



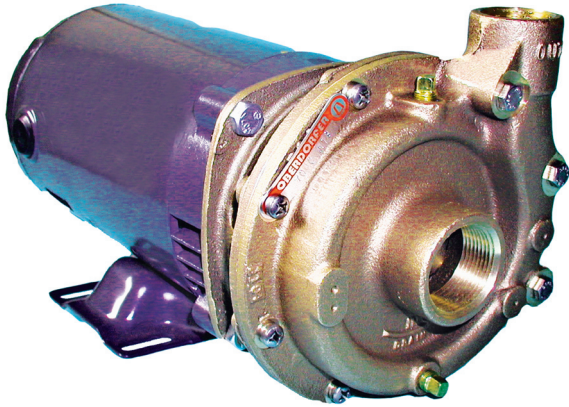
OBERDORFER PUMPS

by Gardner Denver

Bronze Close Coupled Centrifugal Pump

109MB Series

**Inlet 1 1/4" NPT,
Outlet 1" NPT**



FEATURES:

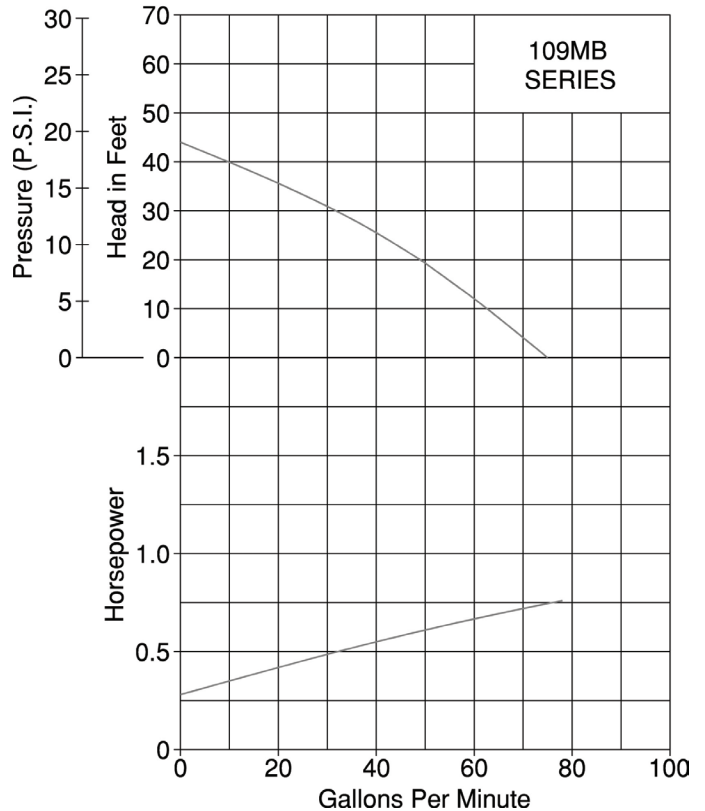
- Rugged bronze construction
- A standard in the marine air conditioning industry
- Extremely quiet operation
- O-ring housing seal eliminates gasket problems
- Teflon barrier seal to protect motor bearings
- Handles contaminated liquids
- Discharge port orientation flexibility
- Mechanical seal - carbon/ceramic - NBR, FKM, or PTFE options
- Pump heads mount to standard footed NEMA 56J jet pump motors
- Shafts: 416 Stainless, Monel or 316 Passivated Stainless
- Multiple motor options available
- For industrial version - see Model 700 series

LIQUIDS:

The special pump alloys used provide corrosion resistance to many liquids including

PERFORMANCE:

Capacity - Water 70° F



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.

Bronze Close Coupled Centrifugal Pump

109MB Series

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. FKM seals and PTFE seals are available for severe solvents, difficult chemicals, and elevated temperatures.

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.

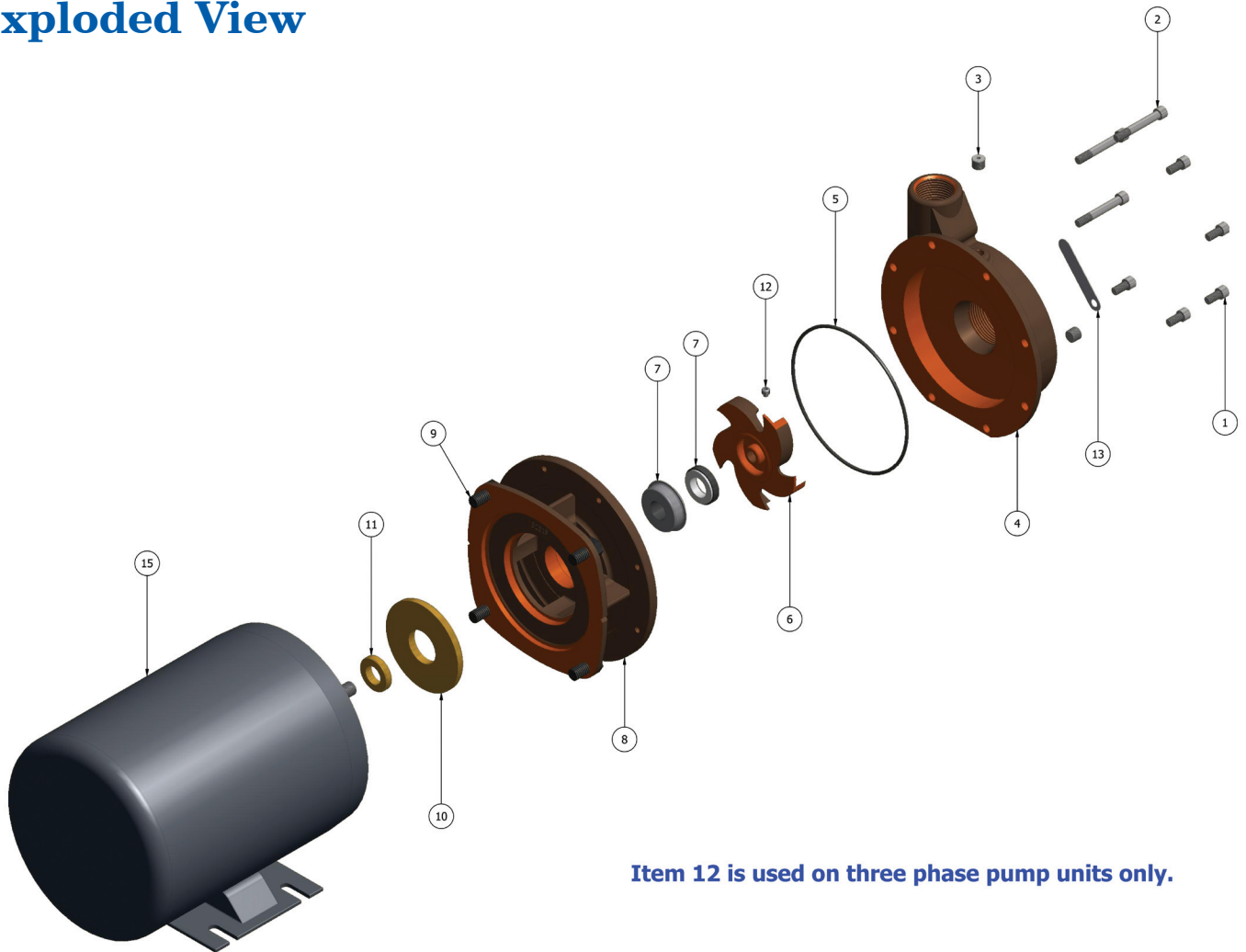
Parts List

	1	2	3	4	5*	6*	7*	8
	Screw	Screw	Pipe Plug	Body	O-Ring	Impeller	Seal	Adapter
Model	Qty. 5	Qty. 3	Qty. 2	Qty. 1	Qty. 1	Qty. 1	Qty. 1	Qty. 1
109MB	978304	978314	7687	5266	9797-157	6297	32155	5251
109MBP	978304	978314	5395	5266	9797-157	7196	32155	5251
109MBS10	978304	978314	5395	5266	9797-157	6297	32210	5251
109MBS11	978304	978314	5395	5266	9355-157S	6297	32211	6300

	9	10	11*	12*	13	14**	15	Repair Kit
	Screw	Insert	Barrier	Set Screw	Tag	Shims	Motor	
Model	Qty. 4	Qty. 1	Qty. 1	Qty. 1	Qty. 1	As Required	Qty. 1	
109MB	5411	6832	6683	N/A	7737	602501, 602502 & 602503	See Motor Options Chart Below	10721
109MBP	5411	6832	6683	9849	7737	602501, 602502 & 602503		11065
109MBS10	5411	6832	6683	N/A	7737	602501, 602502 & 602503		12274
109MBS11	5411	6832	6683	N/A	7737	602501, 602502 & 602503		12276

* Repair kit contains items 5, 6, 7, 11, 12 & 14. **Item 14 is not depicted in the exploded assembly.

Exploded View



Item 12 is used on three phase pump units only.

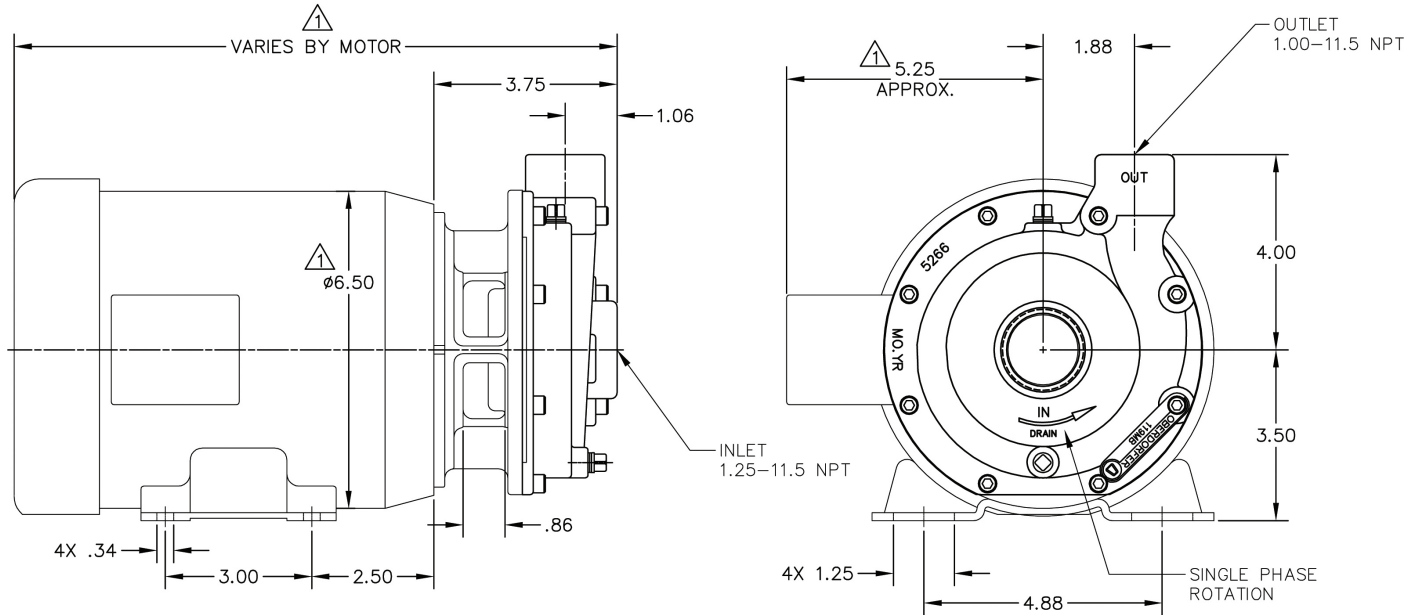
Model	HP	SF	Enclosure	Phase	Voltage	Shaft Construction	Motor Item 15
109MB-J19	1/2	1.65	ODP	Single	115/230	416 SST	5860
109MBP-J57	1/2	1.60	ODP	Three	230/460	416 SST	6998
109MB-J20	1/2	1.65	TEFC	Single	115/230	416 SST	7976
109MB-01J26	1/2	1.65	ODP	Single	115/230	Monel	32332
109MBP-01J58	1/2	1.00	TEFC	Three	208-230/460	Monel	33035
109MB-J24	1/2	1.65	ODP	Single	115/230	316 Passivated	3031
109MB-J89	1/2	1.00	TENV	DC	12V	416 SST	2386
109MBP-M58	3/4	1.15	TEFC	Three	230/460	416 SST	7967
109MBP-M57	3/4	1.50	ODP	Three	50/60 HZ 208-	416 SST	6999

Bronze Close Coupled Centrifugal Pump

109MB Series

Dimensions

 DIMENSIONS VARY BY MOTOR.



NBR = Acrylonitrile-Butadiene PTFE = Polytetrafluorethylene FKM = Fluoroelastomer



OBERDORFER PUMPS

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.