

## Design Features

- Dry pump cavity
- Self-priming operation
- Runs dry without damage
- Complete isolation of fluid pumped
- Heavy-duty roller bearings
- Variety of pump configurations, flows, and pressure ratings
- No seals, cups or packing to leak or wear
- Reversible flow
- Low maintenance

## Materials of Construction

### Non-wetted Parts

Casing: Aluminum Alloy

Rotor: Aluminum Alloy

Rollers: Plastic/Alloy

### Wetted Parts

Hose:

EXTRUDED – Neoprene, Varprene

BRAIDED – EPDM, Hypalon, Nitrile Rubber, Natural Rubber  
(regular and heavy-duty)

Inlet/Outlet Connections:

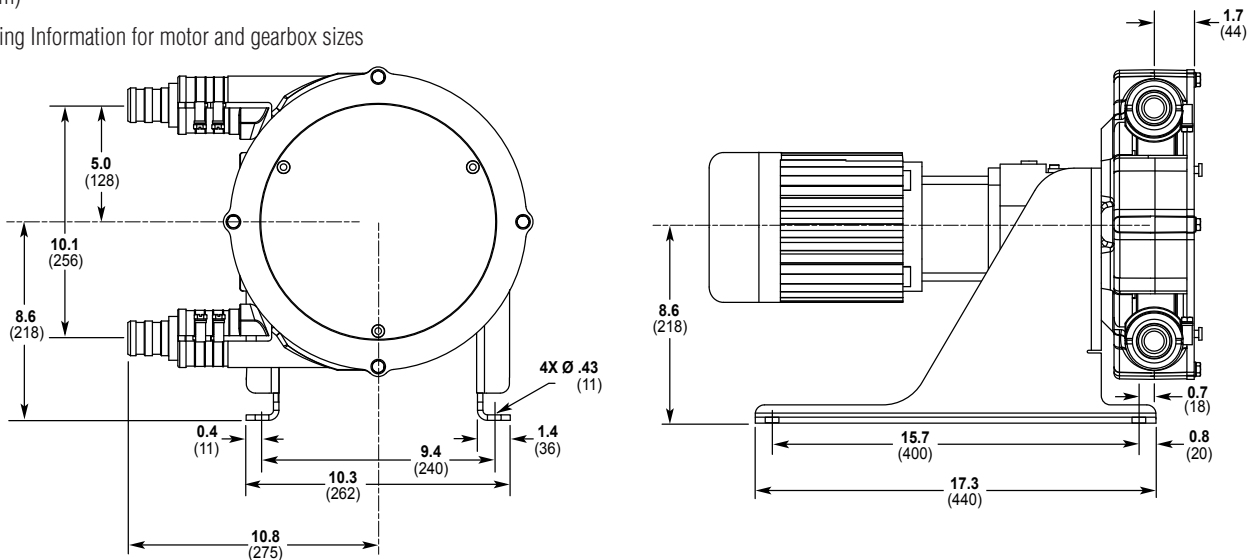
PTFE or Stainless Steel Hose Barb, Stainless Steel or Carbon  
Steel ANSI Flange, PTFE NPT, and Stainless Steel Sanitary  
Tri-clamp



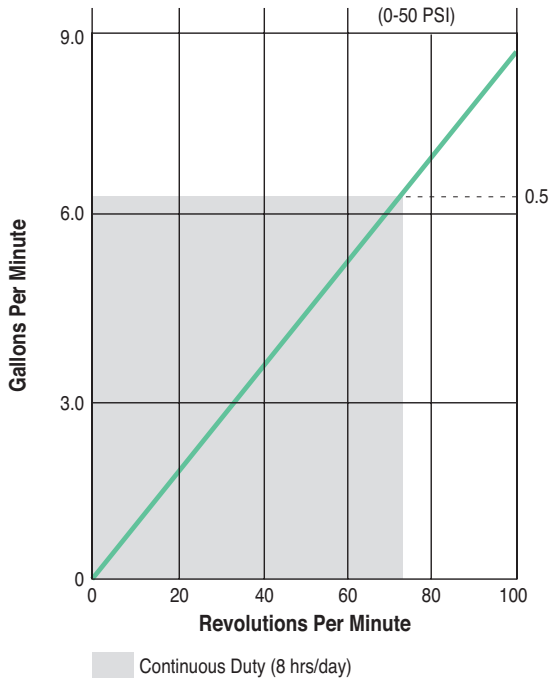
## Dimensional Drawings

Inches (mm)

See Ordering Information for motor and gearbox sizes



### Performance



### Fluid Characteristics

|                     |                           |
|---------------------|---------------------------|
| Viscosity:          | 15,000 cps max.           |
| Liquid Temperature: | 180°F (82°C) max.         |
| Solid Size:         | (see page 4)              |
| Fiber Length:       | 1-1/4 inch (31.7 mm) max. |

### Specifications

|                      |                             |
|----------------------|-----------------------------|
| Discharge Pressure:  | 50 psig (3.4 bar) max.      |
| Suction Lift:        | 16.5 ft. (5 m)              |
| Suction Pressure:    | 25 psig (1.7 bar) max.      |
| Horsepower*:         | 3/4 max.                    |
| Hose Size:           | 25 x 43 x 860 mm            |
| Displacement:        | 0.085 gal/rev (0.032 l/rev) |
| Weight (pump only):  | 40 lbs. (18 kg)             |
| Weight (with drive): | 83 lbs. (38 kg)             |

\* Pumps are shaft driven and require a gearbox and motor.  
See Ordering Information for details.

### Model 2005 Ordering Information

A complete Vector pump order number uses a 9-character order code to identify the desired hose, fittings and drive. Select the appropriate items from the chart below and use the order code from each group to complete the pump assembly order number.

|   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| 1 | 2 | 0 | 0 | 5 | - | 5 | 6 | - | 7 | 8 | - | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|----|

Horsepower

| Order Digit | Order Code  | Description  |
|-------------|-------------|--|
| <b>1-4</b>  | <b>2005</b> | <b>Pump Designation</b><br>Model 2005 Shaft Drive Pump |
| <b>5-6</b>  |             | <b>Hose Material/Type</b>                              |
|             | EF          | EPDM, fiber-braided                                    |
|             | HF          | Hypalon, fiber-braided                                 |
|             | MF          | Natural Rubber, fiber-braided, heavy-duty              |
|             | NF          | Natural Rubber, fiber-braided                          |
|             | OF          | Nitrile, Oil-rated, fiber-braided, heavy-duty          |
|             | PE          | Neoprene, extruded (30 psig max.)                      |
|             | VE          | Varpene, extruded (30 psig max.)                       |
| <b>7-8</b>  |             | <b>Connector Material/Style</b>                        |
|             | AA          | PTFE, 1-1/4" hose barb                                 |
|             | BB          | 316 SST, 1" ANSI flange                                |
|             | CC          | 316 SST, Sanitary, 1-1/2" tri-clamp                    |
|             | EE          | Carbon Steel, 1" male NPT                              |
|             | HH          | PTFE, 1" male NPT                                      |
|             | SS          | 316 SST, 1" hose barb                                  |
| <b>9-10</b> |             | <b>Drive</b>   |
|             |             | <b>Flow GPM</b>  |
|             |             | <b>Gear Ratio</b>                                      |
|             |             | <b>Pump RPM</b>  |
|             |             | <b>Max Psig</b>  |
|             |             | <b>3Ø, 1/2 BHP TEFC, 230-460 VAC, 60 Hz</b>            |
|             |             | <b>4:1 Constant Torque Speed Range</b>                 |
|             | B2          | 1.7      85:1      20      37(50) <sup>1</sup>         |
|             | D2          | 2.5      56:1      30      37(50) <sup>1</sup>         |
|             | F2          | 3.2      45:1      38      37(45) <sup>1</sup>         |
|             | H2          | 3.8      37:1      46      37(43) <sup>1</sup>         |
|             |             | <b>3Ø, 3/4 BHP TEFC, 230-460 VAC, 60 Hz</b>            |
|             |             | <b>4:1 Constant Torque Speed Range</b>                 |
|             | J2          | 5.9      24:1      70      29(32) <sup>1</sup>         |
|             | A           | No Drive   |

<sup>1</sup>( ) Heavy-duty, fiber-braided hose