

Dimensions 200 CWP • Threaded Bonnet • Solid Wedge Disc

Figure 90

Gate Valve, Rising Stem, Solid Wedge Disc, Threaded Ends

Figure 190

Gate Valve, Non-Rising Stem, Solid Wedge Disc, Threaded Ends

Size Range:

½ through 2 inches

Design Features:

- Threaded Ends
- Integral Seat
- Figure 190 - Inside Screw/Non-rising Stem
- MSS SP-42
- ASME B16.34

Dimensions and Weights

| Valve Size | Weight (lbs) | | Dimensions (inches) | | | |
|------------|--------------|-----|---------------------|----------|-----|-----|
| | | | A | B (open) | | C |
| | 90 | 190 | | 90 | 190 | |
| ½ | 1.0 | 0.9 | 2.2 | 5.9 | 3.6 | 2.7 |
| ¾ | 1.3 | 1.5 | 2.4 | 6.7 | 3.9 | 2.7 |
| 1 | 1.7 | 2.5 | 2.6 | 7.6 | 4.5 | 3.1 |
| 1½ | 3.4 | 3.2 | 3.4 | 10.6 | 5.8 | 3.5 |
| 2 | 5.2 | 7.0 | 3.8 | 12.4 | 6.6 | 4.0 |

Please refer to page 28 for Pressure-Temperature Ratings.

Materials of Construction

| | | |
|----|----------------|----------------|
| 1 | Body | ASTM A351 CF8M |
| 2 | Bolt | ASTM A351 CF8M |
| 3 | Disc | ASTM A351 CF8M |
| 4 | Stem | 316 SS |
| 5 | Gland | PTFE |
| 6 | Packing | 316 SS |
| 7 | Nut Gland | ASTM A351 CF8M |
| 8 | Packing Washer | 316 SS |
| 9 | Gasket | PTFE |
| 10 | Hardwheel | Aluminum |
| 11 | Hardwheel Nut | 304 SS |
| 12 | ID Tag | Aluminum |

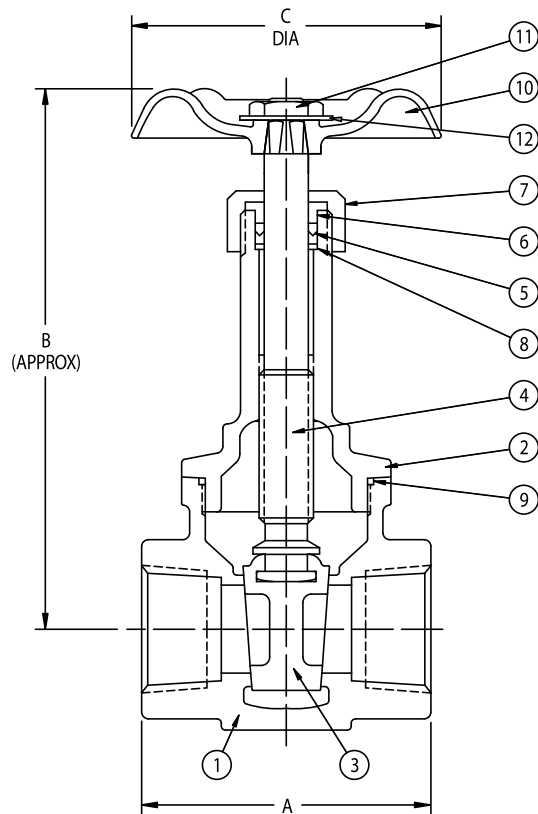


Fig. 190

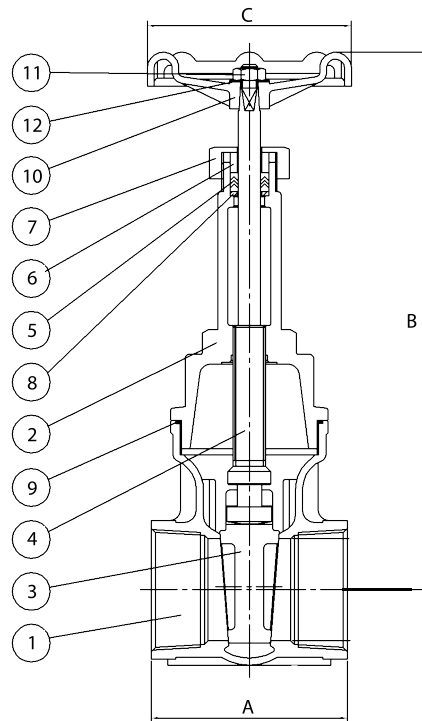


Fig. 90

Industry Standards

| | |
|--------------|-------------------------|
| Pipe Threads | ASME B1.20.1 |
| End-to-End | Manufacturer's Standard |

Dimensions Class 150 • OS&Y • Solid or Flexible Wedge Disc

Figure 110

Gate Valve, Raised Face, Threaded Ends,
Solid Wedge Disc (½ - 1")
Flexible Wedge Disc (1½ - 2")

Figure 114

Gate Valve, Raised Face, Socket Weld Ends,
Solid Wedge Disc (½ - 1")
Flexible Wedge Disc (1½ - 2")

Size Range:

½ through 2 inches

Design Features:

- Bolted Bonnet
- Rising Stem
- Integral Seat
- MSS SP-42
- API 603 (except for end connections)
- ASME B16.34

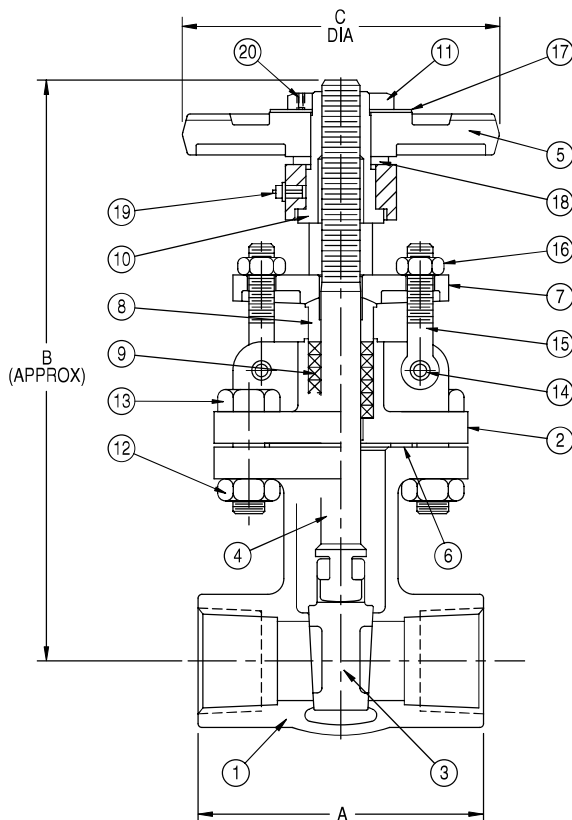


Fig. 110

Dimensions and Weights

| Valve Size | Weight (lbs) | Dimensions (inches) | | |
|------------|--------------|---------------------|----------|-----|
| | | A | B (open) | C |
| ½ | 6.8 | 2.76 | 8.1 | 3.9 |
| ¾ | 7.2 | 3.15 | 8.5 | 3.9 |
| 1 | 9.8 | 3.54 | 9.1 | 3.9 |
| 1½ | 14.9 | 4.13 | 11.0 | 5.5 |
| 2 | 20.1 | 4.72 | 12.6 | 6.3 |

Please refer to page 28 for Pressure-Temperature Ratings.

Industry Standards

| | |
|----------------------|-------------------------|
| Pipe Threads | ASME B1.20.1 |
| Wall Section | ASME B16.34 |
| Socket Weld Ends | ASME B16.11 |
| End-to-End | Manufacturer's Standard |
| Pressure-Temp Rating | ASME B16.34 |
| Testing | API 598 |

Materials of Construction

| | | |
|----|-----------------|----------------------|
| 1 | Body | ASTM A351 CF3M |
| 2 | Bonnet | ASTM A351 CF8M |
| 3 | Disc | ASTM A351 CF8M |
| 4 | Stem | ASTM A276 T316 |
| 5 | Handwheel | ASTM A536 |
| 6 | Gasket | PTFE |
| 7 | Gland Flange | ASTM A351 CF8 |
| 8 | Gland | ASTM A276 T316 |
| 9 | Packing | PTFE |
| 10 | Stem Nut | ASTM A439, D2 |
| 11 | Handwheel Nut | ASTM A276 T316 |
| 12 | Bonnet Bolt Nut | ASTM A194 GR 8 |
| 13 | Bonnet Bolt | ASTM A193 GR B8 |
| 14 | Eyebolt Pin | ASTM A276 T304 |
| 15 | Eyebolt | ASTM A193 GR B8 |
| 16 | Eyebolt Nut | ASTM A194 GR 8 |
| 17 | ID Tag | 304 Stainless |
| 18 | Washer | ASTM A536 |
| 19 | Grease Fitting | Nickel-plated Copper |
| 20 | Set Screw | Steel |

Dimensions Class 150 • OS&Y • Solid or Flexible Wedge Disc

Figure 117

Gate Valve, Raised Face, Flanged Ends,
Solid Wedge Disc (½ - 1")
Flexible Wedge Disc (1½ - 24")

Size Range:

½ through 24 inches

Design Features:

- Bolted Bonnet
- Rising Stem
- Integral Seat
- MSS SP-42
- API 603
- ASME B16.34

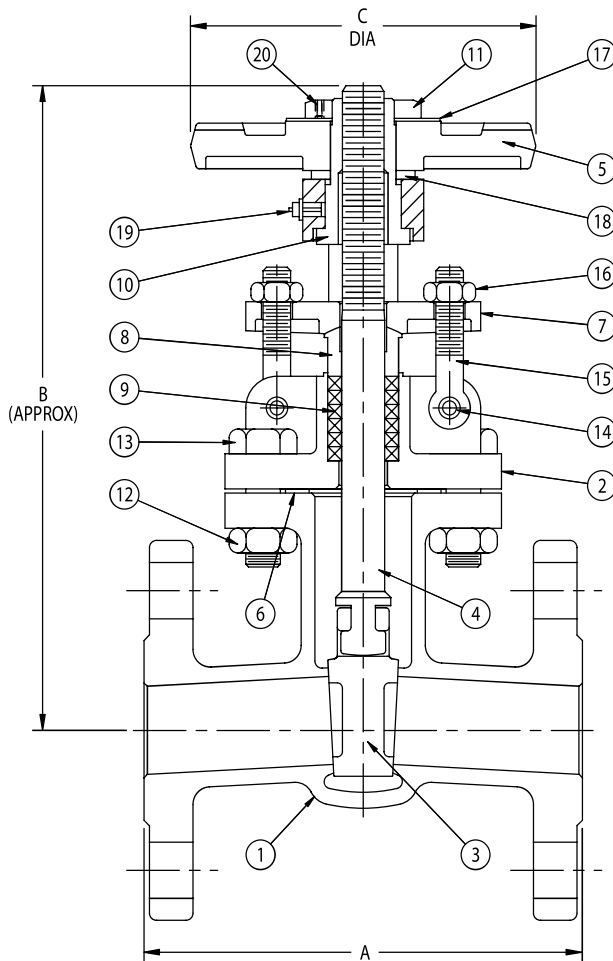


Fig. 117

Dimensions and Weights

| Valve Size | Weight (lbs) | Dimensions (inches) | | |
|------------|--------------|---------------------|----------|------|
| | | A | B (open) | C |
| ½ | 7.4 | 4.25 | 8.1 | 3.9 |
| ¾ | 8.3 | 4.63 | 8.5 | 3.9 |
| 1 | 10.0 | 5.00 | 9.1 | 3.9 |
| 1½ | 18.0 | 6.50 | 11.0 | 5.5 |
| 2 | 27.0 | 7.00 | 12.6 | 6.3 |
| 2½ | 37.5 | 7.50 | 15.1 | 7.9 |
| 3 | 46.3 | 8.00 | 16.7 | 7.9 |
| 4 | 75.0 | 9.00 | 20.9 | 8.8 |
| 6 | 128.0 | 10.50 | 28.7 | 11 |
| 8 | 216.1 | 11.50 | 36.9 | 11.8 |
| 10 | 291.1 | 13.00 | 43.9 | 13.8 |
| 12 | 436.6 | 14.00 | 51.9 | 17.7 |
| 14 | 703.4 | 15.00 | 58.5 | 17.7 |
| 16 | 1018.7 | 16.00 | 66.9 | 19.7 |
| 18 | 1190.7 | 17.00 | 74.8 | 22.0 |
| 20 | 1631.7 | 18.00 | 82.5 | 28.0 |
| 24 | 2434.3 | 20.00 | 97.4 | 31.5 |

Please refer to page 28 for Pressure-Temperature Ratings.

Industry Standards

| | |
|-----------------------|-------------|
| End Flanges | ASME B16.5 |
| Wall Section | ASME B16.34 |
| Face-to-Face | ASME B16.10 |
| Pressure-Temp Ratings | ASME B16.34 |
| Design | API 603 |
| Testing | API 598 |

Materials of Construction

| | | |
|----|-----------------|----------------------|
| 1 | Body | ASTM A351 CF8M |
| 2 | Bonnet | ASTM A351 CF8M |
| 3 | Disc | ASTM A351 CF8M |
| 4 | Stem | ASTM A276 T316 |
| 5 | Handwheel | ASTM A536 |
| 6 | Gasket | PTFE |
| 7 | Gland Flange | ASTM A351 CF8 |
| 8 | Gland | ASTM A276 T316 |
| 9 | Packing | PTFE |
| 10 | Stem Nut | ASTM A439, D2 |
| 11 | Handwheel Nut | ASTM A276 T304 |
| 12 | Bonnet Bolt Nut | ASTM A194 GR 8 |
| 13 | Bonnet Bolt | ASTM A193 GR B8 |
| 14 | Eyebolt Pin | ASTM A276 T304 |
| 15 | Eyebolt | ASTM A193 GR B8 |
| 16 | Eyebolt Nut | ASTM A194 GR 8 |
| 17 | ID Tag | 304 SS |
| 18 | Washer | ASTM A536 |
| 19 | Grease Fitting | Nickel-plated Copper |
| 20 | Set Screw | Steel |

Dimensions Class 300 • OS&Y • Solid Wedge Disc

Figure 2110

Gate Valve, Threaded Ends, Solid Wedge Disc

Figure 2114

Gate Valve, Socket Weld Ends, Solid Wedge Disc

Size Range:

½ through 2 inches

Design Features:

- Bolted Bonnet
- Recessed Retained Gasket
- Rising Stem
- Integral Seat
- MSS SP-42
- ASME B16.34

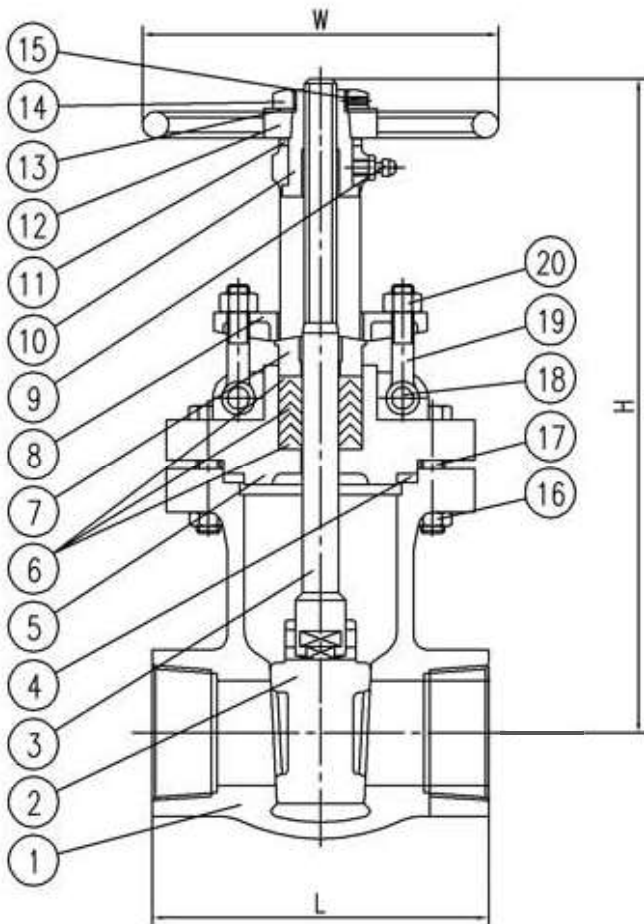


Fig. 2110

Dimensions and Weights

| Valve Size | Weight (lbs) | Dimensions (inches) | | |
|------------|--------------|---------------------|----------|------|
| | | L | H (open) | W |
| ½ | 6.8 | 3.22 | 8.07 | 3.93 |
| ¾ | 7.0 | 3.22 | 8.07 | 3.93 |
| 1 | 10.7 | 4.13 | 9.84 | 5.43 |
| 1½ | 19.5 | 4.92 | 11.85 | 7.87 |
| 2 | 23.5 | 5.31 | 13.38 | 7.87 |

Please refer to page 28 for Pressure-Temperature Ratings.

Industry Standards

| | |
|----------------------|-------------------------|
| Pipe Threads | ASME B1.20.1 |
| Wall Section | ASME B16.34 |
| Socket Weld Ends | ASME B16.11 |
| End-to-End | Manufacturer's Standard |
| Pressure-Temp Rating | ASME B16.34 |
| Testing | API 598 |

Materials of Construction

| | | |
|----|----------------|----------------------|
| 1 | Body | ASTM A351 CF3M |
| 2 | Disc | ASTM A351 CF8M |
| 3 | Stem | ASTM A276 316 |
| 4 | Gasket | PTFE |
| 5 | Bonnet | ASTM A351 CF8M |
| 6 | Packing | PTFE |
| 7 | Gland | ASTM A276 T316 |
| 8 | Gland Flange | ASTM A351 CF8M |
| 9 | Grease Fitting | Nickel-plated Copper |
| 10 | Yoke Nut | ASTM A439 D2 |
| 11 | Washer | ASTM A395 65 45 15 |
| 12 | Handwheel | ASTM A395 65 45 15 |
| 13 | Name Plate | 304 SS |
| 14 | Handwheel Nut | ASTM A276 304 |
| 15 | Set Screw | ASTM A276 304 |
| 16 | Nut | ASTM A194 8 |
| 17 | Bonnet Bolt | ASTM A193 GR B8 |
| 18 | Hinge Pin | ASTM A276 304 |
| 19 | Eyebolt | ASTM A193 GR B8 |
| 20 | Nut | ASTM A194 8 |

Dimensions Class 300 • OS&Y • Solid or Flexible Wedge Disc

Figure 2117

Gate Valve, Raised Face, Flanged Ends,
Solid Wedge Disc (½ - 2")
Flexible Wedge Disc (2½ - 24")

Size Range:

½ through 24 inches

Design Features:

- Bolted Bonnet
- Rising Stem
- Recessed Retained Gasket
- Integral Seat
- MSS SP-42
- ASME B16.34

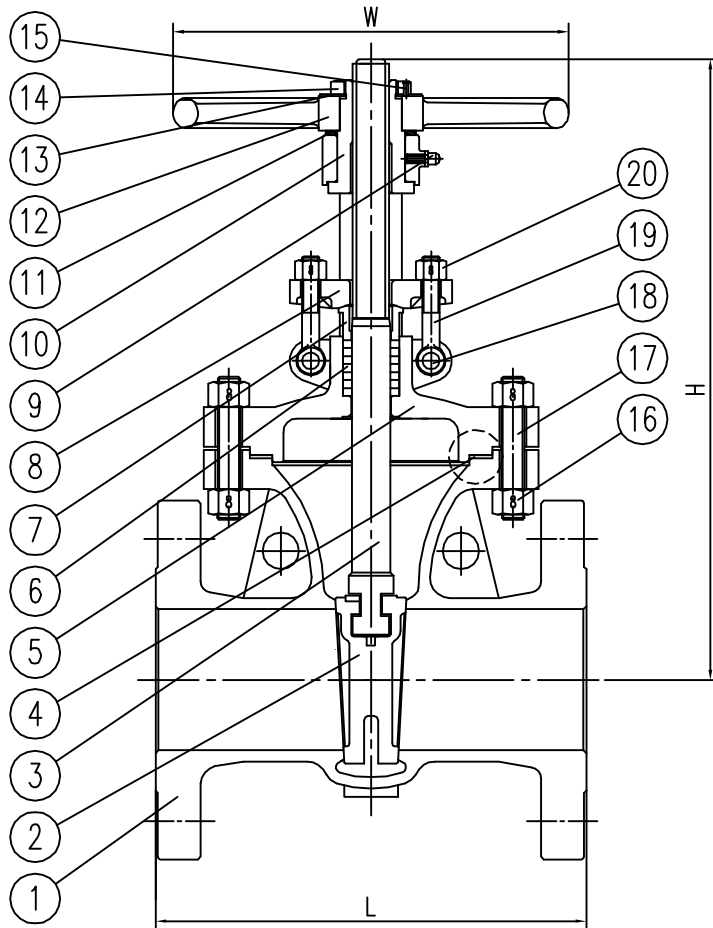


Fig. 2117

Dimensions and Weights

| Valve Size | Weight (lbs) | Dimensions (inches) | | |
|------------|--------------|---------------------|----------|-------|
| | | L | H (open) | W |
| ½ | 9 | 5.51 | 8.19 | 3.94 |
| ¾ | 11 | 5.98 | 8.19 | 3.94 |
| 1 | 16 | 6.50 | 10.08 | 5.43 |
| 1½ | 28 | 7.48 | 12.01 | 7.87 |
| 2 | 34 | 8.50 | 13.36 | 7.87 |
| 2½ | 68 | 9.50 | 17.00 | 8.80 |
| 3 | 90 | 11.12 | 19.30 | 8.80 |
| 4 | 119 | 12.00 | 23.10 | 9.80 |
| 6 | 224.8 | 15.9 | 29.8 | 14 |
| 8 | 439 | 16.50 | 38.70 | 15.75 |
| 10 | 622 | 18.00 | 48.35 | 17.72 |
| 12 | 950 | 19.76 | 56.34 | 19.68 |
| 14 | 957.0 | 30.00 | 59.8 | 22.0 |
| 16 | 1206.1 | 33.00 | 66.7 | 24.8 |
| 18 | 1764.0 | 36.00 | 75.2 | 28.0 |
| 20 | 3281.0 | 39.00 | 83.4 | 31.5 |
| 24 | 4956.8 | 45.00 | 98.1 | 35.4 |

Please refer to page 28 for Pressure-Temperature Ratings.

Industry Standards

| | |
|-----------------------|-------------|
| End Flanges | ASME B16.5 |
| Wall Section | ASME B16.34 |
| Face-to-Face | ASME B16.10 |
| Pressure-Temp Ratings | ASME B16.34 |
| Testing | API 598 |

Materials of Construction

| | | |
|----|----------------|----------------------|
| 1 | Body | ASTM A351 CF8M |
| 2 | Disc | ASTM A351 CF8M |
| 3 | Stem | ASTM A276 316 |
| 4 | Gasket | PTFE |
| 5 | Bonnet | ASTM A351 CF8M |
| 6 | Packing | PTFE |
| 7 | Gland | ASTM A276 T316 |
| 8 | Gland Flange | ASTM A351 CF8M |
| 9 | Grease Fitting | Nickel-Plated Copper |
| 10 | Yoke Nut | ASTM A439, D2 |
| 11 | Washer | PTFE |
| 12 | Handwheel | ASTM A439, D2 |
| 13 | Name Plate | 304 SS |
| 14 | Handwheel Nut | ASTM A276 304 |
| 15 | Set Screw | ASTM A276 304 |
| 16 | Nut | ASTM A194 8 |
| 17 | Bonnet Bolt | ASTM A193 GR B8 |
| 18 | Hinge Pin | ASTM A276 304 |
| 19 | Eyebolt | ASTM A193 GR B8 |
| 20 | Nut | ASTM A194 8 |

Dimensions Class 600 • OS&Y • Solid Wedge Disc

Figure 4210

Gate Valve, Threaded Ends, Solid Wedge Disc

Figure 4214

Gate Valve, Socket Weld Ends, Solid Wedge Disc

Size Range:

½ through 2 inches

Design Features:

- Bolted Bonnet
- Recessed Retained Gasket
- Rising Stem
- Integral Seat
- MSS SP-42
- ASME B16.34

Dimensions and Weights

| Valve Size | Weight (lbs) | Dimensions (inches) | | |
|------------|--------------|---------------------|----------|------|
| | | L | H (open) | W |
| ½ | 6.39 | 3.22 | 8.07 | 3.93 |
| ¾ | 6.61 | 3.22 | 8.07 | 3.93 |
| 1 | 10.10 | 4.13 | 9.84 | 5.43 |
| 1 ½ | 18.07 | 4.92 | 11.85 | 7.87 |
| 2 | 22.04 | 5.31 | 13.38 | 7.87 |

Please refer to page 28 for Pressure-Temperature Ratings.

Industry Standards

| | |
|----------------------|-------------------------|
| Pipe Threads | ASME B1.20.1 |
| Wall Section | ASME B16.34 |
| Socket Weld Ends | ASME B16.11 |
| End-to-End | Manufacturer's Standard |
| Pressure-Temp Rating | ASME B16.34 |
| Testing | API 598 |

Materials of Construction

| | | |
|----|----------------|----------------------|
| 1 | Body | ASTM A351 CF3M |
| 2 | Disc | ASTM A351 CF8M |
| 3 | Stem | ASTM A276 316 |
| 4 | Gasket | PTFE |
| 5 | Bonnet | ASTM A351 CF8M |
| 6 | Packing | PTFE |
| 7 | Gland | ASTM A276 T316 |
| 8 | Gland Flange | ASTM A351 CF8M |
| 9 | Grease Fitting | Nickel-plated Copper |
| 10 | Yoke Nut | A439 D2 |
| 11 | Washer | A395 65 45 15 |
| 12 | Handwheel | A395 65 45 15 |
| 13 | Name Plate | 304 SS |
| 14 | Handwheel Nut | ASTM A276 304 |
| 15 | Set Screw | ASTM A276 304 |
| 16 | Nut | ASTM A194 GR 8 |
| 17 | Bonnet Bolt | ASTM A193 GR B8 |
| 18 | Hinge Pin | ASTM A276 304 |
| 19 | Eyebolt | ASTM A193 GR B8 |
| 20 | Nut | ASTM A194 GR 8 |

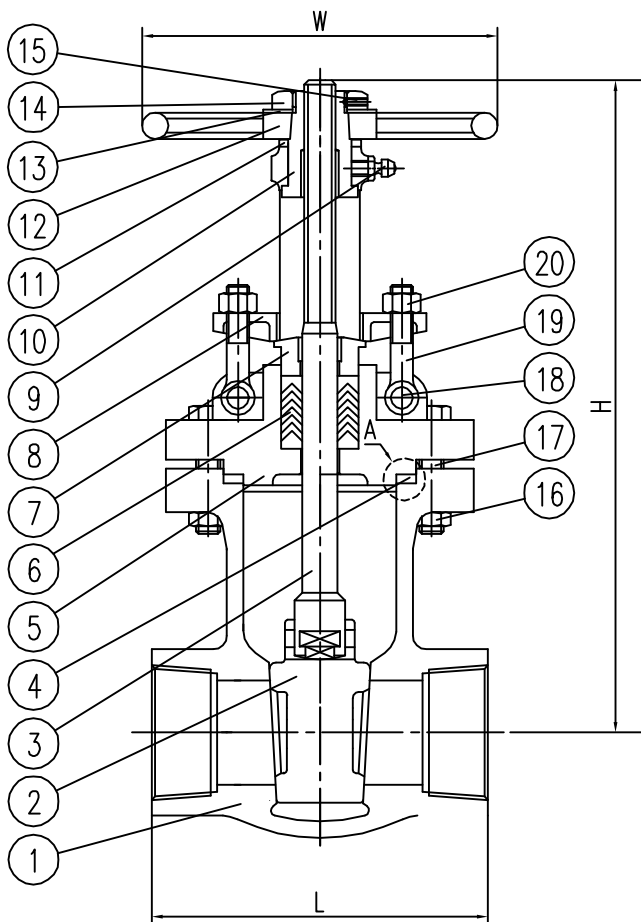
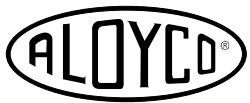


Fig. 4210



Dimensions Class 600 • OS&Y • Flexible Wedge Disc

Figure 4117

Gate Valve, Raised Face, Flanged Ends, Flexible Wedge Disc

Size Range:

2 through 12 inches

Design Features:

- Bolted Bonnet
- Inside Screw
- Rising Stem
- Ring Type Joint Bonnet Gasket
- Integral Seat
- Tested to API 598
- MSS SP-42
- ASME B16.34

Dimensions and Weights

| Valve Size | Weight (lbs) | Dimensions (inches) | | |
|------------|--------------|---------------------|----------|------|
| | | L | H (open) | W |
| 2 | 55 | 11.5 | 16.0 | 11.0 |
| 3 | 106 | 14.0 | 19.8 | 11.8 |
| 4 | 209 | 17.0 | 24.0 | 13.7 |
| 6 | 434 | 22.0 | 33.0 | 17.7 |
| 8 | 747 | 26.0 | 42.5 | 21.6 |
| 10 | 1390.5 | 31.00 | 50.0 | 26.0 |
| 12 | 1993.4 | 33.00 | 63.0 | 27.5 |

Please refer to page 28 for Pressure-Temperature Ratings.

Industry Standards

| | |
|-----------------------|-------------|
| End Flanges | ASME B16.5 |
| Wall Section | ASME B16.34 |
| Face-to-Face | ASME B16.10 |
| Pressure-Temp Ratings | ASME B16.34 |
| Testing | API 598 |

Materials of Construction

| | | |
|----|------------------------|------------------------------|
| 1 | Body | ASTM A351 CF8M |
| 2 | Flexible Gate Disc | ASTM A351 CF8M |
| 3 | Stem | ASTM A276 316 |
| 4 | Ring Type Joint Gasket | ASTM A276 304/316 |
| 5 | Bonnet | ASTM A351 CF8M |
| 6 | Packing | PTFE |
| 7 | Gland | ASTM A276 316 |
| 8 | Gland Flange | ASTM A351 CF8 |
| 9 | Grease Fitting | Nickel-plated Copper |
| 10 | Yoke Nut | ASTM A439 D2 |
| 11 | Washer | ASTM A395 65 45 15 |
| 12 | Handwheel | ASTM A395 65 45 15 |
| 13 | Name Plate | 304 SS |
| 14 | Handwheel Nut | ASTM A276 304/ ASTM A351 CF8 |
| 15 | Fixed Screw | ASTM A276 304 |
| 16 | Nut | ASTM A194 8 |
| 17 | Bonnet Bolt | ASTM A193 GR B8 |
| 18 | Hinge Pin | ASTM A276 304 |
| 19 | Eyebolt | ASTM A193 GR B8 |
| 20 | Nut | ASTM A194 8 |

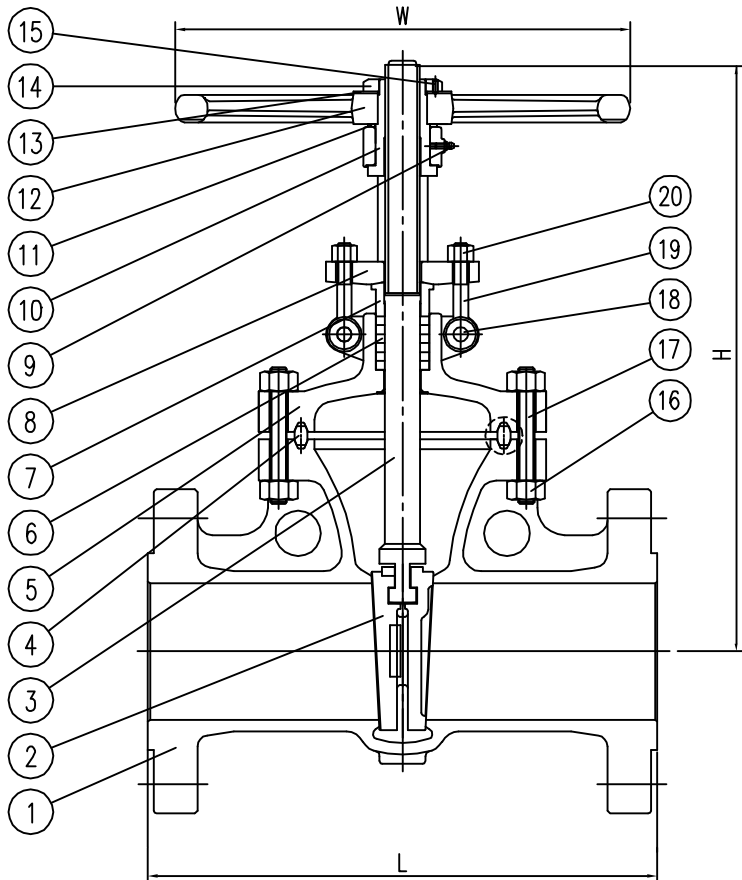


Fig. 4117