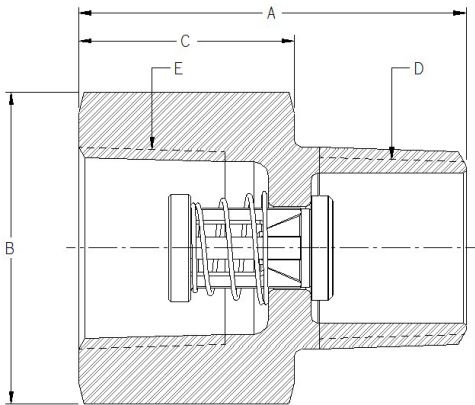


The **Adapter (AM, AF)** check valve is a one-piece body valve machined from bar stock. This is designed to be installed where threaded straight adapter pipe fittings are desired. The adapter check valve is available in AM (MNPT inlet) or in AF (FNPT inlet) flow configurations. This valve can also be used in low pressure or vacuum relief applications by using the desired spring settings. NPT threads are per ASME B1.20.1.



FLOW →  
(AF Configuration as shown. Dimensions applicable for both AM & AF)

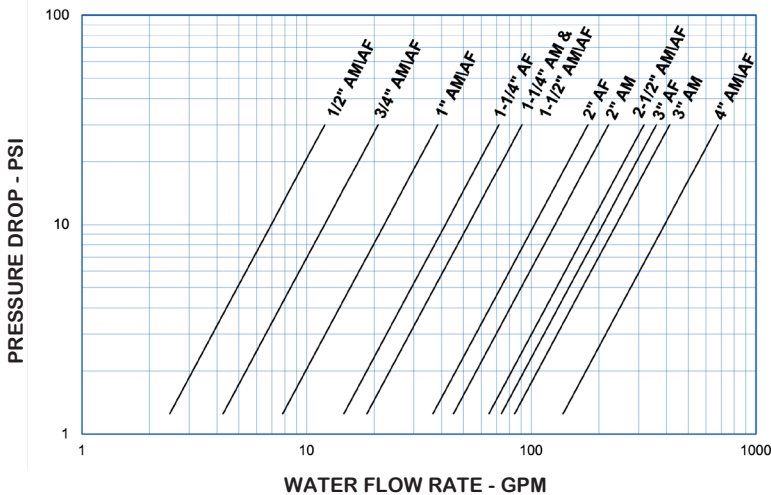
Nom. Pipe Size	Size Code	A	B <sup>①</sup> HEX SIZE	C	D NPT THREAD	E NPT THREAD	Orifice Diameter
1/2	D	1.62	1-1/8	0.90	1/2	1/2	0.348
3/4	F	1.77	1-1/4	1.01	3/4	3/4	0.464
1	H	1.98	1-5/8	1.08	1	1	0.593
1-1/4	I	2.16	2-1/4	1.17	1 1/4	1 1/4	0.890
1-1/2	J	2.37	2-1/2	1.38	1 1/2	1 1/2	0.890
2	K	2.56	3	1.44	2	2	1.385
2-1/2	L	3.21	3-3/4	1.86	2 1/2	2 1/2	1.555
3	M	3.47	4-1/2	2.03	3	3	2.025
4	N	4.38	5-1/2	2.87	4	4	2.560

① May be larger and/or round.

Line Size	Non-Shock Pressure-Temp. Rating @ 100°F	
	Consult factory for P-T rating above 100°F	
	316 Stainless Steel (SS) and Carbon Steel (CS) <sup>②</sup>	Brass (BR) <sup>②</sup>
1/2" - 1-1/4"	3000 PSIG (1500 PSIG for o-ring seats)	3000 PSIG (1500 PSIG for o-ring seats)
1-1/2" - 3"	3000 PSIG (1500 PSIG for o-ring seats)	1500 PSIG
4	1500 PSIG	1500 PSIG

② See page 57 for material grade information.

**Adapter**  
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 AM, AF C <sub>v</sub> VALUES & VALVE WEIGHTS				
AF C <sub>v</sub>	AM C <sub>v</sub>	SIZE	SS & CS ALLOYS	BRASS
2.2	2.2	1/2	4.1 oz.	4.3 oz.
3.8	4.0	3/4	5.2 oz.	5.5 oz.
7.0	7.1	1	9.6 oz.	10.1 oz.
13.1	16.6	1-1/4	1.1 lb.	1.2 lb.
16.0	16.6	1-1/2	1.8 lb.	1.9 lb.
31.7	40.3	2	2.4 lb.	2.5 lb.
52.6	57.9	2-1/2	4.7 lb.	4.9 lb.
65.8	75.4	3	7.0 lb.	7.4 lb.
120	124	4	13.3 lb.	14 lb.

See page 53 for Flow Formulae.  
Valve weights are approximate.

## HOW TO ORDER CHECK-ALL STYLE AM, AF

**BODY MATERIAL**

ALLOY 20 = A2  
BRASS = BR  
CARBON STEEL = CS  
ALLOY B = HB  
ALLOY C-276 = HC  
MONEL® 400 OR ALLOY R405 = MO  
316 SS = SS  
TITANIUM = TI

See p. 3 for temperature ratings

**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 85.0	= 15.0
NO SPRING	= NOSPRG

**STANDARD CRACKING PRESSURES ①**

.125	.500	1.50	3.50
			(Sizes D-J 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

**A**

**VALVE STYLE**

FNPT inlet = AF  
MNPT inlet = AM

**SIZE**

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

**SEAT MATERIAL ②**

AFLAS® = AS  
BUNA-N = BN  
EPDM ③ = EP  
KALREZ® (FFKM) = KZ  
FLUOREZ® (FFKM) = FZ  
"METAL-TO-METAL" = MT  
NEOPRENE = NE  
PTFE = TF  
FKM = VT

See p. 3 for temperature ratings

**SPRING MATERIAL**

316 SS = SS  
ALLOY C-276 = HC  
ALLOY B = HB  
INCONEL® X750 / ALLOY X750 = IX  
MONEL® 400 = MO  
17-7PH SS = PH  
TITANIUM = TI

See p. 4 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. 0.125 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 54 for allowable leakage rates.
- ③ EP seats not recommended for use with Carbon Steel valves.