

Features

- Multiple porting options
- Durable brass construction
- Low cracking pressure
- Compact in-line or port mounting styles



Check Valves

Check valves are used in pneumatic circuits which require free flow in one direction and no flow in the opposite direction.

Application

Check valves are generally used in systems as a bypass valve, allowing flow around components like needle valves which otherwise restrict flow in both directions.



Twenty-One check valve configurations available

Performance Data

Temperature Range		Operating Pressure			
-20° to 160° F		0 to 125 psi			
Porting Option In/ Out	C _v	Flow Rate (scfm)		Cracking Pressure	Fill sec/ in ³ 0-90 psi
		50 psi	125 psi		
062 Barb/ 062 (min. flow option)	.03	1.09	2.5	1.0	.13
10-32 Thd/ 10-32 Thd (max. flow option)	.09	4.5	9.5	1.0	.03
1/8 NPT (F)/ 1/8 NPT (F)	.41	14.3	31.5	1.0	.01
1/8 NPT / 1/4 PI	.32	9.7	24.5	1.0	.012
1/4 PI / 1/4 PI	.26	9.0	19.5	1.0	.014

Cv per ANSI / (NFPA) T3.21.3

* 062 barb recommended for use with 1/16 ID PUR tubing

* 110 barb recommended for use with 5/64 ID PUR tubing

* 170 barb recommended for use with .170 ID PUR tubing

Materials

Brass/ Electroless Nickel, Buna-N, Stainless Steel

Check Valve Cut-away

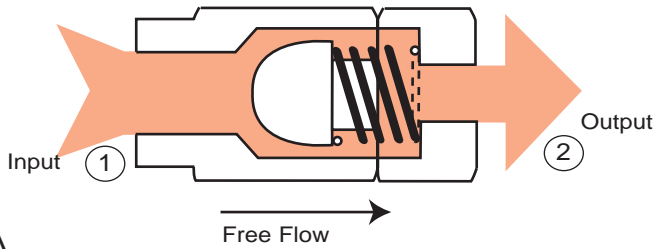


figure A

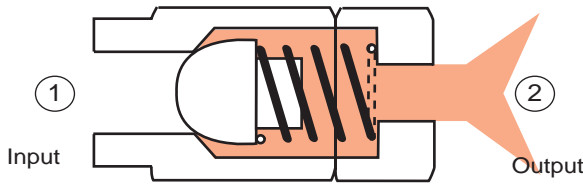


figure B

Function

Two internal designs were developed to ensure a low cracking pressure. The 1/8 NPT style utilizes a poppet and spring, whereas, the 10-32 / barb styles feature a batwing.

When system pressure at the check valve input 1 is high enough to overcome the low spring force (1/2 psi) the poppet is moved off its seat allowing flow out port 2. The flow of a fluid through the check valve is defined as "free flow". When fluid flow reverses the poppet is pushed into its seat, blocking or "checking" the system flow (figure B).

In comparison, the batwing in the 10-32 / barb styles flexes to allow flow through the output port when system pressure exceeds cracking pressure. When fluid flow reverses the batwing straightens, "checking" the system flow.

Product Information

Part Number	Input	Output
C050101	062 Barb	062 Barb
C050102	110 Barb	110 Barb
C050104	170 Barb	170 Barb
C050201	10-32 (M)	062 Barb
C050202	10-32 (M)	110 Barb
C050204	10-32 (M)	170 Barb
C050205	10-32 (M)	10-32 (M)
C050206	062 Barb	10-32 (M)
C050210	170 Barb	10-32 (M)
C050301	10-32 (M)	10-32 (F)
C050302	10-32 (F)	10-32 (M)
C050401	10-32 (F)	10-32 (F)
C050401-SS	10-32 (F)	10-32 (F)
C050501	1/8 NPT (F)	1/8 NPT (F)
C050502	1/8 NPT (F)	1/8 NPT
C050503	1/8 NPT	1/8 NPT (F)
C050504	1/8 NPT	1/8 NPT
C050601	1/8 NPT (F)	1/4 PI
C050602	1/8 NPT	1/4 PI
C050603	1/4 PI	1/8 NPT (F)
C050604	1/4 PI	1/8 NPT
C050605	1/4 PI	1/4 PI

*-SS used to indicate stainless steel



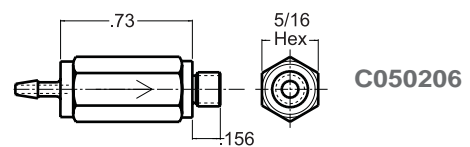
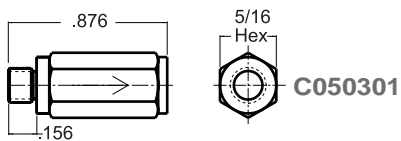
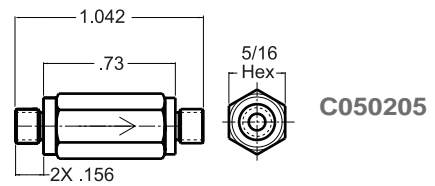
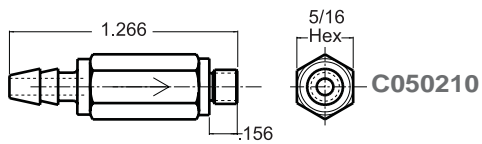
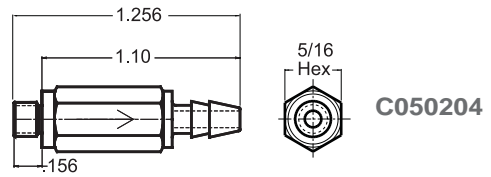
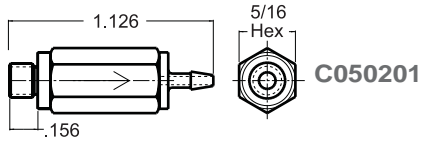
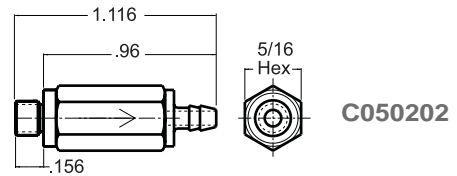
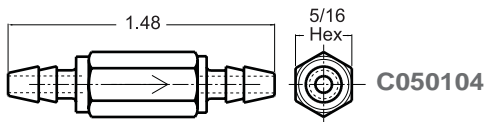
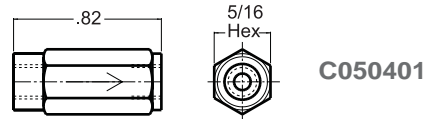
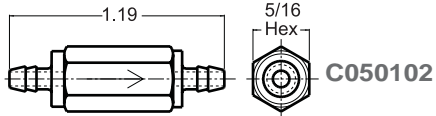
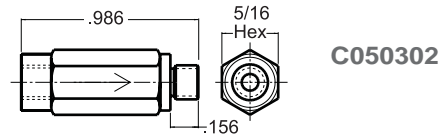
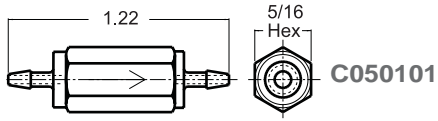
1/8 NPT (F) style utilizes a poppet and spring design

Ordering Information

- To order standard product refer to Product Information listing.
- Optional batwing materials available- contact factory.
- Custom barbs available- contact factory.

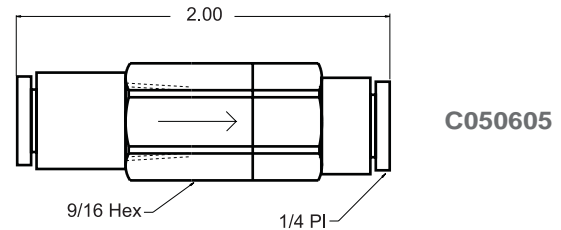
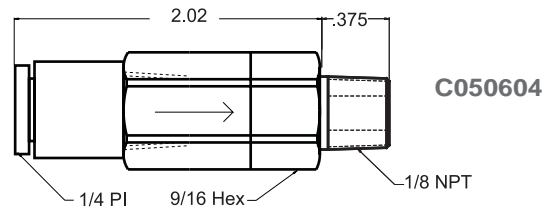
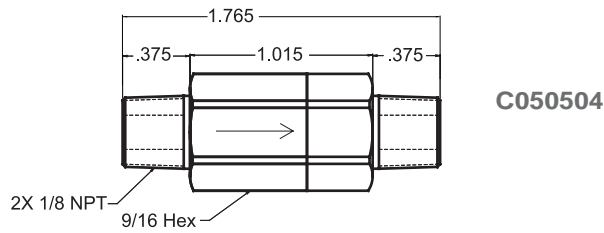
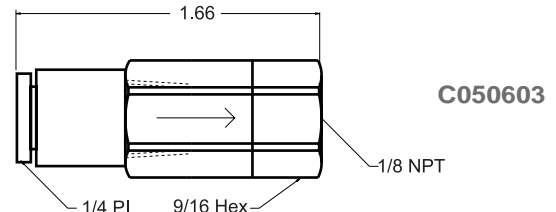
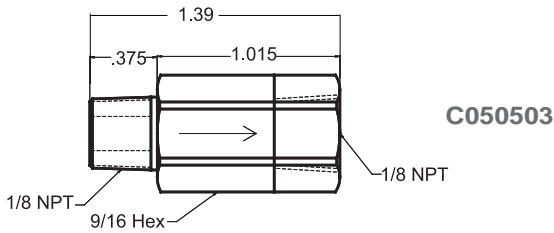
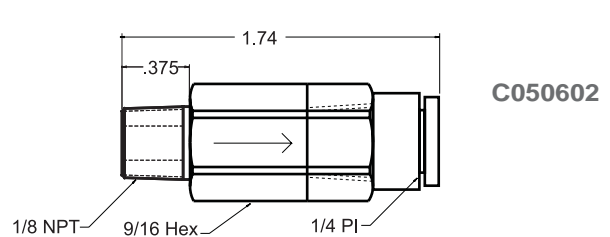
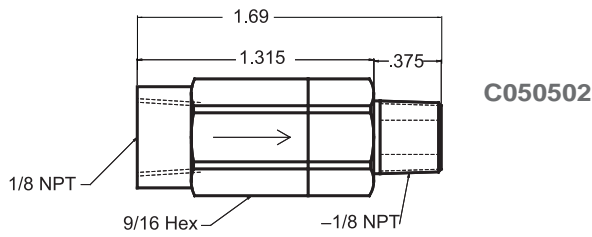
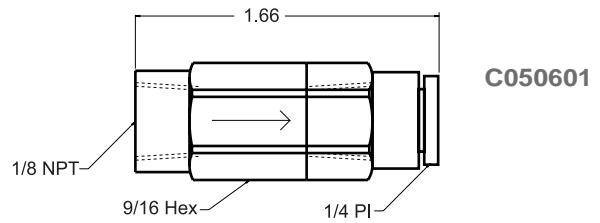
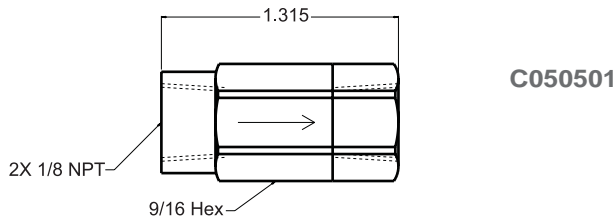
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● When design makes a dimension critical-contact factory for confirmation. All dimensions shown subject to change without notice.