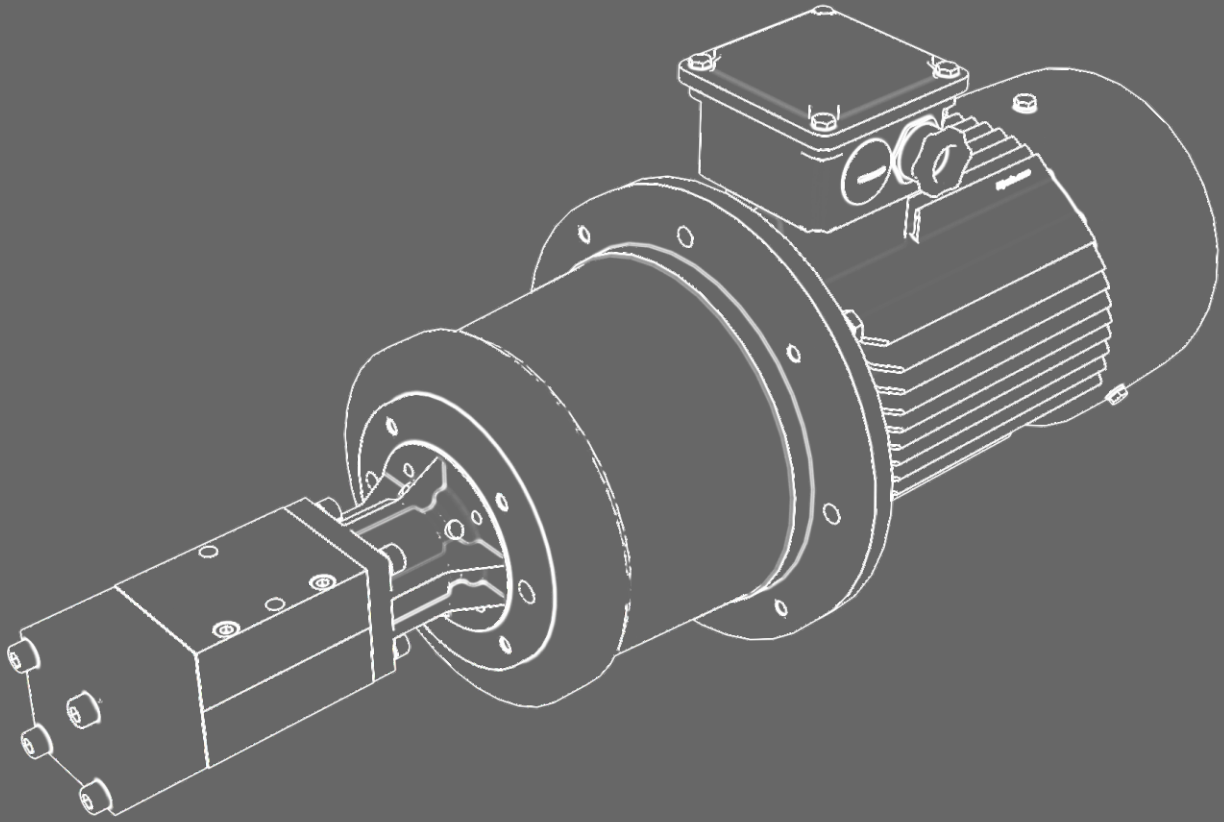




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Pumping stations for pumping coolant

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SN.C-12.40.R1

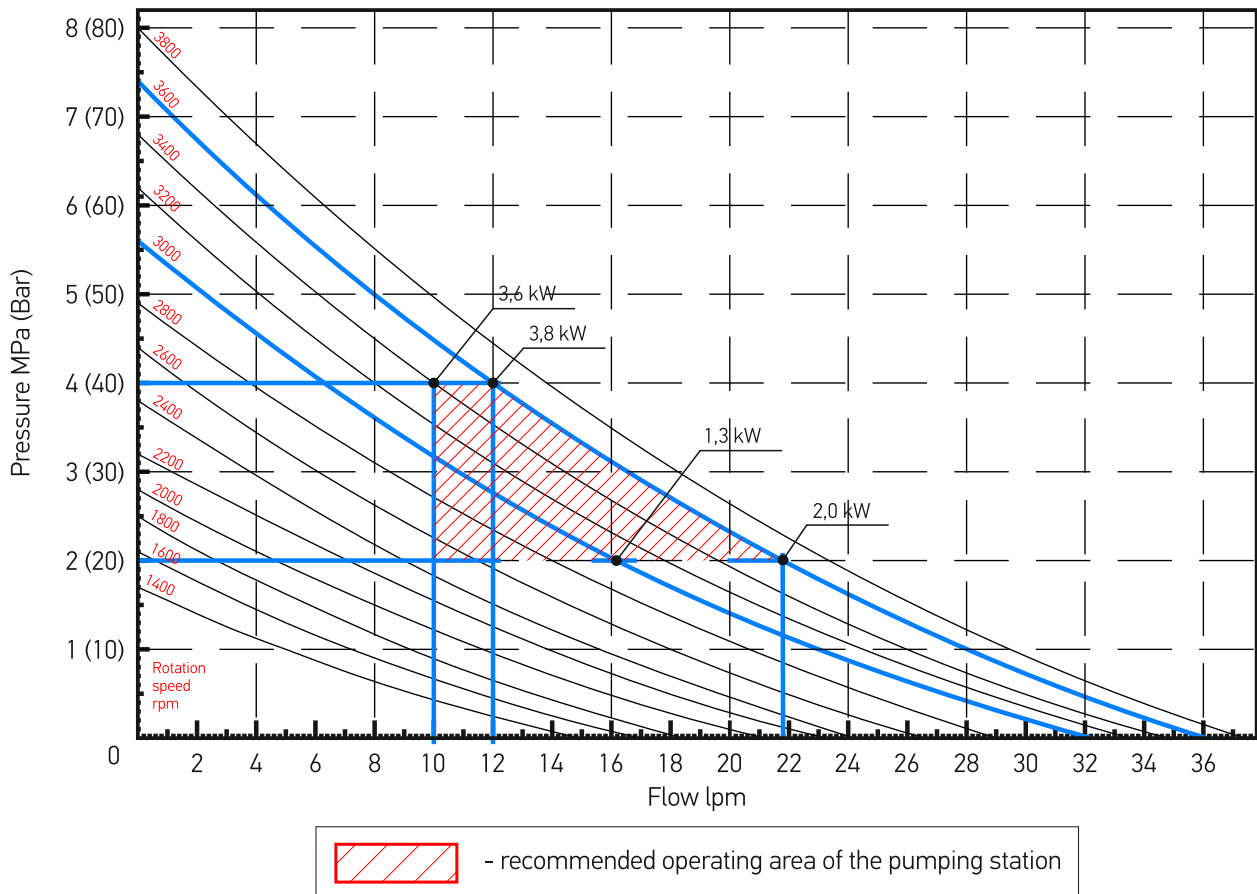
PUMPING STATIONS FOR PUMPING COOLANT

SN.C-12.40.R1.SP3.30.5,5.FC

The pumping station is installed on metalworking machines and is designed for pumping non-aggressive liquids without abrasive impurities, kinematic viscosity from 3×10^6 to 760×10^6 m²/s at temperatures up to 100 °C.

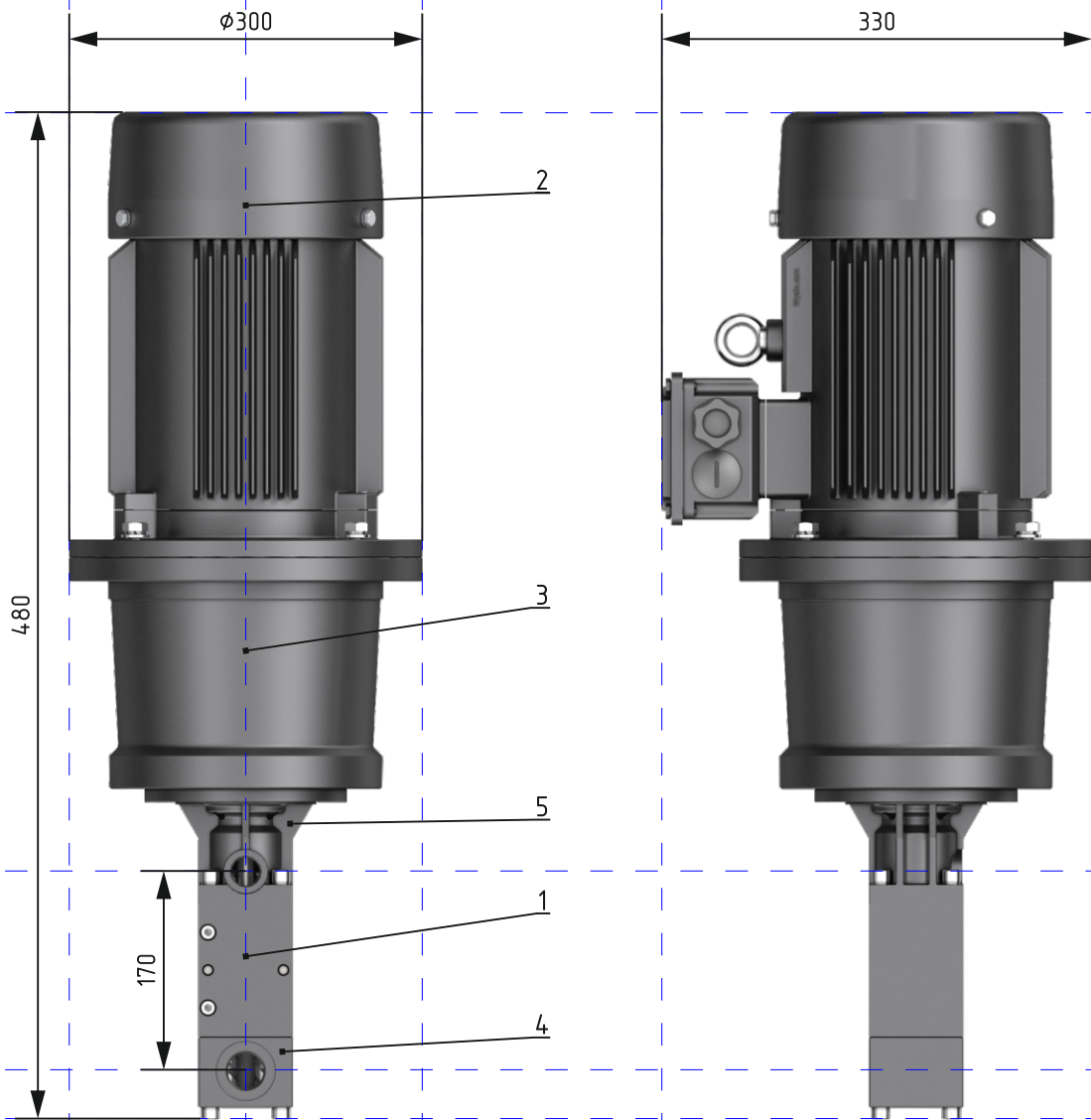
Ambient temperature	from -10°C to +40°C
Equipment placement category	N3
Pumping station:	
Dimensions, LxWxH, mm	330x300x480
Weight, kg	53,5
Degree of protection according to GOST 60034-5-2011	Ip55
Rated feed, lpm	12
Rated pressure, MPa (bar)	4 (40)
Rated power, kW	5,5

Picture 1 - Chart of the pressure dependence on the flow



Pumping station SN.C-12.40.R1.SP3.30.5,5.Fc. Composition and dimensions.

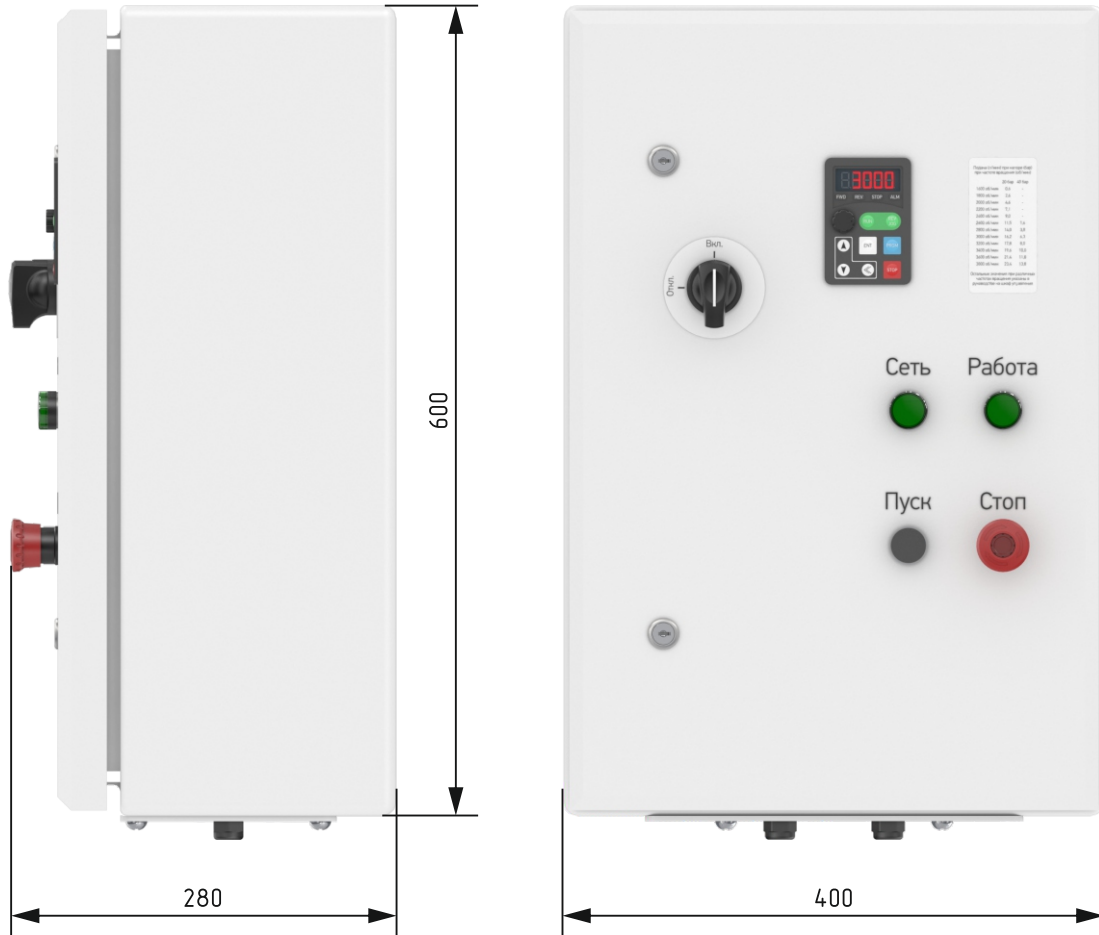
Picture 2



- | | |
|---|----------------|
| 1 | Screw pump |
| 2 | Electric motor |
| 3 | Adapter |
| 4 | Cap |
| 5 | Stud |

Pumping station SN.C-12.40.R1.SP3.30.5,5.Fc. Control cabinet.

Picture 3



Ambient temperature
Equipment placement category

from -10°C to +40°C
N3

Control cabinet:

Dimensions, LxWxH, mm
Weight, kg
Degree of protection according to GOST 60034-5-2011
Max Power, kW
Maximum current, A
Network settings

600x400x250
20
Ip65
7,5
12
380V / 50 Hz

Frequency converter:

Brand
Input voltage
Rated power, kW
Output current, A
The range of rotation speed of the electric motor shaft, rpm

M-Driver M0075G3
380V
7,5
16
1400-3800

Pumping station SN.C-12.40.R1.SP3.30.5,5.Fc. Structure.

The pumping station consists of a screw pump and an electric motor. The pump is screwed to the electric motor through the adapter using bolts. A clutch is used to transmit torque. The coupling consists of a pump half-coupling, an electric motor half-coupling and an asterisk, which provides an elastic connection of the coupling halves.

The pump itself consists of a housing, which is a block with three adjacent cylindrical bores and consisting of two identical parts connected with screws and pins. Inside the housing are the working parts of the pump: the drive screw and two driven screws of smaller diameter, located symmetrically with respect to the drive screw and serving to seal it. The threading profile of the screws is special, ensuring their mutual conjugation. Two-way screw cutting. On the leading screw - right, on the driven left. According to the principle of operation, the pump is volumetric. When the pump is running, the pumped liquid, entering the suction chamber, fills the screw cutting cavities. The screws, rotating, cut off a certain volume of liquid from the suction chamber.

A cover with a G 1" inlet opening is mounted on the bottom of the body with screws, a rack with a G 3/4" pressure opening is installed on top of the body with screws. A through cover is screwed to the rack with screws into which the cuff and bearing are installed. The bearing is mounted on the screw and in the rack using circlips and a thrust ring.

The gap seal prevents leakage of the working fluid between the drive screw and the pump stand at high flow and low head modes. As the pressure in the system increases, the working fluid begins to flow through the seal and drains through the holes in the rack, thereby protecting the pump from overpressure.

When installing the pumping station, a special container should be provided to collect leaks.

Despite the presence of drainage holes, it is recommended to provide a safety valve in the system that protects the pump and piping system from excessive pressures that may occur during emergency shutdown of the pressure pipeline during operation. For example, safety valve VMP 3/4" 10-180 BAR.

The pumping station is controlled by the Pump Control Cabinet.

The control cabinet of general industrial design is designed for operation at an ambient temperature from -10°C to +40°C under a canopy or in rooms where fluctuations in temperature and humidity do not differ significantly from fluctuations in the open air and there is a relatively free access of outside air (lack of direct exposure to solar radiation and precipitation).

Structurally, the pump control cabinet consists of a shield with a mounting panel and control and signaling elements on the front panel.

Pump Control Cabinet includes a frequency converter, a mains choke, an automatic switch, controls, etc.



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