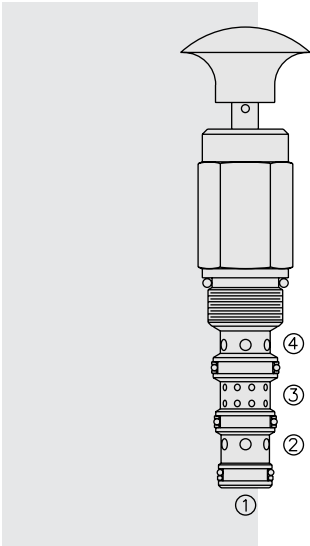


# DIRECTIONAL VALVES

## MP10-47A Manual Pull/Push-to-Shift, 3-Position,



### DESCRIPTION

A 4-way, 3-position, spool-type, tandem center, manual pull/push-to-shift, spring-return, directional hydraulic cartridge valve.

### OPERATION

In its neutral position, the **MP10-47A** blocks ports ② and ④, while allowing flow from ③ to ①. In the pulled position, flow is allowed bi-directionally between ports ③ and ② and from ④ to ①. In the pushed position, flow is allowed between ports ③ and ④ and from ② to ①.

### FEATURES

- Hardened spool and cage for long life.
- Industry common cavity.

### RATINGS

#### Operating Pressure:

- Ports ②, ③ and ④: 207 bar (3000 psi)
- Port ① (Max.): 14 bar (200 psi)

**Flow:** See Performance Chart

**Internal Leakage:** 41 cc/minute (2.5 cu. in./minute) at 207 bar (3000 psi) max.

**Mechanical Pull/Push Effort Required:** 9.0 kg. (20 lbs.) initial;  
11.3 kg. (25 lbs.) full stroke

**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

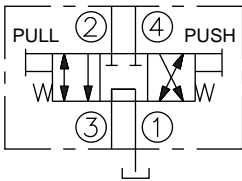
**Cavity:** VC10-4; See page 9.110.1

**Cavity Tool:** CT10-4XX; See page 8.600.1

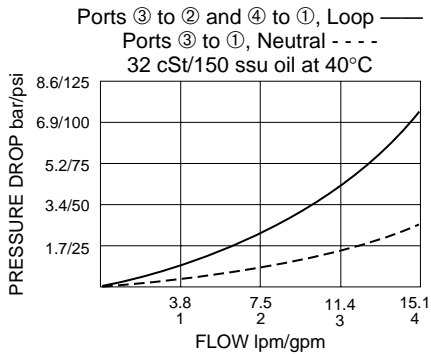
**Seal Kit:** SK10-4X-MMT; See page 8.650.1

### SYMBOLS

#### USASI/ISO:



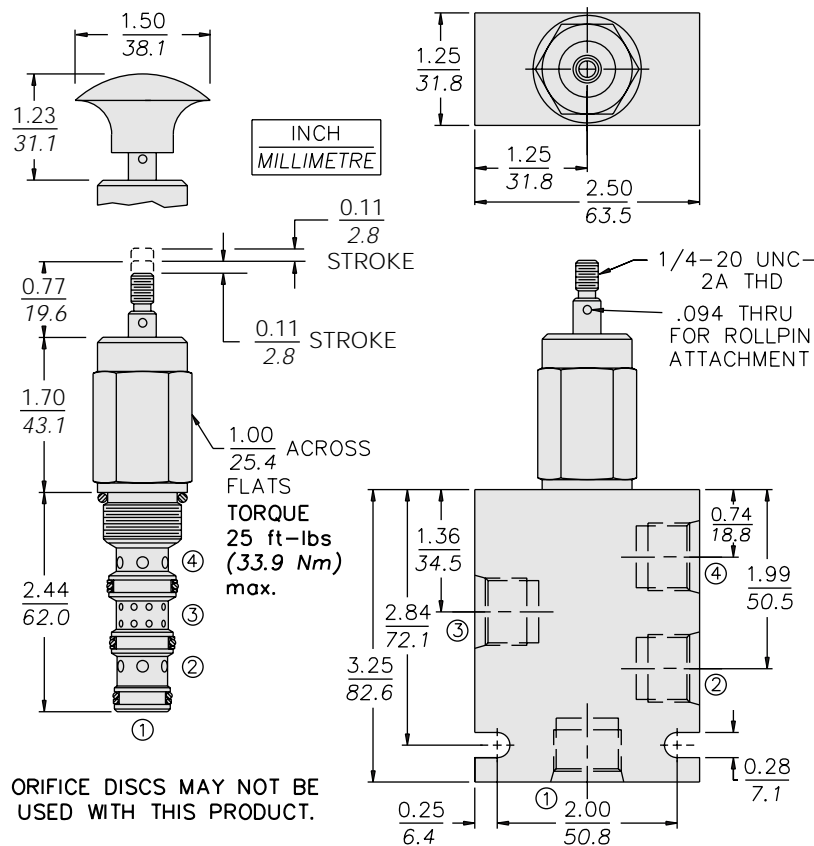
### PERFORMANCE (Cartridge Only)



# 4-Way, Tandem Center

# MP10-47A

## DIMENSIONS



## MATERIALS

**Cartridge:** Weight: 0.32 kg. (0.70 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: 0.34 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.

## TO ORDER

