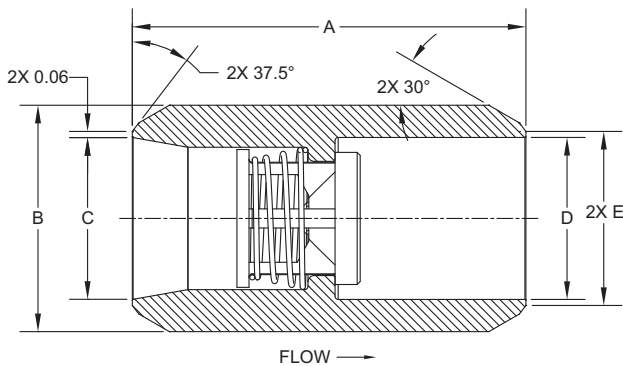


The **Butt Weld (B4, B8)** check valve is a one piece body machined from bar stock, eliminating porosity concerns and providing uniform density for more consistent welds. Made to ASME/ANSI B16.25 for schedule 40 pipe (B4), or schedule 80 pipe (B8) it carries rugged, dependable Check-All® trim with a wide variety of seat materials and cracking pressures to choose from. The Butt Weld valve can also be used as a low pressure relief valve or vacuum breaker by using the desired spring settings.

CAUTION: Please take sufficient measures when welding to prevent heat build-up and possible damage to the valve seat. See page 51 for additional installation information.



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

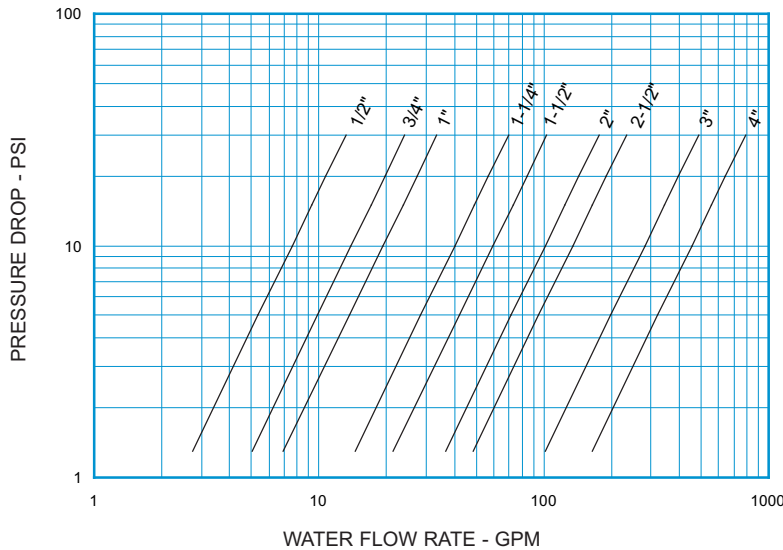
Nom. Pipe Size	Size Code	A	B ①	B4 Valve C & D	B8 Valve C & D	E	Orifice Diameter
1/2	D	2.16	15/16	0.622	0.546	0.84	0.348
3/4	F	2.71	1-3/16	0.824	0.742	1.05	0.464
1	H	2.95	1-1/2	1.049	0.957	1.32	0.593
1-1/4	I	3.64	1-7/8	1.380	1.278	1.66	0.890
1-1/2	J	3.91	2-1/4	1.610	1.500	1.90	1.135
2	K	4.36	2-3/4	2.067	1.939	2.38	1.385
2-1/2	L	5.00	3-1/4	2.469	2.323	2.88	1.555
3	M	5.44	3-3/4	3.068	2.900	3.50	2.025
4	N	6.80	4-3/4	4.026	3.826	4.50	2.560

① May be larger.

Body Material ②	Availability	Non-Shock Pressure-Temperature Rating			
316/316L Stainless Steel (SS)	Standard	1/2" - 1"	1-1/4" - 2-1/2"	3"	4"
Carbon Steel (CS)					
Alloy 20 (A2)	Semi-standard	5000 PSIG @ 100°F (1500 PSIG for o-ring seats)	4000 PSIG @ 100°F (1500 PSIG for o-ring seats)	3000 PSIG @ 100°F (1500 PSIG for o-ring seats)	1500 PSIG @ 100°F
Alloy C-276 (HC)					
Alloy 400 or Monel® (MO)					
Alloy B (HB)	Contact the factory for these or other materials				

② See page 53 for material grade information.

Butt Weld Valve
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 B4 C _v VALUES & VALVE WEIGHTS		
C _v	SIZE	SS & CS Alloys
2.4	1/2	4.6 oz.
4.4	3/4	9.1 oz.
6.1	1	15.0 oz.
12.7	1-1/4	1.7 lb.
18.8	1-1/2	2.6 lb.
32.0	2	4.1 lb.
42.5	2-1/2	6.3 lb.
89.0	3	8.4 lb.
144	4	15.2 lb.

See page 49 for Flow Formulae. Valve weights are approximate.

**HOW TO ORDER
CHECK-ALL STYLE B4, B8**

BODY MATERIAL
ALLOY 20 = A2
CARBON STEEL = CS
ALLOY B = HB
ALLOY C-276 = HC
ALLOY 400 OR MONEL® = MO
316/316L 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
(Sizes D-J Only)

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

SPECIAL OPTIONS
T = FEP ENCAPSULATED SPRING
See p. 4 for temperature rating
Contact the factory for more options

B

VALVE STYLE
SCH 40 PIPE = B4
SCH 80 PIPE = B8

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® = KZ
“METAL-TO-METAL” = MT
NEOPRENE = NE
PTFE = TF
VITON® = VT
See p. 3 for temperature ratings

SPRING MATERIAL
316 SS = SS
ALLOY C-276 = HC
ALLOY B = HB
ALLOY X750 OR INCONEL® X750 = IX
ALLOY 400 OR MONEL® = 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 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 50 for allowable leakage rates.
- ③ EP seats not recommended for use with Carbon Steel valves.