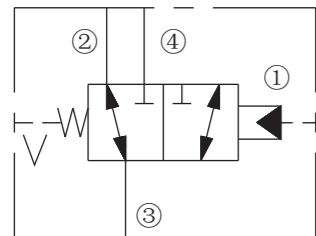
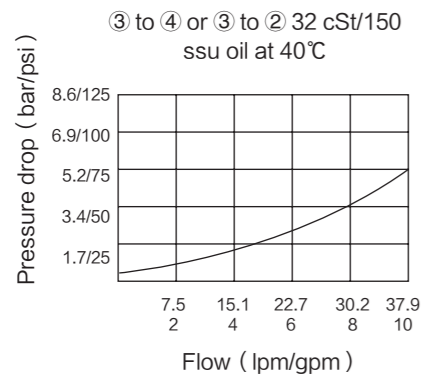


ISO SYMBOL



PERFORMANCE (Cartridge Only)



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 INPD10-40 allows flow passage from ③ to ② bidirectionally, while flow is blocked at ①. 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. Because of the vented spring chamber, the cartridge may be fully pressurized at any port without affecting required pilot pressure.

FEATURES

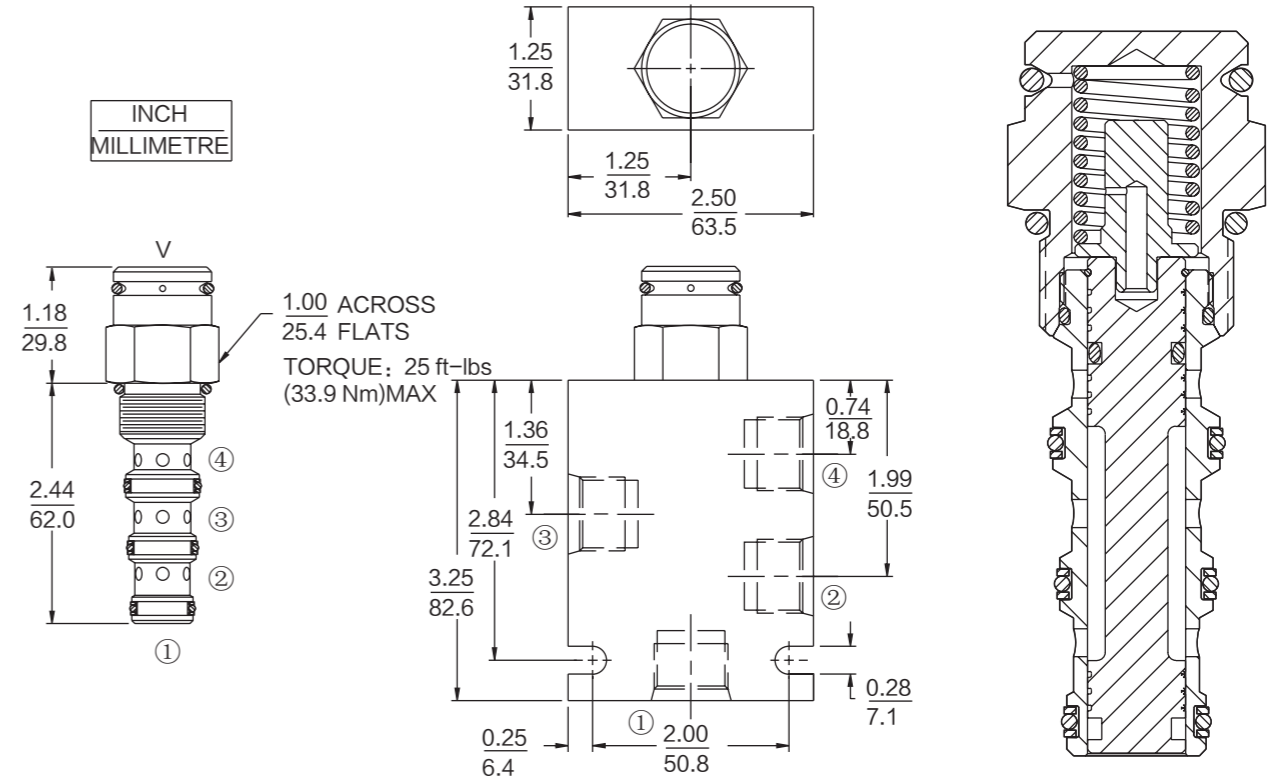
- Hardened spool and cage for long life.
- Industry common cavity.

RATINGS

- Operating Pressure:** 240 bar (3500 psi)
- Proof Pressure:** 350 bar (5075 psi)
- Flow:** See Performance Chart
- Internal Leakage:** 82 cc/minute (5 cu. in./minute) max. at 207 bar (3000 psi)
- Pilot Pressure Required:**
 - To Spool Crossover: 7.6 bar (110 psi)
 - To Full Spool Shift: 8.6 bar (125 psi)
- Oil Volume Required to Full Shift:** 0.65 cc/minute (0.04 cu. in.)
- Temperature:** -40°C ~ 120°C (with Buna N seals)
- Fluids:** Mineral-based or synthetics with lubricating properties at viscosities of 7.4 to 420 cSt (50 to 2000 ssu)
- Cavity:** T10-4A; See bottom of this catalog.

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:** 0.16kg (0.35 lbs) ; Steel with hardened work surfaces. Zinc-plated exposed surfaces. Buna N O-rings and back-ups standard.
- BODY: Weight:** 0.34kg (0.75 lbs) ; Anodized highstrength 6061 T6 aluminum alloy, rated to 207 bar (3000 psi). Ductile iron bodies available; dimensions may differ

TO ORDER

INPD10-40		Bias Spring†
Options		
None (Blank)	-	40 2.8 bar (40 psi)
Open transition	N	60 4.1 bar (60 psi)
Tall Cap	T	110 7.6 bar (110 psi)
		130 9.1 bar (130 psi)
		170 11.7 bar (170 psi)
		M5.0 5.0 bar (73 psi)
		‡M14.0 14 bar (203 psi)
		‡M15.0 15 bar (217 psi)
Porting		
Cartridge Only	0	
SAE 6	6T	
SAE 8	8T	
1/4 in. BSP*	2B	
3/8 in. BSP*	3B	

† T option required.
Cap Height: 2.21" (56.1 mm)
‡ Note: 110 psi bias spring is the minimum required for use with sealed spool.

Seals

- N Buna N (Std.)
- NS Buna N with Sealed Spool (110 psi spring minimum required)
- V Fluorocarbon
- VS Fluorocarbon with Sealed Spool