

CV3000 Series Check Valves

Features

- Positive, bubble-tight shutoff against reverse flow provided by soft seals
- Low pressure drop in free flow direction
- Equally effective in high and low pressure systems
- High pressure increases sealing efficiency
- Attitude insensitive
- Broad fluid compatibility
- Easily maintained, replace soft goods only
- Durable seat and poppet design reduces wear
- High impact and chatter resistant

Specifications

- | | |
|----------------------------------|--|
| • Fluids | Gases and liquids |
| • Operating pressure (brass) | 0 to 2000 psi |
| • Operating pressure (stainless) | 0 psi to 3000 psi |
| • Proof pressure | 1½ times operating |
| • Cracking pressure | 0.5 to 1 psi standard (others available) |
| • Temperature range | -20° F to +250° F |



Materials of Construction

- | | |
|-----------------|---------------------------|
| • Body | Brass or stainless steel |
| • Poppet | Brass or stainless steel |
| • Springs | 304 stainless steel |
| • Seat retainer | Brass or stainless steel |
| • Seals | Viton® (others available) |

Viton® is a registered trademark of DuPont Dow Elastomers

Applications

Self- and full-service car wash systems • High pressure sprayers and washers • Anti-siphon and freeze control Systems with fixed pump pressure • Maintain back pressure or pilot pressure on electric or other valves upstream • Test systems • Analytical instrumentation • Aerospace ground support • Hydraulic power units



A CIRCOR International company

www.usparaplate.com • 951-270-6200

U.S. Para Plate valves and regulators are used where performance and reliability are a must. Proven for over 30 years in the most demanding Aerospace and Industrial applications.



2 CV3000 Series Check Valves

Ordering Information

MODEL NUMBER **CV3 2 0 1 B S - 1**

CONNECTION SIZE
 2 = 1/4"
 3 = 3/8"
 4 = 1/2"
 6 = 3/4"
 8 = 1"

CONNECTION TYPE
 0 = Female pipe

CRACKING PRESSURE
 1 = 0.5 to 1 psi
 2 = 6 to 8 psi
 5 = 50 ± 5 psi

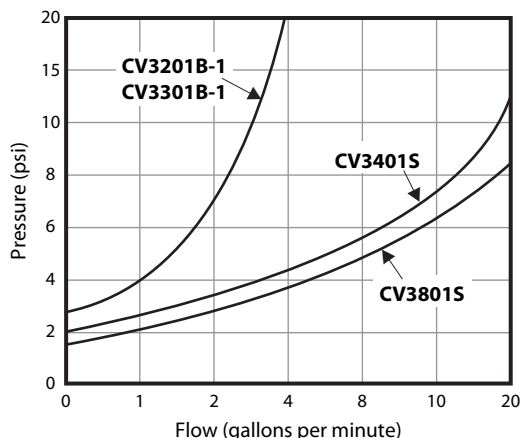
MATERIALS
 B = Brass
 SS = Stainless steel

POPPET
 blank = same as valve
 S = 416 stainless steel (with brass valve only)

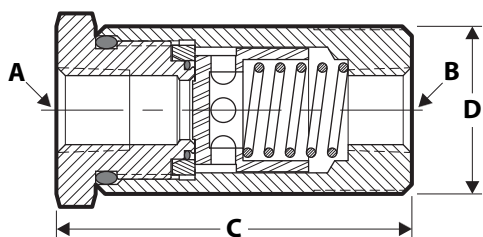
O-RING MATERIAL (OPERATING TEMPERATURE RANGE)
 1 = Viton® (-20° to +250° F)
 2 = Buna N (-65° to +250° F)
 3 = EPR (-65° to +300° F)
 4 = Teflon® (-100° F to +500° F)

Flow vs Pressure

water @ 70° F



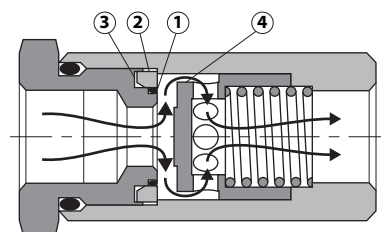
Dimensions



A inlet	B outlet	C length	D diam.	weight (lbs)
1/4"	1/4"	2.25"	1.1"	0.5
3/8"	3/8"	2.25"	1.1"	0.5
1/2"	1/2"	2.6"	1.5"	0.6
3/8"	3/8"	3.4"	2"	1.0
1"	1"	4"	2.8"	1.5"

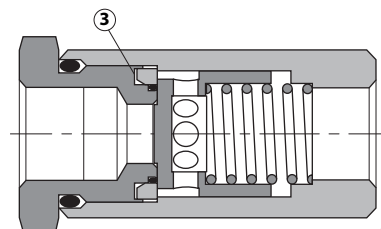
Check Valve Operation

Flowing



O-ring 1 is out of the fluid flow path. Elasticity of O-ring keeps sleeve 2 from metal-to-metal contact at point 3. When valve begins to close, metal poppet 4 makes initial contact with metal sleeve. O-ring is protected from impact of initial valve closing.

Closed



As reverse pressure increases, sleeve is forced against O-ring until space at point 3 is closed. In this position, sleeve has displaced O-ring and O-ring is forced against flat valve poppet to effect bubble-tight seal.



U.S. Para Plate • 2301 Wardlow Circle • Corona, California 92880

Tel: 951-270-6200 • Fax: 951-270-6201 • www.usparaplate.com