

Versatile portable helical-rotor pump 1"-EQP

Application

Pump 1"-EQP-16-6 is intended for pumping clean and service water, liquid manure, sludge, sewage, and thick homogeneous stuffs with content of solids up to max. sizes 5 mm and temperature up to 50 °C.

That pump together with an electric motor represent small and serviceable pump-set available for the widest circle of consumers.

In practice that pump-set may cope with various applications, as follows:

- drainage of flooded spaces
- pumping-out underground and waste water
- pumping out of emergency supplies, pumping-out dugouts, long-distance transport of water
- spraying playgrounds and decorative areas
- watering gardens, parks and smaller lands
- pumping out of sumps

That pump-set may be also applied as an auxiliary equipment in various branches of industry and in other fields of application for pumping out of surface and underground supplies - from rivers, ponds, sumps, pools, cellars, wells, etc.

Construction

Pump-set 1"-EQP consists of a submersible electric motor and a helical-rotor pump of very simple design, with minimal number of parts. That has resulted in good properties of the whole pump-set, that is, small size and weight, easy carrying and controllability, self-suction capacity. That pump has been provided with a relief valve of simple design.

The whole pump-set is installed on a base with rubber block and provided with a handle to allow comfortable carrying.

Material options

Pump main parts are produced of following constructional materials:

Basic workmanship

Suction and discharge casings - grey cast iron

Helix - stainless steel and carbon steel

Connection rod - stainless steel

Stator - steel and rubber

Special workmanship

Helix - structural steel with special surface finish.

Materials of the pump other parts are similar with basic material workmanship.

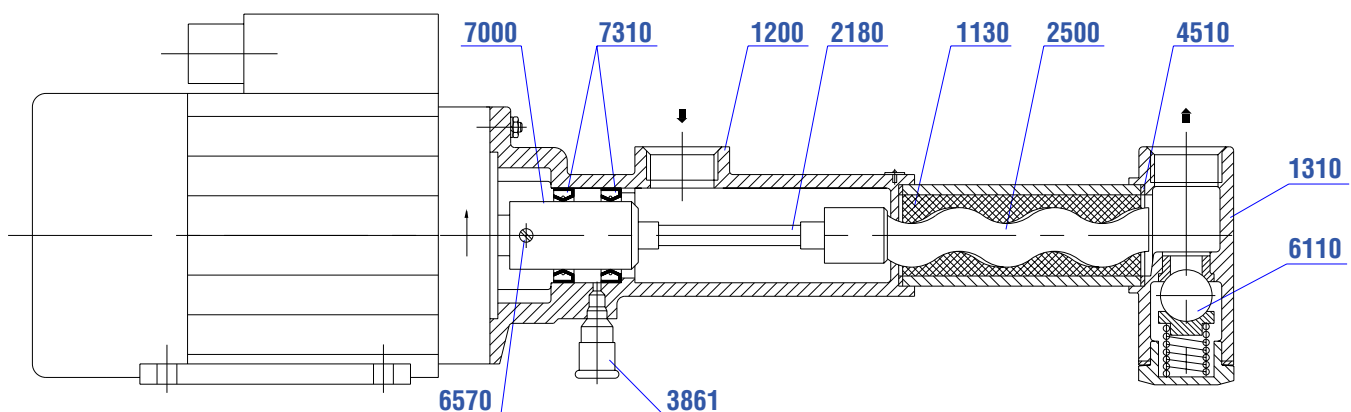
Accessories

As a standard the following accessories are supplied together with the pump-set:

1. Pump with an electric motor being attached to a frame.
2. Circuit breaker hand-operated, inclusive of an electrical cable interconnexion onto an electric motor terminal guard.
3. Connecting cable in length of 16 mm, with a plug and a socket.
4. Rubber suction hose in length of 5 m with connected screw joint and a protective inlet bellmouth.
5. Rubber discharge hose in length of 12.5 m with connected screw joint and a garden sprayer.

On request, it is possible to deliver the pump itself, with an electric motor and without peripheral electrics, as well as without suction and discharge hoses.

Informatory cross-section through pump



| | | | |
|------|------------------|------|-------------------------------|
| 1130 | Stator | 4310 | Radial lip seal ring „gufero“ |
| 1200 | Suction casing | 4510 | Wear ring |
| 1310 | Discharge casing | 6110 | Relief valve |
| 2180 | Connection rod | 6570 | Bolt |
| 2500 | Helix | 7000 | Shaft coupling |
| 3861 | Lubricator | | |

Versatile portable helical-rotor pump 1"-EQP

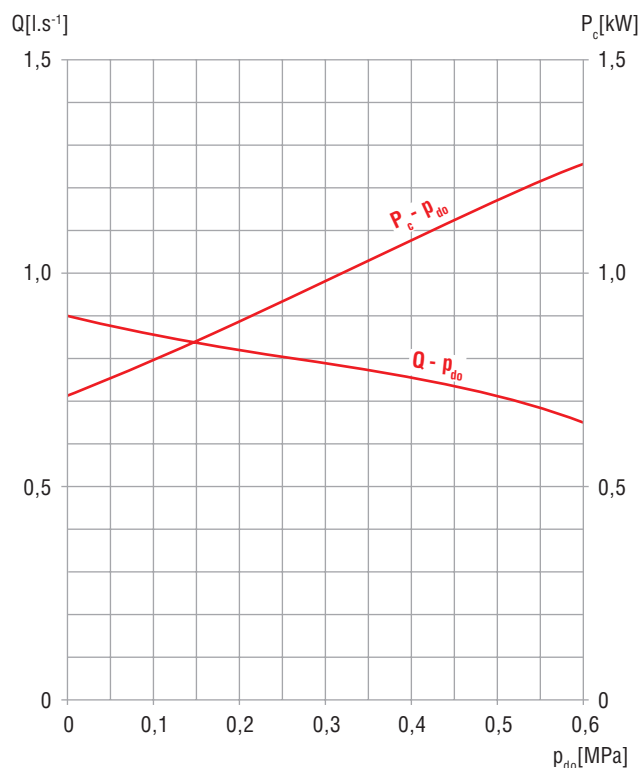
Performance data

| | | | | |
|--|-----------------------|------------|-----------------------------|--------------------------|
| Pump-set | | | 1"-EQP-16-6 | |
| Pump | | | | |
| Max. delivery pressure (Delivery head) | p_{do} H_{max} | MPa m | 0.6 60 | |
| Capacity | Q | $l.s^{-1}$ | 0.65 | |
| Suction connection dia. | | | G 1" | |
| Discharge connection dia. | | | G 1" | |
| Electric motor - type | | | single-phase 4APCC-90S-2 | three-phase 4AP-80-2s |
| Rated power | | kW | 1.5 | 0.75 |
| Speed | | min^{-1} | 2850 | 2840 |
| Voltage | | V | 230 | 400 |
| Frequency | | Hz | 50 | 50 |
| Current (cut-out) | | A | 9.7 | 1.8 |
| Connecting cable | | | CGSG 3 x 1.5 | CGSG 4 x 1.5 |
| Cable standard length | | m | 16 | 16 |
| Covering | | | IP 54 \triangle | IP 54 \triangle |
| Pump-set weight without accessories | | kg | 21 | 13,8 |
| Pump-set dimensions: length / width / height | | mm | 715/200/280 | 560/180/230 |

Above-mentioned performance data are valid for pumping clean water of temperature 25 °C and manometric pressure at the pump inlet section $p_{s\ man} = -0,4$ bar.

Pump selection chart

Single-phase version



Three-phase version

