



Fig. 5350RF

| Standard Material Specifications | | |
|----------------------------------|----------------------|----------------------------|
| No. | Description | Materials |
| 1 | Body | ASTM A216 GR WCB |
| 2 | Cover | ASTM A216 GR WCB |
| 3 | Disc | ASTM A216 GR WCB + 13% Cr. |
| 4 | Seat Ring | ASTM A515 GR 70 + ST6 |
| 5 | Hanger | ASTM A216 GR WCB |
| 6 | Hanger Pin | ASTM A276 Type 410 |
| 7 | Cover Gasket | ASTM A108 GR 1010 |
| 8 | Cover Stud | ASTM A193 GR B7 |
| 9 | Cover Stud Nut | ASTM A194 GR 2H |
| 10 | Disc Washer | ASTM A276 Type 410 |
| 11 | Disc Nut | Alloy Steel |
| *12 | Body Plug | Alloy Steel |
| *13 | Identification Plate | Stainless Steel |

* Not Shown

Dimensions

| D Nominal Diameter | mm inch | 50 | 65 | 80 | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 600 |
|--------------------------|------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|-------|
| | | 2 | 2 1/2 | 3 | 4 | 6 | 8 | 10 | 12 | 14 | 16 | 15 | 20 | 24 |
| A | mm. | 292.1 | 330.2 | 355.6 | 431.8 | 558.8 | 660.4 | 787.4 | 838.2 | 889 | 990.6 | 1092.2 | 1193.8 | 1397 |
| B | mm. | 175 | 190 | 219 | 262 | 344 | 422 | 486 | 536 | 687 | 643 | 717 | 840 | 817 |
| C | mm. | 165.1 | 190.5 | 209.6 | 273 | 355.6 | 419.1 | 508 | 558.8 | 603.2 | 685.8 | 743 | 812.8 | 939.8 |
| Weight | kg. | 36 | 47 | 62 | 119 | 248 | 528 | 700 | 1000 | 1250 | 1724 | 2400 | 3000 | 3450 |

Trim

| Trim | | Internal Parts | | |
|------|----------|-------------------|---------------------|--------------------------------------|
| API | Walworth | Seat Ring | Gate (Disc) | Stem Hanger Pin Bonnet Bushing |
| 8 | *UT | Stellite No. 6 | 13% Cr. (SS 410) | 13% Cr. (SS 410) |
| 5 | HF | Stellite No. 6 | Stellite No. 6 | 13% Cr. (SS 410) |

*UT-Trim (Universal Trim)

Test Pressures

For valves having flanges or butt welding ends to ANSI Class 600 Standards.

| | shell Hydrostatic | Seat* Hydrostatic |
|---------------------|-------------------|-------------------|
| lbf/in ² | 2250 | 1650 |
| MPa | 15.4 | 11.3 |

*Seat leakage rate: All valves meet BS 6755 Part 1 leakage rate A (No visible leakage for duration of test).

Pressure - Temperature Ratings

| °F Temperature °C | | MAXIMUM ALLOWABLE NON-SHOCK WORKING PRESSURE IN PSIG BYCLASS | | | | | |
|-------------------|-----------|--|-----|-----|-------|-------|-------|
| | | 150 | 300 | 400 | 600 | 900 | 1500 |
| -20 to 100 | -29 to 38 | 285 | 740 | 990 | 1,480 | 2,220 | 3,705 |
| 200 | 93 | 260 | 675 | 900 | 1,350 | 2,025 | 3,375 |
| 300 | 149 | 230 | 655 | 875 | 1,315 | 1,970 | 3,280 |
| 400 | 204 | 200 | 635 | 845 | 1,270 | 1,900 | 3,170 |
| 500 | 260 | 170 | 600 | 800 | 1,200 | 1,795 | 2,995 |
| 600 | 316 | 140 | 550 | 730 | 1,095 | 1,640 | 2,735 |
| 650 | 343 | 125 | 535 | 715 | 1,075 | 1,610 | 2,685 |
| 700 | 371 | 110 | 535 | 710 | 1,065 | 1,600 | 2,665 |
| 750 | 399 | 95 | 505 | 670 | 1,010 | 1,510 | 2,520 |
| 800 | 427 | 80 | 410 | 550 | 825 | 1,235 | 2,060 |
| 850 | 454 | 65 | 270 | 355 | 535 | 805 | 1,340 |
| 900 | 482 | 50 | 170 | 230 | 345 | 515 | 860 |
| 950 | 510 | 35 | 105 | 140 | 205 | 310 | 515 |
| 1000 | 538 | 20 | 50 | 70 | 105 | 155 | 260 |

For prolonged usage at temperatures above 800°F (427°C), consideration should be given to the possibility of graphite formation in Carbon Steel.

*last updated 03/16