**DESCRIPTION**
A screw-in, cartridge-style, pressure-compensated, fixed orifice, bi-directional, restrictive-type flow control valve for use in high pressure applications.

**OPERATION**
The HFR10-32F maintains a constant flow rate regardless of pressure drop across the valve and regardless of flow direction: from port 2 to port 3 or from port 3 to port 2. Port 1 should be blocked.

**FEATURES**
- Excellent linearity and hysteresis.
- Industry common cavity.
- All HyPerformance products are tested to the rigorous standards of the NFPA specification T2.6.1.
- All HyPerformance valves are tested at a verification level of 90% and an assurance of 99%.

**RATINGS**
- **Operating Pressure**: 350 bar (5075 psi); 10% cycle life 420 bar (6090 psi)
- **Proof Pressure**: 690 bar (10000 psi)
- **Burst Pressure**: 1380 bar (20,000 psi)
- **Flow Rating**: Min: 1.0 lpm (0.3 gpm); Max: 19.0 lpm (5.0 gpm)
- **Temperature**: -54 to 107°C (-65 to 225°F) with urethane seals
- **Filtration**: See page 9.010.1
- **Fluids**: Mineral-based or synthetics with lubricating properties at viscosities of 7.4 to 420 cSt (50 to 2000 sus); See Temperature and Oil Viscosity, page 9.060.1
- **Installation**: No restrictions; See page 9.020.1
- **Cavity**: HVC10-3; See page 9.110.1
- **Cavity Tool**: HCT10-3XX; See page 8.600.1
- **Seal Kit**: HSK10-3U-00; See page 8.650.1

**PERFORMANCE** (Cartridge Only)

<table>
<thead>
<tr>
<th>Regulated Flow vs. Pressure Drop</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meter Out Mode</td>
</tr>
<tr>
<td>3 to 2</td>
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<tr>
<td>2 to 3</td>
</tr>
</tbody>
</table>

32 cSt/150 sus oil at 40°C (104°F)
**Fixed Orifice, Bi-Directional**

**HFR10-32F**

**DIMENSIONS**

U.S. Patent 6,167,906

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**MATERIALS**

**Cartridge:** Weight: 0.10 kg (0.22 lb) Steel with hardened work surfaces. Zinc-plated exposed surfaces. Urethane seals without back-up rings standard.

**Ported Body:** Weight: 1.40 kg (3.09 lb) H-Series ductile iron bodies standard. Rated to 345 bar (5000 psi). See page 8.010.1

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**TO ORDER**

![Flow Setting Diagram]

**HFR10-32F**

**Flow Setting**

**Setting in gpm**

Specify; For example:

- 0.5 gpm
- 5.0 gpm

**Setting in lpm**

Specify; For example:

- M2.0 2.0 lpm
- M19.0 19.0 lpm

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**Seals**

Urethane *U*

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*Note: Urethane seals recommended for operating pressures above 241 bar (3500 psi)*

Note: Consult factory for additional seal options.