



Instrumentation Check Valves, "C" Series



Size	Flow gpm @ 60°F w/1000 psig Inlet Press.	L	Item No.
1/4"	2.4	2 1/2 in	2KLD2
3/8"	7.1	3 in	2KLD3
1/2"	11.2	3 3/8 in	2KLD4

- 6000 psi at 115°F
 - Cracking pressure: 1 psi
 - Max. temp.: 400°F
- Designed for unidirectional flow control. Custom-molded seat helps prevent blowouts. Fluorocarbon back-stopped poppet reduces spring stress. Valves offer heat code traceability for material certification. FNPT connections.

Instrumentation Plug Valves

- Max. pressure: 3000 psig CWP
 - Temp. range: -10° to 450°F
- 1/4-turn operation, compact, and blowout-resistant seat allows forward flow throttling. Handle indicates flow direction. Pressure

rating is reduced to 150 psig when flow is opposite to the indicated direction. Fluorocarbon seats and seals. Compression connections. Meet ASTM A479 Type 316, except Brass meets ASTM B 16 Alloy C36000.



A-LOK 1RBB7

Tube Size	Cv	Overall Length	316 Stainless Steel A-LOK(R) Item No.	CPI(R) Item No.	Brass A-LOK(R) Item No.	CPI(R) Item No.
1/4 in	1.24	2 9/50 in	1RBB7	1RBC1	1RBC4	1RBC7
3/8 in	3.19	2 33/50 in	1RBB8	1RBC2	1RBC5	1RBC8
1/2 in	3.19	2 22/25 in	1RBB9	1RBC3	—	1RBC9

Instrumentation Needle Valves



STAINLESS STEEL, GLOBE-STYLE

- Max. pressure: 6000 psi

A self-centering nonrotating spindle tip provides bubble-tight shutoff; backstop spindle prevents blowout and minimizes atmospheric contamination. PTFE gland packing.

GENERAL-PURPOSE

Packing above the stem thread (PAT) provides bubble-tight shutoff. Cold-formed body threads. Strain-hardened stem threads. PTFE seals. Tested in accordance with ISA S75.02.

316 Stainless Steel—Packing above the stem thread (PAT) provides bubble-tight shutoff. Cold-formed body threads. Strain-hardened stem threads. PTFE seals.

- Max. pressure: 5000 psig CWP

Brass—Packing above the stem thread (PAT) provides bubble-tight shutoff. Cold-formed body threads. Strain-hardened stem threads. PTFE seals.

- Max. pressure: 3000 psig CWP



4EUJ9



2KLC8



1RAZ4

Tube Size	Pipe Size	Connection	Stem Type	Max. Flow	Max. Height	L	Stainless Steel Temp. Rating	Stainless Steel Item No.	316 Stainless Steel Temp. Rating	316 Stainless Steel Item No.	Brass Temp. Rating	Brass Item No.
Stainless Steel, Globe-Style												
—	1/4 in	FNPT	Stainless Steel	0.35 gpm	3 1/2 in	2 1/2 in	-65° to 450°F	4EUJ9	—	—	—	—
—	1/2 in	FNPT	Stainless Steel	0.35 gpm	3 1/2 in	2 1/2 in	-65° to 450°F	4EUJ1	—	—	—	—
General-Purpose												
—	1/4 in	FNPT	Blunt	0.73 gpm	3 3/64 in	1 1/2 in	—	—	-65° to 450°F	2KLC2	-65° to 450°F	2KLC5
—	1/4 in	FNPT	Needle	0.55 gpm	3 3/64 in	1 1/2 in	—	—	-65° to 450°F	2KLC3	-65° to 450°F	2KLC6
—	1/4 in	FNPT	PTFE	0.8 gpm	3 3/64 in	1 1/2 in	—	—	-65° to 350°F	2KLC4	-65° to 350°F	2KLC7
—	1/2 in	FNPT	Blunt	1.23 gpm	4 1/64 in	2 3/64 in	—	—	-65° to 450°F	2KLC8	—	—
—	1/2 in	FNPT	Needle	1.05 gpm	4 1/64 in	2 3/64 in	—	—	-65° to 450°F	2KLC9	—	—
—	1/2 in	FNPT	PTFE	1.29 gpm	4 1/64 in	2 3/64 in	—	—	-65° to 350°F	2KLD1	—	—
—	1/2 in	FNPT	PTFE	0.12 gpm	6 3/64 in	2 1/4 in	—	—	-65° to 450°F	1RAZ1	—	—
1/8 in	—	A-LOK(R)/Compression	Blunt	0.43 gpm	3 1/2 in	2 3/64 in	—	—	-65° to 450°F	1RAZ4	-65° to 400°F	1RBA7
1/4 in	—	A-LOK(R)/Compression	Blunt	0.45 gpm	3 1/2 in	2 3/64 in	—	—	-65° to 450°F	1RAZ6	-65° to 400°F	1RBA8
—	—	A-LOK(R)/Compression	Regulating	0.43 gpm	3 1/2 in	2 3/64 in	—	—	-65° to 450°F	1RAZ5	-65° to 400°F	1RBA8
—	—	A-LOK(R)/Compression	Regulating	0.55 gpm	3 3/64 in	2 3/64 in	—	—	-65° to 350°F	1RAZ8	-65° to 400°F	1RBA8
3/8 in	—	A-LOK(R)/Compression	Blunt	0.73 gpm	3 3/64 in	2 3/64 in	—	—	-65° to 450°F	1RAZ7	-65° to 400°F	1RBA1
—	—	A-LOK(R)/Compression	Blunt Needle PCTFE	0.8 gpm	3 3/64 in	2 3/64 in	—	—	-65° to 450°F	1RAZ9	-65° to 400°F	1RBA1
—	—	A-LOK(R)/Compression	Regulating	1.05 gpm	4 3/64 in	3 1/6 in	—	—	-65° to 450°F	1RAZ2	-65° to 400°F	1RBA1
1/2 in	—	A-LOK(R)/Compression	Blunt	1.23 gpm	4 3/64 in	3 1/6 in	—	—	-65° to 450°F	1RAZ9	-65° to 400°F	1RBA1
—	—	A-LOK(R)/Compression	Blunt Needle PCTFE	1.29 gpm	4 3/64 in	3 1/6 in	—	—	-65° to 350°F	1RAZ3	-65° to 400°F	1RBA4

Nickel-Plated Brass Mini Ball Valves and Kits

- Temp. range: -20° to 370°F, except kits are -40° to 350°F

Ideal for use in tight spaces and can be used with air, gas, and liquids. Valve structure is 1-pc. and full port, except 1/2" are standard port. 450 psi CWP valves have polycarbonate wedge handles and can be panel mounted. 600 psi CWP valves have zinc, wedge handles. Kits 1PZA7 to 1PZB5 include wedge, lever, and T-style handles. 38EF92 to 38EF99 are lead free and certified for use with potable water and meet MSS SP-110.

Pipe Size	FNPT x FNPT (Valve Only) 450 psi CWP Item No.	FNPT x FNPT (Valve Only) 450 psi CWP Lead-Free Brass Item No.	FNPT x FNPT (Valve Only) 600 psi CWP Item No.	FNPT x MNPT (Valve Only) 450 psi CWP Item No.	FNPT x MNPT (Valve Only) 450 psi CWP Lead-Free Brass Item No.	FNPT x MNPT (Valve Only) 600 psi CWP Item No.	FNPT x MNPT (Valve Only) 600 psi CWP Item No.	FNPT x FNPT (Valve Kit) 450 psi CWP Item No.	FNPT x MNPT (Valve Kit) 450 psi CWP Item No.
1/8 in	38EF84	38EF92	—	38EF88	38EF96	38EG05	1PZA7	1PZB2	—
1/4 in	38EF85	38EF93	38EG02	38EF89	38EF97	38EG06	1PZA8	1PZB3	—
3/8 in	38EF86	38EF94	38EG03	38EF90	38EF98	38EG07	1PZA9	1PZB4	—
1/2 in	38EF87	38EF95	—	38EF91	38EF99	38EG08	1PZB1	1PZB5	—



Brass Mini Ball Valves

Feature PTFE seats and packing, a blowoutproof stem, and a steel lever handle. For use with water, oil, and gas.

Pipe Size	Valve Structure	Port	Max. Pressure	Temp. Range	Lever FNPT x FNPT Item No.	Lever FNPT x MNPT Item No.	Lever Comp. x Comp. Item No.	Round FNPT x FNPT Item No.	Round MNPT x MNPT Item No.	Round Comp. x Comp. Item No.	Round FNPT x MNPT Item No.
1/8 in	1-Pc.	Full	500 psi CWP	-35° to 300°F	21VL80	21VL78	—	—	—	—	—
—	2-Pc.	Full	1,000 psi CWP	-40° to 300°F	1WML2	1WML3	1WML4	1WMN2	1WMN1	—	—
1/4 in	1-Pc.	Std.	500 psi CWP	-35° to 300°F	21VL81	21VL79	—	—	—	—	—
—	2-Pc.	Full	1,000 psi CWP	-40° to 300°F	1WML6	1WML7	1WML8	1WMN6	1WMN5	1WMN8	1WMN7
3/8 in	2-Pc.	Full	1,000 psi CWP	-40° to 300°F	—	—	1WML9	—	—	1WMN9	—

