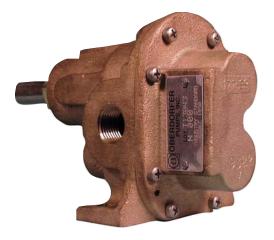


BRONZE PEDESTAL ROTARY GEAR PUMPS

MODEL N3000 - 3/8" NPT PORTS STANDARD

MODEL N3000R



FEATURES

- Bronze Corrosion Resistant Castings
- Special Cast Bronze Gears
- Stainless Steel Shafts & Fasteners
- Formed Ring Seal Packing (Lip & Mechanical Seals on Special Order)
- Heavy Duty Carbon Bearings (Self Lubricating)
- 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). 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 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.

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.

CAPACITY - WATER 70° F R.P.M. FT.HD. 0 46

R.P.M.	FT.HD.	0	46	92	138	184	231	290	346
	P.S.I.	0	20	40	60	80	100	125*	150*
400	GPM	1.50	1.05	0.70	0.40	0.20	0.10		
	HP	0.05	0.08	0.13	0.15	0.20	0.24		
	MOTOR	1/6	1/6	1/6	1/6	1/4	1/4		
600	GPM	2.38	2.14	1.89	1.64	1.39	1.15	0.70	0.32
	HP	0.06	0.10	0.17	0.20	0.28	0.35	0.44	0.53
	MOTOR	1/6	1/6	1/4	1/4	1/3	1/3	1/2	1/2
800	GPM	3.17	2.90	2.64	2.37	2.11	1.85	1.70	1.30
	HP	0.08	0.17	0.23	0.20	0.40	0.48	0.54	0.65
	MOTOR	1/6	1/4	1/4	1/3	1/2	1/2	1/2	3/4
1000	GPM	4.00	3.74	3.48	3.22	2.96	2.71	2.40	2.15
	HP	0.10	0.18	0.27	0.38	0.43	0.55	0.67	0.80
	MOTOR	1/6	1/4	1/3	1/2	1/2	3/4	3/4	1
1200	GPM	4.85	4.60	4.35	4.10	3.84	3.58	3.50	3.20
	HP	0.15	0.25	0.33	0.45	0.55	0.68	0.85	1.00
	MOTOR	1/6	1/4	1/3	1/2	3/4	3/4	1	1
1600	GPM	6.67	6.42	6.16	5.90	5.64	5.38	5.25	5.00
	HP	0.20	0.30	0.45	0.58	0.60	0.85	1.05	1.25
	MOTOR	1/4	1/3	1/2	3/4	3/4	1	1	1 1/2
1725	GPM	7.25	7.00	6.75	6.50	6.25	6.00	5.75	5.50
	HP	0.38	0.50	0.65	0.80	0.95	1.10	1.25	1.40
	MOTOR	1/3	1/2	3/4	1	1	1	1 1/2	1 1/2

H.P. = Actual Horsepower G.P.M. = Gallons per Min. R.P.M. = Rev. per Min. Motor = Convenient Fractional Size P.S.I. = Lbs. Per Square Inch Pressure Ft. Hd. = Equiv. Press. in Ft of Water

*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).

BRONZE PEDESTAL ROTARY GEAR PUMPS



EXPLODED VIEW AND PARTS LIST 3 S6 & S7 4) 5 (9 (7)8 (16)0000 & S15 (1) (2)(6)(12 (10)9 ump No Seal Arrangement 6 8 9 10 11 12 13 14 15 16 17 18 19 Repair Kit 5 Packnut or Drive dle Gea 0-rina Ball Plua Nut Adi, Screw Locknut Fiber Wast Pipe Plug Retaining Packing Seal Body Gear Cover Screw Spring Bypass Nut Dowel Pin Retaining Rin Ass'v Ring Ass'y 1 req'd 2 req'd 1 req'd 1 req'd 4 req'd 1 req'd 1 req'd 1 req'd 1 req'd 8 req'd 1 req'd 1 req'd 1 reg'd 1 reg'd 1 reg'd 1 reg'd 3 req'd 2 req'd 1 req'd 1 reg'd N3000 Packing 1762 5479 NA 9318NC1N 5091 33001 33002 9797-041 9322NN5 5385 8885 10636 N3000S3 8885 Buna Lip 5463 9318NC2N 5091 33001 33002 11350 NA NA 9797-041 9322NN5 5385 N3000S15 Viton Lip NA NA 9997 9318NC2N 5091 33001 33002 9797-041 9322NN5 5385 8885 12105 N3000S16 Buna Bellows Mech. 5374 NA 32202 9372NC9N 5091 33045 33002 9797-041 9322NN5 5385 8885 5382 12134

9797-041 9322NN5 5385

9322NN5 5385

9323NN5B

Relief Valve Versions: N3000R, N3000RS3, N3000RS15, N3000RS16, N3000RS17, N3000RS18

5374

5374

NA

NA 32923

BY-PASS AND ROTATION

Viton Bellows Mech.

Teflon Wedge Mech.

N3000S17

N3000S18

MODEL

N3000 SERIES

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.

32235

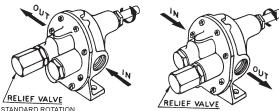
9372NC9N 5091 33045 33002

33002 9355-041

9372NC6N 5091 33045

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 setpoint, turn the by-pass valve adjusting screw in a clockwise direction.



STANDARD ROTATION

6/06 Specifications are subject to change without notice.

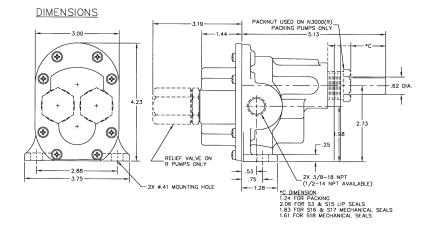
DIMENSIONS

5209

5204

6964

5206 5205 5207 5200



8885

8885

5382

5382

12135

12136

6052

* Viton(R) or equivalent FKM will be used. Viton(R) is a registered trademark of DuPont Dow Elastomers. Teflon(R) or equivalent PTFE will be used. Teflon(R) is a registered trademark of DuPont.