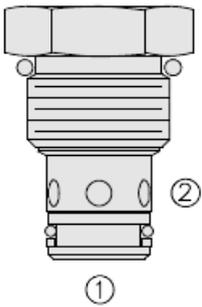




Overview



Description

The HCV10-20 is a screw-in, cartridge style, hydraulic check valve for use as a blocking or load-holding device for high pressure applications.

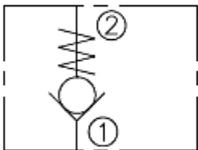
Operation

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.
- High pressure operation.
- Fully guided check assembly.
- Industry-common cavity.
- All HyPerformance products are tested to NFPA specification T2.6.1 and are tested at a verification level of 90% and an assurance of 99%.

Symbol



Ratings

Pressure Ratings

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

Flow Ratings

Flow rating	76 lpm (20 gpm)	- Note: At 350 bar (5075 psi)
Maximum internal leakage	0.25 ml/min (5 drops/min)	

Other Ratings

Cycle life	One million cycles
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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

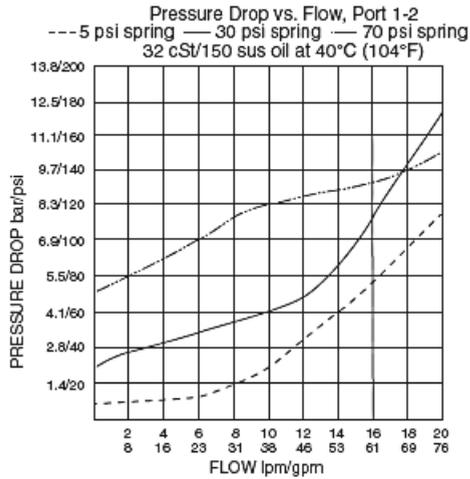
Fluids	Mineral based or synthetic hydraulic fluid with lubricating properties
Fluid viscosity range	7.4 to 420 cSt
Maximum operating contamination level	18/16/13 per ISO 4406

Properties

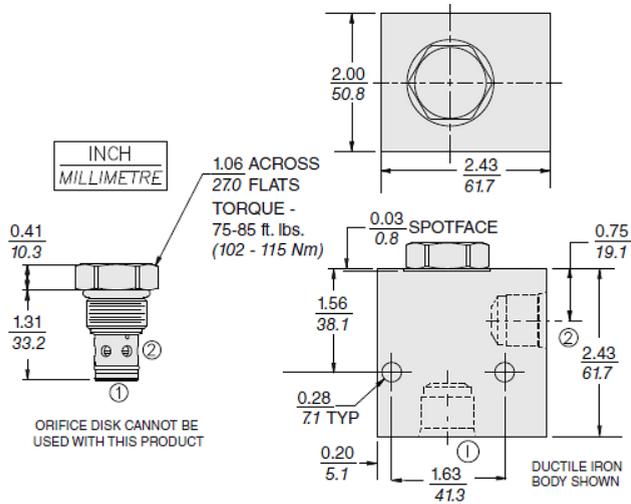
Unit weight	0.10 kg (0.22 lb)
Internal wetted surface area	75 cm ² (11.5 in ²)



Performance



Dimensions



Installation Specifications

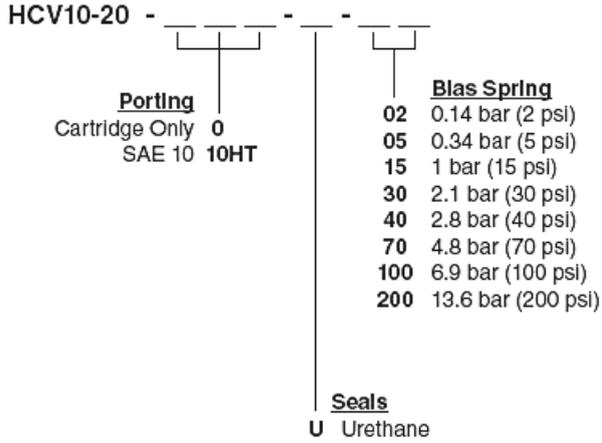
Cavity	HVC10-2	
Cartridge installation torque	102 to 115 N-m (75 to 85 ft-lb)	- Note: Steel/ductile iron cavity
	81 to 88 N-m (60 to 65 ft-lb)	- Note: Aluminum cavity
Orientation restriction	None	

Accessories

Seal kit	SK10-2N-T	- Note: Buna N
	SK10-2V-T	- Note: Fluorocarbon
	SK10-2U-O	- Note: Urethane



Order Code



Model Options

HCV10-20-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
2	2 psi Bias Spring
5	5 psi Bias Spring
15	15 psi Bias Spring
30	30 psi Bias Spring
40	40 psi Bias Spring
70	70 psi Bias Spring
100	100 psi Bias Spring
200	200 psi Bias Spring