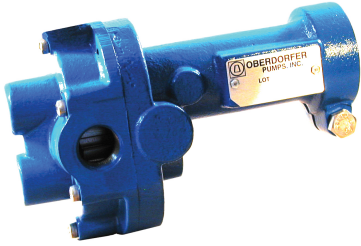


# GEAR PUMPS

## GEAR PUMPS SERIES C991



### FEATURES

- Ductile Iron Construction
- Stainless Steel Shafts
- Steel Gears
- Nitrile Mechanical Seal (Optional fluoroelastomer or EPDM Mechanical Seal)
- Process lubricated carbon bearings
- O-ring cover seal for maximum leak protection
- Durable paint finish
- Easy Field Assembly to a variety of motor frames
- Compact dimensions

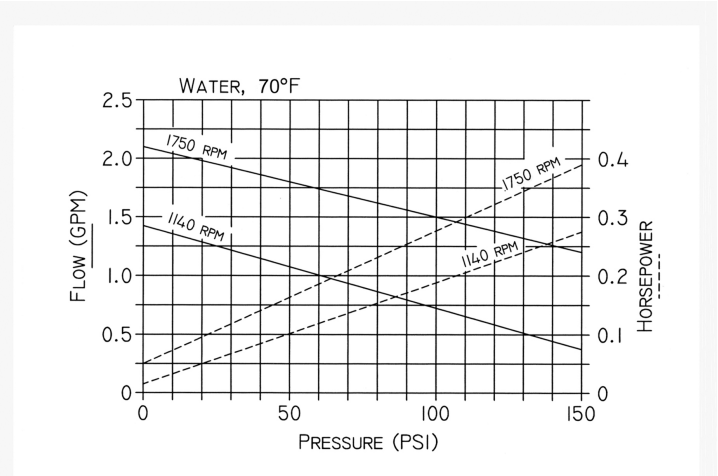
### DRIVE

These close-coupled pumps mount directly to a full range of NEMA and IEC C-face motors by means of a suitable adapter bracket. The clamp style cover also allows adapterless close coupling to modified 48 Frame 1/3rd and 1/2 HP motors. The pump drive shaft is connected to the motor shaft by a flexible coupling. Complete pump and motor units are available.

### 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. The recommended liquid temperature range is 32oF to 140oF for longest pump life. If more extreme temperature conditions exist, our factory should be consulted. 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. Recommended liquid temperature range is 32°F to 225°F (Nitrile).

## PERFORMANCE

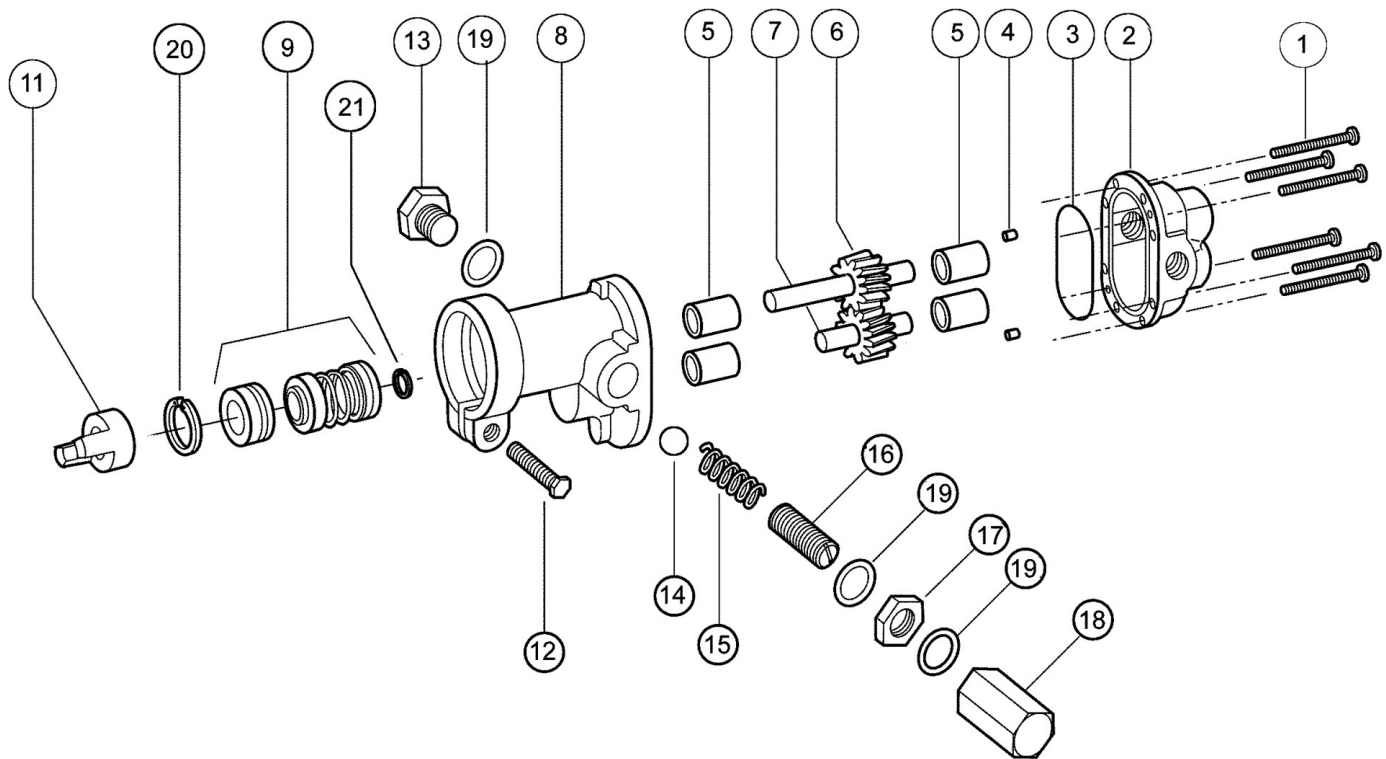


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## **SUCTION LIFT**

Whenever possible, place the pump at an elevation below the liquid source. However since these positive displacement external gear pumps will generate 20" HG lift, this is not a requirement. As a general rule, place the pump as close to the liquid source as possible. 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), the pipe size should be at least one size or two sizes larger than the pump inlet port.

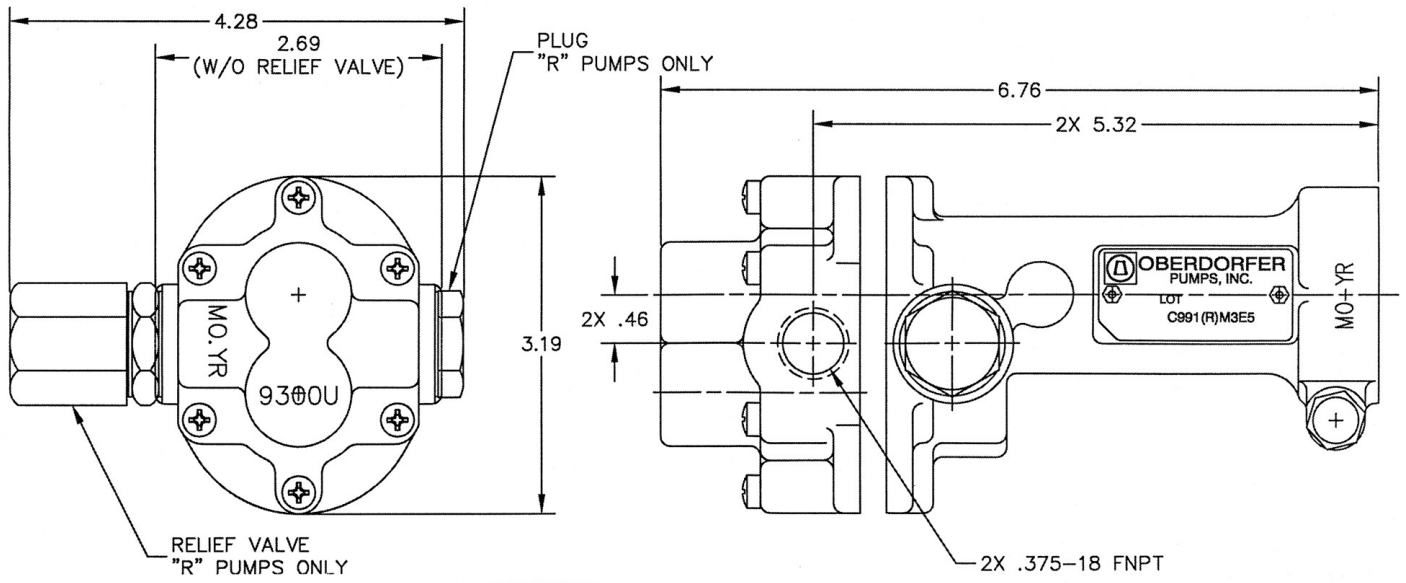
## EXPLODED VIEW AND PARTS LIST



Adapter Kit	Kit Number	Description
M	10562	48 Frame
N	10816	56 Frame
P	11722	S56 Frame
Q	11331	56C Frame (to 3/4 HP)
C	11331H	56C Frame (above 3/4 HP)
F	11332	IEC71
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# DIMENSIONS

C991(R)M3E5



## ROTATION AND RELIEF VALVE

These pumps are bidirectional. The standard pump motor unit is set up for normal rotation (counter clockwise when viewing the pump from the shaft end). Reversing the motor rotation will reverse the "in" and "out" ports and also requires changing the relief valve location.

C991R is equipped with an integrated relief valve setup for internal bypassing. The relief valve must always be located on the inlet side of the pump. This relief valve is not intended to be a metering or flow control device. Its purpose is to function as a discharge pressure relief to guard against intermittent downstream system restrictions. Overheating can occur within 5 to 10 minutes if the discharge line is completely shut off. The pressure relief setting is not set at the factory. To increase pressure, turn the relief valve adjusting screw in a clockwise direction.

