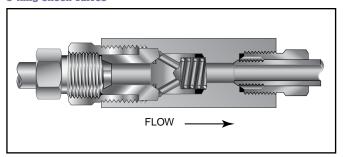
# **High Pressure Check Valves**

## Pressures to 60,000 psi (4137 bar)

#### **O-Ring Check Valves**

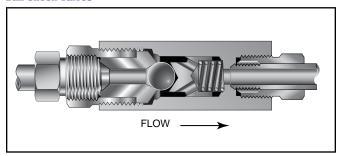


Provides unidirectional flow and tight shut-off for liquids and gas with high reliability. When differential drops below cracking pressure\*, valve shuts off. (Not for use as relief valve.)

**Materials:** Body, cover, poppet: 316 Stainless Steel, Cover gland: Stainless Steel, Spring: 300 Series Stainless Steel, Standard O-ring: Viton, for operation to 500° F (260°C). Buna-N or Teflon 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**

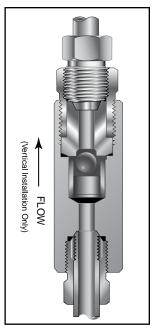


Prevents reverse flow where **leak-tight shut-off is not mandatory**. When differential drops below cracking pressure, valve closes. With all-metal components, valve can be used up to 1200°F (649°C). See Technical Information section for connection temperature limitations. **(Not for use as a relief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

**Ball is cradled in floating poppet** to assure positive, in-line seating without "chatter". Poppet is designed essentially for axial flow with minimum pressure drop.

Materials: Body, cover, poppet: 316 Stainless Steel, Cover gland: Stainless Steel, Ball, Spring: 300 Series Stainless Steel

#### **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:** Body, cover, sleeve: Type 316 Stainless Steel, Ball: 300 Series Stainless Steel, Cover gland: stainless steel.

**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.

NOTE: For optional material see Needle Valve Options section.

# **High Pressure Check Valves**

Catalog	Fits	Pressure	Orifice	Rated		Dimen	sions - inches	s (mm)	
Numbe	' i Connection	Rating psi (bar)*	inches (mm)	C <sub>V</sub>	Α	В	С	D Typical	Hex

### **O-Ring Check Valves**

CKO4400	F250C	60,000 <b>(4136.79)</b>	0.094 <b>(2.39)</b>	0.15	3.38 ( <b>85.85</b> )	2.50 ( <b>63.50</b> )	0.50 <b>(12.70)</b>	0.63 <b>(16.00)</b>	1.18 <b>(29.97)</b>	
01/07/00	F07F0	_ ,		0.00	` ,		, ,	, ,	, ,	
CK06600	F375C	60,000	0.125	0.28	3.75	2.62	0.53	0.75	1.18	
		(4136.79)	(3.18)		(95.25)	(66.55)	(13.46)	(19.05)	(29.97)	
CKO9900	F562C	60,000	0.187	0.63	4.62	3.38	0.81	1.12	1.50	See
		(4136.79)	(4.75)		(117.35)	(85.85)	(20.57)	(28.45)	(38.10)	Figure 1
40CKO9900	F562C40	40,000	0.250	0.78	4.64	3.38	0.72	1.19	1.50	
		(2757.85)	(6.35)		(117.86)	(85.73)	(18.29)	(30.23)	(38.10)	
43CK016	F1000C43	43,000	0.438	4.3	6.54	5.63	.72	1.38	1.88	
		(2964.70)	(11.13)		(166.11)	(143.00)	(18.29)	(35.05)	(47.76)	

#### **Ball Check Valves**

CB4401	F250C	60,000 <b>(4136.79)</b>	0.094 <b>(2.39)</b>	0.15	3.38 ( <b>85.85</b> )	2.50 (63.50)	0.50 <b>(12.70)</b>	0.63 <b>(16.00)</b>	1.18 <b>(29.97)</b>	
		_ `			<b>-</b> `	<b>_</b> `		` '	, ,	
CB6601	F375C	60,000	0.125	0.28	3.75	2.62	0.53	0.75	1.18	
		(4136.79)	(3.18)		(95.25)	(66.55)	(13.46)	(19.05)	(29.97)	See
CB9901	F562C	60,000	0.187	0.63	4.62	3.38	0.81	1.12	1.50	Figure 1
		(4136.79)	(4.75)		(117.35)	(85.85)	(20.57)	(28.45)	(38.10)	
43CB16	F1000C43	43,000	0.438	4.3	6.54	5.63	.72	1.38	1.88	
		(2964.70)	(11.13)		(166.11)	(143.00)	(18.29)	(35.05)	(47.76)	

# **Ball Type Excess Flow Valves**

CK4402	F250C	60,000	0.094	3.38	2.50	0.50	0.63	1.18	
		(4136.79)	(2.39)	(85.85)	(63.50)	(12.70)	(16.00)	(29.97)	
CK6602	F375C	60,000	0.125	3.75	2.62	0.53	0.75	1.18	See
		(4136.79)	(3.18)	(95.25)	(66.55)	(13.46)	(19.05)	(29.97)	Figure 1
CK9902	F562C	60,000	0.187	4.62	3.38	0.81	1.12	1.50	
		(4136.79)	(4.75)	(117.35)	(85.85)	(20.57)	(28.45)	(38.10)	

<sup>\*</sup>Maximum pressure rating is based on the lowest rating of any component. Actual working pressure may be determined by tubing pressure rating, if lower.

All dimensions for reference only and subject to change.

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

