



-  Clean water  
(Maximum sand content 150 g/m³)
-  Domestic use
-  Civil use
-  Agricultural use

### PERFORMANCE RANGE

- Flow rate up to **150 l/min** (9 m³/h)
- Head up to **128 m**

### APPLICATION LIMITS

- Maximum liquid temperature **+35 °C**
- Maximum sand content **150 g/m³**
- 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 AND SAFETY



### INSTALLATION AND USE

Suitable for pumping clean water from boreholes that contain sand (up to 150 g/m³).

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

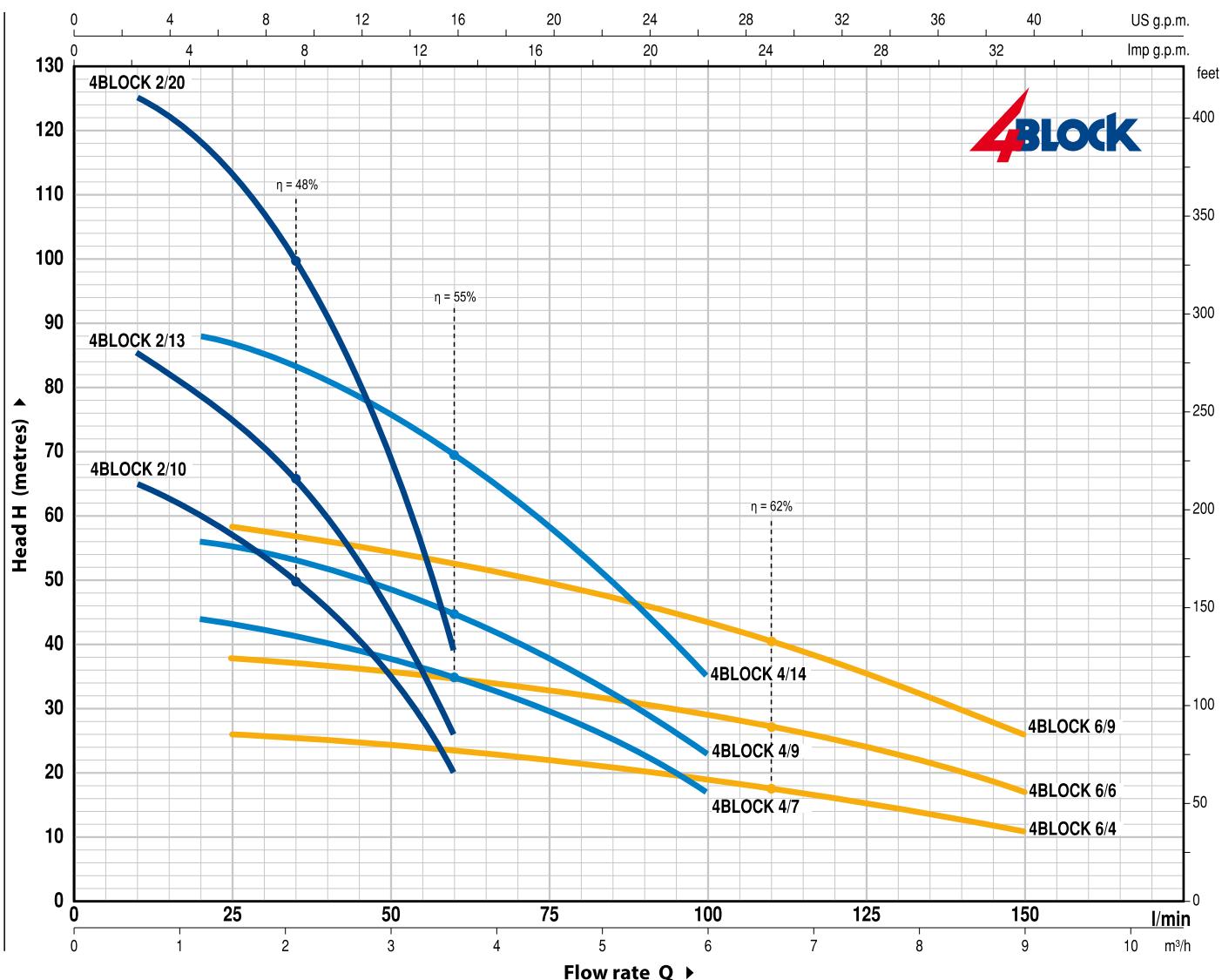
- Patent Pending n. PCT/IB2009/051491
- Patent Pending n. PCT/IB2010/054499
- Patent Pending n. PCT/EP2009/059855

### 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 rpm**


MODEL	POWER (P2)		$Q$ $\text{m}^3/\text{h}$	0	0.6	1.2	1.8	2.4	3.0	3.6
Single-phase	kW	HP		l/min	0	10	20	30	40	50
4BLOCKm 2/10	0.55	0.75	$H$ metres	66	65	60	54	46	35	20
4BLOCKm 2/13	0.75	1		86	85	79	71	60	45	26
4BLOCKm 2/20	1.1	1.5		128	125	118	108	91	70	39

MODEL	POWER (P2)		$Q$ $\text{m}^3/\text{h}$	0	1.2	1.8	2.4	3.0	3.6	4.2	4.8	5.4	6.0
Single-phase	kW	HP		l/min	0	20	30	40	50	60	70	80	90
4BLOCKm 4/7	0.55	0.75	$H$ metres	46	44	42	40	38	35	31.5	27	23	17
4BLOCKm 4/9	0.75	1		60	56	54.5	52	49	45	40.5	35	29	23
4BLOCKm 4/14	1.1	1.5		92	88	85	81	76	70	63	54.5	45	35

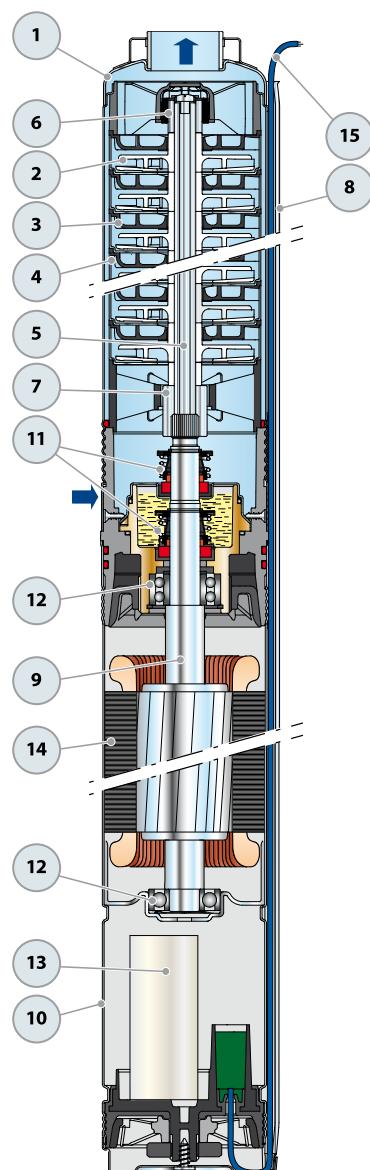
MODEL	POWER (P2)		$Q$ $\text{m}^3/\text{h}$	0	1.5	3.0	4.5	6.0	7.5	9.0
Single-phase	kW	HP		l/min	0	25	50	75	100	125
4BLOCKm 6/4	0.55	0.75	$H$ metres	27	26	24	22	19	15	11
4BLOCKm 6/6	0.75	1		40	38	36	33	29	24	17
4BLOCKm 6/9	1.1	1.5		61	58	54	50	44	35	26

Q = Flow rate H = Total manometric head

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

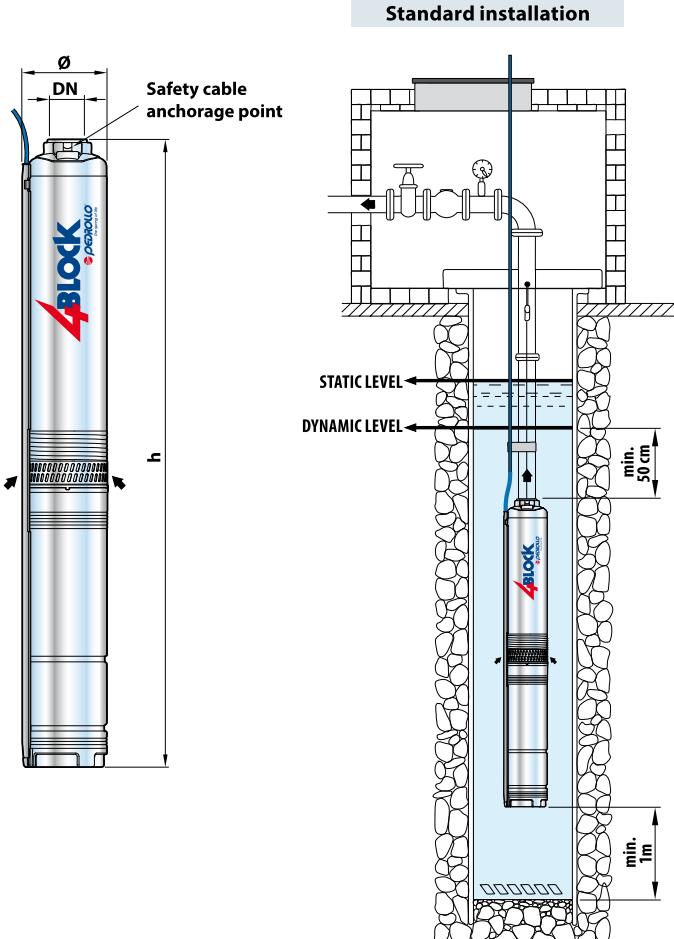
# 4BLOCK

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		
<b>11 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>
<b>STA-17</b>	<b>Ø 17 mm</b>	Motor side	Silicon carbide   Graphite   NBR
<b>ST1-16 SIC</b>	<b>Ø 16 mm</b>	Pump side	Silicon carbide   Silicon carbide   NBR
<b>12 BEARINGS</b>			
<b>Pump</b>	<b>Model</b>		
<b>4BLOCK - 0.55÷0.75 kW</b>	<b>6203 2RS - C3E / 6203 ZZ - C3E</b>		
<b>4BLOCK - 1.1 kW</b>	<b>3203B 2RS - C3 / 6203 ZZ - C3E</b>		
<b>13 CAPACITOR</b>			
<b>Pump</b>	<b>Capacitance</b>		
<i>Single-phase</i>	(230 V or 240 V)		
<b>4BLOCK - 0.55 kW</b>	<b>20 µF - 500 VL</b>		
<b>4BLOCK - 0.75 kW</b>	<b>31.5 µF - 500 VL</b>		
<b>4BLOCK - 1.1 kW</b>	<b>35 µF - 500 VL</b>		
<b>14 ELECTRIC MOTOR</b>			
Submersible PEDROLLO motor, suitable for continuous duty (with dry, rewirable stator).			
<b>4BLOCKm:</b> single-phase 230 V - 50 Hz			
Motor with built-in capacitor.			
Thermal overload protector incorporated into the winding.			
– Insulation: class F			
– Protection: IP X8			
<b>15 POWER CABLE</b>			
→ 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	DIMENSIONS mm			kg
Single-phase	DN	N. STAGES	Ø	h	1~
4BLOCKm 2/10	1 1/4"	10	100	705	12.5
4BLOCKm 2/13		13		786	14.3
4BLOCKm 2/20		20		986	17.8
4BLOCKm 4/7		7		674	12.1
4BLOCKm 4/9		9		743	13.8
4BLOCKm 4/14		14		925	17.0
4BLOCKm 6/4		4		641	10.7
4BLOCKm 6/6		6		725	13.3
4BLOCKm 6/9		9		887	16.5



## ABSORPTION

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

## PALLETIZATION

MODEL	GROUPAGE/CONTAINER
Single-phase	n. pumps
4BLOCKm 2/10	55
4BLOCKm 2/13	33
4BLOCKm 2/20	33
4BLOCKm 4/7	55
4BLOCKm 4/9	55
4BLOCKm 4/14	33
4BLOCKm 6/4	55
4BLOCKm 6/6	55
4BLOCKm 6/9	33