



## Piston Diaphragm Pumps

### Product Overview

Piston diaphragm pumps are positive displacement pumps designed to economically transfer small volumes of fluid at low discharge pressures. The lightweight, compact pumps are self-priming, corrosion resistant and can handle viscous fluids. These features make the pumps ideal for high volume copy machines, scientific and laboratory instruments and other chemical dispensing applications.

#### Operation:

Standard models are constructed with 12 or 24 volt DC solenoids. A switch is required to supply pulsed voltage to the pump. The energized solenoid pulls the piston and diaphragm up, drawing fluid into the pump. A spring forces the piston back to its original position when the solenoid is de-energized, forcing fluid out of the pump, and the cycle is repeated. Valves are utilized to prevent back-flow into the pump and to maintain prime.

#### Specifications:

**Flow Rate:** Range to 250 microliters per stroke

**Max Discharge Pressure:** Range to 2.6 psi (6')

**Self-Priming:** To 3 feet

**Max Fluid Viscosity:** To 300 centistokes

**Max Fluid Temperature:** To 200°F (93°C)

**Typical Duty Cycle:** 1 cycle/second (1/2 sec. on - 1/2 sec. off).

**Metering Accuracy:** ±2% stroke-to-stroke (for a stationary setup)

**I.D. Tubing Size:** 3/16"

**Approximate Weight:** .265 lb.

Note: Positive suction head above 6" requires tight valves; consult factory for availability.

#### Features:

- Economical
- Self-priming
- No dynamic seals
- No backflow
- Continuous duty rated
- Corrosion resistant
- Dry run capability

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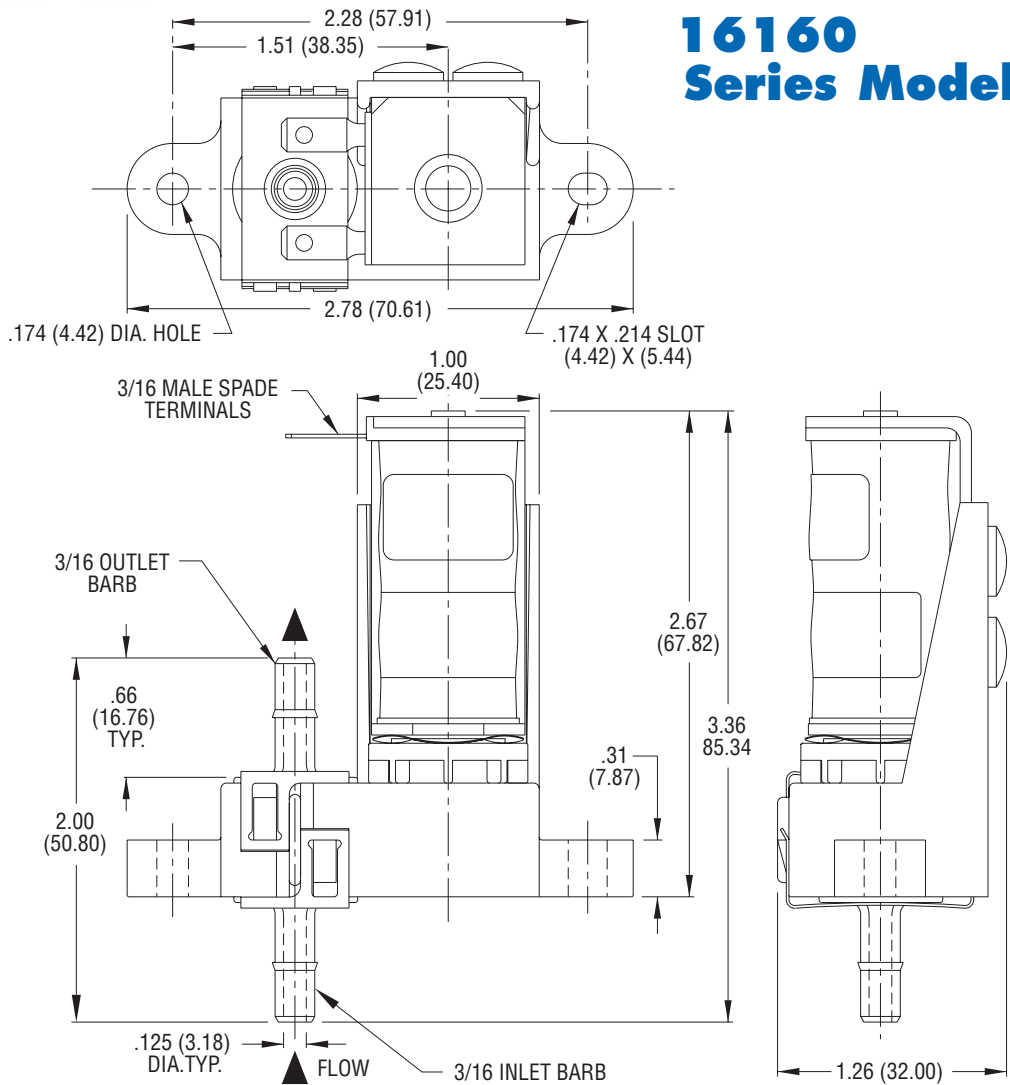
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### OEM Options:

To meet OEM specifications, the following features can be added:

- Fixed flow up to 500 microliters per stroke for low heads
- Fixed flow can be down to 100 microliters per stroke
- Field adjustability with screw and locking nut
- Alternate materials of construction
- Stepper linear actuator can replace solenoid
- Various solenoid voltages
- Better repeatability



Dimensions in Inches (Dimensions in Millimeters)

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