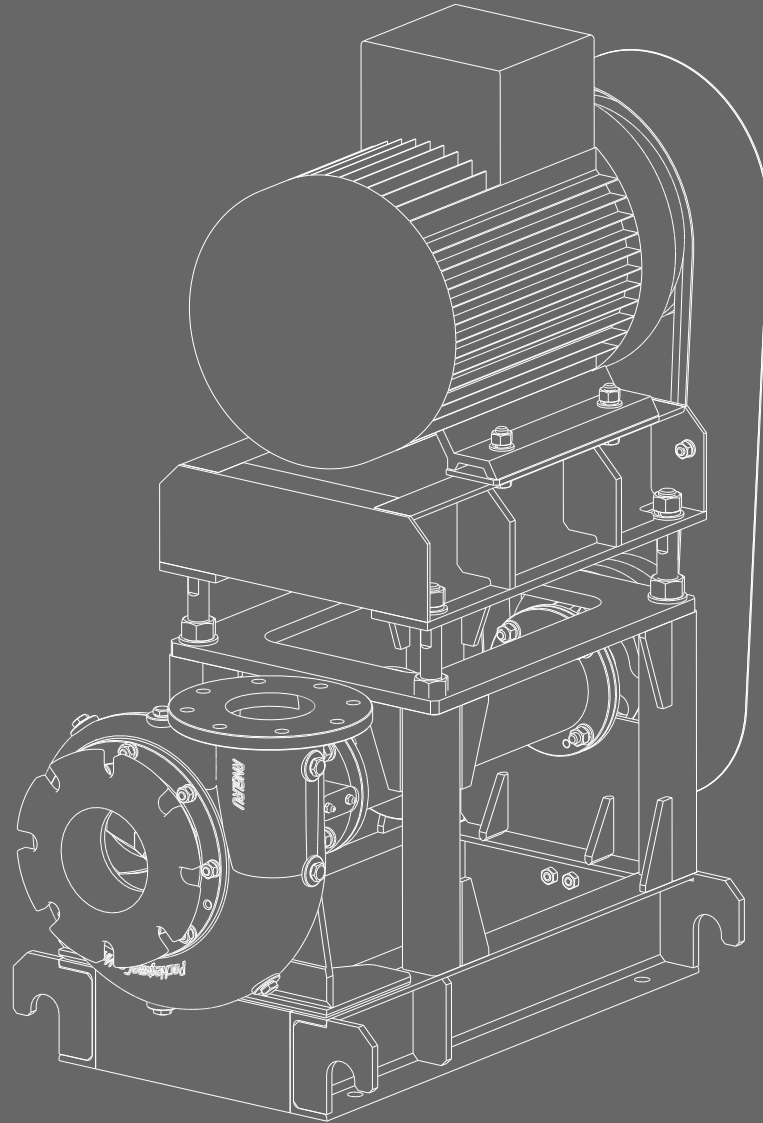




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Pumping station with belt drive

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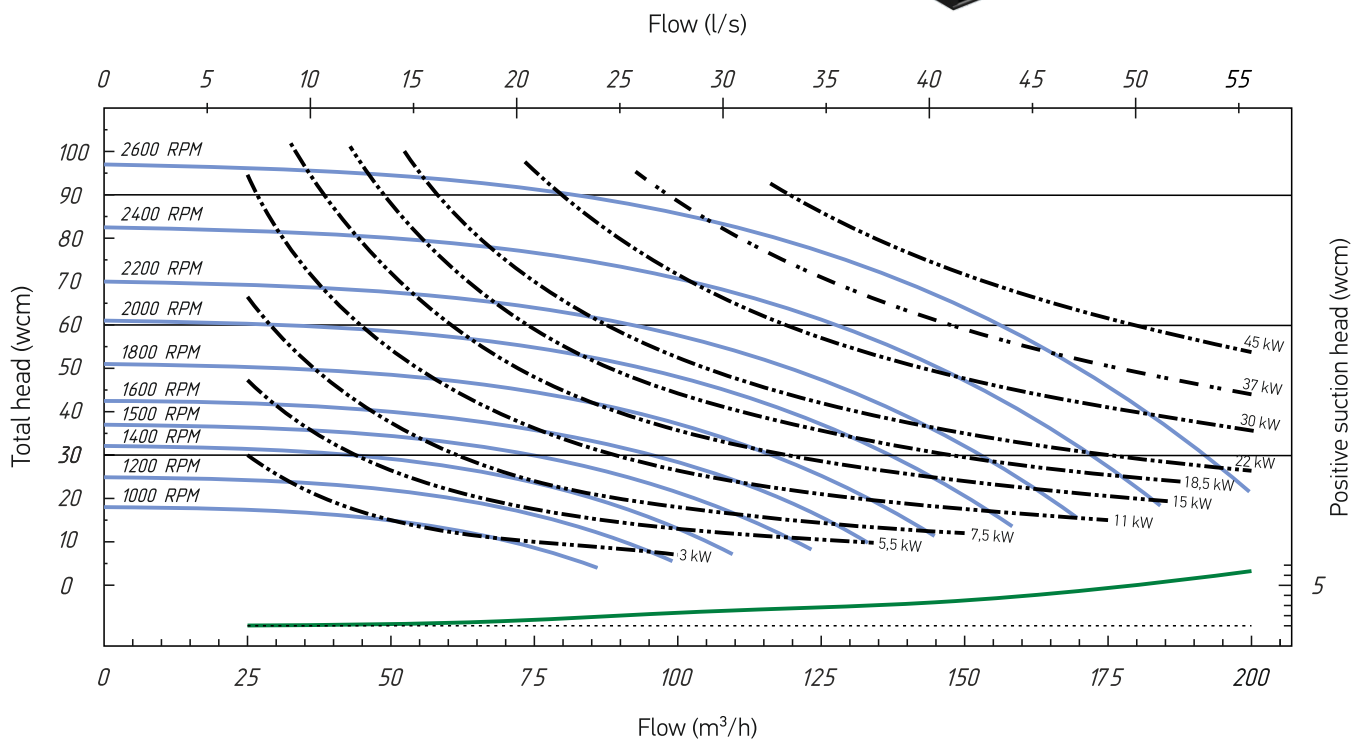
**SN-60.40.1,5R1-05.76.15.30.Ex**

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# PUMPING STATION WITH BELT DRIVE SERIES SN-R1-05

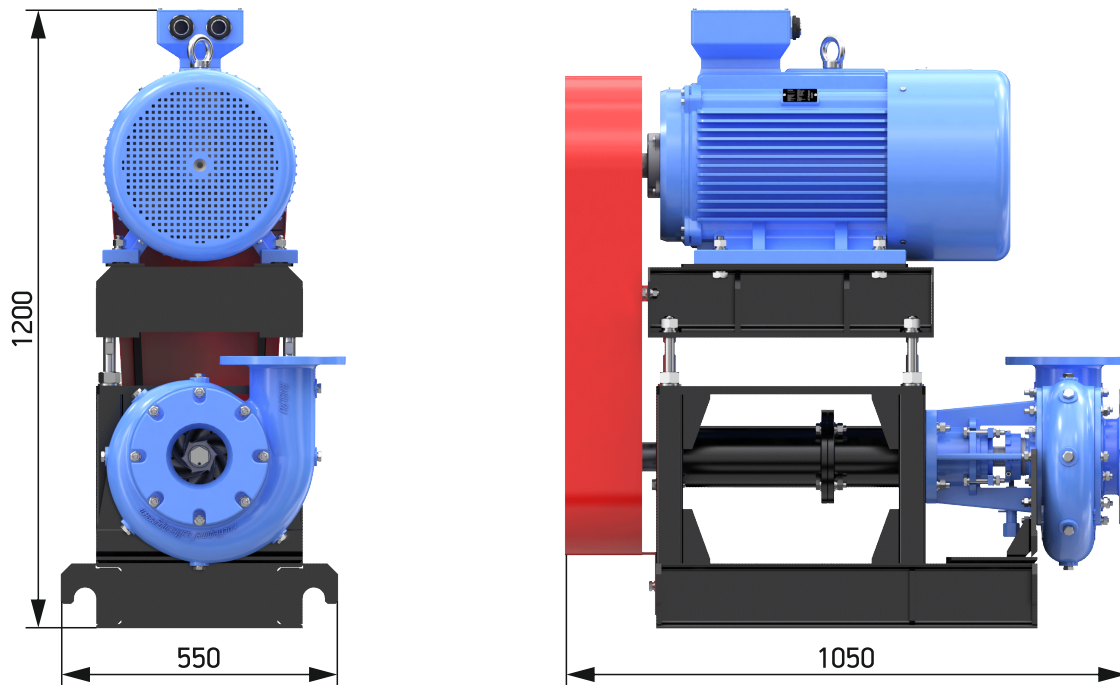
Pumping station SN-60.40.1,5R1-05.76.15.30.Ex is intended to pump various liquids:

- abrasive hydraulic fluids (clay and gravel mortars, mixtures of water and sand, ore, etc.);
- flushing liquid used in the course of well drilling;
- household and industrial waste waters;
- for pumping drilling waste (drill cuttings, waste drilling fluid), oil-contaminated soil and process effluents from oil producing and oil refineries.



Picture1 - Graph of the pump shaft rotation speed and power consumption\* for a density of 1000 kg/m³

\* When pumping a working fluid of a different density, it is necessary to recalculate the power consumption by multiplying the power consumption value taken from the graph by the specific gravity of the pumped liquid.



Picture 2 - Pumping station SN-R1-05. Dimentions.

**Technical specifications of pumping station with belt drive SN-R1-05**

**Pumped fluid properties:**

hydraulic fluid density, kg/m<sup>3</sup>  
 temperature, °C  
 solid particle content  
 solid particle maximal size, mm

SN-60.40.1,5R1-05.76.15.30.Ex

up to 1500  
 +5 ... +90  
 up to 60%  
 at most 10

**Attributes:**

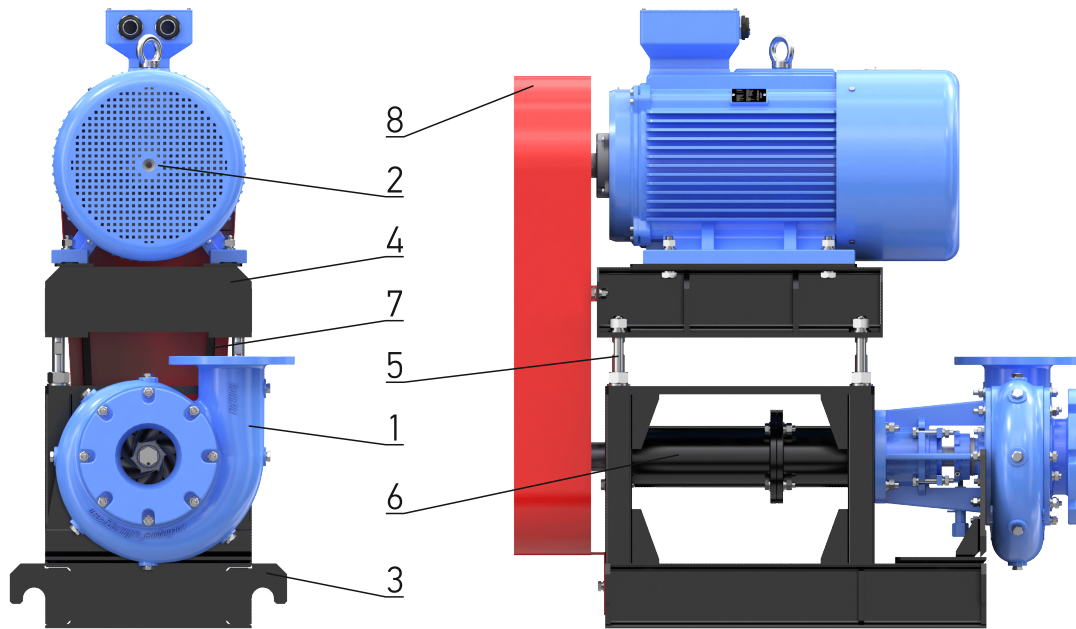
Rated flow, m<sup>3</sup>/h (lps) at head, wcm. (bar)  
 Max flow, m<sup>3</sup>/h (lps) at head, wcm. (bar)  
 Pressure flange DN, mm  
 Inlet flange DN, mm  
 Dimentions, LxBxH, mm  
 Station weight, kg, ±5%  
 Equipment placement category  
 Ambient temperature  
 Controlled fluid temperature

60 (16.7) / 40 (4.0)  
 150 (41.7) / 20 (2.5)  
 76 (3")  
 100 (4")  
 1050x550x1200  
 520  
 NF  
 -45 °C ... +40 °C  
 0 °C ... +80 °C

**Electric motor:**

Power, kW  
 Rate speed, rpm  
 Rated current at 380 W, A  
 IP Code

30  
 1500  
 57.8  
 Ip55



Picture 3 - Pumping station SN-R1-05. Structure.

The pumping station SN-60.40.1,5R1-05.76.15.30.Ex consists of a centrifugal pump NC-76R1 (pos.1) with a size of 4"x3"x14", mounted on a mounting frame (pos.3). The electric motor (pos.2) is located above the centrifugal pump and is mounted to the mounting frame (pos.4) The electric motor is raised and lowered using pins (item 5) On the pump housing there is a drive mechanism with a pulley (pos. 6) connected to the electric motor by means of belts (pos. 7) and closed casing (pos.8).

The pump housing is made of steel 40HL, the impeller (vane) is made of steel 20H13 with heat treatment. The use of these materials allows you to increase the life of the pump several times. It is also possible to manufacture the case from steel 20H13, and the impeller to be made with nitriding of the surface layer to obtain a hardness of up to 70 HRC. This combination will increase the life of the pump up to 10 times when working with abrasive mixtures.

The choice of the layout of the pumping station with a belt drive SN-R1-05

Pump volute position	Name	Mark the desired layout
Right	SN-60R1	<input type="checkbox"/>
Left	SN-60LR1	<input type="checkbox"/>

Additional options of the pumping station with a belt drive SN-R1-05

Pumping station control panel IP 54 (+5 ... +40°C)	<input type="checkbox"/>
Pumping station control panel IP 66 in an explosion-proof design ExdIIBU ( -60 ... +50°C)	<input type="checkbox"/>
Frequency converter (FC) for smooth control of the speed of rotation of the motor shaft	<input type="checkbox"/>
Electric motor in an explosion-proof design 1ExdIIBT4 with ATEX certificate	<input type="checkbox"/>
Dry-running protection of frequency converter shutdown by undercurrent	<input type="checkbox"/>
Cabinet heating at low temperatures (at -40°C)	<input type="checkbox"/>
Line choke to reduce interference from the frequency converter to the line	<input type="checkbox"/>
Electrical cabinet connection cable with motor. Length _____ meters.	<input type="checkbox"/>
Emergency shutdown post on the frame of the pumping station	<input type="checkbox"/>
Mating flange kit by GOST 33259-2015 type 11 design B	<input type="checkbox"/>
Mechanical seal (stuffing box is standard)	<input type="checkbox"/>



**RNGI**

phone:  
+1 (512) 861-19-64

e-mail: [manager@rngi.net](mailto:manager@rngi.net)  
[www.rngi.net](http://www.rngi.net)

