

# 4BLOCK

## 4" monoblock submersible pump



► Ready to install, stainless steel monoblock submersible pump.

Complete with:

- motor with built-in capacitor and thermal overload protector
- 20 m long power cable.



### PERFORMANCE RANGE

- Flow rate up to **150 l/min** (9 m<sup>3</sup>/h)
- Head up to **128 m**

### APPLICATION LIMITS

- Maximum liquid temperature **+35 °C**
- Maximum sand content **150 g/m<sup>3</sup>**
- Maximum immersion depth of **60 m**
- Vertical and horizontal installation
- Starts/hour: 20 at regular intervals
- Continuous service **S1**

### CONSTRUCTION AND SAFETY STANDARDS

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

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



### CERTIFICATIONS



### INSTALLATION AND USE

Suitable for pumping clean water from boreholes that contain sand (up to 150 g/m<sup>3</sup>).

As a result of their high efficiency and reliability they are suitable for use in domestic applications such as domestic water supply as part of a pressure supply and for irrigation, etc.

### PATENTS - TRADE MARKS - MODELS

- Patent Pending n° PCT/IB2009/051491, PCT/EP2009/059855, BO2009A000650
- Registered Community Design n° 342159-0010

### OPTIONALS AVAILABLE ON REQUEST

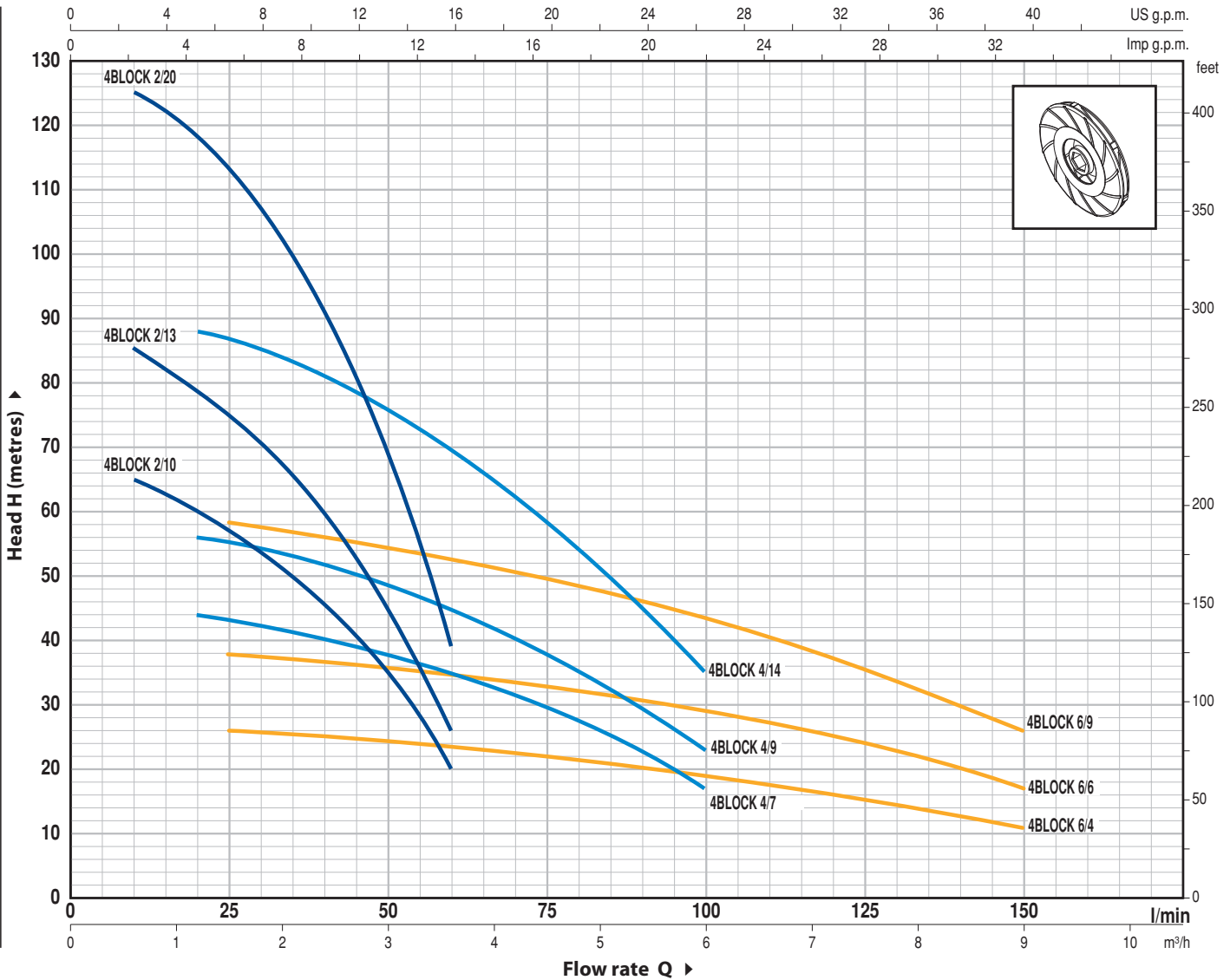
- **30 metre** long power cable
- Other voltages or 60 Hz frequency

### GUARANTEE

1 year subject to terms and conditions

**CHARACTERISTIC CURVES AND PERFORMANCE DATA**

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



MODEL		POWER		Q	Flow rate						
Single-phase	Three-phase	kW	HP		m³/h	0	0.6	1.2	1.8	2.4	3.0
4BLOCKm 2/10	4BLOCK 2/10	0.55	0.75	H metres	0	10	20	30	40	50	60
4BLOCKm 2/13	4BLOCK 2/13	0.75	1		66	65	60	54	46	35	20
4BLOCKm 2/20	4BLOCK 2/20	1.1	1.5		86	85	79	71	60	45	26
					128	125	118	108	91	70	39

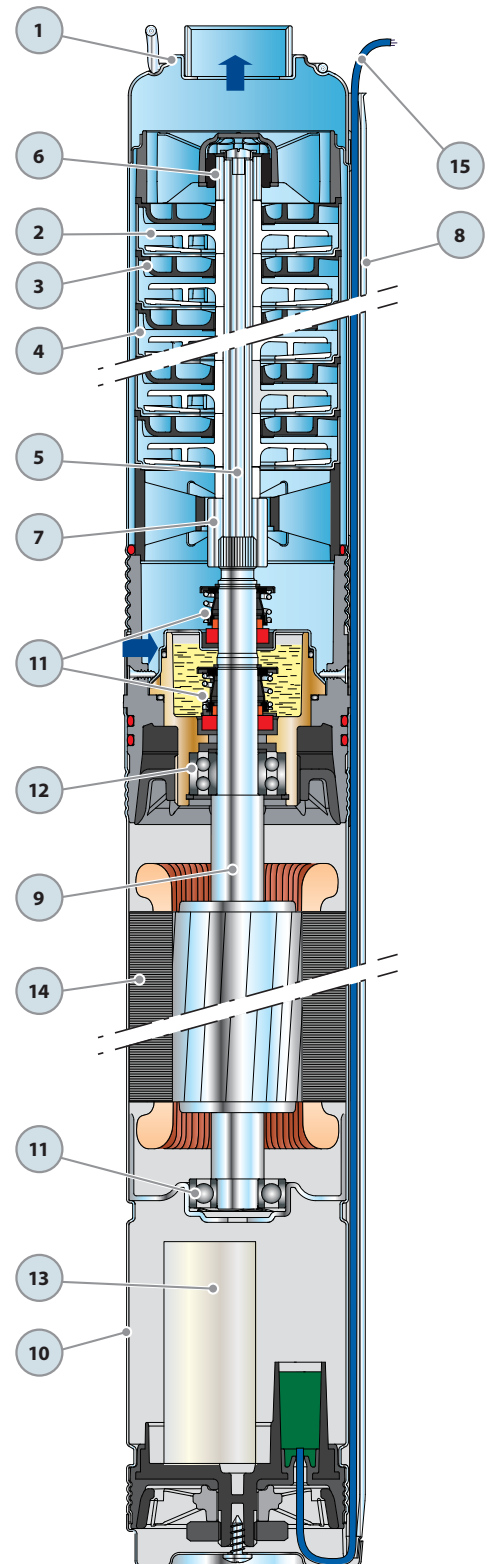
MODEL		POWER		Q	Flow rate									
Single-phase	Three-phase	kW	HP		m³/h	0	1.2	1.8	2.4	3.0	3.6	4.2	4.8	5.4
4BLOCKm 4/7	4BLOCK 4/7	0.55	0.75	H metres	0	20	30	40	50	60	70	80	90	100
4BLOCKm 4/9	4BLOCK 4/9	0.75	1		46	44	42	40	38	35	31.5	27	23	17
4BLOCKm 4/14	4BLOCK 4/14	1.1	1.5		60	56	54.5	52	49	45	40.5	35	29	23
					92	88	85	81	76	70	63	54.5	45	35

MODEL		POWER		Q	Flow rate						
Single-phase	Three-phase	kW	HP		m³/h	0	1.5	3.0	4.5	6.0	7.5
4BLOCKm 6/4	4BLOCK 6/4	0.55	0.75	H metres	0	25	50	75	100	125	150
4BLOCKm 6/6	4BLOCK 6/6	0.75	1		27	26	24	22	19	15	11
4BLOCKm 6/9	4BLOCK 6/9	1.1	1.5		40	38	36	33	29	24	17
					61	58	54	50	44	35	26

Q = Flow rate H = Total manometric head

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

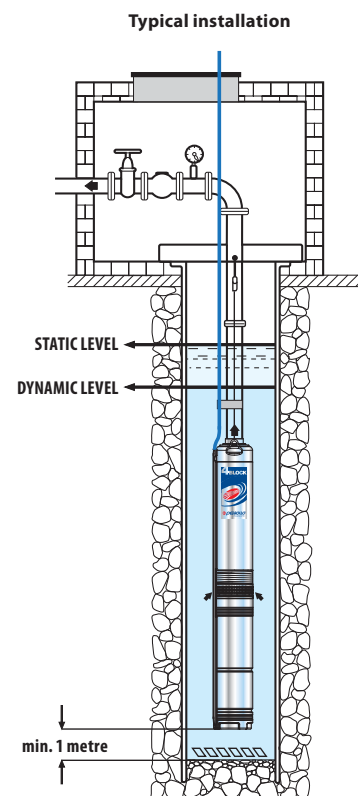
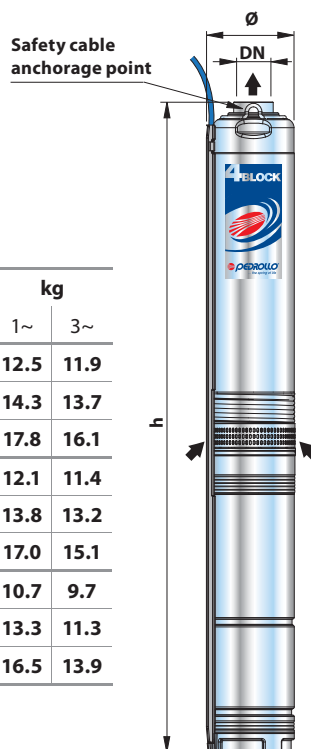
POS.	DESCRIPTION	CONSTRUCTION CHARACTERISTICS				
1	<b>DELIVERY BODY AND EXTERNAL SLEEVE</b>	Stainless steel AISI 304, complete with threaded delivery port in compliance with ISO 228/1.				
2	<b>IMPELLERS</b>	Lexan 141-R				
3	<b>DIFFUSERS</b>	Noryl GFN2V				
4	<b>STAGE CASING</b>	Stainless steel AISI 304				
5	<b>PUMP SHAFT</b>	Stainless steel AISI 304				
6	<b>PUMP BEARINGS</b>	Special-technopolymer housing with stainless steel AISI 316, chrome oxide coated, sand resistant shaft bushing.				
7	<b>DRIVE COUPLING</b>	Stainless steel AISI 316L				
8	<b>CABLE COVER</b>	Stainless steel AISI 304				
9	<b>MOTOR SHAFT</b>	Stainless steel EN 10088-3 1.4104 (AISI 431 for single-phase 1.1 kW)				
10	<b>MOTOR SLEEVE</b>	Stainless steel AISI 304				
11	<b>TWO MECHANICAL SEALS SEPARATED BY AN OIL CHAMBER</b>					
	<b>Seal</b>	<b>Shaft</b>	<b>Position</b>	<b>Materials</b>		
	<i>Model</i>	<i>Diameter</i>		<i>Stationary ring</i>	<i>Rotational ring</i>	<i>Elastomer</i>
	MG1-17	Ø 17 mm	Motor side	Silicon carbide	Graphite	NBR
	MG1-16 SIC	Ø 16 mm	Pump side	Silicon carbide	Silicon carbide	NBR
12	<b>BEARINGS</b>					
	<b>Pump</b>	<b>Model</b>				
	4BLOCK – 0.55÷0.75 kW	6203 ZZ - C3 / 6203 ZZ - C3				
	4BLOCK – 1.1 kW	3203B ZZ - C3 / 6203 ZZ - C3				
13	<b>CAPACITOR</b>					
	<b>Pump</b>	<b>Capacitance</b>				
	<i>Single-phase</i>	<i>(230 V or 240 V)</i>				
	4BLOCK – 0.55 kW	20 µF 500 VL				
	4BLOCK – 0.75 kW	31.5 µF 500 VL				
	4BLOCK – 1.1 kW	35 µF 500 VL				
14	<b>ELECTRIC MOTOR</b>					
	Submersible PEDROLLO motor, suitable for continuous duty (with dry, rewindable stator).					
	<b>4BLOCKm:</b> single-phase 230 V - 50 Hz Motor with built-in capacitor. Thermal overload protector built-in to the winding.					
	<b>4BLOCK:</b> three-phase 400 V - 50 Hz					
	– Insulation: F class.					
	– Protection: IP 68.					
15	<b>POWER CABLE</b>					
	➔ 20 metre long PBS-P cable for AD8 permanent immersion NF C 15-100, ACS guaranteed for contact with drinking water					



Patented

## DIMENSIONS AND WEIGHT

MODEL		PORT DN	DIMENSIONS mm			kg	
Single-phase	Three-phase		N° STAGES	Ø	h	1~	3~
4BLOCKm 2/10	4BLOCK 2/10	1 1/4"	10	100	720-695	12.5	11.9
4BLOCKm 2/13	4BLOCK 2/13		13		801-776	14.3	13.7
4BLOCKm 2/20	4BLOCK 2/20		20		1001-930	17.8	16.1
4BLOCKm 4/7	4BLOCK 4/7		7		689-664	12.1	11.4
4BLOCKm 4/9	4BLOCK 4/9		9		758-733	13.8	13.2
4BLOCKm 4/14	4BLOCK 4/14		14		940-868	17.0	15.1
4BLOCKm 6/4	4BLOCK 6/4		4		655-630	10.7	9.7
4BLOCKm 6/6	4BLOCK 6/6		6		740-715	13.3	11.3
4BLOCKm 6/9	4BLOCK 6/9		9		902-823	16.5	13.9



## ABSORPTION

MODEL	VOLTAGE (single-phase)	
	230 V	240 V
Single-phase	230 V	240 V
4BLOCKm - 0.55 kW	5.0 A	5.0 A
4BLOCKm - 0.75 kW	6.0 A	6.0 A
4BLOCKm - 1.1 kW	8.0 A	8.0 A

MODEL	VOLTAGE (three-phase)			
	230 V	400 V	240 V	415 V
Three-phase	230 V	400 V	240 V	415 V
4BLOCK - 0.55 kW	2.8 A	1.6 A	2.8 A	1.6 A
4BLOCK - 0.75 kW	3.5 A	2.0 A	3.5 A	2.0 A
4BLOCK - 1.1 kW	4.7 A	2.7 A	4.7 A	2.7 A

## PALLETIZATION

MODEL		GROUPAGE			CONTAINER				
Single-phase	Threw	n° pumps	H (mm)	kg		n° pumps	H (mm)	kg	
				1~	3~			1~	3~
4BLOCKm 2/10	4BLOCK 2/10	72	1484	914	877	108	2156	1362	1307
4BLOCKm 2/13	4BLOCK 2/13	52	1570	759	730	72	2120	1044	1004
4BLOCKm 2/20	4BLOCK 2/20	52	1570	944	852	72	2120	1300	1173
4BLOCKm 4/7	4BLOCK 4/7	72	1484	891	839	108	2156	1328	1250
4BLOCKm 4/9	4BLOCK 4/9	52	1570	737	701	72	2120	1013	964
4BLOCKm 4/14	4BLOCK 4/14	52	1570	902	803	72	2120	1242	1105
4BLOCKm 6/4	4BLOCK 6/4	72	1484	785	715	108	2156	1169	1065
4BLOCKm 6/6	4BLOCK 6/6	72	1484	977	831	108	2156	1458	1237
4BLOCKm 6/9	4BLOCK 6/9	52	1570	873	740	72	2120	1202	1018

