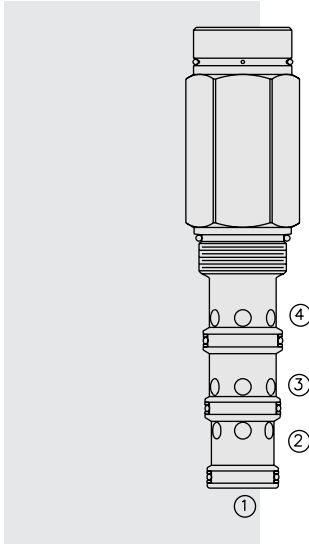


## PD42-M40 Piloted 3-Way Spool, External Vent



### DESCRIPTION

A screw-in, cartridge-style, pilot-operated, spool-type, hydraulic directional valve for three-way circuits requiring remote pilot actuation.

### OPERATION

In neutral (unpiloted), the **PD42-M40** allows flow passage from ③ to ② bidirectionally, while flow is blocked at ④. V is a spring chamber vent-to-atmosphere, which is internally O-ring sealed from the cartridge flow paths.

On remote pilot signal at ①, the valve shifts to open from ③ to ④, while blocking flow at ②.

The vented spring chamber allows PD42-M40 to be fully pressurized at any port without affecting required pilot pressure.

### FEATURES

- Hardened spool and cage for long life.
- Optional sealed pilot.
- Industry-standard ISO cavity.

### RATINGS

**Operating Pressure:** 344 bar (5000 psi) with polyurethane seals

**Flow:** See Performance Chart

**Internal Leakage:** 246 cc/minute (15 cu. in./minute) max. at 344 bar (5000 psi)

**Pilot Pressure Required:**

To Spool Crossover: 11.6 bar (172 psi)

To Full Spool Shift: 17 bar (245 psi)

**Temperature:** -40 to 120°C with standard Buna 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:** VC42-M4; See page 9.142.1

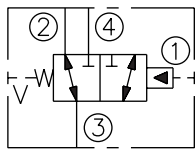
**Cavity Tool:** CT42-M4XX; See page 8.600.1

**Seal Kit:** SK42-4X-MMM; See page 8.650.1

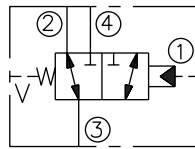
**Cap Vent Seal:** 6003125

### SYMBOLS

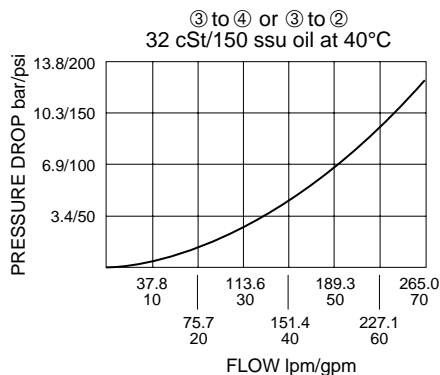
#### USASI:



#### ISO:



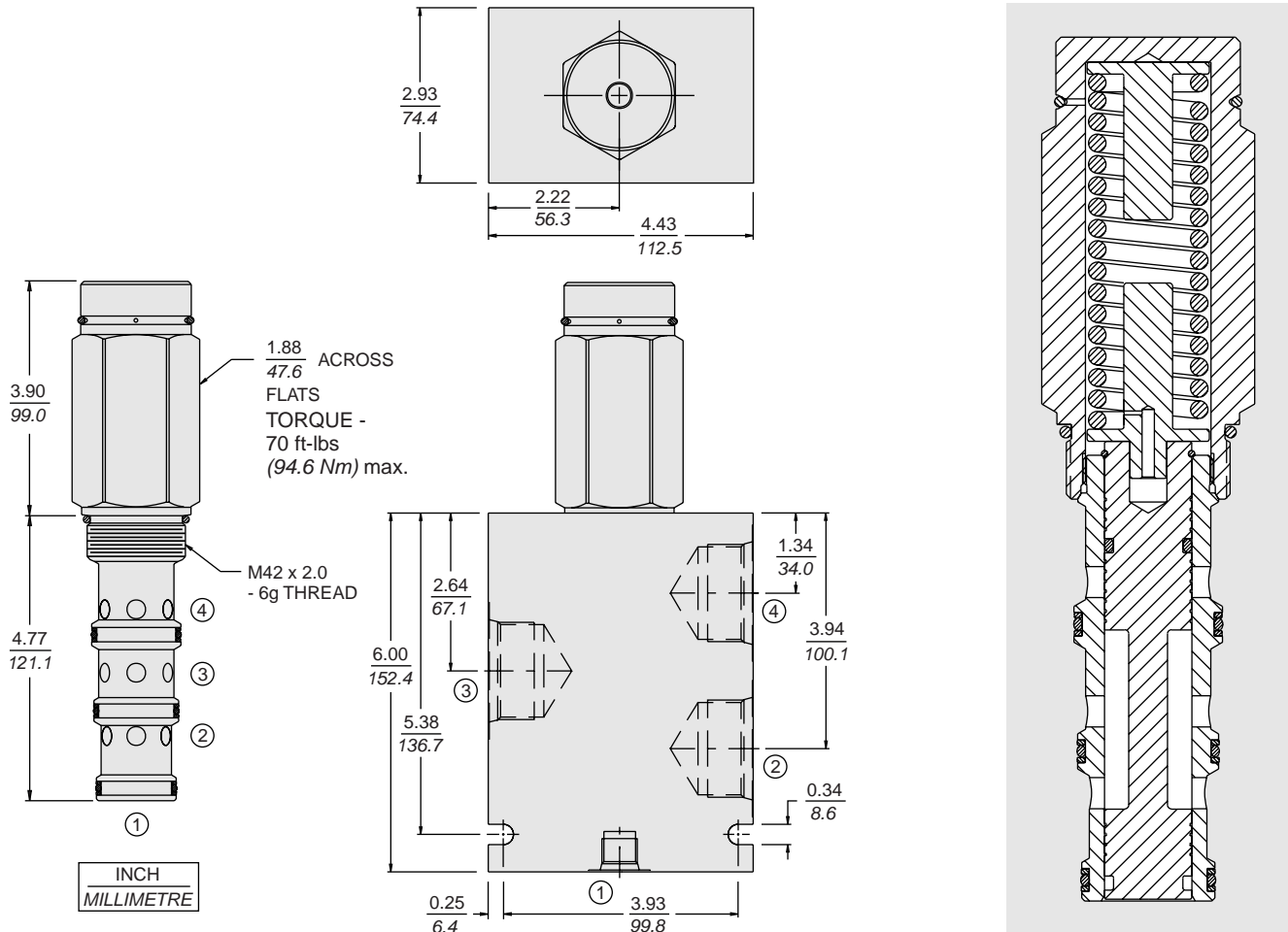
### PERFORMANCE (Cartridge Only)



**Note:** This valve is designed with a dynamic oil-to-atmosphere seal in the vent section. Ambient conditions will cause this vent seal to degrade which will reduce the valve's cycle life. If this could cause a problem, we suggest that a non-vented model be selected. Consult factory for assistance.

**PD42-M40**

**DIMENSIONS**



**MATERIALS**

**Cartridge:** Weight: 0.52 kg. (1.15 lbs.)  
Steel with hardened work surfaces.  
Zinc-plated exposed surfaces.  
Buna N O-rings and polyester elastomer back-ups standard.

**Standard Ported Body:** Weight: 2.8 kg. (6.2 lbs.)  
Anodized high-strength 6061 T6 aluminum alloy, rated to 207 bar (3000 psi). Ductile iron bodies available; dimensions may differ. See page 8.042.1

**TO ORDER**

