



77-100 Series

Bronze Full Port Ball Valve

Threaded, 600 psig WOG, Cold Non-Shock. 150 psig Saturated Steam. (See referenced P/T chart)
Vacuum Service to 29 inches Hg.

Federal Specification: WW-V-35C, Type: II, Composition: BZ, Style: 3.

MSS SP-110; Ball Valves Threaded, Socket-Welding, Solder Joint, Grooved and Flared Ends.

FEATURES

- Chromium plated ball
- RPTFE seats and stuffing box ring
- Mounting pad for easy actuator mounting
- Blow-out-proof stem design
- Adjustable packing gland
- Full port for full flow & min. pressure drop

STANDARD MATERIAL LIST

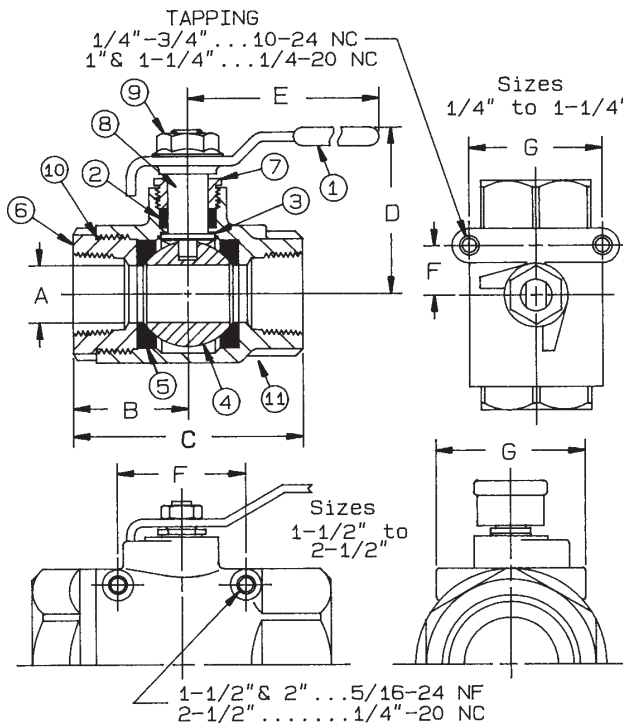
| | | | |
|-------------------|--------------------------------|---------------|-------------------------|
| 1. Lever and grip | Steel, zinc plated w/vinyl | 10. Body seal | PTFE (1-1/4" to 2-1/2") |
| 2. Stem packing | RPTFE | 11. Body | B584-C84400 |
| 3. Stem bearing | RPTFE | | |
| 4. Ball | B16, chrome plated | | |
| 5. Seat (2) | RPTFE | | |
| 6. Retainer | B16 (1/4" to 1") | | |
| | B584-C84400 (1-1/4" to 2-1/2") | | |
| 7. Gland nut | B16 | | |
| 8. Stem | B16 | | |
| 9. Lever nut | Steel, zinc plated | | |

VARIATIONS AVAILABLE:

- 77-140 Series (316 SS Ball & Stem)
- 77-150 Series (Original Balancing Stop)
- 77-190 Series (Locked Retainer)

OPTIONS AVAILABLE:

| (SUFFIX) | OPTION | SIZES |
|----------|---|----------------|
| -02- | Stem Grounded | 1/4" to 2-1/2" |
| -03- | 1-1/4" CS Stem Extension | 1/4" to 2-1/2" |
| -04- | 2-1/4" CS Stem Extension | 1/4" to 2-1/2" |
| -05- | Plain Ball | 1/4" to 2-1/2" |
| -07- | Steel Tee Handle | 1/4" to 1-1/4" |
| -08- | 90° Reversed Stem | 1/4" to 2-1/2" |
| -10- | SS Lever & Nut | 1/4" to 2-1/2" |
| -14- | Side Vented Ball (Uni-Directional) | 1/4" to 2-1/2" |
| -15- | Wheel Handle, Steel | 1/4" to 1-1/4" |
| -16- | Chain Lever - Vertical | 3/4" to 2-1/2" |
| -17- | Rough Chrome Plated - Bronze Valves | 1/4" to 2-1/2" |
| -18- | Plain Yellow Grip | 1/4" to 2-1/2" |
| -20- | Slot Vented Ball | 1/4" to 2-1/2" |
| -21- | UHMWPE Trim (Non-PTFE) | 1/4" to 2-1/2" |
| -24- | Graphite Packing | 1/4" to 2-1/2" |
| -27- | SS Latch-Lock Lever & Nut | 1/4" to 2-1/2" |
| -28- | Mounting Pad Not Drilled & Tapped | 1/4" to 2-1/2" |
| -30- | Cam-Lock and Grounded | 1/4" to 1-1/4" |
| -32- | SS Tee Handle & Nut | 1/4" to 1-1/4" |
| -35- | VTFE Trim | 1/4" to 2-1/2" |
| -36- | SS High-Rise Round Handle & Nut | 1/4" to 1-1/4" |
| -40- | Cyl-Loc and Grounded | 1/4" to 1-1/4" |
| -45- | Less Lever & Nut | 1/4" to 2-1/2" |
| -46- | Latch Lock Lever - Lock in Closed Position Only | 1/4" to 2-1/2" |
| -47- | SS Oval Latch-Lock Handle & Nut | 1/4" to 3/4" |
| -48- | SS Oval Handle (No Latch) & Nut | 1/4" to 2" |
| -49- | Assembled Dry | 1/4" to 2-1/2" |
| -50- | 2-1/4" CS Locking Stem Extension | 1/4" to 2-1/2" |
| -56- | Multifill Seats & Packing | 1/4" to 2-1/2" |
| -57- | Oxygen Cleaned | 1/4" to 2-1/2" |
| -58- | Chain Lever - Horizontal | 3/4" to 2-1/2" |
| -60- | Static Grounded Ball & Stem | 1/4" to 2-1/2" |
| -63- | NPT x Solder/Socket Weld | 1/4" to 2-1/2" |
| -64- | 250# Steam Trim | 1/4" to 2-1/2" |
| -P01- | BSPP (Parallel) Thread Connection | 1/4" to 2-1/2" |
| -T01- | BSPT (Tapered) Thread Connection | 1/4" to 2-1/2" |



BRONZE FULL PORT BALL VALVE

| NUMBER | SIZE | A | B | C | D | E | F | G | Wt. |
|-----------|--------|------|------|------|------|------|------|------|-------|
| 77-101-01 | 1/4" | .43 | 1.09 | 2.18 | 1.77 | 3.87 | .50 | 1.12 | .79 |
| 77-102-01 | 3/8" | .50 | 1.09 | 2.18 | 1.77 | 3.87 | .50 | 1.12 | .75 |
| 77-103-01 | 1/2" | .50 | 1.09 | 2.18 | 1.77 | 3.87 | .50 | 1.12 | .69 |
| 77-104-01 | 3/4" | .81 | 1.56 | 3.12 | 2.17 | 4.87 | .87 | 1.37 | 1.83 |
| 77-105-01 | 1" | 1.00 | 1.81 | 3.62 | 2.68 | 5.50 | .93 | 1.50 | 3.32 |
| 77-106-01 | 1-1/4" | 1.25 | 2.12 | 4.25 | 2.90 | 5.50 | .93 | 1.50 | 5.05 |
| 77-107-01 | 1-1/2" | 1.50 | 2.37 | 4.75 | 3.10 | 8.00 | 2.08 | 3.06 | 6.71 |
| 77-108-01 | 2" | 2.00 | 2.65 | 5.37 | 3.50 | 8.00 | 2.41 | 3.52 | 11.75 |
| 77-109-01 | 2-1/2" | 2.50 | 3.25 | 6.50 | 4.06 | 8.00 | 2.75 | 3.37 | 17.25 |

**For Pressure/Temperature Ratings,
Refer to Page M-8, Graph No. 4**