

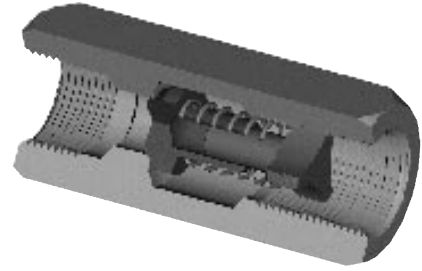
# Check Valves

## C-Series

Especially designed for the control of hydraulic and pneumatic systems. Allows full-flow in one direction only.

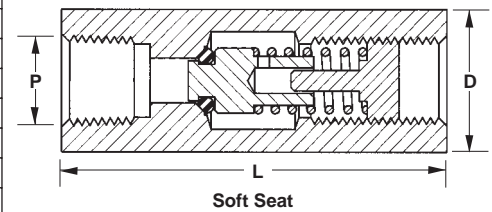
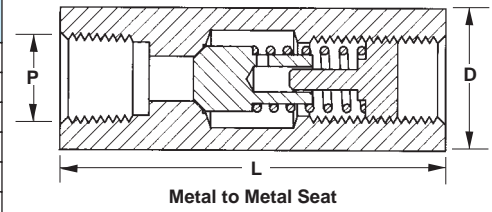
### Features:

- Efficient in line design provides high flow capability with low pressure drop.
- Soft seat poppet assures leak free service. Durable all metal poppets standard on all other models.
- Steel valves are zinc plated with "golden glow" chromate for double corrosion protection.
- Versatile design can be mounted in any position.



### Ordering Information:

Part Number	Seating Option	Inlet/Outlet Connections FNPT P	Length L	Wrenching Hex Size D	Cv	Maximum Operating Pressure
<b>Stainless Steel Check Valves</b>						
C250SS	METAL	1/4"	2 3/8"	13/16"	.87	5000 PSIG
C375SS	METAL	3/8"	2 1/2"	1"	2.3	5000 PSIG
C500SS	METAL	1/2"	3"	1 1/8"	3.5	5000 PSIG
C750SS	METAL	3/4"	3 5/8"	1 1/2"	5.2	5000 PSIG
C250SSL	SOFT	1/4"	2 3/8"	13/16"	.87	250 PSIG
C375SSL	SOFT	3/8"	2 1/2"	1"	2.3	250 PSIG
C500SSL	SOFT	1/2"	3"	1 1/8"	3.5	3000 PSIG
C750SSL	SOFT	3/4"	3 5/8"	1 1/2"	5.2	3000 PSIG
<b>Brass Body Check Valves</b>						
C250B	METAL	1/4"	2 3/8"	13/16"	.87	3000 PSIG
C375B	METAL	3/8"	2 1/2"	1"	2.3	3000 PSIG
C500B	METAL	1/2"	3"	1 1/8"	3.5	3000 PSIG
C750B	METAL	3/4"	3 5/8"	1 1/2"	5.2	3000 PSIG
C250BL	SOFT	1/4"	2 3/8"	13/16"	.87	250 PSIG
C375BL	SOFT	3/8"	2 1/2"	1"	2.3	250 PSIG
C500BL	SOFT	1/2"	3"	1 1/8"	3.5	3000 PSIG
C750BL	SOFT	3/4"	3 5/8"	1 1/2"	5.2	3000 PSIG
<b>Steel Check Valves</b>						
C250S	METAL	1/4"	2 3/8"	13/16"	.87	5000 PSIG
C375S	METAL	3/8"	2 1/2"	1"	2.3	5000 PSIG
C500S	METAL	1/2"	3"	1 1/8"	3.5	5000 PSIG
C750S	METAL	3/4"	3 5/8"	1 1/2"	5.2	5000 PSIG
C250SL	SOFT	1/4"	2 3/8"	13/16"	.87	250 PSIG
C375SL	SOFT	3/8"	2 1/2"	1"	2.3	250 PSIG
C500SL	SOFT	1/2"	3"	1 1/8"	3.5	3000 PSIG
C750SL	SOFT	3/4"	3 5/8"	1 1/2"	5.2	3000 PSIG



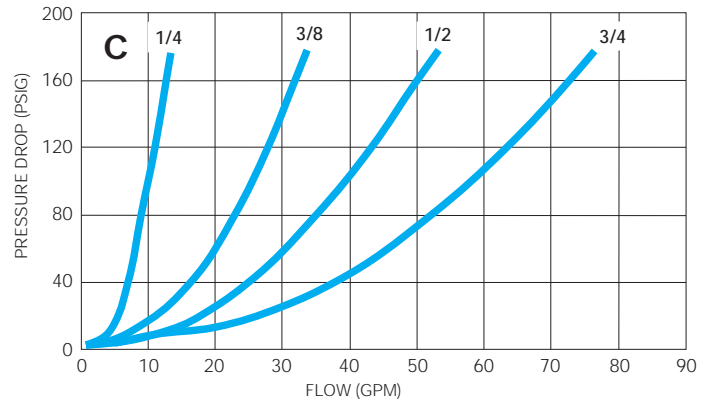
### Specifications:

Maximum Operating Pressure	See Ordering Information
Temperature Range	-20°F to +212°F
CV Factor	See Ordering Information
Cracking Pressure	5 PSIG Standard, call for other settings

### Materials:

Body	ASTM B 16 Brass, 12L14 Steel, or 303 Stainless Steel
Spring	Stainless Steel
Piston	Stainless Steel
Piston Seat - soft-	Viton

### Performance



# Check Valves

## BC & PC Series

Compact, versatile design for the control of air and liquids.  
Allows full-flow in one direction.

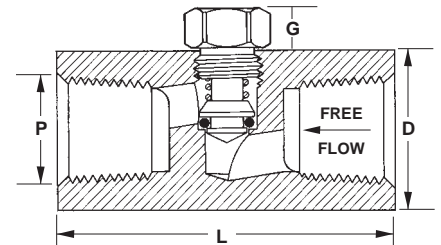
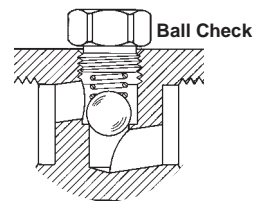
### Features:

- Piston check design for leak-free air service.
- Ball check design for heavy duty liquid service.
- Low cracking pressures and smooth operation provide efficient service.
- Steel valves are zinc-plated and sealed with “golden glow” chromate for double corrosion protection.



### Ordering Information:

Part Number	Body Material	Check Style	P (NPT) Female	D (In.) Hex	L (In.)	G (In.)	Orifice Diameter (In.)	CV	Cracking Pressure (PSIG)
PCI25B	Brass	Piston	1/8	1 1/16	1 1/2	9/32	.203	.21	10
PC250B			1/4	7/8	2	5/16			
PC375B			3/8	1 1/16	2 1/4	1 1/32			
PC500B			1/2	1 5/16	2 2 1/32	3/8			
BC125B	Brass	Ball	1/8	1 1/16	1 1/2	9/32	.203	.21	11
BC250B			1/4	7/8	2	5/16			
BC375B			3/8	1 1/16	2 1/4	1 1/32			
BC500B			1/2	1 5/16	2 2 1/32	3/8			
BC250S	Steel	Ball	1/4	7/8	2	5/16	.203	.45	7
BC375S			3/8	1 1/16	2 1/4	1 1/32			
BC500S			1/2	1 5/16	2 2 1/32	3/8			
BC750S			3/4	1 5/8	3	1 5/32			



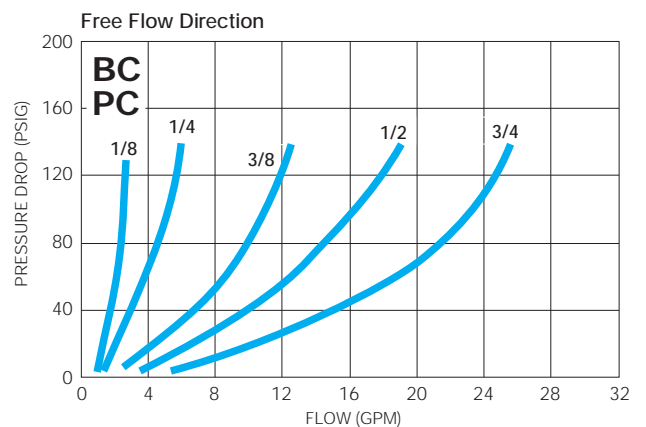
### Specifications:

Maximum Operating Pressure	
“BC” Models	5000 PSIG Steel 2000 PSIG Brass
“PC” Models	2500 PSIG Steel 2000 PSIG Brass
Temperature Range	-20°F to +212°F
CV Factor	See Ordering Information

### Materials:

Body	12L14 Steel or ASTM B16 Brass
Piston Assembly “PC” Models	Stainless Steel with Viton O-Ring
Ball, “BC” Models	Stainless Steel
Spring	Stainless Steel
Plug	Steel or Brass

### Performance



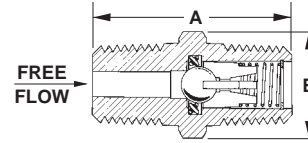
# Check Valves

## CMM Series

Space saving, in-line design for the control of air and liquids.

### Features:

- Metal to Metal seal for leak-free liquid service.
- O-ring design for leak-free air service.
- Steel valves are zinc-plated and sealed with clear chromate for double corrosion protection.



### Specifications:

Maximum Operating Pressure	See Ordering Information
Temperature Range	-20°F to +400°F
Cracking Pressure	See Ordering Information
CV Factor	See Ordering Information

### Ordering Information:

Part Number	Body Material	Seal	Port Size (NPT) Male	A (In.)	B (In.) Hex	Orifice Diameter (In.)	CV	Cracking Pressure (PSIG)	Maximum Pressure (PSIG)
CMM250B	Brass	Metal	1/4	1 5/32	9/16	3/16	.5	7	1000
CMM250B-L		Viton							
CMM375B		Metal							
CMM250S	Steel	Metal	1/4	1 5/32	9/16	3/16	.5	7	3000
CMM250S-L		Viton							
CMM375S		Metal							

### Materials:

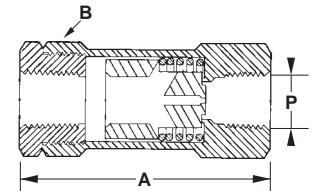
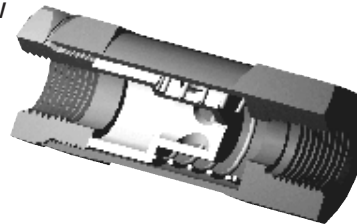
Body	ASTM B 16 Brass or 12L14 Steel
Ball	Stainless Steel
Retainer	Brass or Steel
Spring	Stainless Steel

## 8830E Excess Flow Check Series

Designed to automatically close when air flow exceeds a safe level. For use on all compressed air hoses leading to air tools and pneumatic components.

### Features:

- Re-sets automatically.
- In-line design for easy installation.



### Operation:

During normal operation, a specially molded seal (A) is held away from its seat (B) by spring (C). Air flow is allowed to pass through the orifice (D). When a sudden surge of air flow occurs which exceeds the rated flow of the valve, the resulting pressure differential forces the spring to compress and the seal to contact its seat as in figure 2. After the cause of the higher air flow is repaired, air passing through orifice (E) slowly builds downstream pressure until the differential is low enough for the spring to return the seal to its normal position.

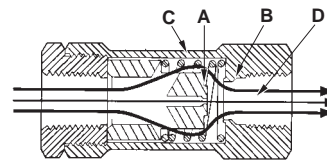


fig. 1 Normal flow condition

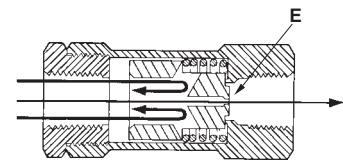


fig. 2 Shut-off condition

### Specifications:

Maximum Operating Pressure	250 PSIG Air
Temperature Range	-40°F to +250°F

### Materials:

Body	Aluminum
Seat	Delrin
Spring	Stainless Steel

### Ordering Information:

Part Number	P (NPT) Female	A (In.)	B (In.) Hex	Approximate closing flow rate (Standard cubic feet per minute/air)							Pressure Drop to Close Valve @ 100 PSIG
				(Inlet Pressure PSIG)							
				25	50	90	125	150	200	250	
8830E3	3/8	3 1/2	1 3/8	29	38	48	56	60	69	76	1 1/2 to 3
8830E4	1/2			50	65	80	90	100	115	125	3 to 5
8830E6	3/4	5	2 1/4	140	175	200	260	280	320	360	1 1/2 to 4
8830E8	1			210	265	340	395	425	490	540	5 to 7

\*To obtain closing flow rates at an inlet pressure, P, that is not shown above, use the following formula:

$$\text{Closing Flow} = \frac{\text{SCFM at 100 PSIG}}{(P + 14.7) / 104.7}$$

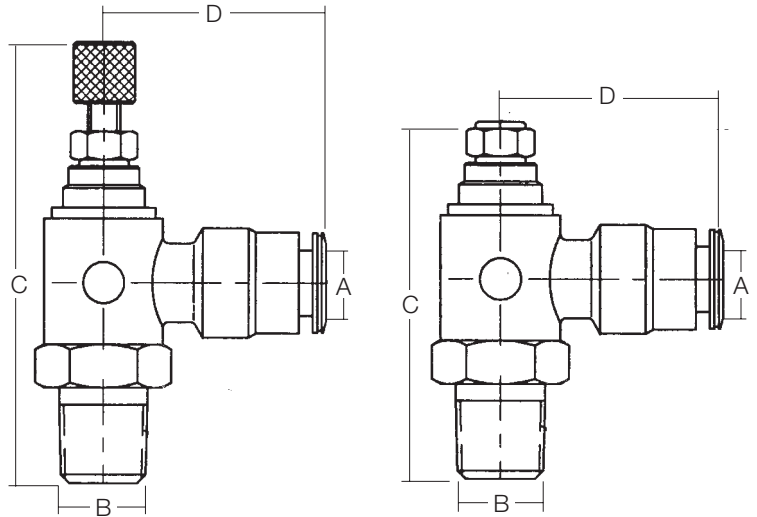
# Compact Pneumatic Flow Controls With Push-In-Tube Connection

## Features:

- Compact design permits mounting directly on pneumatic cylinder.
- Push-In-Tube connections allow convenient tube assembly without the need for tools or other components.
- Tubing easily installed by pushing into outlet and released by pressing collet and pulling.
- Available with convenient knurled knob or tamper resistant recessed screwdriver slot.
- Valves are nickel plated for corrosion protection.
- Unique cup seal provides positive seal during metered flow.
- Precision long-tapered stem provides accurate control.
- Tube Port rotates fully after mounting.

## Specifications:

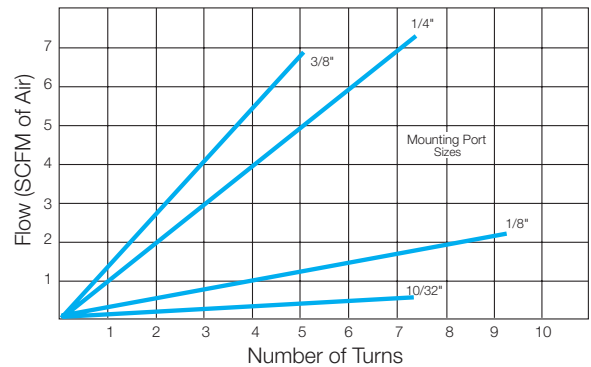
Operating Pressure ..... 15 to 150 PSIG  
 Temperature Range ..... +32° F to +176° F  
 Body Material ..... OT58 Brass Body with Nickel Plating  
 Seal Material ..... Buna-N



## Ordering Information:

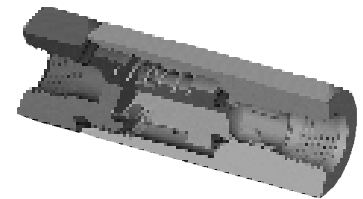
Part Number	Actuation	A Tube Port O.D.	B Mounting Port	C Height (Valve Open)	D
RAM 53-02	Knurled Knob	5/32"	1/8" NPT	1 1/8"	7/8"
RAM 4-02		1/4"	1/4" NPT	2 1/4"	1 1/16"
RAM 6-04		3/8"	3/8" NPT	2 5/8"	1 1/8"
RAM 6-06		1/2"	1/2" NPT	3 1/8"	1 1/16"
RAS 53-02	Recessed Screwdriver Slot	5/32"	1/8" NPT	1 1/2"	7/8"
RAS 4-02		1/4"	1/4" NPT	1 5/8"	1 1/16"
RAS 6-04		3/8"	3/8" NPT	1 7/8"	1 1/8"
RAS 6-06		1/2"	1/2" NPT	2 1/4"	1 1/16"

## Performance



## CW-series check valves

- A check valve specifically designed and manufactured for the car wash/pressure washing industry.
- Unique two piece construction allows the user to dis-assemble the valve, clean and replace seals as necessary.
- Both valves which are available in 1/4" and 3/8"NPTF contain O-rings of Viton7 and Buna-N for long-lasting durability.
- Maximum operating pressure on each valve is 200 psi.
- Cracking pressure is 5 psig.



Valve Number	Material	Thread (Both Ends)	A - Length (in)	B - Width (in)
CW250BL	ASTM B 16 Brass	1/4 NPTF	3.03	1.00
CW375BL	ASTM B 16 Brass	3/8 NPTF	3.03	1.00
CW250SSL	303 Stainless Steel	1/4 NPTF	3.03	1.00
CW375SSL	303 Stainless Steel	3/8 NPTF	3.03	1.00

