OBERDORFER®
An Ingersoll Rand Business

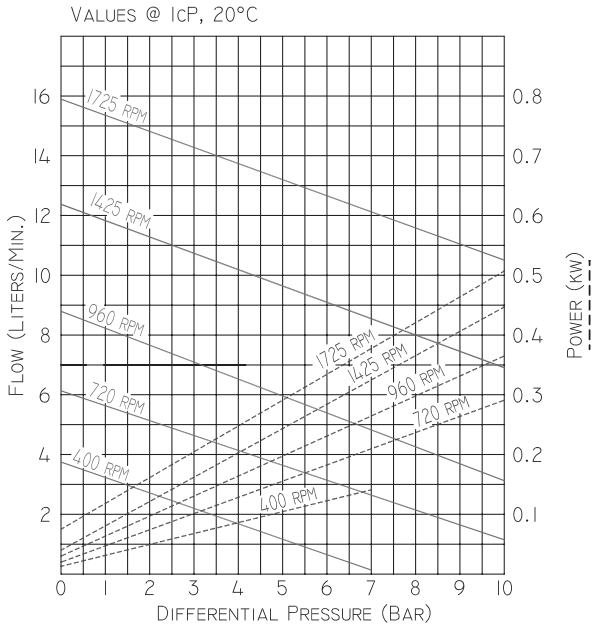
N992E Series
Bronze Close Coupled Rotary Gear Pumps

Features

- 3/8” BSPT Ports
- Rugged corrosion resistant bronze construction
- Compact close-coupled design
- Stainless steel shafts
- Durable bronze helical gears provide quiet operation
- Process lubricated carbon graphite bearings
- O-ring cover seal for maximum leak protection
- Lip seal or Mechanical Seal
- Easy field assembly to a variety of motor frames
- For DC motor pump units - see OBN992 DC
- For compact AC motor pump units - see Bronze Adapterless Rotary Gear Pumps
- Danfoss hydraulic motor driven pump units see adapter OB9960

PUMP	DESCRIPTION
OBN992E	Standard Pump with 3/8” ports
OBN992RE	Pump with 3/8” ports & relief valve
OBN992ES5	Pump with FKM lipseal
OBN992RES5	Pump with FKM lipseal & relief valve
OBN992ES16	Pump with NBR mechanical seal
OBN992RES16	Pump with NBR mechanical seal & relief valve
OBN992ES17	Pump with FKM mechanical seal
OBN992RES17	Pump with FKM mechanical seal & relief valve
OBN992ES18	Pump with PTFE mechanical seal
OBN992RES18	Pump with PTFE mech. seal & relief valve
OBN992ES8	Pump with EPDM mechanical seal
OBN992RES8	Pump with EPDM mech. seal & relief valve

Performance



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. Recommended pressure limits are 7 bar for water and non-lubricants, 10.3 bar for oil and other lubricants. The maximum shaft speed is 1750 RPM.

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 pig-ments 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. If more extreme temperature con-ditions exist, factory should be consulted. 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.

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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 6 meters 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 1 meter) 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.

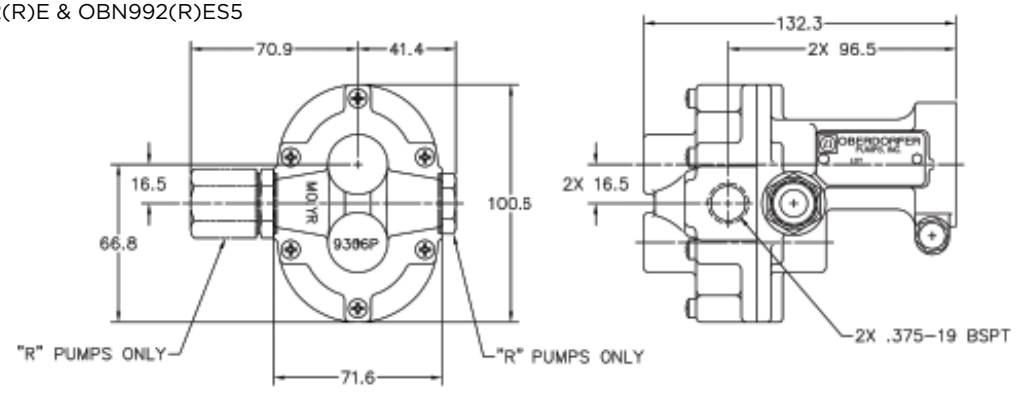
Unless otherwise specified, the pump motor unit is supplied by the factory for shaft rotation counterclockwise from shaft end. Reversing motor will reverse “in and “out” ports and also requires changing relief valve location. The relief valve is al-ways on the inlet side of this pump series. The factory pressure setting is 2.5 bar. To increase pressure, turn the relief valve adjusting screw in a clockwise direction.

Shaft Seals

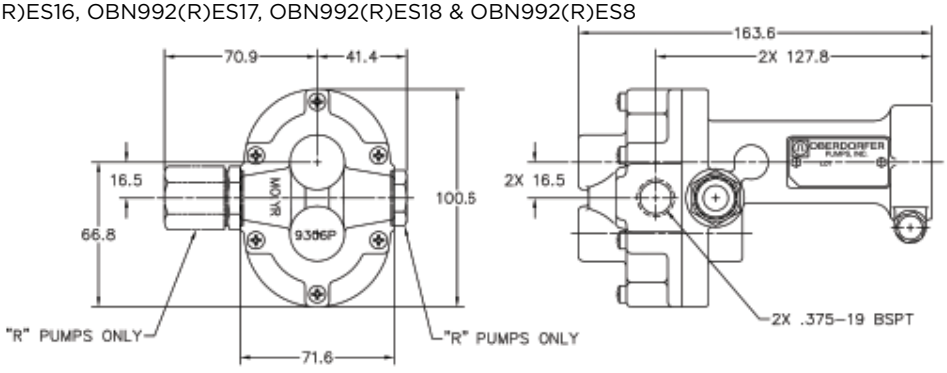
Close coupled gear pumps are normally supplied with a NBR lip seal. For a FKM Seal, add S5 to the pump model number. For a NBR Mechanical seal add S16 and for a FKM Mechanical Seal add S17. For a PTFE mechanical seal add S18. For a EPDM mechanical seal add S8.

Dimensions

OBN992(R)E & OBN992(R)ES5



OBN992(R)ES16, OBN992(R)ES17, OBN992(R)ES18 & OBN992(R)ES8



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

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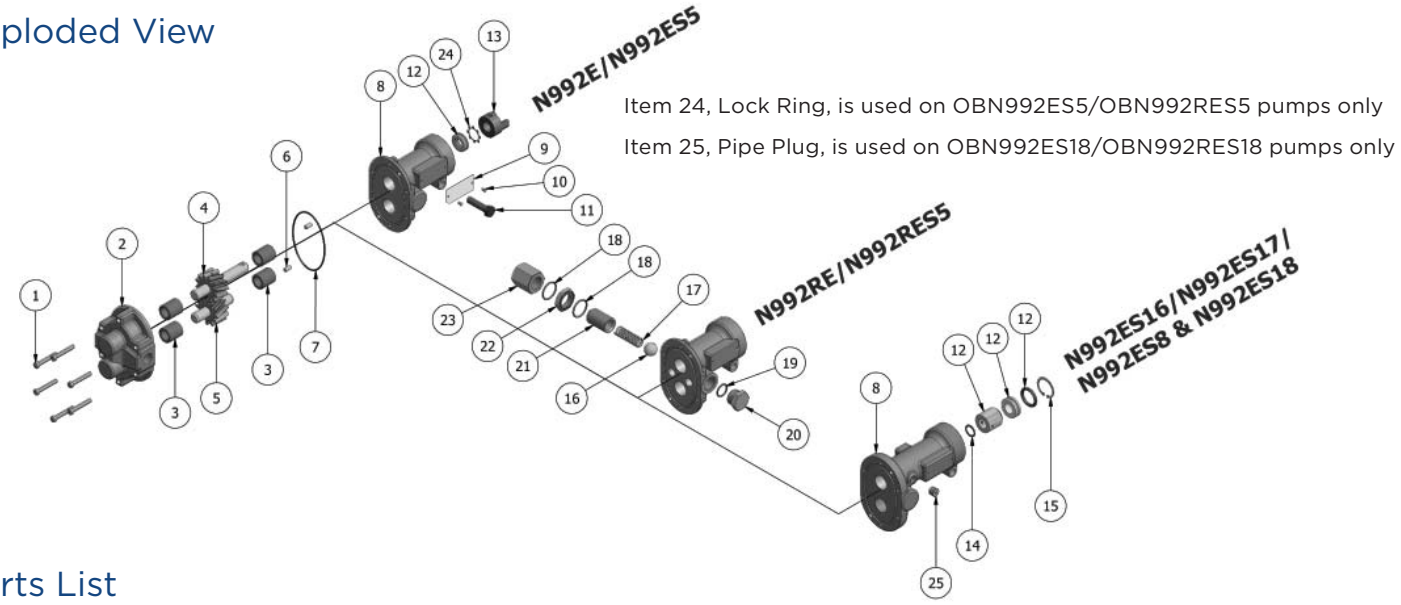
Exploded View



Item 24, Lock Ring, is used on OBN992ES5/OBN992RES5 pumps only

Item 25, Pipe Plug, is used on OBN992ES18/OBN992RES18 pumps only

Parts List

	1	2	3	4	5	6	7	8	9	10	11	12		13	14
	Screw	Body	Bearing	Drive Gear Assy	Idle Gear Assy	Dowel Pin	O-Ring	Cover	Tag	Tag Screw	Screw	Lipseal	Mech. Seal	Coupling Half	Retaining Ring
Model	Qty. 6	Qty. 1	Qty. 4	Qty. 1	Qty. 1	Qty. 2	Qty. 1	Qty. 1	Qty. 1	Qty. 2	Qty. 1	Qty. 1	Qty. 1	Qty. 1	Qty. 1
OBN992E	OB7733	OB9306NC5N	OB5024	OB32994	OB32993	OB8885	OB9797-038	OB9308NN2N	OB9344	OB9345	OB5595	OB5007	N/A	OB5604	N/A
OBN992RE	OB7733	OB9306NC5N	OB5024	OB32994	OB32993	OB8885	OB9797-038	OB9308NN3B	OB9344	OB9345	OB5595	OB5007	N/A	OB5604	N/A
OBN992ES5	OB7733	OB9306NC5N	OB5024	OB32994	OB32993	OB8885	OB9797-038	OB9308NN2N	OB9344	OB9345	OB5595	OB7580	N/A	OB5604	N/A
OBN992RES5	OB7733	OB9306NC5N	OB5024	OB32994	OB32993	OB8885	OB9797-038	OB9308NN3B	OB9344	OB9345	OB5595	OB7580	N/A	OB5604	N/A
OBN992ES16	OB7733	OB9306NC5N	OB5024	OB33341	OB32993	OB8885	OB9797-038	OB9309PN4N	OB9344	OB9345	OB5595	N/A	OB32584	OB5604	OB5373
OBN992RES16	OB7733	OB9306NC5N	OB5024	OB33341	OB32993	OB8885	OB9797-038	OB9309PN4B	OB9344	OB9345	OB5595	N/A	OB32584	OB5604	OB5373
OBN992ES17	OB7733	OB9306NC5N	OB5024	OB33341	OB32993	OB8885	OB9797-038	OB9309PN4N	OB9344	OB9345	OB5595	N/A	OB32585	OB5604	OB5373
OBN992RES17	OB7733	OB9306NC5N	OB5024	OB33341	OB32993	OB8885	OB9797-038	OB9309PN4B	OB9344	OB9345	OB5595	N/A	OB32585	OB5604	OB5373
OBN992ES18	OB7733	OB9306NC5N	OB5024	OB33341	OB32993	OB8885	OB9355-038	OB9309PN6N	OB9344	OB9345	OB5595	N/A	OB32335	OB5604	OB5373
OBN992RES18	OB7733	OB9306NC5N	OB5024	OB33341	OB32993	OB8885	OB9355-038	OB9309PN6B	OB9344	OB9345	OB5595	N/A	OB32335	OB5604	OB5373
OBN992ES8	OB7733	OB9306NC5N	OB5024	OB33341	OB32993	OB8885	OB9999-038	OB9309PN4N	OB9344	OB9345	OB5595	N/A	OB32754	OB5604	OB5373
OBN992RES8	OB7733	OB9306NC5N	OB5024	OB33341	OB32993	OB8885	OB9999-038	OB9309PN4B	OB9344	OB9345	OB5595	N/A	OB32754	OB5604	OB5373

	15	16	17	18	19	20	21	22	23	24	25	Repair Kits
	Retaining Ring	Ball	Spring	O-Ring	O-Ring	Nut Plug	Adjust. Screw	Lock Nut	Nut Bypass	Lock Ring	Pipe Plug	
Model	Qty. 1	Qty. 1	Qty. 1	Qty. 2	Qty. 1	Qty. 1	Qty. 1	Qty. 1	Qty. 1	Qty. 1	Qty. 1	
OBN992E	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	OB10631
OBN992RE	N/A	OB5803	OB1840	OB9797-019	OB9797-015	OB1838	OB5237	OB5240D	OB5239	N/A	N/A	OB10631
OBN992ES5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	OB7626	N/A	OB11351
OBN992RES5	N/A	OB5803	OB1840	OB9797-019	OB9797-015	OB1838	OB5237	OB5240D	OB5239	OB7626	N/A	OB11351
OBN992ES16	OB7639	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	OB12396
OBN992RES16	OB7639	OB5803	OB6302	OB9797-019	OB9797-015	OB1838	OB5237	OB5240D	OB5239	N/A	N/A	OB12396
OBN992ES17	OB7639	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	OB12397
OBN992RES17	OB7639	OB5803	OB6302	OB9797-019	OB9797-015	OB1838	OB5237	OB5240D	OB5239	N/A	N/A	OB12397
OBN992ES18	OB7639	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	OB6052	TBD
OBN992RES18	OB7639	OB5803	OB6302	OB9797-019	OB9797-015	OB1838	OB5237	OB5240D	OB5239	N/A	OB6052	TBD
OBN992ES8	OB7639	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	TBD
OBN992RES8	OB7639	OB5803	OB6302	OB9999-019	OB9999-015	OB1838	OB5237	OB5240D	OB5239	N/A	N/A	TBD

Repair Kits contain items 3, 4, 5, 7 12, 14, 15 & 24.

Adapter Kits

Adapter Kits		
Adapter Kit	Part Number	Description
M	OB10562	48 Frame
N	OB10816	56 Frame
P	OB11722	S56 Frame
Q	OB11331	56C Frame (to 3/4 HP)
C	OB11331H	56C Frame (above 3/4 HP)
F	OB11332	IEC71
N/A	N/A	Adapterless - Modified 48

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