

# 4BLOCK

## 4" monoblock submersible pumps



-  Clean water  
(Maximum sand content 150 g/m<sup>3</sup>)
-  Domestic use
-  Civil use
-  Agricultural use

### PERFORMANCE RANGE

- Flow rate up to **200 l/min** (12 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** with a sufficiently long power cable
- 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



EU REGULATION N. 547/2012

### CERTIFICATIONS

Company with management system certified DNV  
ISO 9001: QUALITY  
ISO 14001: ENVIRONMENT



### INSTALLATION AND USE

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

Because 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 n. EP2300717 - EP2419642

### OPTIONS AVAILABLE ON REQUEST

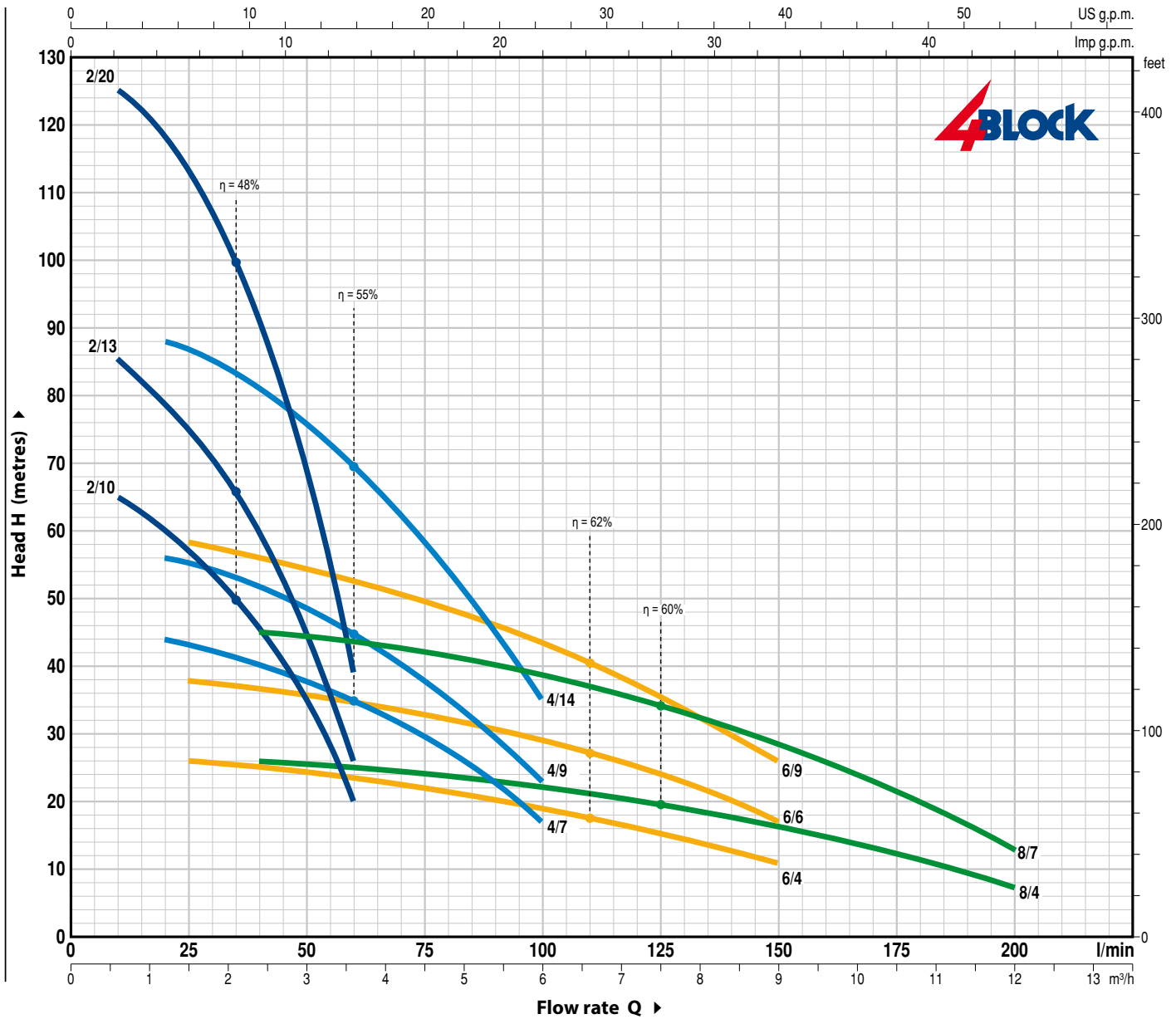
- **30 metres** long power cable
- Other voltages or 60 Hz frequency

► **Ready to install, stainless steel monoblock submersible pump.**

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

### CHARACTERISTIC CURVES AND PERFORMANCE DATA

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



MODEL	POWER (P <sub>2</sub> )		Q	Flow rate (l/min)												
	kW	HP		0	0.6	1.2	1.5	2.4	3.6	4.5	6.0	7.5	9.0	10.5	12.0	
Single-phase			l/min	0	10	20	25	40	60	75	100	125	150	175	200	
4BLOCKm 2/10	0.55	0.75	H metres	60	65	60	57	46	20							
4BLOCKm 2/13	0.75	1		86	85	79	75	60	26							
4BLOCKm 2/20	1.1	1.5		128	125	118	113	91	39							
4BLOCKm 4/7	0.55	0.75		46	-	44	43	40	35	29.5	17					
4BLOCKm 4/9	0.75	1		60	-	56	55	52	45	37.5	23					
4BLOCKm 4/14	1.1	1.5		92	-	88	87	81	70	58	35					
4BLOCKm 6/4	0.55	0.75		28	-	-	26	25	23.5	22	19	15	11			
4BLOCKm 6/6	0.75	1		40	-	-	38	37	35	33	29	24	17			
4BLOCKm 6/9	1.1	1.5		61	-	-	58	56	52.5	50	44	35	26			
4BLOCKm 8/4	0.75	1		26.5	-	-	-	26	25	24	22	19.5	16.2	12.5	7.5	
4BLOCKm 8/7	1.1	1.5		46	-	-	-	45	44	42	39	34	28.5	21.5	13	

Q = Flow rate H = Total manometric head

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

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## 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 FE1520PW
<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 per 1.1 kW single-phase)
<b>10 MOTOR SLEEVE</b>	Stainless steel AISI 304

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

Seal	Shaft	Position	Materials		
Model	Diameter		Stationary ring	Rotational ring	Elastomer
STA-17	Ø 17 mm	Motor side	Ceramic	Graphite	NBR
ST1-16	Ø 16 mm	Pump side	Silicon carbide	Graphite	NBR

### 12 BEARINGS

Pump	Model
4BLOCK – 0.55÷0.75 kW	6203 2RS - C3E / 6203 ZZ - C3E
4BLOCK – 1.1 kW	3203B 2RS - C3 / 6203 ZZ - C3E

### 13 CAPACITOR

Pump	Capacitance
Single-phase	(220-230 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

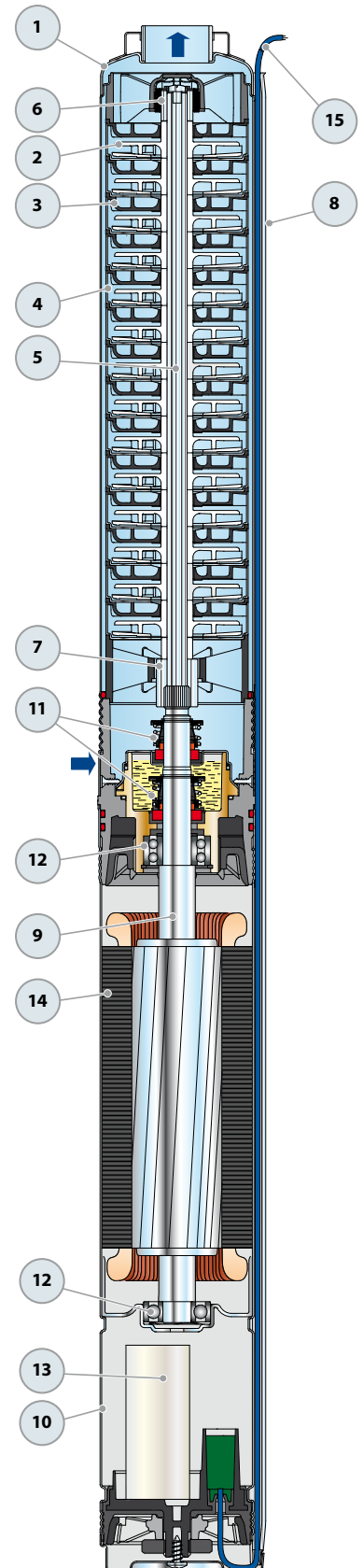
Submersible PEDROLLO motor, suitable for continuous duty (with dry, rewindable stator).

**4BLOCKm:** single-phase 220-230 V - 50 Hz  
Motor with built-in capacitor.  
Thermal overload protector incorporated into the winding.

- Insulation: class F
- Protection: IP X8

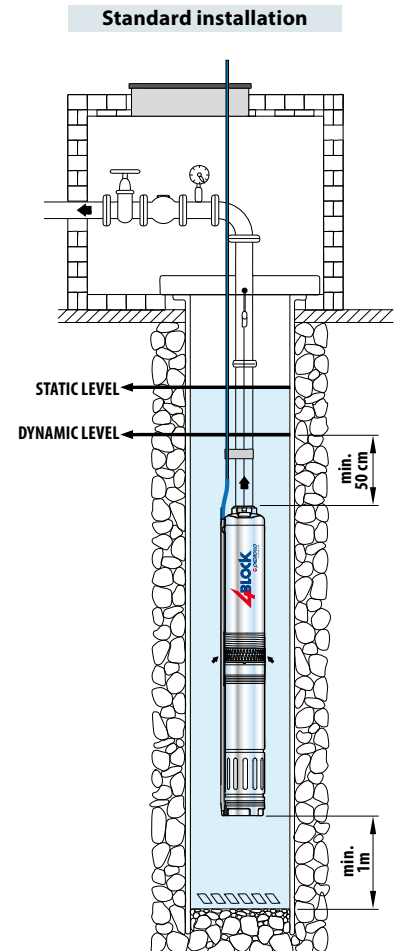
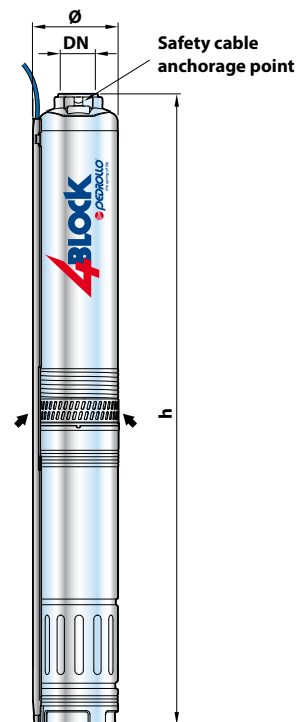
### 15 POWER CABLE

⇒ **PBS-P type**  
**approved for use in drinking water by "ACS"**  
**in compliance with BS 6920, approval n. 04 ACCLI 201**  
**Standard length 20 metres**



## DIMENSIONS AND WEIGHT

MODEL	PORT DN	DIMENSIONS mm			kg
		N. STAGES	Ø	h	
<b>Single-phase</b>					1~
<b>4BLOCKm 2/10</b>	1¼"	10	100	705	<b>12.5</b>
<b>4BLOCKm 2/13</b>		13		786	<b>14.3</b>
<b>4BLOCKm 2/20</b>		20		986	<b>17.8</b>
<b>4BLOCKm 4/7</b>		7		674	<b>12.1</b>
<b>4BLOCKm 4/9</b>		9		743	<b>13.8</b>
<b>4BLOCKm 4/14</b>		14		925	<b>17.0</b>
<b>4BLOCKm 6/4</b>		4		641	<b>10.7</b>
<b>4BLOCKm 6/6</b>		6		725	<b>13.3</b>
<b>4BLOCKm 6/9</b>		9		887	<b>16.5</b>
<b>4BLOCKm 8/4</b>		4		665	<b>13.8</b>
<b>4BLOCKm 8/7</b>		7		827	<b>17.0</b>



## ABSORPTION

MODEL	VOLTAGE	
	230 V	240 V
<b>Single-phase</b>		
<b>4BLOCKm – 0.55 kW</b>	<b>5.0 A</b>	<b>4.8 A</b>
<b>4BLOCKm – 0.75 kW</b>	<b>6.0 A</b>	<b>5.8 A</b>
<b>4BLOCKm – 1.1 kW</b>	<b>8.0 A</b>	<b>7.8 A</b>

## PALLETIZATION

MODEL	GROUPAGE/CONTAINER
	n. pumps
<b>4BLOCKm 2/10</b>	<b>55</b>
<b>4BLOCKm 2/13</b>	<b>33</b>
<b>4BLOCKm 2/20</b>	<b>33</b>
<b>4BLOCKm 4/7</b>	<b>55</b>
<b>4BLOCKm 4/9</b>	<b>55</b>
<b>4BLOCKm 4/14</b>	<b>33</b>
<b>4BLOCKm 6/4</b>	<b>55</b>
<b>4BLOCKm 6/6</b>	<b>55</b>
<b>4BLOCKm 6/9</b>	<b>33</b>
<b>4BLOCKm 8/4</b>	<b>55</b>
<b>4BLOCKm 8/7</b>	<b>33</b>