BRONZE CLOSE COUPLED ROTARY GEAR PUMPS

GEAR PUMPS SERIES N991-32 SERIES D.C.

FEATURES

- Compact design eases installation and use in limited space areas.
- Construction is bronze and stainless steel wetted components.
- Close tolerance design allows for consistent performance.
- Self-Lubricating Bearings
- Complete Units Available
- Slotted Motor Base with Rubber Grommets
- Permanent Magnet Rigid Base Motors
- 3/8 Ports

DRIVE

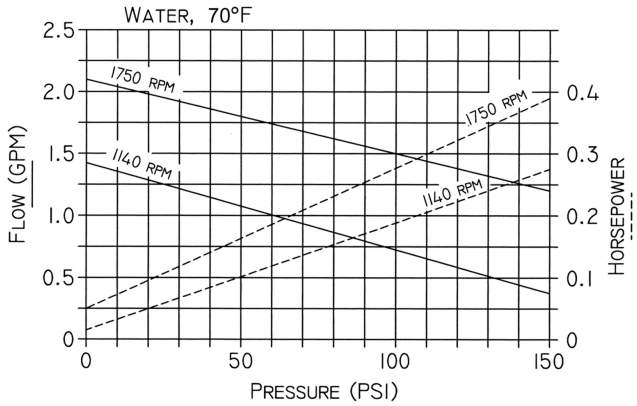
Close-coupled pumps are mounted directly to the electric motor by means of a suitable adapter bracket. The pump drive shaft is connected to the motor shaft by a flexible coupling.

LIQUIDS AND TEMPERATURE

Compact DC portable units convenient for on site servicing of vehicles, machinery and field equipment. For pumping oil direct from crankcase or oil reservoir, drums, containers, transfer diesel fuel to vehicles, pumping other liquids and chemicals compatible with materials of construction. Pumping viscous oils, SAE 30 or greater, can overload motor. Intermittent use is recommended when pumping viscous oils, especially in cold weather.

Service life will be increased substantially if liquid pumped is clean and has lubricity value. These pumps have extremely close tolerances. Fine abrasives like sand, silt or powders in suspension will destroy pumping ability. Liquids compatible with bronze, stainless steel and the Nitrile lip seal can be pumped. For solvents a fluoroelastomer lip seal is available. For a fluoroelastomer Seal, add S5 to the pump model number. See chemical compatibility table. Temperature extremes are detrimental to service life and should be avoided. Basic metals of construction allow temperature range of -40° to 400°F. Standard Nitrile lip seal has a temperature limit of 250°F, while the fluoroelastomer lip seal will handle up to 300°F. Freezing liquid in the pump can deform or damage the pump.

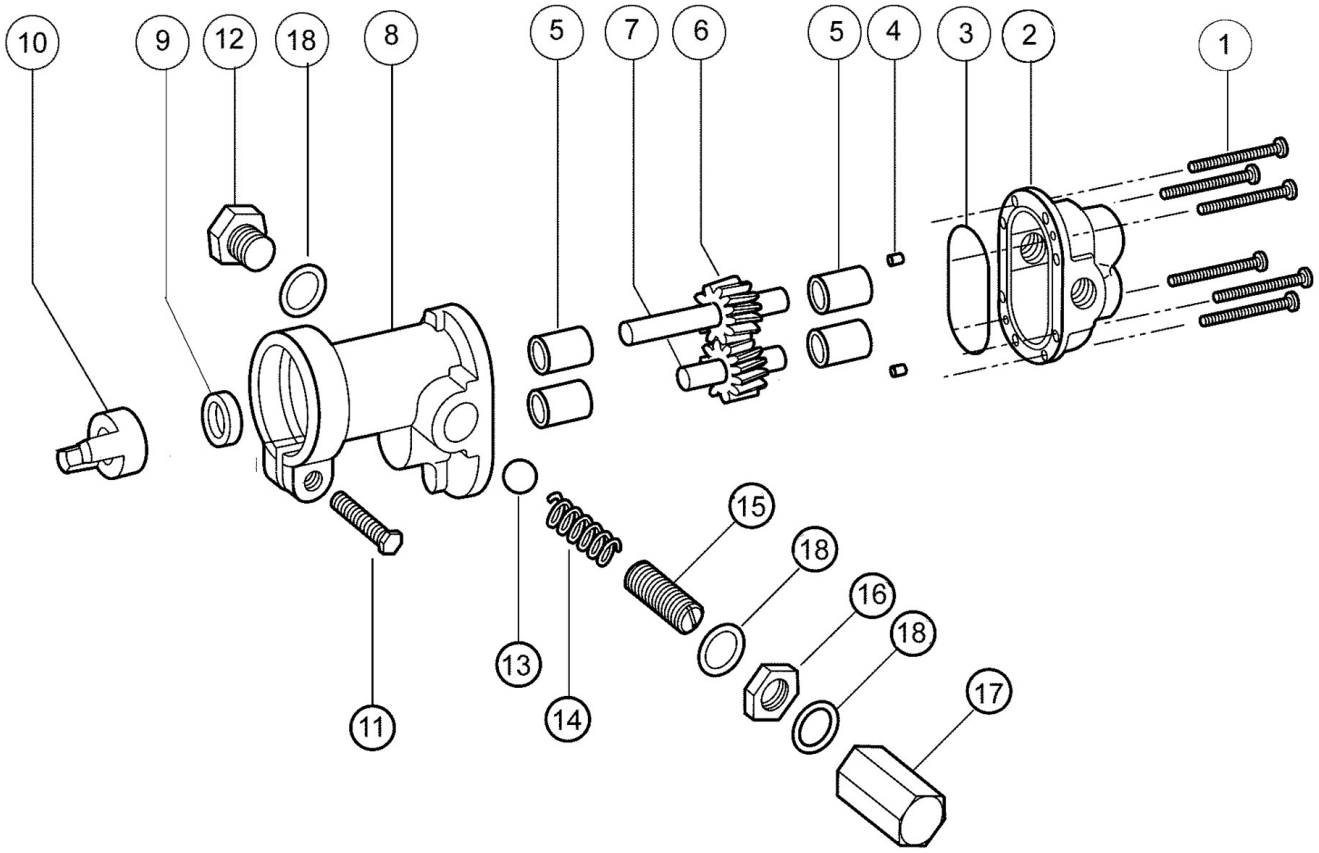
PERFORMANCE



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 should be at least one size or two sizes larger than the pump inlet port.

EXPLODED VIEW AND PARTS LIST



	1	2	3*	4	5*	6*	7*	8	9*	10	11	12	13	14	15	16	17	18
	Screw	Body	O-Ring	Dowel Pin	Bearing	Drive Gear Assy	Idle Gear Assy	Cover	Lip Seal	Coupling	Screw	Plug Nut	Ball	Spring	Adj. Screw	Lock Nut	Bypass Nut	Fiber Washer
Model	Qty. 6	Qty. 1	Qty. 1	Qty. 2	Qty. 4	Qty. 1	Qty. 1	Qty. 1	Qty. 1	Qty. 1	Qty. 1	Qty. 1	Qty. 4	Qty. 2	Qty. 1	Qty. 1	Qty. 1	Qty. 3
N991-32	7733	9300NC5N	9797-033	8885	5024	32149	32110	9303NN2N	5007	5604	5595	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N991R-32	7733	9300NC5N	9797-033	8885	5024	32149	32110	9303NN2N	5007	5604	5595	1838	5803	1840	5237	5240	5239	6533

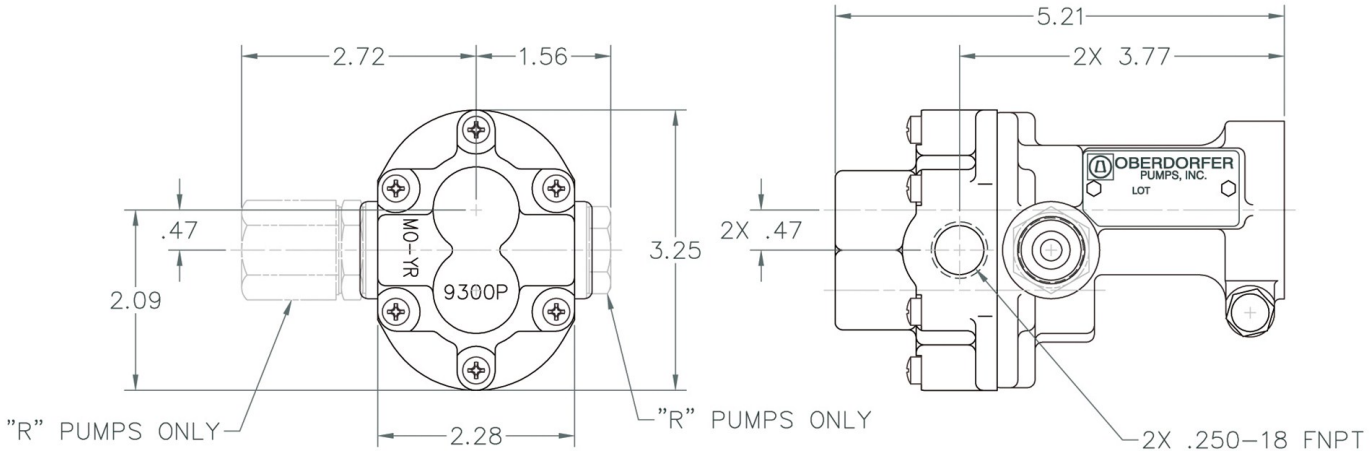
* Repair kit contains these items. Repair Kit for N991 (R) is #10640.

	20	21	22	23a	23b	24	25	26	27
	Spider	Coupling Half	Braket/ Adapter	Screw	Screw	Lock Washer	Grommet	Motor	Adapter Kit
Motor No.	Qty. 1	Qty. 1	Qty. 1	Qty. 2	Qty. 4	Qty. 2	Qty. 1	Qty. 5	Qty. 1
A96	7839	7714	7362	7424	----	5656	6650	8105	12091
A89	7839	7714	7362	7424	----	5656	6650	8030	12091
A97	7839	7714	7362	7424	----	5656	6650	8107	12091
C81	7839	7643	7602	----	5916	----	----	8295	12144
C82	7839	7643	7602	----	5916	----	----	8295	12144

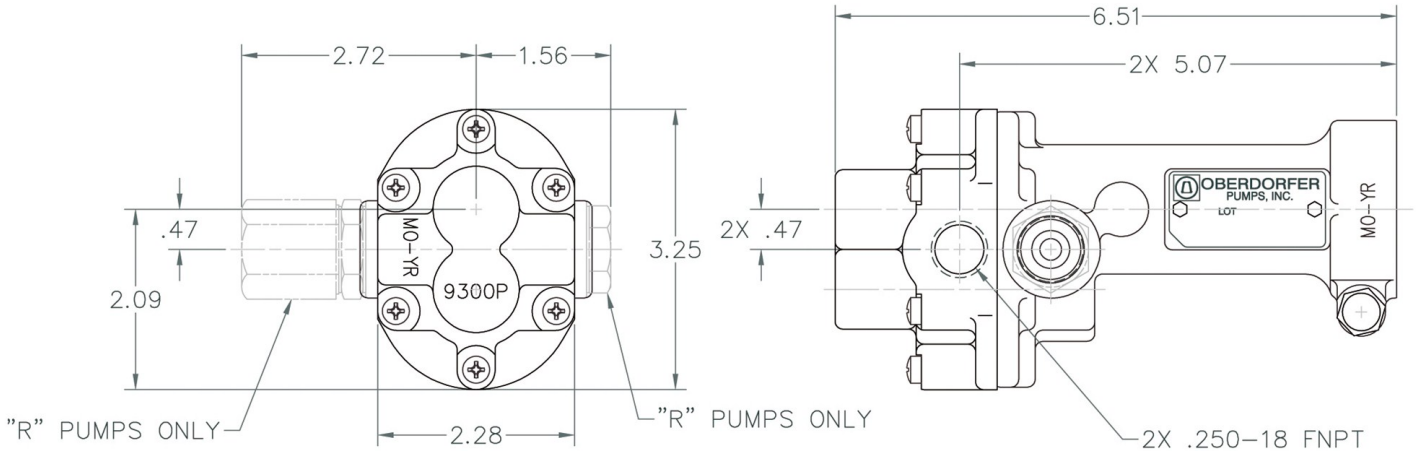
	No. 14	No. 12	No. 10	No. 8
12 Volt DC	11 FT.	18 FT.	28 FT.	45 FT.
24 Volt DC	20 FT.	34 FT.	55 FT.	87 FT.
32 Volt DC	35 FT.	56 FT.	91 FT.	144 FT.

DIMENSIONS

N991(R) & N991(R)S5



N991(R)S16 & N991(R)S17



ROTATION AND RELIEF VALVE

If the discharge line contains any throttling devices such as a shut-off valve, a spray nozzle or other restrictive device, it is necessary to have a relief valve in the system which returns the liquid to the suction side or to the tank. The relief valve is also available as part of the pump itself (R-model pumps). However, built-in relief valves are only good for intermittent service. If used continuously, the pump will overheat. A built-in relief valve is strictly a safety device against overpressure. It will not work successfully as a pressure or flow control device. For this purpose a separate relief valve in the pressure line must be used. Unless otherwise specified, the pump motor unit is supplied by the factory for shaft rotation counterclockwise from shaft end. Reversing motor will reverse “in and “out” ports and also requires changing relief valve location. The relief valve is always on the inlet side of this pump series. The factory pressure setting is 50 PSIG. To increase pressure, turn the relief valve adjusting screw in a clockwise direction.