

# POLY<sup>®</sup> CONN

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## VALVES

### EMAIL

[insidesales@polyconn.com](mailto:insidesales@polyconn.com)

### WEBSITE

[www.polyconn.com](http://www.polyconn.com)

### QUESTIONS

(763) 559-0388



# Features & 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 PSI for set pressure 50 PSI or less.
- Bubble tight to within 10% for set pressures greater than 50 PSI.
- 100% testing or 2.5 AQL sample testing, conforming to API 527.
- Stamped with the UV and NB symbols.
- Everseal 483 sealant standard.

## USES

- Applications: Compact size low flow.

## SPECIFICATIONS

TEMPERATURE RANGE	PRESSURE RANGE	SET PRESSUR TOLARANCE
-65°F to 400°F (-53°C - 204°C)	75 - 200 PSI	±3% of Set Pressure



Part #	MAX PSI	NPT(M)	OAL	QTY	List Price
PCSR-02-75	75	1/8"	1.70"	1	\$ 6.06
PCSR-02-125	125	1/8"	1.70"	1	\$ 6.06
PCSR-02-150	150	1/8"	1.70"	1	\$ 6.06
PCSR-02-200	200	1/8"	1.70"	1	\$ 6.06
PCSR-04-75	75	1/4"	1.70"	1	\$ 6.06
PCSR-04-125	125	1/4"	1.70"	1	\$ 6.06
PCSR-04-135	135	1/4"	1.70"	1	\$ 6.06
PCSR-04-150	150	1/4"	1.70"	1	\$ 6.06
PCSR-04-200	200	1/4"	1.70"	1	\$ 6.06
PCSR-12-135	135	1"	1.70"	1	\$ 84.07
PCSR-12-160	160	1"	1.70"	1	\$ 84.07

# Features & 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 PSI for set pressure 50 PSI or less.
- Bubble tight to within 10% for set pressures greater than 50 PSI.
- 100% testing or 2.5 AQL sample testing, conforming to API 527.
- Stamped with the UV and NB symbols.
- Everseal 483 sealant standard.

## USES

- Applications: Small air compressors with high flow requirements.

## SPECIFICATIONS

TEMPERATURE RANGE	PRESSURE RANGE	SET PRESSUR TOLARANCE
-65°F to 400°F (-53°C - 204°C)	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	\$ 7.58
PCST-02-35	35	1/8"	1.75"	11/16"	1	\$ 7.58
PCST-02-50	50	1/8"	1.75"	11/16"	1	\$ 7.58
PCST-02-65	65	1/8"	1.75"	11/16"	1	\$ 7.58
PCST-02-70	70	1/8"	1.75"	11/16"	1	\$ 7.58
PCST-02-75	75	1/8"	1.75"	11/16"	1	\$ 7.58
PCST-02-125	125	1/8"	1.75"	11/16"	1	\$ 7.58
PCST-02-150	150	1/8"	1.75"	11/16"	1	\$ 7.58
PCST-02-165	165	1/8"	1.75"	11/16"	1	\$ 7.58
PCST-02-175	175	1/8"	1.75"	11/16"	1	\$ 7.58
PCST-02-200	200	1/8"	1.75"	11/16"	1	\$ 7.58

## 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	\$ 7.58
PCST-04-35	35	1/4"	1.75"	11/16"	1	\$ 7.58
PCST-04-40	40	1/4"	1.75"	11/16"	1	\$ 7.58
PCST-04-50	50	1/4"	1.75"	11/16"	1	\$ 7.58
PCST-04-75	75	1/4"	1.75"	11/16"	1	\$ 7.58
PCST-04-90	90	1/4"	1.75"	11/16"	1	\$ 7.58
PCST-04-100	100	1/4"	1.75"	11/16"	1	\$ 7.58
PCST-04-125	125	1/4"	1.75"	11/16"	1	\$ 7.58
PCST-04-140	140	1/4"	1.75"	11/16"	1	\$ 7.58
PCST-04-150	150	1/4"	1.75"	11/16"	1	\$ 7.58
PCST-04-200	200	1/4"	1.75"	11/16"	1	\$ 7.58
PCST-04-250	250	1/4"	1.75"	11/16"	1	\$ 7.58
PCST-04-295	295	1/4"	1.75"	11/16"	1	\$ 7.58
PCST-04-300	300	1/4"	1.75"	11/16"	1	\$ 7.58
PCST-04-350	350	1/4"	1.75"	11/16"	1	\$ 7.58

## 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	\$ 7.58
PCST-06-40	40	3/8"	1.75"	11/16"	1	\$ 7.58
PCST-06-50	50	3/8"	1.75"	11/16"	1	\$ 7.58
PCST-06-70	70	3/8"	1.75"	11/16"	1	\$ 7.58
PCST-06-80	80	3/8"	1.75"	11/16"	1	\$ 7.58
PCST-06-100	100	3/8"	1.75"	11/16"	1	\$ 7.58
PCST-06-125	125	3/8"	1.75"	11/16"	1	\$ 7.58
PCST-06-150	150	3/8"	1.75"	11/16"	1	\$ 7.58
PCST-06-175	175	3/8"	1.75"	11/16"	1	\$ 7.58
PCST-06-200	200	3/8"	1.75"	11/16"	1	\$ 7.58

## 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	\$ 22.94
PCST-08-100	100	1/2"	2.69"	7/8"	1	\$ 22.94
PCST-08-165	165	1/2"	2.69"	7/8"	1	\$ 22.94
PCST-08-175	175	1/2"	2.69"	7/8"	1	\$ 22.94

# Features & 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 PSI for set pressure 50 PSI or less.
- Bubble tight to within 10% for set pressures greater than 50 PSI.
- 100% testing or 2.5 AQL sample testing, conforming to API 527.
- Stamped with the UV and NB symbols.
- Everseal 483 sealant standard.

## USES

- Applications: Compact size low flow

## SPECIFICATIONS

TEMPERATURE RANGE	PRESSURE RANGE	SET PRESSUR TOLARANCE
-65°F to 400°F (-53°C - 204°C)	25 - 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	\$ 5.76
PCNP-02-25	25	1/8"	1.70"	9/16"	1	\$ 5.76
PCNP-02-30	30	1/8"	1.70"	9/16"	1	\$ 5.76
PCNP-02-45	45	1/8"	1.70"	9/16"	1	\$ 5.76
PCNP-02-50	50	1/8"	1.70"	9/16"	1	\$ 5.76
PCNP-02-65	65	1/8"	1.70"	9/16"	1	\$ 5.76
PCNP-02-75	75	1/8"	1.70"	9/16"	1	\$ 5.76
PCNP-02-100	1000	1/8"	1.70"	9/16"	1	\$ 5.76
PCNP-02-125	125	1/8"	1.70"	9/16"	1	\$ 5.76
PCNP-02-150	150	1/8"	1.70"	9/16"	1	\$ 5.76

## 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	\$ 5.76
PCNP-04-25	25	1/4"	1.70"	9/16"	1	\$ 5.76
PCNP-04-40	40	1/4"	1.70"	9/16"	1	\$ 5.76
PCNP-04-50	50	1/4"	1.70"	9/16"	1	\$ 5.76
PCNP-04-60	60	1/4"	1.70"	9/16"	1	\$ 5.76
PCNP-04-65	65	1/4"	1.70"	9/16"	1	\$ 5.76
PCNP-04-70	70	1/4"	1.70"	9/16"	1	\$ 5.76
PCNP-04-75	75	1/4"	1.70"	9/16"	1	\$ 5.76
PCNP-04-90	90	1/4"	1.70"	9/16"	1	\$ 5.76
PCNP-04-100	100	1/4"	1.70"	9/16"	1	\$ 5.76
PCNP-04-120	120	1/4"	1.70"	9/16"	1	\$ 5.76
PCNP-04-125	125	1/4"	1.70"	9/16"	1	\$ 5.76
PCNP-04-150	150	1/4"	1.70"	9/16"	1	\$ 5.76
PCNP-04-175	175	1/4"	1.70"	9/16"	1	\$ 5.76
PCNP-04-200	200	1/4"	1.70"	9/16"	1	\$ 5.76
PCNP-04-250	250	1/4"	1.70"	9/16"	1	\$ 5.76

# Features & Specifications for Vacuum Relief Valves

## FEATURES

- C360 machined brass body, stainless steel spring, nylon piston and nitrile seal.
- PCVR-04 has stainless steel piston and seal.
- Bubble tight to within 5 PSI for set pressure 50 PSI or less.
- Bubble tight to within 10% for set pressures greater than 50 PSI.
- 100% testing or 2.5 AQL sample testing, conforming to API 527.
- Everseal 483 sealant standard.

## USES

- Applications: Used in systems to maintain a desired vacuum level.

## SPECIFICATIONS

TEMPERATURE RANGE	PRESSURE RANGE	SET PRESSUR TOLARANCE
-65°F to 250°F (-53°C - 121°C)	0-27" Hg	±3% of Set Pressure



Part #	NPT(M)	QTY	List Price
PCVR-04	1/4"	1	\$ 13.06
PCVR-06	3/8"	1	\$ 17.11
PCVR-12	3/4"	1	\$ 26.11

# Features & Specifications for Sleeve Valve

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. Outlet is exhausted to atmosphere when the valve is closed.

## SPECIFICATIONS

TEMPERATURE RANGE	WORKING PRESURE	MATERIAL
41°F to 140°F (5°C - 60°C)	0-140 PSI 0-10 kg/cm <sup>2</sup>	Body: Brass Sleeve: Anodized Aluminum



Part #	NPT M & F	OAL	QTY	List Price
PCSLV-02	1/8"	2.688"	1	\$ 13.07
PCSLV-04	1/4"	2.844"	1	\$ 13.50
PCSLV-06	3/8"	3"	1	\$ 14.19
PCSLV-08	1/2"	3.625"	1	\$ 25.79



# Features & Specifications for Slide Valve

The slide valve can be considered a reversing ON-OFF valve. When in the closed position, it allows the used air to exit to the atmosphere.

## SPECIFICATIONS

TEMPERATURE RANGE	WORKING PRESURE	MATERIAL
-4°F to 176°F (-20°C - 80°C)	4-145 PSI	Stem: Nickel Plated Brass Sleeve: Aluminum



Part #	NPT F	OAL	QTY	List Price
PCSLVA-02	1/8"	1.890"	1	\$ 15.50
PCSLVA-04	1/4"	2.283"	1	\$ 19.25
PCSLVA-06	3/8"	2.756"	1	\$ 23.64

# Features & Specifications for Inline Check Valve

Check valves allow air to flow in only one direction. They operate directly with the air that passes through. Check valves are normally used as safety devices, permitting air pressure in a part of the circuit. The internal spring keeps the valve closed.

## SPECIFICATIONS

TEMPERATURE RANGE	WORKING PRESURE	COMPONENT PARTS AND MATERIAL
-4°F to 176°F (-20°C - 80°C)	29-116 PSI	<ul style="list-style-type: none"> <li>• Nickel Plated Brass Body</li> <li>• NBR O-Ring</li> <li>• Steel Spring</li> <li>• Nickel plated Brass Shutter</li> </ul>



Part #	NPT F	OAL	QTY	List Price
PCCVA-02	1/8"	1.437"	1	\$ 8.28
PCCVA-04	1/4"	1.85"	1	\$ 7.44

# Features & 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.
- To lock a cylinder in place to hold a position.

## SPECIFICATIONS

TEMPERATURE RANGE	OPERATING PRESSURE RANGE	MATERIAL
14°F to 158°F (-10°C - 70°C)	1 bar - 10 bar	Body: Anodized Aluminum Thread: Nickel Plated Brass



Part #	NPT M & F	OAL	Max Tightening Torque	QTY	List Price
PCBCV-2	1/8"	1.61"	5.1 lbs/ft	1	\$ 31.94
PCBCV-4	1/8"	1.89"	11.0 lbs/ft	1	\$ 37.64
PCBCV-6	1/8"	2.17"	14.7 lbs/ft	1	\$ 47.75
PCBCV-8	1/8"	2.58"	14.7 lbs/ft	1	\$ 58.17

Part #	PTC	NPT F	OAL	Max Tightening Torque	QTY	List Price
PCBCV-2P	1/8"	1/8"	1.61"	5.1 lbs/ft	1	\$ 32.67
PCBCV-4P	1/8"	1/8"	1.89"	11.0 lbs/ft	1	\$ 36.61
PCBCV-6P	1/8"	1/8"	2.17"	14.7 lbs/ft	1	\$ 48.50

# Features & Specifications for Right Angle Flow Control Valve

## SPECIFICATIONS

TEMPERATURE RANGE	WORKING PRESURE	COMPONENT PARTS AND MATERIAL
-4°F to 176°F (-20°C - 80°C)	Vacuum-250 PSI	<ul style="list-style-type: none"> <li>Nickel Plated Brass Body</li> <li>NBR O-Ring</li> <li>303 Stainless Steel Shaft Clip</li> </ul>

### METERED OUT



Part #	NPT M & F	OAL	QTY	List Price
PCBFC-2	1/8"	1.181"	1	\$ 14.06
PCBFC-4	1/4"	1.417"	1	\$ 15.61
PCBFC-6	3/8"	1.614"	1	\$ 22.58
PCBFC-8	1/2"	N/A	1	\$ 44.11

### METERED IN

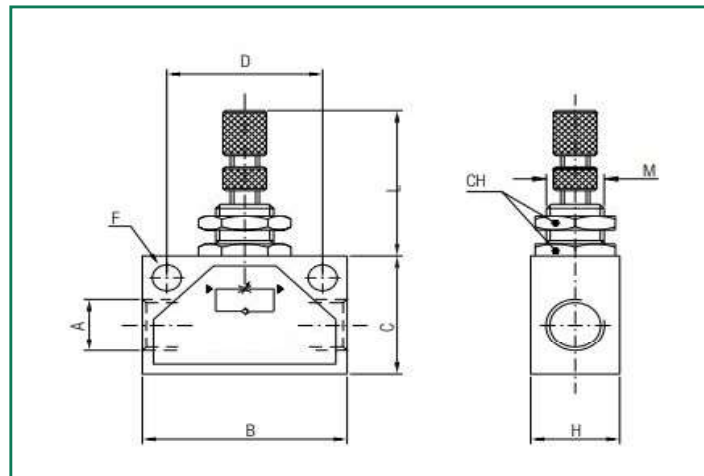


Part #	NPT M & F	OAL	QTY	List Price
PCBFC-2R	1/8"	1.181"	1	\$ 14.06
PCBFC-4R	1/4"	1.417"	1	\$ 15.61

# Features & Specifications for Inline Flow Control Valve

## SPECIFICATIONS

TEMPERATURE RANGE	WORKING PRESURE	COMPONENT PARTS AND MATERIAL
-4°F to 176°F (-20°C - 80°C)	Vacuum-250 PSI	<ul style="list-style-type: none"> <li>• Brass Adjusting Knob</li> <li>• Brass Nut</li> <li>• Brass Locking Nut</li> <li>• Brass Nipple</li> <li>• Anodized Aluminum Body</li> <li>• NBR O-Ring</li> <li>• Steel SPring</li> <li>• Seal floating washer</li> <li>• Brass Adjusting Needle</li> </ul>



Part #	NPT F	B	C	H	D	F	QTY	List Price
PCFC-2	1/8"	1.378"	0.866"	0.709"	0.984"	0.177"	1	\$ 14.83
PCFC-4	1/4"	1.811"	1.181"	0.787"	1.378"	0.256"	1	\$ 19.67
PCFC-6	3/8"	1.968"	1.181"	0.984"	1.378"	0.256"	1	\$ 38.36
PCFC-8	1/2"	2.362"	1.575"	0.984"	1.732"	0.256"	1	\$ 43.58

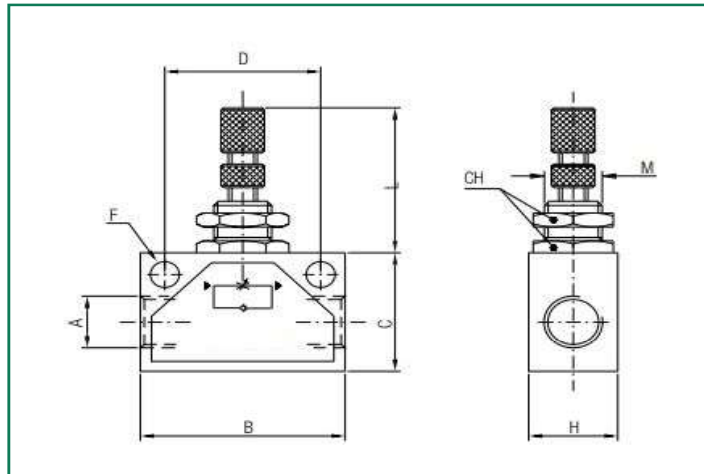
## FLOW CHART



# Features & Specifications for Needle Valve

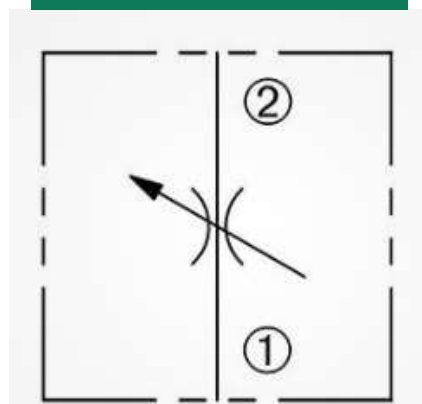
## SPECIFICATIONS

TEMPERATURE RANGE	WORKING PRESURE	COMPONENT PARTS AND MATERIAL
-4°F to 176°F (-20°C - 80°C)	Vacuum-250 PSI	<ul style="list-style-type: none"> <li>Brass Adjusting Knob</li> <li>Brass Nut</li> <li>Brass Locking Nut</li> <li>Brass Nipple</li> <li>Anodized Aluminum Body</li> <li>NBR O-Ring</li> <li>Brass Adjusting Needle</li> </ul>



Part #	NPT F	B	C	H	D	F	QTY	List Price
PCNV-2	1/8"	1.378"	0.866"	0.709"	0.984"	0.177"	1	\$ 14.83
PCNV-4	1/4"	1.811"	1.181"	0.787"	1.378"	0.256"	1	\$ 19.67
PCNV-6	3/8"	1.968"	1.181"	0.984"	1.378"	0.256"	1	\$ 38.36
PCNV-8	1/2"	2.362"	1.575"	0.984"	1.732"	0.256"	1	\$ 43.58

## FLOW CHART



Now that you have your Valves, dont' forget your manifolds and tubing.



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