

## 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



### 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

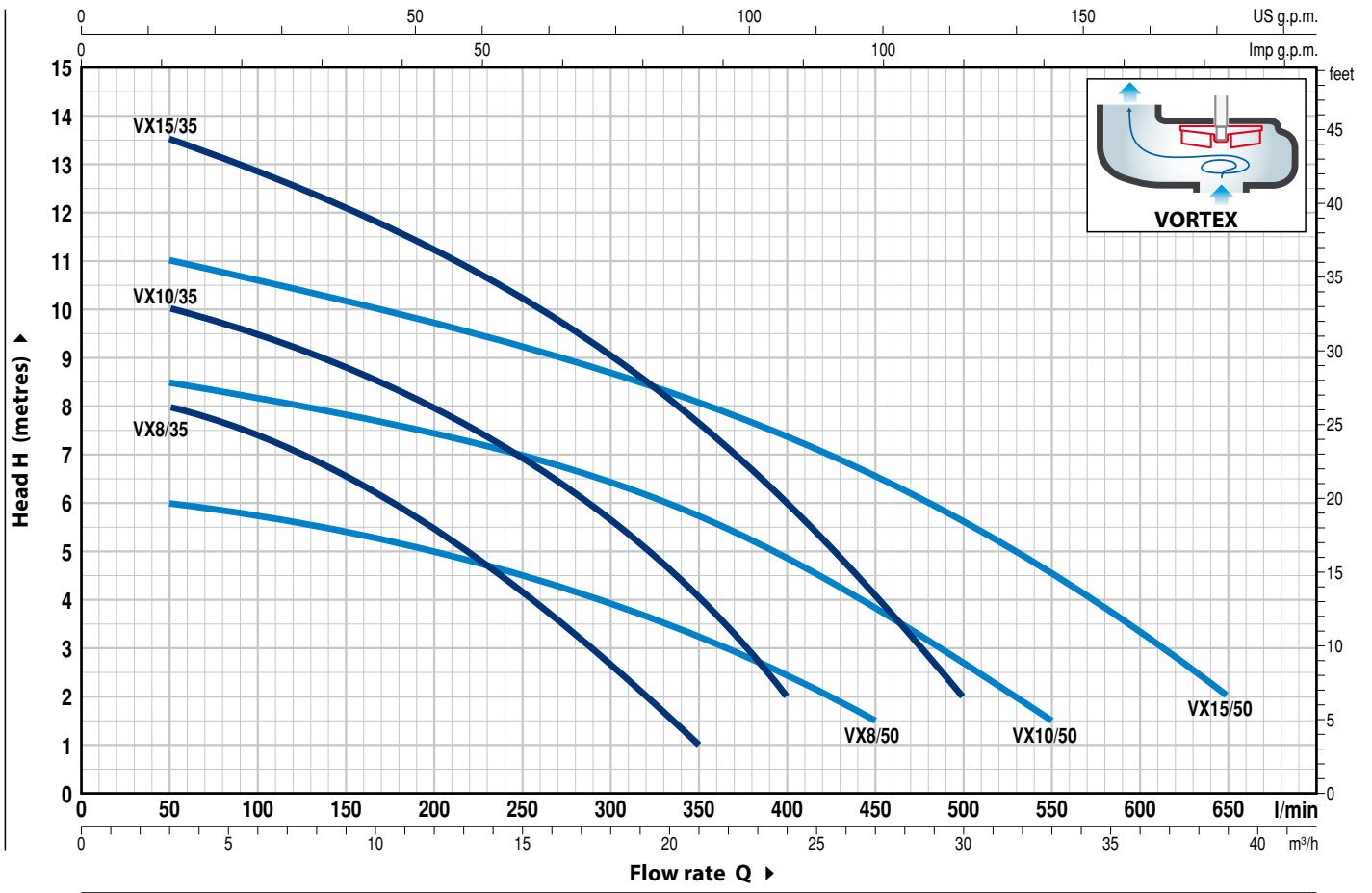
### CERTIFICATIONS

Company with management system certified DNV ISO 9001: QUALITY



# CHARACTERISTIC CURVES AND PERFORMANCE DATA

50 Hz n= 2900 min<sup>-1</sup>



MODEL		POWER (P <sub>2</sub> )		Q	H metres												
Single-phase	Three-phase	kW	HP		m <sup>3</sup> /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**

<b>1 PUMP BODY</b>	Cast iron with an Epoxy Electro Coating treatment, with threaded port in compliance with ISO 228/1
<b>2 BASE</b>	Stainless steel AISI 304
<b>3 IMPELLER</b>	Stainless steel AISI 304 VORTEX type
<b>4 MOTOR CASING</b>	Stainless steel AISI 304
<b>5 MOTOR CASING PLATE</b>	Stainless steel AISI 304
<b>6 MOTOR SHAFT</b>	Stainless steel AISI 431

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

<i>Seal Model</i>	<i>Shaft Diameter</i>	<i>Position</i>	<i>Materials</i>		
			<i>Stationary ring</i>	<i>Rotational ring</i>	<i>Elastomer</i>
<b>MG1-14D SIC</b>	<b>Ø 14 mm</b>	Motor side	Silicon carbide	Graphite	NBR
		Pump side	Silicon carbide	Silicon carbide	NBR

**8 BEARINGS 6203 ZZ / 6203 ZZ**

**9 CAPACITOR**

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

**10 ELECTRIC MOTOR**

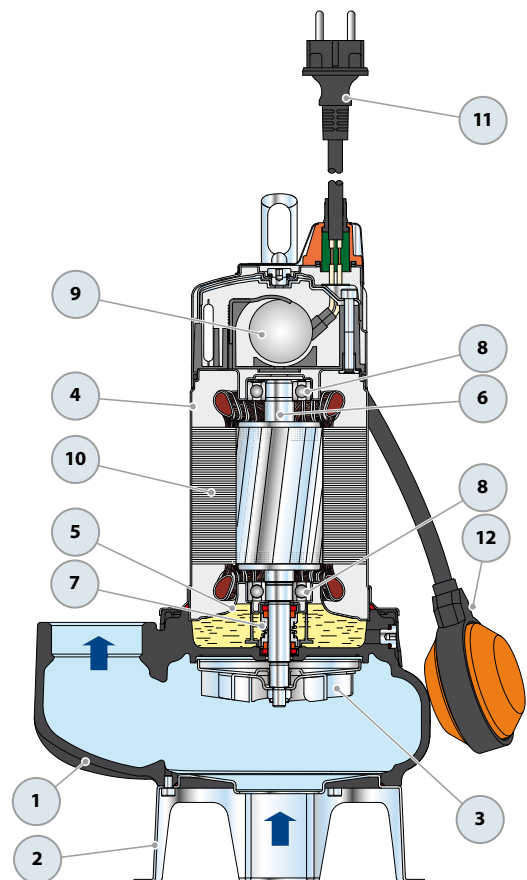
**VXm:** single-phase 230 V - 50 Hz  
with thermal overload protector incorporated into the winding  
**VX:** three-phase 400 V - 50 Hz  
– Insulation: class F  
– Protection: IP X8

**11 POWER CABLE**

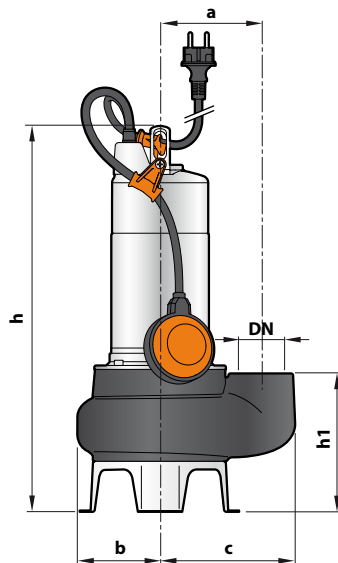
“H07 RN-F” type  
(with Schuko plug for single-phase versions only)  
**Standard length 5 metres (10 metres for VX15/35-50)**

**12 FLOAT SWITCH**

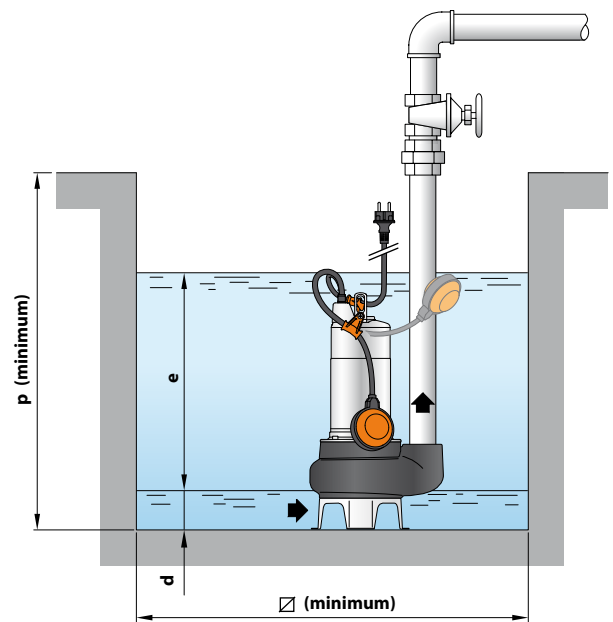
(only for single-phase versions)



## 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						432						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