

BRONZE CLOSE COUPLED ROTARY GEAR PUMPS

MODEL N992(R) Q-J75/J76



MODEL N992(R) C81, C82



PERFORMANCE - WATER 70°

Model	Voltage	HP		Pressure (P.S.I.)																
				5	10	15	20	25	30	35	40	45	50	55	60	70	80	90	100	
C81 8295	12 VDC	1/4	Flow (GPM)	2.8	2.7	2.7	2.6	2.5	2.4	2.3	2.2	2.1	2.1	2.0						
			Speed (RPM)	1140	1120	1100	1090	1070	1060	1040	1020	1000	990	970						
			Current (Amps)	4.5	5.5	6.4	7.4	8.7	9.5	10.7	12.4	13.4	14.4	15.7						
C82 8295	24 VDC	1/4	Flow (GPM)	5.9	5.8	5.8	5.7	5.6												
			Speed (RPM)	2330	2310	2300	2280	2270												
			Current (Amps)	5.9	6.8	7.6	8.4	9.1												
C74 2924	12 VDC	1/4	Flow (GPM)	5.3	5.1	5	4.9	4.7												
			Speed (RPM)	2020	2020	1990	1960	1920												
			Current (Amps)	12.5	12.5	14.3	16.5	18.2												
F93 3073	24 VDC	1/3	Flow (GPM)	4.9	4.9	4.8	4.8	4.7	4.6	4.5	4.5	4.4	4.3	4.2	4.1					
			Speed (RPM)	1960	1950	1950	1930	1920	1910	1910	1900	1890	1890	1870	1850					
			Current (Amps)	5.1	5.5	6.1	6.9	7.7	8.6	8.9	9.2	9.8	10.1	10.5	11.5	12.8				
J75 8562	12 VDC	1/2	Flow (GPM)	4.7	4.7	4.6	4.5	4.4	4.4	4.3	4.3	4.2	4.2	4.1	4	3.8	3.7			
			Speed (RPM)	1860	1850	1840	1830	1830	1830	1830	1820	1820	1820	1820	1790	1770	1750			
			Current (Amps)	10.8	10.8	12.4	14.1	14.8	15.4	16.3	17.5	18.9	20.3	22.5	23.9	31.5	34.5	38.2		
J76 8563	24 VDC	1/2	Flow (GPM)	5.1	5.1	5	6	4.9	4.8	4.8	4.7	4.6	4.6	4.5	4.4	4.3	4.1	4		
			Speed (RPM)	2020	2020	2020	2010	2000	2000	1990	1990	1980	1980	1970	1950	1940	1920	1900		
			Current (Amps)	5.8	5.8	6.3	6.9	7.5	8.2	8.8	9.2	9.9	10.5	11.3	12.2	15.9	17.3	18.7		

Notes: Maximum recommended operating point

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
- Permanent Magnet Rigid Base Motors

GENERAL DESCRIPTION

Pump housings and gears are made of top quality bronze, shafts are 303 stainless steel. Bearings are designed 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.

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 Buna lip seal can be pumped. For solvents a Viton lip seal is available. For a Viton(R)* 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 Buna lip seal has a temperature limit of 250°F, while the Viton lip seal will handle up to 300°F. Freezing liquid in the pump can deform or damage the pump.

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.

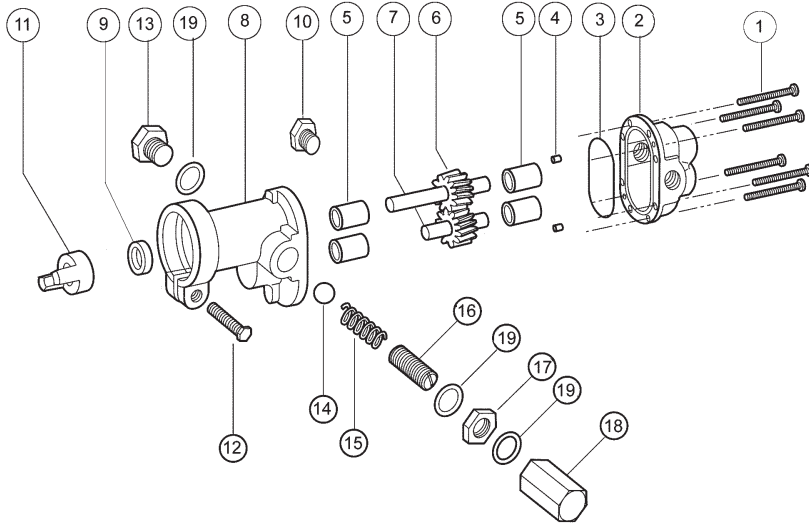
ROTATION AND RELIEF VALVE

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 over-heat. 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.

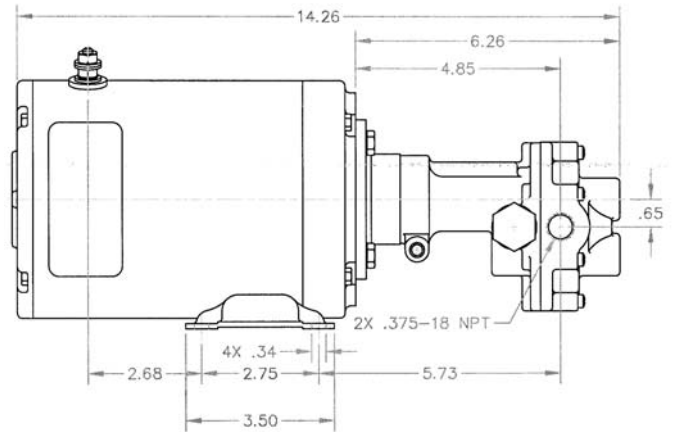
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EXPLODED VIEW AND PARTS LIST

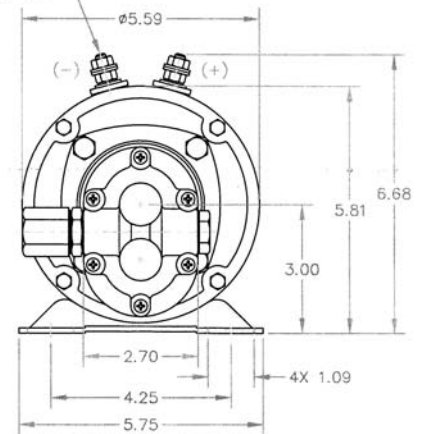


DIMENSIONS & ROTATION

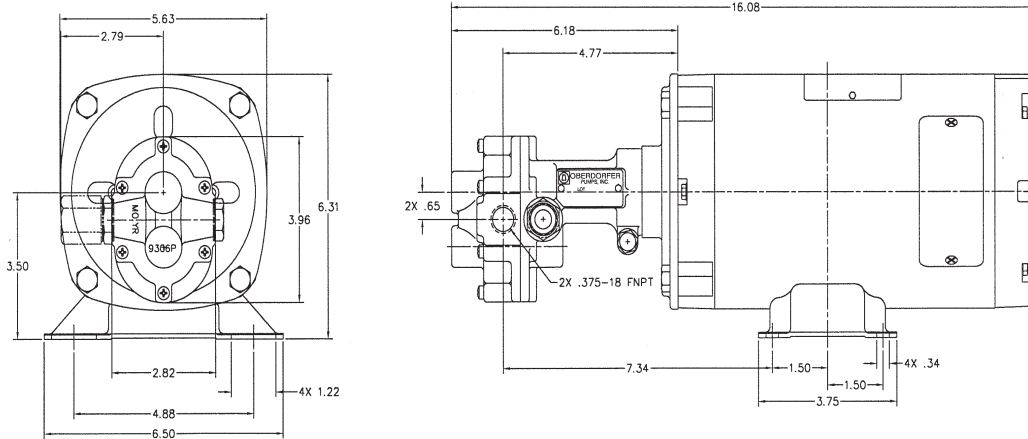
N992(R) C81, C82



2X .25-20 UNC
TERMINAL POST



N992(R) Q-J75/J76



Pump No.	1	2	3 ¹	4	5 ¹	6 ¹	7 ¹	8	9 ^{1,2}	10	11	12	13	14	15	16	17	18	19
	Screw	Body	O-Ring	Dowel Pin	Bearing	Drive Gear Assy.	Idle Gear Assy.	Cover	Lip Seal	Cap Plug	Coupling	Screw	Plug Nut	Ball	Spring	Adj. Screw	Locknut	Bypass Nut	Fiber Washer
	6 Req'd	1 Req'd	1 Req'd	2 Req'd	1 Req'd	1 Req'd	1 Req'd	1 Req'd	1 Req'd	1 Req'd	1 Req'd	1 Req'd	1 Req'd	1 Req'd	1 Req'd	1 Req'd	1 Req'd	1 Req'd	3 Req'd
N992	5013	9306NC5N	9797-038	8885	5024	32994	32993	9308NN2N	5007	9346	5604	5595	---	---	---	---	---	---	---
N992R	5013	9306NC5N	9797-038	8885	5024	32994	32993	9308NN3B	5007	9346	5604	5595	1838	5238	1840	5237	5240	5239	6533

¹ Repair Kits contain items 3, 5, 6, 7 & 9. Repair Kit for N992(R) is #10631.

² Seal #5007 is standard Buna N, #7580 is Viton(R)*-Teflon(R)*.

Product Number				20	21	22	23	26	27
				Spider	Coupling Half	Bracket/ Adapter	Screw	Motor	Adapter Kit
N992(R)	Q	-	J76	7839	7643	8335	5411	8563	11331
N992(R)	Q	-	J75	7839	7643	8335	5411	8562	11331
N992(R)	Q	-	F93	7839	7643	8335	5411	3073	11331
N992(R)	Q	-	C74	7839	7643	8335	5411	2924	11331
N992(R)	-	-	C81	7839	7643	7602	5916	8295	12144
N992(R)	-	-	C82	7839	7643	7602	5916	8295	12144

RECOMMENDED WIRE SIZE AND LENGTH AWG WIRE SIZE AND MAXIMUM LENGTH IN FEET

	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.