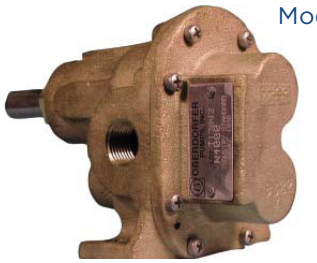
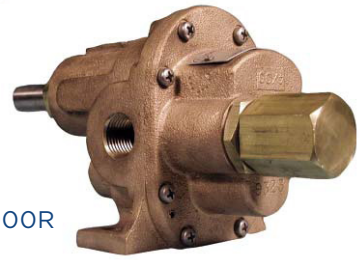
OBERDORFER®
An Ingersoll Rand Business

N4000 Series
Bronze Pedestal Rotary Gear Pumps

Model OBN4000





Model OBN4000R

Features

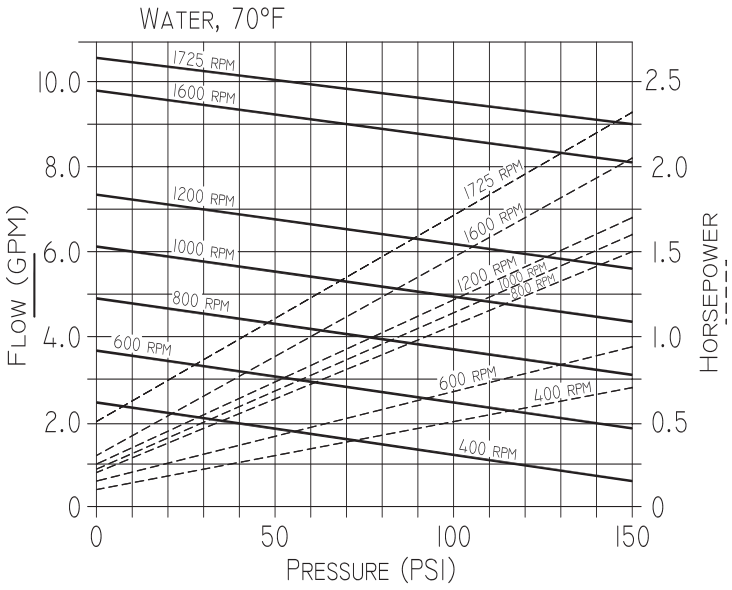
- 1/2" NPT Ports
- Temp. Range: -40 - 400°F
- Bronze Corrosion Resistant Castings
- Special Cast Bronze Gears
- Stainless Steel Shafts & Fasteners
- Formed Ring Seal Packing, Lipseal & Mechanical Seal Options
- Heavy Duty Carbon Bearings (Self Lubricating)
- Positive Displacement Flow

Liquids and Temperature

Service life will be increased substantially if the liquid pumped is clean and has some degree of lubricity. These positive displacement pumps have tight tolerances. Fine abrasives like sand, silt, or powders in suspension will accelerate pump wear and reduce throughput.

Liquids compatible with bronze and stainless steel can be pumped providing proper seal has been specified (see chemical compatibility or check factory). When possible, flush the pump after each usage.

Performance

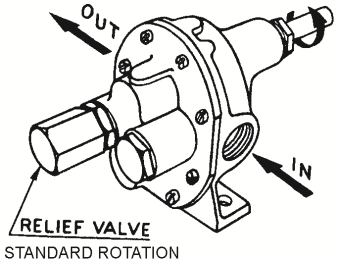


Temperature extremes are detrimental to service life and should be avoided. Basic metals of construction allow a temperature range of -40 to 400°F. Some lip and mechanical seal elastomers have a limit of 212°F. (see engineering data or check factory). Allowing a liquid to freeze in the pump can cause damage

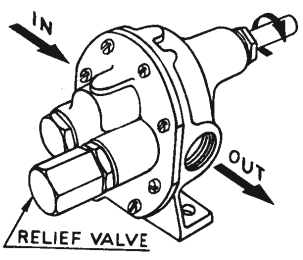
By-Pass and Rotation

The pump by-pass is not intended to be a metering or flow control device. Its main purpose is to function as a pressure relief when the desired set point is exceeded, overheating can occur within 5 -10 minutes if the discharge line is completely shut off for extended periods.

Reversing rotation reverses the "IN" and "OUT" ports and the location of the by-pass ports have to be reversed. The by-pass valve is factory set at 50 psi. To increase the setpoint, turn the by-pass valve adjusting screw in a clockwise direction.



STANDARD ROTATION



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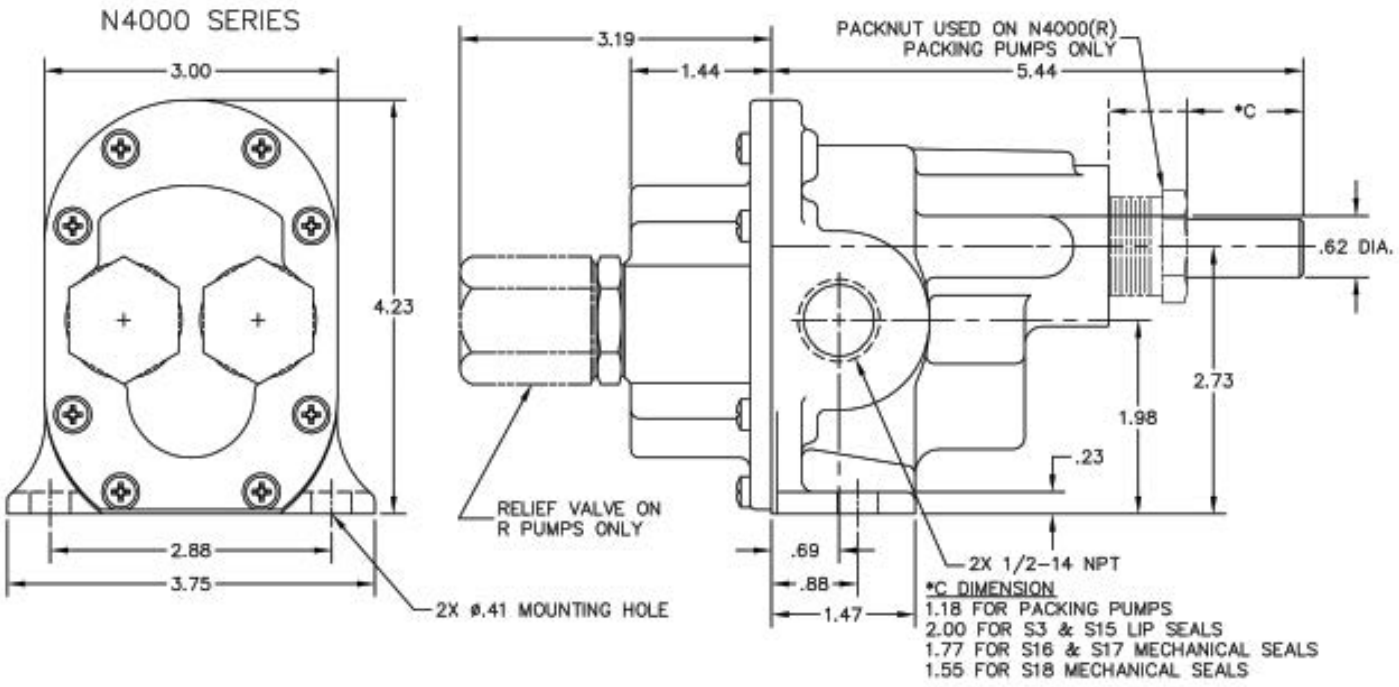
Suction Lift

Close tolerances and the positive pumping action make the rotary gear pump capable of lifting water on the suction side as high as 20 feet. Though gear pumps are self priming, a foot valve is recommended. If possible, wet the gears with liquid to be pumped for the first dry start. Liquid retained in the system and gear chambers serves to “wet” the pump on subsequent starts.

Drive

Either direct drive with flexible coupling or pulley drive can be used. Make sure both flexible coupling halves are properly aligned. When using a pulley, do not overtighten the belt. Also, to absorb belt side thrust at higher pressures and larger size pumps, an external ball bearing support is recommended - consult factory.

Dimensions



Ingersoll Rand
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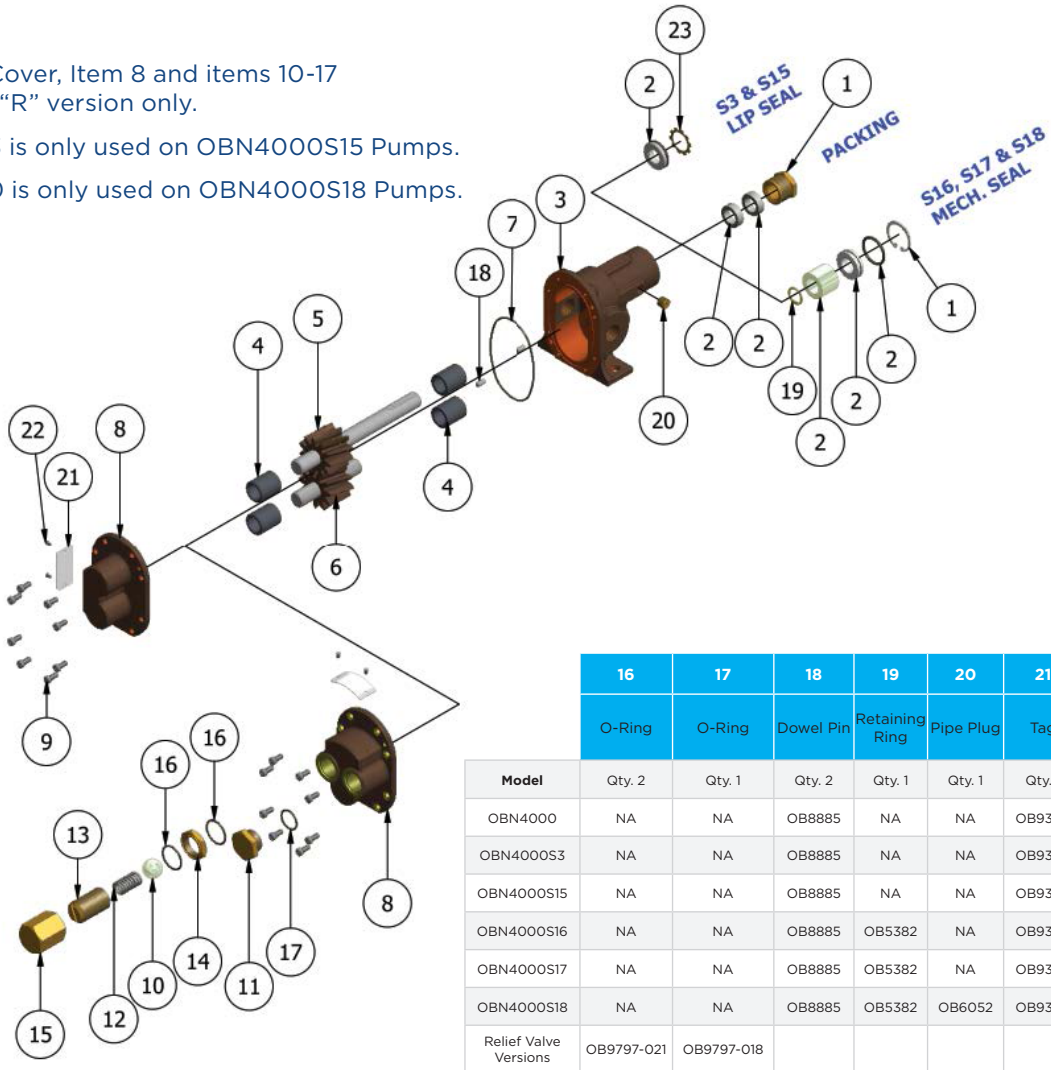
Parts List

	Seal Arrangement	1	2		3	4	5	6	7	8	9	10	11	12	13	14	15
		Packnut or Retaining Ring	Packing	Seal	Body	Bearing	Drive Gear Assy	Idle Gear Assy	O-Ring	Cover	Screw	Ball	Plug Nut	Spring	Adj. Screw	Locknut	Bypass Nut
Model	**Seal Arrangement**	Qty. 1	Qty. 2	Qty. 1	Qty. 1	Qty. 4	Qty. 1	Qty. 1	Qty. 1	Qty. 1	Qty. 8	Qty. 1	Qty. 1	Qty. 1	Qty. 1	Qty. 1	Qty. 1
OBN4000	Packing	OB1762	OB5479	NA	OB9319ND1N	OB5091	OB33007	OB33008	OB9797-041	OB9322NN5N	OB5385	NA	NA	NA	NA	NA	NA
OBN4000S3	Buna Lip	NA	NA	OB5463	OB9319ND2N	OB5091	OB33007	OB33008	OB9797-041	OB9322NN5N	OB5385	NA	NA	NA	NA	NA	NA
OBN4000S15	Viton Lip	NA	NA	OB9997	OB9319ND2N	OB5091	OB33007	OB33008	OB9797-041	OB9322NN5N	OB5385	NA	NA	NA	NA	NA	NA
OBN4000S16	Buna Bellows Mech.	OB5374	NA	OB32202	OB9373ND9N	OB5091	OB33044	OB33008	OB9797-041	OB9322NN5N	OB5385	NA	NA	NA	NA	NA	NA
OBN4000S17	Viton Bellows Mech.	OB5374	NA	OB32235	OB9373ND9N	OB5091	OB33044	OB33008	OB9797-041	OB9322NN5N	OB5385	NA	NA	NA	NA	NA	NA
OBN4000S18	Teflon Wedge Mech.	OB5374	NA	OB32923	OB9373ND6N	OB5091	OB33044	OB33008	OB9355-041	OB9322NN5N	OB5385	NA	NA	NA	NA	NA	NA
Relief Valve Versions: OBN4000R, OBN4000RS3, OBN4000RS15, OBN4000RS16, OBN4000RS17 & OBN4000RS18										OB9323NN5B		OB5206	OB5205	OB5207	OB5200	OB5209D	OB5204

Relief Cover, Item 8 and items 10-17 for the "R" version only.

Item 23 is only used on OBN4000S15 Pumps.

Item 20 is only used on OBN4000S18 Pumps.



	16	17	18	19	20	21	22	23	Repair Kit*
	O-Ring	O-Ring	Dowel Pin	Retaining Ring	Pipe Plug	Tag	Tag Screw	Lock Ring	
Model	Qty. 2	Qty. 1	Qty. 2	Qty. 1	Qty. 1	Qty. 1	Qty. 2	Qty. 1	
OBN4000	NA	NA	OB8885	NA	NA	OB9344	OB9345	NA	OB10637
OBN4000S3	NA	NA	OB8885	NA	NA	OB9344	OB9345	NA	OB11387
OBN4000S15	NA	NA	OB8885	NA	NA	OB9344	OB9345	OB3033	OB12106
OBN4000S16	NA	NA	OB8885	OB5382	NA	OB9344	OB9345	NA	OB12131
OBN4000S17	NA	NA	OB8885	OB5382	NA	OB9344	OB9345	NA	OB12132
OBN4000S18	NA	NA	OB8885	OB5382	OB6052	OB9344	OB9345	NA	OB12133
Relief Valve Versions	OB9797-021	OB9797-018							

* Repair kit contains 2, 4, 5, 6 and 7

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