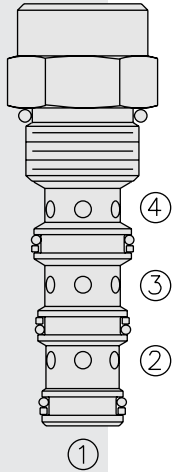


DIRECTIONAL VALVES

BV10-40 Brake Release Valve



DESCRIPTION

A screw-in, cartridge-style, spool-type, hydraulic directional valve which operates by pressure-to-shift spring return. It is normally used to release a spring-applied brake whenever hydraulic power is directed to move a load.

OPERATION

In neutral, the **BV10-40** allows flow from ② to ③. When the pressure differential between the ① and ④ ports exceeds approximately 5.5 bar (80 psi), the spool has moved far enough to close ② to ③ flow, while opening the higher pressure of ① or ④ to ②.

FEATURES

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

RATINGS

Operating Pressure: 240 bar (3500 psi)

Proof Pressure: 390 bar (5700 psi)

Flow: See Performance Chart

Internal Leakage: 164 cc/minute (10 cu. in./minute) max. at 207 bar (3000 psi) ② to ③ (shifted)

Differential Pressure Required (① > ④, ④ > ①) to Shift to Close ② to ③ / Open ① or ④ to ②: 5.5 bar (80 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

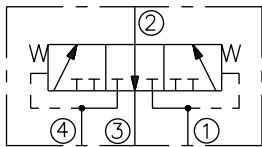
Cavity: VC10-4; See page 9.110.1

Cavity Tool: CT10-4XX; See page 8.600.1

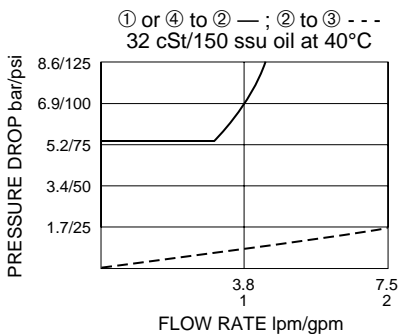
Seal Kit: SK10-4X-TBT; See page 8.650.1

SYMBOLS

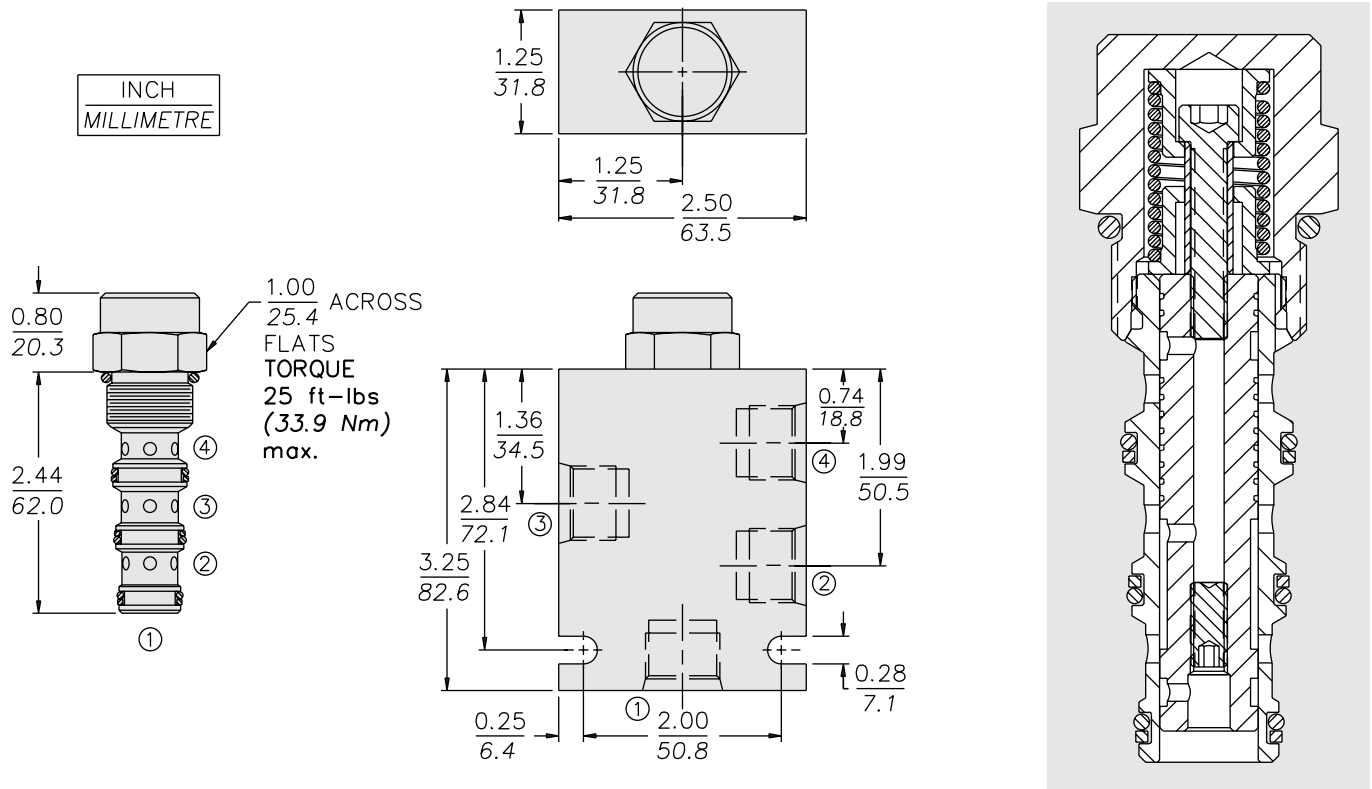
USASI/ISO:



PERFORMANCE (Cartridge Only)



DIMENSIONS



MATERIALS

Cartridge: Weight: 0.16 kg. (0.35 lbs.)
 Steel with hardened work surfaces.
 Zinc-plated exposed surfaces.
 Buna N O-rings and polyester elastomer back-ups standard.

Standard Ported Body: Weight:
 0.34 kg. (0.75 lbs.) Anodized high-strength 6061 T6 aluminum alloy, rated to 207 bar (3000 psi). Ductile iron bodies available; dimensions may differ. See page 8.010.1

TO ORDER

BV10-40 -

Porting		Seals
Cartridge Only	0	N Buna N (Std.)
SAE 6	6T	V Fluorocarbon
SAE 8	8T	
1/4 in. BSP*	2B	
3/8 in. BSP*	3B	

*BSP Body; U.K. Mfr. Only