

INSTALLATION INSTRUCTIONS

Performance

	Power Required	Pressure	Max. Speed	Max. Flow	Max. Temp.	Plunger \varnothing	Plunger Stroke	Weight	NPSHR
Model	BHP (kW)	PSI (bar)	RPM	GPM (l/min)	°F (°C)	in (mm)	in (mm)	lbs. (kg)	ft. of head (mWs)
P414	21.9 (16.3)	10,150 (700)	1450	3.1 (11.8)	104 (40)	0.55 (14)	0.79 (20)	42 (19.0)	29.5 (9.0)
P480	16.5 (12.3)	7250 (500)	1450	3.2 (12.1)	104 (40)	0.55 (14)	0.79 (20)	42 (19.0)	29.5 (9.0)
P460	19.9 (14.8)	7250 (500)	1450	3.8 (14.5)	104 (40)	0.55 (14)	0.94 (24)	42 (19.0)	29.5 (9.0)

Performance data for intermittent operation, data for continuous operation on request.
For information on intermittent operation and calculating of the performance data, see the Giant Industries assembly instructions.

NPSHR / Inlet pressure

Required NPSH refers to water at 60 °F (20°C) at maximum permissible pump speed.
Maximum inlet pressure: 29 PSI (2 bar)

Level of noise emission

Emission sound pressure level: ≤ 85 dB(A)

Fields of application

The fields of application of these pump types correspond to the specifications in the assembly instructions Giant Industries.

Ambient conditions

Ambient temperature: 41°F < T Amb. < 86°F
Ambient temperature: 5°C < T Amb. < 30°C

4. Oil filling

- Filling quantity: 30.4 fl. oz. (0.9 l)
- Quality: Industrial gear oil **ISO VG 220** or automotive gear oil **SAE 90 GL4 (Giant's p/n 01154)**
- Intervals: first oil change after **50 operating hours** then every **500 operating hours**, but at the latest after **12 months**

Installation/ Putting into Operation To Turn Drive Shaft to the Other Side

If it should be on the other side, the valve casing (26) and seal casing (20A) have to be removed, turned 180° round and then put on again.
Also turn seal adaptors (20) 180° round so that the leakage holes are underneath.
Oil dipstick (2) and oil drain plug (5B) have to be interchanged and the crankcase cover turned 180°.

Suction line filter

Recommended mesh size 150 μ m.

Direction of pump rotation

When looking at crankshaft with valve casing mounted on left-hand side, counterclockwise direction of rotation.

When looking at crankshaft with valve casing mounted on right-hand side, clockwise direction of rotation.

Supplementary notes



The connections on both sides in the housing are used to attach a $\varnothing 6$ pneumatic hose in order to flush the area between the high-pressure and low-pressure seals with a medium (e.g. water 20°C - 40°C)..

This flushes away leakage fluid that tends to crystallise or is very aggressive, for example.

The pressure in the rinsing system depends on the respective requirement and installation.

The rinsing water can be guided into the pump from either side and flows out on the opposite side. The rinsing water must be descaled to avoid calcification due to heating. The rinsing-water flow rate should be at least 8.5 ounces/min (0.25 litre/min) and must be drawn in as soon as the pump is started.



If the cold water does not start flowing immediately the pump is put into operation, the ceramic plunger in particular could crack under the cold shock.



Care must be taken to dispose of the rinse water properly.

Operation

For informations, see assembly instructions Giant Industries