BC-ST

DOUBLE-CHANNEL

Submersible pumps in stainless steel

Sewage water

Domestic use

Civil use

Industrial use

PERFORMANCE RANGE

- Flow rate up to **750 l/min** (45 m^3/h)
- Head up to **15 m**

APPLICATION LIMITS

- **5 m** maximum immersion depth
- 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

- **10 m** long power cable
- Float switch for single-phase versions

EN 60335-1
IEC 60335-1
CEI 61-150

EN 60034-1
IEC 60034-1
CEI 2-3

CE

CERTIFICATIONS

Company with management system certified DNV
ISO 9001: QUALITY

EAC

INSTALLATION AND USE

BC-ST submersible pumps in stainless steel are recommended for draining **dirty and sewage water** in domestic, civil and industrial applications. They come equipped with a DOUBLE-CHANNEL impeller and are capable of pumping liquids containing short fibred suspended solids up to Ø 50 mm. 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

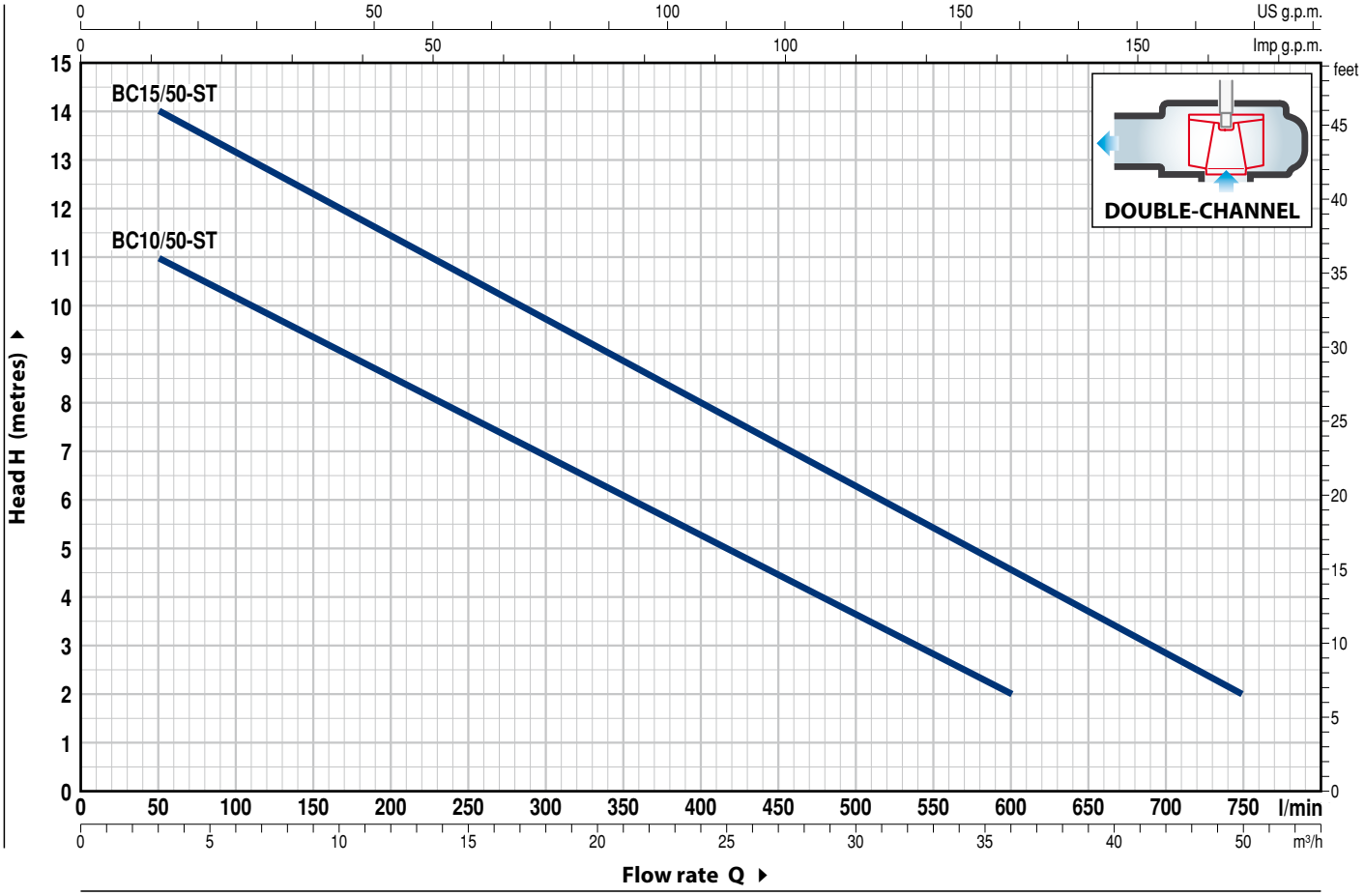
- Patent n. EP2313658
- Patent n. IT0001428923

OPTIONS AVAILABLE ON REQUEST

- Single-phase pumps without float switch
- AISI 316L stainless steel pump shaft
- Other voltages or 60 Hz frequency

CHARACTERISTIC CURVES AND PERFORMANCE DATA

50 Hz n= 2900 min^{-1}



MODEL		POWER (P2)		Q	m³/h	0	3	6	12	18	24	30	36	42	45
Single-phase	Three-phase	kW	HP		l/min	**0**	**50**	**100**	**200**	**300**	**400**	**500**	**600**	**700**	**750**
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	2.9	2

Q = Flow rate **H** = Total manometric head

Tolerance of characteristic curves in compliance with EN ISO 9906 Grade 3B.

POS.	COMPONENT	CONSTRUCTION CHARACTERISTICS
1	**PUMP BODY**	Stainless steel AISI 304 with threaded port in compliance with ISO 228/1
2	**BASE**	Stainless steel AISI 304
3	**IMPELLER**	Precision cast stainless steel AISI 304 DOUBLE-CHANNEL type
4	**MOTOR CASING**	Stainless steel AISI 304
5	**MOTOR CASING PLATE**	Stainless steel AISI 304
6	**MOTOR SHAFT**	Stainless steel AISI 431

7 SHAFT WITH DOUBLE MECHANICAL SEAL SEPARATED BY AN OIL CHAMBER

Seal	***Shaft***	*Position*		*Materials*	
Model	***Diameter***		*Stationary ring*	*Rotational ring*	*Elastomer*
MG1-14D SIC	**Ø 14** mm	Motor side	Silicon carbide	Graphite	NBR
		Pump side	Silicon carbide	Silicon carbide	NBR

8	**BEARINGS**	**6203 ZZ / 6203 ZZ**

9 CAPACITOR

Pump	***Capacitance***	
Single-phase	***(230 V or 240 V)***	***(110 V)***
BCm 10/50-ST	**20** µF 450 VL	**30** µF - 250 VL
BCm 15/50-ST	**25** µF 450 VL	–

10 ELECTRIC MOTOR

BCm: single-phase 230 V - 50 Hz
with thermal overload protector incorporated into the winding
BC: three-phase 400 V - 50 Hz

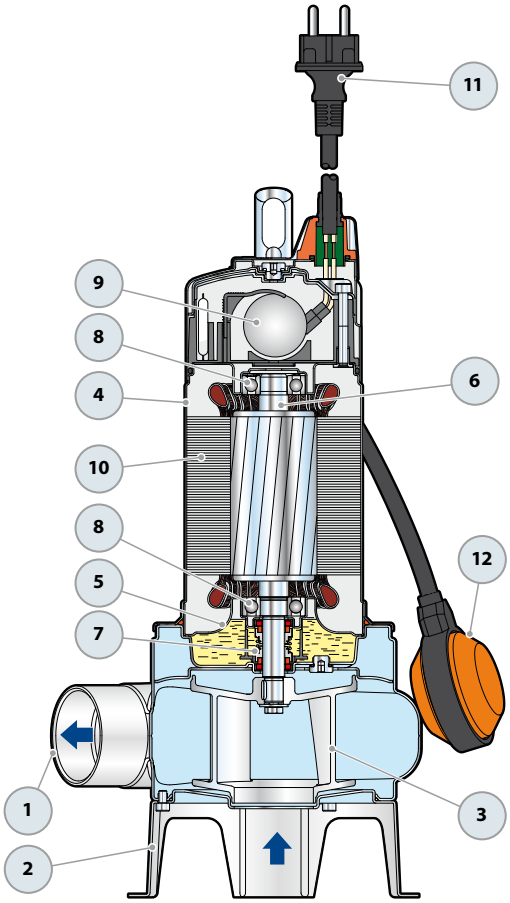
– Insulation: class F
– Protection: IP X8

11 POWER CABLE

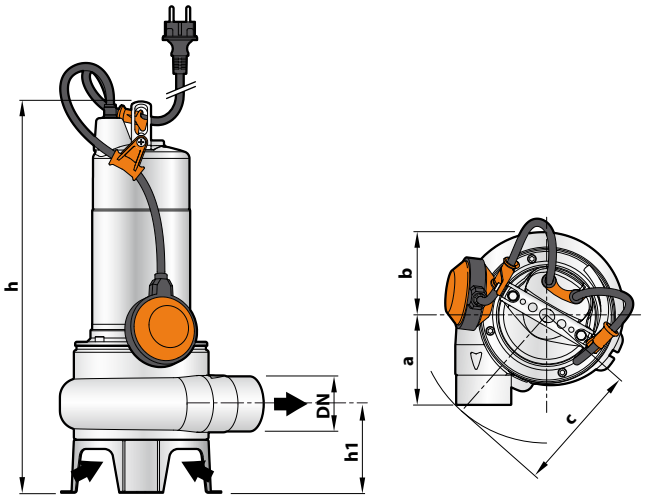
"H07 RN-F" type
(with Schuko plug for single-phase versions only)
Standard length 10 metres

12 FLOAT SWITCH

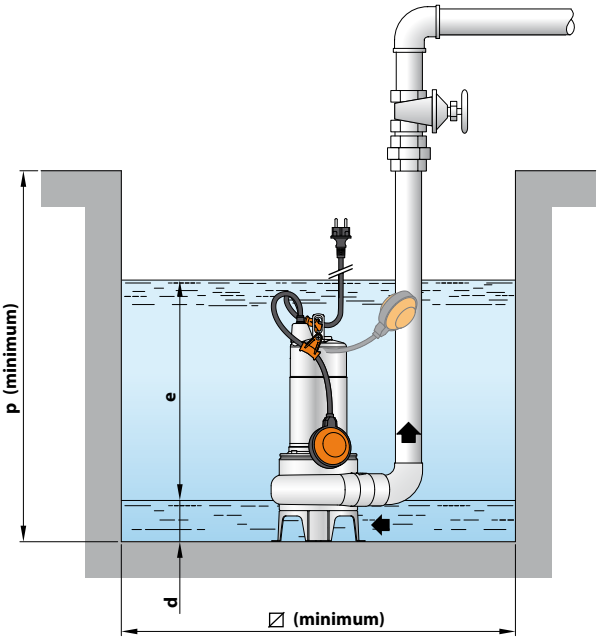
(only for single-phase versions)



DIMENSIONS AND WEIGHT



Standard installation



MODEL		PORT	Passage of solids	DIMENSIONS mm									kg	
Single-phase	Three-phase	DN		a	b	c	h	h1	d	e	p	⍁	1~	3~
BCm 10/50-ST	BC 10/50-ST	2"	Ø 50 mm	102	95	140	432	102	60	variable	500	500	12.4	11.2
BCm 15/50-ST	BC 15/50-ST						447						13.3	12.2

ABSORPTION

MODEL	VOLTAGE		
Single-phase	230 V	240 V	110 V
BCm 10/50-ST	**5.0** A	**4.8** A	**10.0** A
BCm 15/50-ST	**8.2** A	**7.9** A	–

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

PALLETIZATION

MODEL		GROUPAGE	CONTAINER
Single-phase	Three-phase	n. pumps	n. pumps
BCm 10/50-ST	BC 10/50-ST	**54**	**72**
BCm 15/50-ST	BC 15/50-ST	**54**	**72**

SEWAGE LIFTING SYSTEM VX-ST – BC-ST

(A) (B)

A) HORIZONTAL DELIVERY VERSION WITH ¾" GUIDE TUBES

For **VX /35-ST**	Cod. ASSPVX35ST	DN **2"**
For **VX /50-ST , BC /50-ST**	Cod. ASSPVX50ST	DN **2"**

Kit consisting of:
– footing connection
– slide guide with ring nut and seal
– support for the guide tubes

B) VERTICAL DELIVERY VERSION WITH ¾" GUIDE TUBES

For **VX /35-ST**	Cod. ASSPVX35STV	DN **2½"**
For **VX /50-ST, BC /50-ST**	Cod. ASSPVX50STV	DN **2½"**

Kit consisting of:
– footing connection complete with counterflange
– slide guide with ring nut and seal
– support for the guide tubes

SLIDE GUIDE (Also to be ordered separately)

For **VX /35-ST**	Cod. ASSFL005
For **VX /50-ST , BC /50-ST**	Cod. ASSFL005

Complete with ring nut and seal

● **INTERMEDIATE SUPPORT** (To be ordered separately)

Cod. 859SV340INTFA	For guide tubes Ø ¾"

In order to ensure stability, insert the intermediate support every 2 metres

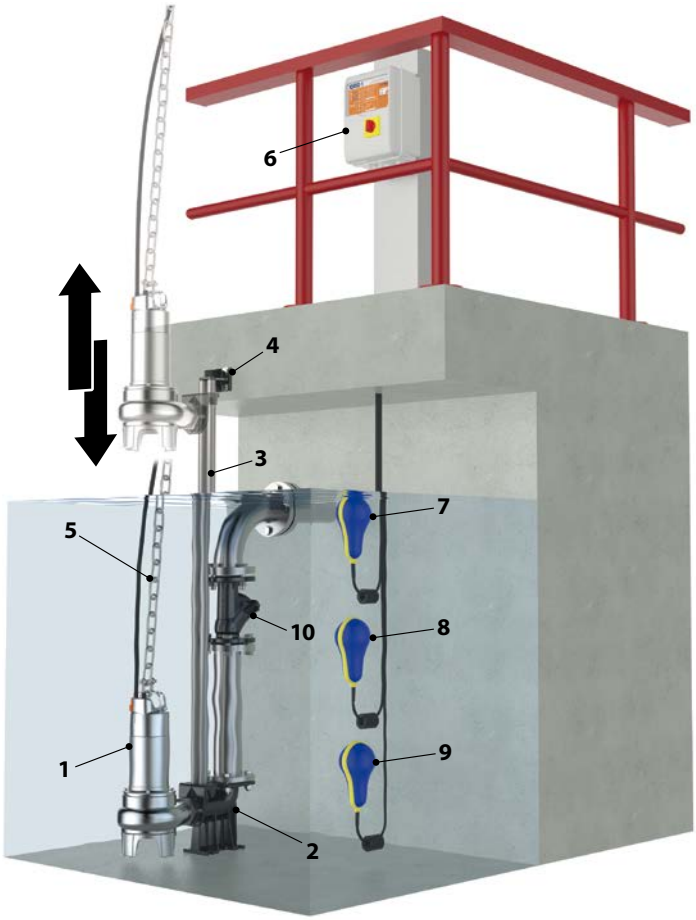
GUIDE TUBES (AISI 304 stainless steel)

Cod. 54SARTG005	Ø ¾"

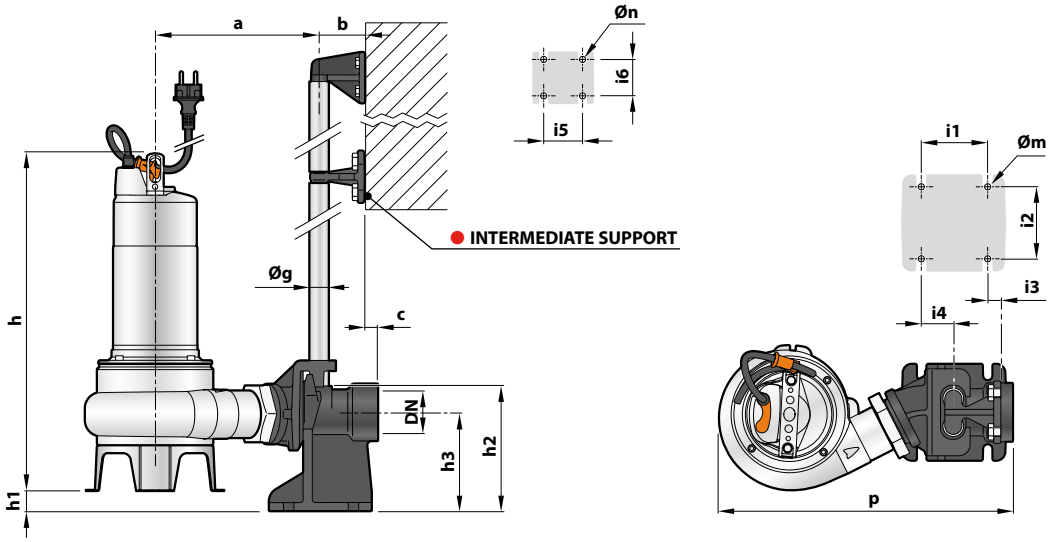
Maximum length of the tube plank: 6 metres

STANDARD INSTALLATION

1. Pump
2. Footing connection
3. Guide tubes
4. Support for the guide tubes
5. Lifting chain
6. Control box
7. Alarm float switch
8. Starting float switch
9. Stop float switch
10. Non-return valve

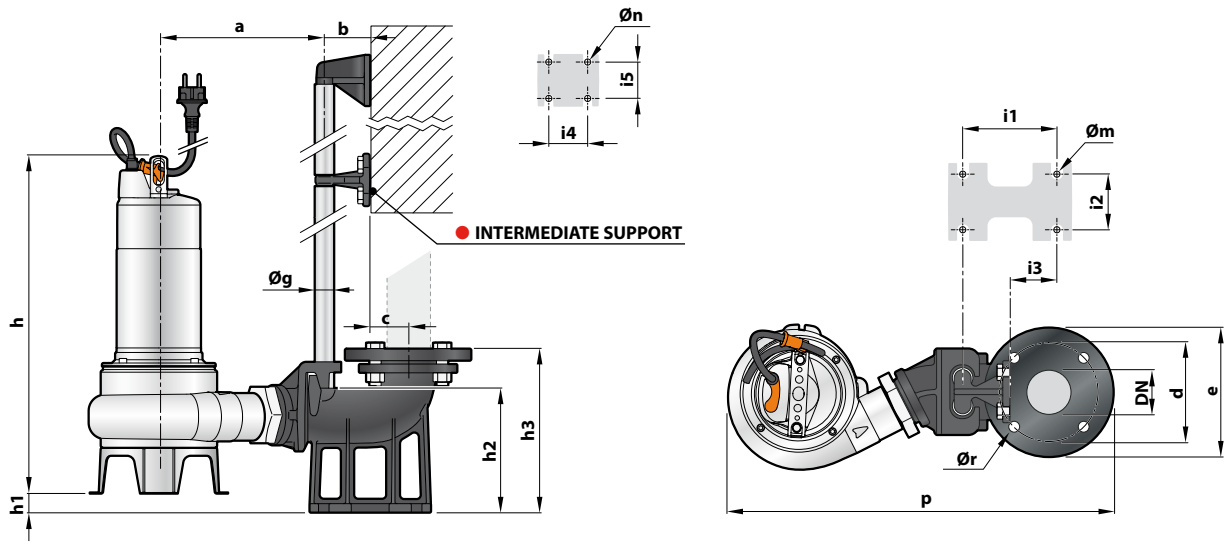


DIMENSIONS (Horizontal delivery version)



MODEL		Passage of solids	PORT	DIMENSIONS mm																
Single-phase	Three-phase	mm	DN	a	b	c	p	h	h1	h2	h3	i1	i2	i3	i4	i5	i6	Øg	Øm	Øn
VXm 8/35 -ST	VX 8/35 -ST	40	2"	207	61	17	379	406	43	130	165	85	94	16	40	50	48	¾"	12	11
VXm 10/35 -ST	VX 10/35 -ST																			
VXm 15/35 -ST	VX 15/35 -ST							421												
VXm 8/50 -ST	VX 8/50 -ST	50	2"	217			388	430	28											
VXm 10/50 -ST	VX 10/50 -ST																			
VXm 15/50 -ST	VX 15/50 -ST							445												
BCm 10/50 -ST	BC 10/50 -ST							430												
BCm 15/50 -ST	BC 15/50 -ST							445												

DIMENSIONS (Vertical delivery version)



MODEL		Passage of solids	PORT	DIMENSIONS mm																		
Single-phase	Three-phase	mm	DN	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	406	40	164	215	120	72	62	50	48	¾"	14	11	18
VXm 10/35 -ST	VX 10/35 -ST																					
VXm 15/35 -ST	VX 15/35 -ST									421												
VXm 8/50 -ST	VX 8/50 -ST	50		217					507	430	26											
VXm 10/50 -ST	VX 10/50 -ST																					
VXm 15/50 -ST	VX 15/50 -ST									445												
BCm 10/50 -ST	BC 10/50 -ST									430												
BCm 15/50 -ST	BC 15/50 -ST									445												