sup>2</sup> (equal to approx. 1 atmosphere). If the same column were of water rather than air, the pressure would be some 700 to 800 times greater, due to the fact that water has a specific weight approximately 700-800 times greater than that of air.

Bearing in mind that a column of water 10 m high is equivalent to approx. 1 kg/cm<sup>2</sup>, if we placed a manometer on the delivery of the pump, the following pressure increases would be measured:

- |  |   |
|--|---|
| a) with petrol (specific weight 0,7 kg/dm <sup>3</sup> )   | = 00,7 x 0,001 x 30 x 100 = 2,1 kg/cm <sup>2</sup>  |
| b) with water (specific weight 1,0 kg/dm <sup>3</sup> )    | = 00,1 x 0,001 x 30 x 100 = 3,0 kg/cm <sup>2</sup>  |
| c) with mercury (specific weight 13,6 kg/dm <sup>3</sup> ) | = 13,6 x 0,001 x 30 x 100 = 40,8 kg/cm <sup>2</sup> |

#### FLOW

Flow means the quantity of liquid or fluid that passes through a point, such as the delivery outlet of a pump, or a cross section of a pipe, in the set unit of time.

This can be measured in litres per minute (l/min), litres per second (l/s), cubic metres per hour (m<sup>3</sup>/h) etc.

It should be noted that there is a perfect analogy between the flow of water through a pipe and the flow of electricity through a wire. It is sufficient to remember that hydraulic head is equivalent to electrical potential or voltage, and hydraulic flow is equivalent to electric current or amperes in electrotechnics. Even their behaviour is the same. Just as a thin wire restricts the flow of electricity more than one with a larger section, in the same way, a pipe of a smaller diameter offers a greater resistance to the flow of a liquid than one of a larger one. Just as the passage of electric current through the wire to a cable needs a voltage difference, in the same way, the flow of a liquid or fluid through a pipe needs a certain head.

There will never be a movement of liquid between two points of a perfectly horizontal pipe, and with the liquid at the same head in both points. This is due to the fact that, in the same way as the cable exerts a certain resistance to the passage of the electric current (electric resistance), the pipe also exerts a certain resistance to the passage of the fluid, the extent of which depends on the quality of the pipe (material, shape, presence of scale) and its section, and therefore the speed at which the fluid runs through the pipe. This resistance is called head loss.

#### HEAD LOSS

Head loss is that part of the head, possessed by the liquid, which is lost when passing through a pipe, a valve, a filter, etc. This loss cannot be recovered, as it is lost due to friction. Going back to the analogy between electrical and hydraulic phenomena, just as the losses in a cable increase in proportion with the current, so head losses are proportionally greater as the speed of the liquid increases. This means that the more the flow is restricted by scaled pipes, clogged filters, partially closed valves etc. the greater the head loss will be.

#### PUMP

A pump is a machine used to give a certain head to a liquid that passes through it. The head can be used to raise the liquid to a higher level, or to make it flow inside a pipe, or even in the open air, so that it covers a certain distance. The characteristics of a pump are:

- Flow** (the quantity of liquid that is moved through the pump in a unit of time)
- Head** (that is the height at which the pump is capable lifting the flow)

Based on the existing relationship between the flow and the head, it is possible to have:

- Pumps with small flow and large head (piston pumps, rotary pumps, small centrifugal pumps).
- Pumps with medium flow and medium head (centrifugal pumps in general).
- Pumps with large flow and small head (helico-centrifugal pumps, propeller pumps).

Centrifugal pumps, helico-centrifugal pumps and propeller pumps have a rotary motion and their speed is universally measured in revolutions per minute (rpm). With these machines operating at a given speed, for each given value of flow, there is only one value of head. This means that in order to increase or decrease the performance of these types of pumps, the operating speed must be varied accordingly. Basically, the liquid passing through the pump is supplied with energy that is related to the head and the speed of the liquid itself. This energy supplied within the unit of time is known as delivered power.

### DELIVERED POWER

The delivered power is the power delivered by the pump to the liquid. The value of this delivered power depends on three factors: flow, head, and specific weight of the pumped liquid. The higher these three factors, the higher is the power delivered by the pump. For example, a pump delivering petrol does less work than when delivering sulphuric acid, because the specific weights of the two liquids are different.

In order to pump a liquid, a pump must be driven by a motor. In the vast majority of cases, this is either an electric, or an internal combustion motor. Electric motors use electric power, while internal combustion motors (engines) use oil or oil derivative fuels. The power that the pump needs in order to operate is called absorbed power.

### DELIVERED POWER CALCULATION

Delivered power is normally expressed in kW or HP, indicating with:

Q = the flow

H = the head in metres of the column of liquid (m.c.l.)

$\gamma$  = the specific weight of the liquid

The delivered power (P3) is calculated using one of the following equations:

$$P3 = \frac{\gamma \text{ (kg/dm}^3\text{)} \times Q \text{ (l/s)} \times H \text{ (m.c.l.)}}{75} \text{ in HP}$$

$$P3 = \frac{\gamma \text{ (kg/dm}^3\text{)} \times Q \text{ (m}^3\text{/h)} \times H \text{ (m.c.l.)}}{270} \text{ in HP}$$

$$P3 = \frac{\gamma \text{ (kg/dm}^3\text{)} \times Q \text{ (l/s)} \times H \text{ (m.c.l.)}}{102} \text{ in kW}$$

$$P3 = \frac{\gamma \text{ (kg/dm}^3\text{)} \times Q \text{ (l/min)} \times H \text{ (m.c.l.)}}{4500} \text{ in HP}$$

$$P3 = \frac{\gamma \text{ (kg/dm}^3\text{)} \times Q \text{ (m}^3\text{/h)} \times H \text{ (m.c.l.)}}{367} \text{ in kW}$$

$$P3 = \frac{\gamma \text{ (kg/dm}^3\text{)} \times Q \text{ (l/min)} \times H \text{ (m.c.l.)}}{6120} \text{ in kW}$$

### ABSORBED POWER

Absorbed power is the power that the pump absorbs from the motor, to give to the liquid the delivered power discussed above.

Not all the absorbed power becomes delivered power, as some power is lost through friction, and even more within the pump itself, due to hydraulic losses. It is therefore clear that the delivered power is always less than the absorbed power, and the relation between the two is a number always lower than 1. This number is known as the efficiency.

### YIELD

The efficiency is obtained by dividing the delivered power by the absorbed power, and is normally expressed as a percentage. For example, an efficiency of 75 % of a pump indicates that only 75 % of the absorbed power is converted into delivered power, with the remaining 25 % being lost due to friction. Therefore, the higher the efficiency of a pump, the smaller the portion of absorbed power being lost. If one then considers that the cost of energy relates to the absorbed power, it immediately becomes apparent just how important efficiency is. If we compare two pumps with the same 1 HP delivered power, but with an efficiency of 50 % for the first, and 60 % for the second, we can assume that the first one will need 2 HP to supply 1, while the second will only need 1,67 HP to achieve the same result. This means that the efficiency of a pump expresses, better than any other parameter, the quality of the pump and the related savings in terms of operating costs.

### CALCULATION OF POWER OUTPUTS

P1: is the power absorbed by the motor in kW (generally indicated by the wattmeter).

P2: the power delivered by the motor in kW. This is measured at the brake (it basically is the power absorbed by the pump).

P3: the power delivered by the pump in kW.

$$\text{Power output of the motor } \eta = \frac{P_2}{P_1}$$

$$\text{Power output of the motor } \eta = \frac{P_3}{P_2}$$

$$\text{Power output of the motor } \eta = \frac{P_3}{P_1}$$



### THE HEAD OF A PUMP AND ITS MEASUREMENT

The head of a pump is always the differential head, or that given by the pump itself. This is generally expressed in metres. In order to ascertain the head of a surface pump, during its operation it is necessary to measure the value of the head both at the suction and at the delivery of the pump itself, making sure that the readings are taken at the same level, which is called the reference plane. Two cases are possible, depending on installation:

- 1) the value of the head at the suction is negative (i.e. below zero shown on the manometer): in this case, the level of the liquid collected is lower than the level of the suction inlet.
- 2) the value of the head at the suction is positive (i.e. above zero shown on the manometer) in this case, the level of the liquid collected is higher than the level of the suction inlet (flooded suction).

In the first case the head of the pump is given by the sum of the two readings, while in the second it is given by subtracting the value of the head at the suction inlet from the value at the delivery outlet.

Finally, it is necessary to make sure that the readings at the suction and the delivery have been taken from apertures of the same diameter, so that they are not distorted by a difference in the speed of the liquid at the point of measurement. Any correction is made by calculating the dynamic head, or that part of the head linked with the speed of the liquid, which means that part of the head that the liquid possesses at the measuring section, due to the fact that it is moving. The dynamic head  $H_d$ , expressed in metres, is calculated using the following formula:

$$H_d = \frac{v^2}{2g}$$

where:  $v$  = speed of the fluid at the measuring point, given in m/s

$g$  = acceleration of gravity (9,81), expressed in m/s<sup>2</sup>

$2g = 2 \times 9,81 = 19,62 \text{ m/s}^2$

The correction of the head is given by the difference between the dynamic head at the delivery, and the dynamic head at the suction. It is therefore clear that if the readings upstream and downstream the pump have been taken on pipes of the same diameter, and therefore with the liquid flowing at the same speed, the correction is zero.

To find the head of submersible impeller pumps, it is sufficient, during operation, to measure the head at the delivery port. In this case, the head of the pump is then given by adding the value read to the dynamic head (at the delivery outlet), and to the difference in level between the free surface of the liquid collected and the manometer.

### VARIATION IN PUMP HEAD IN RELATION TO SPEED VARIATION

The performance of a pump is directly connected to its speed in rpm ( $n$ ). Providing that there is no cavitation, the law of similarity may be used, which is expressed as follows:

$$Q_x = Q \times \frac{n_x}{n}$$

$$H_x = H \times \left(\frac{n_x}{n}\right)^2$$

$$P_{2-x} = P_2 \times \left(\frac{n_x}{n}\right)^3$$

For example, when doubling the number of revolutions ( $n_x$ ) one obtains:

$Q_x$  = the value of the flow doubles

$H_x$  = the value of the head is 4 times higher

$P_{2-x}$  = the value of the absorbed power is 8 times higher

$Q - H - P_2$  are the values at speed  $n$

$Q_x - H_x - P_{2-x}$  are the values at speed  $n_x$ .

### PRACTICAL NOTES ON NPSH

NPSH stands for Net Positive Suction Head.

The physical meaning of this expression is the absolute pressure that must exist at the suction port of the pump in order to pump the liquid without causing cavitation.

This can occur when the absolute pressure falls to values likely to allow the formation of vapour bubbles within the fluid, causing the pump to work with reduced head.

Therefore, NPSH can also be seen as the pressure required to compensate load losses in the path between the suction port and the point with the lowest pressure of the impeller.

All this demonstrates the importance of checking that the pump is not producing cavitation, as in addition to creating high noise similar to metal hammering, cavitation will also quickly damage the impeller.

A special formula associates the NPSH value required by the pump with the conditions of the system and with the type of liquid, allowing to calculate the minimum pressure required at the suction, and consequently to determine the position in which to locate the pump in relation to the free surface of the liquid to be pumped.

The general NPSH formula is:

$$NPSH = Z1 + \left( \frac{p1 + pb - pv}{\gamma} \times 10 \right) - Hr$$

$$Z1 = NPSH - \left( \frac{p1 + pb - pv}{\gamma} \times 10 \right) + Hr$$

where:

Z1 = the difference in level (in m) between the axis of the pump and the free surface of the liquid to be pumped.

p1 = the possible pressure (in kg/cm<sup>2</sup>) on the surface of the liquid in the tank from which it is collected. If the liquid is collected from an open tank and the surface of the liquid is in contact with the atmosphere, p1 will be equal to 0.

pb = atmospheric pressure (in kg/cm<sup>2</sup>) at the site of installation.

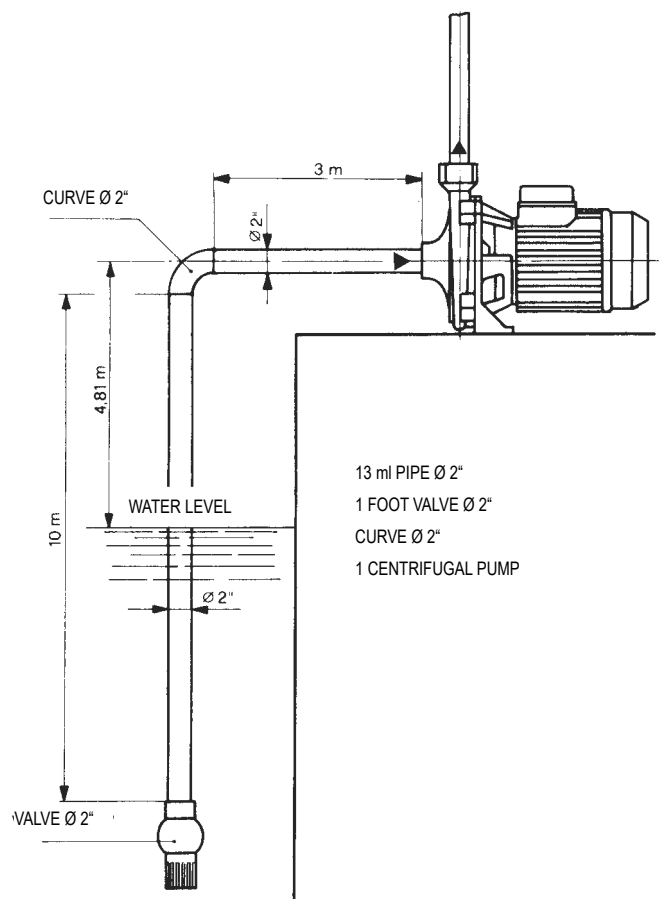
pv = the vapour tension (in kg/cm<sup>2</sup>) of the liquid at pumping temperature.

γ = the specific weight (in kg/dm<sup>3</sup>) of the liquid at pumping temperature.

10 = conversion factor of the units of measure used.

Hr = head loss (in m) in the suction pipework.

To give a practical example, the diagram below is of a system (see the Figure) for a centrifugal pump, for which a flow rate Q of 235 l/min is required, under four different conditions.



### CALCULATION OF THE HEAD LOSS AT THE SUCTION (Hr)

Flow rate :  $Q = 235 \text{ l/min} = 0,00392 \text{ m}^3/\text{s}$   
 Cross section area of the pipe :  $S = 19,6 \text{ cm}^2 = 0,00196 \text{ m}^2$

Velocity of the water in the pipe :  $V = Q/S = \frac{0,00392}{0,00196} = 2 \text{ m/s}$

The head losses (see table 1 & 2) are:

- 2" foot valve = 0,610 m
- Curve (assume  $\frac{d}{R} = 1$ ) = 0,058 m
- Suction piping ( 10 m + 3 m) = 1,370 m
- Total loss at the suction = 2,040 m

Let's now consider the four different conditions, notwithstanding the Hr head losses, and assuming an NPSH for the pump equal to 3,25 m, at the flow rate being considered. The atmospheric pressure  $p_b$  can be read from the diagram, the vapour tension  $p_v$  and the specific weight can be found on table 3.

**1<sup>st</sup> case:** system at sea level and water at 20 °C.

$$3,25 = Z_1 + \left( \frac{1,033 - 0,0238}{0,9982} \times 10 \right) - 2,04$$

$$Z_1 = 3,25 - \left( \frac{1,033 - 0,0238}{0,9982} \times 10 \right) + 2,04 = - 4,82$$

Which means that the pump, for the flow rate being considered, can collect water at 20° from a maximum depth of 4,82 m. It must be noted that a for flow rate greater than 235 l/min, when increasing the value of the NPHS of the pump and the head loss at the suction, the maximum suction depth will be less 4,82m. The opposite happens for flow rates lower than 235 l/min. From this, it follows that in order to bring the pump back to regular operation, it is often sufficient to partially close the delivery valve and reduce the flow rate.

**2<sup>nd</sup> case:** system at sea level and water at 60 °C.

$$3,25 = Z_1 + \left( \frac{1,033 - 0,2031}{0,9831} \times 10 \right) - 2,04$$

$$Z_1 = 3,25 - \left( \frac{1,033 - 0,2031}{0,9831} \times 10 \right) + 2,04 = - 3,15$$

Which means that the pump, for the flow rate being considered, can collect water at 60° from a maximum depth of 3,15 m.

**3<sup>rd</sup> case:** system at sea level and water at 90°C.

$$3,25 = Z_1 + \left( \frac{1,033 - 0,7149}{0,9653} \times 10 \right) - 2,04$$

$$Z_1 = 3,25 - \left( \frac{1,033 - 0,7149}{0,9653} \times 10 \right) + 2,04 = - 1,99$$

Which means that the free surface of the water at 90 °C for the flow rate considered must be 1,99 metres higher than the axis of the pump.

**4<sup>th</sup> case:** system at 1500 m above sea level and water at 50 °C.

$$3,25 = Z_1 + \left( \frac{0,860 - 0,1258}{0,9880} \times 10 \right) - 2,04$$

$$Z_1 = 3,25 - \left( \frac{0,860 - 0,1258}{0,9880} \times 10 \right) + 2,04 = - 2,14$$

Which means that the pump, for the flow rate being considered, in a system at 1500 metres above sea level can collect water at 50 °C from a maximum depth of 2,14 metres.

**Note:** it's always wise to include a safety margin (0,5m for cold water) to allow for errors and unforeseen variations in the estimated values. Such a margin is even more important with liquids near boiling point, as small temperature changes can produce large differences in operating conditions. For example, in case 3, if the temperature of the water were at any time to reach 95°C, instead of 90 °C, the necessary pump suction pressure would no longer be 1,99 metres, but would increase from 1,99 metres to 3,51 metres.

### NOTES ON THE MOTORS OF ELECTRIC PUMPS

| INDEX OF SYMBOLS USED |  |
|-----------------------|--|
| $P_1$                 | : POWER ABSORBED BY THE MOTOR IN KW.   |
| $P_2$                 | : POWER DELIVERED BY THE MOTOR IN KW OR HP.                                      |
| $V \sim$              | = AC POWER INPUT VOLTAGE AT THE MAINS.   |
| Hz                    | = FREQUENCY IN CYCLES PER SECOND OF THE POWER INPUT VOLTAGE.                     |
| I                     | = CURRENT ABSORBED BY THE MOTOR IN AMPERES.                                      |
| $\cos\phi$            | = POWER FACTOR.  |
| $n^{1/min}$           | = SPEED OF ROTATION IN RPM.  |
| $\eta$                | = OUTPUT POWER (RELATION BETWEEN DEVELOPED POWER AND ABSORBED POWER $P_2/P_1$ ). |
| p                     | = NUMBER OF POLES OF THE MOTOR.  |
| Cn                    | = NOMINAL TORQUE OF THE MOTOR.   |

#### NO-LOAD SPEED OF ROTATION

The no-load speed of single-phase and three-phase electric induction motors is given by the formula:

$$n^{1/min} = \frac{120 \times \text{Hz}}{p}$$

No-load speed of rotation  $n^{1/min}$

| FREQUENCY Hz | 2 POLES | 4 POLES |
|--------------|---------|---------|
| 50           | 3000    | 1500    |
| 60           | 3600    | 1800    |

The full-load speed is 2 to 7 % lower than the no-load speed (2 to 7 % sliding).

#### CURRENT ABSORBED

$$\text{Single-phase: } I = \frac{1000 \times P_2 \text{ (kW)}}{V \times \cos\phi \times \eta} \quad \text{or: } I = \frac{736 \times P_2 \text{ (HP)}}{V \times \cos\phi \times \eta}$$

$$\text{Three-phase: } I = \frac{1000 \times P_2 \text{ (kW)}}{1.73 \times V \times \cos\phi \times \eta} \quad \text{or: } I = \frac{736 \times P_2 \text{ (HP)}}{1.73 \times V \times \cos\phi \times \eta}$$

#### ABSORBED POWER

$$\text{Single-phase: } P_1 \text{ (kW)} = \frac{V \times I \times \cos\phi}{1000}$$

$$\text{Three-phase: } P_1 \text{ (kW)} = \frac{1.73 \times V \times I \times \cos\phi}{1000}$$

#### POWER DELIVERED AT THE MOTOR AXIS

$$\text{Single-phase: } P_2 \text{ (kW)} = \frac{V \times I \times \cos\phi \times \eta}{1000} \quad \text{or: } P_2 \text{ (HP)} = \frac{V \times I \times \cos\phi \times \eta}{736}$$

$$\text{Three-phase: } P_2 \text{ (kW)} = \frac{1.73 \times V \times I \times \cos\phi \times \eta}{1000} \quad \text{or: } P_2 \text{ (HP)} = \frac{1.73 \times V \times I \times \cos\phi \times \eta}{736}$$

#### YIELD

$$\eta = \frac{P_2 \text{ (kW)}}{P_1 \text{ (kW)}}$$

### POWER FACTOR

$$\text{Single-phase: } \cos\varphi = \frac{P_2 (\text{kW}) \times 1000}{V \times I \times \eta}$$

$$\text{or: } \cos\varphi = \frac{P_1 (\text{kW}) \times 1000}{V \times I}$$

$$\text{Three-phase: } \cos\varphi = \frac{P_2 (\text{kW}) \times 1000}{1,73 \times V \times I \times \eta}$$

$$\text{or: } \cos\varphi = \frac{P_1 (\text{kW}) \times 1000}{1,73 \times V \times I}$$

### TORQUE FACTOR

$$C_n = \frac{P_2 (\text{kW}) \times 1000}{1.027 \times n^{1/\text{min}}} \text{ in kgm}$$

$$C_n = \frac{P_2 (\text{HP}) \times 736}{1.027 \times n^{1/\text{min}}} \text{ in kgm}$$

$$C_n = \frac{702 \times \text{HP}}{n^{1/\text{min}}} \text{ in decaNewtonmetres}$$

### RELATIONSHIP BETWEEN KW AND HP

$$1 \text{ HP} = 0,736 \text{ kW}$$

$$1 \text{ kW} = 1,36 \text{ HP}$$

$$\frac{\text{HP}}{1.36} = \text{kW}$$

$$\text{kW} \times 1,36 = \text{HP}$$

### STARTING CURRENT (ISP)

The starting current ( at switch on) of a motor is 4 to 8 times greater than the nominal current, depending on the power of the motor.

$$I_{sp} = I_n \times 4 \div 8$$

### DETAILS ON CAPACITORS

The approximate current absorbed by a capacitor is:

$$I = \frac{6,28 \times F \times C \times V}{1,000,000}$$

Where:

I = current in Amps absorbed by the capacitor.

F = frequency in Hz of the applied voltage.

C = capacity of capacitor  $\mu\text{F}$ .

V = applied voltage.

Example:

The current absorbed by a 14  $\mu\text{F}$  capacitor connected to a 220 Volt - 50 Hz power input is:

$$I = \frac{6,28 \times 50 \times 14 \times 220}{1,000,000} = 0,96 \text{ Amperes}$$

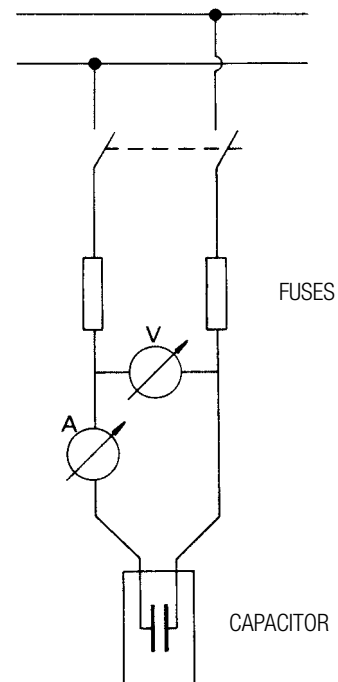
The approximate capacity of a capacitor is determined by:

$$C = \frac{I}{6,28 \times F \times V} \times 1,000,000$$

Example:

The capacity of a capacitor absorbing 1,4 Amps connected to a 220 Volt - 50 Hz power input is:

$$C = \frac{1,4}{6,28 \times 50 \times 220} \times 1,000,000 = 20,2 \mu\text{F}$$



### STAR-DELTA START-UP

The normally delta  $\Delta$  connected motor is connected to the network using a star type connection. The current and the starting torque are both reduced to 1/3 of the value they would be if delta  $\Delta$  connected.

### PROTECTION

It is recommended that motors are connected to the power input network using appropriate three-fuse thermal magnetic circuit breakers, or in any case circuit breakers complying with current local regulations.

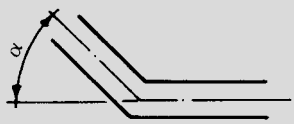
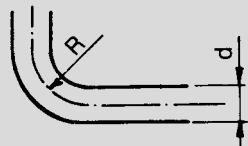
### HEAD LOSS

In centimetres of column water for each metre of straight pipe

| V   | Q<br>h | PIPE DIAMETER IN mm. |      |       |       |       |      |      |      |      |      |      |      |      |        |       |       |         |       |
|-----|--------|----------------------|------|-------|-------|-------|------|------|------|------|------|------|------|------|--------|-------|-------|---------|-------|
|     |        | 20                   | 25   | 30    | 40    | 50    | 65   | 80   | 100  | 125  | 150  | 175  | 200  | 250  | 300    | 350   | 400   | 450     | 500   |
| 0.5 | Q      | 9.4                  | 14.7 | 21.2  | 37.7  | 59.0  | 115  | 151  | 235  | 369  | 530  | 723  | 940  | 1480 | 2120   | 2880  | 3770  | 4780    | 5890  |
|     | h      | 2.4                  | 1.9  | 1.5   | 1.0   | 0.8   | 0.56 | 0.46 | 0.36 | 0.28 | 0.23 | 0.19 | 0.16 | 0.13 | 0.105  | 0.089 | 0.076 | 0.067   | 0.06  |
| 0.6 | Q      | 11.3                 | 17.7 | 25.4  | 45.3  | 70.7  | 138  | 181  | 282  | 442  | 636  | 887  | 1130 | 1770 | 2540   | 3460  | 4520  | 5730    | 7060  |
|     | h      | 3.3                  | 2.6  | 2.1   | 1.5   | 1.12  | 0.78 | 0.65 | 0.5  | 0.39 | 0.32 | 0.27 | 0.23 | 0.18 | 0.15   | 0.12  | 0.11  | 0.096   | 0.086 |
| 0.7 | Q      | 13.2                 | 20.6 | 29.7  | 52.9  | 82.5  | 161  | 211  | 329  | 516  | 742  | 1010 | 1315 | 2070 | 2960   | 4040  | 5270  | 6690    | 8250  |
|     | h      | 4.4                  | 3.4  | 2.7   | 1.9   | 1.5   | 1.0  | 0.86 | 0.67 | 0.52 | 0.43 | 0.36 | 0.31 | 0.24 | 0.2    | 0.17  | 0.15  | 0.13    | 0.12  |
| 0.8 | Q      | 15.05                | 23.6 | 33.9  | 60.4  | 94.5  | 184  | 241  | 377  | 590  | 848  | 1155 | 1505 | 2360 | 3390   | 4620  | 6030  | 7650    | 9420  |
|     | h      | 5.6                  | 4.3  | 3.4   | 2.5   | 1.9   | 1.3  | 1.1  | 0.86 | 0.67 | 0.55 | 0.46 | 0.4  | 0.31 | 0.26   | 0.22  | 0.19  | 0.17    | 0.15  |
| 0.9 | Q      | 16.95                | 26.5 | 38.2  | 68.0  | 106.0 | 207  | 272  | 423  | 664  | 955  | 1300 | 1695 | 2660 | 3810   | 5200  | 6780  | 8600    | 10600 |
|     | h      | 6.9                  | 5.3  | 4.3   | 3.0   | 2.4   | 1.7  | 1.4  | 1.1  | 0.84 | 0.69 | 0.58 | 0.5  | 0.39 | 0.32   | 0.27  | 0.24  | 0.21    | 0.19  |
| 1.0 | Q      | 18.8                 | 29.5 | 42.4  | 75.5  | 117.7 | 230  | 302  | 471  | 737  | 1060 | 1445 | 1880 | 2950 | 4230   | 5770  | 7530  | 9550    | 11770 |
|     | h      | 8.3                  | 6.4  | 5.1   | 3.7   | 2.9   | 2.1  | 1.7  | 1.3  | 1.0  | 0.84 | 0.71 | 0.61 | 0.48 | 0.4    | 0.34  | 0.29  | 0.26    | 0.23  |
| 1.1 | Q      | 20.7                 | 32.4 | 46.6  | 83.0  | 129.5 | 252  | 332  | 518  | 81   | 1165 | 1585 | 2070 | 3250 | 4650   | 6350  | 8290  | 10500   | 12950 |
|     | h      | 9.9                  | 7.6  | 6.2   | 4.4   | 3.4   | 2.4  | 2.0  | 1.6  | 1.2  | 1.0  | 0.85 | 0.74 | 0.58 | 0.48   | 0.4   | 0.35  | 0.31    | 0.28  |
| 1.2 | Q      | 22.6                 | 35.4 | 50.9  | 90.6  | 141.0 | 276  | 362  | 565  | 885  | 1272 | 1730 | 2260 | 3550 | 5080   | 6930  | 9040  | 11450   | 14140 |
|     | h      | 11.7                 | 9.0  | 7.2   | 5.2   | 4.0   | 2.9  | 2.4  | 1.9  | 1.5  | 1.2  | 1.0  | 0.87 | 0.69 | 0.56   | 0.48  | 0.42  | 0.37    | 0.32  |
| 1.3 | Q      | 24.5                 | 38.3 | 55.0  | 98.0  | 153.0 | 299  | 392  | 612  | 960  | 1378 | 1875 | 2450 | 3840 | 5500   | 7500  | 9800  | 12400   | 15320 |
|     | h      | 13.5                 | 10.4 | 8.4   | 6.0   | 4.7   | 3.3  | 2.8  | 2.2  | 1.71 | 1.4  | 1.15 | 1.0  | 0.8  | 0.66   | 0.56  | 0.49  | 0.43    | 0.38  |
| 1.4 | Q      | 26.35                | 41.3 | 59.3  | 105.5 | 165.0 | 302  | 422  | 660  | 1032 | 1473 | 2020 | 2635 | 4140 | 5920   | 8090  | 10530 | 13370   | 16500 |
|     | h      | 15.4                 | 11.9 | 9.6   | 6.9   | 5.4   | 3.8  | 3.2  | 2.5  | 2.0  | 1.6  | 1.3  | 1.17 | 0.92 | 0.76   | 0.64  | 0.56  | 0.5     | 0.44  |
| 1.5 | Q      | 28.25                | 44.2 | 63.6  | 113.0 | 176.5 | 345  | 452  | 707  | 1106 | 1590 | 2165 | 2825 | 4430 | 6350   | 8660  | 11300 | 14320   | 17680 |
|     | h      | 17.4                 | 13.5 | 10.9  | 7.8   | 6.1   | 4.4  | 3.6  | 2.8  | 2.25 | 1.82 | 1.5  | 1.34 | 1.05 | 0.87   | 0.74  | 0.64  | 0.57    | 0.51  |
| 1.6 | Q      | 30.1                 | 47.1 | 67.8  | 121.0 | 188.5 | 368  | 483  | 753  | 1180 | 1695 | 2310 | 3010 | 4730 | 6770   | 9240  | 12055 | 5015270 | 18850 |
|     | h      | 19.6                 | 15.3 | 12.4  | 8.9   | 6.9   | 4.9  | 4.1  | 3.2  | 2.55 | 2.05 | 1.7  | 1.53 | 1.18 | 0.99   | 0.84  | 0.72  | 0.64    | 0.58  |
| 1.7 | Q      | 32.0                 | 50.1 | 72.0  | 128.0 | 200.0 | 392  | 513  | 800  | 1253 | 1802 | 2455 | 3200 | 5020 | 7190   | 9820  | 12800 | 16230   | 20030 |
|     | h      | 21.9                 | 17.2 | 13.9  | 10.0  | 7.8   | 5.4  | 4.6  | 3.6  | 2.85 | 2.3  | 1.95 | 1.7  | 1.33 | 1.11   | 0.94  | 0.81  | 0.73    | 0.65  |
| 1.8 | Q      | 33.9                 | 53.0 | 76.3  | 136.0 | 212.0 | 415  | 543  | 848  | 1327 | 1905 | 2600 | 3390 | 5320 | 7610   | 10380 | 13550 | 17200   | 21200 |
|     | h      | 24.2                 | 19.1 | 15.4  | 11.1  | 8.7   | 6.0  | 5.1  | 4.0  | 3.15 | 2.6  | 2.2  | 1.9  | 1.48 | 1.24   | 1.05  | 0.91  | 0.81    | 0.73  |
| 1.9 | Q      | 35.8                 | 56.0 | 80.5  | 143.5 | 224.0 | 438  | 573  | 895  | 1400 | 2015 | 2740 | 3580 | 5610 | 8040   | 10960 | 14300 | 18150   | 22400 |
|     | h      | 26.8                 | 21.0 | 17.0  | 12.3  | 9.6   | 6.8  | 5.6  | 4.4  | 3.45 | 2.85 | 2.45 | 2.1  | 1.64 | 1.38   | 1.17  | 1.01  | 0.9     | 0.81  |
| 2.0 | Q      | 37.7                 | 59.0 | 84.8  | 151.0 | 235.5 | 461  | 603  | 943  | 1475 | 2120 | 2885 | 3765 | 5910 | 8460   | 11540 | 15060 | 19100   | 23570 |
|     | h      | 29.6                 | 23.0 | 18.6  | 13.4  | 10.5  | 7.5  | 6.2  | 4.9  | 3.8  | 3.17 | 2.7  | 2.33 | 1    | 1.52   | 1.3   | 1.12  | 0.99    | 0.89  |
| 2.1 | Q      | 39.5                 | 62.0 | 89.0  | 158.5 | 247.5 | 484  | 633  | 990  | 1548 | 225  | 3030 | 3955 | 6200 | 8890   | 12100 | 15810 | 20050   | 24750 |
|     | h      | 32.2                 | 25.1 | 20.4  | 14.8  | 11.5  | 8.2  | 6.8  | 5.4  | 4.2  | 3.5  | 2.95 | 2.55 | 2.0  | 1.68   | 1.43  | 1.22  | 1.08    | 0.98  |
| 2.2 | Q      | 41.5                 | 64.9 | 93.2  | 176.0 | 259.0 | 507  | 663  | 1036 | 1620 | 2330 | 3175 | 4145 | 6500 | 9300   | 12700 | 16570 | 21000   | 25930 |
|     | h      | 35.0                 | 27.3 | 22.3  | 16.2  | 12.5  | 9.1  | 7.4  | 5.9  | 4.6  | 3.85 | 3.25 | 2.8  | 22   | 1.85   | 1.56  | 1.34  | 1.18    | 1.08  |
| 2.3 | Q      | 43.3                 | 67.9 | 97.5  | 173.5 | 271.0 | 530  | 694  | 1082 | 1695 | 2440 | 3320 | 4330 | 6800 | 9730   | 13270 | 17310 | 21950   | 27100 |
|     | h      | 38.0                 | 29.7 | 24.2  | 17.7  | 13.6  | 9.8  | 8.1  | 6.4  | 5.0  | 4.15 | 3.5  | 3.05 | 2.4  | 2.03   | 1.7   | 1.46  | 1.28    | 1.18  |
| 2.4 | Q      | 45.2                 | 70.8 | 101.5 | 181.0 | 282.5 | 553  | 724  | 1130 | 1770 | 2545 | 3460 | 4520 | 7090 | 10140  | 13850 | 18090 | 22900   | 28300 |
|     | h      | 42.1                 | 32.1 | 26.2  | 19.1  | 14.7  | 10.6 | 8.8  | 6.9  | 5.45 | 4.55 | 3.8  | 3.3  | 2.62 | 2.21   | 1.85  | 1.58  | 1.38    | 1.28  |
| 2.5 | Q      | 47.1                 | 73.7 | 105.8 | 189.0 | 294.5 | 576  | 755  | 1178 | 1843 | 2650 | 3610 | 4710 | 7390 | 10570  | 14420 | 18820 | 23880   | 29450 |
|     | h      | 45.0                 | 34.7 | 28.3  | 20.5  | 16.0  | 11.4 | 9.6  | 7.5  | 5.9  | 4.9  | 4.1  | 3.58 | 2.84 | 2.4    | 2.0   | 1.7   | 1.5     | 1.4   |
| 2.6 | Q      | 49.0                 | 76.6 | 110.0 | 196.0 | 306.0 | 599  | 785  | 1225 | 1915 | 2755 | 3755 | 4900 | 7680 | 11000  | 15000 | 19590 | 24820   | 30630 |
|     | h      | 48.3                 | 37.3 | 30.4  | 22.2  | 17.2  | 12.3 | 10.4 | 8.1  | 6.35 | 5.25 | 4.4  | 3.85 | 3.07 | 2.59   | 2.17  | 1.84  | 1.62    | 1.51  |
| 2.7 | Q      | 50.9                 | 79.6 | 114.3 | 204.0 | 318.0 | 622  | 815  | 1271 | 1990 | 2860 | 3900 | 5090 | 7980 | 111410 | 15590 | 20340 | 25800   | 31820 |
|     | h      | 51.7                 | 40.0 | 32.5  | 23.8  | 18.5  | 13.2 | 11.2 | 8.7  | 6.85 | 5.65 | 4.75 | 4.15 | 3.3  | 2.78   | 2.34  | 1.98  | 1.74    | 1.62  |
| 2.8 | Q      | 52.7                 | 82.6 | 118.5 | 211.5 | 330.0 | 645  | 845  | 1320 | 2060 | 2970 | 4040 | 5280 | 8270 | 11830  | 16160 | 21090 | 26730   | 33000 |
|     | h      | 55.2                 | 42.5 | 34.8  | 25.5  | 19.9  | 14.0 | 12.0 | 9.3  | 7.35 | 6.05 | 5.10 | 4.45 | 3.56 | 2.98   | 2.51  | 2.13  | 1.88    | 1.74  |
| 2.9 | Q      | 54.6                 | 85.5 | 123.0 | 219.0 | 342.0 | 668  | 875  | 1365 | 2140 | 3075 | 4190 | 5460 | 8560 | 12250  | 16730 | 21480 | 27700   | 34200 |
|     | h      | 58.7                 | 45.1 | 37.1  | 27.1  | 21.3  | 15.2 | 12.8 | 10.0 | 7.85 | 6.45 | 5.5  | 4.75 | 3.82 | 3.18   | 2.7   | 2.3   | 2.03    | 1.87  |
| 3.0 | Q      | 56.5                 | 88.5 | 127.0 | 226.5 | 354.0 | 691  | 905  | 1414 | 2210 | 3180 | 4330 | 5650 | 8850 | 12690  | 17310 | 22600 | 28650   | 35350 |
|     | h      | 62.9                 | 47.9 | 39.6  | 28.8  | 22.6  | 16.3 | 13.6 | 10.7 | 8.4  | 6.9  | 5.9  | 5.1  | 4.1  | 3.4    | 2.9   | 2.5   | 2.2     | 2.0   |

### HEAD LOSS

in cm of column of water in bends, gate valves, and foot valves

| VELOCITY OF WATER IN m/s | SHARP EDGED BENDS   |                     |                     |                     |                     | NORMAL BENDS   |                     |                     |                   |                     | GATE VALVE | FOOT VALVE | NON-RETURN VALVE | HEAD LOSS ON EXIT FROM PIPES<br>$V^2/2g$ |
|--------------------------|---|---------------------|---------------------|---------------------|---------------------|--|---------------------|---------------------|-------------------|---------------------|------------|------------|------------------|--|
|                          |  |                     |                     |                     |                     |  |                     |                     |                   |                     |            |            |                  |  |
|                          | $\alpha = 30^\circ$   | $\alpha = 40^\circ$ | $\alpha = 60^\circ$ | $\alpha = 80^\circ$ | $\alpha = 90^\circ$ | $\frac{d}{R} = 0,4$  | $\frac{d}{R} = 0,6$ | $\frac{d}{R} = 0,8$ | $\frac{d}{R} = 1$ | $\frac{d}{R} = 1,5$ |            |            |                  |  |
| 0,10                     | 0,03  | 0,04                | 0,05                | 0,07                | 0,08                | 0,07   | 0,08                | 0,01                | 0,0155            | 0,027               | 0,03       | 30         | 30               | 0,05                                     |
| 0,15                     | 0,06  | 0,73                | 0,1                 | 0,14                | 0,17                | 0,016  | 0,019               | 0,024               | 0,033             | 0,06                | 0,033      | 31         | 31               | 0,12                                     |
| 0,2                      | 0,11  | 0,13                | 0,18                | 0,26                | 0,31                | 0,028  | 0,033               | 0,04                | 0,059             | 0,11                | 0,058      | 31         | 31               | 0,21                                     |
| 0,25                     | 0,17  | 0,21                | 0,28                | 0,4                 | 0,48                | 0,044  | 0,052               | 0,063               | 0,091             | 0,17                | 0,09       | 31         | 31               | 0,32                                     |
| 0,3                      | 0,25  | 0,3                 | 0,41                | 0,6                 | 0,7                 | 0,063  | 0,074               | 0,09                | 0,13              | 0,25                | 0,13       | 31         | 31               | 0,46                                     |
| 0,35                     | 0,33  | 0,4                 | 0,54                | 0,8                 | 0,93                | 0,085  | 0,10                | 0,12                | 0,18              | 0,33                | 0,18       | 31         | 31               | 0,62                                     |
| 0,4                      | 0,43  | 0,52                | 0,71                | 1,0                 | 1,2                 | 0,11   | 0,13                | 0,16                | 0,23              | 0,43                | 0,23       | 32         | 31               | 0,82                                     |
| 0,5                      | 0,67  | 0,81                | 1,1                 | 1,6                 | 1,9                 | 0,18   | 0,21                | 0,26                | 0,37              | 0,67                | 0,37       | 33         | 32               | 1,27                                     |
| 0,6                      | 0,97  | 1,2                 | 1,6                 | 2,3                 | 2,8                 | 0,25   | 0,29                | 0,36                | 0,52              | 0,97                | 0,52       | 34         | 32               | 1,84                                     |
| 0,7                      | 1,35  | 1,65                | 2,2                 | 3,2                 | 3,9                 | 0,34   | 0,40                | 0,48                | 0,70              | 1,35                | 0,7        | 35         | 32               | 2,5                                      |
| 0,8                      | 1,7   | 2,1                 | 2,8                 | 4,0                 | 4,8                 | 0,45   | 0,53                | 0,64                | 0,93              | 1,7                 | 0,95       | 36         | 33               | 3,3                                      |
| 0,9                      | 2,2   | 2,7                 | 6                   | 5,2                 | 6,2                 | 0,57   | 0,67                | 0,82                | 1,18              | 2,2                 | 1,2        | 37         | 34               | 4,2                                      |
| 1,0                      | 2,7   | 3,3                 | 4,5                 | 6,4                 | 7,6                 | 0,7  | 0,82                | 1,0                 | 1,45              | 2,7                 | 1,45       | 38         | 35               | 5,1                                      |
| 1,5                      | 6,0   | 7,3                 | 10,0                | 14,0                | 17,0                | 1,6  | 1,9                 | 2,3                 | 3,3               | 6,0                 | 3,3        | 47         | 40               | 11,5                                     |
| 2,0                      | 11,0  | 14,0                | 18,0                | 26,0                | 31,0                | 2,8  | 3,3                 | 4,0                 | 5,8               | 11,0                | 5,8        | 61         | 48               | 20,4                                     |
| 2,5                      | 17,0  | 21,0                | 28,0                | 40,0                | 48,0                | 4,4  | 5,2                 | 6,3                 | 9,1               | 17,0                | 9,1        | 78         | 58               | 32,0                                     |
| 3,0                      | 25,0  | 30,0                | 41,0                | 60,0                | 70,0                | 6,3  | 7,4                 | 9,0                 | 13,0              | 25,0                | 13,0       | 100        | 71               | 46,0                                     |
| 3,5                      | 33,0  | 40,0                | 55,0                | 78,0                | 93,0                | 8,5  | 10,0                | 12,0                | 18,0              | 33,0                | 18,0       | 123        | 85               | 62,0                                     |
| 4,0                      | 43,0  | 52,0                | 70,0                | 100,0               | 120,0               | 11,0   | 13,0                | 16,0                | 23,0              | 42,0                | 23,0       | 150        | 100              | 82,0                                     |
| 4,5                      | 55,0  | 67,0                | 90,0                | 130,0               | 160,0               | 14,0   | 21,0                | 26,0                | 37,0              | 55,0                | 37,0       | 190        | 120              | 103,0                                    |
| 5,0                      | 67,0  | 82,0                | 110,0               | 160,0               | 190,0               | 18,0   | 29,0                | 36,0                | 52,0              | 67,0                | 52,0       | 220        | 140              | 127,0                                    |

Q = flow rate in l/min

v = velocity of water in metres per second

d = diameter of pipes in m metres

h = head loss in cm of water column for each metre of pipework, calculated according to the Lang formula:

$$h = \lambda \times \frac{100}{d} \times \frac{v^2}{2g} \quad \lambda = 0,02 + \frac{0,0018}{\sqrt{v \times d}}$$

The only loss in bends is that due to the contraction of the liquid stream when changing direction (the development of the curves must therefore be included in the length of the pipework); the head loss for gate valves has been determined through technical tests.

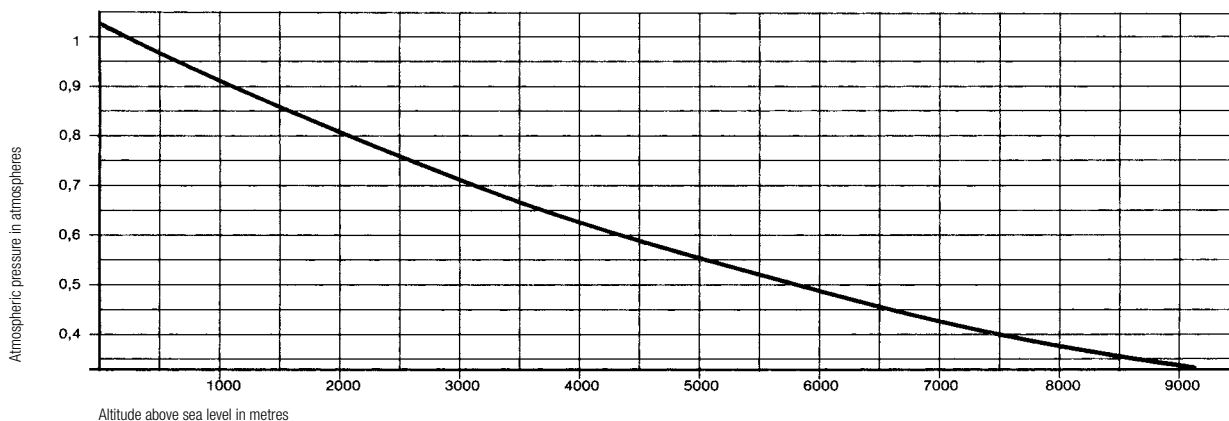
The head loss for gate valves and normal bends is equal to that of 5 m of straight pipework, while that of non-return valves is equal to 15 m.

The values given are for pipes with a completely smooth internal surface. In case of rough or scaled pipes, allowances must be made accordingly.

### VAPOUR TENSION AND SPECIFIC WEIGHT OF WATER AS A FUNCTION OF TEMPERATURE

| t °C | pv kg/cm <sup>2</sup> | γ kg/dm <sup>3</sup> | t °C | pv kg/cm <sup>2</sup> | γ kg/dm <sup>3</sup> | t °C | pv kg/cm <sup>2</sup> | γ kg/dm <sup>3</sup> | t °C | pv kg/cm <sup>2</sup> | γ kg/dm <sup>3</sup> |
|------|-----------------------|----------------------|------|-----------------------|----------------------|------|-----------------------|----------------------|------|-----------------------|----------------------|
| 00   | 0.0062                | 0.9998               | 41   | 0.793                 | 0.9917               | 82   | 0.5234                | 0.9705               | 170  | 008.076               | 0.8973               |
| 01   | 0.0067                | 0.9999               | 42   | 0.836                 | 0.9913               | 83   | 0.5447                | 0.9698               | 175  | 009.101               | 0.8920               |
| 02   | 0.0072                | 0.9999               | 43   | 0.881                 | 0.9909               | 84   | 0.5667                | 0.9693               | 180  | 010.225               | 0.8869               |
| 03   | 0.0077                | 1.0000               | 44   | 0.0928                | 0.9905               | 85   | 0.5897                | 0.9687               | 185  | 011.456               | 0.8814               |
| 04   | 0.0083                | 1.0000               | 45   | 0.0977                | 0.9900               | 86   | 0.6129                | 0.9680               | 190  | 012.800               | 0.8760               |
| 05   | 0.0089                | 1.0000               | 46   | 0.1028                | 0.9898               | 87   | 0.6372                | 0.9673               | 195  | 014.265               | 0.8703               |
| 06   | 0.0095                | 0.9999               | 47   | 0.1082                | 0.9883               | 88   | 0.6623                | 0.9667               | 200  | 015.857               | 0.8646               |
| 07   | 0.0102                | 0.9999               | 48   | 0.1138                | 0.9889               | 89   | 0.6882                | 0.9659               | 205  | 017.858               | 0.8587               |
| 08   | 0.0109                | 0.9998               | 49   | 0.1197                | 0.9885               | 90   | 0.7149                | 0.9653               | 210  | 019.456               | 0.8528               |
| 09   | 0.0117                | 0.9997               | 50   | 0.1258                | 0.9880               | 91   | 0.7425                | 0.9646               | 215  | 021.477               | 0.8465               |
| 10   | 0.0125                | 0.9996               | 51   | 0.1322                | 0.9876               | 92   | 0.7710                | 0.9640               | 220  | 023.659               | 0.8403               |
| 11   | 0.0134                | 0.9995               | 52   | 0.1388                | 0.9871               | 93   | 0.8004                | 0.9632               | 225  | 026.007               | 0.8339               |
| 12   | 0.0143                | 0.9994               | 53   | 0.1457                | 0.9866               | 94   | 0.8307                | 0.9625               | 230  | 028.531               | 0.8272               |
| 13   | 0.0153                | 0.9993               | 54   | 0.1530                | 0.9861               | 95   | 0.8619                | 0.9619               | 235  | 031.239               | 0.8206               |
| 14   | 0.0163                | 0.9992               | 55   | 0.1605                | 0.9857               | 96   | 0.8942                | 0.9611               | 240  | 034.140               | 0.8136               |
| 15   | 0.0174                | 0.9990               | 56   | 0.1683                | 0.9852               | 97   | 0.9271                | 0.9604               | 245  | 037.244               | 0.8064               |
| 16   | 0.0185                | 0.9989               | 57   | 0.1765                | 0.9847               | 98   | 0.9616                | 0.9596               | 250  | 040.560               | 0.7992               |
| 17   | 0.0197                | 0.9987               | 58   | 0.1850                | 0.9842               | 99   | 0.9969                | 0.9590               | 255  | 044.100               | 0.7918               |
| 18   | 0.0210                | 0.9985               | 59   | 0.1939                | 0.9836               | 100  | 1.0032                | 0.9583               | 260  | 047.870               | 0.7840               |
| 19   | 0.0224                | 0.9984               | 60   | 0.2031                | 0.9831               | 102  | 1.1092                | 0.9568               | 265  | 051.880               | 0.7759               |
| 20   | 0.0238                | 0.9982               | 61   | 0.2127                | 0.9826               | 104  | 1.1898                | 0.9554               | 270  | 056.140               | 0.7678               |
| 21   | 0.0253                | 0.9979               | 62   | 0.2227                | 0.9821               | 106  | 1.2751                | 0.9540               | 275  | 060.660               | 0.7593               |
| 22   | 0.0269                | 0.9977               | 63   | 0.2330                | 0.9816               | 108  | 1.6354                | 0.9525               | 280  | 065.460               | 0.7506               |
| 23   | 0.0286                | 0.9974               | 64   | 0.2438                | 0.9810               | 110  | 1.4609                | 0.9510               | 285  | 070.540               | 0.7416               |
| 24   | 0.0304                | 0.9972               | 65   | 0.2550                | 0.9804               | 112  | 1.5618                | 0.9495               | 290  | 075.920               | 0.7323               |
| 25   | 0.0323                | 0.9970               | 66   | 0.2666                | 0.9800               | 114  | 1.6684                | 0.9479               | 286  | 081.600               | 0.7227               |
| 26   | 0.0343                | 0.9966               | 67   | 0.2787                | 0.9794               | 116  | 1.7809                | 0.9464               | 300  | 087.610               | 0.7214               |
| 27   | 0.0363                | 0.9964               | 68   | 0.2912                | 0.9788               | 118  | 1.8995                | 0.9448               | 305  | 093.950               | 0.7017               |
| 28   | 0.0385                | 0.9961               | 69   | 0.3042                | 0.9782               | 120  | 2.0245                | 0.9431               | 310  | 100.640               | 0.6906               |
| 29   | 0.0408                | 0.9957               | 70   | 0.3177                | 0.9777               | 122  | 2.1561                | 0.9414               | 315  | 107.690               | 0.6793               |
| 30   | 0.0432                | 0.9955               | 71   | 0.3317                | 0.9771               | 124  | 2.2947                | 0.9398               | 320  | 115.130               | 0.6671               |
| 31   | 0.0458                | 0.9952               | 72   | 0.3463                | 0.9765               | 126  | 2.4404                | 0.9381               | 325  | 122.950               | 0.6540               |
| 32   | 0.0485                | 0.9949               | 73   | 0.3613                | 0.9759               | 128  | 2.5935                | 0.9365               | 330  | 131.180               | 0.6402               |
| 33   | 0.0513                | 0.9946               | 74   | 0.3869                | 0.9754               | 130  | 2.7544                | 0.9348               | 335  | 139.850               | 0.6257               |
| 34   | 0.0542                | 0.9942               | 75   | 0.3931                | 0.9748               | 135  | 3.1920                | 0.9305               | 340  | 148.960               | 0.6093               |
| 35   | 0.0573                | 0.9939               | 76   | 0.4098                | 0.9742               | 140  | 3.6850                | 0.9260               | 345  | 157.540               | 0.5910               |
| 36   | 0.0606                | 0.9934               | 77   | 0.4274                | 0.9737               | 145  | 4.2370                | 0.9216               | 350  | 168.630               | 0.5724               |
| 37   | 0.0640                | 0.9932               | 78   | 0.4451                | 0.9730               | 150  | 4.8540                | 0.9169               | 355  | 179.240               | 0.5512               |
| 38   | 0.0675                | 0.9928               | 79   | 0.4637                | 0.9724               | 155  | 5.5400                | 0.9121               | 360  | 190.420               | 0.5243               |
| 39   | 0.0713                | 0.9925               | 80   | 0.4829                | 0.9718               | 160  | 6.3020                | 0.9073               | 365  | 202.210               | 0.4926               |
| 40   | 0.0752                | 0.9921               | 81   | 0.5028                | 0.9712               | 165  | 7.1460                | 0.9023               | 370  | 214.680               | 0.4484               |

### ATMOSPHERIC PRESSURE AT VARIOUS HEIGHTS





# TECHNICAL APPENDIX

## CENTRIFUGAL PUMPS

**FLOW RATE OF WATER FROM NOZZLES AND FIRE HOSES IN l/s AS A FUNCTION OF THE PRESSURE MEASURED UPSTREAM THE NOZZLE, IN METRES OF COLUMN OF WATER.**

| Ø<br>NOZZLE IN mm | PRESSURE in m.c.w. |        |        |        |        |        |        |        |        |        |        |        |        |
|-------------------|--------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
|                   | 4                  | 6      | 8      | 10     | 12     | 14     | 16     | 18     | 20     | 22     | 24     | 26     | 28     |
| 1                 | 0.0068             | 0.0083 | 0.0096 | 0.0107 | 0.0118 | 0.0127 | 0.0136 | 0.0144 | 0.0152 | 0.0159 | 0.0167 | 0.0174 | 0.018  |
| 2                 | 0.273              | 0.0334 | 0.0386 | 0.0432 | 0.0473 | 0.0511 | 0.0546 | 0.0579 | 0.0611 | 0.064  | 0.0668 | 0.696  | 0.0722 |
| 3                 | 0.614              | 0.0751 | 0.0868 | 0.097  | 0.1063 | 0.1148 | 0.1228 | 0.13   | 0.137  | 0.144  | 0.15   | 0.156  | 0.162  |
| 4                 | 0.109              | 0.133  | 0.154  | 0.175  | 0.189  | 0.204  | 0.218  | 0.231  | 0.244  | 0.255  | 0.267  | 0.278  | 0.288  |
| 5                 | 1.171              | 0.209  | 0.242  | 0.271  | 0.296  | 0.32   | 0.342  | 0.363  | 0.383  | 0.401  | 0.419  | 0.4336 | 0.453  |
| 6                 | 0.246              | 0.301  | 0.348  | 0.389  | 0.426  | 0.455  | 0.492  | 0.522  | 0.55   | 0.577  | 0.603  | 0.627  | 0.652  |
| 7                 | 0.334              | 0.408  | 0.472  | 0.527  | 0.578  | 0.625  | 0.667  | 0.708  | 0.747  | 0.783  | 0.817  | 0.851  | 0.883  |
| 8                 | 0.436              | 0.534  | 0.616  | 0.689  | 0.755  | 0.815  | 0.871  | 0.925  | 0.975  | 1.022  | 1.067  | 1.11   | 1.152  |
| 9                 | 0.553              | 0.677  | 0.782  | 0.875  | 0.958  | 1.035  | 1.107  | 1.172  | 1.236  | 1.297  | 1.355  | 1.41   | 1.461  |
| 10                | 0.684              | 0.836  | 0.966  | 1.08   | 1.183  | 1.27   | 1.368  | 1.448  | 1.523  | 1.6    | 1.672  | 1.742  | 1.808  |
| 11                | 0.83               | 1.017  | 1.173  | 1.313  | 1.439  | 1.555  | 1.66   | 1.76   | 1.855  | 1.99   | 2.03   | 2.117  | 2.196  |
| 12                | 0.982              | 1.2    | 1.387  | 1.55   | 1.7    | 1.87   | 1.964  | 2.08   | 2.19   | 2.3    | 2.4    | 2.5    | 2.59   |
| 13                | 1.154              | 1.412  | 1.63   | 1.825  | 2.0    | 2.16   | 2.31   | 2.45   | 2.58   | 2.7    | 2.83   | 2.94   | 3.05   |
| 14                | 1.337              | 1.635  | 1.89   | 2.113  | 2.313  | 2.5    | 2.67   | 2.834  | 2.99   | 3.135  | 3.27   | 3.41   | 2.538  |
| 15                | 1.535              | 1.88   | 2.17   | 2.417  | 2.66   | 2.87   | 3.07   | 3.25   | 3.43   | 3.6    | 3.76   | 3.91   | 4.06   |
| 16                | 1.742              | 2.132  | 2.464  | 2.757  | 3.02   | 3.26   | 3.486  | 3.7    | 3.9    | 4.08   | 4.27   | 4.45   | 4.62   |
| 17                | 1.97               | 2.413  | 2.787  | 3.119  | 3.417  | 3.686  | 3.947  | 4.18   | 4.41   | 4.62   | 4.83   | 58.025 | 5.21   |
| 18                | 2.21               | 2.703  | 3.125  | 3.499  | 3.83   | 4.13   | 4.42   | 4.68   | 4.94   | 5.18   | 5.42   | 5.64   | 5.85   |
| 20                | 2.73               | 3.34   | 3.86   | 4.32   | 4.73   | 5.11   | 5.46   | 5.78   | 6.11   | 6.4    | 6.78   | 6.96   | 7.23   |
| 22                | 3.298              | 4.04   | 4.66   | 5.22   | 5.72   | 6.17   | 6.75   | 7.0    | 7.48   | 7.74   | 8.07   | 8.4    | 8.8    |
| 25                | 4.265              | 5.22   | 6.02   | 6.74   | 7.38   | 7.87   | 8.52   | 9.04   | 9.53   | 9.99   | 10.42  | 10.85  | 11.25  |
| 26                | 4.6                | 5.64   | 6.5    | 7.27   | 7.97   | 8.61   | 9.2    | 9.76   | 10.28  | 10.69  | 11.27  | 11.71  | 12.16  |
| 28                | 5.36               | 6.56   | 7.56   | 8.46   | 9.28   | 10.2   | 10.7   | 11.36  | 11.9   | 12.55  | 13.12  | 13.64  | 14.09  |
| 32                | 6.97               | 8.55   | 9.85   | 11.02  | 12.08  | 13.05  | 13.93  | 14.8   | 15.6   | 16.7   | 17.2   | 17.79  | 18.44  |
| 35                | 8.358              | 10.23  | 11.8   | 13.2   | 14.45  | 15.6   | 16.7   | 17.7   | 18.68  | 19.59  | 20.43  | 21.26  | 22.09  |
| 45                | 13.8               | 16.9   | 19.5   | 21.82  | 23.9   | 25.84  | 27.6   | 29.3   | 30.9   | 32.39  | 33.8   | 35.2   | 26.5   |
| 55                | 20.3               | 25.2   | 28.5   | 32.6   | 35.7   | 38.6   | 41.2   | 44.0   | 46.1   | 48.3   | 50.5   | 52.6   | 54.5   |
| 65                | 28.5               | 34.8   | 40.2   | 45.0   | 49.3   | 53.4   | 56.9   | 60.5   | 63.6   | 66.6   | 69.7   | 72.6   | 75.4   |
| 75                | 38.3               | 46.9   | 54.2   | 60.6   | 66.4   | 71.7   | 76.6   | 81.4   | 85.6   | 90.0   | 93.9   | 97.7   | 101.4  |
| 85                | 49.4               | 60.5   | 69.7   | 77.0   | 85.5   | 92.4   | 98.7   | 104.7  | 110.3  | 115.7  | 121.0  | 125.0  | 130.5  |
| 95                | 61.5               | 75.4   | 87.0   | 97.4   | 106.5  | 115.2  | 123.0  | 130.5  | 137.6  | 143.3  | 150.8  | 157.0  | 162.8  |

| Ø<br>NOZZLE IN mm | PRESSURE in m.c.w. |        |        |        |        |        |        |        |        |        |        |        |        |
|-------------------|--------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
|                   | 4                  | 6      | 8      | 10     | 12     | 14     | 16     | 18     | 20     | 22     | 24     | 26     | 28     |
| 1                 | 0.0068             | 0.0083 | 0.0096 | 0.0107 | 0.0118 | 0.0127 | 0.0136 | 0.0144 | 0.0152 | 0.0159 | 0.0167 | 0.0174 | 0.018  |
| 2                 | 0.273              | 0.0334 | 0.0386 | 0.0432 | 0.0473 | 0.0511 | 0.0546 | 0.0579 | 0.0611 | 0.064  | 0.0668 | 0.696  | 0.0722 |
| 3                 | 0.614              | 0.0751 | 0.0868 | 0.097  | 0.1063 | 0.1148 | 0.1228 | 0.13   | 0.137  | 0.144  | 0.15   | 0.156  | 0.162  |
| 4                 | 0.109              | 0.133  | 0.154  | 0.175  | 0.189  | 0.204  | 0.218  | 0.231  | 0.244  | 0.255  | 0.267  | 0.278  | 0.288  |
| 5                 | 1.171              | 0.209  | 0.242  | 0.271  | 0.296  | 0.32   | 0.342  | 0.363  | 0.383  | 0.401  | 0.419  | 0.4336 | 0.453  |
| 6                 | 0.246              | 0.301  | 0.348  | 0.389  | 0.426  | 0.455  | 0.492  | 0.522  | 0.55   | 0.577  | 0.603  | 0.627  | 0.652  |
| 7                 | 0.334              | 0.408  | 0.472  | 0.527  | 0.578  | 0.625  | 0.667  | 0.708  | 0.747  | 0.783  | 0.817  | 0.851  | 0.883  |
| 8                 | 0.436              | 0.534  | 0.616  | 0.689  | 0.755  | 0.815  | 0.871  | 0.925  | 0.975  | 1.022  | 1.067  | 1.11   | 1.152  |
| 9                 | 0.553              | 0.677  | 0.782  | 0.875  | 0.958  | 1.035  | 1.107  | 1.172  | 1.236  | 1.297  | 1.355  | 1.41   | 1.461  |
| 10                | 0.684              | 0.836  | 0.966  | 1.08   | 1.183  | 1.27   | 1.368  | 1.448  | 1.523  | 1.6    | 1.672  | 1.742  | 1.808  |
| 11                | 0.83               | 1.017  | 1.173  | 1.313  | 1.439  | 1.555  | 1.66   | 1.76   | 1.855  | 1.99   | 2.03   | 2.117  | 2.196  |
| 12                | 0.982              | 1.2    | 1.387  | 1.55   | 1.7    | 1.87   | 1.964  | 2.08   | 2.19   | 2.3    | 2.4    | 2.5    | 2.59   |
| 13                | 1.154              | 1.412  | 1.63   | 1.825  | 2.0    | 2.16   | 2.31   | 2.45   | 2.58   | 2.7    | 2.83   | 2.94   | 3.05   |
| 14                | 1.337              | 1.635  | 1.89   | 2.113  | 2.313  | 2.5    | 2.67   | 2.834  | 2.99   | 3.135  | 3.27   | 3.41   | 2.538  |
| 15                | 1.535              | 1.88   | 2.17   | 2.417  | 2.66   | 2.87   | 3.07   | 3.25   | 3.43   | 3.6    | 3.76   | 3.91   | 4.06   |
| 16                | 1.742              | 2.132  | 2.464  | 2.757  | 3.02   | 3.26   | 3.486  | 3.7    | 3.9    | 4.08   | 4.27   | 4.45   | 4.62   |
| 17                | 1.97               | 2.413  | 2.787  | 3.119  | 3.417  | 3.686  | 3.947  | 4.18   | 4.41   | 4.62   | 4.83   | 58.025 | 5.21   |
| 18                | 2.21               | 2.703  | 3.125  | 3.499  | 3.83   | 4.13   | 4.42   | 4.68   | 4.94   | 5.18   | 5.42   | 5.64   | 5.85   |
| 20                | 2.73               | 3.34   | 3.86   | 4.32   | 4.73   | 5.11   | 5.46   | 5.78   | 6.11   | 6.4    | 6.78   | 6.96   | 7.23   |
| 22                | 3.298              | 4.04   | 4.66   | 5.22   | 5.72   | 6.17   | 6.75   | 7.0    | 7.48   | 7.74   | 8.07   | 8.4    | 8.8    |
| 25                | 4.265              | 5.22   | 6.02   | 6.74   | 7.38   | 7.87   | 8.52   | 9.04   | 9.53   | 9.99   | 10.42  | 10.85  | 11.25  |
| 26                | 4.6                | 5.64   | 6.5    | 7.27   | 7.97   | 8.61   | 9.2    | 9.76   | 10.28  | 10.69  | 11.27  | 11.71  | 12.16  |
| 28                | 5.36               | 6.56   | 7.56   | 8.46   | 9.28   | 10.2   | 10.7   | 11.36  | 11.9   | 12.55  | 13.12  | 13.64  | 14.09  |
| 32                | 6.97               | 8.55   | 9.85   | 11.02  | 12.08  | 13.05  | 13.93  | 14.8   | 15.6   | 16.7   | 17.2   | 17.79  | 18.44  |
| 35                | 8.358              | 10.23  | 11.8   | 13.2   | 14.45  | 15.6   | 16.7   | 17.7   | 18.68  | 19.59  | 20.43  | 21.26  | 22.09  |
| 45                | 13.8               | 16.9   | 19.5   | 21.82  | 23.9   | 25.84  | 27.6   | 29.3   | 30.9   | 32.39  | 33.8   | 35.2   | 26.5   |
| 55                | 20.3               | 25.2   | 28.5   | 32.6   | 35.7   | 38.6   | 41.2   | 44.0   | 46.1   | 48.3   | 50.5   | 52.6   | 54.5   |
| 65                | 28.5               | 34.8   | 40.2   | 45.0   | 49.3   | 53.4   | 56.9   | 60.5   | 63.6   | 66.6   | 69.7   | 72.6   | 75.4   |
| 75                | 38.3               | 46.9   | 54.2   | 60.6   | 66.4   | 71.7   | 76.6   | 81.4   | 85.6   | 90.0   | 93.9   | 97.7   | 101.4  |
| 85                | 49.4               | 60.5   | 69.7   | 77.0   | 85.5   | 92.4   | 98.7   | 104.7  | 110.3  | 115.7  | 121.0  | 125.0  | 130.5  |
| 95                | 61.5               | 75.4   | 87.0   | 97.4   | 106.5  | 115.2  | 123.0  | 130.5  | 137.6  | 143.3  | 150.8  | 157.0  | 162.8  |

# TECHNICAL APPENDIX

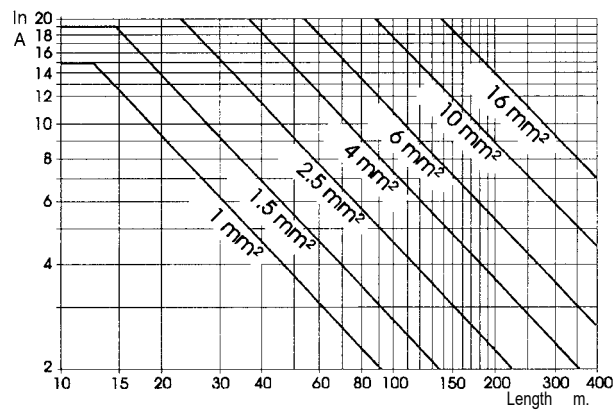
## CENTRIFUGAL PUMPS

**TABLE OF EQUIVALENT STANDARDS FOR MATERIALS**

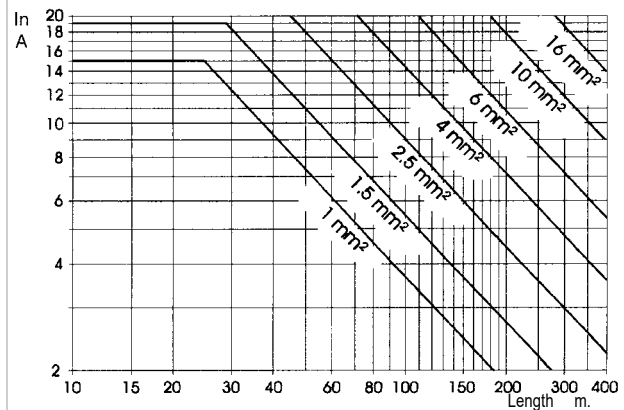
| MATERIAL  | UNI                 |             | DIN           |           | ISO                  | AISI      | ASTM          |
|-----------|---------------------|-------------|---------------|-----------|----------------------|-----------|---------------|
| STEEL     | X 30Cr13            | UNI 6900/71 | X 30Cr13      | DIN 17440 | -                    | AISI 420B | -             |
|           | X 12CrS13           | UNI 6900/71 | X 12CrS13     | DIN 17440 | -                    | AISI 416  | -             |
|           | X 20Cr13            | UNI 6900/71 | X 20Cr13      | DIN 17440 | -                    | AISI 420A | S 42000 A 276 |
|           | X 10CrNiS1809       | UNI 6900/71 | X 10CrNiS1809 | DIN 17440 | XIII-17 ISO 683/XIII | AISI 303  | S 30300 A 276 |
|           | X 5CrNi 1810        | UNI 6900/71 | X 5CrNi 1810  | DIN 17440 | XIII-11 ISO 683/XIII | AISI 304  | S 30400 A 276 |
|           | X 10CrS17           | UNI 6900/71 | X 10CrS17     | DIN 17440 | XIII-84 ISO 683/XIII | AISI 430F | -             |
| CAST IRON | G 20                | UNI ISO 185 | GG 20         | DIN 1691  | Grade 20 ISO R 185   | -         | Class 25 A 48 |
|           | G 25                | UNI ISO 185 | GG 25         | DIN 1691  | Grade 20 ISO R 185   | -         | Class 35 A 48 |
| BRASS     | G CuZn38Al 1Fe 1Mni | UNI 6138/68 | -             | -         | -                    | -         | B 30 C 86550  |
|           | P CuZn40 Pb2        | UNI 5705    | P CuZn40 Pb2  | DIN 17660 | -                    | -         | C 37740       |
| BRONZE    | G CuSn12            | UNI 7013/72 | G CuSn12      | DIN 17006 | CuSn 12 ISO 1338     | -         | B 205 C 90700 |

**CHART FOR THE SELECTION OF THE POWER INPUT CABLE IN RELATION TO LENGTH**

Voltage 1 x 230 V ~ direct start  
3 % voltage drop  
Ambient temperature 30 °C



Voltage 3 x 400 V ~ direct start  
3 % voltage drop  
Ambient temperature 30 °C



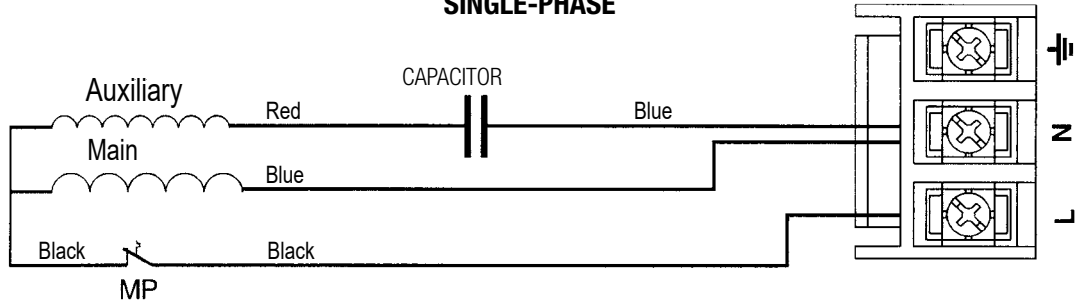
### EXPLANATION OF PUMP DATA PLATES

| No.        | SERIAL NUMBER                     | -     |
|------------|-----------------------------------|-------|
| Q          | FLOW                              | m³/h  |
| H          | HEAD                              | m     |
| H max      | MAXIMUM HEAD                      | m     |
| H min      | MINIMUM HEAD                      | m     |
| -          | REVOLUTIONS PER MINUTE            | 1/min |
| -          | ABSORBED POWER                    | kWass |
| -          | NOMINAL DEVELOPED POWER           | HP    |
| -          | VOLTAGE                           | V ~   |
| -          | FREQUENCY                         | Hz    |
| -          | CURRENT                           | A     |
| -          | PROTECTION CLASS (IEC)            | IP    |
| I.C.L.     | INSULATION CLASS                  | µF Vc |
| -          | CAPACITY AND VOLTAGE OF CAPACITOR | µF Vc |
| $\nabla_m$ | MAXIMUM IMMERSION                 | m     |
| Lwa        | NOISE LEVEL                       | dB    |

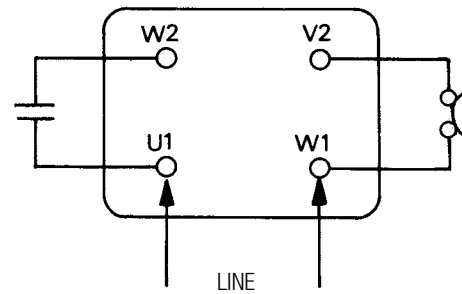
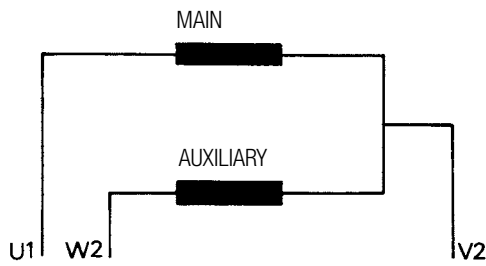
|  |      |      |    |          |               |
|--|------|------|----|----------|---------------|
| <b>DAB</b><br>WATER • TECHNOLOGY<br>DAB PUMPS S.p.A. Via Marco Polo, 14 35035 Mezzano (PD) - Italy |      |      |    |          |               |
|  |      |      | N. | TF       | S1            |
| Q  | m³/h | H    | m  | HP       |               |
| Hmax   | m    | Hmin | m  | I.C.L. F | kW ass.       |
| 1/min  | IP   | Hz   | µF | V~       | MADE IN ITALY |
|  |      |      |    |          |               |

### WIRING DIAGRAMS FOR ELECTRIC MOTORS

#### SINGLE-PHASE



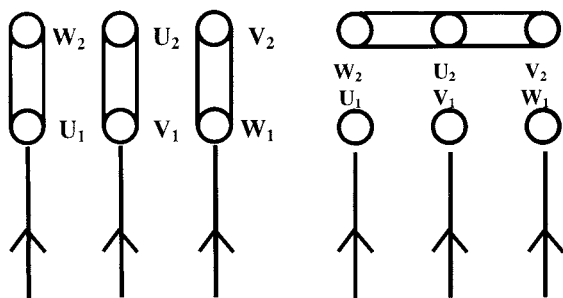
Overload protection inside the winding - MEC 63-71 M



Overload protection inside the terminal board - MEC 80 M

#### THREE-PHASE

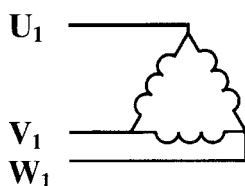
3 ~ 230/400 V



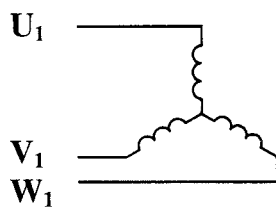
Power input line  
230 V

400 V

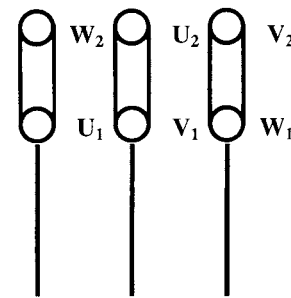
TRIANGLE connection



STAR connection

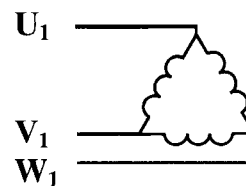


3 ~ 400 Δ V



Power input line

DELTA connection



Clockwise rotation when viewed from the fan end









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