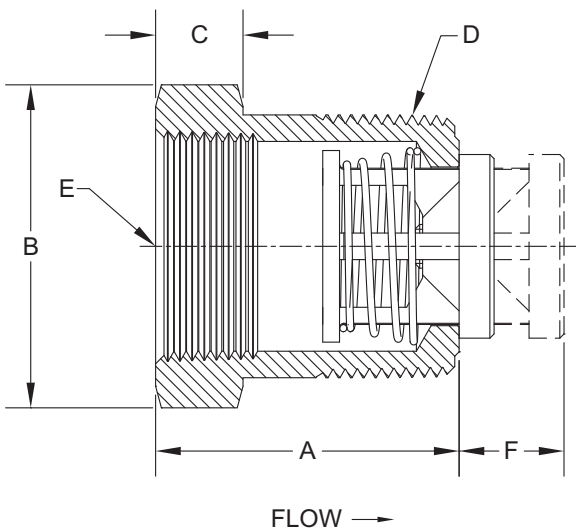


The **Bushing (BU)** valve is a check valve with a standard bushing housing. The valve is adaptable to many types of service applications. It has very little restriction and produces a low pressure drop. It can be used quite effectively in systems where flow and pressure drop are critical by the use of a reducer coupling. The Bushing valve also makes an excellent **vacuum breaker**. The high flow rate insures maximum effectiveness for vacuum breaker service. By reversing the direction of flow it can also be used as a low-pressure **relief valve**.

The bushing thread sizes are designated by two sets of numbers; the first being the male thread, the second the female thread. Threads are per ASME B1.20.1.



| Nom. Pipe Size | Size Code | A    | Hex Size B <sup>①</sup> | C   | D         | E         | F <sup>②</sup> | 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        |

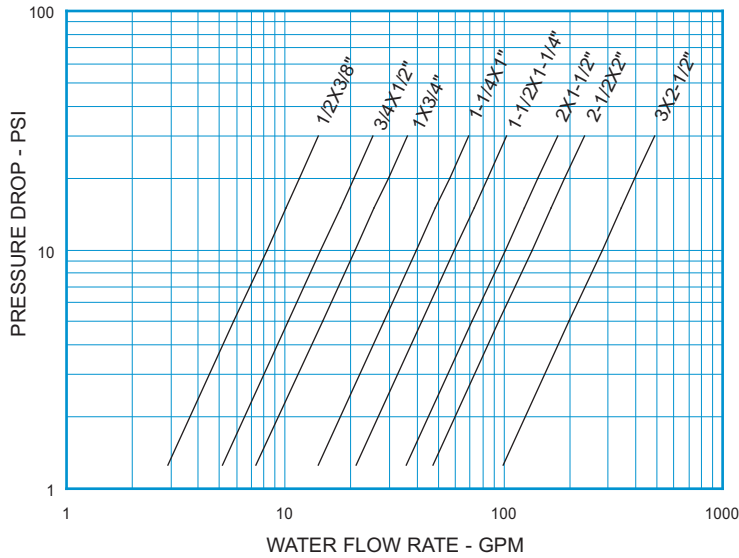
<sup>①</sup> May be larger and/or round.

<sup>②</sup> Maximum nominal dimension for a fully open valve with no spring.

| Body Material <sup>③</sup> | Availability                                     | Non-Shock Pressure-Temperature Rating             |
|----------------------------|--|---|
| 316 Stainless Steel (SS)   | Standard   | 3000 PSIG @ 100°F<br>(1500 PSIG for o-ring seats) |
| Carbon Steel (CS)          |  |   |
| Brass (BR)                 |  |   |
| Alloy 20 (A2)              | Semi-standard                                    |   |
| Alloy C-276 (HC)           |  |   |
| Monel® (MO)                |  |   |
| Alloy B (HB)               | Contact the factory for these or other materials |   |
| Titanium (TI)              |  |   |

<sup>③</sup> See page 54 for material grade information.

**Bushing**  
For Water at 72°F

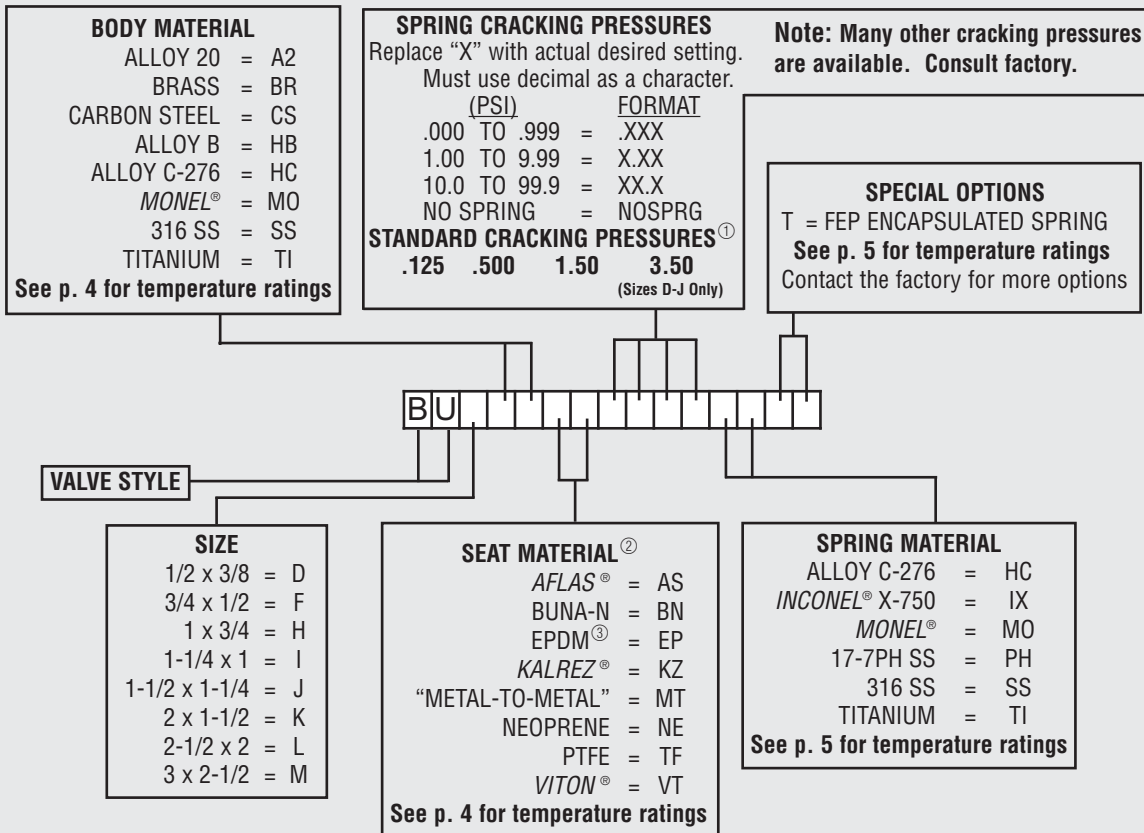


**Note:** All flow curves and Cv values presume the valves are fully open with 1/2 PSI cracking pressure springs. Consult the factory for more information.

| STYLE BU<br>C <sub>v</sub> VALUES & VALVE WEIGHTS |               |          |
|---|---------------|----------|
| C <sub>v</sub>                                    | 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 50 for Flow Formulae.  
Valve weights are approximate.

## HOW TO ORDER CHECK-ALL STYLE BU



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. Cracking pressure tolerance is +/- 15%. .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 51 for allowable leakage rates.
- ③ EP seats not recommended for use with Carbon Steel valves.