**BC-ST** 

# **DOUBLE-CHANNEL**

# Submersible pumps in stainless steel





Filthy water



Domestic use



Civil use



Industrial use

### **PERFORMANCE RANGE**

- Flow rate up to **750 l/min**  $(45 \text{ m}^3/\text{h})$
- Head up to 15 m

## **APPLICATION LIMITS**

- 5 m maximum immersion depth
- Maximum liquid temperature +40 °C
- Passage of suspended solids up to Ø 50 mm
- Minimum immersion depth for continuous service: 300 mm

### **CONSTRUCTION AND SAFETY STANDARDS**

- 10 m long power cable
- Float switch for single-phase versions

CE EN 60335-1 EN 60034-1 IEC 60335-1 IEC 60034-1 **CEI 61-150 CEI 2-3** 

#### **CERTIFICATIONS**

Company with management system certified DNV

ISO 9001: QUALITY ISO 14001: ENVIRONMENT





## **INSTALLATION AND USE**

BC-ST submersible pumps in stainless steel are recommended for draining dirty and filthy water in domestic, civil and industrial applications. They come equipped with a DOUBLE-CHANNEL impeller and are capable of pumping liquids containing short fibred suspended solids up to Ø 50 mm. They are ideal for pumping sewage, waste water, surface water and water mixed with mud in locations such as blocks of flats and detached houses.

These pumps distinguish themselves for their reliability, which can be best appreciated under automatic operating conditions in fixed installations.

#### **PATENTS - TRADE MARKS - MODELS**

• Patent Pending n. BO2015A000116

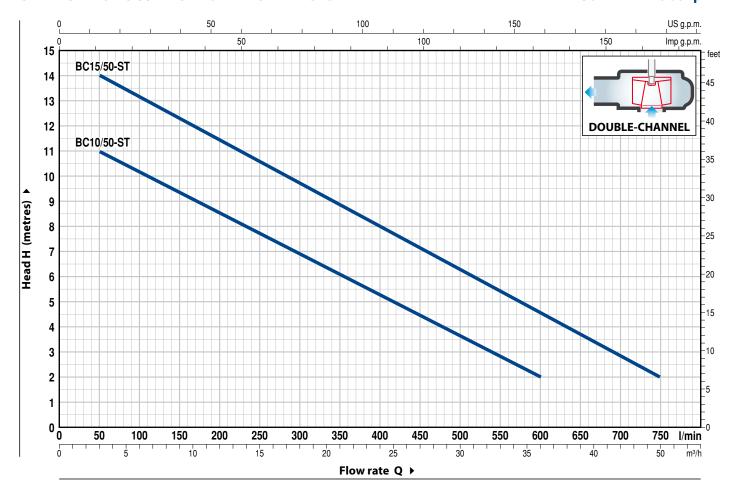
#### **OPTIONS AVAILABLE ON REQUEST**

- Single-phase pumps without float switch
- AISI 304 stainless steel pump shaft
- Other voltages or 60 Hz frequency



## **CHARACTERISTIC CURVES AND PERFORMANCE DATA**

# 50 Hz n= 2900 rpm



М	DDEL	POWE	R (P2)	<b>o</b> m³/h	0	3	6	12	18	24	30	36	42	45
Single-phase	Three-phase	kW	HP	l/min	0	50	100	200	300	400	500	600	700	750
BCm 10/50-ST	BC 10/50-ST	0.75	1		12	11	10	8.5	7	5	3.6	2		
BCm 15/50-ST	BC 15/50-ST	1.1	1.5	<b>H</b> metres	15	14	13	11.5	9.7	8	6.3	4.6	2.9	2

 $\mathbf{Q} = \text{Flow rate} \quad \mathbf{H} = \text{Total manometric head}$ 

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



#### POS. COMPONENT CONSTRUCTION CHARACTERISTICS

1 PUMP BODY Stainless steel AISI 304 with threaded port in compliance with ISO 228/1

2 BASE Stainless steel AISI 304

3 IMPELLER Precision cast stainless steel AISI 304 DOUBLE-CHANNEL type

4 MOTOR CASING Stainless steel AISI 304

5 MOTOR CASING PLATE Stainless steel AISI 304

6 MOTOR SHAFT Stainless steel EN 10088-3 - 1.4104

#### 7 SHAFT WITH DOUBLE MECHANICAL SEAL SEPARATED BY AN OIL CHAMBER

Seal	Shaft	Position		Materials		
Model	Diameter		Stationary ring	Rotational ring	Elastomer	
MG1-14D SIC	<b>Ø 14</b> mm	Motor side	Silicon carbide	Graphite	NBR	
	9 14 111111	Pump side	Silicon carbide	Silicon carbide	NBR	

## B BEARINGS 6203 ZZ / 6203 ZZ

#### 9 CAPACITOR

Pump	Capacitance	
Single-phase	(230 V or 240 V)	(110 V)
BCm 10/50-ST	<b>20</b> μF 450 VL	<b>30</b> μF - 250 VL
BCm 15/50-ST	<b>25</b> μF 450 VL	-

## 10 ELECTRIC MOTOR

BCm: single-phase 230 V - 50 Hz

with thermal overload protector incorporated into the winding

BC: three-phase 400 V - 50 Hz

- Insulation: class F
- Protection: IP X8

#### 11 POWER CABLE

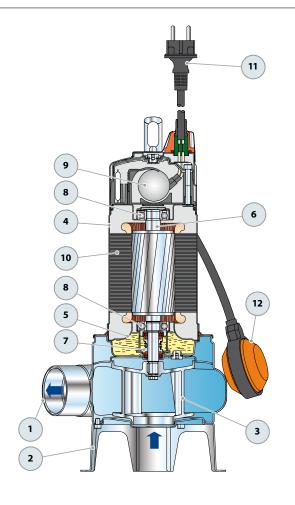
"H07 RN-F" type

(with Schuko plug for single-phase versions only)

**Standard length 10 metres** 

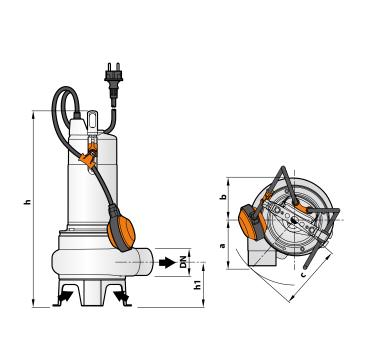
#### 12 FLOAT SWITCH

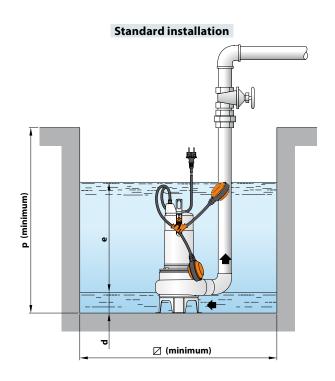
(only for single-phase versions)





## **DIMENSIONS AND WEIGHT**





MODEL PORT		Passage	DIMENSIONS mm							kg				
Single-phase	Three-phase	DN	of solids	a	b	с	h	h1	d	e	р	Ø	1~	3~
BCm 10/50-ST	BC 10/50-ST		Ø 50	100	0.5	1.45	430		60	variable	500	500	11.9	10.8
BCm 15/50-ST	BC 15/50-ST	2″	Ø 50 mm	102	95	145	445	102	60				13.5	12.5

# **ABSORPTION**

MODEL		VOLTAGE	
Single-phase	230 V	240 V	110 V
BCm 10/50-ST	<b>5.0</b> A	<b>4.8</b> A	<b>10.0</b> A
BCm 15/50-ST	<b>8.2</b> A	<b>7.9</b> A	-

MODEL	VOLTAGE						
Three-phase	230 V	400 V	240 V	415 V			
BC 10/50-ST	<b>3.7</b> A	<b>2.1</b> A	<b>3.5</b> A	<b>2.0</b> A			
BC 15/50-ST	<b>5.6</b> A	<b>3.2</b> A	<b>5.4</b> A	<b>3.1</b> A			

## **PALLETIZATION**

МС	DDEL	GROUPAGE	CONTAINER		
Single-phase	Three-phase	n. pumps	n. pumps		
BCm 10/50-ST	BC 10/50-ST	54	72		
BCm 15/50-ST	BC 15/50-ST	54	72		