



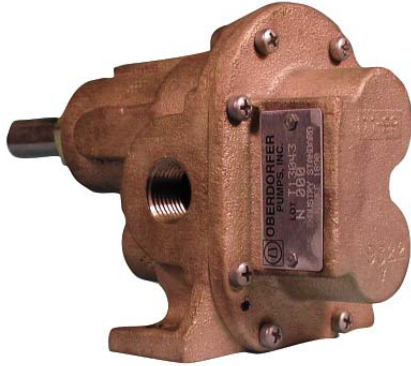
OBERDORFER PUMPS

A Gardner Denver Product

Bronze Close Coupled Rotary Gear Pumps

Model N3000 Series

Model N3000 3/8" NPT Ports



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

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

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.

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

RPM	Ft. Hd.	0	46	92	138	184	231	290	346
		PSI	0	20	40	60	80	100	125
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	.065	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

HP = Actual Horsepower
 GPM = Gallons per minute
 RPM = Rev. per minute

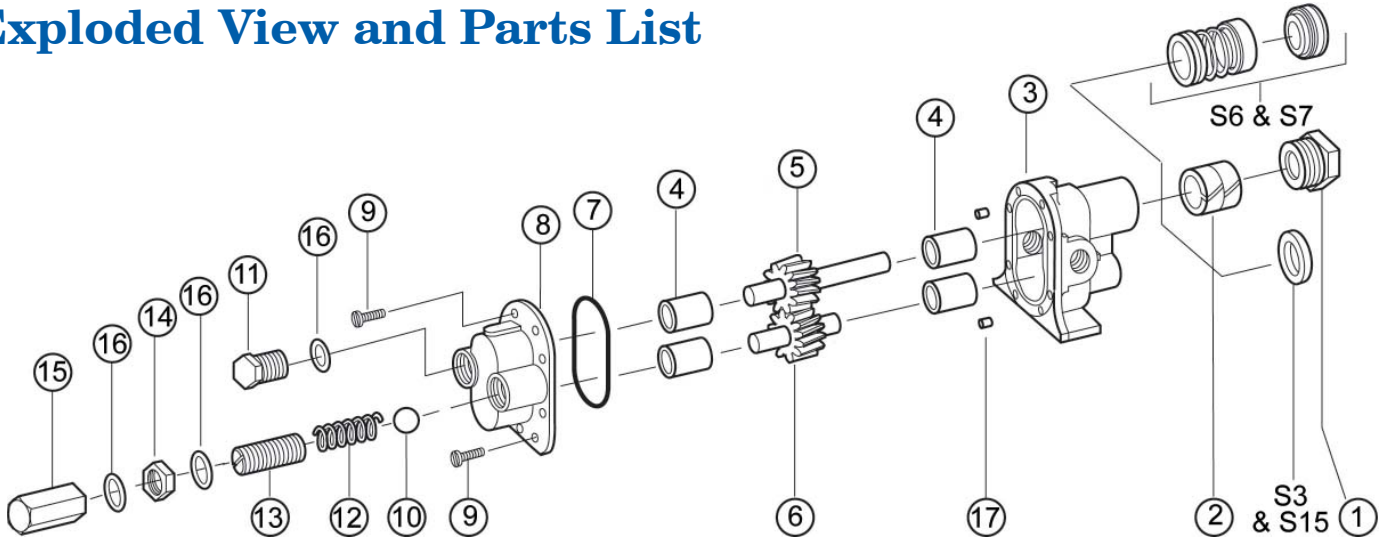
Motor = Convenient Fractional Size
 PSI = Lbs. per square inch pressure
 Ft. Hd. = Equiv. pressure in Ft. of water

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

Bronze Close Coupled Rotary Gear Pumps

Model N3000 Series

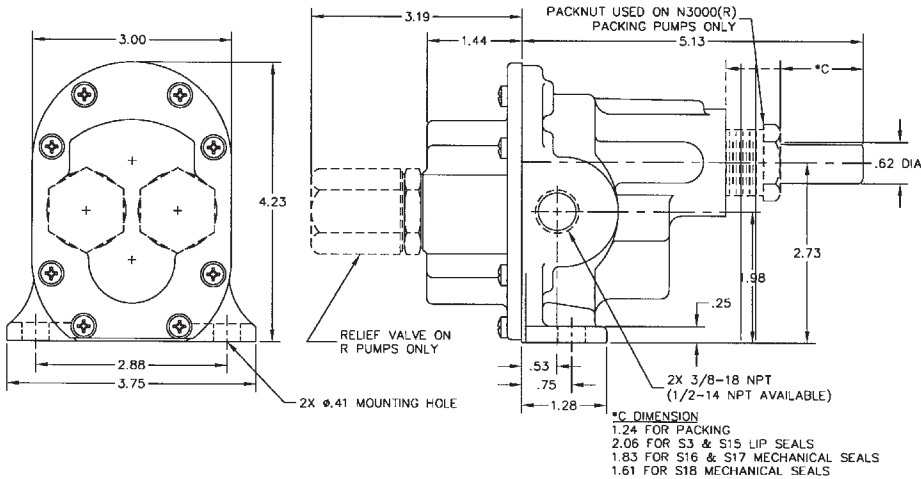
Exploded View and Parts List



	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20*		
	Seal Arrangement	Pack Nut or Retaining Ring	Packing	Seal	Body	Bearing	Drive Gear Assy	Idle Gear Assy	O-Ring	Cover	Screw	Ball	Plug Nut	Spring	Adj. Screw	Lock Nut	Bypass Nut	Fiber Washer	Dowel Pin	Retaining Ring	Pipe Plug	Repair Kit
Model		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	Qty. 3	Qty. 2	Qty. 1	Qty. 1	
N3000	Packing	1762	5479	NA	9318NC1N	5091	33001	33002	9797-041	9322NN5N	5385								8885			10636
N3000S3	Buna Lip	NA	NA	5463	9318NC2N	5091	33001	33002	9797-041	9322NN5N	5385								8885			11350
N3000S15	Viton Lip	NA	NA	9997	9318NC2N	5091	33001	33002	9797-041	9322NN5N	5385								8885			12105
N3000S16	Buna Bellows Mech.	5374	NA	32202	9318NC9N	5091	33045	33002	9797-041	9322NN5N	5385								8885	5382		12134
N3000S17	Viton Bellows Mech.	5374	NA	32235	9318NC9N	5091	33045	33002	9797-041	9322NN5N	5385								8885	5382		12135
N3000S18	Teflon Bellows Mech.	5374	NA	32923	9318NC6N	5091	33045	33002	9355-041	9322NN5N	5385								8885	5382	6052	12136
Relief Valve Versions: N3000R, N3000RS3, N3000RS15, N3000RS16, N3000RS17, N3000RS18										9323NN5B	5206	5205	5207	5200	5209	5204	6964					

* Repair Kit contains items 2, 4, 5, 6, 7.

Dimensions



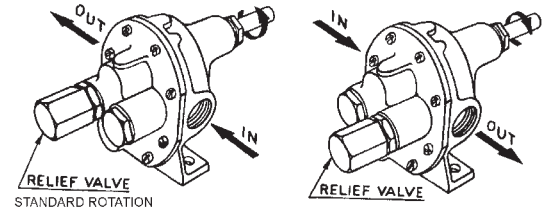
* VITON® is a trademark of DuPont Dow Elastomers. VITON® or equivalent FKM may be used. Teflon® is a registered trademark of DuPont. Teflon® or equivalent PTFE will be used.

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.



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Visit www.oberdorfer-pumps.com to find in-depth descriptions of the world's leading high-quality, dependable pumps.

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

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