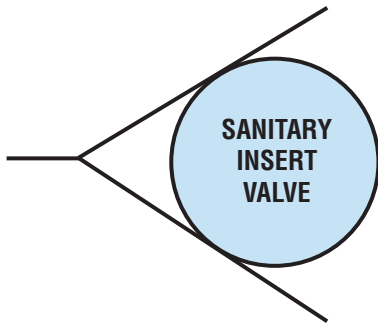




See PED statement below



Valve shown in ferrules. Ferrules and clamp not included.

The **Sanitary Insert (CB, TC)** valve is a compact fluoropolymer (PTFE/FEP/PFA) valve which has been used for over 45 years as the most economical solution for providing a check valve in a new or existing sanitary piping system. This valve style is designed to fit into grooved-end clamp-type fittings (ferrules not included). Since the Sanitary Insert Valve replaces the gasket normally used with clamp joints, no extra space is required to accommodate the valve. **For applications requiring a 3-A compliant valve, see our 3S series on page 16.**

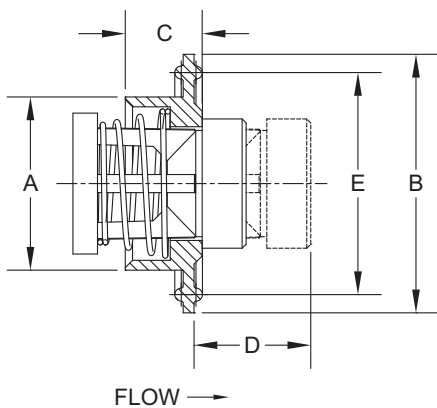
**PED Conformance Statement:** Due to the unique design of the Sanitary Insert Valve, this series is not considered a pressure vessel but rather a gasket. According to PED Guideline 1/8, gaskets are not governed by the Pressure Equipment Directive. As a result, the SIV series is available for sale in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

Two different types of Sanitary Insert Valves are available. They are distinguished by the following designations in their part numbers:

**TC** – Designates Tri-Clamp® fittings manufactured by Alfa Laval Inc., as well as Waukesha Cherry-Burrell® S-Line Series of fittings.

**CB** – Designates the Waukesha Cherry-Burrell® Q-Line Series of fittings.

**NOTE:** Sanitary Insert Valve types TC and CB are not interchangeable!



Line Size	Size Code	TC - Alfa Laval Inc. Waukesha Cherry-Burrell® S-Line					CB - Waukesha Cherry-Burrell® Q-Line Only					Orifice <sup>①</sup> Dia.
		A	B	C	D <sup>②</sup>	E	A	B	C	D <sup>②</sup>	E	
3/4	F	0.500	55/64	0.55	0.63	0.800	-	-	-	-	-	0.348
1	H	0.855	2	0.55	0.70	1.718	0.850	1-3/4	0.55	0.70	1.437	0.464
1-1/2	J	1.345	2	0.60	0.98	1.718	1.350	2	0.60	0.98	1.716	0.890
2	K	1.845	2-1/2	0.57	1.12	2.218	1.850	2-1/2	0.57	1.12	2.247	1.135
2-1/2	L	2.355	3	0.60	0.98	2.781	2.250	3-1/4	0.60	0.98	2.841	1.385
3	M	2.845	3-1/2	0.64	1.59	3.281	2.852	3-55/64	0.61	1.58	3.372	2.025
4	N	3.800	4-5/8	0.78	1.90	4.344	3.800	4-55/64	0.73	1.89	4.372	2.560

<sup>①</sup> Due to molding process, orifice may vary.

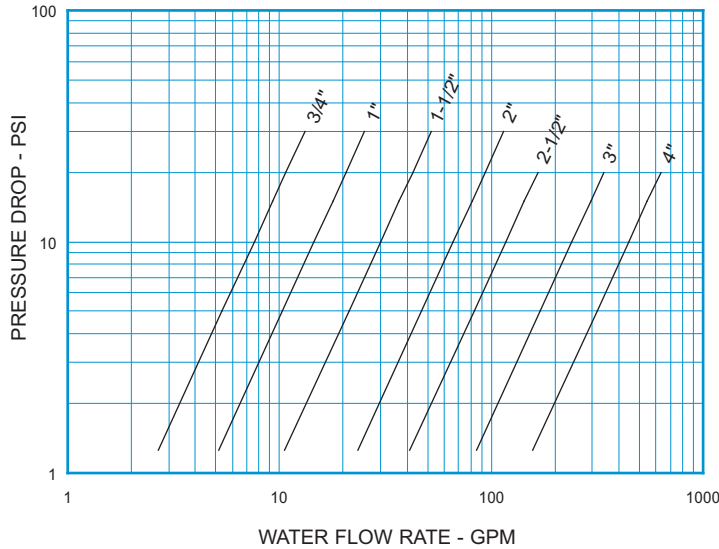
<sup>②</sup> Maximum nominal dimension for a fully open valve with no spring.

Body Material <sup>③</sup>	Line Size	Non-Shock Pressure-Temperature Rating <sup>④</sup>
PTFE (TF)	3/4 - 2	55 PSIG @ 100°F
	2-1/2 - 4	20 PSIG @ 100°F

<sup>③</sup> See page 55 for material grade information.

<sup>④</sup> Consult the factory for reduced P-T rating of PTFE valves above 100°F.

**Sanitary Insert Valve**  
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 TC, CB (SIV) C <sub>v</sub> VALUES & VALVE WEIGHTS		
C <sub>v</sub>	SIZE	PTFE
2.4	3/4	0.2 oz.
4.6	1	0.6 oz.
9.5	1-1/2	1.1 oz.
20.9	2	1.8 oz.
37.0	2-1/2	2.3 oz.
76.0	3	5.1 oz.
141	4	11.2 oz.

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

**HOW TO ORDER  
CHECK-ALL STYLE CB, TC (SIV)**

**BODY MATERIAL**  
PTFE = TF  
See p. 4 for temperature rating

**SPRING CRACKING PRESSURES**  
Replace "X" with actual desired setting.  
Must use decimal as a character.  
(PSI)      FORMAT  
.000 TO .999 = .XXX  
1.00 TO 9.99 = X.XX  
10.0 TO 55.0 = XX.X  
NO SPRING = NOSPRG  
**STANDARD CRACKING PRESSURES**<sup>①</sup>  
.125 .500 1.50 3.50  
(Sizes F-K Only)

**Note: Many other cracking pressures are available. Consult factory.**

**SPECIAL OPTIONS**  
T = FEP ENCAPSULATED SPRING  
See p. 5 for temperature rating  
Contact the factory for more options

**VALVE STYLE**  
SIV-CB = CB  
SIV-TC = TC

**SIZE**  
3/4 = F  
1 = H  
1-1/2 = J  
2 = K  
2-1/2 = L  
3 = M  
4 = N

**SEAT MATERIAL**<sup>②</sup>  
AFLAS® = AS      FDA VITON® = FV  
BUNA-N = BN      KALREZ® = KZ  
EPDM = EP      "METAL-TO-METAL"<sup>③</sup> = MT  
FDA BUNA = FB      NEOPRENE = NE  
FDA EPDM = FE      VITON® = VT  
See p. 4 for temperature ratings

**SPRING MATERIAL**  
316 SS = SS  
ALLOY C-276 = HC  
INCONEL® X-750 = IX  
MONEL® = MO  
17-7PH SS = PH  
TITANIUM = TI  
See p. 5 for temperature ratings

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

① .500 PSI is the only standard cracking pressure for spring materials other than Stainless Steel. Cracking pressure tolerance is +/- 15%. .125 PSI springs are not recommended for installations with flow vertical down.

② Seat materials other than "metal-to-metal" have a maximum pressure rating of 1500 PSI. "Metal-to-Metal" and PTFE seats are not resilient. See page 51 for allowable leakage rates.

③ For plastic valves, "MT" seats mean plastic to plastic. Consult factory for further information.