

Class 300 • Outside Screw & Yoke • Flexible Wedge Disc

Figure 33

- Gate, Flanged

Figure 33½

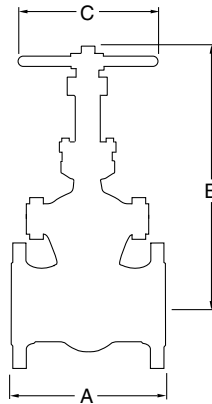
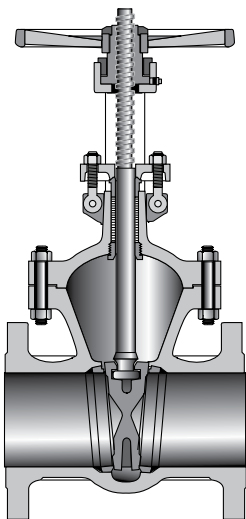
- Gate, Butt Weld

Size Range:

- 2 through 24 inches
- (50 - 600 mm)

Pressure Temperature Rating

- Carbon Steel
- ASTM A216 Grade WCB
- 740 psi @ -20°F to 100°F
- (51 bar @ -28°C to 37°C)



Material of Construction*

| Description | Material |
|------------------|---|
| Body | ASTM A216 GR.WCB |
| Seat Ring | ASTM A105N + Alloy 6 Hardfaced |
| Disc | ASTM A216 GR.WCB + 13Cr Faced |
| Stem | ASTM A182 GR. F6a |
| Gasket | 304SS + Graphite |
| Bonnet | ASTM A216 GR.WCB |
| Bonnet Bolts | ASTM A193 GR.B7 |
| Bonnet Bolt Nuts | ASTM A194 GR.2H |
| Bonnet Bushing | ASTM A276 Type 410 |
| Spacer Ring | ASTM A276 Type 410 |
| Stem Packing | Braided Graphite & Die formed Graphite Ring |
| Gland | ASTM A276 Type 410 |
| Gland Flange | ASTM A216 GRWCB |
| Eye Bolt Pins | ASTM A29 GR.1045 |
| Gland Eye Bolts | ASTM A193 GR.B7 |
| Eye Bolt Nuts | ASTM A194 GR.2H |
| Grease Nipple | ASTM A29 GR.1020 |
| Stem Nut | ASTM A439 GR.D-2 |
| Retaining Nut | ASTM A29 GR.1045 |
| Handwheel | ASTM A536 GR.60-40-18 |
| Handwheel Nut | ASTM A29 GR.1045 |
| Screw | ASTM A29 GR.1035 |
| Nameplate | SS304 |
| Screw | SS304 |

*Standard construction: WCB-Trim 8, other options are available.
Crane recommends the use of manual or powered gear assistance for sizes 8" and larger.

Industry Standards

| | |
|-------------------------|--------------|
| Steel Valves | ASME B16.34 |
| Face-to-Face/End-to-End | ASME B16.10 |
| Flange Dimensions | ASME B16.5 |
| Weld End | ASME B.16.25 |
| Basic Design | API 600 |
| Testing | API 598 |

Dimensions and Weights

Inches (millimeters) - pounds (kilograms)

| Valves | 2 | 2½ | 3 | 4 | 6 | 8 | 10 | 12 | 14 ⁽¹⁾ | 16 ⁽¹⁾ | 18 ⁽¹⁾ | 20 ⁽¹⁾ | 24 ⁽¹⁾ |
|--------|-------|---------|--------|--------|--------|--------|--------|---------|-------------------|-------------------|-------------------|-------------------|-------------------|
| | (50) | (65) | (80) | (100) | (150) | (200) | (250) | (300) | (350) | (400) | (450) | (500) | (600) |
| A | 8.50 | 9.50 | 11.12 | 12.00 | 15.88 | 16.50 | 18.00 | 19.75 | 30.00 | 33.00 | 36.00 | 39.00 | 45.00 |
| (33) | (216) | (241) | (282) | (305) | (403) | (419) | (457) | (502) | (762) | (838) | (914) | (991) | (1143) |
| B | 17.13 | 20.08 | 21.26 | 24.92 | 32.09 | 40.16 | 47.72 | 56.69 | 63.98 | 71.57 | 80.39 | 87.91 | 102.36 |
| (Open) | (435) | (510) | (540) | (633) | (815) | (1020) | (1212) | (1440) | (1625) | (1818) | (2042) | (2233) | (2600) |
| C | 7.87 | 7.87 | 9.84 | 9.84 | 13.78 | 15.75 | 17.72 | 19.69 | 18.11 | 18.11 | 21.26 | 21.26 | 24.02 |
| | (200) | (200) | (250) | (250) | (350) | (400) | (450) | (500) | (460) | (460) | (540) | (540) | (610) |
| Wt. | 59.52 | (74.96) | 114.64 | 163.14 | 321.87 | 485.02 | 617.29 | 1047.20 | 1530.01 | 2012.82 | 2722.71 | 3648.65 | 4828.12 |
| (33) | (27) | (34) | (52) | (74) | (146) | (220) | (280) | (475) | (694) | (913) | (1235) | (1655) | (2190) |
| Wt. | 37.48 | 57.32 | 105.82 | 143.30 | 249.12 | 361.56 | 758.39 | 1047.20 | 1245.61 | 1774.72 | 2332.49 | 3112.93 | 5079.45 |
| (33½) | (17) | (26) | (48) | (65) | (113) | (164) | (344) | (475) | (565) | (805) | (1058) | (1412) | (2304) |

(1) Dimensions and weights shown with gear actuator.
(2) Flanged end and butt-weld valves share same face-to-face dimensions.