

# Submersible Sewage Pump

## Submersible pumps

 Sewage water

 Domestic use

 Civil use

 Industrial use



### PERFORMANCE RANGE

- Flow rate up to **650 l/min** (39 m<sup>3</sup>/h)
- Head up to **14 m**

### APPLICATION LIMITS

- **5 m** maximum immersion depth (with a sufficiently long power cable)
- Maximum liquid temperature **+40 °C**
- Passage of solids:
  - up to **Ø 40 mm** for VX / 35
  - up to **Ø 50 mm** for VX / 50
- Minimum immersion depth for continuous service:
  - **280 mm** for VX / 35
  - **300 mm** for VX / 50

### CONSTRUCTION AND SAFETY STANDARDS

- Power cable length:
  - **5 m** for VX8-10/35, VX8-10/50
  - **10 m** for VX15/35, VX15/50
- 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

**VX** pumps are recommended for domestic, civil and industrial applications in all cases where the water contains suspended solids up to Ø 50 mm, for example **groundwater, surface water, sewage and dirty water**.

They are for example 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

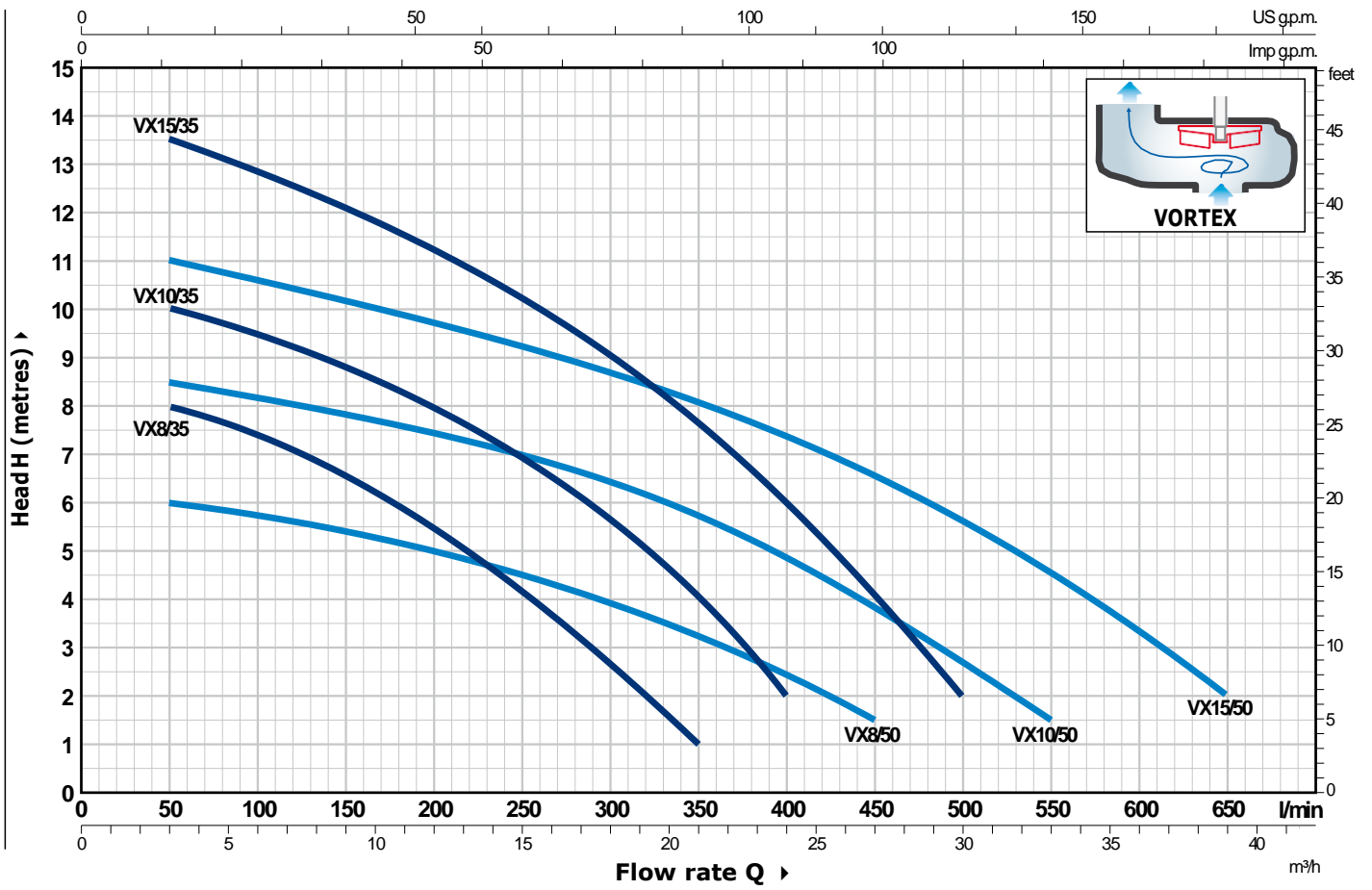
- Patent n. EP2313658
- Patent n. IT0001428923

### OPTIONS AVAILABLE ON REQUEST

- VX8-10 pumps with a **10 m** power cable.
  - ⇒ N.B.: Standard EN 60335-2-41 states that the power cable must be 10 m long for outdoor applications
- Single-phase pumps without float switch
- Other voltages or 60 Hz frequency

**CHARACTERISTIC CURVES AND PERFORMANCE DATA**

**50 Hz n=2900min-1**



MODEL		POWER (P2)		Q	H metres													
Single-phase	Three-phase	kW	HP		m³/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	VX 8/35	0.55	0.75	H metres	9	8	7.5	5.5	2.7	1								
VXm 10/35	VX 10/35	0.75	1		11	10	9.5	8	5.7	4	2							
VXm 15/35	VX 15/35	1.1	1.5		14	13.5	12.8	11.2	9	7.7	6	4	2					
VXm 8/50	VX 8/50	0.55	0.75		6.5	6	5.8	5	4	3.3	2.5	1.5						
VXm 10/50	VX 10/50	0.75	1		9	8.5	8.2	7.5	6.5	5.8	5	3.8	2.5	1.5				
VXm 15/50	VX 15/50	1.1	1.5		11.5	11	10.5	9.8	8.7	8	7.5	6.5	5.5	4.5	3.5	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	<b>PUMPBODY</b>	Cast iron with an Epoxy Electro Coating treatment, with threaded port in compliance with ISO228/1
2	<b>BASE</b>	Stainless steel AISI 304
3	<b>IMPELLER</b>	Stainless steel AISI 304 VORTEX type
4	<b>MOTOR CASING</b>	Stainless steel AISI 304
5	<b>MOTOR CASING PLATE</b>	Stainless steel AISI 304
6	<b>MOTOR SHAFT</b>	Stainless steel AISI 431

### 7 SHAFT WITH DOUBLE MECHANICAL SEAL SEPARATED BY AN OIL CHAMBER

Seal Model	Shaft Diameter	Position	Materials		
			Stationary ring	Rotational ring	Elastomer
MG1-14DSIC	Ø 14mm	Motor side	Silicon carbide	Graphite	NBR
		Pump side	Silicon carbide	Silicon carbide	NBR

### 8 BEARINGS 6203 ZZ / 6203 ZZ

### 9 CAPACITOR

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

### 10 ELECTRIC MOTOR

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

**VX:** three-phase 400 V - 50 Hz

- Insulation: class F
- Protection: IPX8

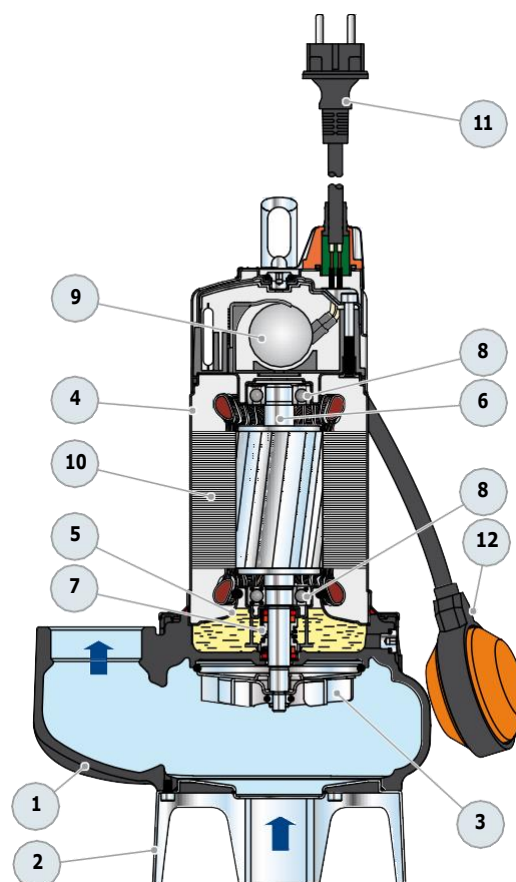
### 11 POWER CABLE

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

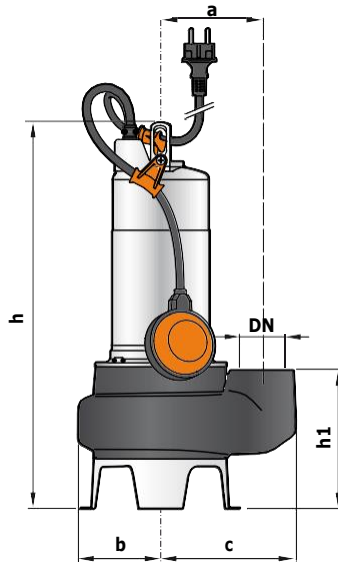
**Standard length 5 metres (10 metres for VX15/35-50)**

### 12 FLOAT SWITCH

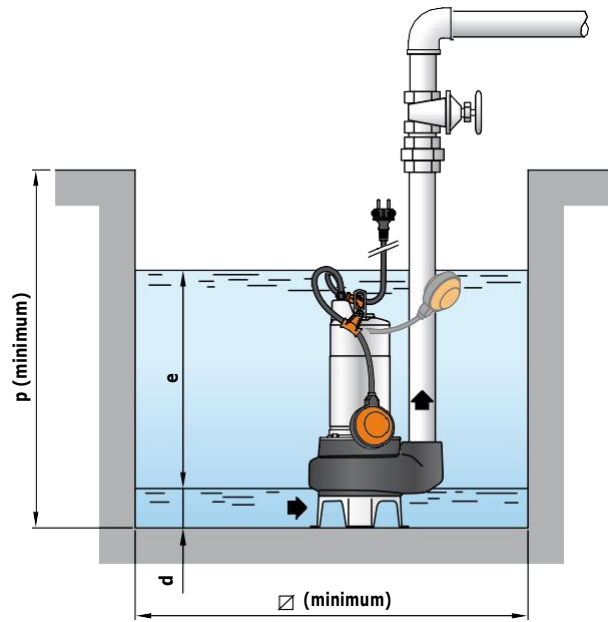
(only for single-phase versions)



## 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	□	1~	3~
VXm 8/35	VX 8/35	1½"	Ø 40 mm	115	95	148	410	139	50	variable	500	500	12.8	12.6
VXm 10/35	VX 10/35						421						13.7	12.6
VXm 15/35	VX 15/35						421						15.7	14.5
VXm 8/50	VX 8/50	2"	Ø 50 mm			155	432	164	60				13.3	13.1
VXm 10/50	VX 10/50						446						14.3	13.1
VXm 15/50	VX 15/50						446						16.1	15.0

## ABSORPTION

MODEL	VOLTAGE		
	230 V	240 V	110 V
<b>Single-phase</b>	230 V	240 V	110 V
VXm 8/35	3.5 A	3.5 A	7.0 A
VXm 10/35	4.8 A	4.8 A	11.5 A
VXm 15/35	7.4 A	7.0 A	-
VXm 8/50	3.7 A	3.6 A	7.0 A
VXm 10/50	5.0 A	4.8 A	11.5 A
VXm 15/50	7.1 A	7.0 A	-

MODEL	VOLTAGE			
	230 V	400 V	240 V	415 V
<b>Three-phase</b>	230 V	400 V	240 V	415 V
VX 8/35	2.9 A	1.7 A	2.8 A	1.6 A
VX 10/35	3.5 A	2.0 A	3.3 A	1.9 A
VX 15/35	5.2 A	3.0 A	5.0 A	2.9 A
VX 8/50	3.1 A	1.8 A	2.9 A	1.7 A
VX 10/50	3.5 A	2.0 A	3.3 A	1.9 A
VX 15/50	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	VX 8/35	60	80
VXm 10/35	VX 10/35	60	80
VXm 15/35	VX 15/35	54	72
VXm 8/50	VX 8/50	54	72
VXm 10/50	VX 10/50	54	72
VXm 15/50	VX 15/50	54	72