**DESCRIPTION**
Manually-operated four-way, three-position directional valve, with adaptability to a variety of adjustment operators (ordered separately), in a variety of spool configurations.

**OPERATION**
Three positions: centered, 45° counterclockwise, and 45° clockwise. In the center position ports ① and ③ are open while ports ② and ④ are closed. In the 45° counterclockwise from center position, ports ③ and ④ are open while ports ① and ② are open. In the 45° clockwise from center position, ports ② and ③ are open while ports ① and ④ are closed. All ports are partially open in transition, except for clockwise from center rotation when port ④ remains closed in transition.

**FEATURES**
- Three-position detent, friction lock (with detented neutral), or spring return operators may be ordered separately.
- May be fully pressurized at all ports.
- Optional lock-down bracket.
- Heavy-duty construction.
- Industry common cavity.

**RATINGS**
- **Operating Pressure:** 240 bar (3500 psi)
- **Max. Flow:** See Performance Chart
- **Internal Leakage:** 164 cc/minute (10 cu. in./minute) at 240 bar (3500 psi)
- **Temperature:** -40 to 120°C with standard Buna N seals
- **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 position restrictions; See page 9.020.1
  - See page 4.990.2 for operator handles/knobs installation;
  - See page 4.990.1 for lock-down bracket installation.
- **Cavity:** VC10-4; See page 9.110.1
- **Cavity Tool:** CT10-4XX; See page 8.600.1
- **Seal Kit:** SK10-4X-MMM; See page 8.650.1
- **Lock-Down Bracket Kit:** Part Number 5399000

**PERFORMANCE** *(Cartridge Only)*

<table>
<thead>
<tr>
<th>Flow (lpm/gpm)</th>
<th>Pressure Drop (bar/psi)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.9</td>
<td>1.7/25</td>
</tr>
<tr>
<td>3.8</td>
<td>3.4/50</td>
</tr>
<tr>
<td>5.7</td>
<td>5.2/75</td>
</tr>
<tr>
<td>7.5</td>
<td>6.9/100</td>
</tr>
<tr>
<td>9.5</td>
<td>8.6/125</td>
</tr>
<tr>
<td>11.4</td>
<td>10.3/150</td>
</tr>
</tbody>
</table>

32 cSt/150 ssu oil at 40°C
**DIMENSIONS**

**MATERIALS**

**Cartridge:**
- Weight: 0.17 kg. (0.37 lbs.)
- Steel with hardened work surfaces.
- Zinc-plated exposed surfaces.
- Buna N O-rings and Fluorocarbon back-ups standard.

**Standard Ported Body:**
- Weight: 0.34 kg. (0.75 lbs.)
- Anodized high-strength 6061 T6 aluminum alloy, rated to 207 bar (3000 psi).
- Ductile iron bodies available; dimensions may differ. See page 8.010.1

**Lever-Type Handle:** (Sold Separately)
- Weight: 0.18 kg. (0.38 lbs.)
- Steel with hardened work surfaces.
- Zinc-plated exposed surfaces.
- Plastic lever arm.

**TO ORDER**

**MR10-47F**

<table>
<thead>
<tr>
<th>Option</th>
<th>Seals</th>
</tr>
</thead>
<tbody>
<tr>
<td>None (Blank)</td>
<td>N Buna N (Std.)</td>
</tr>
<tr>
<td><strong>Porting</strong></td>
<td>V Fluorocarbon</td>
</tr>
<tr>
<td>Cartridge Only 0</td>
<td>P Polyurethane</td>
</tr>
<tr>
<td>SAE 6 6T</td>
<td></td>
</tr>
<tr>
<td>SAE 8 8T</td>
<td></td>
</tr>
<tr>
<td>SAE 8 with Lock-Down Bracket 8TL</td>
<td></td>
</tr>
<tr>
<td>1/4 in. BSP* 2B</td>
<td></td>
</tr>
<tr>
<td>3/8 in. BSP* 3B</td>
<td></td>
</tr>
</tbody>
</table>

*BSP Body; U.K. Mfr. Only

**NOTE:** To order standard operator kits, refer to pages 4.770.1 and 4.770.2