
GRINDER 1400 - 1800

SUBMERSIBLE PUMPS WITH TRITURATOR



GENERAL DATA

Applications

Submersible cast iron pump with triturator suitable for lifting or drainage installations for civil and industrial sewage. Thanks to the grinding system, the material present in the sewage (organic waste, fabric, rubber, etc.) is reduced into small particles, allowing the liquid to be pumped without any risk of clogging or obstruction of the delivery pipes.

Constructional features of the pump

Cast iron pump body, motor casing and suction cover.

High-resistance cast iron thrust ring pipe impeller.

Triturator device obtained by precision casting of extremely strong and durable materials.

Stainless steel rotor shaft, handle and screws.

Inspectable oil seal chamber.

Silicon carbide mechanical seal.

The supply vent of 2" threaded GAS is radial to facilitate assembly on the lifting devices (DSD 2).

Constructional features of the motor

Continuous duty submersible induction motor, in a watertight casing.

Rotor mounted on oversized greased sealed-for-life ball bearings.

Thermal protection in the windings, to be connected to the control panel.

In order to operate, the pumps must be equipped with a control and protection system, supplied separately and not connected to the electropumps.

Supplied with 10 metres of neoprene rubber power cable 6x(4x1,5)+(2x0,5).

Motor protection: IP68

Insulation class: F

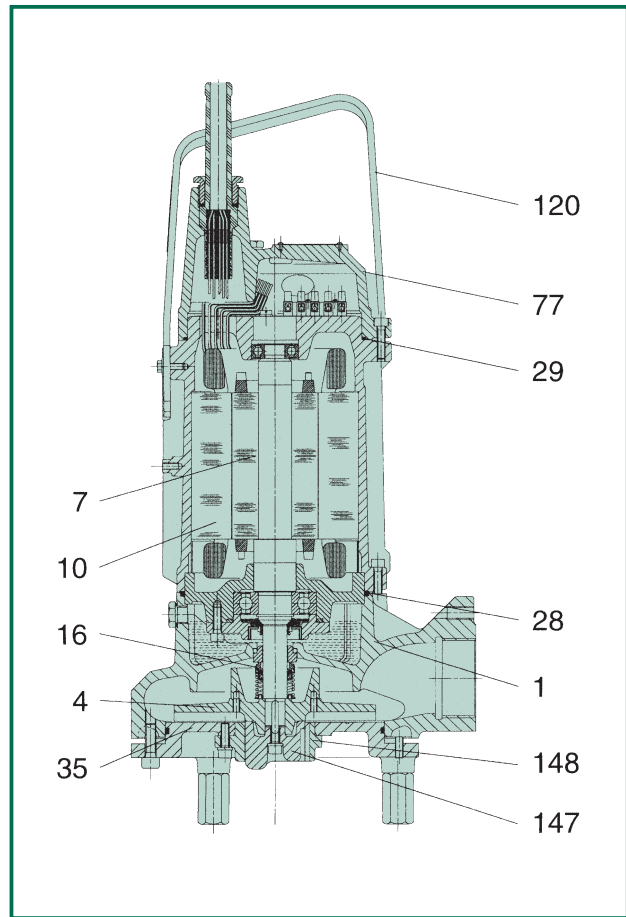
Manufactured according to CEI 2-3 standards.

Standard voltage: single-phase 220-240 V/50 Hz
 three-phase 400 V/50 Hz

TECHNICAL DATA

| N. | PARTS* | MATERIALS |
|-----|--------------------------------------|---|
| 1 | PUMP BODY | CAST IRON 200 UNI ISO 185 |
| 4 | IMPELLER | CAST IRON 200 UNI ISO 185 |
| 7 | MOTOR SHAFT | STAINLESS STEEL AISI 416 X12CrS13 - UNI 6900/71 |
| 10 | MOTOR CASING | CAST IRON 200 UNI ISO 185 |
| 16 | MECHANICAL SEAL | SILICON CARBIDE |
| 28 | OR GASKET | VITON |
| 29 | OR GASKET | VITON |
| 35 | SUCTION COVER | CAST IRON 200 UNI ISO 185 |
| 77 | PROTECTION COVER | CAST IRON 200 UNI ISO 185 |
| 120 | HANDLE | STAINLESS STEEL AISI 304 X5CrNi 1810 - UNI 6900/71 |
| 147 | TRITURATOR FIXED PART FIXED PART | HARDENED STEEL AISI 440 |
| 148 | TRITURATOR FIXED PART ROTARY PART | HARDENED STEEL AISI 440 |

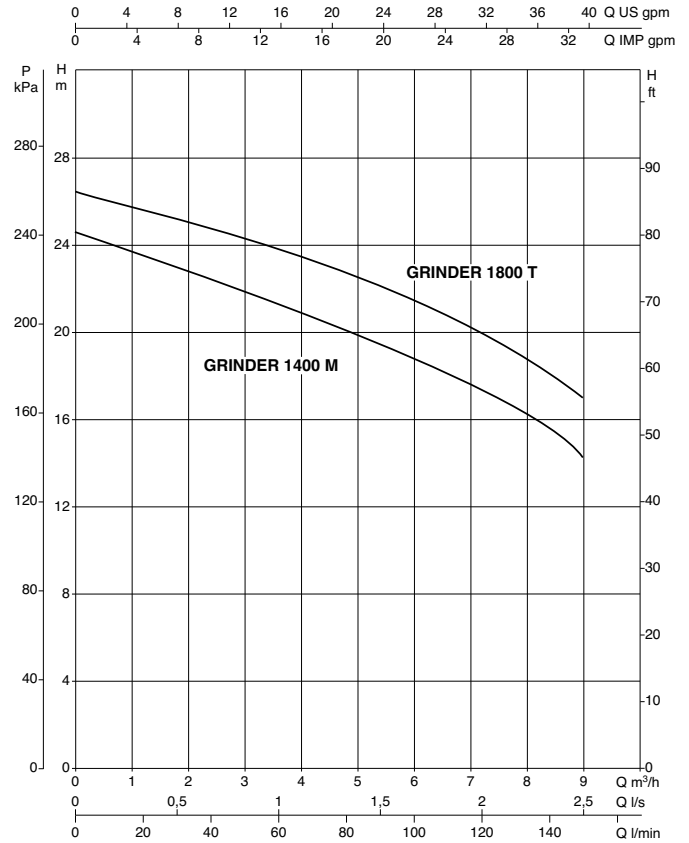
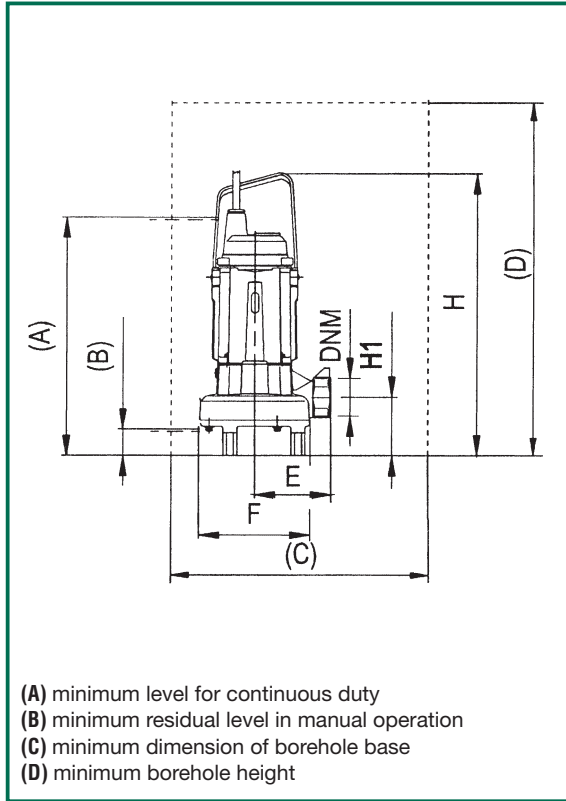
* In contact with the liquid



- Operating range: from 2 to 9 m³/h with head up to 24,5 metres for the single-phase version and 26,5 metres for the three-phase version.
- Liquid quality requirements: dirty waste water, untreated sewage containing solids and/or long fibres, always non aggressive
- Liquid temperature range: from 0°C to +55°C
- Maximum ambient temperature for pump operation with the motor emerging: +40°C
- Maximum immersion depth: 10 metres
- Installation: fixed or portable in a vertical position
- Special executions on request: other voltages and/or frequencies

The performance curves are based on the kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.
Liquid temperature range: from 0°C to +55°C

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| MODEL | A | B | C | D | E | F Ø | DNM | H | H1 | PACKING DIMENSIONS | | | VOLUME m ³ | WEIGHT Kg |
|-----------------------|-----|----|----------------|------------|-----|-----|------|-----|-----|--------------------|-----|-----|--------------------------|--------------|
| | | | | | | | | | | L/A | L/B | H | | |
| GRINDER 1400 M | 500 | 50 | 500x500 min | 600 min | 150 | 219 | 2" G | 549 | 109 | 680 | 330 | 380 | 0,085 | 43,2 |
| GRINDER 1800 T | 500 | 50 | 500x500 min | 600 min | 150 | 219 | 2" G | 549 | 109 | 680 | 330 | 380 | 0,085 | 43,8 |

| MODEL | ELECTRICAL DATA | | | | | | HYDRAULIC DATA (n ≈ 2800 1/min) | | | | | | | |
|-----------------------|------------------|-----------------|---------------|-----|---------|-----------|---------------------------------|---------------------------------|------|------|------|------|------|------|
| | VOLTAGE 50 Hz | P1 MAX kW | P2 NOMINAL | | In A | CAPACITOR | | Q m ³ /h l/min | 0 | 2 | 4 | 6 | 8 | 9 |
| | | | kW | HP | | µF | Vc | | | | | | | |
| GRINDER 1400 M | 1x220-240 V ~ | 1,95 | 1,1 | 1,5 | 8,7 | 40 | 450 | H (m) | 24,5 | 22,8 | 21 | 19 | 16,2 | 14,1 |
| GRINDER 1800 T | 3x400 V ~ | 2 | 1,5 | 2 | 3,8 | - | - | H (m) | 26,5 | 25 | 23,5 | 21,6 | 18,8 | 17 |