# **Submersible pumps**





Sewage 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 (with a sufficiently long power cable)
- 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

- Power cable length:
  - 5 m for BC10/50
  - 10 m for BC15/50
- Float switch for single-phase versions

 $C \in$ EN 60034-1 EN 60335-1 IEC 60335-1 IEC 60034-1 **CEI 2-3** CFI 61-150

# **CERTIFICATIONS**

Company with management system certified DNV ISO 9001: QUALITY





### **INSTALLATION AND USE**

BC submersible pumps are suitable for draining dirty and sewage water in domestic and civil applications. They come equipped with a DOUBLE-CHANNEL stainless steel impeller and are capable of pumping liquids containing short fibred suspended solids up to

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 n. EP2313658
- Patent n. IT0001428923

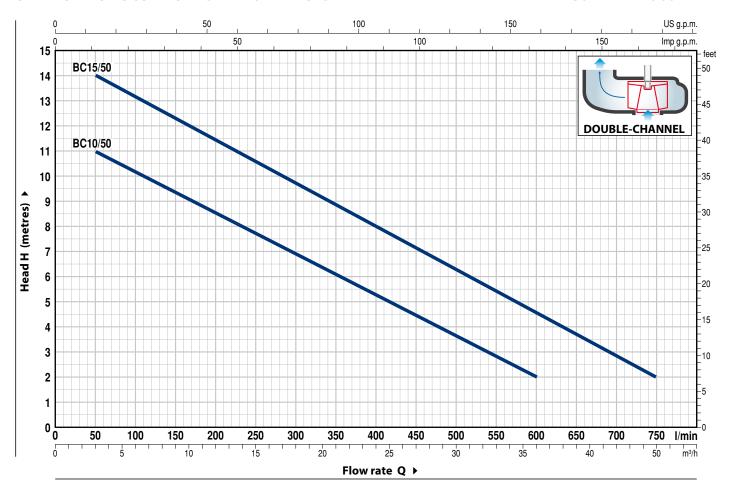
# **OPTIONS AVAILABLE ON REQUEST**

- BC10/50 pumps with a 10 m power cable.
  - N.B.: Standard EN 60335-2-41 states that the power cable must be 10 m long for outdoor applications
- Single-phase pumps without float switch
- Other voltages or 60 Hz frequency



### **CHARACTERISTIC CURVES AND PERFORMANCE DATA**

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



MODEL POWER (P2)		m³/h	0	3	6	12	18	24	30	36	42	45		
Single-phase	Three-phase	kW	HP	Q //min	0	50	100	200	300	400	500	600	700	750
BCm 10/50	BC 10/50	0.75	1	<b>H</b> metres	12	11	10	8.5	7	5	3.5	2		
BCm 15/50	BC 15/50	1.1	1.5		15	14	13	11.5	9.7	8	6.3	4.5	3	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**

**PUMP BODY** Cast iron with an Epoxy Electro Coating treatment, with threaded port in compliance with ISO 228/1 1

Stainless steel AISI 304 **BASE** 2

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

Stainless steel AISI 304 **MOTOR CASING** 

5 **MOTOR CASING PLATE** Stainless steel AISI 304

**MOTOR SHAFT** Stainless steel AISI 431 6

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

Seal	<b>Shaft</b> Position					
Model	Diameter	Diameter		Rotational ring	Elastomer	
MG1-14D SIC	<b>Ø 14</b> mm	Motor side	Silicon carbide	Graphite	NBR	
MIG 1-14D SIC	<b>9 14</b> mm	Pump side	Silicon carbide Silicon carbi	Silicon carbide	NBR	

8 **BEARINGS** 6203 ZZ / 6203 ZZ

### **CAPACITOR**

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

#### **ELECTRIC MOTOR** 10

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

#### **POWER CABLE** 11

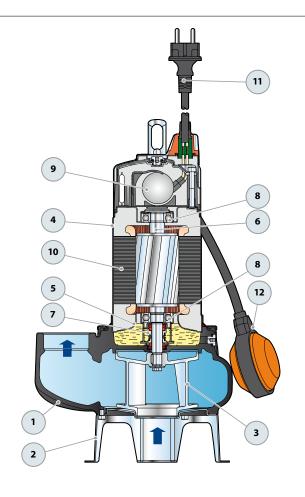
"H07 RN-F" type

(with Schuko plug for single-phase versions only)

Standard length 5 metres (10 metres for BC15/50)

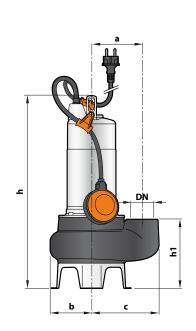
#### 12 **FLOAT SWITCH**

(only for single-phase versions)

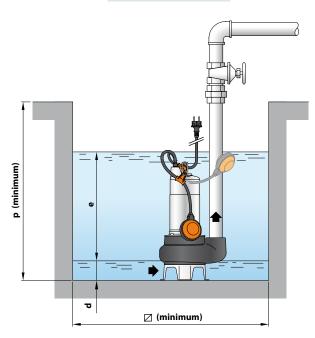




# **DIMENSIONS AND WEIGHT**



# Standard installation



MODEL		PORT	Passage	DIMENSIONS mm						kg				
Single-phase	Three-phase	DN	of solids	a	b	С	h	h1	d	е	р	Ø	1~	3~
BCm 10/50	BC 10/50	2"	Ø 50 mm	115	95	155	432	164	60	variable	500	500	14.8	13.8
BCm 15/50	BC 15/50		שט אט mm			155	447				500		16.4	15.3

# **ABSORPTION**

MODEL	VOLTAGE						
Single-phase	230 V	240 V	110 V				
BCm 10/50	<b>5.0</b> A	<b>5.0</b> A	<b>11.8</b> A				
BCm 15/50	<b>8.2</b> A	<b>8.0</b> A	-				

MODEL	VOLTAGE							
Three-phase	230 V	400 V	240 V	415 V				
BC 10/50	<b>3.6</b> A	<b>2.1</b> A	<b>3.5</b> A	<b>2.0</b> A				
BC 15/50	<b>5.5</b> A	<b>3.2</b> A	<b>5.4</b> A	<b>3.1</b> A				