

**ACV
SERIES**

Description

Compact one piece body, adjustable check/relief valves are available in Brass or 316 Stainless Steel. Available in 1/4" and 1/2" NPT with a wide selection of seal materials. Series ACV valves can be ordered factory "preset and locked" in crack pressures up to 600 Psig. All valves are 100% factory tested and available cleaned & packaged for Oxygen service.

Features

- Compact One Piece Body Construction
- Working Pressures to 3000 Psig (206 bar)
- Adjustable Cracking Pressures from 3 to 600 Psig (0.2 bar to 41.3 bar)
- Fully retained O-Ring Seal
- Full Back Pressure Rating
- Factory Presetting Available
- 100% Factory Tested for Leakage, Crack and Reseal Performance



Technical Data

Cracking Pressure Ranges:

- 3 to 20 Psig (0.2 to 1.4 bar)
- 20 to 65 Psig (1.4 to 4.5 bar)
- 65 to 175 Psig (4.5 to 12.1 bar)
- 175 to 350 Psig (12.1 to 24.1 bar)
- 350 to 600 Psig (24.1 to 41.3 bar)

Maximum Pressure: 3000 Psig @ 100°F (206 bar @ 40°C)

Temperature Rating: -80°F to 450°F (-65°C to 232°C)

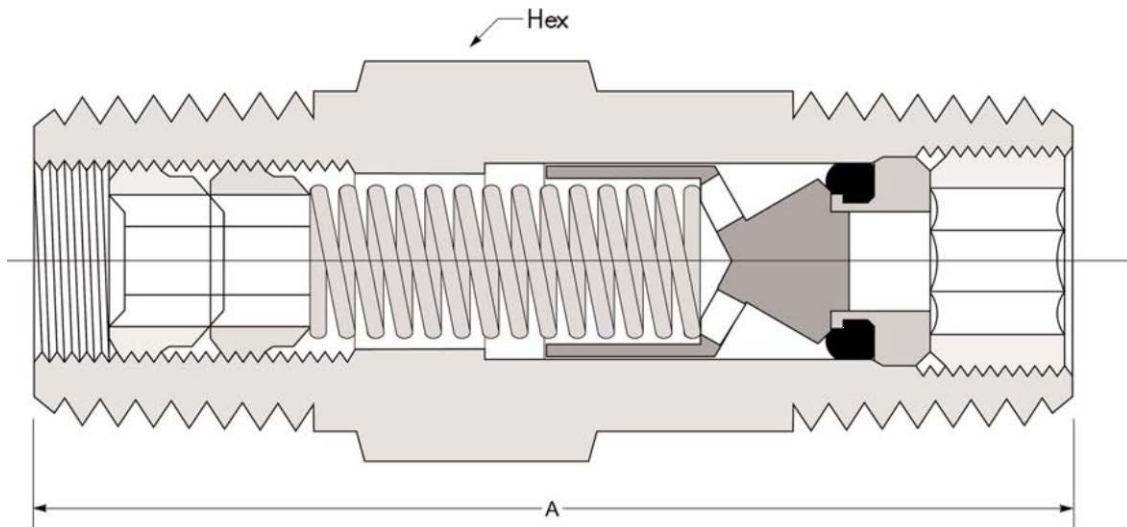
(based on seal selection, see ordering information)

Materials of Construction

Component	Valve Body Material	
	Brass	Stainless Steel
Body, Poppet, Seat Locking Screw, Adjustment Screw, Pressure Locking Screw	Brass, ASTM B16	316 SS, ASTM A479
Spring	302 SS, ASTM A313	
O-Ring Seal ¹	Buna-N	Viton™

¹ Lubricated with Krytox™

SERIES ACV ADJUSTABLE CHECK VALVE



Dimensions

Model Code	Connection Inlet & Outlet	Dimensions		
		A	Hex	Cv
ACV-4P	1/4" Male NPT	1.62"	9/16"	0.35
ACV-4FF	1/4" Female NPT	2.98"	3/4"	
ACV-8P	1/2" Male NPT	2.56"	7/8"	1.20

Flow tested in accordance with ISA S75.21 with air. Restrictions in the inlet or outlet piping may reduce flow. NPT Threads per ASME B1.20.1.

Ordering Information

ACV - 4P B V - 125

SERIES

ACV - Adjustable Check Valve

PORT CONFIGURATION

4P - 1/4" Male NPT x 1/4" Male NPT

4FF - 1/4" Female NPT x 1/4" Female NPT

8P - 1/2" Male NPT x 1/2" Male NPT

MATERIAL CODE

B - Brass

SS - 316 SS

CRACK PRESSURE

(standard pressure ranges)
 3 to 20 Psig (0.2 bar to 1.4 bar)
 20 to 65 Psig (1.4 bar to 4.5 bar)
 65 to 175 Psig (4.5 bar to 12.1 bar)
 175 to 350 Psig (12.1 bar to 24.1 bar)
 350 to 600 Psig (24.1 bar to 41.3 bar)
 May be ordered factory preset to your specifications
 Specify Cracking Pressure, Example ACV-4PB-V-125

SEAL MATERIAL

V - Viton™, -10°F to 375°F (-23°C to 190°C)
 B - Buna-N, -40°F to 250°F (-40°C to 121°C)
 N - Neoprene, -40°F to 300°F (-40°C to 148°C)
 EP - Ethylene Propylene, -65°F to 300°F (-54°C to 148°C)
 FS - Fluorosilicone, -80°F to 350°F (-62°C to 176°C)
 S - Silicone, -70°F to 450°F (-56°C to 232°C)
 * - EP has a max set pressure of 400 Psig (27.6 bar)

OPTIONS

Oxygen cleaning, alternative seals and other thread configurations, consult factory

Note: Viton™ and Krytox™ are trademarks of DuPont.

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.

