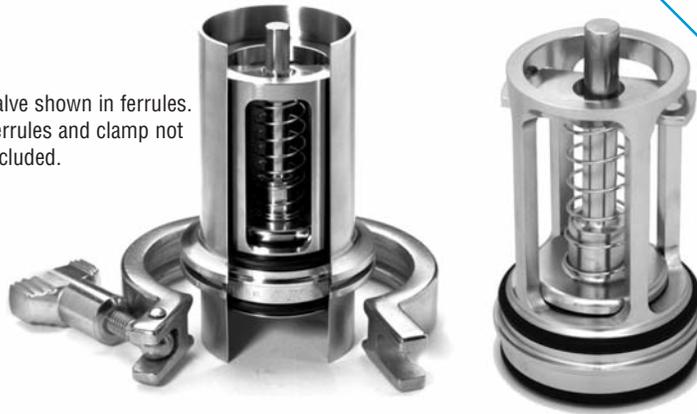
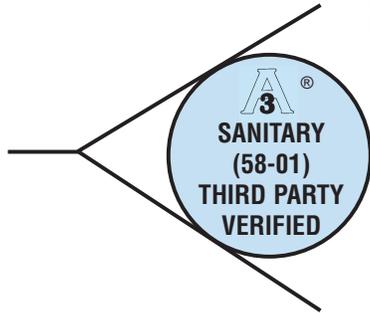




See PED statement below

Valve shown in ferrules.  
Ferrules and clamp not included.

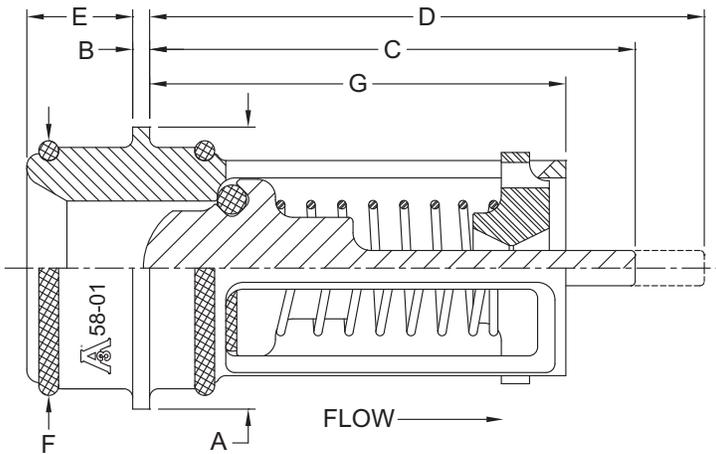


US Patent Numbers:  
6,039,073; 6,152,171

The **3-A SANITARY (3S)** valve is an electropolished 316/316L stainless steel check valve with a standard 32 Ra or better finish (consult the factory for finer finish availability) for use in new or existing sanitary systems. This valve's design seals on the ID of sanitary ferrules with 3-A specified materials. The valve seals inside fittings such as Alfa Laval Inc. Bevel Seat and Tri-Clamp®, Waukesha Cherry-Burrell® Q-Line and S-Line, and others with ID dimensions equal to the "F" dimensions listed below (ferrules not included). This valve is designed to be easily disassembled and cleaned. Spare parts are also available. The compact design fits inside a single set of ferrules and requires no additional space in the line. The insert design makes it extremely economical when compared to full-bodied valves. The wide variety of seat materials and cracking pressure springs allow this series to be used as a check valve or vacuum breaker; please specify when ordering. The standard spring material is 316 SS. Consult factory for additional options.

**PED Conformance Statement:** Due to the unique design of the 3-A Sanitary valve, this series is not considered a pressure vessel but rather a gasket. According to PED Guideline 1/8, gaskets are not governed by the Pressure Equipment Directive. As a result, the 3S series is available for sale in the European Community and no CE Mark is required.

**Note: USP Class VI o-rings can be supplied with certification.**



Line Size	Size Code	A	B	C <sup>①</sup>	D <sup>②</sup>	E	F <sup>③</sup>	G	Orifice Diameter
1	H	1	1/16	1.72	2.16	0.38	0.870	1.47	0.476
1-1/2	J	1-1/2	1/16	2.53	3.47	0.38	1.370	2.18	0.890
2	K	2	1/16	3.03	4.13	0.47	1.870	2.59	1.135
2-1/2	L	2-1/2	1/16	3.28	4.59	0.47	2.370	2.85	1.595
3	M	3	1/16	4.59	5.53	0.47	2.870	3.36	2.150
4	N	4	1/16	4.75	6.69	0.47	3.834	4.02	2.699

- ① Maximum nominal dimension for valve closed.
- ② Maximum nominal dimension for a fully open valve.
- ③ Valves are designed to function with fittings having these internal diameters. (±0.005)

Body Material <sup>④</sup>	Line Size	Non-Shock Pressure-Temperature Rating <sup>⑤</sup>
316/316L Stainless Steel (SS)	1	1000 PSIG @ 100°F
	1-1/2 - 4	725 PSIG @ 100°F

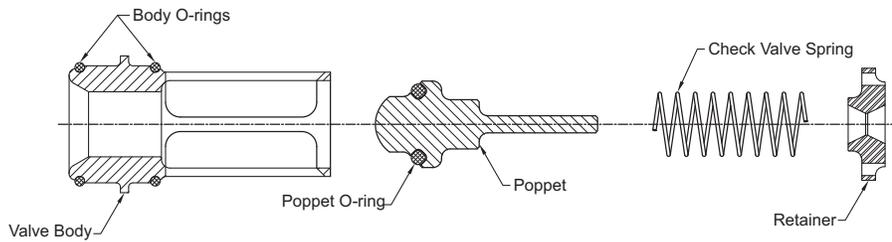
- ④ See page 54 for material grade information.
- ⑤ Consult the factory for applications where higher pressure or temperature is expected.

**Note: 30 PSI is the maximum recommended pressure drop.**

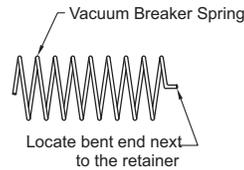
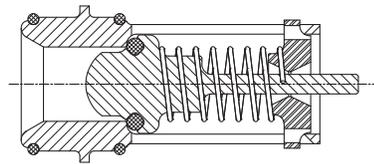
## Disassembly For Cleaning Instructions

To disassemble the 3-A Sanitary valve, start by depressing one side of the retainer as shown in Step 1. With one side of the retainer tipped, rotate the stem of the poppet and remove the retainer as shown in Steps 2, 3, and 4. To reassemble the valve reverse the process. Consult the factory for information on trim kits, o-ring kits, or individual spare parts.

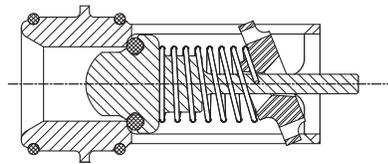
### VALVE PARTS



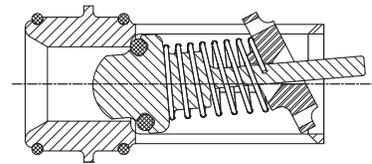
### Assembled Valve



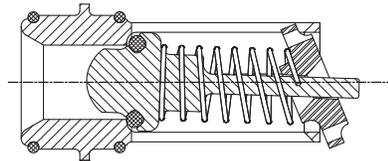
Step 1



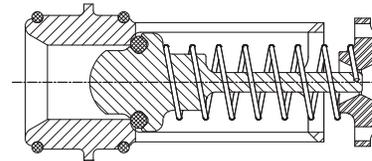
Step 2



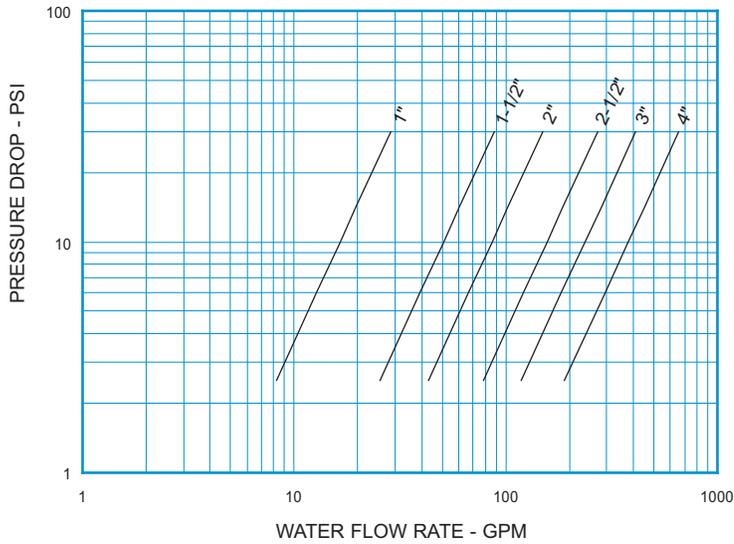
Step 3



Step 4



**3-A Sanitary**  
For Water at 72°F

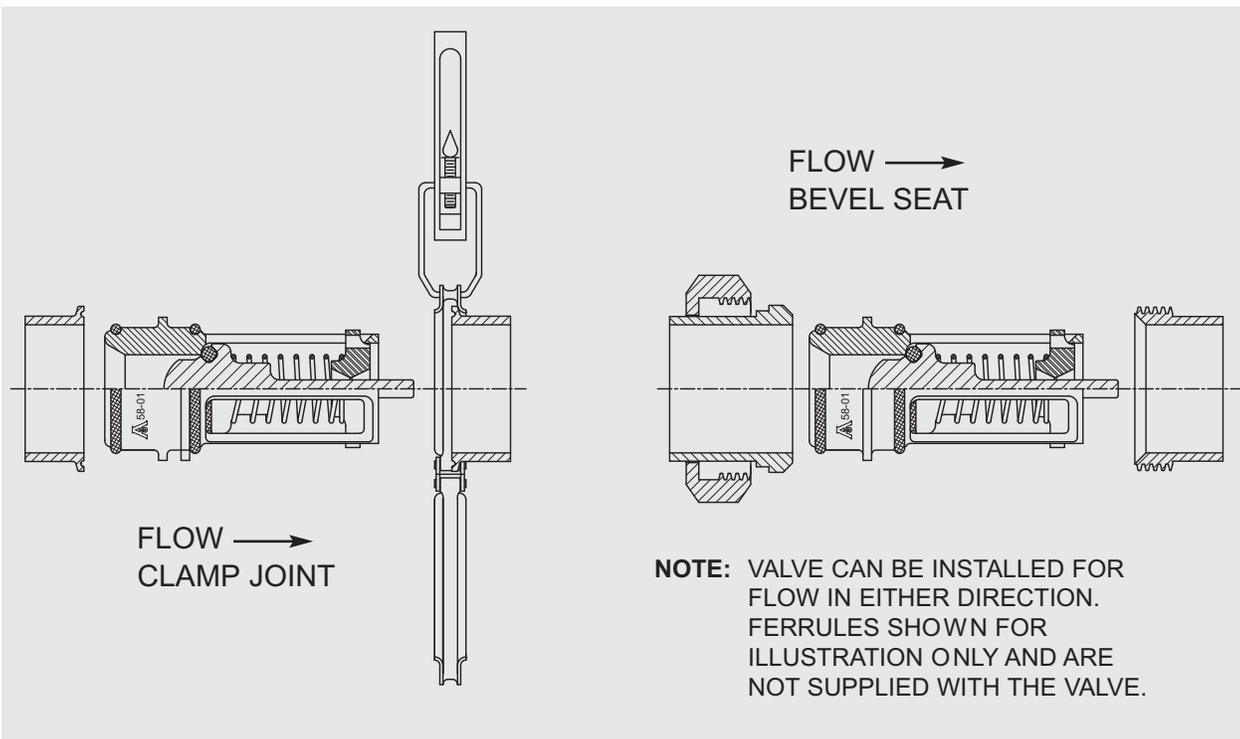


**Note:** All flow curves and Cv values presume the valves are fully open with 1/2 PSI cracking pressure springs. Consult the factory for more information.

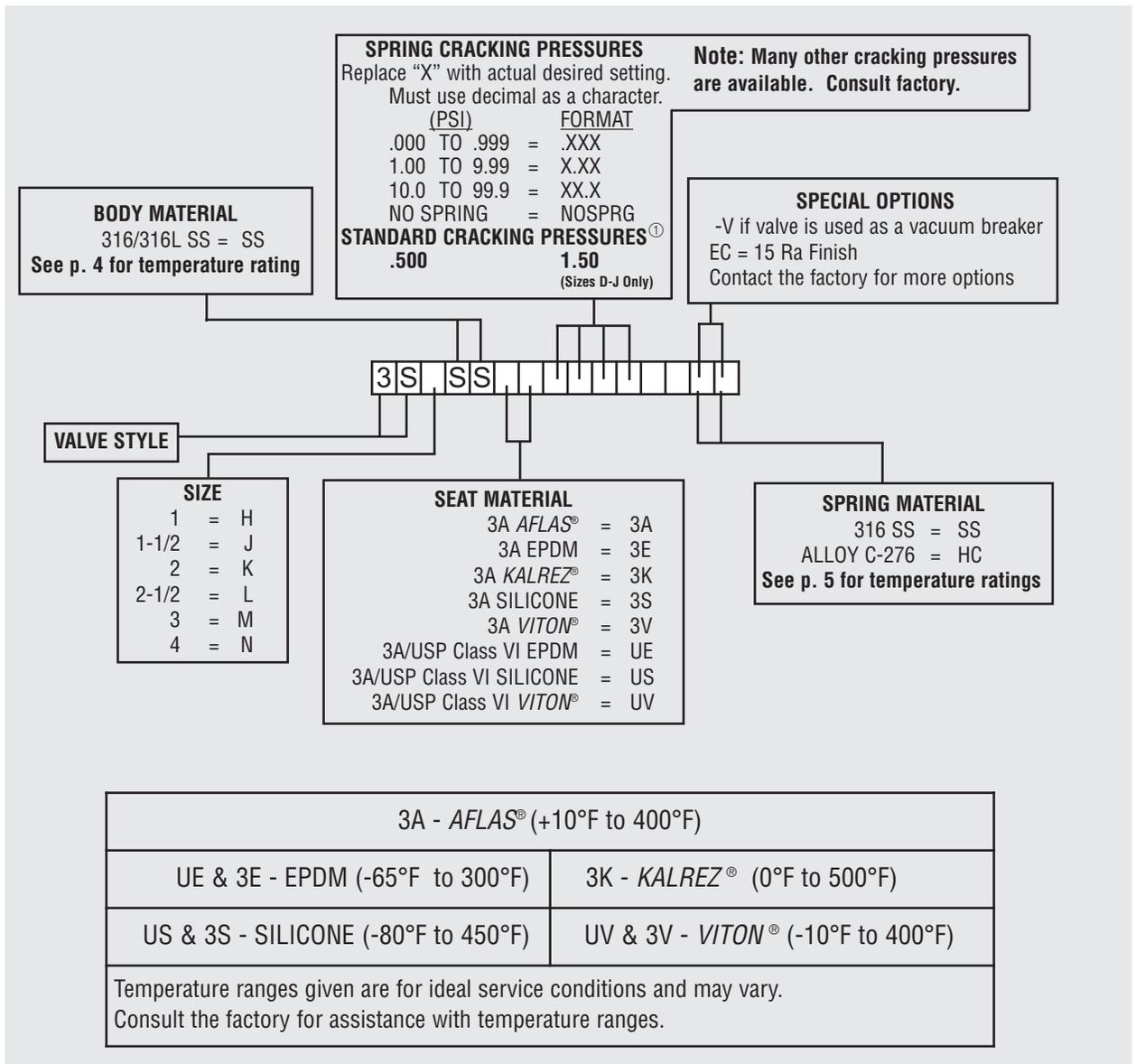
STYLE 3S (3S) C <sub>v</sub> VALUES & VALVE WEIGHTS		
C <sub>v</sub>	SIZE	316/316L SS
5.2	1	2.3 oz.
16.1	1-1/2	6.2 oz.
27.2	2	13.9 oz.
49.4	2-1/2	1.5 lb.
74.9	3	1.9 lb.
120.0	4	3.9 lb.

See page 50 for Flow Formulae.  
Valve weights are approximate.

**Note:** All flow curves and Cv values presume the valves are fully open with 1/2 PSI cracking pressure springs. Consult the factory for more information.



## HOW TO ORDER CHECK-ALL STYLE 3S (3S)



Listed above are the most common material selections. Please contact the factory for additional options.

<sup>①</sup>Contact factory for non-standard cracking pressure availability. Cracking pressure tolerance is +/- 15%.

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 Administered by 3A SSI

