

-  Sewage
-  Domestic use
-  Civil use
-  Industrial use

※ **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 m<sup>3</sup>/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

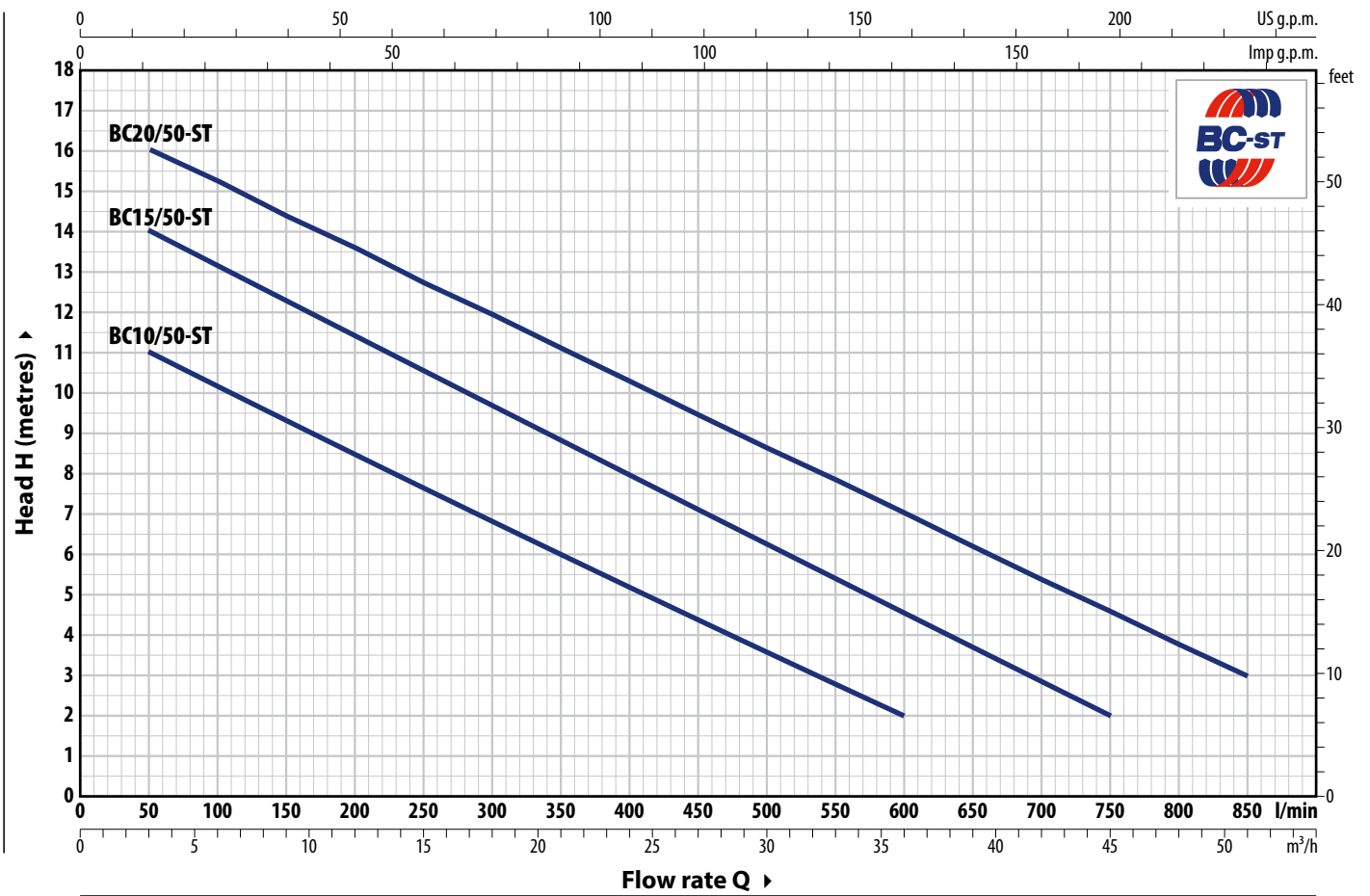
- ※ AISI 316L stainless steel pump shaft
- ※ Different voltage requirements 60 Hz frequency

### PATENTS - TRADE MARKS - MODELS

- Patent No. EP2313658
- Patent No. IT0001428923

## CURVES AND PERFORMANCE DATA

50 Hz



TYPE		POWER (P <sub>2</sub> )		Q	m <sup>3</sup> /h																					
Single-phase	Three-phase	kW	HP		0	3	6	12	18	24	30	36	42	45	51	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

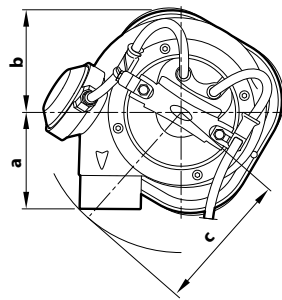
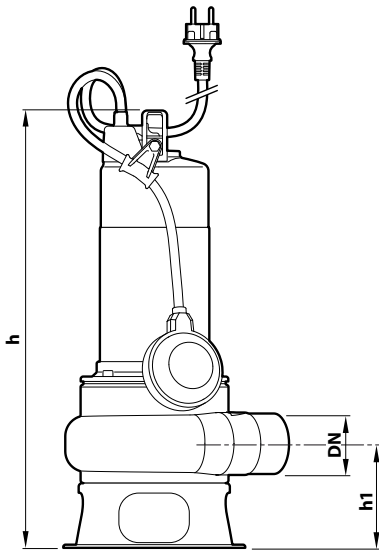
Performance curves comply with EN ISO 9906 Grade 3B tolerance limits.

## ABSORPTION

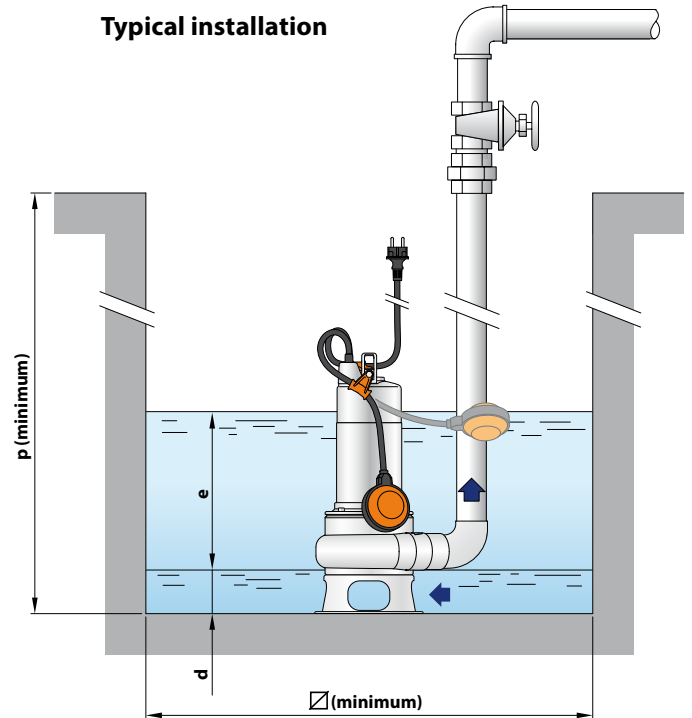
TYPE	VOLTAGE
Single-phase	230 V
BCm 10/50-ST	5.5 A
BCm 15/50-ST	8.0 A
BCm 20/50-ST	10.0 A

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



### Typical installation



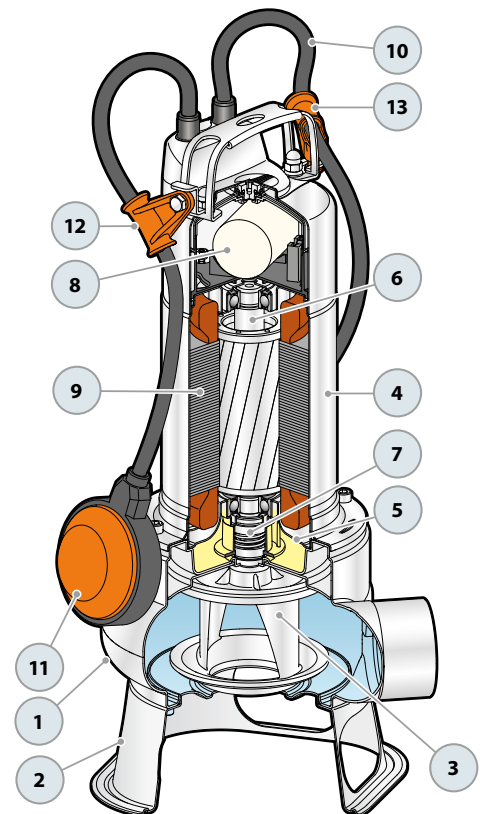
TYPE		PORT DN	Passage of solid bodies	DIMENSIONS mm									kg	
Single-phase	Three-phase			a	b	c	h	h1	d	e	p	$\varnothing$	1~	3~
BCm 10/50-ST	BC 10/50-ST	2"	$\varnothing 50$ mm	102	95	145	450	107	60	adjustable	500	500	13.4	12.2
BCm 15/50-ST	BC 15/50-ST						483						16.0	14.4
BCm 20/50-ST	BC 20/50-ST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

<b>1 Pump body</b>	<b>AISI 304</b> stainless steel with ISO 228/1 threaded port		
<b>2 Base</b>	Stainless steel <b>AISI 304</b>		
<b>3 Impeller</b>	TWO-CHANNEL type in micro-cast <b>AISI 304</b> stainless steel.		
<b>4 Motor sleeve</b>	Stainless steel <b>AISI 304</b>		
<b>5 Motor cover</b>	<b>AISI 304</b> stainless steel for BC 10/50-ST Cast iron with cataphoresis treatment for BC 15/50-ST, BC 20/50-ST		
<b>6 Motor shaft</b>	Stainless steel <b>AISI 431</b>		
<b>7 Double mechanical seal in oil chamber</b>			
Seal	Shaft	Location	Materials
<b>MG1-14D SIC</b>	Ø 14 mm	Motor side Pump side	Silicon carbide / Graphite / NBR Silicon carbide/Silicon carbide/NBR
<b>8 Capacitor</b> (exclusive to single-phase models)			
<b>9 Electric motor</b>			
<b>BCm-ST:</b>	single-phase 230 V - 50 Hz with winding integrated thermal motor protection		
<b>BC-ST:</b>	three-phase 400 V - 50 Hz		
	– Insulation: class F		
	– Protection rating: IP X8		
<b>10 Power cord</b>			
	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		
<b>11 Float switch</b> (exclusive to single-phase models)			
<b>12 Tilting device for the float cable</b> (exclusive to single-phase models)	Patent No. IT0001428923		
<b>13 Power cable strain relief</b>	Patent No. EP2313658		



# SEWAGE LIFTING SYSTEM KIT VX-ST - BC-ST

## VERSION WITH HORIZONTAL DELIVERY AND 3/4" GUIDE PIPES

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

※ 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 <b>VX /35-ST</b>	CODE ASSPVX35STV	DN <b>2½"</b>
For <b>VX /50-ST, BC /50-ST</b>	CODE ASSPVX50STV	DN <b>2½"</b>

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

Complete with ring nut and gasket



### GUIDE TUBE SUPPORT

※ For Ø 3/4 " guide tubes	CODE 859SV340INTFA
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To ensure stability, insert a support every 2 metres along the guide tube

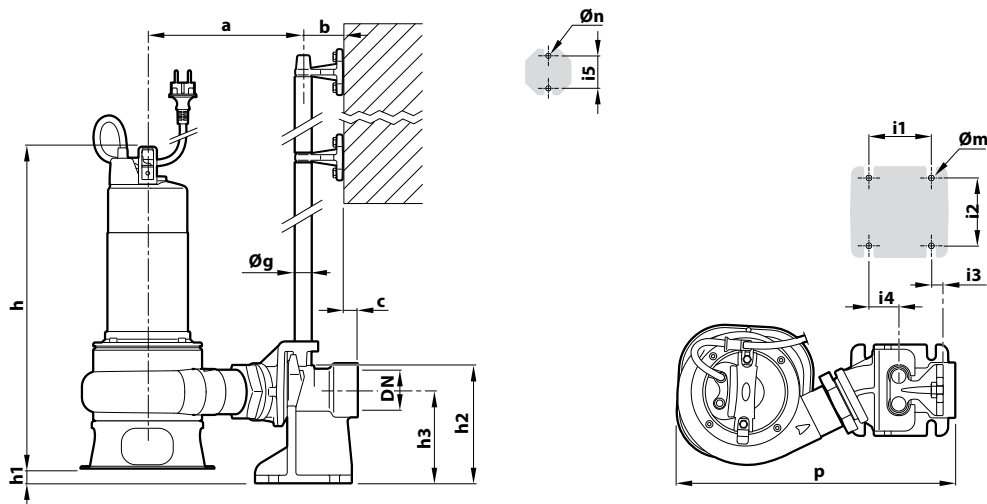


### GUIDE TUBE (AISI 304 stainless steel)

※ 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

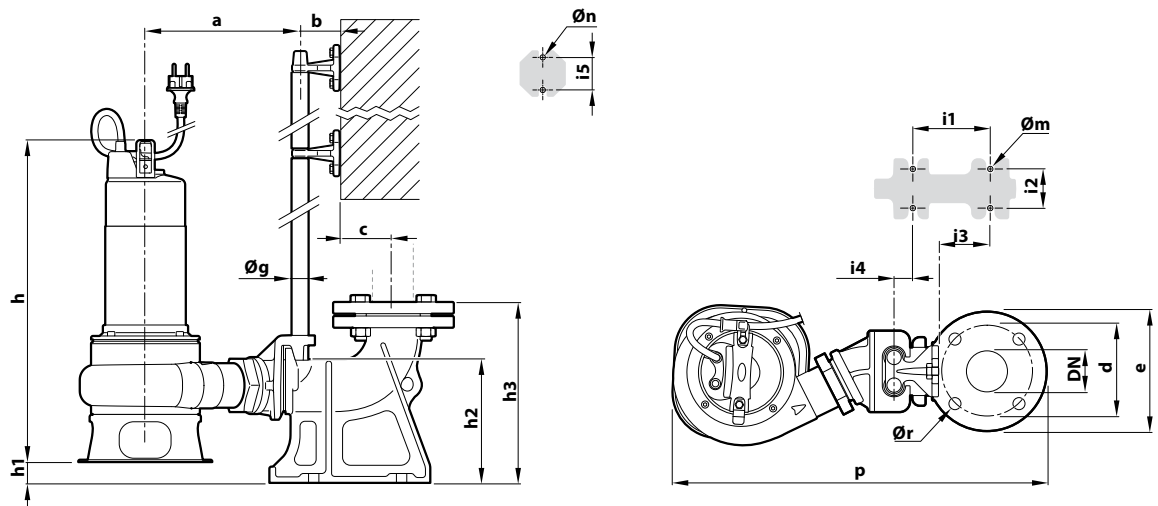


### DIMENSIONS (Version with horizontal outlet)



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			386	424	24										
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	61	17	372	435	23	165	130	85	94	16	40	50	¾"	12	11
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
VXm 8/35 -ST	VX 8/35 -ST	40	2½"	207				495	424	22											
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	61	52	125	165	435	26	164	215	120	72	62	3	50	¾"	14	11	18
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												