

# **Submersible DRAINAGE pumps**



Clear water



Domestic use



Civil use



# PERFORMANCE RANGE

- Flow rate up to 300 l/min (18 m<sup>3</sup>/h)
- Head up to 20 m

#### **APPLICATION LIMITS**

- 10 m maximum immersion depth (with a sufficiently long power cable)
- Maximum liquid temperature +50 °C (Maximum liquid temperature +90 °C for a maximum of 3 minutes intermittent service)
- Passage of suspended solids up to Ø 10 mm
- Suction level:
  - 14 mm above ground level for RX 1-2-3
  - 25 mm above ground level for RX 4-5
- Continuous service \$1

# **CONSTRUCTION AND SAFETY STANDARDS**

The pumps are complete with:

- 5 m long power cable for RX 1-2-3
- 10 m long power cable for RX 4-5
- float switch for single-phase versions

CE EN 60335-1 EN 60034-1 IEC 60335-1 IEC 60034-1 CEI 61-150 CEI 2-3

#### **CERTIFICATIONS**

Company with management system certified DNV ISO 9001: QUALITY



# **INSTALLATION AND USE**

The **RX** series pumps are suitable for use with **clear water** that does not contain abrasive particles.

Because 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 fixed installations and applications such as draining small flooded areas (rooms, cellars, garages) in the event of an emergency, for the disposal of waste water in the home (from dishwashers, washing machines) and for emptying drainage traps.

#### **PATENTS - TRADE MARKS - MODELS**

- Patent n. EP2313658
- Patent n. IT0001428923

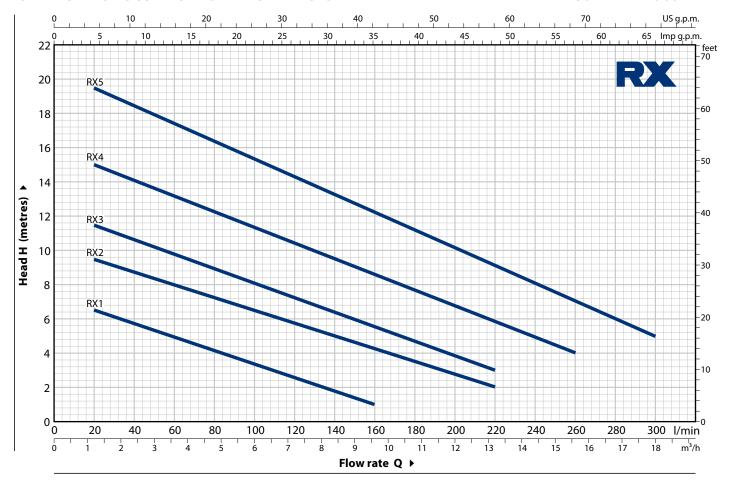
#### **OPTIONS AVAILABLE ON REQUEST**

- "RX-GM" pumps with a vertical float switch (suitable for particularly small wells)
- Special mechanical seal
- RX 1-2-3 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



#### **CHARACTERISTIC CURVES AND PERFORMANCE DATA**

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



МО	DEL	POWE	R (P2)	<b>Q</b> m³/h	0	1.2	3.6	6.0	8.4	9.6	12.0	13.2	15.6	18.0
Single-phase	Three-phase	kW	HP	l/min	0	20	60	100	140	160	200	220	260	300
RXm 1	RX 1	0.25	0.33		7.5	6.5	5	3.5	2	1				
RXm 2	RX 2	0.37	0.50		10	9.5	8	6.5	5	4.5	2.5	2		
RXm 3	RX 3	0.55	0.75	<b>H</b> metres	12	11.5	9.5	8	6.5	5.5	3.5	3		
RXm 4	RX 4	0.75	1		16	15	13	11.5	9.5	8.5	6.5	5.5	4	
RXm 5	RX 5	1.1	1.5		20	19.5	17.5	15.5	13.5	12.5	10	9	7	5

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

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

= Stocked in Australia

Other models available upon request with 6 to 8 weeks lead time.

#### 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 DIFFUSER** Stainless steel AISI 304

4 IMPELLER Stainless steel AISI 304

5 MOTOR CASING Stainless steel AISI 304

6 MOTOR CASING PLATE Stainless steel AISI 304

7 MOTOR SHAFT Stainless steel AISI 431

#### 8 SHAFT WITH DOUBLE SEAL AND OIL CHAMBER

Seal	Shaft		Materials	
Model	Diameter	Stationary ring	Rotational ring	Elastomer
STA-12R	<b>Ø 12</b> mm	Ceramic	Graphite	NBR

#### 9 LIP SEAL Ø 12 x Ø 19 x H 5 mm

#### 10 BEARINGS 6201 ZZ / 6201 ZZ

### 11 CAPACITOR

Pump	Capacitance			
Single-phase	(230 V or 240 V)	(110 V)		
RXm 1	<b>10</b> μF 450 VL	<b>16</b> μF - 250 VL		
RXm 2	<b>10</b> μF 450 VL	<b>16</b> μF - 250 VL		
RXm 3	<b>14</b> μF 450 VL	<b>16</b> μF - 250 VL		

# 12 ELECTRIC MOTOR

**RXm**: single-phase 230 V - 50 Hz

with thermal overload protector incorporated into the

winding

RX: three-phase 400 V - 50 Hz

- Insulation: class F

- Protection: IP X8

### 13 POWER CABLE

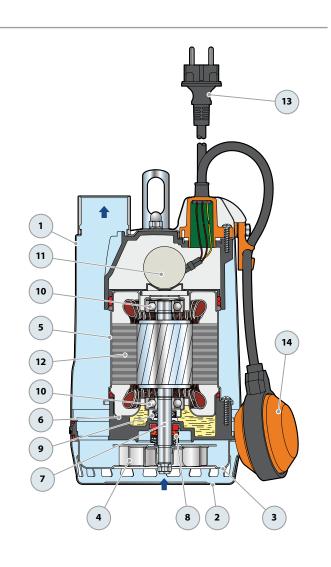
"H07 RN-F" type

(with Schuko plug for single-phase versions only)

**Standard length 5 metres** 

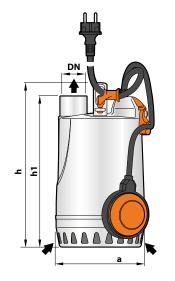
#### 14 FLOAT SWITCH

(Only for single-phase versions)

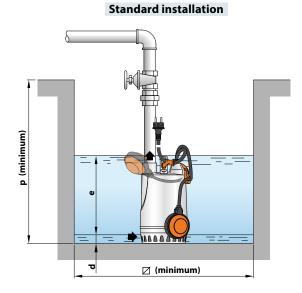




# **DIMENSIONS AND WEIGHT**



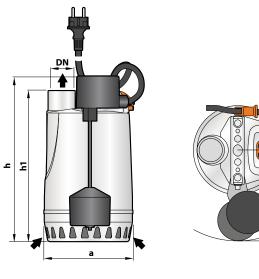


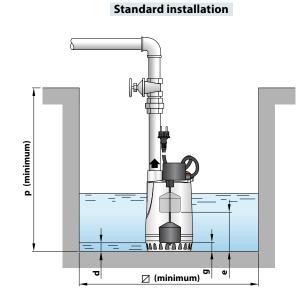


МО	DEL	PORT				DIME	ENSIO	NS mm			k	g
Single-phase	Three-phase	DN	a	b	h	h1	d	e	р	Ø	1~	3~
RXm 1	RX 1			24	269	246	14	variable	350	350	6.1	5.5
RXm 2	RX 2	11⁄4"	147								6.1	5.6
RXm 3	RX 3				298	277					7.6	7.0

PALLETIZATION								
GROUPAGE n. pumps	CONTAINER n. pumps							
96	144							
96	144							
96	144							

#### Version with vertical float switch





MODEL	PORT	DIMENSIONS mm									
Single-phase	DN	a	b	h	h1	d	e	g	р		1~
RXm 1-GM			150	270	247		4.45	40			6.2
RXm 2-GM	11⁄4"	147				145	40	350	240	6.2	
RXm 3-GM				300	277		175	45			7.5

PALLET	PALLETIZATION							
GROUPAGE n. pumps	CONTAINER n. pumps							
80	120							
80	120							
80	120							

# **ABSORPTION**

MODEL	VOLTAGE									
Single-phase	230 V	240 V	110 V							
RXm 1	<b>1.5</b> A	<b>1.4</b> A	<b>3.0</b> A							
RXm 2	<b>2.0</b> A	<b>2.0</b> A	<b>4.0</b> A							
RXm 3	<b>3.6</b> A	<b>3.4</b> A	<b>7.2</b> A							

MODEL		VOL	TAGE	
Three-phase	230 V	400 V	240 V	415 V
RX 1	<b>1.6</b> A	<b>0.9</b> A	<b>1.6</b> A	<b>0.9</b> A
RX 2	<b>1.7</b> A	<b>1.0</b> A	<b>1.7</b> A	<b>1.0</b> A
RX 3	<b>2.8</b> A	<b>1.6</b> A	<b>2.6</b> A	<b>1.5</b> A

#### POS. COMPONENT

#### **CONSTRUCTION CHARACTERISTICS**

**PUMP BODY** Stainless steel AISI 304 with threaded port in compliance with ISO 228/1

**SUCTION FILTER** Stainless steel AISI 304

**DIFFUSER** Stainless steel AISI 304 3

**IMPELLER** Stainless steel AISI 304

**MOTOR CASING** Stainless steel AISI 304

**MOTOR CASING PLATE** Stainless steel AISI 304

7 **MOTOR SHAFT** Stainless steel AISI 431

#### SHAFT WITH DOUBLE MECHANICAL SEAL SEPARATED BY AN OIL CHAMBER

Seal	Shaft	Position				
Model	Diameter		Stationary ring	Rotational ring	Elastomer	
MG1-14D SIC	<b>Ø 14</b> mm	Motor side Silicon carbide		Graphite	NBR	
MG1-14D SIC	<b>9 14</b> mm	Pump side	Silicon carbide	Silicon carbide	NBR	

#### 6203 ZZ-C3E / 6203 ZZ-C3E **BEARINGS** 9

#### **CAPACITOR**

Pump	Capacitance	
Single-phase	(230 V or 240 V)	(110 V)
RXm 4	<b>20</b> μF 450 VL	<b>30</b> μF - 250 VL
RXm 5	<b>25</b> μF 450 VL	<b>30</b> μF - 250 VL

# 11 ELECTRIC MOTOR

RXm: single-phase 230 V - 50 Hz

with thermal overload protector incorporated into the winding

RX: three-phase 400 V - 50 Hz

- Insulation: class F - Protection: IP X8

### 12 POWER CABLE

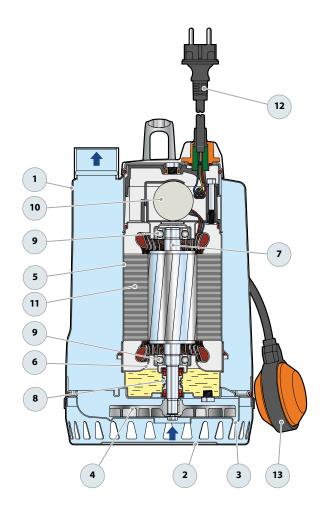
"H07 RN-F" type

(with Schuko plug for single-phase versions only)

**Standard length 10 metres** 

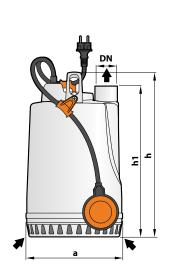
#### 13 FLOAT SWITCH

Only for single-phase versions (Vertical float switch in the GM versions).

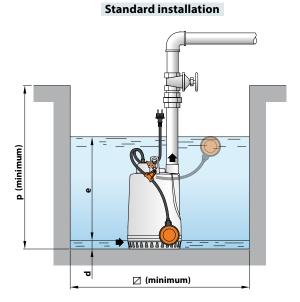




# **DIMENSIONS AND WEIGHT**



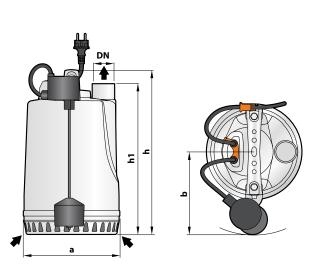


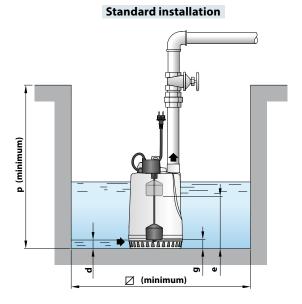


МО	DEL	PORT				DIME	NSIO	NS mm			k	g
Single-phase	Three-phase	DN	a	b	h	h1	d	e	р	Ø	1~	3~
RXm 4	RX 4	1½"	220	110.5	370	336	25	variable	500	500	14.4	13.3
RXm 5	RX 5		220	118.5			25				15.4	14.4

PALLETIZATION					
GROUPAGE CONTAINER n. pumps					
45	60				
45	60				

# Version with vertical float switch





MODEL	PORT	DIMENSIONS mm							kg		
Single-phase	DN	a	b	h	h1	d	e	g	р		1~
RXm 4 - GM	41/ !!	220	106.5	270	226	25	250	50	500	200	16.7
RXm 5 - GM	11/2"	220	186.5	370	336	25	250	50	500	300	15.8

PALLETIZATION				
GROUPAGE CONTAINER n. pumps				
45	60			

# **ABSORPTION**

MODEL	VOLTAGE				
Single-phase	230 V	240 V			
RXm 4	<b>5.9</b> A	<b>5.9</b> A			
RXm 5	<b>7.5</b> A	<b>7.5</b> A			

MODEL	VOLTAGE				
Three-phase	230 V	400 V	240 V	415 V	
RX 4	<b>3.6</b> A	<b>2.1</b> A	<b>3.5</b> A	<b>2.0</b> A	
RX 5	<b>6.1</b> A	<b>3.5</b> A	<b>5.9</b> A	<b>3.4</b> A	