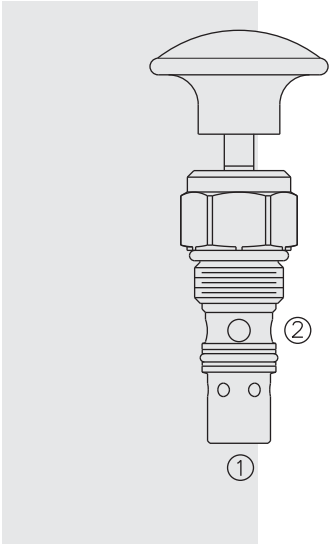


# MPCV08-20 Manual, Spring Return, Pull-to-Open



## DESCRIPTION

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

## OPERATION

The MPCV08-20 blocks flow from ② to ① and from ① to ② until an operator pulls the shaft outward. When released, the valve returns to its neutral position.

The MPCV08-20 is designed to fit into the VC08-3 cavity with the normal inlet at cavity port ③ (valve port ②), the outlet at cavity port ① (valve port ①), and cavity port ② blocked. The pressure drop will be substantially higher if cavity port ② is selected as an alternate outlet port.

**Note:** With pressure at port ② higher than pressure at port ①, maximum allowable pressure at port ① is 150 psi (10.3 bar).

## FEATURES

- Hardened seat for long life and low leakage.
- Industry common cavity.

## RATINGS

**Operating Pressure:** 207 bar (3000 psi)

**Flow:** See Performance Chart

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

**Mechanical Pull Effort Required at Rated Pressure:** 4.5 kg. (10.0 lbs.) initial; 6.8 kg. (15.0 lbs.) full shift

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

**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

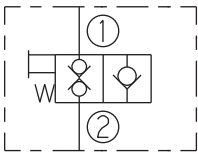
**Cavity:** VC08-3; See page 9.108.1

**Cavity Tool:** CT08-3XX; See page 8.600.1

**Seal Kit:** SK08-2X-T; See page 8.650.1

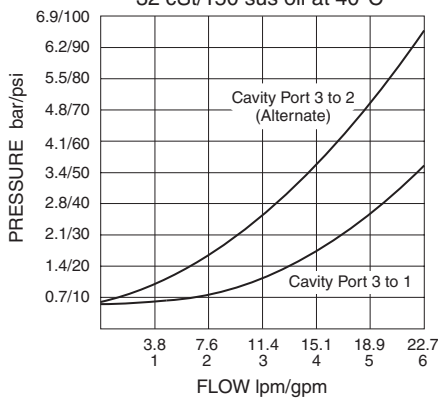
## SYMBOLS

### USAS/ISO:

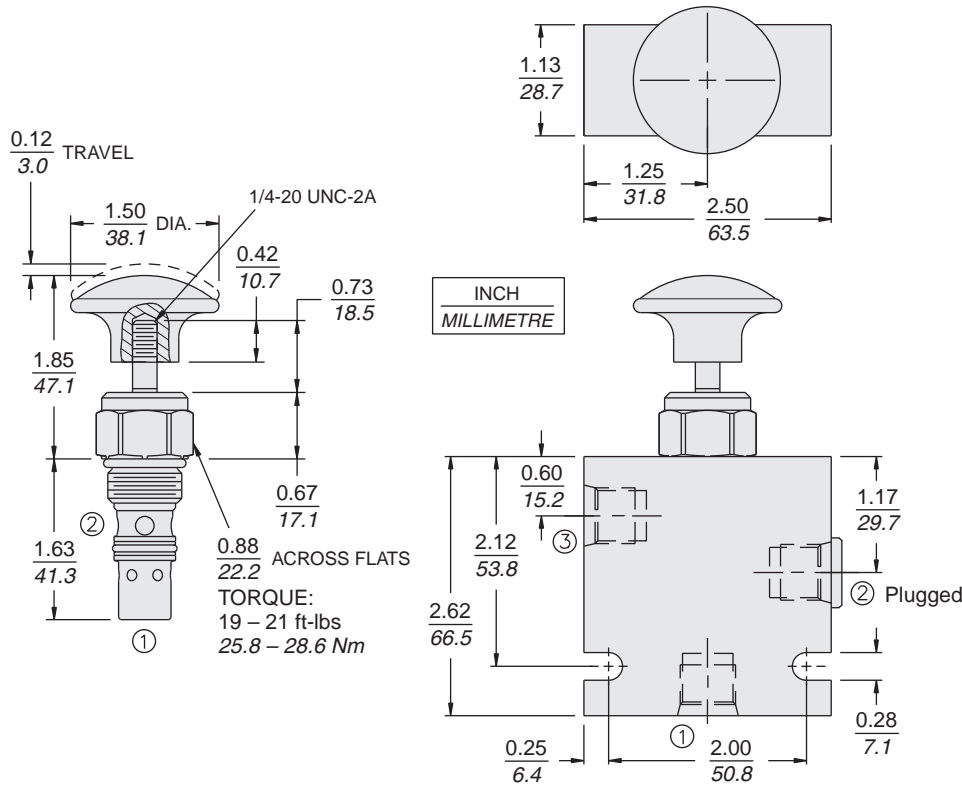


## PERFORMANCE (Cartridge Only)

Valve Ports ② to ① in 3-Way Cavity  
32 cSt/150 sus oil at 40°C



**DIMENSIONS**



**MATERIALS**

**Cartridge:** Weight: 0.10 kg. (0.22 lbs.)  
Steel with hardened work surfaces;  
Zinc-plated exposed surfaces.  
Buna N O-rings and back-ups  
standard. Plastic knob optional.

**Standard Ported Body:** Weight:  
0.27 kg. (0.60 lbs.) Anodized high-  
strength 6061 T6 aluminum alloy,  
rated to 207 bar (3000 psi). Ductile  
iron bodies available; dimensions  
may differ. See page 8.008.1

**TO ORDER**

MPCV08-20 - -

**Option**  
Threaded Shaft w/Spring Return **T**  
Black Plastic Knob w/Spring Return **K**  
Red Plastic Knob w/Spring Return **J**

**Seals**  
**N** Buna N (Std.)  
**V** Fluorocarbon  
**P** Polyurethane

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

\*BSP Body;  
U.K. Mfr. Only