

TRITUS *inox*

Submersible electric pumps with grinder



MADE IN ITALY

 **PEDROLLO**[®]
the spring of life

Submersible electric pumps with grinder

TRITUS INOX is a submersible electric pump with grinder system, versatile and reliable for handling domestic wastewater, especially toilet blackwater.

It is equipped with a professional offset cutting grinder system combined with a low-energy motor, which guarantees efficient operation and prevents clogging caused by particularly problematic objects such as: soft plastic, cloth objects, sanitary towels, wet wipes, latex gloves and other hygiene products.

The grinder unit reduces destructible suspended solids and filamentous substances into small pieces, allowing domestic wastewater to be easily pumped either vertically or horizontally over long distances to the sewer mains or through relatively small diameter pipes.

TRITUS INOX is ideal in single- or two-family houses when gravity sewage systems are not available and there are high gradients or pressure drops; its design features also make it easy to install and simple to handle in the event of maintenance.

- ✳ The grinder is made entirely of high-strength hardened **AISI 440C** stainless steel
- ✳ Double mechanical seal separated by an oil chamber
- ✳ All the cast iron parts are **epoxy coated**
- ✳ The motor case is made of **stainless steel**



PERFORMANCE RANGE

- Flow rate up to **140 l/min** (8.4 m³/h)
- Head up to **18.5 m**

APPLICATION LIMITS

- Installation depth below the water level down to **5 m** (with a suitable power cable length)
- Maximum liquid temperature **+40°C**
- Suction down to:
 - **85 mm**
- Minimum immersion depth for continuous service:
 - **250 mm**

CONSTRUCTION AND SAFETY STANDARDS

- Power cable length **10 m**
- External float switch

INSTALLATION AND USE

TRITUS INOX series grinding pumps are equipped with a **high-strength hardened stainless steel GRINDER** that thoroughly grinds solid bodies and fibres contained in drainwater and wastewater in domestic systems, for conveying under pressure in the sewerage system through small diameter pipes.

PATENTS - TRADEMARKS - MODELS

- Patent No. EP2313658
- Patent No. IT0001428923
- Registered EU Design No. 002501486-0002, 008625685-0005, 008625685-0006
- TRITUS® Registered trademark No. 013017181

OPTIONS AVAILABLE ON REQUEST

- Single-phase electric pumps without a float switch
- Other voltages or 60 Hz frequency

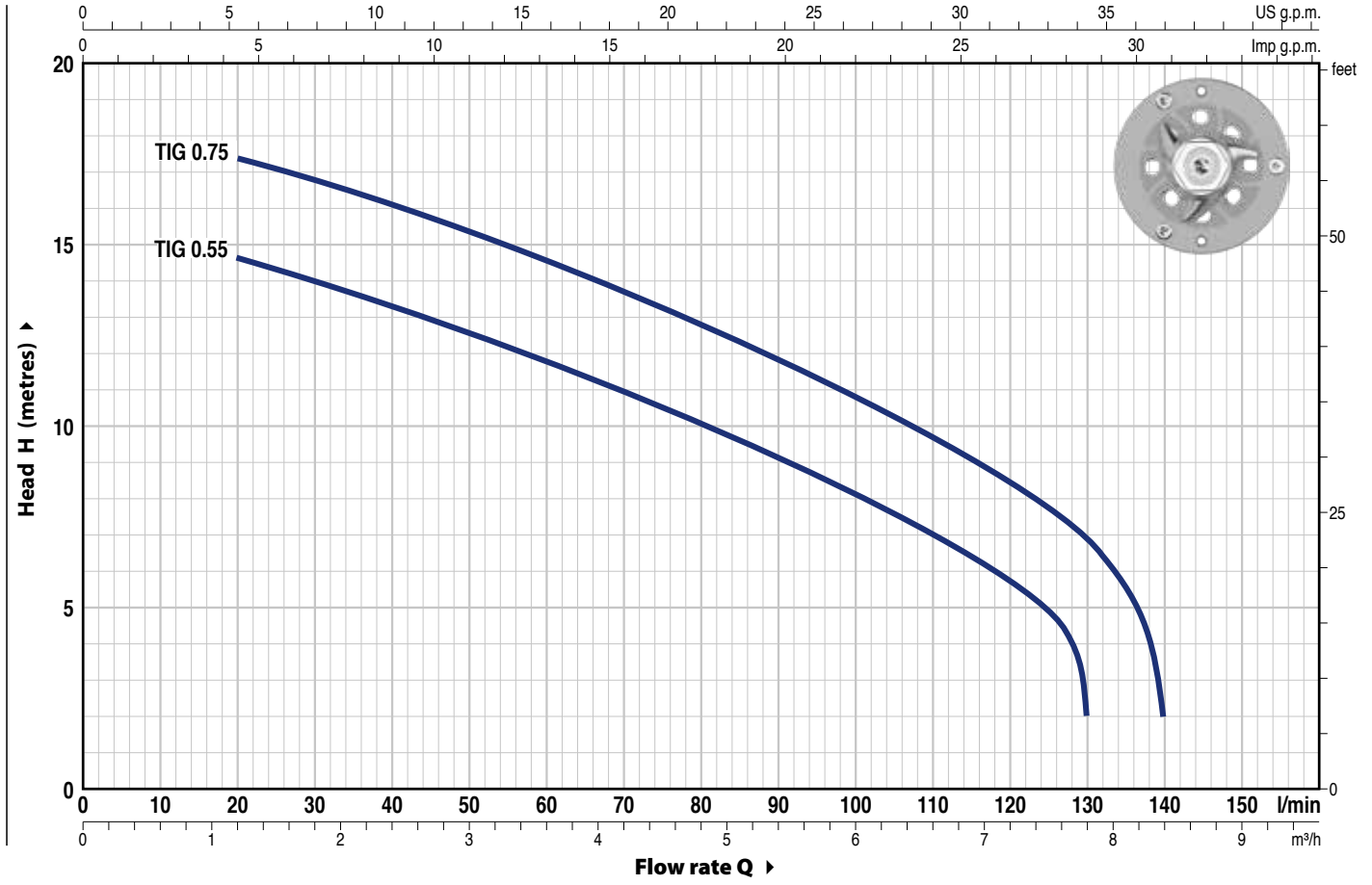
WARRANTY

2 years as per our general terms and conditions of sale

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CHARACTERISTIC CURVES AND PERFORMANCE DATA

50 Hz n= 2900 min⁻¹



MODEL Single-phase	POWER (P ₂)		Q	Flow rate											
	kW	HP		m ³ /h	0	1.2	2.4	3.6	4.8	6	7.2	7.8	8.4		
TIGm 0.55	0.55	0.75	H metres	0	20	40	60	80	100	120	130	140			
TIGm 0.75	0.75	1		0	20	40	60	80	100	120	130	140			

Q = Flow rate H = Total manometric head

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

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POS. COMPONENT CONSTRUCTION CHARACTERISTICS

1 PUMP BODY Cast iron with epoxy coating, with threaded port in compliance with ISO 228/1

2 IMPELLER Technopolymer open type

3 GRINDER Hardened AISI 440C stainless steel

4 MOTOR SHAFT Stainless steel AISI 431

5 MOTOR CASING Stainless steel AISI 304

6 DOUBLE MECHANICAL SEAL IN OIL CHAMBER

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

7 BEARINGS 6303 2RS-C3 / 6203 ZZ-C3E

8 ELECTRIC MOTOR

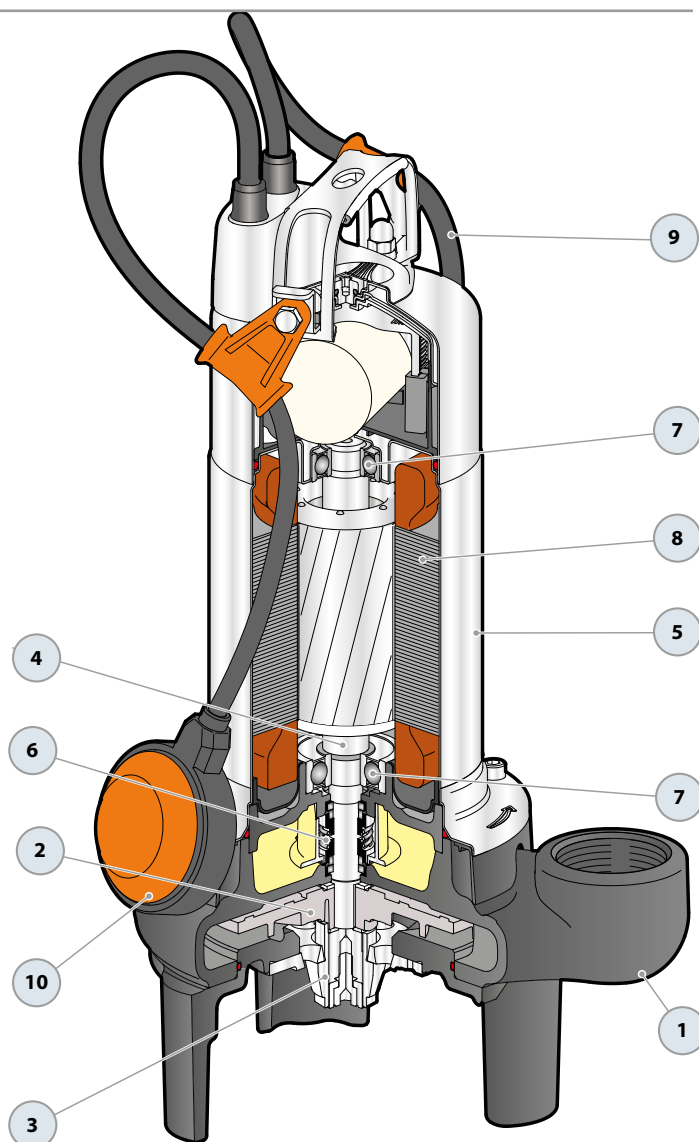
TIGm: single-phase 230 V - 50 Hz
with thermal overload protector incorporated into the winding

- Insulation: class F
- Protection: IP X8

9 POWER CABLE

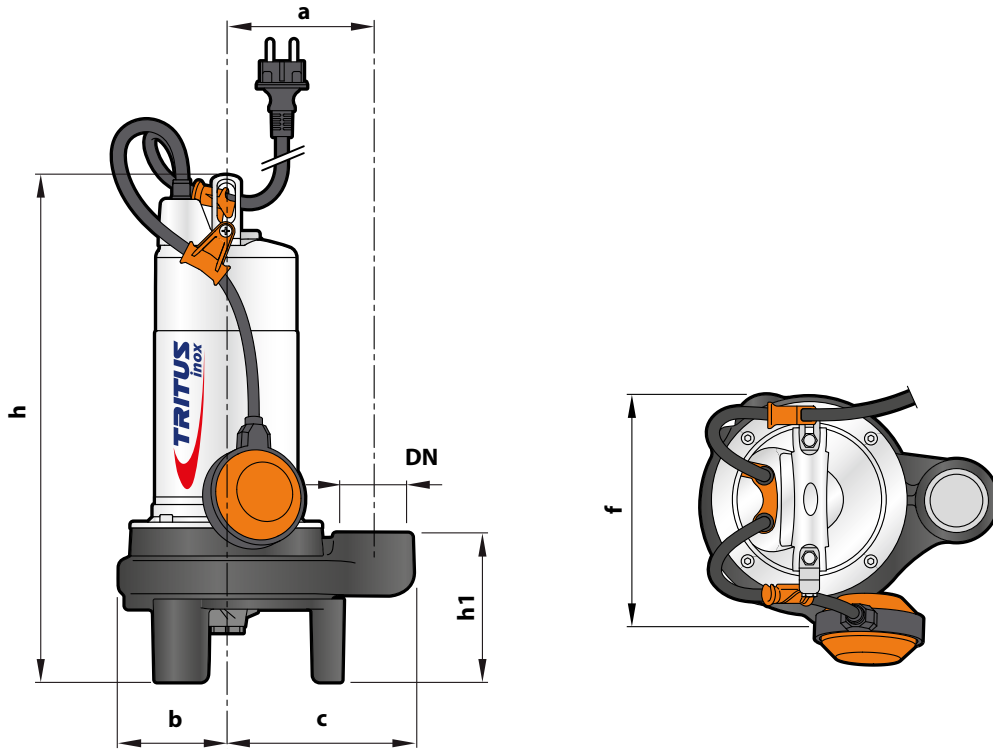
"H07 RN-F" type
Standard length 10 metres

10 EXTERNAL FLOAT SWITCH

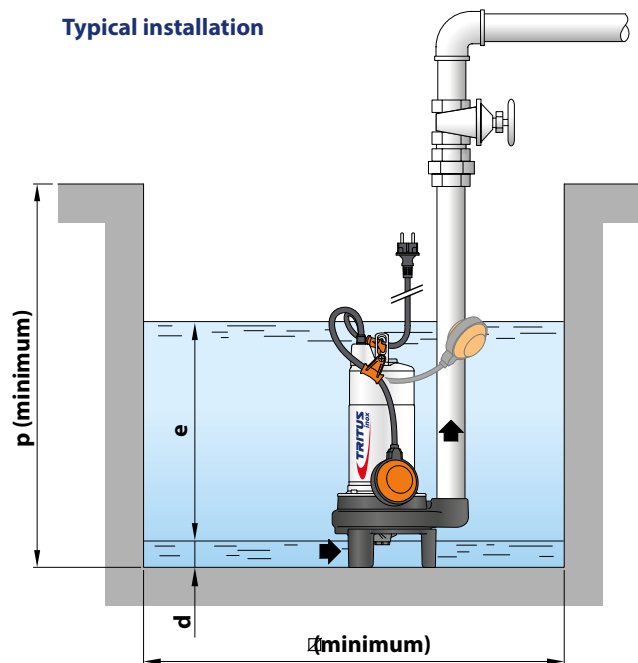


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WEIGHT AND DIMENSIONS



Typical installation



MODEL	PORT DN	DIMENSIONS mm										kg	
		a	b	c	f	h	h1	d	e	p	∅		
Single phase													1~
TIGm 0.55	1½"	115	85	147	177	398	117	65	adjustable	500	500	15.0	
TIGm 0.75												15.2	

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ABSORPTION

MODEL	VOLTAGE	
Single phase	230 V	240 V
TIGm 0.55	4.5 A	4.3 A
TIGm 0.75	5.5 A	5.3 A

CAPACITOR

MODEL	CAPACITY
Single-phase (230 V or 240 V)	Running capacitor
TIGm 0.55	25 μ F 450 VL
TIGm 0.75	

*The data contained in this publication are not to be considered binding.
Pedrollo S.p.A. reserves the right to make any changes it deems appropriate to improve its production.*

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