



Submersible electric pumps with grinder



MADE IN ITALY



Submersible electric pumps with grinder

TRITUS INOX submersible electric pumps are valued for their reliability and safe running: clogging proof. The grinding unit with its offset cutting system drastically reduces the motor torque requirement. It grinds thoroughly, using less power, and eliminates clogging caused by particularly problematic objects such as plastic, rubber, fabric items, sanitary pads, wet wipes, protective masks, latex gloves and other hygiene products.

These grinder pumps are therefore recommended where it is necessary to convey wastewater over long distances or through pipes of a compact size, for plants not suited for being fitted with gravity systems or located in areas not served by sewerage systems.

They are recommended for:

- waste from slaughterhouses
- food industries
- paper mills
- farms
- other manufacturing activities
- for toilet systems

- ✱ 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 the household, civic and industrial sectors, 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

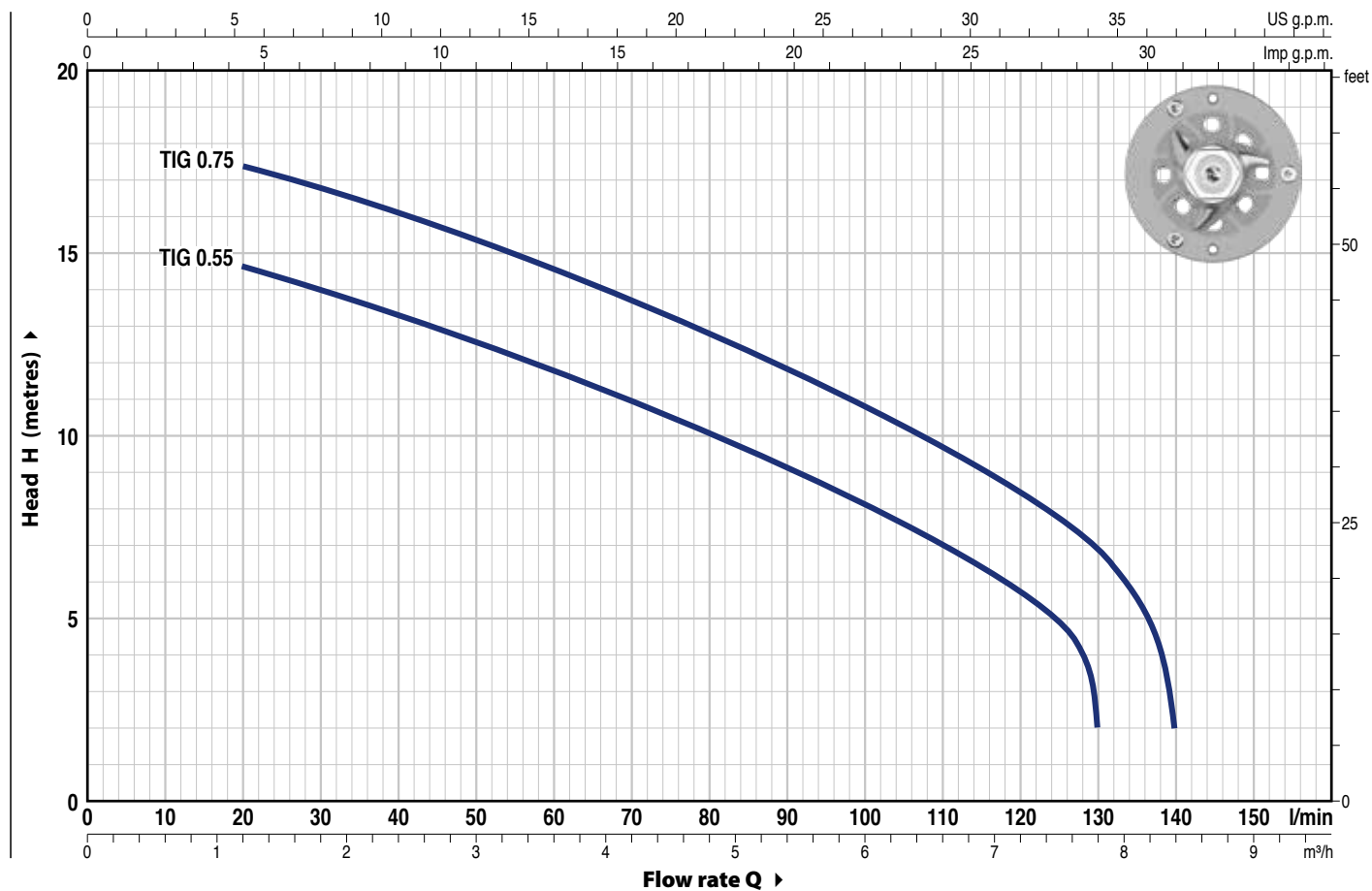
WARRANTY

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 m³/h l/min	0	1.2	2.4	3.6	4.8	6	7.2	7.8	8.4
	kW	HP		0	20	40	60	80	100	120	130	140
TIGm 0.55	0.55	0.75	H metres	16	14.5	13.3	11.8	10.1	8.1	5.7	2	
TIGm 0.75	0.75	1		18.5	17.5	16.1	14.6	12.8	10.8	8.4	7	2

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

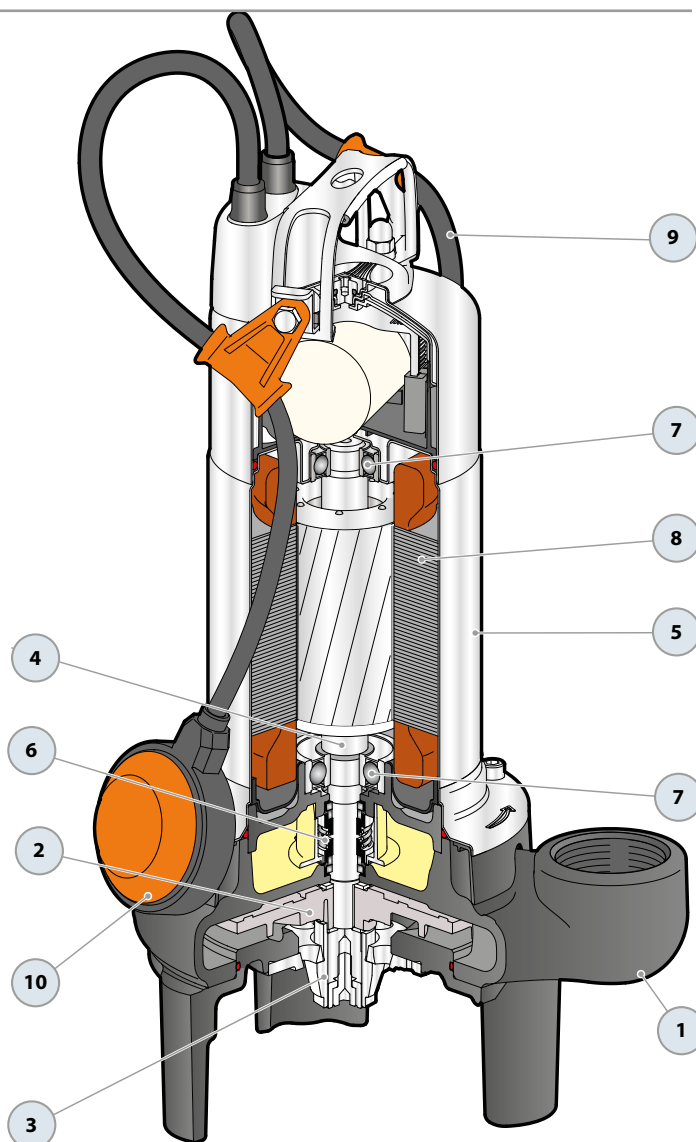
- Insulation: class F
- Protection: IP X8

9 POWER CABLE

"H07 RN-F" type

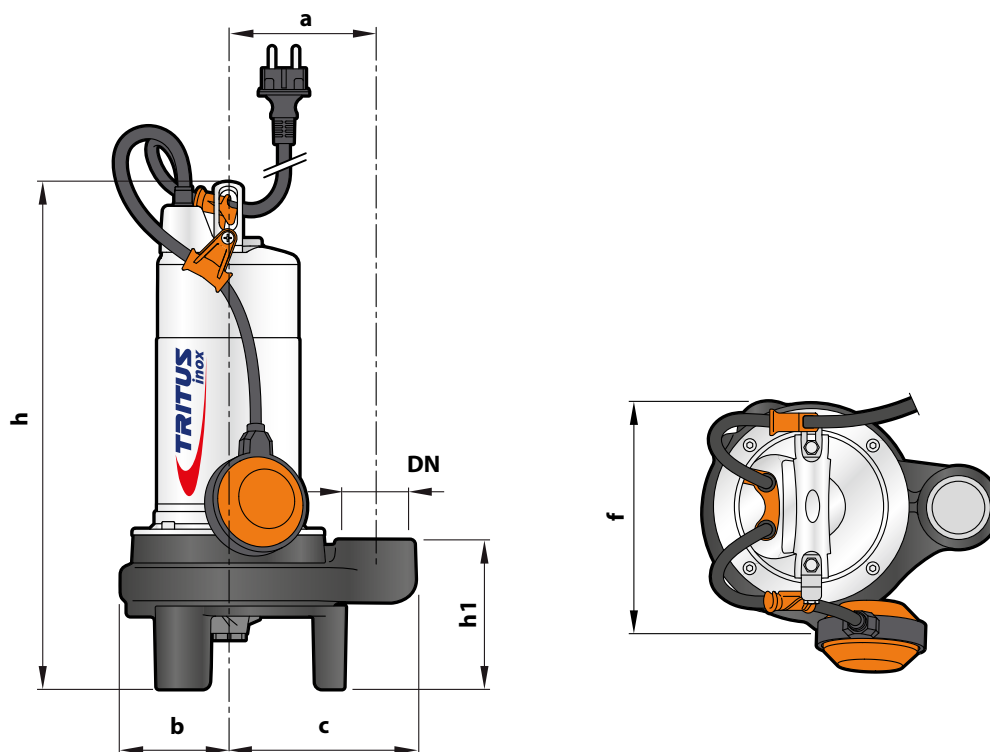
Standard length 10 metres

10 EXTERNAL FLOAT SWITCH

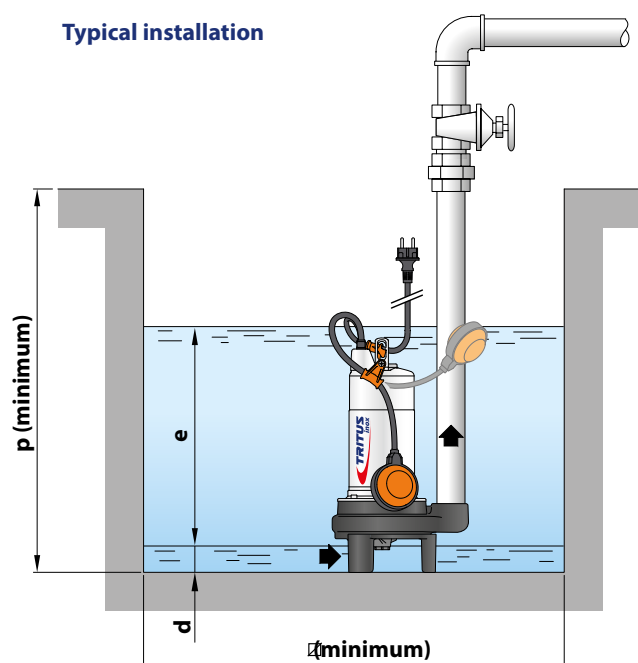


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WEIGHT AND DIMENSIONS



Typical installation



MODEL	PORT	DIMENSIONS mm										kg
Single phase	DN	a	b	c	f	h	h1	d	e	p	∅	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	
	230 V	240 V
Single phase		
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.*