

## Submersible drainage pumps

for clear water



### PERFORMANCE RANGE

- Flow rate up to **300 l/min** (18 m<sup>3</sup>/h)
- Head up to **14 m**

### APPLICATION LIMITS

- Immersion depth:
  - **1.5 m** with 5 m long power cable
  - **5 m** with 10 m long power cable
- Maximum liquid temperature **+40 °C**
- Passage of suspended solids up to **Ø 10 mm**
- Suction down to **21 mm** above ground level
- **180 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



### INSTALLATION AND USE

Designed to pump **clear or slightly dirty water**, these pumps are suitable for use in domestic applications and in particular for draining flooded areas such as cellars or for emptying tanks and reservoirs; they distinguish themselves for the ease with which they are installed and their reliability under automatic operating conditions in fixed installations.

### 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

### CERTIFICATIONS

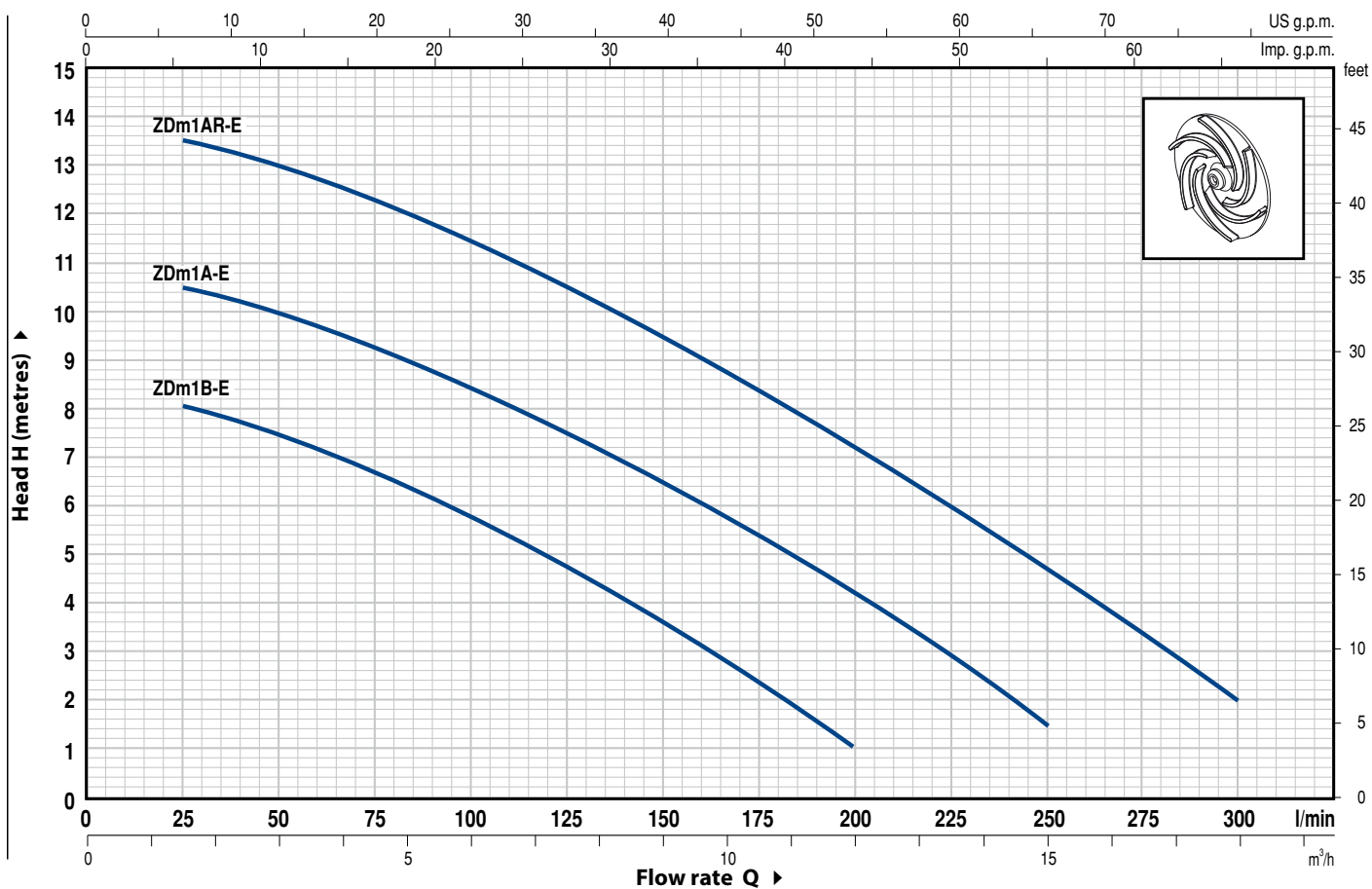


AN30

PPOMTECT-168

### CHARACTERISTIC CURVES AND PERFORMANCE DATA

50 Hz n= 2900 1/min

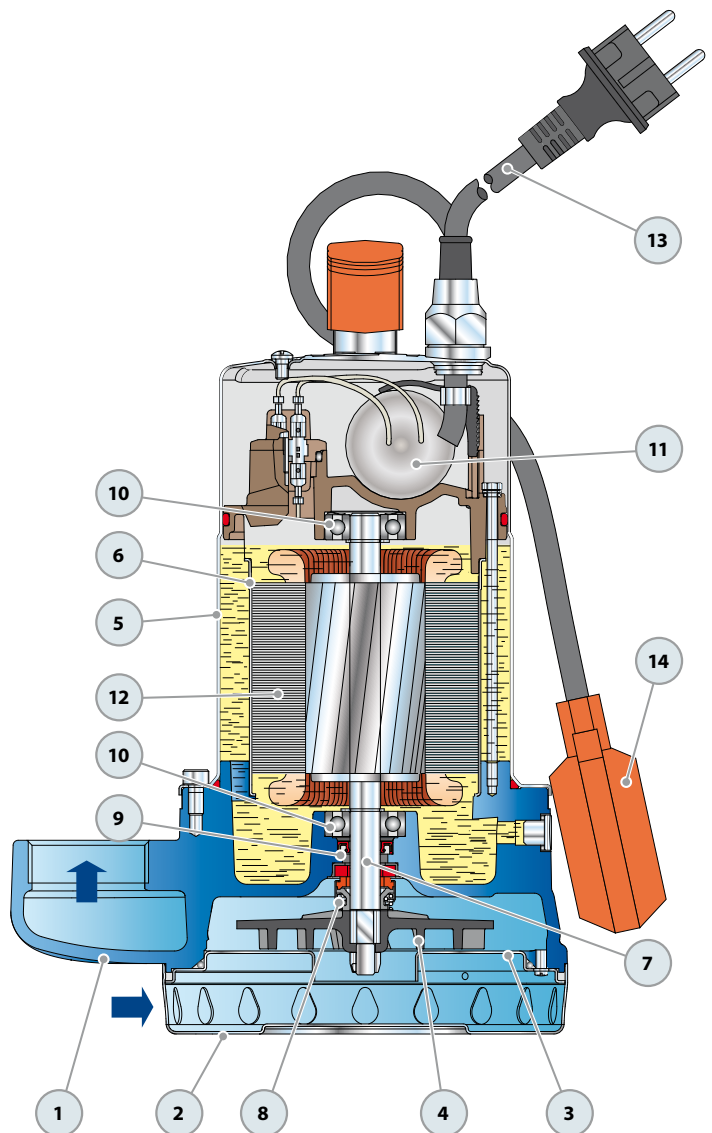


MODEL	POWER		Q	0	1.5	3.0	4.5	6.0	7.5	9.0	10.5	12.0	13.5	15.0	16.5	18.0
	kW	HP		0	25	50	75	100	125	150	175	200	225	250	275	300
Single-phase																
ZDm 1B-E	0.37	0.50	H metres	8.5	8	7.5	6.5	5.5	4.8	3.5	2.5	1				
ZDm 1A-E	0.50	0.70		11	10.5	10	9	8.5	7.5	6.5	5.5	4	2.5	1.5		
ZDm 1AR-E	0.60	0.85		14	13.5	13	12.2	11.5	10.5	9.5	8.3	7	5.7	4.5	3.2	2

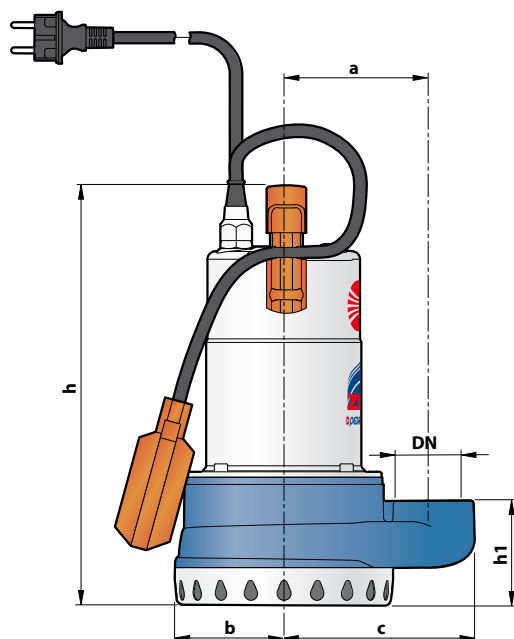
Q = Flow rate H = Total manometric head

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

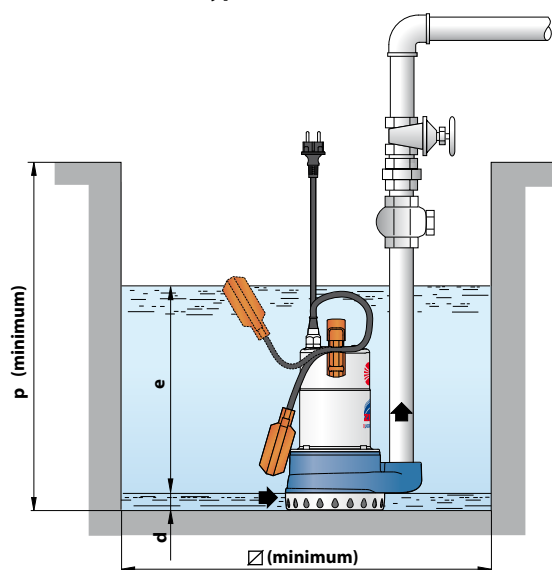
POS.	COMPONENT	CONSTRUCTION CHARACTERISTICS			
1	PUMP BODY	Cast iron, with threaded port in compliance with ISO 228/1			
2	SUCTION FILTER	Stainless steel AISI 304			
3	SUCTION PLATE	Stainless steel AISI 304			
4	IMPELLER	Noryl GFN2V open type			
5	MOTOR SLEEVE	Stainless steel AISI 304			
6	MOTOR CASING	Steel			
7	MOTOR SHAFT	Stainless steel EN 10088-3 - 1.4104			
8	SHAFT WITH DOUBLE SEAL				
	<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
9	LIP SEAL	Ø 12 x Ø 22 x H 6 mm			
10	BEARINGS	6201 ZZ / 6201 ZZ			
11	CAPACITOR				
	<i>Pump</i>	<i>Capacitance</i>			
	<i>Single-phase</i>	<i>(230 V or 240 V)</i>		<i>(110 V)</i>	
	ZDm 1B-E	10 µF 450 VL	16 µF 250 VL		
	ZDm 1A-E	12.5 µF 450 VL	30 µF 250 VL		
	ZDm 1AR-E	16 µF 450 VL	30 µF 250 VL		
12	ELECTRIC MOTOR	<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>			
13	POWER CABLE	5 metre long "H07 RN-F" cable with Schuko plug			
14	FLOAT SWITCH	(only for single-phase versions)			



## DIMENSIONS AND WEIGHT



Typical installation



MODEL	PORT	DIMENSIONS mm									kg	
		a	b	c	h	h1	d	e	p	Ø		
Single-phase	DN											
ZDm 1B-E	1½"	110	81	142	316	77	21	variable	450	450		
ZDm 1A-E											10.9	
ZDm 1AR-E											11.5	
											11.8	

## ABSORPTION

MODEL	VOLTAGE (single-phase)		
	230 V	240 V	110 V
Single-phase			
ZDm 1B-E	2.5 A	2.5 A	5.2 A
ZDm 1A-E	3.3 A	3.3 A	7.0 A
ZDm 1AR-E	4.4 A	4.4 A	9.0 A

## PALLETIZATION

MODEL	GROUPAGE			CONTAINER		
	n° pumps	H (mm)	kg	n° pumps	H (mm)	kg
Single-phase						
ZDm 1B-E	60	1250	670	100	1990	1106
ZDm 1A-E	60	1250	709	100	1990	1170
ZDm 1AR-E	60	1250	726	100	1990	1199

