

# ZX "VORTEX"

## Submersible pumps

⇒ for very dirty water



### PERFORMANCE RANGE

- Flow rate up to **400 l/min** (24 m<sup>3</sup>/h)
- Head up to **11 m**

### APPLICATION LIMITS

- **5 m** maximum immersion depth (with a sufficiently long power cable)
- Maximum liquid temperature **+40 °C**
- Passage of suspended solids up to **Ø 40 mm**
- Suction down to **50 mm** above ground level
- **240 mm** minimum immersion depth for continuous service

### CONSTRUCTION AND SAFETY STANDARDS

- Complete with **5 m** long power cable

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



AN30



NIPOMTECT-168

### INSTALLATION AND USE

ZX series pumps are suitable for draining **waste water** in domestic applications and for pumping dirty water containing suspended solids up to Ø 40 mm. They distinguish themselves for the ease with which they are installed and their reliability under automatic operating conditions in fixed installations.

### PATENTS - TRADE MARKS - MODELS

- Registered Community Design n° 342159-0015

### OPTIONALS AVAILABLE ON REQUEST

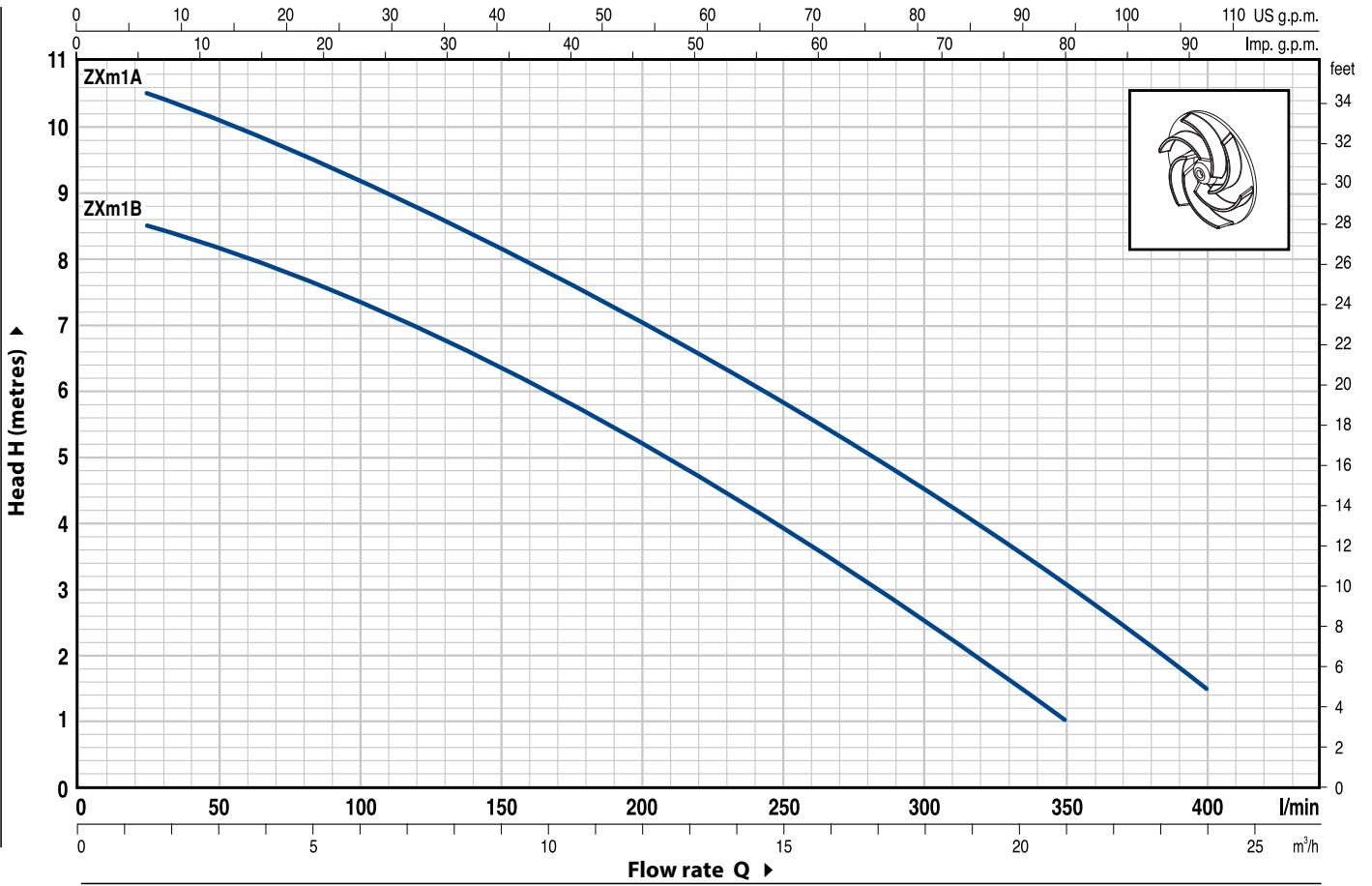
- Special mechanical seal.
- Pumps with a **10 m** long power cable  
⇒ N.B. Standard EN 60335-2-41 states that the power cable must be 10 m long for outdoor applications
- Single-phase pumps without float switch
- Other voltages or 60 Hz frequency

### GUARANTEE

2 years subject to terms and conditions

**CHARACTERISTIC CURVES AND PERFORMANCE DATA**

**50 Hz n= 2900 1/min**



MODEL	POWER		Q	Flow rate														
	kW	HP		m³/h	0	1.5	3.0	4.5	6.0	9.0	12.0	15.0	18.0	21.0	24.0			
Single-phase			l/min	0	25	50	75	100	150	200	250	300	350	400				
<b>ZXm 1B/40</b>	0.50	0.70	H metres	9	8.5	8.3	8	7.5	6.5	5.2	4	2.5	1					
<b>ZXm 1A/40</b>	0.60	0.85		11	10.5	10	9.5	9.2	8.2	7	5.7	4.3	2.8	1.5				

Q = Flow rate H = Total manometric head

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

POS.	COMPONENT	CONSTRUCTION CHARACTERISTICS			
1	<b>PUMP BODY</b>	Cast iron, with threaded port in compliance with ISO 228/1			
2	<b>BASE</b>	Stainless steel AISI 304			
3	<b>IMPELLER</b>	Technopolymer VORTEX type			
4	<b>MOTOR SLEEVE</b>	Stainless steel AISI 304			
5	<b>MOTOR CASING</b>	Steel			
6	<b>MOTOR SHAFT</b>	Stainless steel EN 10088-3 - 1.4104			
7	<b>SHAFT WITH DOUBLE SEAL</b>				
	<i>Seal</i>	<i>Shaft</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
8	<b>LIP SEAL</b>	Ø 12 x Ø 22 x H 6 mm			
9	<b>BEARINGS</b>	6201 ZZ / 6201 ZZ			
10	<b>CAPACITOR</b>				
	<i>Pump</i>	<i>Capacitance</i>			
	<i>Single-phase</i>	<i>(230 V or 240 V)</i>	<i>(110 V)</i>		
	ZXm 1B/40	12.5 µF 450 VL	30 µF 250 VL		
	ZXm 1A/40	16 µF 450 VL	30 µF 250 VL		

**11 ELECTRIC MOTOR**

- Single-phase 230 V - 50 Hz with thermal overload protector built-in to the winding.
- Insulation: F class.
- Protection: IP X8.

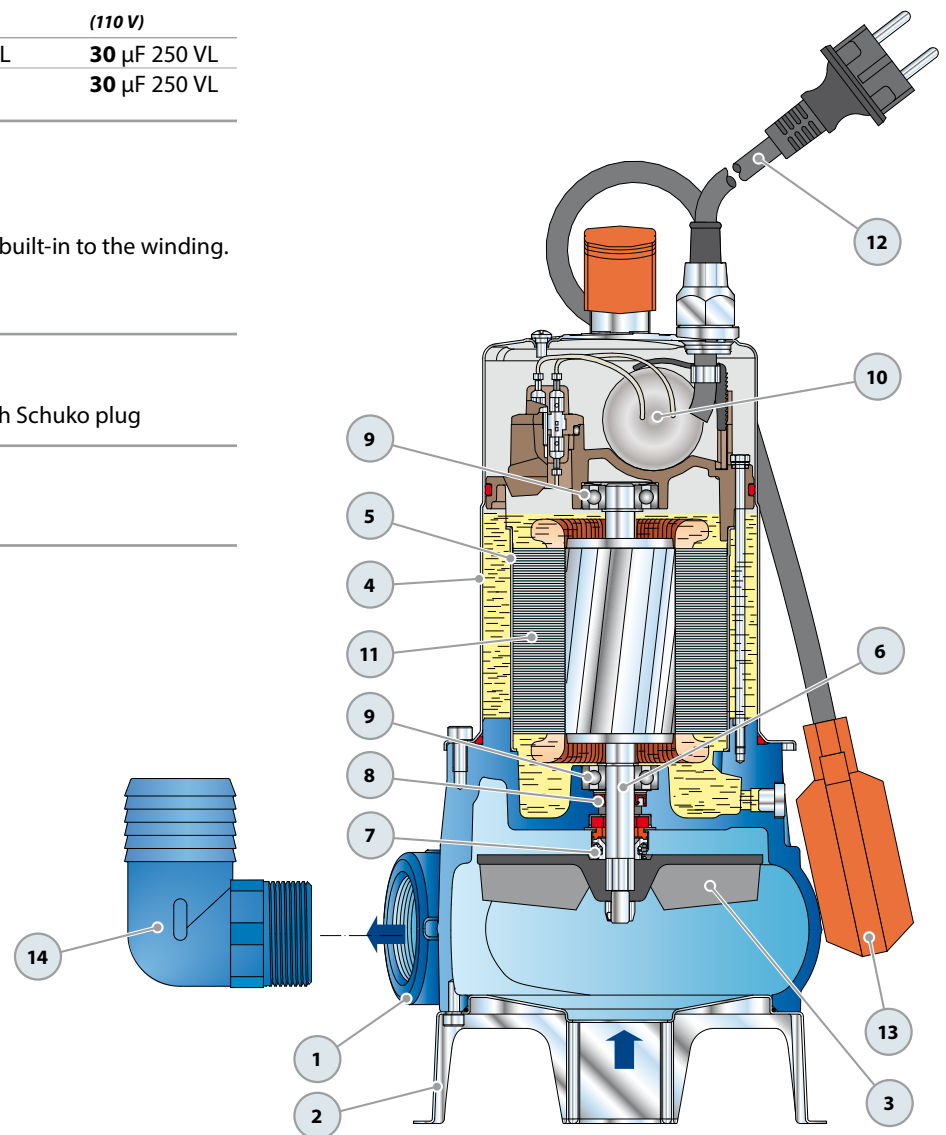
**12 POWER CABLE**

5 metre long "H07 RN-F" cable with Schuko plug

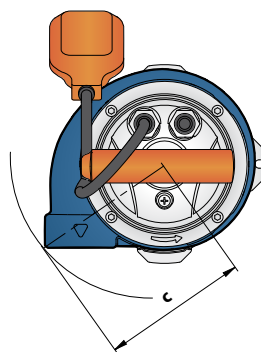
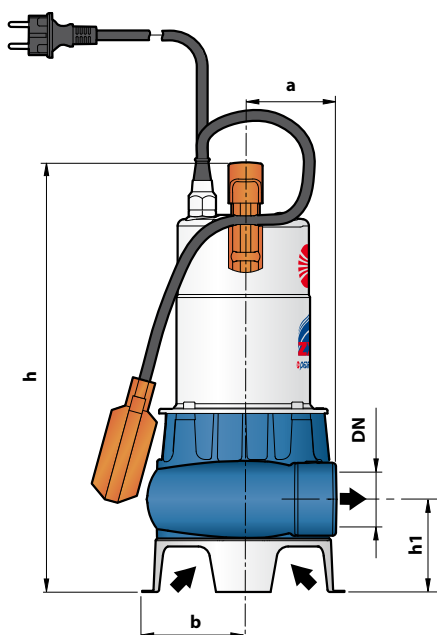
**13 FLOAT SWITCH**  
(only for single-phase versions)

**14 HOSE CONNECTION**

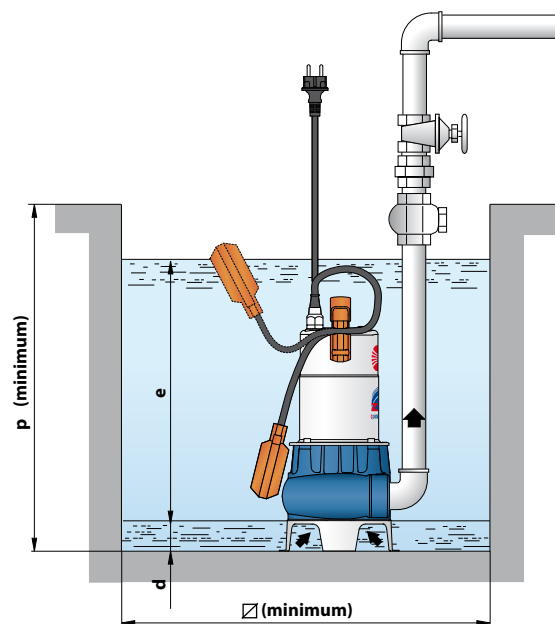
Ø 50 mm



## DIMENSIONS AND WEIGHT



### Typical installation



MODEL	PORT DN	solids passage	DIMENSIONS mm									kg		
			a	b	c	h	h1	d	e	p	∅			
Single-phase	1½"	Ø 40 mm	75	87	130	378	82	50	variable	450	450	1~		
ZXm 1B/40														11.5
ZXm 1A/40														11.7

## ABSORPTION

MODEL	VOLTAGE (single-phase)		
	230 V	240 V	110 V
Single-phase			
ZXm 1B/40	3.3 A	3.3 A	7.0 A
ZXm 1A/40	4.5 A	4.5 A	9.0 A

## PALLETIZATION

MODEL	GROUPAGE			CONTAINER		
	n° pumps	H (mm)	kg	n° pumps	H (mm)	kg
Single-phase						
ZXm 1B/40	60	1460	709	80	1900	940
ZXm 1A/40	60	1460	721	80	1900	956

