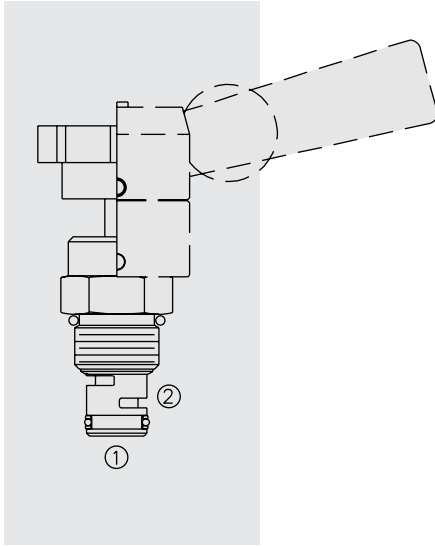


# MR10-20 Manual Rotary Flow Control



## 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.

NOTE: Use of the valve in the ① to ② direction is **not** recommended if the plastic knob operator is used. Because of the low effort (internal bearing used) adjustment, flow forces may cause setting change. The valve will operate ① to ② well with handle-type operator kits.

## 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:**

Model Code	Flow
A	49 lpm (13 gpm)
B	34 lpm (9 gpm)
C	22 lpm (6 gpm)

**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  
See page 4.780.2 for operator handles/knobs installation;  
See page 4.780.1 for lock-down bracket installation.

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

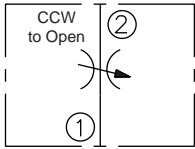
**Cavity Tool:** CT10-2XX; See page 8.600.1

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

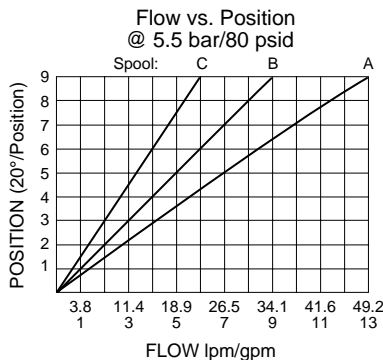
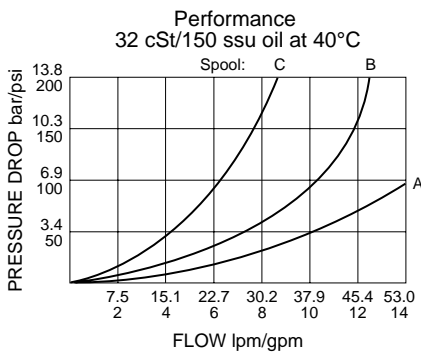
**Lock-Down Bracket Kit:** Part Number 5399000

## SYMBOLS

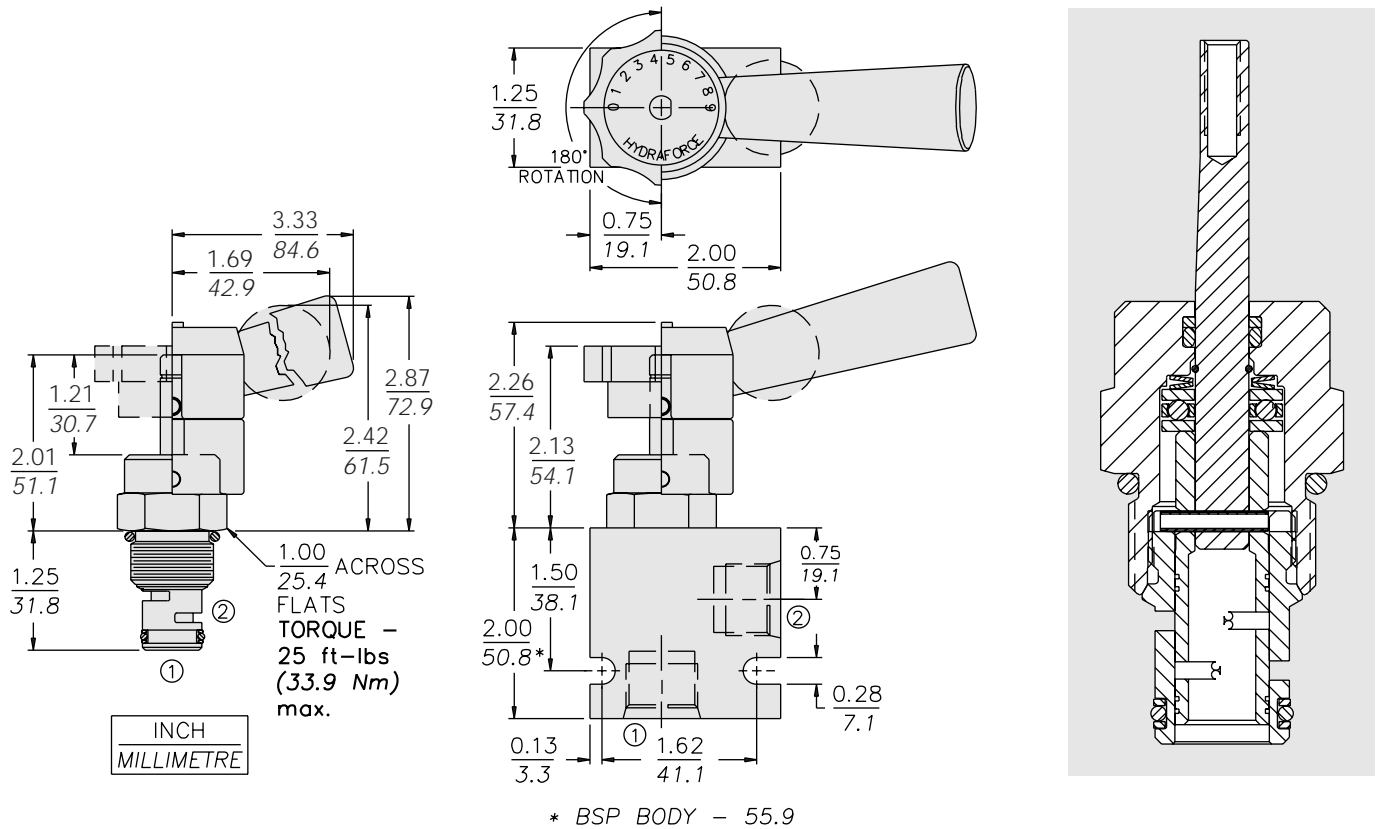
### USASI/ISO:



## PERFORMANCE (Cartridge Only)



## DIMENSIONS



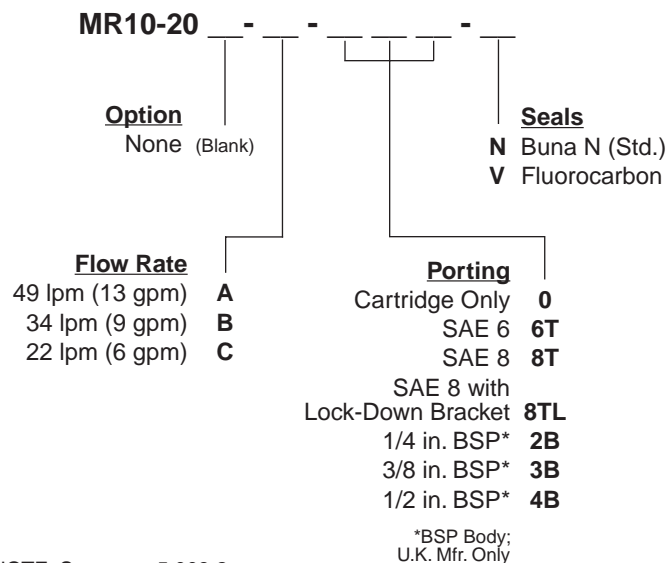
## MATERIALS

**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.

## TO ORDER



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