

Submersible pumps in stainless steel

-  Sewage water
-  Domestic use
-  Civil use
-  Industrial use



PERFORMANCE RANGE

- Flow rate up to **650 l/min** (39 m³/h)
- Head up to **15 m**

APPLICATION LIMITS

- **5 m** maximum immersion depth
- Maximum liquid temperature **+40 °C**
- Passage of solids:
 - up to **Ø 40 mm** for VX /35-ST
 - up to **Ø 50 mm** for VX /50-ST
- Minimum immersion depth for continuous service:
 - **280 mm** for VX /35-ST
 - **300 mm** for VX /50-ST

CONSTRUCTION AND SAFETY STANDARDS

- **10 m** long power cable
- Float switch for single-phase versions

EN 60335-1
IEC 60335-1
CEI 61-150

EN 60034-1
IEC 60034-1
CEI 2-3



CERTIFICATIONS

Company with management system certified DNV
ISO 9001: QUALITY



INSTALLATION AND USE

The **VX-ST** submersible pumps in stainless steel are recommended for draining **sewage water** in domestic, civil and industrial applications, in every case where there are solid bodies in suspension, for example water mixed with mud, groundwater, surface water. They are suitable for draining flooded areas such as cellars, underground car parks, car washes, for emptying cesspools and for sewage disposal. These pumps distinguish themselves for their reliability, which can be best appreciated under automatic operating conditions in fixed installations.

PATENTS - TRADE MARKS - MODELS

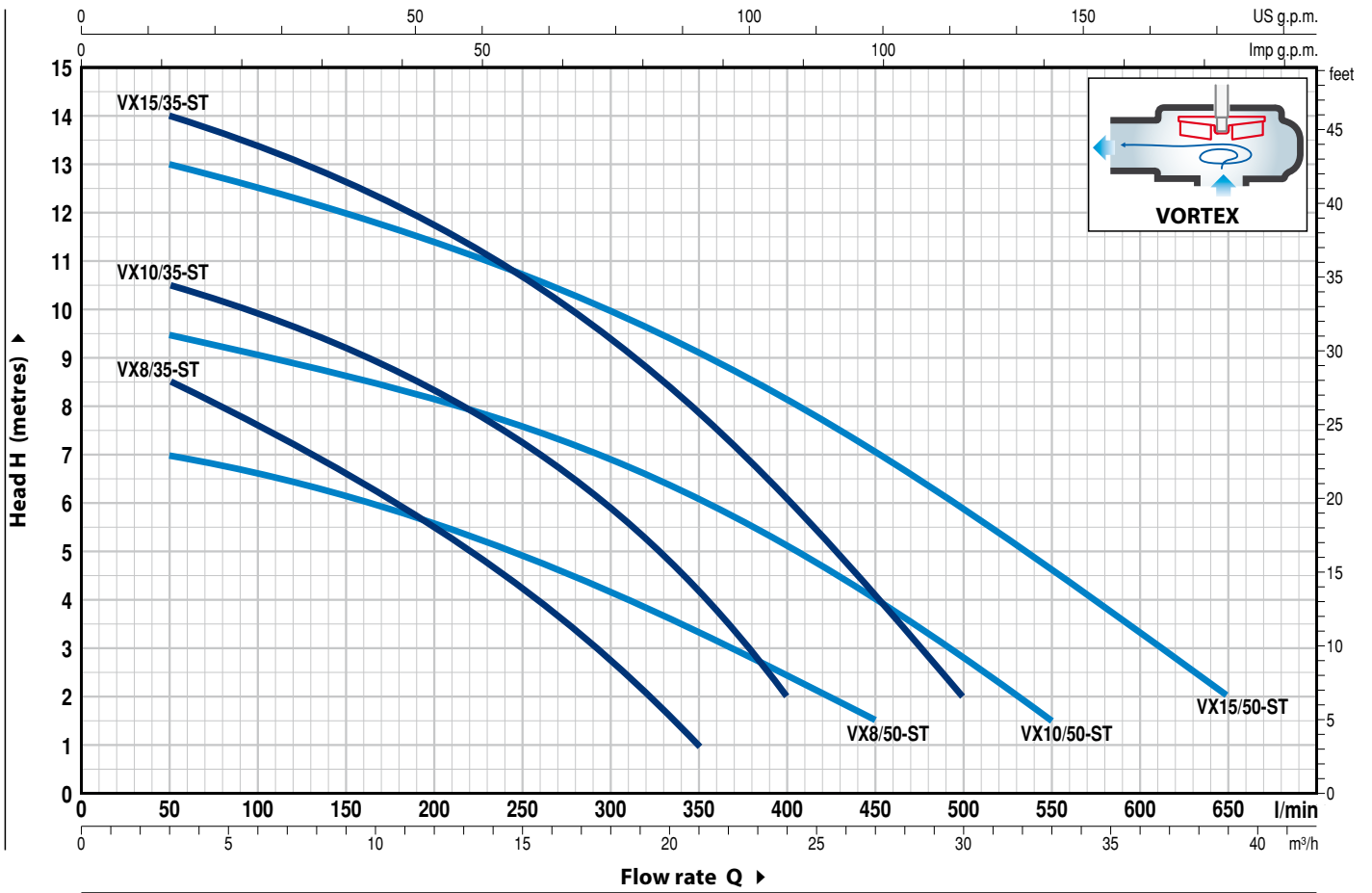
- Patent n° EP2313658
- Patent Pending n° BO2015A000116

OPTIONS AVAILABLE ON REQUEST

- Single-phase pumps without float switch
- AISI 316L stainless steel pump shaft
- Other voltages or 60 Hz frequency

CHARACTERISTIC CURVES AND PERFORMANCE DATA

50 Hz n= 2900 min⁻¹



| MODEL | | POWER (P ₂) | | Q | Flow rate | | | | | | | | | | | | | |
|---------------|--------------|-------------------------|------|----------|-------------------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|----|--|
| Single-phase | Three-phase | kW | HP | | m ³ /h | 0 | 3 | 6 | 12 | 18 | 21 | 24 | 27 | 30 | 33 | 36 | 39 | |
| | | | | l/min | 0 | 50 | 100 | 200 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | | |
| VXm 8/35 -ST | VX 8/35 -ST | 0.55 | 0.75 | H metres | 9.5 | 8.5 | 7.5 | 5.4 | 2.7 | 1 | | | | | | | | |
| VXm 10/35 -ST | VX 10/35 -ST | 0.75 | 1 | | 11.5 | 10.5 | 10 | 8.3 | 6 | 4 | 2 | | | | | | | |
| VXm 15/35 -ST | VX 15/35 -ST | 1.1 | 1.5 | | 15 | 14 | 13.5 | 11.7 | 9.2 | 7.7 | 6 | 4.1 | 2 | | | | | |
| VXm 8/50 -ST | VX 8/50 -ST | 0.55 | 0.75 | | 7.5 | 7 | 6.6 | 5.7 | 4.2 | 3.5 | 2.5 | 1.5 | | | | | | |
| VXm 10/50 -ST | VX 10/50 -ST | 0.75 | 1 | | 10 | 9.5 | 9.2 | 8.5 | 7 | 6 | 5 | 3.8 | 2.7 | 1.5 | | | | |
| VXm 15/50 -ST | VX 15/50 -ST | 1.1 | 1.5 | | 13.5 | 13 | 12.5 | 11.5 | 10 | 9 | 8 | 7 | 6 | 4.7 | 3.3 | 2 | | |

Q = Flow rate H = Total manometric head

Tolerance of characteristic curves in compliance with EN ISO 9906 Grade 3B.

POS. COMPONENT CONSTRUCTION CHARACTERISTICS

| | | | | | |
|--|--|-----------------|------------------------|------------------------|------------------|
| 1 PUMP BODY | Stainless steel AISI 304 with threaded port in compliance with ISO 228/1 | | | | |
| 2 BASE | Stainless steel AISI 304 | | | | |
| 3 IMPELLER | Stainless steel AISI 304 VORTEX type | | | | |
| 4 MOTOR CASING | Stainless steel AISI 304 | | | | |
| 5 MOTOR CASING PLATE | Stainless steel AISI 304 | | | | |
| 6 MOTOR SHAFT | Stainless steel AISI 431 | | | | |
| 7 SHAFT WITH DOUBLE MECHANICAL SEAL SEPARATED BY AN OIL CHAMBER | | | | | |
| Seal | Shaft | Position | Materials | | |
| Model | Diameter | | Stationary ring | Rotational ring | Elastomer |
| MG1-14D SIC | Ø 14 mm | Motor side | Silicon carbide | Graphite | NBR |
| | | Pump side | Silicon carbide | Silicon carbide | NBR |
| 8 BEARINGS | 6203 ZZ / 6203 ZZ | | | | |

9 CAPACITOR

| Pump | Capacitance | |
|---------------------|-----------------------------|----------------|
| <i>Single-phase</i> | <i>(220-230 V or 240 V)</i> | <i>(110 V)</i> |
| VXm 8/35 -ST | 20 µF 450 VL | 30 µF - 250 VL |
| VXm 8/50 -ST | | |
| VXm 10/35-ST | | |
| VXm 10/50-ST | 25 µF 450 VL | - |
| VXm 15/35-ST | | |
| VXm 15/50-ST | | |

10 ELECTRIC MOTOR

VXm: single-phase 220-230 V - 50 Hz
with thermal overload protector incorporated into the winding

VX: three-phase 400 V - 50 Hz

- Insulation: class F
- Protection: IP X8

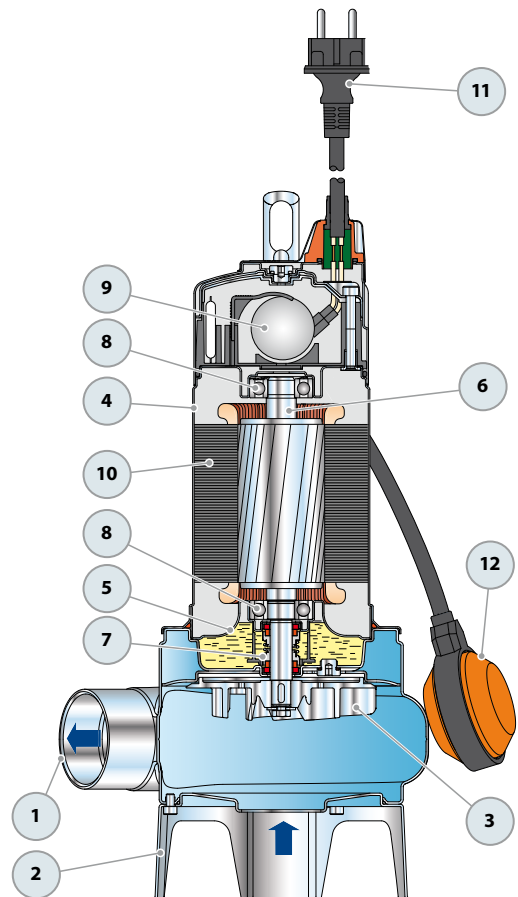
11 POWER CABLE

"H07 RN-F" type
(with Schuko plug for single-phase versions only)

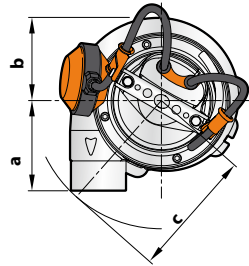
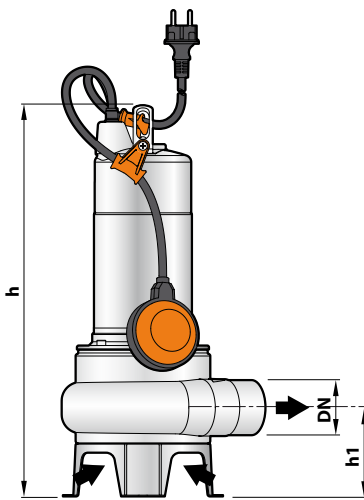
Standard length 10 metres

12 FLOAT SWITCH

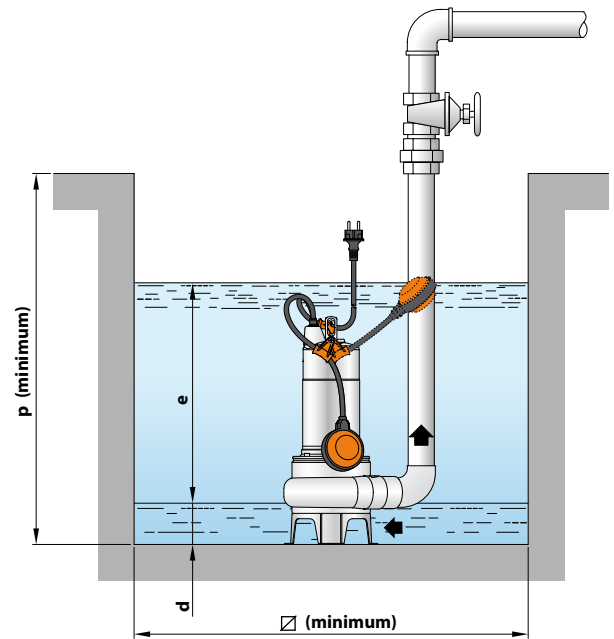
(only for single-phase versions)



DIMENSIONS AND WEIGHT



Standard installation



| MODEL | | PORT DN | Passage of solids | DIMENSIONS mm | | | | | | | | | kg | |
|---------------|--------------|---------|-------------------|---------------|----|-----|-----|-----|----|----------|-----|-----|------|------|
| Single-phase | Three-phase | | | a | b | c | h | h1 | d | e | p | Ø | 1~ | 3~ |
| VXm 8/35 -ST | VX 8/35 -ST | 1½" | Ø 40 mm | 95 | 95 | 140 | 406 | 87 | 50 | variable | 500 | 500 | 10.3 | 10.0 |
| VXm 10/35 -ST | VX 10/35 -ST | | | | | | 421 | | | | | | 11.1 | 10.0 |
| VXm 15/35 -ST | VX 15/35 -ST | | | | | | 430 | | | | | | 13.1 | 12.1 |
| VXm 8/50 -ST | VX 8/50 -ST | 2" | Ø 50 mm | 102 | 95 | 145 | 430 | 102 | 60 | variable | 500 | 500 | 10.4 | 10.1 |
| VXm 10/50 -ST | VX 10/50 -ST | | | | | | 445 | | | | | | 11.2 | 10.1 |
| VXm 15/50 -ST | VX 15/50 -ST | | | | | | 445 | | | | | | 13.2 | 12.2 |

ABSORPTION

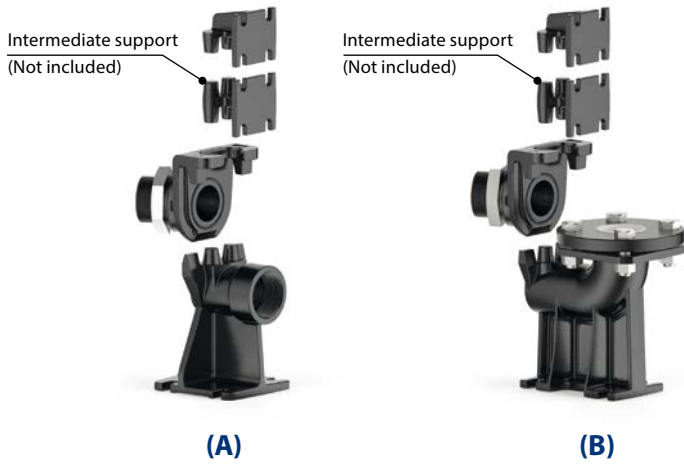
| MODEL | VOLTAGE | | |
|---------------------|---------|-------|--------|
| | 230 V | 240 V | 110 V |
| Single-phase | 230 V | 240 V | 110 V |
| VXm 8/35 -ST | 3.5 A | 3.4 A | 7.0 A |
| VXm 10/35 -ST | 4.8 A | 4.6 A | 9.6 A |
| VXm 15/35 -ST | 7.4 A | 7.1 A | - |
| VXm 8/50 -ST | 3.7 A | 3.5 A | 7.4 A |
| VXm 10/50 -ST | 5.0 A | 4.8 A | 10.0 A |
| VXm 15/50 -ST | 7.1 A | 6.8 A | - |

| MODEL | VOLTAGE | | | |
|--------------------|---------|-------|-------|--------|
| | 230 V | 400 V | 240 V | 415 V |
| Three-phase | 230 V | 400 V | 240 V | 415 V |
| VX 8/35 -ST | 3.0 A | 1.7 A | 2.9 A | 1.65 A |
| VX 10/35 -ST | 3.5 A | 2.0 A | 3.4 A | 1.95 A |
| VX 15/35 -ST | 5.2 A | 3.0 A | 5.0 A | 2.9 A |
| VX 8/50 -ST | 3.2 A | 1.8 A | 3.1 A | 1.75 A |
| VX 10/50 -ST | 3.5 A | 2.0 A | 3.4 A | 1.95 A |
| VX 15/50 -ST | 5.2 A | 3.0 A | 5.0 A | 2.9 A |

PALLETIZATION

| MODEL | | GROUPAGE n. pumps | CONTAINER n. pumps |
|---------------|--------------|----------------------|-----------------------|
| Single-phase | Three-phase | | |
| VXm 8/35 -ST | VX 8/35 -ST | 60 | 80 |
| VXm 10/35 -ST | VX 10/35 -ST | 60 | 80 |
| VXm 15/35 -ST | VX 15/35 -ST | 54 | 72 |
| VXm 8/50 -ST | VX 8/50 -ST | 54 | 72 |
| VXm 10/50 -ST | VX 10/50 -ST | 54 | 72 |
| VXm 15/50 -ST | VX 15/50 -ST | 54 | 72 |

BASE PEDESTAL KIT VX-ST – BC-ST



A) HORIZONTAL DELIVERY VERSION WITH 3/4" GUIDE TUBES

| | | |
|----------------------------------|-----------------|--------------|
| For VX /35-ST | Cod. ASSPVX35ST | DN 2" |
| For VX /50-ST , BC /50-ST | Cod. ASSPVX50ST | DN 2" |

Kit consisting of:

- footing connection
- slide guide with ring nut and seal
- support for the guide tubes

B) VERTICAL DELIVERY VERSION WITH 3/4" GUIDE TUBES

| | | |
|---------------------------------|------------------|------------------|
| For VX /35-ST | Cod. ASSPVX35STV | DN 2" |
| For VX /50-ST, BC /50-ST | Cod. ASSPVX50STV | DN 2 1/2" |

Kit consisting of:

- footing connection complete with counterflange
- slide guide with ring nut and seal
- support for the guide tubes

INTERMEDIATE SUPPORT (To be ordered separately)

| | |
|--------------------|------------------------------------|
| Cod. 859SV340INTFA | For guide tubes \varnothing 3/4" |
|--------------------|------------------------------------|

GUIDE TUBES (AISI 304 stainless steel)

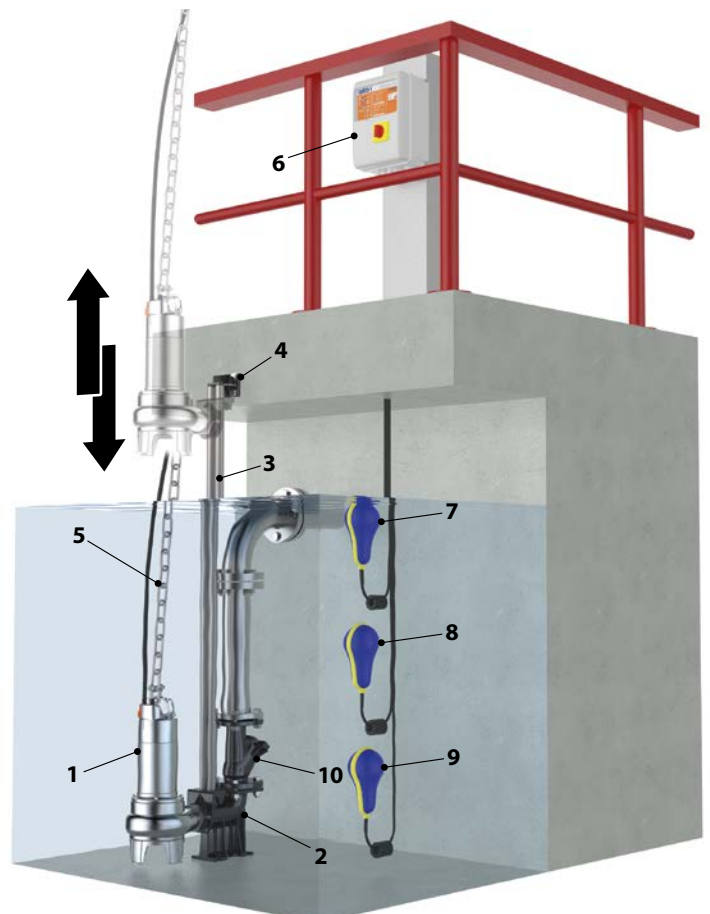
| | |
|-----------------|--------------------|
| Cod. 54SARTG005 | \varnothing 3/4" |
|-----------------|--------------------|

In order to ensure stability, insert the intermediate support every 2 metres

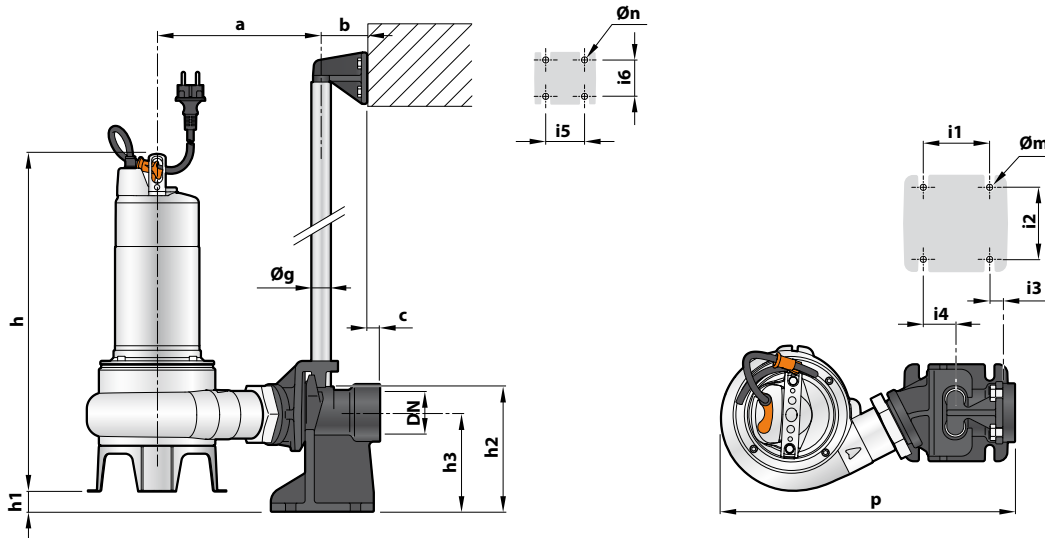
Maximum length of the tube plank: 6 metres

STANDARD INSTALLATION

1. Pump
2. Footing connection
3. Guide tubes
4. Support for the guide tubes
5. Lifting chain
6. Control box
7. Alarm float switch
8. Starting float switch
9. Stop float switch
10. Non-return valve

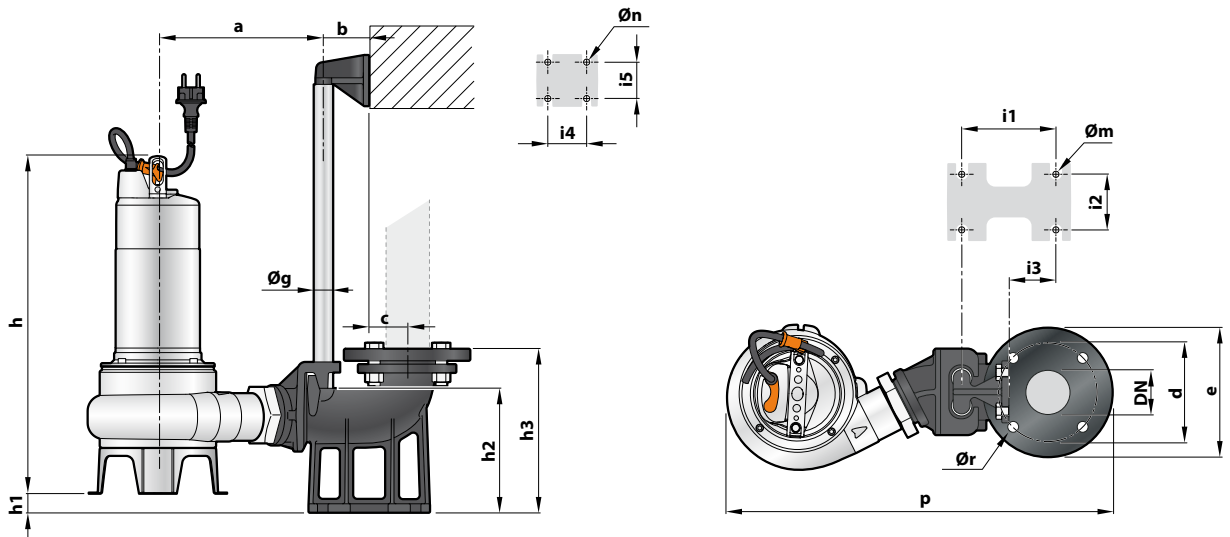


DIMENSIONS (Horizontal delivery version)



| MODEL | | Passage of solids mm | PORT DN | DIMENSIONS mm | | | | | | | | | | | | | | | | | |
|---------------|--------------|-------------------------|------------|---------------|----|----|-----|-----|----|-----|-----|----|----|----|----|----|----|----|----|----|--|
| Single-phase | Three-phase | | | a | b | c | p | h | h1 | h2 | h3 | i1 | i2 | i3 | i4 | i5 | i6 | Øg | Øm | Øn | |
| VXm 8/35 -ST | VX 8/35 -ST | 40 | 2" | 207 | 61 | 17 | 379 | 406 | 43 | 130 | 165 | 85 | 94 | 16 | 40 | 50 | 48 | ¾" | 12 | 11 | |
| VXm 10/35 -ST | VX 10/35 -ST | | | | | | | 421 | | | | | | | | | | | | | |
| VXm 15/35 -ST | VX 15/35 -ST | | | | | | | 430 | | | | | | | | | | | | | |
| VXm 8/50 -ST | VX 8/50 -ST | 50 | 2" | 217 | 61 | 17 | 388 | 445 | 28 | 130 | 165 | 85 | 94 | 16 | 40 | 50 | 48 | ¾" | 12 | 11 | |
| VXm 10/50 -ST | VX 10/50 -ST | | | | | | | 430 | | | | | | | | | | | | | |
| VXm 15/50 -ST | VX 15/50 -ST | | | | | | | 445 | | | | | | | | | | | | | |
| BCm 10/50 -ST | BC 10/50 -ST | | | | | | | 430 | | | | | | | | | | | | | |
| BCm 15/50 -ST | BC 15/50 -ST | | | | | | | 445 | | | | | | | | | | | | | |

DIMENSIONS (Vertical delivery version)



| MODEL | | Passage of solids mm | PORT DN | DIMENSIONS mm | | | | | | | | | | | | | | | | | | |
|---------------|--------------|-------------------------|------------|---------------|----|----|-----|-----|-----|-----|----|-----|-----|-----|----|----|----|----|----|----|----|----|
| Single-phase | Three-phase | | | a | b | c | d | e | p | h | h1 | h2 | h3 | i1 | i2 | i3 | i4 | i5 | Øg | Øm | Øn | Ør |
| VXm 8/35 -ST | VX 8/35 -ST | 40 | 2" | 207 | 61 | 52 | 125 | 165 | 495 | 406 | 40 | 164 | 215 | 120 | 72 | 62 | 50 | 48 | ¾" | 14 | 11 | 18 |
| VXm 10/35 -ST | VX 10/35 -ST | | | | | | | | | 421 | | | | | | | | | | | | |
| VXm 15/35 -ST | VX 15/35 -ST | | | | | | | | | 430 | | | | | | | | | | | | |
| VXm 8/50 -ST | VX 8/50 -ST | 50 | 2½" | 217 | 61 | 52 | 125 | 165 | 507 | 445 | 26 | 164 | 215 | 120 | 72 | 62 | 50 | 48 | ¾" | 14 | 11 | 18 |
| VXm 10/50 -ST | VX 10/50 -ST | | | | | | | | | 430 | | | | | | | | | | | | |
| VXm 15/50 -ST | VX 15/50 -ST | | | | | | | | | 445 | | | | | | | | | | | | |
| BCm 10/50 -ST | BC 10/50 -ST | | | | | | | | | 430 | | | | | | | | | | | | |
| BCm 15/50 -ST | BC 15/50 -ST | | | | | | | | | 445 | | | | | | | | | | | | |