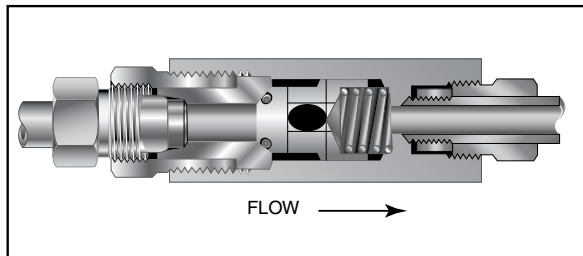


# Medium Pressure Check Valves

**Pressures to 20,000 (1379 bar)**

## O-Ring Check Valves



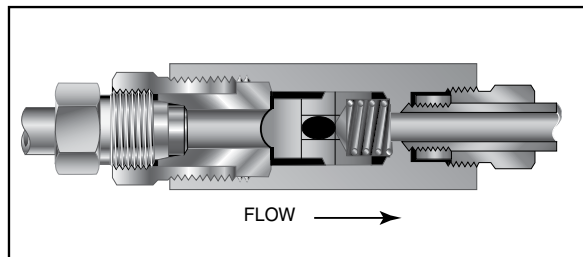
Minimum operating temperature for standard o-ring check valves 0°F (-17.8°C).  
For low temperature option to -423°F (-252°C) add suffix LTTO (Low temperature spring & PTFE o-ring).

Provides unidirectional flow and tight shut-off for liquids and gas with high reliability. When differential drops below cracking pressure\*, valve shuts off. **(Not for use as relief valve.)**

**Materials:** 316 Stainless Steel: body, cover, poppet, cover gland. 300 Series Stainless Steel: spring  
Standard O-ring: Viton, for operation to 400° F (204°C). Buna-N or PTFE available for 250°F (121°C) or 400°F (204°C) respectively; specify when ordering.

\***Cracking Pressure:** 20 psi (1.38 bar) ±30%. Springs for higher cracking pressures (up to 100 psi (6.89 bar)) available on special order for O-ring style check valves only.

## Ball Check Valves



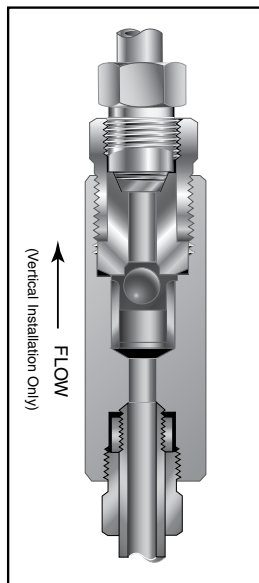
Minimum operating temperature for standard ball check valves -110°F (-79°C).  
For low temperature option to -423°F (-252°C) add suffix LT (Low temperature spring).

Prevents reverse flow where **leak-tight shut-off is not mandatory**. When differential drops below cracking pressure, valve closes. With all-metal components, valve can be used up to 1200°F (649°C). See Technical Information section for connection temperature limitations. (Not for use as a relief valve.)

**The ball and poppet are an integral design** to assure positive, in-line seating without “chatter”. Poppet is designed essentially for axial flow with minimum pressure drop.

**Materials:** 316 Stainless Steel: body, cover, ball poppet, cover gland. 300 Series Stainless Steel: ball, spring.

## Ball Type Excess Flow Valves



Protects pressure gauges and pressure instrumentation from surges in flow or sudden venting in the event of line failure.

**Materials:** 316 Stainless Steel: body, cover, sleeve, cover gland. 300 Series Stainless Steel: ball.

**Vertical Installation:** Since this type of check valve employs a non-spring loaded ball, valve **MUST** be installed in VERTICAL position with arrow on valve body pointing UP. (cover gland up).

**Resetting Valve:** Equalize the pressure across the ball. The ball will drop and reset automatically.

**CAUTION:** While testing has shown O-Rings to provide satisfactory service life, both cyclic and shelf life may vary widely with differing service conditions, properties of reactants, pressure and temperature cycling and age of the O-ring. **FREQUENT INSPECTIONS SHOULD BE MADE** to detect any deterioration, and O-rings replaced as required.

**CAUTION:** See Tubing section for proper selection of tubing.  
**NOTE:** For optional material see Needle Valve Options section.

**NOTE:** Special material check valves may be supplied with four flats in place of standard hex.

All general terms and conditions of sale, including limitations of our liability, apply to all products and services sold.

# Medium Pressure Check Valves

Catalog Number	Fits Connection Type	Pressure Rating psi (bar)*	Orifice inches (mm)	Rated C <sub>v</sub>	Dimensions - inches (mm)				
					A	B	C	D Typical	Hex

## O-Ring Check Valves

CXO4400	SF250CX	20,000 (1378.93)	0.125 (3.18)	0.28	2.94 (74.68)	2.50 (63.50)	0.38 (9.53)	0.50 (12.70)	0.81 (20.57)
CXO6600	SF375CX	20,000 (1378.93)	0.218 (5.54)	0.84	3.12 (79.25)	2.62 (66.55)	0.47 (11.94)	0.62 (15.75)	1.00 (25.40)
CXO9900	SF562CX	20,000 (1378.93)	0.359 (9.12)	2.30	4.18 (106.17)	3.50 (88.90)	0.53 (13.46)	0.94 (23.88)	1.38 (35.05)
CXO12	SF750CX	20,000 (1378.93)	0.516 (13.11)	4.70	5.50 (139.70)	4.75 (120.65)	0.62 (15.75)	1.19 (30.23)	1.75 (44.45)
CXO16	SF1000CX	20,000 (1378.93)	0.688 (17.48)	7.40	6.63 (168.40)	5.75 (146.05)	0.72 (18.29)	1.38 (35.05)	1.88† (47.75)
CXO24	SF1500CX	15,000 (1034.20)	0.94 (23.80)	14.00	9.01 (228.85)	7.25 (184.15)	1.12 (28.45)	1.88 (47.75)	3.00† (76.20)

## Ball Check Valves

CXB4400	SF250CX	20,000 (1378.93)	0.125 (3.18)	0.28	2.94 (74.68)	2.50 (63.50)	0.38 (9.53)	0.50 (12.70)	0.81 (20.57)
CXB6600	SF375CX	20,000 (1378.93)	0.218 (5.54)	0.84	3.12 (79.25)	2.62 (66.55)	0.47 (11.94)	0.62 (15.75)	1.00 (25.40)
CXB9900	SF562CX	20,000 (1378.93)	0.359 (9.12)	2.30	4.18 (106.17)	3.50 (88.90)	0.53 (13.46)	0.94 (23.88)	1.38 (35.05)
CXB12	SF750CX	20,000 (1378.93)	0.516 (13.11)	4.70	5.50 (139.70)	4.75 (120.65)	0.62 (15.75)	1.19 (30.23)	1.75 (44.45)
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CXB24	SF1500CX	15,000 (1034.20)	0.94 (23.80)	14.00	9.01 (228.85)	7.25 (184.15)	1.12 (28.45)	1.88 (47.75)	3.00† (76.20)

## Ball Type Excess Flow Valves

CXK4402	SF250CX	20,000 (1378.93)	0.125 (3.18)	0.037 <sup>†</sup>	2.94 (74.68)	2.50 (63.50)	0.38 (9.53)	0.50 (12.70)	0.81 (20.57)
CXK6602	SF375CX	20,000 (1378.93)	0.218 (5.54)	0.066 <sup>†</sup>	3.12 (79.25)	2.62 (66.55)	0.47 (11.94)	0.62 (15.75)	1.00 (25.40)
CXK9902	SF562CX	20,000 (1378.93)	0.359 (9.12)	.212 <sup>†</sup>	4.18 (106.17)	3.50 (88.90)	0.53 (13.46)	0.94 (23.88)	1.38 (35.05)
CXK1202	SF750CX	20,000 (1378.93)	0.516 (13.11)	.368 <sup>†</sup>	5.12 (130.05)	4.38 (111.25)	0.62 (15.75)	1.19 (30.23)	1.75 (44.45)
CXK1602	SF1000CX	20,000 (1378.93)	0.688 (17.48)	.864 <sup>†</sup>	6.50 (165.10)	5.62 (142.75)	0.72 (18.29)	1.38 (35.05)	1.88† (47.75)

Note:

\* Check Flow - water, GPM

For flow rates using alternate fluids, consult Parker Autoclave Engineers.

\*Maximum pressure rating is based on the lowest rating of any component.

Actual working pressure may be determined by tubing pressure rating, if lower.

† distance across flats

All dimensions for reference only and subject to change.

For prompt service, Parker Autoclave Engineers stocks select products. Consult your local representative.

