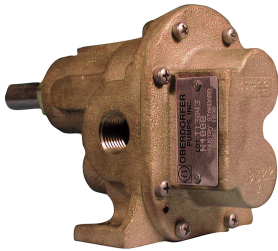


# BRONZE PEDESTAL ROTARY GEAR PUMPS

## GEAR PUMPS SERIES N4000

## PERFORMANCE



### FEATURES

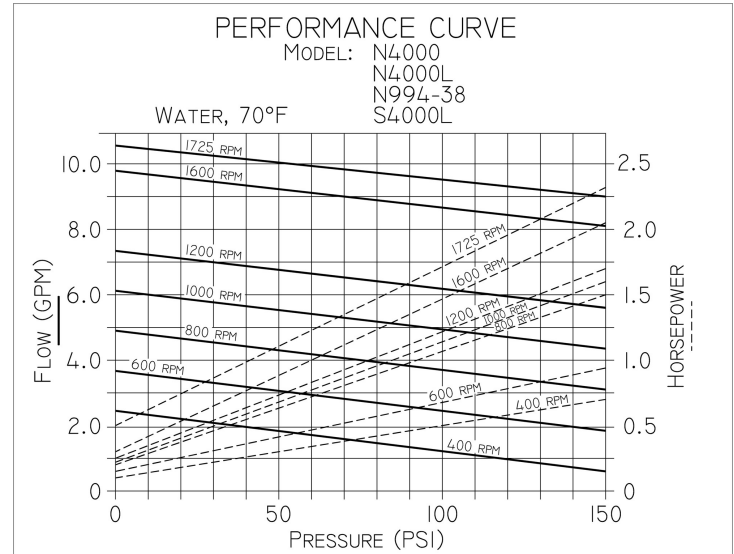
- Bronze Corrosion Resistant Castings
- Special Cast Bronze Helical Gears For Quiet Operation
- Stainless Steel Shafts & Fasteners
- Synthetic Braided Compression Packing (with Polytetrafluoroethylene (PTFE) dispersion) is Standard
- Optional Lip Seals Are Available
- Positive Displacement Flow
- Bronze Bearing Surfaces With Grease Fittings

### 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 over tighten 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 400oF. Some lip seal elastomers have a limit of 212oF. (see engineering data or check factory). Allowing a liquid to freeze in the pump can cause damage.

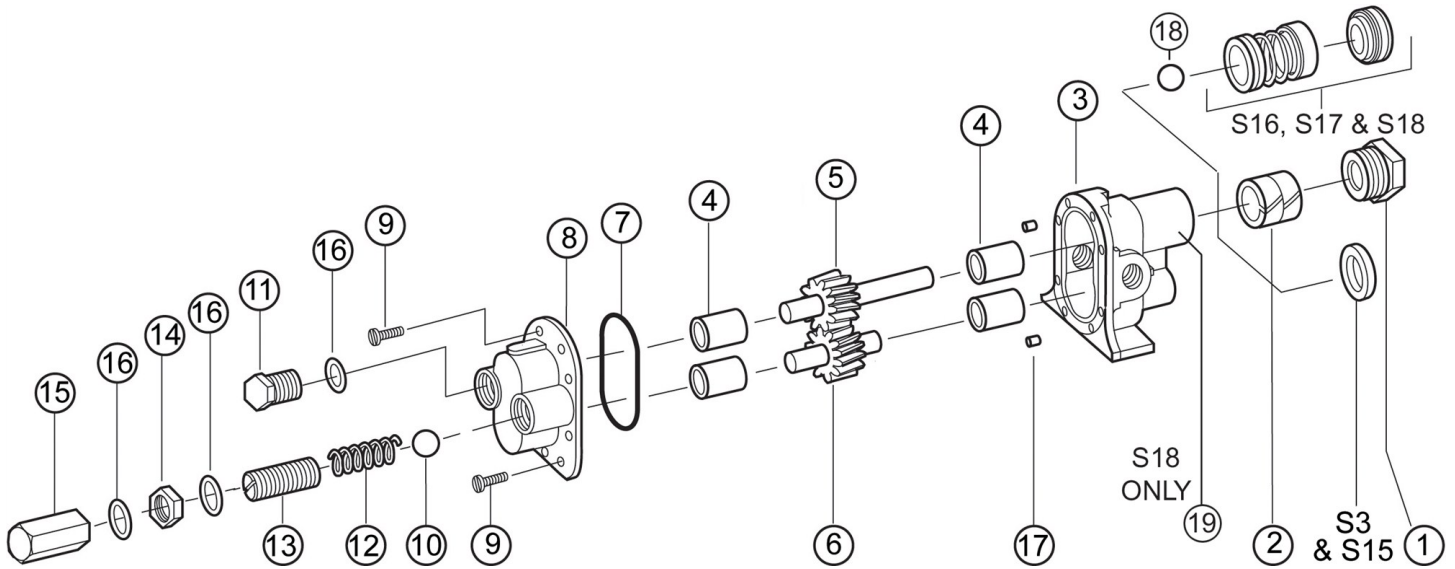


## SUCTION LIFT

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. \*For pressures over 100 psi, the above selections are suitable for pumping fluids with lubricity (e.q. oils, polymers). Service life will decrease for fluids without lubricity (e.q. water, solvents).

## EXPLODED VIEW AND PARTS LIST

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 p.s.i. To increase the set point, turn the bypass valve adjusting screw in a clockwise direction.



Pump No	Seal Arrangement	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	Repair Kit	
		Packnut or Retaining Ring	Packing	Seal	Body	Bearing	Drive Gear Ass'y	Idle Gear Ass'y	O-ring	Cover	Screw	Ball	Plug Nut	Spring	Adj. Screw	Locknut	Bypass Nut	Fiber Washer	Dowel Pin	Retaining Ring	Pipe Plug	
N4000	Packing	1 req'd 1762	2 req'd 5479	1 req'd NA	1 req'd 9319ND1N	4 req'd 5091	1 req'd 33007	1 req'd 33008	1 req'd 9797-041	1 req'd 9322NN5N	8 req'd 5385	1 req'd	1 req'd	1 req'd	1 req'd	1 req'd	1 req'd	3 req'd	2 req'd	1 req'd	1 req'd	10637
N4000S3	Buna Lip	NA	NA	5463	9319ND2N	5091	33007	33008	9797-041	9322NN5N	5385								8885			11387
N4000S15	Viton Lip	NA	NA	9997	9319ND2N	5091	33007	33008	9797-041	9322NN5N	5385								8885			12106
N4000S16	Buna Bellows Mech.	5374	NA	32202	9373ND9N	5091	33044	33008	9797-041	9322NN5N	5385								8885	5382		12131
N4000S17	Viton Bellows Mech.	5374	NA	32235	9373ND9N	5091	33044	33008	9797-041	9322NN5N	5385								8885	5382		12132
N4000S18	Teflon Wedge Mech.	5374	NA	32923	9373ND6N	5091	33044	33008	9355-041	9322NN5N	5385								8885	5382	6052	12133
Relief Valve Versions: N4000R, N4000RS3, N4000RS15, N4000RS16, N4000RS17, N4000RS18										9323NN5B		5206	5205	5207	5200	5209	5204	6964				

All Repair Kits contain items 2, 4, 5, 6 and 7.

# DIMENSIONS

