

3S SERIES SANITARY INSERT



The 3S Series Sanitary Check Valve is an insert style, spring-loaded check valve designed for use in sanitary applications where 3-A certification, a minimum surface finish, or clean-in-place (CIP) is required. 3-A approved for use as a check valve or vacuum breaker, the valve installs inside new or existing sanitary ferrules or fittings¹, and includes 2 outer o-rings that provide a tight seal on the ID of the fittings.

FEATURES

- Standard 32 Ra electropolished finish
- 15 Ra electropolished finish available
- Requires no additional space by utilizing existing ferrules or fittings, making it the ideal choice when retrofitting in existing systems
- Use with liquid, gas, or steam applications
- The open design allows for use in clean-in-place (CIP) applications
- Can be installed horizontal, vertical up or vertical down
- Eliminates the reverse flow conditions that causes water hammer
- Replaceable parts and quick disassembly minimize downtime
- 3-A approved for use in backflow prevention or as a vacuum breaker²
- Outer o-rings seal on the ID of the fittings to provide a bubble-tight seal, eliminating the need for a clamp gasket

OPTIONS

SIZES

1" - 4"

BODY MATERIALS

316/316L Stainless

SEAT & O-RING MATERIALS

Standard: 3-A EPDM, 3-A Silicone

Non-Standard: 3-A AFLAS[®], 3-A KALREZ[®], 3-A FKM, USP Class VI AFLAS[®], USP Class VI EPDM, USP Class VI KALREZ[®], USP Class VI Silicone, USP Class VI FKM

SPRING MATERIALS

Standard: 316 Stainless

Non-Standard: HASTELLOY[®] C-276

CRACKING PRESSURE OPTIONS

Standard: 1/2 psi, 1.50 psi

Non-Standard: 1/8 psi - 20 psi

PRESSURE RATINGS @ (100°F)

1": 1,000 psi

1-1/2" - 4": 725 psi

SURFACE FINISH OPTIONS

Standard: 32 Ra

Non-Standard: 15 Ra

STANDARDS/APPROVALS

3-A (58-02)

Available upon request:

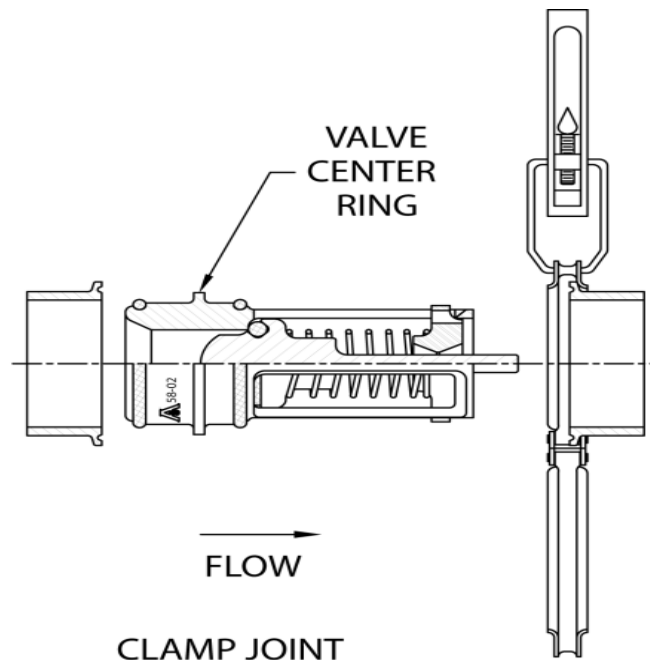
American Iron & Steel Act (AIS)

Buy American Act (BAA)

Canadian Registration Number (CRN)

Contact sales for options not listed here

Typical installation between sanitary ferrules and clamp¹



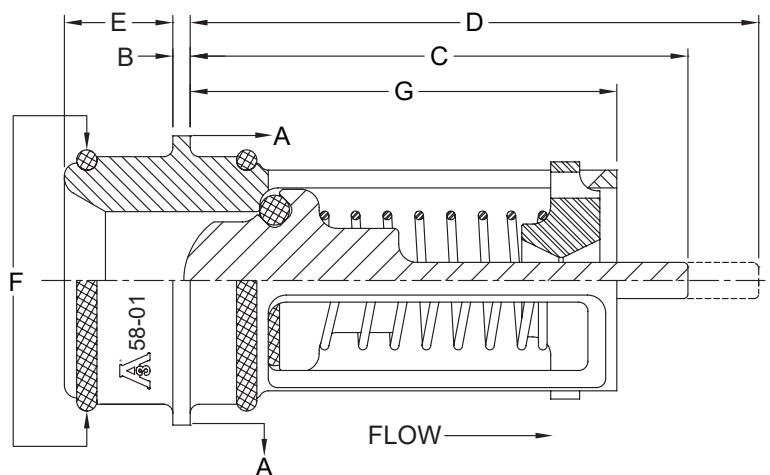
¹Ferrules & fittings not provided | ²For use as a vacuum breaker use special order option V

3S SERIES SANITARY INSERT



58-02 APPROVED

DIMENSIONS



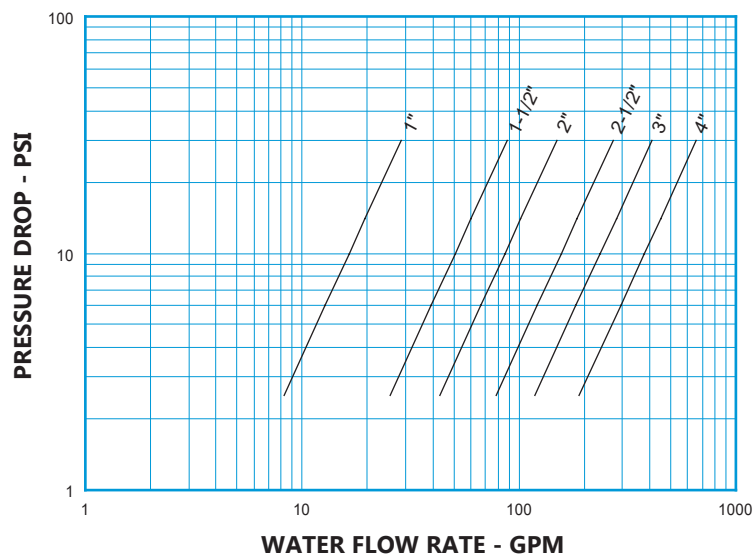
SIZE	SIZE CODE	A		B		C ¹		D ²		E		F ³		G		ORIFICE DIAMETER		WEIGHT
		inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	
1"	H	1	25.4	1/16	1.6	1.72	43.7	2.16	54.9	0.38	9.7	0.87	22.1	1.47	37.3	0.476	12.1	2.3 oz.
1-1/2"	J	1.5	38.1	1/16	1.6	2.53	64.3	3.47	88.1	0.38	9.7	1.37	34.8	2.18	55.4	0.89	22.6	6.2 oz.
2"	K	2	50.8	1/16	1.6	3.03	77.0	4.13	104.9	0.47	11.9	1.37	34.8	2.59	65.8	1.135	28.8	13.9 oz.
2-1/2"	L	2.5	63.5	1/16	1.6	3.28	83.3	4.59	116.6	0.47	11.9	2.37	60.2	2.85	72.4	1.60	40.5	1.5 lbs.
3"	M	3	76.2	1/16	1.6	4.59	116.6	5.53	140.5	0.47	11.9	2.87	72.9	3.36	85.3	2.15	54.6	1.9 lbs.
4"	N	4	101.6	1/16	1.6	4.75	120.7	6.69	169.9	0.47	11.9	3.834	97.4	4.02	102.1	2.70	68.6	3.9 lbs.

1 - Maximum nominal dimension in closed position.

2 - Maximum nominal dimension in open position. Minimum required clearance between valve and hard surface or cross flowing media.

3 - Should match ID of fitting being installed into (± 0.005).

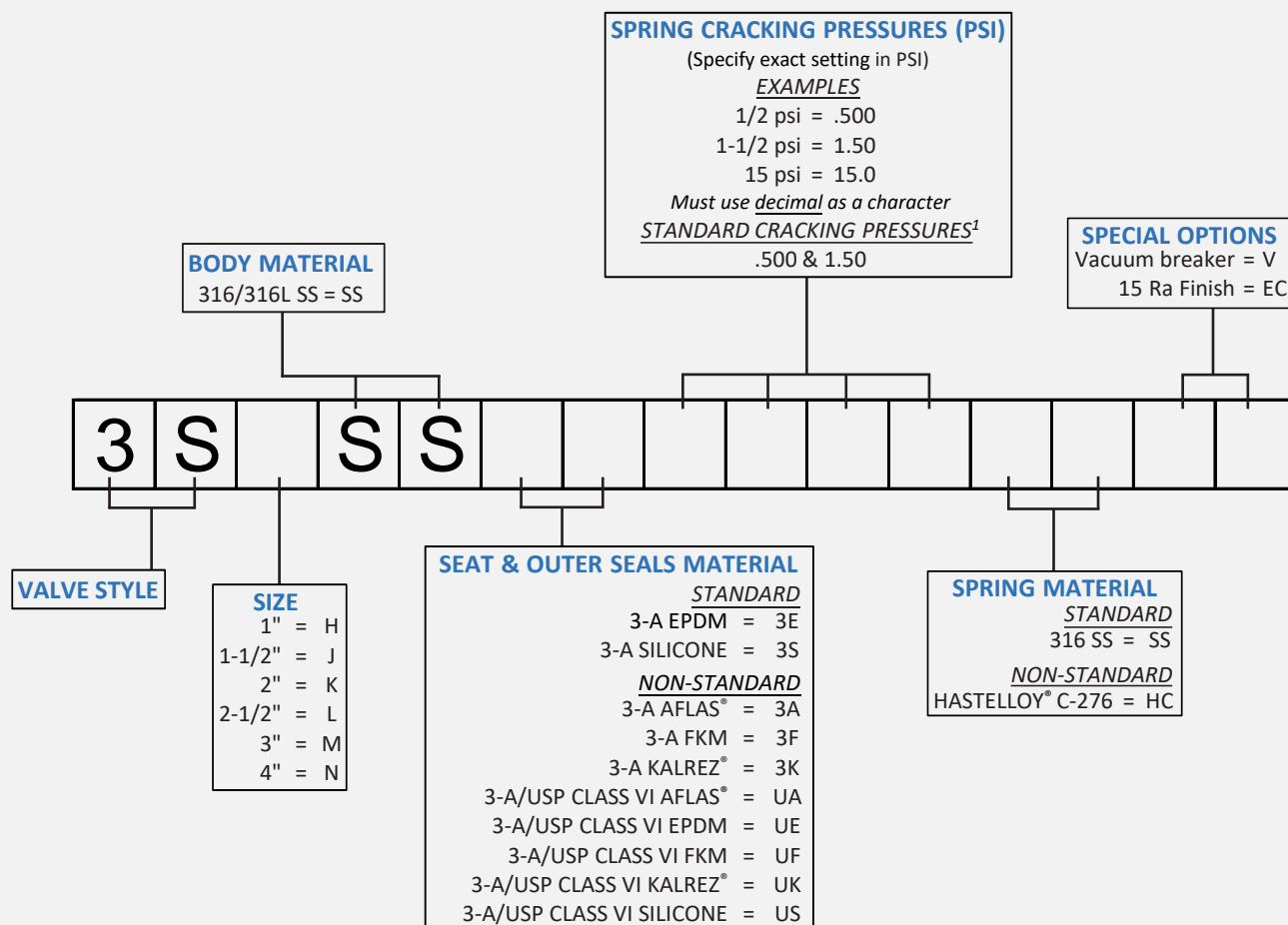
FLOW CHART



Note: All flow curves and Cv values based on water at 72° F and presume the valves are fully open with 1/2 PSI cracking pressure springs.

Contact sales for flow formula and application specific flow data

PART NUMBER BUILDER



1 - Other non-standard cracking pressure options are available, contact sales for options and availability

For temperature ratings, or for any materials or options not listed above contact sales

Spring finish may vary, contact sales for more information

Note: All springs have a cracking pressure tolerance of +/- 15%

TRADEMARKS USED IN THIS CATALOG

3-A (3-A SSI), INCONEL® (Special Metals Family of Companies), HASTELLOY® (Haynes International), FLUOREZ® (Fluorez Technology Ltd.), AFLAS® (GC, Inc.), KALREZ® (E.I. du Pont de Nemours and Company), MONEL® (Special Metals Family of Companies)

PUBLICATION: 3S-SERIES-CUT-SHEET



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