## Federal valve specifications for bronze and cast iron valves

## Bronze Valve Specifications\* (below valves conform to MSS-SP-80)

Federal Specification WW-V-51e: Class A, Type I Covers

125 lb. S.W.P. Globe Valves

Class A, Type II Covers 125 lb. S.W.P. Angle Valves

Class A, Type IV Covers

125 lb. S.W.P. Swing Check Valves

Class B, Type I Covers 150 lb. S.W.P. Globe Valves

Class B, Type II Covers 150 lb. S.W.P. Angle Valves

Class B, Type IV Covers 150 lb. S.W.P. Globe Valves

Federal Specification WW-V-54d; Class A, Type I Covers

125 lb. S.W.P. Wedge Disc, Non-Rising Stem Gate Valves

Class A, Type II Covers

125 lb. S.W.P. Wedge Disc, Rising Stem, Inside Screw Gate Valves

Class A, Type III Covers

125 lb. S.W.P. Double Disc, Rising Stem, Inside Screw Gate Valves

Class B, Type I Covers

150 lb. S.W.P. Wedge Disc, Non-Rising Stem Gate Valves

Class B, Type II Covers

150 lb. S.W.P. Wedge Disc, Rising Stem, Inside Screw Gate Valves

Class B, Type III Covers

150 lb. S.W.P. Double Disc, Rising Stem, Inside Screw Gate Valves

# Iron Valve Specifications\* (below valves conform to MS-SP-70)

Federal Specification WW-V-58b: Class 1, Type I Covers

125 lb. S.W.P. Wedge Disc, OS&Y, Screwed End, Cast Iron Gate Valves

Class 2, Type I Covers

250 lb. S.W.P. Wedge Disc, OS&Y, Screwed End, Cast Iron Gate Valves

Class 1. Type I Covers

125 lb. S.W.P. Non-Rising Stem, Inside Screw, Screwed End, Cast Iron Gate Valves

Class 2, Type I Covers

250 lb. S.W.P. Non-Rising Stem, Inside Screw, Screwed End, Cast Iron Gate Valves

Class 1, Type I Covers

125 lb. S.W.P. OS&Y, Flanged End, Cast Iron Gate Valves

Class 2, Type I Covers

250 lb. S.W.P. OS&Y, Flanged End, Cast Iron Gate Valves

Class 1, Type I Covers

125 lb. S.W.P. Non-Rising Stem, Inside Screw, Flanged End, Cast Iron Gate Valves

Class 2, Type I Covers

250 lb. S.W.P. Non-Rising Stem, Inside Screw, Flanged End, Cast Iron Gate Valves

<sup>•</sup> The Federal Government has now accepted MSS-SP specifications in lieu of the WW-V Series of specifications.

## Federal valve specifications for bronze and cast iron valves

Note: WW-V-51, WW-V-54, WW-V-58 have been cancelled and replaced by the corresponding MSS Specifications.

#### **BRONZE**

- Federal Specification WW-V-51e Class A, Type I Covers 125 lb. S.W.P. Globe Valves (MSS-SP-80).
- Federal Specification WW-V-51e Class A, Type II Covers 125 lb. S.W.P. Angle Valves (MSS-SP-80).
- Federal Specification WW-V-51e Class A, Type IV Covers 125 lb. S.W.P. Swing Check Valves (MSS-SP-80).
- Federal Specification WW-V-51e Class B, Type I Covers 150 lb. S.W.P. Globe Valves (MSS-SP-80).
- Federal Specification WW-V-51e Class B, Type II Covers 150 lb. S.W.P. Angle Valves (MSS-SP-80).
- Federal Specification WW-V-51e Class B, Type IV Covers 150 lb. S.W.P. Swing Check Valves (MSS-SP-80)
- Federal Specification WW-V-51e Class C, Type I Covers 200 lb. S.W.P. Globe Valves (MSS-SP-80).
- Federal Specification WW-V-54d Class A, Type I Covers 125 lb. S.W.P. Wedge Disc, Non-Rising Stem Gate Valves(MSS-SP-80).
- Federal Specification WW-V-51e Class C, Type II Covers 200 lb. S.W.P. Angle Valves (MSS-SP-80).
- Federal Specification WW-V-51e Class C, Type IV Covers 200 lb. S.W.P. Swing Check Valves (MSS-SP-80).
- Federal Specification WW-V-54d Class A, Type II Covers 125 lb. S.W.P. Wedge Disc, Rising Stem, Inside Screw Gate Valves (MSS-SP-80).
- Federal Specification WW-V-54d Class A, Type III Covers 125 lb. S.W.P. Double Disc, Rising Stem, Inside Screw Gate Valves (MSS-SP-80).
- Federal Specification WW-V-54d Class B, Type I Covers 150 lb. S.W.P. Wedge Disc, Non-Rising Stem Gate Valves (MSS-SP-80).
- Federal Specification WW-V-54d Class B, Type II Covers 150 lb. S.W.P. Wedge Disc, Rising Stem, Inside Screw Gate Valves (MSS-SP-80).
- Federal Specification WW-V-54d Class B, Type III Covers 150 lb. S.W.P. Double Disc, Rising Stem, Inside Screw Gate Valves (MSS-SP-80).
- Federal Specification WW-V-54d Class C, Type I Covers 200 lb. S.W.P. Wedge Disc, Non-Rising Stem Gate Valves (MSS-SP-80).
- Federal Specification WW-V-54d Class C, Type II Covers 200 lb. S.W.P. Wedge Disc, Rising Stem, Inside Screw Gate Valves (MSS-SP-80).
- Federal Specification WW-V-35b Covers 150 lb. S.W.P. Ball Valves

#### **IRON**

- Federal Specification WW-V-58b Class 1, Type I Covers 125lb. S.W.P. Wedge Disc, OS&Y, Screwed End, Cast Iron Gate Valves (MSS-SP-70).
- Federal Specification WW-V-58b Class 2, Type I Covers 200 lb. S.W.P. Wedge Disc, OS&Y, Screwed End, Cast iron Gate Valves (MSS-SP-70).
- Federal Specification WW-V-58b Class 1, Type I Covers 125 lb. S.W.P. Non-Rising Stem, Inside Screw, Screwed End, Cast Iron Gate Valves (MSS-SP-70).
- Federal Specification WW-V-58b Class 2, Type 1 Covers 250 lb. S.W. P. Non-Rising Stem, Inside Screw, Screwed End, Cast Iron Gate Valves (MSS-SP-70)
- Federal Specification WW-V-58b Class 1, Type 1 Covers 125 lb. S.W.P. OS & Y Flanged End, Cast Iron Gate Valves (MSS-SP-20)
- Federal Specification WW-V-58b Class 2, Type 1 Covers 250 lb. S.W.P. OS & Y, Flanged End, Cast Iron Gate Valves (MSS-SP-70)
- Federal Specification WW-V-58b Class 1, Type 1 Covers 125 lb. S.W.P. Non-Rising Stem, Inside Screw, Flanged End, Cast Iron Gate Valves (MSS-SP-70)
- Federal Specification WW-V-58b Class 2 Type 1 Covers 250 lb. S.W.P. Non –Rising Stem, Inside Screw, Flanged End, Cast Iron Gate Valves (MSS-SP-70)

### STANDARDS -

## FOR INFORMATION PURPOSES ONLY

- MSS-SP-67 Covers Butterfly Valves of the Single Flange Type (Lug Wafer)
- MSS-SP-67 Covers Butterfly Valves of the Flangeless Type (Wafer)
- MSS-SP-70 Covers Cast Iron Gate Valves, Flanged and Threaded Ends
- MSS-SP-71 Covers Cast Iron Swing Check Valves, Flanged and Threaded Ends
- MSS-SP-80 Covers Bronze Gate, Globe, Angle and Check Valves
- MSS-SP-85 Covers Cast Iron Globe and Angle Valves, Flanged and Threaded Ends
- A.N.S.I. Standard B1.1 The Unified Screw Threads Standard that covers manufacturing tolerances of screw threads
- A.N.S.I. Standard B1.20.1 This standard controls NIBCO pipe threads
- A.N.S.I. Standard B2.4 This standard controls NIBCO hose coupling screw threads
- A.N.S.I. Standard B16.18 This standard controls NIBCO valve solder cups
- A.N.S.I. Standard B16.1 Covers cast iron pipe flanges and flanged fittings (Class 125 and 250)
- A.N.S.I. Standard B16-10 Covers face-to-face and end-to-end dimensions of ferrous valves
- MILITARY Standard MIL-V-18826 Covers cast iron globe valves
- MILITARY Standard MIL-V-18436 Applies to bronze and iron check valves sizes ½" thru 12".