

# TOP-VORTEX

## Submersible pump

for dirty water



### PERFORMANCE RANGE

- Flow rate up to **180 l/min** (10.8 m<sup>3</sup>/h)
- Head up to **7 m**

### APPLICATION LIMITS

- **3 m** maximum immersion depth (with a sufficiently long power cable)
- Maximum liquid temperature **+40 °C** (Maximum liquid temperature +90 °C for a maximum of 3 minutes intermittent service)
- Passage of suspended solids up to **Ø 20 mm**
- Suction down to **25 mm** above ground level
- Continuous service **S1**

### CONSTRUCTION AND SAFETY STANDARDS

Complete with:  
– **5 m** long power cable  
– float switch

EN 60335-1  
IEC 60335-1  
CEI 61-150

EN 60034-1  
IEC 60034-1  
CEI 2-3



### CERTIFICATIONS

COMPANY WITH MANAGEMENT SYSTEM  
CERTIFIED BY DNV  
ISO 9001: QUALITY  
ISO 14001: ENVIRONMENT AND SAFETY



### INSTALLATION AND USE

The **TOP-VORTEX** pump is suitable for use with **dirty water** that is not chemically aggressive towards the materials from which the pump is made.

As a result of the design solutions that have been adopted, such as the complete cooling of the motor and the shaft with double seal, these pumps are easy to use and reliable.

They are suitable for use in applications such as clearing dirty water, emptying tanks, discharging domestic waste water, and for emptying collection traps containing suspended solids up to a maximum of Ø 20 mm.

### PATENTS - TRADE MARKS - MODELS

- Registered Community Design n° 342159-0011

### OPTIONALS AVAILABLE ON REQUEST

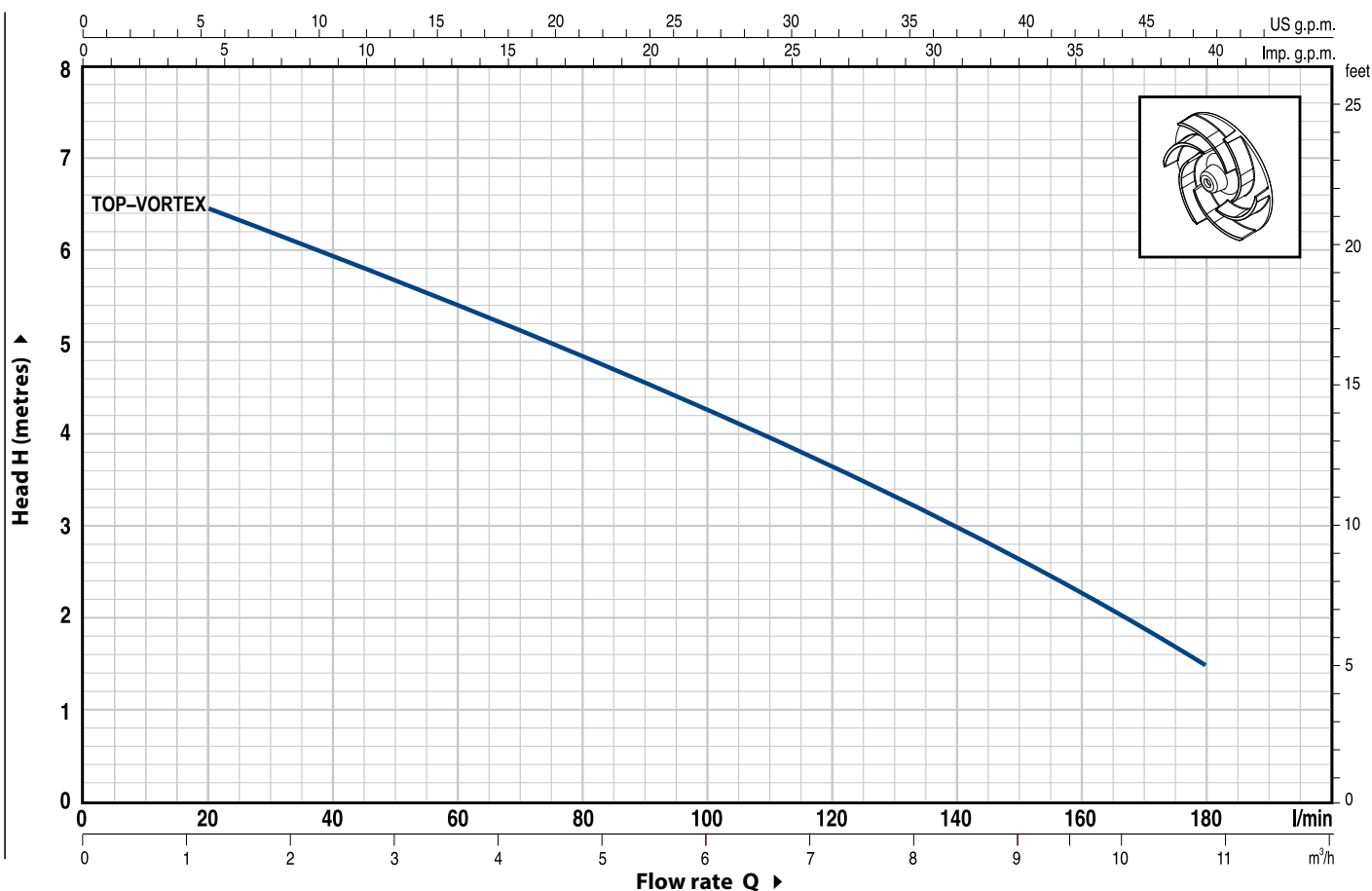
- Special mechanical seal
- Pumps with a **10 m** long power cable
  - ➔ N.B. Standard EN 60335-2-41 states that the power cable must be 10 m long for outdoor applications
- Pumps without float switch
- Other voltages or 60 Hz frequency

### GUARANTEE

1 year subject to terms and conditions

### CHARACTERISTIC CURVES AND PERFORMANCE DATA

50 Hz n= 2900 1/min



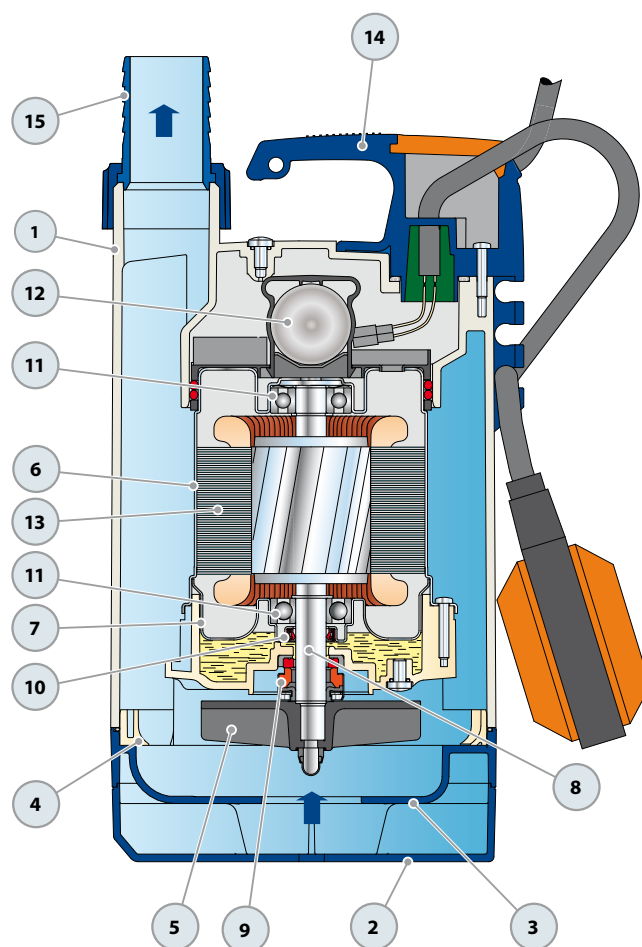
MODEL	POWER		Q	Flow rate											
	kW	HP		0	1.2	2.4	3.6	4.8	6.0	7.2	8.4	9.6	10.8		
Single-phase			l/min	0	20	40	60	80	100	120	140	160	180		
<b>TOP-VORTEX</b>	0.37	0.50	H metres	7	6.5	6	5.4	4.8	4.2	3.5	3	2.5	1.5		

Q = Flow rate H = Total manometric head

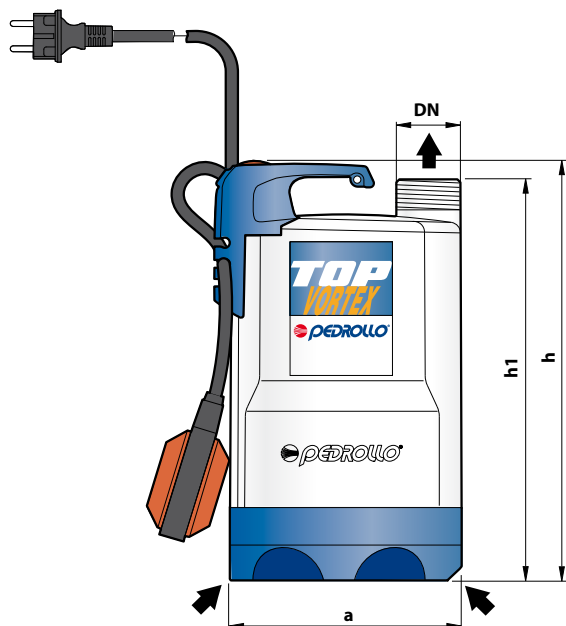
Tolerance of characteristic curves in compliance with EN ISO 9906 Grade 3.

# TOP-VORTEX

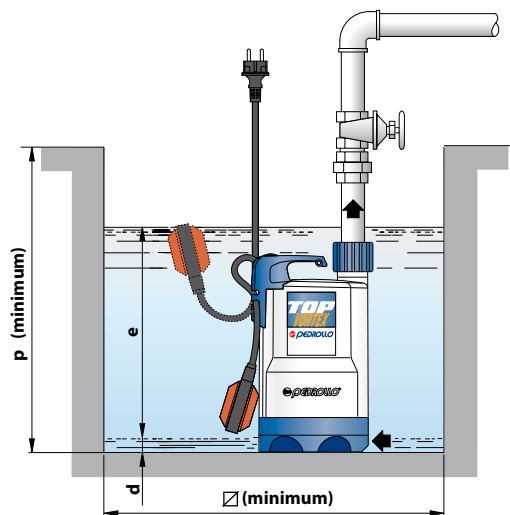
POS.	COMPONENT	CONSTRUCTION CHARACTERISTICS	
1	PUMP BODY	Technopolymer	
2	SUCTION FILTER	Technopolymer	
3	SUCTION PLATE	Technopolymer	
4	DIFFUSER	Technopolymer	
5	IMPELLER	Technopolymer VORTEX type	
6	MOTOR CASING	Stainless steel AISI 304	
7	MOTOR CASING PLATE	Stainless steel AISI 304	
8	MOTOR SHAFT	Stainless steel EN 10088-3 - 1.4104	
9	<b>SHAFT WITH DOUBLE SEAL AND OIL CHAMBER</b>		
	<i>Seal</i>	<i>Shaft</i>	<i>Materials</i>
	<i>Model</i>	<i>Diameter</i>	<i>Stationary ring</i> <i>Rotational ring</i> <i>Elastomer</i>
	AR-12R	Ø 12 mm	Ceramic Graphite NBR
10	LIP SEAL	Ø 12 x Ø 19 x H 5 mm	
11	BEARINGS	6201 ZZ / 6201 ZZ	
12	<b>CAPACITOR</b>		
	<i>Capacitance</i>		
	(230 V or 240 V)	(110 V)	
	10 µF 450 VL	16 µF 250 VL	
13	<b>ELECTRIC MOTOR</b>		
	<ul style="list-style-type: none"> <li>- Single-phase 230 V - 50 Hz with thermal overload protector built-in to the winding</li> <li>- Insulation: F class</li> <li>- Protection: IP X8</li> </ul>		
14	<b>HANDLE ASSEMBLY</b> (resin sealed)		
	Complete with: <ul style="list-style-type: none"> <li>- <b>5 metre</b> long "H07 RN-F" power cable with Schuko plug</li> <li>- Float switch.</li> </ul>		
15	<b>HOSE CONNECTOR WITH UNION</b>		
	Hose connection Ø 35 mm		



## DIMENSIONS AND WEIGHT



### Typical installation



MODEL	PORT DN	DIMENSIONS mm							kg
		a	h	h1	d	e	p	Ø	
Single-phase	DN								
TOP-VORTEX	1 1/4"	152	288	268	25	variable	350	350	5.1

## ABSORPTION

MODEL	VOLTAGE (single-phase)		
	Single-phase	230 V	240 V
TOP-VORTEX	2.0 A	2.0 A	5.3 A

## PALLETIZATION

MODEL	GROUPAGE			CONTAINER		
	n° pumps	H (mm)	kg	n° pumps	H (mm)	kg
Single-phase						
TOP-VORTEX	96	1360	508	144	1970	753

