



**WASTE WATER DRAINING**  
TECHNOLOGIES





**NEW RANGE**  
**SUBMERSIBLE PUMPS**



DRAINAGE



EFFLUENT



SEWAGE



**WHEN THE GOING GETS TOUGH...**

[FX.DABPUMPS.COM](http://FX.DABPUMPS.COM)





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# WE WORK FOR YOUR COMFORT

COMPANY  
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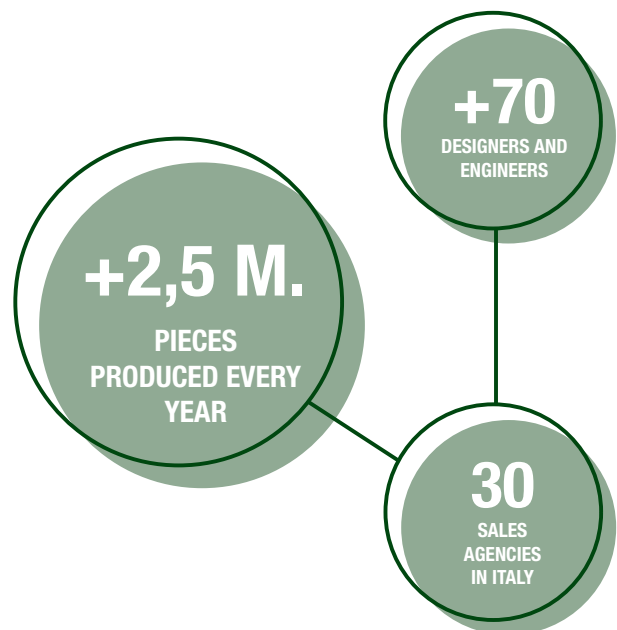
## WHO WE ARE, WHAT WE DO

With over **2,5 million pieces produced each year**, DAB pumps stand for technology and reliability. Established in 1975 we are today an international benchmark in the water handling sector.

The **careful selection of materials** and the **approval procedures** applied to each line before production release ensure both product **strength** and **maximum performance levels**.

During the last years **DAB PUMPS** has invested resources, passion and energy, acquiring companies with different specific skills, from electronics to motors. This merger of technologies, competences and know-how has resulted in **"WASTE WATER", the new offer for the management of waste water**.

**DAB** provides solutions for **residential, civil and industrial applications**. Each product has been developed to guarantee **reliability, efficiency** and **easy maintenance**, translating design choices into a significant advantage for installation and maintenance personnel.



## WASTE WATER

DAB **WASTE WATER** products are split into three families:



RESIDENTIAL  
BUILDINGS



CIVIL AND  
COMMERCIAL  
BUILDINGS



INDUSTRIAL  
BUILDINGS

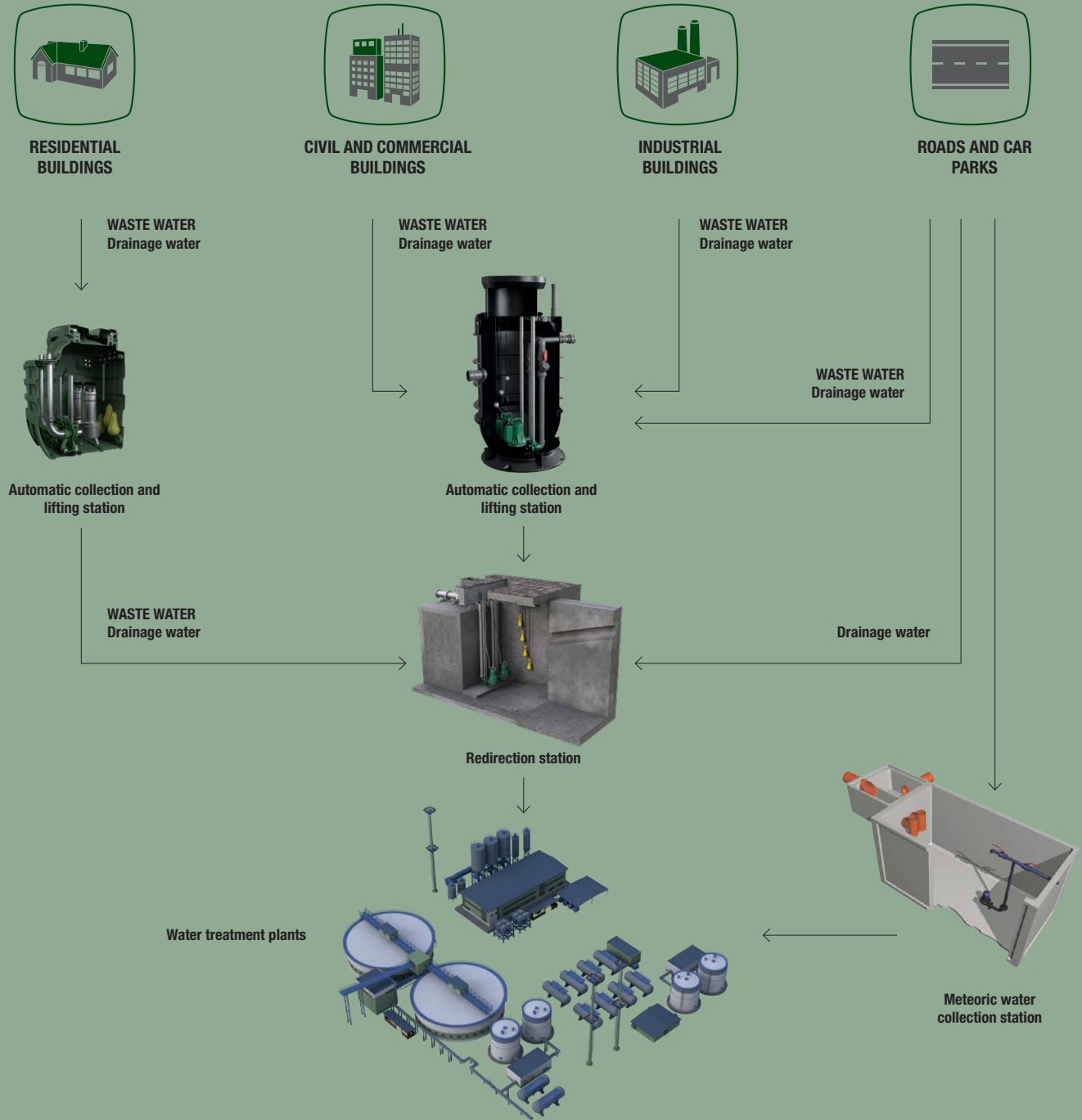
## D SERVICE

**For more information please do not hesitate in contacting our sales department.**

Our knowledgeable and experienced professionals will happily help you identify the best solution for your specific needs.

# WATER DISPOSAL PROCESS DIAGRAM

Sewerage systems are designed to capture, collect and transfer the sewage produced during human activities (residences, offices, industries) to an appropriate plant



## GLOSSARY

### CLEAR WATER

Clear and drainage water, ground water, well water, dirty water without fibres, sandy and muddy water, water containing abrasive particles, drainage water from roads and basements, water table water, rain water. Solid particles not exceeding 10 mm (included).

### EFFLUENT WATER

Water used in human activities, domestic or industrial waste water, water from rivers, lakes, streams. Water of civil and commercial origin. Free passage between 11 and 39 mm included.

### SEWAGE WATER

Waste water, with paper or textile material, cesspool water, water with suspended solids, water with long or short fibres, waste water from toilets, black water, water with faecal matter, untreated sewage from domestic sewage systems, farms and industries.

# PRODUCT RANGE FOR RESIDENTIAL APPLICATIONS



RANGE



- |   |               |    |                   |
|---|---------------|----|-------------------|
| 1 | Nova          | 7  | Drenag 1000, 1200 |
| 2 | Nova Up       | 8  | FX Range          |
| 3 | Nova up Mae   | 9  | Fekabox           |
| 4 | Verty Nova    | 10 | Fekafos           |
| 5 | Feka 300,600  | 11 | Genix             |
| 6 | Feka VS / VSL |    |                   |



# PRODUCT RANGE FOR CIVIL AND INDUSTRIAL APPLICATIONS



RANGE  
↓



8

2



3

- 1 FK
- 2 Feka FXV
- 3 Feka FXC
- 4 Grinder FX
- 5 Drenag FX
- 6 Fekafos
- 7 Fekafos Maxi
- 8 Genix



# RESIDENTIAL APPLICATIONS

Tanks for the collection and redirection to the sewer network of domestic waste water (sewage and draining water), for basements and garages, for one or more dwellings, when the sewer network cannot be reached due to gravity issues.

Submersible pumps waste water



Submersible pumps clear and sandy water



Automatic collection and lifting stations



Submersible pumps waste water



Electronic protection and control panel



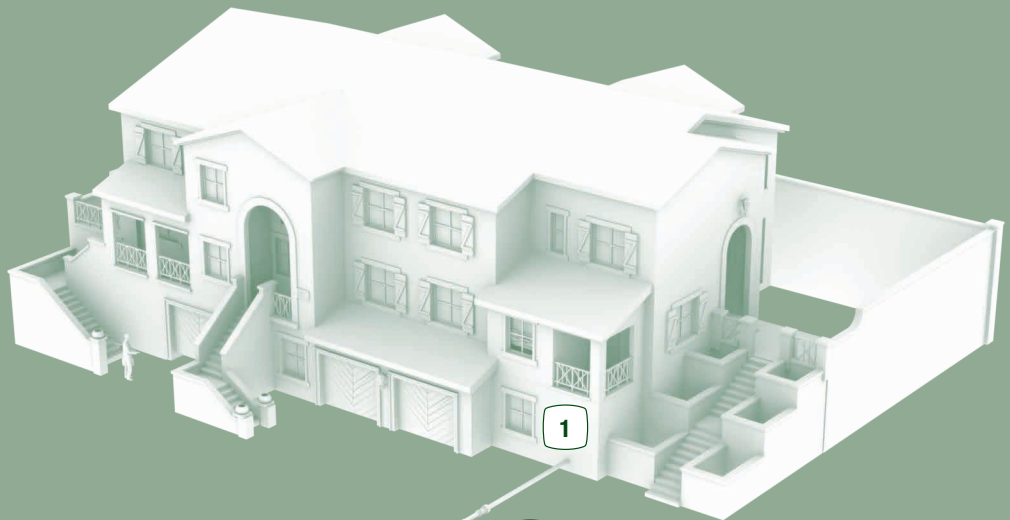
Automatic collection and lifting unit



Submersible pumps clear waters

## EXAMPLE OF INSTALLATION FOR HOME DWELLING

In residential applications, drainage pumps have the dual function of draining areas subjected to flooding, and managing and transferring waste water. Collection and transfer tanks are used if the sewers cannot be reached by gravity. The electronic control panel allows the automatic operation of one or two pumps.



SUBMERSIBLE PUMP  
Pumping station  
Electronic protection and control panel



# FEKABOX - FEKAFOS

Made of recyclable materials



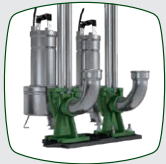
## AUTOMATIC COLLECTION AND LIFTING STATIONS

Tanks for the collection and redirection to the sewer network of domestic waste water (sewage and draining water), for basements and garages, for one or more dwellings, when the sewer network cannot be reached due to gravity issues.



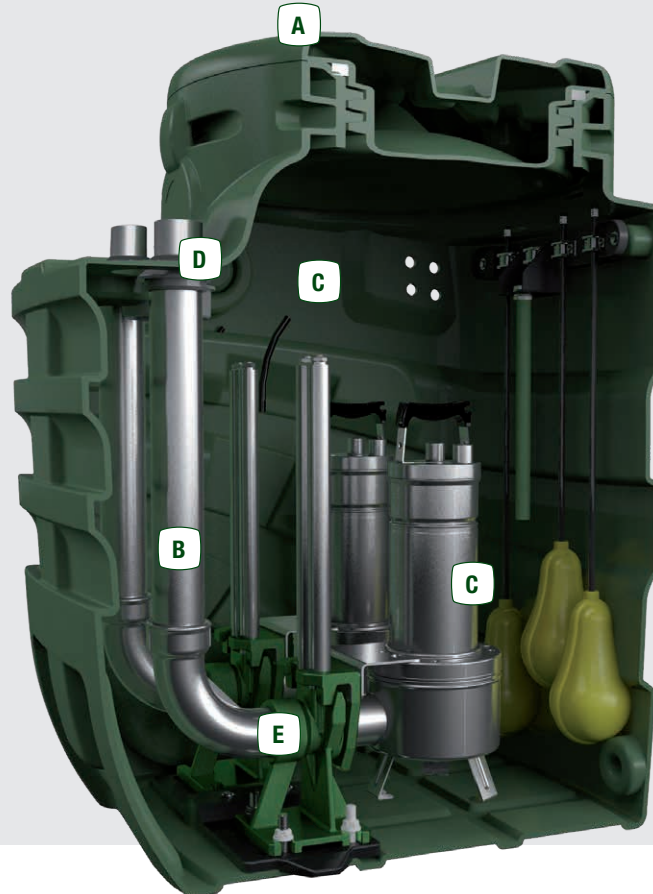
### A - COVER

Fully sealed and easy to install: it is fitted with a seal and safety closing mechanism. It can withstand a weight of up to 100 kg.



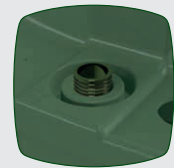
### B - TWO-PUMP STATION

The FEKAFOS DOUBLE range requires two-pump stations.



### C - INPUTS

The station is ready for on-site perforation on different sides and in various sizes from DN 110 to DN 50. It ensures high flexibility in already existing systems.



### D - OUTPUTS

2" threaded



### E - COUPLING FOOT

It makes the installation and maintenance of the pump easier.

RESIDENTIAL



## WHY CHOOSE A DAB AUTOMATIC COLLECTION AND LIFTING STATION

### THE IMPORTANCE OF THE MATERIAL

They are made of polyethylene, with an average thickness of 8mm. Unlike from cement, this material provides an important reduction of weight, with a significant impact on handling and installation costs. In addition, polyethylene also ensures a level of resistance that makes DAB tanks capable of withstanding chemical attacks and mechanical stress.

### ERGONOMIC DESIGN

The new range of DAB tanks is supplied with all the necessary arrangements to facilitate installation as much as possible. Each single aspect has been carefully checked to make the work of the installer as easy as possible, including the pre-printed symbols at the inputs and outputs.

### CERTIFICATIONS

The FEKABOX and FEKAFOS tanks comply with European Standard EN 12050 1-2.

## NOVA 40<sup>th</sup>



### SUBMERSIBLE PUMPS FOR CLEAR WATER

Submersible pump for draining clear water in domestic and residential applications. Suitable for draining flooded basements, cellars and garages, it can also be used as a portable pump in emergency situations.

- +** **QUALITY OF THE MATERIALS**  
Built with anti-corrosion and anti-oxidation materials
- +** **HIGH EFFICIENCY**  
Suction of the liquid down to a minimum level of 10 mm thanks to the possibility of dry run for up to 1 minute
- +** **RELIABILITY**  
Reliability guaranteed by the triple seal in oil chamber
- +** **VERSATILITY**  
It can also be used as a portable pump



#### OPERATING RANGE

Flow rate from 1 m<sup>3</sup>/h to 16 m<sup>3</sup>/h  
Maximum head 10.2 m

#### NOMINAL POWER

0.2 - 0.5 kW / 0.27 - 0.67 HP

#### FREE PASSAGE

5 mm or 10 mm depending on the model

#### TYPE OF INSTALLATION

Fixed or mobile in vertical position

## NOVA UP



### SUBMERSIBLE PUMPS FOR CLEAR WATER

Submersible pump with vertical delivery for draining clear water in domestic and residential applications. Suitable for fixed or mobile installation, available in the automatic version with built-in float, or in the manual version without float.

- +** **HIGH EFFICIENCY**  
Minimum suction level: 3 mm.
- +** **FUNCTIONALITY**  
Check valve provided
- +** **RELIABILITY**  
Reliability guaranteed by the triple seal in oil chamber
- +** **VERSATILITY**  
Suitable for small draining wells



#### OPERATING RANGE

Range from 1 m<sup>3</sup>/h to 15 m<sup>3</sup>/h  
Maximum head 10 m

#### NOMINAL POWER

0.2 - 0.5 kW / 0.27 - 0.67 HP

#### FREE PASSAGE

10 mm.

#### TYPE OF INSTALLATION

Fixed or portable, vertical position

## NOVA UP MAE



### SUBMERSIBLE PUMPS FOR CLEAR WATER

Submersible pump for draining clear water in domestic and residential applications. It can be used for emptying tanks or cisterns and river water. The vertical delivery and the electronic float allow the pump to be installed in small wells, with sizes down to 20x20 cm.

- +** **HIGH EFFICIENCY**  
Minimum suction level: 2 mm.
- +** **TECHNICAL FOCUS**  
Built-in electronic level sensor
- +** **RELIABILITY**  
Reliability guaranteed by the triple seal in oil chamber
- +** **VERSATILITY**  
Suitable for small draining wells



#### OPERATING RANGE

Flow rate from 1 m<sup>3</sup>/h to 15 m<sup>3</sup>/h  
Maximum head 10 m

#### NOMINAL POWER

0.21 - 0.52 kW / 0.28 - 0.69 HP

#### FREE PASSAGE

10 mm.

#### TYPE OF INSTALLATION

Fixed or portable, vertical position

## VERTY NOVA



### SUBMERSIBLE PUMPS WITH BUILT-IN FLOAT FOR CLEAR WATER

Submersible pump for draining clear water in domestic and residential applications. Ideal for draining flooded basements, cellars and garages, and for pumping river water. With selector switch for manual or automatic operation.

- +** **HIGH EFFICIENCY**  
Minimum suction level: 2 mm (manual operation)
- +** **EASE OF USE**  
Intuitive mode selector for manual or automatic operation
- +** **VERSATILITY**  
Suitable for small draining wells (min. 20x20 cm)
- +** **SIMPLIFIED MAINTENANCE**  
Easy access to the float for maintenance purposes



#### OPERATING RANGE

Flow rate from 1 m<sup>3</sup>/h to 10 m<sup>3</sup>/h  
Maximum head 9 m

#### NOMINAL POWER

0.3 - 0.6 kW / 0.28 - 0.55 HP

#### FREE PASSAGE

5 mm.

#### TYPE OF INSTALLATION

Fixed or portable, vertical position

## FEKA 40<sup>th</sup>



### SUBMERSIBLE PUMPS FOR EFFLUENT WATER

Submersible pump suitable for draining and lifting clear or effluent water in domestic and residential applications. Suitable for fixed or mobile installation, available in the automatic version with built-in float, or in the manual version without float.



#### QUALITY OF THE MATERIALS

Corrosion resistant thanks to the use of composite materials and the AISI 413 stainless steel motor shaft



#### HIGH EFFICIENCY

It allows the suction of the liquid down to the minimum level thanks to the possibility of dry run for up to 1 minute



#### RELIABILITY

Strong and reliable with triple seal in oil chamber



#### OPERATING RANGE

Range from 1 m<sup>3</sup>/h to 16 m<sup>3</sup>/h  
Maximum head 7.5 m

#### NOMINAL POWER

0.22 - 0.68 kW / 0.3 - 0.5 HP

#### FREE PASSAGE

25 mm.

#### TYPE OF INSTALLATION

Fixed or portable, vertical position

## DRENAG 1000 - 1200



### SUBMERSIBLE PUMPS FOR CLEAR AND SANDY CONSTRUCTION SITE WATER

Stainless steel submersible pumps suitable for draining clear water and construction site water in domestic and residential, civil and commercial applications. Built-in thermal protection in all single-phase and three-phase versions, available with or without float.



#### EASE OF USE

Extremely easy to handle, with a weight of less than 20 kg and wide rubber-coated handle



#### FUNCTIONALITY

High resistance impeller in microcast AISI 304 stainless steel



#### COMPONENTS

Supplied with 10 m power cord



#### RELIABILITY

Reliability guaranteed by the double seal in oil chamber



#### OPERATING RANGE

Flow rate from 3 m<sup>3</sup>/h to 28 m<sup>3</sup>/h  
Maximum head 17 m

#### NOMINAL POWER

1-1.2 kW / 1.36-1.6 HP

#### FREE PASSAGE

10 mm.

#### TYPE OF INSTALLATION

Fixed or portable, vertical position

## FEKA VS



### SUBMERSIBLE PUMPS FOR WASTE WATER

Submersible pump made entirely of stainless steel, ideal for lifting waste water in domestic and residential, civil and commercial applications. The vortex impeller in microcast steel is backflowing and, therefore, prevents clogging of the pump and permits the passage of solids of a particle size up to 50 mm.



#### REGULATORY COMPLIANCE

Certified for the lifting of waste water in accordance with EN 12050-2



#### FUNCTIONALITY

High resistance impeller in microcast AISI 304 stainless steel



#### COMPONENTS

10 metre cable for even the deepest applications



#### RELIABILITY

High reliability thanks to the double silicon carbide mechanical seal in oil chamber



#### OPERATING RANGE

Flow rate from 3 m<sup>3</sup>/h to 32 m<sup>3</sup>/h  
Maximum head 14 m

#### NOMINAL POWER

0.55 - 1.11 kW / 0.75 - 1 HP

#### FREE PASSAGE

50 mm.

#### TYPE OF INSTALLATION

Fixed or portable, vertical position

## GENIX



### AUTOMATIC COLLECTION AND LIFTING UNITS

Automatic collection and lifting unit for use in domestic and residential applications. Its use is necessary when toilet, shower, sink, or bidet waste water cannot be expelled due to gravity.



#### EASE OF USE

Quick and easy, equipped as standard with all that is required for correct installation and connection



#### QUALITY OF THE MATERIALS

Maximum comfort thanks to the quiet operation, the activated carbon filter and the quality of the construction materials



#### RELIABILITY

High reliability and grinding capacity, thanks to the high-performance motor and nickel-plated stainless steel grinder



#### SIMPLE MAINTENANCE

It does not need removal for maintenance



#### TYPE OF PUMPED LIQUID

Waste water, sewage water

#### SUPPORTED LIQUID TEMPERATURE

from +0°C to +50°C

#### MOTOR PROTECTION CLASS

IP 44

#### TYPE OF INSTALLATION

Fixed horizontal





# GRINDER FX



RESIDENTIAL

## SUBMERSIBLE PUMPS WITH GRINDER FOR WASTE WATER

Submersible pump with grinder designed for the lifting and transfer of waste water from drains in residential, civil and commercial applications. Suitable for systems with small pipe diameters, or requiring high pressures.



- + REGULATORY COMPLIANCE**  
Waste water certificate according to EN12050-1
- + EASE OF USE**  
Easy installation and suitable for replacement
- + RELIABILITY**  
Reliability and strength (double mechanical seal, cataphoresis and two-component painting, stainless steel motor shaft, resin coated cable gland)
- + SIMPLE MAINTENANCE**  
Easy maintenance, assembly in three separate parts (hydraulics, motor, seal and flange)

<p><b>OPERATING RANGE</b> Maximum flow rate 23.8 m<sup>3</sup>/h, Head 33 m</p>	<p><b>NOMINAL POWER</b> 0.8 - 2.1 kW / 1.1 - 2.8 HP</p>	<p><b>DELIVERY AND SUCTION FLANGES OR THREADS</b> From 1"1/2, DN 32, DN 40</p>	<p><b>TYPE OF INSTALLATION</b> Mobile on ground or fixed on coupling device</p>
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# FEKABOX



## AUTOMATIC COLLECTION AND LIFTING STATIONS FOR ONE PUMP

One pump automatic collection and lifting station designed for lifting waste water, or rainwater in basement rooms below sewer level in domestic and residential applications.

- + REGULATORY COMPLIANCE**  
EN 12050-1 certification to ensure hermetic seal preventing the release of odours and leaks
- + EASE OF USE**  
Easy installation and maintenance of the pump thanks to the lifting device
- + FUNCTIONALITY**  
Supplied with floats and ready for the installation of an additional overflow alarm float.
- + SUSTAINABILITY**  
100% recyclable environmentally friendly tank material



**TYPE OF PUMPED LIQUID**  
Waste water, sewage water

**SUPPORTED LIQUID TEMPERATURE**  
From +0 °C to +50 °C

**TANK CAPACITY AND CONSTRUCTION MATERIAL**  
From 110 to 200 litres, polyethylene

**TYPE OF INSTALLATION**  
Inside or outside a building, fixed to the floor, underground, not suitable to withstand foot or vehicle traffic

# FEKAFOS



## AUTOMATIC COLLECTION AND LIFTING STATIONS FOR ONE PUMP

One pump automatic collection and lifting station designed for lifting waste water, or rainwater in basement rooms below sewer level in domestic and residential applications. Numerous input, output and ventilation piping connection possibilities, for use even in limited spaces.

- + REGULATORY COMPLIANCE**  
EN 12050-1 certification to ensure hermetic seal preventing the release of odours and leaks
- + EASE OF USE**  
Easy installation and maintenance of the pump thanks to the lifting device
- + FUNCTIONALITY**  
Supplied with floats and ready for the installation of an additional overflow alarm float.
- + SUSTAINABILITY**  
100% recyclable environmentally friendly tank material



**TYPE OF PUMPED LIQUID**  
Waste water, sewage water

**SUPPORTED LIQUID TEMPERATURE**  
From +0 °C to +45 °C

**TANK CAPACITY AND CONSTRUCTION MATERIAL**  
From 280 to 550 litres, polyethylene

**TYPE OF INSTALLATION**  
Inside or outside a building, fixed to the floor, underground, not suitable to withstand foot or vehicle traffic



# CIVIL AND INDUSTRIAL APPLICATIONS

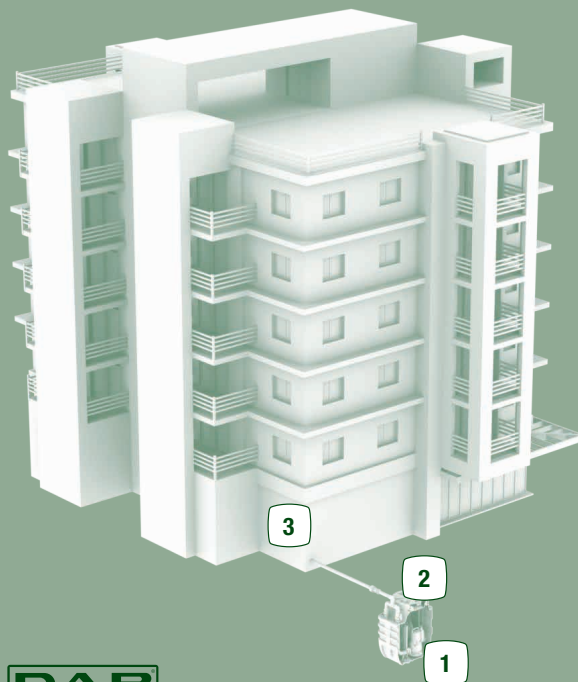
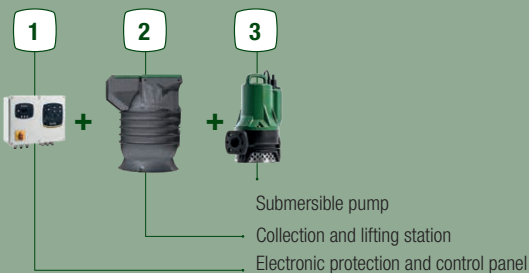
The management of waste water in civil and industrial environments requires the use of sturdy products capable of high performance levels. This is why the DAB range of solutions sets itself apart, due to its high reliability also in the most demanding operating conditions, and for its design aimed at making maintenance activities as simple as possible.



CIVIL AND INDUSTRIAL  
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## EXAMPLE OF INSTALLATION ON CIVIL OR INDUSTRIAL UNITS

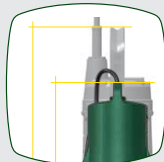
In condominiums and residential complexes, waste water management or draining pumps combined with automatic collection and lifting stations prevent flooding or allow to redirect waste water to the sewer network.



# FX



## SUBMERSIBLE PUMPS



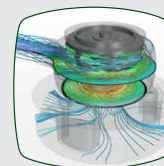
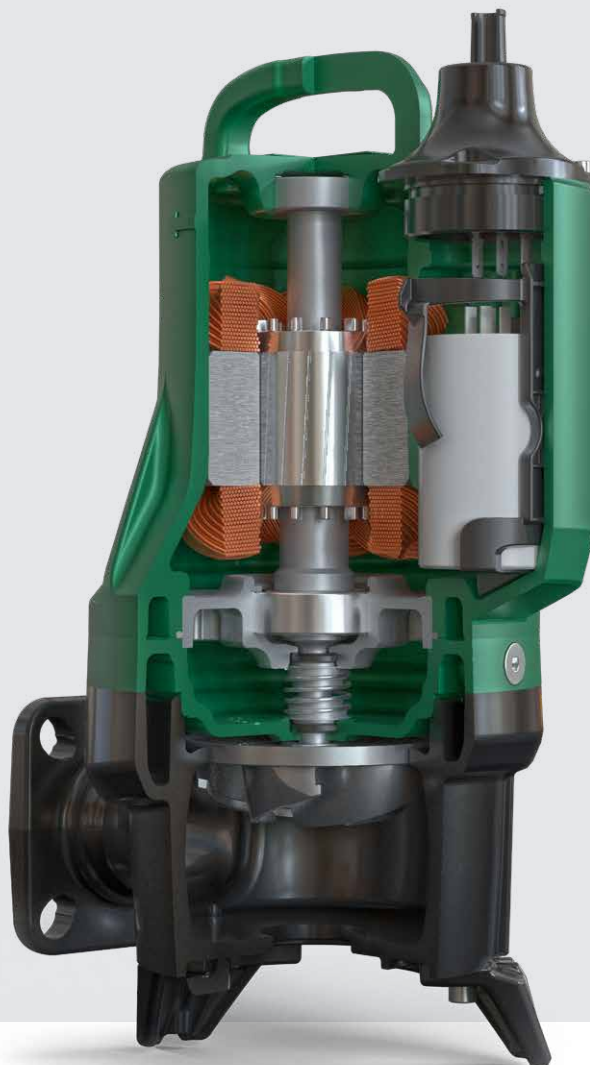
### COMPACT MOTORS

Compact motors designed to increase the starting torque and reduce the risk of seizing. They allow the FX pumps to run even when not fully submerged, to permit complete emptying of the tanks.



### QUICK AND EASY MAINTENANCE

Designed with a structure with three levels for quick access to all the main components, greatly facilitating maintenance.



### HIGH EFFICIENCY

Optimised performance in terms of efficiency and improved waste water management capacity, thanks to advanced fluid-dynamic studies.



### SUPER VORTEX

New DAB patented Super Vortex impeller. The new impeller improves on the performance of the FEKA FXV pumps under all conditions, reducing motor consumption while still offering the benefit of a free passage the same size as the delivery port of the pump (50 and 65 mm).

## WHY CHOOSE AN FX SUBMERSIBLE PUMP

### A STRONGER AND MORE RESILIENT RANGE

The double silicon carbide mechanical seal is entirely enclosed in the oil chamber to avoid direct contact with the pumped liquid.

The high standards of construction, like the motor shaft in AISI 304 stainless steel, the external cataphoresis and two-component paint coating and the resin coated cable gland, guarantee the long life of the range.

The compact motors, sized to ensure high resistance to clogging, help to extend the life of the product and ensure constant performance over time.

### QUICK TO INSTALL, AND REPLACEABLE

The new FX range comes with all accessories that make it possible to replace old models and upgrade existing systems.

The small size and the threaded and flanged connections make installation and replacement even easier.

### RELIABLE AND SAFE

The FX range meets the strictest quality standards. The pumps comply with the UNI EN 12050 standard.

They are also available with ATEX certification



# DRENAG FX



## SUBMERSIBLE PUMPS FOR DRAINING SANDY AND CONSTRUCTION SITE WATER

Submersible pump for draining clear and effluent water in civil and commercial applications, capable of providing high heads. It can also handle ground and rain water. Designed to allow quick maintenance, thanks to a construction solution that provides easy access to the main components of the pump.

- +** **REGULATORY COMPLIANCE**  
Waste water certificate according to EN 12050-2
- +** **HIGH EFFICIENCY**  
Double mechanical seal, cataphoresis and two-component painting, stainless steel motor shaft, resin coated cable gland
- +** **EASE OF USE**  
Easy installation, suitable for replacement
- +** **SIMPLE MAINTENANCE**  
Easy maintenance, assembly in three separate parts (hydraulics, motor, seal and flange)



### OPERATING RANGE

Maximum flow rate 28.5 m<sup>3</sup>/h  
Head 33 m

### NOMINAL POWER

0.8 - 2.3 kW / 1.1 - 3.1 HP

### FREE PASSAGE

10 mm.

### TYPE OF INSTALLATION

Mobile on ground or fixed on coupling device

# GRINDER FX



## SUBMERSIBLE PUMPS WITH GRINDER FOR WASTE WATER

Submersible pump with grinder designed for the lifting and transfer of waste water from drains in civil and commercial applications. Suitable for systems with small pipe diameters, or requiring high pressures.

- +** **REGULATORY COMPLIANCE**  
Waste water certificate according to EN12050-1
- +** **HIGH EFFICIENCY**  
Double mechanical seal, cataphoresis and two-component painting, stainless steel motor shaft, resin coated cable gland
- +** **EASE OF USE**  
Easy installation and suitable for replacement
- +** **SIMPLIFIED MAINTENANCE**  
Easy maintenance, assembly in three separate parts (hydraulics, motor, seal and flange)



### OPERATING RANGE

Maximum flow rate 23.8 m<sup>3</sup>/h  
Head 33 m

### NOMINAL POWER

0.8 - 2.1 kW / 1.1 - 2.8 HP

### TYPE OF INSTALLATION

Mobile on ground or fixed on coupling device

# FEKA FXV



## SUBMERSIBLE PUMPS FOR WASTE WATER

Submersible pump for draining waste water in civil and commercial applications. High-performance super vortex impeller with integral free passage, 50 mm or 65 mm depending on model.

- +** **REGULATORY COMPLIANCE**  
Waste water certificate according to EN12050-1
- +** **HIGH EFFICIENCY**  
Double mechanical seal, cataphoresis and two-component painting, stainless steel motor shaft, resin coated cable gland
- +** **EASE OF USE**  
Easy installation and suitable for replacement
- +** **SIMPLIFIED MAINTENANCE**  
Easy maintenance, assembly in three separate parts (hydraulics, motor, seal and flange)



### OPERATING RANGE

Maximum flow rate 62.8 m<sup>3</sup>/h  
Head 19.6 m

### NOMINAL POWER

0.9 - 2.2 kW / 1.2 - 2.9 HP

### FREE PASSAGE

50 mm or 65 mm depending on model

### TYPE OF INSTALLATION

Mobile on ground or fixed on coupling device

# FEKA FXC



## SUBMERSIBLE PUMPS FOR EFFLUENT WATER

Submersible pump for the lifting and transfer of waste water in civil and commercial applications. Channel impeller with a free passage of 50 millimetres and anti-seizing system.

- +** **REGULATORY COMPLIANCE**  
Waste water certificate according to EN12050-1
- +** **HIGH EFFICIENCY**  
Double mechanical seal, cataphoresis and two-component painting, stainless steel motor shaft, resin coated cable gland
- +** **EASE OF USE**  
Easy maintenance, assembly in three separate parts (hydraulics, motor, seal and flange)
- +** **SIMPLE MAINTENANCE**  
Easy installation and suitable for replacement



### OPERATING RANGE

Maximum flow rate 78.9 m<sup>3</sup>/h  
Head 20.9 m

### NOMINAL POWER

0.7 - 2.2 kW / 0.9 - 2.9 HP

### FREE PASSAGE

50 mm.

### TYPE OF INSTALLATION

Mobile on ground or fixed on coupling device

# FK



## SUBMERSIBLE PUMPS FOR WASTE WATER

Submersible pump for draining waste water, such as water from sewage systems in civil and commercial applications and urban sewerage networks. Compliant with EN 12050-1. Cast iron vortex impeller with total free passage. Double cartridge mechanical seal.

- +** **REGULATORY COMPLIANCE**  
Single channel hydraulics
- +** **HIGH EFFICIENCY**  
High efficiency IE3 motors
- +** **FUNCTIONALITY**  
Anti-clogging vortex impellers
- +** **TECHNICAL FOCUS**  
Cartridge seal



**OPERATING RANGE**

Flow rate from 4.3 m<sup>3</sup>/h to 280 m<sup>3</sup>/h  
Maximum head 41 m

**NOMINAL POWER**

1.1 - 11 kW / 1.5 - 15 HP

**FREE PASSAGE**

From 65 to 100 mm depending on the version

**TYPE OF INSTALLATION**

Fixed using a coupling device, or free in vertical position using a base plate

# FEKA 6000/8000



## SUBMERSIBLE PUMPS FOR WASTE WATER

Submersible pump for large plants and for wastewater treatment plant. The cover pump, the motor body and the hydraulic body are in cast iron. Single-channel or three-channel impeller depending on the model. The standard version includes the water sensor in the oil chamber and the thermal protection housed in the motor windings.

- +** **EFFICIENT DESIGN**  
Extremely robust and professional mechanical construction pumps
- +** **FUNCTIONALITY**  
Single-channel (6000 series) or three-channel (8000 series) shim impeller
- +** **ADAPTABILITY**  
They provide large flow rates, are available with 4 or 6 poles
- +** **TECHNICAL FOCUS**  
Water sensor in the oil chamber and thermal protection in the motor windings



**OPERATING RANGE**

Flow rate from 36 m<sup>3</sup>/h to 780 m<sup>3</sup>/h  
Maximum head 28 m

**NOMINAL POWER**

8.5 - 19.1 kW / 11.3 - 25.6 HP

**FREE PASSAGE**

From 80 to 100 mm depending on the version

**TYPE OF INSTALLATION**

Fixed by means of coupling device or free in vertical position by means of base

# FEKAFOS



## AUTOMATIC COLLECTION AND LIFTING STATIONS FOR ONE PUMP

One pump automatic collection and lifting station designed for lifting waste water, rainwater in basement rooms below sewer level in domestic and residential applications. Numerous input, output and ventilation piping connection possibilities, for use even in limited spaces.

- +** **REGULATORY COMPLIANCE**  
EN 12050-1 certification to ensure hermetic seal preventing the release of odours and leaks
- +** **EASE OF USE**  
Easy installation and maintenance of the pump thanks to the lifting device
- +** **FUNCTIONALITY**  
Supplied with floats and ready for the installation of an additional overflow alarm float
- +** **SUSTAINABILITY**  
100% recyclable environmentally friendly tank material



**TYPE OF PUMPED LIQUID**

Waste water, sewage water

**SUPPORTED LIQUID TEMPERATURE**

From +0 °C to +45 °C

**TANK CAPACITY AND CONSTRUCTION MATERIAL**

From 280 to 550 litres, polyethylene

**POSSIBLE TYPE OF INSTALLATION**

Inside or outside a building, fixed to the floor, underground, not suitable to withstand foot or vehicle traffic

# FEKAFOS MAXI



## AUTOMATIC COLLECTION AND LIFTING STATIONS FOR TWO PUMPS

Automatic collection and lifting station ready for the installation of two pumps with delivery diameter from DN50 to DN80; station designed for the accumulation of waste water and effluent/clear water in civil and commercial applications.

- +** **EASE OF USE**  
Easy installation and maintenance of the pumps thanks to the lifting device
- +** **FUNCTIONALITY**  
Supplied with floats and ready for the installation of an additional overflow alarm float
- +** **DESIGN**  
Shaped bottom to avoid stagnation
- +** **SUSTAINABILITY**  
100% recyclable environmentally friendly tank material



**TYPE OF PUMPED LIQUID**

Waste water, sewage water

**SUPPORTED LIQUID TEMPERATURE**

From +0 °C to +50 °C

**TANK CAPACITY AND CONSTRUCTION MATERIAL**

1200 litres or 3600 litres in polyethylene

**POSSIBLE TYPE OF INSTALLATION**

Inside or outside a building, fixed to the floor, underground, not suitable to withstand foot or vehicle traffic



## SUBMERSIBLE PUMPS



**ENERGY EFFICIENCY IE3**

### NEW IE3 MOTORS

The new **IE3 high efficiency motors** drastically reduce operation energy costs. Due to the low overheating temperatures, their operation is guaranteed for temperatures up to 40 °C. For higher temperatures contact our sales network. Thermal protection as standard, insulation class F.



### CARTRIDGE SEAL

The cartridge is a great advantage during maintenance of the pump, as it enables removing and replacing the seals in less time, with full reassurance that the operation has been carried out correctly. This is an exclusive DAB patent, with double Sic/Sic seal with opposite faces independent from the direction of rotation, with Viton elastomers and Corteco.



It complies with European regulations

**EN 12050-1**

### ANTI-CLOGGING VORTEX IMPELLERS

The **operation guarantee** comes even before efficiency. A new design of Vortex impellers, and the guarantee of always having a **total free passage**, are only two of the most important functionalities of the new FK.



It complies with European regulations

**EN 12050-1**

### NEW SINGLE-CHANNEL HYDRAULICS

The new **high efficiency** single-channel hydraulics are suitable for applications where continuous operation is required, for high flow rates with low fibre content waste water.



## WHY CHOOSE A DAB SUBMERSIBLE PUMP

### RELIABILITY

- New anti-clogging vortex impellers
- Cartridge seal
- Sensor in oil chamber
- Two-component paint coating
- Approval EN 12050-1 and ATEX
- New coupling device

### SIMPLE MAINTENANCE

- Cable specific for the pump
- Cartridge seal

### EFFICIENCY

- New IE3 motors
- New single-channel hydraulics

### EFFICIENCY FOR TRUE SAVINGS

Example based on a comparison between a P2=3kW pump available on the market and a pump from the new FKV range with equal hydraulic performance.

	EFFICIENCY		P1 KW	€ / YEAR*
	STANDARD PUMP	FKV PUMP		
STANDARD PUMP	83%	39%	4.0	2190 €
FKV PUMP	88%	44%	3.3	1807 €
IMPROVEMENT	EFFICIENCY		SAVINGS	
	+5%	+5%	383 € / YEAR	

\* Calculations based on a use of 10h/day for one year. Average electricity costs in EU 15c€/kWh for systems with total annual consumption < 20MWh.





### A - 3" DISPLAY

- Step-by-step installer guide for all the settings of the first installation
- It gives the possibility of viewing the complete log of the pump and panel errors
- Easy pump and sensor status monitoring and set-up of the pump start/stop levels
- Possibility of selecting the language and a password for protecting the settings



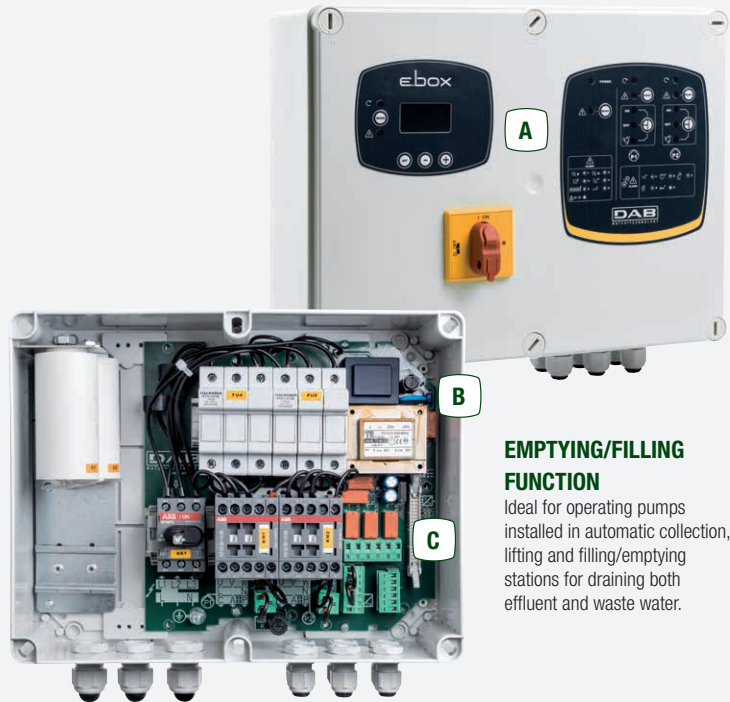
### B - AUTOMATIC VOLTAGE SELECTOR

With only one model in stock, it will be possible to manage both single-phase and three-phase pumps.



### C - GSM MONITORING READY

Possible connection to a GSM card for SMS control of the status of the pumps and the panel.



### EMPTYING/FILLING FUNCTION

Ideal for operating pumps installed in automatic collection, lifting and filling/emptying stations for draining both effluent and waste water.

## D + CONNECT

THE INTERNET OF PUMPS IS ALREADY A REALITY



DOWNLOAD THE APP FROM:

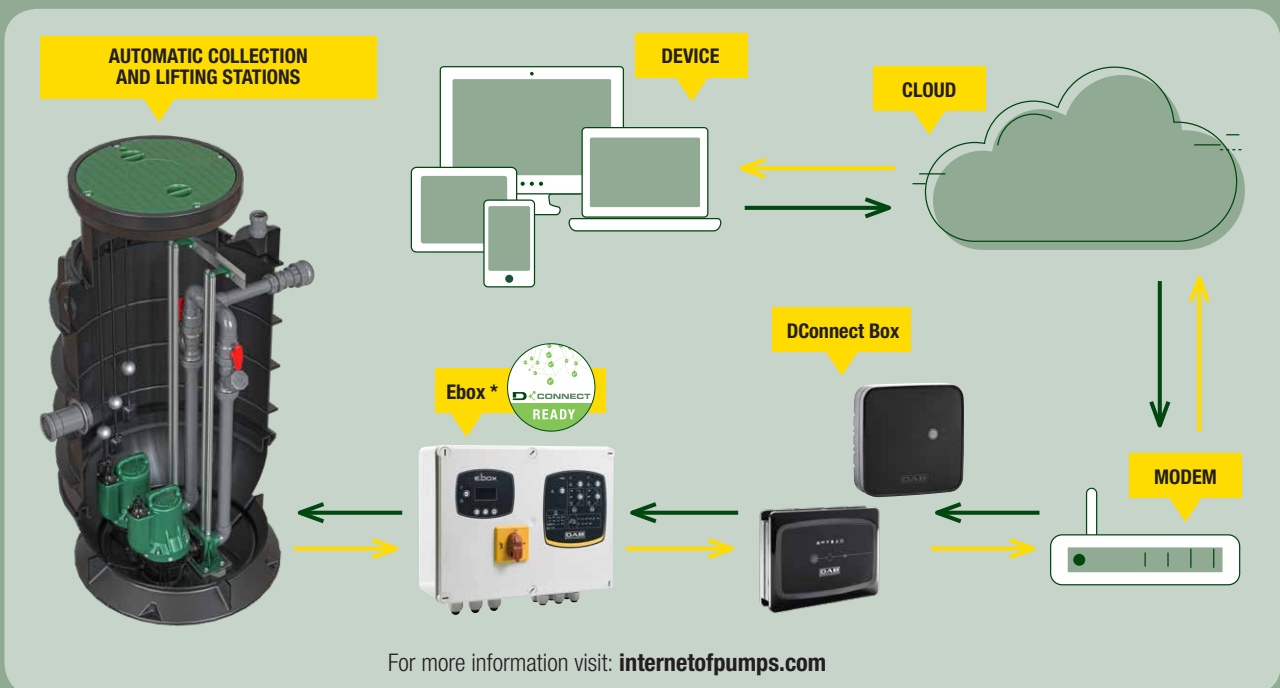


### ALWAYS IN CONTACT WITH YOUR SYSTEMS

DConnect is the new DAB cloud service that allows you to remotely control your installations, in real time and wherever you are.

Thanks to the DConnect app, it is possible to easily monitor the activity of the pump, analyze its behavior and receive both operation and alarm updates, therefore making it possible to anticipate any malfunction or seizing risks.

### OPERATION DIAGRAM



For more information visit: [internetofpumps.com](http://internetofpumps.com)

\* Only EBOXES with the DConnect READY label are compatible with DConnect

# EUROPEAN STANDARD EN 12050-1/2



## EN 12050-1

### **Applies to waste water lifting systems containing faecal matter in buildings and building sites.**

Faecal matter lifting systems must be capable of pumping waste water in accordance with the requirements of EN 12056-1, including all the solid matter normally contained in domestic waste water. They must be designed in a way that avoids the accumulation of solid matter.

#### **Requirements:**

- the system and the pumps must be capable of pumping waste water containing faecal matter, including solid matter normally found in domestic water (minimum free passage 40 mm);
- collection tanks must be covered, watertight and capable of preventing smell from escaping; the structural design must be in compliance with European standards;
- the collection tank must have appropriate ventilation and must include the fastening device to prevent rotation and floating;
- the pump and the system must guarantee a flow rate at the discharge piping of 0.7 m/s or higher at the point of service

#### **Testing:**

- the system must be able to withstand an overpressure of 0.5 +/- 0.01 bar for 10' without visible leaks
- the system must guarantee the pumping and the passage of floor cloths without significant efficiency loss and without clogging.

## EN 12050-2

### **It Applies to waste water lifting systems not containing faecal matter in buildings and building sites.**

The system must be capable of pumping domestic waste water not containing faecal matter, or rain water as defined by EN 12056-1, which may also contain sand and other solids, up to a maximum size of 8 mm.

#### **Requirements:**

- the system and the pump must be capable of pumping waste water not containing faecal matter or rain water that may also contain sand or other solids, up to (minimum free passage 10 mm)
- the pump and the system must guarantee a flow rate at the discharge piping of 0.7 m/s or higher at the point of service
- collection tanks must be covered, watertight and resistant to water at the atmospheric pressure ( $\Delta P = 0$  bar); the structural design must be in compliance with European standards
- the collection tank must have appropriate ventilation and must include the fastening device to prevent rotation and floating;







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