PRODUCT DATA

DESIGN FEATURES

Corrosion Resistant

Pump Material: Glass Filled Epoxy Plastic Suitable

for Temperatures to 200°F. (93°C)

Impeller Design: Enclosed 4.35" Dia.

4.0" Dia. 3.5" Dia.

SEAL-LESS

Magnetic Drive:

Impeller Magnets enclosed in a molded epoxy cup. No Contact MODEL 18500-SERIES PEDESTAL

with Liquid Being Pumped. Suction 11/2" NPT Internal

Ports: Discharge 1" NPT Internal

Maximum Fluid

Temperature:

200°F (93°C)

Cast Iron, Protective Enamel Bearing Housing:

Painted

Shaft: Carbon Steel Bearings: Ball Bearings Weight: 141/2 lbs. (6.6 kgs.)

APPLICATIONS

The seal-less magnetic drive pedestal mounted, centrifugal pump may be direct coupled to, or belt driven by, an electric or air motor provided by the customer. Thus, a wide selection of electrical characteristics are available, and, as an added benefit drivers of suitable horsepower can be selected to handle a wide range of liquids whose specific gravity differs from water.

The seal-less magnetic drive centrifugal pumps are designed to handle corrosive liquids without concern for selection of exotic mechanical shaft seal materials or leakage of expensive or dangerous fluids between shaft and housing.

Highly corrosive chemicals or caustic solutions compatible with glass filled epoxy plastic may be transferred or circulated. All parts in contact with fluid are glass filled epoxy plastic or graphite filled teflon. Viton "O" ring gasket is used.

or a comprehensive list of chemicals and their compatibility with epoxy plastic, consult the Jabsco Chemical Resistance Table or the factory.

Impeller Size	Model Number
4.35	18500-0000
4.00	18500-0001
3.50	18500-0002

INDUSTRIAL AND OEM

Transfer, circulation or filtration of photo chemicals, etching solutions, plating baths, laboratory systems, processing transfer and application of agricultural chemicals (not wettable powder solutions) fume scrubbing, circulation and precious metal recovery processes are typical applications.

LOCATION AND PLUMBING

Pump should be mounted with shaft horizontal. Volute may be removed and rotated to any of eight different port positions to simplify piping. If pump is to be mounted above the liquid level, provision must be made to assure that the suction line and pump cavity is flooded before starting the pump.

THIS PUMP WILL NOT SELF PRIME. DO NOT RUN DRY.

All piping to the pump must be supported independently of the pump. CAUTION: Extreme care must be exercised if metal port fittings are used to prevent cracking port. Plastic port fittings are recommended. Use teflon

tape to seal threads. Keep suction and discharge lines as free of elbows and bends as possible. Line to suction port should be straight for a minimum length of 12", without elbows or reducers, to assure optimum performance. Suction line must be airtight to maintain prime. A flap type foot valve at the suction intake may be installed to retain liquid in the system during shutdown. A auxiliary priming line may be installed by drilling and tapping the upper boss on the volute face. The lower boss may be tapped and plugged as a drain hole if desired.

NOTE: For inlet pressures exceeding 20 psi (1,4 Kg/CM²) consult the factory for assistance.

MOTOR SELECTION - Refer to performance curves and notes on specific gravity or viscosity to calculate proper horsepower requirement for drive motor. The ball bearing equipped pedestal mounted magnetic drive centrifugal pump permits direct coupling or belt drive to a motor of your choice, either electric or air driven. A motor with electrical characteristics of your choice may be obtained from local source and mounted on a simple channel base to drive the pump in a manner most suited for your requirements.

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BELT DRIVE — Proper belt tension will insure optimum pump performance, belt and bearing life. Under normal belt tension, the belt can be deflected 1/2 inch midway between the pulley center lines.

DIRECT DRIVE — A flexible coupling is recommended. Be sure there is clearance between the motor shaft and pump shaft, when installing coupling. Mount and align pump and motor shaft before tightening coupling set screws.

MAXIMUM OPERATING SPEEDS — Do not operate at speeds above 3850 RPM without consulting factory. Ball bearing life will be reduced if operated at higher speeds.

HORSEPOWER REQUIRED

Depends on pump speed and specific gravity of fluid. Refer to performance curves and notes on specific gravity and viscosity to calculate proper horse-power requirement for application. DO NOT EXCEED 3.0 HP. Magnetic drive will uncouple at about 3-1/2 horsepower.

OPERATION — Pump must be primed to begin pumping operation. Do not operate pump dry for extended periods. Dry running or starved suction will reduce the service life of the sleeve and thrust bearings.

If pumping ceases during normal operation and the motor continues to run, disconnect power to the motor. Let pump motor come to a complete stop, then resume operation. This allows the magnetic drive to "re-couple".

Recurring uncoupling indicates excessive horsepower requirements, hydraulic hammer or friction contact between impeller and volute housing. Inspect pump for particulate build-up between impeller and housing, or scuffing of impeller shroud face, which indicates teflon thrust bearing is worn and requires replacement. Check track on impeller shroud for wear groove. If badly worn, replace impeller and thrust bearing. Change in liquid viscosity or specific gravity may affect power requirement. Restrict flow thru discharge line until pump operates without uncoupling or motor overload kick out.

DIMENSIONAL DRAWING

