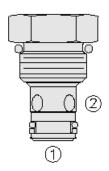


#### **Overview**



## **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.

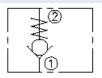
#### **Operation**

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%.

# **Symbol**



## **Ratings**

#### Pressure Ratings

350 bar (5075 psi) Pressure rating

420 bar (6090 psi) - Note: 10% cycle life 690 bar (10000 psi)

Proof pressure Burst pressure

1380 bar (20000 psi)

Flow Ratings

Flow rating 30 lpm (8 gpm)

0.10 ml/min (2 drops/min) - Note: At 350 bar (5075 psi) Maximum internal leakage

Other Ratings

One million cycles Cycle life

**Temperature Ratings** 

Operating fluid temperature

-40 to 100 °C (-40 to 212 °F) -26 to 204 °C (-15 to 400 °F) -54 to 107 °C (-65 to 225 °F) - Note: With buna N seals - Note: With fluorocarbon seals - Note: With urethane seals

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

#### **Operating Parameters**

Mineral based or synthetic hydraulic fluid with lubricating properties Fluids

Fluid viscosity range

7.4 to 420 cSt Maximum operating contamination 18/16/13 per ISO 4406

level

# **Properties**

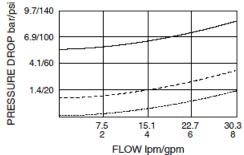
0.07 kg (0.15 lb) Unit weight 61 cm<sup>2</sup> (9.5 in<sup>2</sup>) Internal wetted surface area

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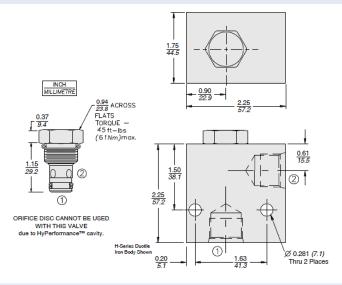


#### **Performance**

Pressure Drop vs. Flow (cartridge only)
32 cSt/150 sus oil at 40°C
—80 psi spring ----30 psi spring ----3 psi spring
9.7/140
6.9/100



## **Dimensions**



## **Installation Specifications**

Cavity HVC08-2

Cartridge installation torque 54 to 61 N-m (40 to 45 ft-lb)
41 to 47 N-m (30 to 35 ft-lb)

- Note: Steel/ductile iron cavity
- Note: Aluminum cavity

Orientation restriction

41 to 47 N-III (30 to 35 It-Ib)

- Note: Aluminum cavit

## **Accessories**

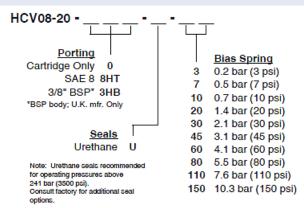
Seal kit SK08-2N-T - Note: Buna N SK08-2V-T - Note: Fluorocarbon

SK08-2U-O - Note: Urethane

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## **Order Code**



#### **Model Options**

HCV08-20-H-J-R

#### **H Line Body**

# CODE DESCRIPTION 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

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