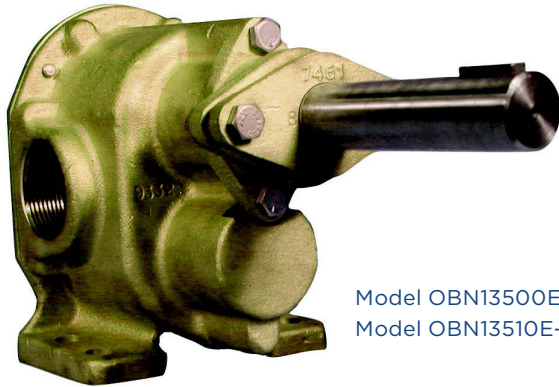




OBERDORFER®

An Ingersoll Rand Business

N13500E | N13510E Series Bronze Pedestal Rotary Gear Pumps



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

Features

- 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 N13HDME
- For Heavy Pully Loads, see Model N13HDPE
- 1 1/2" BSPT Ports

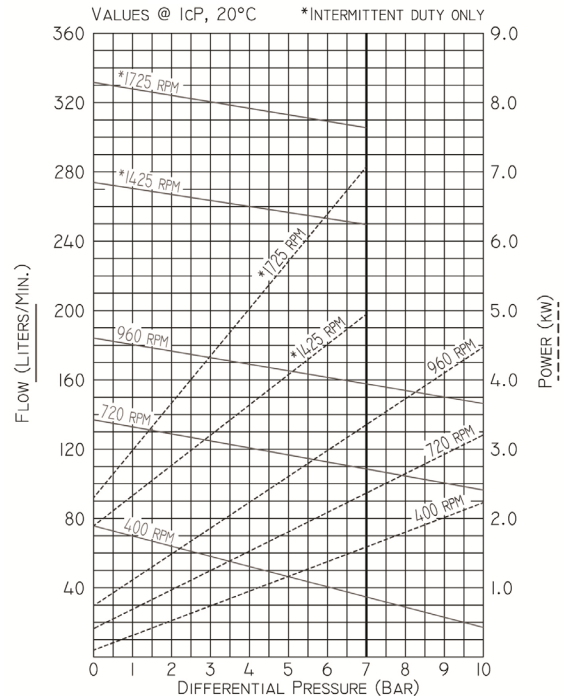
Liquids and Temperature

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 Values @ 1cP, 20° C

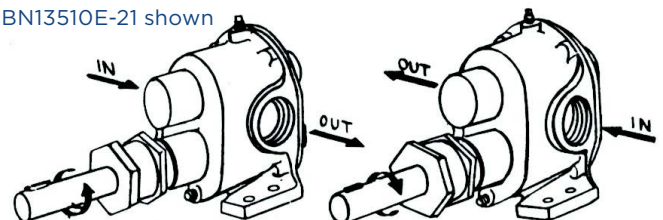


Temperature extremes are detrimental to service life and should be avoided. Basic metals of construction allow temperature range of -40° to 204°C. The acrylic graphite packing is rated to 260°C, the FKM lip seal is rated to 149°C. Freezing liquid in the pump can deform or damage the pump. Viscous liquids 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

OBN13510E-21 shown





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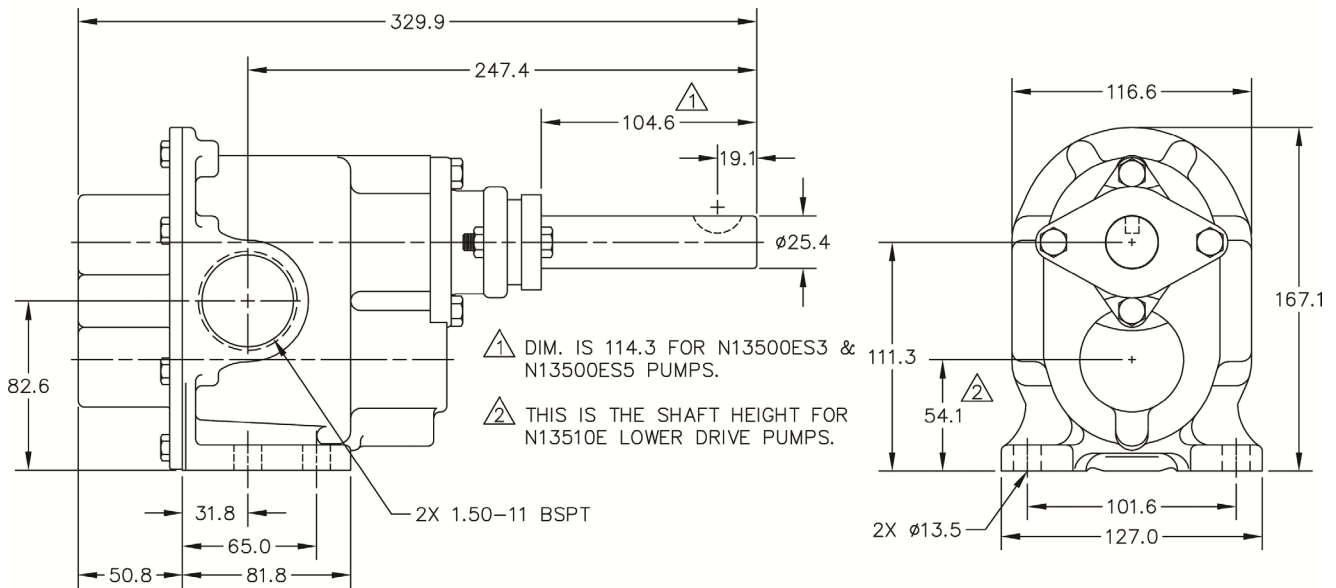
Drive

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



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



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Exploded View

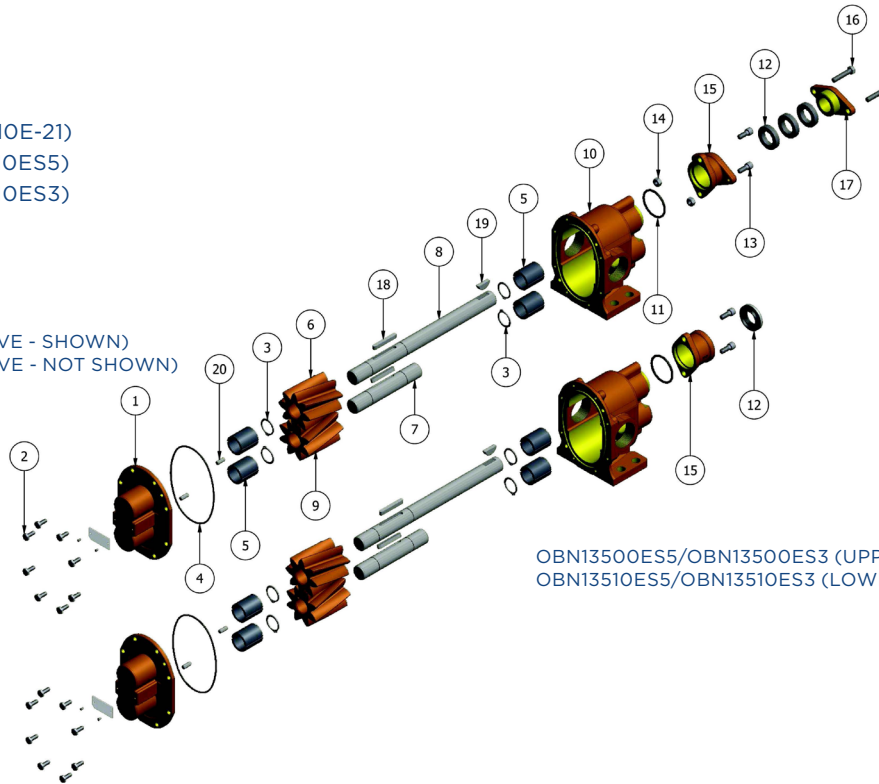
MODEL

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 | | | | | | | | | | OB9332NH7NE | OB6515 | OB7624 |
| OBN13510E-21 | | | | | | | | | | OB9332NH8NE | | |
| OBN13500ES5 | OB9333NN5N | OB5393 | OB7651 | OB9797-158 | OB5108 | OB9854 | OB7653 | OB5176 | OB9855 | OB9332NH7NE | OB9797-224 | N/A |
| OBN13510ES5 | | | | | | | | | | OB9332NH8NE | | |
| OBN13500ES3 | | | | | | | | | | OB9332NH7NE | | |
| OBN13510ES3 | | | | | | | | | | OB9332NH8NE | | |

| | 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 | | | | | | OB9904 | | | | | | OB10643 |
| OBN13510E-21 | | OB9905 | OB8395 | OB7451 | | | | | | | | |
| OBN13500ES5 | OB7262 | N/A | N/A | 9853 | OB6827 | N/A | OB5975 | OB5576 | OB8597 | OB9344 | OB9345 | OB12269 |
| OBN13510ES5 | | | | | | | | | | | | |
| OBN13500ES3 | OB6500 | | | | | | | | | | | TBD |
| OBN13510ES3 | | | | | | | | | | | | |

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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