Valve shown in ferrules.
Ferrules and clamp not included.

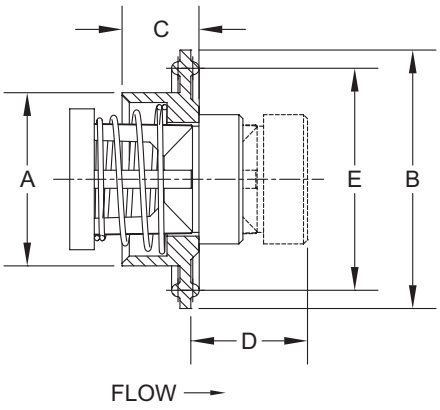
See page 60 for Non-PED statement

SANITARY INSERT VALVE

The **Sanitary Insert (TC)** check valve is a compact fluoropolymer (PTFE/FEP/PFA) valve which has been used for decades as the most economical solution for providing a check valve in a new or existing sanitary piping system. (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. The Sanitary Insert valve can also be used as a low pressure relief valve or vacuum breaker by using the desired spring settings.

For applications requiring a 3-A compliant valve and/or 32 RA or finer surface finishes, see our 3S series on page 25.

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

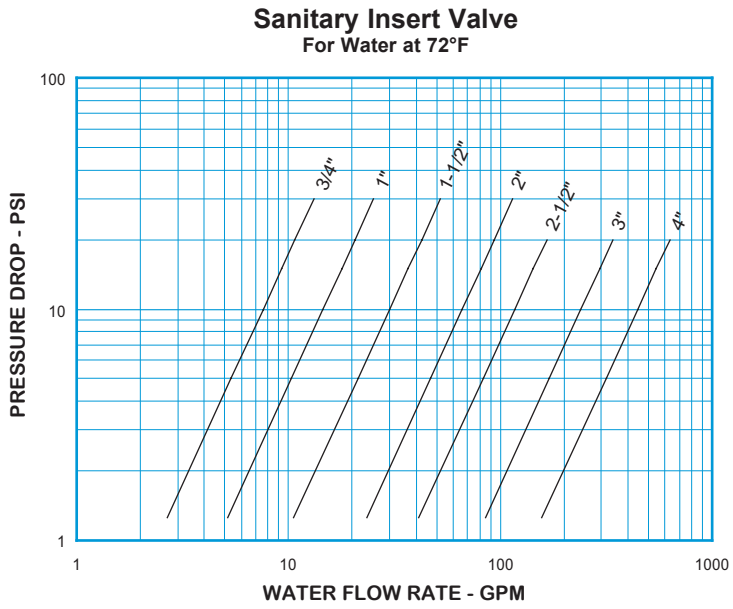


Line Size	Size Code	A	B	C	D ❷	E	Orifice ❶ Dia.
3/4	F	0.590	55/64	0.55	0.63	0.800	0.348
1	H	0.855	2	0.55	0.70	1.718	0.464
1-1/2	J	1.345	2	0.60	0.98	1.718	0.890
2	K	1.845	2-1/2	0.57	1.12	2.218	1.135
2-1/2	L	2.355	3	0.60	0.98	2.781	1.385
3	M	2.845	3-1/2	0.64	1.59	3.281	2.025
4	N	3.806	4-5/8	0.78	1.90	4.344	2.560

❶ Due to molding process, orifice may vary.
❷ Maximum nominal dimension for a fully open valve with no spring.

Body Material ❸	Line Size	Non-Shock Pressure-Temp. Rating @ 100°F Consult factory for P-T ratings above 100°F
PTFE (TF)	3/4" - 2"	55 PSIG
	2-1/2" - 4"	20 PSIG

❸ See page 58 for material grade information.



Note: All flow curves and Cv values presume the valves are fully open with 1/2 PSI cracking pressure springs.

STYLE TC C_V VALUES & VALVE WEIGHTS		
C_V	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 53 for Flow Formulae.
Valve weights are approximate.

HOW TO ORDER
CHECK-ALL STYLE TC

SPRING CRACKING PRESSURES (PSI)
Must use decimal as a character unless selecting NO SPRING. *Specify Exact Setting*

SPRING RANGES		EXAMPLE
.000 TO .999	=	.500
1.00 TO 9.99	=	1.50
10.0 TO 15.0	=	15.0
NO SPRING	=	NOSPRG

STANDARD CRACKING PRESSURES ❶
.125 .500 1.50 3.50
(Sizes F-K Only)

Note: Many other cracking pressures are available. All spring tolerances +/- 15%.

SPECIAL OPTIONS
T = FEP ENCAPSULATED SPRING
Contact the factory for more options
See p. 4 for temperature rating

BODY MATERIAL
PTFE = TF
See p. 3 for temperature rating

VALVE STYLE

T C T F

SIZE

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

SEAT MATERIAL ❷

FDA AFLAS®	= FA	"METAL-TO-METAL"	= MT
FDA BUNA	= FB	USP CLASS VI AFLAS®	= UA
FDA EPDM	= FE	USP CLASS VI EPDM	= UE
FDA FKM	= FV	USP CLASS VI SILICONE	= US
FDA KALREZ®	= FK	USP CLASS VI FKM	= UV
		USP CLASS VI KALREZ®	= UK

See p. 3 for temperature ratings

SPRING MATERIAL

316 SS	= SS
ALLOY C-276	= HC
INCONEL® X750 OR ALLOY X750	= IX
MONEL® 400	= MO
TITANIUM	= TI

See p. 4 for temperature ratings

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

❶ .500 PSI is the only standard cracking pressure for spring materials other than Stainless Steel. 0.125 PSI springs are not recommended for installations with flow vertical down.

❷ For PTFE valves, "MT" seats mean plastic to plastic. (No o-ring). See page 54 for allowable leakage rates.