

RX 2-3-4-5 "VORTEX"

Submersible pumps

➡ for dirty water



PERFORMANCE RANGE

- Flow rate up to **380 l/min** (22.8 m³/h)
- Head up to **13 m**

APPLICATION LIMITS

- **10 m** maximum immersion depth
- Maximum liquid temperature **+50 °C**
(Maximum liquid temperature +90 °C for a maximum of 3 minutes intermittent service)
- Solids passage:
 - up to **Ø 20 mm** for RX 2/20, RX 3/20
 - up to **Ø 40 mm** for RX 4/40, RX 5/40
- Suction level:
 - **25 mm** above ground level for RX 2/20, RX 3/20
 - **50 mm** above ground level for RX 4/40, RX 5/40
- Continuous service **S1**

CONSTRUCTION AND SAFETY STANDARDS

Complete with:

- **5 m** long power cable for RX 2/20, RX 3/20
- **10 m** long power cable for RX 4/40, RX 5/40
- 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



INSTALLATION AND USE

The **RX-VORTEX** series pumps are suitable for use with **dirty water**. The design solutions that have been adopted, such as the complete cooling of the motor, guarantee the reliability of the pump. They are suitable for use in domestic applications such as for discharging dirty water containing suspended solids.

PATENTS - TRADE MARKS - MODELS

- Registered Community Design n° 342159-0013

OPTIONALS AVAILABLE ON REQUEST

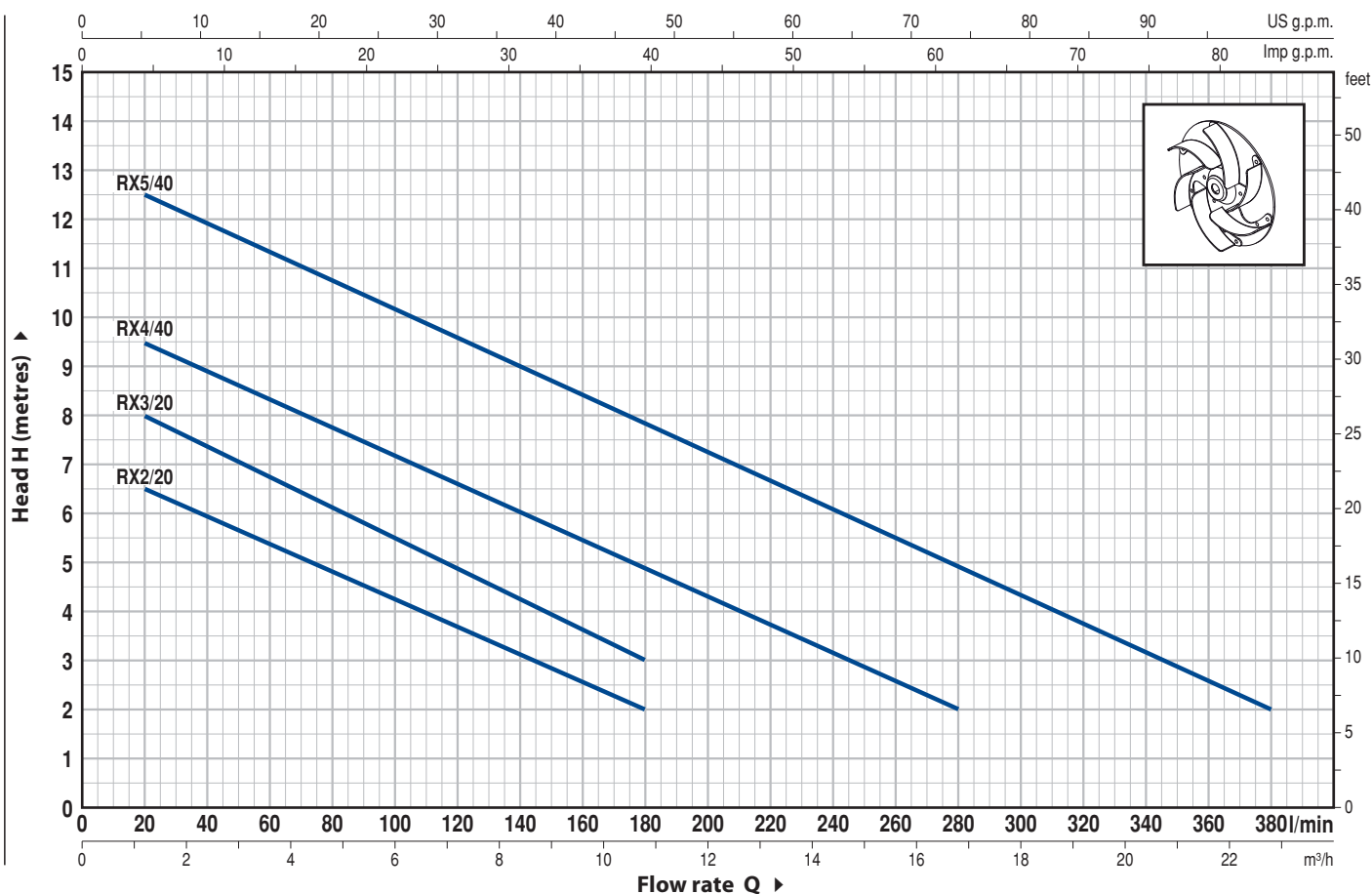
- Special mechanical seal
- Pumps with a **10 m** long power cable
 - ➡ N.B. Standard EN 60335-2-41 states that the power cable must be 10 m long for outdoor applications
- Single-phase pumps without float switch
- Other voltages or 60 Hz frequency

GUARANTEE

1 year subject to terms and conditions

CHARACTERISTIC CURVES AND PERFORMANCE DATA

50 Hz n= 2900 1/min



MODEL		POWER		Q	m³/h	0	1.2	2.4	3.6	4.8	6	7.2	8.4	9.6	10.8	13.2	16.8	20.4	22.8
Single-phase	Three-phase	kW	HP		l/min	0	20	40	60	80	100	120	140	160	180	220	280	340	380
RXm 2/20	–	0.37	0.50	H metres	7	6.5	6	5.4	4.8	4.3	3.7	3.1	2.5	2					
RXm 3/20	–	0.55	0.75		9	8	7.5	6.5	6	5.5	4.7	4.2	3	3					
RXm 4/40	RX 4/40	0.75	1		10	9.5	8.7	8.5	7.7	7	6.5	6	5.5	4.7	3.7	2			
RXm 5/40	RX 5/40	1.1	1.5		13	12.5	12	11.5	10.7	10	9.5	9	8.3	7.7	6.5	5	3	2	

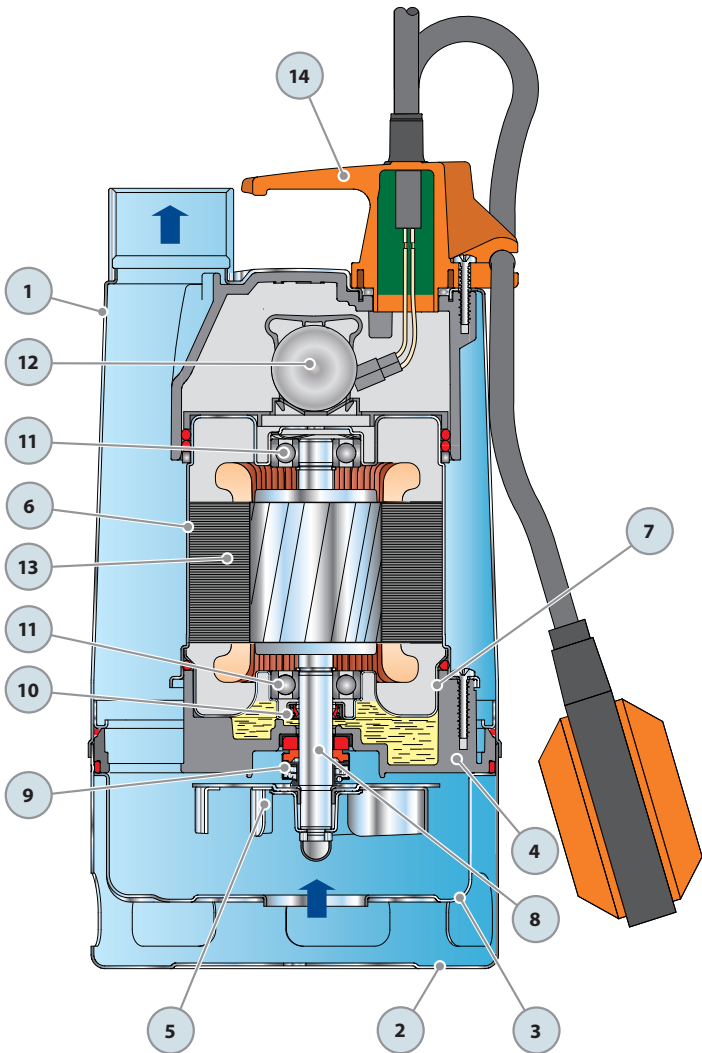
Q = Flow rate H = Total manometric head

Tolerance of characteristic curves in compliance with EN ISO 9906 App. A.

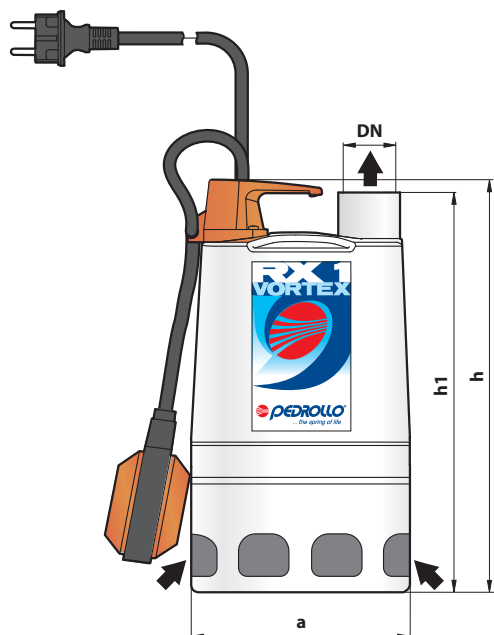
RX 2-3 "VORTEX"

POS. COMPONENT		CONSTRUCTION CHARACTERISTICS																
1	PUMP BODY	Stainless steel AISI 304, with threaded port in compliance with ISO 228/1																
2	SUCTION FILTER	Stainless steel AISI 304																
3	SUCTION PLATE	Stainless steel AISI 304																
4	DIFFUSER	Technopolymer																
5	IMPELLER	Stainless steel AISI 304 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	SHAFT WITH DOUBLE SEAL AND OIL CHAMBER																	
		<table><tr><th>Seal</th><th>Shaft</th><th colspan="2">Materials</th></tr><tr><th>Model</th><th>Diameter</th><th>Stationary ring</th><th>Rotational ring</th><th>Elastomer</th></tr><tr><td>AR-12R SIC</td><td>Ø 12 mm</td><td>Ceramic</td><td>Silicon carbide</td><td>NBR</td></tr></table>			Seal	Shaft	Materials		Model	Diameter	Stationary ring	Rotational ring	Elastomer	AR-12R SIC	Ø 12 mm	Ceramic	Silicon carbide	NBR
Seal	Shaft	Materials																
Model	Diameter	Stationary ring	Rotational ring	Elastomer														
AR-12R SIC	Ø 12 mm	Ceramic	Silicon carbide	NBR														
10	LIP SEAL	Ø 12 x Ø 19 x H 5 mm																
11	BEARINGS	6201 ZZ / 6201 ZZ																
12	CAPACITOR																	
		<table><tr><th>Pump</th><th colspan="2">Capacitance</th></tr><tr><th>Single-phase</th><th>(230 V or 240 V)</th><th>(110 V)</th></tr><tr><td>RXm 2/20</td><td>10 µF 450 VL</td><td>16 µF 250 VL</td></tr><tr><td>RXm 3/20</td><td>14 µF 450 VL</td><td>16 µF 250 VL</td></tr></table>			Pump	Capacitance		Single-phase	(230 V or 240 V)	(110 V)	RXm 2/20	10 µF 450 VL	16 µF 250 VL	RXm 3/20	14 µF 450 VL	16 µF 250 VL		
Pump	Capacitance																	
Single-phase	(230 V or 240 V)	(110 V)																
RXm 2/20	10 µF 450 VL	16 µF 250 VL																
RXm 3/20	14 µF 450 VL	16 µF 250 VL																
13	ELECTRIC MOTOR																	
		– Single-phase 230 V - 50 Hz with thermal overload protector built-in to the winding – Insulation: F class. – Protection: IP 68.																
14	HANDLE ASSEMBLY (resin sealed)																	
		Complete with: – 5 metre long “H07 RN-F” power cable with Schuko plug – Float switch.																

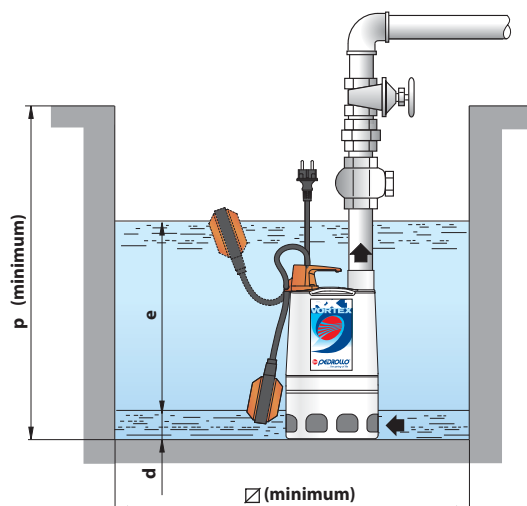
The diagram is a vertical cross-section of the pump assembly. At the top, a blue arrow points upwards from a blue rectangular component (1). Below this is a grey circular component (2) with a central hole. Underneath is a grey ring (3). Below the ring is a grey cylindrical component (4). In the center is a grey cylindrical component (5) with a central shaft. The shaft is surrounded by a grey ring (6) and a grey ring (7). Below the shaft is a grey ring (8). At the bottom is a grey ring (9). A grey cable (10) is connected to the top of the assembly. A grey cable (11) is connected to the bottom of the assembly. A grey cable (12) is connected to the side of the assembly. A grey cable (13) is connected to the bottom of the assembly. A grey cable (14) is connected to the top of the assembly.



DIMENSIONS AND WEIGHT



Typical installation



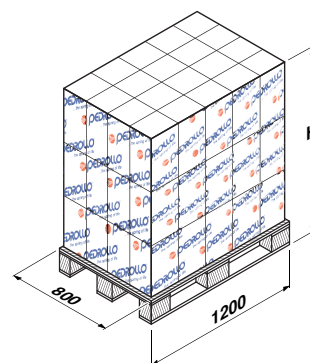
MODEL	PORT DN	DIMENSIONS mm							kg
Single-phase		a	h	h1	d	e	p	Ø	
RXm 2/20	1 1/4"	147	290	278	25	variable	350	350	6.1
RXm 3/20			320	308					7.85

ABSORPTION

MODEL	VOLTAGE (single-phase)		
Single-phase	230 V	240 V	110 V
RXm 2/20	2.6 A	2.6 A	6.5 A
RXm 3/20	3.2 A	3.2 A	7.5 A

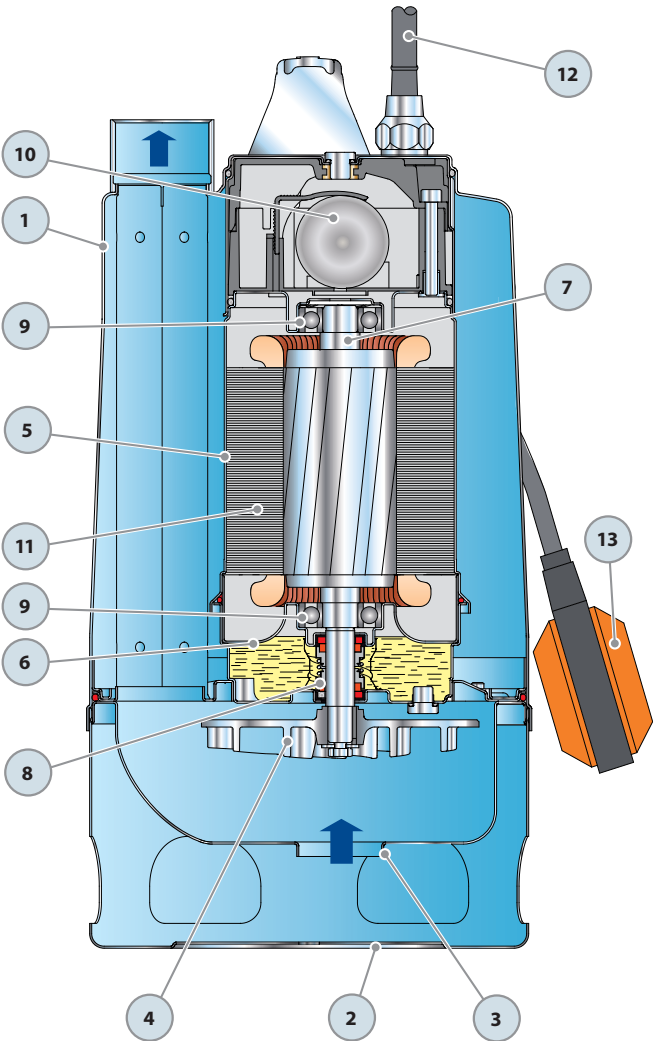
PALLETIZATION

MODEL	GROUPAGE			CONTAINER		
	n° pumps	H (mm)	kg	n° pumps	H (mm)	kg
Single-phase						
RXm 2/20	96	1500	607	144	2180	902
RXm 3/20	60	1310	488	100	2090	802

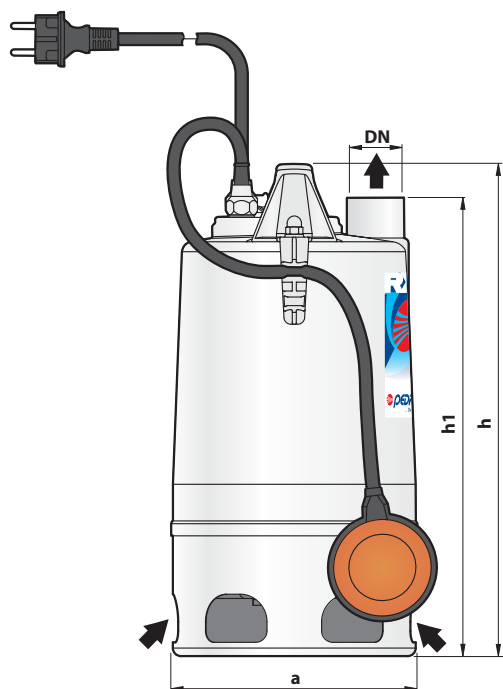


RX 4-5 "VORTEX"

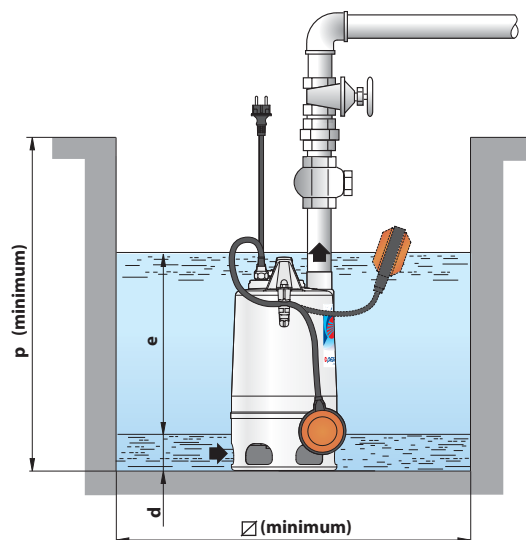
POS. COMPONENT		CONSTRUCTION CHARACTERISTICS
1	PUMP BODY	Stainless steel AISI 304, with threaded port in compliance with ISO 228/1
2	SUCTION FILTER	Stainless steel AISI 304
3	SUCTION PLATE	Stainless steel AISI 304
4	IMPELLER	Stainless steel AISI 304 VORTEX type
5	MOTOR CASING	Stainless steel AISI 304
6	MOTOR CASING PLATE	Stainless steel AISI 304
7	MOTOR SHAFT	Stainless steel EN 10088-3 - 1.4104
8	SHAFT WITH DOUBLE MECHANICAL SEAL SEPARATED BY AN OIL CHAMBER	
<i>Seal</i>		<i>Shaft</i>
<i>Model</i>		<i>Diameter</i>
MG1-14D SIC		Ø 14 mm
		<i>Stationary ring</i>
		Silicon carbide
		<i>Rotational ring</i>
		Silicon carbide
		<i>Elastomer</i>
		NBR
9	BEARINGS	6203 ZZ / 6203 ZZ
10	CAPACITOR	
<i>Pump</i>		<i>Capacitance</i>
<i>Single-phase</i>		<i>(230 V or 240 V)</i>
		<i>(110 V)</i>
RXm 4/40		20 µF 450 VL
RXm 5/40		30 µF 250 VL
		–
11	ELECTRIC MOTOR	
		– Single-phase 230 V - 50 Hz
		with thermal overload protector built-in to the winding
		– Three-phase 400 V - 50 Hz
		– Insulation: F class
		– Protection: IP 68
12	POWER CABLE	
		10 metre long "H07 RN-F" cable
		(with Schuko plug on single-phase versions only)
13	FLOAT SWITCH	
		(only for single-phase versions)



DIMENSIONS AND WEIGHT



Typical installation



MODEL		PORT	DIMENSIONS mm							kg	
Single-phase	Three-phase	DN	a	h	h1	d	e	p	Ø	1~	3~
RXm 4/40	RX 4/40	1½"	220	430	400	50	variable	500	500	13.0	12.2
RXm 5/40	RX 5/40									14.0	13.0

ABSORPTION

MODEL	VOLTAGE (single-phase)		
Single-phase	230 V	240 V	110 V
RXm 4/40	5.2 A	5.2 A	10.5 A
RXm 5/40	6.5 A	6.5 A	–

MODEL	VOLTAGE (three-phase)			
Three-phase	230 V	400 V	240 V	415 V
RX 4/40	3.6 A	2.1 A	3.6 A	2.1 A
RX 5/40	5.4 A	3.1 A	5.4 A	3.1 A

PALLETIZATION

MODEL		GROUPAGE				CONTAINER			
Single-phase	Three-phase	n° pumps	H (mm)	1~	3~	n° pumps	H (mm)	1~	3~
RXm 4/40	RX 4/40	45	1574	602	566	60	2052	797	749
RXm 5/40	RX 5/40	45	1574	647	602	60	2052	857	797

