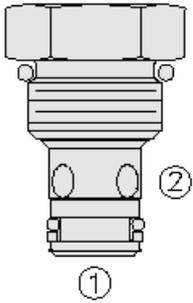
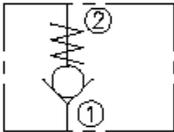




Overview



Symbol



Description

The HCV08-20 is a screw-in, cartridge style, hydraulic check valve for use as a blocking or load-holding device for high pressure applications.

Operation

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

Features

- Hardened seat for long life and low leakage.
- Optional bias springs for back-pressure application flexibility.
- Fully guided check assembly.
- Compact size.
- Fast closing and seating.
- All HyPerformance products are tested to the rigorous standards of the NFPA specification T2.6.1.
- All HyPerformance valves are tested at a verification level of 90% and an assurance of 99%.

Ratings

Pressure Ratings

| | | |
|-----------------|----------------------|-------------------------------|
| Pressure rating | 350 bar (5075 psi) | - Note: 10% cycle life |
| | 420 bar (6090 psi) | |
| Proof pressure | 690 bar (10000 psi) | |
| Burst pressure | 1380 bar (20000 psi) | |

Flow Ratings

| | | |
|--------------------------|---------------------------|--------------------------------------|
| Flow rating | 30 lpm (8 gpm) | |
| Maximum internal leakage | 0.10 ml/min (2 drops/min) | - Note: At 350 bar (5075 psi) |

Other Ratings

| | |
|------------|--------------------|
| Cycle life | One million cycles |
|------------|--------------------|

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 urethane seals |
| Storage temperature | -40 to 70 °C (-40 to 160 °F) | |
| Ambient temperature | -40 to 90 °C (-40 to 194 °F) | |

Operating Parameters

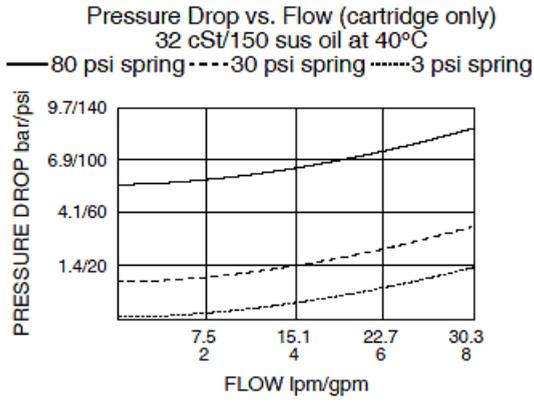
| | |
|---------------------------------------|--|
| Fluids | Mineral based or synthetic hydraulic fluid with lubricating properties |
| Fluid viscosity range | 7.4 to 420 cSt |
| Maximum operating contamination level | 18/16/13 per ISO 4406 |

Properties

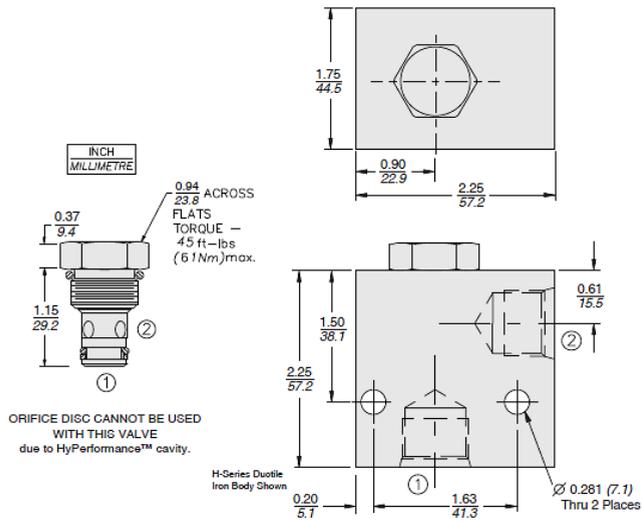
| | |
|------------------------------|---|
| Unit weight | 0.07 kg (0.15 lb) |
| Internal wetted surface area | 61 cm ² (9.5 in ²) |



Performance



Dimensions



Installation Specifications

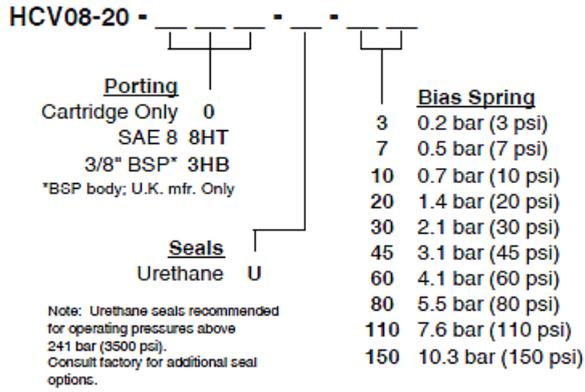
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|-------------------------------|-------------------------------|--|
| Cavity | HVC08-2 | |
| Cartridge installation torque | 54 to 61 N-m (40 to 45 ft-lb) | - Note: Steel/ductile iron cavity |
| | 41 to 47 N-m (30 to 35 ft-lb) | - Note: Aluminum cavity |
| Orientation restriction | None | |

Accessories

| | | |
|----------|-----------|-----------------------------|
| Seal kit | SK08-2N-T | - Note: Buna N |
| | SK08-2V-T | - Note: Fluorocarbon |
| | SK08-2U-O | - Note: Urethane |



Order Code



Model Options

HCV08-20-H-J-R

H Line Body

| CODE | DESCRIPTION |
|------|-------------|
| 0 | No Body |

J Seal

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

R Spring

| CODE | DESCRIPTION |
|------|---------------------|
| 3 | 3 psi Bias Spring |
| 7 | 7 psi Bias Spring |
| 10 | 10 psi Bias Spring |
| 20 | 20 psi Bias Spring |
| 30 | 30 psi Bias Spring |
| 45 | 45 psi Bias Spring |
| 60 | 60 psi Bias Spring |
| 80 | 80 psi Bias Spring |
| 110 | 110 psi Bias Spring |
| 150 | 150 psi Bias Spring |