

# BRONZE OR ALUMINUM PEDESTAL CENTRIFUGAL PUMPS



**OBERDORFER PUMPS**  
*A Subsidiary of Thomas Industries Inc.*

**MODELS**  
**800**  
**800B**

**PIPE SIZE: INLET 1 1/4", OUTLET 1"**



**MODEL 800 ALUMINUM**  
**MODEL 800B BRONZE**

## FEATURES

- n Bronze or Aluminum Construction
- n Heavy Duty Ball Bearings
- n Designed for Pulley Drive
- n Mechanical Seal
- n Quiet Operation
- n Handles Contaminated Liquids
- n No Lubrication Required
- n Closed Impeller -- High Discharge Pressure

## USES

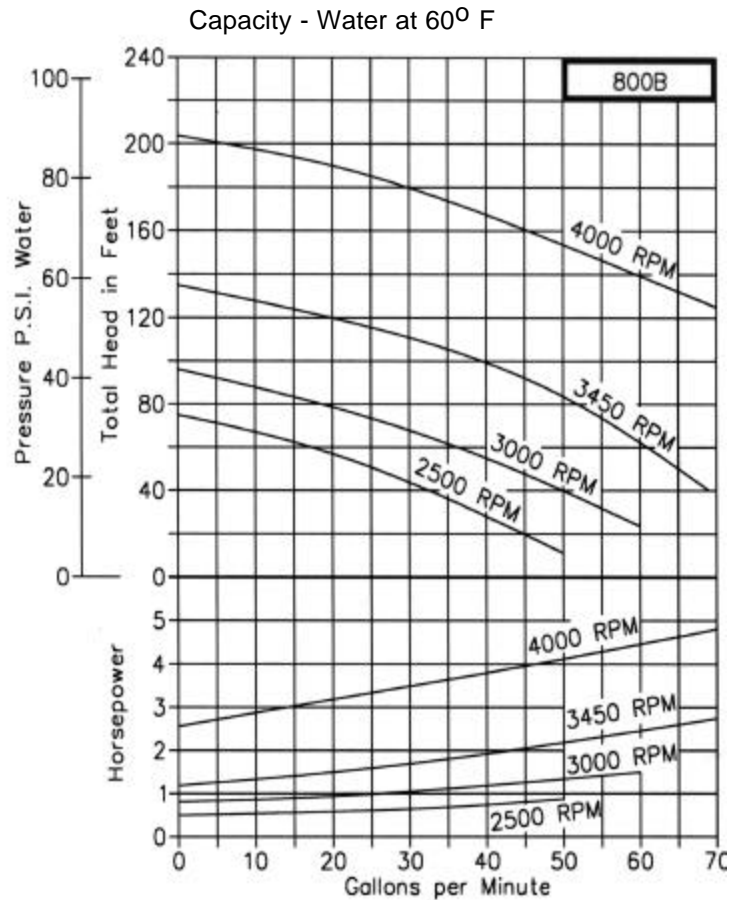
Silent, efficient, centrifugal pumping is ideal for convenient equipment location in offices, laboratories, public areas, and living quarters. Long trouble-free service life has made centrifugal pumps acceptable for industrial uses or wherever clean or contaminated liquid is to be transferred or handled.

The 800 and 800B centrifugal pumps have external ball bearings isolated from the liquid being pumped. The ball bearings are grease 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 varies directly as 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 decreased 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 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 and gasoline engines or pulley driven at intermediate speeds as listed in the capacity chart above.

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 Centifugal Universal. More viscous liquids are not recommended for centrifugal pumps.

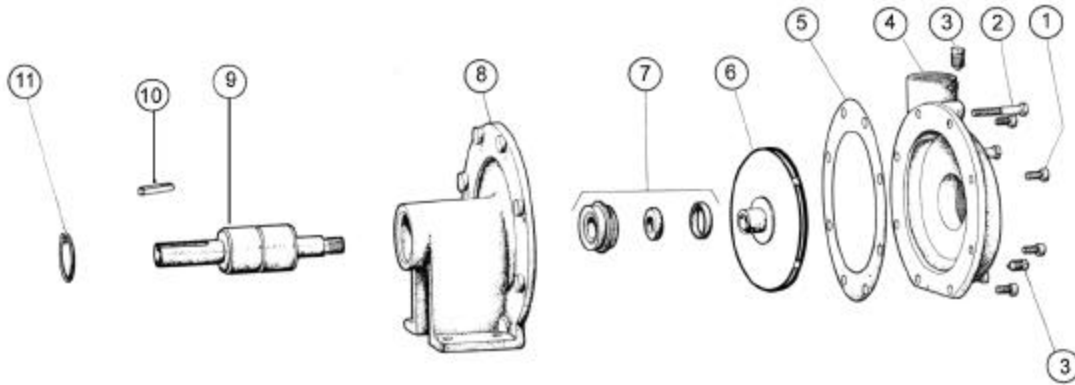
Heavy liquids can be pumped; however, they demand more horsepower in direct ratio to the weight of water. For example, carbon tetrachloride has a specific gravity of 1.6 which means it is 1.6 times heavier than water and the horsepower required is 1.6 times water horsepower.

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## EXPLODED VIEW AND PARTS LIST



Pump No.	1	2	3	4	5 <sup>1</sup>	6 <sup>1</sup>	7 <sup>1</sup>	8	9 <sup>1</sup>	10	11	Repair Kit
	Screw	Screw	Plug	Body	Gasket	Impeller	Seal Assembly	Pedestal	Shaft & Bearing	Key	Ret. Ring	
	4 Req'd	3 Req'd	4 Req'd	1 Req'd	1 Req'd	1 Req'd	1 Req'd	1 Req'd	1 Req'd	1 Req'd	1 Req'd	
800	5411	---	5908	6403	6426	32213	32210	6404	6425	6567	5650	10857
800B	5411	---	5395	7249	6426	32270	32210	7250	6425	6567	5650	10945

<sup>1</sup> Repair Kit contains items 5, 6, 7, & 10.

## DIMENSIONS

