# DIG 1100-1500-1800-2200

## SUBMERSIBLE PUMPS

## TECHNICAL DATA

**Operating range:**
from 6 to 54 $m^3/h$ with head up to 20 metres.
**Pumped liquid:** rain water, ground water, sandy water from construction site, water containing abrasive particles in general.
**Free passage of solids:** 6 mm.
**Liquid temperature range:** from 0 °C to 35 °C.
**Maximum immersion depth:** 20 metres (with cable of appropriate length).
**Motor protection class:** IP 68.
**Insulation class:** F.
**Standard voltage:** 220-240 V - 50Hz single-phase.
380-415 V - 50Hz three-phase.
**Installation:** fixed or portable, vertical position.
Continuous service with completely or partially submerged pump.
**Power cable:**
10 metres H07RN-F. Special patented steel core reinforced tear-resistant electric cable also available on request.

## APPLICATIONS

Portable pumps, ideal for draining abrasive liquids in the field:
- Building, tunnel, or infrastructure construction sites
- Civil, for pedestrian subways and car parks
- Industrial, for process waters
- Open mines and caves
- Municipal, for emergency sandy water flooding

## CONSTRUCTION FEATURES OF THE PUMP

Pump body made of EN GJL 200 cast iron, internally lined with high abrasion and wear resistance Nitrile (NR) rubber.
Double silicon carbide/silicon carbide mechanical seal on the pump side and carbon/alumina seal on the motor side, in oil chamber plus lip seal.
AISI 304 stainless steel suction grid
Delivery ND: 2"½
Open CRA2 650 HB chrome cast iron impeller

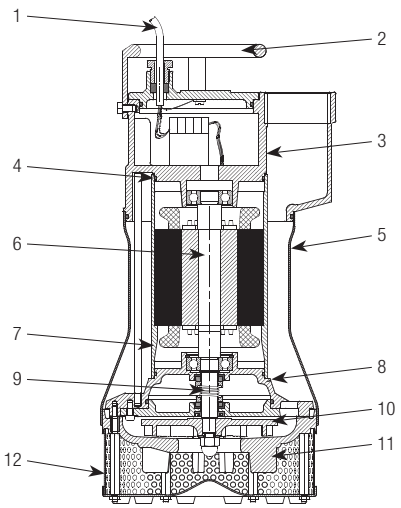
## CONSTRUCTION FEATURES OF THE MOTOR

Dry, asynchronous and waterproof type motor, cooled by the pumped liquid. Rotor mounted on permanently lubricated ball bearings, oversized to ensure long-term reliability and extended lifetime. Standard built-in thermo-amperometric protection. Capacitor permanently fitted on single phase versions. Continuous S1 service with completely or partially submerged pump.
Number of poles: 2
Max starts/hour: 15

## MATERIALS

| N. | PARTS* | MATERIALS |
|---|---|---|
| 1 | POWER INPUT CABLE | H07RN-F |
| 2 | HANDLE | CHROME STEEL |
| 3 | UPPER COVER | EN GJL 200 CAST IRON |
| 4 | OR | NBR |
| 5 | EXTERNAL COOLING LINER | AISI 304 STAINLESS STEEL |
| 6 | ROTOR SHAFT | AISI 420 |
| 7 | MOTOR BODY | AISI 304 |
| 8 | BEARING FLANGE | EN GJL 200 CAST IRON |
| 9 | MECHANICAL SEAL | MOTOR: CARBON/ALUMINA<br>PUMP: SILICON CARBIDE/SILICON CARBIDE |
| 10 | IMPELLER | AISI ASTM 532-80 |
| 11 | HYDRAULIC BODY | 70SHORE ABRASION RESISTANCE RUBBER |
| 12 | GRID | AISI 304 STAINLESS STEEL |

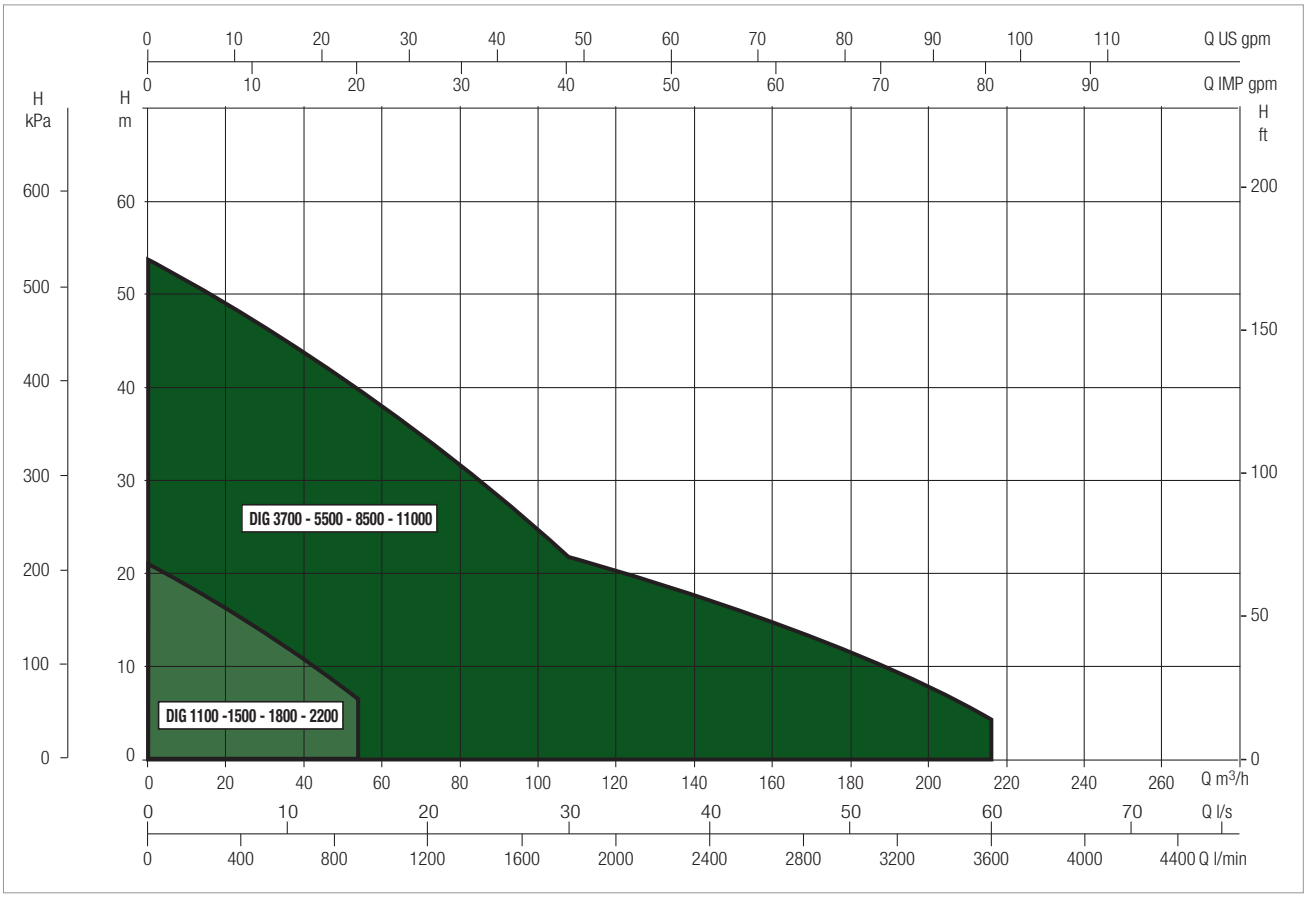
* In contact with the liquid



# PERFORMANCE RANGE

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

### GRAPHIC SELECTION TABLE

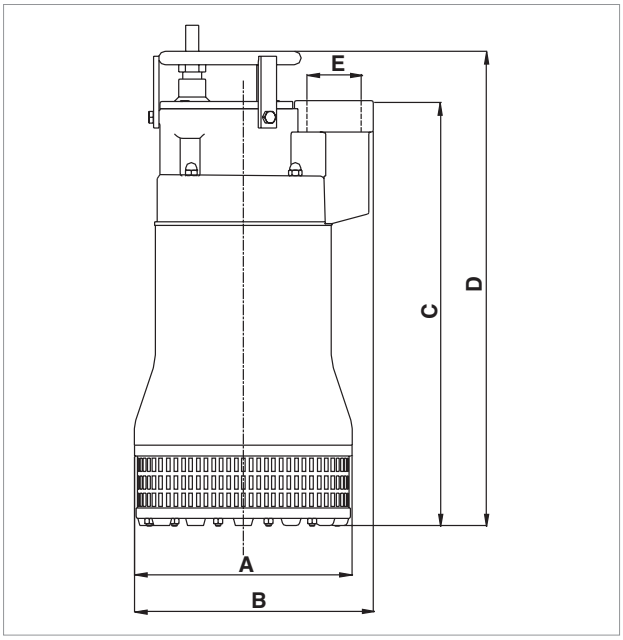


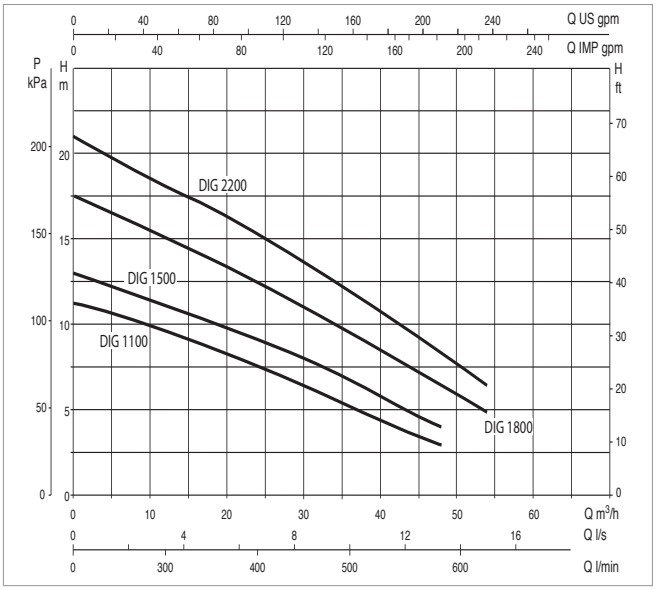

## SELECTION TABLE - DIG 1100 -1500 - 1800 - 2200

| MODEL | Q= m³/h | 0 | 6 | 12 | 18 | 24 | 30 | 36 | 42 | 48 | 54 | 60 | 72 | 84 | 96 | 108 | 120 | 132 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Q=l/min | 0 | 100 | 200 | 300 | 400 | 500 | 600 | 700 | 800 | 900 | 1000 | 1200 | 1400 | 1600 | 1800 | 2000 | 2200 |
| DIG 1100 M-T | H (m) | 11.3 | 10.6 | 9.6 | 8.5 | 7.4 | 6.5 | 5.3 | 3.8 | 3.0 | | | | | | | | |
| DIG 1500 T | | 13 | | 11.0 | 10.0 | 9.0 | 8.0 | 6.8 | 5.3 | 4.0 | | | | | | | | |
| DIG 1800 T | | 17.6 | | 15.0 | 13.8 | 12.5 | 11.0 | 9.4 | 8.1 | 6.3 | 4.9 | | | | | | | |
| DIG 2200 T | | 20.1 | | 16.8 | 15.2 | 14.1 | 12.4 | 10.6 | 9.1 | 7.4 | 5.9 | | | | | | | |

# **DIG 1100 -1500 - 1800 - 2200** - SUBMERSIBLE PUMPS FOR DRAINING CLEAR WATER CONTAINING ABRASIVE SUBSTANCES

Liquid temperature range: from 0 °C to +35 °C




The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

| MODEL | ELECTRICAL DATA | | | | | | |
|---|---|---|---|---|---|---|---|
| | POWER INPUT 50 Hz | P1 MAX kW | P2 NOMINAL | | In A | CAPACITOR | |
| | | | kW | HP | | µF | Vc |
| **DIG 1100 MA** | 1 x 230 V ~ | 1.7 | 1.1 | 1.5 | 7.8 | 25 | 450 |
| **DIG 1100 M-NA** | 1 x 230 V ~ | 1.7 | 1.1 | 1.5 | 7.8 | 25 | 450 |
| **DIG 1100 T-NA** | 1 x 230 V ~ | 1.7 | 1.1 | 1.5 | 3 | - | - |
| **DIG 1500 T-NA** | 1 x 230 V ~ | 2.4 | 1.5 | 2 | 4.3 | - | - |
| **DIG 1800 T-NA** | 1 x 230 V ~ | 3.2 | 1.8 | 2.4 | 5.3 | - | - |
| **DIG 2200 T-NA** | 1 x 230 V ~ | 4.0 | 2.2 | 3 | 6.4 | - | - |

| MODEL | A | B | C | D | E DNM | FREE PASSAGE mm | PACKING DIMENSIONS | | | VOLUME ($m^3$) | WEIGHT kg |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | L/A | L/B | H | | |
| **DIG 1100 MA** | 250 | 270 | 480 | 530 | 2 1/2" - F | 6 | 400 | 400 | 750 | 0.12 | 34 |
| **DIG 1100 M-NA** | 250 | 270 | 480 | 530 | 2 1/2" - F | 6 | 400 | 400 | 750 | 0.12 | 34 |
| **DIG 1100 T-NA** | 250 | 270 | 480 | 530 | 2 1/2" - F | 6 | 400 | 400 | 750 | 0.12 | 34 |
| **DIG 1500 T-NA** | 250 | 270 | 480 | 530 | 2 1/2" - F | 6 | 400 | 400 | 750 | 0.12 | 35 |
| **DIG 1800 T-NA** | 250 | 270 | 480 | 530 | 2 1/2" - F | 6 | 400 | 400 | 750 | 0.12 | 36 |
| **DIG 2200 T-NA** | 250 | 270 | 480 | 530 | 2 1/2" - F | 6 | 400 | 400 | 750 | 0.12 | 37 |