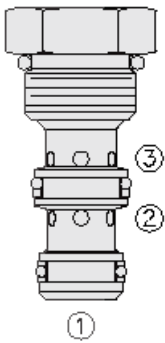




Overview



Description

The HPC08-30 is a screw-in, cartridge style, pilot operated, hydraulic check valve for use as a blocking or load-holding device for high pressure applications.

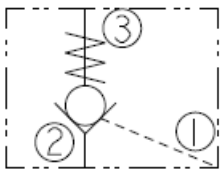
Operation

The valve allows free flow from port 2 to port 3, while normally blocking flow in the reverse direction. Flow will be allowed from port 3 to port 2 when pressure at port 1 exceeds one-third the pressure at port 3.

Features

- Hardened seat for long life and low leakage.
- Optional sealed piston.
- Optional spring ranges.
- Compact size.
- 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

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	30.3 lpm (8 gpm)
Maximum internal leakage	2 drops/min - Note: At 350 bar (5075 psi)

Other Ratings

Pilot ratio	3:1
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

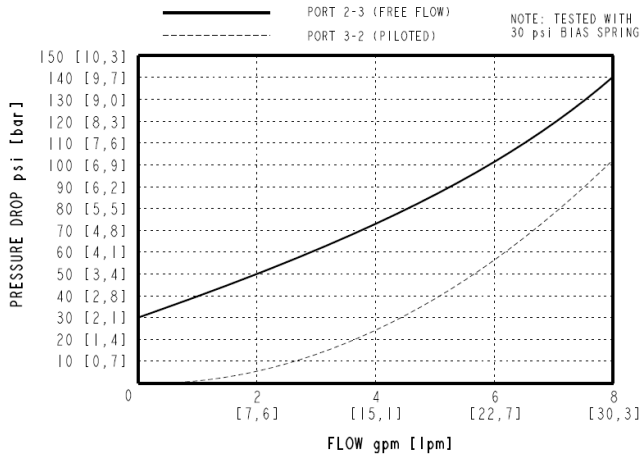
Unit weight	0.07 kg (0.16 lb)
Internal wetted surface area	90.13 cm ² (13.97 in ²)



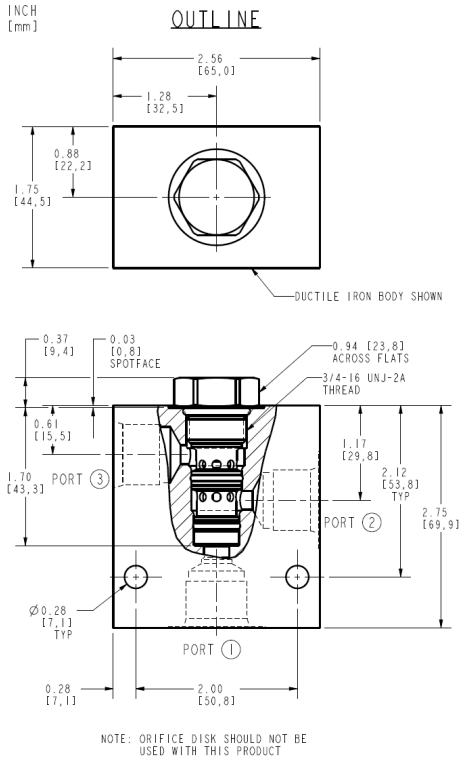
Performance

PERFORMANCE

PRESSURE DROP VS FLOW
(CARTRIDGE ONLY)
32 cSt AT 104°F [40°C]



Dimensions



ALL DIMENSIONS ARE FOR REFERENCE ONLY

Installation Specifications

Cavity	HVC08-3	
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	SK08-3N-TM	- Note: Buna N
	SK08-3V-TM	- Note: Fluorocarbon
	SK08-3U-00	- Note: Urethane



Order Code

ORDERING INFORMATION:

HPC08-30-X-XX-XXX

BASE MODEL NUMBER —
 PORTING —
 CARTRIDGE ONLY - 0
 SEALS —
 BUNA N - N
 FLUOROCARBON - V
 * PPDI URETHANE - U
 BUNA N WITH - NS
 SEALED SPOOL
 FLUOROCARBON WITH - VS
 SEALED SPOOL
 * PPDI URETHANE - US
 WITH SEALED SPOOL

BIAS SPRING VALUE

30 psi [2,1 bar] - 30
 50 psi [3,4 bar] - 50
 80 psi [5,5 bar] - 80
 100 psi [6,9 bar] - 100
 140 psi [9,7 bar] - 140
 200 psi [13,8 bar] - 200

* URETHANE SEALS RECOMMENDED
 FOR OPERATING PRESSURES
 ABOVE 3500 psi [241 bar].

NOTE: NS, VS, AND US SEAL
 OPTIONS REQUIRE 140 psi
 [9,7 bar] SPRING MINIMUM.

Model Options

HPC08-30-H-J-R

H Line Body

CODE	DESCRIPTION
0	No Body
8HT	Ductile Iron SAE 8

J Seal

CODE	DESCRIPTION
N	Buna-N
NS	Buna-N with a Sealed Spool
V	Fluorocarbon
VS	Fluorocarbon with a Sealed Spool
U	PPDI Urethane
US	PPDI Urethane with a Sealed Spool

R Spring

CODE	DESCRIPTION
30	30 psi Bias Spring
50	50 psi Bias Spring
80	80 psi Bias Spring
100	100 psi Bias Spring
140	140 psi Bias Spring
200	200 psi Bias Spring