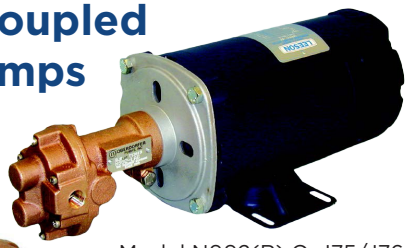
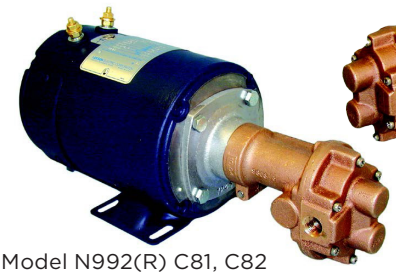
OBERDORFER®
An Ingersoll Rand Business

N992(R) DC Series
Bronze Close Coupled Rotary Gear Pumps



Model N992(R) Q-J75/J76



Model N992(R) C81, C82

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 carbongraphite 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.

Liquids and Temperature

Compact DC portable units convienient for on site servicing of vehicles, machinery and field equipment. For pumping oil direct from crankcase or oil resevoir, 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 ecommended when pumping viscous oils, especially in cold weather.

Service life will be increased substanially 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 NBR lip seal can be pumped. For solvents a FKM lip seal is available. For a FKM 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 NBR lip seal has a temperature limit of 250° F, while the FKM 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 builtin 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 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.

OBERDORFER®
An Ingersoll Rand Business

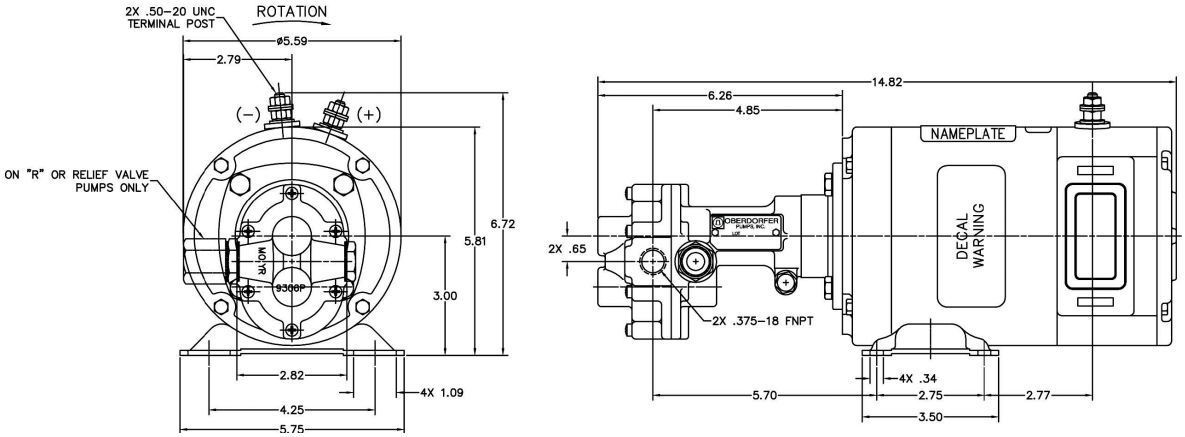
Performance

Capacity Water 70°F

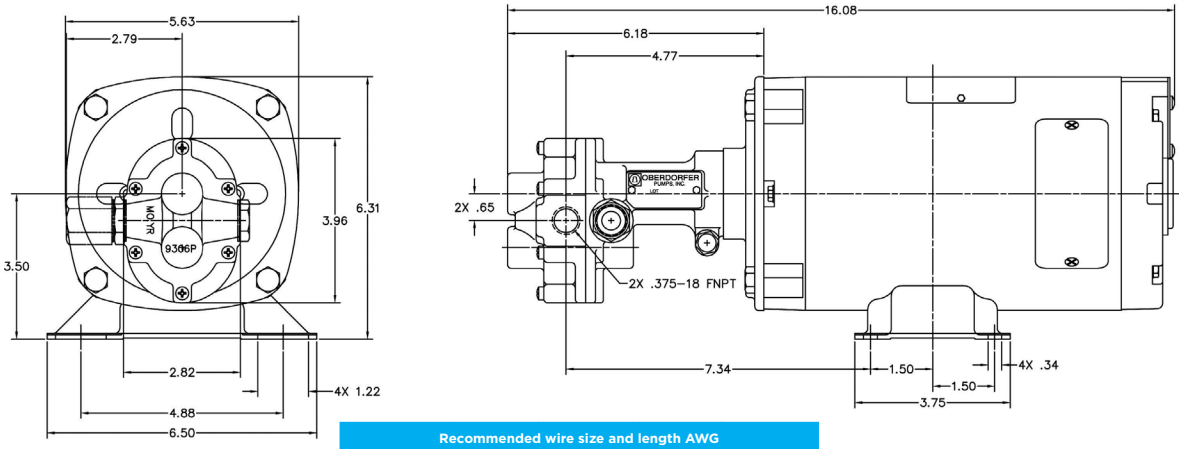
Motor No.	Voltage	HP		5	10	15	20	25	30	35	40	45	50	55	60	70	80	90	100
C81			Flow (GPM)	2.8	2.7	2.7	2.6	2.5	2.4	2.3	2.2	2.1	2.1	2.0					
	12V DC	1/4	Speed (RPM)	1140	1120	1100	1090	2070	1060	1040	1020	1000	990	970					
8295			Current (Amps)	4.5	5.5	6.4	7.4	8.7	9.5	10.7	12.4	13.4	14.4	15.7					
C82			Flow (GPM)	5.9	5.8	5.8	5.7	5.6											
	24 VDC	1/4	Speed (RPM)	2330	2310	2300	2280	2270											
8295			Current (Amps)	5.9	6.8	7.6	8.4	9.1											
C74			Flow (GPM)	5.3	5.1	5.0	4.9	4.7											
	12 VDC	1/4	Speed (RPM)	2020	2020	1990	1960	1920											
2924			Current (Amps)	12.5	12.5	14.3	16.5	18.2											
F93			Flow (GPM)	4.9	4.9	4.8	4.8	4.7	4.6	4.5	4.5	4.4	4.3	4.3	4.2	4.1			
	24 VDC	1/3	Speed (RPM)	1960	1950	1950	1930	1920	1910	1910	1900	1900	1890	1890	1870	1850			
3073			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			Flow (GPM)	4.7	4.7	4.6	4.5	4.4	4.4	4.4	4.3	4.3	4.2	4.2	4.1	4.0	3.8	3.7	
	12 VDC	1/2	Speed (RPM)	1860	1850	1840	1830	1830	1830	1830	830	1820	1820	1820	1820	1790	1770	1750	
8562			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			Flow (GPM)	5.1	5.1	5.0	5.0	4.9	4.8	4.8	4.7	4.6	4.5	4.5	4.4	4.3	4.1	4.0	
	24 VDC	1/2	Speed (RPM)	2020	2020	2020	2010	2000	2000	1990	1990	1980	1980	1970	1950	1940	1920	1900	
8563			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	

Dimensions

N992(R) - C81 & C82



N992(R)Q - J75 & J76



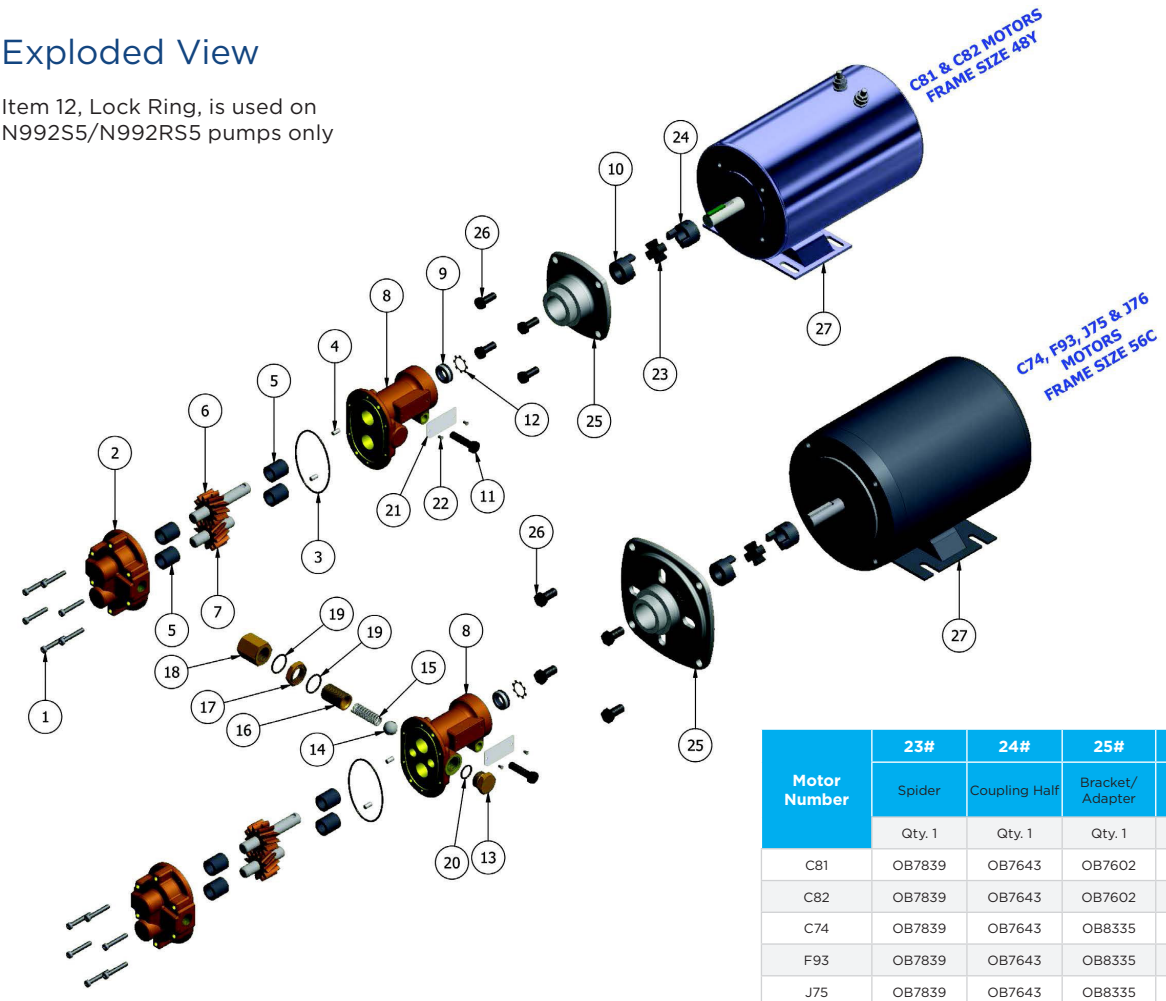
Recommended wire size and length AWG wire size and maximum length in ft.				
12 Volt DC	11 ft.	18 ft.	28 ft.	45 ft.
24 Volt DC	20 ft.	34 ft.	55 ft.	87 ft.
32 Volt DC	35 ft.	56 ft.	91 ft.	144 ft.

Ingersoll Rand
12500 South Pulaski Road
Alsip, IL 60803, USA
Phone (800) 448.1668

OBERDORFER®
An Ingersoll Rand Business

Exploded View

Item 12, Lock Ring, is used on N992S5/N992RS5 pumps only



Motor Parts

Motor Number	23#	24#	25#	26#	27	Adapter Kit
	Spider	Coupling Half	Bracket/ Adapter	Screw	Motor	
	Qty. 1	Qty. 1	Qty. 1	Qty. 4	Qty. 1	Qty. 1
C81	OB7839	OB7643	OB7602	OB5916	OB8295	OB12144
C82	OB7839	OB7643	OB7602	OB5916	OB8295	OB12144
C74	OB7839	OB7643	OB8335	OB5411	OB2924	OB11331
F93	OB7839	OB7643	OB8335	OB5411	OB3073	OB11331
J75	OB7839	OB7643	OB8335	OB5411	OB8562	OB11331
J76	OB7839	OB7643	OB8335	OB5411	OB8563	OB11331

Adapter Kits contain items 23, 24, 25 & 26

Parts List

	1	2	3*	4	5*	6*	7*	8	9*	10	11	12*
	Screw	Body	O-Ring	Dowel Pin	Bearing	Drive Gear Assy	Idle Gear Assy	Cover	Lip Seal	Coupling	Screw	Lock Ring
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
OBN992	OB7733	OB9306NC5N	OB9797-038	OB8885	OB5024	OB32994	OB32993	OB9308NN2N	OB5007	OB5604	OB5595	N/A
OBN992R	OB7733	OB9306NC5N	OB9797-038	OB8885	OB5024	OB32994	OB32993	OB9308NN3B	OB5007	OB5604	OB5595	N/A
OBN992S5	OB7733	OB9306NC5N	OB9797-038	OB8885	OB5024	OB32994	OB32993	OB9308NN2N	OB7580	OB5604	OB5595	OB7626
OBN992RS5	OB7733	OB9306NC5N	OB9797-038	OB8885	OB5024	OB32994	OB32993	OB9308NN3B	OB7580	OB5604	OB5595	OB7626

	13	14	15	16	17	18	19	20	21	22	Repair Kit
	Plug Nut	Ball	Spring	Adjust. Screw	Lock Nut	Nut Bypass	O-Ring	O-Ring	Name Tag	Tag Screw	
Model	Qty. 1	Qty. 1	Qty. 1	Qty. 1	Qty. 1	Qty. 1	Qty.	Qty. 1	Qty. 1	Qty. 2	
OBN992	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	OB9344	OB9345	OB10631
OBN992R	OB1838	OB5238	OB1840	OB5237	OB5240D	OB5239	OB9797-019	OB9797-015	OB9344	OB9345	OB10631
OBN992S5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	OB9344	OB9345	OB11351
OBN992RS5	OB1838	OB5238	OB1840	OB5237	OB5240D	OB5239	OB9797-019	OB9797-015	OB9344	OB9345	OB11351

*Repair Kits contain items 3, 5, 6, 7, 9 & 12.

Ingersoll Rand
12500 South Pulaski Road
Alsip, IL 60803, USA
Phone (800) 448.1668