

# 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** 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



### CERTIFICATIONS

COMPANY WITH MANAGEMENT SYSTEM  
CERTIFIED BY DNV  
ISO 9001: QUALITY  
ISO 14001: ENVIRONMENT AND SAFETY



AN30



ПРОМТЕКТ-168

### 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 n° PCT/IB2009/051491
- Patent Pending n° PCT/EP2009/059855, BO2009A000650

### OPTIONALS AVAILABLE ON REQUEST

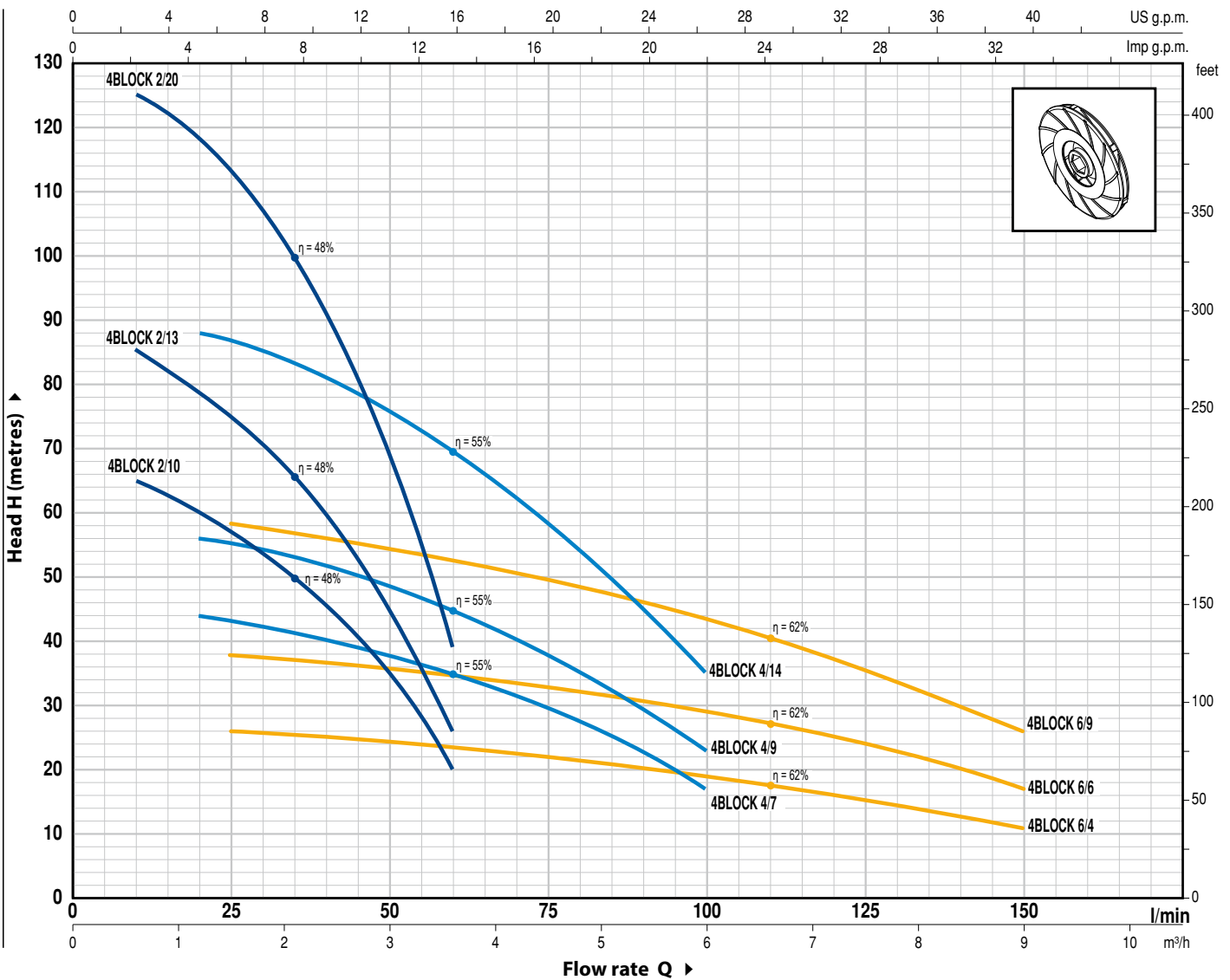
- **30 metre** long power cable
- Other voltages or 60 Hz frequency

### GUARANTEE

2 years subject to terms and conditions

**CHARACTERISTIC CURVES AND PERFORMANCE DATA**

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



MODEL	POWER		Q	Flow rate (l/min)						
	kW	HP		0	0.6	1.2	1.8	2.4	3.0	3.6
Single-phase				0	0.6	1.2	1.8	2.4	3.0	3.6
4BLOCKm 2/10	0.55	0.75	H metres	66	65	60	54	46	35	20
4BLOCKm 2/13	0.75	1	H metres	86	85	79	71	60	45	26
4BLOCKm 2/20	1.1	1.5	H metres	128	125	118	108	91	70	39

MODEL	POWER		Q	Flow rate (l/min)										
	kW	HP		0	1.2	1.8	2.4	3.0	3.6	4.2	4.8	5.4	6.0	
Single-phase				0	1.2	1.8	2.4	3.0	3.6	4.2	4.8	5.4	6.0	
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	H metres	60	56	54.5	52	49	45	40.5	35	29	23	
4BLOCKm 4/14	1.1	1.5	H metres	92	88	85	81	76	70	63	54.5	45	35	

MODEL	POWER		Q	Flow rate (l/min)						
	kW	HP		0	1.5	3.0	4.5	6.0	7.5	9.0
Single-phase				0	1.5	3.0	4.5	6.0	7.5	9.0
4BLOCKm 6/4	0.55	0.75	H metres	27	26	24	22	19	15	11
4BLOCKm 6/6	0.75	1	H metres	40	38	36	33	29	24	17
4BLOCKm 6/9	1.1	1.5	H metres	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 3.

## 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
STA-17	Ø 17 mm	Motor side	Silicon carbide	Graphite	NBR
ST1-16 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	Capacitance
Single-phase	(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).

Single-phase 230 V - 50 Hz

Motor with built-in capacitor.

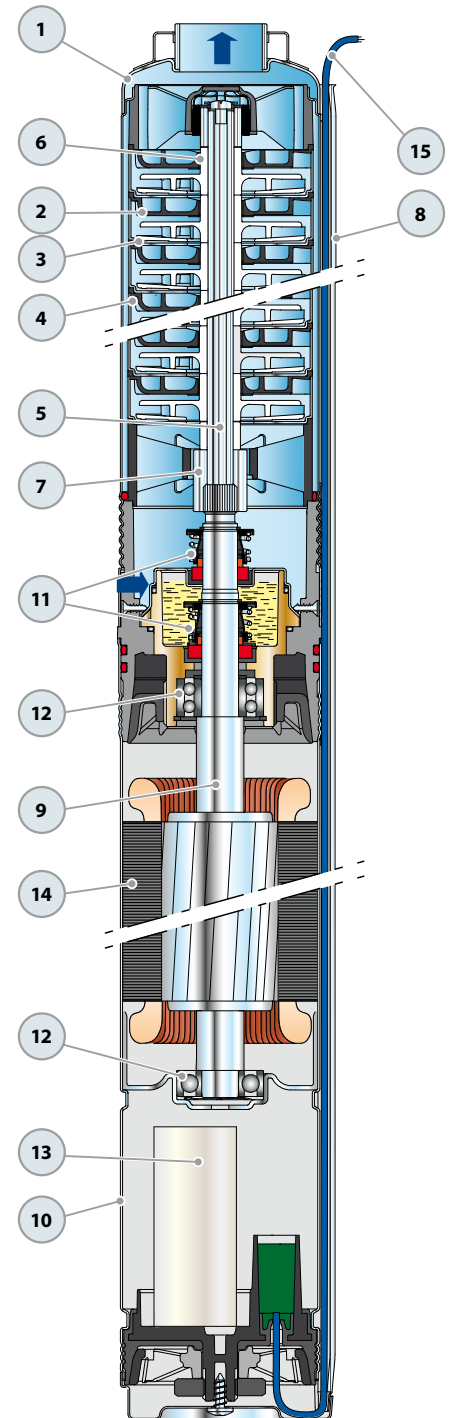
Thermal overload protector built-in to the winding.

– Insulation: F class.

– Protection: IP X8.

### 15 POWER CABLE

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

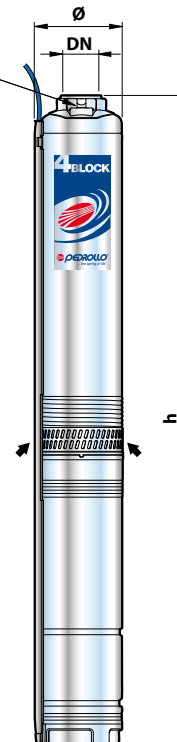


Patented

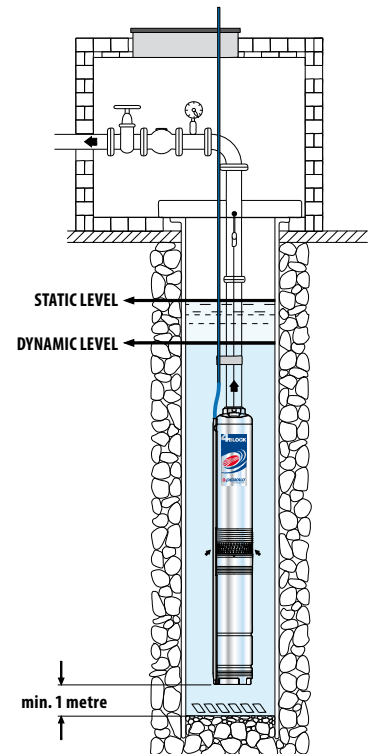
## DIMENSIONS AND WEIGHT

MODEL	PORT DN	DIMENSIONS mm			kg 1~
		N° STAGES	Ø	h	
Single-phase	1 1/4"		100		
4BLOCKm 2/10		10		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

Safety cable anchorage point



Typical installation



## ABSORPTION

MODEL	VOLTAGE (single-phase)	
	Single-phase	230 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

## PALLETIZATION

MODEL	GROUPAGE / CONTAINER		
	n° pumps	H (mm)	kg 1~
4BLOCKm 2/10	60	1260	767
4BLOCKm 2/13	40	1240	589
4BLOCKm 2/20	40	1240	729
4BLOCKm 4/7	60	1260	743
4BLOCKm 4/9	40	1240	569
4BLOCKm 4/14	40	1240	697
4BLOCKm 6/4	60	1260	659
4BLOCKm 6/6	60	1260	815
4BLOCKm 6/9	40	1240	677

