

### 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 dynamic seals, cups or packing to leak, wear or replace
- Reversible flow
- Low maintenance

### Materials of Construction

#### Non-wetted Parts

Casing: Aluminum Alloy

Rotor: Aluminum Alloy

Rollers: Plastic/Alloy

#### Wetted Parts

Hose:

EXTRUDED – Neoprene, Hypalon, Varpene, Silicone

BRAIDED – Natural Rubber, EPDM, Nitrile Rubber

Inlet/Outlet Connections:

PTFE or Stainless Steel Hose Barb, Stainless Steel or Carbon

Steel ANSI Flange, Brass or Carbon Steel NPT, and Stainless

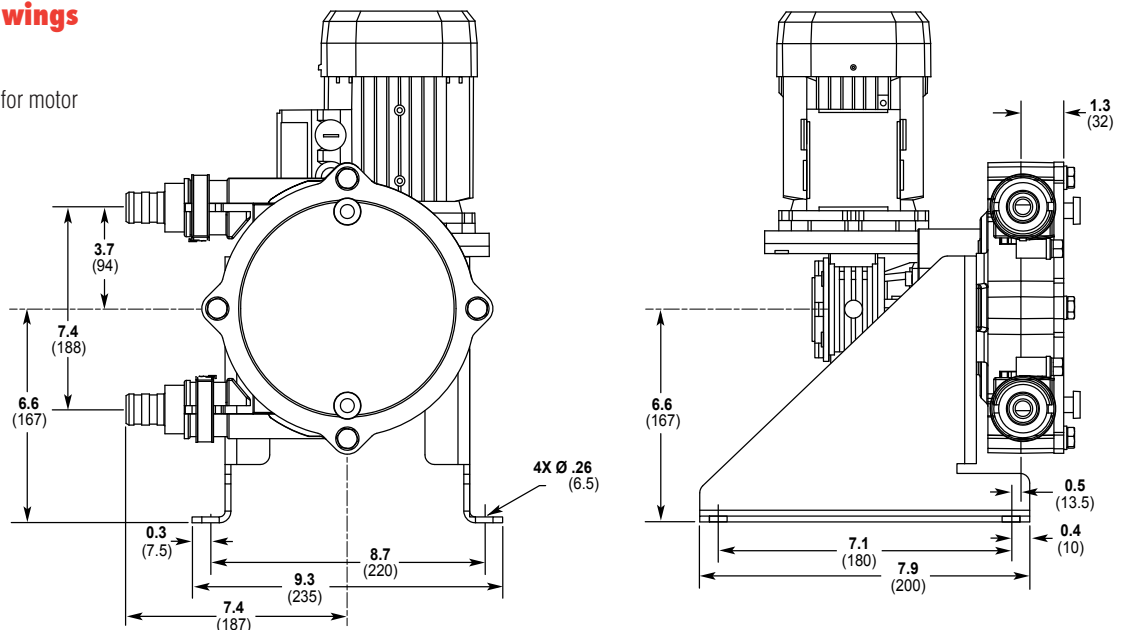
Steel Sanitary Tri-clamp



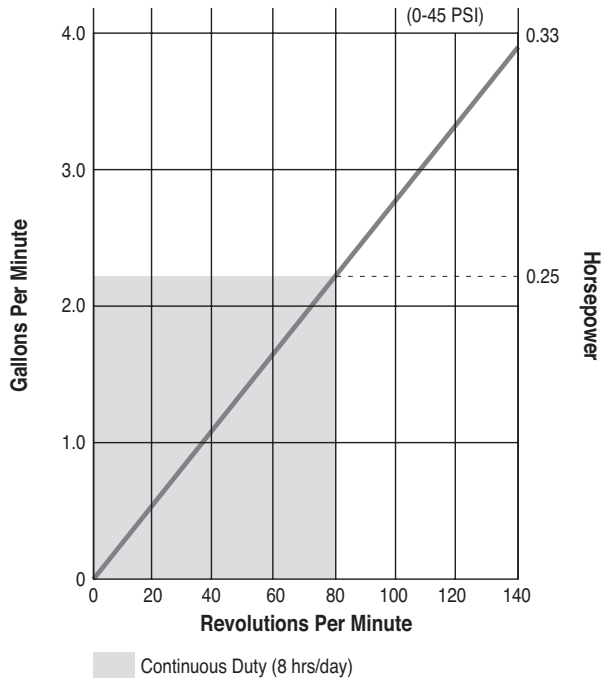
### Dimensional Drawings

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:       | 11/16 inch (17.4 mm) max. |

## Specifications

|                      |                        |
|----------------------|------------------------|
| Discharge Pressure:  | 45 psig (3 bar) max.   |
| Suction Lift:        | 14 ft. (4.3 m)         |
| Suction Pressure:    | 18 psig (1.2 bar) max. |
| Horsepower*:         | 1/3 max.               |
| Hose Size:           | 17 x 31 x 590 mm       |
| Displacement:        | 0.0286 gal/rev         |
| Weight (pump only):  | 20 lbs. (9 kg)         |
| Weight (with drive): | 34 lbs. (15.5 kg)      |

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

## Model 2004 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.

|          |          |          |          |          |          |          |          |          |           |
|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|
| <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> | <b>6</b> | <b>7</b> | <b>8</b> | <b>9</b> | <b>10</b> |
| 2        | 0        | 0        | 4        |          |          |          |          |          |           |

| Order Digit | Order Code  | Description  |
|-------------|-------------|--|
| <b>1-4</b>  | <b>2004</b> | <b>Pump Designation</b><br>Model 2004 Shaft Drive Pump |
| <b>5-6</b>  |             | <b>Hose Material/Type</b>                              |
|             | EF          | EPDM, fiber-braided                                    |
|             | HE          | Hypalon, extruded                                      |
|             | MF          | Natural Rubber, fiber-braided, heavy-duty              |
|             | NF          | Natural Rubber, fiber-braided                          |
|             | PE          | Neoprene, extruded                                     |
|             | SE          | Silicone, extruded                                     |
|             | OF          | Nitrile, Oil-rated, fiber-braided, heavy-duty          |
|             | VE          | Varprene, extruded                                     |
| <b>7-8</b>  |             | <b>Connector Material/Style</b>                        |
|             | AA          | PTFE, 1" hose barb                                     |
|             | CC          | 316 SST, Sanitary, 1" tri-clamp                        |
|             | EE          | Carbon Steel, 3/4" male NPT                            |
|             | FF          | Brass, 3/4" hose barb                                  |
|             | GG          | Brass, 3/4" male NPT                                   |
|             | SS          | 316 SST, 3/4" hose barb                                |
|             | TT          | 316 SST, 3/4" male NPT                                 |
| <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, 1/3 BHP TEFC, 230/460 VAC, 60 Hz</b>            |
|             |             | <b>10:1 Constant Torque Speed Range</b>                |
|             | B2          | 0.49 100:1 17.2 30(45) <sup>1</sup>                    |
|             | D2          | 0.69 70:1 24 30(45) <sup>1</sup>                       |
|             | F2          | 0.86 60:1 30 30(45) <sup>1</sup>                       |
|             | H2          | 1.00 46:1 37.5 30(45) <sup>1</sup>                     |
|             | J2          | 1.43 35:1 50 25(30) <sup>1</sup>                       |
|             | L2          | 1.75 28:1 61 22(25) <sup>1</sup>                       |
|             | N2          | 2.52 20:1 88 18(21)                                    |
|             | A           | No Drive   |

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

Note: 1Ø motors also available. Contact Wanner Engineering.