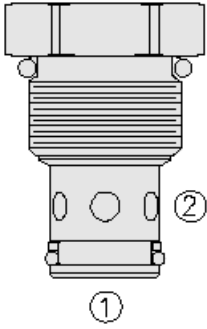




Overview



Description

The CV10-24X is a screw-in, cartridge style, hydraulic check valve for use as a blocking or load-holding device.

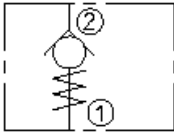
Operation

The cartridge valve allows flow from port 2 to 1 while normally blocking flow in the opposite direction. The cartridge valve has a fully guided check which spring biased closed until sufficient pressure is applied at port 2 to open to port 1.

Features

- Hardened seat for long life and low leakage.
- Optional bias springs for back-pressure application flexibility.
- Low check mass for anti-cavitation applications.
- Industry-common cavity.

Symbol



Ratings

Pressure Ratings

Pressure rating 241 bar (3500 psi)

Flow Ratings

Flow rating 56.8 lpm (15 gpm) - **Note:** See graph
 Maximum internal leakage 0.25 ml/min (5 drops/min) - **Note:** At 241 bar (3500 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
 Storage temperature -40 to 70 °C (-40 to 160 °F)
 Ambient temperature -40 to 70 °C (-40 to 160 °F)

Operating Parameters

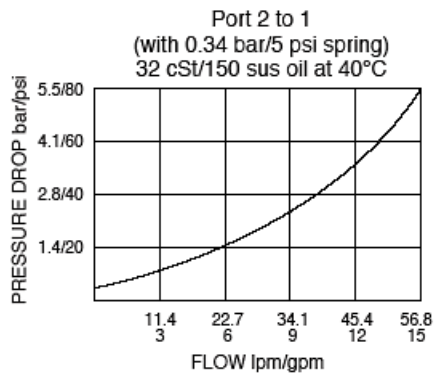
Fluids Mineral based or synthetic hydraulic fluid with lubricating properties
 Fluid viscosity range 7.4 to 420 cSt
 Maximum operating contamination level 20/18/14 per ISO 4406

Properties

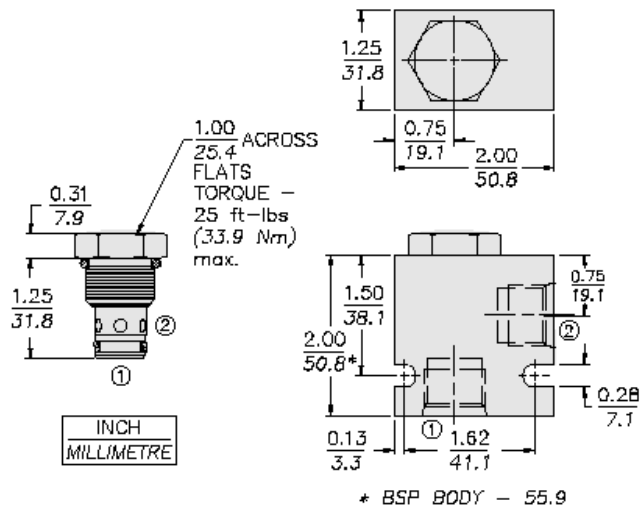
Unit weight 0.09 kg (0.20 lb)
 Internal wetted surface area 67.7 cm² (10.5 in²)



Performance



Dimensions



Installation Specifications

| | |
|-------------------------------|-----------------------------------|
| Cavity | VC10-2 |
| Cartridge installation torque | 32.5 to 35.3 N-m (24 to 26 ft-lb) |
| Orientation restriction | None |

Accessories

| | | |
|----------|-------------|--------------------------------|
| Seal kit | SK10-2X-T/B | - Note: X = seal option |
|----------|-------------|--------------------------------|



Order Code

CV10-24 -

| | | | |
|------------------------------|----|--------------------|------------------|
| Porting | | Bias Spring | |
| Cartridge Only | 0 | 05 | 0.34 bar (5 psi) |
| SAE 6 | 6T | 25 | 1.7 bar (25 psi) |
| SAE 8 | 8T | 55 | 3.8 bar (55 psi) |
| 1/4 in. BSP* | 2B | | |
| 3/8 in. BSP* | 3B | | |
| 1/2 in. BSP* | 4B | | |
| *BSP Body; U.K. Mfr. Only | | Seals | |
| | N | Buna N (Std.) | |
| | V | Viton | |

Model Options

CV10-24G-H-J-R

G Screen

| CODE | DESCRIPTION |
|-------|-----------------|
| BLANK | NONE |
| S | 100 Mesh Screen |

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 |
| 2B | Aluminum BSPP 1/4" (2) |
| 3B | Aluminum BSPP 3/8" (3) |
| 4B | Aluminum BSPP 1/2" (4) |
| 4BD | Ductile Iron BSPP 1/2" (4) |

J Seal

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

R Spring

| CODE | DESCRIPTION |
|------|--------------------|
| 5 | 5 psi Bias Spring |
| 25 | 25 psi Bias Spring |
| 55 | 55 psi Bias Spring |