

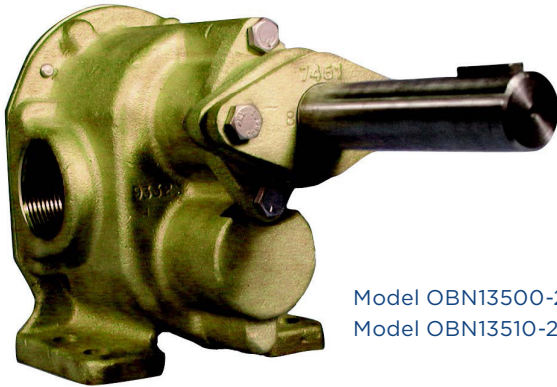


**OBERDORFER®**

An Ingersoll Rand Business

## N13500 | N13510 Series

### Bronze Pedestal Rotary Gear Pumps



Model OBN13500-21 Upper Drive  
Model OBN13510-21 Lower Drive

### Features

- 1-1/2" NPT Ports
- Temp. Range: -40 - 500°F
- 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 OBN13HDM
- For Heavy Pully Loads, see Model OBN13HDP

### Liquids and Temperature

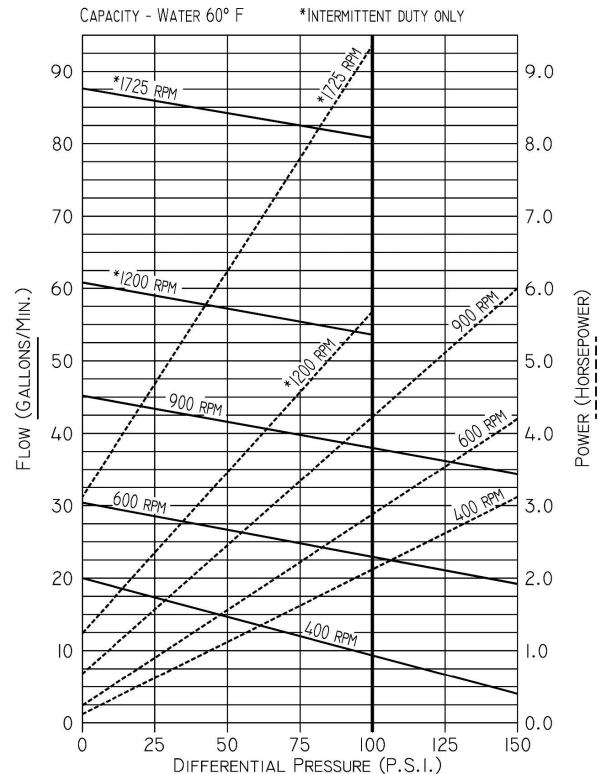
Service life will be increased substantially if the liquid pumped is clean and has a lubricity value.

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

Capacity Water at 70°F

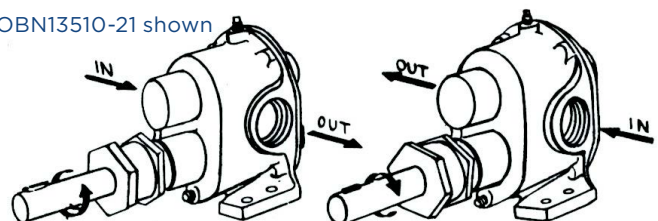


Temperature extremes are detrimental to service life and should be avoided. Basic metals of construction allow temperature range of -40° to 400° F. The acrylic graphite packing is rated to 500° F, the FKM lip seal is rated to 300° F. Freezing liquid in the pump can deform or damage the pump. Viscous 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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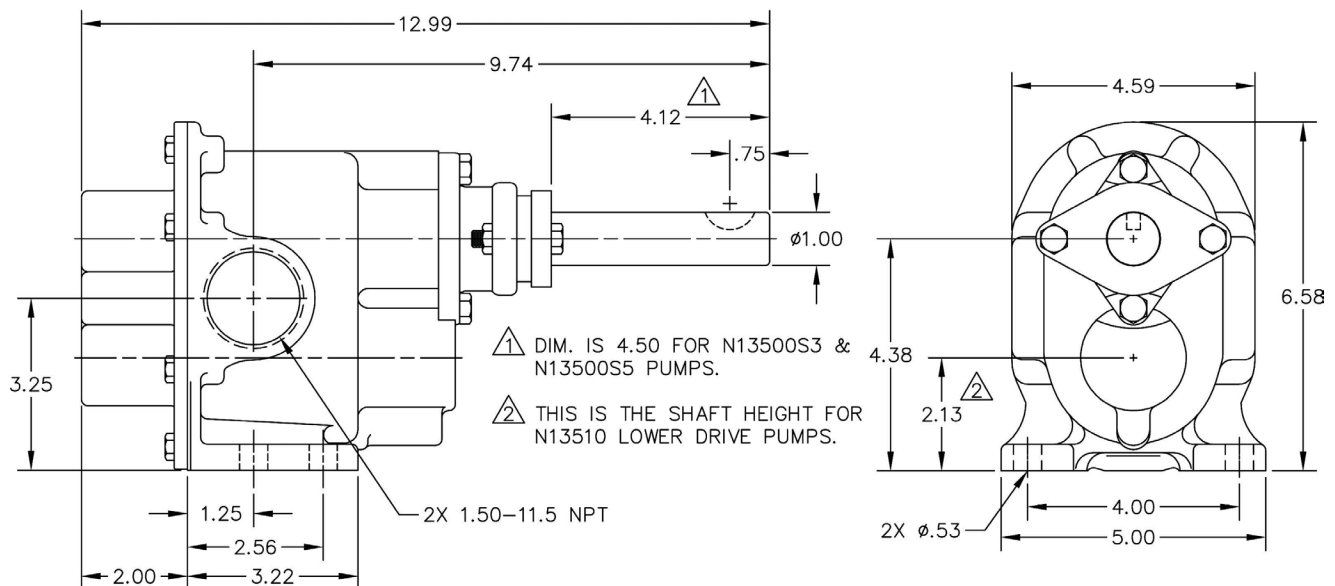
## Drive

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 20 feet. 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



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



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## Exploded View

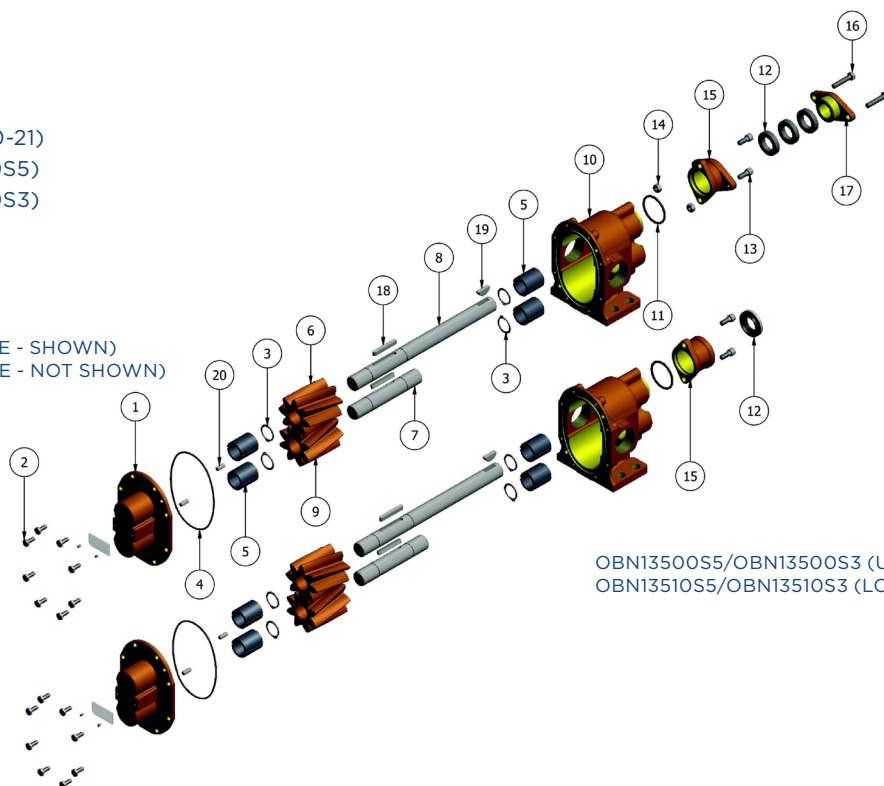
### MODEL

OBN13500-21 (OBN13510-21)

OBN13500S5 (OBN13510S5)

OBN13500S3 (OBN13510S3)

OBN13500-21 (UPPER DRIVE - SHOWN)  
OBN13510-21 (LOWER DRIVE - NOT SHOWN)



OBN13500S5/OBN13500S3 (UPPER DRIVE - SHOWN)  
OBN13510S5/OBN13510S3 (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
OBN13500-21	OB9333NN5N	OB5393	OB7651	OB9797-158	OB5108	OB9854	OB7653	OB5176	OB9855	OB9332NH7N	OB6515	OB7624
OBN13510-21										OB9332NH8N		
OBN13500S5										OB9332NH7N	OB9797-224	N/A
OBN13510S5										OB9332NH8N		
OBN13500S3										OB9332NH7N		
OBN13510S3										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										
OBN13500-21	N/A	OB9905	OB8395	OB7451		OB9904						OB10643									
OBN13510-21																					
OBN13500S5	OB7262	N/A	N/A	9853	OB6827	N/A	OB5975	OB5576	OB8597	OB9344	OB9345	OB12269									
OBN13510S5																					
OBN13500S3	OB6500																				TBD
OBN13510S3																					

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

For shaft and gear subassemblies only refer to kit 12021.



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