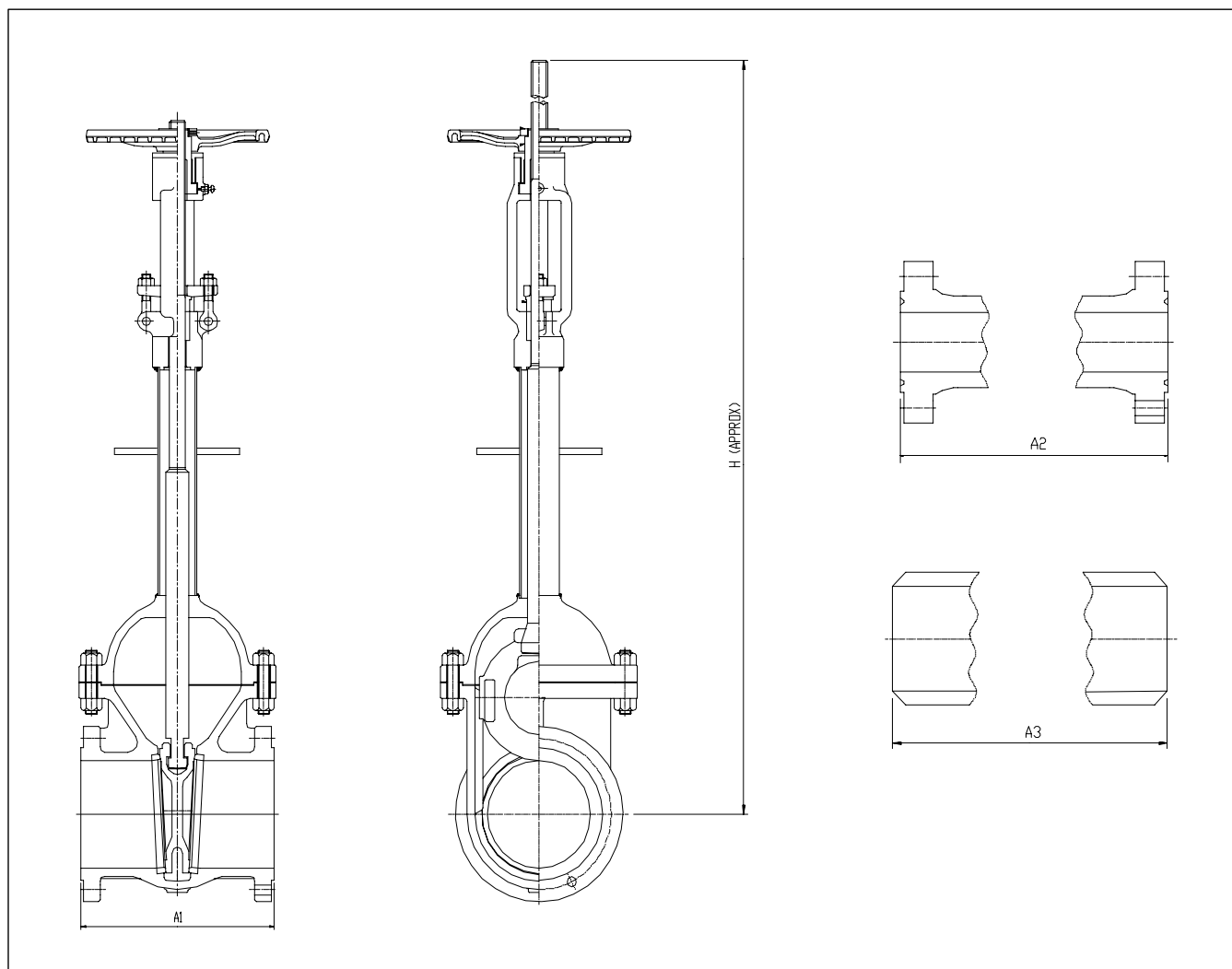


CRYOGENIC GATE VALVES



| NO. | NAME OF PART | ASTM MATERIAL | | | |
|-----|----------------|-------------------|-----------|------------|------------|
| 1 | BODY | A351-CF8 | A351-CF8M | A351-CF3 | A351-CF3M |
| 2 | BONNET | A351-CF8 | A351-CF8M | A351-CF3 | A351-CF3M |
| 3 | WEDGE | A351-CF8 | A351-CF8M | A351-CF3 | A351-CF3M |
| 4 | BODY SEAT RING | A182-F304 | A182-F316 | A182-F304L | A182-F316L |
| 5 | STEM | A276-304 | A276-316 | A276-304L | A276-316L |
| 6 | BONNET BUSH | A276-304 | A276-316 | A276-304L | A276-316L |
| 7 | PACKING GLAND | A276-304 | | | |
| 8 | GLAND FLANGE | A351-CF8 OR 304SS | | | |
| 9 | YOKE SLEEVE | A439-D2C | | | |
| 10 | BONNET BOLT | A320 - B8 | | | |
| 11 | BONNET NUT | A194 - B8 | | | |
| 12 | GLAND BOLT | A193 - B8 | | | |
| 13 | GLAND NUT | A194 - B8 | | | |
| 14 | HINGE PIN | A276-304 | | | |
| 15 | PACKING WASHER | A276-304 | A276-316 | A276-304L | A276-316L |
| 16 | YOKE | A351-CF8 | | | |
| 17 | YOKE BOLT | A193 - B8 | | | |
| 18 | YOKE NUT | A194 - B8 | | | |

MAIN DIMENSIONS & WEIGHT (CLASS 150)

| VALVE SIZE | in | 2 | 2.5 | 3 | 4 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | |
|------------|----|------|------|-------|------|-------|------|------|-------|------|------|------|------|
| | mm | 50 | 65 | 80 | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | |
| A1 | in | 7.0 | 7.5 | 8.0 | 9.0 | 10.5 | 11.5 | 13.0 | 14.0 | 15.0 | 16.0 | 17.0 | |
| | mm | 178 | 190 | 203 | 229 | 267 | 292 | 330 | 356 | 381 | 406 | 432 | |
| A3 | in | 8.5 | 9.5 | 11.12 | 12.0 | 15.87 | 16.5 | 18.0 | 19.75 | 22.5 | 24.0 | 26.0 | |
| | mm | 216 | 241 | 283 | 305 | 403 | 419 | 457 | 502 | 572 | 610 | 660 | |
| H | in | 29.5 | 32.5 | 34.5 | 38.1 | 44.5 | 61.5 | 68.2 | 74.5 | 88.5 | 97.5 | 106 | |
| | mm | 749 | 826 | 876 | 968 | 1130 | 1562 | 1732 | 1892 | 2248 | 2477 | 2692 | |
| W | in | 9.8 | 9.8 | 11.0 | 11.8 | 15.7 | 17.7 | 23.6 | 27.2 | 28.0 | 28.0 | 31.5 | |
| | mm | 250 | 250 | 280 | 300 | 400 | 450 | 600 | 690 | 710 | 710 | 800 | |
| WEIGHT | RF | lb | 77 | 95 | 108 | 165 | 298 | 441 | 617 | 911 | 1114 | 1444 | 1985 |
| | | kg | 35 | 43 | 49 | 75 | 135 | 200 | 280 | 413 | 505 | 655 | 900 |
| | BW | lb | 64 | 60 | 90 | 139 | 258 | 388 | 558 | 847 | 1019 | 1321 | 1848 |
| | | kg | 29 | 27 | 41 | 63 | 117 | 176 | 253 | 384 | 462 | 599 | 838 |

MAIN DIMENSIONS & WEIGHT (CLASS 300)

| VALVE SIZE | in | 2 | 2.5 | 3 | 4 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | |
|------------|----|------|------|-------|------|-------|------|------|-------|------|------|-------|------|
| | mm | 50 | 65 | 80 | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | |
| A1 & A3 | in | 8.5 | 9.5 | 11.12 | 12.0 | 15.88 | 16.5 | 18.0 | 19.75 | 30.0 | 33.0 | 36.0 | |
| | mm | 216 | 241 | 283 | 305 | 403 | 419 | 457 | 502 | 762 | 838 | 914 | |
| H | in | 29.5 | 33.1 | 34.5 | 38.5 | 49.5 | 59.5 | 66.5 | 82.3 | 87.6 | 99.6 | 108.7 | |
| | mm | 749 | 841 | 876 | 978 | 1257 | 1511 | 1689 | 2090 | 2225 | 2530 | 2761 | |
| W | in | 9.8 | 9.8 | 11.0 | 15.7 | 19.7 | 27.2 | 27.2 | 28.0 | 35.4 | 35.4 | 35.4 | |
| | mm | 250 | 250 | 280 | 400 | 500 | 690 | 690 | 710 | 900 | 900 | 900 | |
| WEIGHT | RF | lb | 86 | 115 | 143 | 209 | 386 | 628 | 948 | 1290 | 1768 | 2756 | 3263 |
| | | kg | 39 | 52 | 65 | 95 | 175 | 285 | 430 | 585 | 802 | 1250 | 1480 |
| | BW | lb | 75 | 99 | 119 | 187 | 362 | 587 | 849 | 1136 | 1550 | 2423 | 2864 |
| | | kg | 34 | 45 | 54 | 85 | 164 | 266 | 385 | 515 | 703 | 1099 | 1299 |

MAIN DIMENSIONS & WEIGHT (CLASS 600)

| VALVE SIZE | in | 2 | 2.5 | 3 | 4 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | |
|------------|----|------|------|-------|------|-------|------|------|-------|------|------|------|--|
| | mm | 50 | 65 | 80 | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | |
| A1 & A3 | in | 11.5 | 13.0 | 14.00 | 17.0 | 22.00 | 26.0 | 31.0 | 33.00 | 35.0 | 39.0 | 43.0 | |
| | mm | 292 | 330 | 356 | 432 | 556 | 660 | 787 | 838 | 889 | 991 | 1092 | |
| H | in | 29.1 | 34.5 | 35.5 | 39.5 | 53.2 | 67.3 | 79.1 | | | | | |
| | mm | 739 | 876 | 902 | 1003 | 1351 | 1709 | 2009 | | | | | |
| W | in | 9.8 | 9.8 | 14.0 | 15.7 | 23.6 | 24.8 | 31.5 | | | | | |
| | mm | 200 | 200 | 355 | 400 | 600 | 630 | 800 | | | | | |
| WEIGHT | RF | lb | 115 | 157 | 176 | 313 | 668 | 1103 | 1841 | | | | |
| | | kg | 52 | 71 | 80 | 142 | 303 | 500 | 835 | | | | |
| | BW | lb | 97 | 139 | 152 | 282 | 589 | 1061 | 1731 | | | | |
| | | kg | 44 | 63 | 69 | 128 | 267 | 481 | 785 | | | | |