

VXC-F

VORTEX Submersible Pumps with flanged ports



- ※ An innovative project by Pedrollo's Research and Development department, has resulted in the new VXC-F, a complete range of extremely robust and reliable electric pumps.
- ※ Thanks to the enhanced oversizing of the oil-bath electric motor, shaft and bearings, the new VXC-F electric pumps guarantee an unprecedented service life, with high hydraulic performance, low operating costs and easy maintenance. The oil-bath motor also allows continuous operation of the electric pump, even if completely uncovered.
- ※ They are recommended in all installations for pumping waste water with suspended solid bodies up to 65 mm diameter.
- ※ The VXC-F series is equipped with an extremely reliable and robust VORTEX impeller with low risk of clogging.



PERFORMANCE RANGE

- Flow rate up to **1250 l/min** (75 m³/h)
- Head up to **20 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 65 mm** for VXC /65-F

CONSTRUCTION AND SAFETY STANDARDS

- **10 m** long power cable
- External float switch and control box for single-phase versions

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.

PATENTS - TRADE MARKS - MODELS

- Patent n° IT0001428923

OPTIONS AVAILABLE ON REQUEST

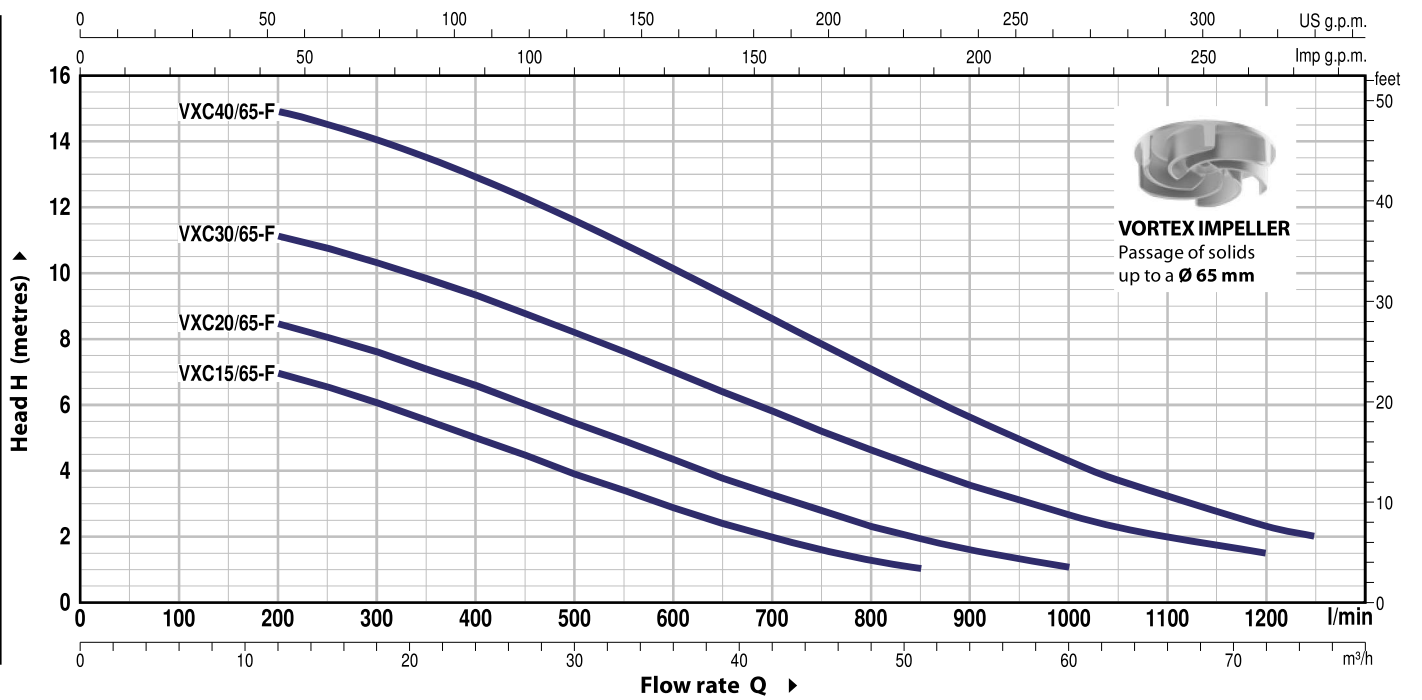
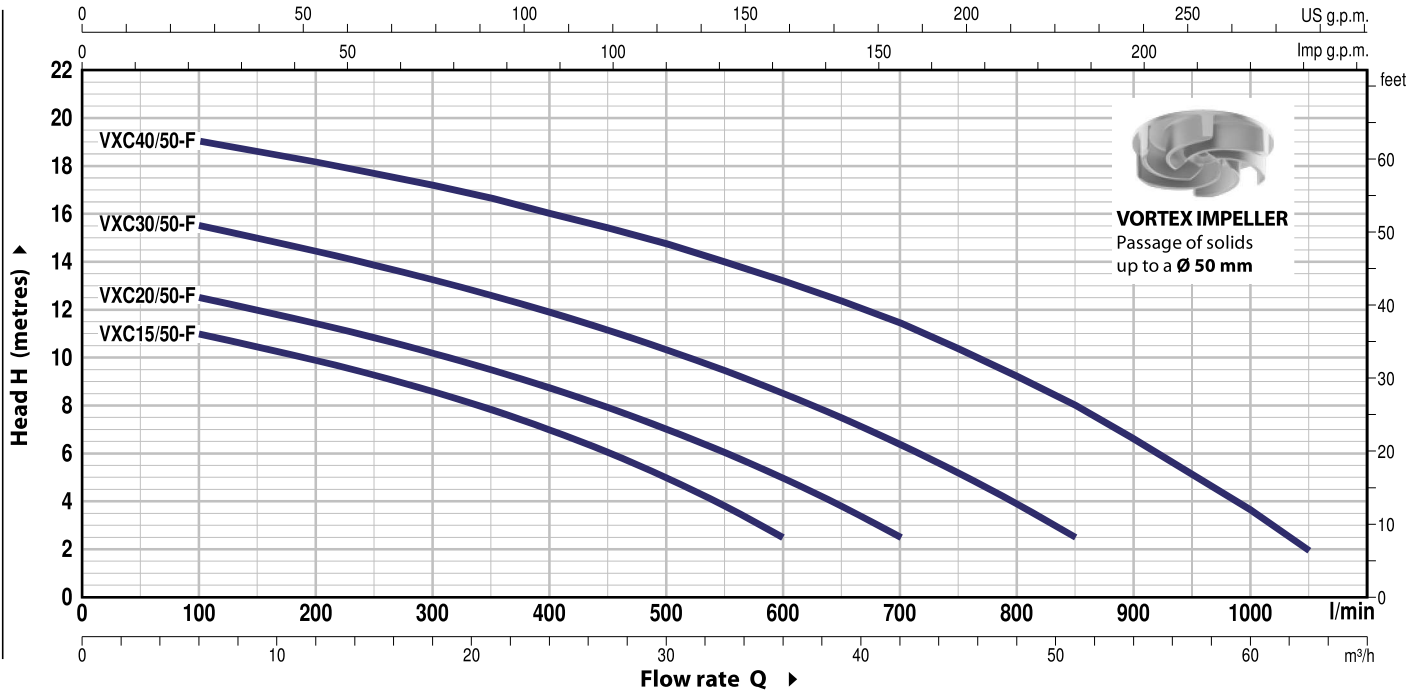
- Connection support KIT
- **QES** control box for three-phase pumps
- Single-phase pumps without float switch
- Other voltages or 60 Hz frequency

GUARANTEE

- ⇒ **For the following versions, to validate the guarantee, the built-in thermal overload protector must be connected to the control box:**
 - three-phase
 - **VXC 15-20-30-40/50-F**
 - **VXC 15-20-30-40/65-F**

CHARACTERISTIC CURVES AND PERFORMANCE DATA

50 Hz n= 2900 min⁻¹



MODEL		POWER (P2)		Q	Flow rate (m³/h)													
Single-phase	Three-phase	kW	HP		0	6	12	18	24	30	36	42	51	60	63	72	75	
VXCm 15/50-F	VXC 15/50-F	1.1	1.5	H metri	12.0	11.0	9.9	8.6	7.0	5.0	2.5							
VXCm 20/50-F	VXC 20/50-F	1.5	2		13.5	12.5	11.4	10.2	8.7	7.0	5.0	2.5						
VXCm 30/50-F	VXC 30/50-F	2.2	3		16.5	15.5	14.4	13.2	11.9	10.3	8.5	6.4	2.5					
-	VXC 40/50-F	3	4		20.0	19.0	18.1	17.1	16.0	14.7	13.2	11.4	8.0	3.6	2.0			
VXCm 15/65-F	VXC 15/65-F	1.1	1.5		8.0	-	7.0	6.0	5.0	3.9	2.8	2.0	1.0					
VXCm 20/65-F	VXC 20/65-F	1.5	2		9.5	-	8.5	7.6	6.6	5.4	4.3	3.3	2.0	1.0				
VXCm 30/65-F	VXC 30/65-F	2.2	3		12.0	-	11.1	10.3	9.3	8.2	7.0	5.8	4.1	2.6	2.3	1.5		
-	VXC 40/65-F	3	4		15.5	-	15.0	14.0	13.0	11.6	10.1	8.6	6.3	4.3	3.7	2.3	2.0	

Q = Flow rate H = Total manometric head

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

POS. COMPONENT CONSTRUCTION CHARACTERISTICS

1 PUMP BODY	Cast iron with an Epoxy Electro Coating treatment, with flanged and threaded ports in compliance with ISO 228/1
2 IMPELLER	VORTEX type in cast iron with an Epoxy Electro Coating treatment
3 MOTOR CASING	Cast iron with an Epoxy Electro Coating treatment
4 MOTOR CASING PLATE	Cast iron with an Epoxy Electro Coating treatment
5 MOTOR SHAFT	Stainless steel AISI 431

6 TWO MECHANICAL SEALS SEPARATED BY AN OIL CHAMBER

Seal Model	Shaft Diameter	Position	Materials		
			Stationary ring	Rotational ring	Elastomer
STA-22	Ø 22 mm	Motor side	Ceramic	Graphite	NBR
STA-20	Ø 20 mm	Pump side	Silicon carbide	Silicon carbide	NBR

7 BEARINGS 6305 CM D 6 / 6204 ZZ - C3

8 ELECTRIC MOTOR

VXCm 15-20-30-F: single-phase 230 V - 50 Hz with thermal overload protector incorporated into the winding

VXC-F: three-phase 400 V - 50 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

9 POWER CABLE

10 metres long "H07 RN-F" cable

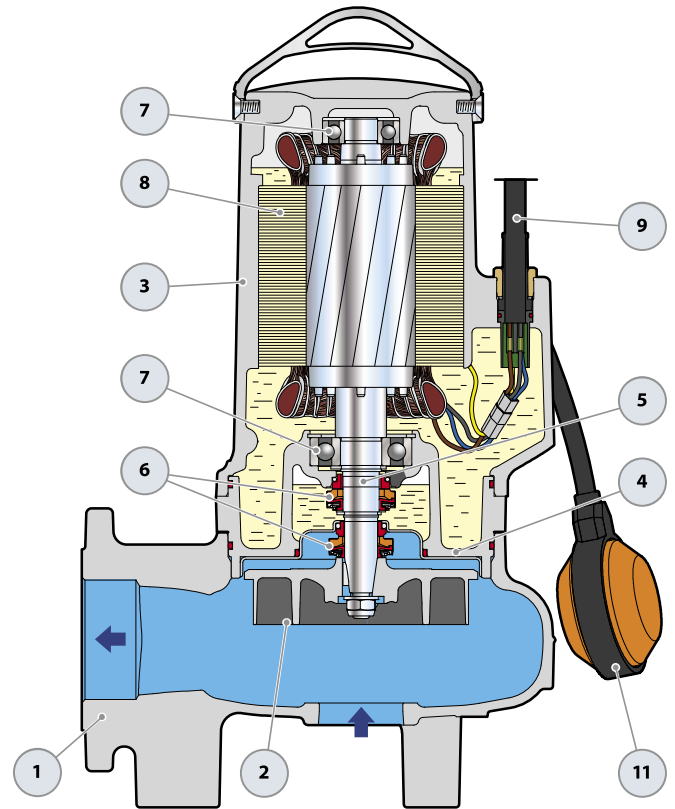
10 CONTROL BOX for VXCm 15-20-30-F

(only for single-phase versions)

Complete with capacitor and manual reset motor protector

11 FLOAT SWITCH

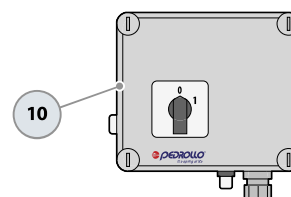
(only for single-phase versions)



OPTIONAL – Supporting Base

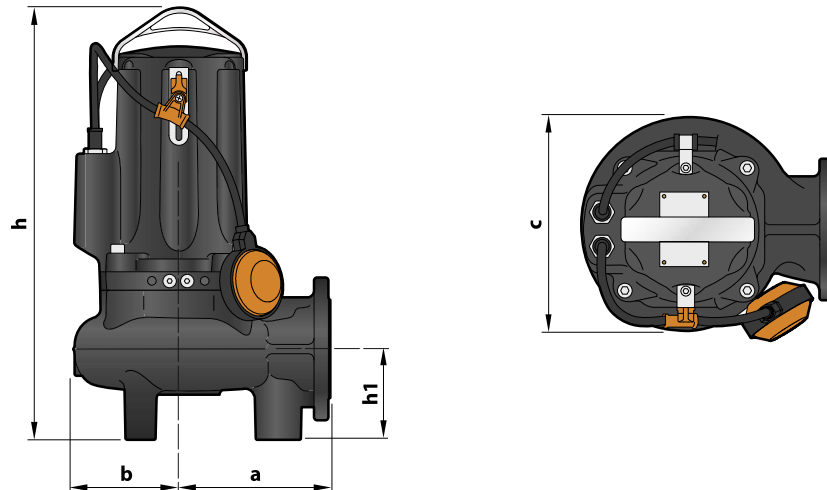


Standard Equipment



Control Box
(only for single-phase versions)

DIMENSIONS AND WEIGHT



MODEL		Passage of solids mm	DIMENSIONS mm					kg	
Single-phase	Three-phase		a	b	c	h	h1	1~	3~
VXCm 15/50-F	VXC 15/50-F	Ø 50	170	119	242	487	102	43.5	42.0
VXCm 20/50-F	VXC 20/50-F					513 487		44.5	43.5
VXCm 30/50-F	VXC 30/50-F					513		49.5	44.5
-	VXC 40/50-F					513		-	49.5
VXCm 15/65-F	VXC 15/65-F	Ø 65	210	120	246	521	123	46.0	44.5
VXCm 20/65-F	VXC 20/65-F					547 521		47.0	46.0
VXCm 30/65-F	VXC 30/65-F					547		52.0	47.0
-	VXC 40/65-F					547		-	52.0

ABSORPTION AND CAPACITORS

MODEL	VOLTAGE	
Single-phase	230 V	240 V
VXCm 15/50-F	8.5 A	8.1 A
VXCm 20/50-F	9.0 A	8.6 A
VXCm 30/50-F	12.0 A	11.5 A
VXCm 15/65-F	8.5 A	8.1 A
VXCm 20/65-F	9.0 A	8.6 A
VXCm 30/65-F	12.0 A	11.5 A

MODEL	VOLTAGE		
Three-phase	230-240 V	400-415 V	690-720 V
VXC 15/50-F	5.9 A	3.4 A	2.0 A
VXC 20/50-F	6.4 A	3.7 A	2.1 A
VXC 30/50-F	8.7 A	5.0 A	2.9 A
VXC 40/50-F	10.7 A	6.2 A	3.5 A
VXC 15/65-F	5.9 A	3.4 A	2.0 A
VXC 20/65-F	6.4 A	3.7 A	2.1 A
VXC 30/65-F	8.7 A	5.0 A	2.9 A
VXC 40/65-F	10.7 A	6.2 A	3.6 A

MODEL	CAPACITANCE CAPACITORS
Single-phase	(230 V o 240 V)
VXCm 15/50-F VXCm 15/65-F	50 µF 450 VL
VXCm 20/50-F VXCm 20/65-F	50 µF 450 VL
VXCm 30/50-F VXCm 30/65-F	60 µF 450 VL

PORT FLANGE

MODEL	FLANGE	F	K	D	L	HOLES	
						N°	Ø (mm)
VXC /50-F	DN65 (PN10)	2½"	145	185	160	4	18
VXC /65-F	DN80 (PN10)	3"	160	200	180	8	18

