CLOSE COUPLED BRONZE CENTRIFUGAL PUMP

OBERDORFER PUMPS
A Subsidiary of Thomas Industries Inc.

MODEL 109MB

PIPE SIZE INLET 1 1/4, OUTLET 1

PERFORMANCE

FEATURES
- All Bronze
- Stainless Steel or Monel Shaft for Marine Use
- Teflon® Barrier Seal to Protect Motor Bearings
- Carbon Face Mechanical Pumps Seals
- Viton(R)* or Teflon(R)* Pump Seals Available for Solvent Transfer
- Explosion Proof Motors Available
- Will Handle Contaminated Liquids
- Extremely Quiet
- A Standard in the Marine Air Conditioning Industry

LIQUIDS
The special pump alloys used provide corrosion resistance to many liquids including water, water solutions, and a wide range of commercial chemicals. Questions as to the chemical compatibility of special liquids should be referred to the factory.

Viscous liquids with a maximum viscosity of 2000 Saybolt Seconds Universal can be pumped. However, when pumping viscous liquids as compared with water, a reduction in flow and pressure occurs and the required horsepower rate increases.

Liquids heavier than water require additional horsepower in direct proportion to the increase in specific gravity. Liquids contaminated with small solids or abrasives can be handled, but a reduction in mechanical seal life must be expected.

CHARACTERISTICS
This close-coupled pump uses a standard NEMA C-Flange Jet Pump Motor with weld-on base and threaded shaft end to accept the pump impeller. Single phase motors are non-reversible and are wired for the proper pump rotation which is counter-clockwise looking at the inlet end of the pump. (See the dimensional drawing on back.) Three phase motors must be checked out for proper rotation when the pump is installed. Interchanging of any 2 wires in a 3-phase system will reverse motor rotation.

The pump uses a mechanical type shaft seal with a Buna N rubber element. It is suitable for water, oils, and some mild solvents and it is limited to 212°F and 75 P.S.I. Viton(R)* seals and Teflon(R)* seals are available for severe solvents and difficult chemicals.

These centrifugal pumps are not self-priming. They must be installed below the liquid level so that the liquid flows to the pump by gravity (flooded suction). However, if a foot valve is used at the beginning of the suction line and all air is bled from

*Viton® is a registered trademark of DuPont Dow Elastomers. Viton® or equivalent FKM will be used.
Teflon® is a registered trademark of DuPont. Teflon® or equivalent PTFE will be used.

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EXPLODED VIEW & PARTS LIST

DIMENSIONS

(continued from front)
the pump by manual priming, the pump will lift on the suction side up to 15 feet. Such a system relies entirely on a non-leaking foot valve for starting capability.

The flow of a centrifugal pump can be conveniently controlled by a throttling valve in the discharge line without the need for a relief valve. In centrifugal pumps, the horsepower demand will decrease as the pressure increases. Maximum horsepower occurs with a wide open discharge.