



Sewage



Domestic use



Industrial use



TRm 1.3



TRm 2.2 AP

PERFORMANCE RANGE

- Flow rate up to **430 l/min** (25.8 m³/h)
- Head up to **55 m**

INSTALLATION AND USE

The **TRITUS** is constructed from thick cast iron, offering exceptional robustness, abrasion resistance, and longevity. The pumps are equipped with a robust, **hardened stainless steel blade**, expertly designed to cut through solids and fibers found in **domestic and civil** wastewater and sewage, for pressurized transfer of materials into sewage systems via small-diameter piping

INCLUDES

- ✧ Power cable length **10 m**
- ✧ Float switch (exclusive to single-phase models)
- ✧ Switchbox compatible with single-phase versions
- ✧ For **TR5** and **TR6** internal probes that detect the presence of water in the oil chamber

APPLICATION LIMITS

- Depth below water level up to **10 m** (with an appropriately sized power cable)
- Liquid temperature up to **+40 °C**
- Draining capability from bottom up to:
 - **85 mm** for 0.75, 0.9, 1.1, 1.3
 - **95 mm** for 1.5, 2.2, TR 2.2 AP, TR 3 AP, TR 3, TR 4
 - **130 mm** per TR 5, TR 6
- **Minimum immersion for continuous service:**
 - **300 mm** for 0.75, 0.9, 1.1, 1.3
 - **350 mm** for 1.5, 2.2, TR 2.2 AP, TR 3 AP, TR 3, TR 4
 - **490 mm** for TR 5, TR 6

AVAILABLE UPON REQUEST

- ✧ Different voltage requirements or frequency

WARRANTY

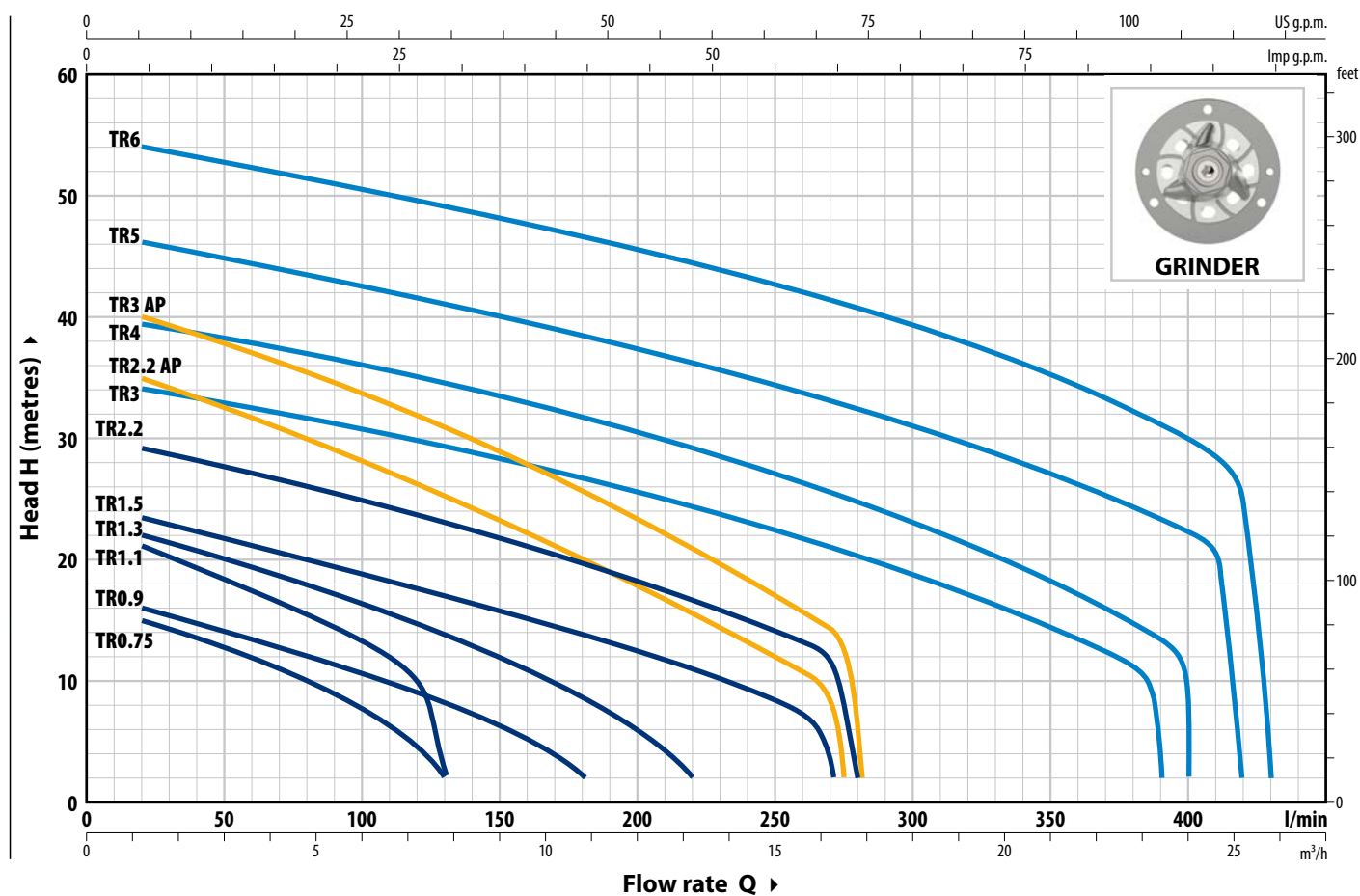
- ✧ **The warranty for the Three-Phase TR 1.5, TR 2.2, TR 2.2 AP, TR3 AP, TR3, TR 4 models remains valid only if the motor's built-in thermal protector is properly connected to the control panel. This connection is essential for the warranty's applicability.**

PATENTS - TRADE MARKS - MODELS

- Patent No. IT0001428923
- Registered Community Model No. 002501486-0002, 008625685-0005, 008625685-0006
- TRITUS® Registered Trade mark No. 013017181

CURVES AND PERFORMANCE DATA

60 Hz



TYPE		POWER (P ₂)		Q															
Single-ph.	Three-ph.	kW	HP		m ³ /h	0	1.2	2.4	3.6	4.8	6.0	7.2	7.8	10.8	13.2	16.2	16.8		
					l/min	0	20	40	60	80	100	120	130	180	220	270	280		
TRm 0.75	TR 0.75	0.75	1	H m		16.5	15	13.5	11.9	9.9	7.5	4.5	2						
TRm 0.9	TR 0.9	0.9	1.25			17	16	14.5	13.3	12	10.5	9	8.1	2					
TRm 1.1	TR 1.1	1.1	1.5			23	21	19.4	17.5	15.5	13	10	2						
TRm 1.3	TR 1.3	1.3	1.75			23	22	20.8	19.5	18.1	16.5	14.8	13.9	8.5	2				
TRm 1.5	TR 1.5	1.5	2			24.5	23.5	22.3	21.1	20	18.9	17.7	17.1	13.7	10.6	2			
-	TR 2.2	2.2	3			30	29	28	26.9	25.9	24.8	23.6	23	19.7	16.6	12.1	2		

TYPE		POWER (P ₂)		Q											
Single-ph.	Three-ph.	kW	HP		m ³ /h	0	1.2	3.0	6.0	9.0	12.0	15.0	16.2	16.5	16.8
					l/min	0	20	50	100	150	200	250	270	275	280
TRm 2.2 AP	TR 2.2 AP	2.2	3	H m		36.5	35	32.5	28	23.1	17.7	11.6	9	2	
-	TR 3 AP	3	4			41.5	40	38	33.5	29	23.3	16.9	14.1	13.4	2

TYPE		POWER (P ₂)		Q											
Three-phase		kW	HP		m ³ /h	0	1.2	3.6	6.0	9.6	12.0	15.0	18	21.6	23.4
					l/min	0	20	60	100	160	200	250	300	360	390
TR 3		3	4	H mem		34.5	34	32.3	30.6	27.8	25.7	22.5	18.7	13	2
TR 4		4	5.5			40	39.5	37.8	35.9	32.7	30.3	27	23.1	17.2	13.4

TYPE		POWER (P ₂)		Q											
Three-phase		kW	HP		m ³ /h	0	1.2	3	6	9	12	15	18	21	24
					l/min	0	20	50	100	150	200	250	300	350	400
TR 5		5	6.7	H m		47	46	44.7	42.4	40	37.4	34.5	31.1	27.2	22.5
TR 6		6	8			55	54	52.5	50.3	48.1	45.6	42.8	39.5	35.3	30.2

Q = Flow rate H = Total manometric head

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

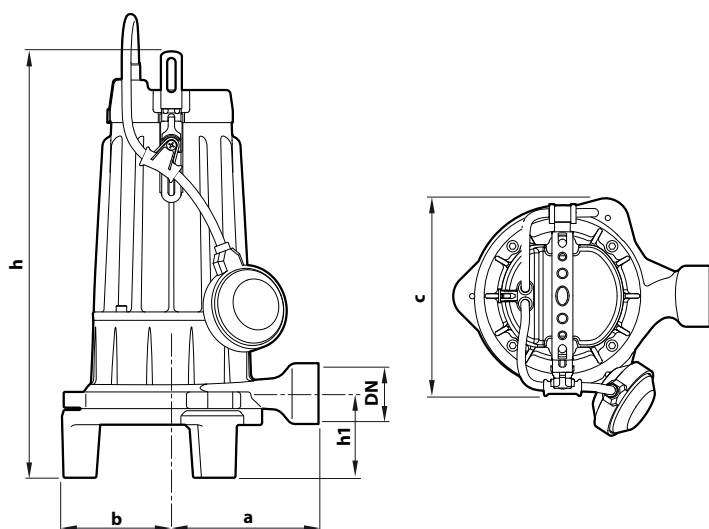
TRITUS 0.75 – 0.9 – 1.1 – 1.3

ABSORPTION

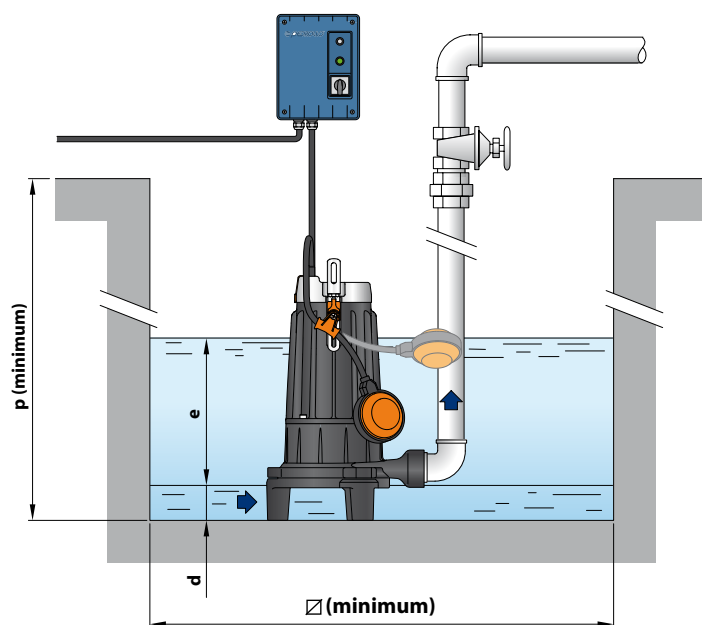
TYPE	VOLTAGE
Single-phase	220 V
TRm 0.75	5.5 A
TRm 0.9	6.5 A
TRm 1.1	7.4 A
TRm 1.3	8.5 A

TYPE	VOLTAGE
Three-phase	380 V
TR 0.75	2.5 A
TR 0.9	2.7 A
TR 1.1	3.2 A
TR 1.3	3.4 A

DIMENSIONS AND WEIGHT



Typical installation



TYPE		PORT DN	DIMENSIONS mm									kg *	
Single-ph.	Three-ph.		a	b	c	h	h1	d	e	p	∅	1~	3~
TRm 0.75	TR 0.75	1 1/4"	140	104	186	406	80	85	adjustable	500	500	24.0	22.2
TRm 0.9	TR 0.9											23.9	22.2
TRm 1.1	TR 1.1											25.7	23.1
TRm 1.3	TR 1.3											25.5	23.1

(* weight of pump without control panel)

PALLET CAPACITY

TYPE	GROUPAGE	CONTAINER
Single-ph.	n. pumps	n. pumps
TRm 0.75	36	48
TRm 0.9	36	48
TRm 1.1	36	48
TRm 1.3	36	48

TYPE	GROUPAGE	CONTAINER
Three-ph.	n. pumps	n. pumps
TR 0.75	60	80
TR 0.9	60	80
TR 1.1	60	80
TR 1.3	60	80

MATERIALS AND COMPONENTS

1 Pump body Cast iron with cataphoresis treatment

2 Impeller Open type in technopolymer

3 Grinder Hardened **AISI 440C** stainless steel

4 Motor shaft Stainless steel **AISI 431**

5 Motor holder Cast iron with cataphoresis treatment

6 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

7 Electric Motor

TRm: single-phase 220 V - 60 Hz with thermal motor protection

TR: three-phase 380 V - 60 Hz

- Insulation: class F
- Protection rating: IP X8

8 Power cord

※ 10 metres 'H07 RN-F' type

9 Float switch

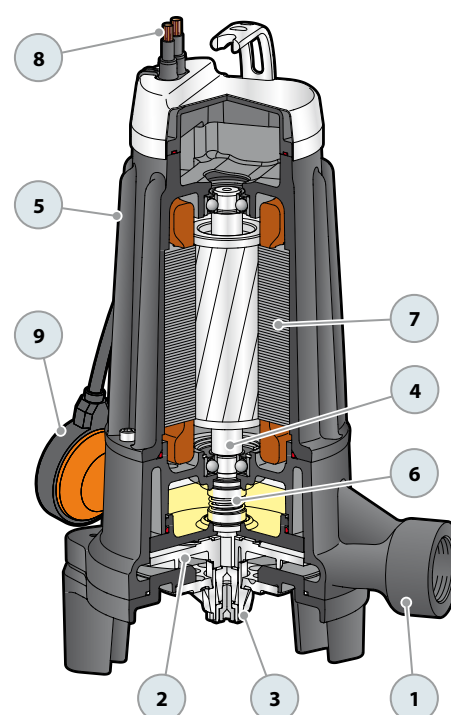
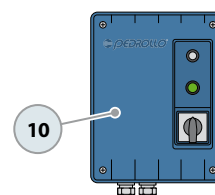
(exclusive to single-phase models)

10 Control panel (exclusive to single-phase models)

Including:

- ON/OFF switch
- manual reset motor protection
- operating capacitor (permanently switched on)
- starting capacitor

Control panel
(standard for single-phase versions)



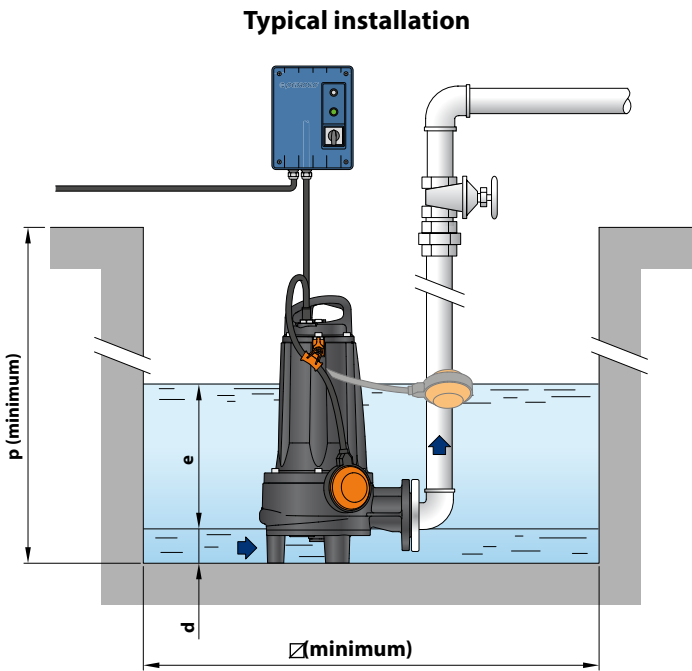
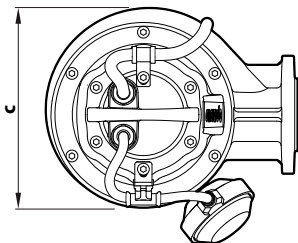
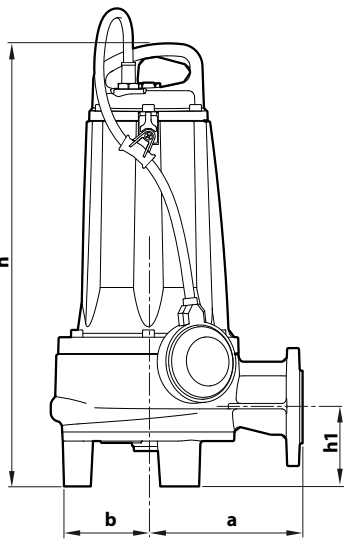
TRITUS 1.5 – 2.2

ABSORPTION

TYPE	VOLTAGE
Single-phase	220 V
TRm 1.5	11.0 A

TYPE	VOLTAGE
Three-phase	380 V
TR 1.5	4.5 A
TR 2.2	6.5 A

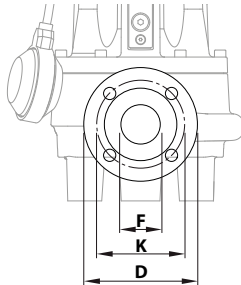
DIMENSIONS AND WEIGHT



TYPE		DIMENSIONS mm									kg	
Single-phase	Three-phase	a	b	c	h	h1	d	e	p	Ø	1~	3~
TRm 1.5	TR 1.5	172	105	221	489	87.5	95	adjustable	800	800	45.0	44.0
-	TR 2.2										-	44.0

PORT FLANGE

TYPE		FLANGE	F	K	D	HOLES	
Single-phase	Three-phase	DN	mm	mm	mm	N°	Ø (mm)
TRm 1.5	TR 1.5	40 (PN6)	1½"	100	130	4	14
-	TR 2.2						



PALLET CAPACITY

TYPE		GROUPAGE	CONTAINER
Single-phase	Three-phase	n. pumps	n. pumps
TRm 1.5	TR 1.5	12	18
-	TR 2.2	12	18

MATERIALS AND COMPONENTS

1 Pump body Cast iron with cataphoresis treatment

2 Impeller Micro-cast **AISI 304** stainless steel

3 Grinder Hardened **AISI 440C** stainless steel

4 Motor shaft Stainless steel **AISI 431**

5 Motor holder Cast iron with cataphoresis treatment

6 Double mechanical seal with interposed oil chamber

Seal	Shaft	Location	Materials
STA-20	Ø 20 mm	Motor side	Ceramic / Graphite / NBR
STA-19	Ø 19 mm	Pump side	Silicon carbide/Silicon carbide/NBR

7 Electric Motor

TRm: single-phase 220 V - 60 Hz with thermal motor protection

TR: three-phase 380 V - 60 Hz

✖ with winding integrated thermal motor protection to be connected to the control panel

- Insulation: class F
- Protection rating: IP X8

8 Power cord

✖ 10 metres 'H07 RN-F' type

9 Float switch

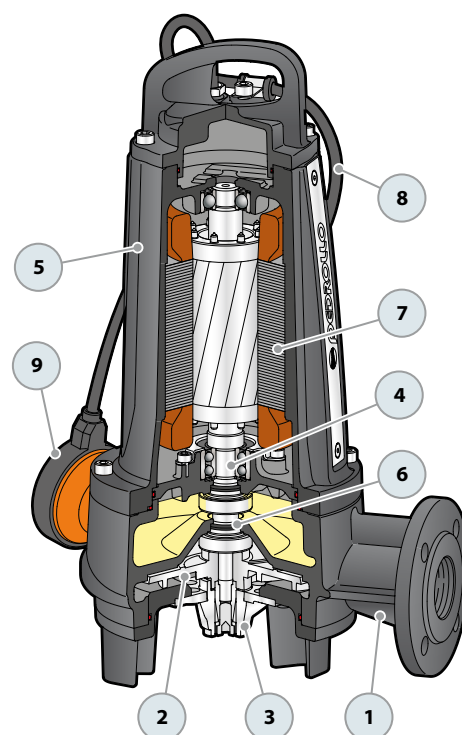
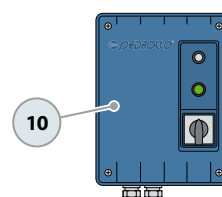
(exclusive to single-phase models)

10 Control panel (exclusive to single-phase models)

Including:

- ON/OFF switch
- manual reset motor protection
- operating capacitor (permanently switched on)
- starting capacitor

Control panel
(standard for single-phase versions)



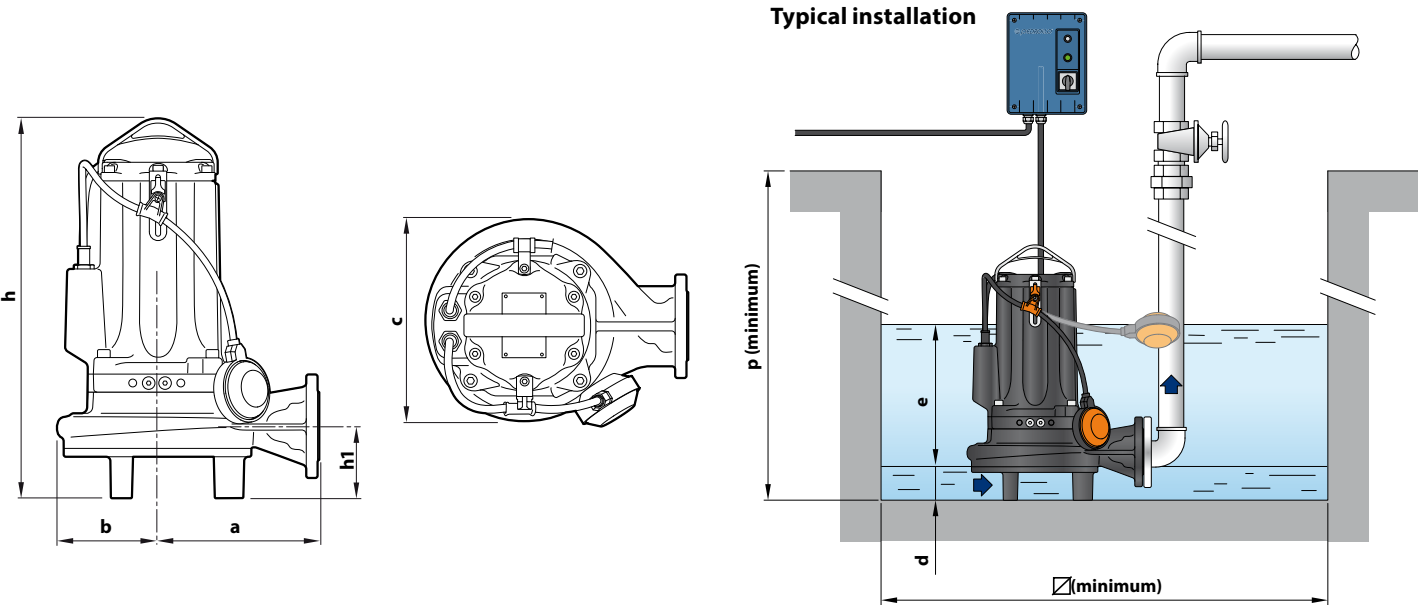
TRITUS 2.2 AP - 3 AP - 3 - 4

ABSORPTION

TYPE	VOLTAGE
Single-phase	220 V
TRm 2.2 AP	15.0 A

TYPE	VOLTAGE
Three-phase	380 V
TR 2.2 AP	6.5 A
TR 3 AP	7.0 A
TR 3	7.0 A
TR 4	8.0 A

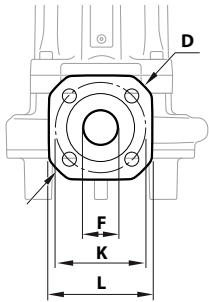
DIMENSIONS AND WEIGHT



TYPE		DIMENSIONS mm									kg	
Single-phase	Three-phase	a	b	c	h	h1	d	e	p	∅	1~	3~
TRm 2.2 AP	TR 2.2 AP	203	126	256	480 453	90	95	adjustable	800	800	53.5	47.0
—	TR 3 AP				480						—	53.0
—	TR 3										—	53.0
—	TR 4										—	54.0

PORT FLANGE

TYPE		FLANGE	F	K	D	L	HOLES	
Single-phase	Three-phase	DN		mm	mm	mm	N°	Ø mm
TRm 2.2 AP	TR 2.2 AP	40 (PN10)	1½"	110	150	130	4	18
-	TR 3 AP							
-	TR 3							
-	TR 4							



PALLET CAPACITY

TYPE		GROUPAGE
Single-phase	Three-phase	n. pumps
TRm 2.2 AP	TR 2.2 AP	18
-	TR 3 AP	18
-	TR 3	18
-	TR 4	18

MATERIALS AND COMPONENTS

1 Pump body	Cast iron with cataphoresis treatment
2 Impeller	Open type in micro-cast AISI 304 stainless steel
3 Grinder	Hardened AISI 440C stainless steel
4 Motor shaft	Stainless steel AISI 431
5 Motor holder	Cast iron with cataphoresis treatment
6 Motor bracket	Cast iron with cataphoresis treatment

7 Double mechanical seal with interposed oil chamber

Seal	Shaft	Location	Materials
STA-24	Ø 24 mm	Motor side	Ceramic / Graphite / NBR
STA-22 SIC	Ø 22 mm	Pump side	Silicon Carbide/Silicon Carbide/NBR

8 Electric Motor

TRm: single-phase 220 V - 60 Hz with thermal motor protection

TR: three-phase 380 V - 60 Hz

✖ with winding integrated thermal motor protection to be connected to the Control panel

- Insulation: class F
- Protection rating: IP X8

9 Power cord

✖ 10 metres 'H07 RN-F' type

10 Float switch

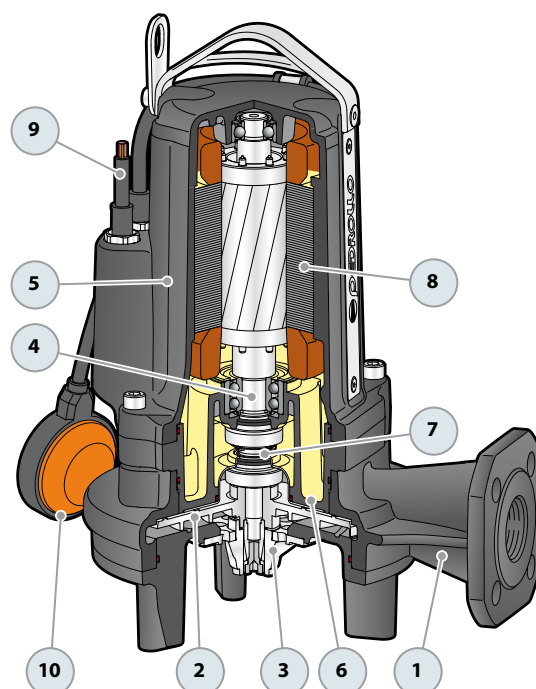
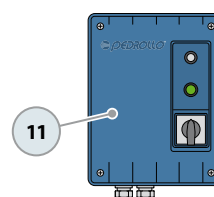
(exclusive to single-phase models)

11 Control panel (exclusive to single-phase models)

Including:

- ON/OFF switch
- manual reset motor protection
- operating capacitor (permanently switched on)
- starting capacitor

Control panel
(standard for single-phase versions)



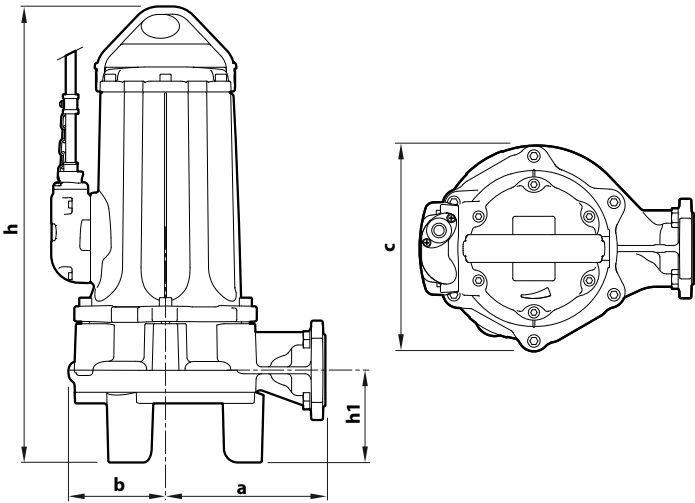
TRITUS 5 - 6

ABSORPTION

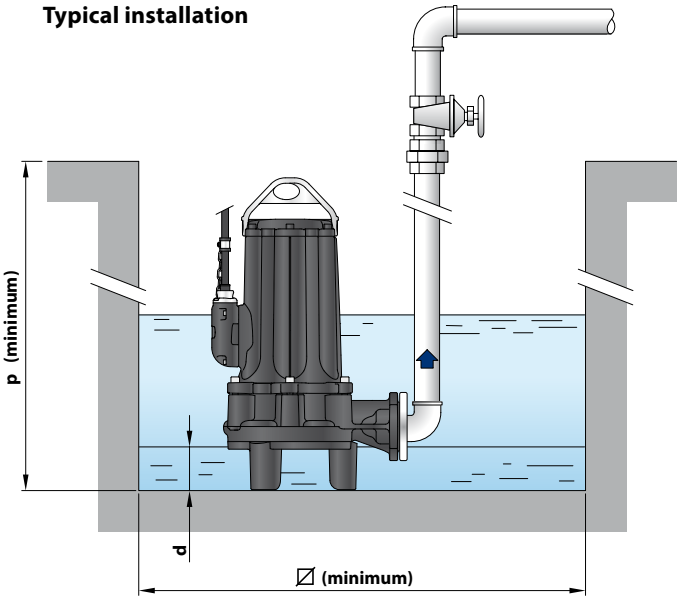
TYPE	VOLTAGE
Three-phase	380 V
TR 5	12.0 A
TR 6	17.0 A

TYPE	VOLTAGE
Three-phase	440 V
TR 5	9.5 A
TR 6	14.0 A

DIMENSIONS AND WEIGHT



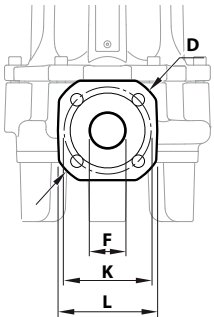
Typical installation



TYPE	DIMENSIONS mm								kg
Three-phase	a	b	c	h	h1	d	p	Ø	3~
TR 5	230	164.5	296	656	133	130	1000	1000	114.8
TR 6									117.8

PORT FLANGE

TYPE	FLANGE	F	K	D	L	HOLES	
Three-phase	DN		mm	mm	mm	N°	Ø mm
TR 5	50 (PN10)	2"	125	165	143	4	18
TR 6							



PALLET CAPACITY

TYPE	GROUPAGE
Three-phase	n. pumps
TR 5	4
TR 6	4

MATERIALS AND COMPONENTS

1 Pump body Cast iron with cataphoresis treatment

2 Impeller Open type in micro-cast **AISI 304** stainless steel

3 Grinder Hardened **AISI 440C** stainless steel

4 Motor shaft Stainless steel **AISI 431**

5 Motor holder Cast iron with cataphoresis treatment

6 Double mechanical seal with interposed oil chamber

Seal	Shaft	Location	Materials
AR-27	Ø 27 mm	Motor side	Silicon Carbide / Graphite / NBR
MG1-25 SIC	Ø 25 mm	Pump side	Silicon Carbide / Silicon Carbide / NBR

7 Electric Motor

Three-phase 380 V - 60 Hz or 440 V - 60 Hz
with winding integrated thermal motor protection

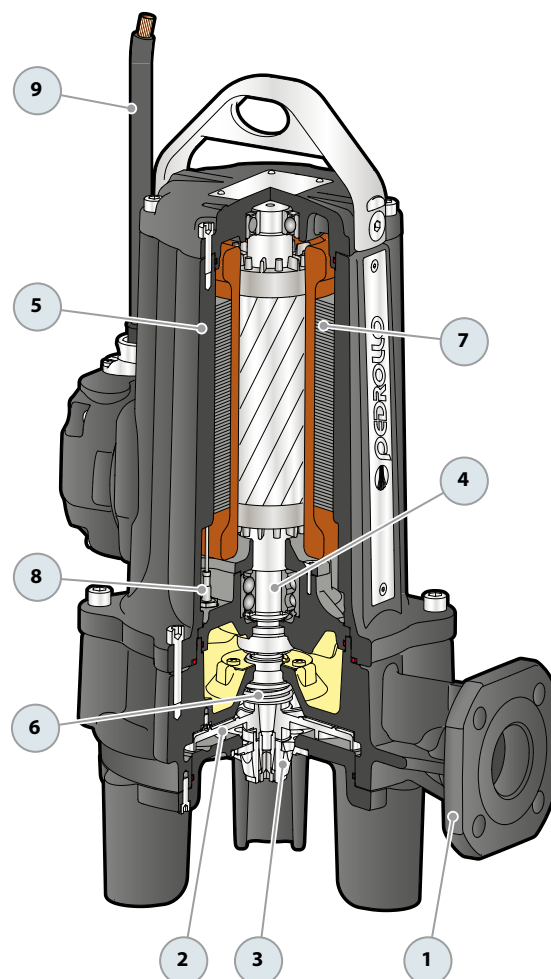
- Insulation: class F
- Protection rating: IP X8

8 Probes

✗ internal probes that detect the presence of water in the oil chamber

9 Power cord

✗ 10 metres 'H07 RN-F' type



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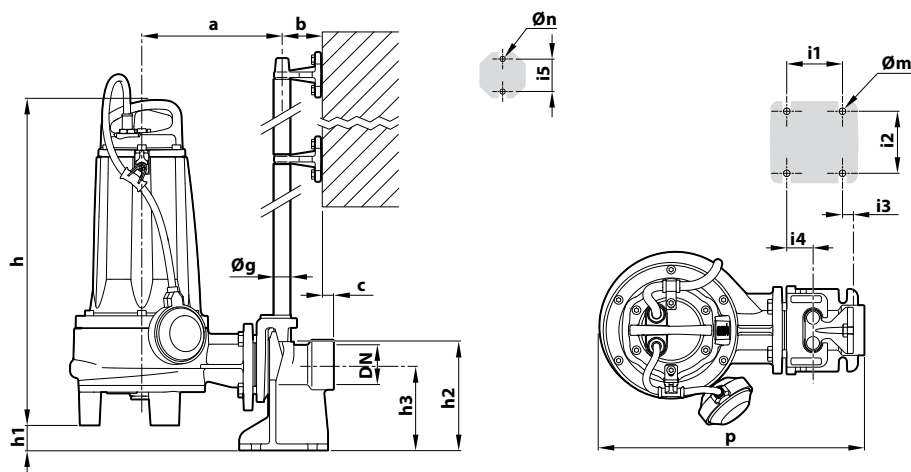
To ensure stability, insert a support every 2 metres along the guide tube

GUIDE TUBE (AISI 304 stainless steel)

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

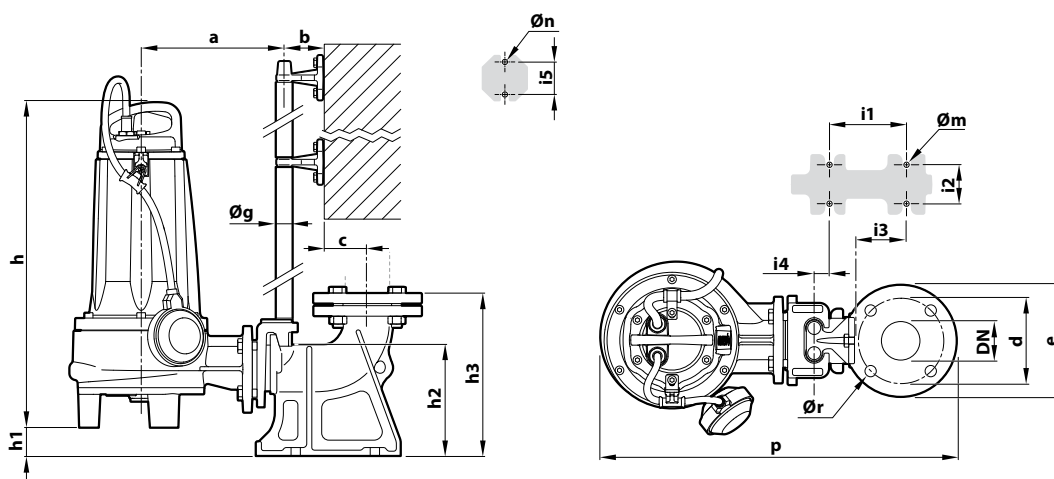


DIMENSIONS (Version with horizontal outlet)



TYPE		PORT DN	Solid bodies	DIMENSIONS mm														
Single-ph.	Three-ph.			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															
TRm 0.9	TR 0.9			212	61	17	395	50	165	130	85	94	16	40	50	¾"	14	11
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 DN	Solid bodies	DIMENSIONS mm														
Single-ph.	Three-ph.			a	b	c	d	e	p	h1	h2	h3	i1	i2	i3	i4	i5	Øg
TRm 0.75	TR 0.75	2½"	Ø 7 mm															
TRm 0.9	TR 0.9			206	61	51.5	125	165	505	48	163.5	215.5	120	72	62	3	50	¾"
TRm 1.1	TR 1.1																	
TRm 1.3	TR 1.3																	
TRm 1.5	TR 1.5	2½"	Ø 7 mm	211	61	51.5	125	165	514	40	163.5	215.5	120	72	62	3	50	¾"
-	TR 2.2																	

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

VERSION WITH HORIZONTAL DELIVERY AND 3/4" GUIDE PIPES

For TR 2.2 AP, 3 AP, 3, 4	Code ASSPTRITUS61	DN 2"
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※ Kit consisting of:



Coupling foot



Guide rail



Support for guide tubes



VERSION WITH VERTICAL DELIVERY AND 3/4" GUIDE PIPES

For TR 2.2 AP, 3 AP, 3, 4	Code ASSPTRITUS61V	DN 2 1/2"
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※ 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
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Complete with screws and seals

GUIDE TUBE SUPPORT

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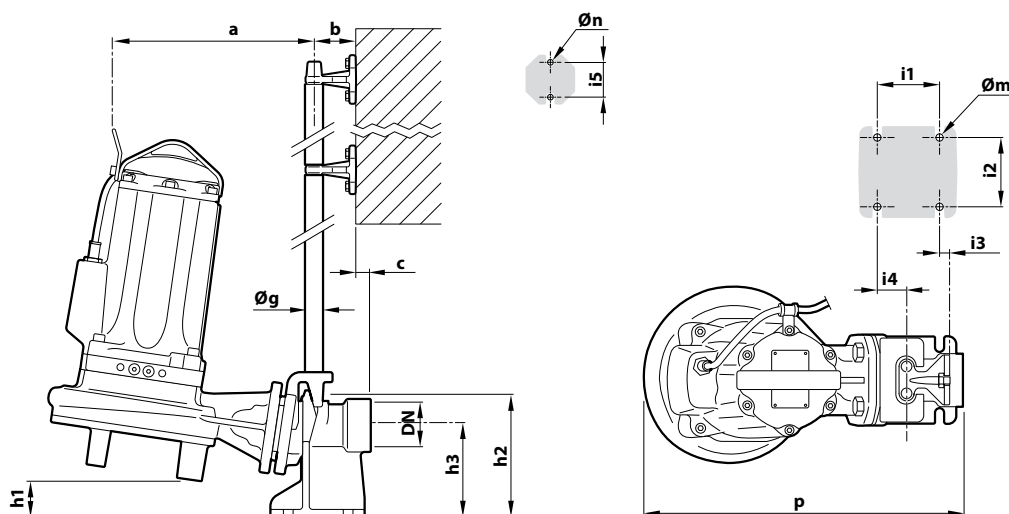
To ensure stability, insert a support every 2 metres along the guide tube

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

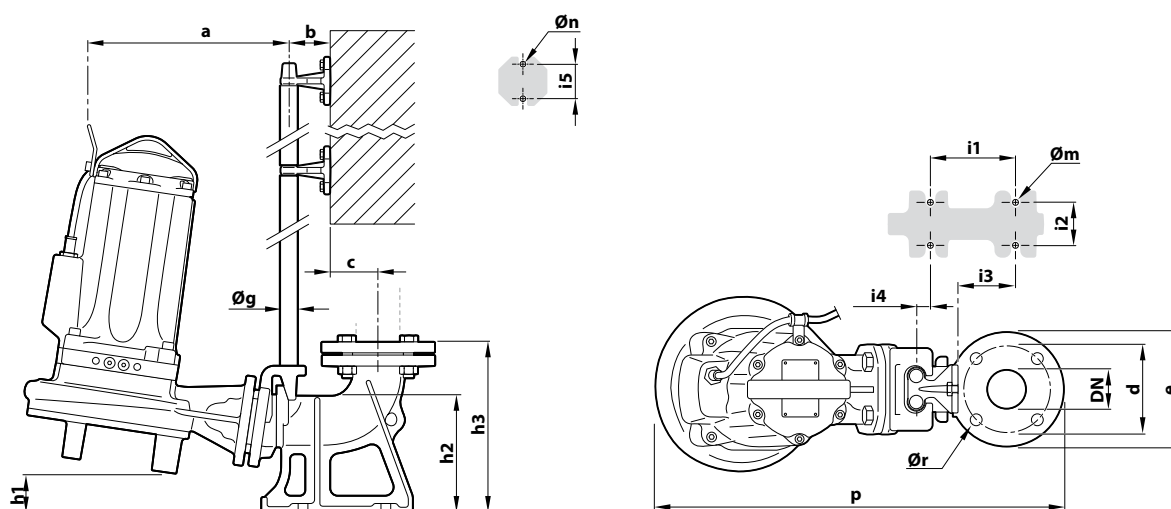


DIMENSIONS (Version with horizontal outlet)



TYPE	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																	
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																				
TR 3																				
TR 4																				

SEWAGE LIFTING SYSTEM (TR5 - TR6)

VERSION WITH VERTICAL DELIVERY AND 2" GUIDE PIPES

For TR5, TR6	Cod. ASSPVX50V	DN 3"
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※ **Kit consisting of:**



Coupling foot complete with counterflange



Guide rail



Support for guide tubes



● ACCESSORIES AVAILABLE FOR ORDER

RUNNING GUIDE

※ For TR5, TR6	Code ASSFL050
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Complete with screws and seals

GUIDE TUBE SUPPORT

※ For Ø 2" guide tubes	Code 859SV349INTFA
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For reasons of stability, interpose a support every 3 metres (recommended)

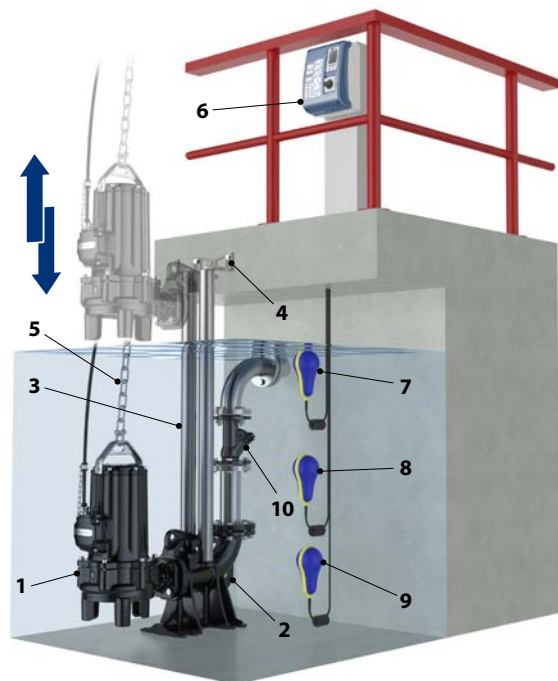
GUIDE TUBE (AISI 304 stainless steel)

※ 3 metres Ø 2" guide tube	Code 54SARTG0063F
※ 6 metres Ø 2" guide tube	Code 54SARTG0066F

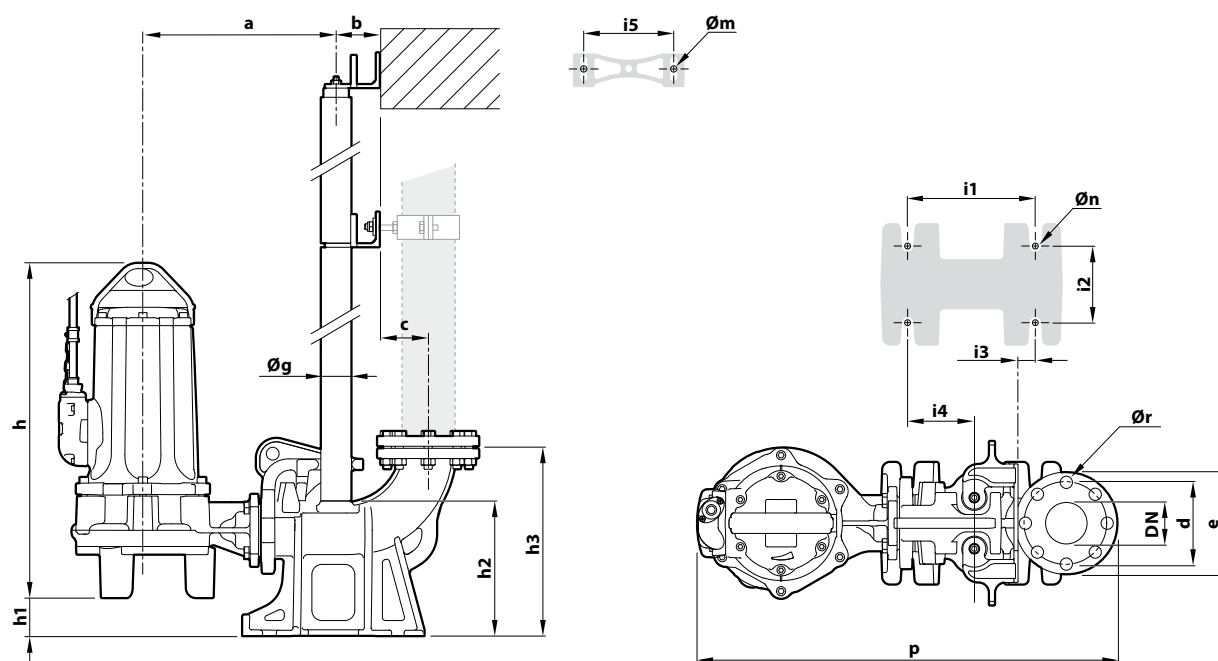


Typical installation

1. Pump
2. Pump Base
3. Guide tube
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 (Version with vertical delivery)



TYPE	PORT	DIMENSIONS mm																
	DN	a	b	c	p	h	h1	h2	h3	i1	i2	i3	i4	i5	Øg	Øm	Øn	Ør
TR 5	3"																	
TR 6		378	85.5	94.5	823	656	75	264	392	250	150	35	130.5	187	60	22	13.5	18