

Submersible pumps

-  Filthy water
-  Domestic use
-  Civil use
-  Industrial use



PERFORMANCE RANGE

- Flow rate up to **1200 l/min** (72 m³/h)
- Head up to **16 m**

APPLICATION LIMITS

- **10 m** maximum immersion depth (with a sufficiently long power cable)
- Maximum liquid temperature **+40 °C**
- Passage of solids:
 - up to **Ø 50 mm** for VXC /50-F
 - up to **Ø 70 mm** for VXC /70-F
- Minimum immersion depth for continuous service:
 - **390 mm** for VXC /50-F
 - **440 mm** for VXC /70-F

CONSTRUCTION AND SAFETY STANDARDS

- **10 m** long power cable
- External float switch and control box 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
ISO 14001: ENVIRONMENT

INSTALLATION AND USE

The **VXC-F** series of pumps, manufactured from heavy gauge robust cast iron, resistant to abrasion and long lasting, are fitted with a VORTEX impeller and therefore suitable for drainage of **refluent water, water mixed with mud, liquids containing air or gas, and putrid muds**. They are recommended for fixed installations, when placed in suitable wells, in sewers, tunnels, wells, underground car parks, etc.

OPTIONS AVAILABLE ON REQUEST

- Connection support KIT for PVXC
- **QES** control box for three-phase pumps
- Single-phase pumps without float switch
- Other voltages

GUARANTEE

2 years subject to terms and conditions

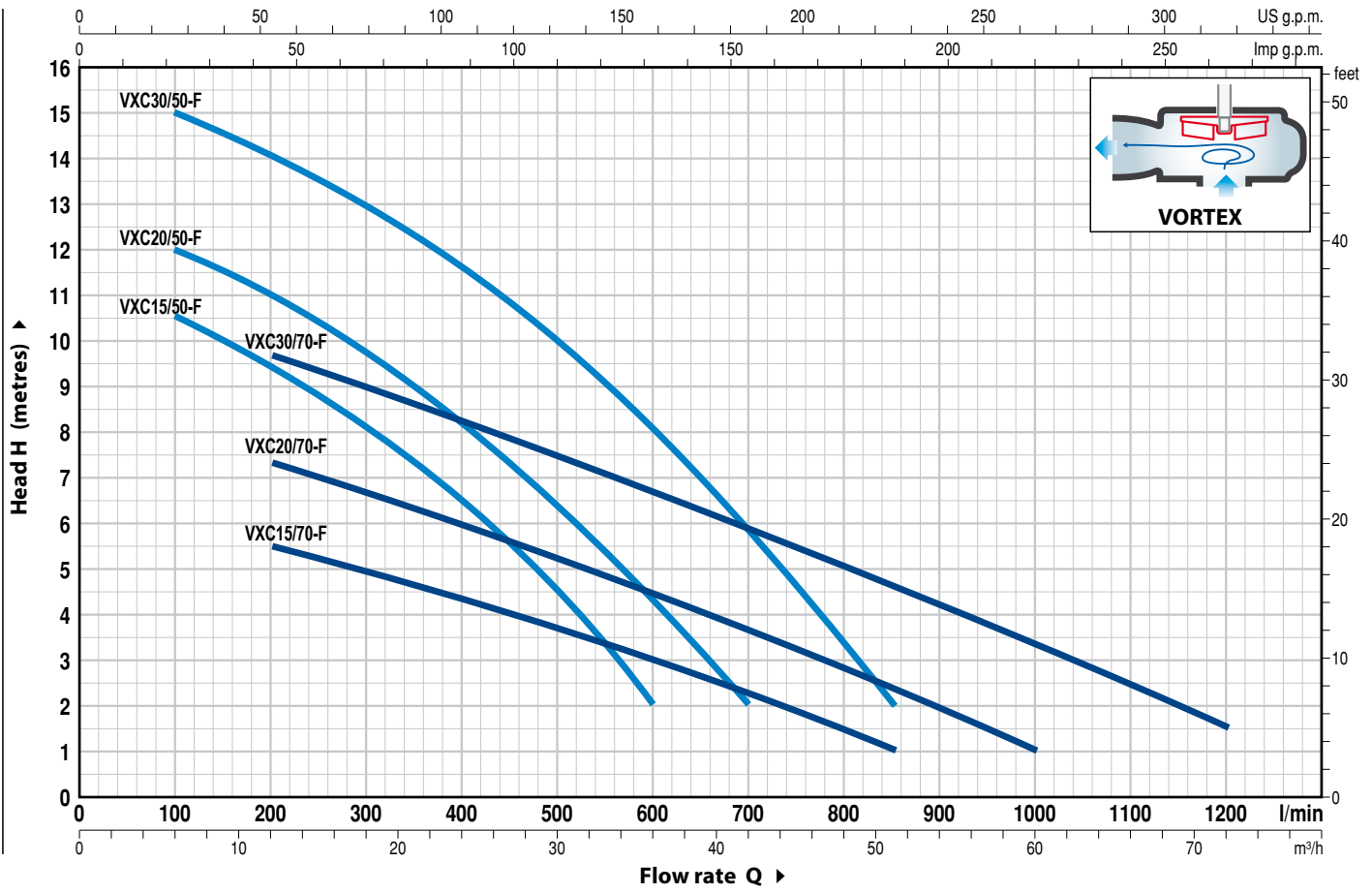
➔ **For the following versions the incorporated thermal overload protector must be connected to the control box for the guarantee to be considered valid:**

single-phase
– **VXCm 30/50-F**
– **VXCm 30/70-F**

three-phase
– **VXC 15-20-30/50-F**
– **VXC 15-20-30/70-F**

CHARACTERISTIC CURVES AND PERFORMANCE DATA

60 Hz n= 3450 rpm



| MODEL | | POWER (P ₂) | | Q | H metres | | | | | | | | | | | | | | | | |
|--------------|-------------|-------------------------|-----|-------|-------------------|------|-----|-----|------|------|------|-----|-----|-----|-----|-----|-----|------|------|------|----|
| Single-phase | Three-phase | kW | HP | | m ³ /h | 0 | 6 | 12 | 18 | 21 | 24 | 27 | 30 | 36 | 42 | 48 | 51 | 54 | 60 | 66 | 72 |
| | | | | l/min | 0 | 100 | 200 | 300 | 350 | 400 | 450 | 500 | 600 | 700 | 800 | 850 | 900 | 1000 | 1100 | 1200 | |
| VXCm 15/50-F | VXC 15/50-F | 1.1 | 1.5 | | 11.5 | 10.5 | 9.5 | 8.2 | 7.2 | 6.5 | 5.6 | 4.5 | 2 | | | | | | | | |
| VXCm 20/50-F | VXC 20/50-F | 1.5 | 2 | | 13 | 12 | 11 | 9.5 | 9 | 8 | 7.2 | 6.5 | 4.5 | 2 | | | | | | | |
| VXCm 30/50-F | VXC 30/50-F | 2.2 | 3 | | 16 | 15 | 14 | 13 | 12.3 | 11.5 | 10.8 | 10 | 8 | 5.9 | 3.3 | 2 | | | | | |
| VXCm 15/70-F | VXC 15/70-F | 1.1 | 1.5 | | 6.5 | - | 5.5 | 5 | 4.7 | 4.4 | 4 | 3.7 | 3 | 2.2 | 1.5 | 1 | | | | | |
| VXCm 20/70-F | VXC 20/70-F | 1.5 | 2 | | 8.5 | - | 7.4 | 6.7 | 6.3 | 6 | 5.6 | 5.2 | 4.5 | 3.6 | 2.8 | 2.4 | 2 | 1 | | | |
| VXCm 30/70-F | VXC 30/70-F | 2.2 | 3 | | 11 | - | 9.7 | 9 | 8.6 | 8.2 | 7.8 | 7.5 | 6.7 | 5.8 | 5 | 4.6 | 4.2 | 3.3 | 2.5 | 1.5 | |

Q = Flow rate H = Total manometric head

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

ABSORPTION

| MODEL | VOLTAGE |
|--------------|---------|
| Single-phase | 220 V |
| VXCm 15/50-F | 10.0 A |
| VXCm 20/50-F | 13.0 A |
| VXCm 30/50-F | 18.0 A |
| VXCm 15/70-F | 9.2 A |
| VXCm 20/70-F | 12.6 A |
| VXCm 30/70-F | 18.0 A |

| MODEL | VOLTAGE | | |
|-------------|---------|-------|-------|
| Three-phase | 220 V | 380 V | 440 V |
| VXC 15/50-F | 7.0 A | 4.0 A | 3.1 A |
| VXC 20/50-F | 9.3 A | 5.4 A | 3.8 A |
| VXC 30/50-F | 12.0 A | 7.2 A | 5.0 A |
| VXC 15/70-F | 7.5 A | 4.5 A | 3.7 A |
| VXC 20/70-F | 9.4 A | 5.5 A | 4.7 A |
| VXC 30/70-F | 11.5 A | 6.6 A | 5.5 A |

POS. COMPONENT CONSTRUCTION CHARACTERISTICS

| | | |
|---|---------------------------|--|
| 1 | PUMP BODY | Cast iron complete with flanged ports |
| 2 | SUCTION PLATE | Cast iron |
| 3 | IMPELLER | VORTEX type in cast iron with an Epoxy Electro Coating treatment |
| 4 | MOTOR CASING | Cast iron |
| 5 | MOTOR CASING PLATE | Cast iron |
| 6 | MOTOR SHAFT | Stainless steel AISI 431 |

7 TWO MECHANICAL SEALS SEPARATED BY AN OIL CHAMBER

| Seal Model | Shaft Diameter | Position | Materials | | |
|------------|----------------|------------|-----------------|-----------------|-----------|
| | | | Stationary ring | Rotational ring | Elastomer |
| STA-20 | Ø 20 mm | Motor side | Ceramic | Graphite | NBR |
| STA-19 | Ø 19 mm | Pump side | Silicon carbide | Silicon carbide | NBR |

8 BEARINGS 6304 ZZ - C3 / 6304 ZZ - C3

9 CAPACITOR

| Pump Single-phase | Capacitance (220 V) |
|-------------------|---------------------|
| VXCm 15/50-70-F | 31.5 µF 450 VL |
| VXCm 20/50-70-F | 50 µF 450 VL |
| VXCm 30/50-70-F | 60 µF 450 VL |

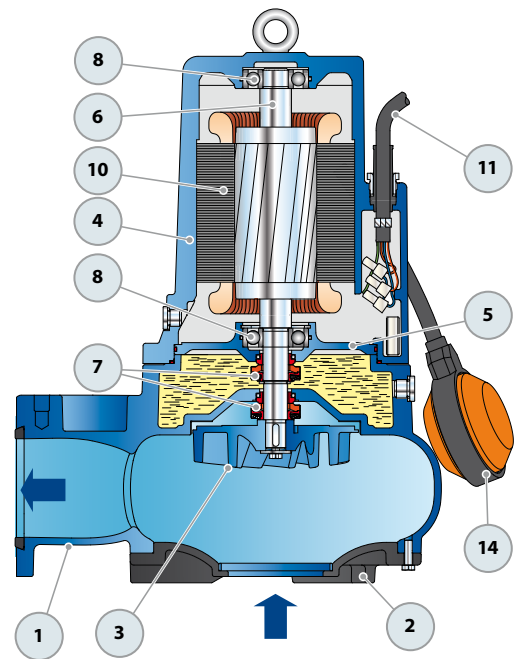
10 ELECTRIC MOTOR

VXCm 15-20-F: single-phase 220 V - 60 Hz with thermal overload protector incorporated into the winding

⇒ **VXCm 30-F:** single-phase 220 V - 60 Hz with thermal overload protector incorporated into the winding to be connected to the control box

⇒ **VXC-F:** three-phase 380 V - 60 Hz with thermal overload protector incorporated into the winding to be connected to the control box (supplied on demand)

- Insulation: class F
- Protection: IP X8



11 POWER CABLE

10 metres long "H07 RN-F" cable

12 CONTROL BOX per VXCm 15-20-F

(only for single-phase versions)

Complete with capacitor and manual reset motor protector

13 CONTROL BOX per VXCm 30-F

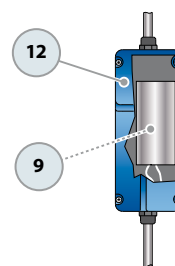
(only for single-phase versions)

QES 300 MONO series

14 FLOAT SWITCH

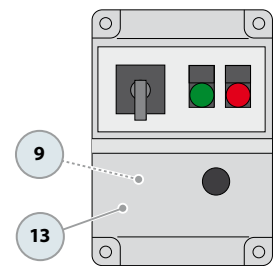
(only for single-phase versions)

Standard features



Control box for VXCm 15-20-F (HP 1.5-2.0) (only for single-phase versions)

Standard features



Control box for VXC 30-F (HP 3.0) (only for single-phase versions)