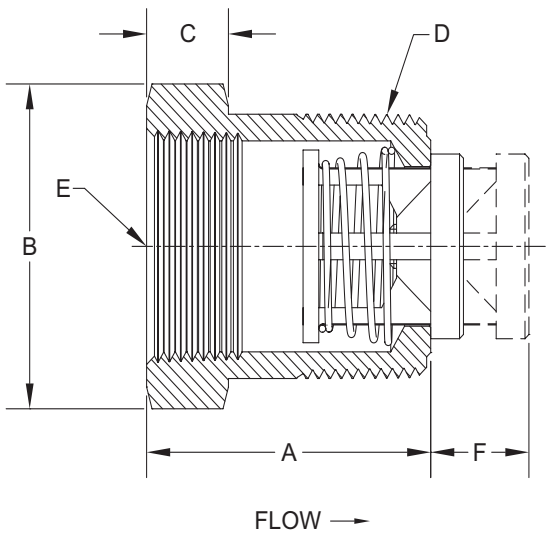


The **Bushing (BU, BR)** valve is a check valve with a standard bushing housing. The valve is adaptable to many types of service applications. It has very little restriction and produces a low pressure drop. It can be used quite effectively in systems where flow and pressure drop are critical by the use of a reducer coupling. The BU valve can also be used as a low pressure relief valve or vacuum breaker by using the desired spring settings.

The bushing thread sizes are designated by two sets of numbers; the first being the male thread, the second the female thread. NPT threads are per ASME B1.20.1. Also available with ISO 7 "R" (R male x Rp female) threads (BR).



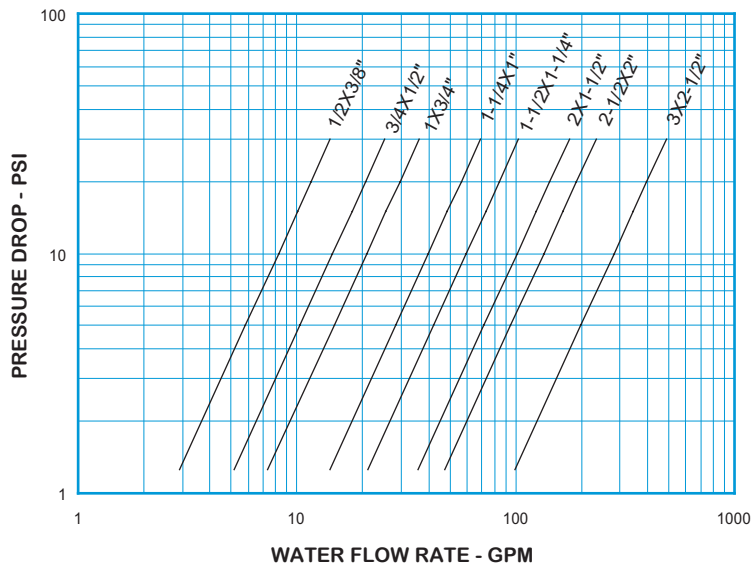
Nom. Pipe Size	Size Code	A	Hex ^① Size B	C	D	E	F ^②	Orifice Dia.
1/2 x 3/8	D	1.30	7/8	1/4	1/2 NPT	3/8 NPT	0.53	0.348
3/4 x 1/2	F	1.30	1-1/8	1/4	3/4 NPT	1/2 NPT	0.61	0.464
1 x 3/4	H	1.83	1-3/8	1/2	1 NPT	3/4 NPT	0.78	0.593
1-1/4 x 1	I	1.83	1-3/4	1/2	1-1/4 NPT	1 NPT	0.85	0.890
1-1/2 x 1-1/4	J	2.17	2	5/8	1-1/2 NPT	1-1/4 NPT	1.01	1.135
2 x 1-1/2	K	2.17	2-1/2	5/8	2 NPT	1-1/2 NPT	1.19	1.385
2-1/2 x 2	L	2.53	3	5/8	2-1/2 NPT	2 NPT	1.43	1.555
3 x 2-1/2	M	3.09	3-1/2	1	3 NPT	2-1/2 NPT	1.59	2.025

- ① May be larger and/or round.
- ② Maximum nominal dimension for a fully open valve with no spring.

Body Material ^③	Availability	Non-Shock Pressure-Temp. Rating @ 100° F Consult factory for P-T rating above 100° F
316 Stainless Steel (SS)	Standard	3000 PSIG (1500 PSIG for o-ring seats)
Carbon Steel (CS)		
Brass (BR)		
Alloy 20 (A2)	Semi-standard	
Alloy C-276 (HC)		
MONEL® 400 or Alloy R405		
Alloy B (HB)	Contact the factory for these or other materials	
Titanium (TI)		

③ See page 55 for material grade information.

Bushing
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.

STYLE BU C _v VALUES & VALVE WEIGHTS		
C _v	SIZE	ALL MATL
2.6	1/2 x 3/8	1.7 oz.
4.6	3/4 x 1/2	2.9 oz.
6.6	1 x 3/4	6.4 oz.
12.6	1-1/4 x 1	10.8 oz.
18.8	1-1/2 x 1-1/4	13.8 oz.
32.0	2 x 1-1/2	1.6 lb.
42.5	2-1/2 x 2	2.3 lb.
89.0	3 x 2-1/2	5.4 lb.

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

HOW TO ORDER CHECK-ALL STYLE BU

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 ratings

B

VALVE STYLE

NPT Threads = BU
ISO 7 R & Rp Threads = BR

SIZE

1/2 x 3/8 = D
3/4 x 1/2 = F
1 x 3/4 = H
1-1/4 x 1 = I
1-1/2 x 1-1/4 = J
2 x 1-1/2 = K
2-1/2 x 2 = L
3 x 2-1/2 = M

SEAT MATERIAL ②

AFLAS® = AS
BUNA-N = BN
EPDM ③ = EP
KALREZ® = KZ
"METAL-TO-METAL" = MT
NEOPRENE = NE
PTFE = TF
VITON™ = VT

See p. 3 for temperature ratings

SPRING MATERIAL

ALLOY C-276 = HC
INCONEL® X750 OR ALLOY X750 = IX
MONEL® 400 = MO
17-7PH SS = PH
316 SS = SS
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 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.
- ③ EP seats not recommended for use with Carbon Steel valves.

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ISO 9001 CERTIFIED

MADE IN USA 2019

Page information references listed on this cut sheet are available in the printed catalog as well as the digital catalog, which is available at www.checkall.com.

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VITON™ - The Chemours Company FC LLC

AFLAS® - AGC, Inc.