

HYPD10-40 (Three Way Pilot Directional Valve)

Description

A cartridge-style 3-way pilot-operated spool-type external-vent directional valve.

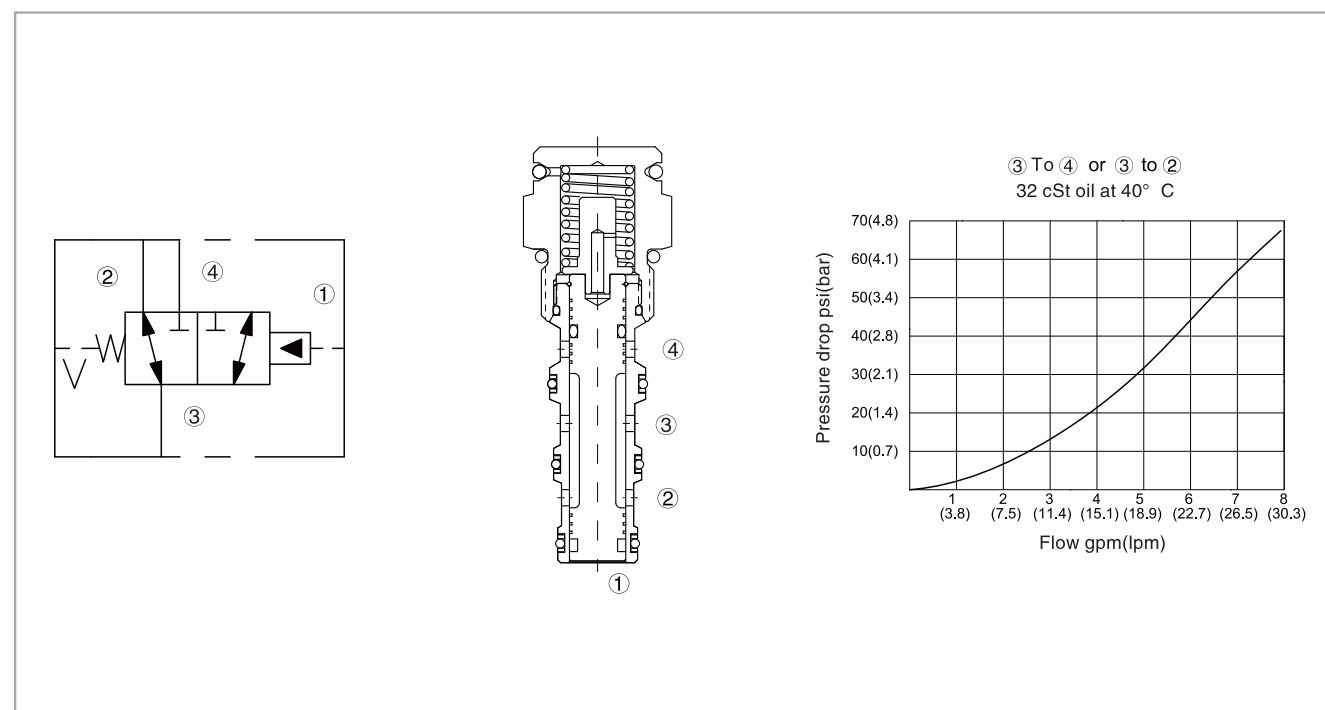
Operation

On no remote pilot signal at ①, the valve allows flow from ③ to ② bi-directionally, while flow is blocked at ④, 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.

Specifications

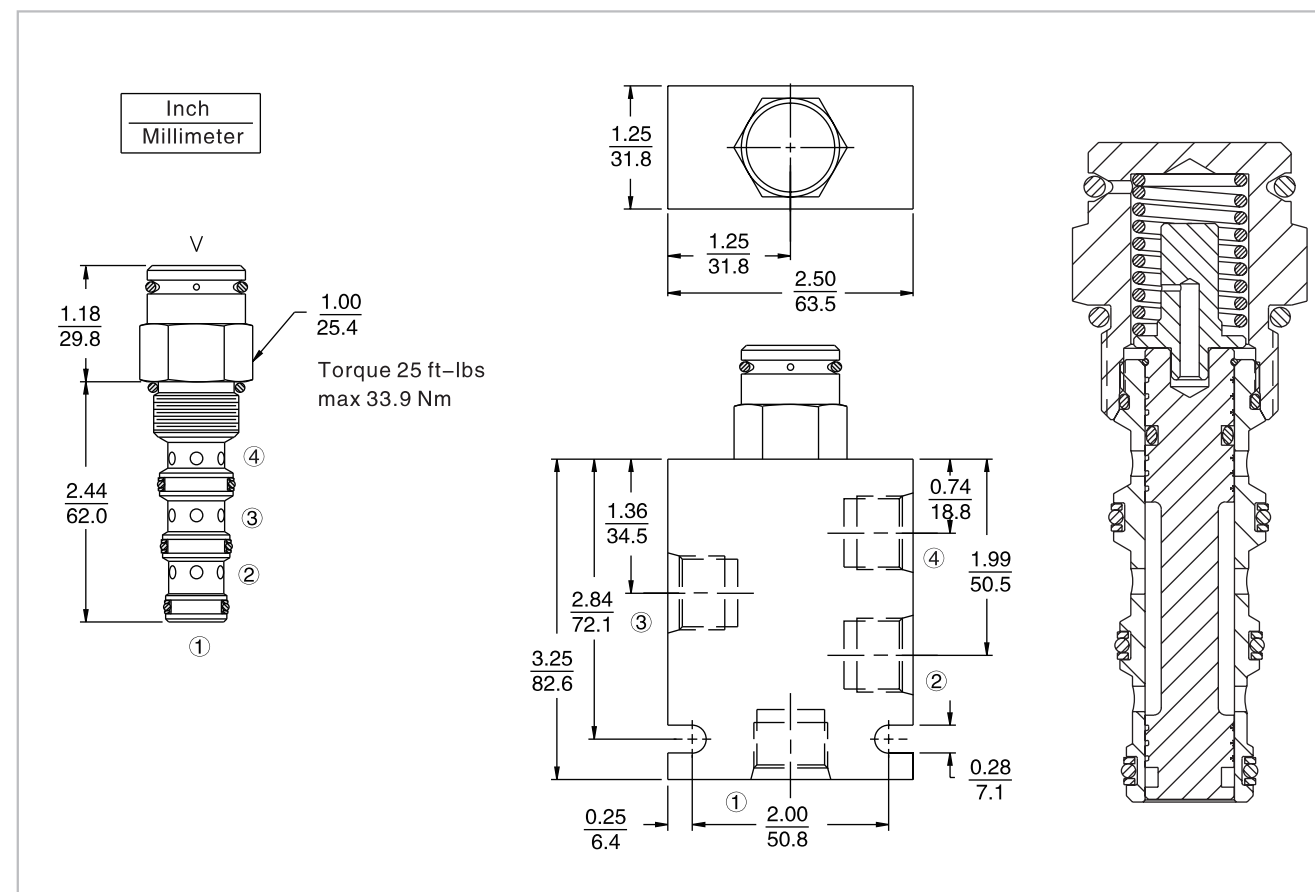
Max. operating pressure:	240 Bar
Flow:	See pressure drop vs. flow graph
Internal leakage:	82 cc/min. max. at 207 bar
Pilot pressure required:	To spool crossover 7.6 bar(110psi) To Full spool shift 8.6 bar(125psi)
Temperature:	(-40°C To +120°C) with NBR material seals
Fluids:	Mineral-based fluids with viscosities of 7.4 to 420 cSt.
Cavity:	HY10-4, see page H.1.4
Body material:	6061-T6 Aluminum alloy rated to 207 bar, steel & ductile iron rated to 350 bar

Code symbol, profile and pressure drop vs. flow



HYPD10-40 (Three Way Pilot Directional Valve)

External dimensions



Material science and order model

Cartridge: weight: 0.16 kg (0.35 lb);
 Steel, the working face is duratected
 Surface zinc-plated;
 NBR material sealing and
 check ring (standard).

Block: weight :0.34 kg (0.75 lb);
 High-strength performance aluminum
 alloy with anodic oxidation;
 #6061 T6;
 Rated pressure up to 240 bar (3500 psi);
 Also available with ductile cast iron and
 steel material;
 Size might be different, please consult factory.

HYPD10-40

Options		Bias spring
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)
		T option required
		Cap height: 2.21 inch (56.1mm)
		Noted: 110 psi bias spring is the minimum required for use with sealed spool.
Porting		Seals
Cartridge only	0	N Buna N (std.)
SAE 6	6T	NS Buna N with sealed spool
SAE 8	8T	(110 psi spring minimum required)
1/4 Inch BSP*	2B	V Fluorocarbon
3/8 Inch BSP*	3B	VS Fluorocarbon with sealed spool
		(110 psi spring minimum required)

*BSP block only for UK made