



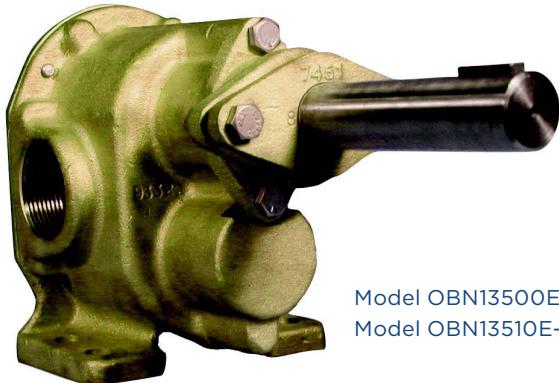
oberdorfer[®]

An Ingersoll Rand Business



N13500E | N13510E Series

Bronze Pedestal Rotary Gear Pumps



Model OBN13500E-21 Upper Drive
Model OBN13510E-21 Lower Drive

Features

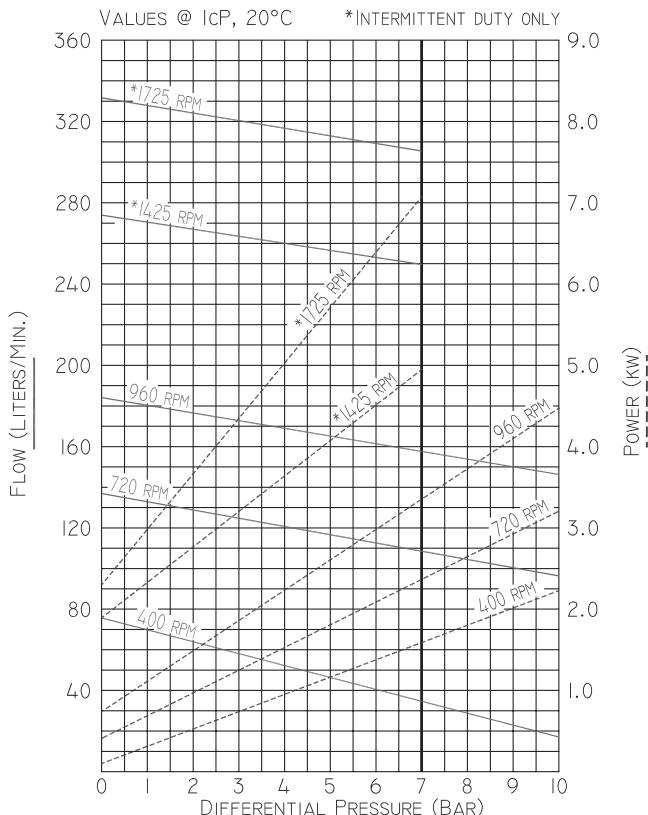
- 1-1/2" BSPT Ports
- Temp. Range: -40 - 260°C
- Bronze Corrosion Resistant Castings
- Stainless Steel Shafts & Fasteners
- Self-Lubricating Carbon Bearings
- Packing (Braided Acrylic yarn with special lubricant and Graphite)
- Optional FKM Lip Seal or NBR Lip Seal
- For Mechanical Seals, see Model OBN13HDME
- For Heavy Pully Loads, see Model OBN13HDPE

Liquids and Temperature

Service life will be increased substantially if the liquid pumped is clean and has a 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 acrylic graphite packing can be pumped. Optional S5 FKM lip seal has NBR backup and stainless case. Solvent resistant packings and FKM packings are also available, check with Oberdorfer factory. When possible, flush the pump with water after using.

Performance

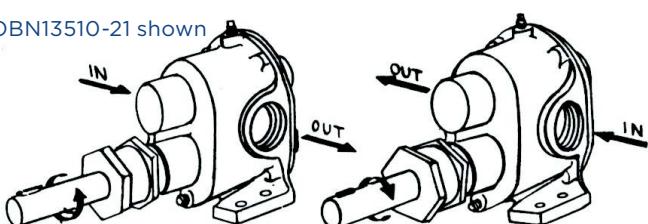


Temperature extremes are detrimental to service life and should be avoided. Basic metals of construction allow temperature range of -40° to 204°C. The acrylic graphite packing is rated to 260° C, the FKM lip seal is rated to 149° C. Freezing liquid in the pump can deform or damage the pump. Viscous liquids such as molasses or oils require a lower pumping speed, in extreme cases as low as 200 RPM. Consult factory for recommended speeds and increased horsepower requirements. Large suction lines are required to prevent cavitation which can cause pump destruction.

Liquids with specific gravities heavier than water such as dry cleaning fluids require an increase in motor horsepower directly proportional to the increase in specific gravity over water.

Rotation

OBN13510-21 shown





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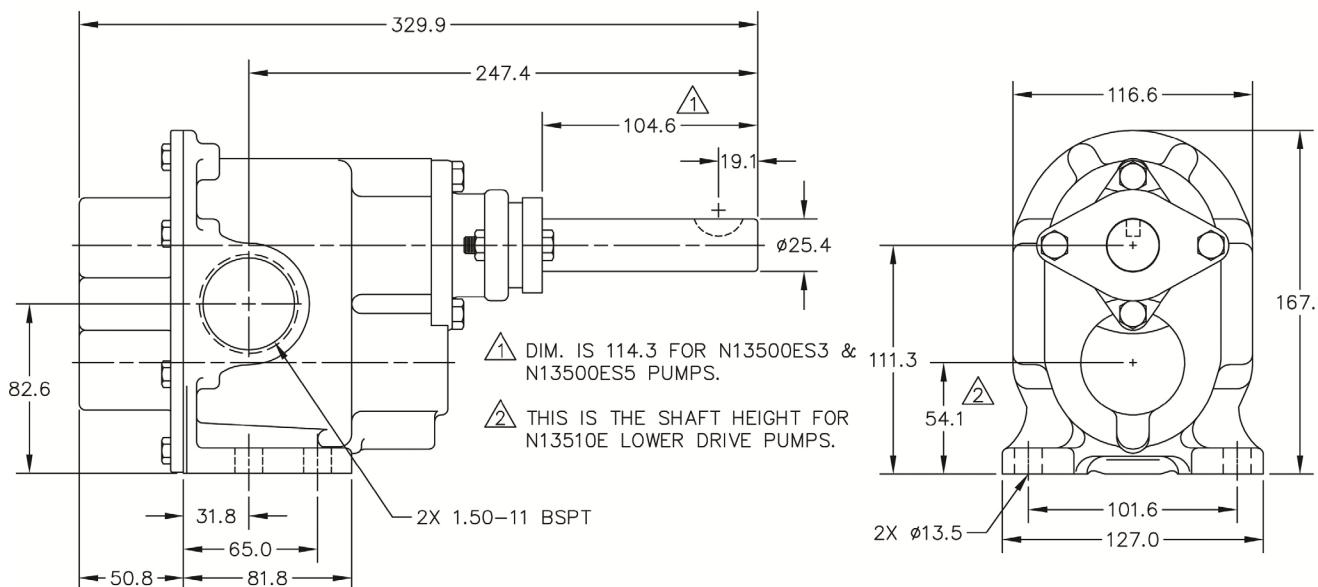
Drive

Either direct drive with flexible coupling or pulley drive can be used. For pulley driven pumps a pillow block bearing must be used at the drive shaft end to absorb the belt forces. The drive shaft is sufficiently long enough to accommodate a pillow block in addition to the pulley. Correct alignment is absolutely essential for satisfactory pump life. Recheck alignment after the piping has been connected to the pump.

Suction Lift

A rotary gear pump is capable of lifting water on the suction side as high as 6 meters. Though gear pumps are self-priming, a foot valve is recommended. For pumping water directly from streams or ponds, a wire mesh strainer must be used at the beginning of the suction line to prevent stones from entering the pump. Strainer and foot valve are commercially available as combination units.

Dimensions



IR Ingersoll Rand

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



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Exploded View

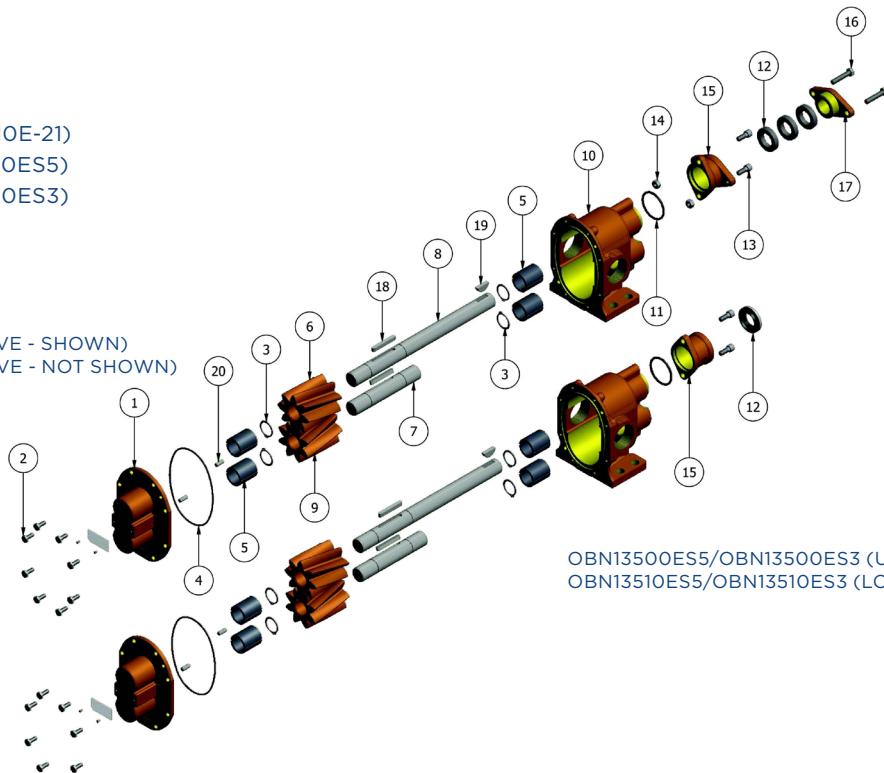
MODEL

OBN13500E-21 (OBN13510E-21)

OBN13500ES5 (OBN13510ES5)

OBN13500ES3 (OBN13510ES3)

OBN13500E-21 (UPPER DRIVE - SHOWN)
OBN13510E-21 (LOWER DRIVE - NOT SHOWN)



OBN13500ES5/OBN13500ES3 (UPPER DRIVE - SHOWN)
OBN13510ES5/OBN13510ES3 (LOWER DRIVE - NOT SHOWN)

	1	2	3	4	5	6	7	8	9	10	11	12a
	Cover	Screw	Snap Ring	O-Ring	Bearing	Drive Gear	Idle Shaft	Drive Shaft	Idle Gear	Body	O-Ring	Packing
Model	Qty. 1	Qty. 8	Qty. 4	Qty. 1	Qty. 4	Qty. 1	Qty. 1	Qty. 1	Qty. 1	Qty. 1	Qty. 1	Qty. 3
OBN13500E-21	OB9333NN5N	OB5393	OB7651	OB9797-158	OB5108	OB9854	OB7653	OB5176	OB9855	OB9332NH7N	OB6515	OB7624
OBN13510E-21										OB9332NH8N		
OBN13500ES5										OB9332NH7N	OB9797-224	N/A
OBN13510ES5										OB9332NH8N		
OBN13500ES3										OB9332NH7N		
OBN13510ES3										OB9332NH8N		

	12b	13	14	15	16	17	18	19	20	21	22	Repair Kit							
	Lip Seal	Screw	Nut	Gland	Screw	Seal Adapter	Key	Key	Dowel Pin	Tag	Tag Screw								
Model	Qty. 1	Qty. 2	Qty. 2	Qty. 1	Qty. 2	Qty. 1	Qty. 2	Qty. 1	Qty. 2	Qty. 1	Qty. 2								
OBN13500E-21	N/A	OB9905	OB8395	OB7451	OB9904	OB5975	OB5576	OB8597	OB9344	OB9345	OB10643								
OBN13510E-21																			
OBN13500ES5	OB7262	N/A	N/A	9853	OB6827	N/A	OB5975	OB5576	OB8597	OB9344	OB9345	OB12269							
OBN13510ES5																			
OBN13500ES3	OB6500	N/A	N/A	9853								TBD							
OBN13510ES3																			

Repair kit contains 3, 4, 5, 6, 7, 8, 9, 12 & 18.

For shaft and gear subassemblies only refer to kit OB12021.



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