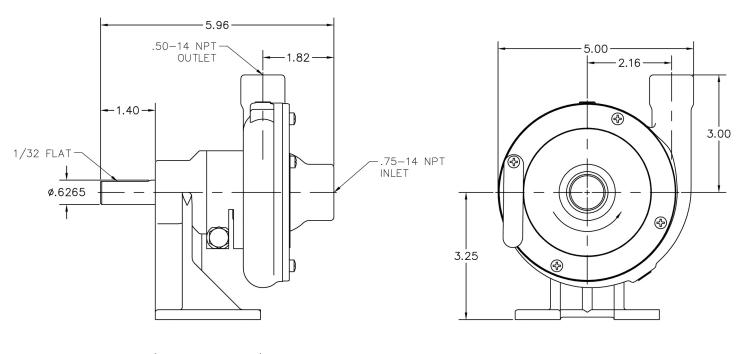
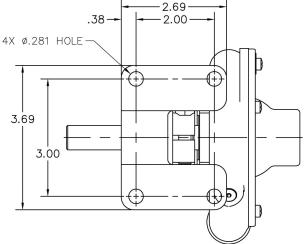
## **Bronze Centrifugal Pumps**

**60P Series** 

### **Dimensions**







by Gardner Denver

5900 Firestone Drive, Syracuse, NY 13206 Phone: (800) 448-1668; (315) 437-0361 • Fax: (315) 463-9561 Visit www.oberdorferpumps.com to find in-depth descriptions of the world's leading high-quality, dependable pumps.

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

60PSeries.032015



by Gardner Denver

# **Bronze Centrifugal Pumps**

**60P Series** 

Pipe Size INLET 3/4" NPT, **OUTLET 1/2" NPT** 



#### **FEATURES:**

- Rugged Bronze Construction
- Quiet Operation
- O-Ring Housing seal eliminates gasket problems
- Mechanical Seal Carbon/Ceramic
- NBR
- FKM (S10) or PTFE (S11) options
- Designed for Pulley Drive
- Heavy Duty Integral Steel Shaft and Ball Bearings
- Handles Contaminated Liquids
- No bearing lubrication required
- For Close Coupled Style, see Model 600

### **USES:**

Silent, efficient, centrifugal pumping is ideal for convenient equipment location in offices, laboratories, public areas, and living quarters. Long trouble-free service life has made centrifugal pumps acceptable for industrial uses or wherever clean or contaminated liquid compatible with bronze is to be transferred or handled.

The 60P centrifugal pump has an external ball bearing isolated from the liquid being pumped. The ball bearing is greased and sealed for life, requiring no maintenance

#### **CHARACTERISTICS:**

Oberdorfer centrifugal pumps have a single rotating metal impeller. Liquid enters at the center and is thrown outward radially by centrifugal force. The impeller is not

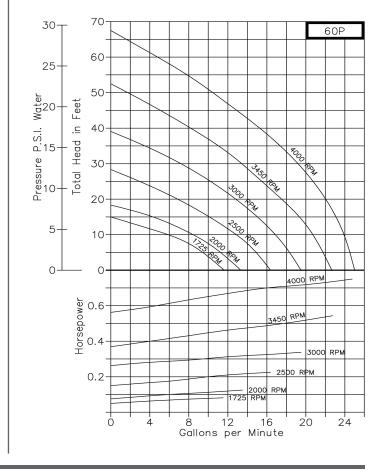
in contact with other pump parts resulting in quiet, efficient, pumping action. The flow produced is not positive which permits the discharge line to be shut off completely without danger of overloading motors or bursting lines. Consequently a relief valve is not required.

The liquid flow is proportional to the pump speed-the higher the speed the greater the flow. Horsepower required varies directly as flow and pressure. Maximum horsepower is required with a wide open discharge line. This is the point of maximum flow. With a throttled discharge, the flow decreases at a greater rate than the pressure increases thereby requiring less horsepower at the higher pressures. This is known as an "unloading" feature of the pump.

This centrifugal pump is not self priming. Normally these pumps must be installed below the liquid level so that the liquid flows to the pump by gravity. However, if a foot valve is used at the beginning of the suction line and all air is bled from the suction line and pump by careful manual priming, these pumps will lift liquid

### **PERFORMANCE:**

**CAPACITY WATER AT 70°F** 



# **Bronze Centrifugal Pumps**

**60P Series** 



### USES (CONT'D):

on the suction side up to 15 ft. Such a system is only as positive as the ability of the foot valve to seal and keep the suction line and pump full of liquid. If the foot valve should leak, the pump will not prime.

The pedestal centrifugal pumps can be direct driven by electric motors at either 3450 R.P.M. or 1725 R.P.M. Performance for both speeds are shown in the curves above. The 60P pedestal centrifugal pump can be pulley driven at any desired intermediate speed.

Because centrifugal pumps are more efficient at higher shaft speeds, pumping of viscous or thick liquids is difficult. It is possible to lose as much as 40% pump performance when attempting to pump liquids of viscosity equal to S.A.E. 30 oil at room temperature. S.A.E. 30 oil at room temperature has a viscosity of 2000 Saybolt Seconds Universal. More viscous liquids are not recommended for centrifugal pumps.

Heavy liquids can be pumped; however, they demand more horsepower in direct ratio to the weight of water. For example, carbon tetrachloride has a specific gravity of 1.6 which means it is 1.6 times heavier than water and the horsepower required is 1.6 times water horsepower.

### LIQUIDS AND TEMPERATURES:

Bronze pumps are suitable for most common liquids in the PH-range from 4 to 11.

The temperature limit for bronze pumps is  $212^\circ$  F, higher temperatures are possible with FKM or PTFE seals. If in doubt, consult with factory.

### **SHAFT SEAL OPTIONS:**

Mechanical Shaft Seals have NBR rubber components (212° F max), for temperatures up to 400° F a FKM seal must be selected by adding code S10 to the pump number. To handle strong solvents and chemicals (compatible with bronze), a PTFE seal (500° F max) must be specified by adding code S11 to the pump number. In most instances, FKM and PTFE seals are not field interchangeable with the standard NBR seals. Call factory for details.

### **Parts List**

	1	2	3	4	<b>5</b> a	5b	5c	6	7	8	9	10	11	12	
	Screw	Cover	O-Ring	Impeller	Seal Head	Seal Wearface	Seal Seat or O-Ring	Plug	Body	Screw	Ret. Ring	Shaft & Bearing	Pedestal	Name Plate	Repair Kit*
Model	Qty. 4	Qty. 1	Qty. 1	Qty. 1	Qty. 1	Qty. 1	Qty. 1	Qty. 2	Qty. 1	Qty. 1	Qty. 1	Qty. 1	Qty. 1	Qty. 1	
60P	5385	5168-2	9797-043	5219	2913	529201		6052	7515-2	5595	5741	5348	5215	7736	10692
60PS-10	5385	5168-2	9797-043	6033	6141	6142	6143	6052	7515-2	5595	5741	5348	5215	7736	10994
60PS-11	5385	5168-2	9355-043	6033	32211			6052	7515-2	5595	5741	5348	5215	7736	10966

<sup>\*</sup> Items 3, 4, 5 (5a, 5b & 5c) and 10 are included in the Repair Kits

## **Exploded View**

