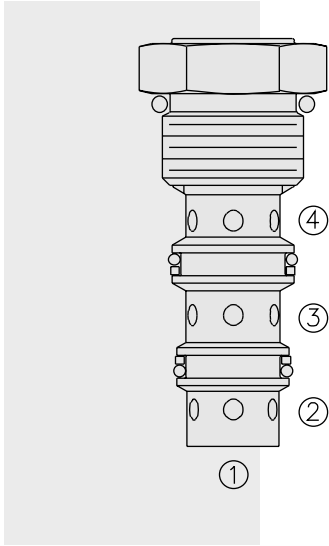


DIRECTIONAL CONTROLS

HS10-42 Low Side (Hot Oil) Shuttle, Springless



DESCRIPTION

A spool-type, closed in transition, 2-position, 3-way hot oil shuttle valve, which may be used on hydrostatic transmissions to direct charge pump oil to a heat exchanger or to tank.

OPERATION

With internal piloting at port ①, ② or ④, oil will flow from the port opposite of the port piloted to port ③, thus removing oil from the low-pressure side for cooling or filtration purposes. The valve is **springless**, relying solely on the internal pilot pressure signal to shift to either side. The **HS10-42** is closed in transition.

FEATURES

- Hardened parts for long life.
- Industry common cavity.

RATINGS

Operating Pressure:

HS10-42: 207 bar (3000 psi)

HS50-42: 345 bar (5000 psi)

Flow Rate: See Performance Chart

Internal Leakage: 115 cc/minute (7 cu. in./minute) max.

Temperature: -40 to 120°C

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

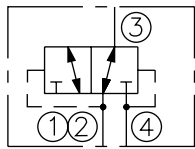
Seal Kit:

HS10-42: SK10-4N-TTT/BBB; See page 8.650.1

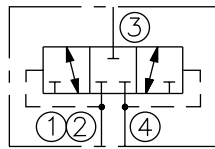
HS50-42: SK10-4P-TTT/BBB; See page 8.650.1

SYMBOLS

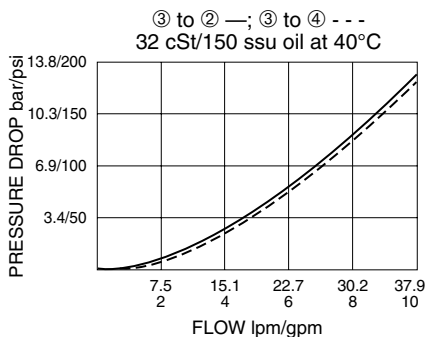
USASI/ISO:



TRANSITION:

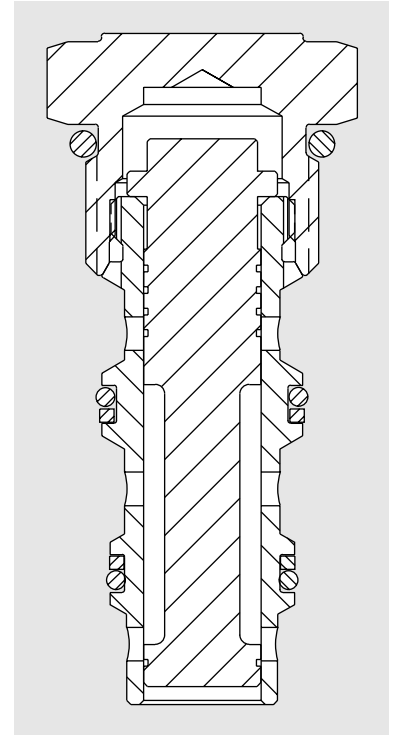
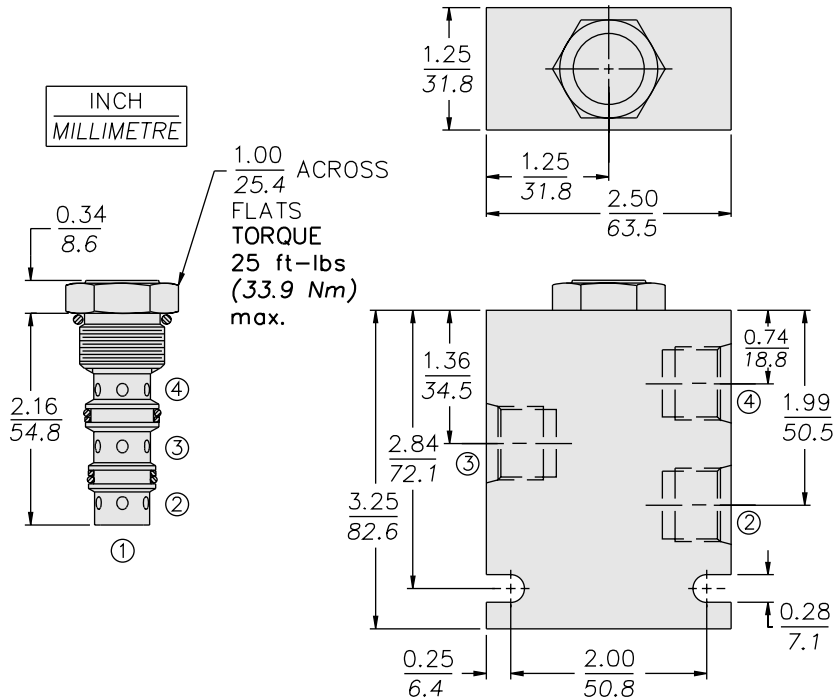


PERFORMANCE (Cartridge Only)



HS10-42

DIMENSIONS



MATERIALS

Cartridge: Weight: 0.15 kg. (0.32 lbs.); Steel with hardened work surfaces. Zinc-plated exposed surfaces. Buna N O-rings and polyester elastomer back-ups standard. Polyurethane seals optional for high pressure.

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. Steel or Ductile Iron body required for operation over 241 bar (3500 psi); dimensions may differ; consult factory.

TO ORDER

HS		0 - 42 -	-	-
Pressure				Seals
207 bar (3000 psi)	1			N Buna N (Std. for 3000 psi)
345 bar (5000 psi)	5			P Polyurethane (Std. for 5000 psi)
Porting				
Cartridge Only	0			
SAE 6	6T			
SAE 6 (Steel)	6TS			
SAE 6 (Ductile)	6TD			
SAE 8	8T			
1/4 in. BSP*	2B			
3/8 in. BSP*	3B			
*BSP Body; U.K. Mfr. Only				

Note: Steel or Ductile body required for operation over 241 bar (3500 psi).