**MR10-20 Manual Rotary Flow Control**

**DESCRIPTION**
A manually-adjustable variable orifice, offering linear control with adaptability to a variety of adjustment operators (ordered separately).

**OPERATION**
In extreme clockwise position, valve is fully closed (normally closed). Counterclockwise rotation of 180° gradually increases flow. The first 10° (approx.) of rotation is deadband. The last 15° of rotation increases flow very little. For a normally-open version with counterclockwise rotation gradually decreasing flow, consult factory.

**FEATURES**
- Ten-position detent or infinite friction lock options.
- Good linearity in three flow range options.
- Adaptable to a variety of operators.
- Optional lock-down bracket.
- Heavy-duty construction.
- Low effort adjustment.
- Industry common cavity.

**RATINGS**
**Operating Pressure:** 240 bar (3500 psi)
**Max. Flow:** See Performance Chart
**Flow Rate Delivered at 5.5 bar (80 psi) Differential:**

<table>
<thead>
<tr>
<th>Model Code</th>
<th>Flow</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>49 lpm (13 gpm)</td>
</tr>
<tr>
<td>B</td>
<td>34 lpm (9 gpm)</td>
</tr>
<tr>
<td>C</td>
<td>22 lpm (6 gpm)</td>
</tr>
</tbody>
</table>

**Leakage in “Off” Position at 207 bar (3000 psi):** 164 cc/min. (10 cu. in.)

**Temperature:** -40 to 120°C with standard Buna N seals

**Torque Required to Change Position Under Load:**
- @ 7 bar (100 psi): 3.9 Nm (35 lb.-in.)
- @ 240 bar (3500 psi): 5.1 Nm (45 lb.-in.)

**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 position restrictions; See page 9.020.1

**Cavity:** VC10-2; See page 9.110.1

**Cavity Tool:** CT10-2XX; See page 8.600.1

**Seal Kit:** SK10-2X-M; See page 8.650.1

**Lock-Down Bracket Kit:** Part Number 5399000
**DIMENSIONS**

**Cartridge:**
- Weight: 0.12 kg (0.26 lbs)
- Steel with hardened work surfaces
- Zinc-plated exposed surfaces
- Buna N O-rings and Fluorocarbon back-ups standard

**Standard Ported Body:**
- Weight: 0.16 kg (0.35 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 lb)
- Steel with hardened work surfaces
- Zinc-plated exposed surfaces
- Plastic lever arm

**MATERIALS**

**Seals**
- N Buna N (Std.)
- V Fluorocarbon

**Option**
- None (Blank)

**Flow Rate**
- 49 lpm (13 gpm) A
- 34 lpm (9 gpm) B
- 22 lpm (6 gpm) C

**Porting**
- Cartridge Only: 0
- SAE 6: 6T
- SAE 8: 8T
- SAE 8 with Lock-Down Bracket: 8TL
  - 1/4 in. BSP* 2B
  - 3/8 in. BSP* 3B
  - 1/2 in. BSP* 4B

*BSP Body: U.K. Mfr. Only

**TO ORDER**

**MR10-20**

**Seals**
- N Buna N (Std.)
- V Fluorocarbon

**Option**
- None (Blank)

**Flow Rate**
- 49 lpm (13 gpm) A
- 34 lpm (9 gpm) B
- 22 lpm (6 gpm) C

**Porting**
- Cartridge Only: 0
- SAE 6: 6T
- SAE 8: 8T
- SAE 8 with Lock-Down Bracket: 8TL
  - 1/4 in. BSP* 2B
  - 3/8 in. BSP* 3B
  - 1/2 in. BSP* 4B

*BSP Body: U.K. Mfr. Only

**NOTE:** See page 5.003.2 for Flow Control Adjustment Options (ordered separately).