

## Valves: Relief, Sleeve, & Check Valves



# Features and Specifications for Low Flow Coded Relief Valves

## FEATURES

- \* Seat Cap and Piston C360 Brass (ASTM B-16), 17-7 Stainless Steel Spring and Silicone Seal.
- \* Bubble Tight to within 5 psig for Set Pressure 50 psig or less. Bubble Tight to within 10% for Set Pressures greater than 50 psig. 100% Testing or 2.5 AQL sample testing, conforming to AP1 527.
- \* Stamped with the UV and NB symbols.
- \* Everseal 483 sealant standard.

## USES

- \* Applications: Compact size low flow

## SPECIFICATIONS

Product	Temperature Range	Pressure Range	Set Pressure Tolerance
Low Flow Coded Relief Valves	-65°F to 400°F	75 to 200 PSI	±3% of Set Pressure



Part #	MAX PSI	NPT (M)	OAL	HEX	QTY	List Price
PCSR-02-75	75	1/8"	1.70"	9/16"	1	\$ 5.82
PCSR-02-125	125	1/8"	1.70"	9/16"	1	\$ 5.82
PCSR-02-150	150	1/8"	1.70"	9/16"	1	\$ 5.82
PCSR-02-200	200	1/8"	1.70"	9/16"	1	\$ 5.82
PCSR-04-75	75	1/4"	1.70"	9/16"	1	\$ 5.82
PCSR-04-125	125	1/4"	1.70"	9/16"	1	\$ 5.82
PCSR-04-135	135	1/4"	1.70"	9/16"	1	\$ 5.82
PCSR-04-150	150	1/4"	1.70"	9/16"	1	\$ 5.82
PCSR-04-200	200	1/4"	1.70"	9/16"	1	\$ 5.82
PCSR-12-135	135	1"	1.70"	9/16"	1	\$ 80.88
PCSR-12-160	160	1"	1.70"	9/16"	1	\$ 80.88

# Features and Specifications for High Flow Coded Relief Valves

## FEATURES

- \* Seat Cap and Piston C360 Brass (ASTM B-16), 17-7 Stainless Steel Spring and Silicone Seal.
- \* Bubble Tight to within 5 psig for Set Pressure 50 psig or less. Bubble Tight to within 10% for Set Pressures greater than 50 psig. 100% Testing or 2.5 AQL sample testing, conforming to AP1 527.
- \* Stamped with the UV and NB symbols.
- \* Everseal 483 sealant standard.

## USES

- \* Applications: Small Air Compressors with High Flow Requirements.



## SPECIFICATIONS

Product	Temperature Range	Pressure Range	Set Pressure Tolerance
High Flow Coded Relief Valves	-65°F to 400°F	25 - 450 PSI	±3% of Set Pressure

## HIGH FLOW CODED RELIEF VALVES 1/8"

Part #	MAX PSI	NPT (M)	OAL	HEX	QTY	List Price
PCST-02-25	25	1/8"	1.75"	11/16"	1	\$ 7.28
PCST-02-35	35	1/8"	1.75"	11/16"	1	\$ 7.28
PCST-02-50	50	1/8"	1.75"	11/16"	1	\$ 7.28
PCST-02-65	65	1/8"	1.75"	11/16"	1	\$ 7.28
PCST-02-70	70	1/8"	1.75"	11/16"	1	\$ 7.28
PCST-02-75	75	1/8"	1.75"	11/16"	1	\$ 7.28
PCST-02-125	125	1/8"	1.75"	11/16"	1	\$ 7.28
PCST-02-150	150	1/8"	1.75"	11/16"	1	\$ 7.28
PCST-02-165	165	1/8"	1.75"	11/16"	1	\$ 7.28
PCST-02-175	175	1/8"	1.75"	11/16"	1	\$ 7.28
PCST-02-200	200	1/8"	1.75"	11/16"	1	\$ 7.28

## HIGH FLOW CODED RELIEF VALVES 1/4"

Part #	MAX PSI	NPT (M)	OAL	HEX	QTY	List Price
PCST-04-25	25	1/4"	1.75"	11/16"	1	\$ 7.28
PCST-04-35	35	1/4"	1.75"	11/16"	1	\$ 7.28
PCST-04-40	40	1/4"	1.75"	11/16"	1	\$ 7.28
PCST-04-50	50	1/4"	1.75"	11/16"	1	\$ 7.28
PCST-04-75	75	1/4"	1.75"	11/16"	1	\$ 7.28
PCST-04-90	90	1/4"	1.75"	11/16"	1	\$ 7.28
PCST-04-100	100	1/4"	1.75"	11/16"	1	\$ 7.28
PCST-04-125	125	1/4"	1.75"	11/16"	1	\$ 7.28
PCST-04-140	140	1/4"	1.75"	11/16"	1	\$ 7.28
PCST-04-150	150	1/4"	1.75"	11/16"	1	\$ 7.28
PCST-04-200	200	1/4"	1.75"	11/16"	1	\$ 7.28
PCST-04-250	250	1/4"	1.75"	11/16"	1	\$ 7.28
PCST-04-295	295	1/4"	1.75"	11/16"	1	\$ 7.28
PCST-04-300	300	1/4"	1.75"	11/16"	1	\$ 7.28
PCST-04-350	350	1/4"	1.75"	11/16"	1	\$ 7.28

## HIGH FLOW CODED RELIEF VALVES 3/8"

Part #	MAX PSI	NPT (M)	OAL	HEX	QTY	List Price
PCST-06-25	25	3/8"	1.75"	11/16"	1	\$ 7.28
PCST-06-40	40	3/8"	1.75"	11/16"	1	\$ 7.28
PCST-06-50	50	3/8"	1.75"	11/16"	1	\$ 7.28
PCST-06-70	70	3/8"	1.75"	11/16"	1	\$ 7.28
PCST-06-80	80	3/8"	1.75"	11/16"	1	\$ 7.28
PCST-06-100	100	3/8"	1.75"	11/16"	1	\$ 7.28
PCST-06-125	125	3/8"	1.75"	11/16"	1	\$ 7.28
PCST-06-150	150	3/8"	1.75"	11/16"	1	\$ 7.28
PCST-06-175	175	3/8"	1.75"	11/16"	1	\$ 7.28
PCST-06-200	200	3/8"	1.75"	11/16"	1	\$ 7.28

## HIGH FLOW CODED RELIEF VALVES 1/2"

Part #	MAX PSI	NPT (M)	OAL	HEX	QTY	List Price
PCST-08-25	25	1/2"	2.69"	7/8"	1	\$ 22.11
PCST-08-100	100	1/2"	2.69"	7/8"	1	\$ 22.11
PCST-08-165	165	1/2"	2.69"	7/8"	1	\$ 22.11
PCST-08-175	175	1/2"	2.69"	7/8"	1	\$ 22.11

# Features and Specifications for Low Flow Relief Valves

## FEATURES

- \* Seat Cap and Piston C360 Brass (ASTM B-16), 17-7 Stainless Steel Spring and Silicone Seal.
- \* Bubble Tight to within 5 psig for Set Pressure 50 psig or less. Bubble Tight to within 10% for Set Pressures greater than 50 psig. 100% Testing or 2.5 AQL sample testing, conforming to AP1 527.
- \* Stamped with the UV and NB symbols.
- \* Everseal 483 sealant standard.

## USES

- \* Applications: Compact size low flow



## SPECIFICATIONS

Product	Temperature Range	Pressure Range	Set Pressure Tolerance
Low Flow Relief Valves	-65°F to 400°F	20 - 150 PSI	±3% of Set Pressure

## LOW FLOW RELIEF VALVES 1/8"

Part #	MAX PSI	NPT (M)	OAL	HEX	QTY	List Price
PCNP-02-20	20	1/8"	1.70"	9/16"	1	\$ 5.50
PCNP-02-25	25	1/8"	1.70"	9/16"	1	\$ 5.50
PCNP-02-30	30	1/8"	1.70"	9/16"	1	\$ 5.50
PCNP-02-45	45	1/8"	1.70"	9/16"	1	\$ 5.50
PCNP-02-50	50	1/8"	1.70"	9/16"	1	\$ 5.50
PCNP-02-65	65	1/8"	1.70"	9/16"	1	\$ 5.50
PCNP-02-75	75	1/8"	1.70"	9/16"	1	\$ 5.50
PCNP-02-100	100	1/8"	1.70"	9/16"	1	\$ 5.50
PCNP-02-125	125	1/8"	1.70"	9/16"	1	\$ 5.50
PCNP-02-150	150	1/8"	1.70"	9/16"	1	\$ 5.50

## LOW FLOW RELIEF VALVES 1/4"

Part #	MAX PSI	NPT (M)	OAL	HEX	QTY	List Price
PCNP-04-05	05	1/4"	1.70"	9/16"	1	\$ 5.50
PCNP-04-25	25	1/4"	1.70"	9/16"	1	\$ 5.50
PCNP-04-40	40	1/4"	1.70"	9/16"	1	\$ 5.50
PCNP-04-50	50	1/4"	1.70"	9/16"	1	\$ 5.50
PCNP-04-60	50	1/4"	1.70"	9/16"	1	\$ 5.50
PCNP-04-65	65	1/4"	1.70"	9/16"	1	\$ 5.50
PCNP-04-70	70	1/4"	1.70"	9/16"	1	\$ 5.50
PCNP-04-75	75	1/4"	1.70"	9/16"	1	\$ 5.50
PCNP-04-90	90	1/4"	1.70"	9/16"	1	\$ 5.50
PCNP-04-100	100	1/4"	1.70"	9/16"	1	\$ 5.50
PCNP-04-120	120	1/4"	1.70"	9/16"	1	\$ 5.50
PCNP-04-125	125	1/4"	1.70"	9/16"	1	\$ 5.50
PCNP-04-150	150	1/4"	1.70"	9/16"	1	\$ 5.50
PCNP-04-175	175	1/4"	1.70"	9/16"	1	\$ 5.50
PCNP-04-200	200	1/4"	1.70"	9/16"	1	\$ 5.50
PCNP-04-250	250	1/4"	1.70"	9/16"	1	\$ 5.50

# Features and Specifications for Vacuum Relief Valves

## FEATURES

- \* C360 machined brass body, stainless steel spring, nylon piston and nitrile seal (PCVR-04 Stainless Steel Piston and Seal).
- \* Bubble Tight to within 5 psig for Set Pressure 50 psig or less. Bubble Tight to within 10% for Set Pressures greater than 50 psig. 100% Testing or 2.5 AQL sample testing, conforming to AP1 527.
- \* Everseal 483 sealant standard.

## USES

- \* Applications: Used in Systems to Maintain a Desired Vacuum Level

## SPECIFICATIONS

Product	Temperature Range	Pressure Range	Set Pressure Tolerance
Vacuum Relief Valves	-65°F to 250°F	0-27" Hg	±3% of Set Pressure



Part #	Set Pressure	NPT (M)	QTY	List Price
PCVR-04	0-27" Hg	1/4"	1	\$ 12.57
PCVR-06	0-27" Hg	3/8"	1	\$ 16.46
PCVR-12	0-27" Hg	3/4"	1	\$ 25.18

# Features and Specifications for Sleeve Valves

Sleeve Valves combine high flow capability with short stroke in a small package. Unlike ball valves, sleeve valves do not require space for a handle. Sleeve valves feature smooth opening/closing operation. The outlet is exhausted to the atmosphere when the valve is closed. The unit is constructed of a brass body and an anodized aluminum sleeve for corrosion resistance.

## FEATURES

- \* 2 Position, 3-Way, Vent to Exhaust

## USES

- \* High Flow capability for small spaces

## SPECIFICATIONS

Product	Temperature Range	Working Pressure (PSI)	Material
Sleeve Valves	-41 °F to 140 °F (5°C to 60°C)	0-140 PSI	Brass & Anodized Aluminum



Part #	NPT M	NPT F	OAL	Material	QTY	List Price
PCSLV-02	1/8"	1/8"	2.688"	Brass	1	\$ 14.30
PCSLV-04	1/4"	1/4"	2.844"	Brass	1	\$ 14.77
PCSLV-06	3/8"	3/8"	3"	Brass	1	\$ 15.52
PCSLV-08	1/2"	1/2"	3.625"	Brass	1	\$ 28.20



Part #	NPT F	OAL	Material Body	Material Sleeve	Pressure Range	Temp. Range	QTY	List Price
PCSLVA-02	1/8"	1.890"	Chrome Brass	Aluminum	0-150 PSI	0°F - 160°F	1	\$ 14.06
PCSLVA-04	1/4"	2.283"	Chrome Brass	Aluminum	0-150 PSI	0°F - 160°F	1	\$ 17.44
PCSLVA-06	3/8"	2.756"	Chrome Brass	Aluminum	0-150 PSI	0°F - 160°F	1	\$ 21.42



# Features and Specifications for Inline Check Valves

## PCCVA SERIES

- \* Nickel Plated Brass Material
- \* Steel Spring
- \* NBR 70/Viton End Cap and Piston Seal
- \* Pressure Range: 3 - 120 PSI
- \* Cracking Pressure: 3 PSI
- \* Maximum Pressure: 150 PSI
- \* Temperature Range: 0°F - 160°F  
(-18°C - 70°C)



Part #	NPT F	OAL	QTY	List Price
PCCVA-02	1/8"	1.44"	1	\$ 7.89
PCCVA-04	1/4"	1.85"	1	\$ 9.72

# Features and Specifications for Pilot Operated Check Valve

## FEATURES

- \* Threaded Banjo or Push-to-Connect Fittings
- \* NPT Male threads have sealant applied.

## USES

- \* Pilot operated check valve is used in applications requiring control of media in one direction
- \* Provides a “release” from the “checking” function
- \* For use with Pneumatic Cylinders.

## SPECIFICATIONS

Product	Operating Pressure Range	Temperature Range	Material
Pilot Operated Check Valve	1 bar to 10 bar	14°F to +158°F (-10°C to 70°C)	Composite Body Nickle Plated Brass Thread



Part #	NPT M	NPT F/Push-In	OAL	Max Tightening Torque	QTY	List Price
PCBCV-2	1/8"	1/8"	1.61"	5.1 lbs/ft	1	\$ 30.42
PCBCV-4	1/4"	1/4"	1.89"	11.0 lbs/ft	1	\$ 34.94
PCBCV-6	3/8"	3/8"	2.17"	14.7 lbs/ft	1	\$ 45.56
PCBCV-8	1/2"	1/2"	2.58"	14.7 lbs/ft	1	\$ 55.50
PCBCV-2P	1/8"	1/8"	1.61"	5.1 lbs/ft	1	\$ 31.08
PCBCV-4P	1/4"	1/4"	1.89"	11.0 lbs/ft	1	\$ 34.94
PCBCV-6P	3/8"	3/8"	2.17"	14.7 lbs/ft	1	\$ 45.97

# Features and Specifications for Right Angle Flow Control Valves

Right angle flow controls are technically the same as inline devices and perform the same function. Their usefulness is evident in the ability to screw directly into the port of a cylinder on the bottom port. The right angle port lines up parallel to the cylinder barrel thus making a more compact assembly.

## FEATURES COMPOSITE\*

- \* Metered Out or Metered In Functions.
- \* NPT Male Threads have sealant applied
- \* Slot or Knob adjusted
- \* Threaded Banjo or Push-In Fittings
- \* Temperature Range: 14°F - 158°F  
(-10°C - 70°C)
- \* Operating Pressure Range: 1 bar to 10 bar.

## FEATURES NICKEL PLATED BRASS

- \* Nickel-Plated Brass Fitting
- \* NBR 70 O-rings and Lip Seal
- \* Pressure Rating: Vacuum - 250 PSI
- \* Temperature Rating: 0°F - 160°F  
(-18°C - 72°C)

## FLOW CONTROL COMPOSITE METERED OUT



PCBFC



PCBFC-8  
Only

Part #	NPT M	NPT F/PI	NKL-BRS	OAL	QTY	List Price
PCBFC-2	1/8"	1/8"	Y	1.18"	1	\$ 12.22
PCBFC-4	1/4"	1/4"	Y	1.42"	1	\$ 13.58
PCBFC-6	3/8"	3/8"	Y	1.61"	1	\$ 19.58
PCBFC-8	1/2"	1/2"	N	2.28"	1	\$ 39.00

## FLOW CONTROL NICKEL PLATED BRASS



PCBFC & PCBFC-R

Part #	NPT M	NPT F/PI	NKL-BRS	OAL	QTY	List Price
PCBFC-2R	1/8"	1/8"	Y	1.181"	1	\$ 14.33
PCBFC-4R	1/4"	1/4"	Y	1.417"	1	\$ 20.25

# Features and Specifications for Inline Flow Control

## FEATURES

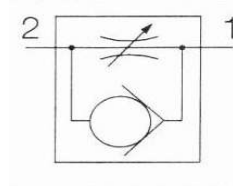
- \* Nickel-Plated Brass Fitting
- \* NBR 70 O-rings and Lip Seal
- \* Pressure Rating: Vacuum - 250 PSI
- \* Temperature Rating: 0°F - 160°F (-18°C - 72°C)

## USES

- \* Used in applications requiring control of fluids in one direction

## SPECIFICATIONS

Product	Operating Pressure Range	Temperature Range	Material
Inline Flow Control	1 bar to 10 bar	14°F to +158°F (-10°C to 70°C)	Nickle Plated Brass



Part #	NPT F	OAL	Hex	QTY	List Price
PCFC-2	1/8"	1.378"	M12 x 0.75	1	\$ 13.47
PCFC-4	1/4"	1.811"	M12 x 0.75	1	\$ 17.86
PCFC-6	3/8"	1.968"	M18 x 1.5	1	\$ 34.78
PCFC-8	1/2"	2.362"	M18 x 1.5	1	\$ 39.53

# Features and Specifications for Inline Needle Valve

## FEATURES

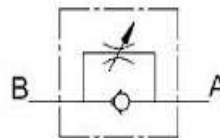
- \* Inline porting
- \* Four sizes of NPT porting
- \* Panel mountable
- \* Aluminum body with brass insert, stem, and knob
- \* Seals are nitrile rubber 70

## USES

- \* Used in applications requiring control of fluids in both directions

## SPECIFICATIONS

Product	Operating Pressure Range	Temperature Range	Material
Inline Needle Valve	1 bar to 10 bar	14°F to +158°F (-10°C to 70°C)	Nickle Plated Brass



Part #	NPT F	OAL	Hex	QTY	List Price
PCNV-2	1/8"	1.378"	M12 x 0.75	1	\$ 13.47
PCNV-4	1/4"	1.811"	M12 x 0.75	1	\$ 17.86
PCNV-6	3/8"	1.968"	M18 x 1.5	1	\$ 34.78
PCNV-8	1/2"	2.362"	M18 x 1.5	1	\$ 39.53

Now that you have your valves don't forget your tubing!



Polyconn offers Push-In fittings in many different materials!



Polyconn carries Polyurethane, Nylon, Polyethylene and many more materials to choose from!

Available Materials:  
Composite  
Plastic  
Nickel Plated Brass  
Stainless Steel  
D.O.T. Brass

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