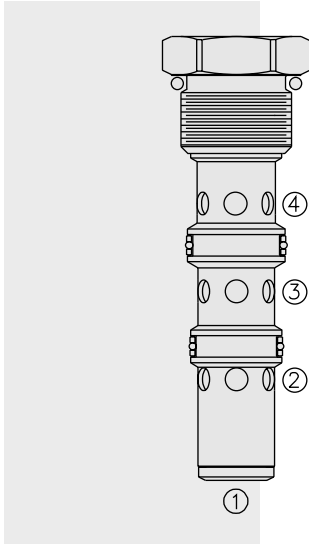


DIRECTIONAL CONTROLS

HS52-42 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 **HS52-42** is closed in transition.

FEATURES

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

RATINGS

Operating Pressure: 345 bar (5000 psi) when used in steel body

Flow Rate: See Performance Chart

Internal Leakage: 164 cc/minute (10 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

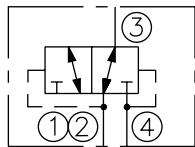
Cavity: VC12-4; See page 9.112.1 (Cavity Variation "A")

Cavity Tool: CT12-4XX; See page 8.600.1

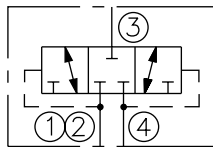
Seal Kit: SK12-2x-TB

SYMBOLS

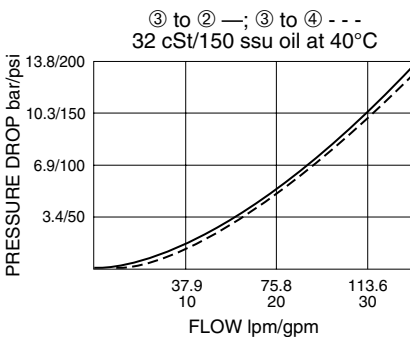
USASI/ISO:



TRANSITION:

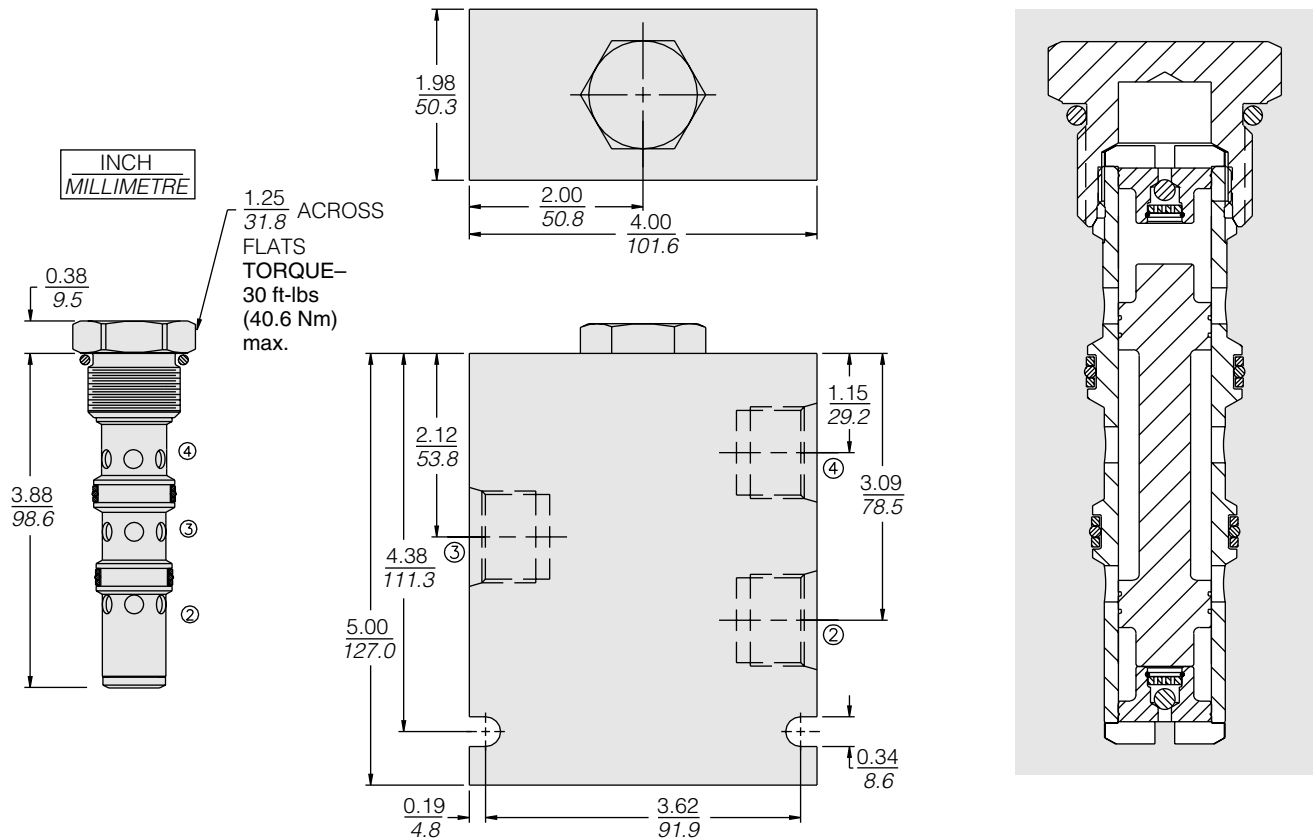


PERFORMANCE (Cartridge Only)



HS52-42

DIMENSIONS



MATERIALS

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

Ported Body: Weight: 3.57 kg.
(7.87 lbs.); Steel, zinc-plated (code
"S"); or **Ductile Iron (code "D")**
standard, consult factory for weight;
dimensions may differ; rated to 345
bar (5000 psi); See page 8.012.1.

TO ORDER

HS52 - 42 - - P

Seals
P Polyurethane

Porting
Cartridge Only 0
SAE 12 (Ductile) 12TD
SAE 12 (Steel) 12TS