

# BRONZE PEDESTAL ROTARY GEAR PUMPS

## GEAR PUMPS SERIES N13500



### FEATURES

- Bronze Corrosion Resistant Castings
- Stainless Steel Shafts & Fasteners
- Self-Lubricating Carbon Bearings
- Packing (Braided Acrylic yarn with special lubricant and Graphite)
- Optional fluoroelastomer Lip Seal
- For Mechanical Seals, see Models N13HDM

### 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.

### LIQUIDS AND TEMPERATURE

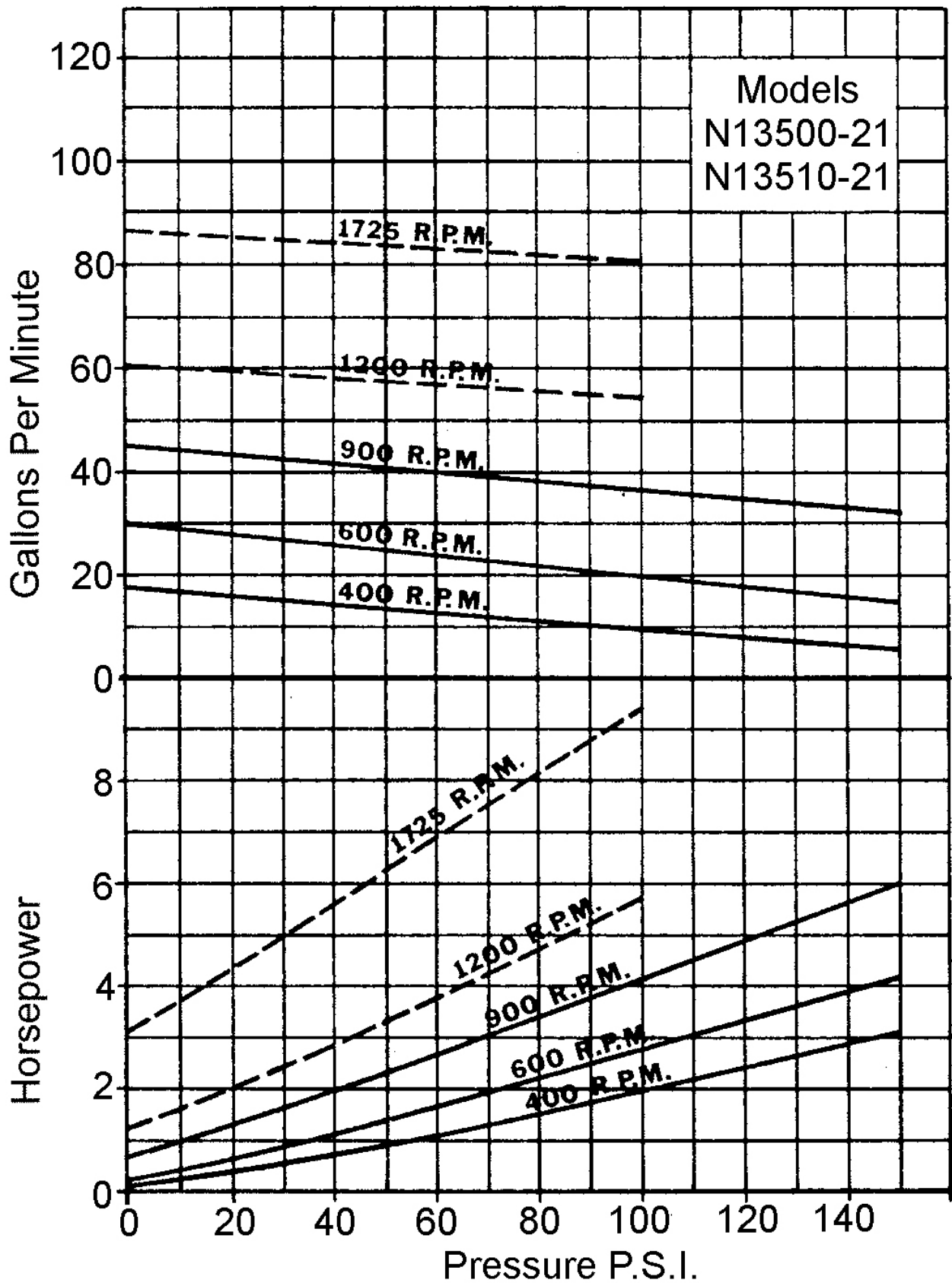
Service life will be increased substantially if the liquid pumped is clean and has a lubricity value. These pumps have extremely close tolerances. Fine abrasives like sand, silt, or powders in suspension will destroy pumping ability. Liquids compatible with bronze, stainless steel and the acrylic graphite packing can be pumped. Optional S5 fluoroelastomer lip seal has Polytetrafluoroethylene (PTFE) backup and stainless case. Solvent resistant packing and Polytetrafluoroethylene (PTFE) packing are also available. See a chemical compatibility table or check factory. When possible, flush the pump with water after using. Temperature extremes are detrimental to service life and should be avoided. Basic metals of construction allow temperature range of -40°F to 400° F. the acrylic graphite packing is rated to 500°F, the fluoroelastomer 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 R.P.M. 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.

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## PERFORMANCE

# CAPACITY Water 60°F

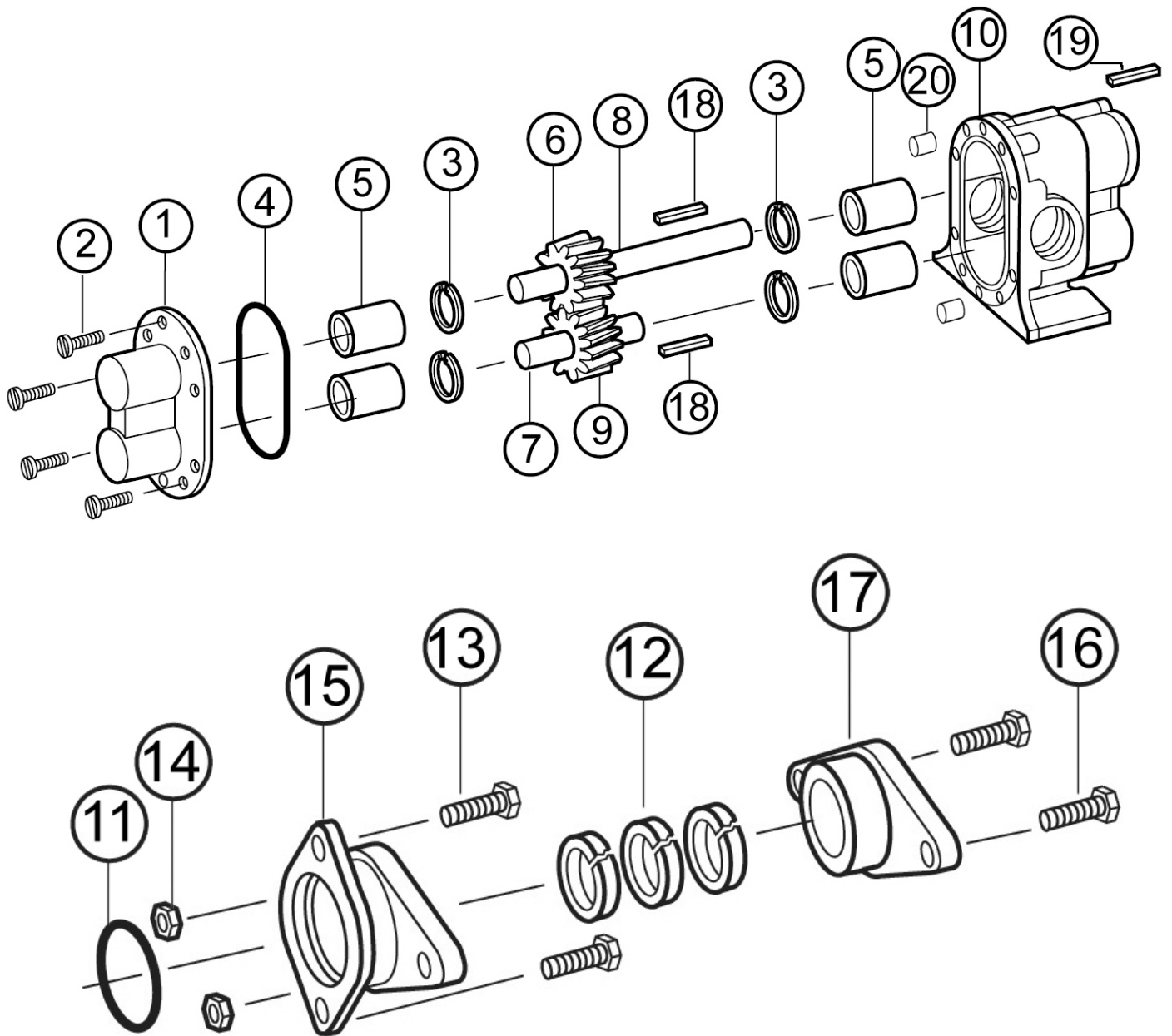


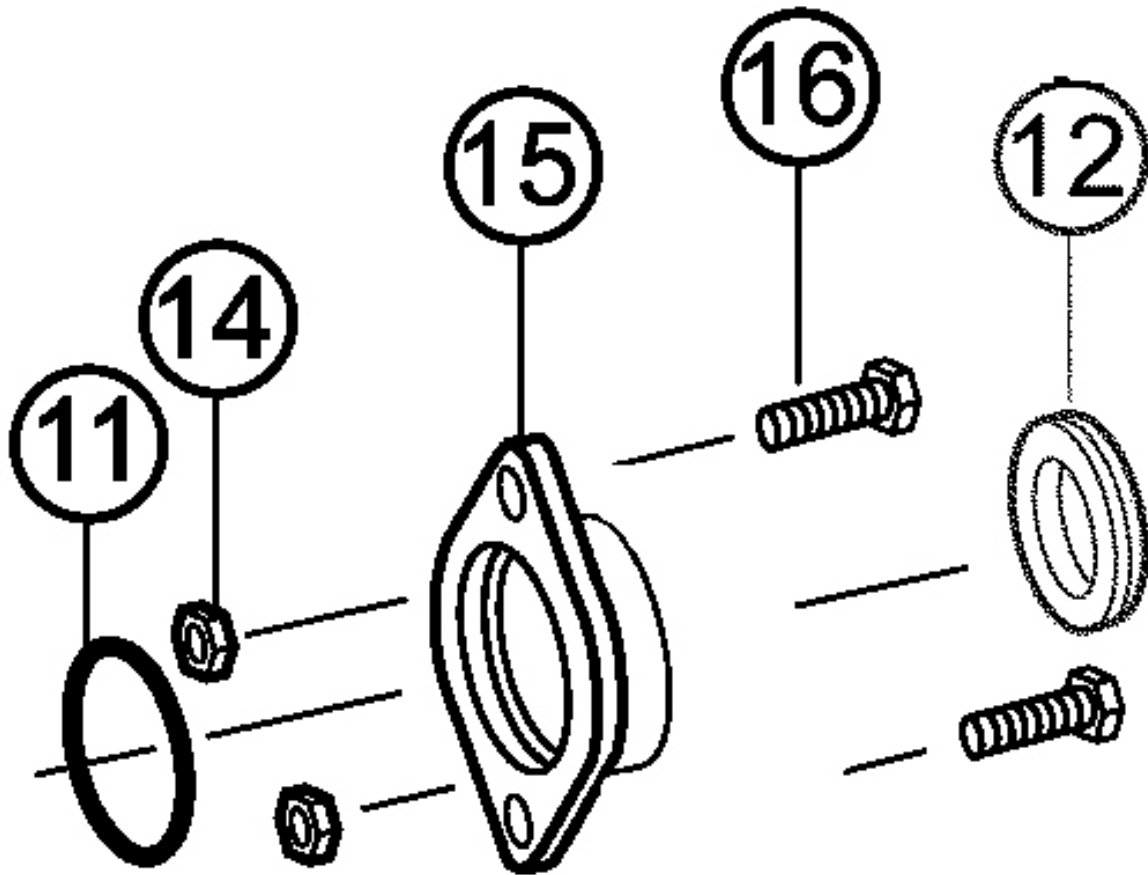
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## **SUCTION LIFT**

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.

# EXPLODED VIEW AND PARTS LIST





	1	2	3	4	5	6	7	8	9	10	11	12a	12b	13	14	15
	Cover	Screw	Snap Ring	O-Ring	Bearing	Drive Gear	Idle Shaft	Drive Shaft	Idle Gear	Body	O-Ring	Packing	Lip Seal	Screw	Nut	Gland
Pump No.	1 Req'd	8 Req'd	4 Req'd	1 Req'd	4 Req'd	1 Req'd	1 Req'd	1 Req'd	1 Req'd	1 Req'd	1 Req'd	3 Req'd	1 Req'd	2 Req'd	2 Req'd	1 Req'd
N13500-21	9333NN5N	5393	7651	9797-158	5108	9854	7653	5176	9855	9332NH7N	6515	7624	N/A	5916	8395	7451
N13510-21	9333NN5N	5393	7651	9797-158	5108	9854	7653	5176	9855	9332NH8N	6515	7624	N/A	5916	8395	7451
N13500S5	9333NN5N	5393	7651	9797-158	5108	9854	7653	5176	9855	9332NH7N	9797-224	N/A	7262	5916	N/A	9853
N13510S5	9333NN5N	5393	7651	9797-158	5108	9854	7653	5176	9855	9332NH8N	9797-224	N/A	7262	5916	N/A	9853

Repair Kits contain items 3, 4, 5, 6, 7, 8, 9, 12 & 18.

16	17	18	19	20	Repair Kit
Screw	Seal Adapter	Key	Key	Dowel Pin	
2 Req'd	1 Req'd	2 Req'd	1 Req'd	2 Req'd	
9905	9904	5975	5576	8597	10643
9905	9904	5975	5576	8597	10643
N/A	N/A	5975	5576	8597	12269
N/A	N/A	5975	5576	8597	12269

# DIMENSIONS

