

The Ultimate Pump for Demanding Conditions and Maximum Performance



- ✓ **SEWAGE**
- ✓ **DOMESTIC USE**
- ✓ **CIVIL USE**
- ✓ **INDUSTRIAL USE**

PERFORMANCE RANGE

- Flow rate up to **850 l/min** (51 m³/h)
- Head up to **17 m**

INSTALLATION AND USE

BC submersible pumps are designed to drain **dirty and sewage water** in **domestic, civil, and industrial settings**. Featuring a **TWO-CHANNEL** stainless steel impeller, they can efficiently pump liquids containing suspended solids up to **50 mm in diameter** with short fibers and handle wastewater, sewage, surface water, and sludge-mixed water in residential properties.

- The **TWO-CHANNEL** impeller provides excellent performance and high energy efficiency, generating increased pressure for pumping solids up to **50 mm in diameter**, making it the best choice for wastewater drainage.

INCLUDES

- Power cable length:
 - **5 m** for BC 10
 - **10 m** for BC 15 and BC 20
- Float switch (exclusive to single-phase models)

APPLICATION LIMITS

- Depth below water level up to **5 m** (with an appropriately sized power cable)
- Liquid temperature up to **+40 °C**
- Capable of processing suspended solids up to **Ø 50 mm**
- **Minimum immersion for continuous service:**
 - **290 mm** for BC 10/50
 - **330 mm** for BC 15/50
 - **360 mm** for BC 20/50

AVAILABLE UPON REQUEST

- Pumps with **10 m** power cable for BC 10
- Different voltage requirements 60 Hz frequency

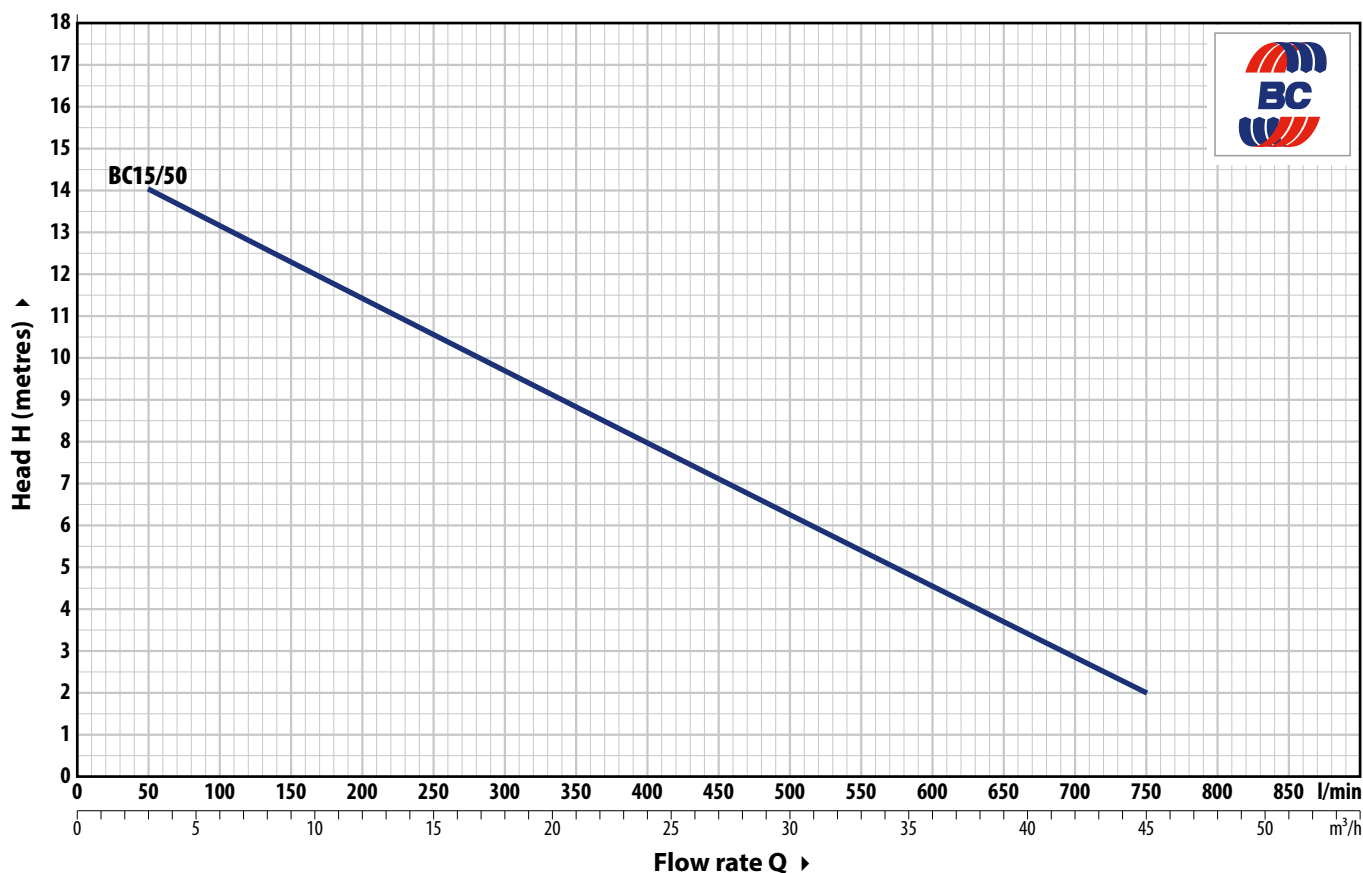
PATENTS - TRADE MARKS - MODELS

- Patent No. EP2313658
- Patent No. IT0001428923



CURVES AND PERFORMANCE DATA

50 Hz



TYPE		POWER (P ₂)		Q	0	3	6	12	18	24	30	36	42	45	51
Single-phase	Three-phase	kW	HP		0	50	100	200	300	400	500	600	700	750	850
BCm 15/50	BC 15/50	1.1	1.5	H metres	15	14	13	11.5	9.7	8	6.3	4.6	3	2	

Q = Flow rate H = Total manometric head

Performance curves comply with EN ISO 9906 Grade 3B tolerance limits.

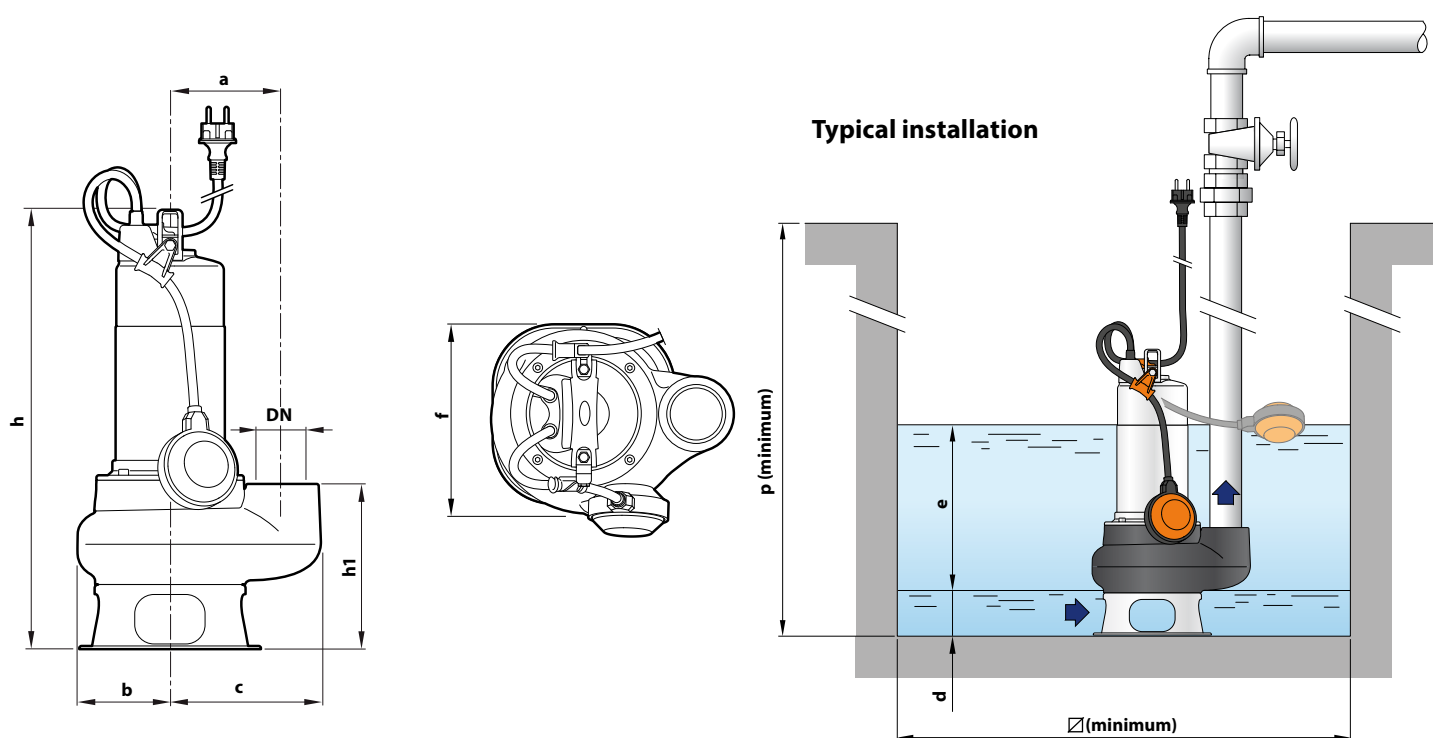
ABSORPTION

TYPE	VOLTAGE
Single-phase	230 V
BCm 10/50	5.5 A
BCm 15/50	8.0 A
BCm 20/50	10.0 A

TYPE	VOLTAGE
Three-phase	400 V
BC 10/50	2.2 A
BC 15/50	3.1 A
BC 20/50	3.9 A



DIMENSIONS AND WEIGHT



TYPE		PORT DN	Passage of solid bodies	DIMENSIONS mm										kg	
Single-phase	Three-phase			a	b	c	f	h	h1	d	e	p	Ø	1~	3~
BCm 10/50	BC 10/50	2"	Ø 50 mm	115	95	155	200	451	169	60	adjustable	500	500	16.2	15.0
BCm 15/50	BC 15/50							484						18.8	17.2
BCm 20/50	BC 20/50							514						21.0	18.8

PALLET CAPACITY

TYPE		NO. OF PUMPS
Single-phase	Three-phase	
BCm 10/50	BC 10/50	45
BCm 15/50	BC 15/50	30
BCm 20/50	BC 20/50	30



MATERIALS AND COMPONENTS

1	Pump body	Cast iron with cataphoresis treatment for greater corrosion resistance with ISO 228/1 threaded port		
2	Base	Stainless steel AISI 304		
3	Impeller	TWO-CHANNEL type in micro-cast AISI 304 stainless steel.		
4	Motor sleeve	Stainless steel AISI 304		
5	Motor cover	AISI 304 stainless steel for BC 10/50 Cast iron with cataphoresis treatment for BC 15/50, BC 20/50		
6	Motor shaft	Stainless steel AISI 431		
7	Double mechanical seal in oil chamber			
	Seal	Shaft	Location	Materials
	MG1-14D SIC	Ø 14 mm	Motor side	Silicon carbide / Graphite / NBR
			Pump side	Silicon carbide/Silicon carbide/NBR
8	Capacitor	(exclusive to single-phase models)		
9	Electric motor			
	BCm: single-phase 230 V - 50 Hz with winding integrated thermal motor protection			
	BC: three-phase 400 V - 50 Hz			
	– Insulation: class F			
	– Protection rating: IP X8			
10	Power cord			
	Power cable encapsulated with epoxy resin both in the grommet area and where the conductors exit the sheath, for absolute insulation against moisture and water.			
	Type 'H07 RN-F			
	(Schuko plug exclusive to single-phase models)			
	※ Standard length 5 metres (10 metres for BC 15 and BC 20)			
11	Float switch (exclusive to single-phase models)			
12	Tilting device for the float cable (exclusive to single-phase models)			
	Patent No. IT0001428923			
13	Power cable strain relief			
	Patent No. EP2313658			

A detailed cross-sectional diagram of a submersible pump assembly. The diagram shows the internal components, including the motor, shaft, impeller, and various seals. Numbered callouts (1-13) point to specific parts: 1. Pump body, 2. Base, 3. Impeller, 4. Motor sleeve, 5. Motor cover, 6. Motor shaft, 7. Double mechanical seal in oil chamber, 8. Capacitor, 9. Electric motor, 10. Power cord, 11. Float switch, 12. Tilting device for the float cable, and 13. Power cable strain relief. The diagram also shows the pump's connection to a power source and its internal wiring.

