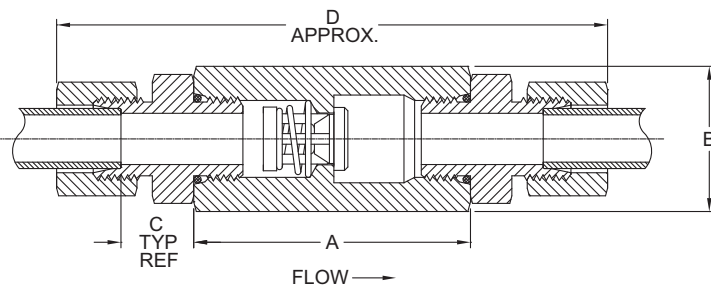


The **Tubing Check (TV)** valve is constructed with **flareless** tube ends designed for minimum pressure drop. The valves are furnished complete with ferrules and nuts. Consult the factory for more information.



Tubing O.D. Size	Size Code	A	Hex Size B <sup>①</sup>	C	D	Orifice Diameter
1/8	A	2.16	7/8	0.42	3.99	0.348
1/4	B	2.16	7/8	0.57	4.58	0.348
3/8	C	2.16	7/8	0.57	4.80	0.348
1/2	D	2.48	1-1/8	0.63	5.44	0.464
5/8*	E	2.63	1-1/4	0.72	5.89	0.464
3/4	F	2.93	1-1/2	0.85	6.47	0.593
7/8*	G	3.34	1-3/4	0.85	6.98	0.890
1	H	3.34	1-7/8	0.81	7.18	0.890
1-1/4*	I	3.48	2-1/4	0.89	7.56	1.135
1-1/2*	J	3.81	2-1/2	0.89	7.99	1.385
2*	K	5.09	3-1/2	1.05	9.66	2.025

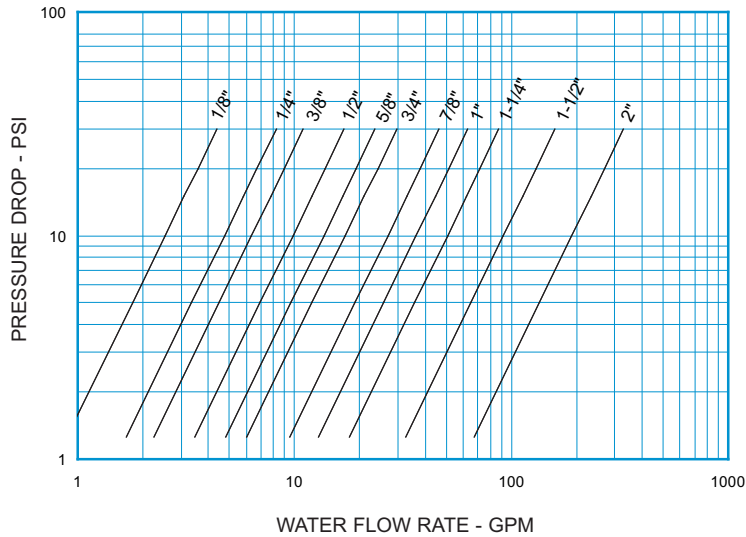
<sup>①</sup> May be larger and/or round.  
 \*Not a stock item. Consult factory for delivery.

Line Size	Non-Shock Pressure-Temperature Rating <sup>②</sup>	
	Stainless Steel (SS) and Carbon Steel <sup>③</sup>	Brass (BR) <sup>③</sup>
1/8 - 3/8	8000 PSIG @ 100°F	3000 PSIG @ 100°F
1/2	6600 PSIG @ 100°F	3000 PSIG @ 100°F
5/8 - 3/4	6000 PSIG @ 100°F	1600 PSIG @ 100°F
7/8 - 1	5000 PSIG @ 100°F	1600 PSIG @ 100°F
1-1/4 - 1-1/2	4000 PSIG @ 100°F	1600 PSIG @ 100°F
2	2600 PSIG @ 100°F	1600 PSIG @ 100°F

<sup>②</sup> Maximum Pressure 1500 PSIG for o-ring seats.

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

**Tubing Check**  
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 TV (TCV) C <sub>v</sub> VALUES & VALVE WEIGHTS		
C <sub>v</sub>	SIZE	ALL MATL
0.8	1/8	6.9 oz.
1.5	1/4	7.6 oz.
2.0	3/8	8.1 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	4.9 lb.
29.0	1-1/2	7.8 lb.
60.0	2	15.0 lb.

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

**HOW TO ORDER  
CHECK-ALL STYLE TV (TCV)**

**BODY MATERIAL**<sup>①</sup>  
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  
.000 TO .999 = .XXX  
1.00 TO 9.99 = X.XX  
10.0 TO 99.9 = XX.X  
NO SPRING = NOSPRG  
**STANDARD CRACKING PRESSURES**<sup>②</sup>  
.125 .500 1.50 3.50  
(Sizes A-1 Only)

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

**SPECIAL OPTIONS**  
T = FEP ENCAPSULATED SPRING  
-O = Outer o-ring seals same as seat  
See p. 5 for temperature rating  
Contact the factory for more options

**VALVE STYLE**



**SIZE**

1/8	=	A
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 <sup>④</sup> = EP	EPDM <sup>④</sup> (EP)
KALREZ® = KZ	PTFE (TF)
"METAL-TO-METAL" = MT	SEE NOTE BELOW <sup>⑤</sup>
NEOPRENE = NE	NEOPRENE (NE)
PTFE (TF) = TF	PTFE (TF)
VITON® = VT	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.

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. "Metal-to-Metal" and PTFE seats are not resilient. See page 51 for allowable leakage rates.

④ EP seats not recommended for use with Carbon Steel valves.

⑤ Fitting o-rings are the same as the seat for standard seat materials. For "metal-to-metal" seated valves, end fitting o-rings are Buna-N for brass and carbon steel valves and Viton® for stainless steel valves. Consult the factory for further information.