

Class 300 • Bolted Cap

Figure 159

- Swing Check, Flanged

Figure 159½

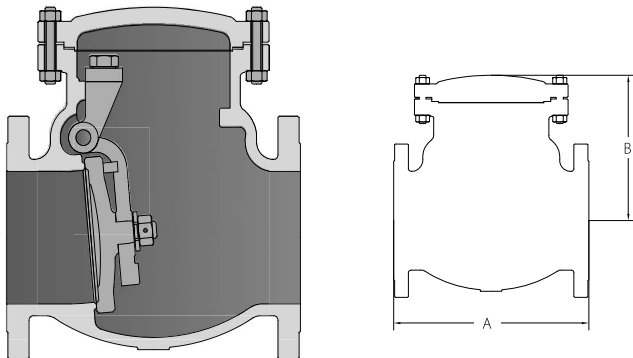
- Swing Check, Butt Weld

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 |
| Disc Washer | ASTM A29 GR.1020 |
| Disc Nut Pin | ASTM A276 Type 410 |
| Disc Nut | ASTM A29 GR.1045 |
| Hinge | ASTM A216 GR.WCB |
| Hinge Pin | ASTM A182 GR.F6a |
| Bearing Bracket | ASTM A216 GR.WCB |
| Spring Washer | ASTM A29 GR.1045 |
| Hex Bolt | ASTM A29 GR.1035 |
| Gasket | 304SS + Graphite |
| Cover Bolt | ASTM A193 GR.B7 |
| Cover Bolt Nut | ASTM A194 GR.2H |
| Cover | ASTM A216 GR.WCB |
| Eye Bolt | ASTM A181 |
| Nameplate | SS304 |
| Screw | SS304 |

*Standard construction: WCB-Trim 8, other options are available.

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 |
| Testing | API 598 |
| Basic Design | API 594 |

Dimensions and Weights

Inches (millimeters) - pounds (kilograms)

| Valves | 2 | 2½ | 3 | 4 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 | 24 |
|--------|-------|-------|-------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|
| | (50) | (65) | (80) | (100) | (150) | (200) | (250) | (300) | (350) | (400) | (450) | (500) | (600) |
| A | 10.50 | 11.50 | 12.50 | 14.00 | 17.50 | 21.00 | 24.50 | 28.00 | 33.00 | 34.00 | 38.50 | 40.00 | 53.00 |
| (159) | (267) | (292) | (318) | (356) | (444) | (533) | (622) | (711) | (838) | (864) | (978) | (1016) | (1346) |
| B | 6.97 | 8.00 | 9.09 | 10.47 | 12.72 | 15.47 | 17.87 | 21.30 | 23.98 | 25.71 | 28.19 | 27.40 | 31.34 |
| (Open) | (177) | (203) | (231) | (266) | (323) | (393) | (454) | (541) | (609) | (653) | (716) | (696) | (796) |
| Wt. | 61.73 | 66.00 | 97.00 | 154.32 | 282.19 | 445.33 | 462.97 | 573.20 | 1477.10 | 1763.70 | 2259.74 | 2976.24 | 4303.42 |
| (159) | (28) | (29) | (44) | (70) | (128) | (202) | (210) | (260) | (670) | (800) | (1025) | (1350) | (1952) |
| Wt. | 35.27 | 48.50 | 66.14 | 116.84 | 222.67 | 346.13 | 511.47 | 912.71 | 1003.10 | 1688.74 | 1706.38 | 2116.44 | 3950.68 |
| (159½) | (16) | (22) | (30) | (53) | (101) | (157) | (232) | (414) | (455) | (766) | (774) | (960) | (1792) |

(2) Flanged end and butt-weld valves share same face-to-face dimensions.