

Bronze Closed Coupled Rotary Gear Pumps

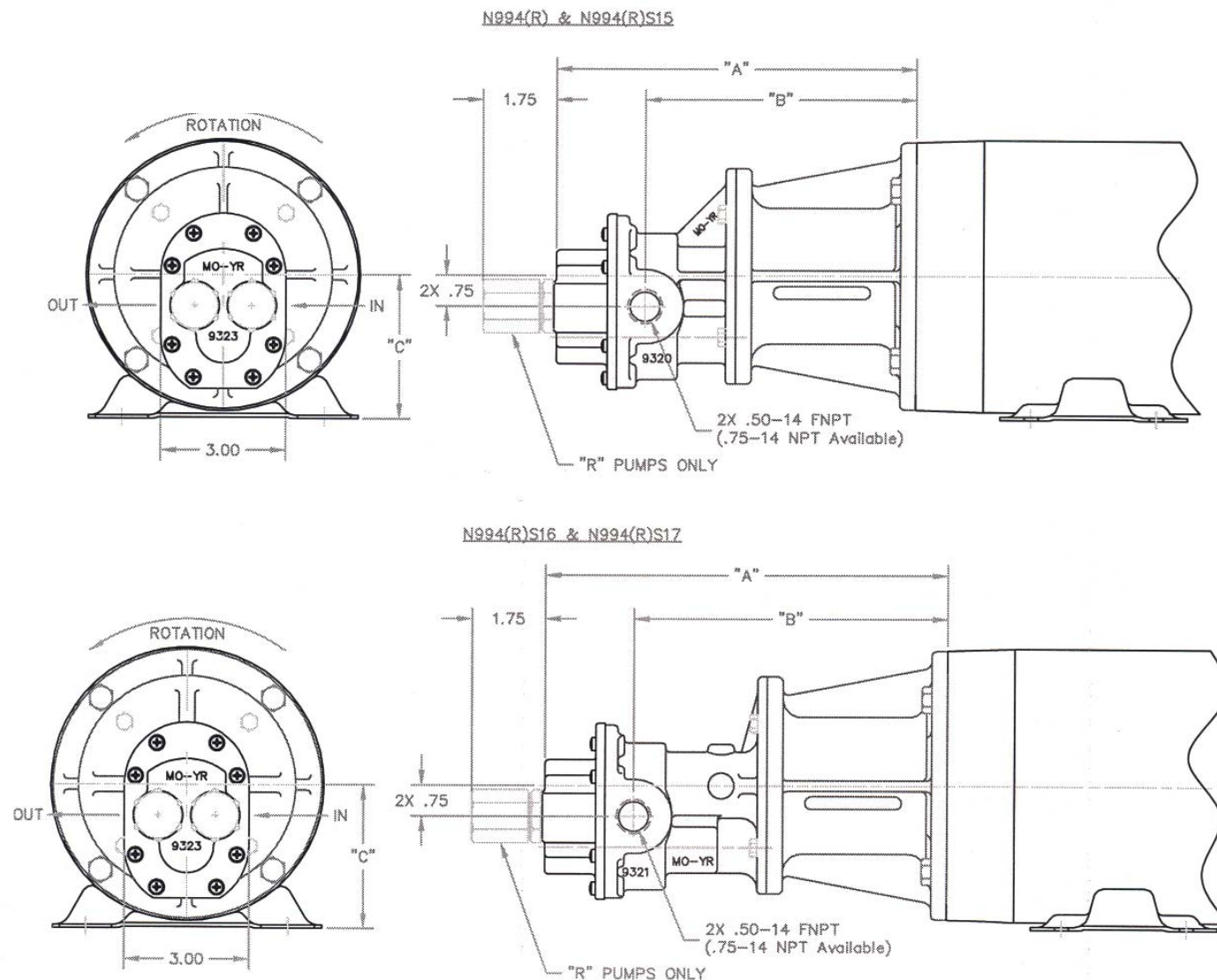
N994 Series



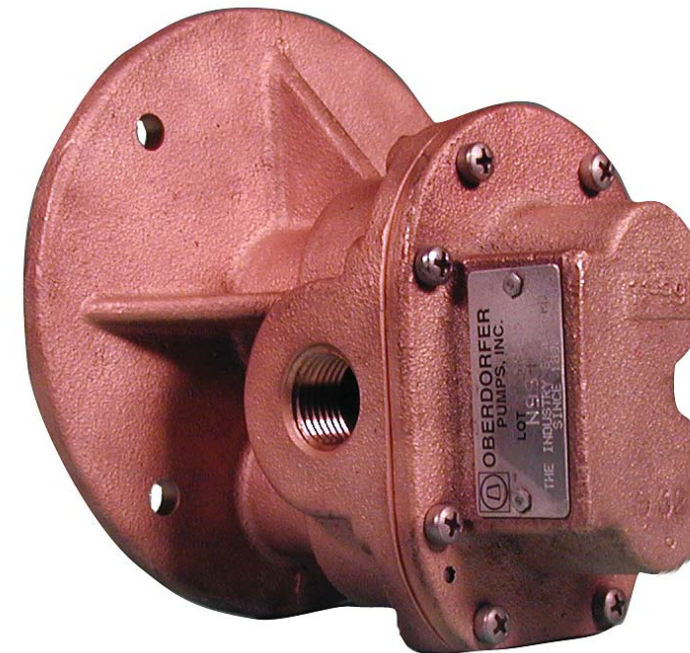
Bronze Close Coupled Rotary Gear Pumps

N994 Series

Dimensions



Model N994 - 1/2" NPT Ports



FEATURES:

- Bronze Construction with Stainless Steel Shafts
- Helical gears for quiet operation
- Easy Field Assembly to Motors
- Self-Lubricating Carbon Bearings
- O-ring seal for maximum leak protection
- For clutch driven version, see N994-38
- Lip or Mechanical Seal
- For Danfoss hydraulic motor driven pump units see N994-40

GENERAL DESCRIPTION:

Pump housings and gears are made of top quality bronze, shafts are stainless steel 303. Bearings are made of high performance carbon-graphite material selected for wear resistance and long service life. Gear pumps are positive displacement pumps. Each shaft revolution displaces a definite amount of liquid relatively unaffected by the back pressure in the discharge line. Shaft speed and flow are directly proportional.

DRIVE ARRANGEMENT:

Close coupled pumps are mounted directly to the electric motor by means of a suitable adapter bracket. The pump drive shaft is connected to the motor shaft by a flexible coupling.

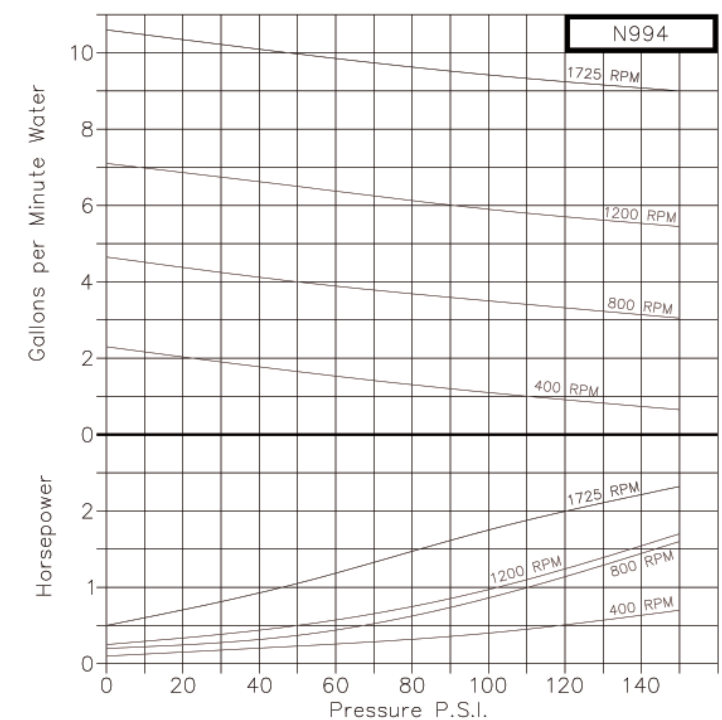
LIQUIDS AND TEMPERATURE:

These pumps are suitable for all liquids that are compatible with bronze. Most common liquids are water, oil, and mild chemicals in the pH-range of 4 to 11. Viscous liquids require reduced shaft speeds of 1150 RPM or lower. Consult factory.

Liquids containing solids, abrasives, powders or paint pigments are definitely not recommended for gear pumps. If abrasives are unavoidable, use a very low shaft speed. See pricebook for the recommended liquid temperature range of lip and mechanical seals. Freezing of water-filled pumps can cause damage and must be avoided. Oils at low temperatures are very viscous requiring a lower speed or extra power.

PERFORMANCE:

Capacity - Water 60° F



SUCTION LIFT:

As a general rule, the suction lift should be kept at an absolute minimum by placing the pump as close to the liquid source as possible. A gear pump in new condition can lift 20 feet of water in the suction line. A foot valve (preferably with built-in strainer) is recommended at the beginning of the suction line. For a first start-up, the pump should be primed to avoid dry running. Minimum size of the suction pipe is the size of the pump inlet port. For longer suction lines (over 3 feet), or for viscous liquids, the pipe size should be at least one size or two sizes larger than the pump inlet port.



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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ROTATION AND RELIEF VALVE:

The relief valve is not intended to be a metering or flow control device. Its main purpose is to function as a discharge pressure relief when the spring tension is exceeded by the discharge pressure. Overheating can occur within 5-10 minutes if the discharge line is completely shut off for extended periods.

Unless otherwise specified, the pump motor unit is supplied by the factory for shaft rotation clockwise from shaft end. Reversing the motor rotation will reverse the “in” and “out” ports and also requires changing the relief valve location. The relief valve is always on the discharge side in this pump series. The factory pressure setting is 50 PSIG. To increase pressure, turn the relief valve adjusting screw in a clockwise direction.

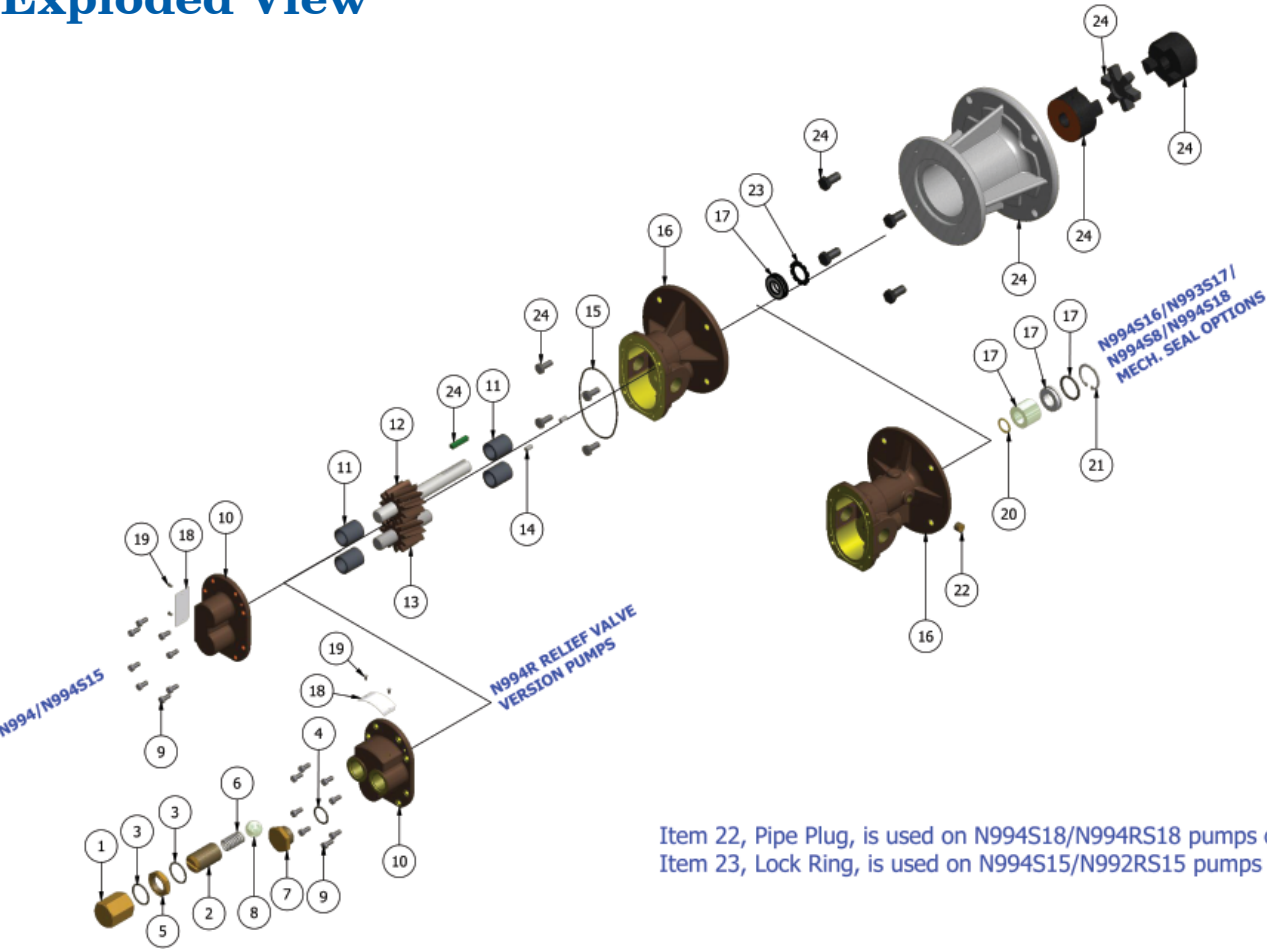
To reverse single phase motors, find instructions on the inside of the junction box cover or on the name plate of the motor. Three phase motors are not wired for any particular rotation. They can be reversed by interchanging any two (2) wires of the three (3) wire leads.

Parts List

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Bypass Nut	Adj. Screw	O-Ring	O-Ring	Locknut	Spring	Plugnut	Ball	Screw	Cover	Bearing	Drive Gear Assy	Idle Gear Assy	Dowel Pin
Pump No.	Qty. 1	Qty. 1	Qty. 2	Qty. 1	Qty. 1	Qty. 1	Qty. 1	Qty. 1	Qty. 8	Qty. 1	Qty. 4	Qty. 1.	Qty. 1	Qty. 2
N994	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	5385	9322NN5N	5091	33011	33008	8885
N994R	5204	5200	9797-021	9797-018	5209D	5207	5205	5206	5385	9323NN5B	5091	33011	33008	8885
N994S15	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	5385	9322NN5N	5091	33011	33008	8885
N994RS15	5204	5200	9797-021	9797-018	5209D	5207	5205	5206	5385	9323NN5B	5091	33011	33008	8885
N994S16	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	5385	9322NN5N	5091	33014	33008	8885
N994RS16	5204	5200	9797-021	9797-018	5209D	5207	5205	5206	5385	9323NN5B	5091	33014	33008	8885
N994S17	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	5385	9322NN5N	5091	33014	33008	8885
N994RS17	5204	5200	9797-021	9797-018	5209D	5207	5205	5206	5385	9323NN5B	5091	33014	33008	8885
N994S8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	5385	9322NN5N	5091	33013	33008	8885
N994RS8	5204	5200	9797-021	9797-018	5209D	5207	5205	5206	5385	9323NN5B	5091	33013	33008	8885
N994S18	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	5385	9322NN5N	5091	33013	33008	8885

	15	16	17	18	19	20	21	22	23	24	Repair Kits	
	O-Ring	Body	Lipseal	Mechanical Seal	Tag	Tag Screw	Retaining Ring	Retaining Ring	Pipe Plug	Lock Ring		Adapter Kits
Pump No.	Qty. 1	Qty. 1	Qty. 1	Qty. 1	Qty. 1	Qty. 2	Qty. 1	Qty. 1	Qty. 1	Qty. 1	See Next Page (H Kit Shown)	
N994	9797-041	9320ND2N	5463	N/A	9344	9345	N/A	N/A	N/A	N/A		11333
N994R	9797-041	9320ND2N	5463	N/A	9344	9345	N/A	N/A	N/A	N/A		12100
N994S15	9797-041	9320ND2N	9997	N/A	9344	9345	N/A	N/A	N/A	3033		
N994RS15	9797-041	9320ND2N	9997	N/A	9344	9345	N/A	N/A	N/A	3033		12400
N994S16	9797-041	9321PD4N	N/A	32202	9344	9345	5382	5374	N/A	N/A		
N994RS16	9797-041	9321PD4N	N/A	32202	9344	9345	5382	5374	N/A	N/A		12401
N994S17	9797-041	9321PD4N	N/A	32235	9344	9345	5382	5374	N/A	N/A		
N994RS17	9797-041	9321PD4N	N/A	32235	9344	9345	5382	5374	N/A	N/A		TBD
N994S8	9999-041	9321PD4N	N/A	33074	9344	9345	5382	5374	N/A	N/A		
N994RS8	9999-041	9321PD4N	N/A	33074	9344	9345	5382	5374	N/A	N/A	TBD	
N994S18	9355-041	9321PD6N	N/A	32923	9344	9345	5382	5374	6052	N/A		

Exploded View



Item 22, Pipe Plug, is used on N994S18/N994RS18 pumps only.
Item 23, Lock Ring, is used on N994S15/N992RS15 pumps only.

Adapter Kits		
Adapter Kit	Part Number	Description
H	11299	56C Frame
J	11300	143TC/145TC
K	11301	182TC/184TC
L	11302	213TC/215TC

Motor/Adapter Kit Dimensions (inches)				
Model	Motor Frame	“A”	“B”	“C”
N994(R)H & N994(R)S15H	56C	8.63	6.50	3.50
N994(R)J & N994(R)S15J	143TC/145TC	8.63	6.50	3.50
N994(R)K & N994(R)S15K	182TC/184TC	9.45	7.31	4.50
N994(R)L & N994(R)S15L	213TC/215TC	9.45	7.31	5.25
N994(R)S16, S17, S8 OR S18H	56C	9.66	7.53	3.50
N994(R)S16, S17, S8 OR S18J	143TC/145TC	9.66	7.53	3.50
N994(R)S16, S17, S8 OR S18K	182TC/184TC	10.48	8.34	4.50
N994(R)S16, S17, S8 OR S18L	213TC/215TC	10.48	8.34	5.25