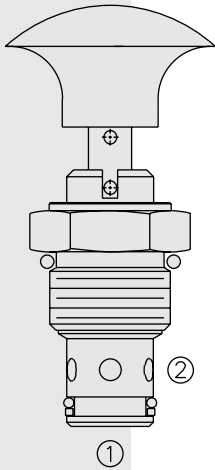


DIRECTIONAL VALVES

MP10-20 Manual, Spring Return, Pull-to-Open



DESCRIPTION

A manual, 2-way, pull-to-open, screw-in hydraulic directional valve.

OPERATION

The **MP10-20** blocks flow from ② to ① until an operator pulls the shaft outward. The bias spring allows for up to 12.4 bar (180 psi) back-pressure at ① before the valve will open.

Note: Pressure at port ① will directly act on the spool and spring. Port ① is intended to be a tank port only.

A unique 90° rotational lock is optional for positive “open” position holding. The valve resets to spring return-to-close with a 90° turn from the locked-open position.

FEATURES

- Hardened seat for long life and low leakage.
- Remains closed to 12.4 bar (180 psi) back-pressure.
- Optional rotational lock position.
- Industry common cavity.

RATINGS

Operating Pressure: 207 bar (3000 psi)

Proof Pressure: 350 bar (5075 psi)

Flow: See Performance Chart

Internal Leakage ② to ①: 0.25 cc/minute (5 drops/minute) max. at 207 bar (3000 psi)

Mechanical Pull Effort Required at Rated Pressure: 7.3 kg. (16 lbs.)

Temperature: -40 to 120°C

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

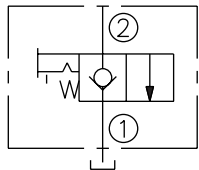
Cavity: VC10-2; See page 9.110.1

Cavity Tool: CT10-2XX; See page 8.600.1

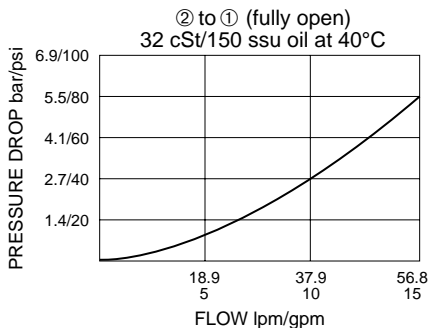
Seal Kit: SK10-2X-T; See page 8.650.1

SYMBOLS

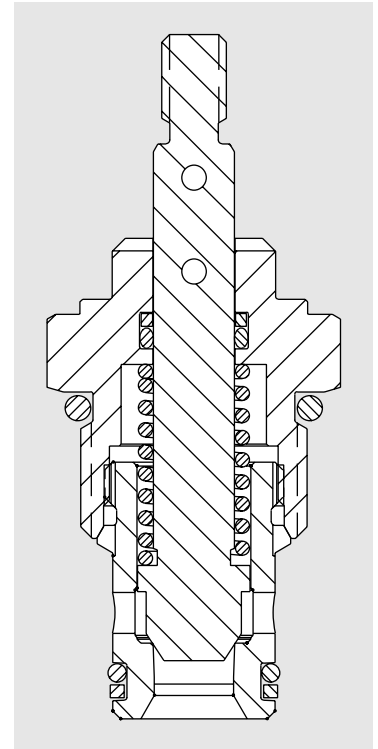
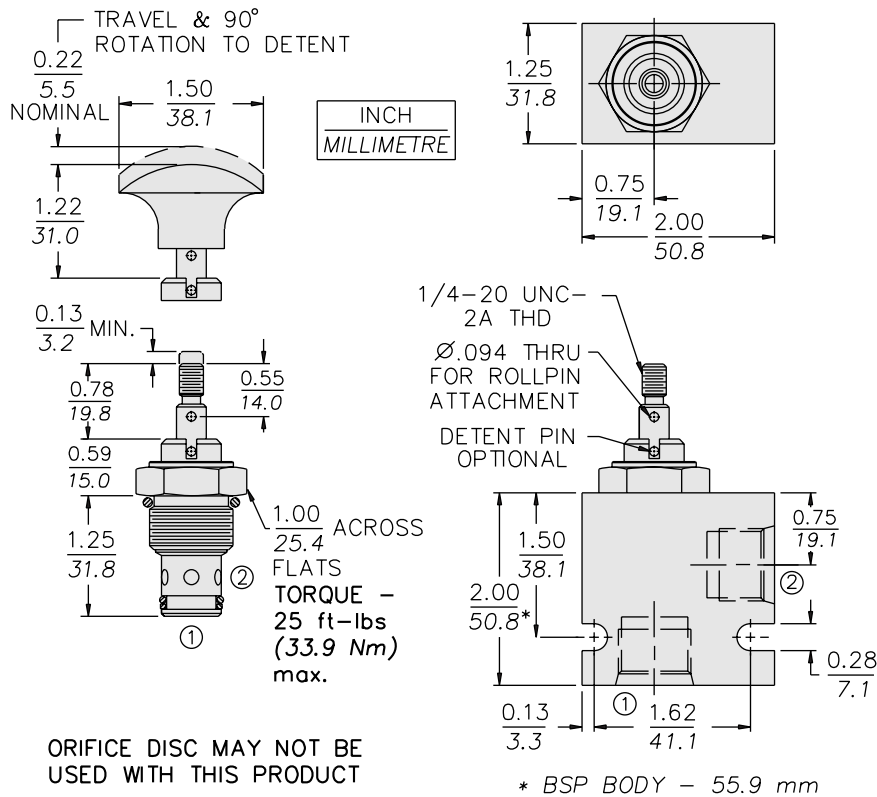
USAS/ISO:



PERFORMANCE (Cartridge Only)



DIMENSIONS



ORIFICE DISC MAY NOT BE USED WITH THIS PRODUCT

MATERIALS

Cartridge: Weight: 0.11 kg. (0.25 lbs.)
Steel with hardened work surfaces.
Zinc-plated exposed surfaces.
Buna N O-rings and polyester elastomer back-ups standard.
Plastic knob optional.

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.

TO ORDER

MP10-20

Option

Threaded Shaft/
Spring Return T

Threaded Shaft/
Lock Position Pin R

Black Plastic Knob/
Spring Return K

Black Plastic Knob/
Lock Position Pin D

Red Plastic Knob/
Spring Return J

Red Plastic Knob/
Lock Position Pin L

Seals

N Buna N (Std.)
V Fluorocarbon

Porting

0 Cartridge Only
6T SAE 6
8T SAE 8
2B 1/4 in. BSP*
3B 3/8 in. BSP*
4B 1/2 in. BSP*

*BSP Body; U.K. Mfr. Only