

# Bronze Pedestal Rotary Gear Pumps N4000E Series

#### Model N4000E 1/2" BSPT Ports



#### **FEATURES:**

- Bronze corrosion resistant castings
- Special cast bronze helical gears for quiet operation
- Stainless steel shafts & fasteners
- Synthetic braided compression packing (with PTFE dispersion) is standard
- Optional lip and mechanical seals are available
- · Positive displacement flow

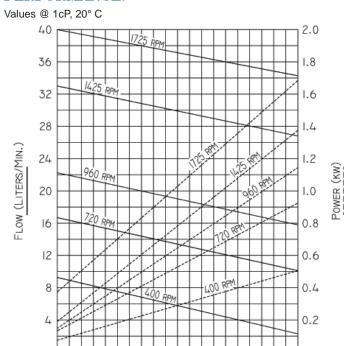
#### **DRIVE:**

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.

#### 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). No carbon bearings used. When possible, flush the pump after each usage. Temperature extremes are detrimental to service life and should be avoided. Basic metals of construction allow a temperature range of -40° to 200° C Some lip 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.

#### **PERFORMANCE:**



\* For pressures over 7 bar, the above selections are suitable for pumping fluids with lubricity (eq. oils, polymers). Service life will decrease for fluids without lubricity (eq. water, solvents).

4

5

DIFFERENTIAL PRESSURE (BAR)

6

10

8

#### SUCTION LIFT:

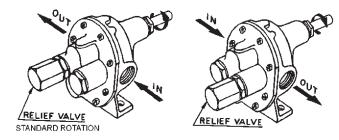
Close tolerances and the positive pumping action make the rotary gear pump capable of lifting water on the suction side as high as 6 meters. Though gear pumps are self priming, a foot valve is recommended. If possible, wet the gears with liquid to be pumped for the first dry start. Liquid retained in the system and gear chambers serves to "wet" the pump on subsequent starts.

#### **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.

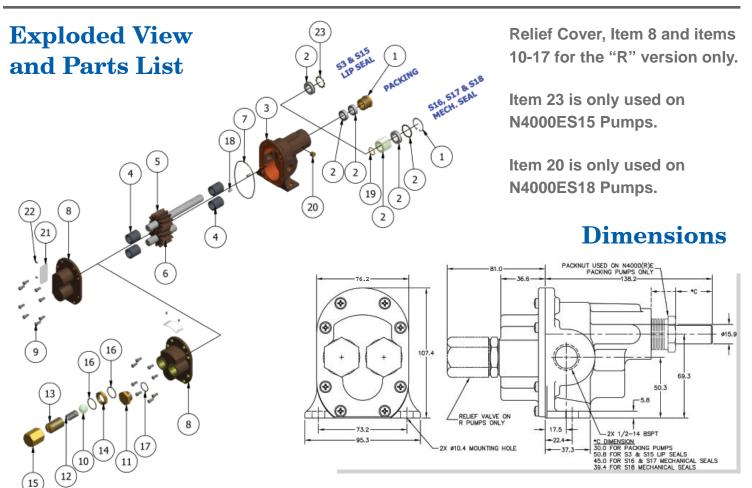
Reversing rotation reverses the "IN" and "OUT" ports and the location of the by-pass ports have to be reversed.

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.



### **Bronze Pedestal Rotary Gear Pumps**

N4000E Series



		1	2		3	4 5		6 7		8	9	10
		Packnut or Retaining Ring	Packing	Seal	Body	Bearing	Drive Gear Assy	Idle Gear Assy	O-ring	Cover	Screw	Ball
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
N4000E	Packing	1762	5479	NA	9319ND1N-E	5091	33007	33008	9797-041	9322NN5N	5385	NA
N4000ES3	NBR Lip	NA	NA	5463	9319ND2N-E	5091	33007	33008	9797-041	9322NN5N	5385	NA
N4000ES15	FKM Lip	NA	NA	9997	9319ND2N-E	5091	33007	33008	9797-041	9322NN5N	5385	NA
N4000ES16	NBR Bellows Mech.	5374	NA	32202	9373ND9N-E	5091	33044	33008	9797-041	9322NN5N	5385	NA
N4000ES17	FKM Bellows Mech.	5374	NA	32235	9373ND9N-E	5091	33044	33008	9797-041	9322NN5N	5385	NA
N4000ES18	PTFE Wedge Mech.	5374	NA	32923	9373ND6N-E	5091	33044	33008	9355-041	9322NN5N	5385	NA
Relief Valve Versions: N4000RE, N4000RES3, N4000RES15, N4000RES16, N4000RES17, N4000RES18												5206

	11	12	13	14	15	16	17	18	19	20	21	22	23	
	Plug Nut	Spring	Adj. Screw	Locknut	Bypass Nut	O-Ring	O-Ring	Dowel Pin	Retaining Ring	Pipe Plug	Tag	Tag Screw	Lock Ring	Repair Kit*
Model	Qty. 1	Qty. 1	Qty. 1	Qty. 1	Qty. 1	Qty. 2	Qty. 1	Qty. 2	Qty. 1	Qty. 1	Qty. 1	Qty. 2	Qty. 1	
N4000E	NA	NA	NA	NA	NA	NA	NA	8885	NA	NA	9344	9345	NA	10637
N4000ES3	NA	NA	NA	NA	NA	NA	NA	8885	NA	NA	9344	9345	NA	11387
N4000ES15	NA	NA	NA	NA	NA	NA	NA	8885	NA	NA	9344	9345	3033	12106
N4000ES16	NA	NA	NA	NA	NA	NA	NA	8885	5382	NA	9344	9345	NA	12131
N4000ES17	NA	NA	NA	NA	NA	NA	NA	8885	5382	NA	9344	9345	NA	12132
N4000ES18	NA	NA	NA	NA	NA	NA	NA	8885	5382	6052	9344	9345	NA	12133
Relief Valve Versions	5205	5207	5200	5209D	5204	9797-021	9797-018							

<sup>\*</sup> Repair kit contains items 2, 4, 5, 6, 7

 $NBR = A crylonitrile - Butadiene \qquad PTFE = Polytetra fluorethylene \qquad FKM = Fluoroelastomer$ 



## **OBERDORFER PUMPS**

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Due to ongoing product improvements, data shown here is subject to change without notice. Contact Oberdorfer Pumps for latest specifications.