SEWAGE LIFTING SYSTEM (TRITUS 0.75 - 2.2)

VERSION WITH HORIZONTAL DELIVERY AND ¾" GUIDE PIPES

For **TR 0.75, 0.9, 1.1, 1.3**	Code ASSPTRITUS11	**DN 2"**
For **TR 1.5, 2.2**	Code ASSPTRITUS22	**DN 2"**



※ Kit consisting of:



Coupling foot



Guide rail



Support for guide tubes

VERSION WITH VERTICAL DELIVERY AND ¾" GUIDE PIPES

For **TR 0.75, 0.9, 1.1, 1.3**	Code ASSPTRITUS11V	**DN 2½"**
For **TR 1.5, 2.2**	Code ASSPTRITUS22V	**DN 2½"**



※ Kit consisting of:



Coupling foot complete with counter-flange



Guide rail



Support for guide tubes

● ACCESSORIES AVAILABLE FOR ORDER

RUNNING GUIDE

※ For TR 0.75, 0.9, 1.1, 1.3	Code ASSFL003
※ For TR 1.5, 2.2	Code ASSFL004



Complete with ring nut and gasket for 0.75, 0.9, 1.1, 1.3
Complete with screws and seals for TR 1.5, 2.2

GUIDE TUBE SUPPORT

※ For Ø ¾ " guide tubes	Code 859SV340INTFA



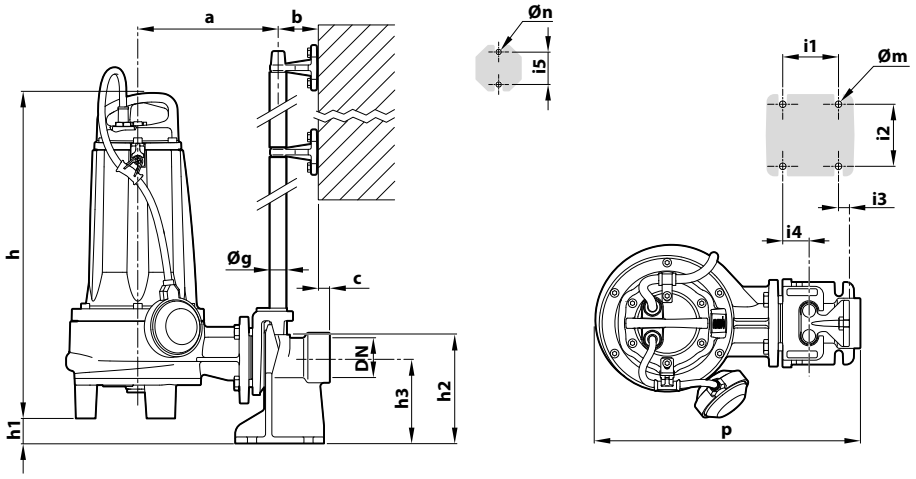
To ensure stability, insert a support every 2 metres along the guide tube

GUIDE TUBE (AISI 304 stainless steel)

※ 2 metres Ø ¾" guide tube	Code 54SARTG0052F
※ 3 metres Ø ¾" guide tube	Code 54SARTG0053F
※ 6 metres Ø ¾" guide tube	Code 54SARTG0056F

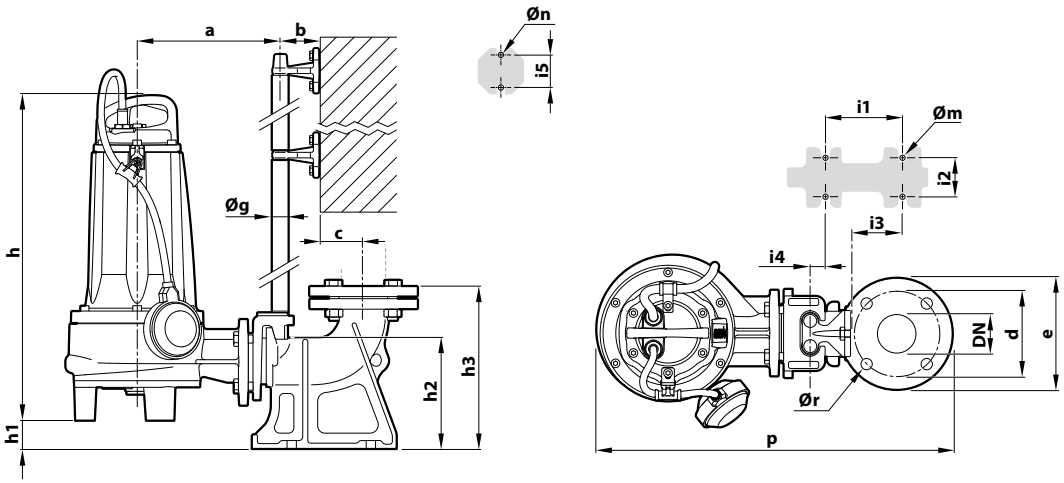


DIMENSIONS (Version with horizontal outlet)



TYPE		PORT	Solid bodies	DIMENSIONS mm														
Single-ph.	**Three-ph.**	**DN**		a	b	c	p	h1	h2	h3	i1	i2	i3	i4	i5	Øg	Øm	Øn
TRm 0.75	**TR 0.75**	**2"**	**Ø 7 mm**	212	61	17	395	50	165	130	85	94	16	40	50	¾"	14	11
TRm 0.9	**TR 0.9**																	
TRm 1.1	**TR 1.1**																	
TRm 1.3	**TR 1.3**																	
TRm 1.5	**TR 1.5**	**2"**	**Ø 7 mm**	215	61	17	400	42.5	165	130	85	94	16	40	50	¾"	14	11
–	**TR 2.2**																	

DIMENSIONS (Version with vertical delivery)



TYPE		PORT	Solid bodies	DIMENSIONS mm																	
Single-ph.	**Three-ph.**	**DN**		a	b	c	d	e	p	h1	h2	h3	i1	i2	i3	i4	i5	Øg	Øm	Øn	Ør
TRm 0.75	**TR 0.75**	**2½"**	**Ø 7 mm**	206	61	51.5	125	165	505	48	163.5	215.5	120	72	62	3	50	3/4	14	11	18
TRm 0.9	**TR 0.9**																				
TRm 1.1	**TR 1.1**																				
TRm 1.3	**TR 1.3**																				
TRm 1.5	**TR 1.5**	**2½"**		211	61	51.5	125	165	514	40	163.5	215.5	120	72	62	3	50	3/4	14	11	18
–	**TR 2.2**																				

SEWAGE LIFTING SYSTEM (TRITUS 2.2 AP - 3 AP - TR3 - TR4)

VERSION WITH HORIZONTAL DELIVERY AND ¾" GUIDE PIPES

For **TR 2.2 AP, 3 AP, 3, 4**	Code ASSPTRITUS61	**DN 2"**

※ Kit consisting of:



Coupling foot



Guide rail



Support for guide tubes



VERSION WITH VERTICAL DELIVERY AND ¾" GUIDE PIPES

For **TR 2.2 AP, 3 AP, 3, 4**	Code ASSPTRITUS61V	**DN 2½"**

※ Kit consisting of:



Coupling foot complete with counterflange



Guide rail



Support for guide tubes



● ACCESSORIES AVAILABLE FOR ORDER

RUNNING GUIDE

※ For TR 2.2 AP, 3 AP, 3, 4	Code ASSFL014



Complete with screws and seals

GUIDE TUBE SUPPORT

※ For Ø ¾ " guide tubes	Code 859SV340INTFA



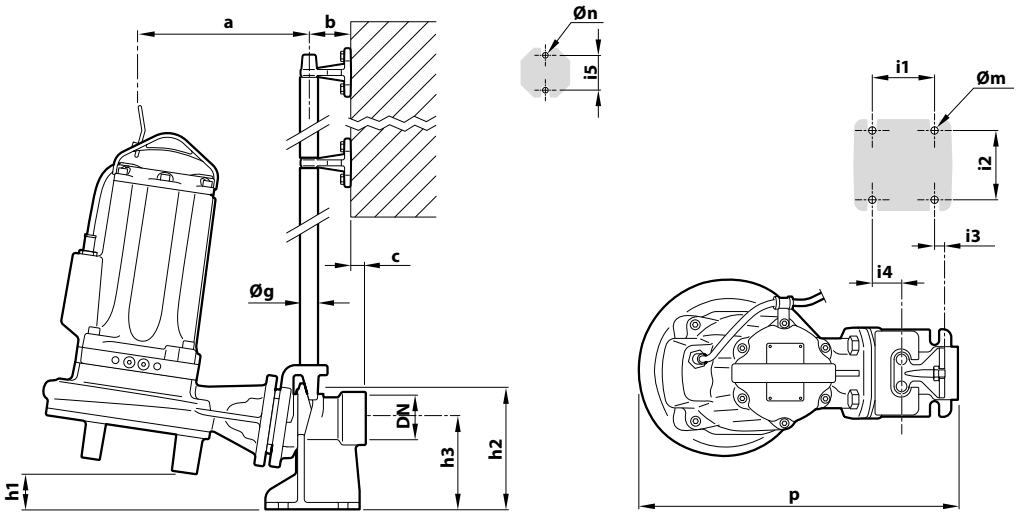
To ensure stability, insert a support every 2 metres along the guide tube

GUIDE TUBE (AISI 304 stainless steel)

※ 2 metres Ø ¾" guide tube	Code 54SARTG0052F
※ 3 metres Ø ¾" guide tube	Code 54SARTG0053F
※ 6 metres Ø ¾" guide tube	Code 54SARTG0056F

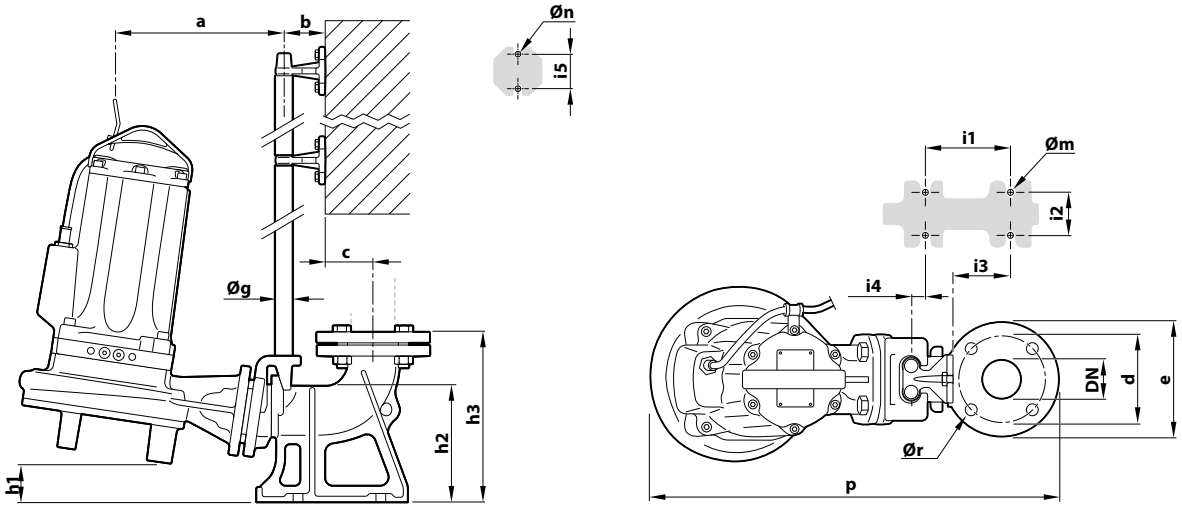


DIMENSIONS (Version with horizontal outlet)



TYPE	PORT DN	Solid bodies	DIMENSIONS mm														
			a	b	c	p	h1	h2	h3	i1	i2	i3	i4	i5	Øg	Øm	Øn
TR 2.2 AP	**2"**	**Ø 7 mm**	228	61	17	455	71	165	130	85	94	16	40	50	3/4	14	11
TR 3 AP			238														
TR 3																	
TR 4																	

DIMENSIONS (Version with vertical delivery)



TYPE	PORT DN	Solid bodies	DIMENSIONS mm																	
			a	b	c	d	e	p	h1	h2	h3	i1	i2	i3	i4	i5	Øg	Øm	Øn	Ør
TR 2.2 AP	**2½"**	**Ø 7 mm**	225	61	51.5	125	165	569	69	163.5	215.5	120	72	62	3	50	3/4	14	11	18
TR 3 AP			235																	
TR 3																				
TR 4																				

Sewage
Civil use
Industrial use

※ **High-quality materials and robust construction ensure superior performance and reliability**



PERFORMANCE RANGE

- Flow rate up to **1250 l/min** (75 m^3/h)
- Head up to **20 m**

INSTALLATION AND USE

The **VXC** series is constructed from thick cast iron, offering exceptional robustness, abrasion resistance, and longevity. Featuring **VORTEX**-type impellers, these pumps are designed to drain **sewage, wastewater, sludge-mixed water, activated and putrid sludge**.
They are suitable for a wide range of applications, including sewers, tunnels, excavations, canals, and underground parking facilities

APPLICATION LIMITS

- Depth below water level up to **10 m**
  (with an appropriately sized power cable)
- Liquid temperature up to **+40 °C**
- Suspended solids transfer:
  – up to **Ø 50 mm** for VXC /50
  – up to **Ø 65 mm** for VXC /65
- **Continuous operation of the pump even when completely uncovered.**

INCLUDES

※ Power cable length **10 m**
※ Float switch (exclusive to single-phase models)
※ Switchbox compatible with single-phase versions

AVAILABLE UPON REQUEST

※ **QES** control panel for three-phase pumps
※ Different voltage requirements 60 Hz frequency

WARRANTY

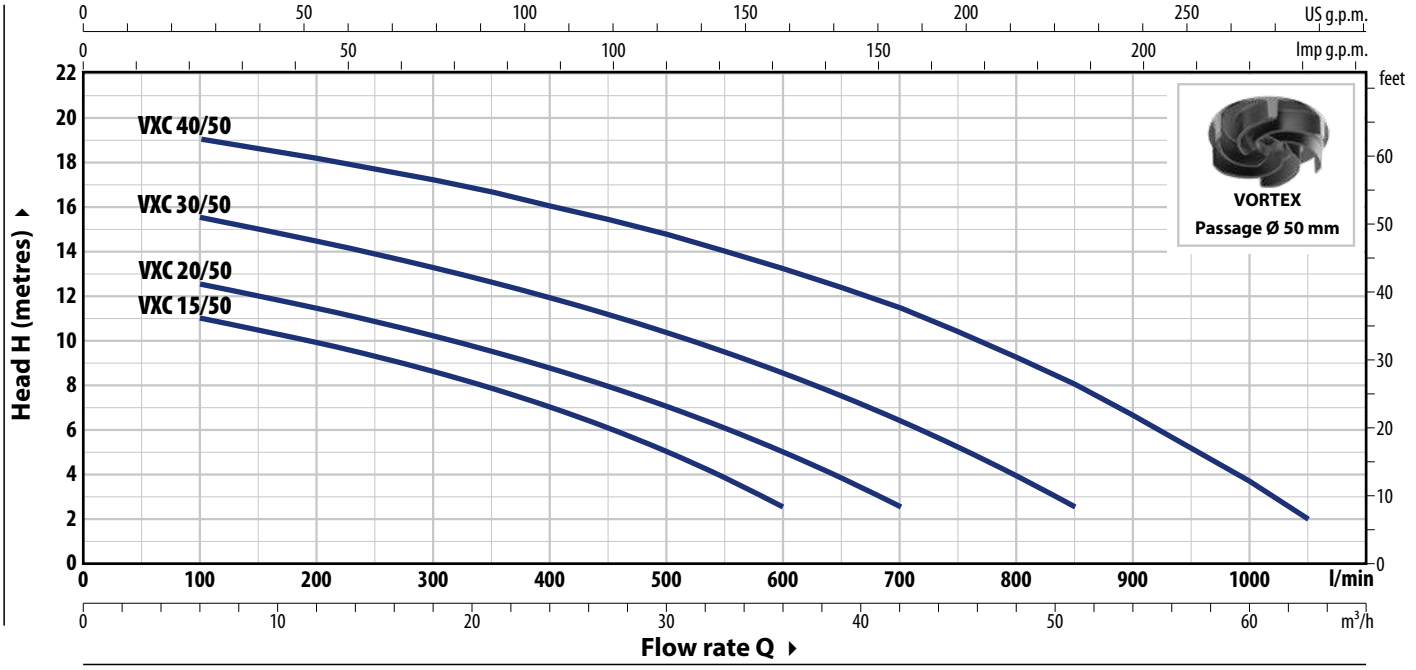
※ **The warranty for three-phase models remains valid only if the motor's built-in thermal protector is properly connected to the control panel. This connection is essential for the warranty's applicability.**

PATENTS - TRADE MARKS - MODELS

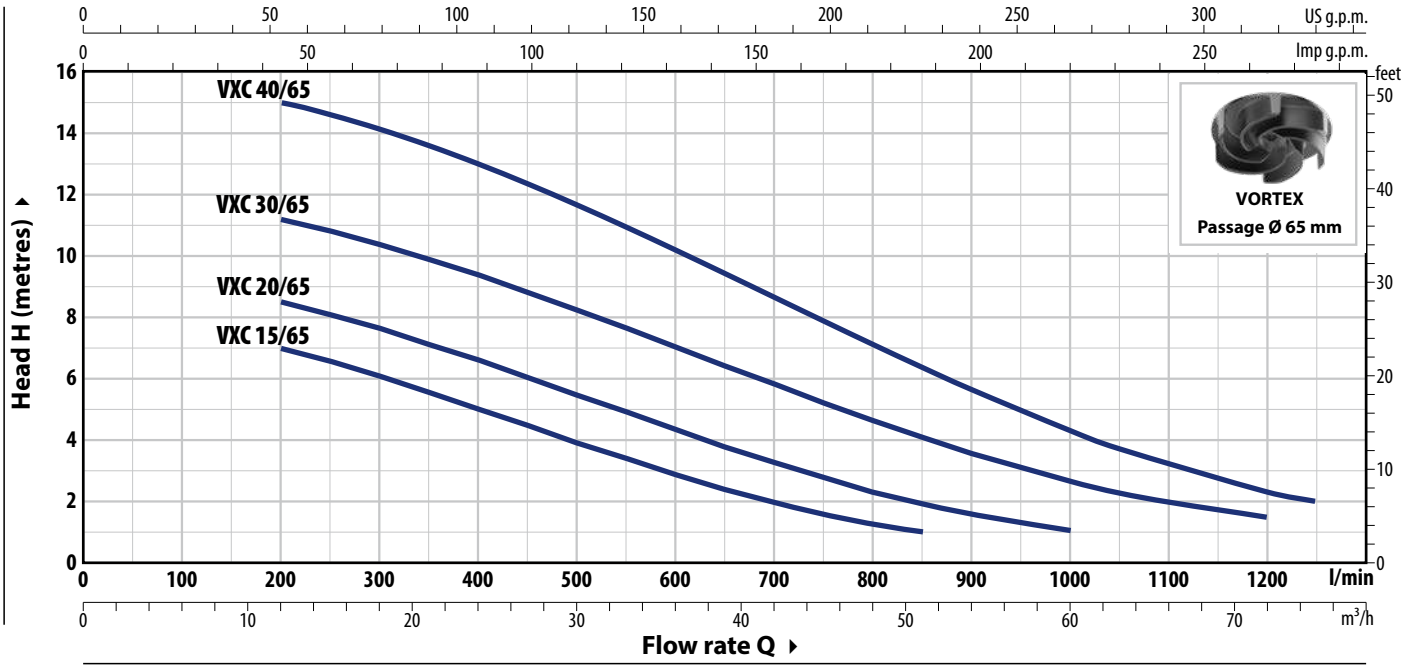
- Patent No. IT0001428923
- Registered Community Model No. 008625685-0001, No. 008625685-0002

CURVES AND PERFORMANCE DATA

50 Hz



TYPE		POWER (P2)		Q m³/h	0	6	12	18	24	30	36	42	51	60	63
Single-ph.	Three-ph.	kW	HP	l/min	**0**	**100**	**200**	**300**	**400**	**500**	**600**	**700**	**850**	**1000**	**1050**
VXCm 15/50	VXC 15/50	1.1	1.5	H metres	12	11	9.9	8.6	7	5	2.5				
VXCm 20/50	VXC 20/50	1.5	2		13.5	12.5	11.4	10.2	8.7	7	5	2.5			
VXCm 30/50	VXC 30/50	2.2	3		16.5	15.5	14.4	13.2	11.9	10.3	8.5	6.4	2.5		
–	VXC 40/50	3	4		20	19	18.1	17.1	16	14.7	13.2	11.4	8	3.6	2



TYPE		POWER (P2)		Q m³/h	0	12	18	24	30	36	42	51	60	63	72	75
Single-ph.	Three-ph.	kW	HP	l/min	**0**	**200**	**300**	**400**	**500**	**600**	**700**	**850**	**1000**	**1050**	**1200**	**1250**
VXCm 15/65	VXC 15/65	1.1	1.5	H metres	8	7	6	5	4	2.8	2	1				
VXCm 20/65	VXC 20/65	1.5	2		9.5	8.5	7.6	6.6	5.4	4.3	3.3	2	1			
VXCm 30/65	VXC 30/65	2.2	3		12	11	10.3	9.3	8.2	7	5.8	4	2.6	2.3	1.5	
–	VXC 40/65	3	4		15.5	15	14	13	11.6	10	8.6	6.3	4.3	3.7	2.3	2

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

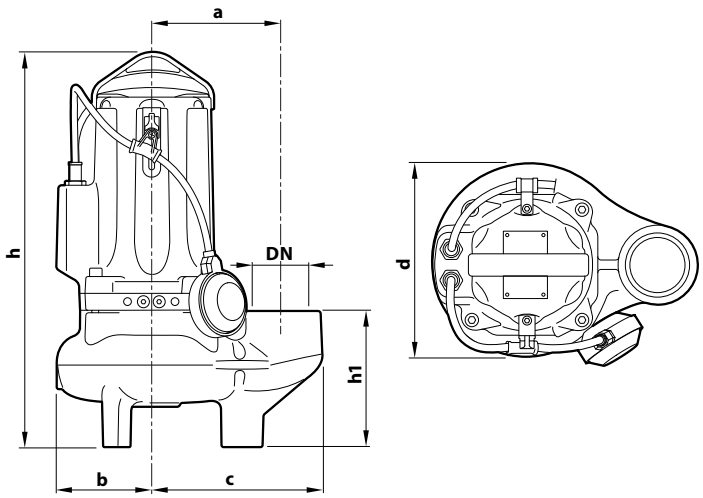
Performance curves comply with EN ISO 9906 Grade 3B tolerance limits.

ABSORPTION

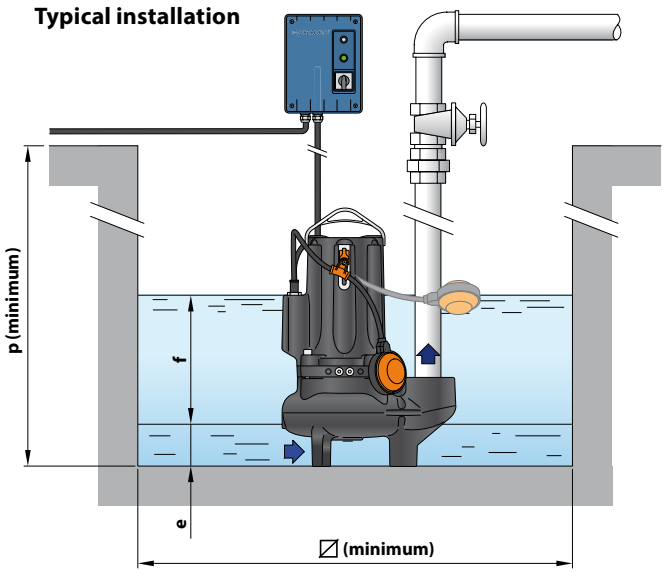
TYPE	VOLTAGE
Single-phase	**230 V**
VXCm 15/50	8.5 A
VXCm 20/50	9.0 A
VXCm 30/50	12.0 A
VXCm 15/65	8.5 A
VXCm 20/65	9.0 A
VXCm 30/65	12.0 A

TYPE	VOLTAGE
Three-phase	**400 V**
VXC 15/50	3.4 A
VXC 20/50	3.7 A
VXC 30/50	5.0 A
VXC 40/50	6.2 A
VXC 15/65	3.4 A
VXC 20/65	3.7 A
VXC 30/65	5.0 A
VXC 40/65	6.2 A

DIMENSIONS AND WEIGHT



Typical installation



TYPE		PORT	Passage of solid bodies	DIMENSIONS mm										kg	
Single-phase	**Three-phase**	**DN**		a	b	c	h	h1	d	e	f	p	⍁	1~	3~
VXCm 15/50	**VXC 15/50**	**2½"**	**50 mm**	162	119	212	487	167	242	75	adjustable	800	800	42.1	40.0
VXCm 20/50	**VXC 20/50**													43.0	42.0
VXCm 30/50	**VXC 30/50**						513 | 487						48.0	44.0
–	**VXC 40/50**						513							–	48.0
VXCm 15/65	**VXC 15/65**	**3"**	**65 mm**	180	120	240	521	201	246	85				44.0	42.5
VXCm 20/65	**VXC 20/65**													45.1	44.0
VXCm 30/65	**VXC 30/65**						547 | 521						49.8	46.0
–	**VXC 40/65**						547							–	49.8

PALLET CAPACITY

TYPE		NO. OF PUMPS
Single-phase	**Three-phase**	
VXCm 15/50	**VXC 15/50**	16
VXCm 20/50	**VXC 20/50**	16
VXCm 30/50	**VXC 30/50**	12 | 16
–	**VXC 40/50**	12
VXCm 15/65	**VXC 15/65**	12
VXCm 20/65	**VXC 20/65**	12
VXCm 30/65	**VXC 30/65**	12
–	**VXC 40/65**	12

MATERIALS AND COMPONENTS

1	**Pump body**	Cast iron with cataphoresis treatment
2	**Impeller**	Cast iron VORTEX type with cataphoresis treatment
3	**Motor holder**	Cast iron with cataphoresis treatment
4	**Motor bracket**	Cast iron with cataphoresis treatment
5	**Motor shaft**	Stainless steel **AISI 431**

6 Double mechanical seal with interposed oil chamber

Seal	Shaft	Location	Materials
STA-22	Ø 22 mm	Motor side	Ceramic / Graphite / NBR
STA-20	Ø 20 mm	Pump side	Silicon carbide/Silicon carbide/NBR

7 Electric Motor

VXCm: single-phase 230 V - 50 Hz with thermal motor protection

VXC: three-phase 400 V - 50 Hz
※ with winding integrated thermal motor protection (to be connected to the control panel supplied on request)

– Insulation: class F
– Protection rating: IP X8

8 Power cord

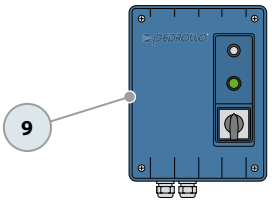
※ 10 metres 'H07 RN-F' type

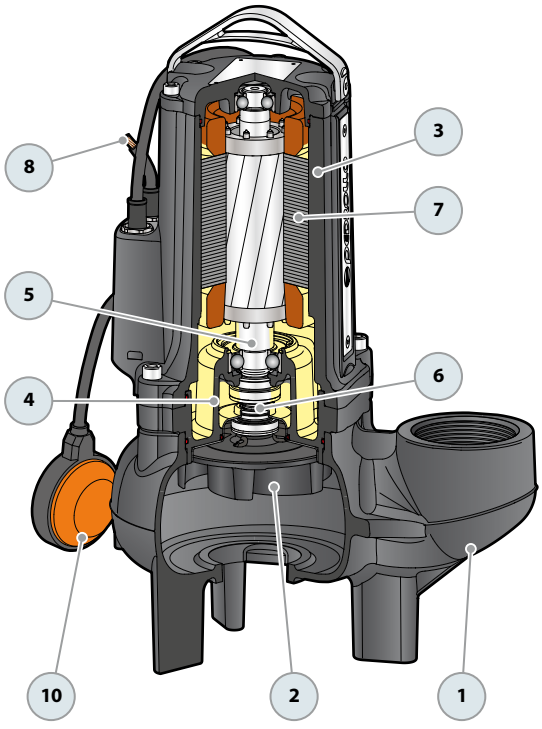
9 Control panel
(exclusive to single-phase models)

With capacitor and manual reset motor protection switch

10 Float switch
(exclusive to single-phase models)

Control panel
(standard for single-phase versions)





OPTIONAL - Support base
(Cod. ASSBAVM)



Sewage
Civil use
Industrial use

※ **High-quality materials and robust construction ensure superior performance and reliability**



PERFORMANCE RANGE

- Flow rate up to **1600 l/min** (96 m^3/h)
- Head up to **25 m**

INSTALLATION AND USE

The **MC** deries is constructed from thick cast iron, offering exceptional robustness, abrasion resistance, and longevity. Featuring **TWO-CHANNEL** impellers, these pumps are designed to drain liquids containing suspended solids and short fibers, as well as **sewage, wastewater, sludge-mixed water, activated and putrid sludge**.
They are suitable for a wide range of applications, including sewers, tunnels, excavations, canals, and underground parking facilities

APPLICATION LIMITS

- Depth below water level up to **10 m** (with an appropriately sized power cable)
- Liquid temperature up to **+40 °C**
- Suspended solids transfer:
  – up to **Ø 50 mm** for MC /50
  – up to **Ø 65 mm** for MC /65
- **Minimum immersion for continuous service:**
  – 320 mm for MC /50
  – 360 mm for MC /65

INCLUDES

※ Power cable length **10 m**
※ Float switch (exclusive to single-phase models)
※ Switchbox compatible with single-phase versions

AVAILABLE UPON REQUEST

※ **QES** control panel for three-phase pumps
※ Different voltage requirements 60 Hz frequency

WARRANTY

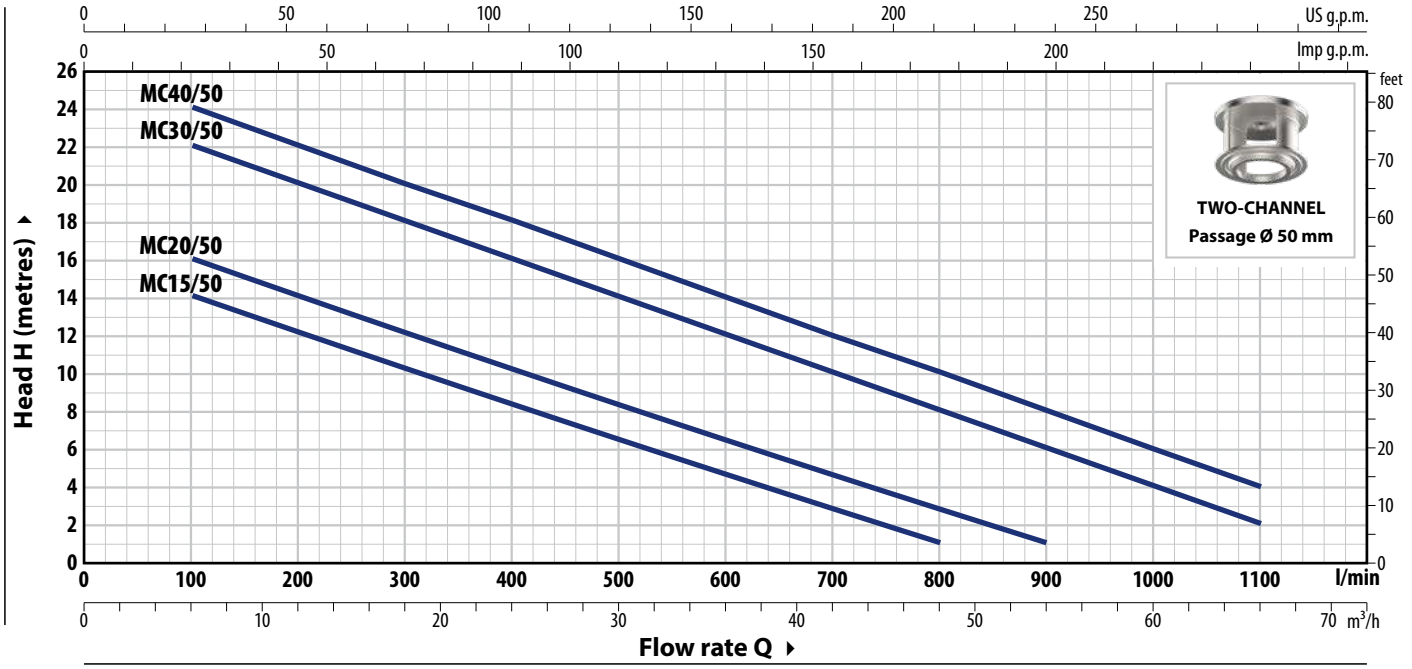
※ **The warranty for three-phase models remains valid only if the motor's built-in thermal protector is properly connected to the control panel. This connection is essential for the warranty's applicability.**

PATENTS - TRADE MARKS - MODELS

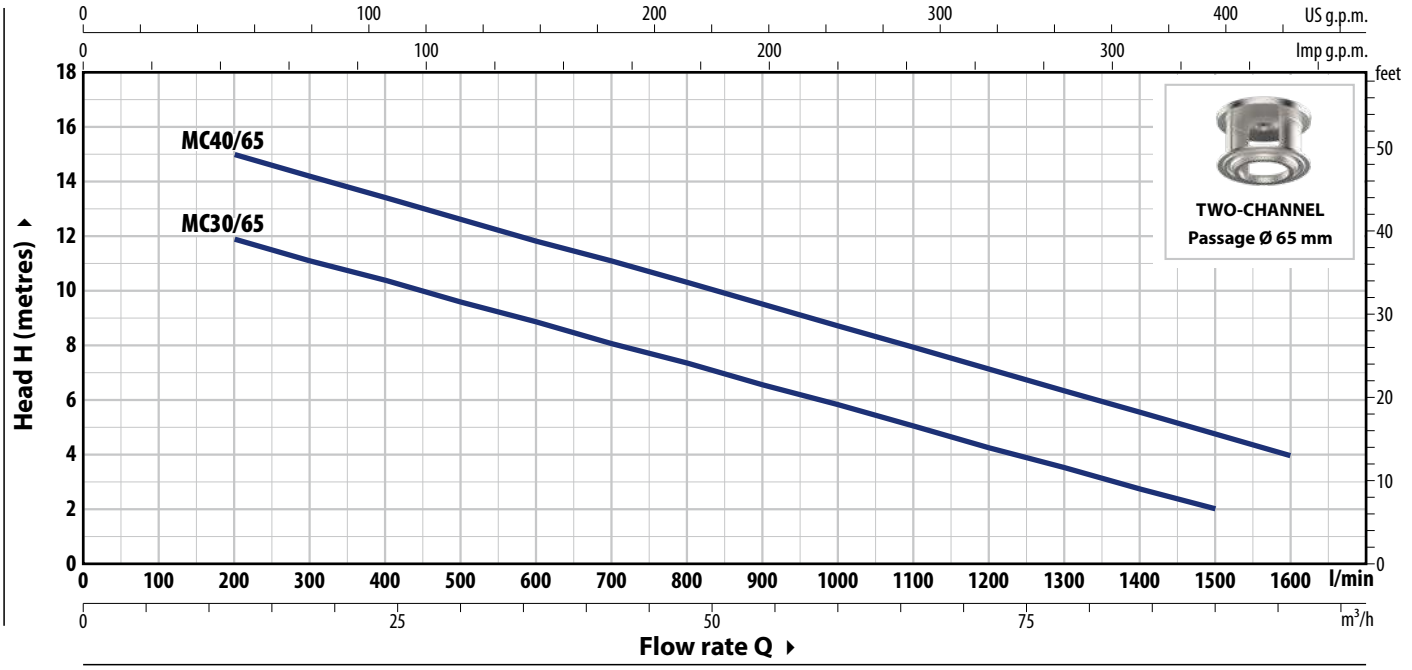
- Patent No. IT0001428923
- Registered Community Model No. 008625685-0001, No. 008625685-0002

CURVES AND PERFORMANCE DATA

50 Hz



TYPE		POWER (P2)		Q	m³/h	0	6	12	18	24	30	36	42	48	54	60	66
Single-ph.	**Three-ph.**	**kW**	**HP**		l/min	**0**	**100**	**200**	**300**	**400**	**500**	**600**	**700**	**800**	**900**	**1000**	**1100**
MCm 15/50	**MC 15/50**	1.1	1.5	**H** metres		16	14	12.5	10.5	8.5	6.5	4.5	3	1			
MCm 20/50	**MC 20/50**	1.5	2			18	16	14	12.5	10.5	8.5	6.5	5	3	1		
MCm 30/50	**MC 30/50**	2.2	3			24	22	20	18	16	14	12	10	8	6	4	2
–	**MC 40/50**	3	4			25	24	22	20	18	16	14	12	10	8	6	4



TYPE		POWER (P2)		Q	m³/h	0	12	24	36	48	54	60	66	72	90	96
Single-ph.	**Three-ph.**	**kW**	**HP**		l/min	**0**	**200**	**400**	**600**	**800**	**900**	**1000**	**1100**	**1200**	**1500**	**1600**
MCm 30/65	**MC 30/65**	2.2	3	**H** metres		13	12	10.5	9	7.5	6.5	6	5	4.5	2	
–	**MC 40/65**	3	4			17	15	13.5	12	10.5	9.5	8.5	8	7	4.8	4

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

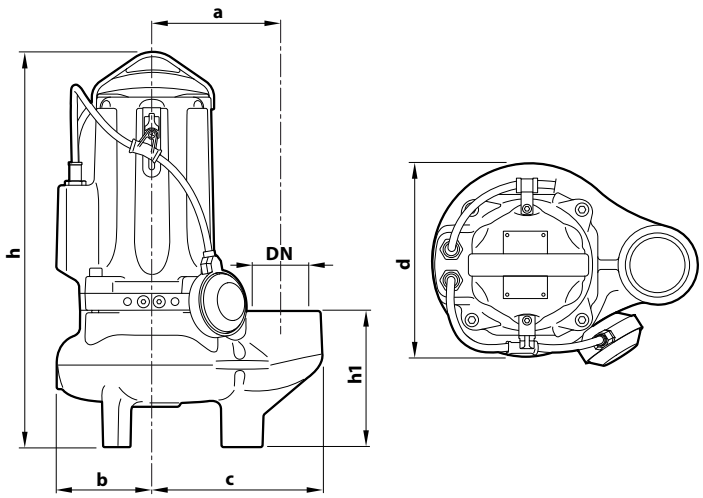
Performance curves comply with EN ISO 9906 Grade 3B tolerance limits.

ABSORPTION

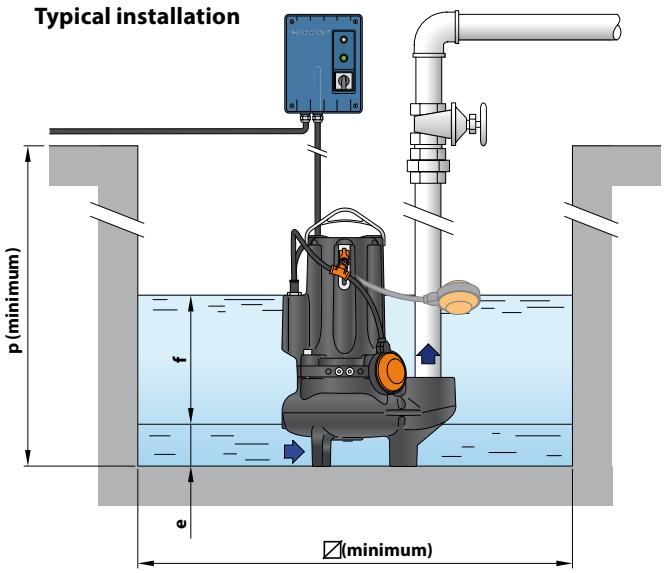
TYPE	VOLTAGE
Single-phase	**230 V**
MCm 15/50	10.5 A
MCm 20/50	14.0 A
MCm 30/50	18.0 A
MCm 30/65	14.0 A

TYPE	VOLTAGE
Three-phase	**400 V**
MC 15/50	4.5 A
MC 20/50	5.0 A
MC 30/50	6.5 A
MC 40/50	7.0 A
MC 30/65	6.5 A
MC 40/65	7.5 A

DIMENSIONS AND WEIGHT



Typical installation



TYPE		PORT	Passage of	DIMENSIONS mm										kg	
Single-phase	**Three-phase**	**DN**	solid bodies	a	b	c	h	h1	d	e	f	p	⍁	1~	3~
MCm 15/50	**MC 15/50**	**2½"**	**50 mm**	162	119	212	487	167	242	75	adjustable	800	800	42.0	40.0
MCm 20/50	**MC 20/50**													43.0	41.9
MCm 30/50	**MC 30/50**						513 | 487						47.8	44.0
–	**MC 40/50**						513							–	47.8
MCm 30/65	**MC 30/65**	**3"**	**65 mm**	180	120	240	547 | 521	201	246	85				50.0	46.0
–	**MC 40/65**						547							–	49.8

PALLET CAPACITY

TYPE		NO. OF PUMPS
Single-phase	**Three-phase**	
MCm 15/50	**MC 15/50**	16
MCm 20/50	**MC 20/50**	16
MCm 30/50	**MC 30/50**	12 | 16
–	**MC 40/50**	12
MCm 30/65	**MC 30/65**	12
–	**MC 40/65**	12

MATERIALS AND COMPONENTS

1	**Pump body**	Cast iron with cataphoresis treatment
2	**Impeller**	TWO-CHANNEL type in micro-cast **AISI 304** stainless steel
3	**Motor holder**	Cast iron with cataphoresis treatment
4	**Motor bracket**	Cast iron with cataphoresis treatment
5	**Motor shaft**	Stainless steel **AISI 431**

6 Double mechanical seal with interposed oil chamber

Seal	Shaft	Location	Materials
STA-22	Ø 22 mm	Motor side	Ceramic / Graphite / NBR
STA-20	Ø 20 mm	Pump side	Silicon carbide/Silicon carbide/NBR

7 Electric Motor

MCm: single-phase 230 V - 50 Hz with thermal motor protection

MC: three-phase 400 V - 50 Hz
※ with winding integrated thermal motor protection (to be connected to the control panel supplied on request)

– Insulation: class F
– Protection rating: IP X8

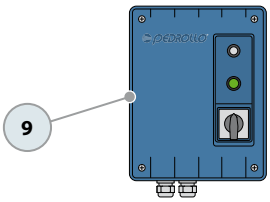
8 Power cord
※ 10 metres 'H07 RN-F' type

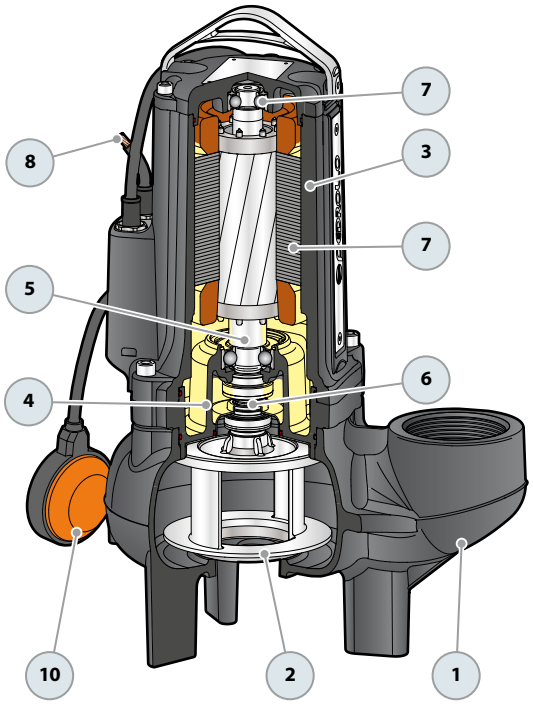
9 Switchbox compatible with MCm 15-20-30
(exclusive to single-phase models)

With capacitor and manual reset motor protection switch

10 Float switch
(exclusive to single-phase models)

Control panel
(standard for single-phase versions)





OPTIONAL - Support base
(Cod. ASSBAVM)



Sewage
Civil use
Industrial use

※ **High quality materials and robustness assure superior performance and reliability**



PERFORMANCE RANGE

- Flow rate up to **1250 l/min** (75 m^3/h)
- Head up to **20 m**

INSTALLATION AND USE

The **VXC-F** series is constructed from thick cast iron, offering exceptional robustness, abrasion resistance, and longevity.
Featuring VORTEX-type impellers, these pumps are designed to drain **wastewater, sludge-mixed water, liquids with air or gas, as well as activated and putrid sludge**.
Recommended for stationary installation in sewers, tunnels, shafts, underground parking facilities, and specialized manholes.

APPLICATION LIMITS

- Depth below water level up to **10 m** (with an appropriately sized power cable)
- Liquid temperature up to **+40 °C**
- Suspended solids transfer:
  – up to **Ø 50 mm** for **VXC /50-F**
  – up to **Ø 65 mm** for **VXC /65-F**
- **Continuous operation of the pump even when completely uncovered.**

INCLUDES

※ Power cable length **10 m**
※ Float switch (exclusive to single-phase models)
※ Switchbox compatible with single-phase versions

AVAILABLE UPON REQUEST

※ Coupling foot kit
※ **QES** control panel for three-phase pumps
※ Different voltage requirements 60 Hz frequency

WARRANTY

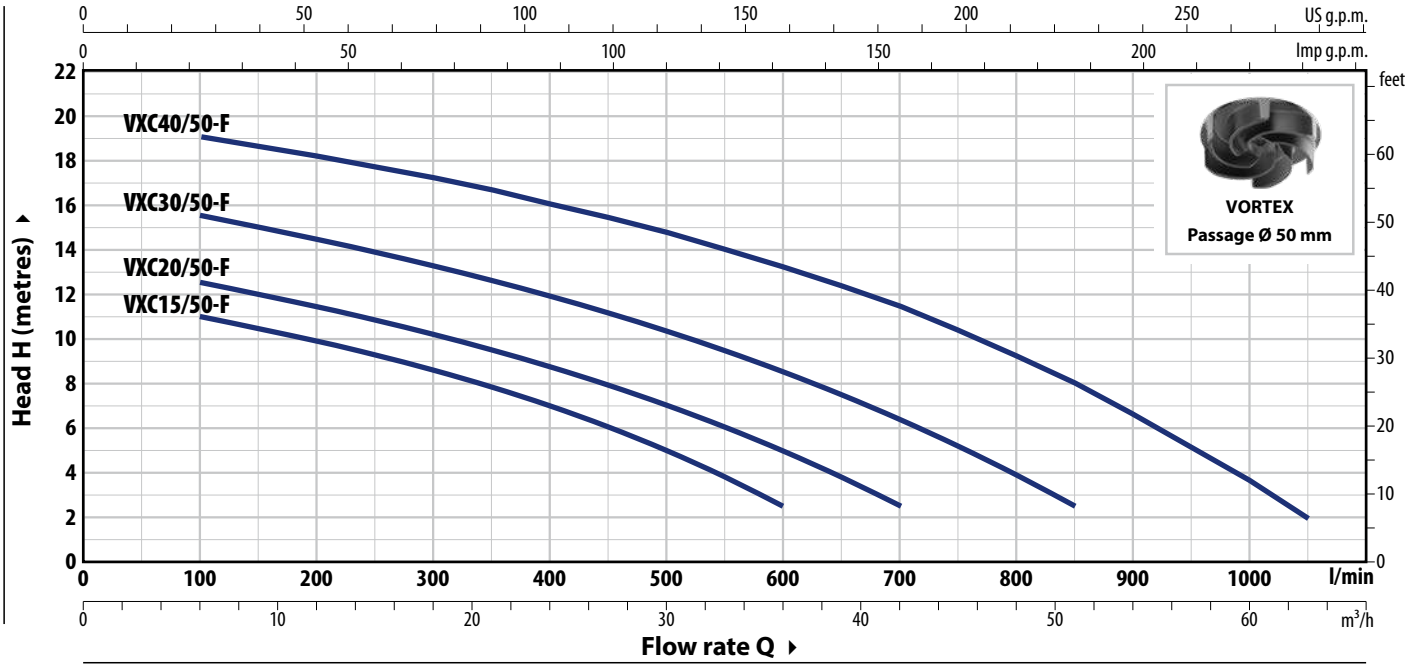
※ **The warranty for three-phase models remains valid only if the motor's built-in thermal protector is properly connected to the control panel. This connection is essential for the warranty's applicability.**

PATENTS - TRADE MARKS - MODELS

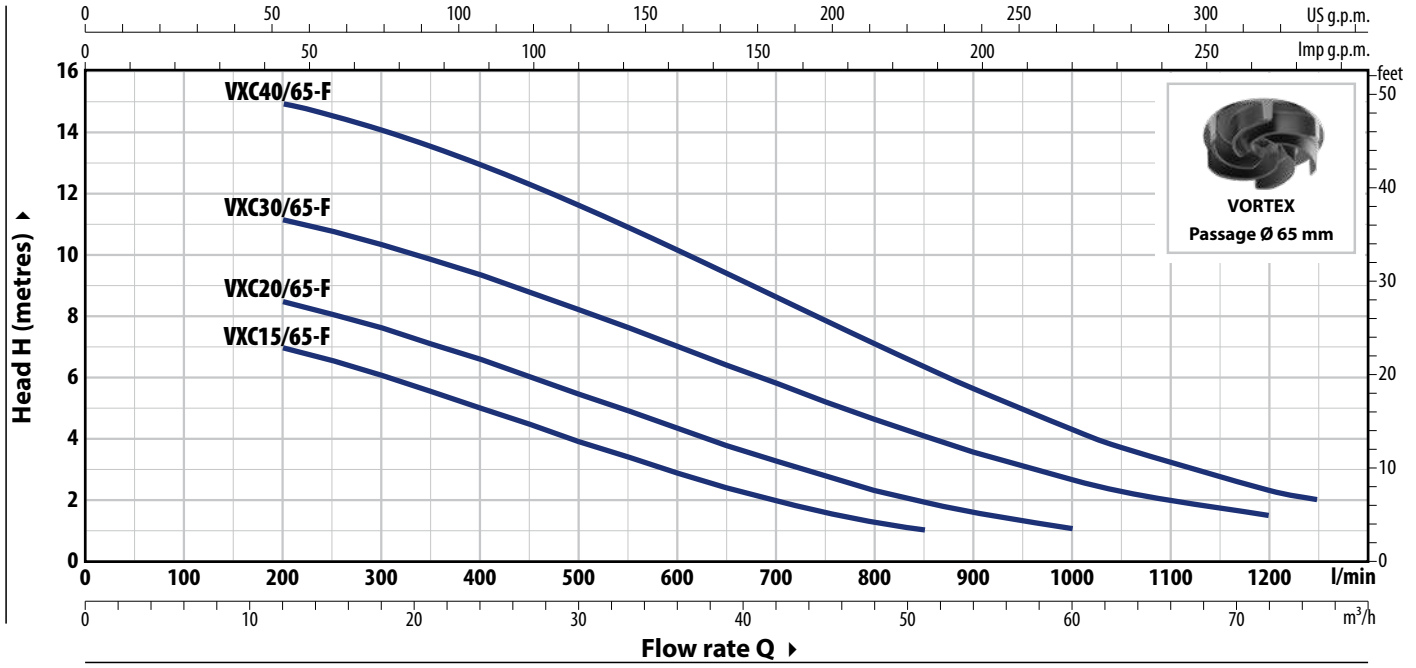
- Patent No. IT0001428923

CURVES AND PERFORMANCE DATA

50 Hz



TYPE		POWER (P2)		Q m³/h	0	6	12	18	24	30	36	42	51	60	63
Single-phase	**Three-phase**	**kW**	**HP**	Q l/min	**0**	**100**	**200**	**300**	**400**	**500**	**600**	**700**	**850**	**1000**	**1050**
VXCm 15/50-F	**VXC 15/50-F**	1.1	1.5	H metres	12	11	10	8.6	7	5	2.5				
VXCm 20/50-F	**VXC 20/50-F**	1.5	2		13.5	12.5	11.4	10.2	8.7	7	5	2.5			
VXCm 30/50-F	**VXC 30/50-F**	2.2	3		16.5	15.5	14.4	13.2	12	10.3	8.5	6.4	2.5		
–	**VXC 40/50-F**	3	4		20	19	18	17	16	14.7	13.2	11.4	8	3.6	2



TYPE		POWER (P2)		Q m³/h	0	12	24	36	42	51	60	63	72	75
Single-phase	**Three-phase**	**kW**	**HP**	Q l/min	**0**	**200**	**400**	**600**	**700**	**850**	**1000**	**1050**	**1200**	**1250**
VXCm 15/65-F	**VXC 15/65-F**	1.1	1.5	H metres	8	7	5	2.8	2	1				
VXCm 20/65-F	**VXC 20/65-F**	1.5	2		9.5	8.5	6.6	4.3	3.3	2	1			
VXCm 30/65-F	**VXC 30/65-F**	2.2	3		12	11	9.3	7	5.8	4	2.6	2.3	1.5	
–	**VXC 40/65-F**	3	4		15.5	15	13	10	8.6	6.3	4.3	3.7	2.3	2

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

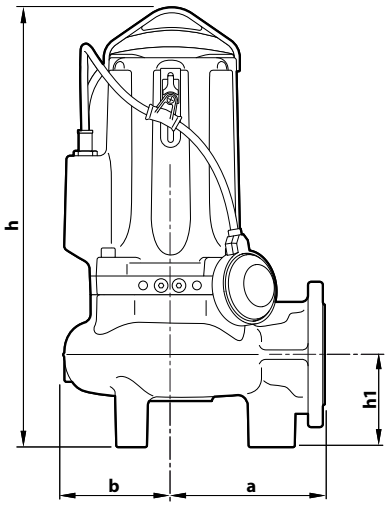
Performance curves comply with EN ISO 9906 Grade 3B tolerance limits.

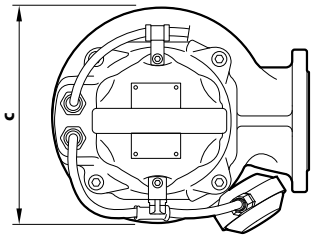
ABSORPTION

TYPE	VOLTAGE
Single-phase	**230 V**
VXCm 15/50-F	8.5 A
VXCm 20/50-F	9.0 A
VXCm 30/50-F	12.0 A
VXCm 15/65-F	8.5 A
VXCm 20/65-F	9.0 A
VXCm 30/65-F	12.0 A

TYPE	VOLTAGE
Three-phase	**400 V**
VXC 15/50-F	3.4 A
VXC 20/50-F	3.7 A
VXC 30/50-F	5.0 A
VXC 40/50-F	6.2 A
VXC 15/65-F	3.4 A
VXC 20/65-F	3.7 A
VXC 30/65-F	5.0 A
VXC 40/65-F	6.2 A

DIMENSIONS AND WEIGHT

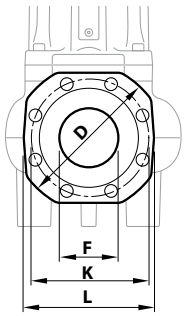




TYPE		Passage of solid bodies	DIMENSIONS mm					kg	
Single-phase	**Three-phase**		a	b	c	h	h1	1~	3~
VXCm 15/50-F	**VXC 15/50-F**	**50 mm**	170	119	242	487	102	43.6	42.0
VXCm 20/50-F	**VXC 20/50-F**							44.6	43.3
VXCm 30/50-F	**VXC 30/50-F**					513 | 487		49.5	45.5
–	**VXC 40/50-F**					513		–	50.0
VXCm 15/65-F	**VXC 15/65-F**	**65 mm**	210	120	246	521	123	46.0	44.7
VXCm 20/65-F	**VXC 20/65-F**							47.1	46.0
VXCm 30/65-F	**VXC 30/65-F**					547 | 521		51.8	48.0
–	**VXC 40/65-F**					547		–	51.8

PORT FLANGE

TYPE	FLANGE	F	K	D	L	HOLES	
			mm	mm	mm	N°	Ø (mm)
VXC /50-F	**DN65** (PN10)	**2½"**	145	185	160	4	18
VXC /65-F	**DN80** (PN10)	**3"**	160	200	180	8	18



MATERIALS AND COMPONENTS

1	**Pump body**	Cast iron with cataphoresis treatment with flanged and threaded ISO 228/1 port
2	**Impeller**	Cast iron VORTEX type with cataphoresis treatment
3	**Motor holder**	Cast iron with cataphoresis treatment
4	**Motor bracket**	Cast iron with cataphoresis treatment
5	**Motor shaft**	Stainless steel **AISI 431**

6 Double mechanical seal with interposed oil chamber

Seal	Shaft	Location	Materials
STA-22	Ø 22 mm	Motor side	Ceramic / Graphite / NBR
STA-20	Ø 20 mm	Pump side	Silicon carbide/Silicon carbide/NBR

7 Electric Motor

VXCm-F: single-phase 230 V - 50 Hz
with thermal motor protection

VXC-F: three-phase 400 V - 50 Hz
※ with winding integrated thermal motor protection (to be connected to the control panel supplied on request)

– Insulation: class F
– Protection rating: IP X8

8 Power cord

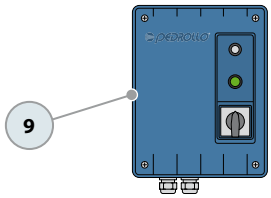
※ 10 metres 'H07 RN-F' type

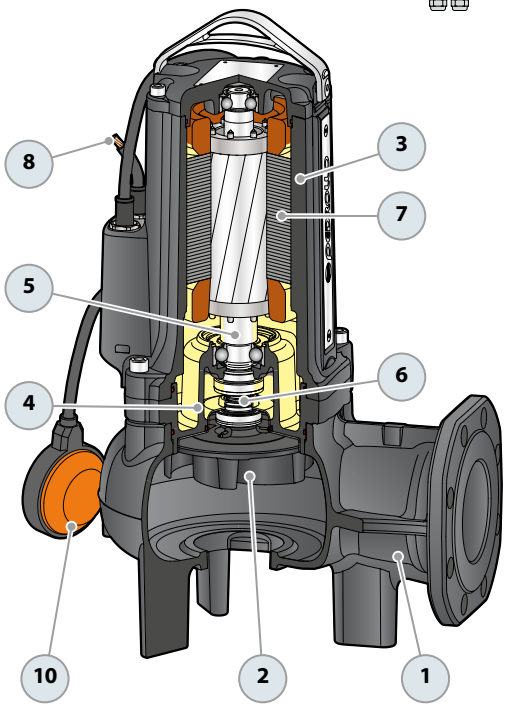
9 Control panel
(exclusive to single-phase models)

With capacitor and manual reset motor protection switch

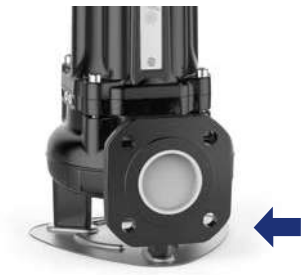
10 Float switch
(exclusive to single-phase models)

Control panel
(standard for single-phase versions)





OPTIONAL - Support base
(Cod. ASSBAVM)



Sewage
Civil use
Industrial use

※ **High quality materials and robustness assure superior performance and reliability**



PERFORMANCE RANGE

- Flow rate up to **1600 l/min** (96 m^3/h)
- Head up to **25 m**

INSTALLATION AND USE

The **MC-F** series is constructed from thick cast iron, offering exceptional robustness, abrasion resistance, and longevity. Featuring **TWO-CHANNEL** impellers, these pumps are designed to drain liquids containing suspended solids and short fibers, as well as wastewater, **sewage, sludge-mixed water, groundwater, and surface water** in various settings including apartment buildings, public facilities, industrial sites, parking facilities, and washing areas.

APPLICATION LIMITS

- Depth below water level up to **10 m** (with an appropriately sized power cable)
- Liquid temperature up to **+40 °C**
- Suspended solids transfer:
  – up to **Ø 50 mm** for **MC /50-F**
  – up to **Ø 65 mm** for **MC /65-F**
- **Minimum immersion for continuous service:**
  – 320 mm for MC /50
  – 360 mm for MC /65

INCLUDES

※ Power cable length **10 m**
※ Float switch (exclusive to single-phase models)
※ Switchbox compatible with single-phase versions

AVAILABLE UPON REQUEST

※ Coupling foot kit
※ **QES** control panel for three-phase pumps
※ Different voltage requirements 60 Hz frequency

WARRANTY

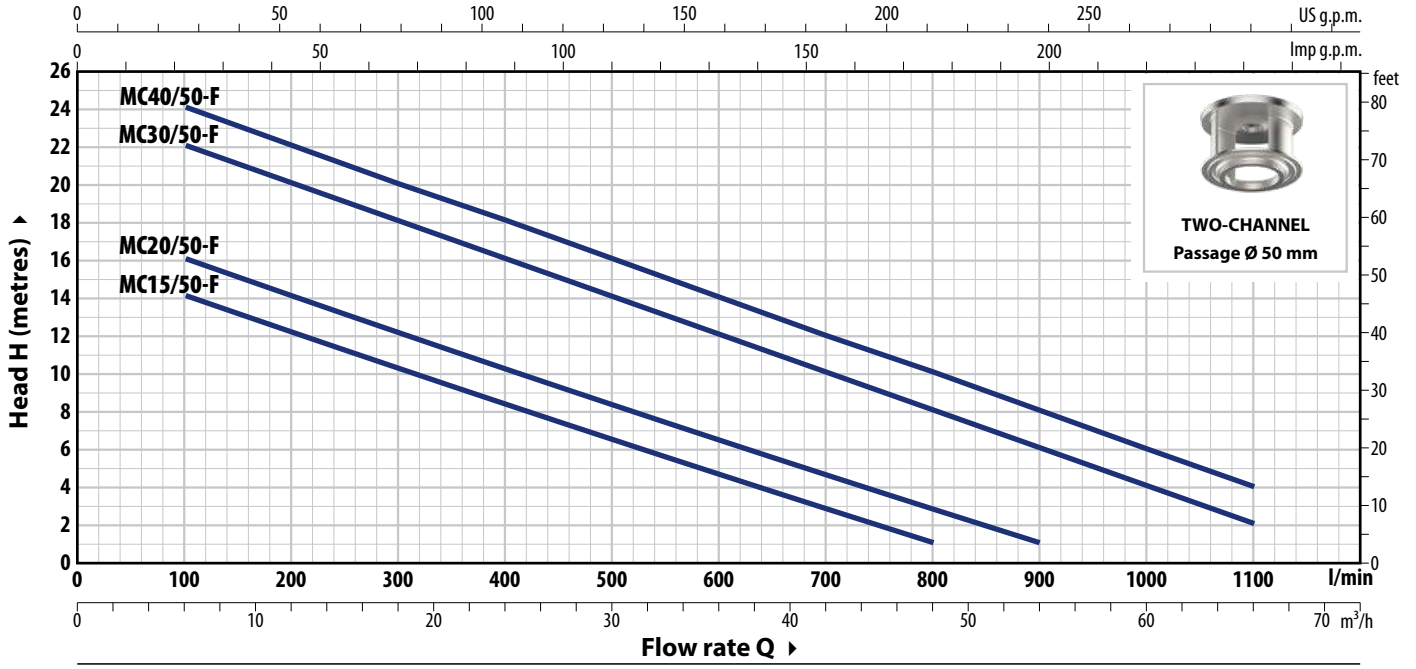
※ **The warranty for three-phase models remains valid only if the motor's built-in thermal protector is properly connected to the control panel. This connection is essential for the warranty's applicability.**

PATENTS - TRADE MARKS - MODELS

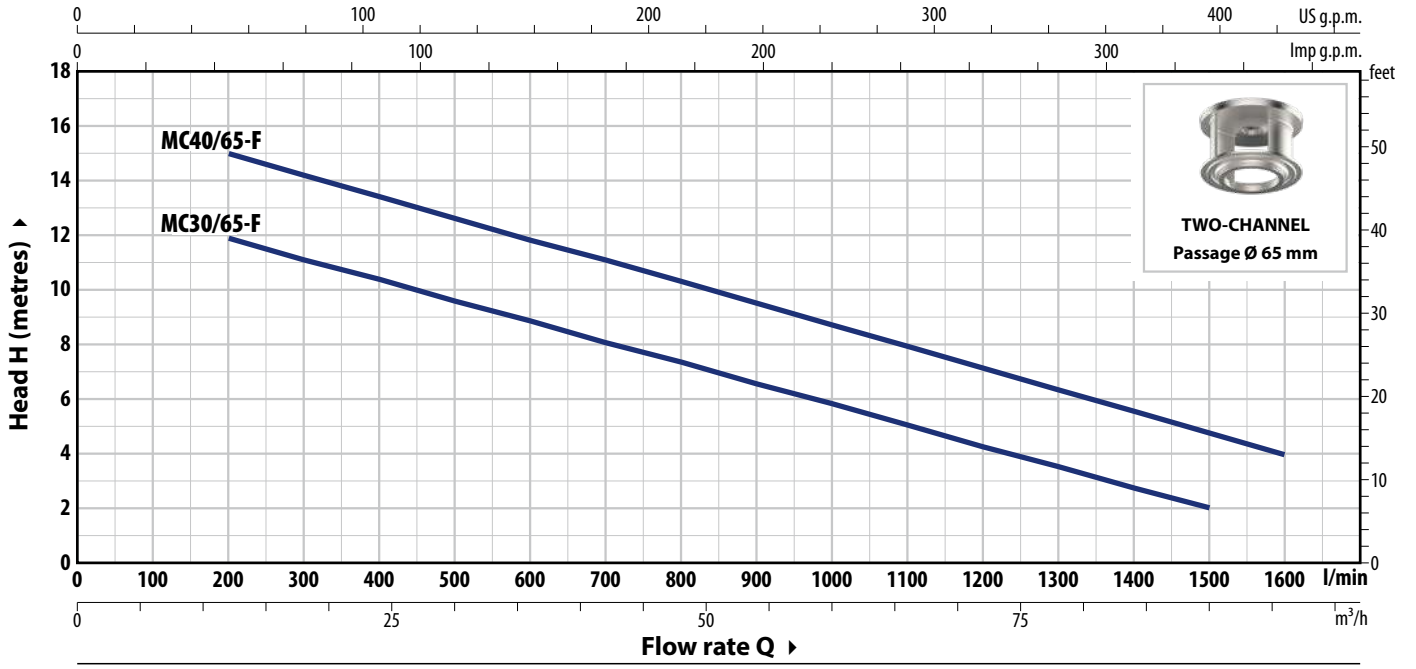
- Patent No. IT0001428923

CURVES AND PERFORMANCE DATA

50 Hz



TYPE		POWER (P2)		Q m³/h	0	6	12	18	24	30	36	42	48	54	60	66
Single-phase	Three-phase	kW	HP	l/min	**0**	**100**	**200**	**300**	**400**	**500**	**600**	**700**	**800**	**900**	**1000**	**1100**
MCm 15/50-F	MC 15/50-F	1.1	1.5	H metres	16	14	12.5	10.5	8.5	6.5	4.5	3	1			
MCm 20/50-F	MC 20/50-F	1.5	2		18	16	14	12.5	10.5	8.5	6.5	5	3	1		
MCm 30/50-F	MC 30/50-F	2.2	3		24	22	20	18	16	14	12	10	8	6	4	2
–	MC 40/50-F	3	4		25	24	22	20	18	16	14	12	10	8	6	4



TYPE		POWER (P2)		Q m³/h	0	12	24	36	48	60	66	72	90	96
Single-phase	Three-phase	kW	HP	l/min	**0**	**200**	**400**	**600**	**800**	**1000**	**1100**	**1200**	**1500**	**1600**
MCm 30/65-F	MC 30/65-F	2.2	3	H metres	13	12	10.5	9	7.5	6	5	4.5	2	
–	MC 40/65-F	3	4		17	15	13.5	12	10.5	8.5	8	7	4.8	4

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

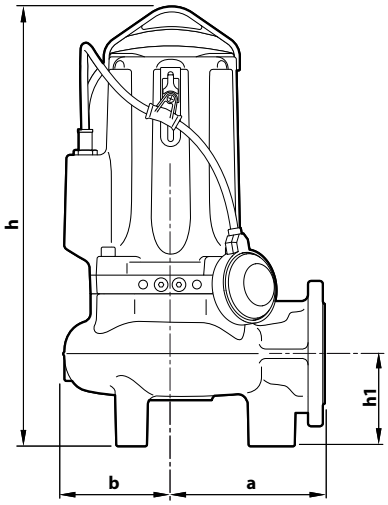
Performance curves comply with EN ISO 9906 Grade 3B tolerance limits.

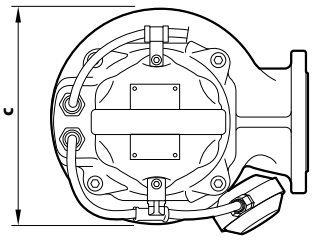
ABSORPTION

TYPE **Single-phase**	VOLTAGE **230 V**
MCm 15/50-F	10.5 A
MCm 20/50-F	14.0 A
MCm 30/50-F	18.0 A
MCm 30/65-F	14.0 A

TYPE **Three-phase**	VOLTAGE **400 V**
MC 15/50-F	4.5 A
MC 20/50-F	5.0 A
MC 30/50-F	6.5 A
MC 40/50-F	7.0 A
MC 30/65-F	6.5 A
MC 40/65-F	7.5 A

DIMENSIONS AND WEIGHT

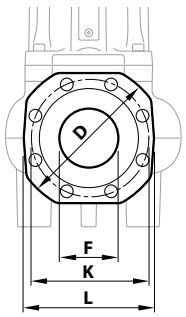




TYPE		Passage of solid bodies	DIMENSIONS mm					kg	
Single-phase	**Three-phase**		a	b	c	h	h1	1~	3~
MCm 15/50-F	**MC 15/50-F**	**50 mm**	170	119	242	487	102	43.6	42.0
MCm 20/50-F	**MC 20/50-F**							44.6	43.5
MCm 30/50-F	**MC 30/50-F**					513 | 487		50.0	45.5
–	**MC 40/50-F**					513		–	49.8
MCm 30/65-F	**MC 30/65-F**	**65 mm**	210	120	246	547 | 521	123	51.8	48.0
–	**MC 40/65-F**					547		–	52.8

PORT FLANGE

TYPE	FLANGE	F	K	D	L	HOLES	
			mm	mm	mm	N°	Ø (mm)
MC /50-F	**DN65** (PN10)	**2½"**	145	185	160	4	18
MC /65-F	**DN80** (PN10)	**3"**	160	200	180	8	18



MATERIALS AND COMPONENTS

1	**Pump body**	Cast iron with cataphoresis treatment with flanged and threaded ISO 228/1 port
2	**Impeller**	TWO-CHANNEL type in micro-cast **AISI 304** stainless steel
3	**Motor holder**	Cast iron with cataphoresis treatment
4	**Motor bracket**	Cast iron with cataphoresis treatment
5	**Motor shaft**	Stainless steel **AISI 431**

6 Double mechanical seal with interposed oil chamber

Seal	Shaft	Location	Materials
STA-22	Ø 22 mm	Motor side	Ceramic / Graphite / NBR
STA-20	Ø 20 mm	Pump side	Silicon carbide/Silicon carbide/NBR

7 Electric Motor

MCm-F: single-phase 230 V - 50 Hz
with thermal motor protection

MC-F: three-phase 400 V - 50 Hz
※ with winding integrated thermal motor protection (to be connected to the control panel supplied on request)

– Insulation: class F
– Protection rating: IP X8

8 Power cord

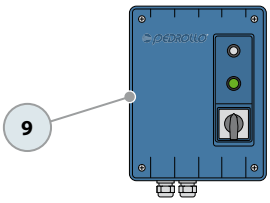
※ 10 metres 'H07 RN-F' type

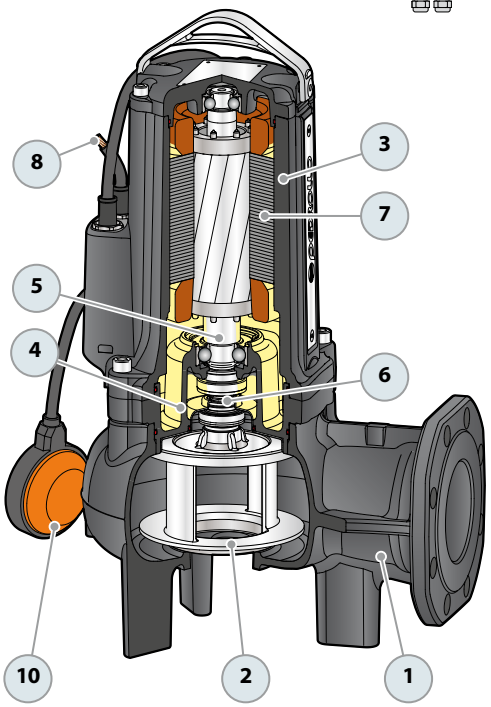
9 Control panel
(exclusive to single-phase models)

With capacitor and manual reset motor protection switch

10 Float switch
(exclusive to single-phase models)

Control panel
(standard for single-phase versions)





OPTIONAL - Support base
(Cod. ASSBAVM)



SEWAGE LIFTING SYSTEM VXC-F - MC-F

VERSION WITH HORIZONTAL DELIVERY AND ¾" GUIDE PIPES

For **VXC /50-F, MC /50-F**	Code ASSVXCF051	**DN 2"**

※ Kit consisting of:



Coupling foot



Slide rail with screws and gasket



Support for guide tubes



VERSION WITH VERTICAL DELIVERY AND ¾" GUIDE PIPES

For **VXC /50-F, MC /50-F**	Code ASSVXCF051V	**DN 2½"**
For **VXC /65-F, MC /65-F**	Code ASSVXCF071V	**DN 3"**

VERSION WITH VERTICAL DELIVERY AND 2" GUIDE TUBES

For **VXC /50-F, MC /50-F**	Code ASSVXCF0704V	**DN 3"**
For **VXC /65-F, MC /65-F**	Code ASSVXCF0705V	

※ Kit consisting of:



Coupling foot complete with counterflange



Slide rail with screws and gasket



Support for guide tubes



● ACCESSORIES AVAILABLE FOR ORDER

RUNNING GUIDE

※ For VXC /50-F, MC /50-F with guide tubes Ø ¾".	Code ASSFL0017
※ For VXC /65-F, MC /65-F with guide tubes Ø ¾".	Code ASSFL0018
※ For VXC /50-F, MC /50-F with guide tubes Ø 2".	Code ASSFL071
※ For VXC /65-F, MC /65-F with guide tubes Ø 2".	Code ASSFL072

Complete with screws and seals



for Ø ¾" guide tubes



for guide tubes Ø 2"

INTERMEDIATE GUIDE TUBE SUPPORT

※ For Ø ¾" guide tubes	Code 859SV340INTFA
※ For guide tubes Ø 2"	Code 859SV349INTFA

For reasons of stability, interpose a support:
– every 2 metres with ¾ " guide pipes (mandatory)
– every 3 metres with 2" guide tubes (recommended)



for Ø ¾" guide tubes



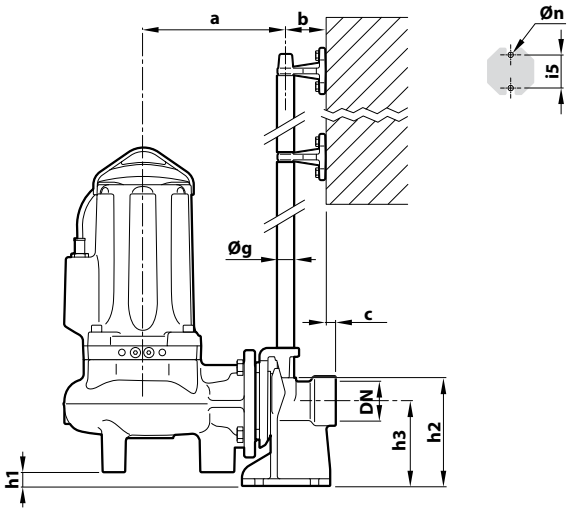
for guide tubes Ø 2"

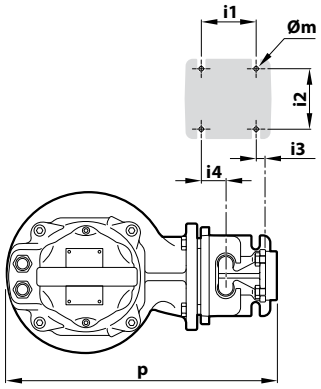
GUIDE TUBE (AISI 304 stainless steel)

※ 2 metres Ø ¾" guide tube	Code 54SARTG0052F
※ 3 metres Ø ¾" guide tube	Code 54SARTG0053F
※ 6 metres Ø ¾" guide tube	Code 54SARTG0056F
※ 3 metres Ø 2" guide tube	Code 54SARTG0063F
※ 6 metres guide tube Ø 2"	Code 54SARTG0066F



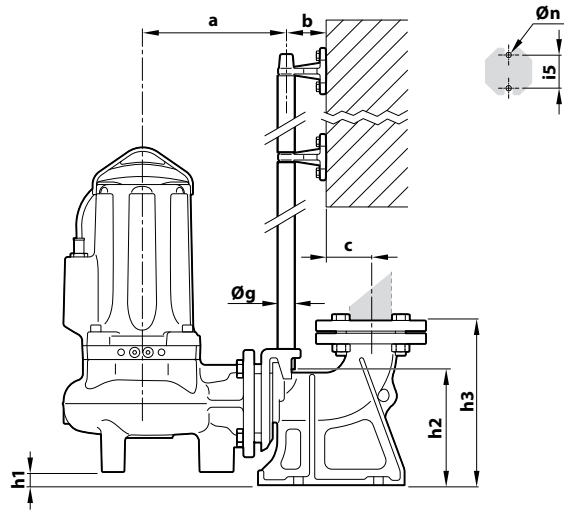
DIMENSIONS (Version with horizontal outlet)

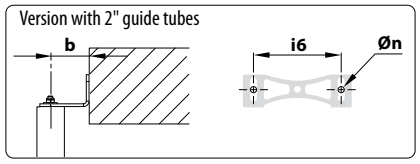


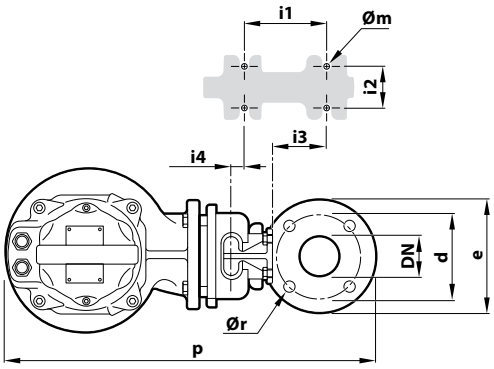


TYPE	Solid bodies mm	PORT DN	DIMENSIONS mm													
			a	b	c	p	h1	h2	h3	i1	i2	i3	i4	i5	Øg	Øm	Øn
VXC /50 -F	**Ø 50**	**2"**	216	61	17	412	28	165	130	85	94	16	40	50	¾"	12	11
MC /50 -F																	

DIMENSIONS (Version with vertical delivery)







Version with ¾" guide tubes

TYPE	Solid bodies mm	PORT DN	DIMENSIONS mm																
			a	b	c	d	e	p	h1	h2	h3	i1	i2	i3	i4	i5	Øg	Øm	Øn	Ør
VXC /50 -F	**Ø 50 mm**	**2½"**	213	61	52	125	165	526	25.5	164	215	120	72	62	3	50	¾"	14	11	18
MC /50 -F																				
VXC /65 -F	**Ø 65 mm**	**3"** (PN6)	253	61	69	150	190	598	46	216	279	130	112	84	15	50	¾"	14	11	18
MC /65 -F																				

Version with 2" guide tubes

TYPE	Solid bodies mm	PORT DN	DIMENSIONS mm																		
			a	b	c	d	e	p	h1	h2	h3	i1	i2	i3	i4	i5	i6	Øg	Øm	Øn	Ør
VXC /50 -F	**Ø 50 mm**	**3"** (PN10)	320	85	95	160	200	718	105	265	392	250	150	35	-130	–	187	2"	22	13.5	18
MC /50 -F																					
VXC /65 -F	**Ø 65 mm**	**3"** (PN10)	359	85	95	160	200	760	84	256	392	250	150	35	-130	–	187	2"	22	13.5	18
MC /65 -F																					

Sewage
Civil use
Industrial use

※ **Advanced design and high-quality materials assure long-term performance and reliability**



PERFORMANCE RANGE

- Flow rate up to **1800 l/min** (108 m³/h)
- Head up to **26 m**

INSTALLATION AND USE

The **VX** series is constructed from thick stainless steel and cast iron, offering exceptional robustness, abrasion resistance, and durability. The pumps feature **VORTEX**-type impellers, renowned for their reliable operation and minimal risk of clogging.
Recommended for various applications including sewage with suspended solids, wastewater, rainwater, city sewage, and industrial wastewater.
They are suitable for a wide range of applications, including sewers, tunnels, excavations, canals, and underground parking facilities.

ELECTRIC MOTOR

※ **The electric motor is safeguarded by a special three-phase thermal protector, situated within the motor, which activates in case of overheating or abnormal power consumption.**

INCLUDES

※ Power cable length **10 m**

APPLICATION LIMITS

- Depth below water level up to **10 m** (with an appropriately sized power cable)
- Liquid temperature up to **+40 °C**
- Suspended solids transfer:
  – up to **Ø 50 mm** for VX/50
  – up to **Ø 65 mm** for VX/65
  – up to **Ø 80 mm** for VX/80
- **Minimum immersion for continuous service: 500 mm**

AVAILABLE UPON REQUEST

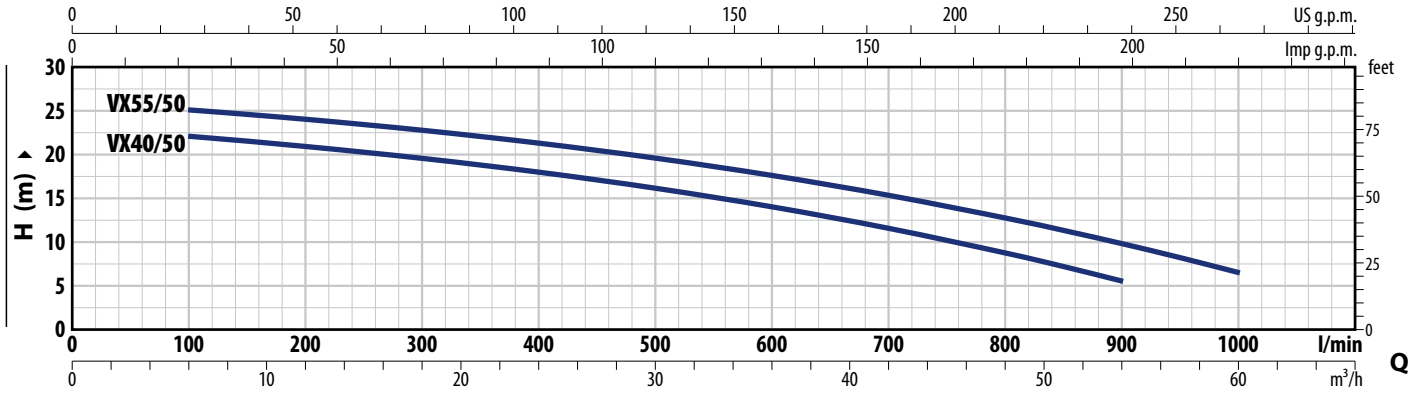
※ Different voltage requirements 60 Hz frequency

PATENTS - TRADE MARKS - MODELS

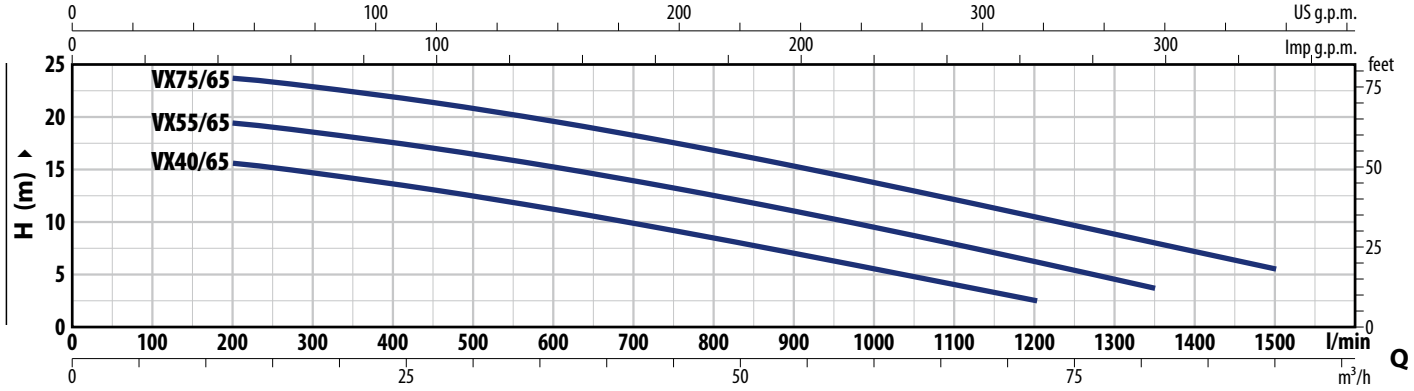
- Registered Community Model No. 003863158-0002

CURVES AND PERFORMANCE DATA

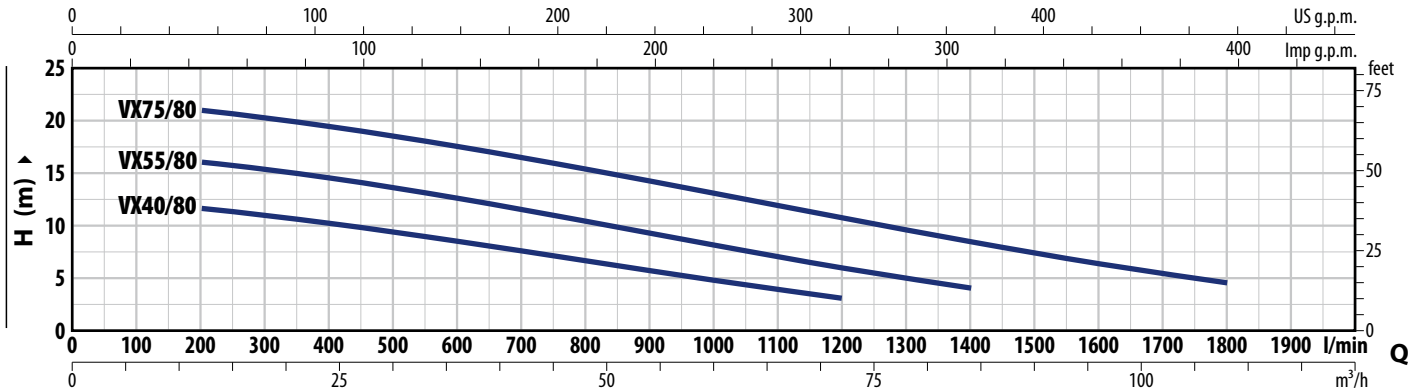
50 Hz



TYPE Three-phase	POWER (P2) kW	POWER (P2) HP	Q	m³/h	0	6	12	18	24	30	36	42	48	54	60
				l/min	**0**	**100**	**200**	**300**	**400**	**500**	**600**	**700**	**800**	**900**	**1000**
VX 40/50	3	4	**H**	metres	23	22	20.8	19.5	18	16	14	11.5	8.7	5.5	
VX 55/50	4	5.5			26	25	24	22.7	21.2	19.5	17.5	15.3	12.7	9.8	6.5



TYPE Three-phase	POWER (P2) kW	POWER (P2) HP	Q	m³/h	0	12	18	27	36	45	54	63	72	81	90
				l/min	**0**	**200**	**300**	**450**	**600**	**750**	**900**	**1050**	**1200**	**1350**	**1500**
VX 40/65	3	4			17	15.6	14.7	13	11.2	9.2	7	4.8	2.5		
VX 55/65	4	5.5	**H**	metres	20.7	19.4	18.5	17	15.2	13.2	11	8.7	6.2	3.7	
VX 75/65	5.5	7.5			24.8	23.6	23	21.4	19.6	17.5	15.2	13	10.5	8	5.5



TYPE Three-phase	POWER (P2) kW	POWER (P2) HP	Q	m³/h	0	12	24	36	48	60	72	84	96	108
				l/min	**0**	**200**	**400**	**600**	**800**	**1000**	**1200**	**1400**	**1600**	**1800**
VX 40/80	3	4			12.5	11.5	10.2	8.5	6.7	5	3			
VX 55/80	4	5.5	**H**	metres	16.5	16	14.4	12.5	10.3	8	6	4		
VX 75/80	5.5	7.5			22	21	19.2	17.4	15.2	13	10.7	8.4	6.4	4.5

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

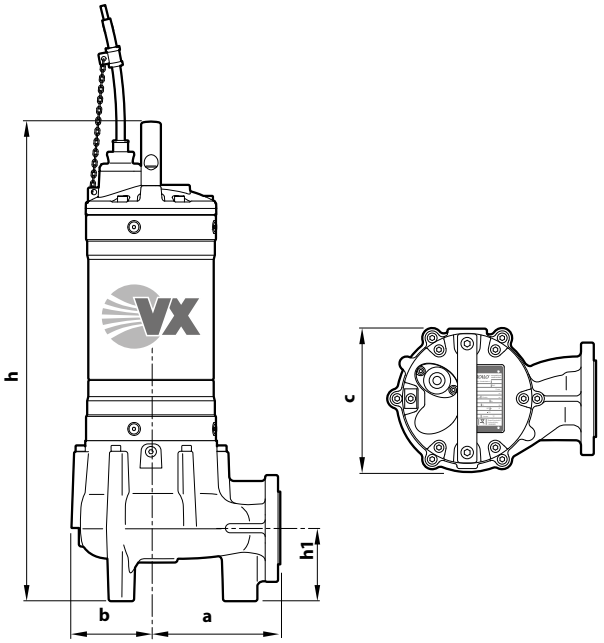
Performance curves comply with EN ISO 9906 Grade 3B tolerance limits.

ABSORPTION

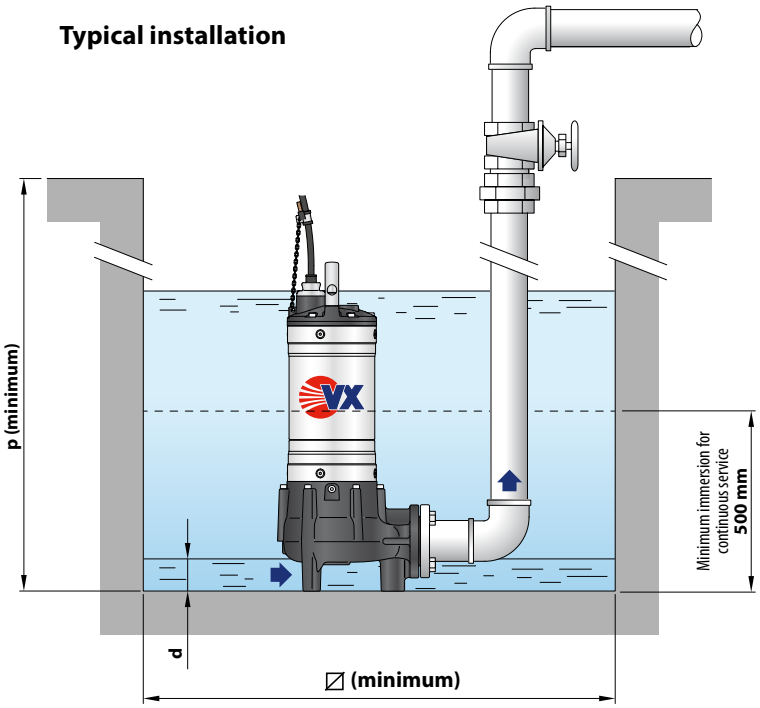
TYPE **Three-phase**	VOLTAGE **400 V**
VX 40/50	5.8 A
VX 55/50	7.0 A
VX 40/65	6.2 A
VX 55/65	7.7 A
VX 75/65	12.7 A

TYPE **Three-phase**	VOLTAGE **400 V**
VX 40/80	6.0 A
VX 55/80	8.5 A
VX 75/80	13.5 A

DIMENSIONS AND WEIGHT



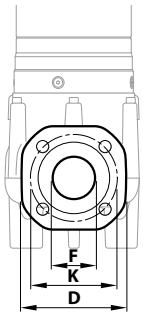
Typical installation



TYPE **Three-phase**	Passage of solid bodies	DIMENSIONS mm a	b	c	h	h1	d	p	⍁	kg 3~
VX 40/50	**Ø 50 mm**	170	106	193	602	100	55	700	500	50.0
VX 55/50					642					59.0
VX 40/65	**Ø 65 mm**	170	107	196	630	121	70	800	500	54.0
VX 55/65					670					60.0
VX 75/65					700					67.0
VX 40/80	**Ø 80 mm**	178	107	210	655	150	85	800	500	54.8
VX 55/80					695					60.0
VX 75/80					725					68.0

PORT FLANGE

TYPE **Three-phase**	FLANGE **DN**	F	K mm	D mm	HOLES N°	Ø (mm)
VX 40/50	**50** (PN10)	2"	125	150	4	18
VX 55/50						
VX 40/65	**65** (PN10)	2½"	145	185	8	18
VX 55/65						
VX 75/65						
VX 40/80	**80** (PN10)	3"	160	200	8	18
VX 55/80						
VX 75/80						



PALLET CAPACITY

TYPE **Three-phase**	NO. OF PUMPS
VX 40/50	10
VX 55/50	12
VX 40/65	12
VX 55/65	12
VX 75/65	12
VX 40/80	12
VX 55/80	12
VX 75/80	12

MATERIALS AND COMPONENTS

1	**Pump body**	Cast iron with cataphoresis treatment
2	**Impeller**	Cast iron VORTEX type with cataphoresis treatment
3	**Motor sleeve**	Stainless steel **AISI 304**
4	**Motor cover**	Cast iron with cataphoresis treatment
5	**Motor shaft**	Stainless steel **AISI 431**

6 Double mechanical seal with interposed oil chamber

Water pump	Seal	Shaft	Location	Materials
VX 50	**ED560-25**	Ø 25 mm	Motor side	Silicon carbide / Graphite / NBR
			Pump side	Silicon carbide/Silicon carbide/NBR
VX 65-80	**AR-27**	Ø 27 mm	Motor side	Silicon carbide / Graphite / NBR
	AR-25	Ø 25 mm	Pump side	Silicon carbide/Silicon carbide/NBR

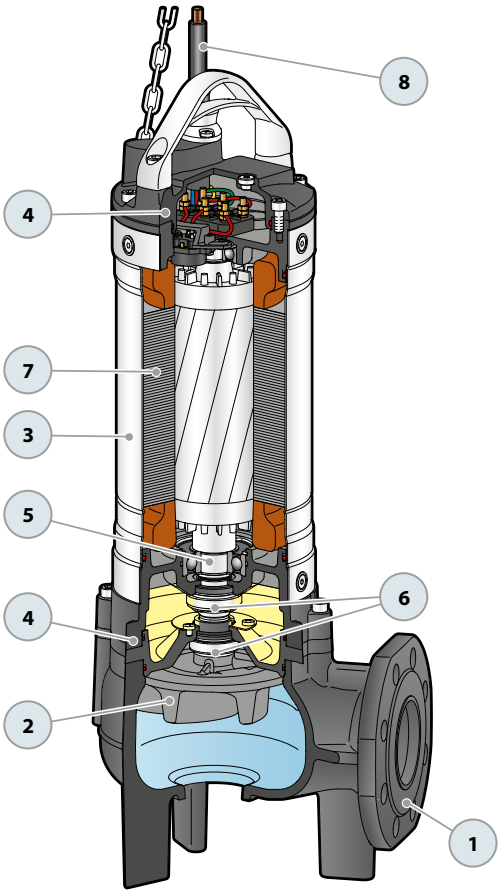
7 Electric Motor

Three-phase 400 V - 50Hz
with winding integrated thermal motor protection

– Insulation: class F
– Protection rating: IP X8

8 Power cord

※ 10 metres 'H07 RN-F' type



Sewage
Civil use
Industrial use

※ **Advanced design and high-quality materials assure long-term performance and reliability**



PERFORMANCE RANGE

- Flow rate up to **2300 l/min** (138 m³/h)
- Head up to **31 m**

INSTALLATION AND USE

The **BC** series is constructed from thick stainless steel and cast iron, offering exceptional robustness, abrasion resistance, and durability. Equipped with **TWO-CHANNEL** impellers, the pumps are designed to drain **sewage, sludge-mixed water, and activated and putrid sludge**.
They are suitable for a wide range of applications, including sewers, tunnels, excavations, canals, and underground parking facilities.

ELECTRIC MOTOR

※ **The electric motor is safeguarded by a special three-phase thermal protector, situated within the motor, which activates in case of overheating or abnormal power consumption.**

INCLUDES

※ Power cable length **10 m**

APPLICATION LIMITS

- Depth below water level up to **10 m** (with an appropriately sized power cable)
- Liquid temperature up to **+40 °C**
- Suspended solids transfer:
  – up to **Ø 35 mm** for BC/35
  – up to **Ø 50 mm** for BC/50
- **Minimum immersion for continuous service: 500 mm**

AVAILABLE UPON REQUEST

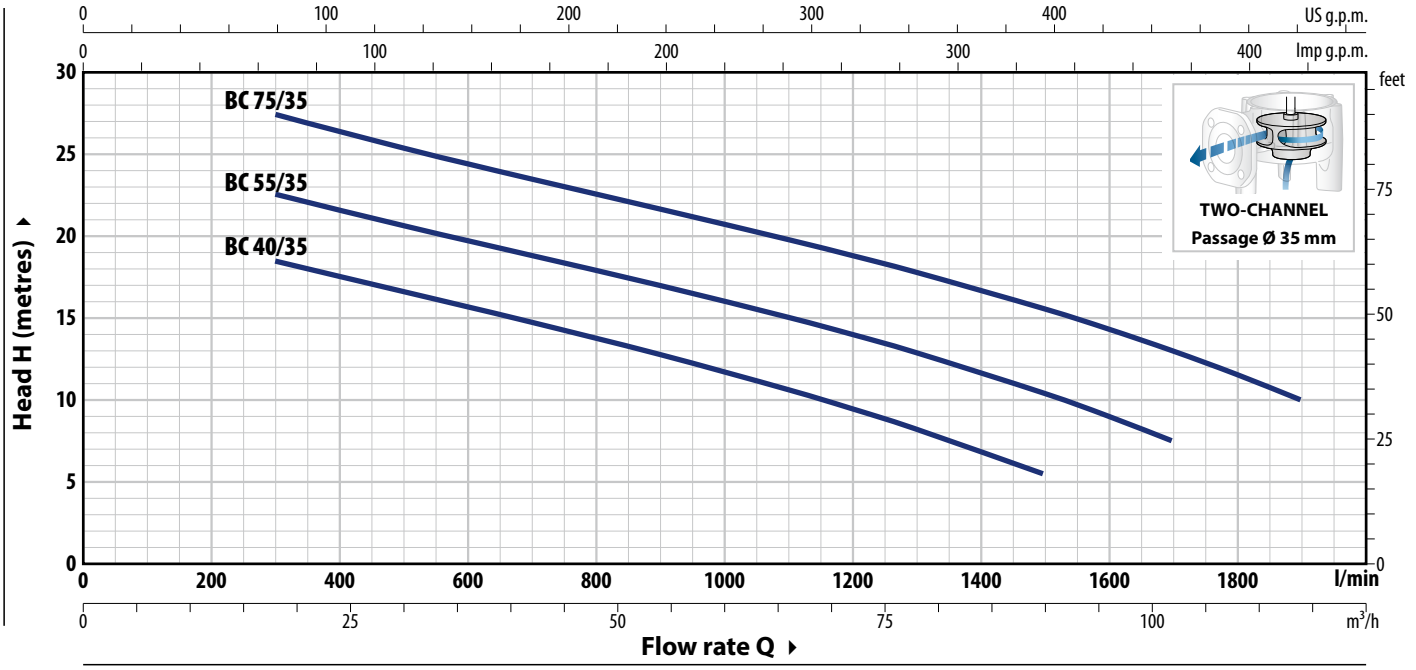
※ Different voltage requirements 60 Hz frequency

PATENTS - TRADE MARKS - MODELS

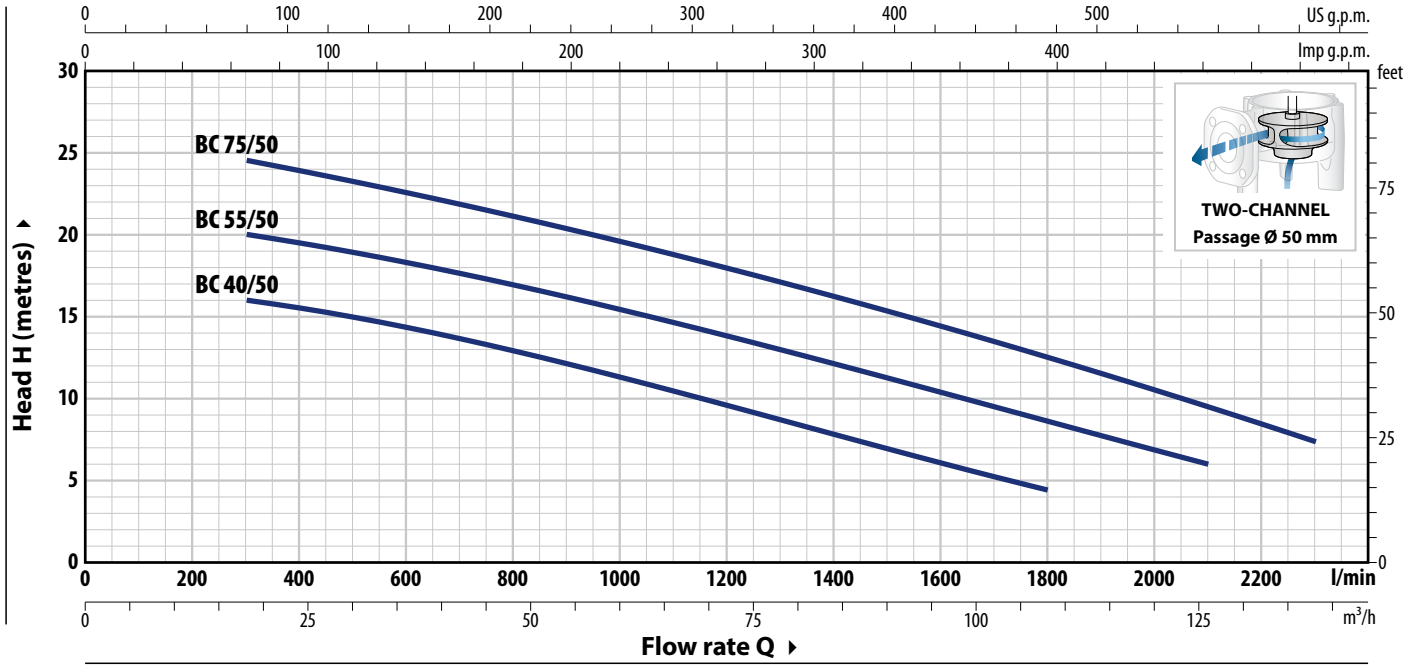
- Registered Community Model No. 003863158-0001

CURVES AND PERFORMANCE DATA

50 Hz



TYPE	POWER (P2)		Q	m³/h	0	18	30	42	54	66	78	90	102	114
Three-phase	kW	HP		l/min	**0**	**300**	**500**	**700**	**900**	**1100**	**1300**	**1500**	**1700**	**1900**
BC 40/35	3	4	H	metres	21.4	18.5	16.6	14.7	12.8	10.6	8.2	5.5		
BC 55/35	4	5.5			25.8	22.5	20.6	18.8	17	15	13	10.4	7.5	
BC 75/35	5.5	7.5			31	27.5	25.4	23.5	21.6	19.8	17.8	15.6	13	10



TYPE	POWER (P2)		Q	m³/h	0	18	30	45	60	75	90	108	126	138
Three-phase	kW	HP		l/min	**0**	**300**	**500**	**750**	**1000**	**1250**	**1500**	**1800**	**2100**	**2300**
BC 40/50	3	4	H	metres	16.5	16	14.8	13	11	9	6.8	4.5		
BC 55/50	4	5.5			21.5	20	19	17.5	15.6	13.5	11.3	8.7	6	
BC 75/50	5.5	7.5			26.5	24.5	23.2	21.5	19.6	17.5	15.3	12.4	9.4	7.5

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

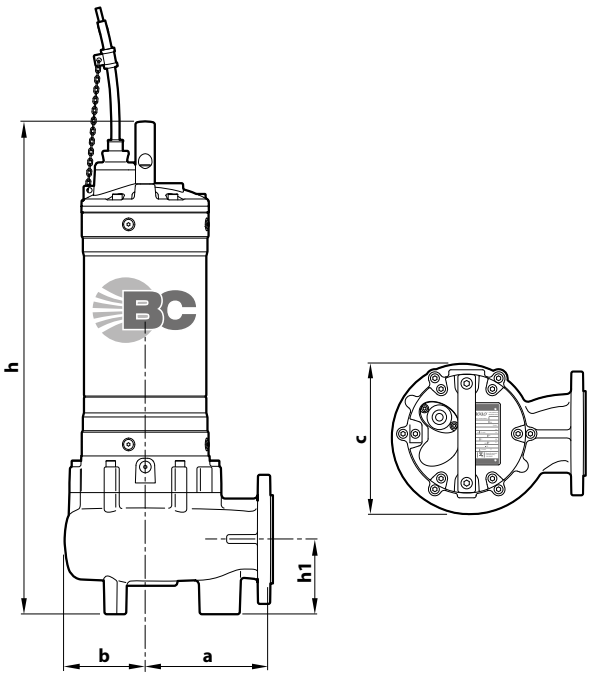
Performance curves comply with EN ISO 9906 Grade 3B tolerance limits.

ABSORPTION

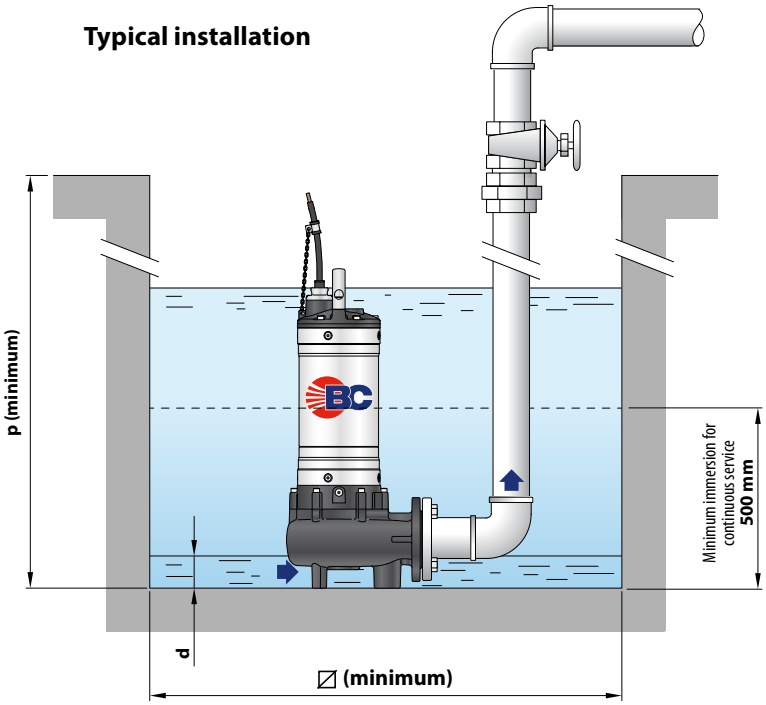
TYPE **Three-phase**	VOLTAGE **400 V**
BC 40/35	6.2 A
BC 55/35	8.3 A
BC 75/35	13.5 A

TYPE **Three-phase**	VOLTAGE **400 V**
BC 40/50	7.0 A
BC 55/50	9.0 A
BC 75/50	13.5 A

DIMENSIONS AND WEIGHT



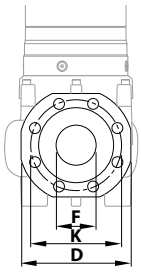
Typical installation



TYPE **Three-phase**	Passage of solid bodies	DIMENSIONS mm a	b	c	h	h1	d	p	⍁	3~
BC 40/35	**Ø 35 mm**	170	113	225	595	100	40	800	500	56.0
BC 55/35					635					62.2
BC 75/35					665					67.0
BC 40/50	**Ø 50 mm**	178	107	210	655	150	85	800	500	58.1
BC 55/50					695					64.3
BC 75/50					725					69.1

PORT FLANGE

TYPE **Three-phase**	FLANGE **DN**	F	K mm	D mm	HOLES N°	Ø mm)
BC 40/35	**65** (PN10)	**2½"**	145	185	4	18
BC 55/35						
BC 75/35						
BC 40/50	**80** (PN10)	**3"**	160	200	8	18
BC 55/50						
BC 75/50						



PALLET CAPACITY

TYPE **Three-phase**	NO. OF PUMPS
BC 40/35	12
BC 55/35	12
BC 75/35	12
BC 40/50	12
BC 55/50	12
BC 75/50	12

MATERIALS AND COMPONENTS

1	**Pump body**	Cast iron with cataphoresis treatment
2	**Impeller**	TWO-CHANNEL cast iron type with cataphoresis treatment
3	**Motor sleeve**	Stainless steel **AISI 304**
4	**Motor cover**	Cast iron with cataphoresis treatment
5	**Motor shaft**	Stainless steel **AISI 431**

6 Double mechanical seal with interposed oil chamber

Seal	Shaft	Location	Materials
AR-27	Ø 27 mm	Motor side	Silicon carbide / Graphite / NBR
AR-25	Ø 25 mm	Pump side	Silicon carbide/Silicon carbide/NBR

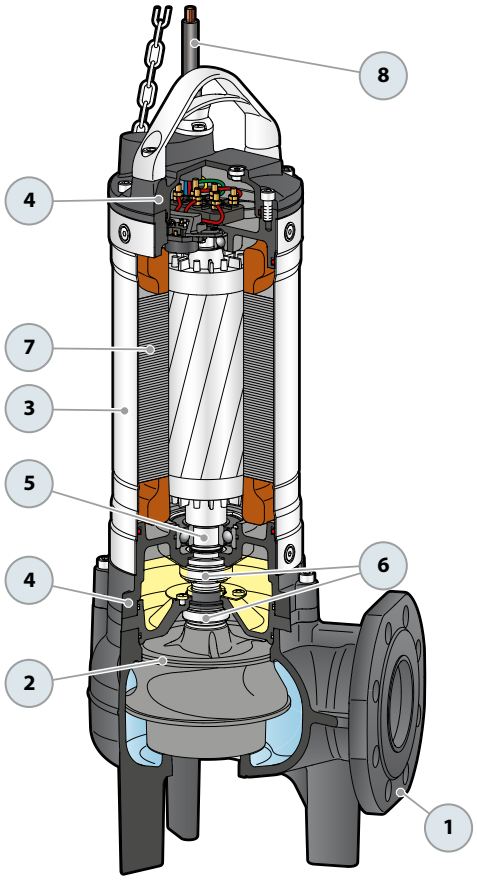
7 Electric Motor

Three-phase 400 V - 50Hz
with winding integrated thermal motor protection

– Insulation: class F
– Protection rating: IP X8

8 Power cord

※ 10 metres 'H07 RN-F' type



SEWAGE LIFTING SYSTEM VX - BC

VERSION WITH HORIZONTAL DELIVERY AND ¾" GUIDE PIPES

For **VX /50**	Code ASSPVX50	**DN 2**

※ Kit consisting of:



Coupling foot



Guide rail



Support for guide tubes



VERSION WITH VERTICAL DELIVERY AND ¾" GUIDE PIPES

For **VX /50**	Code ASSPVX503V	**DN 2½"**
For **VX /65, BC /35**	Code ASSPVX653V	**DN 3"**
For **BC /50**	Code ASSVXCF071V	

VERSION WITH VERTICAL DELIVERY AND 2" GUIDE TUBES

For **VX /50**	Code ASSPVX50V	**DN 3"**
For **VX /65, BC /35**	Code ASSPVX65V	
For **VX /80, BC /50**	Code ASSVXCF0705V	

※ Kit consisting of:



Coupling foot complete with counterflange



Guide rail



Support for guide tubes



● ACCESSORIES AVAILABLE FOR ORDER

RUNNING GUIDE

※ For VX /50 with Ø ¾" guide tubes	Code ASSFL009
※ For VX /65, BC /35 with Ø ¾" guide tubes	Code ASSFL010
※ For BC /50 with Ø ¾" guide tubes	Code ASSFL0018
※ For VX /50 with Ø 2" guide tubes	Code ASSFL050
※ For VX /65, BC /35 with Ø 2" guide tubes	Code ASSFL065
※ For VX /80, BC /50 with Ø 2" guide tubes	Code ASSFL072

Complete with screws and seals



for Ø ¾" guide tubes



for guide tubes Ø 2"

INTERMEDIATE GUIDE TUBE SUPPORT

※ For Ø ¾" guide tubes	Code 859SV340INTFA
※ For guide tubes Ø 2"	Code 859SV349INTFA

For reasons of stability, an intermediate support should be interposed:
– every 2 metres with ¾" guide pipes (mandatory)
– every 3 metres with 2" guide tubes (recommended)



for Ø ¾" guide tubes



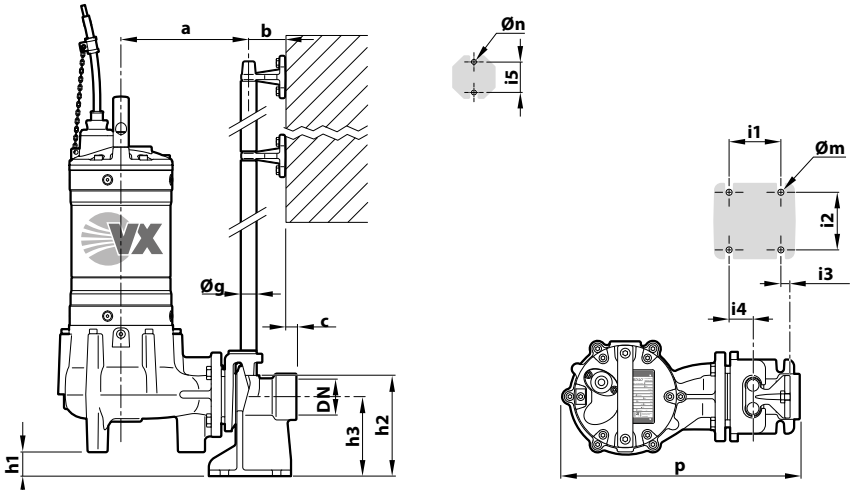
for guide tubes Ø 2"

GUIDE TUBE (AISI 304 stainless steel)

※ 2 metres Ø ¾" guide tube	Code 54SARTG0052F
※ 3 metres Ø ¾" guide tube	Code 54SARTG0053F
※ 6 metres Ø ¾" guide tube	Code 54SARTG0056F
※ 3 metres Ø 2" guide tube	Code 54SARTG0063F
※ 6 metres guide tube Ø 2"	Code 54SARTG0066F

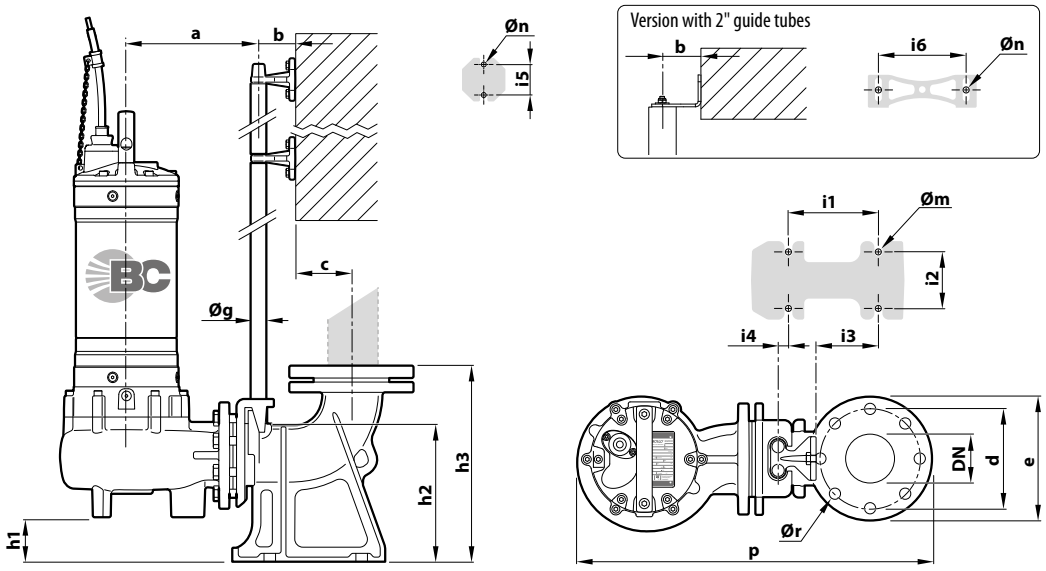


DIMENSIONS (HORIZONTAL delivery version)



TYPE	Solid bodies mm	PORT DN	DIMENSIONS mm														
			a	b	c	p	h1	h2	h3	i1	i2	i3	i4	i5	Øg	Øm	Øn
VX /50	**Ø 50**	**2"**	214	61	17	400	30	165	130	85	94	16	40	50	¾"	12	11

DIMENSIONS (Version with VERTICAL delivery)



※ Version with ¾" guide tubes

TYPE	Solid bodies mm	PORT DN	DIMENSIONS mm																		
			a	b	c	d	e	p	h1	h2	h3	i1	i2	i3	i4	i5	Øg	Øm	Øn	Ør
VX /50	**Ø 50 mm**	**2½"**	211	61	52	125	165	506	28	164	216	120	72	62	3	50	¾"	14	11	18
VX /65	**Ø 65 mm**	**3"**	213		69	150	190	537	48	216	280	130	112	84	15					
BC /35	**Ø 35 mm**		231					550	69											
BC /50	**Ø 50 mm**		222					553	19											

※ Version with 2" guide tubes

TYPE	Solid bodies mm	PORT DN	DIMENSIONS mm																				
			a	b	c	d	e	p	h1	h2	h3	i1	i2	i3	i4	i5	i6	Øg	Øm	Øn	Ør
VX /50	**Ø 50 mm**	**3"**	319	86	95	160	200	706	107	264	392	250	150	34	–	80	186	2"	22	13.5	18
VX /65	**Ø 65 mm**							697	86												
VX /80	**Ø 80 mm**		328					714	57												
BC /35	**Ø 35 mm**		319					710	107												
BC /50	**Ø 50 mm**		328					714	57												