

### TWO-CHANNEL

※ Experience high-efficiency, quality, and durability



-  Sewage
-  Domestic use
-  Civil use
-  Industrial use

※ Constructed entirely from micro-cast stainless steel, BC-MF 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-MF 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-MF**
  - **330 mm for BC 15/50-MF**
  - **360 mm for BC 20/50-MF**

#### AVAILABLE UPON REQUEST

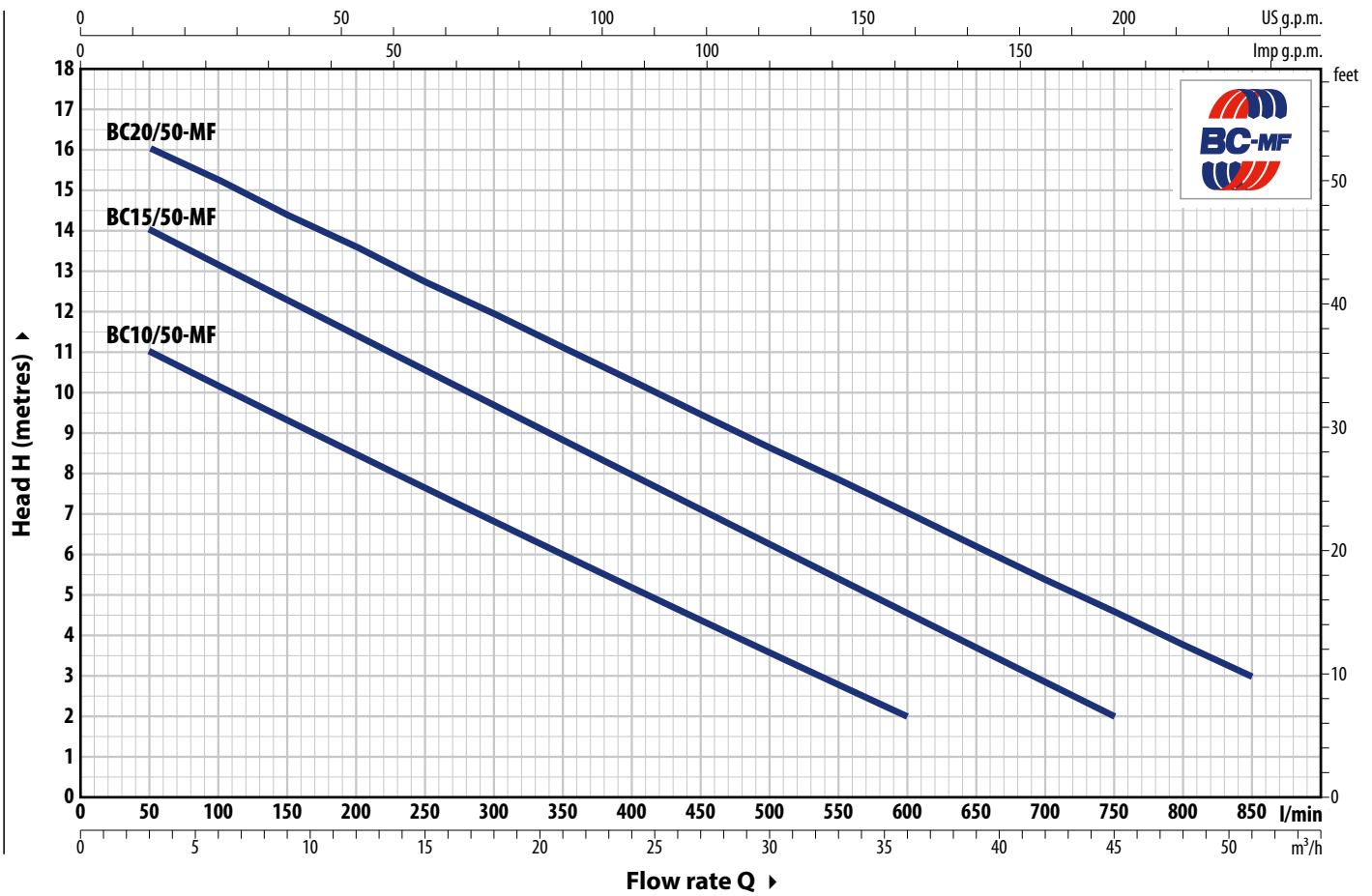
- ※ Different voltage requirements 60 Hz frequency

#### PATENTS - TRADE MARKS - MODELS

- Patent No. EP2313658
- Patent No. IT0001428923

## CURVES AND PERFORMANCE DATA

50 Hz



TYPE		POWER (P <sub>2</sub> )		Q	Flow rate (l/min)										
Single-phase	Three-phase	kW	HP		0	3	6	12	18	24	30	36	42	45	51
BCm 10/50-MF	BC 10/50-MF	0.75	1	H metres	12	11	10	8.5	7	5	3.6	2			
BCm 15/50-MF	BC 15/50-MF	1.1	1.5		15	14	13	11.5	9.7	8	6.3	4.6	3	2	
BCm 20/50-MF	BC 20/50-MF	1.5	2		17	16	15.3	13.5	12	10.3	8.6	7.0	5.3	4.5	3

Q = Flow rate H = Total manometric head

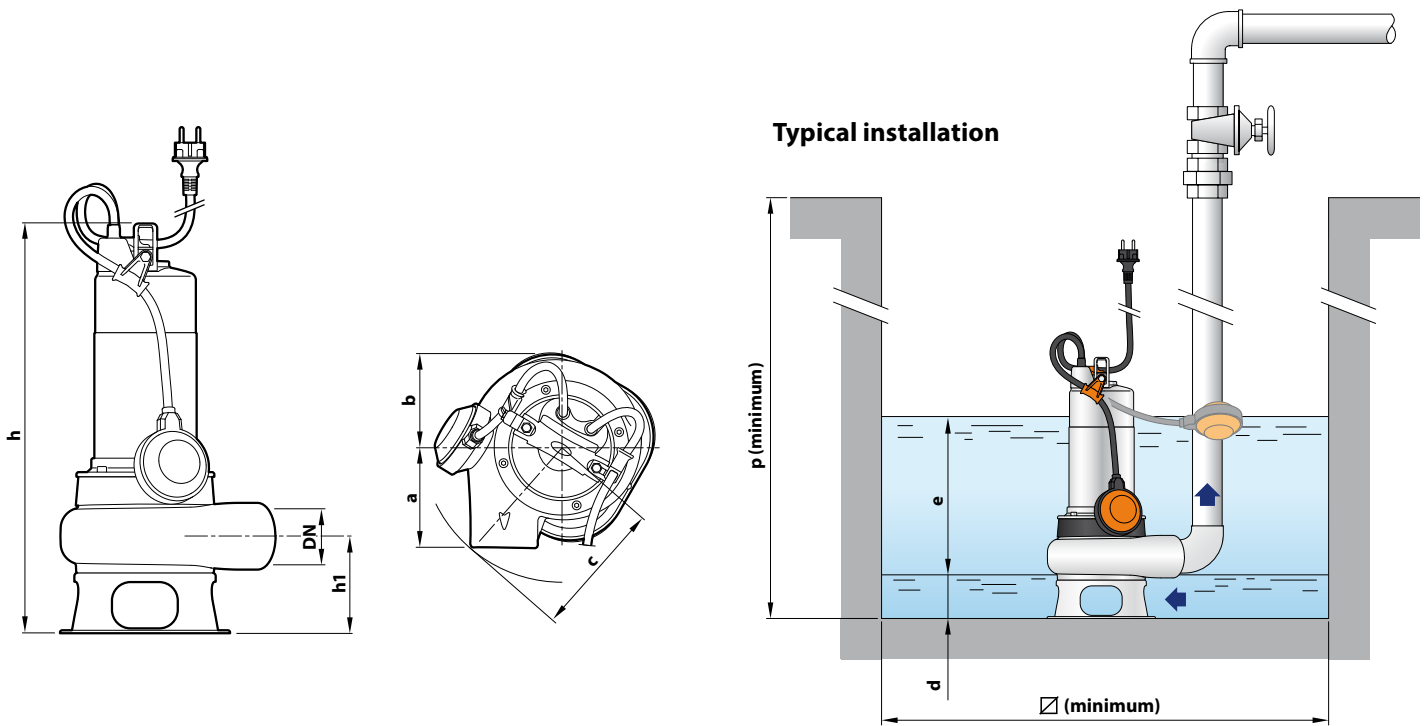
Performance curves comply with EN ISO 9906 Grade 3B tolerance limits.

## ABSORPTION

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

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

## DIMENSIONS AND WEIGHT



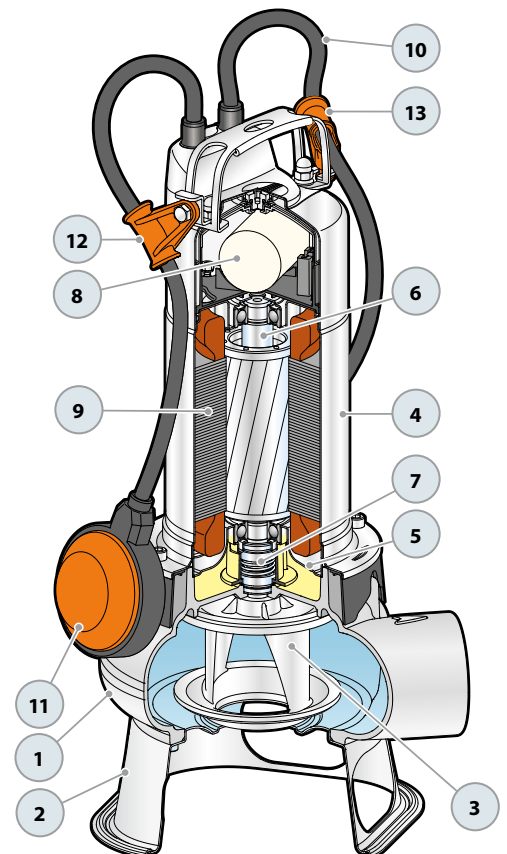
TYPE		PORT DN	Passage of solid bodies	DIMENSIONS mm										kg	
Single-phase	Three-phase			a	b	c	h	h1	d	e	p	□	1~	3~	
<b>BCm 10/50-MF</b>	<b>BC 10/50-MF</b>	<b>2"</b>	<b>Ø 50 mm</b>	102	95	145	450	107	60	adjustable	500	500	15.2	14.0	
<b>BCm 15/50-MF</b>	<b>BC 15/50-MF</b>						483						17.8	16.2	
<b>BCm 20/50-MF</b>	<b>BC 20/50-MF</b>						513						20.0	17.8	

## PALLET CAPACITY

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

## MATERIALS AND COMPONENTS

<b>1 Pump body</b>	Micro-cast <b>AISI 316L</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-MF Cast iron with cataphoresis treatment for BC 15/50-MF, BC 20/50-MF												
<b>6 Motor shaft</b>	Stainless steel <b>AISI 316L</b>												
<b>7 Double mechanical seal in oil chamber</b>	<table border="1"> <thead> <tr> <th>Seal</th> <th>Shaft</th> <th>Location</th> <th>Materials</th> </tr> </thead> <tbody> <tr> <td rowspan="2"><b>MG1-14D SIC</b></td> <td rowspan="2">Ø 14 mm</td> <td>Motor side</td> <td>Silicon carbide / Graphite / NBR</td> </tr> <tr> <td>Pump side</td> <td>Silicon carbide/Silicon carbide/NBR</td> </tr> </tbody> </table>			Seal	Shaft	Location	Materials	<b>MG1-14D SIC</b>	Ø 14 mm	Motor side	Silicon carbide / Graphite / NBR	Pump side	Silicon carbide/Silicon carbide/NBR
Seal	Shaft	Location	Materials										
<b>MG1-14D SIC</b>	Ø 14 mm	Motor side	Silicon carbide / Graphite / NBR										
		Pump side	Silicon carbide/Silicon carbide/NBR										
<b>8 Capacitor</b>	(exclusive to single-phase models)												
<b>9 Electric motor</b>	<p><b>BCm-MF:</b> single-phase 230 V - 50 Hz with winding integrated thermal motor protection</p> <p><b>BC-MF:</b> three-phase 400 V - 50 Hz</p> <ul style="list-style-type: none"> <li>- Insulation: class F</li> <li>- Protection rating: IP X8</li> </ul>												
<b>10 Power cord</b>	<p>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.</p> <p>Type 'H07 RN-F' (Schuko plug exclusive to single-phase models)</p> <p>※ Standard length 10 metres</p>												
<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-MF - BC-MF

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

For <b>VX /35-MF</b>	CODE ASSPVX35ST	DN <b>2"</b>
Per <b>VX /50-MF , BC /50-MF</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-MF</b>	CODE ASSPVX35STV	DN <b>2 1/2"</b>
For <b>VX /50-MF , BC /50-MF</b>	CODE ASSPVX50STV	DN <b>2 1/2"</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-MF</b>	CODE ASSFL005
※ For <b>VX /50-MF , BC /50-MF</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

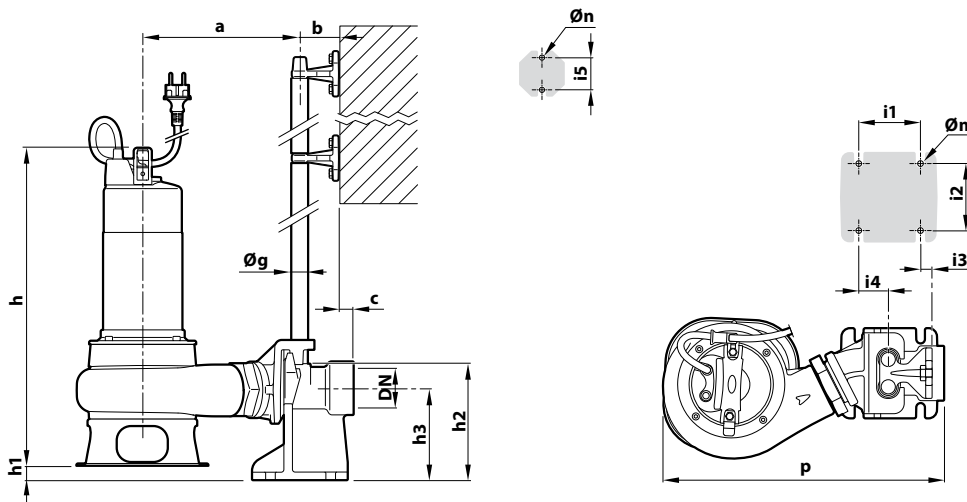


### GUIDE TUBE (AISI 304 stainless steel)

※ 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

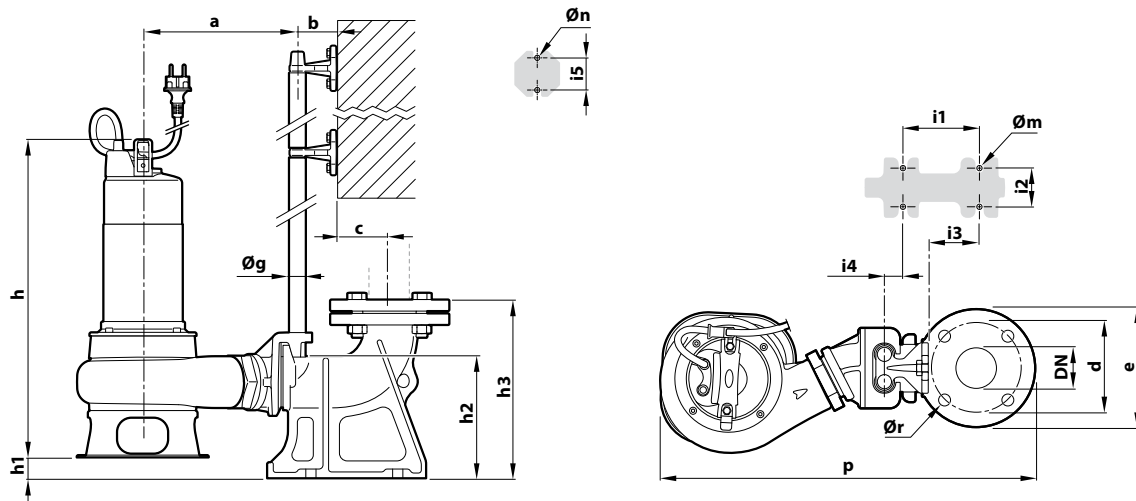


### DIMENSIONS (Version with horizontal outlet)



TYPE		Passage of solid bodies mm	PORT DN	DIMENSIONS mm															
Single-phase	Three-phase			a	b	c	p	h	h1	h2	h3	i1	i2	i3	i4	i5	Øg	Øm	Øn
VXm 8/35 -MF	VX 8/35 -MF	40	2"	222			395	424	25										
VXm 10/35 -MF	VX 10/35 -MF							439											
VXm 15/35 -MF	VX 15/35 -MF							472											
VXm 20/35 -MF	VX 20/35 -MF							502											
VXm 8/50 -MF	VX 8/50 -MF	50	2"	226	61	17	398	435	23	165	130	85	94	16	40	50	¾"	12	11
VXm 10/50 -MF	VX 10/50 -MF							450											
VXm 15/50 -MF	VX 15/50 -MF							483											
VXm 20/50 -MF	VX 20/50 -MF							513											
BCm 10/50 -MF	BC 10/50 -MF	50	2"					450											
BCm 15/50 -MF	BC 15/50 -MF							483											
BCm 20/50 -MF	BC 20/50 -MF							513											

### DIMENSIONS (Version with vertical delivery)



TYPE		Passage of solid bodies mm	PORT DN	DIMENSIONS mm																		
Single-phase	Three-phase			a	b	c	d	e	p	h	h1	h2	h3	i1	i2	i3	i4	i5	Øg	Øm	Øn	Ør
VXm 8/35 -MF	VX 8/35 -MF	40	2½"	215					503	23												
VXm 10/35 -MF	VX 10/35 -MF																				439	
VXm 15/35 -MF	VX 15/35 -MF																				472	
VXm 20/35 -MF	VX 20/35 -MF																				502	
VXm 8/50 -MF	VX 8/50 -MF	50	2½"	217	61	52	125	165	507	21	164	215	120	72	62	3	50	¾"	14	11	18	
VXm 10/50 -MF	VX 10/50 -MF																					435
VXm 15/50 -MF	VX 15/50 -MF																					450
VXm 20/50 -MF	VX 20/50 -MF																					483
BCm 10/50 -MF	BC 10/50 -MF	50	2½"																			
BCm 15/50 -MF	BC 15/50 -MF																					450
BCm 20/50 -MF	BC 20/50 -MF																					483