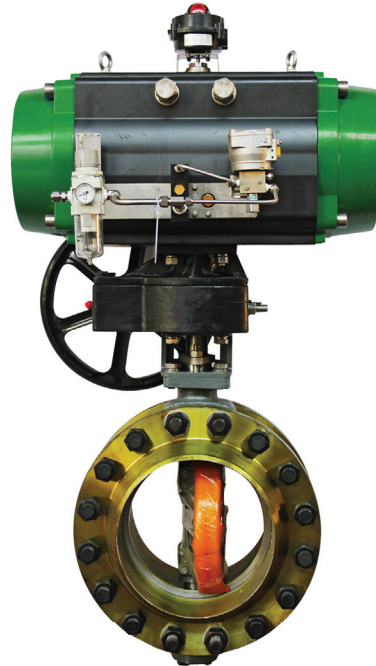


TVT60 High Performance Butterfly Valve



FEATURES

- ▶ Body - Extended Neck and Easy Access to Stem Packing
- ▶ Double Offset Disk Design
- ▶ Disk - Standard Stainless Steel Engineered to Maximize Flow Providing a High Cv
- ▶ Resilient Seat - High Pressure Resistance and First Safe (Optional)
- ▶ Seat Retainer - Easy Replacement, Low Maintenance Cost
- ▶ Stem Bearings - Top and Bottom Bearings Provide Resistance to Unbalanced Side Loading
- ▶ Adjustable Stem Packing - Ability to Adjust Packing without Removing Actuator
- ▶ Taper Pins - Precision Fit Tangential Pins

*Equipment should be installed, operated, serviced, and maintained only by qualified personnel.
No responsibility is assumed by Schneider Electric for any consequences arising from the use of this material.*

KEY COMPONENTS OF THE HIGH PERFORMANCE BUTTERFLY

Figure 1. Key Components

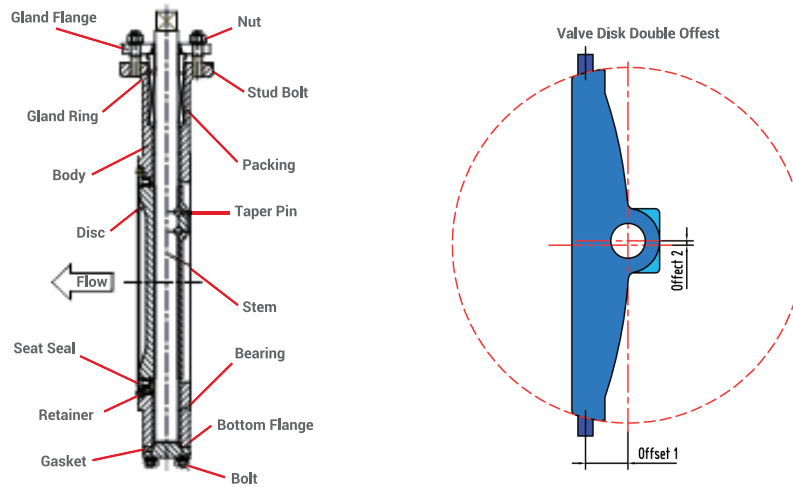


Table 1. Key Components

| | |
|---|--|
| Type | High Performance Double Offset Butterfly |
| Body Sizes | 2" (DN50) to 120" (DN3000) |
| Body Type | Wafer Style and Double Flange |
| Pressure Classes | Class 150 |
| Body Connections | Raised Face Flange |
| Design Temperature | -45°C to 500°C (-50°F to 932°F) |
| Face to Face Dimensions | See Tables 4 through 9 |
| Packing | PTFE V-Ring, Flexible Graphite |
| Seated Seal Material | Filled PTFE/O-Ring Energized Metal |
| Notes: | |
| 1. Lugged style bodies are optional. | |
| 2. For optional sizes and ratings, consult the factory. | |

MATERIALS OF CONSTRUCTION

Valve Materials

Figure 2. Valve Materials

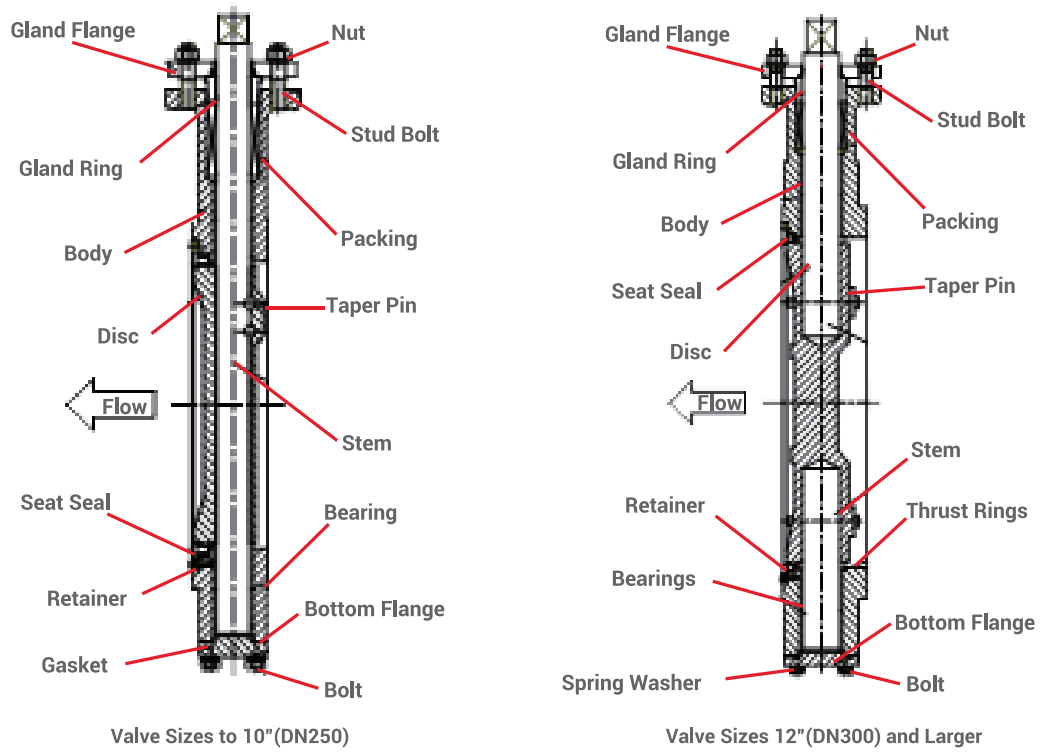


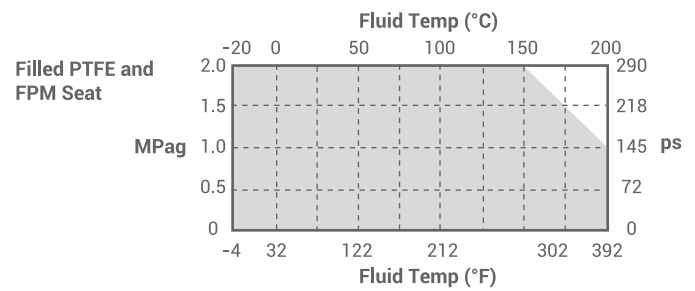
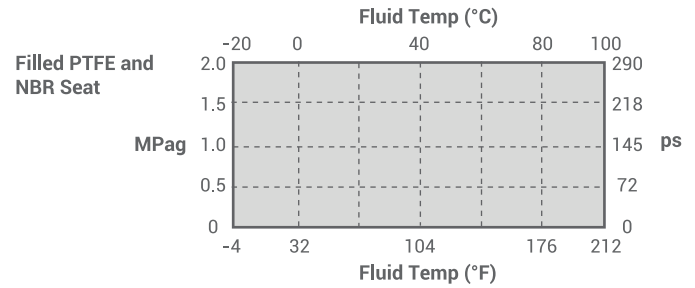
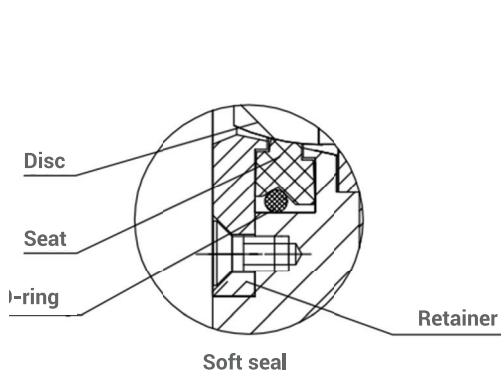
Table 2. Valve Materials

| Number | Name | Carbon Steel | Stainless Steel |
|--------|--------------|--|--------------------------------|
| 1 | Body | A216 WCB | A351 CF8, A351 CF8M |
| 2 | Seat | 304/316/F4+MOS2 | 304/316/F4+MOS2 |
| 3 | Disc | CA15 (NT with metal seat) | CF8, CF8M (NT with metal seat) |
| 4 | Stem | 316 SS, 17-4 PH HT, 420 SS HT | 316 SS, 17-4 PH HT, 420 SS HT |
| 5 | Retainer | 304 SS, 316 SS, Carbon Steel | 304 SS, 316 SS |
| 6 | Bolt | Stainless Steel | Stainless Steel |
| 7 | Taper Pin | 430 SS, 316 SS | 430 SS, 316 SS |
| 8 | Stud Bolt | A193-B7 | A193-B8/B8M |
| 9 | Bottom Cover | A216 WCB | A351 CF8, A351 CF8M |
| 10 | Gasket | PTFE, Spiral Wound Gasket | PTFE, Spiral Wound Gasket |
| 11 | Thrust Ring | Solid Lubricant Embedded Thrust Ring | |
| 12 | Guide | Metaloplast®, High Nickel Cast Iron, 304 SS NT | |
| 13 | Spacer Ring | 304 SS | |
| 14 | Packing | PTFE/Flexible Graphite | |
| 15 | Gland | 420 SS | |
| 16 | Gland Flange | A351 CF8 | |
| 17 | Bolt | A193-B7 | A193-B8 |
| 18 | Nut | A194-2H | A194-B8 |

Notes:
1. HT = Heat Treated, NT = Nitride.
2. Optional materials are available; consult the factory.
3. Pressure boundary parts are provided to ASTM standards.
4. Valve internal materials are supplied to ASTM/JIS/DIN/GB equivalent.
5. Compliance to NACE is available to MR0103 or MR01-75/ISO 15156.

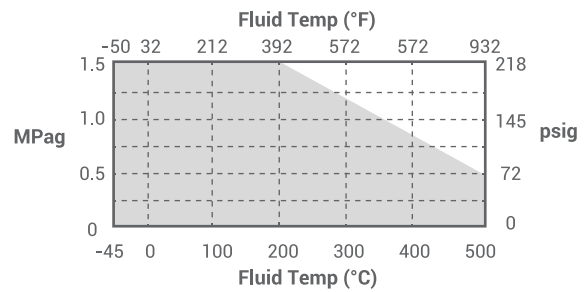
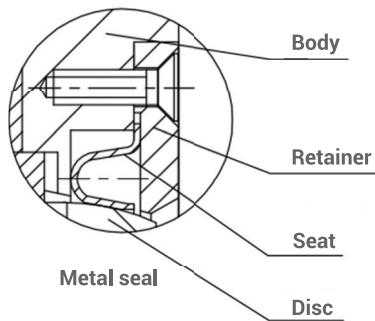
Soft Seat-Reinforced Teflon

Figure 3. Soft Seat-Reinforced Teflon



Metal Seat

Figure 4. Metal Seat



Note: Allowable pressure may be limited by actuator, shaft material, or pressure class rating.

CV VALUES

TVT60 High Performance Butterfly Valve

Table 3. Cv Values

| DN | | 50 | 80 | 100 | 125 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 600 | 700 | 800 |
|----|-----|----|-----|-----|-----|------|------|------|------|------|------|-------|-------|-------|-------|-------|
| in | | 2 | 3 | 4 | 5 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 | 24 | 28 | 32 |
| Cv | 90° | 77 | 263 | 482 | 748 | 1352 | 2313 | 3743 | 5102 | 6864 | 8962 | 11338 | 13997 | 20158 | 27196 | 34840 |
| | 60° | - | 130 | 240 | 365 | 660 | 1125 | 1820 | 2480 | 3300 | 4312 | 5445 | 6726 | 9680 | 13050 | 16720 |

Notes:

1. 90° = Full Open; On/Off Application.
2. 60° = Partially Open; Control Application.
3. Cv values shown are for 150# class valve, consult the factory for different ratings.
4. Valve rangeability is 50:1 or better.

DIMENSIONS AND WEIGHTS

Figure 5. Wafer Type Without Handwheel

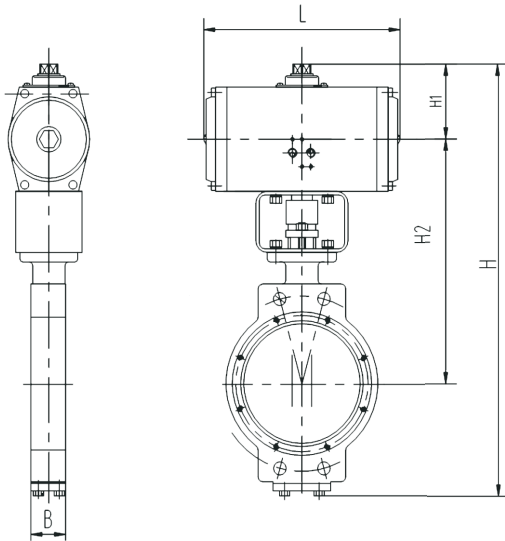


Figure 6. Wafer Type With Handwheel

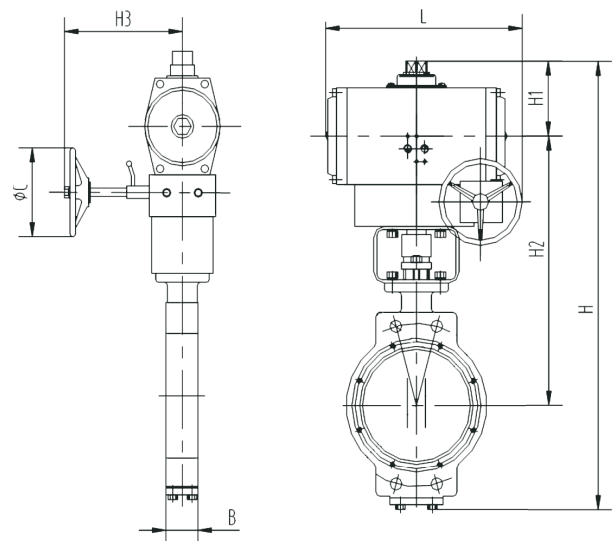


Figure 7. Double Flange Type Without Handwheel

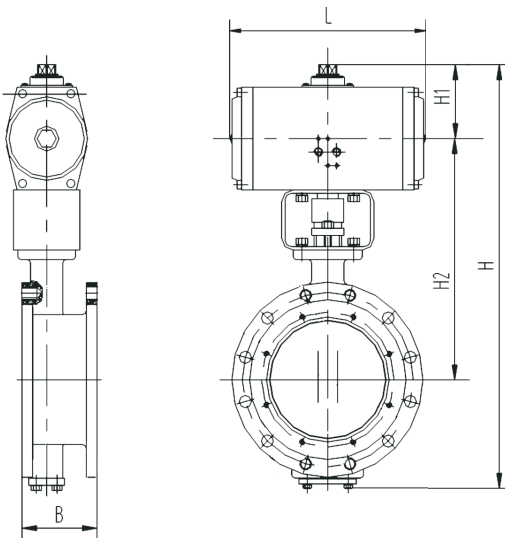
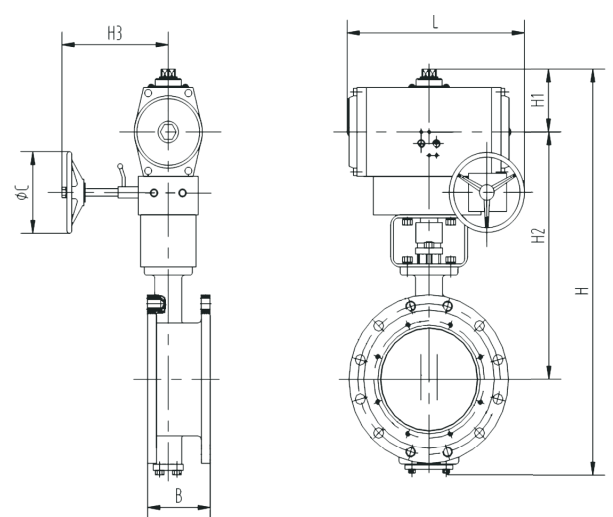


Figure 8. Double Flange Type With Handwheel



Notes:

- 1) For sizes, ratings, and actuators not shown, consult the factory.
- 2) Flange bolt patterns are per ASME B16.5 up to 24" Tapped holes on double flange body, one side depending on size.

Table 4. Class 150 Wafer Dimensions Metric (Figures 5 and 6) (a)

| Valve Size (mm) | B | Actuator | | Without Handwheel | | | With Handwheel | | | |
|-----------------|-----|----------|-----|-------------------|------|-------|----------------|-------|-----|-----|
| | | Size | L | H | H1 | H2 | H | H2 | H3 | C |
| 50 | 44 | APR63 | 180 | 345.4 | 75 | 201.4 | 449.4 | 305.4 | 155 | 200 |
| | | APR80 | 236 | 355.4 | 76.5 | 209.9 | 477.4 | 331.9 | 195 | 200 |
| | | APR100 | 272 | 393.4 | 102 | 222.4 | 516.4 | 345.4 | 195 | 200 |
| 80 | 48 | APR80 | 236 | 441 | 76.5 | 250.5 | 558 | 367.5 | 195 | 200 |
| | | APR100 | 272 | 479 | 102 | 263 | 597 | 381 | 195 | 200 |
| | | APR125 | 340 | 521 | 111 | 296 | 638 | 413 | 195 | 200 |
| | | APR160 | 452 | 641 | 171 | 356 | 759 | 474 | 205 | 300 |
| 100 | 54 | APR100 | 272 | 518 | 102 | 286 | 636 | 404 | 195 | 200 |
| | | APR125 | 340 | 568 | 111 | 327 | 685 | 444 | 195 | 200 |
| | | APR160 | 452 | 680 | 171 | 379 | 798 | 497 | 205 | 300 |
| | | APR200 | 570 | 770 | 240 | 400 | 918 | 548 | 245 | 400 |
| 125 | 57 | APR100 | 272 | 537 | 102 | 296 | 655 | 414 | 195 | 200 |
| | | APR125 | 340 | 587 | 111 | 337 | 704 | 454 | 195 | 200 |
| | | APR160 | 452 | 699 | 171 | 389 | 817 | 507 | 205 | 300 |
| | | APR200 | 570 | 789 | 240 | 410 | 937 | 558 | 245 | 400 |
| 150 | 57 | APR100 | 272 | 575 | 102 | 311 | 693 | 429 | 195 | 200 |
| | | APR125 | 340 | 625 | 111 | 352 | 742 | 469 | 195 | 200 |
| | | APR160 | 452 | 737 | 171 | 404 | 855 | 522 | 205 | 300 |
| | | APR200 | 570 | 827 | 240 | 425 | 975 | 573 | 245 | 400 |
| 200 | 64 | APR125 | 340 | 728 | 111 | 419 | 845 | 536 | 195 | 200 |
| | | APR160 | 452 | 808 | 171 | 439 | 926 | 557 | 205 | 300 |
| | | APR200 | 570 | 898 | 240 | 460 | 1046 | 608 | 245 | 400 |
| | | APR254 | 695 | 908 | 198 | 512 | 1058 | 662 | 265 | 600 |
| 250 | 71 | APR160 | 452 | 874 | 136 | 499 | 992 | 617 | 205 | 300 |
| | | APR200 | 570 | 909 | 150 | 520 | 1057 | 668 | 245 | 400 |
| | | APR254 | 695 | 1019 | 208 | 572 | 1169 | 722 | 265 | 600 |
| | | APR270 | 722 | 1009 | 190 | 580 | 1159 | 730 | 265 | 600 |
| 300 | 81 | APR160 | 452 | 957 | 136 | 539 | 1075 | 657 | 205 | 300 |
| | | APR200 | 570 | 992 | 150 | 560 | 1140 | 708 | 245 | 400 |
| | | APR254 | 695 | 1102 | 208 | 612 | 1252 | 762 | 265 | 600 |
| | | APR270 | 722 | 1092 | 190 | 620 | 1242 | 770 | 265 | 600 |
| 350 | 92 | APR200 | 570 | 1100 | 150 | 625 | 1248 | 773 | 245 | 400 |
| | | APR254 | 695 | 1190 | 208 | 657 | 1340 | 807 | 265 | 600 |
| | | APR270 | 722 | 1180 | 190 | 665 | 1330 | 815 | 265 | 600 |
| | | APR300 | 742 | 1208 | 204 | 679 | 1358 | 829 | 265 | 600 |
| 400 | 102 | APR254 | 695 | 1231 | 208 | 667 | 1381 | 817 | 265 | 600 |
| | | APR270 | 722 | 1221 | 190 | 675 | 1371 | 825 | 265 | 600 |
| | | APR300 | 742 | 1249 | 204 | 689 | 1399 | 839 | 265 | 600 |
| | | APR350 | 860 | 1303 | 231 | 716 | 1498 | 911 | 410 | 800 |
| 450 | 114 | APR254 | 695 | 1273 | 208 | 697 | 1423 | 847 | 265 | 600 |
| | | APR270 | 722 | 1263 | 190 | 705 | 1413 | 855 | 265 | 600 |
| | | APR350 | 860 | 1345 | 231 | 746 | 1540 | 941 | 410 | 800 |
| | | APR400 | 918 | 1423 | 270 | 785 | 1618 | 980 | 430 | 800 |

Table 4. Class 150 Wafer Dimensions Metric (Figures 5 and 6) (a) (Continued)

| Valve Size (mm) | B | Actuator | | Without Handwheel | | | With Handwheel | | | |
|-----------------|-----|----------|-----|-------------------|-----|-----|----------------|------|-----|-----|
| | | Size | L | H | H1 | H2 | H | H2 | H3 | C |
| 500 | 127 | APR254 | 695 | 1346 | 208 | 732 | 1496 | 882 | 265 | 600 |
| | | APR270 | 722 | 1336 | 190 | 740 | 1486 | 890 | 265 | 600 |
| | | APR350 | 860 | 1418 | 231 | 781 | 1613 | 976 | 410 | 800 |
| | | APR400 | 918 | 1496 | 270 | 820 | 1691 | 1015 | 430 | 800 |
| 600 | 154 | APR270 | 722 | 1517 | 190 | 840 | 1667 | 990 | 265 | 600 |
| | | APR300 | 742 | 1545 | 204 | 854 | 1695 | 1004 | 265 | 600 |
| | | APR350 | 860 | 1599 | 231 | 881 | 1794 | 1076 | 410 | 800 |
| | | APR400 | 918 | 1677 | 270 | 920 | 1872 | 1115 | 430 | 800 |

a. For sizes and ratings not shown, consult the factory.

Table 5. Class 150 Wafer Dimensions Imperial (Figures 5 and 6) (a)

| Valve Size (inch) | B | Actuator | | Without Handwheel | | | With Handwheel | | | |
|-------------------|------|----------|------|-------------------|-----|------|----------------|------|------|------|
| | | Size | L | H | H1 | H2 | H | H2 | H3 | C |
| 2" | 1.75 | APR63 | 7.1 | 13.6 | 3.0 | 7.9 | 17.7 | 12.0 | 6.1 | 7.9 |
| | | APR80 | 9.3 | 14.0 | 3.0 | 8.3 | 18.8 | 13.1 | 7.7 | 7.9 |
| | | APR100 | 10.7 | 15.5 | 4.0 | 8.8 | 20.3 | 13.6 | 7.7 | 7.9 |
| 3" | 1.88 | APR80 | 9.3 | 17.4 | 3.0 | 9.9 | 22.0 | 14.5 | 7.7 | 7.9 |
| | | APR100 | 10.7 | 18.9 | 4.0 | 10.4 | 23.5 | 15.0 | 7.7 | 7.9 |
| | | APR125 | 13.4 | 20.5 | 4.4 | 11.7 | 25.1 | 16.3 | 7.7 | 7.9 |
| | | APR160 | 17.8 | 25.2 | 6.7 | 14.0 | 29.9 | 18.7 | 8.1 | 11.8 |
| 4" | 2.12 | APR100 | 10.7 | 20.4 | 4.0 | 11.3 | 25.0 | 15.9 | 7.7 | 7.9 |
| | | APR125 | 13.4 | 22.4 | 4.4 | 12.9 | 27.0 | 17.5 | 7.7 | 7.9 |
| | | APR160 | 17.8 | 26.8 | 6.7 | 14.9 | 31.4 | 19.6 | 8.1 | 11.8 |
| | | APR200 | 22.4 | 30.3 | 9.4 | 15.7 | 36.1 | 21.6 | 9.6 | 15.7 |
| 5" | 2.25 | APR100 | 10.7 | 21.1 | 4.0 | 11.7 | 25.8 | 16.3 | 7.7 | 7.9 |
| | | APR125 | 13.4 | 23.1 | 4.4 | 13.3 | 27.7 | 17.9 | 7.7 | 7.9 |
| | | APR160 | 17.8 | 27.5 | 6.7 | 15.3 | 32.2 | 20.0 | 8.1 | 11.8 |
| | | APR200 | 22.4 | 31.1 | 9.4 | 16.1 | 36.9 | 22.0 | 9.6 | 15.7 |
| 6" | 2.25 | APR100 | 10.7 | 22.6 | 4.0 | 12.2 | 27.3 | 16.9 | 7.7 | 7.9 |
| | | APR125 | 13.4 | 24.6 | 4.4 | 13.9 | 29.2 | 18.5 | 7.7 | 7.9 |
| | | APR160 | 17.8 | 29.0 | 6.7 | 15.9 | 33.7 | 20.6 | 8.1 | 11.8 |
| | | APR200 | 22.4 | 32.6 | 9.4 | 16.7 | 38.4 | 22.6 | 9.6 | 15.7 |
| 8" | 2.50 | APR125 | 13.4 | 28.7 | 4.4 | 16.5 | 33.3 | 21.1 | 7.7 | 7.9 |
| | | APR160 | 17.8 | 31.8 | 6.7 | 17.3 | 36.5 | 21.9 | 8.1 | 11.8 |
| | | APR200 | 22.4 | 35.4 | 9.4 | 18.1 | 41.2 | 23.9 | 9.6 | 15.7 |
| | | APR254 | 27.4 | 35.7 | 7.8 | 20.2 | 41.7 | 26.1 | 10.4 | 23.6 |
| 10" | 2.81 | APR160 | 17.8 | 34.4 | 5.4 | 19.6 | 39.1 | 24.3 | 8.1 | 11.8 |
| | | APR200 | 22.4 | 35.8 | 5.9 | 20.5 | 41.6 | 26.3 | 9.6 | 15.7 |
| | | APR254 | 27.4 | 40.1 | 8.2 | 22.5 | 46.0 | 28.4 | 10.4 | 23.6 |
| | | APR270 | 28.4 | 39.7 | 7.5 | 22.8 | 45.6 | 28.7 | 10.4 | 23.6 |

Table 5. Class 150 Wafer Dimensions Imperial (Figures 5 and 6) (a) (Continued)

| Valve Size (inch) | B | Actuator | | Without Handwheel | | | With Handwheel | | | |
|-------------------|------|----------|------|-------------------|------|------|----------------|------|------|------|
| | | Size | L | H | H1 | H2 | H | H2 | H3 | C |
| 12" | 3.19 | APR160 | 17.8 | 37.7 | 5.4 | 21.2 | 42.3 | 25.9 | 8.1 | 11.8 |
| | | APR200 | 22.4 | 39.1 | 5.9 | 22.0 | 44.9 | 27.9 | 9.6 | 15.7 |
| | | APR254 | 27.4 | 43.4 | 8.2 | 24.1 | 49.3 | 30.0 | 10.4 | 23.6 |
| | | APR270 | 28.4 | 43.0 | 7.5 | 24.4 | 48.9 | 30.3 | 10.4 | 23.6 |
| 14" | 3.62 | APR200 | 22.4 | 43.3 | 5.9 | 24.6 | 49.1 | 30.4 | 9.6 | 15.7 |
| | | APR254 | 27.4 | 46.9 | 8.2 | 25.9 | 52.8 | 31.8 | 10.4 | 23.6 |
| | | APR270 | 28.4 | 46.5 | 7.5 | 26.2 | 52.4 | 32.1 | 10.4 | 23.6 |
| | | APR300 | 29.2 | 47.6 | 8.0 | 26.7 | 53.5 | 32.6 | 10.4 | 23.6 |
| 16" | 4.00 | APR254 | 27.4 | 48.5 | 8.2 | 26.3 | 54.4 | 32.2 | 10.4 | 23.6 |
| | | APR270 | 28.4 | 48.1 | 7.5 | 26.6 | 54.0 | 32.5 | 10.4 | 23.6 |
| | | APR300 | 29.2 | 49.2 | 8.0 | 27.1 | 55.1 | 33.9 | 10.4 | 23.6 |
| | | APR350 | 33.9 | 51.3 | 9.1 | 28.2 | 59.0 | 35.9 | 16.1 | 31.5 |
| 18" | 4.50 | APR254 | 27.4 | 50.1 | 8.2 | 27.4 | 56.0 | 33.3 | 10.4 | 23.6 |
| | | APR270 | 28.4 | 49.7 | 7.5 | 27.8 | 55.6 | 33.7 | 10.4 | 23.6 |
| | | APR350 | 33.9 | 53.0 | 9.1 | 29.4 | 60.6 | 37.0 | 16.1 | 31.5 |
| | | APR400 | 36.1 | 56.0 | 10.6 | 30.9 | 63.7 | 38.6 | 16.9 | 31.5 |
| 20" | 5.00 | APR254 | 27.4 | 53.0 | 8.2 | 28.8 | 58.9 | 34.7 | 10.4 | 23.6 |
| | | APR270 | 28.4 | 52.6 | 7.5 | 29.1 | 58.5 | 35.0 | 10.4 | 23.6 |
| | | APR350 | 33.9 | 55.8 | 9.1 | 30.7 | 63.5 | 38.4 | 16.1 | 31.5 |
| | | APR400 | 36.1 | 58.9 | 10.6 | 32.3 | 66.6 | 40.0 | 16.9 | 31.5 |
| 24" | 6.06 | APR270 | 28.4 | 59.7 | 7.5 | 33.1 | 65.6 | 39.0 | 10.4 | 23.6 |
| | | APR300 | 29.2 | 60.8 | 8.0 | 33.6 | 66.7 | 39.5 | 10.4 | 23.6 |
| | | APR350 | 33.9 | 63.0 | 9.1 | 34.7 | 70.6 | 42.4 | 16.1 | 31.5 |
| | | APR400 | 36.1 | 66.0 | 10.6 | 36.2 | 73.7 | 43.9 | 16.9 | 31.5 |

a. For sizes and ratings not shown, consult the factory.

Table 6. Class 150 Double Flange Dimensions Metric (Figures 7 and 8) (a)

| Valve Size (mm) | B | Actuator | | Without Handwheel | | | With Handwheel | | | |
|-----------------|-----|----------|-----|-------------------|------|-------|----------------|-------|-----|-----|
| | | Size | L | H | H1 | H2 | H | H2 | H3 | C |
| 80 | 114 | APR80 | 236 | 441 | 76.5 | 250.5 | 558 | 367.5 | 195 | 200 |
| | | APR100 | 272 | 479 | 102 | 263 | 597 | 381 | 195 | 200 |
| | | APR125 | 340 | 521 | 111 | 296 | 638 | 413 | 195 | 200 |
| | | APR160 | 452 | 641 | 171 | 356 | 759 | 474 | 205 | 300 |
| 100 | 127 | APR100 | 272 | 518 | 102 | 286 | 636 | 404 | 195 | 200 |
| | | APR125 | 340 | 568 | 111 | 327 | 685 | 444 | 195 | 200 |
| | | APR160 | 452 | 680 | 171 | 379 | 798 | 497 | 205 | 300 |
| | | APR200 | 570 | 770 | 240 | 400 | 918 | 548 | 245 | 400 |
| 125 | 140 | APR100 | 272 | 537 | 102 | 296 | 655 | 414 | 195 | 200 |
| | | APR125 | 340 | 587 | 111 | 337 | 704 | 454 | 195 | 200 |
| | | APR160 | 452 | 699 | 171 | 389 | 817 | 507 | 205 | 300 |
| | | APR200 | 570 | 789 | 240 | 410 | 937 | 558 | 245 | 400 |

Table 6. Class 150 Double Flange Dimensions Metric (Figures 7 and 8) (a) (Continued)

| Valve Size (mm) | B | Actuator | | Without Handwheel | | | With Handwheel | | | |
|-----------------|-----|----------|-----|-------------------|-----|-----|----------------|------|-----|-----|
| | | Size | L | H | H1 | H2 | H | H2 | H3 | C |
| 150 | 140 | APR100 | 272 | 575 | 102 | 311 | 693 | 429 | 195 | 200 |
| | | APR125 | 340 | 625 | 111 | 352 | 742 | 469 | 195 | 200 |
| | | APR160 | 452 | 737 | 171 | 404 | 855 | 522 | 205 | 300 |
| | | APR200 | 570 | 827 | 240 | 425 | 975 | 573 | 245 | 400 |
| 200 | 152 | APR125 | 340 | 728 | 111 | 419 | 845 | 536 | 195 | 200 |
| | | APR160 | 452 | 808 | 171 | 439 | 926 | 557 | 205 | 300 |
| | | APR200 | 570 | 898 | 240 | 460 | 1046 | 608 | 245 | 400 |
| | | APR254 | 695 | 908 | 198 | 512 | 1058 | 662 | 265 | 600 |
| 250 | 165 | APR160 | 452 | 874 | 136 | 499 | 992 | 617 | 205 | 300 |
| | | APR200 | 570 | 909 | 150 | 520 | 1057 | 668 | 245 | 400 |
| | | APR254 | 695 | 1019 | 208 | 572 | 1169 | 722 | 265 | 600 |
| | | APR270 | 722 | 1009 | 190 | 580 | 1159 | 730 | 265 | 600 |
| 300 | 178 | APR160 | 452 | 957 | 136 | 539 | 1075 | 657 | 205 | 300 |
| | | APR200 | 570 | 992 | 150 | 560 | 1140 | 708 | 245 | 400 |
| | | APR254 | 695 | 1102 | 208 | 612 | 1252 | 762 | 265 | 600 |
| | | APR270 | 722 | 1092 | 190 | 620 | 1242 | 770 | 265 | 600 |
| 350 | 191 | APR200 | 570 | 1100 | 150 | 625 | 1248 | 773 | 245 | 400 |
| | | APR254 | 695 | 1190 | 208 | 657 | 1340 | 807 | 265 | 600 |
| | | APR270 | 722 | 1180 | 190 | 665 | 1330 | 815 | 265 | 600 |
| | | APR300 | 742 | 1208 | 204 | 679 | 1358 | 829 | 265 | 600 |
| 400 | 216 | APR254 | 695 | 1231 | 208 | 667 | 1381 | 817 | 265 | 600 |
| | | APR270 | 722 | 1221 | 190 | 675 | 1371 | 825 | 265 | 600 |
| | | APR300 | 742 | 1249 | 204 | 689 | 1399 | 839 | 265 | 600 |
| | | APR350 | 860 | 1303 | 231 | 716 | 1498 | 911 | 410 | 800 |
| 450 | 222 | APR254 | 695 | 1273 | 208 | 697 | 1423 | 847 | 265 | 600 |
| | | APR270 | 722 | 1263 | 190 | 705 | 1413 | 855 | 265 | 600 |
| | | APR350 | 860 | 1345 | 231 | 746 | 1540 | 941 | 410 | 800 |
| | | APR400 | 918 | 1423 | 270 | 785 | 1618 | 980 | 430 | 800 |
| 500 | 229 | APR254 | 695 | 1346 | 208 | 732 | 1496 | 882 | 265 | 600 |
| | | APR270 | 722 | 1336 | 190 | 740 | 1486 | 890 | 265 | 600 |
| | | APR350 | 860 | 1418 | 231 | 781 | 1613 | 976 | 410 | 800 |
| | | APR400 | 918 | 1496 | 270 | 820 | 1691 | 1015 | 430 | 800 |
| 600 | 267 | APR270 | 722 | 1517 | 190 | 840 | 1667 | 990 | 265 | 600 |
| | | APR300 | 742 | 1545 | 204 | 854 | 1695 | 1004 | 265 | 600 |
| | | APR350 | 860 | 1599 | 231 | 881 | 1794 | 1076 | 410 | 800 |
| | | APR400 | 918 | 1677 | 270 | 920 | 1872 | 1115 | 430 | 800 |

a. For sizes and ratings not shown, consult the factory.

Table 7. Class 150 Double Flange Dimensions Imperial (Figures 7 and 8) (a)

| Valve Size (inch) | B | Actuator | | Without Handwheel | | | With Handwheel | | | |
|-------------------|------|----------|------|-------------------|------|------|----------------|------|------|------|
| | | Size | L | H | H1 | H2 | H | H2 | H3 | C |
| 3" | 4.50 | APR80 | 9.3 | 17.4 | 3.0 | 9.9 | 22.0 | 14.5 | 7.7 | 7.9 |
| | | APR100 | 10.7 | 18.9 | 4.0 | 10.4 | 23.5 | 15.0 | 7.7 | 7.9 |
| | | APR125 | 13.4 | 20.5 | 4.4 | 11.7 | 25.1 | 16.3 | 7.7 | 7.9 |
| | | APR160 | 17.8 | 25.2 | 6.7 | 14.0 | 29.9 | 18.7 | 8.1 | 11.8 |
| 4" | 5.00 | APR100 | 10.7 | 20.4 | 4.0 | 11.3 | 25.0 | 15.9 | 7.7 | 7.9 |
| | | APR125 | 13.4 | 22.4 | 4.4 | 12.9 | 27.0 | 17.5 | 7.7 | 7.9 |
| | | APR160 | 17.8 | 26.8 | 6.7 | 14.9 | 31.4 | 19.6 | 8.1 | 11.8 |
| | | APR200 | 22.4 | 30.3 | 9.4 | 15.7 | 36.1 | 21.6 | 9.6 | 15.7 |
| 5" | 5.50 | APR100 | 10.7 | 21.1 | 4.0 | 11.7 | 25.8 | 16.3 | 7.7 | 7.9 |
| | | APR125 | 13.4 | 23.1 | 4.4 | 13.3 | 27.7 | 17.9 | 7.7 | 7.9 |
| | | APR160 | 17.8 | 27.5 | 6.7 | 15.3 | 32.2 | 20.0 | 8.1 | 11.8 |
| | | APR200 | 22.4 | 31.1 | 9.4 | 16.1 | 36.9 | 22.0 | 9.6 | 15.7 |
| 6" | 5.50 | APR100 | 10.7 | 22.6 | 4.0 | 12.2 | 27.3 | 16.9 | 7.7 | 7.9 |
| | | APR125 | 13.4 | 24.6 | 4.4 | 13.9 | 29.2 | 18.5 | 7.7 | 7.9 |
| | | APR160 | 17.8 | 29.0 | 6.7 | 15.9 | 33.7 | 20.6 | 8.1 | 11.8 |
| | | APR200 | 22.4 | 32.6 | 9.4 | 16.7 | 38.4 | 22.6 | 9.6 | 15.7 |
| 8" | 6.00 | APR125 | 13.4 | 28.7 | 4.4 | 16.5 | 33.3 | 21.1 | 7.7 | 7.9 |
| | | APR160 | 17.8 | 31.8 | 6.7 | 17.3 | 36.5 | 21.9 | 8.1 | 11.8 |
| | | APR200 | 22.4 | 35.4 | 9.4 | 18.1 | 41.2 | 23.9 | 9.6 | 15.7 |
| | | APR254 | 27.4 | 35.7 | 7.8 | 20.2 | 41.7 | 26.1 | 10.4 | 23.6 |
| 10" | 6.50 | APR160 | 17.8 | 34.4 | 5.4 | 19.6 | 39.1 | 24.3 | 8.1 | 11.8 |
| | | APR200 | 22.4 | 35.8 | 5.9 | 20.5 | 41.6 | 26.3 | 9.6 | 15.7 |
| | | APR254 | 27.4 | 40.1 | 8.2 | 22.5 | 46.0 | 28.4 | 10.4 | 23.6 |
| | | APR270 | 28.4 | 39.7 | 7.5 | 22.8 | 45.6 | 28.7 | 10.4 | 23.6 |
| 12" | 7.00 | APR160 | 17.8 | 37.7 | 5.4 | 21.2 | 42.3 | 25.9 | 8.1 | 11.8 |
| | | APR200 | 22.4 | 39.1 | 5.9 | 22.0 | 44.9 | 27.9 | 9.6 | 15.7 |
| | | APR254 | 27.4 | 43.4 | 8.2 | 24.1 | 49.3 | 30.0 | 10.4 | 23.6 |
| | | APR270 | 28.4 | 43.0 | 7.5 | 24.4 | 48.9 | 30.3 | 10.4 | 23.6 |
| 14" | 7.50 | APR200 | 22.4 | 43.3 | 5.9 | 24.6 | 49.1 | 30.4 | 9.6 | 15.7 |
| | | APR254 | 27.4 | 46.9 | 8.2 | 25.9 | 52.8 | 31.8 | 10.4 | 23.6 |
| | | APR270 | 28.4 | 46.5 | 7.5 | 26.2 | 52.4 | 32.1 | 10.4 | 23.6 |
| | | APR300 | 29.2 | 47.6 | 8.0 | 26.7 | 53.5 | 32.6 | 10.4 | 23.6 |
| 16" | 8.50 | APR254 | 27.4 | 48.5 | 8.2 | 26.3 | 54.4 | 32.2 | 10.4 | 23.6 |
| | | APR270 | 28.4 | 48.1 | 7.5 | 26.6 | 54.0 | 32.5 | 10.4 | 23.6 |
| | | APR300 | 29.2 | 49.2 | 8.0 | 27.1 | 55.1 | 33.0 | 10.4 | 23.6 |
| | | APR350 | 33.9 | 51.3 | 9.1 | 28.2 | 59.0 | 35.9 | 16.1 | 31.5 |
| 18" | 8.75 | APR254 | 27.4 | 50.1 | 8.2 | 27.4 | 56.0 | 33.3 | 10.4 | 23.6 |
| | | APR270 | 28.4 | 49.7 | 7.5 | 27.8 | 55.6 | 33.7 | 10.4 | 23.6 |
| | | APR350 | 33.9 | 53.0 | 9.1 | 29.4 | 60.6 | 37.0 | 16.1 | 31.5 |
| | | APR400 | 36.1 | 56.0 | 10.6 | 30.9 | 63.7 | 38.6 | 16.9 | 31.5 |
| 20" | 9.00 | APR254 | 27.4 | 53.0 | 8.2 | 28.8 | 58.9 | 34.7 | 10.4 | 23.6 |
| | | APR270 | 28.4 | 52.6 | 7.5 | 29.1 | 58.5 | 35.0 | 10.4 | 23.6 |
| | | APR350 | 33.9 | 55.8 | 9.1 | 30.7 | 63.5 | 38.4 | 16.1 | 31.5 |
| | | APR400 | 36.1 | 58.9 | 10.6 | 32.3 | 66.6 | 40.0 | 16.9 | 31.5 |

Table 7. Class 150 Double Flange Dimensions Imperial (Figures 7 and 8) (a) (Continued)

| Valve Size (inch) | B | Actuator | | Without Handwheel | | | With Handwheel | | | |
|-------------------|-------|----------|------|-------------------|------|------|----------------|------|------|------|
| | | Size | L | H | H1 | H2 | H | H2 | H3 | C |
| 24" | 10.50 | APR270 | 28.4 | 59.7 | 7.5 | 33.1 | 65.6 | 39.0 | 10.4 | 23.6 |
| | | APR300 | 29.2 | 60.8 | 8.0 | 33.6 | 66.7 | 39.5 | 10.4 | 23.6 |
| | | APR350 | 33.9 | 63.0 | 9.1 | 34.7 | 70.6 | 42.4 | 16.1 | 31.5 |
| | | APR400 | 36.1 | 66.0 | 10.6 | 36.2 | 73.7 | 43.9 | 16.9 | 31.5 |

a. For sizes and ratings not shown, consult the factory.

Figure 9. Wafer Valve Actuator interface

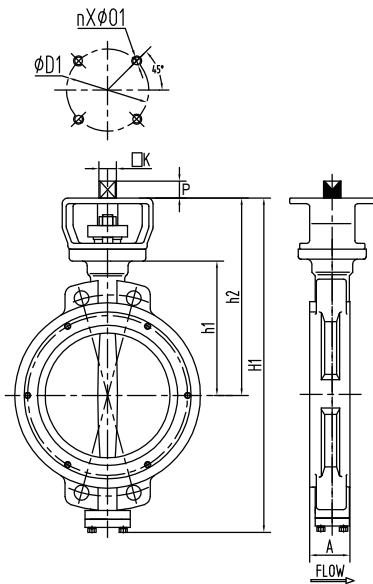


Figure 10. Double Flange Valve Actuator Interface

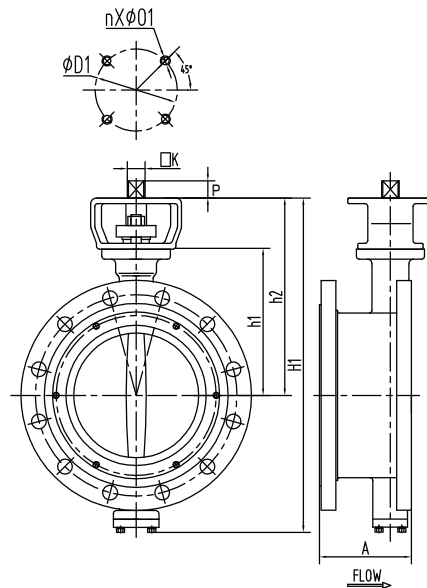


Table 8. Class 150 Wafer Valve Dimensions (Figure 9) (a)

| Valve Size | | A | | h1 | | h2 | | H1 | | □K | ΦD1 | | P | | nxΦ | Weight | |
|------------|------|-----|------|-----|------|-----|------|------|------|-----|-----|------|----|------|-------|--------|-----|
| DN (mm) | inch | mm | inch | mm | inch | mm | inch | mm | inch | mm | mm | inch | mm | inch | mm | kg | lb |
| 50 | 2" | 44 | 1.75 | 101 | 4.0 | 182 | 7.1 | 248 | 9.7 | □9 | 70 | 2.76 | 9 | 0.35 | 4xΦ8 | 5 | 11 |
| 80 | 3" | 48 | 1.88 | 137 | 5.4 | 194 | 7.6 | 312 | 12.3 | □11 | 102 | 4.02 | 12 | 0.47 | 4xΦ12 | 11.5 | 25 |
| 100 | 4" | 54 | 2.12 | 160 | 6.3 | 243 | 9.6 | 368 | 14.5 | □17 | 125 | 4.92 | 16 | 0.63 | 4xΦ14 | 16.8 | 37 |
| 125 | 5" | 57 | 2.25 | 170 | 6.7 | 251 | 9.9 | 387 | 15.2 | □17 | 125 | 4.92 | 16 | 0.63 | 4xΦ14 | 20.8 | 46 |
| 150 | 6" | 57 | 2.25 | 185 | 7.3 | 305 | 12.0 | 465 | 18.3 | □17 | 125 | 4.92 | 16 | 0.63 | 4xΦ14 | 23.8 | 52 |
| 200 | 8" | 64 | 2.50 | 220 | 8.7 | 320 | 12.6 | 512 | 20.1 | □22 | 140 | 5.51 | 20 | 0.79 | 4xΦ18 | 34.7 | 76 |
| 250 | 10" | 71 | 2.81 | 280 | 11.0 | 370 | 14.6 | 589 | 23.2 | □24 | 165 | 6.50 | 25 | 0.98 | 4xΦ22 | 57.5 | 127 |
| 300 | 12" | 81 | 3.19 | 320 | 12.6 | 410 | 16.1 | 687 | 27.0 | □24 | 165 | 6.50 | 25 | 0.98 | 4xΦ22 | 67.5 | 149 |
| 350 | 14" | 92 | 3.62 | 365 | 14.4 | 465 | 18.3 | 787 | 31.0 | □32 | 165 | 6.50 | 36 | 1.42 | 4xΦ22 | 85 | 187 |
| 400 | 16" | 102 | 4.00 | 395 | 15.6 | 495 | 19.5 | 848 | 33.4 | □36 | 165 | 6.50 | 45 | 1.77 | 4xΦ22 | 120 | 264 |
| 450 | 18" | 114 | 4.50 | 425 | 16.7 | 715 | 28.1 | 1086 | 42.8 | □42 | 165 | 6.50 | 45 | 1.77 | 4xΦ22 | 150 | 330 |
| 500 | 20" | 127 | 5.00 | 460 | 18.1 | 750 | 29.5 | 1152 | 45.4 | □42 | 165 | 6.50 | 46 | 1.81 | 4xΦ22 | 229 | 504 |
| 600 | 24" | 154 | 6.06 | 560 | 22.0 | 850 | 33.5 | 1337 | 52.6 | □46 | 165 | 6.50 | 46 | 1.81 | 4xΦ22 | 344 | 757 |

a. For sizes and ratings not shown, consult the factory.

Table 9. Class 150 Double Flange Valve Dimensions (Figure 10) (a)

| Valve Size | | A | | h1 | | h2 | | H1 | | □K | ΦD1 | | P | | nxΦ | Weight | |
|------------|------|-----|-------|-----|------|-------|------|------|------|-----|-----|------|----|------|-------|--------|------|
| DN (mm) | inch | mm | inch | mm | inch | mm | inch | mm | inch | mm | mm | inch | mm | inch | mm | kg | lb |
| 80 | 3" | 114 | 4.50 | 137 | 5.4 | 193.5 | 7.6 | 312 | 12.3 | □11 | 102 | 4.02 | 12 | 0.35 | 4xΦ12 | 16.5 | 36 |
| 100 | 4" | 127 | 5.00 | 160 | 6.3 | 243 | 9.6 | 368 | 14.5 | □17 | 125 | 4.92 | 16 | 0.47 | 4xΦ14 | 26.8 | 59 |
| 125 | 5" | 140 | 5.50 | 170 | 6.7 | 250.5 | 9.9 | 387 | 15.2 | □17 | 125 | 4.92 | 16 | 0.63 | 4xΦ14 | 33.8 | 74 |
| 150 | 6" | 140 | 5.50 | 185 | 7.3 | 304.5 | 12.0 | 465 | 18.3 | □17 | 125 | 4.92 | 16 | 0.63 | 4xΦ14 | 39.8 | 88 |
| 200 | 8" | 152 | 6.00 | 220 | 8.7 | 320 | 12.6 | 512 | 20.1 | □22 | 140 | 5.51 | 20 | 0.63 | 4xΦ18 | 54.7 | 120 |
| 250 | 10" | 165 | 6.50 | 280 | 11.0 | 370 | 14.6 | 589 | 23.2 | □24 | 165 | 6.50 | 25 | 0.79 | 4xΦ22 | 87.5 | 193 |
| 300 | 12" | 178 | 7.00 | 320 | 12.6 | 410 | 16.1 | 687 | 27.0 | □24 | 165 | 6.50 | 25 | 0.98 | 4xΦ22 | 111.5 | 245 |
| 350 | 14" | 191 | 7.50 | 365 | 14.4 | 465 | 18.3 | 787 | 31.0 | □32 | 165 | 6.50 | 36 | 0.98 | 4xΦ22 | 178 | 392 |
| 400 | 16" | 216 | 8.50 | 395 | 15.6 | 495 | 19.5 | 848 | 33.4 | □36 | 165 | 6.50 | 45 | 1.42 | 4xΦ22 | 202 | 444 |
| 450 | 18" | 222 | 8.75 | 425 | 16.7 | 715 | 28.1 | 1086 | 42.8 | □42 | 165 | 6.50 | 45 | 1.77 | 4xΦ22 | 250 | 550 |
| 500 | 20" | 229 | 9.00 | 460 | 18.1 | 750 | 29.5 | 1152 | 45.4 | □42 | 165 | 6.50 | 46 | 1.77 | 4xΦ22 | 427 | 939 |
| 600 | 24" | 267 | 10.50 | 560 | 22.0 | 850 | 33.5 | 1337 | 52.6 | □46 | 165 | 6.50 | 46 | 1.81 | 4xΦ22 | 544 | 1197 |

a. For sizes and ratings not shown, consult the factory.

NOTES

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