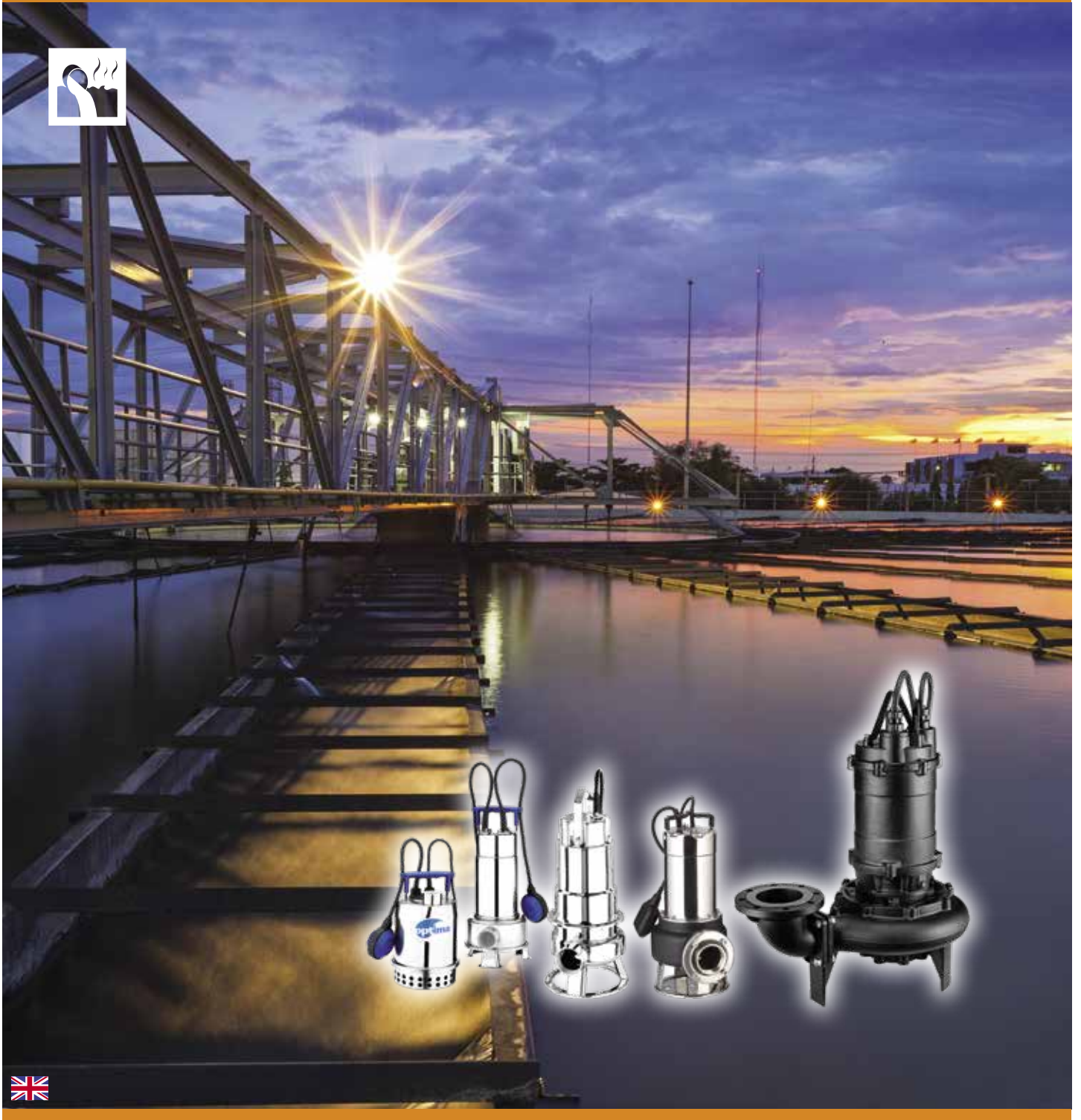


Looking ahead,  
going beyond expectations  
*Ahead > Beyond*



## Submersible electric Pumps

Product Catalogue



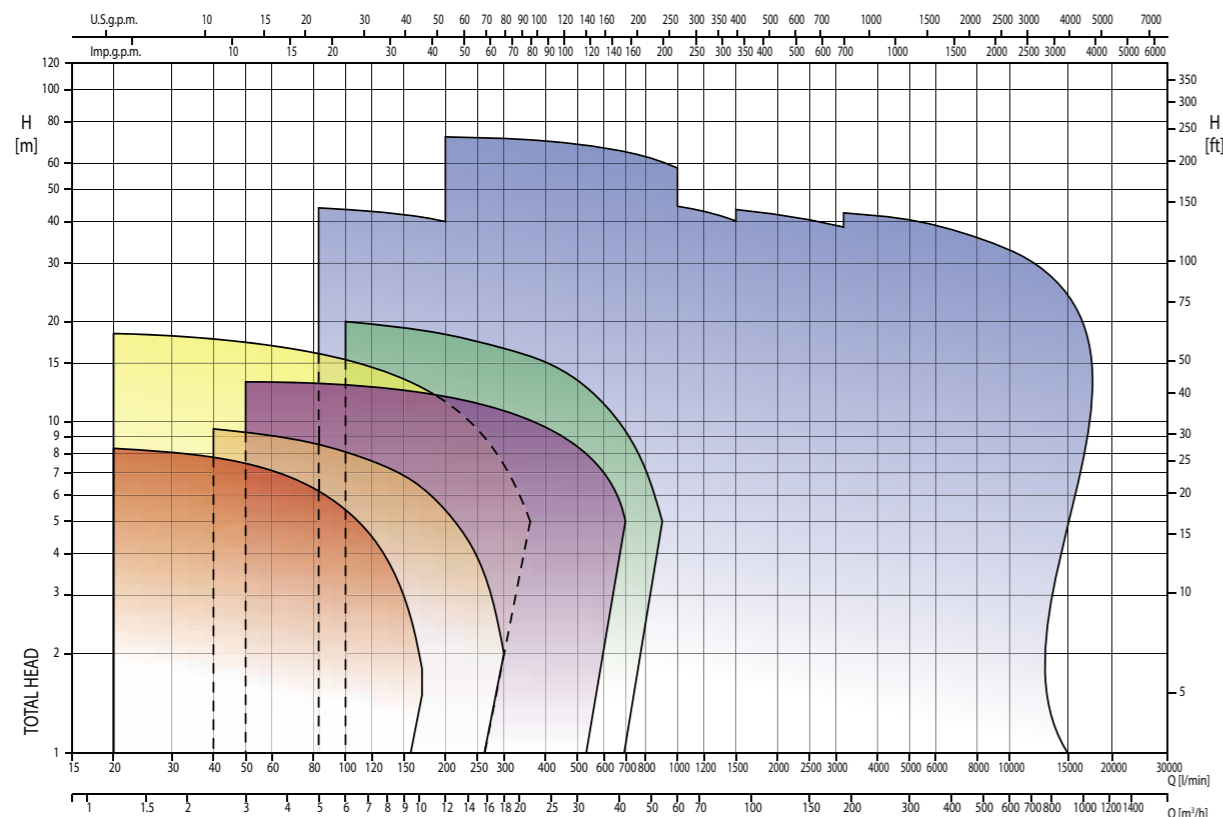


# Sectors and Areas of Application

- **Emptying of wells, garages and cellars**  
For the emptying of domestic premises subject to flooding or water infiltrations.
- **Emptying of tanks and cisterns**  
For aspiration from water recovery systems
- **Handling of load liquids of solid or filamentous substances in suspension**  
For the drainage of sludge with solid or filamentous particles
- **Civil and industrial waste water evacuation**  
For the drainage of discharges of residential or industrial uses
- **Drainage of sublevel areas**  
For the extraction of water from lower level areas
- **Emptying of cesspools**  
For the emptying residential and industrial sewage systems
- **The lifting of rainwater**  
For movement of the water contained in rainwater recovery tanks
- **Irrigation of gardens and vegetable gardens**  
For gardening and small-scale agriculture



# Technology, performance, quality in two different forms: steel and cast iron

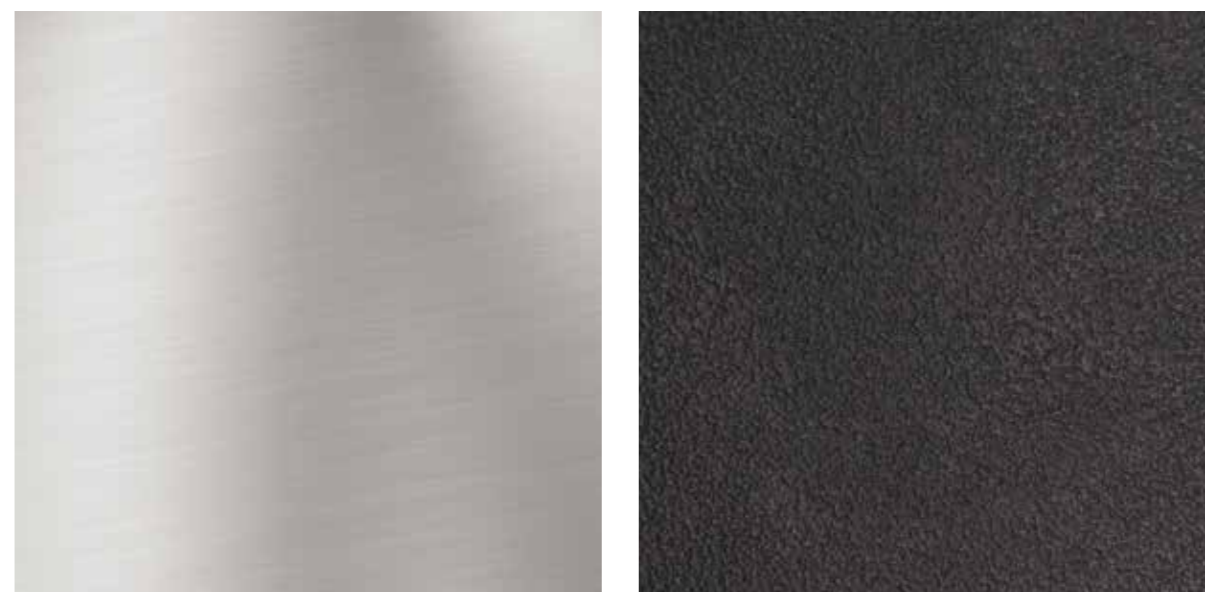


**Technology, Performance, Quality:** words that can take on different shapes and meanings. For EBARA they assume a **precise meaning**. They represent the characteristics that distinguish their products and that are also found in the wide range of submersed electric pumps: high technology used in production, performance of a very wide range that covers the most types of use, quality in the details and precision of the technical solutions adopted.

The submersed electric pumps summarise all this in two different families: steel submersibles and cast-iron submersibles. The **steel** range was also conceived and designed to offer high quality standards in the field of domestic applications.

The range of **cast iron** electric pumps, on the other hand, is ideal for residential and industrial uses and ensures high performance even in the most extreme situations.

The same quality, the same technology, the same EBARA imprint in two different forms: Steel and Cast iron.



# STEEL

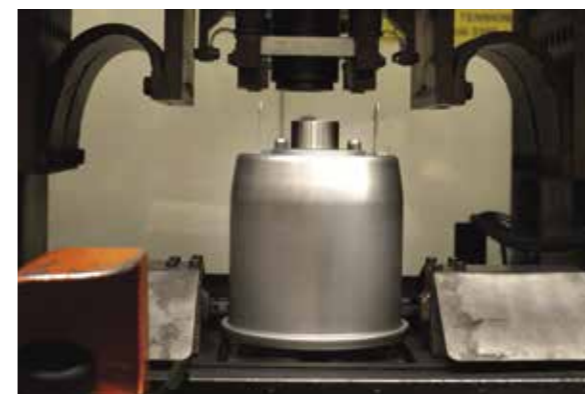
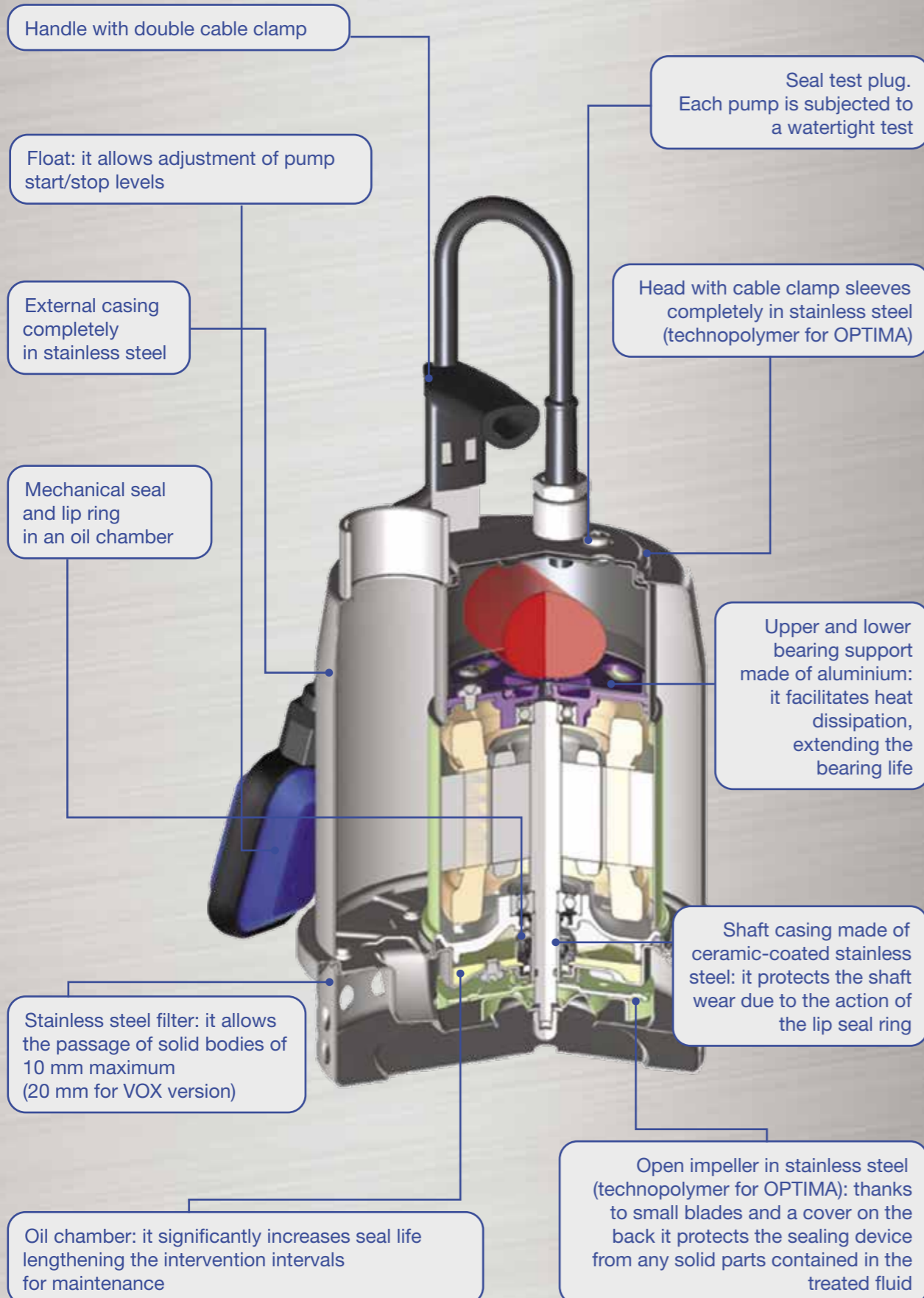
## STEEL - From long and proven industry experience, high technology comes to small household electric pumps

Small domestic pumps or for large industrial plants, there is no difference. Our goal is to offer the product that best suits requirements, in every situation. For these reasons we offer our experience, gained in more than 100 years in the field of waste water treatment, both for industrial products and for domestic pumps.

The electric pumps are made of stainless steel AISI 304, to ensure maximum reliability and resistance. The technical solutions adopted, as well as the matching accessories, ensure this range of high performance and a variety of solutions that adapt to any need.

The OPTIMA, easy-to-use light-water electric pumps, are part of this range. The BEST ONES, also for clear waters that also feature the vortex type impeller option (BEST ONE VOX version). Following on, with similar constructive characteristics but offering greater performance, are the BEST 2 - 5. The two larger models complete the range of submersed steel pumps: the RIGHTS, suitable for waste water and the DW - DW VOX, used with sewage and also available with a vortex impeller.

The Vox type impellers available on a number of models, as well as the minimal suction device or the magnetic float, are accessories that best express the versatility of domestic pumps. Quality and technological innovation, distinctive signs of EBARA.



# OPTIMA

## Submersible pumps in AISI 304

Submersible electric pump for clear water with AISI 304 stainless steel hydraulics. Pump body, intake grille, seal holder disc and motor casing are in AISI 304. Impeller in PPE + PS reinforced with glass fibres and shaft in AISI 303. The mechanical seal is standard (Ceramic/Carbon/NBR)

- MA version (fig.1) with float
- MS version (fig.3) with MS vertical magnetic float with reduced dimensions for clean water

### Accessories

- 1"¼ hose connector and relative hose clamp (optional)
- Minimum suction device up to 3 mm (fig. 2)



Practical and easy to use



Possibility of use in fixed and mobile installations



Resistant to corrosion

- Total head from 1.5 to 7.6 m
- Capacity from 1.2 to 9 m³/h
- Maximum immersion 5 m
- Maximum liquid temperature 50°C
- Maximum solid size passage 10 mm

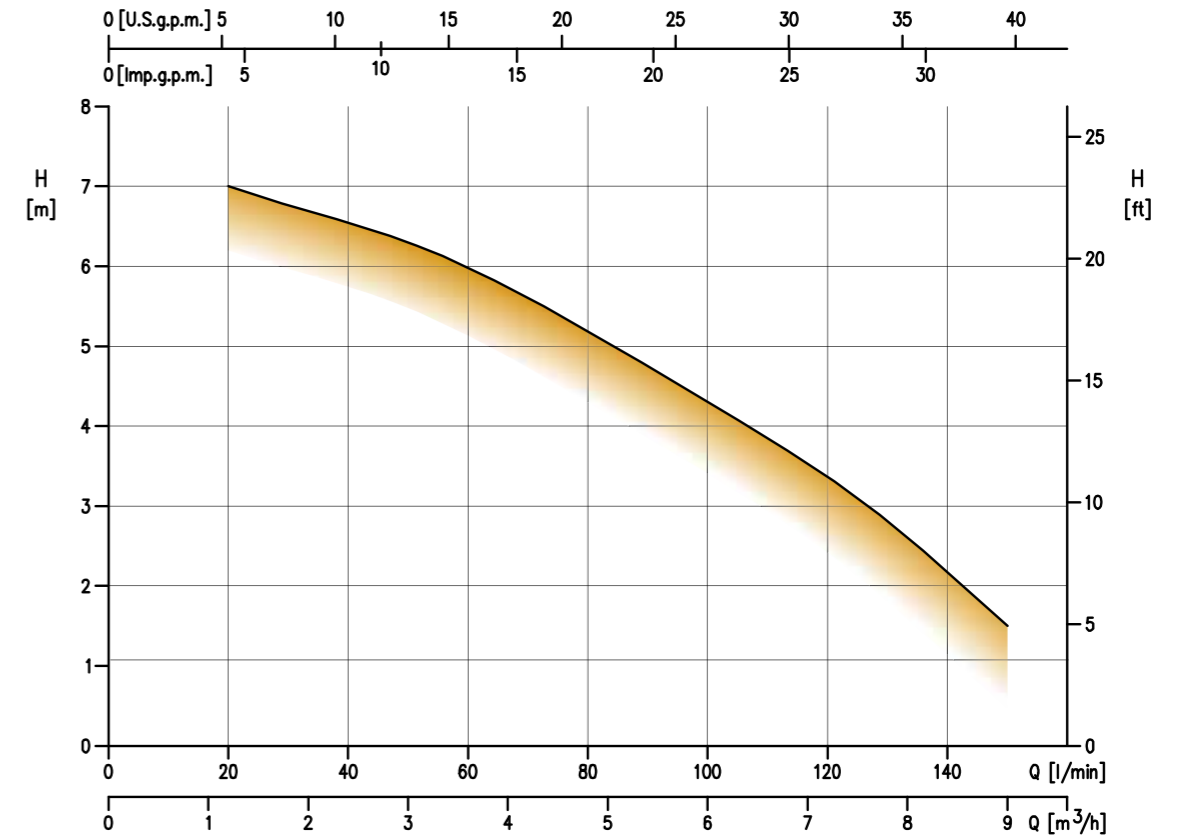


**Low suction device**  
It allows aspiration to 3 mm from the ground (only for M and MA version). Easily mountable with simple pressing

**MS magnetic float (vertical)**  
It allows the use of floating pumps where space is limited (not compatible with low suction device)

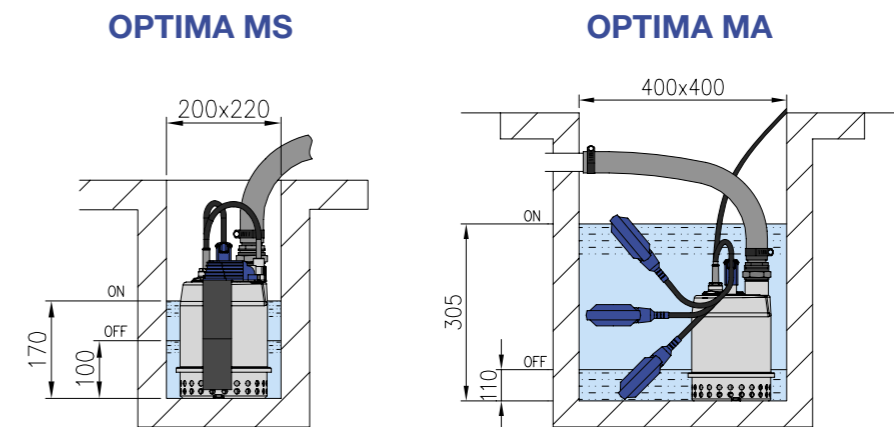
# Performance curve

50Hz



### INSTALLATION

The OPTIMA electric pumps have a wide versatility of installation. The possibility of choosing between the vertical magnetic float (small) or the float switch allows choosing of the best option, also based on the space available to insert the pump. Furthermore, the choice of switch type also depends on the water level for which pump start is preferred.



# BEST ONE - ONE VOX

Fully submersed electric pumps in AISI 304



Possibility of use in fixed and mobile installations



Resistant to corrosion



Practical and easy to use

Submersible electric pump for clear water with AISI 304 stainless steel hydraulics. Outer casing, impeller, filter, motor cover, seal holder disc and motor case all in AISI 304, shaft in AISI 303. The mechanical seal is standard in Ceramic/Carbon/NBR. Provided with 5 m of power cable type H05 RN - F (single phase), H07 RN - F (three phase) for internal use, with or without float.

### Special Versions

- Version MA (fig. 1) with float
- Version VORTEX (VOX) (fig. 2)
- Version MA (fig. 3) with magnetic float MS vertical with reduced dimensions for clean water

### Accessories

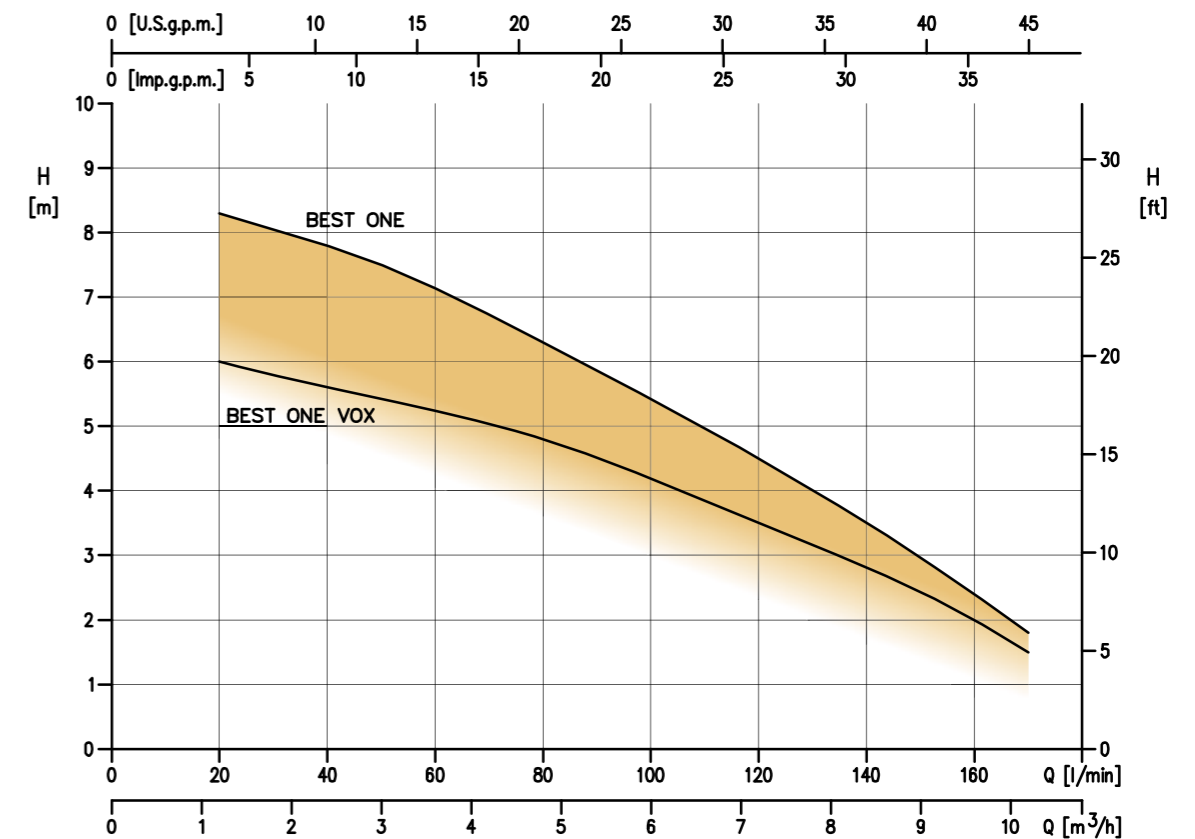
- 1 1/4" hose connector and relative hose clamp (optional)
- Minimum suction device up to 3 mm (fig. 4)

- Total head from 1.8 to 8.3 m for BEST ONE and from 1.5 to 6 m for BEST ONE VOX
- Capacity from 1.2 to 10.2 m<sup>3</sup>/h
- Maximum immersion 5 m
- Maximum liquid temperature 50°C
- Maximum solid size passage:
  - 10 mm
  - 20 mm for version VOX (VORTEX)



# Performance curve

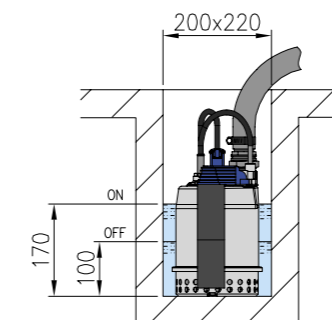
50Hz



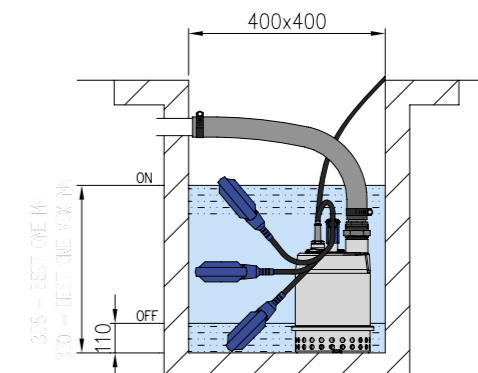
### INSTALLATION

The BEST ONE electric pumps have a wide versatility of installation. The possibility of choosing between the vertical magnetic float (small) or the float switch allows choosing of the best option also based on the space available to insert the pump. Furthermore, the choice of switch type also depends on the water level for which pump start is preferred.

#### BEST ONE MS



#### BEST ONE MA



# BEST 2-5

## Submersible pumps in AISI 304

Submersible electric pump completely in AISI 304 stainless steel.

The pump body, the impeller, the suction grille, the motor cover, the seal holder disc and the motor case are in AISI 304.

The shaft is in AISI 303 (part in contact with the liquid). Double mechanical seal with oil chamber: the upper one in Carbon/Ceramic/NBR (motor side), the lower one in SiC/SiC/NBR (pump side).

### Special Versions

- MA Version with float



Possibility of use in fixed and mobile installations



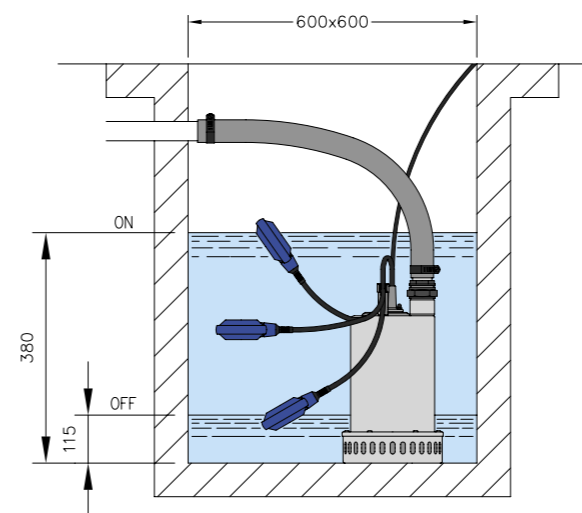
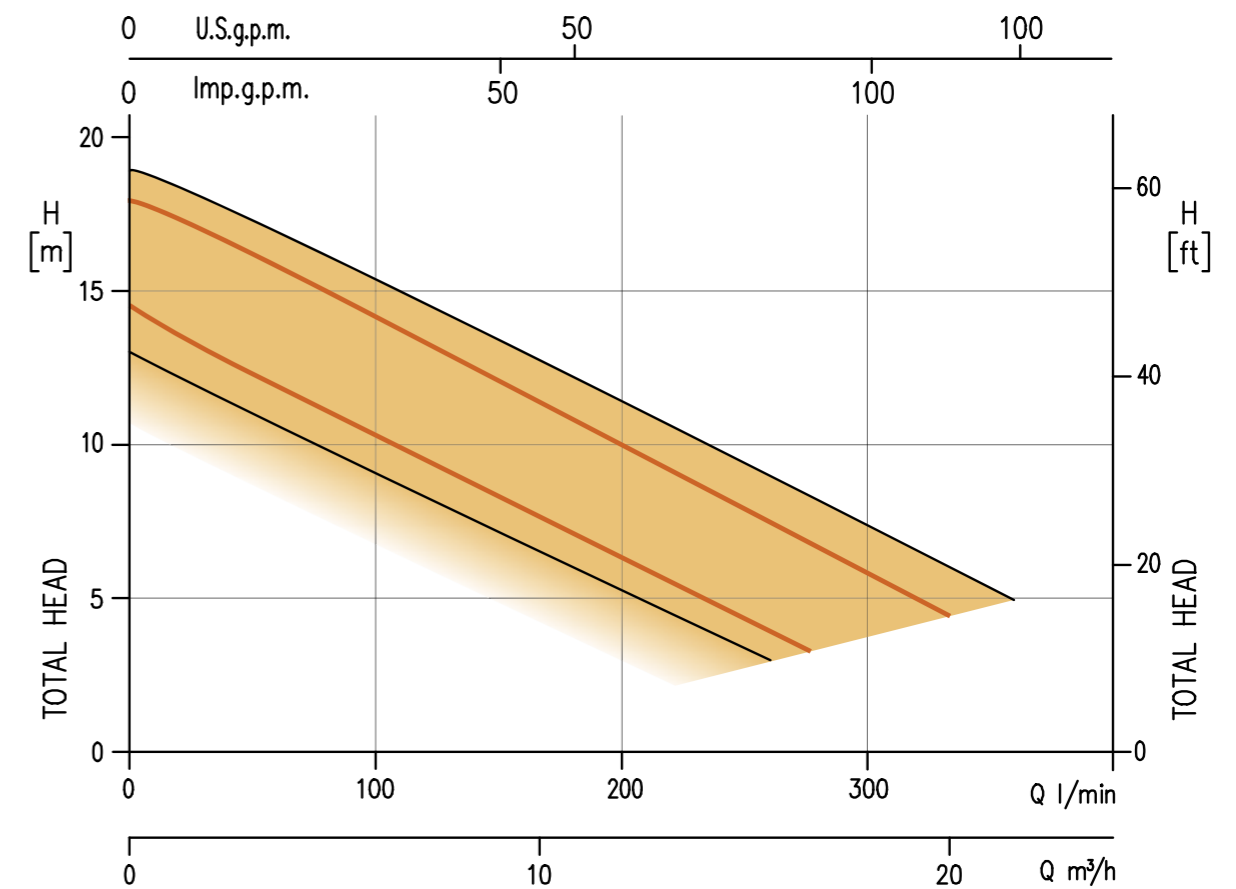
Practical and easy to use

- Total head from 2.9 to 18.4 m
- Capacity from 1.2 to 21.6 m<sup>3</sup>/h
- Maximum immersion 7 m
- Maximum liquid temperature 35°C
- Maximum solid size passage 10 mm



# Performance curve

50Hz



### INSTALLATION

The BEST 2 - 5 electric pumps are also available with a float switch, thus increasing the versatility of use. The choice of the use of the float switch requires the respecting of minimum installation spaces to guarantee correct operation of the pump itself.

# RIGHT

## Submersible electric pumps for waste water in AISI 304

Submersible electric pump for waste water in AISI 304 stainless steel. Pump body, impeller, motor cover, seal holder disc and motor case in AISI 304. Shaft in AISI 303 (part in contact with the liquid). Present the double mechanical seal with oil chamber: the upper one in Carbon/Ceramic/NBR (motor side) and the lower one in SiC/SiC/NBR (pump side).

### Special Versions

- MA Version with float
- Version with 10 m of cable



### Accessories

Adapter for use of the DW descent kit with RIGHT pumps



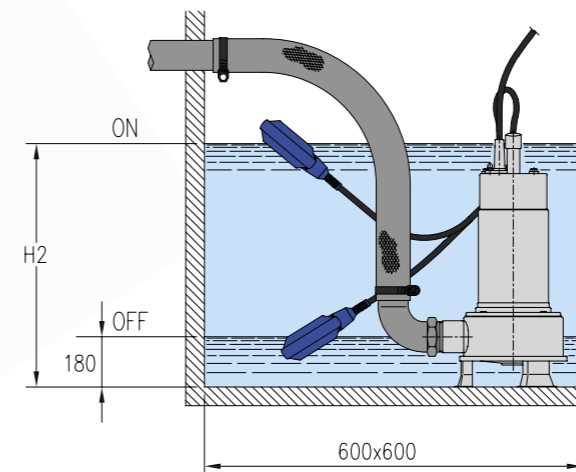
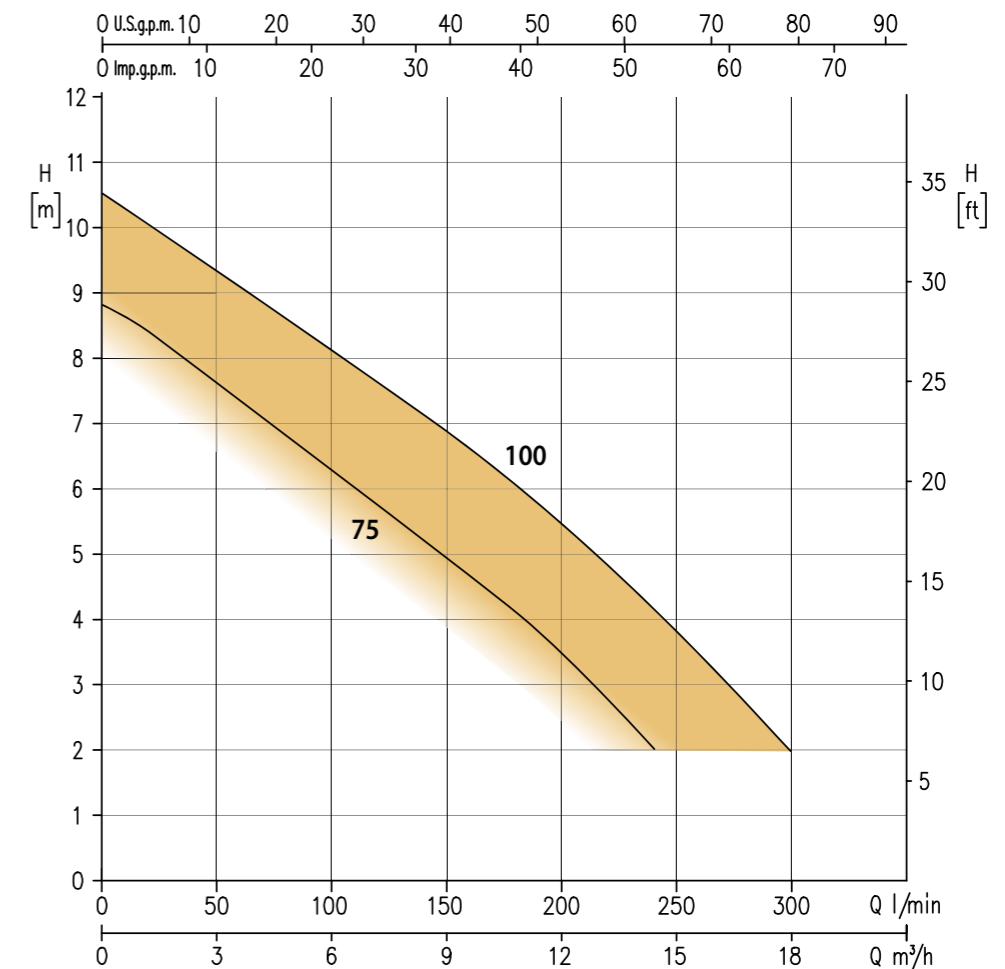
Possibility of use in fixed and mobile installations



- Total head from 2 to 9.5 m
- Capacity from 2.4 to 18 m<sup>3</sup>/h
- Maximum immersion 7 m
- Maximum liquid temperature 50°C
- Maximum solid size passage 35 mm
- Provided with 5 m of power cable type H07 RN - F (on request 10 m of power cable)

# Performance curve

50Hz



### INSTALLATION

The RIGHT electric pumps are also available with a float switch, thus increasing the versatility of use. The choice of the use of the float switch requires the respecting of minimum installation spaces to guarantee correct operation of the pump itself.

# DW – DW VOX

## Submersible electric pumps for waste water in AISI 304

Submersible electric pumps in stainless steel AISI 304 for waste water. They have a pump body, impeller, motor cover, seal holder disc and motor case in AISI 304, while the shaft is in AISI 303. Double mechanical seal with interposed oil chamber: the upper one in carbon/ceramic/NBR (motor side), the lower one in SiC/SiC/NBR (pump side). G20 cast iron spacer (only for DW – DW VOX 300). Available single-phase versions with or without float.

### Special Versions

- Single-channel impeller version (DW)
- Vortex type impeller version (DW VOX)
- Flanged version (DWF/DW VOXF)

### Accessories

Descent device kit

- Guide hook DW - DW VOX in cast iron
- Fixed hook DW - DW VOX in cast iron
- On request version with special seal of Tungsten Carbide/Tungsten Carbide + FPM O-Ring

- Total head from 2.2 to 20 m for DW and from 1.6 a 15.7 m for DW VOX
- Capacity from 6 a 54 m<sup>3</sup>/h for DW and from 6 to 48 m<sup>3</sup>/h for DW VOX
- Maximum immersion 7 m
- Maximum liquid temperature 40°C
- Maximum solid size passage 50 mm

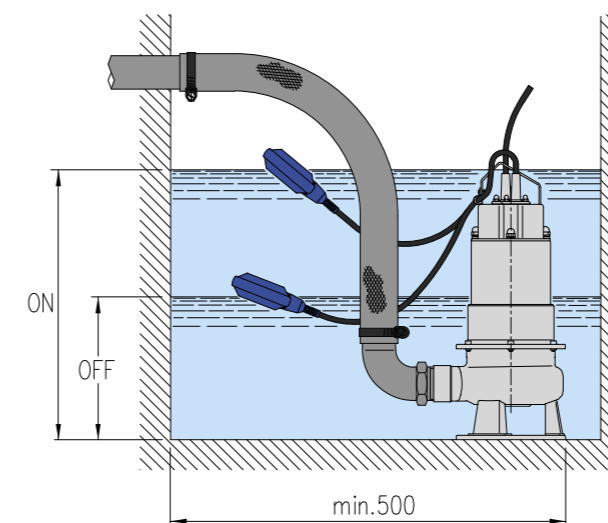
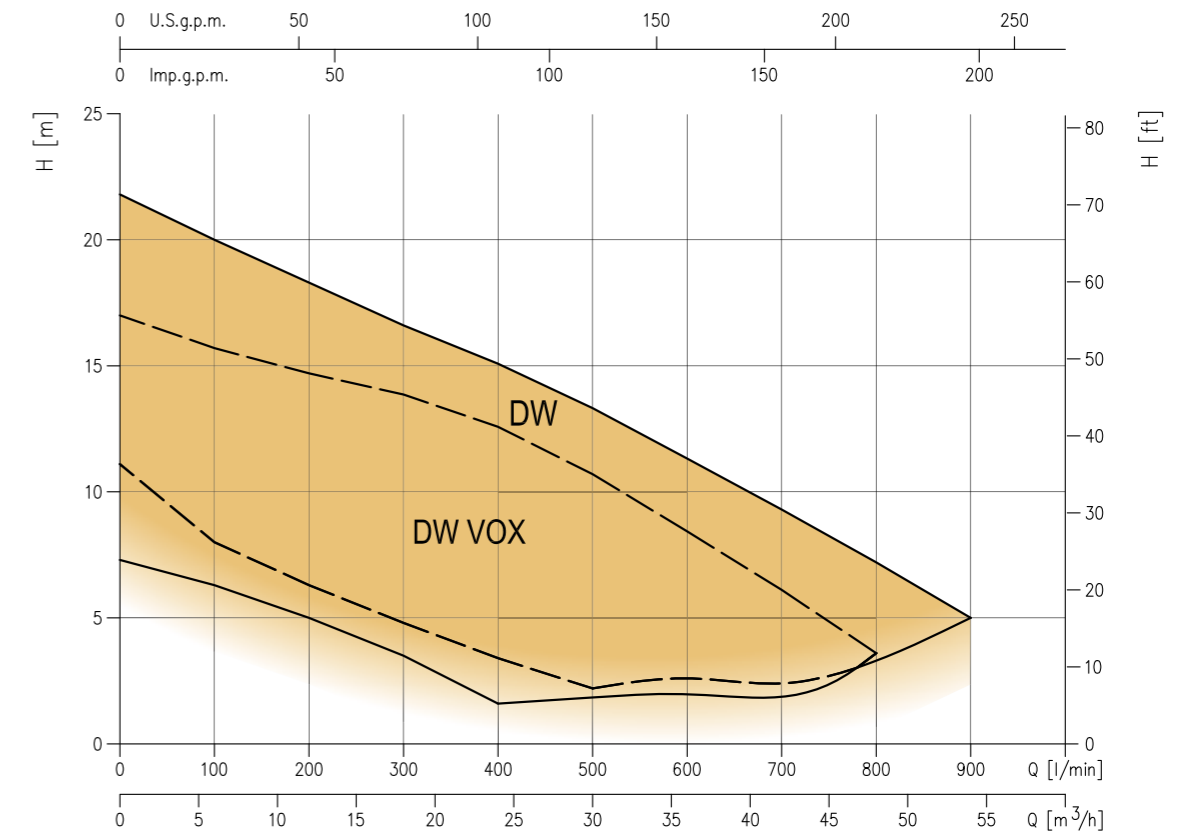


Possibility of use in fixed and mobile installations



# Performance curve

50Hz

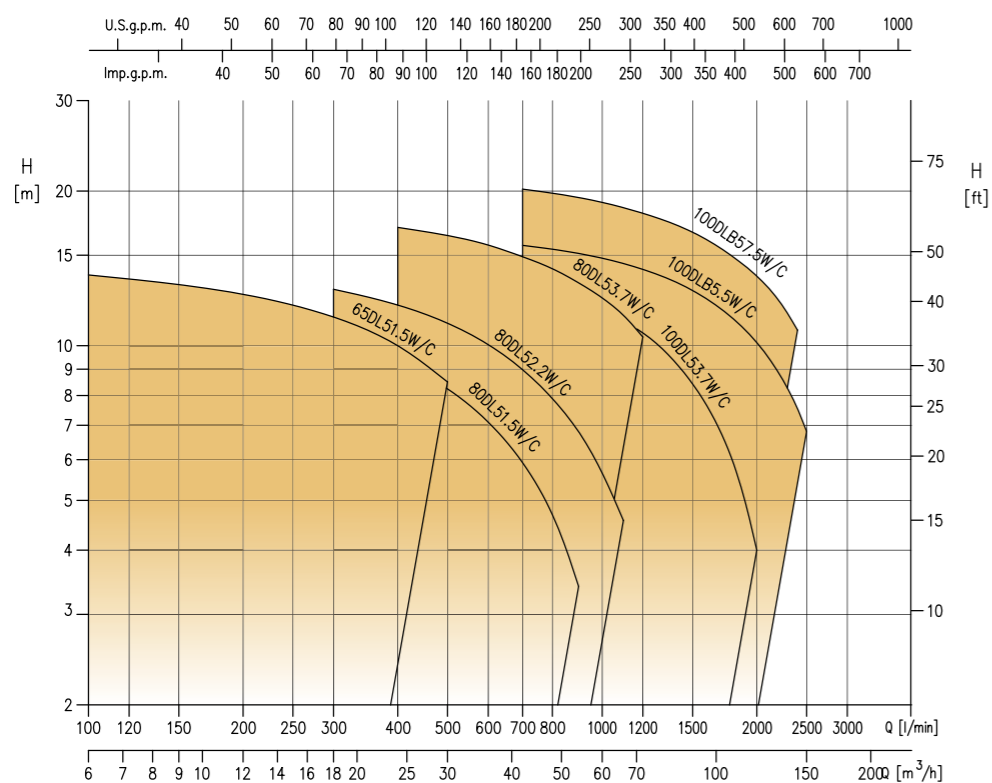
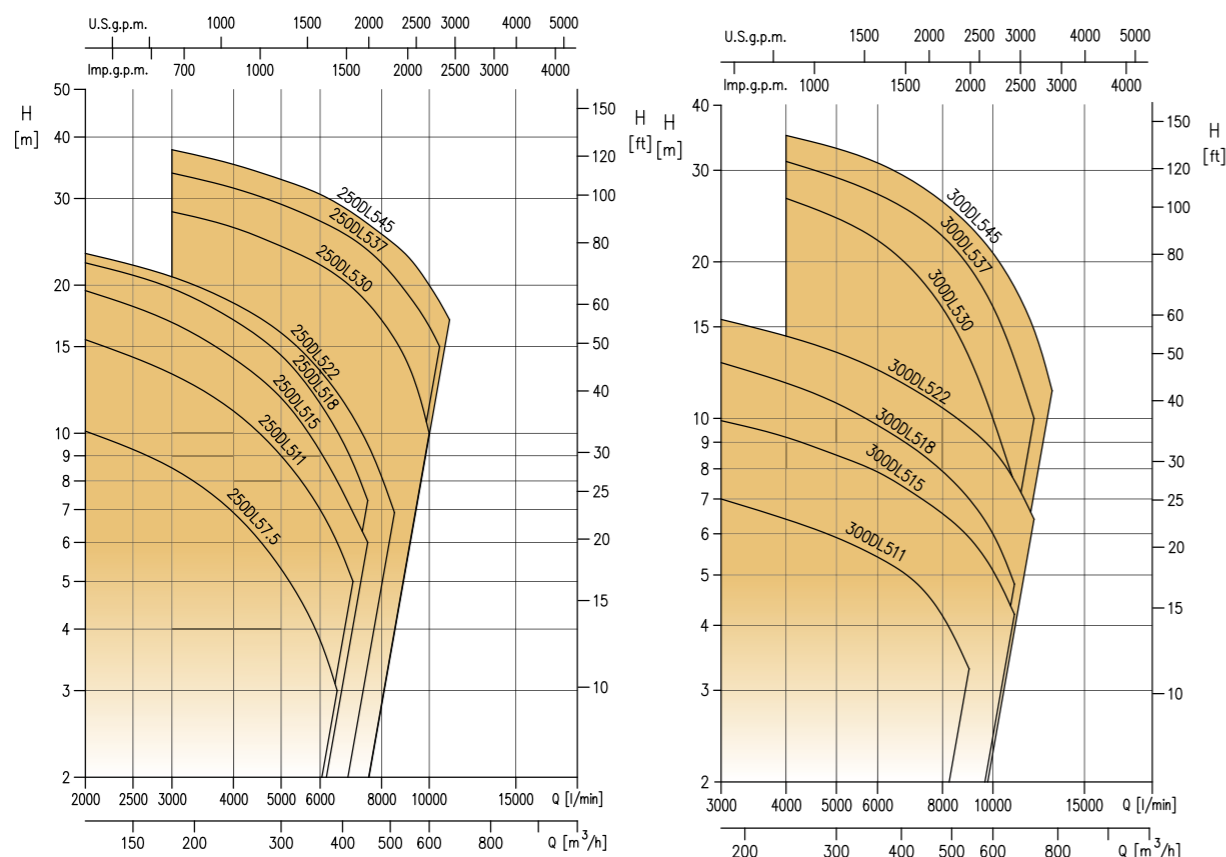


### INSTALLATION

The DW - DW VOX electric pumps are also available with a float switch, thus increasing the versatility of use. The choice of the use of the float switch requires the respecting of minimum installation spaces to guarantee correct operation of the pump itself.

# Performance curve

50Hz



# DML(F) - DMLV(F)

Submersible electric pumps with single-channel impeller (DML-DMLF) or with vortex impeller (DMLV-DMLVF) cast iron, for sewage.

Pump body, single-channel impeller, cast iron (bend) elbow. The shaft is in AISI 403 for DML-DMLV and in AISI 420B for DMLF-DMLVF.

Mechanical seal:

- SiC/SiC/NBR (pump side) for DML and DMLF
- Carbon/Ceramic/NBR (motor side) for DML and DMLF
- SiC/SiC/NBR (pump side) for DMLV and DMLVF
- Carbon/Ceramic/NBR (motor side) for DMLV and DMLVF



Open single-channel impeller with cutting action



Impeller vortex



Semi-open anti-clogging impeller



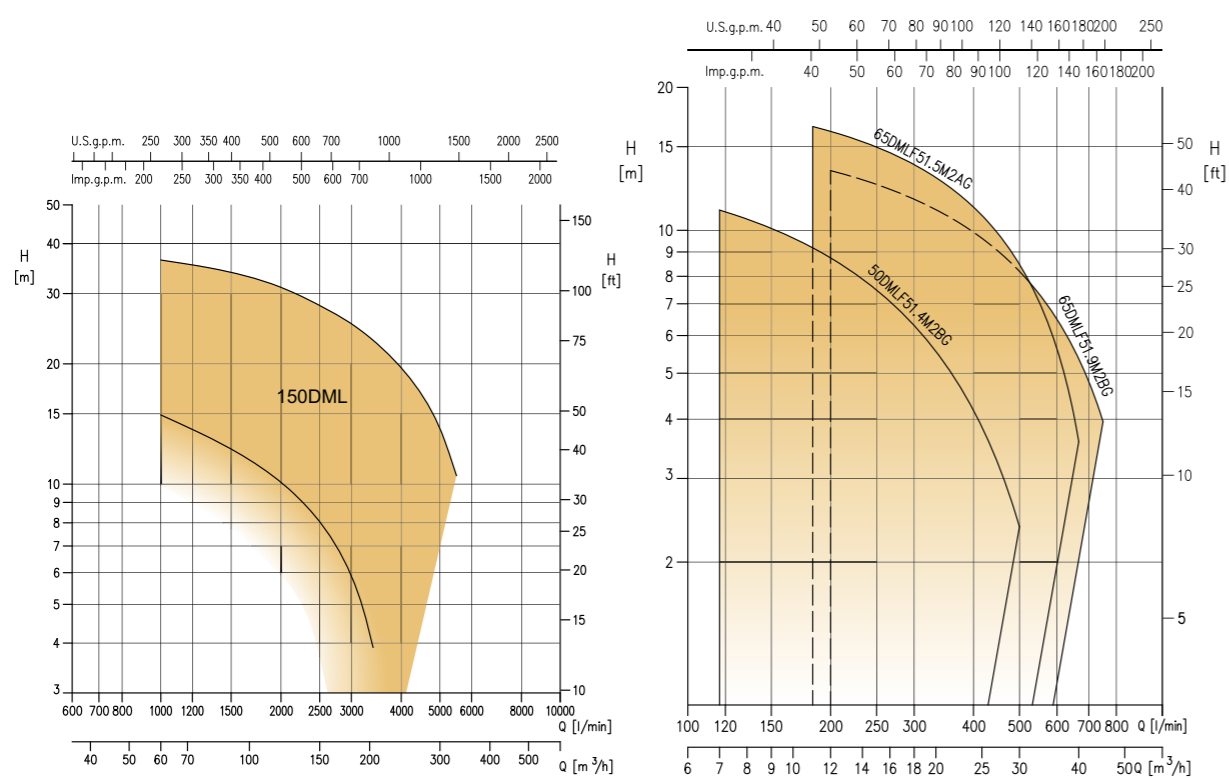
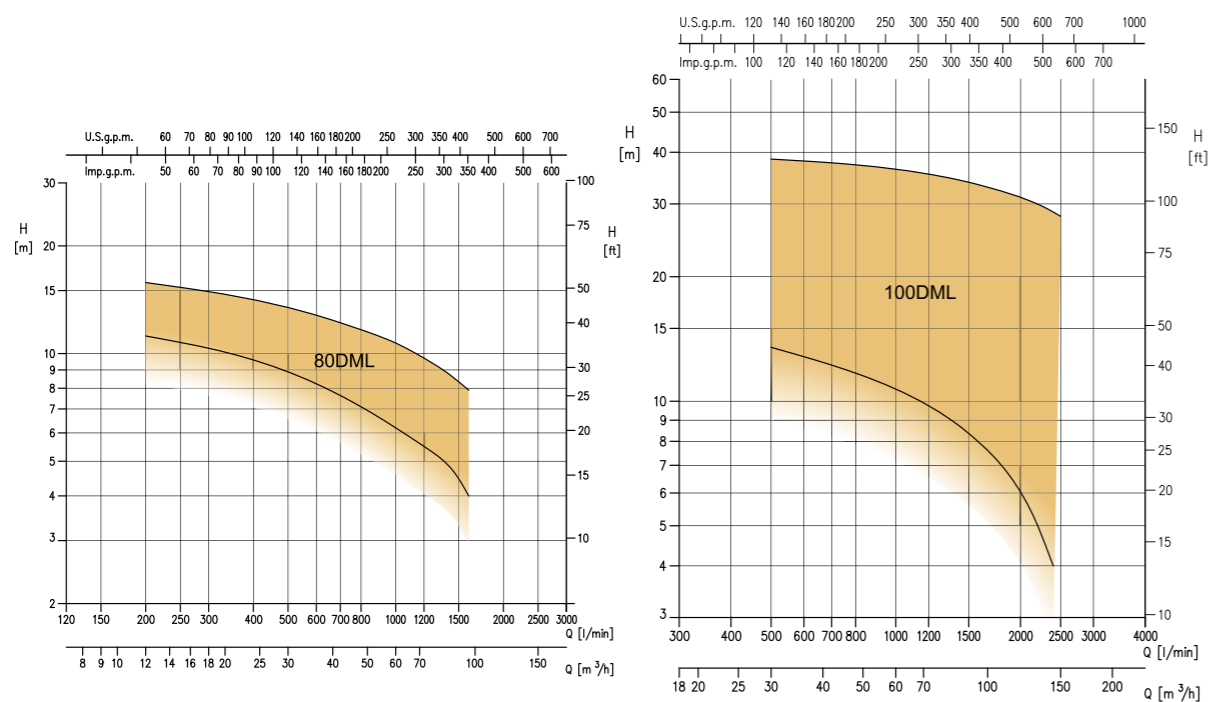
Possibility of use in fixed and mobile installations



- Total head from 4 to 38.5 m for DML  
from 2.4 to 16.5 m for DMLF  
from 1,4 to 41.3 m for DMLV(F)
- Capacity from 12 to 330 m<sup>3</sup>/h for DML  
from 7 to 45 m<sup>3</sup>/h for DMLF  
from 12 to 200 m<sup>3</sup>/h for DMLV(F)
- Maximum liquid temperature 40°C
- Maximum solid size passage:
  - 76 mm (DML)
  - 30 mm (DMLF up to 1,4 kW)
  - 40 mm (DMLF)
  - 80 ÷ 100 mm (DMLV)
  - 30 ÷ 80 mm (DMLVF)
- Maximum length of fibrous bodies 400 mm for 80DMLV, 500 mm for 100DMLV and 40 mm for DMLF

# Performance curve

50Hz



# Performance curve

50Hz

