

VALVES  
SERIES  
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**Description**

A compact, inline, direct acting poppet check valve suitable for pressure and vacuum applications. Bubble tight sealing is achieved by a line of contact between a precision machined seat and a standard elastomer O-ring with minimum differential pressure, regardless of mounting attitude. Floating poppet and fluted retainer design provides laminar flow. Metal to metal positive stop ensures long service life.

**Technical Data**

- Nominal Crack Pressures: .15, 1 & 3 Psig (0.01, 0.07 & 0.21 bar)
- Proof Pressure: 1200 Psig (83 bar)
- Operating Pressure Range: Vacuum - 800 Psig (55 bar)
- Leakage: Zero @ > 0.5 Psig Back Pressure (0.03 bar)
- Temperature Rating: -80°F to 375°F (-62°C to 190°C) based on seal material

**Materials of Construction**

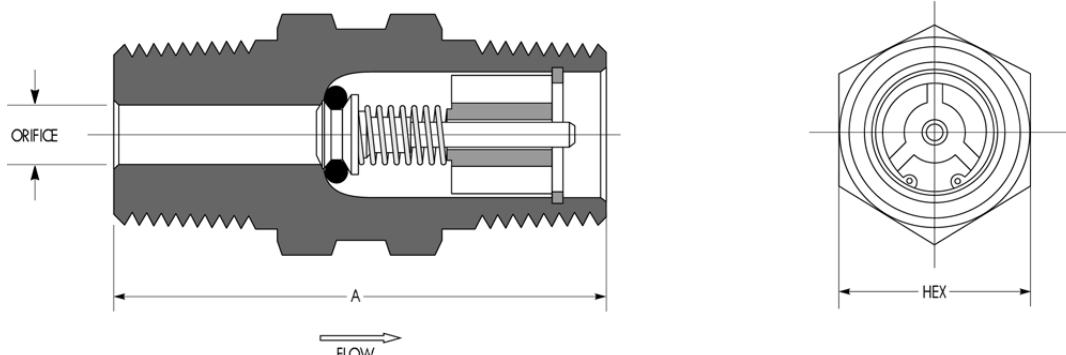
Component	Valve Body Material	
	Brass	Stainless Steel <sup>1</sup>
Body, Poppet	Brass, ASTM B16	316 SS, ASTM A479
Spring Retainer	Brass, ASTM B16 <sup>2</sup>	316 SS, ASTM A479
Spring	302 SS, ASTM A313	
O'Ring <sup>3</sup>	Buna-N	Viton™
Retaining Ring	Zinc Plated Carbon Steel	Stainless Steel

<sup>1</sup> Stainless Steel available in 1/8", 1/4", 3/8" & 1/2" Male x Male only

<sup>2</sup> 1/8" & 1/4" Brass valves have 316SS retainer

<sup>3</sup> Lubricated with Krytox™

# SERIES ICV INLINE CHECK VALVE



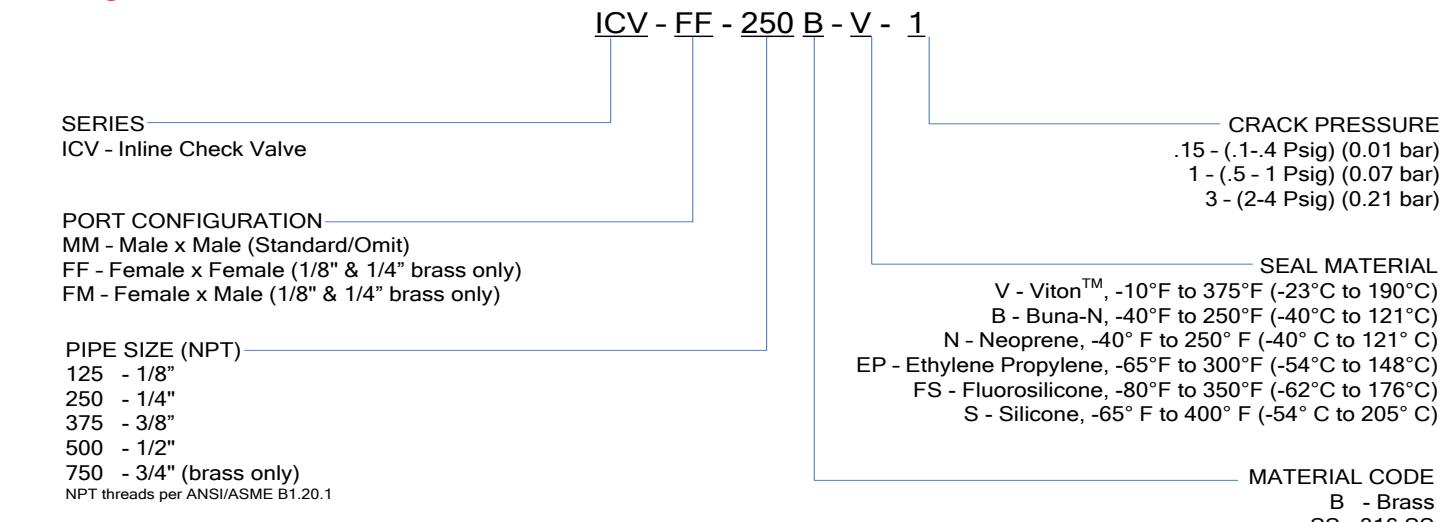
## Dimensional/Flow Data

Pipe Size (NPT)	Port Configuration		A (inches)	HEX	Orifice (inches)	Cv	Flow at Max Psid <sup>1</sup> (SCFM)			
	Inlet	Outlet								
1/8"	Male	Male	1.312	1/2"	.140	0.4	7.2			
	Female	Female	1.687							
	Female	Male	1.437							
1/4"	Male	Male	1.592	5/8"	.193	0.8	14.3			
	Female	Female	1.937	3/4"						
	Female	Male	1.500							
3/8"	Male	Male	1.610	3/4"	.270	1.2	21.5			
1/2"	Male	Male	2.140	7/8"	.327	2.0	35.5			
3/4"	Male	Male	2.160	1 - 1/8"	.467	5.0	90.0			

1. Maximum allowable pressure drop 15 Psid.

Flow tested in accordance with ISA S75.02 with air. Restrictions in the inlet or outlet piping may reduce flow.

## Ordering Information



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.

