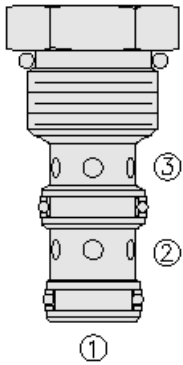




Overview



Description

A load shuttle, screw-in, cartridge style, hydraulic check valve, for use in blocking circuits where a priority of flow/direction is given to a higher pressure circuit over a lower one.

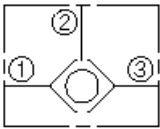
Operation

The LS10-30 will allow flow from the higher pressure port 1 or 3 to port 2.

Features

- Rapid response to load direction changes. Industry-common cavity.

Symbol



Ratings

Pressure Ratings

Pressure rating 241 bar (3500 psi)

Flow Ratings

Flow rating See performance graph
Maximum internal leakage 0.25 ml/min (5 drops/min) - **Note:** At 207 bar (3000 psi)

Temperature Ratings

Operating fluid temperature -40 to 100 °C (-40 to 212 °F) - **Note:** With buna N seals
-26 to 204 °C (-15 to 400 °F) - **Note:** With fluorocarbon seals
-54 to 107 °C (-65 to 225 °F) - **Note:** With polyurethane seals
Storage temperature -40 to 70 °C (-40 to 160 °F)
Ambient temperature -40 to 90 °C (-40 to 194 °F)

Other Ratings

Corrosion protection 960 hr salt spray per ASTM b117 (gls10-30)

Operating Parameters

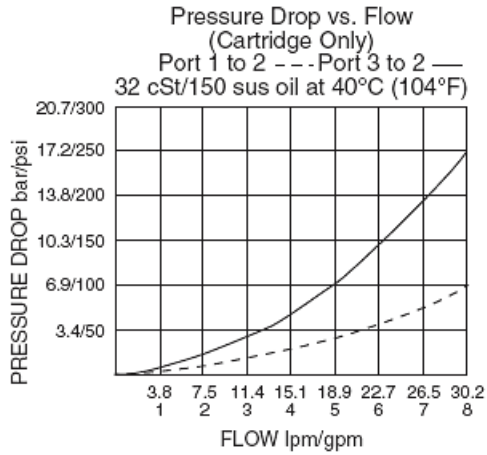
Fluids Mineral based or synthetic hydraulic fluid with lubricating properties
Fluid viscosity range 7.4 to 420 cSt
Maximum operating contamination 20/18/14 per ISO 4406 level

Properties

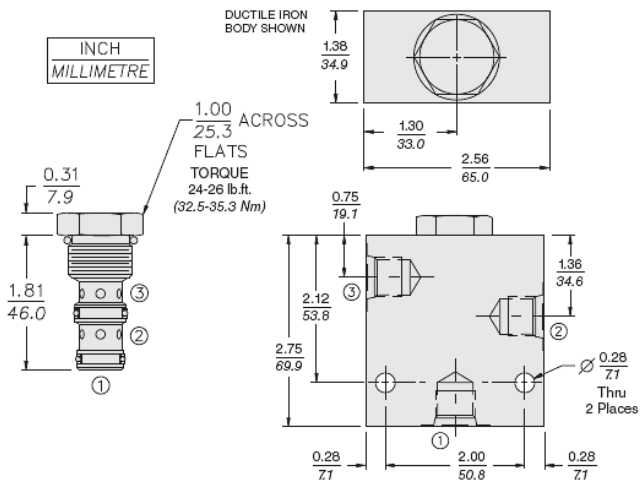
Unit weight 0.09 kg (0.2 lb)
Internal wetted surface area 88 cm² (13.7 in²)



Performance



Dimensions



Installation Specifications

| | |
|-------------------------------|-----------------------------------|
| Cavity | VC10-3 |
| Cartridge installation torque | 32.6 to 35.4 N-m (24 to 26 ft-lb) |
| Maximum allowable torque | 67.8 N-m (50 ft-lb) |
| Orientation restriction | None |

Accessories

| | | |
|----------|------------|-------------------------|
| Seal kit | SK10-3X-MM | - Note: X = seal option |
|----------|------------|-------------------------|



Order Code

LS10-30- -

| <u>Porting</u> | | <u>Seals</u> | |
|----------------|-----------|--------------|---------------|
| 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

Model Options

LS10-30-H-J

H Line Body

| CODE | DESCRIPTION |
|------|----------------------------|
| 0 | No Body |
| 6T | Aluminum SAE 6 |
| 8T | Aluminum SAE 8 |
| 6TD | Ductile Iron SAE 6 |
| 8TD | Ductile Iron SAE 8 |
| 3B | Aluminum BSPP 3/8" (3) |
| 3BD | Ductile Iron BSPP 3/8" (3) |

J Seal

| CODE | DESCRIPTION |
|------|------------------|
| N | Buna-N |
| V | Fluorocarbon |
| P | Polyurethane |
| U | PPDI Urethane |