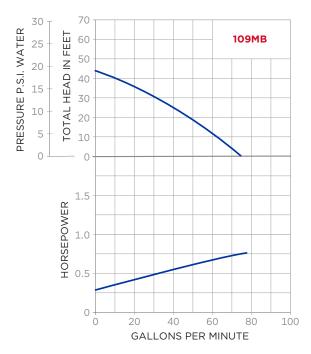


BRONZE CLOSE-COUPLED CENTRIFUGAL PUMP INLET 11/4" NPT, OUTLET 1" NPT

# Model 109MB

#### PERFORMANCE CAPACITY, WATER 70°F



## Features

- Rugged bronze construction
- A standard in the marine air conditioning industry
- Extremely quiet operation
- O-ring housing seal eliminates gasket problems
- Teflon barrier seal to protect motor bearings
- Handles contaminated liquids
- Discharge port orientation flexibility
- Mechanical seal: carbon/ceramic
  NBR, FKM, or PTFE options
- Pump heads mount to standard footed NEMA 56J jet pump motors
- 300 series Stainless Steel standard also optional Monel
- Multiple motor options available
- For industrial version, see Model 700 series

#### 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.



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#### 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 inlet end of pump. See the dimensional drawing on back. Three phase motors must be checked out for proper rotation when 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 NBR rubber element. It is suitable for water, oils, and some mild solvents and it is limited to 212°F and 75 PSI.

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 the pump by manual priming, the pump will lift on the suction side up to 15 feet. Such a system relies entirely on the 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.

#### MOTOR OPTIONS

MODEL	HP	SF	ENCLOSURE	PHASE	VOLTAGE	SHAFT CONSTRUCTION	MOTOR ITEM 15
109MB-J19	1/2	1.65	ODP	Single	115/230	416 SST	5860
109MB-J20	1/2	1.65	TEFC	Single	115/230	416 SST	7976
109MB-01J26	1/2	1.65	ODP	Single	115/230	Monel	32332
109MBP-01J58	1⁄2	1	TEFC	Three	208-230/460	Monel	33035
109MBP-M58	3/4	1.15	TEFC	Three	230/460	416 SST	7967





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## PARTS LIST

ITEM NO.	DESCRIPTION	COMPON		QTY.	REPAIR KIT	
		109MB	109MBP		109MB	10721
1	Screw	978304	978304	5	109MBP	11065
2	Screw	978314	978314	3	Items Included	5, 6, 7, 11, 12 & 14
3	Pipe Plug	7687	5395	2	items included	
4	Body	5266	5266	1		
5	O-Ring	9797-157	9797-157	1		
6	Impeller	6297	7196	1		
7	Seal	32155	32155	1		
8	Adapter	5251	5251	1		
9	Screw	5411	5411	4		
10	Insert	6832	6832	1		
11	Barrier seal	6683	6683	1		
12*	Set Screw	N/A	9849	1		
13	Тад	7737	7737	1		
14**	Shims	602501, 602502 & 602503	602501, 602502 & 602503	As Required		2
15	Motor	See Motor Option	s Chart	1	3	

\*Item 12 is only used on three-phase pump units.

\*Item 14 is not depicted in the exploded assembly.



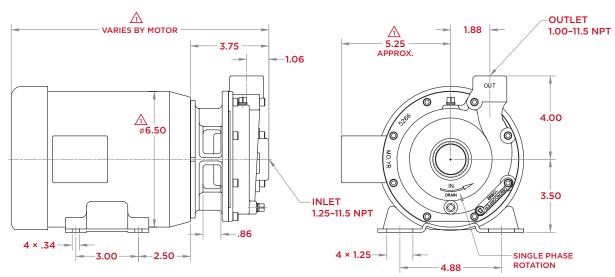
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## DIMENSIONS







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