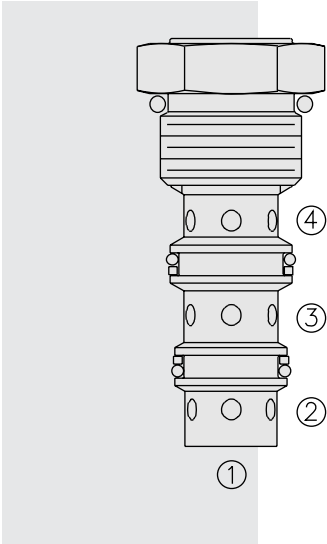


HS10-42 Low Side (Hot Oil) Shuttle, Springless



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 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:

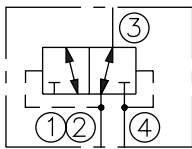
 CT10-4XX; See page 8.600.1

Seal Kit:

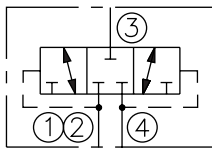
- HS10-42: SK10-4N-TTT/BBB; See page 8.650.1
- HS50-42: SK10-4P-TTT/BBB; See page 8.650.1

SYMBOLS

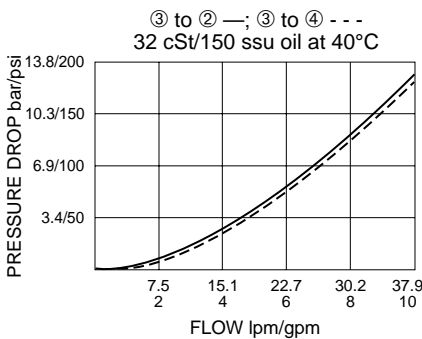
USASI/ISO:



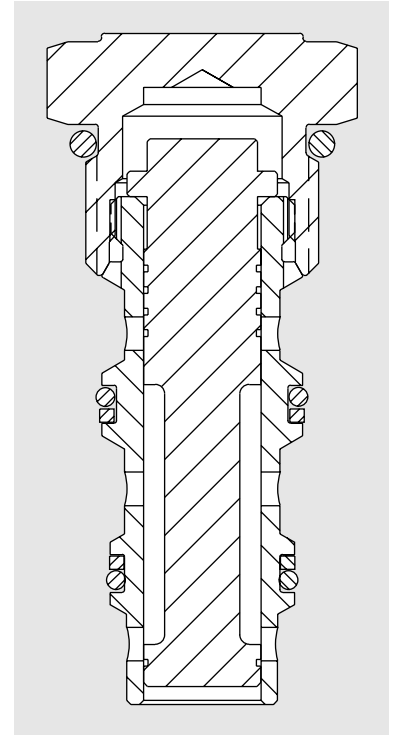
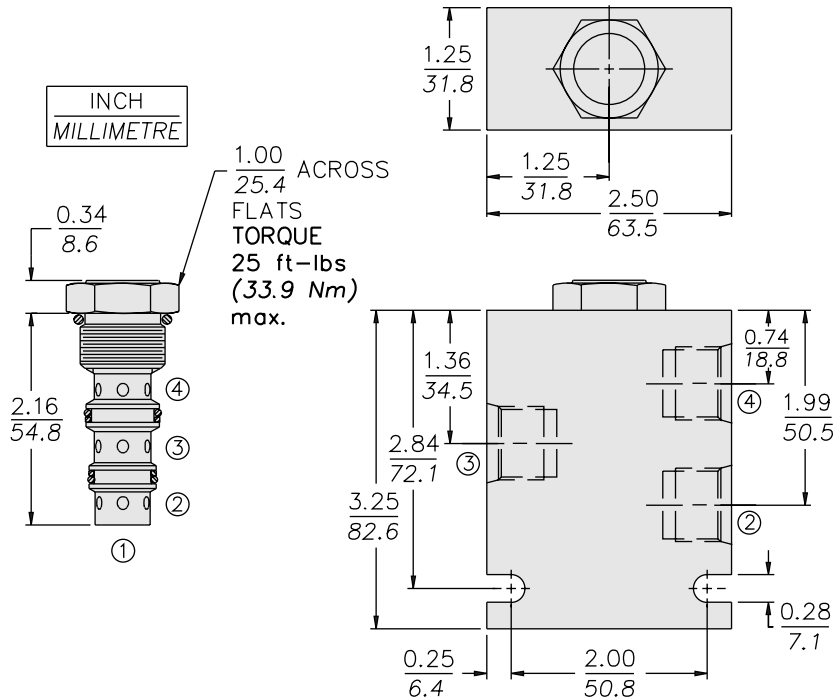
TRANSITION:



PERFORMANCE (Cartridge Only)



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 207 bar (3000 psi). Ductile
iron body required for operation over
241 bar (3500 psi); dimensions may
differ. See page 8.010.1

TO ORDER

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

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