



Submersible pumps with grinder



**MADE IN ITALY**





 Sewage water

 Domestic use

 Industrial use

## Submersible pumps with grinder

**TRITUS** submersible shredder pumps are recognised for their reliability and high operational safety: not subject to locking.

The shredder group with its staggered cutting system drastically reduces the need for the motor torque.

It undertakes a perfect shredding, using less power, and it eliminates clogging caused by particularly problematic objects such as plastic, rubber, articles in cloth, sanitary napkins, wet wipes, protective masks, latex gloves and other hygiene products.

**These shredders are therefore recommended where it is necessary to transport waste water over long distances or through small pipes, for installations which are not suitable for the installation of gravity systems or located in areas which are not serviced by sewer systems.**

**They are therefore recommended for:**

- Slaughterhouse waste
- Food Industries
- Paper Mills
- Farms
- Production Activities in General
- Lavatories WC

- ✱ The shredder is manufactured entirely of high strength **AISI 440 C** tempered stainless steel
- ✱ Double mechanical seal with an interposed oil chamber
- ✱ All cast iron parts with **cataphoresis** treatment
- ✱ Electric panel with a manual reset motor protection and with a starting and operating condenser (only for single phase versions)



### PERFORMANCE RANGE

- Flow rate up to **305 l/min** (18.3 m<sup>3</sup>/h)
- Head up to **44.5 m**

### APPLICATION LIMITS

- **10 m** maximum immersion depth (with a sufficiently long power cable)
- Maximum liquid temperature **+40 °C**
- Suction down above ground level:
  - **85 mm** for **TR 0.75-0.9-1.1-1.3**
  - **95 mm** for **TR 1.5-2.2-3**
- Minimum immersion depth for continuous service:
  - **300 mm** per **TR 0.75-0.9-1.1-1.3**
  - **350 mm** per **TR 1.5-2.2-3**

### CONSTRUCTION AND SAFETY STANDARDS

- **10 m** long power cable
- External float switch and control box for single-phase versions

### INSTALLATION AND USE

The **TRITUS** series of grinder pumps are fitted with a **GRINDER in tempered stainless steel of great resistance** which completely grinds up solid bodies and fibres in waste and reflux water from domestic, civil and industrial applications and conveys it under pressure into the sewers through small diameter pipes.

### PATENTS - TRADE MARKS - MODELS

- Patent n° EP2313658
- Patent n° IT0001428923
- Registered EU Design n° 002501486-0002, 008625685-0005, 008625685-0006
- TRITUS® Registered trade mark n° 013017181

### OPTIONS AVAILABLE ON REQUEST

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

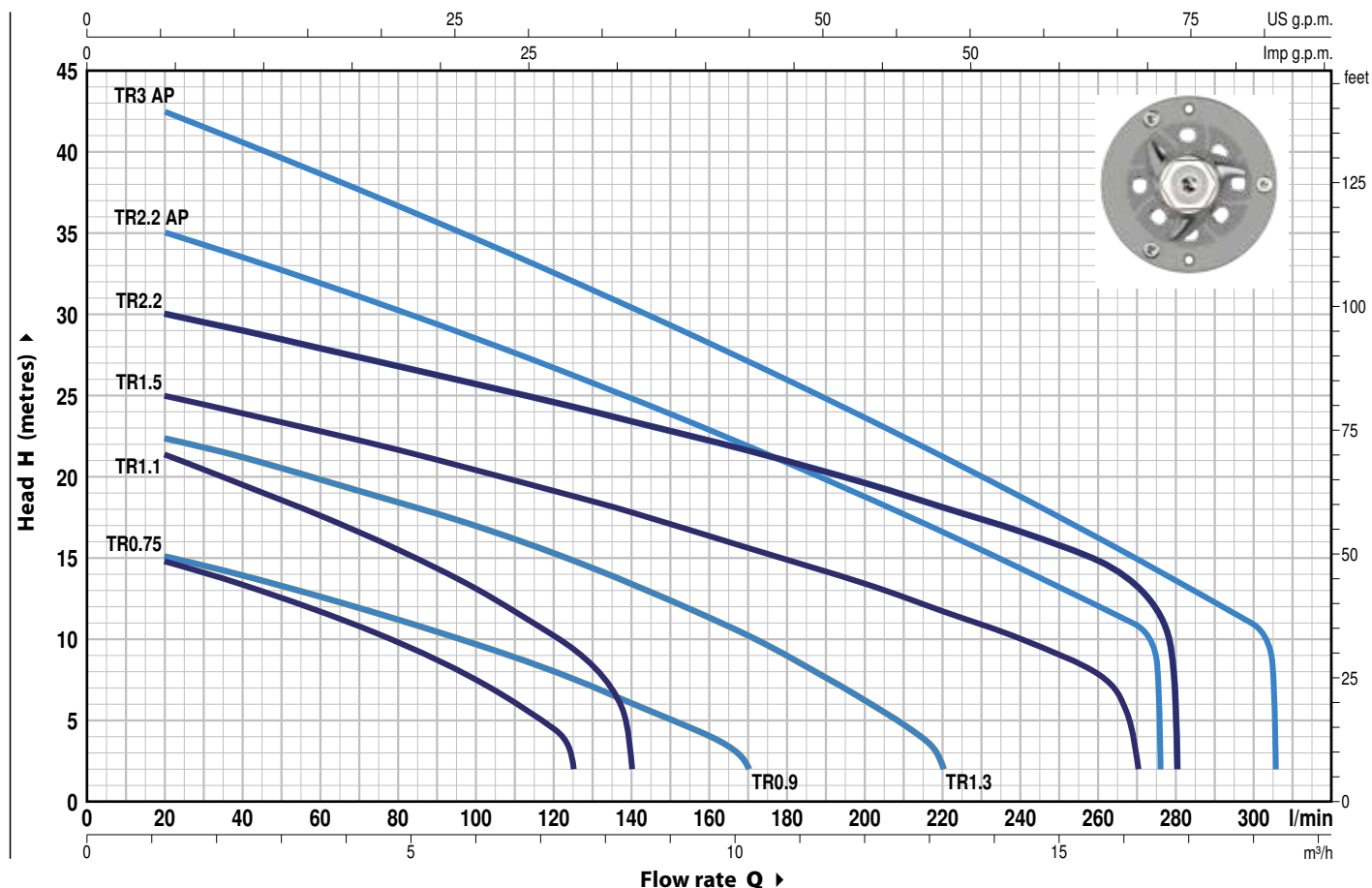
### WARRANTY

2 years in accordance with our general conditions of sale

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### CHARACTERISTIC CURVES AND PERFORMANCE DATA

50 Hz n= 2900 min<sup>-1</sup>



MODEL		POWER (P <sub>2</sub> )		Q	m³/h	0	1.2	2.4	3.6	4.8	6.0	7.5	8.4	10.2	12	13.2	14.4	16.2	16.5	16.8	18	18.3	
Single-phase	Three-phase	kW	HP		l/min	0	20	40	60	80	100	125	140	170	200	220	240	270	275	280	300	305	
TRm 0.75	TR 0.75	0.75	1	H metres	16.5	15	13.5	11.8	10	7.5	2												
TRm 0.9	TR 0.9	0.9	1.25		16	15	13.8	12.5	11.1	9.6	7.5	6	2										
TRm 1.1	TR 1.1	1.1	1.5		23	21.5	19.5	17.5	15.5	13	9.5	2											
TRm 1.3	TR 1.3	1.3	1.75		23.5	22.5	21.2	19.8	18.4	17	14.8	13.4	10.2	6.2	2								
TRm 1.5	TR 1.5	1.5	2		26	25	24	22.8	21.7	20.4	18.8	17.8	15.6	13.4	11.7	10	2						
–	TR 2.2	2.2	3		31	30	29	28	26.8	25.7	24.3	23.5	21.5	19.5	18	16.5	13.2	12	2				
TRm 2.2 AP	TR 2.2 AP	2.2	3		36.5	35	33.5	32	30.5	28.5	26.5	24.8	21.8	18.7	16.6	14.3	11	2					
–	TR 3 AP	3	4		44.5	42.5	41	39	37	35	32	30.5	27.5	23.7	21.3	18.8	15	14	13.6	11	2		

Q = Flow rate H = Total manometric head

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

# TRITUS 0.75 – 0.9 – 1.1 – 1.3

## POS. COMPONENT CONSTRUCTION CHARACTERISTICS

1	PUMP BODY	Cast iron with an Epoxy Electro Coating treatment, with threaded port in compliance with ISO 228/1				
2	IMPELLER	Technopolymer open type				
3	GRINDER	Tempered AISI 440C stainless steel				
4	MOTOR SHAFT	Stainless steel AISI 431				
5	MOTOR CASING	Cast iron with an Epoxy Electro Coating treatment				
6	DOUBLE MECHANICAL SEAL IN 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
7	BEARINGS	6203 ZZ-C3E / 6203 ZZ-C3E				
8	ELECTRIC MOTOR					
	TRm:	single-phase 230 V - 50 Hz with thermal overload protector incorporated into the winding				
	TR:	three-phase 400 V - 50 Hz				
	– Insulation:	class F				
	– Protection:	IP X8				
9	POWER CABLE					
	"H07 RN-F" type					
	Standard length	10 metres				
10	FLOAT SWITCH	(only for single-phase versions)				
11	CONTROL BOX	(only for single-phase versions)				
	With manual overload cut-out and with starting and operating capacitors.					

Standard features  
Control box  
(only for single-phase versions)

