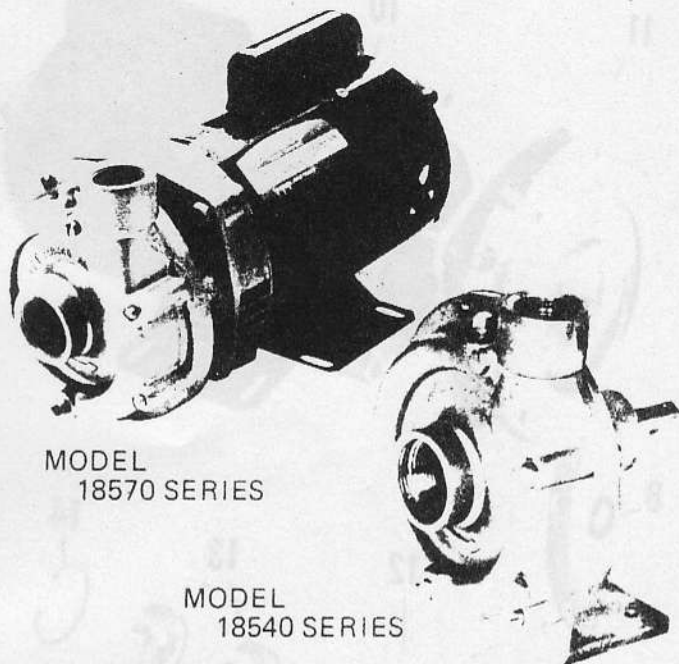


# MODEL 18540-Series Ped. 18570-Series M.P.U.

## BRONZE CENTRIFUGAL



MODEL  
18570 SERIES

MODEL  
18540 SERIES

### FEATURES

Volute Body:	Bronze
Ports – Inlet:	1-1/4" NPT
Discharge:	1" NPT
Impeller:	Bronze
Pedestal:	Bronze
Shaft:	MPU – 316 St. St. Ped. – 304 St. St.
Seal:	Carbon/Ceramic Face with Buna N Optional: with Viton
Motor:	1/3 HP 115/1/60 Open Drip Proof, 3450 RPM 1/2 HP 115/230/1/60 Open Drip Proof, 3450 RPM 3/4 HP 115/230/1/60 Open Drip Proof, 3450 RPM
Weight:	18570-0000 – 25-1/2 lbs. (11.6 kgs.) 18570-0001 – 25-3/4 lbs. (11.7 kgs.) 18570-0002 – 28-5/8 lbs. (13 kgs.) 18540-0000 – 11-1/8 lbs. (5 kgs.) 18540-0001 – 11-1/8 lbs. (5 kgs.) 18540-0002 – 11-1/8 lbs. (5 kgs.)

MODEL 18540 SERIES PED.  
MODEL 18570 SERIES M.P.U.

### MODELS AVAILABLE

MOTOR PUMP UNITS			PEDESTAL PUMP UNITS		
MOTOR	BUNA SEAL	VITON SEAL	IMPELLER DIAMETER	BUNA SEAL	VITON SEAL
1/3 HP	18570-0000	18570-0004	3.00	18540-0000	18540-0004
1/2 HP	18570-0001	18570-0014	3.50	18540-0001	18540-0014
3/4 HP	18570-0002	18570-0024	3.75	18540-0002	18540-0024

### DESCRIPTION

The Jabsco bronze centrifugal pumps are designed for continuous duty service. The close coupled, compact motor pump units are equipped with ball bearing motors and stainless steel shafts and have service factors of 1.5 or greater. The pedestal mounted pumps are equipped with two single row ball bearings lubricated for long heavy duty service.

Mechanical rotary seals have carbon/ceramic seal faces with the choice of Buna N or viton seal parts for application versatility. Unlike the usual Jabsco pump, the Jabsco centrifugal pumps are *not* self priming. Normal installation is flooded suction, that is, with the pump below the source liquid level so that liquid flows by gravity to the pump. The pump may be located above the liquid source, if a check valve or foot valve is installed at the beginning of the suction line; and, the pump and entire suction line if filled with liquid; and, all air is bled from the suction system. The pump will lift water approximately 15 feet on the suction side when primed and will maintain its prime, as long as the foot or check valve functions as it should, without leaking. If the check valve leaks, the pump will not reprime, and must be manually primed in order to resume operation.

Published performance curves are based on pumping water, at 68°F. Referring to the performance curves for the pedestal mount pump, the maximum horsepower at a given speed is required at open discharge. As the head (pressure) against which the pump operates increases, the horsepower decreases.

Liquids of higher specific gravity (weight) than water require more power to generate the same performance available with water. The horsepower requirement increases directly as the increase in specific gravity. Thus, for a pedestal mount pump we would multiply the horsepower shown for water by the specific gravity of the liquid to be pumped, to determine the horsepower required to do the job.

It is not possible to increase the horsepower of a close coupled motor pump unit, therefore, to pump a liquid of higher specific gravity, with the centrifugal motor pumps, the capacity must be limited by restricting the discharge to stay within the horsepower available. In other words, the discharge must be throttled to the extent that the motor full load amperage rating, found on the motor label, is not exceeded.

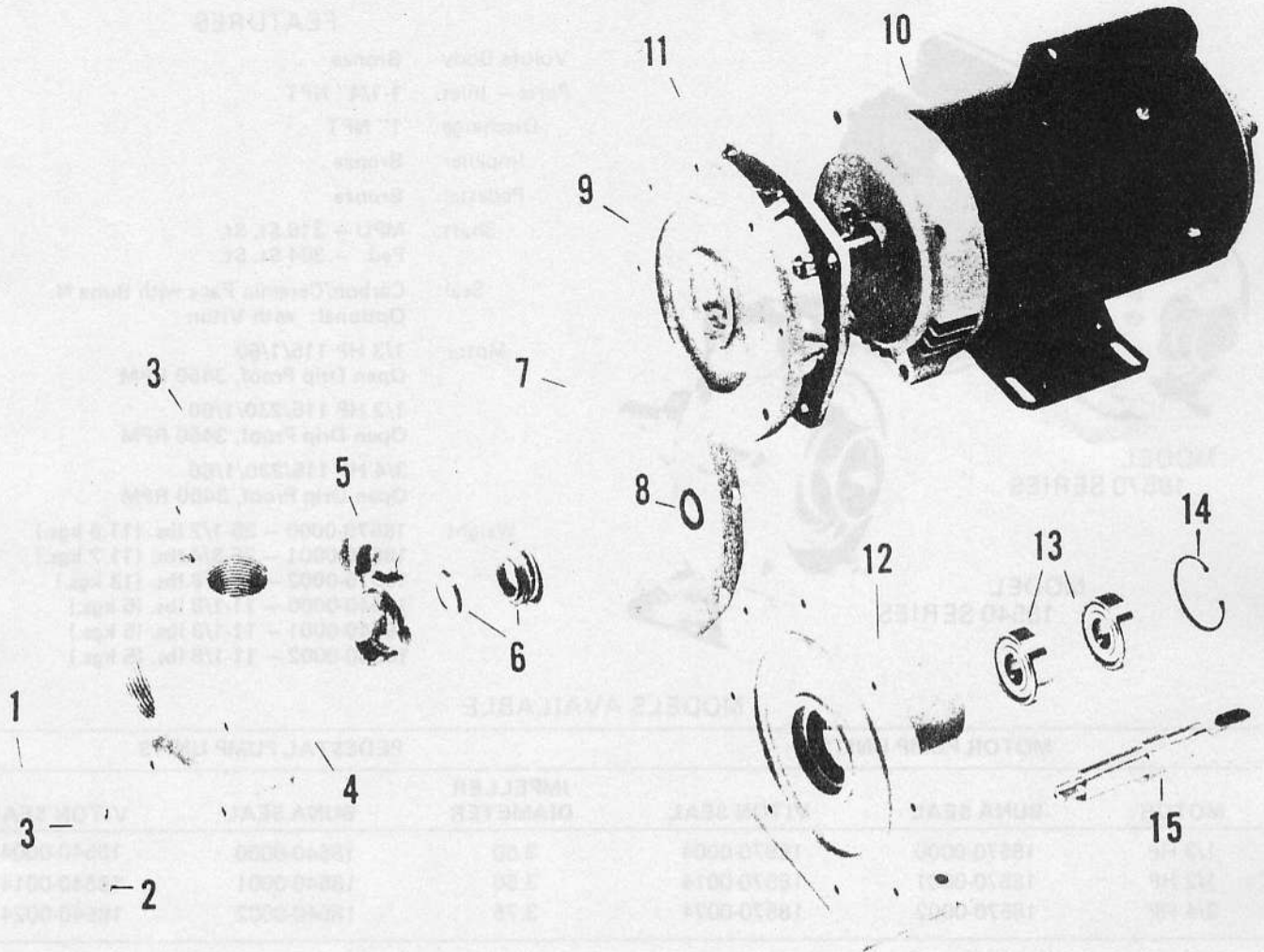
In all installations, make sure the suction is not restricted. Do not use an elbow fitting in the pump intake port. Starved suction can result in cavitation which will damage the pump and cause performance deterioration.

Viscous or thick liquids are difficult to pump with a small centrifugal pump. Do not attempt to pump liquids with a viscosity exceeding 1500 SSU (SAE 30 WT OIL at 75°F) with a centrifugal pump. Consider, instead, the Jabsco flexible impeller pump or gear pump.

**JABSCO PRODUCTS** **ITT**

Form 43000-0367 8-79

# EXPLODED VIEW

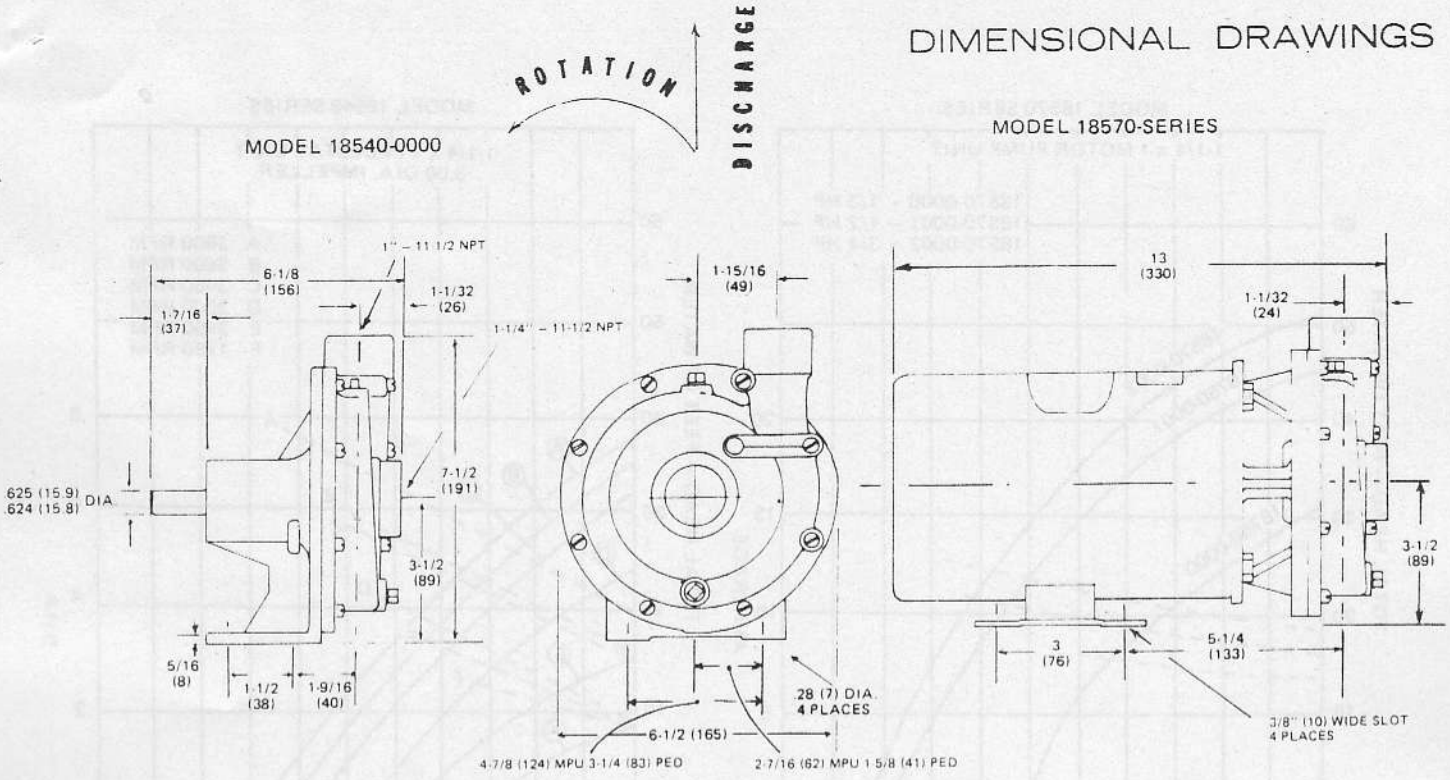


## PARTS LIST

KEY	COMMON	QTY	PART NUMBER	KEY	MOTOR PUMP	QTY	PART NUMBER
1	Screw (Short)	5	91004-0020	9	Seal Hsg.	1	18575-0000
2	Screw (Long)	3	91004-0080	10	Motor — 1/3 HP 115/1/60	1	93004-2608
3	Pipe Plug	2	92650-0040		— 1/2 HP 115/230/1/60		93004-2609
4	Volute	1	18574-0000		— 3/4 HP 115/230/1/60		93004-2610
5	Impeller — 3.00 Dia.	1	18576-0000	11	Bolt (Motor)	4	91094-0070
	— 3.50 Dia.		18576-0001		SHIM (Not Shown)	1	18578-0000
	— 3.75 Dia.		18576-0002		(PEDESTAL)	1	18544-0000
6	Seal Assembly — Buna	1	96080-0375	12	Pedestal	1	18544-0000
	— Viton		96080-0378	13	Ball Bearing	2	92600-0460
7	Gasket	1	18577-0000	14	Retaining Ring	1	18719-0000
8	Slinger	1	3180-0000	15	Shaft	1	18579-0000

MODEL 18540-0000

MODEL 18570-SERIES



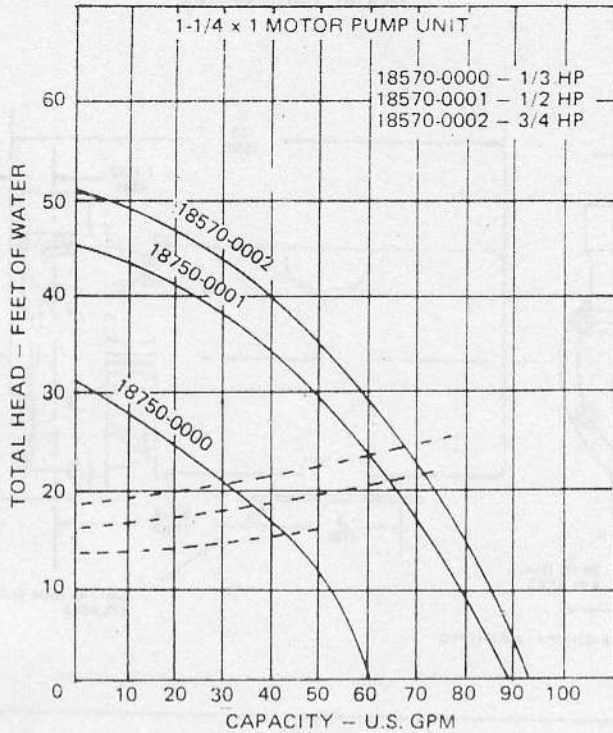
**ASSEMBLY INSTRUCTIONS**

- |   |  |  |   |
|---|--|--|---|
| <p>Ped</p> <p>Ped</p> <p>Ped<br/>MPU</p> <p>Ped<br/>MPU</p> | <ol style="list-style-type: none"> <li>Support inner race of ball bearing, lubricate shaft with light film of oil, press drive end of shaft through bearing firmly against shoulder. (Care should be taken not to damage threads on shaft when pressing on threaded end.)<br/><br/>Support inner race of second ball bearing and press threaded end of shaft through bearing firmly against shoulder.</li> <li>Support flange side of bearing pedestal, insert threaded end of shaft/bearing assembly into pedestal. Seat inner bearing firmly against inner bearing shoulder. Install retaining ring into groove in pedestal against outer bearing.</li> <li>Install slinger on shaft within 1/4" of bearing or motor.</li> <li>Apply light coat of Permatex or equivalent sealant on O.D. of seal. With large flange face of pedestal and multi-hole flange of seal housing up, install seal, carbon face outwards, using 1-5/8" O.D. x 1-3/8" I.D. tubing 1" long to press against flange of seal. Seat firmly into seal bore.</li> </ol> | <p>Ped<br/>MPU</p> <p>MPU<br/>MPU<br/>Ped</p> <p>Ped<br/>MPU</p> <p>Ped<br/>MPU</p> <p>Ped<br/>MPU</p> | <ol style="list-style-type: none"> <li>Install ceramic seat into seat cup with polished surface outwards. Lubricate seat cup with water and press into impeller bore with polished ceramic surface facing out. Do not scratch or mar seat surface.</li> <li>Attach seal housing to motor with 4 bolts.</li> <li>Apply Loctite to shaft threads and install impeller into shaft until it bottoms firmly against shaft shoulder. Motor pump unit normally requires one shim between impeller and shaft shoulder.</li> <li>Install gasket against mounting flange and secure volute body to flange face with 3 long screws and 5 short screws.</li> <li>Make sure priming plug and drain plug are secure and sealed in volute body.</li> <li>Rotate shaft to make sure there is no metal contact between body and impeller.</li> </ol> |
|---|--|--|---|

**DISASSEMBLY**

- |   |   |  |  |
|---|---|--|--|
| <p>MPU<br/>Ped</p> <p>MPU<br/>Ped</p> <p>MPU<br/>Ped</p> <p>MPU<br/>Ped</p> | <ol style="list-style-type: none"> <li>Remove 8 body screws and body.</li> <li>Remove body gasket.</li> <li>Prevent shaft from turning. Pedestal Pump – Grasp shaft with vice grip pliers. MPU – Insert screwdriver in slot in end of motor shaft after removing end cap. Grasp nose of impeller with vice-grip pliers and rotate impeller counterclockwise to unthread from shaft.</li> <li>Use a pointed tool to remove seal seat from rear of impeller.</li> </ol> | <p>Ped</p> <p>Ped</p> <p>Ped</p> <p>Ped</p> <p>MPU</p> | <ol style="list-style-type: none"> <li>Remove retaining ring from bearing housing.</li> <li>Place block of wood on shaft threaded end to protect threads, support pedestal and press shaft and bearing assembly out of pedestal.</li> <li>Support flange face of pedestal and using a 1-3/8" dia. dowel or plastic pipe, press seal from pedestal.</li> <li>Place two metal bars between bearings to support bearing while pressing shaft out of bearing. Use a wooden block to protect threads when removing shaft from inner bearing.</li> <li>Remove seal housing from motor. Use a 1-3/8" dia. dowel or plastic pipe to press seal from pedestal.</li> </ol> |
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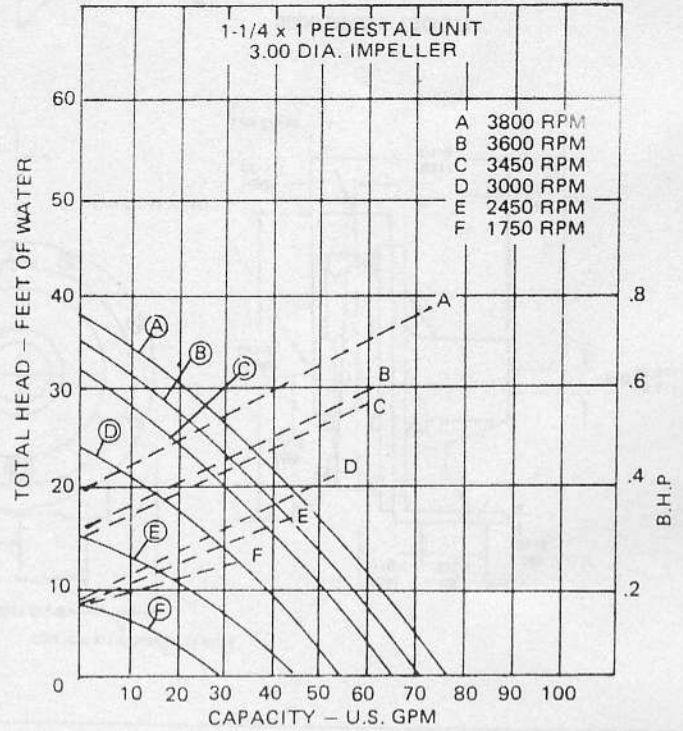
MODEL 18570 SERIES



1.2 U.S. GAL. = 1 IMP. GAL.  
1 U.S. GAL. = 3.785 LITERS

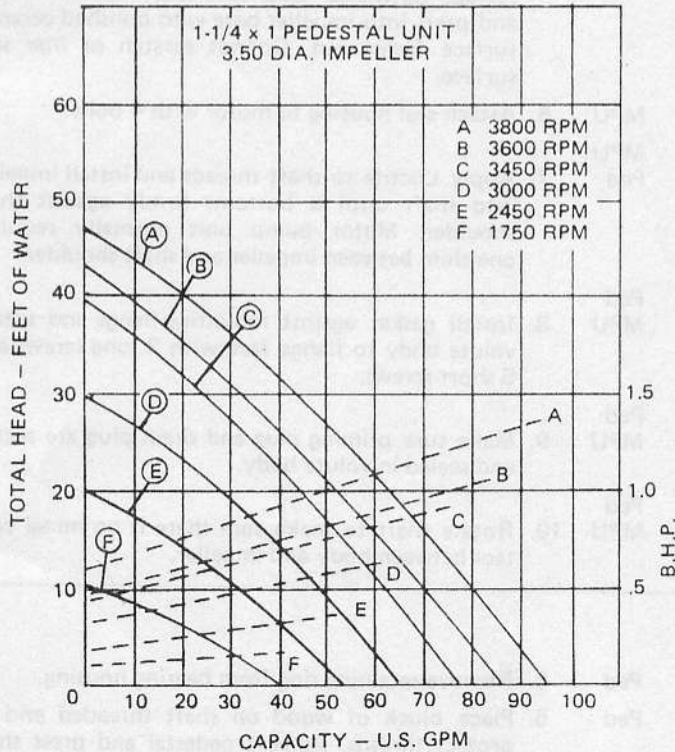
4.546 LITERS = 1 IMP. GAL.  
2.31 FT = 1 PSI

MODEL 18540 SERIES

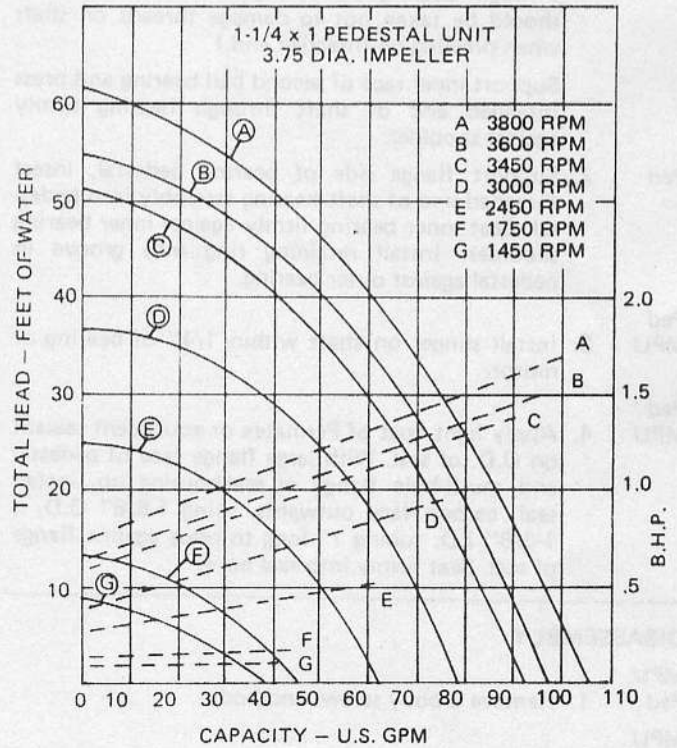


14.22 PSI = 1 KG/CM<sup>2</sup>  
32.85 FT/HD = 1 KG/CM<sup>2</sup>

MODEL 18540-0001



MODEL 18540-0002



**JABSCO PRODUCTS ITT**

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