

# VXC

## submersible VORTEX pumps

(for sewage)

**Submersible VORTEX pumps for professional use. Specifically designed for dirty water, sewage, industrial waste, etc. Extremely reliable, sturdy and suitable for continuous heavy duty service on building sites and industrial use. (for sewage)**



### PERFORMANCE RANGE

Flow rate up to 1200 l/min (72 m<sup>3</sup>/h)

Dynamic head up to 16 m

Maximum suspended solid Ø 35 mm for VXC8-10/35

Maximum suspended solid Ø 45 mm for VXC8-10/45

Maximum suspended solid Ø 50 mm for VXC15-20-30/50

Maximum suspended solid Ø 70 mm for VXC15-20-30/70

### OPERATING LIMITS

Maximum operating depth 10 m

Fluid temperature up to + 50°C

Maximum passage for suspended solids Ø 70 mm

### CONSTRUCTION AND SAFETY STANDARDS:

EN 60 335-1

IEC 335-1

CEI 61-150

EN 60034-1

IEC 34-1

CEI 2-3



### PUMP INSTALLATION AND APPLICATIONS

THE VORTEX TYPE IMPELLERS FITTED TO VXC PUMPS ARE SUITABLE FOR HANDLING DIRTY WATER, SEWAGE, REFLUENT WATER, WATER MIXED WITH MUD, LIQUIDS CONTAINING AIR OR GAS, AS WELL AS TREATED AND PUTRID MUD. VXC PUMPS ARE PARTICULARLY SUITABLE FOR INSTALLATION IN SEWERS, GALLERIES, EXCAVATION SITES, WELLS, CHANNELS, UNDERGROUND CAR PARKS, ETC.

Manufactured entirely in extremely thick cast iron, these pumps are particularly sturdy, abrasion resistant and built to last. A purpose built pit with minimum dimensions 800x800x800h mm is recommended for fixed installations.

### WARRANTY: 1 YEAR

(according to our general sales conditions).

### STRUCTURAL CHARACTERISTICS

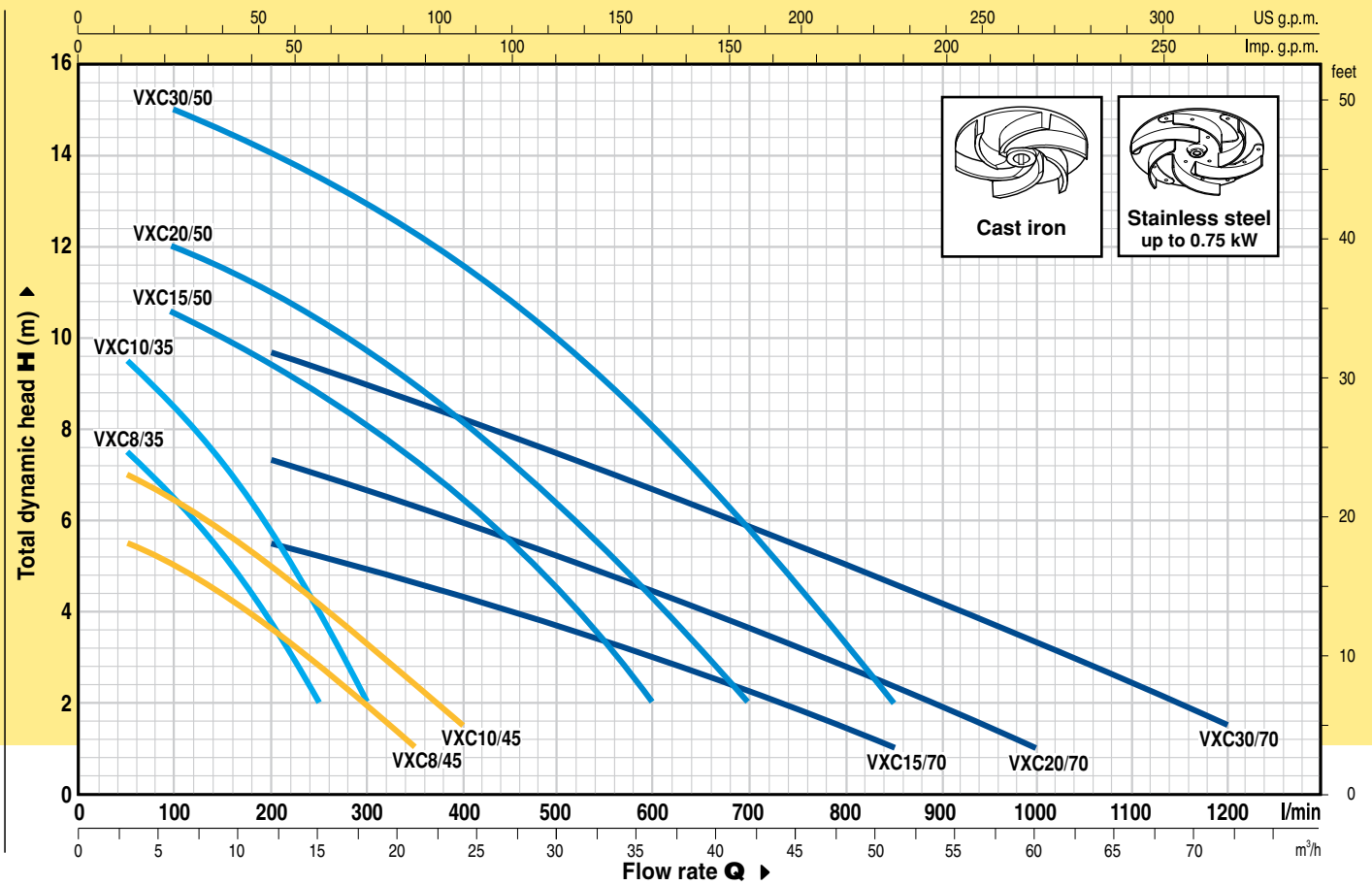
- **PUMP BODY, BASE and MOTOR CASING :**  
cast iron.
- **IMPELLER:**  
cast iron, (AISI 304 stainless steel up to 0.75 kW), open vortex type.
- **SCREWS:**  
AISI 304 stainless steel.
- **MOTOR SHAFT:**  
AISI 304 stainless steel (AISI 430F stainless steel up to 0.75 kW).
- **DOUBLE MECHANICAL SEAL:**  
widia/silicon carbide (silicon carbide/silicon carbide up to 0.75 kW) on the pump side and sealing ring on the motor side (with barrier oil chamber to lubricate and cool the sealing surfaces in the absence of water).
- **MOTOR:**  
sealed induction **MOTOR** with double impregnated class F winding (ensuring extended motor life and wide range of use).The thermal cutout relay (motor protector) is incorporated in single phase models.  
• In the three phase versions (over 0.75 kW) three thermal overload cutouts (motor protectors) are placed against the windings in series connected by a grey cable. The two ends coming out from the supply cable must be properly connected to the contactor coil by the user.
- **PROTECTION:**  
IP 68.
- **CONTROL BOX:**  
with capacitor (and motor protector with manual reset for power above 0.75kW) on single phase versions. Protection IP 64.
- **NEOPRENE SUBMERSIBLE SUPPLY CABLE:**  
• supplied standard with 5 meters of cable, and SCHUKO plug up to 0.75 kW  
• above 0.75 kW: supplied standard with 10 meters of cable; Single phase: "H07 RN-F"; Three phase: "FG5 0K".
- **EXTERNAL FLOAT SWITCH:**  
for single phase versions.

### SPECIAL FEATURES ON REQUEST:

⇒ 10 meters supply cable, for pumps intended for outdoor use, length compulsory according to EN 60335-2-41 (for versions up to 0,75 kW)



### PERFORMANCE CHART AT n= 2900 1/min

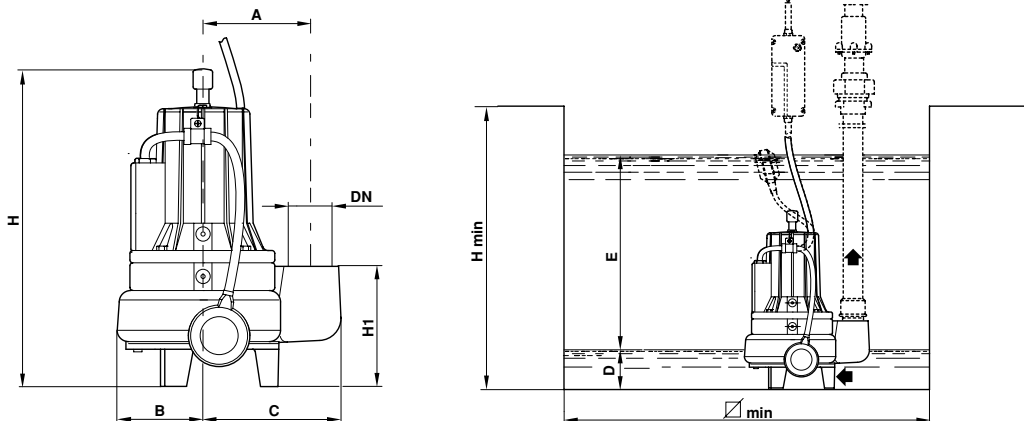


### PERFORMANCE DATA AT n= 2900 1/min

| PUMP MODEL   |             | POWER |      | Q        | 0    | 3   | 6    | 12  | 18  | 21   | 24   | 30  | 36  | 42  | 48  | 51  | 54  | 60   | 66   | 72   |  |  |
|--------------|-------------|-------|------|----------|------|-----|------|-----|-----|------|------|-----|-----|-----|-----|-----|-----|------|------|------|--|--|
| Single phase | Three phase | kW    | HP   | m³/h     | 0    | 50  | 100  | 200 | 300 | 350  | 400  | 500 | 600 | 700 | 800 | 850 | 900 | 1000 | 1100 | 1200 |  |  |
| VXCm 8/35    | —           | 0.60  | 0.85 | H<br>(m) | 8.4  | 7.5 | 6.5  | 3.7 |     |      |      |     |     |     |     |     |     |      |      |      |  |  |
| VXCm 10/35   | VXC 10/35   | 0.75  | 1    |          | 10   | 9.5 | 8.5  | 5.8 | 2   |      |      |     |     |     |     |     |     |      |      |      |  |  |
| VXCm 8/45    | —           | 0.60  | 0.85 |          | 6    | 5.5 | 5    | 3.6 | 2   | 1    |      |     |     |     |     |     |     |      |      |      |  |  |
| VXCm 10/45   | VXC 10/45   | 0.75  | 1    |          | 7.5  | 7   | 6.5  | 5   | 3.2 | 2.4  | 1.5  |     |     |     |     |     |     |      |      |      |  |  |
| VXCm 15/50   | VXC 15/50   | 1.1   | 1.5  |          | 11.5 | —   | 10.5 | 9.5 | 8.2 | 7.2  | 6.5  | 4.5 | 2   |     |     |     |     |      |      |      |  |  |
| VXCm 20/50   | VXC 20/50   | 1.5   | 2    |          | 13   | —   | 12   | 11  | 9.5 | 9    | 8    | 6.5 | 4.5 | 2   |     |     |     |      |      |      |  |  |
| —            | VXC 30/50   | 2.2   | 3    |          | 16   | —   | 15   | 14  | 13  | 12.3 | 11.5 | 10  | 8   | 5.9 | 3.3 | 2   |     |      |      |      |  |  |
| VXCm 15/70   | VXC 15/70   | 1.1   | 1.5  |          | 6.5  | —   | —    | 5.5 | 5   | 4.7  | 4.4  | 3.7 | 3   | 2.2 | 1.5 | 1   |     |      |      |      |  |  |
| VXCm 20/70   | VXC 20/70   | 1.5   | 2    |          | 8.5  | —   | —    | 7.4 | 6.7 | 6.3  | 6    | 5.2 | 4.5 | 3.6 | 2.8 | 2.4 | 2   | 1    |      |      |  |  |
| —            | VXC 30/70   | 2.2   | 3    |          | 11   | —   | —    | 9.7 | 9   | 8.6  | 8.2  | 7.5 | 6.7 | 5.8 | 5   | 4.6 | 4.2 | 3.3  | 2.5  | 1.5  |  |  |

Q = FLOW RATE H = TOTAL DYNAMIC HEAD IN METERS

Curve tolerance according to ISO 2548.



### DIMENSIONS

| PUMP MODEL    |                 | DN     | maximum suspended solid size | DIMENSIONS mm |     |     |     |     |       |            |       |       |
|---------------|-----------------|--------|------------------------------|---------------|-----|-----|-----|-----|-------|------------|-------|-------|
| Single phase  | Three phase     |        |                              | A             | B   | C   | H   | H1  | D min | E          | H min | ∅ min |
| VXCm 8/35     | —               | 1 1/2" | ∅ 35 mm                      | 105           | 87  | 137 | 350 | 123 | 40    | Adjustable | 500   | 500   |
| VXCm 10/35    | VXC 10/35       | 1 1/2" | ∅ 35 mm                      | 105           | 87  | 137 | 350 | 123 | 40    | Adjustable | 500   | 500   |
| VXCm 8/45     | —               | 2"     | ∅ 45 mm                      | 110           | 90  | 150 | 375 | 148 | 55    | Adjustable | 500   | 500   |
| VXCm 10/45    | VXC 10/45       | 2"     | ∅ 45 mm                      | 110           | 90  | 150 | 375 | 148 | 55    | Adjustable | 500   | 500   |
| VXCm 15-20/50 | VXC 15-20-30/50 | 2 1/2" | ∅ 50 mm                      | 162           | 124 | 212 | 475 | 173 | 55    | Adjustable | 800   | 800   |
| VXCm 15-20/70 | VXC 15-20-30/70 | 3"     | ∅ 70 mm                      | 180           | 136 | 240 | 520 | 220 | 80    | Adjustable | 800   | 800   |