

 **STOCKHAM**<sup>®</sup>

brands you trust.



STOCKHAM<sup>®</sup> - Bronze Valves

**CRANE**<sup>®</sup>

Energy Flow Solutions

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# **SETTING THE STANDARD IN SERVICE**

Stockham is committed to setting the standard in quality service to the Commercial Construction industry.

Our pledge to our customers is:

- A friendly voice every time you call
- Quick response to your quotes and questions
- On-time delivery
- Accurate shipments

## Figure Number Index

| GLOBE/ANGLE VALVES |      |
|--------------------|------|
| FIG. NO.           | PAGE |
| B-13T .....        | 9    |
| B-14T .....        | 10   |
| B-16 .....         | 11   |
| B-17 .....         | 12   |
| B-20T .....        | 14   |
| B-22T .....        | 15   |
| B-29 .....         | 17   |
| B-32T .....        | 18   |
| B-37 .....         | 19   |
| B-62 .....         | 20   |
| B-64 .....         | 21   |
| B-66 .....         | 23   |
| B-74 .....         | 25   |
| B-220 .....        | 13   |
| B-222T .....       | 16   |
| B-264 .....        | 22   |
| B-266 .....        | 24   |
| B-274 .....        | 26   |

| GATE VALVES   |      |
|---------------|------|
| FIG. NO.      | PAGE |
| B-100 .....   | 27   |
| B-103 .....   | 29   |
| B-104 .....   | 30   |
| B-105 .....   | 31   |
| B-108 .....   | 28   |
| B-120 .....   | 32   |
| B-122 .....   | 33   |
| B-128 .....   | 34   |
| B-131 .....   | 35   |
| B-132 .....   | 36   |
| B-135 .....   | 37   |
| B-144 .....   | 38   |
| B-145 .....   | 39   |
| B-147 .....   | 40   |
| LFB-103 ..... | 60   |
| LFB-104 ..... | 61   |

| CHECK VALVES        |      |
|---------------------|------|
| FIG. NO.            | PAGE |
| B-309C .....        | 47   |
| B-309Y .....        | 48   |
| B-310BY .....       | 41   |
| B-310TC .....       | 42   |
| B-310TY .....       | 43   |
| B-316 .....         | 51   |
| B-319C .....        | 49   |
| B-319Y .....        | 50   |
| B-320BY .....       | 44   |
| B-320TY .....       | 45   |
| B-320BC/TC/VC ..... | 46   |
| B-321 .....         | 54   |
| B-322B .....        | 52   |
| B-322T .....        | 53   |
| B-337 .....         | 55   |
| B-345 .....         | 56   |
| B-367 .....         | 58   |
| B-375 .....         | 57   |
| LFB-309Y .....      | 62   |
| LFB-319Y .....      | 63   |

**NOTE:** Add "K" to figure numbers above to designate valves assembled and tested in the USA. For example, B-100K, B-309YK, etc.

# Index

|                                  |       |
|----------------------------------|-------|
| <b>General Information</b> ..... | 6-9   |
| <b>Globe and Angle Valves</b>    |       |
| Class 125 / 200 CWP .....        | 9-12  |
| Class 150 / 300 CWP .....        | 13-17 |
| Class 200.....                   | 18-22 |
| Class 300.....                   | 23-26 |
| <b>Gate Valves</b>               |       |
| Class 125 / 200 CWP .....        | 27-31 |
| Class 150 / 300 CWP .....        | 32-35 |
| Class 200.....                   | 36-37 |
| Class 300.....                   | 38-40 |
| <b>Check Valves</b>              |       |
| Class 125 / 200 CWP .....        | 41-51 |
| Class 150 / 300 CWP .....        | 52-54 |
| Class 200.....                   | 55-56 |
| Class 300.....                   | 57-58 |
| <b>Bronze Lead Free Valves</b>   |       |
| <b>Gate Valves</b>               |       |
| Class 125 / 200 CWP .....        | 60-61 |
| <b>Swing Check Valves</b>        |       |
| Class 125 / 200 CWP .....        | 62-63 |

## Cross Reference for Commonly Used Valves

### BRONZE VALVES

| <b>GATE</b>            | <b>CRANE®</b> | <b>NIBCO</b> | <b>Milwaukee</b> | <b>Stockham®</b> |
|------------------------|---------------|--------------|------------------|------------------|
| Class 125 RS-Threaded  | 428           | T-111        | 148              | B-100            |
| Class 125 NRS-Threaded | 438           | T-113        | 105              | B-103            |
| Class 125 RS-Solder    | 1330          | S-111        | 149              | B-108            |
| Class 125 NRS-Solder   | 1320          | S-113        | 115              | B-104            |
| Class 150 Union Bonnet | 431UB         | T-134        | 1151             | B-120            |
| Class 300 SS Trim      | 634E          | T-174-SS     | 1184             | B-145            |
| <b>GLOBE</b>           |               |              |                  |                  |
| Class 125              | 1             | T-211-B      | 502              | B-16             |
| Class 300 SS Trim      | 382P          | T-275        | 593A             | B-74             |
| <b>CHECK</b>           |               |              |                  |                  |
| Class 125 Threaded     | 37            | T-413-BY     | 509              | B-319Y           |
| Class 125 Solder       | 1340          | S-413-B      | 1509             | B-309Y           |
| Class 300 Swing Check  | 76E           | T-473-B      | 507              | B-375            |
| Class 300 Lift Check   | 366E          | ----         | ----             | B-367            |

### IRON VALVES

| <b>GATE</b>                      | <b>CRANE®</b> | <b>NIBCO</b> | <b>Milwaukee</b> | <b>Powell</b> | <b>Walworth</b> | <b>Stockham®</b> |
|----------------------------------|---------------|--------------|------------------|---------------|-----------------|------------------|
| Class 125 NRS                    | 461           | F-619        | F2882 A          | 1787          | W719F           | G-612            |
| Class 125 OS&Y                   | 465 ½         | F-617-0      | F2885 A          | 1793          | W726F           | G-623            |
| Class 250 OS&Y                   | 7 ½E          | F-667-0      | F2894 A          | 1797          | W786F           | F-667            |
| <b>GLOBE</b>                     |               |              |                  |               |                 |                  |
| Class 125                        | 351           | F-718-B      | F2981 A          | 241           | W906F           | G-512            |
| <b>SWING CHECK</b>               |               |              |                  |               |                 |                  |
| Class 125                        | 373           | F-918-B      | F2974 A          | 559           | W928F           | G-931            |
| <b>STOP CHECK</b>                |               |              |                  |               |                 |                  |
| Class 250 Straight-Way Y-Pattern | 28E           | ----         | ----             | ----          | ----            | F-540            |
| Class 250 Angle Y-Pattern        | 30E           | F-869-B      | ----             | ----          | ----            | F-541            |

# Pressure-Temperature Ratings

Stockham bronze valves have been specified, installed, and are proven performers in commercial and industrial facilities internationally. The broadness and unsurpassed quality of the Stockham line appeal to consulting engineers, mechanical contractors, and industrial users alike.

## QUALITY MANAGEMENT

Stockham is committed to a philosophy of total quality management. It begins with design, to comply with pertinent MSS and ASME Standards. Continuous improvement is applied in a process to improve materials and services to meet or exceed customer needs.

## MATERIALS

The basic bronze pressure-containing parts conform to either the American Society for Testing and Materials Specifications B-61 or B-62. Materials for most valve parts are listed in this catalog section. Changes in materials may be made without notice.

### PRESSURE-TEMPERATURE RATINGS, NONSHOCK

The pressure classes available have these rated working pressures:

| Press. Class      | PRESSURE-PSI |     |     |           |      |     |
|-------------------|--------------|-----|-----|-----------|------|-----|
|                   | 125          | 150 |     | 200       | 300  |     |
| End Conn.         | THD          | THD | FLG | THD       | THD  | FLG |
| Temp.<br>(Deg. F) | MATERIAL     |     |     |           |      |     |
|                   | ASTM B-62    |     |     | ASTM B-61 |      |     |
| -20 to            |              |     |     |           |      |     |
| 150               | 200          | 300 | 225 | 400       | 1000 | 500 |
| 200               | 185          | 270 | 210 | 375       | 920  | 475 |
| 250               | 170          | 240 | 195 | 350       | 830  | 450 |
| 300               | 155          | 210 | 180 | 325       | 740  | 425 |
| 350               | 155          | 210 | 165 | 300       | 650  | 400 |
| 400               | -            | -   | -   | 275       | 560  | 375 |
| 406               | 125          | 150 | 150 | -         | -    | -   |
| 450               | 120          | 145 | -   | 250       | 480  | 350 |
| 500               | -            | -   | -   | 225       | 390  | 325 |
| 550               | -            | -   | -   | 200       | 300  | 300 |

#### NOTES:

- Buna-N Disc Valves limited to 150°F temperatures.
- PTFE and Viton® Disc Valves are limited to 450°F temperatures.
- For lower temperatures, Pressures for Temperatures -20 to 150 shall apply - Uses for low temperatures shall conform to the rules of Applicable Codes under which they are to be used.
- P-T Ratings-ASME B16.24-1971.
- Some codes (i.e. ASME BPVC, Section 1) limit the rating temperatures of B-62 material to 406°F.
- Solder End Valves are limited by temperatures which affect the strength of the solder joint. These ratings must be adjusted as below.
- Internal pressures great enough to burst castings can be developed during the formation of ice. Valves should be protected so that contained media does not freeze.
- Class 300 Valves, 2 ½" and 3" are rated by MSS SP-80 to 600 psi CWP maximum including B-375 bronze check valve.
- Class 200 & 300 valves made of ASTM B62 are limited to 450°F.

### ADJUSTED PRESSURE RATINGS

Joints made of Copper Tube and Solder End Valves  
(Pounds per square inch)  
Extracted from MSS SP-80

| SOLDER USED IN JOINTS                                 | SERVICE TEMPERATURE DEGREES F | WATER, including other non-corrosive liquids and gases |                 |                 | SATURATED STEAM (psig) |
|---|-------------------------------|--|-----------------|-----------------|------------------------|
|   |                               | Valve Sizes  |                 |                 | Valve Sizes            |
|   |                               | ¼" through 1"  | 1 ¼" through 2" | 2 ½" through 4" | ¼" through 4"          |
| 50-50<br>Tin-Lead<br>(ASTM B-32,<br>Alloy Grade 50-A) | 100                           | 200  | 175             | 150             | -                      |
|   | 150                           | 150  | 125             | 100             | -                      |
|   | 200                           | 100  | 90              | 75              | -                      |
|   | 250                           | 85   | 75              | 50              | 15                     |
| 95-5<br>Tin-Antimony                                  | 100                           | 500  | 400             | 300             | -                      |
|   | 150                           | 400  | 350             | 275             | -                      |
|   | 200                           | 300  | 250             | 200             | -                      |
|   | 250                           | 200  | 175             | 150             | 15                     |

## Design: Gate, Globe & Angle Valves Classes 125 - 300

### Gate Valves Classes 125, 150, 200 and 300

**Handwheel**—Strong malleable handwheels dissipate heat rapidly and are accurately fitted to stems.

**Nameplate**—Aluminum nameplates are used for valve identification.

**Stem**—Copper-silicon bronze stems have excellent corrosion resistance and superior strength.

**Bonnet**—Bonnetts are either threaded, union, or bolted type. Ample packing chamber depth with adequate packing is provided for maximum life.

**Wedge**—All wedges are the tapered solid type. Wedge guides assure alignment and minimize friction on seats. Wedges are completely out of the line of flow when valves are open.

**Body**—Bodies have guides for close and accurate disc travel. Threaded pipe ends conform to the ASME B.1.20.1 Standard. Solder ends conform to the ASME Standard for Solder Joint Fittings B16.18. They are suitable for use with Types K, L, and M copper tubing handling nonflammable materials. End flanges of flanged valves are faced and drilled to meet ASME B16.24, the standard covering Classes 150 and 300 bronze flanges.

**Seat Rings**—Certain valves are furnished with stainless steel seat rings, swaged into bodies. This provides wear resistance and improves corrosion resistance and longer life.

### Globe and Angle Valves Classes 125, 150, 200 and 300

**Handwheel**—Strong malleable handwheels dissipate heat rapidly and are accurately fitted to stems.

**Nameplate**—Aluminum nameplates are used for valve identification.

**Stem**—Copper-silicon bronze stems have excellent corrosion resistance and superior strength.

**Bonnet**—Bonnetts are either threaded, union, or bolted type. Ample packing chamber depth with adequate packing is provided for maximum life.

**Seat Ring**—Renewable seats are furnished on most Class 150, 200, and 300 valves. The materials for each valve in this catalog are clearly specified.

**Disc**—Discs may be metal in the plug, fullway, needle-type design or PTFE. The available materials are noted on each valve page.

**Body**—Bodies are designed for easy flow with ample wall sections for adequate strength. Threaded pipe ends conform to the ASME B1.20.1. Solder ends conform to the ASME Standard for Solder Joint Fittings B16.18. They are used with Types K, L and M copper tubing handling nonflammable materials.

End flanges of flanged valves are faced and drilled to meet ASME B16.24, the standard covering Classes 150 and 300 bronze flanges.

## Design: Swing and Lift Check Valves Classes 125 - 300

**Body**—Threaded pipe ends conform to ASME B1.20.1. Most threaded end valves can be bored for silver brazed end connections. Solder ends comply with the ASME Standard for Solder Joint Fittings B16.18 and are suitable for use with Types K, L, and M copper tubing handling nonflammable materials.

End flanges of flanged valves are faced and drilled to meet ASME B16.24.

**Cap**—Caps on threaded end check valves have threaded or union body connections with sturdy wrench grips.

**Disc**—Discs may be nonmetallic (PTFE, Viton® or Buna-N) or metal (bronze). The available materials are noted on each valve page. Disc and disc holders are guided during travel by caps or bodies. The nonmetallic discs are securely fastened in disc holders and are easily replaced.

**Hinge, Hinge Pin, Side Plug**—Swing check hinges are mounted on type 304 hinge pins which are held in place by side plugs.

**Marking**—For identification, each globe and gate valve has a metal identification plate under the handwheel nut showing the Stockham figure number.

**Testing**—Before shipment, each and every valve is individually tested under pressure for soundness of body castings and tight closure.

**Packaging**—All valves are shipped in sturdy cardboard containers. This packaging protects the valves during shipment and facilitates storage.

**Weights and Dimensions**—Complete information on weights and dimensions is incorporated on the same pages with the valve listings. Weights and dimensions are furnished for estimating purposes only and are subject to change without notice except for basic dimensions established by accepted standards.

### Cv COEFFICIENTS\*

(For Estimating Purposes Only)

| SIZE  | GATE   | GLOBE  |        | ANGLE  | CHECK        |            |       |
|-------|--------|--------|--------|--------|--------------|------------|-------|
|       |        | Std.   | Needle |        | Y-Type Swing | Std. Swing | Lift  |
| 1/8   | 4.66   | 0.71   | 0.16   | -      | -            | 1.86       | -     |
| 1/4   | 8.52   | 1.31   | 0.37   | 1.97   | 2.41         | 3.41       | 0.98  |
| 3/8   | 15.64  | 2.40   | 0.51   | 3.61   | 4.42         | 6.25       | 1.81  |
| 1/2   | 24.89  | 3.82   | 1.09   | 5.75   | 7.04         | 9.96       | 2.87  |
| 3/4   | 45.40  | 6.96   | 2.25   | 10.48  | 12.84        | 18.16      | 5.24  |
| 1     | 76.70  | 11.77  | -      | 17.71  | 21.70        | 30.68      | 8.86  |
| 1 1/4 | 135.73 | 20.82  | -      | 31.35  | 38.40        | 54.29      | 15.67 |
| 1 1/2 | 189.09 | 29.01  | -      | 43.67  | 53.48        | 75.64      | 21.83 |
| 2     | 327.67 | 50.26  | -      | 75.67  | 92.67        | 131.07     | 37.84 |
| 2 1/2 | 480.32 | 73.68  | -      | 110.93 | -            | 192.13     | 55.46 |
| 3     | 741.65 | 113.76 | -      | 171.28 | -            | 296.66     | 85.64 |

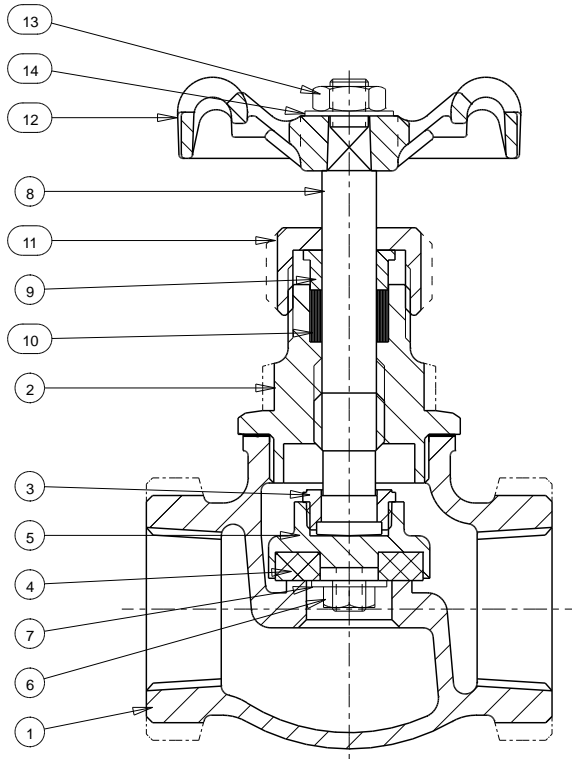
\* Fully open. Cv = GPM @ 1 PSI Pressure Drop, 60°F Water

Viton® is a registered trademark of DuPont Performance Elastomers L.L.C.



# Class 125 • Threaded Bonnet • PTFE Disc • Threaded Ends

## Globe Valve Figure B-13T



### Materials of Construction

| No. | Description        | Material                 | ASTM Spec.       |
|-----|--------------------|--------------------------|------------------|
| 1   | Body               | Bronze                   | B-62 C83600      |
| 2   | Bonnet             | Bronze                   | B-62 C83600      |
| 3   | Disc Stem Ring     | Copper Silicon Steel     | B-371 C69400     |
| 4   | Disc               | PTFE (25% Glass Filled)  |                  |
| 5   | Disc Holder        | Bronze                   | B-62 C83600      |
| 6   | Disc Retaining Nut | Brass                    | BSEN12164 CW614N |
| 7   | Washer             | (2 1/2" - 3") Brass      | BSEN12164 CW614N |
| 8   | Stem               | Copper Silicon Steel     | B-371 C69400     |
| 9   | Gland              | Brass                    | BSEN12164 CW614N |
| 10  | Packing            | Graphite (Asbestos Free) |                  |
| 11  | Packing Nut        | Brass                    | BSEN12164 CW614N |
| 12  | Handwheel          | Malleable Iron           | A-197 F22000     |
| 13  | Handwheel Nut      | Brass                    | BSEN12164 CW614N |
| 14  | ID Plate           | Aluminum                 |                  |

#### NOTE:

The addition of the letter "K" at the end of the figure number designates valves assembled & tested in the USA. Materials of Construction & Dimensions are the same.

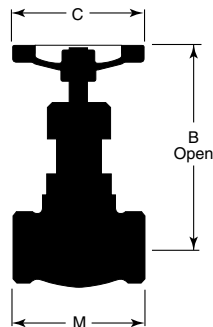
### Industry Standards

With the exception of the port opening, complies with MSS SP-80 Type 2

See Page 6 for Pressure-Temperature Ratings

### Dimensions and Weights

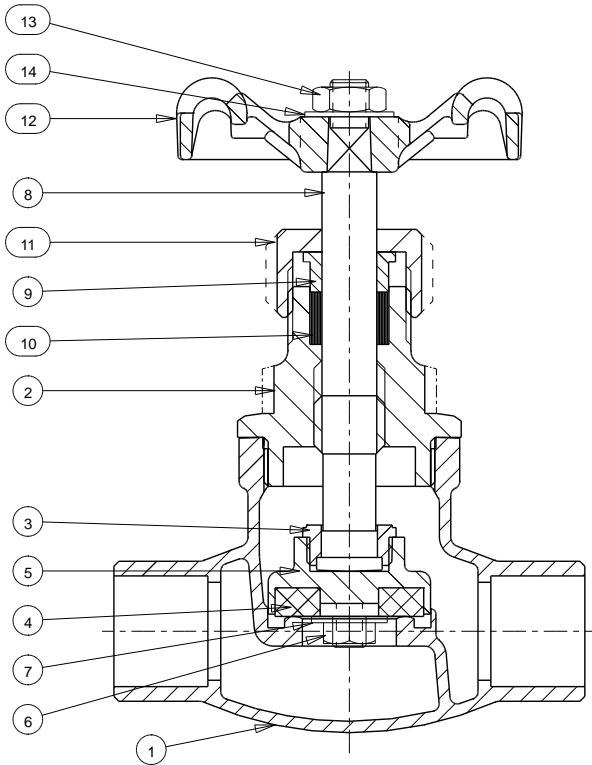
Inches (millimeters) - Pounds (kilograms)



| Valve Size | Dimensions |       |       | Wt.    |
|------------|------------|-------|-------|--------|
|            | B          | C     | M     |        |
| 3/8        | 3.94       | 2.05  | 2.05  | 0.86   |
|            | (100)      | (52)  | (52)  | (0.39) |
| 1/2        | 3.98       | 2.05  | 2.44  | 1.19   |
|            | (101)      | (52)  | (62)  | (0.54) |
| 3/4        | 4.53       | 2.05  | 2.91  | 1.43   |
|            | (115)      | (52)  | (74)  | (0.65) |
| 1          | 4.92       | 2.76  | 3.54  | 1.79   |
|            | (125)      | (70)  | (90)  | (0.81) |
| 1 1/4      | 5.91       | 2.76  | 3.94  | 3.42   |
|            | (150)      | (70)  | (100) | (1.55) |
| 1 1/2      | 6.26       | 3.62  | 4.53  | 4.43   |
|            | (159)      | (92)  | (115) | (2.01) |
| 2          | 7.52       | 4.06  | 5.35  | 6.79   |
|            | (191)      | (103) | (136) | (3.08) |

# 200 CWP • Threaded Bonnet • PTFE Disc • Solder Ends

## Globe Valve Figure B-14T



### Materials of Construction

| No. | Description        | Material                 | ASTM Spec.       |
|-----|--------------------|--------------------------|------------------|
| 1   | Body               | Bronze                   | B-62 C83600      |
| 2   | Bonnet             | Bronze                   | B-62 C83600      |
| 3   | Disc Stem Ring     | Copper Silicon Bronze    | B-371 C69400     |
| 4   | Disc               | PTFE (25% Glass Filled)  |                  |
| 5   | Disc Holder        | Bronze                   | B-62 C83600      |
| 6   | Disc Retaining Nut | Brass                    | BSEN12164 CW614N |
| 7   | Washer             | Brass                    | BSEN12164 CW614N |
| 8   | Stem               | Copper Silicon Steel     | B-371 C69400     |
| 9   | Gland              | Brass                    | BSEN12164 CW614N |
| 10  | Packing            | Graphite (Asbestos Free) |                  |
| 11  | Packing Nut        | Brass                    | BSEN12164 CW614N |
| 12  | Handwheel          | Malleable Iron           | A-197 F22000     |
| 13  | Handwheel Nut      | Brass                    | BSEN12164 CW614N |
| 14  | ID Plate           | Aluminum                 |                  |

**NOTE:**

The addition of the letter "K" at the end of the figure number designates valves assembled & tested in the USA. Materials of Construction & Dimensions are the same.

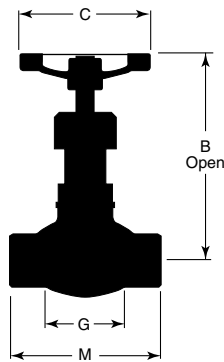
### Industry Standards

Complies with MSS SP-80 Type 2

See Page 6 for Pressure-Temperature Ratings

### Dimensions and Weights

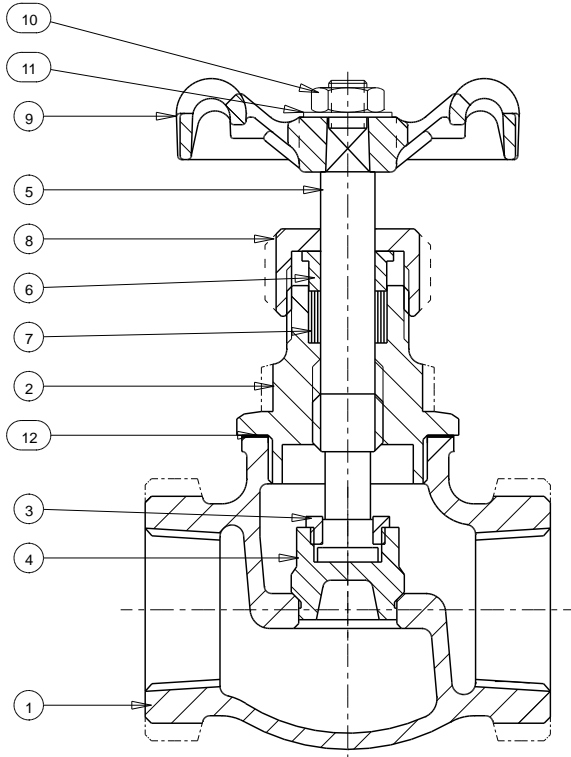
Inches (millimeters) - Pounds (kilograms)



| Valve Size | Dimensions |       |       |       | Wt.    |
|------------|------------|-------|-------|-------|--------|
|            | B          | C     | G     | M     |        |
| 3/8        | 3.94       | 2.05  | 1.56  | 2.32  | 1.90   |
|            | (100)      | (52)  | (40)  | (59)  | (0.39) |
| 1/2        | 3.98       | 2.05  | 1.93  | 2.91  | 2.62   |
|            | (101)      | (52)  | (49)  | (74)  | (0.54) |
| 3/4        | 4.53       | 2.05  | 2.24  | 3.74  | 3.15   |
|            | (115)      | (52)  | (57)  | (95)  | (0.65) |
| 1          | 4.92       | 2.76  | 2.74  | 4.57  | 3.95   |
|            | (125)      | (70)  | (70)  | (116) | (0.81) |
| 1 1/4      | 5.91       | 2.76  | 2.99  | 4.92  | 7.54   |
|            | (150)      | (70)  | (76)  | (125) | (1.55) |
| 1 1/2      | 6.26       | 3.62  | 3.52  | 5.75  | 9.31   |
|            | (159)      | (92)  | (90)  | (146) | (2.01) |
| 2          | 7.52       | 4.06  | 4.40  | 7.09  | 14.97  |
|            | (191)      | (103) | (112) | (180) | (3.08) |

# Class 125 • Threaded Bonnet • Bronze Disc • Threaded Ends

## Globe Valve Figure B-16



### Materials of Construction

| No. | Description    | Material   | ASTM Spec.       |
|-----|----------------|--|------------------|
| 1   | Body           | Bronze   | B-62 C83600      |
| 2   | Bonnet         | Brass  | B-62 C83600      |
| 3   | Disc Stem Ring | Copper Silicon Bronze                                      | B-371 C69400     |
| 4   | Disc           | ( $\frac{1}{4}$ " - $\frac{3}{4}$ ") Copper Silicon Bronze | B-371 C69400     |
|     |                | (1" - 2") Bronze   | B-62 C83600      |
| 5   | Stem           | Copper Silicon Bronze                                      | B-371 C69400     |
| 6   | Gland          | Brass  | BSEN12164 CW614N |
| 7   | Packing        | Graphite (Asbestos Free)                                   |                  |
| 8   | Packing Nut    | Brass  | BSEN12164 CW614N |
| 9   | Handwheel      | Malleable Iron   | A-197 F22000     |
| 10  | Handwheel Nut  | Brass  | BSEN12164 CW614N |
| 11  | ID Plate       | Aluminum   |                  |
| 12  | Gasket         | Synthetic Glass Fiber with Nitrile Filled                  |                  |

**NOTE:**

The addition of the letter "K" at the end of the figure number designates valves assembled & tested in the USA. Materials of Construction & Dimensions are the same.

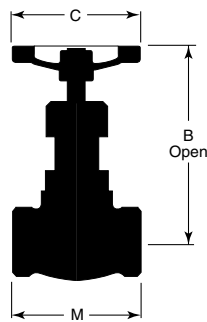
### Industry Standards

Complies with MSS SP-80 Type 1

See Page 6 for Pressure-Temperature Ratings

### Dimensions and Weights

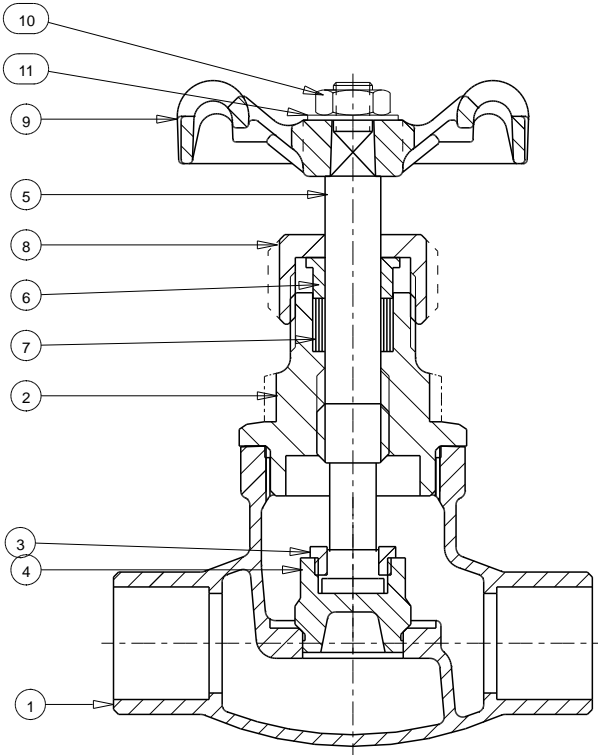
Inches (millimeters) - Pounds (kilograms)



| Valve Size      | Dimensions |       |       | Wt.    |
|-----------------|------------|-------|-------|--------|
|                 | B          | C     | M     |        |
| $\frac{1}{4}$   | 3.94       | 2.05  | 2.05  | 0.88   |
|                 | (100)      | (52)  | (52)  | (0.40) |
| $\frac{3}{8}$   | 3.94       | 2.05  | 2.05  | 0.86   |
|                 | (100)      | (52)  | (52)  | (0.39) |
| $\frac{1}{2}$   | 3.98       | 2.05  | 2.44  | 1.19   |
|                 | (101)      | (52)  | (62)  | (0.54) |
| $\frac{3}{4}$   | 4.53       | 2.05  | 2.91  | 1.43   |
|                 | (115)      | (52)  | (74)  | (0.65) |
| 1               | 4.92       | 2.76  | 3.54  | 1.98   |
|                 | (125)      | (70)  | (90)  | (0.90) |
| 1 $\frac{1}{4}$ | 5.91       | 2.76  | 3.94  | 3.48   |
|                 | (150)      | (70)  | (100) | (1.58) |
| 1 $\frac{1}{2}$ | 6.26       | 3.62  | 4.53  | 4.54   |
|                 | (159)      | (92)  | (115) | (2.06) |
| 2               | 7.52       | 4.06  | 5.35  | 7.30   |
|                 | (191)      | (103) | (136) | (3.31) |

# 200 CWP • Threaded Bonnet • Bronze Disc • Solder Ends

## Globe Valve Figure B-17



### Materials of Construction

| No. | Description    | Material  | ASTM Spec.       |
|-----|----------------|---|------------------|
| 1   | Body           | Bronze  | B-62 C83600      |
| 2   | Bonnet         | Bronze  | B-62 C83600      |
| 3   | Disc Stem Ring | Copper Silicon Bronze                                     | B-371 C69400     |
| 4   | Disc           | ( $\frac{1}{2}$ " - $\frac{3}{4}$ " Copper Silicon Bronze | B-371 C69400     |
|     |                | (1" - 2") Bronze  | B-62 C83600      |
| 5   | Stem           | Copper Silicon Bronze                                     | B-371 C69400     |
| 6   | Gland          | Brass   | BSEN12164 CW614N |
| 7   | Packing        | Graphite (Asbestos Free)                                  |                  |
| 8   | Packing Nut    | Brass   | BSEN12164 CW614N |
| 9   | Handwheel      | Malleable Iron  | A-197 F22000     |
| 10  | Handwheel Nut  | Brass   | BSEN12164 CW614N |
| 11  | ID Plate       | Aluminum  |                  |

**NOTE:**

The addition of the letter "K" at the end of the figure number designates valves assembled & tested in the USA. Materials of Construction & Dimensions are the same.

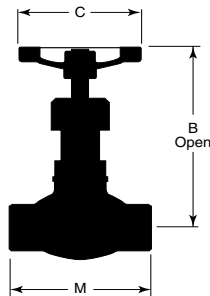
### Industry Standards

Complies with MSS SP-80 Type 1

See Page 6 for Pressure-Temperature Ratings

### Dimensions and Weights

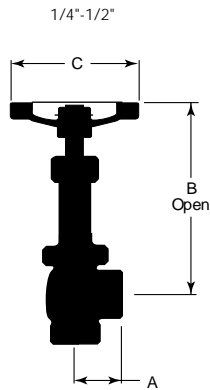
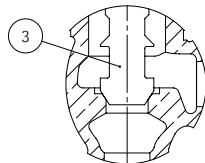
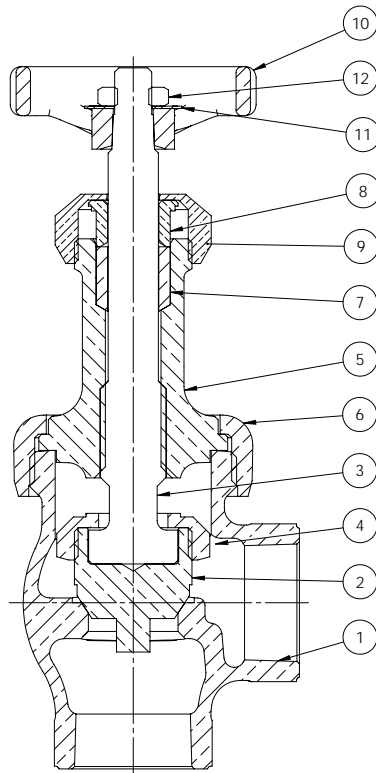
Inches (millimeters) - Pounds (kilograms)



| Valve Size      | Dimensions |       |       | Wt.    |
|-----------------|------------|-------|-------|--------|
|                 | B          | C     | M     |        |
| $\frac{1}{2}$   | 3.98       | 2.05  | 2.91  | 1.19   |
|                 | (101)      | (52)  | (74)  | (0.54) |
| $\frac{3}{4}$   | 4.53       | 2.05  | 3.74  | 1.43   |
|                 | (115)      | (52)  | (95)  | (0.65) |
| 1               | 4.92       | 2.76  | 4.57  | 1.98   |
|                 | (125)      | (70)  | (116) | (0.90) |
| 1 $\frac{1}{4}$ | 5.91       | 2.76  | 4.92  | 3.48   |
|                 | (150)      | (70)  | (125) | (1.58) |
| 1 $\frac{1}{2}$ | 6.26       | 3.62  | 5.75  | 4.54   |
|                 | (159)      | (92)  | (146) | (2.06) |
| 2               | 7.52       | 4.06  | 7.09  | 7.30   |
|                 | (191)      | (103) | (180) | (3.31) |

# Class 150 • Union Bonnet • Brass/Bronze Disc • Thrd. Ends

## Angle Valve Figure B-220



### Materials of Construction

| No. | Description       | Material                 | ASTM Spec.   |
|-----|-------------------|--------------------------|--------------|
| 1   | Body              | Bronze                   | B-62 C83600  |
| 2   | Disc              | (1/2" - 2") Bronze       | B-61 C92200  |
| 3   | Disc Stem         | (1/4" - 1 1/2") Bronze   | B-371 C69400 |
| 4   | Disc Stem Ring    | (1/2" - 1") Brass        | B-16 H02     |
|     |                   | (1 1/4" - 2") Bronze     | B-61 C92200  |
| 5   | Bonnet            | (1/4" - 3/8") Brass      | B-16 H02     |
|     |                   | (1/2" - 2") Bronze       | B-62 C83600  |
| 6   | Union Bonnet Ring | Bronze B-62 C83600       |              |
| 7   | Packing           | Graphite (Asbestos Free) |              |
| 8   | Gland             | Brass                    | B-16 H02     |
| 9   | Packing Nut       | (1/4" - 1 1/2") Brass    | B-16 H02     |
|     |                   | (2") Bronze              | B-61 C92200  |
| 10  | Handwheel         | Ductile Iron             |              |
| 11  | ID Plate          | Aluminum                 |              |
| 12  | Lock Nut          | Steel Cadmium            |              |

**NOTE:**

The addition of the letter "K" at the end of the figure number designates valves assembled & tested in the USA. Materials of Construction & Dimensions are the same.

### Industry Standards

Complies with MSS SP-80 Type 1

See Page 6 for Pressure-Temperature Ratings

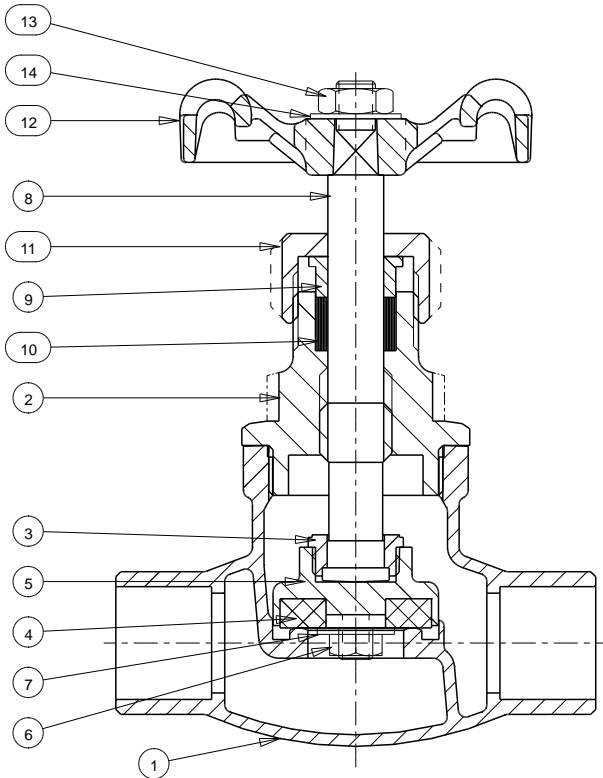
### Dimensions and Weights

Inches (millimeters) - Pounds (kilograms)

| Valve Size | Dimensions |       |      | Wt.    |
|------------|------------|-------|------|--------|
|            | B          | C     | A    |        |
| 1/4        | 4.22       | 2.76  | 1.12 | 1.01   |
|            | (107)      | (70)  | (28) | (0.46) |
| 3/8        | 4.22       | 2.76  | 1.12 | .99    |
|            | (107)      | (70)  | (28) | (0.45) |
| 1/2        | 3.92       | 2.76  | 1.15 | 1.21   |
|            | (100)      | (70)  | (29) | (0.55) |
| 3/4        | 4.78       | 2.76  | 1.39 | 1.85   |
|            | (122)      | (70)  | (35) | (0.84) |
| 1          | 5.39       | 4.02  | 1.64 | 3.08   |
|            | (137)      | (102) | (42) | (1.40) |
| 1 1/4      | 6.35       | 4.02  | 2.00 | 4.66   |
|            | (161)      | (102) | (51) | (2.12) |
| 1 1/2      | 6.74       | 4.02  | 2.18 | 6.12   |
|            | (171)      | (102) | (55) | (2.78) |
| 2          | 7.14       | 4.76  | 2.69 | 10.58  |
|            | (181)      | (121) | (68) | (4.81) |

# 300 CWP • Threaded Bonnet • PTFE Disc • Solder Ends

## Globe Valve Figure B-20T



### Materials of Construction

| No. | Description        | Material                 | ASTM Spec.       |
|-----|--------------------|--------------------------|------------------|
| 1   | Body               | Bronze                   | B-62 C83600      |
| 2   | Bonnet             | Bronze                   | B-62 C83600      |
| 3   | Disc Stem Ring     | Copper Silicon Steel     | B-371 C69400     |
| 4   | Disc               | PTFE (25% Glass Filled)  |                  |
| 5   | Disc Holder        | Bronze                   | B-62 C83600      |
| 6   | Disc Retaining Nut | Brass                    | BSEN12164 CW614N |
| 7   | Washer             | Brass                    | BSEN12164 CW614N |
| 8   | Stem               | Copper Silicon Steel     | B-371 C69400     |
| 9   | Gland              | Brass                    | BSEN12164 CW614N |
| 10  | Packing            | Graphite (Asbestos Free) |                  |
| 11  | Packing Nut        | Brass                    | BSEN12164 CW614N |
| 12  | Handwheel          | Malleable Iron           | A-197 F22000     |
| 13  | Handwheel Nut      | Brass                    | BSEN12164 CW614N |
| 14  | ID Plate           | Aluminum                 |                  |

**NOTE:**

The addition of the letter "K" at the end of the figure number designates valves assembled & tested in the USA. Materials of Construction & Dimensions are the same.

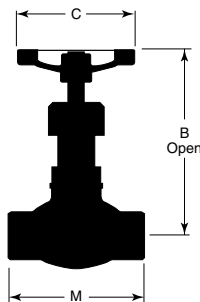
### Industry Standards

Complies with MSS SP-80 Type 2

See Page 6 for Pressure-Temperature Ratings

### Dimensions and Weights

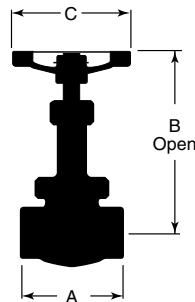
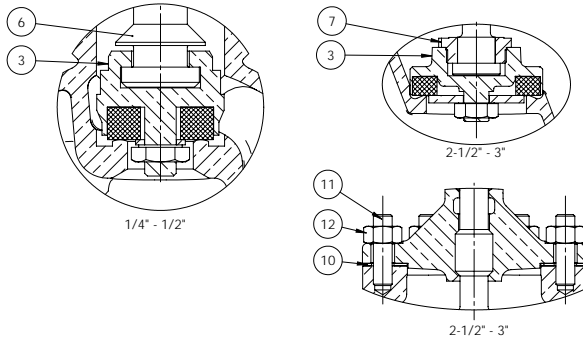
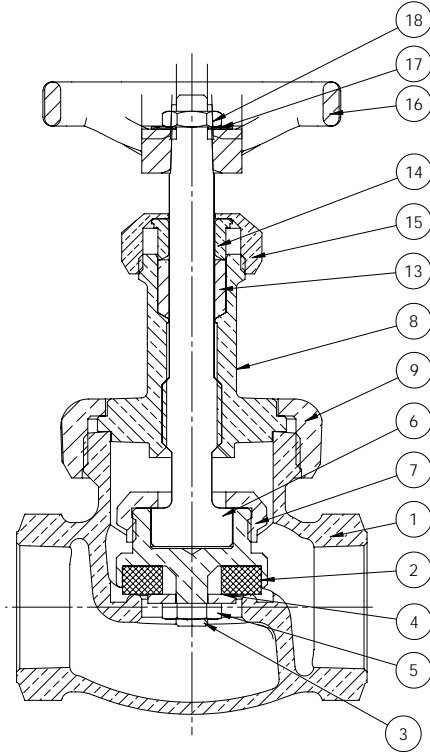
Inches (millimeters) - Pounds (kilograms)



| Valve Size | Dimensions |       |       | Wt.    |
|------------|------------|-------|-------|--------|
|            | B          | C     | M     |        |
| 3/8        | 3.94       | 2.05  | 2.32  | 1.90   |
|            | (100)      | (52)  | (59)  | (0.39) |
| 1/2        | 3.98       | 2.05  | 2.91  | 2.62   |
|            | (101)      | (52)  | (74)  | (0.54) |
| 3/4        | 4.53       | 2.05  | 3.74  | 3.15   |
|            | (115)      | (52)  | (95)  | (0.65) |
| 1          | 4.92       | 2.76  | 4.57  | 3.95   |
|            | (125)      | (70)  | (116) | (0.81) |
| 1 1/4      | 5.91       | 2.76  | 4.92  | 7.54   |
|            | (150)      | (70)  | (125) | (1.55) |
| 1 1/2      | 6.26       | 3.62  | 5.75  | 9.31   |
|            | (159)      | (92)  | (146) | (2.01) |
| 2          | 7.52       | 4.06  | 7.09  | 14.97  |
|            | (191)      | (103) | (180) | (3.08) |

# Class 150 • Union Bonnet • PTFE Disc • Threaded Ends

## Globe Valve Figure B-22T



**Industry Standards**  
Complies with MSS SP-80 Type 2  
See Page 6 for Pressure-Temperature Ratings

## Materials of Construction

| No. | Description       | Material                                  | ASTM Spec.   |
|-----|-------------------|---|--------------|
| 1   | Body              | Bronze                                    | B-62 C83600  |
| 2   | Disc              | PTFE (15% Glass Filled)                   |              |
| 3   | Disc Holder       | (1/4" - 1/2") Brass                       | B-16 H02     |
|     |                   | (3/4" - 3") Bronze                        | B-62 C83600  |
| 4   | Disc Washer       | Brass                                     | B-16 H02     |
| 5   | Lock Nut          | Brass                                     | B-16 H02     |
| 6   | Stem              | (1/4" - 3/8") Bronze                      | B-371 C69400 |
|     |                   | (1/2" - 3") Bronze                        | B-371 C69400 |
| 7   | Disc Stem Ring    | (1/2" - 3/4") Brass                       | B-16 H02     |
|     |                   | (2 1/2" - 3") Bronze                      | B-61 C92200  |
| 8   | Bonnet            | (1/4" - 3/8") Brass                       | B-16 H02     |
|     |                   | (1/2" - 3") Bronze                        | B-62 C83600  |
| 9   | Union Bonnet Ring | (1/4" - 2") Bronze                        | B-62 C83600  |
| 10  | Gasket            | Synthetic Glass Fiber with Nitrile Binder |              |
| 11  | Stud              | Steel Cadmium                             | A-109 C1145  |
| 12  | Nut               | Mild Steel                                | A-563 GR. A  |
| 13  | Packing           | Graphite (Asbestos Free)                  |              |
| 14  | Gland             | Brass                                     | B-16 H02     |
| 15  | Packing Nut       | (1/4" - 1 1/2") Brass                     | B-16 H02     |
|     |                   | (2" - 3") Bronze                          | B-61 C92200  |
| 16  | Handwheel         | Cast Iron                                 |              |
| 17  | ID Plate          | Aluminum                                  |              |
| 18  | Lock Nut          | Steel Cadmium                             |              |

**NOTE:**

The addition of the letter "K" at the end of the figure number designates valves assembled & tested in the USA. Materials of Construction & Dimensions are the same.

## Dimensions and Weights

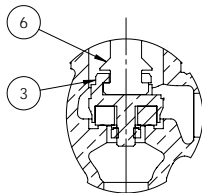
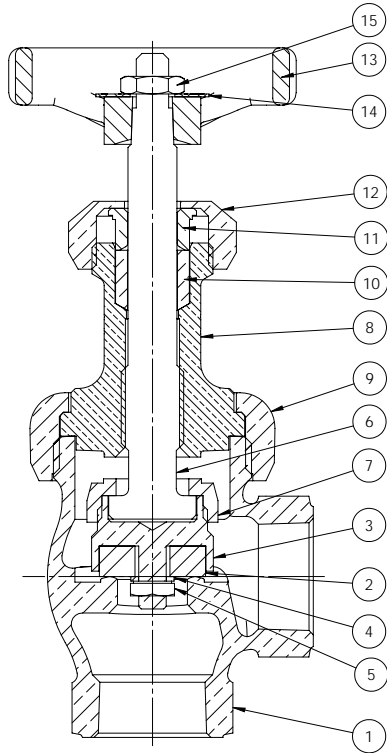
Inches (millimeters) - Pounds (kilograms)

| Valve Size | Dimensions |       |       | Wt.     |
|------------|------------|-------|-------|---------|
|            | B          | C     | A     |         |
| 1/4        | 4.19       | 2.76  | 1.94  | 0.97    |
|            | (107)      | (70)  | (49)  | (0.44)  |
| 3/8        | 4.20       | 2.76  | 1.94  | 0.99    |
|            | (107)      | (70)  | (49)  | (0.45)  |
| 1/2        | 4.06       | 2.76  | 2.56  | 1.25    |
|            | (103)      | (70)  | (65)  | (0.57)  |
| 3/4        | 5.00       | 2.76  | 2.96  | 1.91    |
|            | (127)      | (70)  | (75)  | (0.87)  |
| 1          | 5.59       | 4.02  | 3.50  | 3.21    |
|            | (142)      | (102) | (89)  | (1.46)  |
| 1 1/4      | 6.51       | 4.02  | 4.02  | 4.47    |
|            | (165)      | (102) | (102) | (2.03)  |
| 1 1/2      | 6.91       | 4.02  | 4.58  | 6.25    |
|            | (176)      | (102) | (116) | (2.84)  |
| 2          | 7.40       | 4.76  | 5.70  | 11.07   |
|            | (188)      | (121) | (145) | (5.03)  |
| *2 1/2     | 8.69       | 5.51  | 7.25  | 19.65   |
|            | (221)      | (140) | (184) | (8.93)  |
| *3         | 10.25      | 5.98  | 8.50  | 33.22   |
|            | (260)      | (152) | (216) | (15.10) |

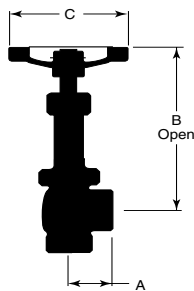
\*2 1/2" and 3" have Bolted Bonnet

# Class 150 • Union Bonnet • PTFE Disc • Threaded Ends

## Angle Valve Figure B-222T



1/4"-1/2"



## Materials of Construction

| No. | Description       | Material                                  | ASTM Spec.              |
|-----|-------------------|---|-------------------------|
| 1   | Body              | Bronze                                    | B-62 C83600             |
| 2   | Disc              | PTFE (15% Glass Filled)                   |                         |
| 3   | Disc Holder       | (1/4" - 1/2") Brass<br>(3/4" - 2") Bronze | B-16 H02<br>B-62 C83600 |
| 4   | Stem              | Bronze                                    | B-371 C69400            |
| 5   | Lock Nut          | Brass                                     | B-16 H02                |
| 6   | Disc Washer       | Brass                                     | B-16 H02                |
| 7   | Disc Stem Ring    | Bronze                                    | B-61 C92200             |
| 8   | Bonnet            | (1/8" - 3/8") Brass<br>(1/2" - 2") Bronze | B-16 H02<br>B-62 C83600 |
| 9   | Packing           | Graphite (Asbestos Free)                  |                         |
| 10  | Gland             | Brass                                     | B-16 H02                |
| 11  | Packing Nut       | (1/4" - 1 1/2") Brass<br>(2") Bronze      | B-16 H02<br>B-61 C83600 |
| 12  | Union Bonnet Ring | Bronze                                    | B-62 C83600             |
| 13  | Handwheel         | Cast Iron                                 |                         |
| 14  | ID Plate          | Aluminum                                  |                         |
| 15  | Lock Nut          | Steel Cadmium                             |                         |

### NOTE:

The addition of the letter "K" at the end of the figure number designates valves assembled & tested in the USA. Materials of Construction & Dimensions are the same.

## Industry Standards

Complies with MSS SP-80 Type 2

See Page 6 for Pressure-Temperature Ratings

## Dimensions and Weights

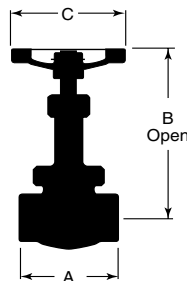
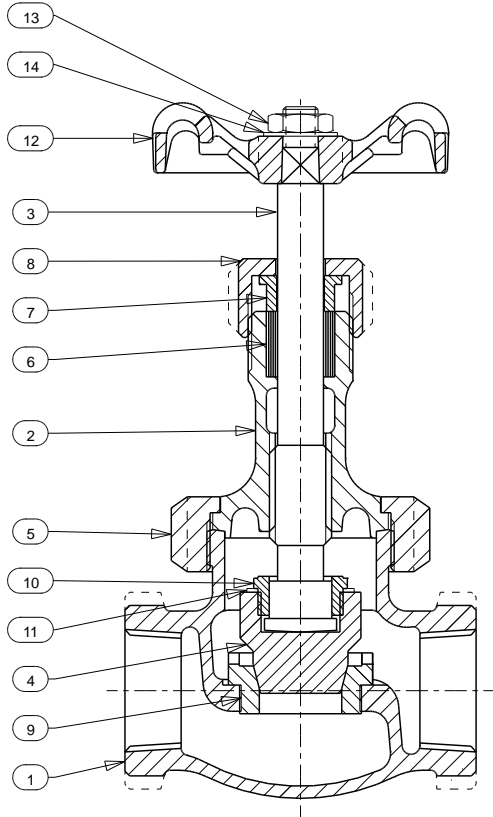
Inches (millimeters) - Pounds (kilograms)

| Valve Size | Dimensions |       |      | Wt.    |
|------------|------------|-------|------|--------|
|            | B          | C     | A    |        |
| 1/4        | 4.05       | 2.76  | 1.13 | 1.03   |
|            | (103)      | (70)  | (29) | (0.47) |
| 3/8        | 4.05       | 2.76  | 1.13 | 1.01   |
|            | (103)      | (70)  | (29) | (0.46) |
| 1/2        | 3.92       | 2.76  | 1.15 | 1.21   |
|            | (100)      | (70)  | (29) | (0.55) |
| 3/4        | 4.78       | 2.76  | 1.39 | 1.80   |
|            | (122)      | (70)  | (35) | (0.82) |
| 1          | 5.42       | 4.02  | 1.64 | 3.01   |
|            | (138)      | (102) | (42) | (1.37) |
| 1 1/4      | 6.38       | 4.02  | 2.00 | 4.51   |
|            | (162)      | (102) | (51) | (2.05) |
| 1 1/2      | 6.69       | 4.02  | 2.18 | 6.01   |
|            | (170)      | (102) | (55) | (2.73) |
| 2          | 7.14       | 4.76  | 2.65 | 10.69  |
|            | (181)      | (121) | (67) | (4.86) |



# Class 150 • Union Bonnet\* • Stainless Steel Disc • Thrd. Ends

## Globe Valve Figure B-29



### Materials of Construction

| No. | Description    | Material                 | ASTM Spec.                         |
|-----|----------------|--------------------------|------------------------------------|
| 1   | Body           | Bronze                   | B-61 C92200                        |
| 2   | Bonnet         | Bronze                   | B-61 C92200                        |
| 3   | Stem           | Copper Silicon Bronze    | B-371 C69400                       |
| 4   | Disc           | 316 Stainless Steel      |                                    |
| 5   | Union Ring     | Bronze                   | B-62 C83600                        |
| 6   | Packing        | Graphite (Asbestos Free) |                                    |
| 7   | Gland          | Brass                    | BSEN12164 CW614N                   |
| 8   | Packing Nut    | (1/4" - 1 1/2") Brass    | BSEN12164 CW614N                   |
|     |                | (2" - 3") Bronze         | B-62 C83600                        |
| 9   | Body Seat Ring | 13% CR. Steel            | BS970P11 410S21 or BS970P11 431S29 |
| 10  | Disc Stem Ring | Mang. Bronze             | B-371 C69400                       |
| 11  | Lock Washer    | Brass                    | BS2870 CZ123                       |
| 12  | Handwheel      | Malleable Iron           | A197 F22000                        |
| 13  | Handwheel Nut  | Brass                    | BSEN12164 CW614N                   |
| 14  | ID Plate       | Aluminum                 |                                    |

#### NOTE:

The addition of the letter "K" at the end of the figure number designates valves assembled & tested in the USA. Materials of Construction & Dimensions are the same.

### Industry Standards

Complies with MSS SP-80 Type 3

See Page 6 for Pressure-Temperature Ratings

### Dimensions and Weights

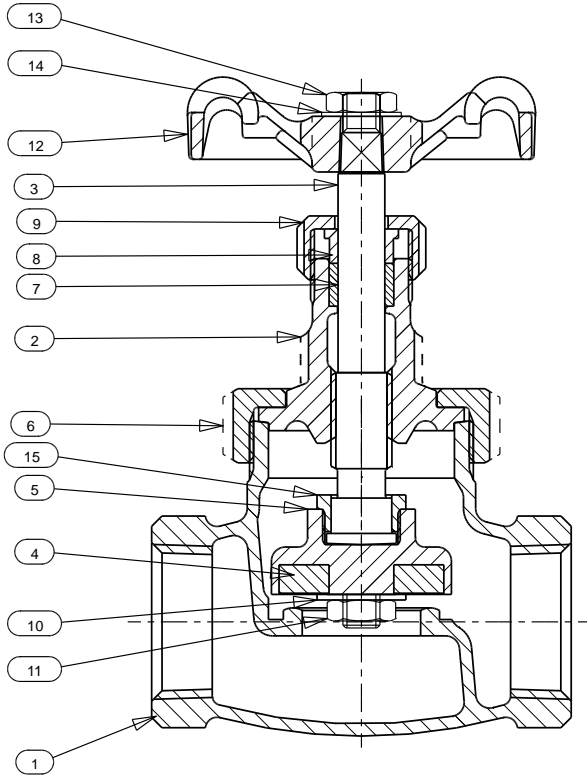
Inches (millimeters) - Pounds (kilograms)

| Valve Size | Dimensions |       |       | Wt.    |
|------------|------------|-------|-------|--------|
|            | B          | C     | A     |        |
| 1/4        | 4.80       | 2.05  | 2.32  | 1.24   |
|            | (122)      | (52)  | (59)  | (0.56) |
| 3/8        | 4.80       | 2.05  | 2.32  | 1.24   |
|            | (122)      | (52)  | (59)  | (0.55) |
| 1/2        | 5.51       | 2.56  | 2.68  | 1.76   |
|            | (140)      | (65)  | (68)  | (0.80) |
| 3/4        | 5.98       | 2.76  | 3.19  | 2.73   |
|            | (152)      | (70)  | (81)  | (1.24) |
| 1          | 6.73       | 3.07  | 3.74  | 4.01   |
|            | (171)      | (78)  | (95)  | (1.82) |
| 1 1/4      | 7.60       | 3.62  | 4.25  | 6.02   |
|            | (193)      | (92)  | (108) | (2.73) |
| 1 1/2      | 8.66       | 4.06  | 4.76  | 8.34   |
|            | (220)      | (103) | (121) | (3.78) |
| 2          | 9.88       | 4.76  | 5.75  | 13.30  |
|            | (251)      | (121) | (146) | (6.03) |
| *2 1/2     | 10.98      | 5.98  | 7.24  | 24.04  |
|            | (279)      | (152) | (184) | (10.9) |
| *3         | 12.32      | 7.00  | 8.87  | 36.16  |
|            | (313)      | (178) | (210) | (16.4) |

\*2 1/2" and 3" have Bolted Bonnet

# Class 200 • Union Bonnet • PTFE Disc • Threaded Ends

## Globe Valve Figure B-32T



## Materials of Construction

| No. | Description        | Material                 | ASTM Spec.       |
|-----|--------------------|--------------------------|------------------|
| 1   | Body               | Bronze                   | B-61 C92200      |
| 2   | Bonnet             | Bronze                   | B-61 C92200      |
| 3   | Stem               | Copper Silicon Bronze    | B-371 C69400     |
| 4   | Disc               | PTFE (25% Glass Filled)  |                  |
| 5   | Disc Holder        | Bronze                   | B-62 C83600      |
| 6   | Union Ring         | Bronze                   | B-62 C83600      |
| 7   | Packing            | Graphite (Asbestos Free) |                  |
| 8   | Gland              | Brass                    | BSEN12164 CW614N |
| 9   | Packing Nut        | (1/4" - 1 1/2") Brass    | BSEN12164 CW614N |
|     |                    | (2") Bronze              | B-62 C83600      |
| 10  | Washer             | Brass                    | BSEN12164 CW614N |
| 11  | Disc Retaining Nut | Brass                    | BSEN12164 CW614N |
| 12  | Handwheel          | Malleable Iron           |                  |
| 13  | Handwheel Nut      | Brass                    | BSEN12164 CW614N |
| 14  | ID Plate           | Aluminum                 |                  |
| 15  | Stem Ring          | Copper Silicon Bronze    | B-371 C69400     |

### NOTE:

The addition of the letter "K" at the end of the figure number designates valves assembled & tested in the USA. Materials of Construction & Dimensions are the same.

## Industry Standards

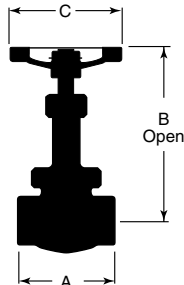
Complies with MSS SP-80 Type 2

See Page 6 for Pressure-Temperature Ratings

## Dimensions and Weights

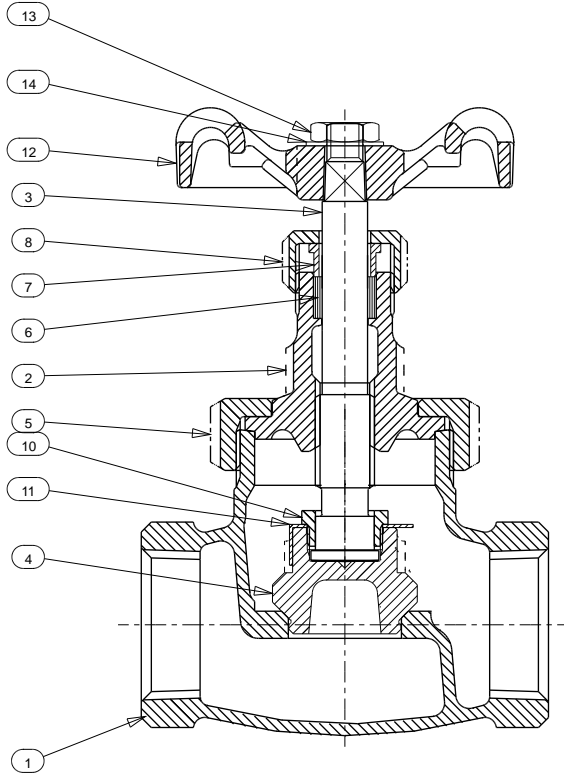
Inches (millimeters) - Pounds (kilograms)

| Valve Size | Dimensions |       |       | Wt.    |
|------------|------------|-------|-------|--------|
|            | B          | C     | A     |        |
| 1/4        | 3.94       | 2.05  | 2.05  | 1.10   |
|            | (100)      | (52)  | (52)  | (0.50) |
| 3/8        | 3.94       | 2.05  | 2.05  | 1.08   |
|            | (100)      | (52)  | (52)  | (0.49) |
| 1/2        | 3.98       | 2.05  | 2.44  | 1.61   |
|            | (101)      | (52)  | (62)  | (0.73) |
| 3/4        | 4.53       | 2.05  | 2.91  | 2.40   |
|            | (115)      | (52)  | (74)  | (1.09) |
| 1          | 4.92       | 2.76  | 3.54  | 3.84   |
|            | (125)      | (70)  | (90)  | (1.74) |
| 1 1/4      | 5.91       | 2.76  | 3.94  | 5.38   |
|            | (150)      | (70)  | (100) | (2.44) |
| 1 1/2      | 6.26       | 3.62  | 4.53  | 7.32   |
|            | (159)      | (92)  | (115) | (3.32) |
| 2          | 7.52       | 4.06  | 5.35  | 12.22  |
|            | (191)      | (103) | (136) | (5.54) |



# Class 200 • Union Bonnet • Brz. Disc • Regrinding Seat • Thrd.

## Globe Valve Figure B-37



### Materials of Construction

| No. | Description    | Material                 | ASTM Spec.       |
|-----|----------------|--------------------------|------------------|
| 1   | Body           | Bronze                   | B-61 C92200      |
| 2   | Bonnet         | Bronze                   | B-61 C92200      |
| 3   | Stem           | Copper Silicon Bronze    | B-371 C69400     |
| 4   | Disc           | Bronze                   | B-61 C92200      |
| 5   | Union Ring     | Bronze                   | B-62 C83600      |
| 6   | Packing        | Graphite (Asbestos Free) |                  |
| 7   | Gland          | Brass                    | BSEN12164 CW614N |
| 8   | Packing Nut    | (1/4" - 1 1/4") Brass    | BSEN12164 CW614N |
|     |                | (1 1/2" - 2") Bronze     | B-62 C83600      |
| 10  | Disc Stem Ring | Copper Silicon Bronze    | B-371 C69400     |
| 11  | Lock Washer    | Brass                    | BSEN1652 CW507L  |
| 12  | Handwheel      | Malleable Iron           | A-197 F22000     |
| 13  | Handwheel Nut  | Brass                    | BSEN12164 CW614N |
| 14  | ID Plate       | Aluminum                 |                  |

**NOTE:**

The addition of the letter "K" at the end of the figure number designates valves assembled & tested in the USA. Materials of Construction & Dimensions are the same.

### Industry Standards

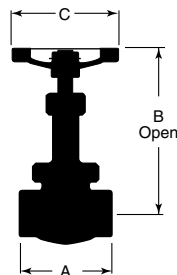
Complies with MSS SP-80 Type 1

See Page 6 for Pressure-Temperature Ratings

### Dimensions and Weights

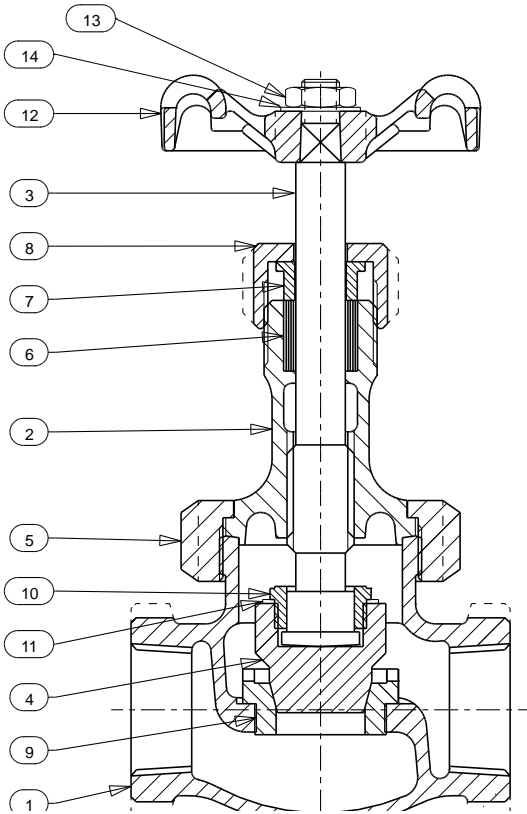
Inches (millimeters) - Pounds (kilograms)

| Valve Size | Dimensions |       |       | Wt.    |
|------------|------------|-------|-------|--------|
|            | B          | C     | A     |        |
| 1/4        | 4.80       | 2.05  | 2.05  | 1.24   |
|            | (122)      | (52)  | (52)  | (0.56) |
| 3/8        | 4.80       | 2.05  | 2.05  | 1.21   |
|            | (122)      | (52)  | (52)  | (0.55) |
| 1/2        | 5.51       | 2.56  | 2.44  | 1.76   |
|            | (140)      | (65)  | (62)  | (0.80) |
| 3/4        | 5.98       | 2.76  | 2.91  | 2.73   |
|            | (152)      | (70)  | (74)  | (1.24) |
| 1          | 6.73       | 3.07  | 3.54  | 4.01   |
|            | (171)      | (78)  | (90)  | (1.82) |
| 1 1/4      | 7.60       | 3.62  | 3.94  | 6.02   |
|            | (193)      | (92)  | (100) | (2.73) |
| 1 1/2      | 8.66       | 4.06  | 4.53  | 8.34   |
|            | (220)      | (103) | (115) | (3.78) |
| 2          | 9.88       | 4.76  | 5.35  | 13.30  |
|            | (251)      | (121) | (136) | (6.03) |



# Class 200 • Union Bonnet\* • SS Plug Type Disc • Thrd. Ends

## Globe Valve Figure B-62



### Materials of Construction

| No. | Description    | Material                 | ASTM Spec.                           |
|-----|----------------|--------------------------|--------------------------------------|
| 1   | Body           | Bronze                   | B-61 C92200                          |
| 2   | Bonnet         | Bronze                   | B-61 C92200                          |
| 3   | Stem           | Copper Silicon Bronze    | B-371 C69400                         |
| 4   | Disc           | 316 Stainless Steel      |                                      |
| 5   | Union Ring     | Bronze                   | B-62 C83600                          |
| 6   | Packing        | Graphite (Asbestos Free) |                                      |
| 7   | Gland          | Brass                    | BSEN12164 CW614N                     |
| 8   | Packing Nut    | (1/4" - 1 1/2") Brass    | BSEN12164 CW614N                     |
|     |                | (2" - 3") Bronze         | B-62 C83600                          |
| 9   | Body Seat Ring | 13% CR Steel             | BS970 Pt1 410S21 or BS970 Pt1 431S29 |
| 10  | Disc Stem Ring | Mang. Bronze             | B-371 C69400                         |
| 11  | Lock Washer    | Brass                    | BS2870 - CZ 123                      |
| 12  | Handwheel      | Malleable Iron           | A-197 F22000                         |
| 13  | Handwheel Nut  | Brass                    | BSEN12164 CW614N                     |
| 14  | ID Plate       | Aluminum                 |                                      |

**NOTE:**

The addition of the letter "K" at the end of the figure number designates valves assembled & tested in the USA. Materials of Construction & Dimensions are the same.

### Industry Standards

Complies with MSS SP-80 Type 3

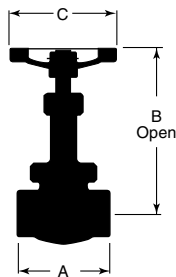
See Page 6 for Pressure-Temperature Ratings

### Dimensions and Weights

Inches (millimeters) - Pounds (kilograms)

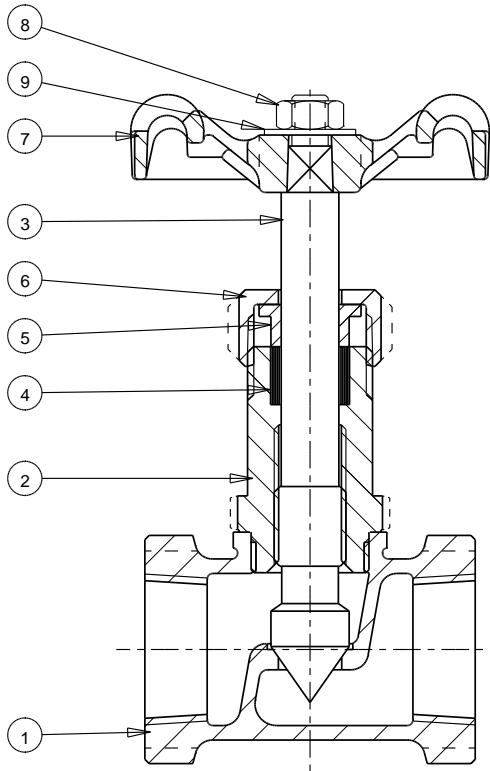
| Valve Size | Dimensions |       |       | Wt.    |
|------------|------------|-------|-------|--------|
|            | B          | C     | A     |        |
| 1/4        | 4.80       | 2.05  | 2.32  | 1.24   |
|            | (122)      | (52)  | (59)  | (0.56) |
| 3/8        | 4.80       | 2.05  | 2.32  | 1.24   |
|            | (122)      | (52)  | (59)  | (0.56) |
| 1/2        | 5.51       | 2.56  | 2.68  | 1.76   |
|            | (140)      | (65)  | (68)  | (0.80) |
| 3/4        | 5.98       | 2.76  | 3.19  | 2.73   |
|            | (152)      | (70)  | (81)  | (1.24) |
| 1          | 6.73       | 3.07  | 3.74  | 4.01   |
|            | (171)      | (78)  | (95)  | (1.82) |
| 1 1/4      | 7.60       | 3.62  | 4.25  | 6.02   |
|            | (193)      | (92)  | (108) | (2.73) |
| 1 1/2      | 8.66       | 4.06  | 4.76  | 8.34   |
|            | (220)      | (103) | (121) | (3.78) |
| 2          | 9.88       | 4.76  | 5.75  | 13.30  |
|            | (251)      | (121) | (146) | (6.03) |
| *2 1/2     | 10.98      | 5.98  | 7.24  | 24.04  |
|            | (279)      | (152) | (184) | (10.9) |
| *3         | 12.32      | 7.00  | 8.27  | 36.16  |
|            | (313)      | (178) | (210) | (16.4) |

\*2 1/2" and 3" have Bolted Bonnet



# Class 200 • Threaded Bonnet • Needle Type Disc • Thrd. Ends

## Globe Valve Figure B-64



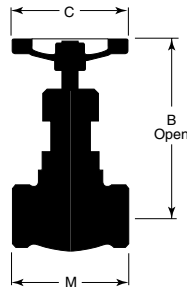
### Materials of Construction

| No. | Description   | Material                      | ASTM Spec.       |
|-----|---------------|-------------------------------|------------------|
| 1   | Body          | Bronze                        | B-62 C83600      |
| 2   | Bonnet        | (1/8" - 1/2") Sil. Al. Bronze | BSEN12163 CW301G |
|     |               | (3/4") Brass                  | BSEN12164 CW614N |
| 3   | Stem          | Sil. Al. Bronze               | BSEN12163 CW301G |
| 4   | Packing       | Graphite (Asbestos Free)      |                  |
| 5   | Gland         | Brass                         | BSEN12164 CW614N |
| 6   | Packing Nut   | Brass                         | BSEN12164 CW614N |
| 7   | Handwheel     | Aluminum                      |                  |
| 8   | Handwheel Nut | Brass                         | BSEN12164 CW614N |
| 9   | ID Plate      | Aluminum                      |                  |

#### NOTES:

The addition of the letter "K" at the end of the figure number designates valves assembled & tested in the USA. Materials of Construction & Dimensions are the same.

See Page 6 for Pressure-Temperature Ratings.



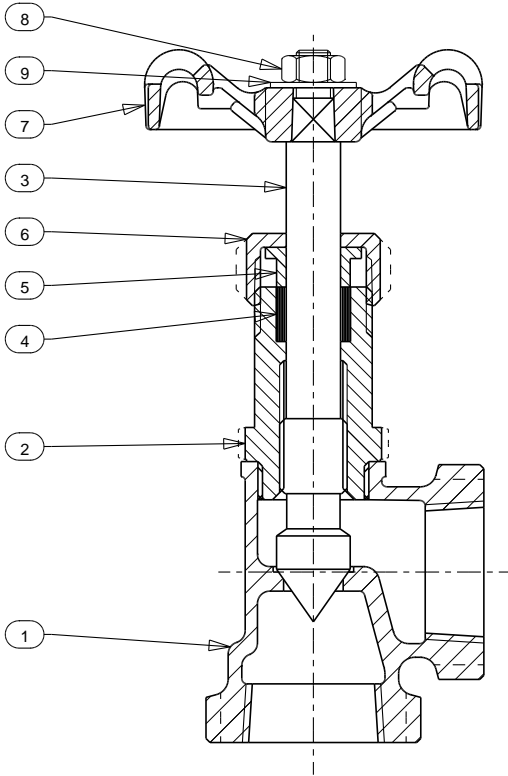
### Dimensions and Weights

Inches (millimeters) - Pounds (kilograms)

| Valve Size | Dimensions |      |      | Wt.    |
|------------|------------|------|------|--------|
|            | B          | C    | M    |        |
| 1/8        | 2.91       | 1.73 | 1.14 | 0.29   |
|            | (74)       | (44) | (29) | (0.13) |
| 1/4        | 2.87       | 1.73 | 1.54 | 0.33   |
|            | (73)       | (44) | (39) | (0.15) |
| 3/8        | 3.03       | 1.73 | 1.77 | 0.46   |
|            | (77)       | (44) | (45) | (0.21) |
| 1/2        | 3.58       | 2.05 | 2.01 | 0.64   |
|            | (91)       | (52) | (51) | (0.29) |
| 3/4        | 4.09       | 2.56 | 2.28 | 1.01   |
|            | (104)      | (65) | (58) | (0.46) |

# Class 200 • Threaded Bonnet • Needle Type Disc • Thrd. Ends

## Angle Valve Figure B-264



### Materials of Construction

| No. | Description   | Material   | ASTM Spec.       |
|-----|---------------|--|------------------|
| 1   | Body          | Bronze   | B-62 C83600      |
| 2   | Bonnet        | ( $\frac{1}{8}$ " - $\frac{3}{8}$ ") Sil. Al. Bronze | BSEN12163 CW301G |
|     |               | ( $\frac{1}{2}$ " - $\frac{3}{4}$ ") Brass           | BSEN12164 CW614N |
| 3   | Stem          | Sil. Al. Bronze                                      | BSEN12163 CW301G |
| 4   | Packing       | Graphite (Asbestos Free)                             |                  |
| 5   | Gland         | Brass  | BSEN12164 CW614N |
| 6   | Packing Nut   | Brass  | BSEN12164 CW614N |
| 7   | Handwheel     | Aluminum   |                  |
| 8   | Handwheel Nut | Brass  | BSEN12164 CW614N |
| 9   | ID Plate      | Aluminum   |                  |

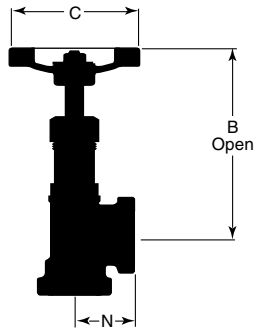
#### NOTES:

The addition of the letter "K" at the end of the figure number designates valves assembled & tested in the USA. Materials of Construction & Dimensions are the same.

See Page 6 for Pressure-Temperature Ratings.

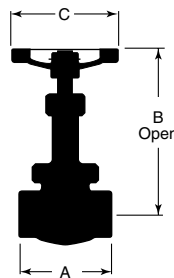
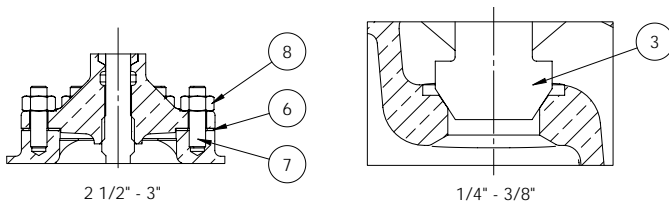
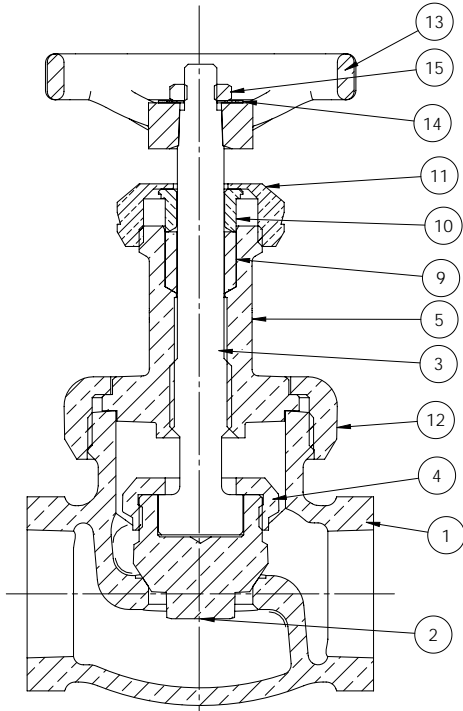
### Dimensions and Weights Inches (millimeters) - Pounds (kilograms)

| Valve Size    | Dimensions |      |      | Wt.    |
|---------------|------------|------|------|--------|
|               | B          | C    | N    |        |
| $\frac{1}{8}$ | 2.91       | 1.73 | 0.59 | 0.29   |
|               | (74)       | (44) | (15) | (0.13) |
| $\frac{1}{4}$ | 2.87       | 1.73 | 0.79 | 0.33   |
|               | (73)       | (44) | (20) | (0.15) |
| $\frac{3}{8}$ | 3.03       | 1.73 | 0.91 | 0.46   |
|               | (77)       | (44) | (23) | (0.21) |
| $\frac{1}{2}$ | 3.58       | 2.05 | 1.06 | 0.64   |
|               | (91)       | (52) | (27) | (0.29) |
| $\frac{3}{4}$ | 4.09       | 2.56 | 1.26 | 1.01   |
|               | (104)      | (65) | (32) | (0.46) |



**Class 300 • Union Bonnet\* • Brz. Disc • Regrinding Seat • Thrd.**

**Globe Valve Figure B-66**



**Materials of Construction**

| No. | Description       | Material                                  | ASTM Spec.   |
|-----|-------------------|---|--------------|
| 1   | Body              | Bronze                                    | B-61 C92200  |
| 2   | Disc              | (1/2" - 3") Bronze                        | B-61 C92200  |
| 3   | Disc Stem         | (1/4" - 3/8") Bronze                      | B-371 C69400 |
|     |                   | (1/2" - 3") Bronze                        | B-371 C69400 |
| 4   | Disc Stem Ring    | (1/2" - 3") Bronze                        | B-61 C92200  |
| 5   | Bonnet            | Bronze                                    | B-61 C92200  |
| 6   | Gasket            | Synthetic/Glass Fiber with Nitrile Binder |              |
| 7   | Stud              | Steel Cadmium                             | A-109 C1144  |
| 8   | Stud Nut          | Mild Steel                                | A-563 Gr. A  |
| 9   | Packing           | Graphite (Asbestos Free)                  |              |
| 10  | Gland             | Brass                                     | B-16 H02     |
| 11  | Packing Nut       | Bronze                                    | B-61 C92200  |
| 12  | Union Bonnet Ring | Bronze                                    | B-61 C92200  |
| 13  | Handwheel         | Ductile Iron                              |              |
| 14  | ID Plate          | Aluminum                                  |              |
| 15  | Lock Nut          | Steel Cadmium                             |              |

**NOTE:**

The addition of the letter "K" at the end of the figure number designates valves assembled & tested in the USA. Materials of Construction & Dimensions are the same.

**Industry Standards**

Complies with MSS SP-80 Type 1

See Page 6 for Pressure-Temperature Ratings

**Dimensions and Weights**

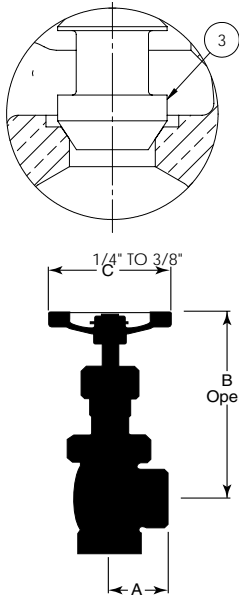
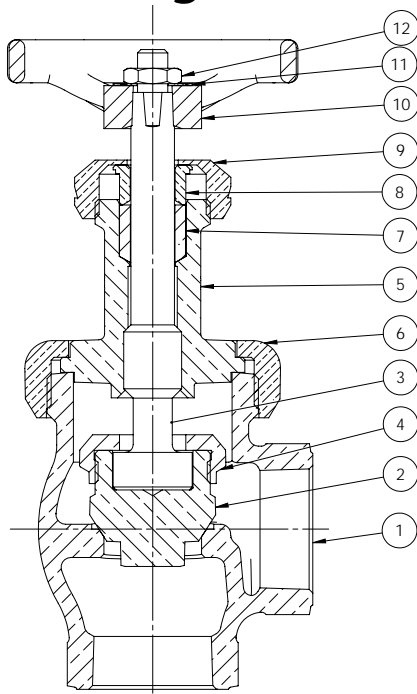
Inches (millimeters) - Pounds (kilograms)

| Valve Size | Dimensions |       |       | Wt.     |
|------------|------------|-------|-------|---------|
|            | B          | C     | A     |         |
| 1/4        | 4.37       | 2.76  | 1.94  | 0.97    |
|            | (111)      | (70)  | (49)  | (0.44)  |
| 3/8        | 4.37       | 2.76  | 1.94  | 0.95    |
|            | (111)      | (70)  | (49)  | (0.43)  |
| 1/2        | 4.04       | 2.76  | 2.56  | 1.34    |
|            | (103)      | (70)  | (65)  | (0.61)  |
| 3/4        | 4.96       | 2.76  | 2.96  | 2.20    |
|            | (126)      | (70)  | (75)  | (1.00)  |
| 1          | 5.56       | 4.02  | 3.32  | 3.48    |
|            | (141)      | (102) | (84)  | (1.58)  |
| 1 1/4      | 6.48       | 4.02  | 4.02  | 4.93    |
|            | (165)      | (102) | (102) | (2.24)  |
| 1 1/2      | 6.88       | 4.02  | 4.58  | 6.75    |
|            | (175)      | (102) | (116) | (3.07)  |
| 2          | 7.39       | 4.76  | 5.70  | 12.47   |
|            | (188)      | (121) | (145) | (5.67)  |
| *2 1/2     | 9.31       | 5.98  | 7.25  | 20.39   |
|            | (237)      | (152) | (184) | (9.27)  |
| *3         | 10.57      | 5.98  | 8.50  | 34.72   |
|            | (269)      | (152) | (216) | (15.78) |

\* 2 1/2" and 3" have Bolted Bonnet

# Class 300 • Union Bonnet • Brnz. Disc • Regrinding Seat • Thrd.

## Angle Valve Figure B-266



## Materials of Construction

| No. | Description       | Material                 | ASTM Spec.   |
|-----|-------------------|--------------------------|--------------|
| 1   | Body              | Bronze                   | B-61 C92200  |
| 2   | Disc              | (1/2" - 2") Bronze       | B-61 C92200  |
| 3   | Disc Stem         | Bronze                   | B-371 C69400 |
| 4   | Disc Stem Ring    | (1/2" - 3/4") Brass      | B-16 H02     |
|     |                   | (1" - 2") Bronze         | B-61 C92200  |
| 5   | Bonnet            | (1/4" - 3/8") Brass      | B-16 H02     |
|     |                   | (1/2" - 2") Bronze       | B-61 C92200  |
| 6   | Union Bonnet Ring | Bronze                   | B-61 C92200  |
| 7   | Packing           | Graphite (Asbestos Free) |              |
| 8   | Gland             | Brass                    | B-16 H02     |
| 9   | Packing Nut       | (1/4" - 1 1/2") Brass    | B-16 H02     |
|     |                   | (2") Bronze              | B-61 C92200  |
| 10  | Handwheel         | Ductile Iron             |              |
| 11  | ID Plate          | Aluminum                 |              |
| 12  | Lock Nut          | Steel Cadmium            |              |

### NOTE:

The addition of the letter "K" at the end of the figure number designates valves assembled & tested in the USA. Materials of Construction & Dimensions are the same.

## Industry Standards

Complies with MSS SP-80 Type 1

See Page 6 for Pressure-Temperature Ratings

## Dimensions and Weights

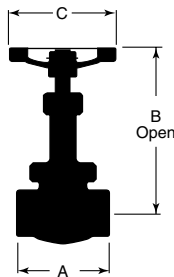
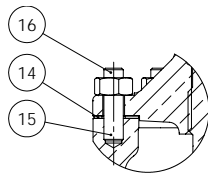
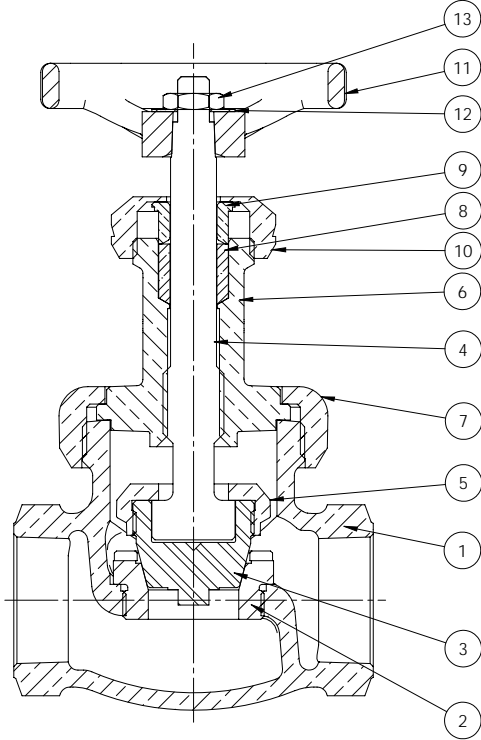
Inches (millimeters) - Pounds (kilograms)

| Valve Size | Dimensions |       |      | Wt.    |
|------------|------------|-------|------|--------|
|            | B          | C     | A    |        |
| 1/4        | 4.22       | 2.75  | 1.12 | 0.99   |
|            | (107)      | (70)  | (29) | (0.45) |
| 3/8        | 4.22       | 2.75  | 1.12 | 0.97   |
|            | (107)      | (70)  | (28) | (0.44) |
| 1/2        | 3.92       | 2.75  | 1.15 | 1.30   |
|            | (100)      | (70)  | (29) | (0.59) |
| 3/4        | 4.78       | 2.75  | 1.39 | 2.13   |
|            | (122)      | (70)  | (35) | (0.97) |
| 1          | 5.39       | 4.00  | 1.64 | 3.43   |
|            | (137)      | (102) | (42) | (1.56) |
| 1 1/4      | 6.36       | 4.00  | 2.00 | 5.21   |
|            | (162)      | (102) | (51) | (2.37) |
| 1 1/2      | 6.74       | 4.00  | 2.18 | 6.58   |
|            | (171)      | (102) | (55) | (2.99) |
| 2          | 7.14       | 4.75  | 2.69 | 12.06  |
|            | (181)      | (121) | (68) | (5.48) |



# Class 300 • Union Bonnet\* • Plug-Type Disc • Renewable SS Seats

## Globe Valve Figure B-74



### Industry Standards

Complies with MSS SP-80 Type 3

See Page 6 for Pressure-Temperature Ratings

## Materials of Construction

| No. | Description       | Material                                  | ASTM Spec.   |
|-----|-------------------|---|--------------|
| 1   | Body              | Bronze                                    | B-61 C92200  |
| 2   | Body Seat Ring    | Stainless Steel                           | AISI 420 SS  |
| 3   | Disc              | Stainless Steel                           | AISI 420F SS |
| 4   | Stem              | Bronze                                    | B-371 C69400 |
| 5   | Disc Stem Ring    | (1/4" - 3/4") Brass                       | B-16 H02     |
|     |                   | (1" - 3") Bronze                          | B-61 C92200  |
| 6   | Bonnet            | (1/4" - 3/8") Brass                       | B-16 H02     |
|     |                   | (1/2" - 3") Bronze                        | B-61 C92200  |
| 7   | Union Bonnet Ring | Bronze                                    | B-61 C92200  |
| 8   | Packing           | Graphite (Asbestos Free)                  |              |
| 9   | Gland             | Brass                                     | B-16 H02     |
| 10  | Packing Nut       | (1/4" - 1 1/2") Brass                     | B-16 H02     |
|     |                   | (2" - 3") Bronze                          | B-61 C92200  |
| 11  | Handwheel         | Ductile Iron                              |              |
| 12  | ID Plate          | Aluminum                                  |              |
| 13  | Lock Nut          | Steel Cadmium                             |              |
| 14  | Gasket            | Synthetic/Glass Fiber with Nitrile Binder |              |
| 15  | Stud              | Steel Cadmium                             |              |
| 16  | Nut               | Mild Steel                                |              |

### NOTE:

The addition of the letter "K" at the end of the figure number designates valves assembled & tested in the USA. Materials of Construction & Dimensions are the same.

## Dimensions and Weights

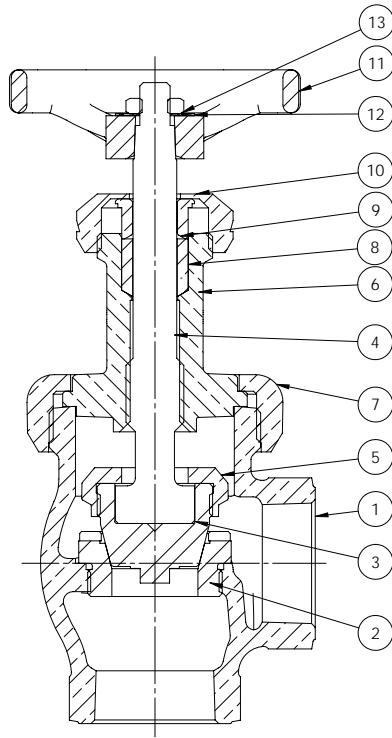
Inches (millimeters) - Pounds (kilograms)

| Valve Size | Dimensions |       |       | Wt.    |
|------------|------------|-------|-------|--------|
|            | B          | C     | A     |        |
| 1/4        | 4.47       | 2.76  | 1.94  | 0.97   |
|            | (114)      | (70)  | (49)  | (0.44) |
| 3/8        | 4.47       | 2.76  | 1.94  | 0.95   |
|            | (114)      | (70)  | (49)  | (0.43) |
| 1/2        | 4.06       | 2.76  | 2.56  | 1.36   |
|            | (103)      | (70)  | (65)  | (0.62) |
| 3/4        | 4.98       | 2.76  | 2.96  | 2.20   |
|            | (127)      | (70)  | (75)  | (1.00) |
| 1          | 5.59       | 4.02  | 3.50  | 3.50   |
|            | (142)      | (102) | (89)  | (1.59) |
| 1 1/4      | 6.48       | 4.02  | 4.02  | 4.93   |
|            | (165)      | (102) | (102) | (2.24) |
| 1 1/2      | 6.85       | 4.02  | 4.58  | 6.86   |
|            | (174)      | (102) | (116) | (3.12) |
| 2          | 7.39       | 4.76  | 5.70  | 12.83  |
|            | (188)      | (121) | (145) | (5.83) |
| *2 1/2     | 9.68       | 5.51  | 7.24  | 23.58  |
|            | (246)      | (140) | (184) | (10.7) |
| *3         | 11.02      | 5.98  | 8.50  | 34.83  |
|            | (280)      | (152) | (216) | (15.8) |

\* 2 1/2" and 3" have Bolted Bonnet

# Class 300 • Union Bonnet • Plug-Type Disc • Renewable SS Seats

## Angle Valve Figure B-274



### Materials of Construction

| No. | Description       | Material   | ASTM Spec.              |
|-----|-------------------|--|-------------------------|
| 1   | Body              | Bronze   | B-61 C92200             |
| 2   | Body Seat Ring    | Stainless Steel  | AISI 420 SS             |
| 3   | Disc              | Stainless Steel  | AISI 420F SS            |
| 4   | Stem              | Bronze   | B-371 C69400            |
| 5   | Disc Stem Ring    | ( $\frac{1}{2}$ " - $\frac{3}{4}$ ") Brass<br>(1" - 2") Bronze | B-16 H02<br>B-61 C92200 |
| 6   | Bonnet            | Bronze   | B-61 C92200             |
| 7   | Union Bonnet Ring | Bronze   | B-61 C92200             |
| 8   | Packing           | Graphite (Asbestos Free)                                       |                         |
| 9   | Gland             | Brass  | B-16 H02                |
| 10  | Packing Nut       | ( $\frac{1}{2}$ " - 1 $\frac{1}{2}$ ") Brass<br>(2") Bronze    | B-16 H02<br>B-61 C92200 |
| 11  | Handwheel         | Ductile Iron   |                         |
| 12  | ID Plate          | Aluminum   |                         |
| 13  | Lock Nut          | Steel Cadmium  |                         |

**NOTE:**

The addition of the letter "K" at the end of the figure number designates valves assembled & tested in the USA. Materials of Construction & Dimensions are the same.

### Industry Standards

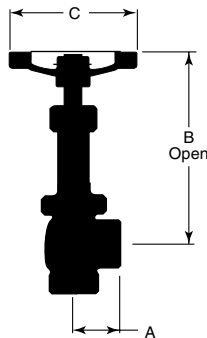
Complies with MSS SP-80 Type 3

See Page 6 for Pressure-Temperature Ratings

### Dimensions and Weights

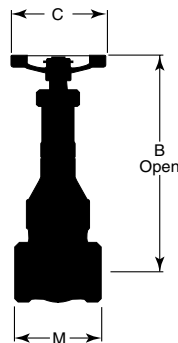
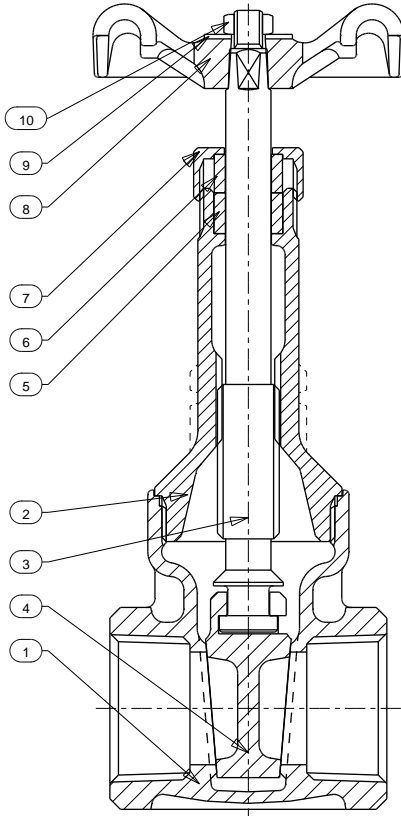
Inches (millimeters) - Pounds (kilograms)

| Valve Size      | Dimensions |       |      | Wt.    |
|-----------------|------------|-------|------|--------|
|                 | B          | C     | A    |        |
| $\frac{1}{2}$   | 3.97       | 2.76  | 1.15 | 1.32   |
|                 | (101)      | (70)  | (29) | (0.60) |
| $\frac{3}{4}$   | 4.83       | 2.76  | 1.39 | 2.16   |
|                 | (123)      | (70)  | (35) | (0.98) |
| 1               | 5.41       | 4.02  | 1.64 | 3.45   |
|                 | (138)      | (102) | (42) | (1.57) |
| 1 $\frac{1}{4}$ | 6.38       | 4.02  | 2.00 | 5.21   |
|                 | (162)      | (102) | (51) | (2.37) |
| 1 $\frac{1}{2}$ | 6.74       | 4.02  | 2.18 | 6.62   |
|                 | (171)      | (102) | (55) | (3.01) |
| 2               | 7.13       | 4.76  | 2.69 | 12.32  |
|                 | (181)      | (121) | (68) | (5.60) |



# Class 125 • Threaded Bonnet • Rising Stem • Threaded Ends

## Gate Valve Figure B-100



### Materials of Construction

| No. | Description   | Material                 | ASTM Spec.       |
|-----|---------------|--------------------------|------------------|
| 1   | Body          | Bronze                   | B-62 C83600      |
| 2   | Bonnet        | Bronze                   | B-62 C83600      |
| 3   | Stem          | Copper Silicon Bronze    | B-371 69400      |
| 4   | Disc          | Bronze                   | B-62 C83600      |
| 5   | Packing Ring  | Graphite (Asbestos Free) |                  |
| 6   | Gland         | Brass                    | BSEN12164 CW614N |
| 7   | Packing Nut   | Brass                    | BSEN12164 CW614N |
| 8   | Handwheel     | Malleable Iron           | A-197 F22000     |
| 9   | ID Plate      | Aluminum                 |                  |
| 10  | Handwheel Nut | Brass                    | BSEN12164 CW614N |

#### NOTE:

The addition of the letter "K" at the end of the figure number designates valves assembled & tested in the USA. Materials of Construction & Dimensions are the same.

### Industry Standards

Complies with MSS SP-80 Type 2

See Page 6 for Pressure-Temperature Ratings

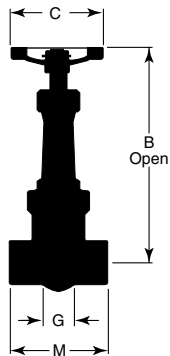
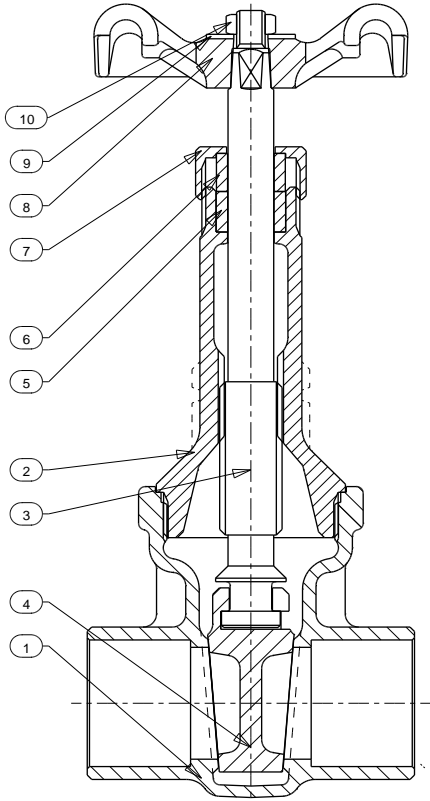
### Dimensions and Weights

Inches (millimeters) - Pounds (kilograms)

| Valve Size | Dimensions |       |       | Wt.    |
|------------|------------|-------|-------|--------|
|            | B          | C     | M     |        |
| 1/4        | 4.96       | 1.75  | 1.81  | 0.7    |
|            | (126)      | (45)  | (46)  | (0.32) |
| 3/8        | 4.96       | 1.75  | 1.81  | 0.7    |
|            | (126)      | (45)  | (46)  | (0.31) |
| 1/2        | 5.07       | 2.06  | 1.98  | 1.0    |
|            | (129)      | (52)  | (51)  | (0.46) |
| 3/4        | 6.25       | 2.56  | 2.14  | 1.6    |
|            | (159)      | (65)  | (55)  | (0.72) |
| 1          | 7.44       | 2.75  | 2.46  | 2.4    |
|            | (189)      | (70)  | (63)  | (1.10) |
| 1 1/4      | 8.62       | 3.06  | 2.77  | 3.3    |
|            | (219)      | (78)  | (71)  | (1.50) |
| 1 1/2      | 9.68       | 3.62  | 2.85  | 4.9    |
|            | (246)      | (92)  | (73)  | (2.25) |
| 2          | 11.85      | 3.62  | 3.25  | 7.0    |
|            | (301)      | (92)  | (83)  | (3.20) |
| 2 1/2      | 14.53      | 5.28  | 4.25  | 12.8   |
|            | (369)      | (134) | (108) | (5.80) |
| 3          | 16.39      | 5.28  | 4.59  | 18.8   |
|            | (416)      | (134) | (117) | (8.52) |

# 200 CWP • Threaded Bonnet • Rising Stem • Solder Ends

## Gate Valve Figure B-108



### Materials of Construction

| No. | Description   | Material                 | ASTM Spec.       |
|-----|---------------|--------------------------|------------------|
| 1   | Body          | Bronze                   | B-62 C83600      |
| 2   | Bonnet        | Bronze                   | B-62 C83600      |
| 3   | Stem          | Copper Silicon Bronze    | B-371 69400      |
| 4   | Disc          | Bronze                   | B-62 C83600      |
| 5   | Packing Ring  | Graphite (Asbestos Free) |                  |
| 6   | Gland         | Brass                    | BSEN12164 CW614N |
| 7   | Packing Nut   | Brass                    | BSEN12164 CW614N |
| 8   | Handwheel     | Malleable Iron           | A-197 F22000     |
| 9   | ID Plate      | Aluminum                 |                  |
| 10  | Handwheel Nut | Brass                    | BSEN12164 CW614N |

#### NOTE:

The addition of the letter "K" at the end of the figure number designates valves assembled & tested in the USA. Materials of Construction & Dimensions are the same.

### Industry Standards

Complies with MSS SP-80 Type 2

See Page 6 for Pressure-Temperature Ratings

### Dimensions and Weights

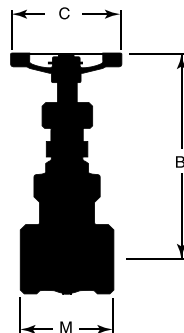
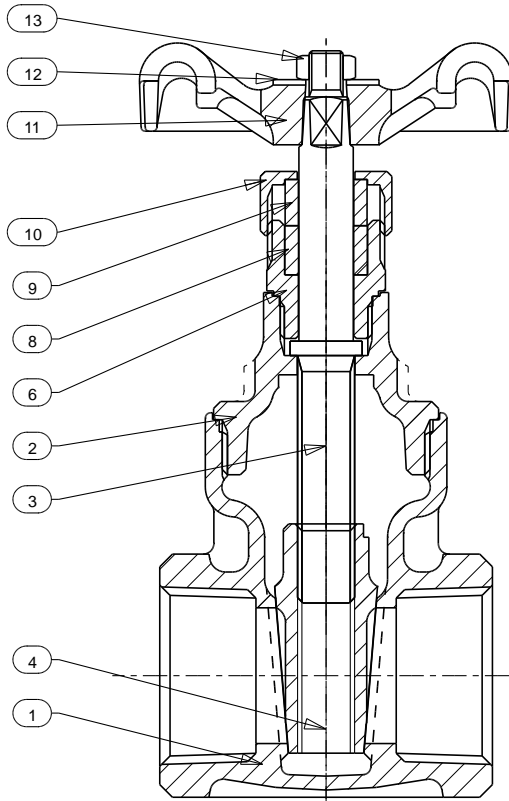
Inches (millimeters) - Pounds (kilograms)

| Valve Size | Dimensions |       |      |       | Wt.    |
|------------|------------|-------|------|-------|--------|
|            | B          | C     | G*   | M     |        |
| ½          | 5.07       | 2.06  | 0.81 | 2.00  | 1.0    |
|            | (129)      | (52)  | (21) | (48)  | (0.46) |
| ¾          | 6.25       | 2.56  | 0.86 | 2.20  | 1.6    |
|            | (159)      | (65)  | (23) | (61)  | (0.72) |
| 1          | 7.44       | 2.75  | 1.04 | 2.50  | 2.4    |
|            | (189)      | (70)  | (27) | (73)  | (1.10) |
| 1 ¼        | 8.62       | 3.06  | 1.18 | 2.80  | 3.3    |
|            | (219)      | (78)  | (30) | (79)  | (1.50) |
| 1 ½        | 9.68       | 3.62  | 1.22 | 2.90  | 4.9    |
|            | (246)      | (92)  | (31) | (88)  | (2.25) |
| 2          | 11.85      | 3.62  | 1.42 | 3.30  | 7.0    |
|            | (301)      | (92)  | (36) | (105) | (3.20) |
| 2 ½        | 14.53      | 5.28  | 1.63 | 4.30  | 12.8   |
|            | (369)      | (134) | (42) | (112) | (5.80) |
| 3          | 16.39      | 5.28  | 1.69 | 4.60  | 18.8   |
|            | (416)      | (134) | (43) | (126) | (8.52) |

\*Piping Make-Up Dimensions

# Class 125 • Threaded Bonnet • Non-Rising Stem • Threaded Ends

## Gate Valve Figure B-103



### Materials of Construction

| No. | Description   | Material                 | ASTM Spec.       |
|-----|---------------|--------------------------|------------------|
| 1   | Body          | Bronze                   | B-62 C83600      |
| 2   | Bonnet        | Bronze                   | B-62 C83600      |
| 3   | Stem          | Brass                    | B-371 69400      |
| 4   | Disc          | Bronze                   | B-62 C83600      |
| 6   | Stuffing Box  | Brass                    | B-371 69400      |
| 8   | Packing Ring  | Graphite (Asbestos Free) |                  |
| 9   | Gland         | Brass                    | BSEN12164 CW614N |
| 10  | Packing Nut   | Brass                    | BSEN12164 CW614N |
| 11  | Handwheel     | Malleable Iron           | A-197 F22000     |
| 12  | ID Plate      | Aluminum                 |                  |
| 13  | Handwheel Nut | Brass                    | BSEN12164 CW614N |

#### NOTE:

The addition of the letter "K" at the end of the figure number designates valves assembled & tested in the USA. Materials of Construction & Dimensions are the same.

### Industry Standards

Complies with MSS SP-80 Type 1

See Page 6 for Pressure-Temperature Ratings

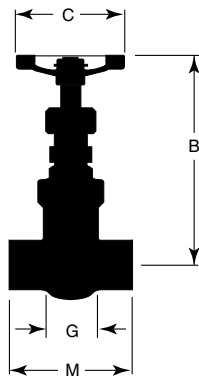
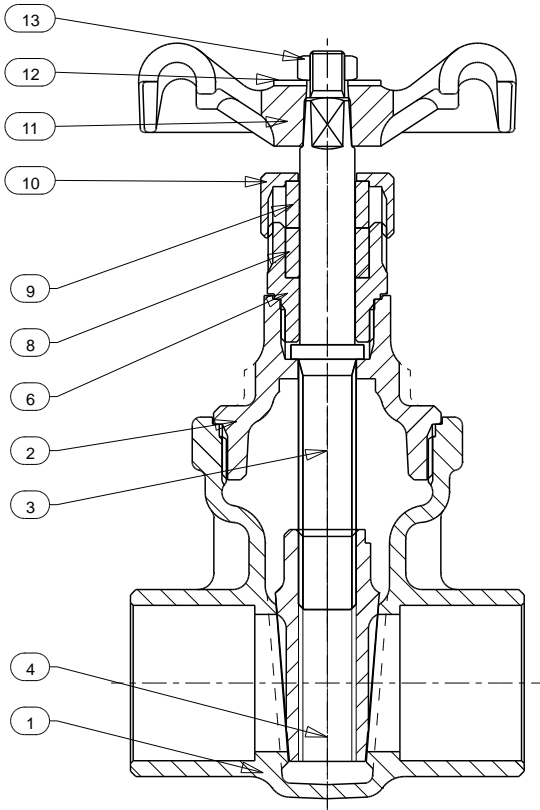
### Dimensions and Weights

Inches (millimeters) - Pounds (kilograms)

| Valve Size | Dimensions |       |       | Wt.    |
|------------|------------|-------|-------|--------|
|            | B          | C     | M     |        |
| ¼          | 2.95       | 1.75  | 1.81  | 0.6    |
|            | (75)       | (45)  | (46)  | (0.27) |
| ⅜          | 2.95       | 1.75  | 1.81  | 0.6    |
|            | (75)       | (45)  | (46)  | (0.26) |
| ½          | 3.23       | 2.06  | 1.98  | 0.8    |
|            | (82)       | (52)  | (51)  | (0.35) |
| ¾          | 3.74       | 2.56  | 2.14  | 1.2    |
|            | (95)       | (65)  | (55)  | (0.55) |
| 1          | 4.64       | 2.75  | 2.46  | 1.8    |
|            | (118)      | (70)  | (63)  | (0.84) |
| 1 ¼        | 5.67       | 3.06  | 2.77  | 2.6    |
|            | (144)      | (79)  | (71)  | (1.18) |
| 1 ½        | 6.53       | 3.62  | 2.85  | 3.6    |
|            | (166)      | (92)  | (73)  | (1.66) |
| 2          | 7.48       | 4.06  | 3.25  | 5.6    |
|            | (190)      | (103) | (83)  | (2.55) |
| 2 ½        | 9.26       | 5.28  | 4.25  | 12.4   |
|            | (235)      | (134) | (108) | (5.62) |
| 3          | 9.89       | 5.28  | 4.59  | 17.4   |
|            | (251)      | (134) | (117) | (7.89) |

# 200 CWP • Threaded Bonnet • Non-Rising Stem • Solder Ends

## Gate Valve Figure B-104



### Materials of Construction

| No. | Description   | Material                 | ASTM Spec.       |
|-----|---------------|--------------------------|------------------|
| 1   | Body          | Bronze                   | B-62 C83600      |
| 2   | Bonnet        | Bronze                   | B-62 C83600      |
| 3   | Stem          | Copper Silicon Bronze    | B-371 C69400     |
| 4   | Disc          | Bronze                   | B-62 C83600      |
| 6   | Stuffing Box  | Copper Silicon Brass     | B-124 C37700     |
| 8   | Packing Ring  | Graphite (Asbestos Free) |                  |
| 9   | Gland         | Brass                    | BSEN12164 CW614N |
| 10  | Packing Nut   | Brass                    | BSEN12164 CW614N |
| 11  | Handwheel     | Malleable Iron           | A-197 F22000     |
| 12  | ID Plate      | Aluminum                 |                  |
| 13  | Handwheel Nut | Brass                    | BSEN12164 CW614N |

#### NOTE:

The addition of the letter "K" at the end of the figure number designates valves assembled & tested in the USA. Materials of Construction & Dimensions are the same.

### Industry Standards

Complies with MSS SP-80 Type 1

See Page 6 for Pressure-Temperature Ratings

### Dimensions and Weights

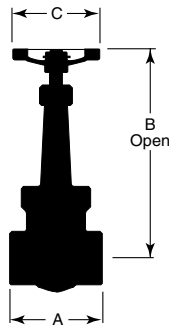
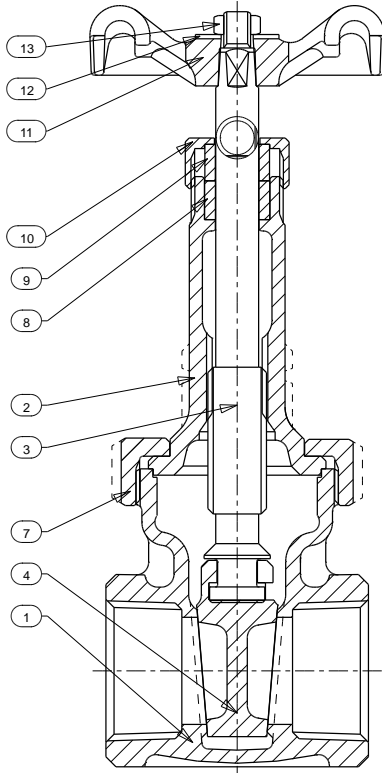
Inches (millimeters) - Pounds (kilograms)

| Valve Size | Dimensions |       |      |       | Wt.    |
|------------|------------|-------|------|-------|--------|
|            | B          | C     | G*   | M     |        |
| ½          | 3.23       | 2.06  | 0.81 | 2.00  | 1.0    |
|            | (82)       | (52)  | (21) | (48)  | (0.47) |
| ¾          | 3.74       | 2.56  | 0.86 | 2.20  | 1.3    |
|            | (95)       | (65)  | (23) | (62)  | (0.60) |
| 1          | 4.64       | 2.75  | 1.04 | 2.50  | 2.0    |
|            | (118)      | (70)  | (27) | (73)  | (0.92) |
| 1 ¼        | 5.67       | 3.06  | 1.18 | 2.80  | 3.1    |
|            | (144)      | (79)  | (30) | (79)  | (1.41) |
| 1 ½        | 6.53       | 3.62  | 1.22 | 2.90  | 4.2    |
|            | (166)      | (92)  | (31) | (88)  | (1.92) |
| 2          | 7.48       | 4.06  | 1.42 | 3.30  | 6.0    |
|            | (190)      | (103) | (36) | (105) | (2.72) |
| 2 ½        | 9.26       | 5.28  | 1.44 | 4.30  | 12.4   |
|            | (235)      | (134) | (37) | (112) | (5.62) |
| 3          | 9.89       | 5.28  | 1.57 | 4.60  | 17.4   |
|            | (251)      | (134) | (40) | (126) | (7.89) |

\*Piping Make-Up Dimensions

# Class 125 • Union Bonnet • Rising Stem • Threaded Ends

## Gate Valve Figure B-105



### Materials of Construction

| No. | Description    | Material  | ASTM Spec.       |
|-----|----------------|---|------------------|
| 1   | Body           | Bronze  | B-62 C83600      |
| 2   | Bonnet - Union | Bronze  | B-62 C83600      |
| 3   | Stem           | Copper Silicon Bronze                                   | B-371 C69400     |
| 4   | Disc           | Bronze  | B-62 C83600      |
| 7   | Union Ring     | Bronze  | B-62 C83600      |
| 8   | Packing Ring   | Graphite (Asbestos Free)                                |                  |
| 9   | Gland          | Brass   | BSEN12164 CW614N |
| 10  | Packing Nut    | (1/4" - 2") Brass                                       | BSEN12164 CW614N |
|     |                | (2 1/2" - 3") Bronze                                    | B-62 C83600      |
| 11  | Handwheel      | Malleable Iron  | A-197 F22000     |
| 12  | ID Plate       | Aluminum  |                  |
| 13  | Handwheel Nut  | Brass   | BSEN12164 CW614N |
| 14  | Gasket         | (2 1/2" - 3" only) Synthetic Glass Fiber Nitrile Filled | Klingersil C4500 |

#### NOTE:

The addition of the letter "K" at the end of the figure number designates valves assembled & tested in the USA. Materials of Construction & Dimensions are the same.

### Industry Standards

Complies with MSS SP-80 Type 2

See Page 6 for Pressure-Temperature Ratings

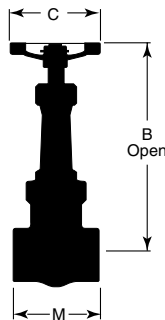
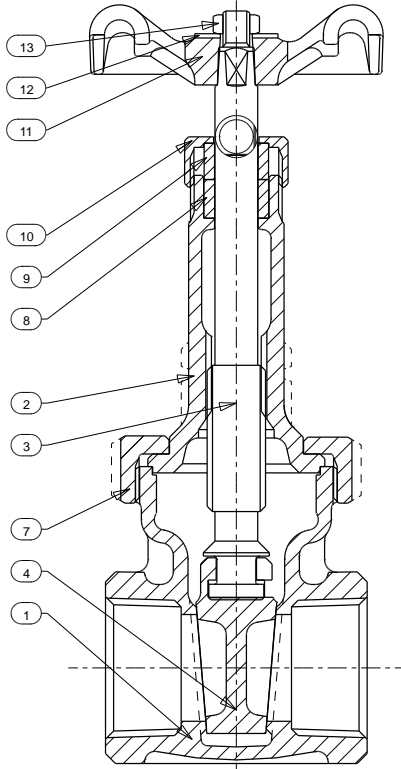
### Dimensions and Weights

Inches (millimeters) - Pounds (kilograms)

| Valve Size | Dimensions |       |       | Wt.    |
|------------|------------|-------|-------|--------|
|            | B          | C     | A     |        |
| 1/4        | 4.96       | 1.75  | 1.81  | 0.7    |
|            | (126)      | (45)  | (46)  | (0.32) |
| 3/8        | 4.96       | 1.75  | 1.81  | 0.7    |
|            | (126)      | (45)  | (46)  | (0.31) |
| 1/2        | 5.07       | 2.06  | 1.98  | 1.0    |
|            | (129)      | (52)  | (51)  | (0.46) |
| 3/4        | 6.25       | 2.56  | 2.14  | 1.6    |
|            | (159)      | (65)  | (55)  | (0.72) |
| 1          | 7.44       | 2.75  | 2.46  | 2.4    |
|            | (189)      | (70)  | (63)  | (1.10) |
| 1 1/4      | 8.62       | 3.06  | 2.77  | 3.3    |
|            | (219)      | (78)  | (71)  | (1.50) |
| 1 1/2      | 9.68       | 3.62  | 2.85  | 4.9    |
|            | (246)      | (92)  | (73)  | (2.25) |
| 2          | 11.85      | 3.62  | 3.25  | 7.0    |
|            | (301)      | (92)  | (83)  | (3.20) |
| 2 1/2      | 14.53      | 5.28  | 4.25  | 12.8   |
|            | (369)      | (134) | (108) | (5.80) |
| 3          | 16.39      | 5.28  | 4.59  | 18.8   |
|            | (416)      | (134) | (117) | (8.52) |

# Class 150 • Union Bonnet • Rising Stem • Threaded Ends

## Gate Valve Figure B-120



### Materials of Construction

| No. | Description    | Material  | ASTM Spec.       |
|-----|----------------|---|------------------|
| 1   | Body           | Bronze  | B-62 C83600      |
| 2   | Bonnet - Union | Bronze  | B-62 C83600      |
| 3   | Stem           | Copper Silicon Bronze                                   | B-371 C69400     |
| 4   | Disc           | Bronze  | B-62 C83600      |
| 7   | Union Ring     | Bronze  | B-62 C83600      |
| 8   | Packing Ring   | Graphite (Asbestos Free)                                |                  |
| 9   | Gland          | Brass   | BSEN12164 CW614N |
| 10  | Packing Nut    | (1/4" - 2") Brass                                       | BSEN12164 CW614N |
|     |                | (2 1/2" - 3") Bronze                                    | B-62 C83600      |
| 11  | Handwheel      | Malleable Iron  | A-197 F22000     |
| 12  | ID Plate       | Aluminum  |                  |
| 13  | Handwheel Nut  | Brass   | BSEN12164 CW614N |
| 14  | Gasket         | (2 1/2" - 3" only) Synthetic Glass Fiber Nitrile Filled | Klingsil C4500   |

**NOTE:**

The addition of the letter "K" at the end of the figure number designates valves assembled & tested in the USA. Materials of Construction & Dimensions are the same.

### Industry Standards

Complies with MSS SP-80 Type 2

See Page 6 for Pressure-Temperature Ratings

### Dimensions and Weights

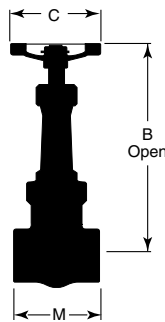
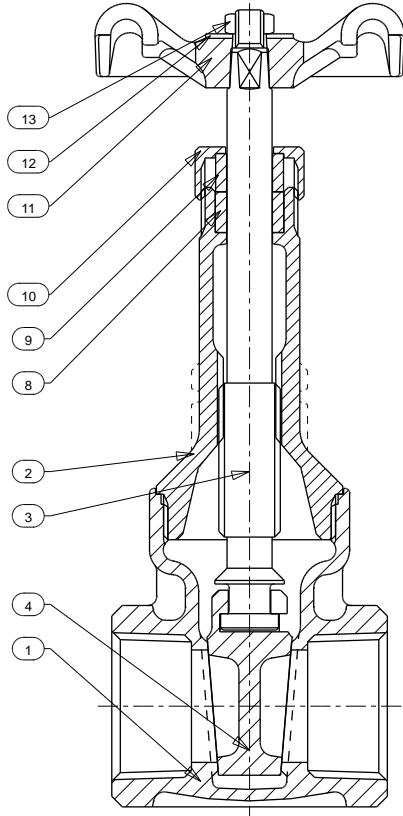
Inches (millimeters) - Pounds (kilograms)

| Valve Size | Dimensions |       |       | Wt.    |
|------------|------------|-------|-------|--------|
|            | B          | C     | M     |        |
| 1/4        | 4.96       | 1.75  | 1.81  | 0.7    |
|            | (126)      | (45)  | (46)  | (0.32) |
| 3/8        | 4.96       | 1.75  | 1.81  | 0.7    |
|            | (126)      | (45)  | (46)  | (0.31) |
| 1/2        | 5.07       | 2.06  | 1.98  | 1.0    |
|            | (129)      | (52)  | (51)  | (0.46) |
| 3/4        | 6.25       | 2.56  | 2.14  | 1.6    |
|            | (159)      | (65)  | (55)  | (0.72) |
| 1          | 7.44       | 2.75  | 2.46  | 2.4    |
|            | (189)      | (70)  | (63)  | (1.10) |
| 1 1/4      | 8.62       | 3.06  | 2.77  | 3.3    |
|            | (219)      | (78)  | (71)  | (1.50) |
| 1 1/2      | 9.68       | 3.62  | 2.85  | 4.9    |
|            | (246)      | (92)  | (73)  | (2.25) |
| 2          | 11.85      | 3.62  | 3.25  | 7.0    |
|            | (301)      | (92)  | (83)  | (3.20) |
| 2 1/2      | 14.53      | 5.28  | 4.25  | 12.8   |
|            | (369)      | (134) | (108) | (5.80) |
| 3          | 16.39      | 5.28  | 4.59  | 18.8   |
|            | (416)      | (134) | (117) | (8.52) |



# Class 150 • Threaded Bonnet • Rising Stem • Threaded Ends

## Gate Valve Figure B-122



### Materials of Construction

| No. | Description   | Material                 | ASTM Spec.       |
|-----|---------------|--------------------------|------------------|
| 1   | Body          | Bronze                   | B-62 C83600      |
| 2   | Bonnet        | Bronze                   | B-62 C83600      |
| 3   | Stem          | Copper Silicon Bronze    | B-371 C69400     |
| 4   | Disc          | Bronze                   | B-62 C83600      |
| 8   | Packing Ring  | Graphite (Asbestos Free) |                  |
| 9   | Gland         | Brass                    | BSEN12164 CW614N |
| 10  | Packing Nut   | Brass                    | BSEN12164 CW614N |
| 11  | Handwheel     | Malleable Iron           | A-197 F22000     |
| 12  | ID Plate      | Aluminum                 |                  |
| 13  | Handwheel Nut | Brass                    | BSEN12164 CW614N |

#### NOTE:

The addition of the letter "K" at the end of the figure number designates valves assembled & tested in the USA. Materials of Construction & Dimensions are the same.

### Industry Standards

Complies with MSS SP-80 Type 2

See Page 6 for Pressure-Temperature Ratings

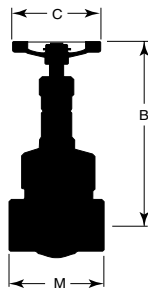
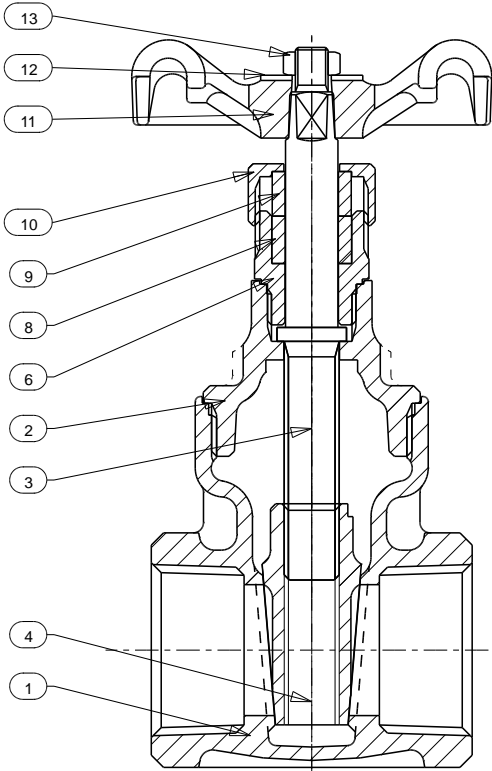
### Dimensions and Weights

Inches (millimeters) - Pounds (kilograms)

| Valve Size | Dimensions |       |       | Wt.    |
|------------|------------|-------|-------|--------|
|            | B          | C     | M     |        |
| ¼          | 4.96       | 1.75  | 1.81  | 0.7    |
|            | (126)      | (45)  | (46)  | (0.32) |
| ⅜          | 4.96       | 1.75  | 1.81  | 0.7    |
|            | (126)      | (45)  | (46)  | (0.32) |
| ½          | 5.07       | 2.06  | 1.98  | 1.0    |
|            | (129)      | (52)  | (51)  | (0.46) |
| ¾          | 6.25       | 2.56  | 2.14  | 1.6    |
|            | (159)      | (65)  | (55)  | (0.72) |
| 1          | 7.44       | 2.75  | 2.46  | 2.4    |
|            | (189)      | (70)  | (63)  | (1.10) |
| 1 ¼        | 8.62       | 3.06  | 2.77  | 3.3    |
|            | (219)      | (78)  | (71)  | (1.50) |
| 1 ½        | 9.68       | 3.62  | 2.85  | 4.9    |
|            | (246)      | (92)  | (73)  | (2.25) |
| 2          | 11.85      | 3.62  | 3.25  | 7.0    |
|            | (301)      | (92)  | (83)  | (3.20) |
| 2 ½        | 14.53      | 5.28  | 4.25  | 12.8   |
|            | (369)      | (134) | (108) | (5.80) |
| 3          | 16.39      | 5.28  | 4.59  | 18.8   |
|            | (416)      | (134) | (117) | (8.52) |

# Class 150 • Threaded Bonnet • Non-Rising Stem • Threaded Ends

## Gate Valve Figure B-128



### Materials of Construction

| No. | Description   | Material                 | ASTM Spec.       |
|-----|---------------|--------------------------|------------------|
| 1   | Body          | Bronze                   | B-62 C83600      |
| 2   | Bonnet        | Bronze                   | B-62 C83600      |
| 3   | Stem          | Copper Silicon Bronze    | B-371 C69400     |
| 4   | Disc          | Bronze                   | B-62 C83600      |
| 6   | Stuffing Box  | Brass                    | B-371 C69400     |
| 8   | Packing Ring  | Graphite (Asbestos Free) |                  |
| 9   | Gland         | Brass                    | BSEN12164 CW614N |
| 10  | Packing Nut   | Brass                    | BSEN12164 CW614N |
| 11  | Handwheel     | Malleable Iron           | A-197 F22000     |
| 12  | ID Plate      | Aluminum                 |                  |
| 13  | Handwheel Nut | Brass                    | BSEN12164 CW614N |

**NOTE:**

The addition of the letter "K" at the end of the figure number designates valves assembled & tested in the USA. Materials of Construction & Dimensions are the same.

### Industry Standards

Complies with MSS SP-80 Type 1

See Page 6 for Pressure-Temperature Ratings

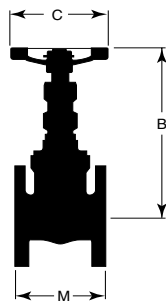
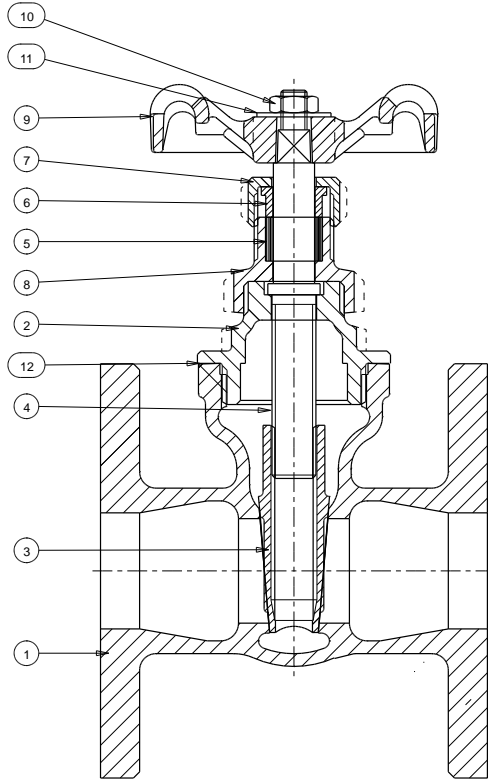
### Dimensions and Weights

Inches (millimeters) - Pounds (kilograms)

| Valve Size | Dimensions |       |       | Wt.    |
|------------|------------|-------|-------|--------|
|            | B          | C     | M     |        |
| 1/4        | 2.95       | 1.75  | 1.81  | 0.6    |
|            | (75)       | (45)  | (46)  | (0.27) |
| 3/8        | 2.95       | 1.75  | 1.81  | 0.6    |
|            | (75)       | (45)  | (46)  | (0.26) |
| 1/2        | 3.23       | 2.06  | 1.98  | 0.8    |
|            | (82)       | (52)  | (51)  | (0.35) |
| 3/4        | 3.74       | 2.56  | 2.14  | 1.2    |
|            | (95)       | (65)  | (55)  | (0.55) |
| 1          | 4.64       | 2.75  | 2.46  | 1.8    |
|            | (118)      | (70)  | (63)  | (0.84) |
| 1 1/4      | 5.67       | 3.06  | 2.77  | 2.6    |
|            | (144)      | (79)  | (71)  | (1.18) |
| 1 1/2      | 6.53       | 3.62  | 2.85  | 3.6    |
|            | (166)      | (92)  | (73)  | (1.66) |
| 2          | 7.48       | 4.06  | 3.25  | 5.6    |
|            | (190)      | (103) | (83)  | (2.55) |
| 2 1/2      | 9.26       | 5.28  | 4.25  | 12.4   |
|            | (235)      | (134) | (108) | (5.62) |
| 3          | 9.89       | 5.28  | 4.59  | 17.4   |
|            | (251)      | (134) | (117) | (7.89) |

# Class 150 • Threaded Bonnet • Non-Rising Stem • Flanged Ends

## Gate Valve Figure B-131



## Materials of Construction

| No. | Description   | Material  | ASTM Spec.                  |
|-----|---------------|---|-----------------------------|
| 1   | Body          | Bronze  | B-62 C83600                 |
| 2   | Bonnet        | Bronze  | B-62 C83600                 |
| 3   | Disc          | Bronze  | B-62 C83600                 |
| 4   | Stem          | Copper Silicon Bronze                                   | B-371 C69400                |
| 5   | Packing       | Graphite (Asbestos Free)                                |                             |
| 6   | Gland         | Brass   | BSEN12164 CW614N            |
| 7   | Packing Nut   | Brass   | BSEN12164 CW614N            |
| 8   | Stem Bush     | (1") Copper Silicon Bronze                              | B-371 C69400                |
| 8   | Stuffing Box  | (1 ¼" - 2") Copper Silicon Bronze<br>(2 ½" - 3") Bronze | B-371 C69400<br>B-62 C83600 |
| 9   | Handwheel     | Malleable Iron  | A-197 F22000                |
| 10  | Handwheel Nut | Brass   | BSEN12164 CW614N            |
| 11  | ID Plate      | Aluminum  |                             |
| 12  | Gasket        | (3" only) Synthetic Glass Fiber<br>Nitrile Filled       |                             |

### NOTE:

The addition of the letter "K" at the end of the figure number designates valves assembled & tested in the USA. Materials of Construction & Dimensions are the same.

## Industry Standards

Complies with MSS SP-80 Type 1

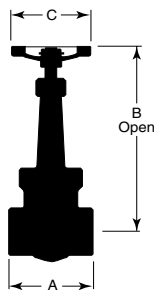
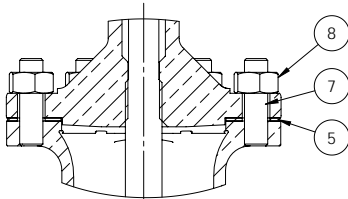
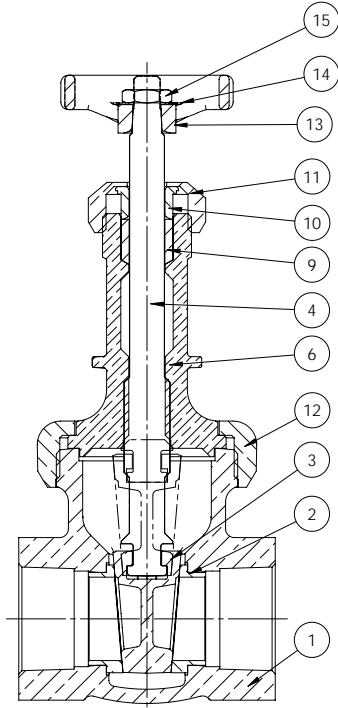
See Page 6 for Pressure-Temperature Ratings

## Dimensions and Weights

Inches (millimeters) - Pounds (kilograms)

| Valve Size | Dimensions     |               |               | Wt.              |
|------------|----------------|---------------|---------------|------------------|
|            | B              | C             | M             |                  |
| 1          | 4.88<br>(124)  | 2.75<br>(70)  | 3.90<br>(99)  | 5.71<br>(2.59)   |
| 1¼         | 5.71<br>(145)  | 3.63<br>(92)  | 4.33<br>(110) | 6.31<br>(2.86)   |
| 1½         | 6.50<br>(165)  | 3.63<br>(92)  | 4.72<br>(120) | 9.04<br>(4.10)   |
| 2          | 7.44<br>(189)  | 4.06<br>(103) | 5.32<br>(135) | 12.33<br>(5.54)  |
| 2½         | 9.13<br>(232)  | 4.75<br>(121) | 6.50<br>(165) | 18.50<br>(8.39)  |
| 3          | 10.39<br>(264) | 6.00<br>(152) | 7.28<br>(185) | 25.50<br>(11.60) |

## Gate Valve Figure B-132



### Materials of Construction

| No. | Description       | Material                                       | ASTM Spec.     |
|-----|-------------------|--|----------------|
| 1   | Body              | Bronze   | B-61 C92200    |
| 2   | Body Seat Ring    | Stainless Steel                                | A-276 Type 410 |
| 3   | Disc              | Bronze   | B-61 C92200    |
| 4   | Stem              | Bronze   | B-371 C69400   |
| 5   | Gasket            | Synthetic/Glass Fiber with Nitrile Binder      |                |
| 6   | Bonnet            | Bronze   | B-61 C92200    |
| 7   | Stud              | Steel Cadmium                                  | A-109 C1144    |
| 8   | Stud Nut          | Mild Steel                                     | A-563 GR A     |
| 9   | Packing           | Graphite (Asbestos Free)                       |                |
| 10  | Gland             | Brass  | B-16 H02       |
| 11  | Packing Nut       | Brass  | B-16 H02       |
| 12  | Union Bonnet Ring | Bronze   | B-61 C92200    |
| 13  | Handwheel         | (1/4" - 2 1/2") Cast Iron<br>(3") Ductile Iron |                |
| 14  | ID Plate          | Steel Zinc Plated                              |                |
| 15  | Lock Nut          | Steel Cadmium                                  |                |

**NOTE:**

The addition of the letter "K" at the end of the figure number designates valves assembled & tested in the USA. Materials of Construction & Dimensions are the same.

### Industry Standards

Complies with MSS SP-80 Type 2

See Page 6 for Pressure-Temperature Ratings

### Dimensions and Weights

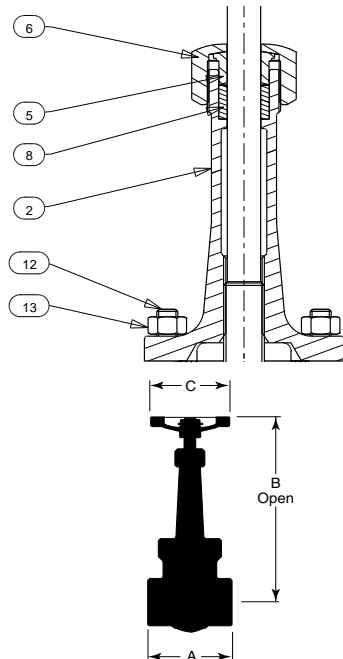
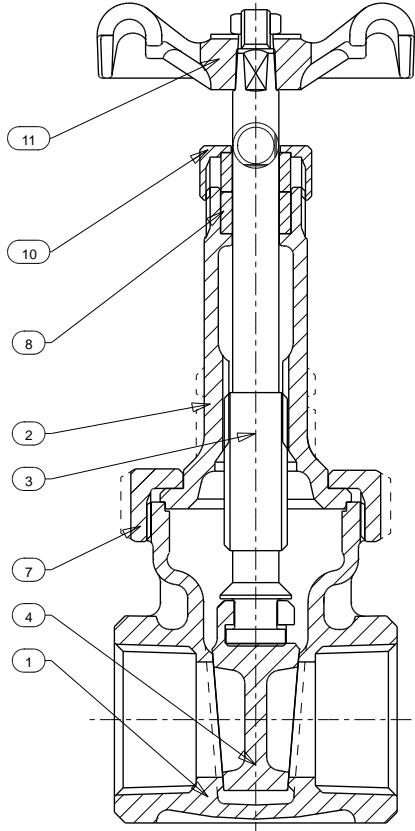
Inches (millimeters) - Pounds (kilograms)

| Valve Size | Dimensions |       |       | Wt.     |
|------------|------------|-------|-------|---------|
|            | B          | C     | A     |         |
| 1/4        | 4.67       | 2.24  | 2.03  | 0.88    |
|            | (119)      | (57)  | (52)  | (0.40)  |
| 3/8        | 4.67       | 2.24  | 2.13  | 0.90    |
|            | (119)      | (57)  | (54)  | (0.41)  |
| 1/2        | 5.37       | 2.76  | 2.44  | 1.43    |
|            | (136)      | (70)  | (62)  | (0.65)  |
| 3/4        | 6.57       | 2.76  | 2.61  | 2.07    |
|            | (167)      | (70)  | (66)  | (0.94)  |
| 1          | 7.60       | 2.76  | 3.06  | 3.23    |
|            | (193)      | (70)  | (78)  | (1.47)  |
| 1 1/4      | 9.09       | 4.02  | 3.35  | 4.86    |
|            | (231)      | (102) | (85)  | (2.21)  |
| 1 1/2      | 10.28      | 4.02  | 3.69  | 6.18    |
|            | (261)      | (102) | (94)  | (2.81)  |
| 2          | 12.17      | 4.02  | 3.96  | 10.36   |
|            | (309)      | (102) | (101) | (4.71)  |
| *2 1/2     | 14.37      | 4.76  | 4.60  | 18.61   |
|            | (365)      | (121) | (117) | (8.46)  |
| *3         | 16.68      | 5.51  | 5.63  | 31.33   |
|            | (424)      | (140) | (143) | (14.24) |

\* 2 1/2" and 3" have Bolted Bonnet

# Class 200 • Union Bonnet\* • Rising Stem • Threaded Ends

## Gate Valve Figure B-135



### Materials of Construction

| No. | Description    | Material  | ASTM Spec.                      |
|-----|----------------|---|---------------------------------|
| 1   | Body           | Bronze  | B-62 C83600                     |
| 2   | Bonnet - Union | Bronze  | B-62 C83600                     |
| 3   | Stem           | Copper Silicon Bronze                                   | B-371 C69400                    |
| 4   | Disc           | Bronze  | B-62 C83600                     |
| 5   | Gland          | Brass   | BSEN12164 CW614N                |
| 6   | Packing Nut    | Bronze  | B-62 C83600                     |
| 7   | Union Ring     | Bronze  | B-62 C83600                     |
| 8   | Packing Ring   | Graphite (Asbestos Free)                                | WRAS Listed & Approved          |
| 10  | Packing Nut    | (1/4" - 2") Brass<br>(2 1/2" - 3") Bronze               | BSEN12164 CW614N<br>B-62 C83600 |
| 11  | Handwheel      | Malleable Iron  | A-197 F22000                    |
| 12  | Bonnet Stud    | Phosphated Steel  | BS970605M36 T & BS3189          |
| 13  | Bonnet Nut     | Phosphated Steel  | BS4190 & BS3189                 |
| 14  | Gasket**       | (2 1/2" - 3" only) Synthetic Glass Fiber Nitrile Filled | Klingsil C4500                  |

\*\* Not Shown

**NOTE:**

The addition of the letter "K" at the end of the figure number designates valves assembled & tested in the USA. Materials of Construction & Dimensions are the same.

### Industry Standards

Complies with MSS SP-80 Type 2

See Page 6 for Pressure-Temperature Ratings

### Dimensions and Weights

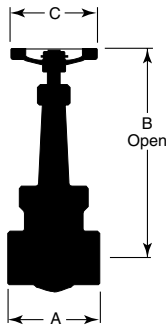
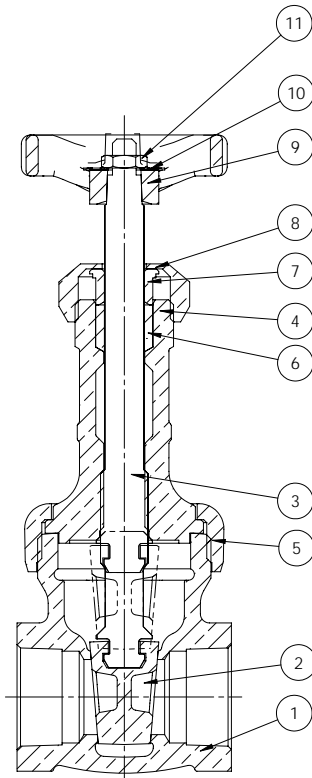
Inches (millimeters) - Pounds (kilograms)

| Valve Size | Dimensions |       |       | Wt.    |
|------------|------------|-------|-------|--------|
|            | B          | C     | A     |        |
| 1/4        | 4.96       | 1.75  | 1.81  | 0.7    |
|            | (126)      | (45)  | (46)  | (0.32) |
| 3/8        | 4.96       | 1.75  | 1.81  | 0.7    |
|            | (126)      | (45)  | (46)  | (0.31) |
| 1/2        | 5.07       | 2.06  | 1.98  | 1.0    |
|            | (129)      | (52)  | (51)  | (0.46) |
| 3/4        | 6.25       | 2.56  | 2.14  | 1.6    |
|            | (159)      | (65)  | (55)  | (0.72) |
| 1          | 7.44       | 2.75  | 2.46  | 2.4    |
|            | (189)      | (70)  | (63)  | (1.10) |
| 1 1/4      | 8.62       | 3.06  | 2.77  | 3.3    |
|            | (219)      | (78)  | (71)  | (1.50) |
| 1 1/2      | 9.68       | 3.62  | 2.85  | 4.9    |
|            | (246)      | (92)  | (73)  | (2.25) |
| 2          | 11.85      | 3.62  | 3.25  | 7.0    |
|            | (301)      | (92)  | (83)  | (3.20) |
| 2 1/2      | 14.53      | 5.28  | 4.25  | 12.8   |
|            | (369)      | (134) | (108) | (5.80) |
| 3          | 16.39      | 5.28  | 4.59  | 18.8   |
|            | (416)      | (134) | (117) | (8.52) |

\* 2 1/2" and 3" have Bolted Bonnet

# Class 300 • Union Bonnet\* • Rising Stem • Threaded Ends

## Gate Valve Figure B-144



### Materials of Construction

| No. | Description       | Material                 | ASTM Spec.   |
|-----|-------------------|--------------------------|--------------|
| 1   | Body              | Bronze                   | B-61 C92200  |
| 2   | Disc              | Bronze                   | B-61 C92200  |
| 3   | Stem              | Bronze                   | B-371 C69400 |
| 4   | Bonnet            | Bronze                   | B-61 C92200  |
| 5   | Union Bonnet Ring | Bronze                   | B-61 C92200  |
| 6   | Packing           | Graphite (Asbestos Free) |              |
| 7   | Gland             | Brass                    | B-16 H02     |
| 8   | Packing Nut       | (1/4" - 1 1/2") Brass    | B-16 H02     |
|     |                   | (2" - 3") Brass          | B-61 C92200  |
| 9   | Handwheel         | Ductile Iron             |              |
| 10  | ID Plate          | Aluminum                 |              |
| 11  | Lock Nut          | Steel Cadmium            |              |

**NOTE:**

The addition of the letter "K" at the end of the figure number designates valves assembled & tested in the USA. Materials of Construction & Dimensions are the same.

### Industry Standards

Complies with MSS SP-80 Type 2

See Page 6 for Pressure-Temperature Ratings

### Dimensions and Weights

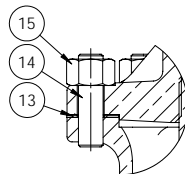
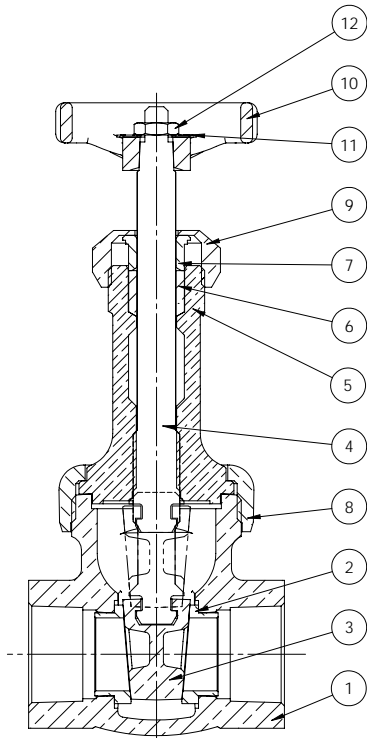
Inches (millimeters) - Pounds (kilograms)

| Valve Size | Dimensions |       |       | Wt.     |
|------------|------------|-------|-------|---------|
|            | B          | C     | A     |         |
| 1/4        | 4.65       | 2.25  | 1.64  | 0.79    |
|            | (118)      | (57)  | (42)  | (0.36)  |
| 3/8        | 4.65       | 2.25  | 1.64  | 0.77    |
|            | (118)      | (57)  | (42)  | (0.35)  |
| 1/2        | 5.37       | 2.75  | 2.10  | 1.28    |
|            | (136)      | (70)  | (53)  | (0.58)  |
| 3/4        | 6.56       | 2.75  | 2.14  | 1.85    |
|            | (167)      | (70)  | (54)  | (0.84)  |
| 1          | 7.60       | 2.75  | 2.47  | 2.99    |
|            | (193)      | (70)  | (63)  | (1.36)  |
| 1 1/4      | 9.09       | 4.00  | 3.08  | 4.40    |
|            | (231)      | (102) | (78)  | (2.00)  |
| 1 1/2      | 10.24      | 4.00  | 3.21  | 5.46    |
|            | (260)      | (102) | (82)  | (2.48)  |
| 2          | 12.14      | 4.00  | 3.47  | 9.70    |
|            | (308)      | (102) | (88)  | (4.41)  |
| *2 1/2     | 14.65      | 4.75  | 4.25  | 14.83   |
|            | (372)      | (121) | (108) | (6.74)  |
| *3         | 16.81      | 5.50  | 4.59  | 22.07   |
|            | (427)      | (140) | (117) | (10.03) |

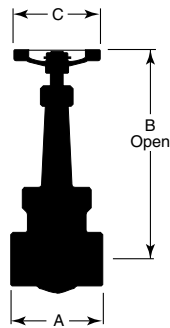
\* 2 1/2" and 3" have Bolted Bonnet

# Class 300 • Union Bonnet\* • Rising Stem • SS Seats • Thrd. Ends

## Gate Valve Figure B-145



FOR 2 1/2"-3"



### Materials of Construction

| No. | Description       | Material                                  | ASTM Spec.     |
|-----|-------------------|---|----------------|
| 1   | Body              | Bronze                                    | B-61 C92200    |
| 2   | Body Seat Ring    | Stainless Steel                           | A-276 Type 410 |
| 3   | Disc              | Bronze                                    | B-61 C92200    |
| 4   | Stem              | Bronze                                    | B-371 C69400   |
| 5   | Bonnet            | Bronze                                    | B-61 C92200    |
| 6   | Packing           | Graphite (Asbestos Free)                  |                |
| 7   | Gland             | Brass                                     | B-16 H02       |
| 8   | Union Bonnet Ring | Bronze                                    | B-61 C92200    |
| 9   | Packing Nut       | Brass                                     | B-16 H02       |
| 10  | Handwheel         | Cast Iron                                 |                |
| 11  | ID Plate          | Aluminum                                  |                |
| 12  | Lock Nut          | (2 1/2" - 3") Steel Cadmium               |                |
| 13  | Gasket            | Synthetic/Glass Fiber with Nitrile Binder |                |
| 14  | Stud              | Steel Cadmium                             | A-109 C1145    |
| 15  | Nut               | Mild Steel                                | A-563 GR A     |

#### NOTE:

The addition of the letter "K" at the end of the figure number designates valves assembled & tested in the USA. Materials of Construction & Dimensions are the same.

### Industry Standards

Complies with MSS SP-80 Type 2

See Page 6 for Pressure-Temperature Ratings

### Dimensions and Weights

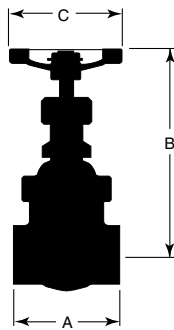
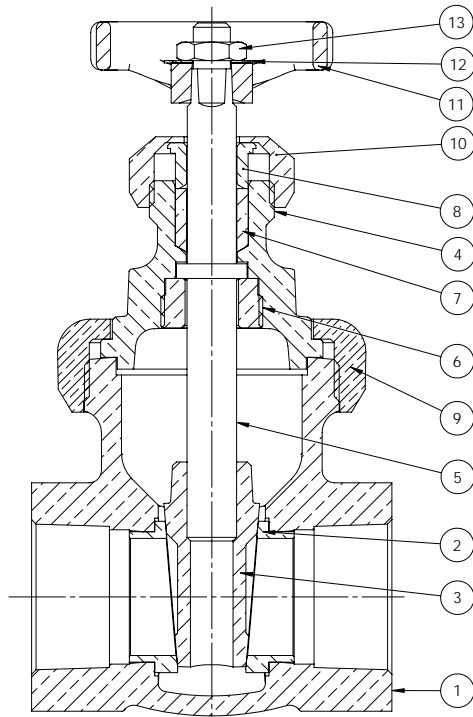
Inches (millimeters) - Pounds (kilograms)

| Valve Size | Dimensions |       |       | Wt.     |
|------------|------------|-------|-------|---------|
|            | B          | C     | A     |         |
| 1/4        | 4.67       | 2.24  | 2.03  | 0.88    |
|            | (119)      | (57)  | (52)  | (0.40)  |
| 3/8        | 7.43       | 2.24  | 2.13  | 0.90    |
|            | (189)      | (57)  | (54)  | (0.41)  |
| 1/2        | 5.37       | 2.76  | 2.44  | 1.43    |
|            | (136)      | (70)  | (62)  | (0.65)  |
| 3/4        | 6.56       | 2.76  | 2.61  | 2.07    |
|            | (167)      | (70)  | (66)  | (0.94)  |
| 1          | 7.60       | 2.76  | 3.06  | 3.23    |
|            | (193)      | (70)  | (78)  | (1.47)  |
| 1 1/4      | 9.09       | 4.02  | 3.35  | 4.86    |
|            | (231)      | (102) | (85)  | (2.21)  |
| 1 1/2      | 10.28      | 4.02  | 3.69  | 6.18    |
|            | (261)      | (102) | (94)  | (2.81)  |
| 2          | 12.17      | 4.02  | 3.96  | 10.36   |
|            | (309)      | (102) | (101) | (4.71)  |
| *2 1/2     | 14.36      | 4.75  | 4.60  | 19.21   |
|            | (365)      | (121) | (117) | (8.73)  |
| *3         | 16.71      | 5.51  | 5.63  | 32.82   |
|            | (425)      | (140) | (143) | (14.92) |

\* 2 1/2" and 3" have Bolted Bonnet

**Class 300 • Union Bonnet • Non-Rising Stem • SS Seats • Thrd. Ends**

**Gate Valve Figure B-147**



**Materials of Construction**

| No. | Description        | Material                 | ASTM Spec.     |
|-----|--------------------|--------------------------|----------------|
| 1   | Body               | Bronze                   | B-61 C92200    |
| 2   | Disc               | Bronze                   | B-61 C92200    |
| 3   | Body Seat Ring     | Stainless Steel          | A-276 Type 410 |
| 4   | Bonnet             | Bronze                   | B-61 C92200    |
| 5   | Stem               | Bronze                   | B-371 C69400   |
| 6   | Stem Retaining Nut | Brass                    | B-16 H02       |
| 7   | Packing            | Graphite (Asbestos Free) |                |
| 8   | Gland              | Brass                    | B-16 H02       |
| 9   | Union Bonnet Ring  | Bronze                   | B-61 C92200    |
| 10  | Packing Nut        | Brass                    | B-16 H02       |
| 11  | Handwheel          | Ductile Iron             |                |
| 12  | ID Plate           | Aluminum                 |                |
| 13  | Lock Nut           | Steel Cadmium            |                |

**NOTE:**

The addition of the letter "K" at the end of the figure number designates valves assembled & tested in the USA. Materials of Construction & Dimensions are the same.

**Industry Standards**

Complies with MSS SP-80 Type 1

See Page 6 for Pressure-Temperature Ratings

**Dimensions and Weights**

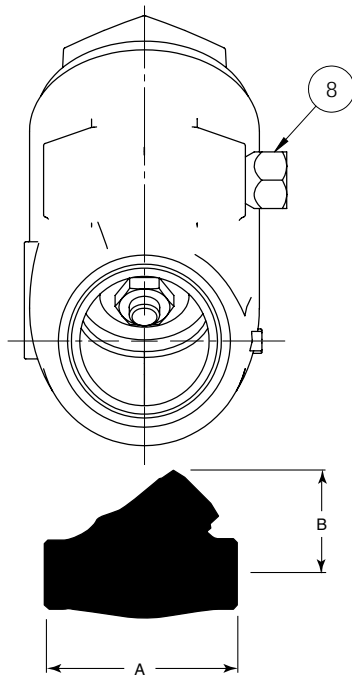
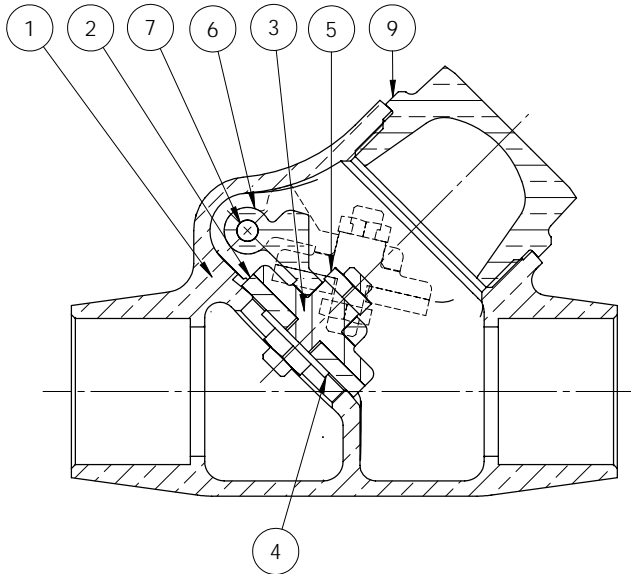
Inches (millimeters) - Pounds (kilograms)

| Valve Size | Dimensions |       |       | Wt.    |
|------------|------------|-------|-------|--------|
|            | B          | C     | A     |        |
| ¼          | 3.46       | 2.25  | 2.03  | 0.81   |
|            | (88)       | (57)  | (52)  | (0.37) |
| ⅜          | 3.46       | 2.25  | 2.13  | 0.84   |
|            | (88)       | (57)  | (54)  | (0.38) |
| ½          | 3.85       | 2.75  | 2.44  | 1.32   |
|            | (98)       | (70)  | (62)  | (0.60) |
| ¾          | 4.38       | 2.75  | 2.61  | 1.83   |
|            | (111)      | (70)  | (66)  | (0.83) |
| 1          | 4.89       | 2.75  | 3.06  | 2.95   |
|            | (124)      | (70)  | (78)  | (1.34) |
| 1 ¼        | 5.88       | 4.00  | 3.35  | 4.44   |
|            | (149)      | (102) | (85)  | (2.02) |
| 1 ½        | 6.66       | 4.00  | 3.69  | 5.65   |
|            | (169)      | (102) | (94)  | (2.57) |
| 2          | 7.51       | 4.00  | 3.96  | 9.61   |
|            | (191)      | (102) | (101) | (4.37) |



# 200 CWP • Threaded Cap • Viton® Disc • Solder Ends

## Swing Check Valve\* Figure B-310BY



### Materials of Construction

| No. | Description    | Material                                | ASTM Spec.              |
|-----|----------------|---|-------------------------|
| 1   | Body           | Bronze                                  | B-62 C83600             |
| 2   | Disc           | Viton® (Viton 90+5 Shore A)             |                         |
| 3   | Disc Holder    | (1/2" - 3/4") Brass<br>(1" - 2") Bronze | B-16 H02<br>B-62 C83600 |
| 4   | Disc Washer    | Brass                                   | B-16 H02                |
| 5   | Lock Nut       | Brass                                   | B-16 H02                |
| 6   | Hinge          | Bronze                                  | B-584 C87600            |
| 7   | Hinge Pin      | Stainless Steel                         | A-276 Type 304          |
| 8   | Hinge Pin Plug | Brass                                   | B-16 H02                |
| 9   | Cap            | Bronze                                  | B-61 C92200             |

#### NOTE:

The addition of the letter "K" at the end of the figure number designates valves assembled & tested in the USA. Materials of Construction & Dimensions are the same.

### Industry Standards

Complies with MSS SP-80 Type 4

See Page 6 for Pressure-Temperature Ratings

### Dimensions and Weights

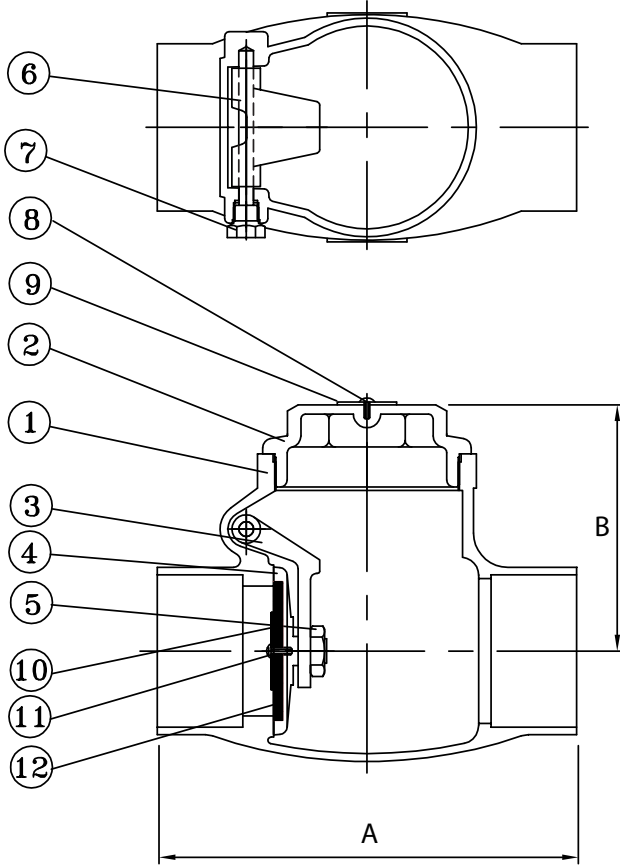
Inches (millimeters) - Pounds (kilograms)

| Valve Size | Dimensions |       | Wt.    |
|------------|------------|-------|--------|
|            | B          | A     |        |
| 1/2        | 1.64       | 2.69  | 0.57   |
|            | (42)       | (68)  | (0.27) |
| 3/4        | 1.92       | 3.61  | 0.95   |
|            | (49)       | (92)  | (0.45) |
| 1          | 2.52       | 4.22  | 1.56   |
|            | (64)       | (107) | (0.68) |
| 1 1/4      | 2.95       | 4.78  | 2.38   |
|            | (75)       | (121) | (1.00) |
| 1 1/2      | 3.43       | 5.55  | 3.76   |
|            | (87)       | (141) | (1.50) |
| 2          | 4.19       | 6.85  | 6.18   |
|            | (106)      | (174) | (2.45) |

\* Not recommended for use in reciprocating air compressor service.

# 200 CWP • Threaded Cap • PTFE Teflon Disc • Solder Ends

## Swing Check Valve\* Figure B-310TC



### Materials of Construction

| No. | Description | Material    | ASTM Spec.  |
|-----|-------------|-------------|-------------|
| 1   | Body        | Bronze      | B-62 C83600 |
| 2   | Cap         | Bronze      | B-62 C83600 |
| 3   | Hanger      |             | B-62 C83600 |
| 4   | Disc        |             | B-62 C83600 |
| 5   | Hanger Nut  |             | B-62 C83600 |
| 6   | Hanger Pin  |             | B-62 C83600 |
| 7   | Side Plug   |             | B-62 C83600 |
| 8   | Rivet       | Mild Steel  |             |
| 9   | Name Plate  | Aluminum    |             |
| 10  | Washer      |             | B-16 C36000 |
| 11  | Screw       |             | B-16 C36000 |
| 12  | Disc        | PTFE Teflon |             |

### Industry Standards

Complies with MSS SP-80 Type 4

See Page 6 for Pressure-Temperature Ratings

### Dimensions and Weights

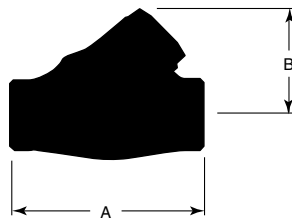
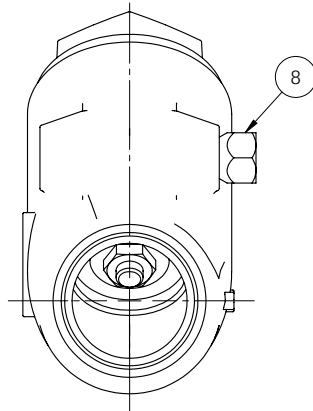
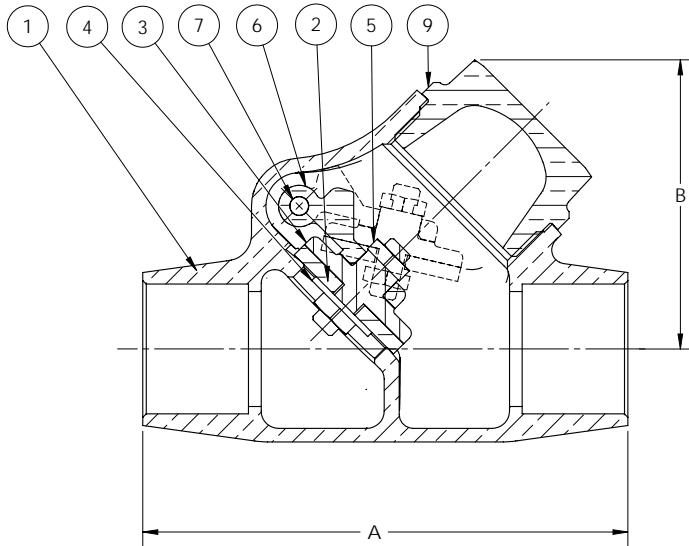
Inches (millimeters) - Pounds (kilograms)

| Valve Size | Dimensions |       | Wt.    |
|------------|------------|-------|--------|
|            | B          | A     |        |
| ½          | 1.77       | 2.59  | .66    |
|            | (45)       | (66)  | (.30)  |
| ¾          | 1.92       | 3.22  | .90    |
|            | (49)       | (82)  | (.41)  |
| 1          | 2.28       | 3.85  | 1.36   |
|            | (58)       | (98)  | (.62)  |
| 1 ¼        | 2.55       | 4.48  | 2.16   |
|            | (65)       | (114) | (.98)  |
| 1 ½        | 2.87       | 5.11  | 3.04   |
|            | (73)       | (130) | (1.38) |
| 2          | 3.50       | 6.14  | 4.74   |
|            | (89)       | (156) | (2.15) |

\* Not recommended for use in reciprocating air compressor service.

# 200 CWP • Threaded Cap • PTFE Disc • Solder Ends

## Swing Check Valve\* Figure B-310TY



### Materials of Construction

| No. | Description    | Material                                | ASTM Spec.              |
|-----|----------------|---|-------------------------|
| 1   | Body           | Bronze                                  | B-62 C83600             |
| 2   | Disc           | PTFE                                    |                         |
| 3   | Disc Holder    | (1/2" - 3/4") Brass<br>(1" - 2") Bronze | B-16 H02<br>B-62 C83600 |
| 4   | Disc Washer    | Brass                                   | B-16 H02                |
| 5   | Lock Nut       | Brass                                   | B-16 H02                |
| 6   | Hinge          | Bronze                                  | B-584 C87600            |
| 7   | Hinge Pin      | Stainless Steel                         | A-276 Type 304          |
| 8   | Hinge Pin Plug | Brass                                   | B-16 H02                |
| 9   | Cap            | Bronze                                  | B-61 C92200             |

**NOTE:**

The addition of the letter "K" at the end of the figure number designates valves assembled & tested in the USA. Materials of Construction & Dimensions are the same.

### Industry Standards

Complies with MSS SP-80 Type 4

See Page 6 for Pressure-Temperature Ratings

### Dimensions and Weights

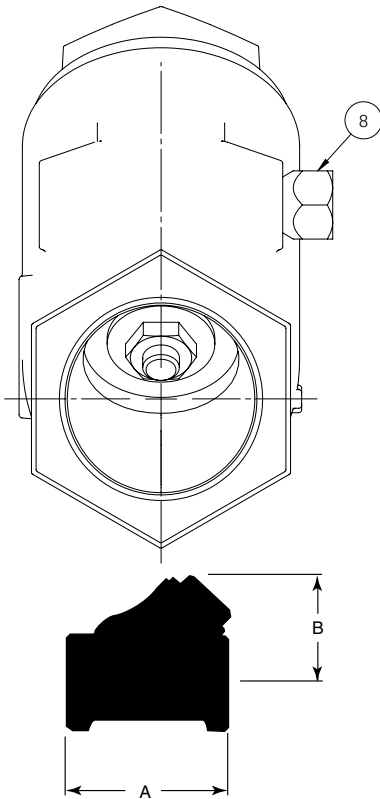
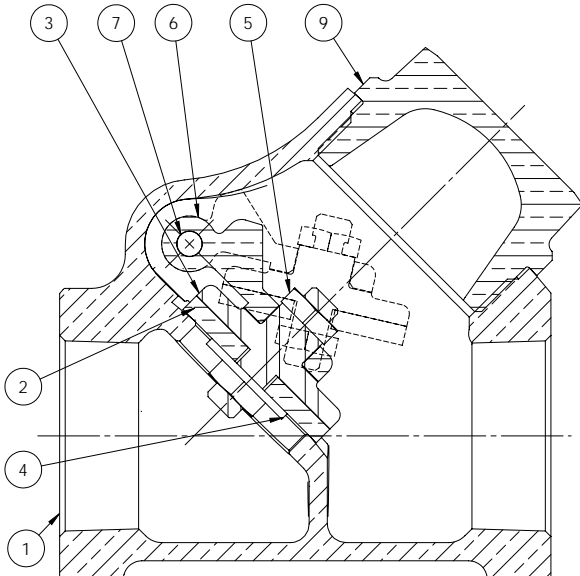
Inches (millimeters) - Pounds (kilograms)

| Valve Size | Dimensions    |               | Wt.            |
|------------|---------------|---------------|----------------|
|            | B             | A             |                |
| 1/2        | 1.64<br>(42)  | 2.69<br>(68)  | 0.57<br>(0.26) |
|            | 1.92<br>(49)  | 3.61<br>(92)  | 0.95<br>(0.43) |
| 1          | 2.52<br>(64)  | 4.22<br>(107) | 1.56<br>(0.71) |
|            | 2.95<br>(75)  | 4.78<br>(121) | 2.38<br>(1.08) |
| 1 1/2      | 3.43<br>(87)  | 5.55<br>(141) | 3.76<br>(1.71) |
|            | 4.19<br>(106) | 6.85<br>(174) | 6.18<br>(2.81) |

\* Not recommended for use in reciprocating air compressor service.

# Class 125 • Threaded Cap • Viton® Disc • Threaded Ends

## Swing Check Valve\* Figure B-320BY



### Materials of Construction

| No. | Description    | Material         | ASTM Spec.     |
|-----|----------------|------------------|----------------|
| 1   | Body           | Bronze           | B-62 C83600    |
| 2   | Disc           | Viton®           |                |
| 3   | Disc Holder    | (½" - ¾") Brass  | B-16 H02       |
|     |                | (1" - 2") Bronze | B-62 C83600    |
| 4   | Disc Washer    | Brass            | B-16 H02       |
| 5   | Lock Nut       | Brass            | B-16 H02       |
| 6   | Hinge          | Bronze           | B-584 C87600   |
| 7   | Hinge Pin      | Stainless Steel  | A-276 Type 304 |
| 8   | Hinge Pin Plug | Brass            | B-16 H02       |
| 9   | Cap            | Bronze           | B61 C92200     |

#### NOTE:

The addition of the letter "K" at the end of the figure number designates valves assembled & tested in the USA. Materials of Construction & Dimensions are the same.

### Industry Standards

Complies with MSS SP-80 Type 4

See Page 6 for Pressure-Temperature Ratings

### Dimensions and Weights

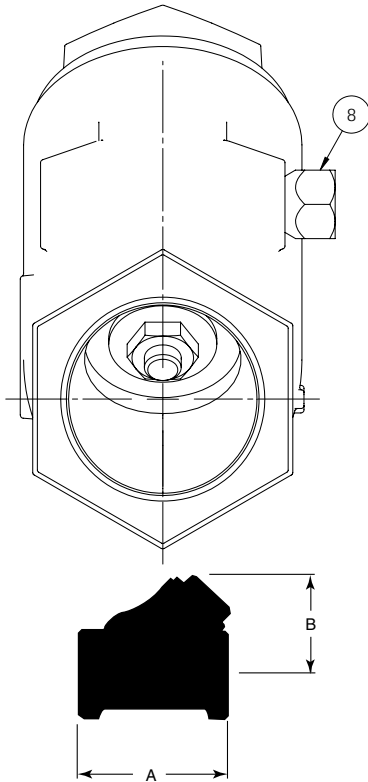
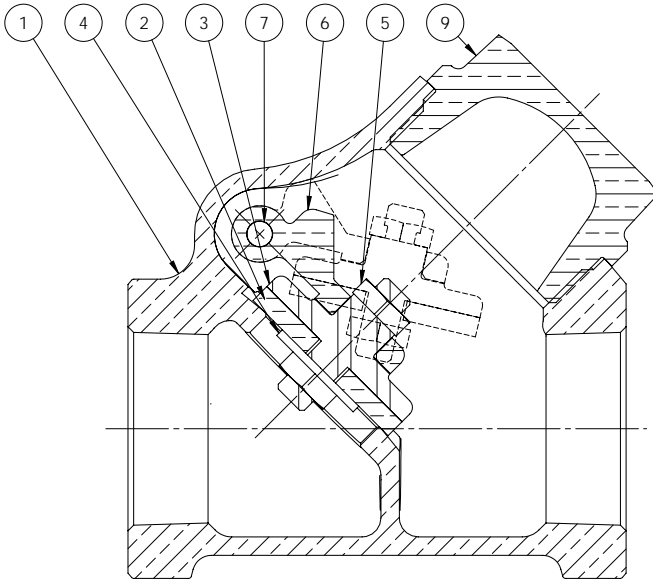
Inches (millimeters) - Pounds (kilograms)

| Valve Size | Dimensions |       | Wt.    |
|------------|------------|-------|--------|
|            | B          | A     |        |
| ½          | 1.64       | 2.15  | 0.55   |
|            | (42)       | (55)  | (0.25) |
| ¾          | 1.92       | 2.71  | 0.90   |
|            | (49)       | (69)  | (0.41) |
| 1          | 2.52       | 3.18  | 1.45   |
|            | (64)       | (81)  | (0.66) |
| 1 ¼        | 2.95       | 3.81  | 2.29   |
|            | (75)       | (97)  | (1.04) |
| 1 ½        | 3.43       | 4.34  | 3.65   |
|            | (87)       | (110) | (1.66) |
| 2          | 4.19       | 5.11  | 5.79   |
|            | (106)      | (130) | (2.63) |

\* Not recommended for use in reciprocating air compressor service.

# Class 125 • Threaded Cap • PTFE Disc • Threaded Ends

## Swing Check Valve\* Figure B-320TY



### Materials of Construction

| No. | Description    | Material                                | ASTM Spec.              |
|-----|----------------|---|-------------------------|
| 1   | Body           | Bronze                                  | B-62 C83600             |
| 2   | Disc           | PTFE (15% Glass filled)                 |                         |
| 3   | Disc Holder    | (1/2" - 3/4") Brass<br>(1" - 2") Bronze | B-16 H02<br>B-62 C83600 |
| 4   | Disc Washer    | Brass                                   | B-16 H02                |
| 5   | Lock Nut       | Brass                                   | B-16 H02                |
| 6   | Hinge          | Bronze                                  | B-584 C87600            |
| 7   | Hinge Pin      | Stainless Steel                         | A-276 Type 304          |
| 8   | Hinge Pin Plug | Brass                                   | B-16 H02                |
| 9   | Cap            | Bronze                                  | B-61 C92200             |

#### NOTE:

The addition of the letter "K" at the end of the figure number designates valves assembled & tested in the USA. Materials of Construction & Dimensions are the same.

### Industry Standards

Complies with MSS SP-80 Type 4

See Page 6 for Pressure-Temperature Ratings

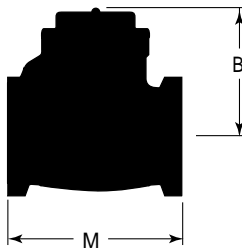
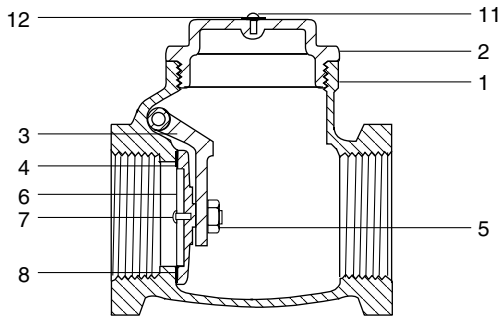
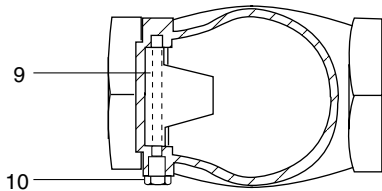
### Dimensions and Weights

Inches (millimeters) - Pounds (kilograms)

| Valve Size | Dimensions |       | Wt.    |
|------------|------------|-------|--------|
|            | B          | A     |        |
| 1/2        | 1.64       | 2.15  | 0.55   |
|            | (42)       | (55)  | (0.25) |
| 3/4        | 1.92       | 2.71  | 0.90   |
|            | (49)       | (69)  | (0.41) |
| 1          | 2.52       | 3.18  | 1.45   |
|            | (64)       | (81)  | (0.66) |
| 1 1/4      | 2.95       | 3.81  | 2.29   |
|            | (75)       | (97)  | (1.04) |
| 1 1/2      | 3.43       | 4.34  | 3.65   |
|            | (87)       | (110) | (1.66) |
| 2          | 4.19       | 5.11  | 5.79   |
|            | (106)      | (130) | (2.63) |

\* Not recommended for use in reciprocating air compressor service.

## Swing Check Valve\* Figures B-320BC, B320TC, B320VC



### Materials of Construction

| No. | Description | Material       | ASTM Spec.  |
|-----|-------------|----------------|-------------|
| 1   | Body        | Bronze         | B-62 C83600 |
| 2   | Cap         | Bronze         | B-61 C92200 |
| 3   | Hinge       | Bronze         | B-62 C83600 |
| 4   | Disc Holder | Bronze         | B-62 C83600 |
| 5   | Nut         | Brass          | B-16 C36000 |
| 6   | Washer      | Brass          | B-16 C36000 |
| 7   | Screw       | Brass          | B-16 C36000 |
| 8   | Disc        | B-320BC Buna-N |             |
|     |             | B-320TC PTFE   |             |
|     |             | B-320VC Viton® |             |
| 9   | Pin         | Brass          | B-16 C36000 |
| 10  | Screw       | Brass          | B-16 C36000 |
| 11  | Drive Pin   | Mild Steel     |             |
| 12  | ID Plate    | Aluminum       |             |

**NOTE:**

Complies with MSS SP-80, Type 4

### Dimensions and Weights

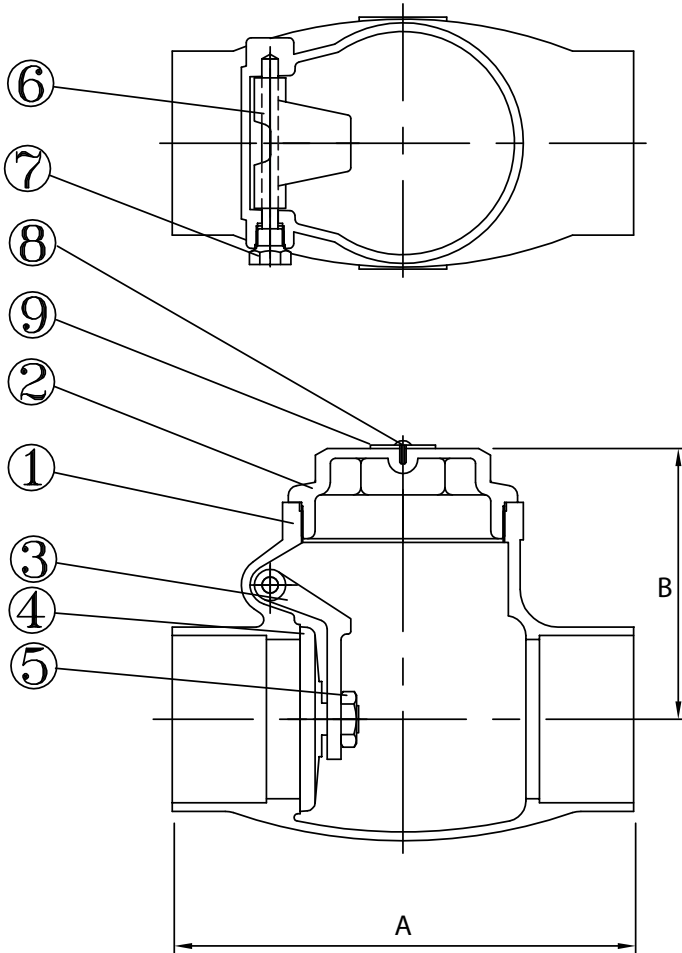
Inches (Millimeters) - Pounds (Kilograms)

| Valve Size | Dimensions |       | Wt.    |
|------------|------------|-------|--------|
|            | B          | M     |        |
| ¼          | 1.50       | 2.12  | 0.70   |
|            | (38)       | (54)  | (0.32) |
| ⅜          | 1.50       | 2.12  | 0.70   |
|            | (38)       | (54)  | (0.32) |
| ½          | 1.77       | 2.60  | 0.80   |
|            | (45)       | (66)  | (0.36) |
| ¾          | 1.93       | 2.75  | 1.00   |
|            | (49)       | (70)  | (0.45) |
| 1          | 2.28       | 3.27  | 1.40   |
|            | (58)       | (83)  | (0.63) |
| 1 ¼        | 2.56       | 3.78  | 2.70   |
|            | (65)       | (96)  | (1.22) |
| 1 ½        | 2.87       | 4.25  | 2.90   |
|            | (73)       | (108) | (1.31) |
| 2          | 3.50       | 5.04  | 4.40   |
|            | (89)       | (128) | (1.98) |
| 2 ½        | 4.25       | 6.30  | 7.60   |
|            | (108)      | (160) | (3.42) |
| 3          | 4.84       | 7.09  | 9.30   |
|            | (123)      | (180) | (4.19) |

\* Not recommended for use in reciprocating air compressor service.

## 200 CWP • Threaded Cap • Bronze Disc • Solder Ends

### Swing Check Valve\* Figure B-309C



### Materials of Construction

| No. | Description | Material   | ASTM Spec.  |
|-----|-------------|------------|-------------|
| 1   | Body        | Bronze     | B-62 C83600 |
| 2   | Cap         | Bronze     | B-62 C83600 |
| 3   | Hanger      |            | B-62 C83600 |
| 4   | Disc        |            | B-62 C83600 |
| 5   | Hanger Nut  |            | B-62 C83600 |
| 6   | Hanger Pin  |            | B-62 C83600 |
| 7   | Side Plug   |            | B-62 C83600 |
| 8   | Rivet       | Mild Steel |             |
| 9   | Name Plate  | Aluminum   |             |

### Industry Standards

Complies with MSS SP-80 Type 3

See Page 6 for Pressure-Temperature Ratings

### Dimensions and Weights

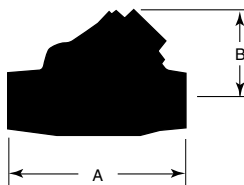
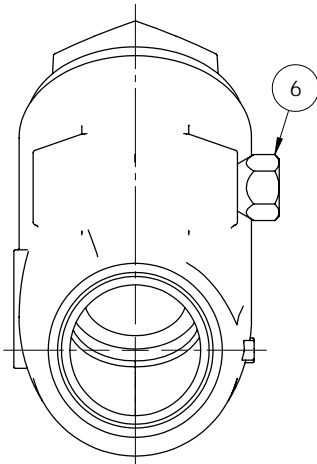
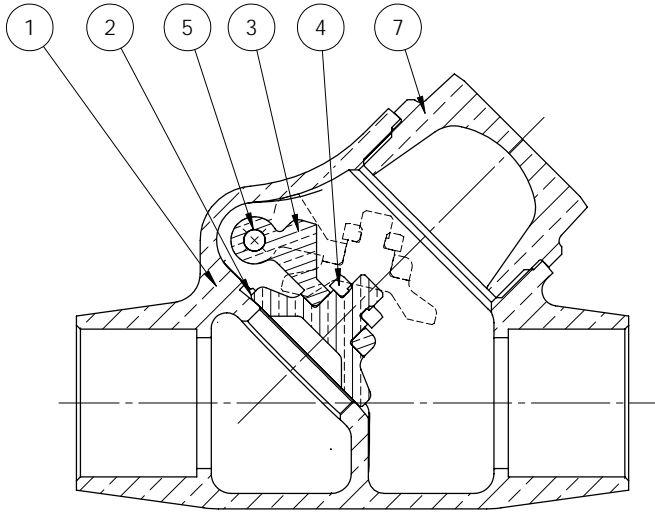
Inches (millimeters) - Pounds (kilograms)

| Valve Size | Dimensions |       | Wt.    |
|------------|------------|-------|--------|
|            | B          | A     |        |
| ½          | 1.77       | 2.59  | .66    |
|            | (45)       | (66)  | (.30)  |
| ¾          | 1.92       | 3.22  | .90    |
|            | (49)       | (82)  | (.41)  |
| 1          | 2.28       | 3.85  | 1.36   |
|            | (58)       | (98)  | (.62)  |
| 1 ¼        | 2.55       | 4.48  | 2.16   |
|            | (65)       | (114) | (.98)  |
| 1 ½        | 2.87       | 5.11  | 3.04   |
|            | (73)       | (130) | (1.38) |
| 2          | 3.50       | 6.14  | 4.74   |
|            | (89)       | (156) | (2.15) |
| 2 ½        | 4.25       | 7.24  | 7.71   |
|            | (108)      | (184) | (3.50) |
| 3          | 4.84       | 8.26  | 9.10   |
|            | (123)      | (210) | (4.13) |

\* Not recommended for use in reciprocating air compressor service.

# 200 CWP • Threaded Cap • Brass/Bronze Disc • Solder Ends

## Swing Check Valve\* Figure B-309Y



### Materials of Construction

| No. | Description    | Material             | ASTM Spec.   |
|-----|----------------|----------------------|--------------|
| 1   | Body           | Bronze               | B-62 C83600  |
| 2   | Disc           | (1/2" - 3/4") Brass  | B-16 H02     |
|     |                | (1" - 2") Bronze     | B-61 C92200  |
|     |                | (2 1/2" - 3") Bronze | B-62 C83600  |
| 3   | Hinge          | Bronze               | B-584 C87600 |
| 4   | Lock Nut       | Brass                | B-16 H02     |
| 5   | Hinge Pin      | Stainless Steel      | A-276 C304   |
| 6   | Hinge Pin Plug | Brass                | B-16 H02     |
| 7   | Cap            | Bronze               | B-61 C92200  |

#### NOTE:

The addition of the letter "K" at the end of the figure number designates valves assembled & tested in the USA. Materials of Construction & Dimensions are the same.

### Industry Standards

Complies with MSS SP-80 Type 3

See Page 6 for Pressure-Temperature Ratings

### Dimensions and Weights

Inches (Millimeters) - Pounds (Kilograms)

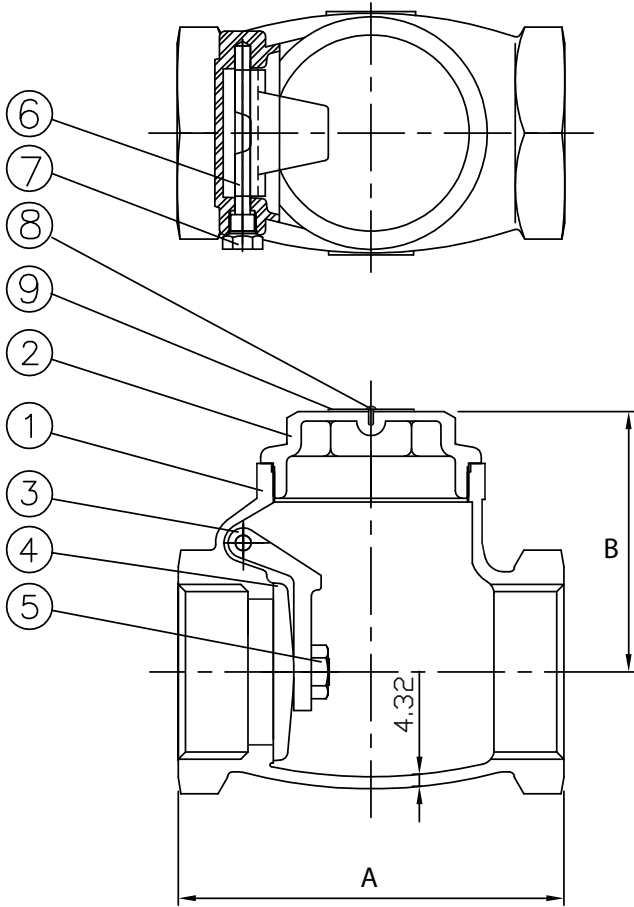
| Valve Size | Dimensions |       | Wt.    |
|------------|------------|-------|--------|
|            | B          | A     |        |
| 1/2        | 1.64       | 2.69  | 0.57   |
|            | (42)       | (68)  | (0.26) |
| 3/4        | 1.92       | 3.61  | 0.95   |
|            | (49)       | (92)  | (0.43) |
| 1          | 2.52       | 4.22  | 1.54   |
|            | (64)       | (107) | (0.70) |
| 1 1/4      | 2.95       | 4.81  | 2.35   |
|            | (75)       | (122) | (1.07) |
| 1 1/2      | 3.43       | 5.58  | 3.72   |
|            | (87)       | (142) | (1.69) |
| 2          | 4.19       | 6.85  | 6.12   |
|            | (106)      | (174) | (2.78) |
| 2 1/2      | 5.04       | 7.78  | 9.31   |
|            | (128)      | (198) | (4.23) |
| 3          | 5.98       | 9.19  | 14.10  |
|            | (152)      | (233) | (6.41) |

\* Not recommended for use in reciprocating air compressor service.



# Class 125 • Threaded Cap • Bronze Disc • Threaded Ends

## Swing Check Valve\* Figure B-319C



### Materials of Construction

| No. | Description | Material   | ASTM Spec.  |
|-----|-------------|------------|-------------|
| 1   | Body        | Bronze     | B-62 C83600 |
| 2   | Cap         | Bronze     | B-62 C83600 |
| 3   | Hanger      |            | B-62 C83600 |
| 4   | Disc        |            | B-62 C83600 |
| 5   | Hanger Nut  |            | B-62 C83600 |
| 6   | Hanger Pin  |            | B-62 C83600 |
| 7   | Side Plug   |            | B-62 C83600 |
| 8   | Rivet       | Mild Steel |             |
| 9   | Name Plate  | Aluminum   |             |

### Industry Standards

Complies with MSS SP-80 Type 3

See Page 6 for Pressure-Temperature Ratings

### Dimensions and Weights

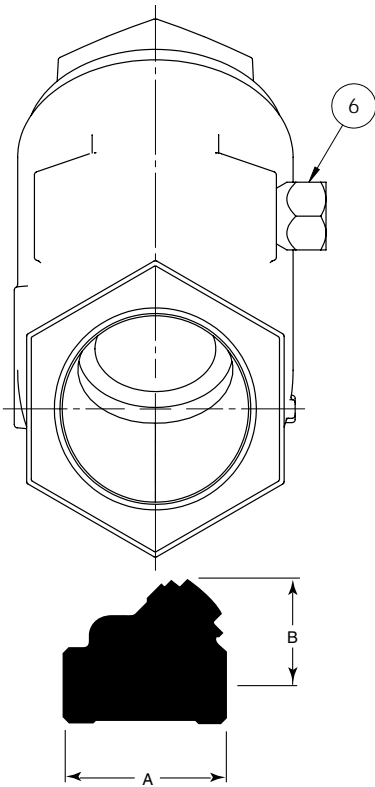
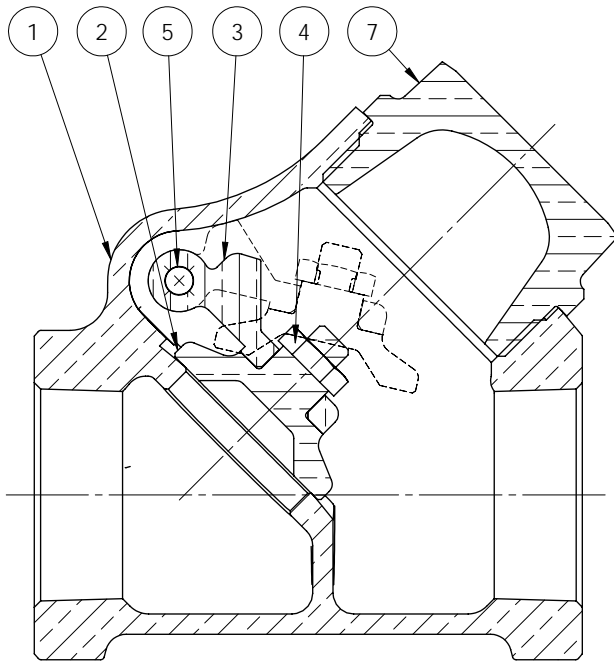
Inches (millimeters) - Pounds (kilograms)

| Valve Size | Dimensions |       | Wt.    |
|------------|------------|-------|--------|
|            | B          | A     |        |
| ½          | 1.77       | 2.59  | .66    |
|            | (45)       | (66)  | (.30)  |
| ¾          | 1.92       | 2.75  | .90    |
|            | (49)       | (70)  | (.41)  |
| 1          | 2.28       | 3.26  | 1.36   |
|            | (58)       | (83)  | (.62)  |
| 1 ¼        | 2.55       | 3.77  | 2.16   |
|            | (65)       | (96)  | (.98)  |
| 1 ½        | 2.87       | 4.25  | 3.04   |
|            | (73)       | (108) | (1.38) |
| 2          | 3.50       | 5.03  | 4.74   |
|            | (89)       | (128) | (2.15) |
| 2 ½        | 4.25       | 6.29  | 7.71   |
|            | (108)      | (160) | (3.50) |
| 3          | 4.84       | 7.08  | 9.10   |
|            | (123)      | (180) | (4.13) |

\* Not recommended for use in reciprocating air compressor service.

# Class 125 • Threaded Cap • Brass/Bonze Disc • Threaded Ends

## Swing Check Valve\* Figure B-319Y



### Materials of Construction

| No. | Description    | Material             | ASTM Spec.     |
|-----|----------------|----------------------|----------------|
| 1   | Body           | Bronze               | B-62 C83600    |
| 2   | Disc           | (1/4" - 3/4") Brass  | B-16 H02       |
|     |                | (1" - 2") Bronze     | B-61 C92200    |
|     |                | (2 1/2" - 3") Bronze | B-62 C83600    |
| 3   | Hinge          | Bronze               | B-584 C87600   |
| 4   | Lock Nut       | Brass                | B-16 H02       |
| 5   | Hinge Pin      | Stainless Steel      | A-276 Type 304 |
| 6   | Hinge Pin Plug | Brass                | B-16 H02       |
| 7   | Cap            | Bronze               | B-61 C92200    |

#### NOTE:

The addition of the letter "K" at the end of the figure number designates valves assembled & tested in the USA. Materials of Construction & Dimensions are the same.

### Industry Standards

Complies with MSS SP-80 Type 3

See Page 6 for Pressure-Temperature Ratings

### Dimensions and Weights

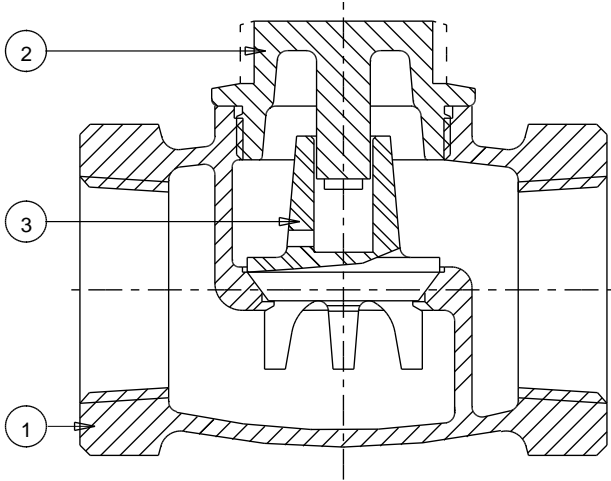
Inches (millimeters) - Pounds (kilograms)

| Valve Size | Dimensions |       | Wt.    |
|------------|------------|-------|--------|
|            | B          | A     |        |
| 1/4        | 1.49       | 2.14  | 0.48   |
|            | (38)       | (54)  | (0.22) |
| 3/8        | 1.49       | 2.14  | 0.46   |
|            | (38)       | (54)  | (0.21) |
| 1/2        | 1.64       | 2.15  | 0.57   |
|            | (42)       | (55)  | (0.26) |
| 3/4        | 1.92       | 2.71  | 0.90   |
|            | (49)       | (69)  | (0.41) |
| 1          | 2.52       | 3.18  | 1.43   |
|            | (64)       | (81)  | (0.65) |
| 1 1/4      | 2.95       | 3.81  | 2.27   |
|            | (75)       | (97)  | (1.03) |
| 1 1/2      | 3.43       | 4.34  | 3.61   |
|            | (87)       | (110) | (1.64) |
| 2          | 4.19       | 5.11  | 5.70   |
|            | (106)      | (130) | (2.59) |
| 2 1/2      | 5.04       | 6.12  | 9.09   |
|            | (128)      | (155) | (4.13) |
| 3          | 5.97       | 7.25  | 14.59  |
|            | (152)      | (184) | (6.63) |

\* Not recommended for use in reciprocating air compressor service.

# Class 125 • Threaded Cap • Brass/Bronze Disc • Threaded Ends

## Lift Check Valve Figure B-316



### Materials of Construction

| No. | Description | Material            | ASTM Spec.       |
|-----|-------------|---------------------|------------------|
| 1   | Body        | Bronze              | B-62 C83600      |
| 2   | Cap         | (1/2") Brass        | BSEN12164 CW614N |
|     |             | (3/4" - 2") Bronze  | B-62 C83600      |
| 3   | Disc        | (1/2" - 3/4") Brass | B-371 C69400     |
|     |             | (1" - 2") Bronze    | B-62 C83600      |

#### NOTE:

The addition of the letter "K" at the end of the figure number designates valves assembled & tested in the USA. Materials of Construction & Dimensions are the same.

### Industry Standards

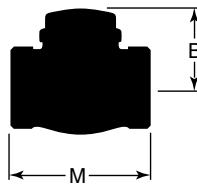
Complies with MSS SP-80 Type 1

See Page 6 for Pressure-Temperature Ratings

### Dimensions and Weights

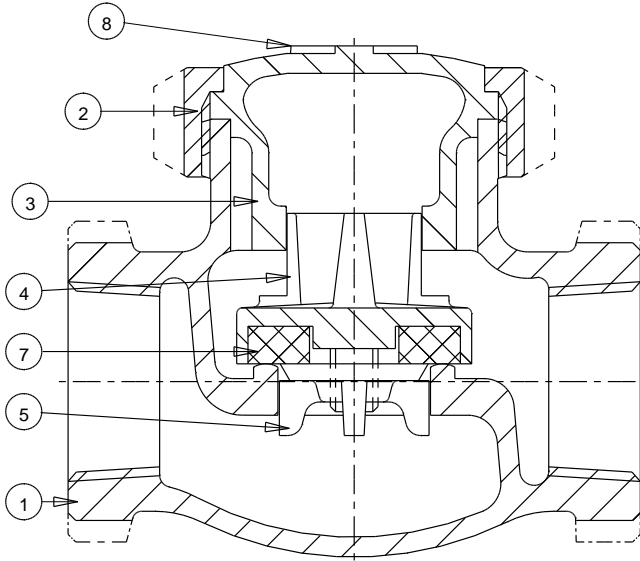
Inches (millimeters) - Pounds (kilograms)

| Valve Size | Dimensions |      | Wt.    |
|------------|------------|------|--------|
|            | L          | T    |        |
| 1/2        | 2.17       | 1.30 | 0.53   |
|            | (55)       | (33) | (0.24) |
| 3/4        | 2.48       | 1.30 | 0.77   |
|            | (63)       | (33) | (0.35) |
| 1          | 3.03       | 1.54 | 1.32   |
|            | (77)       | (39) | (0.60) |
| 1 1/4      | 3.58       | 1.85 | 2.14   |
|            | (91)       | (47) | (0.97) |
| 1 1/2      | 3.86       | 2.13 | 2.78   |
|            | (98)       | (54) | (1.26) |
| 2          | 4.65       | 2.56 | 4.61   |
|            | (118)      | (65) | (2.09) |



# Class 150 • Union Cap • Buna-N Disc • Threaded Ends

## Lift Check Valve Figure B-322B



### Materials of Construction

| No. | Description        | Material            | ASTM Spec.        |
|-----|--------------------|---------------------|-------------------|
| 1   | Body               | Bronze              | B-62 C83600       |
| 2   | Union Ring         | Bronze              | B-62 C83600       |
| 3   | Cap                | Bronze              | B-62 C83600       |
| 4   | Disc Holder        | Bronze              | B-62 C83600       |
| 5   | Disc Retaining Nut | (1/4" - 3/8") Brass | BSEN 12164 CW614N |
|     |                    | (1/2" - 2") Bronze  | B-62 C83600       |
| 7   | Washer             | (1/4" - 3/8") Brass | BSEN 12164 CW614N |
| 8   | Disc               | Nitrile             |                   |

**NOTE:**

The addition of the letter "K" at the end of the figure number designates valves assembled & tested in the USA. Materials of Construction & Dimensions are the same.

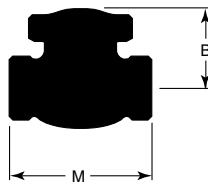
### Industry Standards

Complies with MSS SP-80 Type 2

See Page 6 for Pressure-Temperature Ratings

### Dimensions and Weights

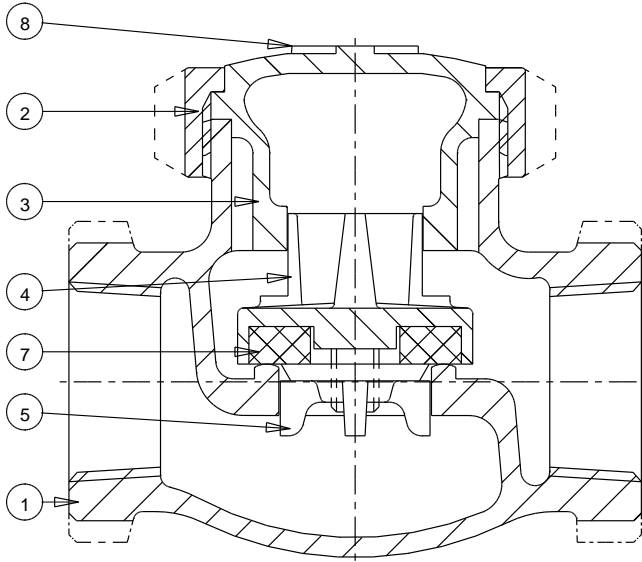
Inches (millimeters) - Pounds (kilograms)



| Valve Size | Dimensions |       | Wt.    |
|------------|------------|-------|--------|
|            | B          | M     |        |
| 1/4        | 1.46       | 2.32  | 0.82   |
|            | (37)       | (59)  | (0.37) |
| 3/8        | 1.46       | 2.32  | 0.79   |
|            | (37)       | (59)  | (0.36) |
| 1/2        | 1.69       | 2.68  | 1.13   |
|            | (43)       | (68)  | (0.51) |
| 3/4        | 1.93       | 3.19  | 1.87   |
|            | (49)       | (81)  | (0.85) |
| 1          | 2.21       | 3.74  | 2.91   |
|            | (56)       | (95)  | (1.32) |
| 1 1/4      | 2.56       | 4.25  | 4.35   |
|            | (65)       | (108) | (1.97) |
| 1 1/2      | 2.87       | 4.76  | 5.84   |
|            | (73)       | (121) | (2.65) |
| 2          | 3.43       | 5.75  | 9.79   |
|            | (87)       | (146) | (4.44) |

# Class 150 • Union Cap • PTFE Disc • Threaded Ends

## Lift Check Valve Figure B-322T



### Materials of Construction

| No. | Description        | Material            | ASTM Spec.       |
|-----|--------------------|---------------------|------------------|
| 1   | Body               | Bronze              | B-62 C83600      |
| 2   | Union Ring         | Bronze              | B-62 C83600      |
| 3   | Cap                | Bronze              | B-62 C83600      |
| 4   | Disc Holder        | Bronze              | B-62 C83600      |
| 5   | Disc Retaining Nut | (1/4" - 3/8") Brass | BSEN12164 CW614N |
|     |                    | (1/2" - 2") Bronze  | B-62 C83600      |
| 7   | Washer             | (1/4" - 3/8") Brass | BSEN12164 CW614N |
| 8   | Disc               | PTFE                |                  |

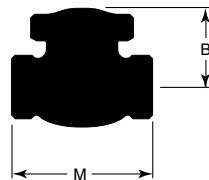
### Industry Standards

Complies with MSS SP-80 Type 2

See Page 6 for Pressure-Temperature Ratings

### Dimensions and Weights

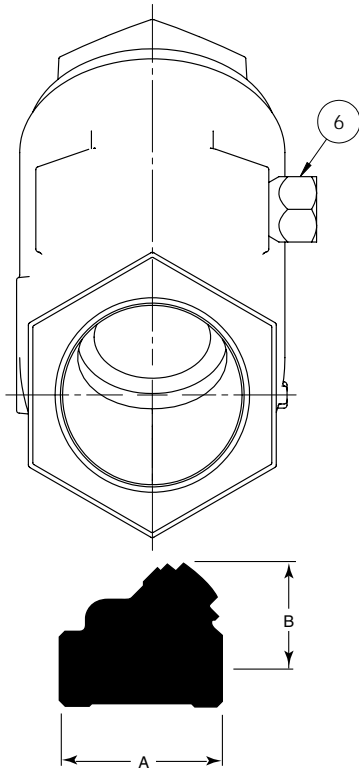
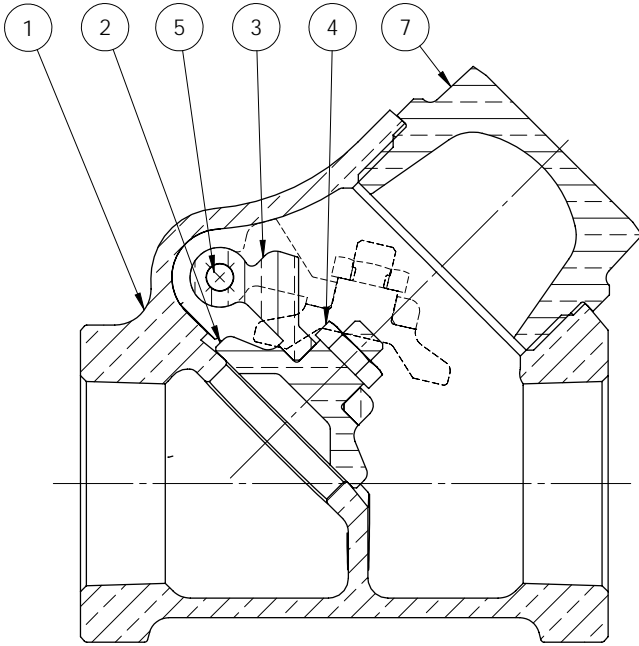
Inches (millimeters) - Pounds (kilograms)



| Valve Size | Dimensions |       | Wt.    |
|------------|------------|-------|--------|
|            | B          | M     |        |
| 1/4        | 1.46       | 2.32  | 0.82   |
|            | (37)       | (59)  | (0.37) |
| 3/8        | 1.46       | 2.32  | 0.79   |
|            | (37)       | (59)  | (0.36) |
| 1/2        | 1.69       | 2.68  | 1.13   |
|            | (43)       | (68)  | (0.51) |
| 3/4        | 1.93       | 3.19  | 1.87   |
|            | (49)       | (81)  | (0.85) |
| 1          | 2.21       | 3.74  | 2.91   |
|            | (56)       | (95)  | (1.32) |
| 1 1/4      | 2.56       | 4.25  | 4.35   |
|            | (65)       | (108) | (1.97) |
| 1 1/2      | 2.87       | 4.76  | 5.84   |
|            | (73)       | (121) | (2.65) |
| 2          | 3.43       | 5.75  | 9.79   |
|            | (87)       | (146) | (4.44) |

# Class 150 • Threaded Cap • Brass/Bronze Disc • Threaded Ends

## Swing Check Valve\* Figure B-321



### Materials of Construction

| No. | Description    | Material             | ASTM Spec.     |
|-----|----------------|----------------------|----------------|
| 1   | Body           | Bronze               | B-61 C92200    |
| 2   | Disc           | (1/4" - 3/4") Brass  | B-16 H02       |
|     |                | (1" - 2") Bronze     | B-61 C92200    |
|     |                | (2 1/2" - 3") Bronze | B-62 C83600    |
| 3   | Hinge          | Bronze               | B-584 C87600   |
| 4   | Lock Nut       | Brass                | B-16 H02       |
| 5   | Hinge Pin      | Stainless Steel      | A-276 Type 304 |
| 6   | Hinge Pin Plug | Brass                | B-16 H02       |
| 7   | Cap            | Bronze               | B-61 C92200    |

#### NOTE:

The addition of the letter "K" at the end of the figure number designates valves assembled & tested in the USA. Materials of Construction & Dimensions are the same.

### Industry Standards

Complies with MSS SP-80 Type 3

See Page 6 for Pressure-Temperature Ratings

### Dimensions and Weights

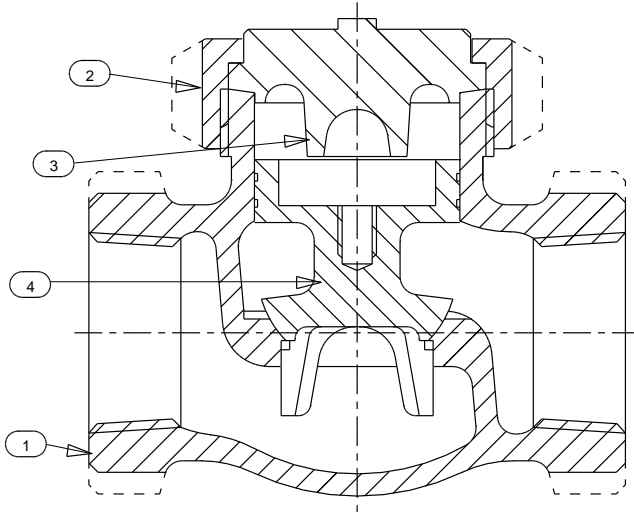
Inches (millimeters) - Pounds (kilograms)

| Valve Size | Dimensions    |               | Wt.             |
|------------|---------------|---------------|-----------------|
|            | B             | A             |                 |
| 1/4        | 1.49<br>(38)  | 2.14<br>(54)  | 0.50<br>(0.23)  |
|            | 1.49<br>(38)  | 2.14<br>(54)  | 0.50<br>(0.23)  |
| 1/2        | 1.64<br>(42)  | 2.15<br>(55)  | 0.60<br>(0.27)  |
|            | 1.92<br>(49)  | 2.71<br>(69)  | 1.00<br>(0.45)  |
| 1          | 2.52<br>(64)  | 3.18<br>(81)  | 1.50<br>(0.68)  |
|            | 2.95<br>(75)  | 3.81<br>(97)  | 2.20<br>(1.00)  |
| 1 1/4      | 3.43<br>(87)  | 4.34<br>(110) | 3.40<br>(1.55)  |
|            | 4.19<br>(106) | 5.11<br>(130) | 5.40<br>(2.45)  |
| 2          | 5.04<br>(128) | 6.12<br>(155) | 9.00<br>(4.09)  |
|            | 5.97<br>(152) | 7.25<br>(184) | 14.50<br>(6.59) |

\* Not recommended for use in reciprocating air compressor service.

# Class 200 • Union Cap • Bronze Disc • Threaded Ends

## Lift Check Valve Figure B-337



### Materials of Construction

| No. | Description | Material                     | ASTM Spec.   |
|-----|-------------|------------------------------|--------------|
| 1   | Body        | Bronze                       | B-61 C92200  |
| 2   | Union Ring  | Bronze                       | B-62 C83600  |
| 3   | Cap         | (1/2") Copper Silicon Bronze | B-371 C69400 |
|     |             | (3/4" - 2") Bronze           | B-61 C92200  |
| 4   | Disc        | Bronze                       | B-61 C92200  |

#### NOTE:

The addition of the letter "K" at the end of the figure number designates valves assembled & tested in the USA. Materials of Construction & Dimensions are the same.

### Industry Standards

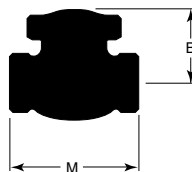
Complies with MSS SP-80 Type 1

See Page 6 for Pressure-Temperature Ratings

### Dimensions and Weights

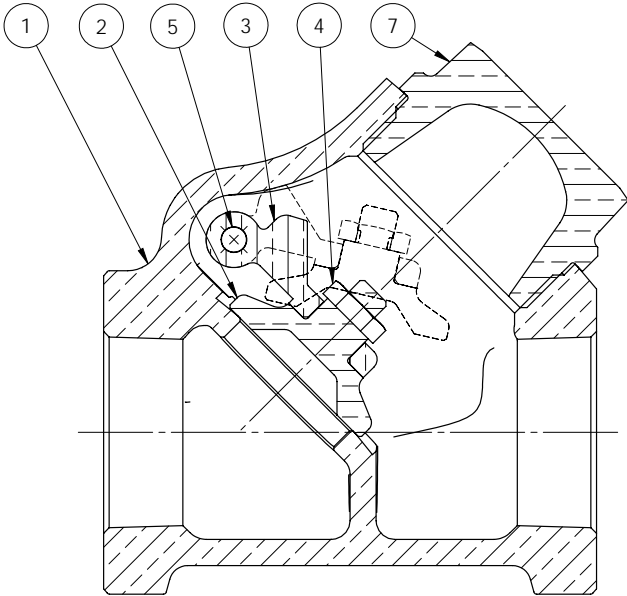
Inches (millimeters) - Pounds (kilograms)

| Valve Size | Dimensions |       | Wt.    |
|------------|------------|-------|--------|
|            | B          | M     |        |
| 1/2        | 1.46       | 2.56  | 1.04   |
|            | (37)       | (65)  | (0.47) |
| 3/4        | 1.85       | 2.95  | 1.70   |
|            | (47)       | (75)  | (0.77) |
| 1          | 2.05       | 3.50  | 2.69   |
|            | (52)       | (89)  | (1.21) |
| 1 1/4      | 2.36       | 4.06  | 4.08   |
|            | (60)       | (103) | (1.85) |
| 1 1/2      | 2.64       | 4.61  | 5.84   |
|            | (67)       | (117) | (2.65) |
| 2          | 3.23       | 5.75  | 10.06  |
|            | (82)       | (146) | (4.56) |



# Class 200 • Threaded Cap • Brass/Bronze Disc • Threaded Ends

## Swing Check Valve\* Figure B-345



### Materials of Construction

| No. | Description    | Material            | ASTM Spec.   |
|-----|----------------|---------------------|--------------|
| 1   | Body           | Bronze              | B-61 C92200  |
| 2   | Disc           | (1/4" - 3/4") Brass | B-16 H02     |
|     |                | (1" - 3") Bronze    | B-61 C92200  |
| 3   | Hinge          | Bronze              | B-584 C87600 |
| 4   | Lock Nut       | Brass               | B-16 H02     |
| 5   | Hinge Pin      | Stainless Steel     | A-276 C304   |
| 6   | Hinge Pin Plug | Brass               | B-16 H02     |
| 7   | Cap            | Bronze              | B-61 C92200  |

#### NOTE:

The addition of the letter "K" at the end of the figure number designates valves assembled & tested in the USA. Materials of Construction & Dimensions are the same.

### Industry Standards

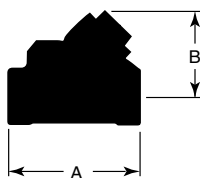
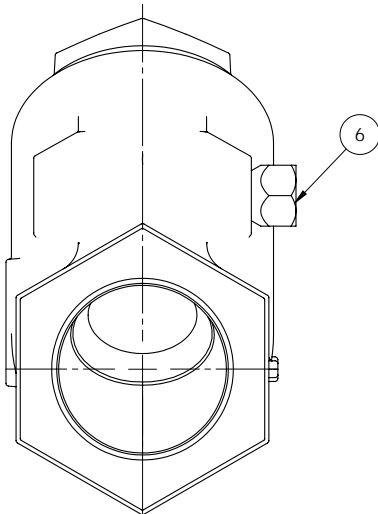
Complies with MSS SP-80 Type 3

See Page 6 for Pressure-Temperature Ratings

### Dimensions and Weights

Inches (millimeters) - Pounds (kilograms)

| Valve Size | Dimensions |       | Wt.    |
|------------|------------|-------|--------|
|            | B          | A     |        |
| 1/4        | 1.49       | 2.14  | 0.48   |
|            | (38)       | (54)  | (0.22) |
| 3/8        | 1.49       | 2.14  | 0.46   |
|            | (38)       | (54)  | (0.21) |
| 1/2        | 1.64       | 2.15  | 0.62   |
|            | (42)       | (55)  | (0.28) |
| 3/4        | 1.92       | 2.71  | 1.10   |
|            | (49)       | (69)  | (0.50) |
| 1          | 2.52       | 3.18  | 1.78   |
|            | (64)       | (81)  | (0.81) |
| 1 1/4      | 2.95       | 3.81  | 2.68   |
|            | (75)       | (97)  | (1.22) |
| 1 1/2      | 3.43       | 4.34  | 4.05   |
|            | (87)       | (110) | (1.84) |
| 2          | 4.19       | 5.11  | 6.67   |
|            | (106)      | (130) | (3.03) |
| 2 1/2      | 4.89       | 6.94  | 13.00  |
|            | (124)      | (176) | (5.91) |
| 3          | 5.88       | 8.39  | 21.67  |
|            | (149)      | (213) | (9.85) |

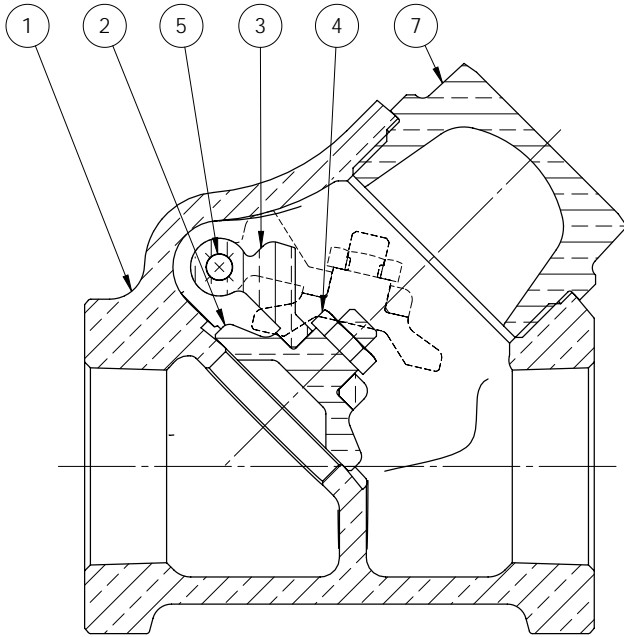


\* Not recommended for use in reciprocating air compressor service.



# Class 300 • Threaded Cap • Brass/Bronze Disc • Threaded Ends

## Swing Check Valve\* Figure B-375



### Materials of Construction

| No. | Description    | Material            | ASTM Spec.   |
|-----|----------------|---------------------|--------------|
| 1   | Body           | Bronze              | B-61 C92200  |
| 2   | Disc           | (1/4" - 3/4") Brass | B-16 H02     |
|     |                | (1" - 3") Bronze    | B-61 C92200  |
| 3   | Hinge          | Bronze              | B-584 C87600 |
| 4   | Lock Nut       | Brass               | B-16 H02     |
| 5   | Hinge Pin      | Stainless Steel     | A-276 C304   |
| 6   | Hinge Pin Plug | Brass               | B-16 H02     |
| 7   | Cap            | Bronze              | B-61 C92200  |

#### NOTE:

The addition of the letter "K" at the end of the figure number designates valves assembled & tested in the USA. Materials of Construction & Dimensions are the same.

### Industry Standards

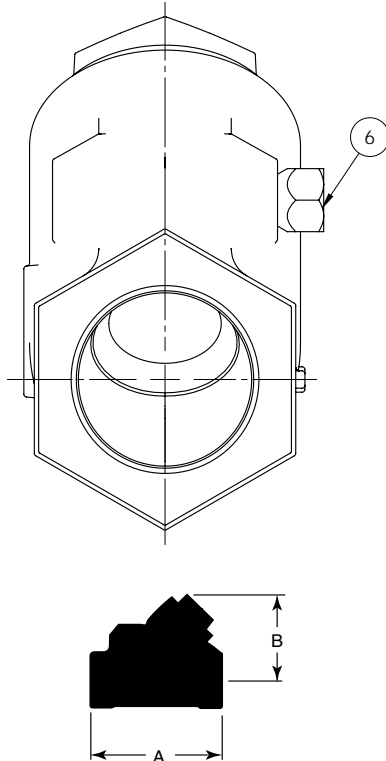
Complies with MSS SP-80 Type 3

See Page 6 for Pressure-Temperature Ratings

### Dimensions and Weights

Inches (millimeters) - Pounds (kilograms)

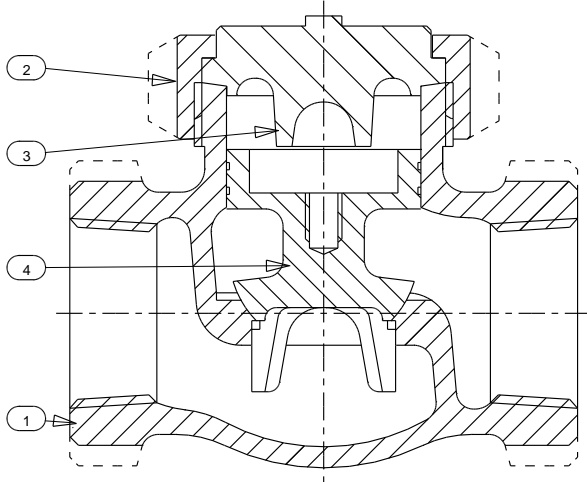
| Valve Size | Dimensions |       | Wt.    |
|------------|------------|-------|--------|
|            | B          | A     |        |
| 1/4        | 1.49       | 2.14  | 0.48   |
|            | (38)       | (54)  | (0.22) |
| 3/8        | 1.49       | 2.14  | 0.46   |
|            | (38)       | (54)  | (0.21) |
| 1/2        | 1.64       | 2.15  | 0.62   |
|            | (42)       | (55)  | (0.28) |
| 3/4        | 1.92       | 2.71  | 1.10   |
|            | (49)       | (69)  | (0.50) |
| 1          | 2.52       | 3.18  | 1.78   |
|            | (64)       | (81)  | (0.81) |
| 1 1/4      | 2.95       | 3.81  | 2.68   |
|            | (75)       | (97)  | (1.22) |
| 1 1/2      | 3.43       | 4.34  | 4.05   |
|            | (87)       | (110) | (1.84) |
| 2          | 4.19       | 5.11  | 6.67   |
|            | (106)      | (130) | (3.03) |
| 2 1/2      | 4.89       | 6.94  | 13.00  |
|            | (124)      | (176) | (5.91) |
| 3          | 5.88       | 8.39  | 21.67  |
|            | (149)      | (213) | (9.85) |



\* Not recommended for use in reciprocating air compressor service.

# Class 300 • Union Cap • Bronze Disc • Threaded Ends

## Lift Check Valve Figure B-367



### Materials of Construction

| No. | Description | Material                                  | ASTM Spec.   |
|-----|-------------|---|--------------|
| 1   | Body        | Bronze                                    | B-61 C92200  |
| 2   | Union Ring  | Bronze                                    | B-62 C83600  |
| 3   | Cap         | ( $\frac{1}{2}$ " ) Copper Silicon Bronze | B-371 C69400 |
|     |             | ( $\frac{3}{4}$ " - 2" ) Bronze           | B-61 C92200  |
| 4   | Disc        | Bronze                                    | B-61 C92200  |

### Industry Standards

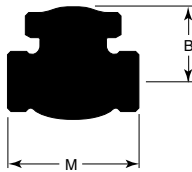
Complies with MSS SP-80 Type 1

See Page 6 for Pressure-Temperature Ratings

### Dimensions and Weights

Inches (millimeters) - Pounds (kilograms)

| Valve Size      | Dimensions |       | Wt.    |
|-----------------|------------|-------|--------|
|                 | B          | M     |        |
| $\frac{1}{2}$   | 1.46       | 2.56  | 1.04   |
|                 | (37)       | (65)  | (0.47) |
| $\frac{3}{4}$   | 1.85       | 2.95  | 1.70   |
|                 | (47)       | (75)  | (0.77) |
| 1               | 2.05       | 3.50  | 2.69   |
|                 | (52)       | (89)  | (1.21) |
| 1 $\frac{1}{4}$ | 2.36       | 4.06  | 4.08   |
|                 | (60)       | (103) | (1.85) |
| 1 $\frac{1}{2}$ | 2.64       | 4.61  | 5.84   |
|                 | (67)       | (117) | (2.65) |
| 2               | 3.23       | 5.75  | 10.06  |
|                 | (82)       | (146) | (4.56) |



# Bronze Lead Free Valve Index

**Bronze Lead Free Valves**

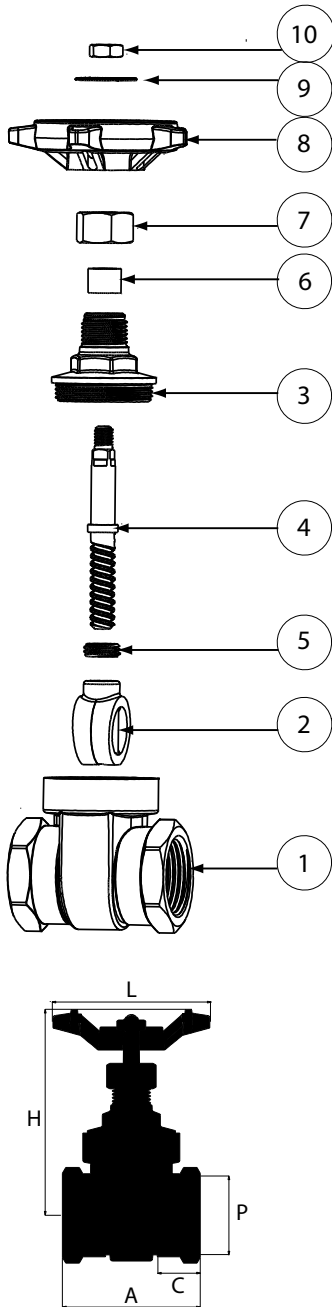
**Gate Valves**

Class 125 / 200 CWP ..... 58-59

**Swing Check Valves**

Class 125 / 200 CWP ..... 60-61

## Lead Free Gate Valve Figure LFB-103



### Materials of Construction

| No. | Description  | Material          | Specification   |
|-----|--------------|-------------------|-----------------|
| 1   | Body         | Lead Free Brass   | CW510L          |
| 2   | Wedge        | Lead Free Brass   | CW510L          |
| 3   | Bonnet       | Lead Free Brass   | CW510L          |
| 4   | Stem         | Lead Free Brass   | CW510L          |
| 5   | Ring         | Lead Free Brass   | CW510L          |
| 6   | Packing Ring | Graphite          | WRAS Approved   |
| 7   | Packing Nut  | Brass             | BS2874 CZ122    |
| 8   | Handwheel    | Aluminum          | B85 Red Painted |
| 9   | Disc         | Aluminum          | B85             |
| 10  | Nut          | Zinc Plated Steel | A36             |

### Industry Standards

Meet the requirements of California's AB1953  
and in full compliance with NSF61 Annex G.

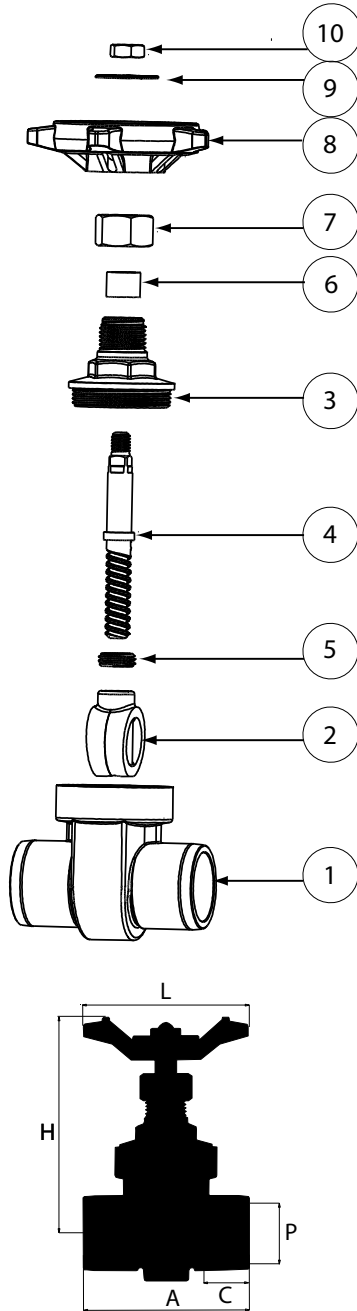
### Dimensions and Weights

Inches (millimeters) - Pounds (kilograms)

| Valve Size | Dimensions |      |       |       |      | Wt.    | Cv   |
|------------|------------|------|-------|-------|------|--------|------|
|            | A          | C    | H     | L     | P    |        |      |
| ½          | 1.97       | 0.65 | 2.79  | 2.51  | 0.51 | 0.53   | 10.8 |
|            | (50)       | (17) | (71)  | (64)  | (13) | (0.24) |      |
| ¾          | 2.12       | 0.65 | 3.17  | 2.51  | 0.74 | 0.82   | 23   |
|            | (54)       | (17) | (81)  | (64)  | (19) | (0.37) |      |
| 1          | 2.44       | 0.78 | 3.93  | 2.99  | 1.00 | 1.17   | 42   |
|            | (62)       | (20) | (100) | (76)  | (25) | (0.53) |      |
| 1 ¼        | 2.75       | 0.86 | 4.37  | 3.54  | 1.25 | 1.83   | 72   |
|            | (70)       | (22) | (111) | (90)  | (32) | (0.83) |      |
| 1 ½        | 2.84       | 0.86 | 4.94  | 3.54  | 1.50 | 2.38   | 120  |
|            | (72)       | (22) | (125) | (90)  | (38) | (1.08) |      |
| 2          | 3.23       | 0.86 | 6.27  | 4.13  | 2.00 | 4.03   | 210  |
|            | (82)       | (22) | (159) | (105) | (51) | (1.82) |      |

**Class 125 WSP • 200 WOG • Screw Over Bonnet • Solid Disc • Solder**

**Lead Free Gate Valve  
Figure LFB-104**



**Materials of Construction**

| No. | Description  | Material          | Specification   |
|-----|--------------|-------------------|-----------------|
| 1   | Body         | Lead Free Brass   | CW510L          |
| 2   | Wedge        | Lead Free Brass   | CW510L          |
| 3   | Bonnet       | Lead Free Brass   | CW510L          |
| 4   | Stem         | Lead Free Brass   | CW510L          |
| 5   | Ring         | Lead Free Brass   | CW510L          |
| 6   | Packing Ring | Graphite          | WRAS Approved   |
| 7   | Packing Nut  | Brass             | BS2874 CZ122    |
| 8   | Handwheel    | Aluminum          | B85 Red Painted |
| 9   | Disc         | Aluminum          | B85             |
| 10  | Nut          | Zinc Plated Steel | A36             |

**Industry Standards**

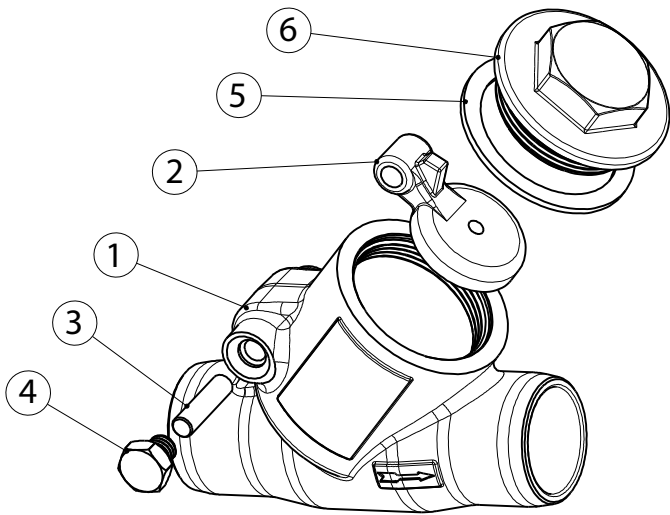
Meet the requirements of California's AB1953 and in full compliance with NSF61 Annex G.

**Dimensions and Weights**  
Inches (millimeters) - Pounds (kilograms)

| Valve Size | Dimensions |      |       |       |      | Wt.    | Cv   |
|------------|------------|------|-------|-------|------|--------|------|
|            | A          | C    | H     | L     | P    |        |      |
| 1/2        | 1.97       | 0.65 | 2.79  | 2.51  | 0.51 | 0.53   | 10.8 |
|            | (50)       | (17) | (71)  | (64)  | (13) | (0.24) |      |
| 3/4        | 2.12       | 0.65 | 3.17  | 2.51  | 0.74 | 0.82   | 23   |
|            | (54)       | (17) | (81)  | (64)  | (19) | (0.37) |      |
| 1          | 2.44       | 0.78 | 3.93  | 2.99  | 1.00 | 1.17   | 42   |
|            | (62)       | (20) | (100) | (76)  | (25) | (0.53) |      |
| 1 1/4      | 2.75       | 0.86 | 4.37  | 3.54  | 1.25 | 1.83   | 72   |
|            | (70)       | (22) | (111) | (90)  | (32) | (0.83) |      |
| 1 1/2      | 2.84       | 0.86 | 4.94  | 3.54  | 1.50 | 2.38   | 120  |
|            | (72)       | (22) | (125) | (90)  | (38) | (1.08) |      |
| 2          | 3.23       | 0.86 | 6.27  | 4.13  | 2.00 | 4.03   | 210  |
|            | (82)       | (22) | (159) | (105) | (51) | (1.82) |      |

## 200 CWP • Y-Pattern • Bronze Disc • Solder Ends

### Lead Free Swing Check Valve Figure LFB-309Y



#### Materials of Construction

| No. | Description    | Material          |
|-----|----------------|-------------------|
| 1   | Body           | AB1953 Brass OT60 |
| 2   | Retaining Disc | AB1953 Brass OT57 |
| 3   | Stem           | AB1953 Brass OT57 |
| 4   | Screw          | AB1953 Brass OT57 |
| 5   | Gasket         | PTFE AE/2         |
| 6   | Cap            | AB1953 Brass OT57 |

#### Industry Standards

Meet the requirements of California's AB1953 and in full compliance with NSF61 Annex G.

See Page 6 for Pressure-Temperature Ratings

#### Dimensions and Weights

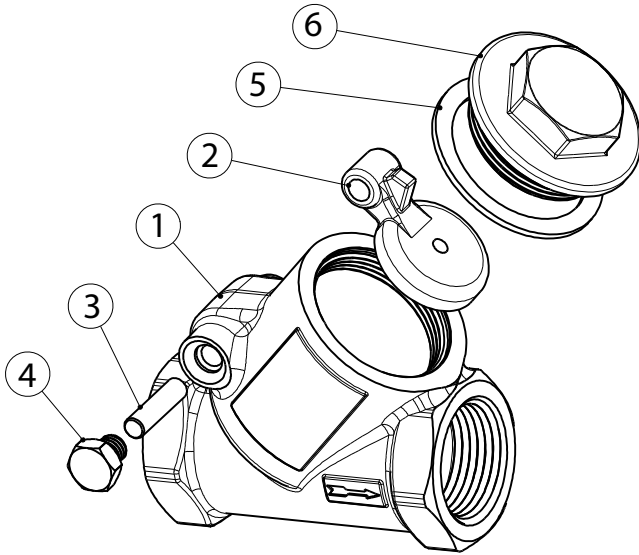
Inches (millimeters) - Pounds (kilograms)



| Valve Size | Dimensions |      | Wt.    |
|------------|------------|------|--------|
|            | A          | B    |        |
| ½          | 2.60       | 1.65 | 0.35   |
|            | (66)       | (42) | (0.16) |
| ¾          | 3.39       | 1.97 | 0.87   |
|            | (86)       | (50) | (0.40) |
| 1          | 4.09       | 2.28 | 1.33   |
|            | (104)      | (58) | (0.60) |
| 1¼         | 4.72       | 2.71 | 2.04   |
|            | (120)      | (69) | (0.93) |
| 1½         | 5.35       | 3.19 | 2.80   |
|            | (136)      | (81) | (1.27) |
| 2          | 6.69       | 3.86 | 4.78   |
|            | (170)      | (98) | (2.16) |

**Class 125 • Y-Pattern • Bronze Disc • Threaded Ends**

**Lead Free Swing Check Valve  
Figure LFB-319Y**



**Materials of Construction**

| No. | Description    | Material          |
|-----|----------------|-------------------|
| 1   | Body           | AB1953 Brass OT60 |
| 2   | Retaining Disc | AB1953 Brass OT57 |
| 3   | Stem           | AB1953 Brass OT57 |
| 4   | Screw          | AB1953 Brass OT57 |
| 5   | Gasket         | PTFE AE/2         |
| 6   | Cap            | AB1953 Brass OT57 |

**Industry Standards**

Meet the requirements of California's AB1953 and in full compliance with NSF61 Annex G.

See Page 6 for Pressure-Temperature Ratings

**Dimensions and Weights**  
Inches (millimeters) - Pounds (kilograms)

| Valve Size | Dimensions |      | Wt.    |
|------------|------------|------|--------|
|            | A          | B    |        |
| ½          | 2.21       | 1.65 | 0.58   |
|            | (56)       | (42) | (0.26) |
| ¾          | 2.76       | 1.97 | 0.93   |
|            | (70)       | (50) | (0.42) |
| 1          | 3.15       | 2.28 | 1.37   |
|            | (80)       | (58) | (0.62) |
| 1¼         | 3.78       | 2.71 | 2.15   |
|            | (96)       | (69) | (0.98) |
| 1½         | 4.33       | 3.19 | 2.97   |
|            | (110)      | (81) | (1.35) |
| 2          | 5.04       | 3.86 | 4.82   |
|            | (128)      | (98) | (2.18) |





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