



**OBERDORFER®**

An Ingersoll Rand Business

## N2000E Series Bronze Pedestal Rotary Gear Pumps



Model OBN2000E

Model OBN2000RE

### Features

- 1/4" BSPT Ports
- Temp. Range: -40°C - 204°C
- Bronze corrosion resistant castings
- Special cast bronze gears
- Stainless steel shafts & fasteners
- Formed ring seal packing, lip and mechanical seals available
- Heavy duty carbon bearings (self lubricating)
- Positive displacement flow

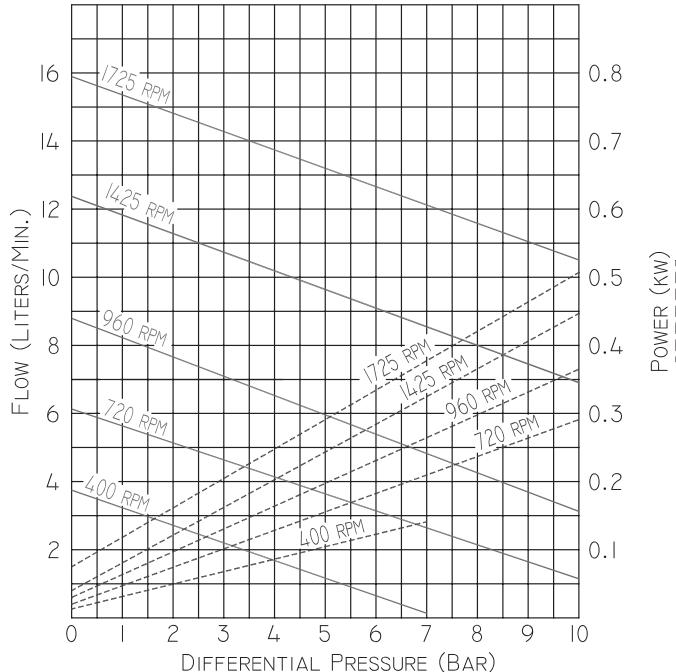
### Liquids and Temperature

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

VALUES @ ICP, 20°C



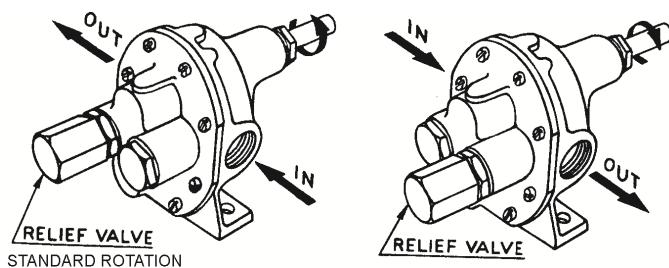
Temperature extremes are detrimental to service life and should be avoided. Basic metals of construction allow a temperature range of -40 to 204°C. Some lip and mechanical seal elastomers have a limit of 100°C. (see engineering data or check factory). Allowing a liquid to freeze in the pump can cause 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 3.5 bar. To increase the setpoint, turn the by-pass valve adjusting screw in a clockwise direction.





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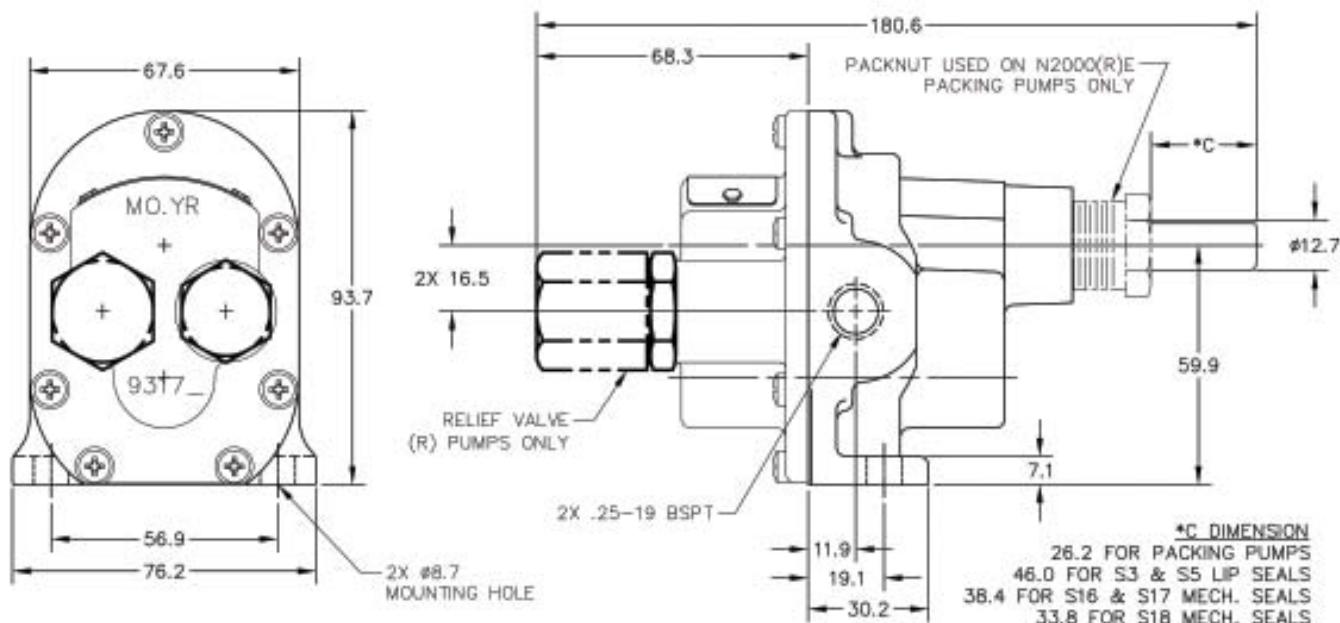
## Suction Lift

Close tolerances and the positive pumping action make the rotary gear pump capable of lifting water on the suction side as high as 6 meters. 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



12500 South Pulaski Road  
Alsip, IL 60803, USA  
Phone (800) 448.1668



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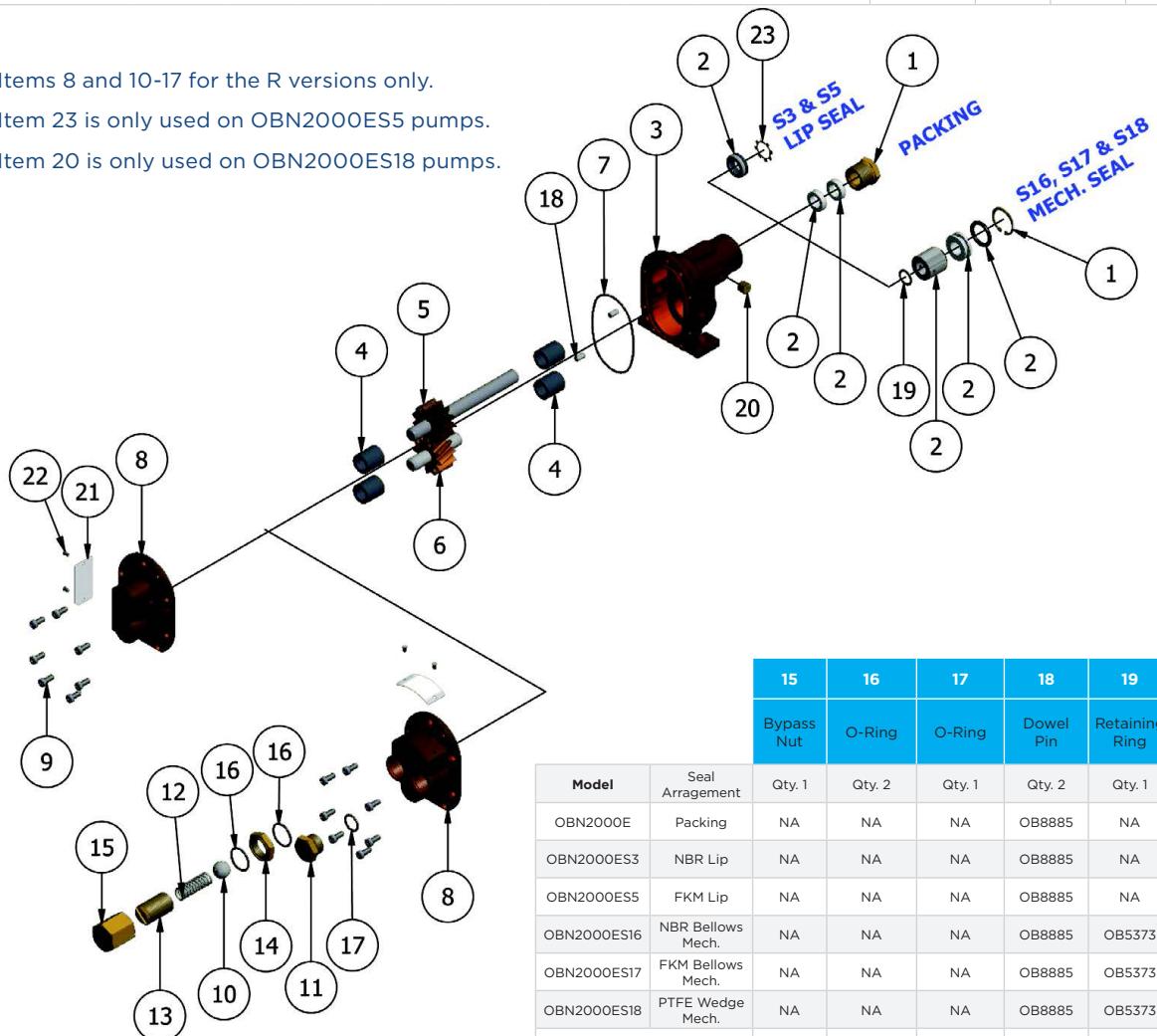
## Parts List

Seal Arrangement	1	2*		3	4*	5*	6*	7*	8	9	10	11	12	13	14
	Packnut or Retaining Ring	Packing	Seal	Body	Bearing	Drive Gear Assy	Idle Gear Assy	O-Ring	Cover	Screw	Ball	Plug Nut	Spring	Adjust. Screw	Locknut
<b>Model</b>		Qty. 1	Qty. 2	Qty. 1	Qty. 1	Qty. 4	Qty. 1	Qty. 1	Qty. 1	Qty. 7	Qty. 1	Qty. 1	Qty. 1	Qty. 1	Qty. 1
OBN2000E	Packing	OB1892	OB5481	NA	OB 9315NB1N	OB5024	OB32992	OB32993	OB9797-038	OB 9316NN5N	OB5385	NA	NA	NA	NA
OBN2000ES3	NBR Lip	NA	NA	OB5007	OB 9315NB2N	OB5024	OB32992	OB32993	OB9797-038	OB 9316NN5N	OB5385	NA	NA	NA	NA
OBN2000ES5	FKM Lip	NA	NA	OB7580	OB 9315NB2N	OB5024	OB32992	OB32993	OB9797-038	OB 9316NN5N	OB5385	NA	NA	NA	NA
OBN2000ES16	NBR Bellows Mech.	OB7639	NA	OB32584	OB 9371NB4N	OB5024	OB33000	OB32993	OB9797-038	OB 9316NN5N	OB5385	NA	NA	NA	NA
OBN2000ES17	FKM Bellows Mech.	OB7639	NA	OB32585	OB 9371NB4N	OB5024	OB33000	OB32993	OB9797-038	OB 9316NN5N	OB5385	NA	NA	NA	NA
OBN2000ES18	PTFE Wedge Mech.	OB7639	NA	OB32335	OB 9371NB6N	OB5024	OB33000	OB32993	OB9355-038	OB 9316NN5N	OB5385	NA	NA	NA	NA
Relief Valve Versions: OBN2000RE, OBN2000RES3, OBN2000RESS5, OBN2000RES16, OBN2000RES17 & OBN2000RES18										OB 9317NN5B	OB5238	OB1838	OB1840	OB5237	OB5240D

Items 8 and 10-17 for the R versions only.

Item 23 is only used on OBN2000ES5 pumps.

Item 20 is only used on OBN2000ES18 pumps.



Model	Seal Arrangement	15	16	17	18	19	20	23	Repair Kit*
		Bypass Nut	O-Ring	O-Ring	Dowel Pin	Retaining Ring	Pipe Plug	Lock Ring	
OBN2000E	Packing	NA	NA	NA	OB8885	NA	NA	NA	OB10641
OBN2000ES3	NBR Lip	NA	NA	NA	OB8885	NA	NA	NA	OB11379
OBN2000ES5	FKM Lip	NA	NA	NA	OB8885	NA	NA	OB7626	OB11195
OBN2000ES16	NBR Bellows Mech.	NA	NA	NA	OB8885	OB5373	NA	NA	OB11970
OBN2000ES17	FKM Bellows Mech.	NA	NA	NA	OB8885	OB5373	NA	NA	OB12103
OBN2000ES18	PTFE Wedge Mech.	NA	NA	NA	OB8885	OB5373	OB6052	NA	OB12225
Relief Valve Versions		OB5239	OB9797-019	OB9797-015					

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

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