



※ **Powerful and robust high-efficiency pumps made entirely of stainless steel**



※ **Constructed entirely from stainless steel, BC-ST submersible pumps offer superior corrosion and abrasion.**

PERFORMANCE RANGE

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

INSTALLATION AND USE

BC-ST stainless steel submersible pumps are designed to drain dirty and **sewage water** in **domestic, civil, and industrial settings**. Featuring a **TWO-CHANNEL** 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 hydraulic configuration of the volute and **TWO-CHANNEL** impeller results from advanced fluid dynamics calculations, delivering superior performance and efficiency for notable energy savings.

※ 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 **10 m**
- ※ 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-ST**
 - **330 mm for BC 15/50-ST**
 - **360 mm for BC 20/50-ST**

AVAILABLE UPON REQUEST

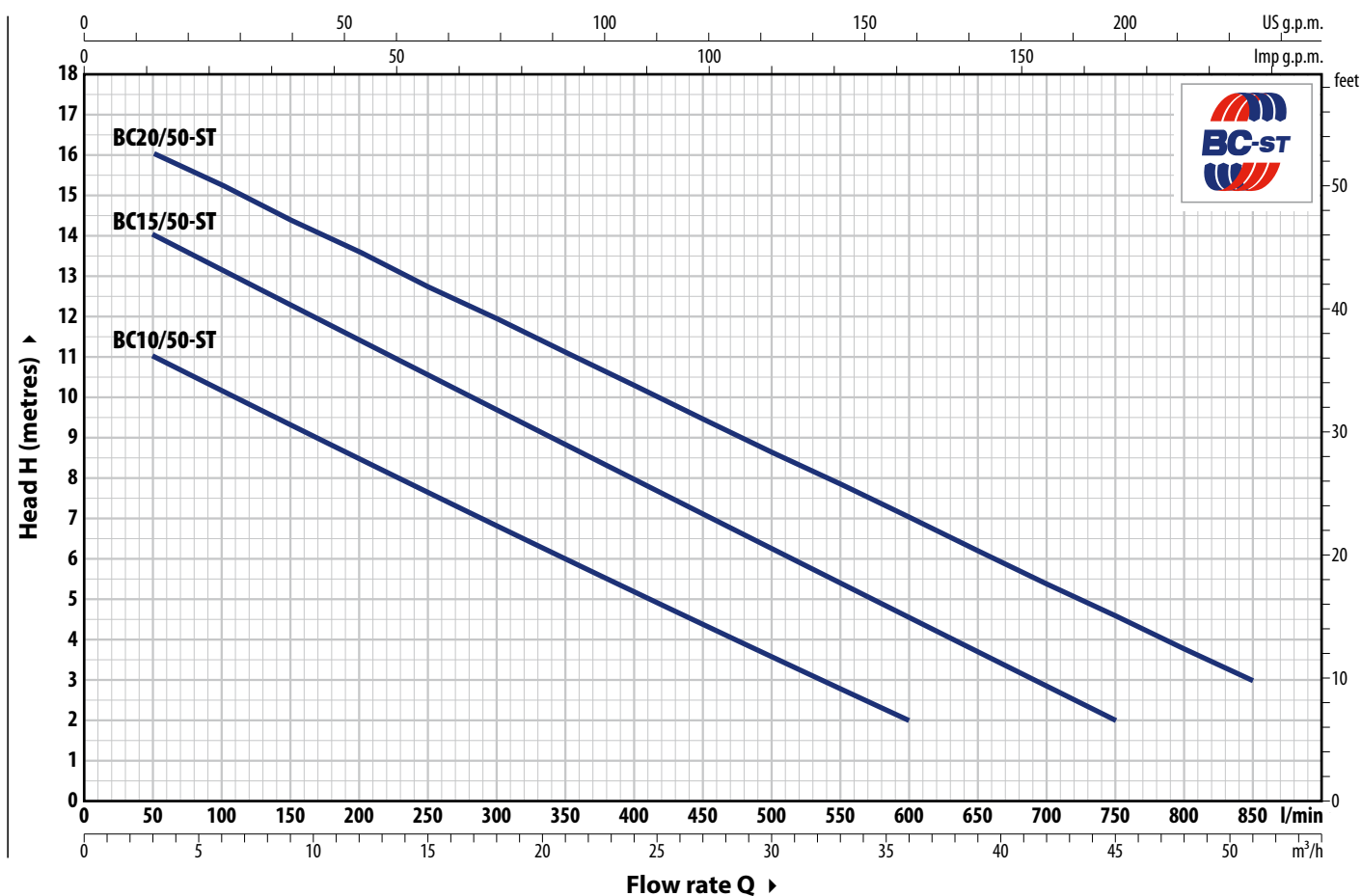
- ※ AISI 316L stainless steel pump shaft
- ※ Different voltage requirements 60 Hz frequency

PATENTS - TRADE MARKS - MODELS

- Patent No. EP2313658
- Patent No. IT0001428923

CURVES AND PERFORMANCE DATA

50 Hz



TYPE		POWER (P ₂)		Q	m³/h	0	3	6	12	18	24	30	36	42	45	51
Single-phase	Three-phase	kW	HP		l/min	0	50	100	200	300	400	500	600	700	750	850
BCm 10/50-ST	BC 10/50-ST	0.75	1	H metres	12	11	10	8.5	7	5	3.6	2				
BCm 15/50-ST	BC 15/50-ST	1.1	1.5		15	14	13	11.5	9.7	8	6.3	4.6	3	2		
BCm 20/50-ST	BC 20/50-ST	1.5	2		17	16	15.3	13.5	12	10.3	8.6	7	5.3	4.5	3	

Q = Flow rate H = Total manometric head

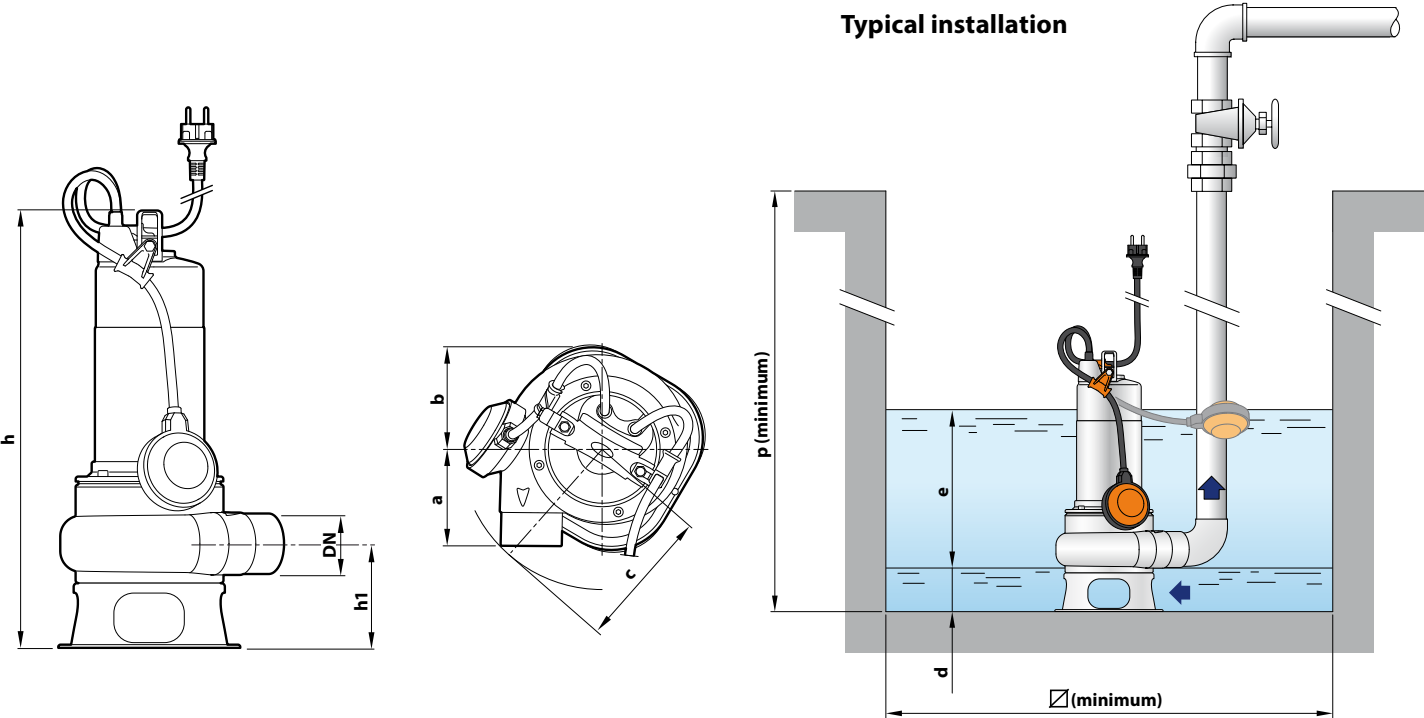
Performance curves comply with EN ISO 9906 Grade 3B tolerance limits.

ABSORPTION

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

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

DIMENSIONS AND WEIGHT



TYPE		PORT DN	Passage of solid bodies	DIMENSIONS mm									kg	
Single-phase	Three-phase			a	b	c	h	h1	d	e	p	□	1~	3~
BCm 10/50-ST	BC 10/50-ST	2"	Ø 50 mm	102	95	145	450	107	60	adjustable	500	500	13.4	12.2
BCm 15/50-ST	BC 15/50-ST						483						16.0	14.4
BCm 20/50-ST	BC 20/50-ST						513						18.2	16.0

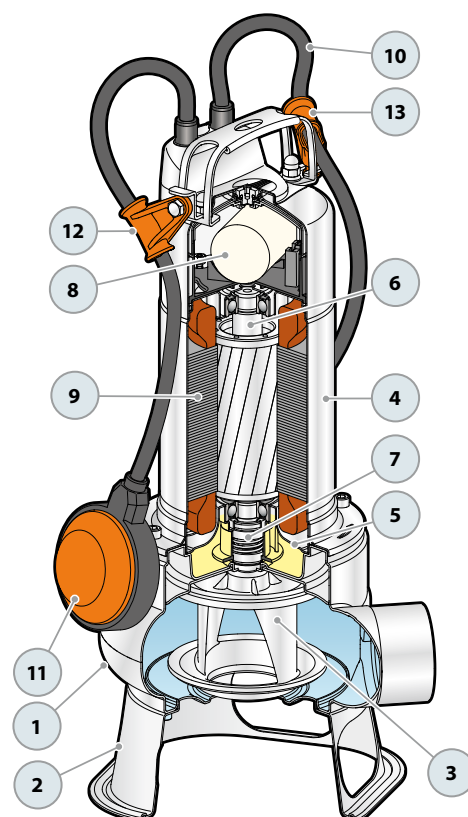
PALLET CAPACITY

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

MATERIALS AND COMPONENTS

1	Pump body	AISI 304 stainless steel 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-ST Cast iron with cathaphoresis treatment for BC 15/50-ST, BC 20/50-ST		
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-ST:	single-phase 230 V - 50 Hz with winding integrated thermal motor protection		
	BC-ST:	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 10 metres			
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			

The diagram illustrates the internal components of a submersible pump assembly. The main body is a vertical cylinder. At the top, there's a motor assembly with a capacitor (8) and a power cord (10) with a strain relief (13). Below the motor is a double mechanical seal (7) in an oil chamber. The motor shaft (6) passes through the seal. The pump body (1) is at the bottom, containing a two-channel impeller (3). A float switch (11) and a tilting device (12) are also shown. The motor sleeve (4) and motor cover (5) are also indicated.



SEWAGE LIFTING SYSTEM KIT VX-ST - BC-ST

VERSION WITH HORIZONTAL DELIVERY AND 3/4" GUIDE PIPES

For VX /35-ST	CODE ASSPVX35ST	DN 2"
For VX /50-ST , BC /50-ST	CODE ASSPVX50ST	DN 2"

※ Kit consisting of:



Coupling foot



Solids rail with ring nut and seal



Support for guide tubes



VERSION WITH VERTICAL DELIVERY AND 3/4" GUIDE PIPES

For VX /35-ST	CODE ASSPVX35STV	DN 2½"
For VX /50-ST, BC /50-ST	CODE ASSPVX50STV	DN 2½"

※ Kit consisting of:



Coupling foot complete with counterflange



Solids rail with ring nut and seal



Support for guide tubes



● ACCESSORIES AVAILABLE FOR ORDER

RUNNING GUIDE

※ For VX /35-ST	CODE ASSFL005
※ For VX /50-ST , BC /50-ST	CODE ASSFL006

Complete with ring nut and gasket

GUIDE TUBE SUPPORT

※ For Ø 3/4 " guide tubes	CODE 859SV340INTFA
---------------------------	--------------------

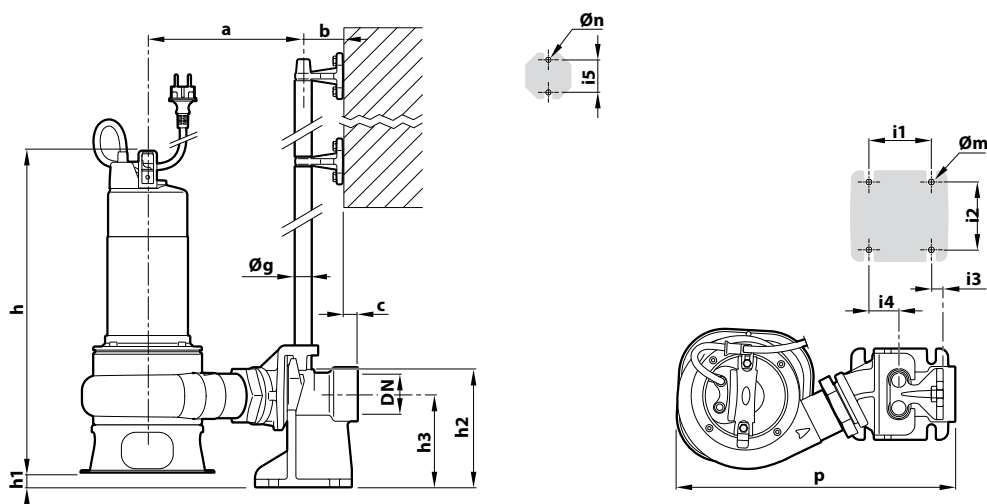
To ensure stability, insert a support every 2 metres along the guide tube

GUIDE TUBE (AISI 304 stainless steel)

※ 2 metres Ø 3/4" guide tube	CODE 54SARTG0052F
※ 3 metres Ø 3/4" guide tube	CODE 54SARTG0053F
※ 6 metres Ø 3/4" guide tube	CODE 54SARTG0056F

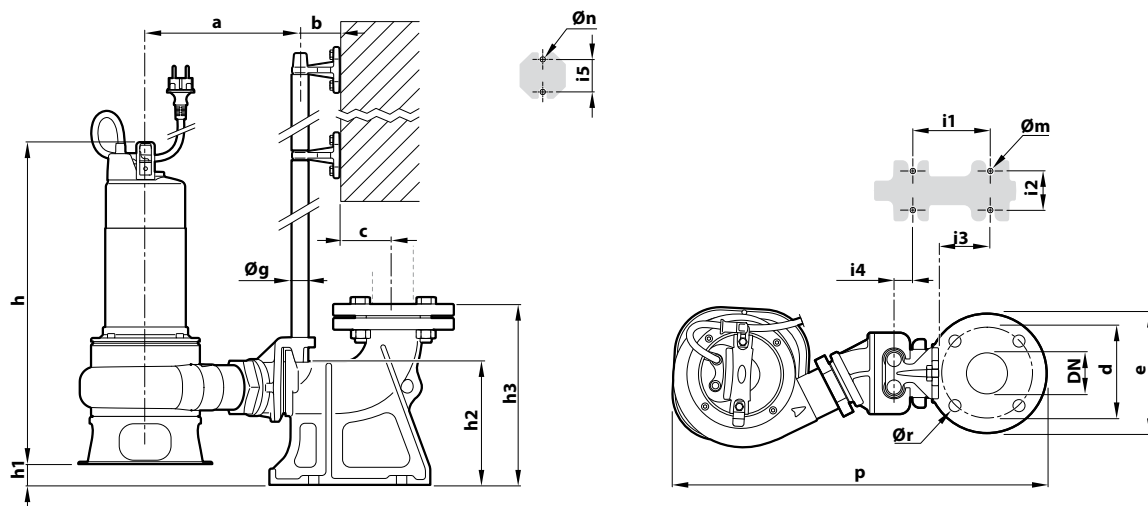


DIMENSIONS (Version with horizontal outlet)



TYPE		Passage of solid bodies mm	PORT DN	DIMENSIONS mm																											
Single-ph.	Three-ph.			a	b	c	p	h	h1	h2	h3	i1	i2	i3	i4	i5	Øg	Øm	Øn												
VXm 8/35 -ST	VX 8/35 -ST	40	2"	214	61	17	386	424	24	165	130	85	94	16	40	50	¾"	12	11												
VXm 10/35 -ST	VX 10/35 -ST							439																							
VXm 15/35 -ST	VX 15/35 -ST							472																							
VXm 20/35 -ST	VX 20/35 -ST							502																							
VXm 8/50 -ST	VX 8/50 -ST	50	2"	221			372	435	23																						
VXm 10/50 -ST	VX 10/50 -ST							450																							
VXm 15/50 -ST	VX 15/50 -ST							483																							
VXm 20/50 -ST	VX 20/50 -ST							513																							
BCm 10/50 -ST	BC 10/50 -ST	50	2"					450																							
BCm 15/50 -ST	BC 15/50 -ST							483																							
BCm 20/50 -ST	BC 20/50 -ST							513																							

DIMENSIONS (Version with vertical delivery)



TYPE		Passage of solid bodies mm	PORT DN	DIMENSIONS mm																														
Single-ph.	Three-ph.			a	b	c	d	e	p	h	h1	h2	h3	i1	i2	i3	i4	i5	Øg	Øm	Øn	Ør												
VXm 8/35 -ST	VX 8/35 -ST	40	2½"	207	61	52	125	165	495	424	22	164	215	120	72	62	3	50	¾"	14	11	18												
VXm 10/35 -ST	VX 10/35 -ST									439																								
VXm 15/35 -ST	VX 15/35 -ST									472																								
VXm 20/35 -ST	VX 20/35 -ST									502																								
VXm 8/50 -ST	VX 8/50 -ST	50	2½"	212					501	435	26																							
VXm 10/50 -ST	VX 10/50 -ST									450																								
VXm 15/50 -ST	VX 15/50 -ST									483																								
VXm 20/50 -ST	VX 20/50 -ST									513																								
BCm 10/50 -ST	BC 10/50 -ST	50	2½"							450																								
BCm 15/50 -ST	BC 15/50 -ST									483																								
BCm 20/50 -ST	BC 20/50 -ST									513																								