Valworx®

Sanitary Check Valves

Stainless Steel, 1" to 4" Tri-Clamp

SERIES
5790

Features

- Concentric spring loaded design
- Highly polished internals and end caps with 32 Ra finish
- All materials comply with FDA, USDA, and 3-A requirements
- ASTM 316L stainless steel forged and machined valve body
- ASTM 304 stainless steel clamp
- ASTM 316L stainless steel spring and retaining ring
- Viton® seals
- Tri-Clamp ends for hygienic connections
- Clamp design for easy disassembly, cleaning, and maintenance
- 100% tested with full traceability of all components

Applications

Sanitary check valves are typically used to prevent unwanted backflow for food, beverage, pharmaceutical, personal care, and pet care applications where 3-A sanitary construction is required. Suitable for vertical installation or horizontal where self-draining is not required.

Operation

The sealing disc on the sanitary check valve opens when upstream pressure is sufficient (the cracking pressure), allowing media to flow through the valve. When upstream pressure falls below the cracking pressure an internal spring re-seats the disc, preventing backflow.

Pressure-Temperature Range

Pressure Rating: 217 PSI @ 482°F

Temperature Rating: -67 to 482° F (-55 to 250° C)

Construction

Valve Body/ End Caps	ASTM 316L Stainless Steel
Clamp	ASTM 304 Stainless Steel
Spring	ASTM 316L Stainless Steel
Stem Seals	Viton® (EPDM/Silicone Seal Kit Option)
Disc Assembly	ASTM 316L Stainless Steel
Retaining Ring	ASTM 316L Stainless Steel

Description

Concentric design, 316L stainless steel sanitary check valves can be used in vertical and horizontal applications. Spring loaded design reduces water hammer. Suitable for non-viscous, smooth-flowing non-particulate media.

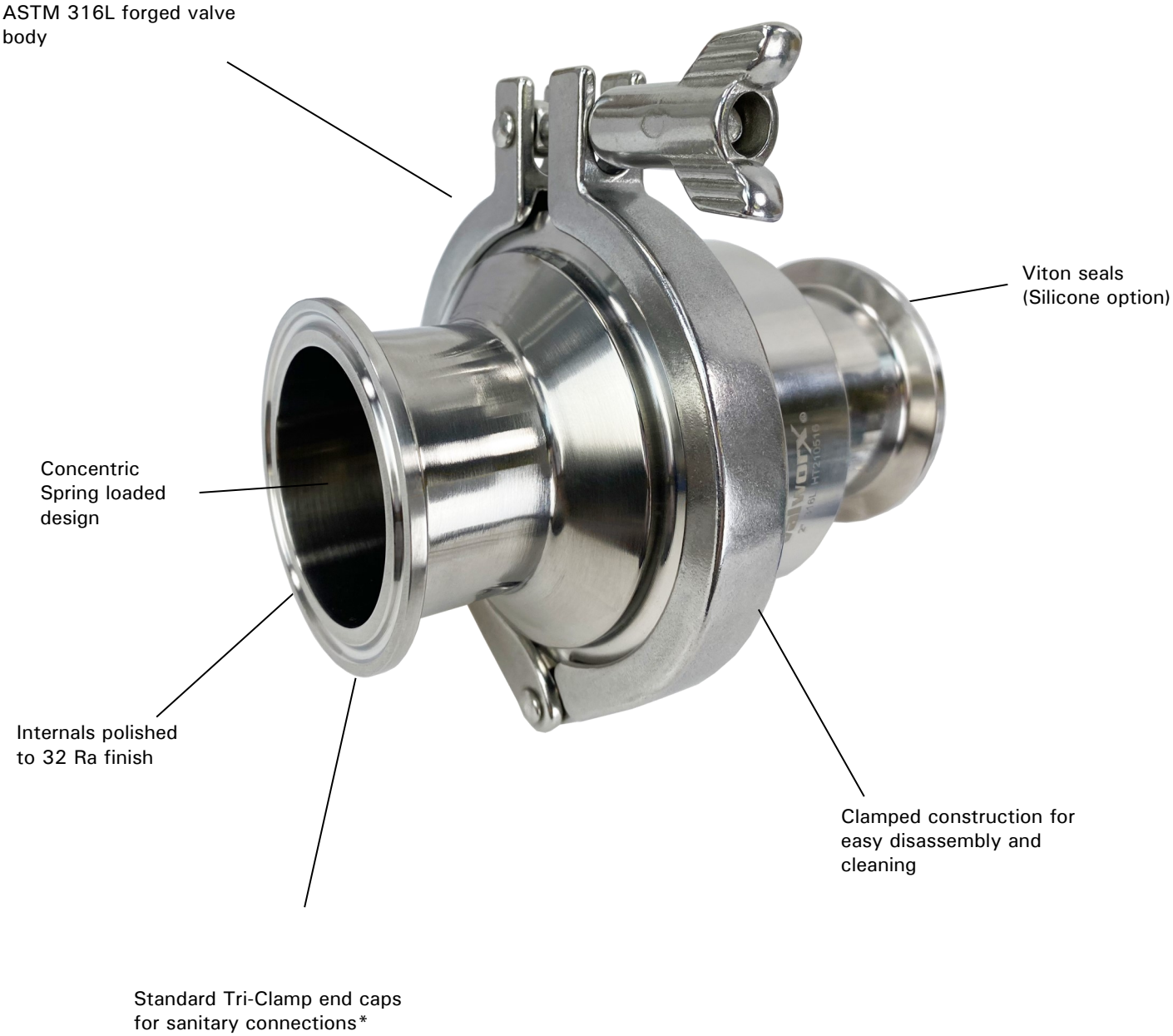
Standards

- Construction:

- 3A 68-00

-FDA 21 CFR 177.1550

Features



* Refer to specifications table for Tri-Clamp size

* Note: Tri-Clamp size is **NOT** determined by the OD of the end cap

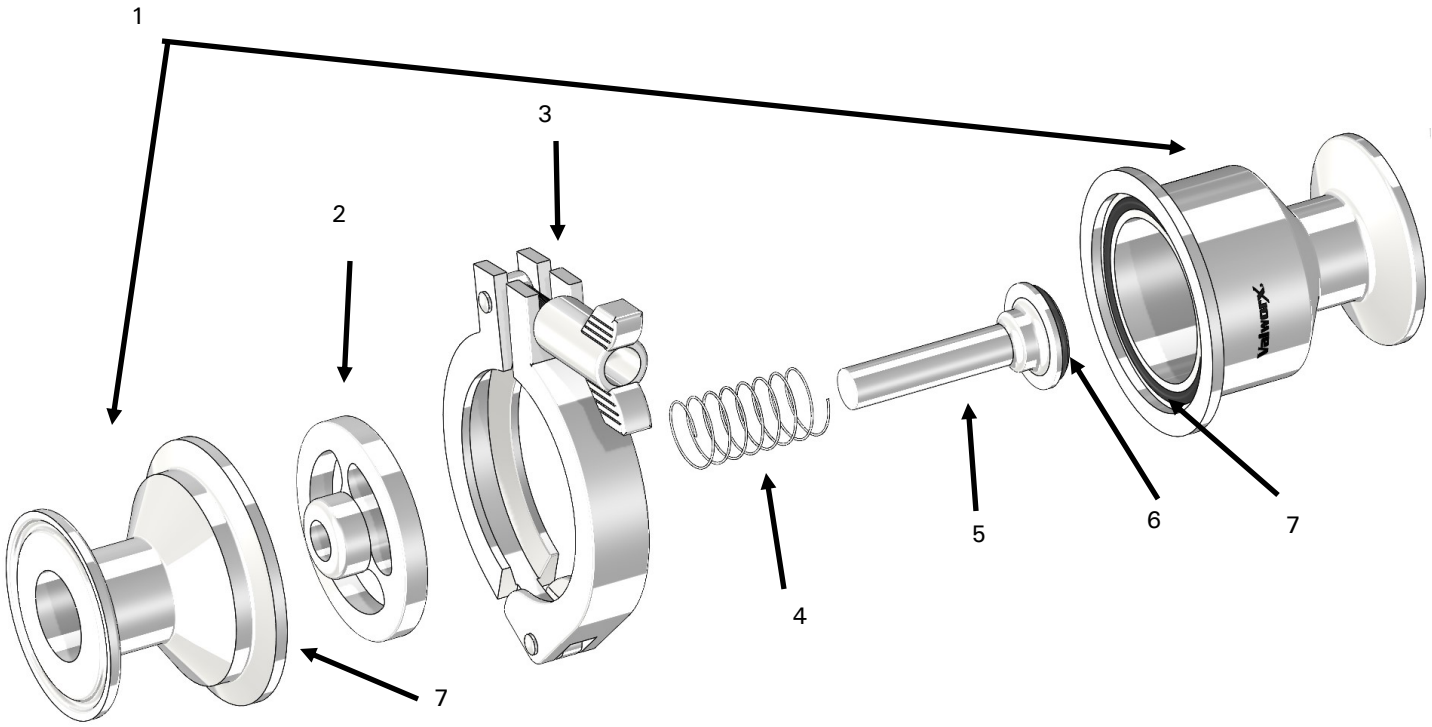
Specifications (English units)

Stock Number	Pipe Size (inch)	Tri-Clamp Size (inch)	Cv	Max Pressure* (PSI)	Cracking Pressure (PSI)	Weight (lbs)
579000	1	1 -1/2	11	217.6	2.9	1.9
579001	1 -1/2	1 -1/2	21	217.6	1.5	2.4
579002	2	2	40	145.0	1.5	3.3
579003	3	3	88	145.0	0.9	5.7
579004	4	4	176	101.5	0.9	9.3

Specifications (Metric units)

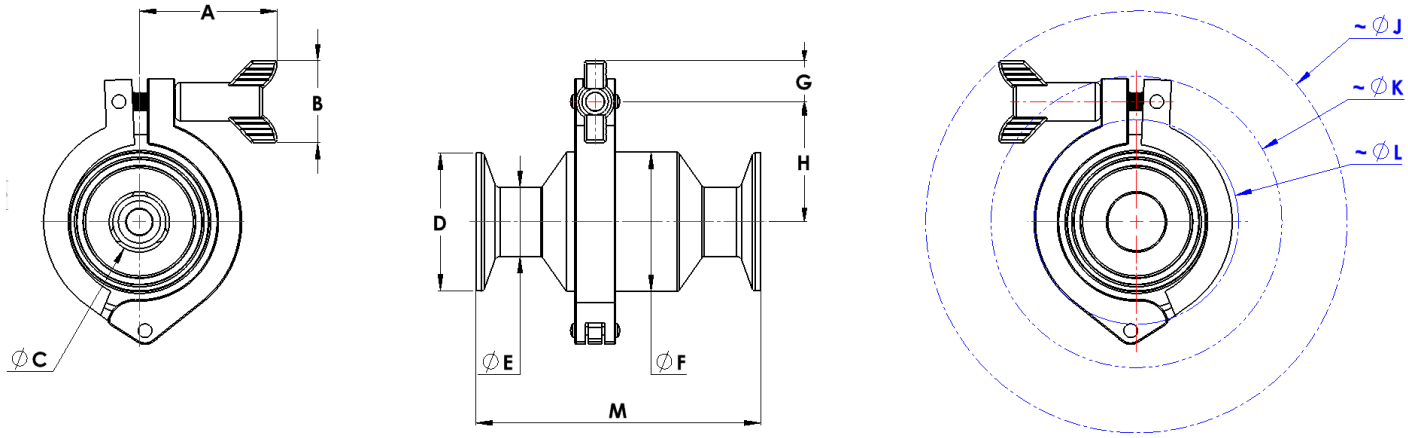
Stock Number	Pipe Size (mm)	Tri-Clamp Size (inch)	Kv	Max Pressure* (Bar)	Cracking Pressure (Bar)	Weight (Kg)
579000	25.4	1 -1/2	9.6	15.0	0.2	0.9
579001	38.1	1 -1/2	18.2	15.0	0.1	1.1
579002	50.8	2	34.6	10.0	0.1	1.5
579003	76.2	3	76.1	10.0	0.1	2.6
579004	101.6	4	152.2	7.0	0.1	4.2

Specifications (Parts Assembly)



Item	Part (Qty)	Material
1	Body/End Caps	ASTM 316L SS
2	Retaining Ring	ASTM 316L SS
3	Clamp	ASTM 304 SS
4	Spring	ASTM 316L SS
5	Disc Assembly	ASTM 316L SS
6	Disc O-Ring (1)	Viton®
6A	Disc 0 Ring (1)	Silicone
7	Body O-Ring (2)	Viton®
7A	Body O-Ring (2)	EPDM

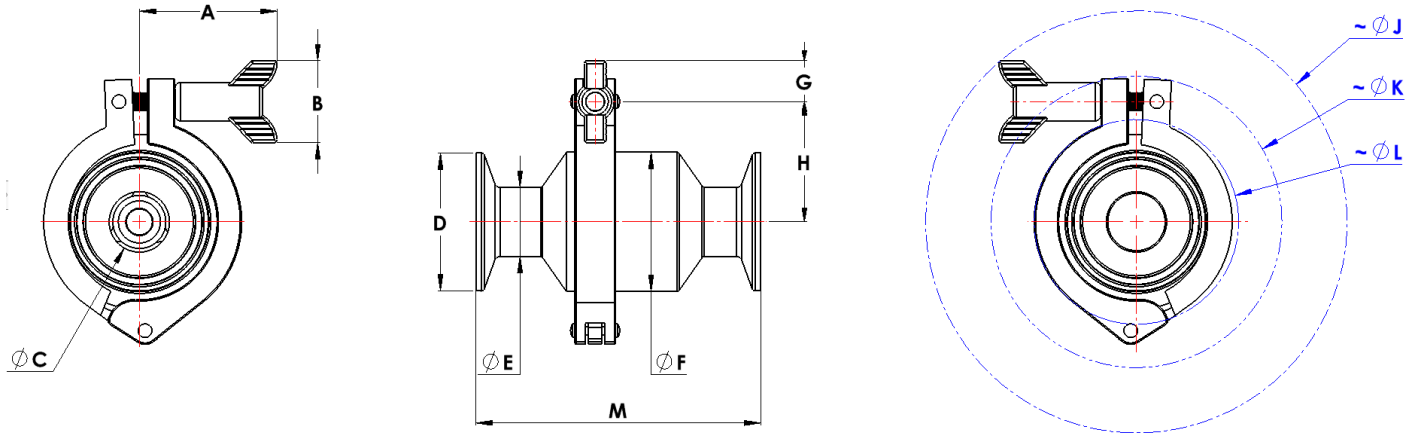
Dimensions: (inches)



Pipe Size (inch)	A	B	C	D	E	F	G	H	J*	K*	L*	M	Weight (lbs)
1	1.4	1.2	0.9	2.0	1.0	2.0	0.6	1.7	6.1	4.2	3.0	4.1	1.9
1-1/2	1.7	1.2	1.4	2.0	1.5	2.5	0.6	2.0	6.6	4.7	3.3	4.6	2.4
2	2.0	1.2	1.9	2.5	2.0	3.0	0.6	2.3	7.1	5.4	4.1	5.1	3.3
3	2.5	1.2	2.9	3.6	3.0	4.0	0.6	2.8	8.4	6.6	5.1	6.2	5.7
4	3.3	1.2	3.8	4.7	4.0	5.1	0.6	3.5	9.4	8.0	6.1	8.1	9.3

**Marked dimensions ~approximate*

Dimensions: (mm)



Pipe Size (inch)	A	B	C	D	E	F	G	H	J*	K*	L*	M	Weight (kg)
1	35.6	30.0	22.0	50.5	25.4	51.0	15.0	44.0	154.5	107.0	75.0	104.4	0.9
1-1/2	43.2	30.0	34.8	50.5	38.1	63.5	15.0	50.8	166.5	119.7	83.0	116.0	1.1
2	50.8	30.0	47.5	64.0	50.8	76.0	15.0	59.3	180.0	137.6	103.0	129.0	1.5
3	63.5	30.0	73.0	91.0	76.2	102.0	15.0	70.3	213.6	167.4	129.0	156.6	2.6
4	83.8	30.0	97.6	119.0	101.6	129.0	15.0	89.9	238.6	202.1	155.0	206.2	4.2

**Marked dimensions ~approximate*