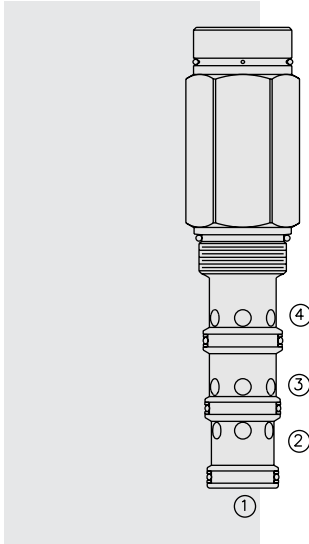


DIRECTIONAL VALVES

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

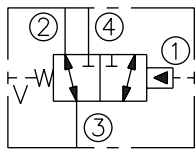
Cavity Tool: CT42-M4XX; See page 8.600.1

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

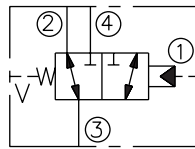
Cap Vent Seal: 6003125

SYMBOLS

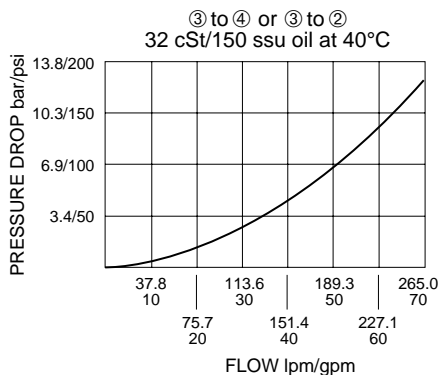
USASI:



ISO:

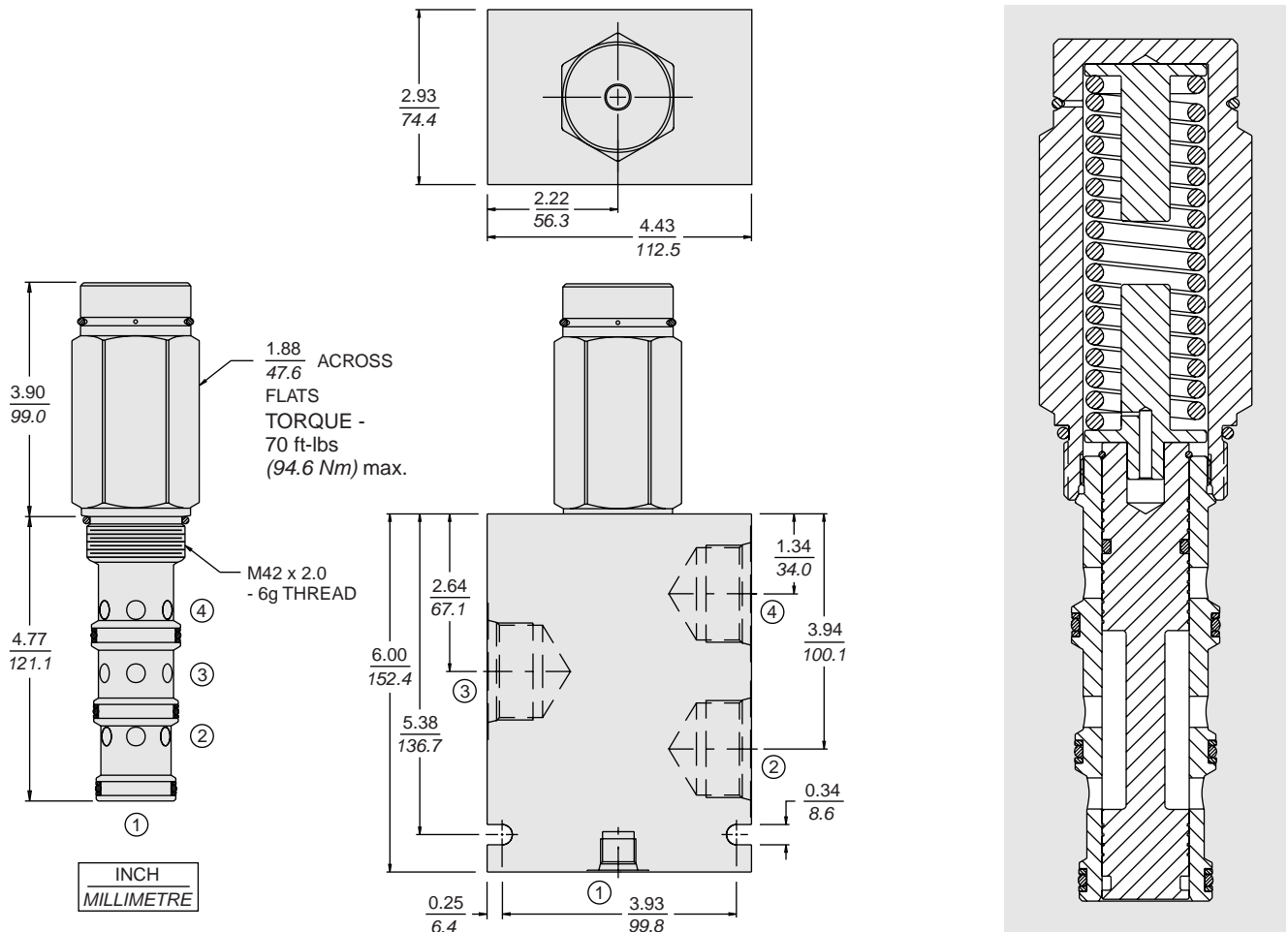


PERFORMANCE (Cartridge Only)



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.

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

