

# **H994** - High Pressure Bronze Close Coupled Rotary Gear Pumps

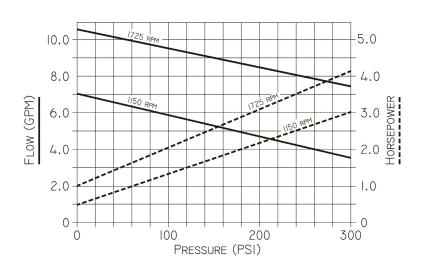


#### **Features**

- High strength Navy M Bronze housing
- Rugged bronze spur gears
- Hardened stainless steel shafts
- Silicon carbide bearings
- 300 PSI pressure capability
- Mechanical seal
- Oring housing seal
- Bidirectional
- Easy field assembly to footed NEMA
  C- Face and IEC B14 Motors\*

### Performance

Capacity - Water 70°F



### **General Description**

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.

### **Drive Arrangement**

Close coupled pumps are mounted directly to the electric motor by means of a suitable adapter bracket. The pump drive shaft is connected to the motor shaft by a flexible coupling.

### 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 pigments 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 mechanical seals.

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

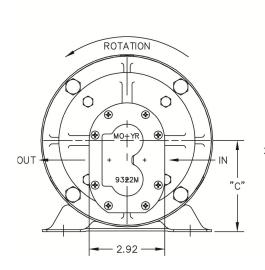
As a general rule, the suction lift should be kept at an absolute minimum by placing the pump as close to the liquid source as possible. A gear pump in new condition can lift 20 feet of water in the suction line. A foot valve (preferably with built-in strainer) is recommended at the beginning of the 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 3 feet), or for viscous liquids, the pipe size should be at least one size or two sizes larger than the pump inlet port.

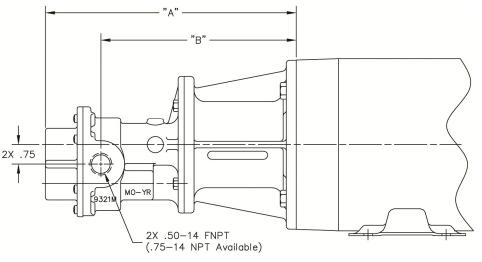
### Rotation and Flow Direction

Unless otherwise specified, the pump motor unit is supplied by the factory for shaft rotation clockwise from shaft end. Reversing the motor rotation will reverse the "in" and "out" ports.

To reverse single phase motors, find instructions on the inside of the junction box cover or on the name plate of the motor. Three phase motors are not wired for any particular rotation. They can be reversed by interchanging any two (2) wires of the three (3) wire leads.

#### **Dimensions**





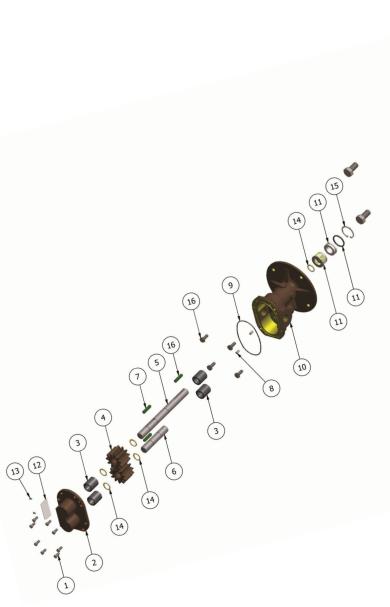
MOTOR/ADAPTER KIT DIMENSIONS (inches)						
MODEL	MOTOR FRAME	"A"	"B"	"c"		
OBH994S16 OR S17H	56C	9.66	7.53	3.50		
OBH994S16 OR S17J	143TC/145TC	9.66	7.53	3.50		
OBH994S16 OR S17K	182TC/184TC	10.48	8.34	4.50		
OBH994S16 OR S17L	213TC/215TC	10.48	8.34	5.25		

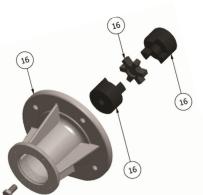
ADAPTER KITS					
ADAPTER KIT	PART NUMBER	DESCRIPTION			
Н	OB11299	56C Frame			
J	OB11300	143TC/145TC			
K	OB11301	182TC/184TC			
L	OB11302	213TC/215TC			



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## **Exploded View**





PARTS LIST								
Item No.	December Obs		PUMP MODEL					
item No.	Description	Qty.	ОВН994S16	ОВН994S17				
1	Screw	8	OB5385					
2	Cover	1	OB9322MN5N					
3	Bearing	4	OB3116					
4	Spur Gear	2	OB3639					
5	Drive Shaft	1	OB3638					
6	Idle Shaft	1	OB2936					
7	Key	2	OB6567					
8	Dowel Pin	2	OB8885					
9	O-Ring	1	OB9797-041					
10	Body	1	OB9321MD4N					
11	Mechanical Seal	1	OB32015	OB32017				
12	Tag	1	OB9344					
13	Tag Screw	2	OB9345					
14	Retaining Ring	5	OB5382					
15	Retaining Ring	1	OB5374					
16	Adapter Kits		See Chart					
	*Popair Kits		OP12460	OP12461				

Due to ongoing product improvements, data shown here is subject to change without notice. Contact Oberdorfer Pumps for latest specifications.

