

A Gardner Denver Product

# GEAR PUMPS N2000 SERIES

# **BRONZE PEDESTAL ROTARY GEAR PUMPS**

# GEAR PUMPS SERIES N2000

### PERFORMANCE



# FEATURES

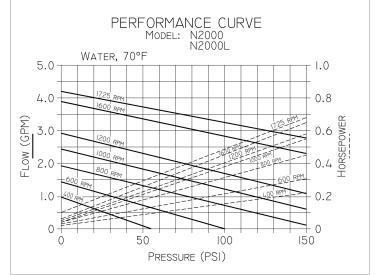
- Bronze Corrosion Resistant Castings
- Special Cast Bronze Gears •
- Stainless Steel Shafts & Fasteners
- Formed Ring Seal Packing (Lip & Mechanical Seals on Special Order)
- Heavy Duty Carbon Bearings (Self Lubricating)
- Positive Displacement Flow

### 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 over tighten N2000 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 400oF. Some lip and mechanical seal elastomers have a limit of 212oF. (see engineering data or check factory). Allowing a liquid to freeze in the pump can cause damage.



CAPACITY - WATER 70° F

	CAFACI									
ſ	R.P.M.	FT.HD.	0	46	92	138	184	231	290	346
		P.S.I.	0	20	40	60	80	100	125*	150*
		GPM	0.97	0.69	0.40	0.10				
	400	HP 0.02 0.04 0.08 0.10	0.10							
		MOTOR	1/6	1/6	1/6	1/6				
ſ		GPM	1.50	1.30	1.09	0.88	0.68	0.47	0.21	
	600	HP	0.03	0.05	0.09	0.13	0.18	0.24	0.26	
		MOTOR	1/6	1/6	1/6	1/6	1/4	1/4	1/4	
ſ		GPM	2.03	1.82	1.62	1.41	1.21	1.00	0.65	0.30
	800	HP	0.04	0.07	0.11	0.15	0.22	0.29	0.36	0.45
		MOTOR	1/6	1/6	1/6	1/6	1/4	1/3	1/2	1/2
ſ		GPM	2.50	2.30	2.10	1.90	1.70	1.50	1.00	0.50
	1000	HP	0.04	0.08	0.13	0.18	0.24	0.32	0.45	0.55
		MOTOR	1/6	1/6	1/6	1/4	1/4	1/3	1/2	1/2
ſ		GPM	2.92	2.72	2.52	2.31	2.10	1.90	1.50	1.00
	1200	HP	0.05	0.09	0.16	0.22	0.28	0.36	0.48	0.58
		MOTOR	1/6	1/6	1/6	1/4	1/3	1/3	1/2	1/2
ſ		GPM	3.75	3.55	3.35	3.15	2.95	2.75	2.45	2.20
	1600	HP	0.06	0.11	0.18	0.25	0.33	0.41	0.53	0.65
		MOTOR	1/6	1/6	1/4	1/4	1/3	1/2	1/2	3/4
ſ		GPM	4.07	3.86	3.65	3.44	3.23	3.03	2.80	2.50
	1725	HP	0.10	0.14	0.20	0.29	0.37	0.43	0.56	0.68
		MOTOR	1/6	1/6	1/4	1/3	1/2	1/2	3/4	3/4
						-				

H.P. = Actual Horsepower

Motor = Convenient Fractional Size P.S.I. = Lbs. Per Square Inch Pressure

Ft. Hd. = Equiv. Press. in Ft of Water

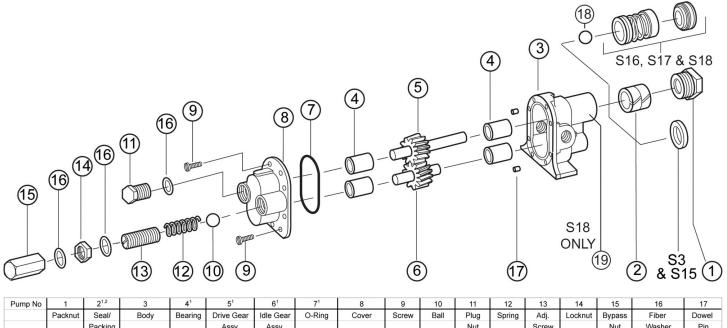
G.P.M. = Gallons per Minute R.P.M. = Revolutions per Min.

www.oberdorfer-pumps.com

### SUCTION LIFT

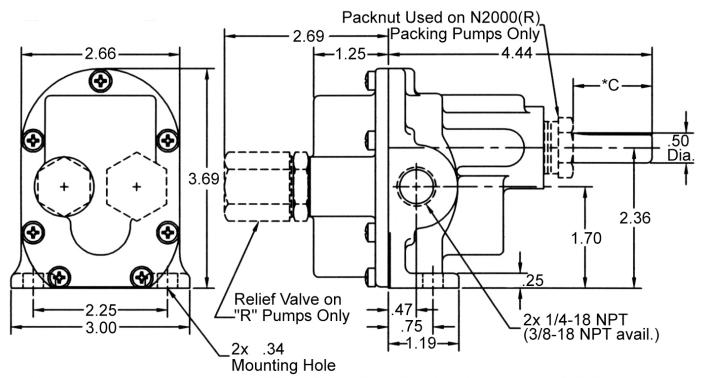
Close tolerances and the positive pumping action make the rotary gear pump capable of lifting water on the suction side as high as 20 feet. Though gear pumps are self priming, a foot valve is recommended. If possible, wet the gears with liquid to be pumped for the first dry start. Liquid retained in 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**



	racknut	Ocall	Douy	Dearing	Drive Ocar	iule Ocal	Orthing	00001	OCICW	Dali	riug	oping	Auj.	LOCKIIII	Dypass	1 ibei	DOWCI
		Packing			Assy.	Assy.					Nut		Screw		Nut	Washer	Pin
	1 Req'd	2 Req'd	1 Req'd	4 Req'd	1 Req'd	1 Req'd	1 Req'd	1 Req'd	7 Req'd	1 Req'd	1 Req'd	3 Req'd	2 Req'd				
N2000	1892	5481	9315NB1N	5024	32992	32993	9797-038	9316NN5N	5385								8885
N2000R	1892	5481	9315NB1N	5024	32992	32993	9797-038	9317NN5B	5385	5238	1838	1840	5237	5240	5239	6533	8885
N2000 1892 5481 9315NB1N 5024 32992 32993 9797-038 9316NN5N 5385																	

# DIMENSIONS



\*C Dim: 1.03 for Packing Pumps, 1.81 for S3 & S5 Lip Seals, 1.51 for S16 & S17 Mech. Seals

# SEALS

### <sup>2</sup>Seals

Number	Description	Part #	Reqd	Repair Kit
S3	Buna N Lipseal	5007	1	11379
S5	Viton(R)*-Teflon(R)* Lipseal	7580	1	11195
		1000		11100

Note: For seals S3 & S5 part #3 is 9315NB2N.

# **ADDITIONAL**

Number	Description	Part	Reqd	Repair
		Number		Kit
S16	Buna N Mech. Seal	32584	1	11970
S17	Viton(R)* Mech. Seal	32585	1	12103

Note: For seals S16 & S17 part #5 is 33000 & part #3 is 9315NB4N.

Pump No.	A	В	С	C*	C**	D	E	F	G	Н
N2000, N2000R N2000B, N2000BR	1/4	0.50	1.00	1.69	1.03	4.44	0.47	0.75	1.19	0.25
C - Packing	C* - L	ip Seal	Seal C** - Mechanical Seal							
		J	К	L	М	Ν	0	Р	R	S
		0.34	2.36	1.25	2.69	2.66	2.69	1.70	2.25	3.00