

The **Mini-Check (M1 - M8)** is designed for minimum pressure drop. The three-piece construction permits many combinations of end fittings, which makes the valve adaptable for nearly every application. The Mini-Check is available with 1/8, 1/4, and 3/8 inch pipe threads, both male and female. It can also be supplied with a 1/8, 1/4, or 3/8 inch **tubing end** on one side and with a **pipe thread end** on the other. **Combinations** of male and female threads are also available. The Mini-Check can also be used as a low pressure relief valve or vacuum breaker by using the desired spring settings.

NOTE: Many valves in this series can be supplied with B16.34 certification. Consult the factory for more information.

M1 – Male pipe threads both ends.

M5 – Male pipe **inlet** – tubing **outlet**.

M2 – Female pipe threads both ends.

M6 – Female pipe **inlet** – tubing **outlet**.

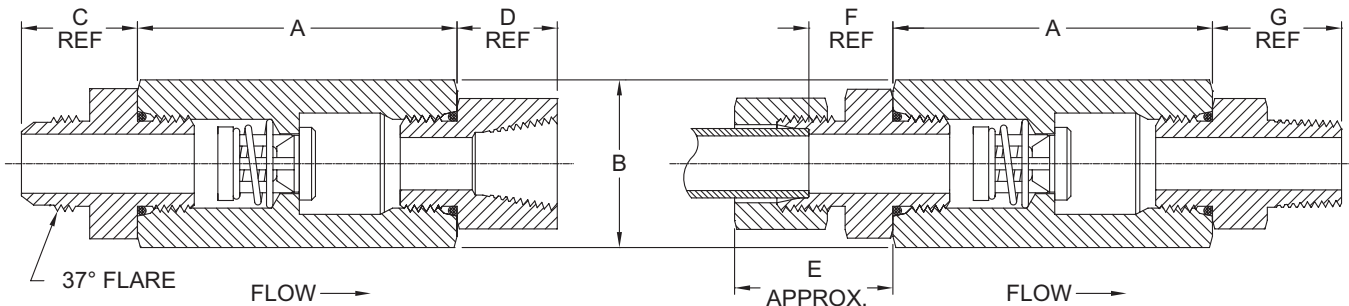
M3 – Male pipe **inlet** – female pipe **outlet**.

M7 – Tubing **inlet** – male pipe **outlet**.

M4 – Female pipe **inlet** – male pipe **outlet**.

M8 – Tubing **inlet** – female pipe **outlet**.

NOTE: When ordering styles M5 through M8 be sure to specify whether **compression (-C)** or **37° flare (-F)**.



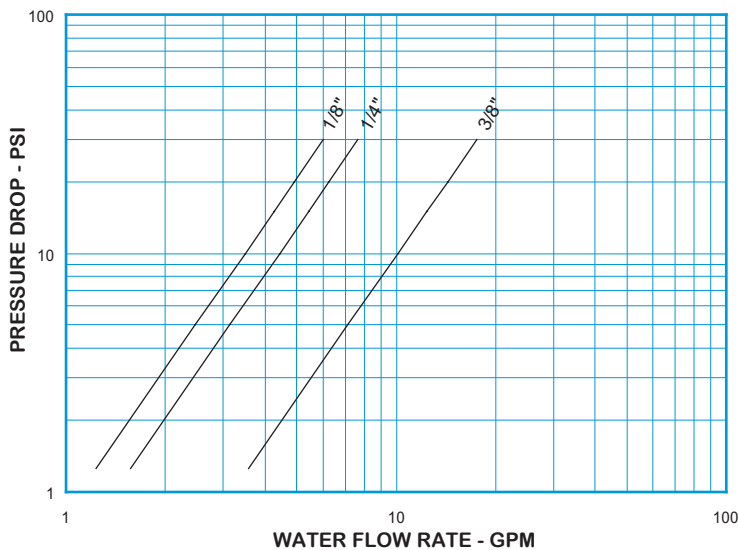
Nom. Pipe & Tube Size	Size Code	A	Hex Size B ^①	C	D	E	F	G	Orifice Diameter
1/8	A	2.16	7/8	0.75	0.71	0.93	0.11	0.73	0.348
1/4	B	2.16	7/8	0.92	0.84	1.23	0.57	0.97	0.348
3/8	C	2.48	1-1/8	0.92	0.91	1.32	0.59	1.00	0.464

① May be larger and/or round.

Body Material ^②	Non-Shock Pressure-Temp. Rating @ 100° F Consult factory for P-T rating above 100° F
316 Stainless Steel (SS)	5000 PSIG (1500 for o-ring seats)
Carbon Steel (CS)	
Brass (BR)	3000 PSIG (1500 for o-ring seats)

② See page 56 for material grade information.

Mini 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 M1-M8 C _v VALUES & VALVE WEIGHTS		
C _v	SIZE	ALL MATL
1.1	1/8	6.2 oz.
1.4	1/4	7.3 oz.
3.2	3/8	11.8 oz.

See page 51 for Flow Formulae.
Valve weights are approximate.

**HOW TO ORDER
CHECK-ALL STYLE M1 - M8**

BODY MATERIAL^②

BRASS = BR
CARBON STEEL = CS
316 SS = SS

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

SPECIAL OPTIONS

T = FEP ENCAPSULATED SPRING
-O = Outer o-ring seals same as seat

See pages 3 & 4 for temperature rating

-C = Compression Tube (M5 - M8 only)
-F = Flared Tube (M5 - M8 only)

VALVE STYLE

M1
M2
M3
M4
M5
M6
M7
M8

SIZE

1/8 = A
1/4 = B
3/8 = C

SEAT MATERIAL	STANDARD END FITTING O-RING MATERIAL
AFLAS® = AS	PTFE (TF)
BUNA-N = BN	BUNA-N (BN)
EPDM ^④ = EP	EPDM ^④ (EP)
KALREZ® = KZ	PTFE (TF)
"METAL-TO-METAL" = MT	SEE NOTE BELOW ^⑤
NEOPRENE = NE	NEOPRENE (NE)
PTFE (TF) = TF	PTFE (TF)
VITON™ = VT	VITON™ (VT)

See p. 3 for temp ratings

SPRING MATERIAL

316 SS = SS
ALLOY C-276 = HC
INCONEL® X750 OR 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. .125 PSI springs are not recommended for installations with flow vertical down.

② Brass valves have plated Carbon Steel tube fittings if applicable. Consult factory if other body or fitting materials are desired.

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 52 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.