

HIGH PRESSURE CHECK VALVE **1/4" and 1/2" NPT** **10,000 Psig (690 Bar)**

Description

Series HPCV is a High Pressure, One-Piece Body, Zero Leak, Check Valve for High Pressure and Severe Service applications. The unique design features a fully retained encapsulated O-ring seal with metal to metal backup for long service life. Available in Brass, 316 and 17-4 PH Stainless Steel to 10,000 psig.

Features

- One-Piece Body Design
- Encapsulated Seal with Metal Backup
- Self Purging Design prevents leakage
- Increasing Pressure Increases Sealing Efficiency

Technical Data

Maximum Operating Pressure @ 100° F

Body Material	Operating Pressure Psig (Bar)	Proof Pressure Psig (Bar)
Brass	5000 (345)	7500 (517)
316 Stainless	6000 (413)	10000 (690)
17-4 PH Stainless	10000 (690)	15000 (1034)

Minimum Burst Pressure: Greater than 3 times Operating Pressure

Leakage:

Elastomeric Seals: Zero @ 1.0 Psig (0.07 Bar) to Proof

Teflon Seals: Zero @ 75 Psig (5.2 Bar) to Proof

Nominal Crack Pressure: 2 - 5 Psig (0.14 - 0.34 Bar)

Temperature Range:

Seal Dependent (see How to Order)

Materials of Construction

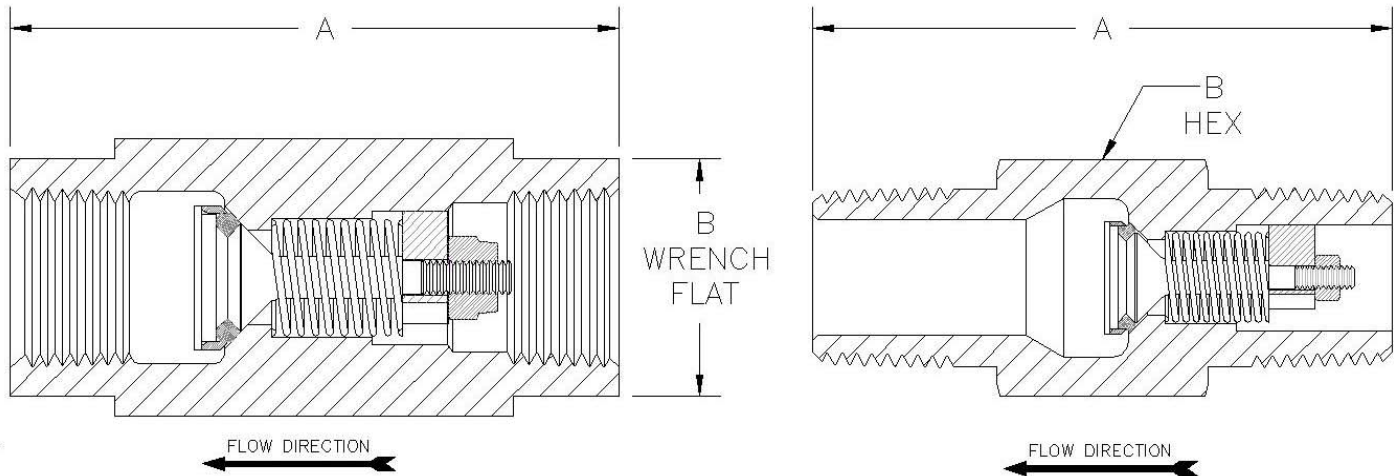
Component	Valve Body Materials		
	Brass	316 Stainless Steel	17-4 PH Stainless Steel
Valve Body	Brass, ASTM B16	316SS, ASTM A479	17-4 PH SS, ASTM A564, Heat Treated to H1150D
Stem			17-4 PH SS, ASTM A564
Spring Retainer			303 SS, ASTM A582
O-Ring Shroud	303 SS, ASTM A582		
Spring	302 SS, ASTM A313		
Locknut	Corrosion Resistant Austenitic Steel (CRES)		
O-Ring	Buna-N, Teflon® or Viton®		

O-rings are lubricated with Krytox®



HPCV
SERIES

HIGH PRESSURE CHECK VALVE



Dimensional Data

Model Code	Port Configuration		Flow Coefficient, Cv	Dimensions in inches (mm)	
	Inlet	Outlet		OAL	Hex Size ¹
HPCV-4F	1/4" Female NPT		0.69	2.00 (50.8)	3/4 (19.05)
HPCV-8F	1/2" Female NPT		2.63	2.89 (73.4)	1-1/8 (28.58)
HPCV-4P	1/4" Male NPT		0.32	1.82 (46.23)	5/8 (15.88)
HPCV-8P	1/2" Male NPT		1.83	2.75 (69.85)	1 (25.4)

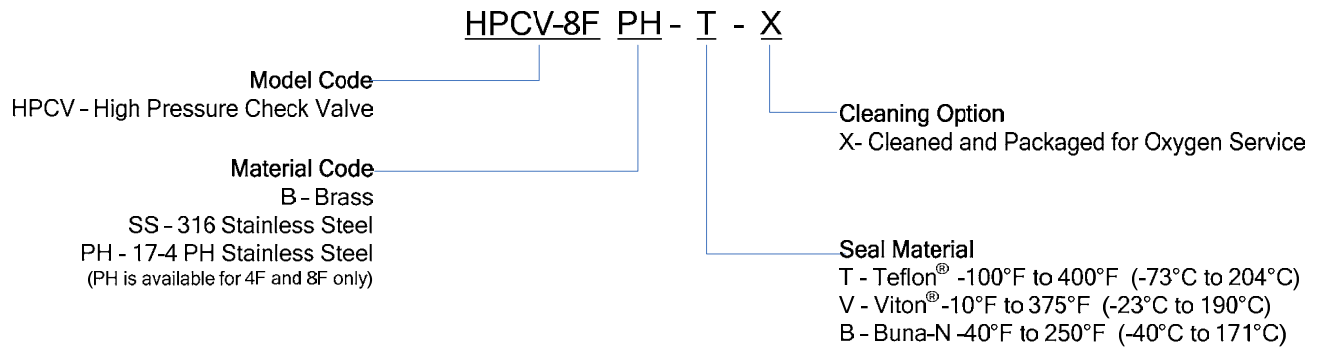
Note: Dimensions are in inches (millimeters), for reference only and subject to change.

Flow Coefficient stated with Nitrogen and 2 - 5 Psig Nominal Spring.

¹ Female x Female Configuration made from Round Stock with Wrench Flats.

NPT Threads per ASME B1.20.1

How To Order



For additional configurations consult factory.

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PROPER COMPONENT SELECTION – When specifying a component, the total system design must be considered to ensure safe and trouble-free performance. Intended component function, materials compatibility, pressure ratings, installation, environment and maintenance are the responsibility of the system designer.

GENERANT