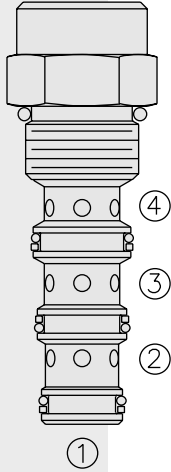


DIRECTIONAL VALVES

BV10-42 Brake Release Valve, 2-Position



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 **BV10-42** 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 ④ to ②.

FEATURES

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

RATINGS

Operating Pressure: 240 bar (3500 psi)

Flow: See Performance Chart

Internal Leakage: 82 cc/minute (5 cu. in./minute) max. at 207 bar (3000 psi) ② to ③ (shifted)

Differential Pressure Required (④ > ①) to Shift to Close ② to ③/Open 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 ssu)

Installation: No restrictions; See page 9.020.1

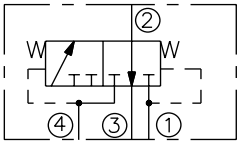
Cavity: VC10-4; See page 9.110.1

Cavity Tool: CT10-4XX; See page 8.600.1

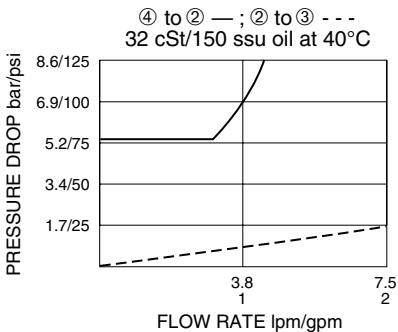
Seal Kit: SK10-4X-TBT; See page 8.650.1

SYMBOLS

USASI/ISO:

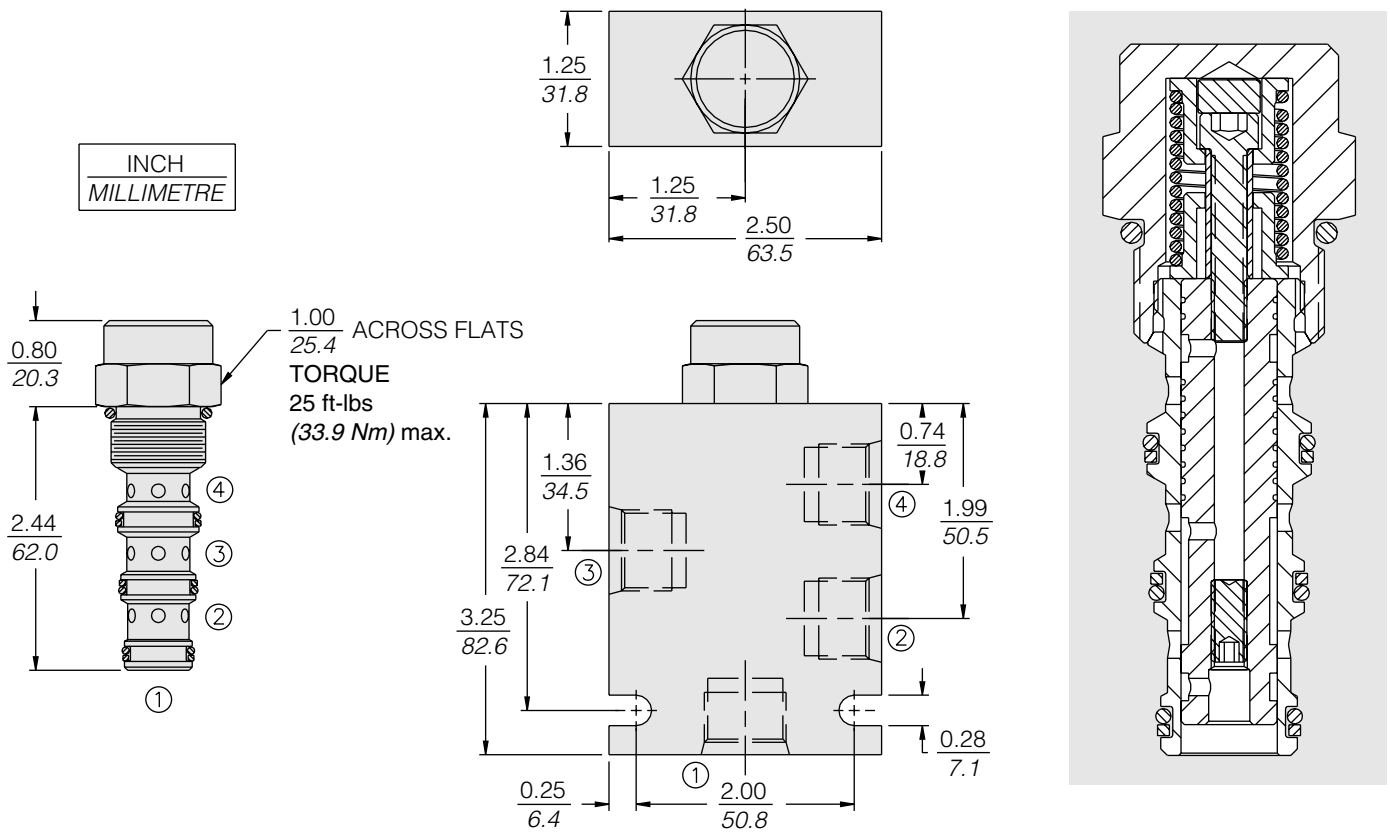


PERFORMANCE (Cartridge Only)



BV10-42

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 240 bar (3500 psi); see page 8.010.1. Ductile iron and steel bodies available; dimensions may differ; consult factory.

TO ORDER

BV10-42 -

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