

# 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

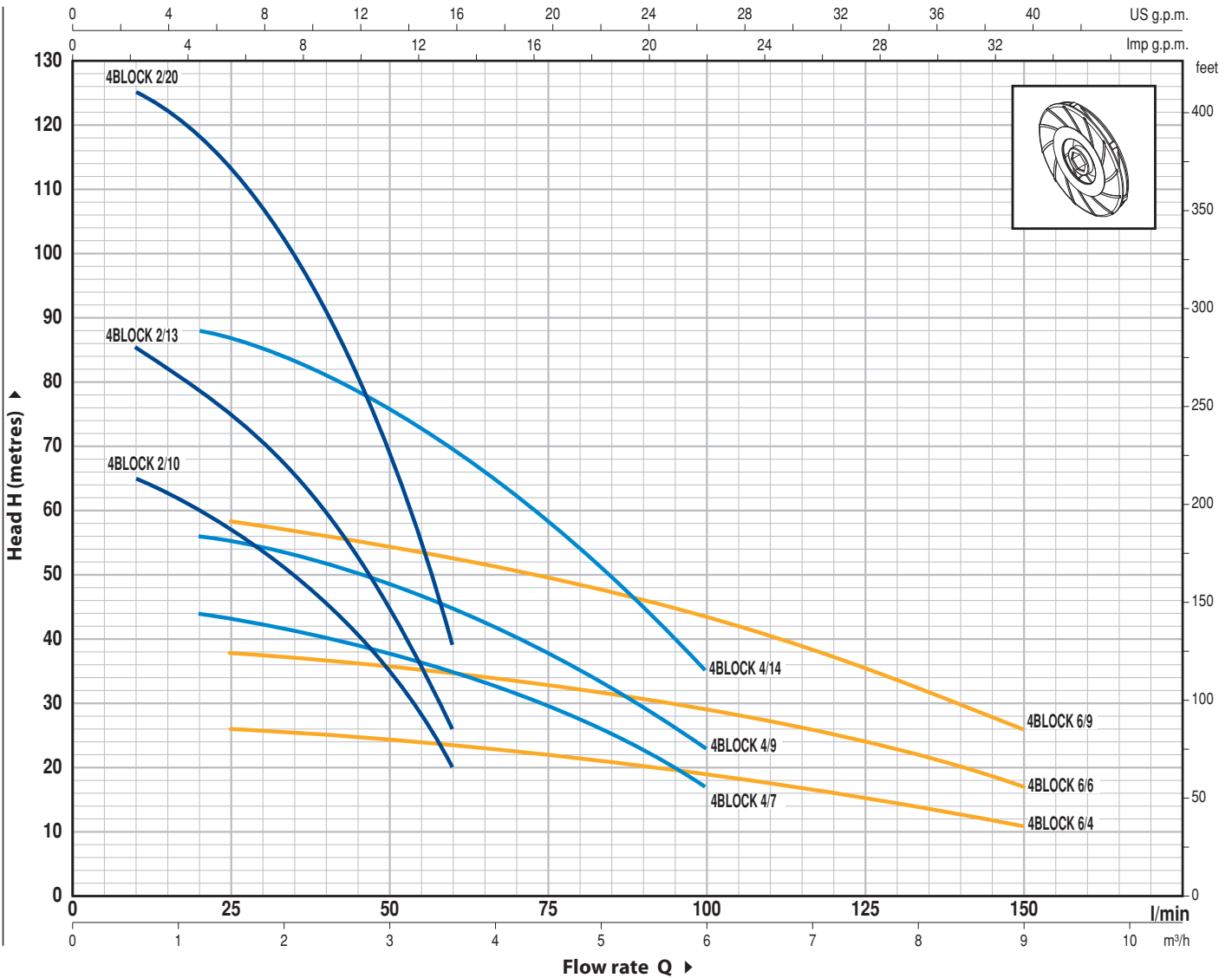
- **30 metre** long power cable
- Other voltages or 60 Hz frequency

### GUARANTEE

2 years 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	-	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	-	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	-	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. COMPONENT CONSTRUCTION CHARACTERISTICS

<b>1 DELIVERY BODY AND EXTERNAL SLEEVE</b>	Stainless steel AISI 304, complete with threaded delivery port in compliance with ISO 228/1.
<b>2 IMPELLERS</b>	Lexan 141-R
<b>3 DIFFUSERS</b>	Noryl GFN2V
<b>4 STAGE CASING</b>	Stainless steel AISI 304
<b>5 PUMP SHAFT</b>	Stainless steel AISI 304
<b>6 PUMP BEARINGS</b>	Special-technopolymer housing with stainless steel AISI 316, chrome oxide coated, sand resistant shaft bushing.
<b>7 DRIVE COUPLING</b>	Stainless steel AISI 316L
<b>8 CABLE COVER</b>	Stainless steel AISI 304
<b>9 MOTOR SHAFT</b>	Stainless steel EN 10088-3 1.4104 (AISI 431 for single-phase 1.1 kW)
<b>10 MOTOR SLEEVE</b>	Stainless steel AISI 304

### 11 TWO MECHANICAL SEALS SEPARATED BY AN OIL CHAMBER

Seal Model	Shaft Diameter	Position	Materials		
			Stationary ring	Rotational ring	Elastomer
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 BEARINGS

Pump	Model
4BLOCK – 0.55÷0.75 kW	6203 ZZ - C3 / 6203 ZZ - C3
4BLOCK – 1.1 kW	3203B ZZ - C3 / 6203 ZZ - C3

### 13 CAPACITOR

Pump Single-phase	Capacitance (230 V or 240 V)
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 ELECTRIC MOTOR

Submersible PEDROLLO motor, suitable for continuous duty (with dry, rewindable stator).

**4BLOCKm:** single-phase 230 V - 50 Hz  
Motor with built-in capacitor.  
Thermal overload protector built-in to the winding.

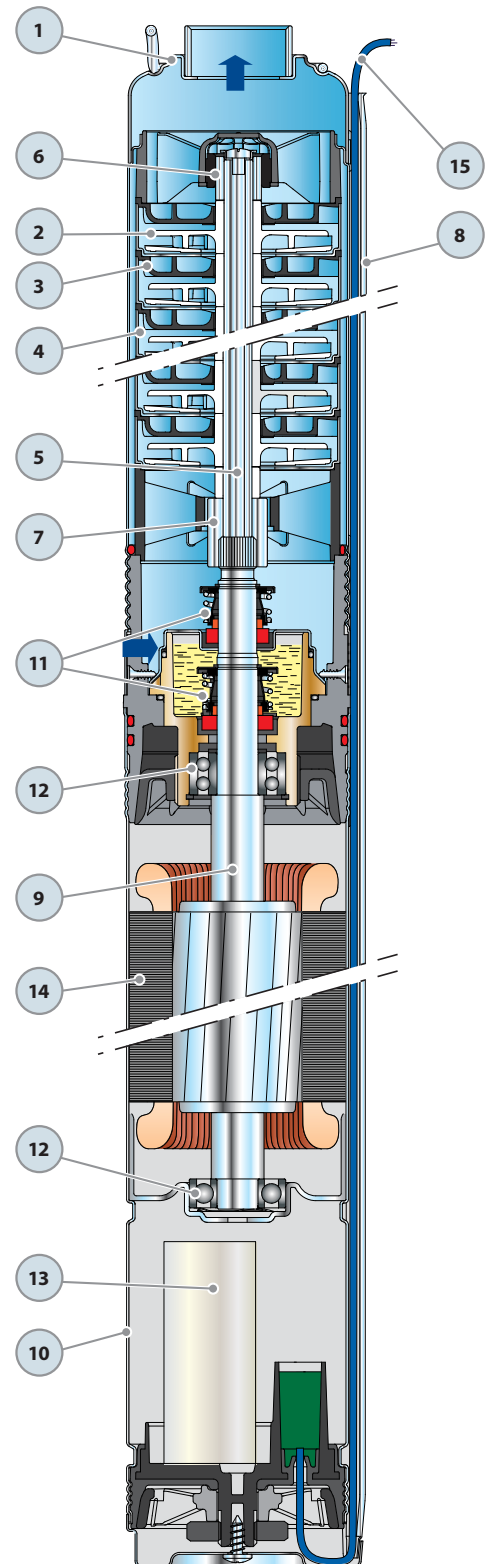
**4BLOCK:** three-phase 400 V - 50 Hz

– Insulation: F class.

– Protection: IP 68.

### 15 POWER CABLE

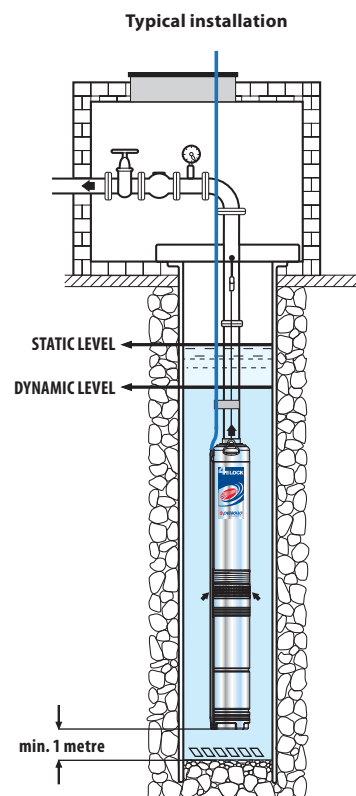
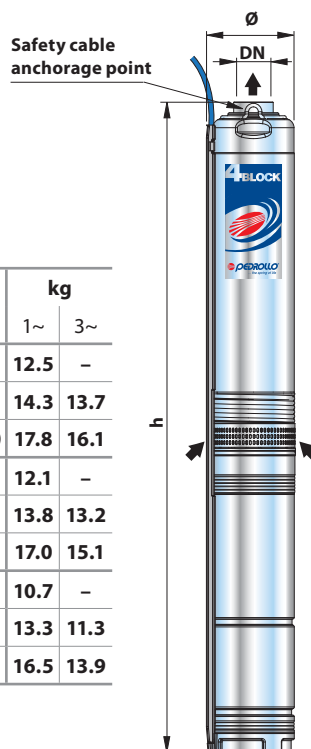
➔ 20 metre long PBS-P cable for AD8 permanent immersion  
NF C 15-100, ACS guaranteed for contact with drinking water



Patented

## DIMENSIONS AND WEIGHT

MODEL		PORT DN	DIMENSIONS mm			kg	
Single-phase	Three-phase		N° STAGES	Ø	h	1~	3~
4BLOCKm 2/10	-	1 1/4"	10	100	720	12.5	-
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	-		7		689	12.1	-
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	-		4		655	10.7	-
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 - 0.75 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	Three-phase	n° pumps	H (mm)	kg	
				1~	3~
4BLOCKm 2/10	-	60	1260	767	-
4BLOCKm 2/13	4BLOCK 2/13	40	1240	589	565
4BLOCKm 2/20	4BLOCK 2/20	40	1240	729	661
4BLOCKm 4/7	-	60	1260	743	-
4BLOCKm 4/9	4BLOCK 4/9	40	1240	569	545
4BLOCKm 4/14	4BLOCK 4/14	40	1240	697	621
4BLOCKm 6/4	-	60	1260	659	-
4BLOCKm 6/6	4BLOCK 6/6	60	1260	815	695
4BLOCKm 6/9	4BLOCK 6/9	40	1240	677	573

