Submersible pumps

VORTEX





PERFORMANCE RANGE

- Flow rate up to **750 l/min** (45 m³/h)
- Head up to **15.5 m**

APPLICATION LIMITS

- **5 m** maximum immersion depth (with a sufficiently long power cable)
- Maximum liquid temperature +40 °C
 Passage of solids:
 - 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:
 290 mm for VX 8 and VX 10
 - **330 mm** for VX 15
 - 360 mm for VX 20

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





CERTIFICATIONS

Company with management system certified DNV ISO 9001: QUALITY



CE

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

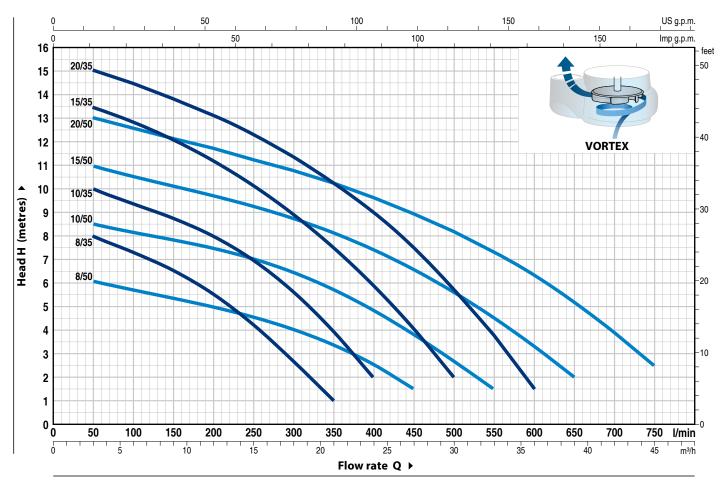
OPTIONS AVAILABLE ON REQUEST

- 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= 2900 min⁻¹



м	ODEL	POWE	R (P2)	m³/h	0	3	6	12	18	21	24	27	30	33	36	39	45
Single-phase	Three-phase	kW	HP	Q //min	0	50	100	200	300	350	400	450	500	550	600	650	750
VXm 8/35	VX 8/35	0.55	0.75		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 20/35	VX 20/35	1.5	2]	15.5	15	14.5	13	11.5	10.3	9	7.5	5.8	3.8	1.5		
VXm 8/50	VX 8/50	0.55	0.75	H metres	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	1	11.5	11	10.5	9.8	8.7	8	7.5	6.5	5.5	4.5	3.5	2	
VXm 20/50	VX 20/50	1.5	2		13.5	13	12.5	11.5	10.7	10	9.5	9	8	7.5	6.5	5	2.5

 $\mathbf{Q} = Flow rate \mathbf{H} = Total manometric head$

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

POS.	COMPONENT	CONSTRU	CTION CHAR	ACTERISTICS		
1	PUMP BODY		n an Epoxy Electr liance with ISO 2	5	for a greater resistar	nce to corrosion, with threaded
2	BASE	Stainless stee	el AISI 304			
3	IMPELLER	The VORTEX i	•			er of up to 50 mm and thanks to its
4	MOTOR CASING	Stainless stee	el AISI 304			
5	MOTOR CASING PLATE		el AISI 304 for VX n an Epoxy Electr	8-10 o Coating treatment	for VX 15-20	
6	MOTOR SHAFT	Stainless stee	el AISI 431			
7	DOUBLE MECHANICAL	SEAL IN OIL CI	HAMBER			
	Seal	Shaft	Position		Materials	
	Model	Diameter		Stationary ring	Rotational ring	Elastomer
	MG1-14D SIC	Ø 14 mm	Motor side	Silicon carbide	Graphite	NBR
	MIGT-140 SIC		Pump side	Silicon carbide	Silicon carbide	NBR

Double mechanical seal with an intermediate oil chamber, with silicon carbide chute slides for a greater resistance to abrasion and wear and for a longer life of the pump.

8 BEARINGS

Pump	Model
VX 8-10	6203 ZZ / 6203 ZZ
VX 15-20	6303 2RS - C3 / 6203 ZZ
CAPACITOR	EN 60252-1/A1 🛞 🖉

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(only for single-phase versions)

ELECTRIC MOTOR 10

Electric motors produced to a high quality standard, subjected to the most rigorous checks to ensure excellent insulation. The impregnation of the winding, achieved with high quality resins, is followed by treatment in an oven for up to eight hours, thus ensuring the long working life of the 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

POWER CABLE 11

Power cable encapsulated in epoxy resin both in the area of the grommets and at the point where the wires exit the sheath, resulting in an absolute insulation from moisture and water infiltration.

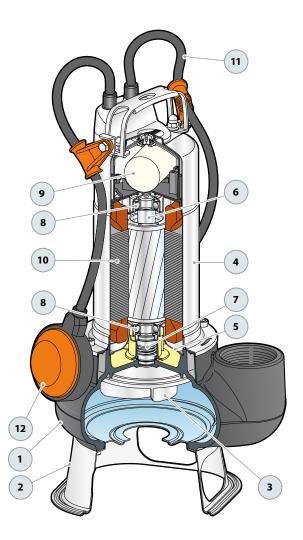
H07 RN-F" type

(with Schuko plug for single-phase versions only)

Standard length:

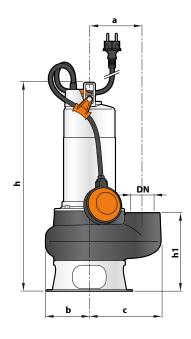
- 5 metres for VX 8-10,
- 10 metres for VX 15-20
- 12 FLOAT SWITCH

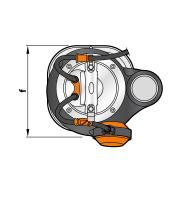
(only for single-phase versions)

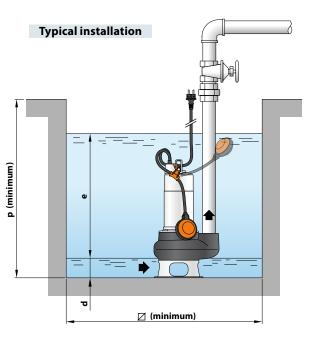




DIMENSIONS AND WEIGHT







M	ODEL	PORT	Passage				D	IMENS	ONS m	m				k	g
Single-phase	Three-phase	DN	of solids	a	b	с	f	h	h1	d	e	р	Ø	1~	3~
VXm 8/35	VX 8/35							425						13.7	12.6
VXm 10/35	VX 10/35	11/ 11	Ø 40 mm	115	05	140	200	440	150					15.2	14.0
VXm 15/35	VX 15/35	11⁄2"	Ø 40 mm	115	95	148	200	473	158	55				18.0	16.4
VXm 20/35	VX 20/35							503			able	500	500	20.2	18.0
VXm 8/50	VX 8/50							436			variable	500	500	14.2	13.1
VXm 10/50	VX 10/50	2"	Ø 50 mm	115	05	155	200	451	169	60				15.7	14.5
VXm 15/50	VX 15/50	2	Ø 50 mm	115	95	155	200	484	109	00				18.5	16.9
VXm 20/50	VX 20/50							514						20.7	18.5

ABSORPTION

MODEL	VOL	AGE
Single-phase	230 V	240 V
VXm 8/35	4.3 A	4.2 A
VXm 10/35	5.5 A	5.4 A
VXm 15/35	7.0 A	6.9 A
VXm 20/35	9.6 A	9.4 A
VXm 8/50	4.3 A	4.2 A
VXm 10/50	5.5 A	5.4 A
VXm 15/50	7.0 A	6.9 A
VXm 20/50	9.6 A	9.4 A

MODEL	VOLTAGE								
Three-phase	230 V	400 V	240 V	415 V					
VX 8/35	2.8 A	1.6 A	2.7 A	1.6 A					
VX 10/35	3.8 A	2.2 A	3.6 A	2.1 A					
VX 15/35	4.7 A	2.7 A	4.5 A	2.6 A					
VX 20/35	6.4 A	3.7 A	6.1 A	3.5 A					
VX 8/50	2.8 A	1.6 A	2.7 A	1.6 A					
VX 10/50	3.8 A	2.2 A	3.6 A	2.1 A					
VX 15/50	4.7 A	2.7 A	4.5 A	2.6 A					
VX 20/50	6.4 A	3.7 A	6.1 A	3.5 A					

CAPACITOR

MODEL	CAPACITANCE
Single-phase	(230 V or 240 V)
VXm 8/35	20 μF 450 VL
VXm 10/35	25 μF 450 VL
VXm 15/35	35 μF 450 VL
VXm 20/35	35 μF 450 VL
VXm 8/50	20 μF 450 VL
VXm 10/50	25 μF 450 VL
VXm 15/50	35 μF 450 VL
VXm 20/50	35 μF 450 VL

PALLETIZATION

M	ODEL	GROUPAGE	CONTAINER
Single-phase	Three-phase	n. pumps	n. pumps
VXm 8/35	VX 8/35	45	60
VXm 10/35	VX 10/35	45	60
VXm 15/35	VX 15/35	30	45
VXm 20/35	VX 20/35	30	45
VXm 8/50	VX 8/50	45	60
VXm 10/50	VX 10/50	45	60
VXm 15/50	VX 15/50	30	60
VXm 20/50	VX 20/50	30	45