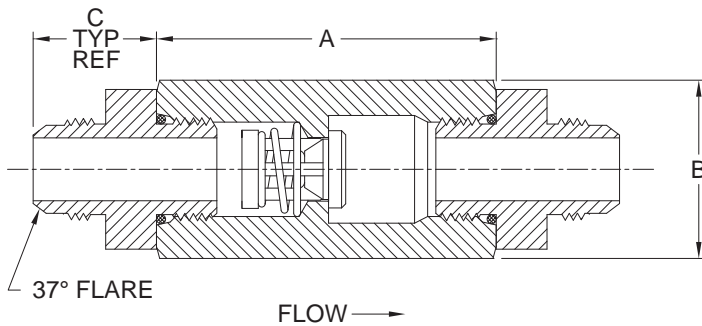


The **Tubing Check Valve-Flared (TF)** is a three-piece constructed check valve with 37° flared end fittings that conform to SAE J514 & ISO 8434-2 . These valves are designed for maximum flow with minimal pressure drop. Consult the factory for more information.



Tubing O.D. Size	Size Code	A	Hex ^① Size B	C	Orifice Diameter
1/4	B	2.16	7/8	0.89	0.348
3/8	C	2.16	7/8	0.91	0.348
1/2	D	2.47	1-1/8	1.04	0.464
5/8*	E	2.63	1-1/4	1.20	0.464
3/4	F	2.92	1-1/2	1.38	0.593
7/8*	G	3.33	1-3/4	1.40	0.890
1	H	3.33	1-7/8	1.46	0.890
1-1/4*	I	3.48	2-1/4	1.58	1.135
1-1/2*	J	3.80	2-1/2	1.79	1.385
2*	K	5.09	3-1/2	2.19	2.025

^①May be larger and/or round.

*Not a stock item. Consult factory for delivery.

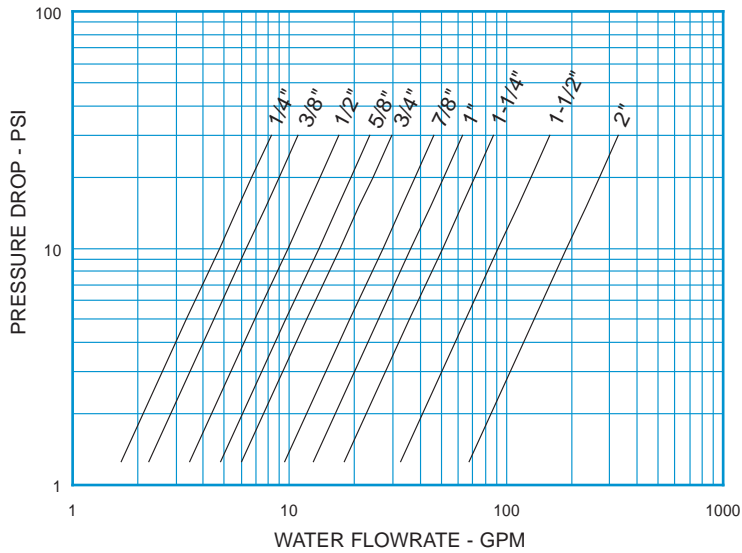
Line Size	Non-Shock Pressure-Temperature Rating ^②		
	Stainless Steel (SS) ^③	Carbon Steel (CS) ^③	Brass (BR) ^③
1/4 - 1/2	8500 PSIG @ 100°F	7000 PSIG @ 100°F	2000 PSIG @ 100°F
5/8 - 1	6600 PSIG @ 100°F	5000 PSIG @ 100°F	1600 PSIG @ 100°F
1-1/4 - 1-1/2	5800 PSIG @ 100°F	4600 PSIG @ 100°F	1600 PSIG @ 100°F
2	3000 PSIG @ 100°F	2500 PSIG @ 100°F	1600 PSIG @ 100°F

^②Maximum Pressure 1500 PSIG for o-ring seats.

^③See page 53 for material grade information.

Tubing Check Valve Flared

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 TF (TCVF) C _v VALUES & VALVE WEIGHTS		
C _v	SIZE	ALL MATL
1.5	1/4	6.6 oz.
2.0	3/8	7.2 oz.
3.1	1/2	13.0 oz.
4.3	5/8	1.8 lb.
5.4	3/4	2.3 lb.
8.5	7/8	2.7 lb.
11.5	1	3.0 lb.
16.0	1-1/4	5.7 lb.
29.0	1-1/2	7.8 lb.
60.0	2	15.0 lb.

See page 48 for Flow Formulae
Valve weights are approximate.

HOW TO ORDER CHECK-ALL STYLE TF (TCVF)

BODY MATERIAL ①
BRASS = BR
CARBON STEEL = CS
316 SS = SS
See p. 4 for Temperature ratings

SPRING CRACKING PRESSURES
Replace "X" with actual desired setting.
Must use decimal as a character.
(PSI) **FORMAT**
0.000 TO 0.999 = .XXX
1.00 TO 9.99 = X.XX
10.0 TO 99.9 = XX.X
NO SPRING = NOSPRG
STANDARD CRACKING PRESSURES ②
.125 .500 1.50 3.50
(Sizes B-I 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

SIZE
1/4 = B
3/8 = C
1/2 = D
5/8 = E
3/4 = F
7/8 = G
1 = H
1-1/4 = I
1-1/2 = J
2 = K

SEAT MATERIAL	STANDARD END FITTING O-RING MATERIAL
AFLAS® = AS	PTFE (TF)
BUNA-N = BN	BUNA-N (BN)
EPDM = EP	EPDM (EP)
KALREZ® = KZ	PTFE (TF)
METAL-TO-METAL = MT	SEE NOTE BELOW ④
NEOPRENE = NE	NEOPRENE (NE)
PTFE (TF) = TF	PTFE (TF)
VITON® = VT	VITON®(VT)

See p. 4 for Temperature ratings

SPRING MATERIAL
316 SS = SS
HASTELLOY® C = 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 Brass valves have plated Carbon Steel fittings. Consult factory if other body or fitting materials are desired.
- ② .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.
- ③ Seat materials other than metal-to-metal have a maximum pressure rating of 1500 PSI. PTFE seats are not resilient. See page 49 for allowable leakage rates.
- ④ Brass and Carbon Steel valves have Buna-N end fitting o-rings, 316 SS valves have Viton® end fitting o-rings.