



## PUMP SECTION

### Centrifugal Pumps - Type B9

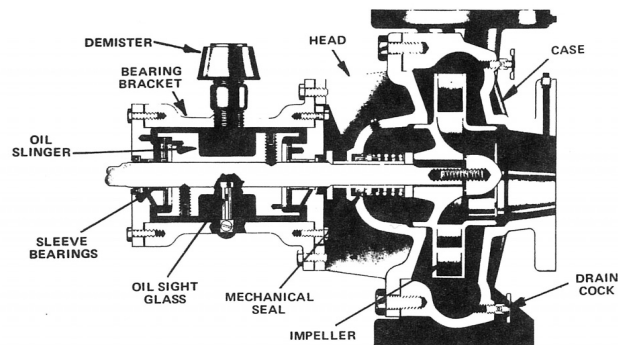
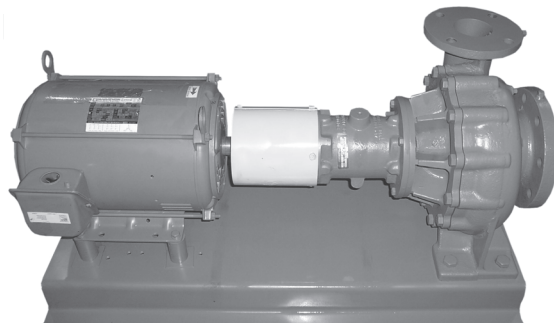
#### APPLICATION

The MEPCO type B9 pumps are of the volute type for horizontal mounting. A flexible coupling is used to connect the motor to the centrifugal pump and all are mounted on a common base.

These pumps are most commonly applied for water circulation to be used for heating or air conditioning. The particular quietness of these pumps makes them most suitable for handling hot water, chilled water or secondary refrigerants for comfort conditioning. In a hydronic system where radiation, fan and coil units or piping may be in the occupied space, noise level is of paramount importance. These specially designed pumping units more than fulfill this requirement. They are also very successfully applied for condenser water, domestic hot water, water supply systems, etc.

The B9 pump is available in eighteen models from one horsepower through 20 horsepower at 1750 RPM. The capacity range is up to 1,000 GPM and heads up to 90 feet.

For applications involving fluids other than water (glycols, brines, etc.), consult the factory for recommendations.



---

## CONSTRUCTION FEATURES

---

**BASE** — All pumps through 10 HP are furnished with heavy gage fabricated steel base. The optional structural base is standard for pumps above 10 HP and constructed of heavy steel with integral feet for ease of installation and leveling.

**MOTORS** — Rigid base ball bearing motors are standard. Only quality, name brand motors are used. The motors are 1750 RPM and single-phase motors are dual voltage 115-230, and the three-phase motors are 230/460 or 200 volt. Three-phase motors are recommended for quiet operation. Single-phase motors over two horsepower are available only on special order. The motors are sized so maximum BHP output required is, in all cases, less than that allowed by the motor manufacturer.

**COUPLING** — Rugged in construction, longer bearing, motor and pump life as well as smooth noiseless operation of both motor and pump are assured. Simple in design and easily installed, the couplings are unaffected by abrasives, dirt or moisture. There is no need for lubrication or maintenance. The non-metallic sleeve acts as a barrier, insulating the motor from the pump. Coupling guards are furnished as a standard.

**HEAD** — Cast iron head connects the case and bearing bracket. It houses the mechanical seal assembly and is vented for cooling, as well as to provide means of getting rid of water in the event of seal leakage due to wear. A non-ferrous shaft sleeve is used as standard, again insuring minimum maintenance.

**IMPELLERS** — Bronze impellers of the enclosed type are machined overall for improved efficiency. These impellers are hydraulically balanced to assure minimum thrust.

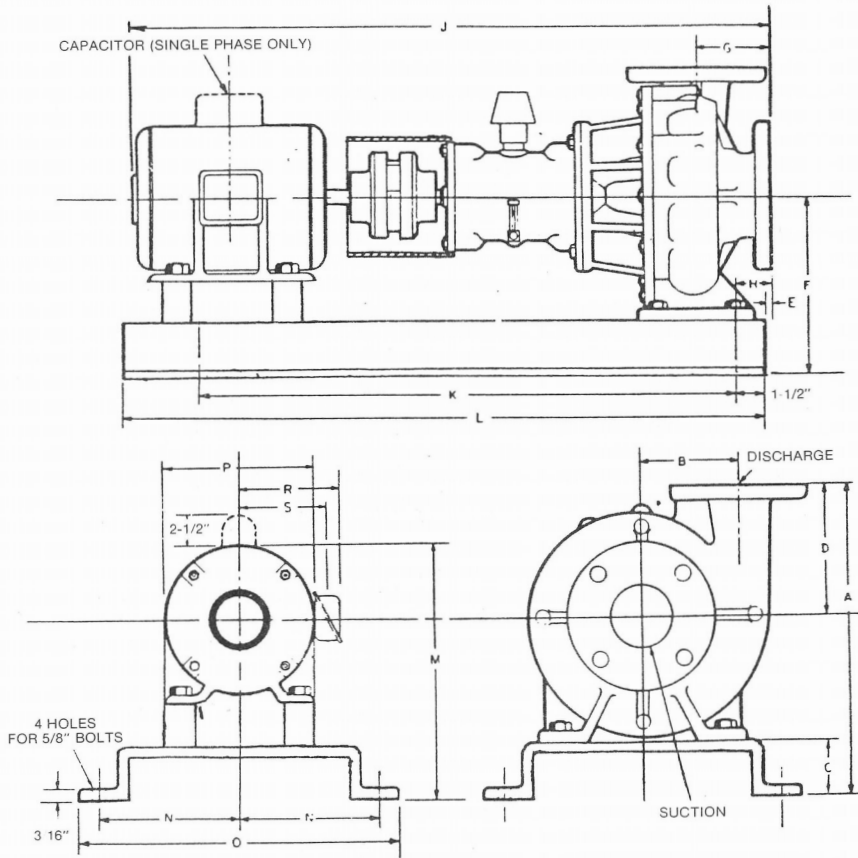
**BEARING BRACKET** — The MEPCO type B9 pumps are equipped with an oil pump that provides forced feed lubrication. Automotive type metal backed Babbitt faced sleeve bearings, precision turned, ground and polished special alloy steel shaft, bronze rotating thrust washers and steel stationary members insure long life. The bearing bracket assembly with pump head and impeller can be easily removed for servicing without disturbing the motor or the piping. A grease lubricated ball bearing assembly can be furnished as an option.

**MECHANICAL SEAL** — The mechanical seals used in the B9 pump are specially selected and, as applied in this pump, are suitable for water temperatures up to 225° F, 75 PSIG. The carbon rotating member and ni-resist stationary member with precision lapped surfaces insure long life and positive prevention of leakage.

**CASE** — Heavy cast iron construction is integral with the base. Flanged suction and discharge connection. Pump is suitable for 175 psi working pressure. High impeller efficiency does not require close clearances at the suction, and wearing rings are not necessary with this design. This in turn means fewer parts and lower maintenance. However, wearing rings may be furnished as an optional extra.

## Dimensions

### B9 Pumps With Fabricated Steel Base \* (1-10 HP)



#### NOTES:

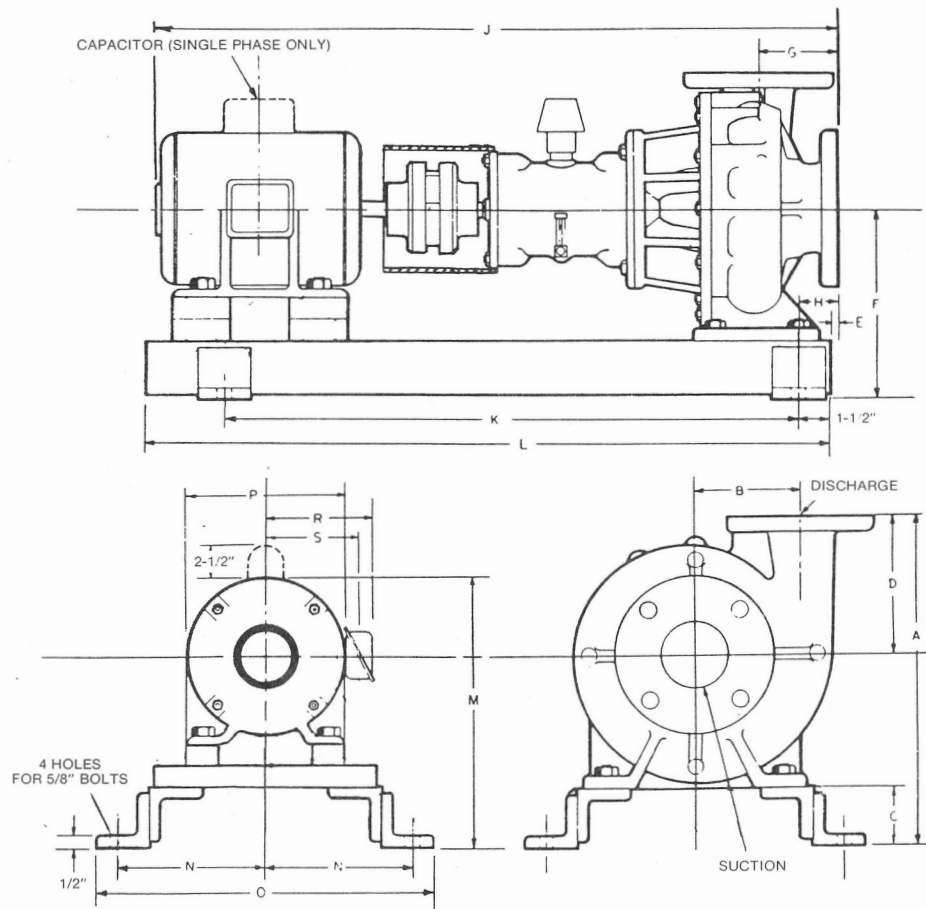
- 1) Dimensions and weights are approximate.
- 2) There is no need for lubrication or maintenance on the coupling. The non-metallic sleeve acts as a barrier insulating motor from pump.
- 3) Single phase motors over 2 HP are available only on special order. Motors are sized so maximum boiler horsepower output required is, in all cases, less than allowed by motor manufacturer.
- 4) A non-ferrous shaft sleeve is used as standard.
- 5) Dimensions are not for construction purposes unless certified.

MODEL	SUC.	DIS.	A	B	C	D	E	F	G	H	J	K	L	M	N	O	P	R	S	SHIP WT*
5 HP 3" B9-C67S	4	3	17-1/4	5-3/4	2-3/4	7	9/16	10-1/4	4-1/4	2-1/16	33	25	35-7/16	13-1/2	8-1/2	19	9	8-1/8	6-1/2	360
7-1/2 HP 3" B9-C74	4	3	17-1/4	5-3/4	2-3/4	7	9/16	10-1/4	4-1/4	2-1/16	35-1/8	25	35-7/16	15-1/2	8-1/2	19	10-5/8	8-3/4	7-1/8	390
10 HP 3" B9-C84S	4	3	17-1/4	5-3/4	2-3/4	7	9/16	10-1/4	4-1/4	2-1/16	36-5/8	25	35-7/16	15-1/2	8-1/2	19	10-5/8	8-3/4	7-1/8	400
10 HP 3" B9-C90S	4	3	17-1/4	5-3/4	2-3/4	7	9/16	10-1/4	4-1/4	2-1/16	36-5/8	25	35-7/16	15-1/2	8-1/2	19	10-5/8	8-3/4	7-1/8	400
3 HP 4" B9-C60S	5	4	17-3/4	6-1/4	2-3/4	7-1/2	7/8	10-1/4	4-1/4	2-3/8	32-3/8	25	35-7/16	14-3/4	8-1/2	19	9	8-3/4	6-1/2	360
5 HP 4" B9-C65S	5	4	17-3/4	6-1/4	2-3/4	7-1/2	7/8	10-1/4	4-1/4	2-3/8	33-1/4	25	35-7/16	14-3/4	8-1/2	19	9	8-1/8	6-1/2	360
7-1/2 4" B9-C72S	5	4	17-3/4	6-1/4	2-3/4	7-1/2	7/8	10-1/4	4-1/4	2-3/8	35-1/2	25	35-7/16	15-1/2	8-1/2	19	10-5/8	8-3/4	7-1/8	390
10 HP 4" B9-C76S	5	4	17-3/4	6-1/4	2-3/4	7-1/2	7/8	10-1/4	4-1/4	2-3/8	37	25	35-7/16	15-1/2	8-1/2	19	10-5/8	8-3/4	7-1/8	420
15 HP3" B9-C90S	4	3	17-1/4	5-3/4	2-3/4	7	9/16	10-1/4	4-1/4	2-1/16	40	25	44-1/2	16-1/2	8-1/2	19	12-1/2	9-3/4	8-1/8	470
15 HP4" B9-C82S	5	4	17-3/4	6-1/4	2-3/4	7-1/2	7/8	10-1/4	4-1/4	2-3/8	40-3/8	25	44-1/2	16-1/2	8-1/2	19	12-1/2	9-3/4	8-1/8	500
20 HP 4" B9-C90S	5	4	17-3/4	6-1/4	2-3/4	7-1/2	7/8	10-1/4	4-1/4	2-3/8	42-1/8	25	44-1/2	16-1/2	8-1/2	19	12-1/2	9-3/4	8-1/8	500

\* Structural Steel Base available as an option - Consult Factory.

## Dimensions

### B9 Pumps with Structural Steel Base (15 & 20 HP)



### B9 Centrifugal Pump — Typical Specifications

The contractor shall furnish and install as specified in the plans and in accordance with the manufacturer's instructions MEPCO Type B9 Centrifugal Pump \_\_\_\_\_. Pump(s) shall have standard and optional features listed below perform at: \_\_\_\_\_ Ft. Hd; \_\_\_\_\_ GPM; \_\_\_\_\_ HP; \_\_\_\_\_ Voltage; \_\_\_\_\_ Fluid; \_\_\_\_\_ Temp.

#### Standard

- ☐ Bronze impellers
- ☐ Cast iron bearing frame with internal foot support
- ☐ Grease lubricated power frame
- ☐ Self-aligning coupling
- ☐ Dual voltage in single phase motors
- ☐ Three phase motors are 230/460 or 200 volt
- ☐ Adequate drain tappings
- ☐ Suction and discharge gauge tappings
- ☐ Non-ferrous shaft sleeve

#### Optional

- ☐ Grease lubricated ball bearing assembly
- ☐ Structural Steel Base (Standard on 15 & 20 HP)
- ☐ Case wearing rings
- ☐ Stainless steel shaft
- ☐ Stainless steel shaft sleeve
- ☐ Mechanical seal drain pan
- ☐ Pump & mechanical seal drip pan
- ☐ Abrasive separator 180°
- ☐ Abrasive separator 300°

Job Name \_\_\_\_\_ Location \_\_\_\_\_ Door Size \_\_\_\_\_ X \_\_\_\_\_



# Selection Chart B-9 Pumps 1750 RPM

