

CAST STEEL GATE VALVES - API 150/BS 1414

| No: | Parts | Material |
|-----|---------------|--------------------------|
| 1 | Body | ASTM A216 Gr.WCB |
| 2 | Seat ring | ASTM A105+STL No.6 |
| 3 | Wedge | ASTM A216 WCB+13Cr |
| 4 | Stem | ASTM A182 F6a |
| 5 | Gasket | 304S.S.Jacketed Graphite |
| 6 | Bonnet bolt | ASTM A193 Gr.B7 |
| 7 | Bonnet nut | ASTM A194 Gr.2H |
| 8 | Bonnet | ASTM A216 Gr.WCB |
| 9 | Back seat | ASTM A276 410 |
| 10 | Packing | Graphite |
| 11 | Pin | C.S. |
| 12 | Gland bolt | ASTM A193 Gr. B7 |
| 13 | Gland nut | ASTM A194 Gr.2H |
| 14 | Gland | ASTM A276 410 |
| 15 | Gland flange | ASTM A216 Gr.WCB |
| 16 | Stem nut | Aluminum Bronze |
| 17 | Retaining nut | C.S. |
| 18 | Handwheel | Malleable Iron |
| 19 | H.W.lock nut | C.S. |
| 20 | Lubricator | Assem. |

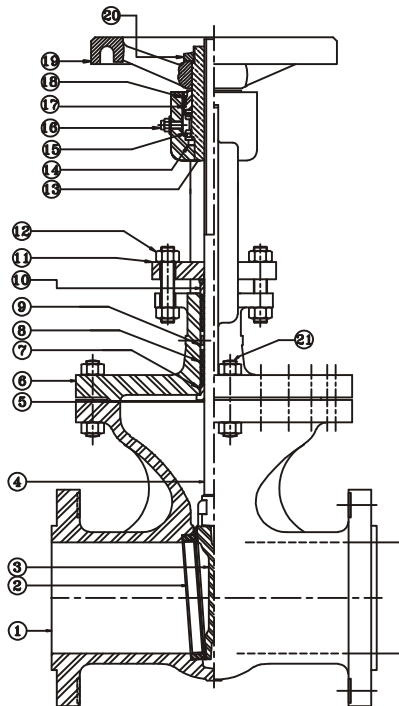
Features

| | |
|---|---|
| Face to face and end to end dimension: 36" and smaller to ASME B16.10 40" and larger to manufacturer's standard | Shell Wall thickness: 24" and smaller to API 600 28" and larger to manufacturer's standard |
| Flange dimension: 24" and smaller to ASME B16.5 28" and larger to ASME B16.47 series A | B.W. end to ASME B16.25 |
| | 8" and smaller valves have a one-piece bonnet and yoke design 10" and larger valves have a two-piece bonnet and yoke design. |

Dimensions and Weights

| Valve size | in | 1 1/2 | 2 | 2 1/2 | 3 | 4 | 5 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 | 24 | 28 | 30 | 32 | 36 |
|------------|----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|--------|--------|--------|--------|--------|
| | mm | 40 | 50 | 65 | 80 | 100 | 125 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 600 | 700 | 750 | 800 | 900 |
| L (RF) | in | 6.5 | 7 | 7.5 | 8 | 9 | 10 | 10.5 | 11.5 | 13 | 14 | 15 | 16 | 17 | 18 | 20 | 24 | 24 | 26 | 28 |
| | mm | 165 | 178 | 190 | 203 | 229 | 254 | 267 | 292 | 330 | 356 | 381 | 406 | 432 | 457 | 508 | 610 | 610 | 660 | 711 |
| L1 (BW) | in | 6.5 | 8.5 | 9.5 | 11.13 | 12 | 15 | 15.88 | 16.5 | 18 | 19.75 | 22.5 | 24 | 26 | 28 | 32 | 36 | 36 | 38 | 40 |
| | mm | 165 | 216 | 241 | 283 | 305 | 381 | 403 | 419 | 457 | 502 | 572 | 610 | 660 | 711 | 813 | 914 | 914 | 965 | 1016 |
| L2 (RTJ) | in | 7.0 | 7.5 | 8 | 8.5 | 9.5 | 10.5 | 11 | 12 | 13.5 | 14.5 | 15.5 | 16.5 | 17.5 | 18.5 | 20.5 | 24.5 | 24.5 | 26.5 | 28.5 |
| | mm | 178 | 191 | 203 | 216 | 242 | 267 | 279 | 305 | 343 | 368 | 394 | 419 | 445 | 470 | 521 | 622 | 622 | 673 | 724 |
| H (open) | in | 15.7 | 16.13 | 18.56 | 20.94 | 24.13 | 27.94 | 31.75 | 39 | 46.69 | 55.31 | 63.56 | 71.31 | 78.19 | 87 | 106.25 | 119.31 | 130.56 | 137.25 | 150.56 |
| | mm | 392 | 409 | 472 | 532 | 612 | 710 | 806 | 990 | 1186 | 1405 | 1615 | 1811 | 1986 | 2210 | 2698 | 3030 | 3317 | 3487 | 3825 |
| W | in | 7.86 | 7.86 | 7.86 | 9.86 | 9.86 | 11.81 | 11.81 | 13.75 | 17.69 | 19.69 | 18.13 | 18.13 | 18.13 | 24 | 24 | 24 | 24 | 24 | 30 |
| | mm | 200 | 200 | 200 | 250 | 250 | 300 | 300 | 350 | 450 | 500 | 460 | 460 | 460 | 610 | 610 | 610 | 610 | 610 | 760 |
| WT (kg) | RF | 18.5 | 20 | 30 | 36 | 53 | 71 | 85 | 136 | 220 | 323 | 387 | 553 | 660 | 810 | 1250 | 1931 | 2380 | 2490 | 3600 |
| | BW | 15.5 | 17 | 26 | 29 | 46 | 66 | 77 | 116 | 202 | 294 | 350 | 506 | 575 | 720 | 1130 | 1765 | 2028 | 2280 | 3080 |

CAST STEEL GATE VALVES- API 600/BS 1414, Bolted Bonnet OS & Yoke Type Rising Stem, Flanged/Butt Weld Ends

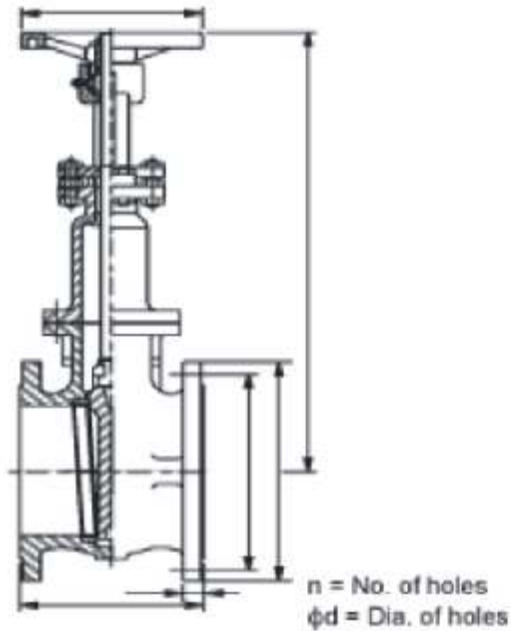


STANDARD MATERIAL COMBINATION

| P. NO. | PART DESCRIPTION | Carbon steel to ASTM | | Alloy steel to ASTM | | | | | Stainless steel to ASTM | | | |
|--------|---------------------------|--|-----------|---------------------|-----------|-----------|-----------|-----------|-------------------------|-----------|-----------|-----------|
| | | Type WCB | Type LCB | Type WC1 | Type WC6 | Type WC9 | Type C5 | Type C12 | Type CF8 | Type CF8M | Type CF3 | Type CF3M |
| 1 | BODY | A216 WCB | A352 LCB | A217 WC1 | A217 WC6 | A217 WC9 | A217 C5 | A217 C12 | A351 CF8 | A351 CF8M | A351 CF3 | A351 CF3M |
| 2 | Seat Ring | As per Trim Material Combination | | | | | | | | | | |
| 3 | Wedge | As per Trim Material Combination | | | | | | | | | | |
| 4 | Stem | As per Trim Material Combination | | | | | | | | | | |
| 5 | GASKET | Stainless steel + Graphoil | | | | | | | | | | |
| 6 | BONNET | A216 WCB | A352 LCB | A217 WC1 | A217 WC6 | A217 WC9 | A217 C5 | A217 C12 | A351 CF8 | A351 CF8M | A351 CF3 | A351 CF3M |
| 7 | Back Seat Bush | As per Trim Material Combination | | | | | | | | | | |
| 8 | PACKING | To Suit Service conditions | | | | | | | | | | |
| 9 | Lantern Ring | As per Trim Material Combination | | | | | | | | | | |
| 10 | GLAND | A182 F6a | A182 F304 | A182 F6a | A182 F6a | A182 F6a | A182 F6a | A182 F6a | F-304 | F-316 | F-304L | F-316L |
| 11 | GLAND FLANGE | A216 WCB | A352 LCB | A217 WC1 | A217 WC6 | A217 WC9 | A217 C5 | A217 C12 | A351 CF8 | A351CF8M | A351 CF3 | A351CF3M |
| 12 | NUTS | A194 2H | A194 Gr.4 | A194 Gr.4 | A194 Gr.4 | A194 Gr.4 | A194 Gr.4 | A194 Gr.4 | A194 Gr.8 | A194 Gr.8 | A194 Gr.8 | A194 Gr.8 |
| 13 | YOKE SLEEVE | Al. Bronze BS1982 CC331G or Ni - resist to A439 D2 | | | | | | | | | | |
| 14 | OIL SEAL | EPDM/BUNA 'N' RUBBER | | | | | | | | | | |
| 15 | THRUST BEARING | STEEL | | | | | | | | | | |
| 16 | LUBRICATOR | STEEL | | | | | | | | | | |
| 17 | YOKE SLEEVE RETAINING NUT | STEEL | | | | | | | IS:2062 | | | |
| 18 | LOCKING SCREW | STEEL | | | | | | | IS:2062 | | | |
| 19 | HANDWHEEL | D1 A536 80-55-D6 OR MI 1S 2108 BM 290/ASTMA338 | | | | | | | | | | |
| 20 | HANDWHEEL RETAINING NUT | STEEL | | | | | | | IS:2062 | | | |
| 21 | STUDS | A193 B7 | A320 L7 | A193 B16 | A193 B16 | A193 B16 | A193 B16 | A193 B16 | A193 B8 | A193 B8 | A193 B8 | A193 B8 |

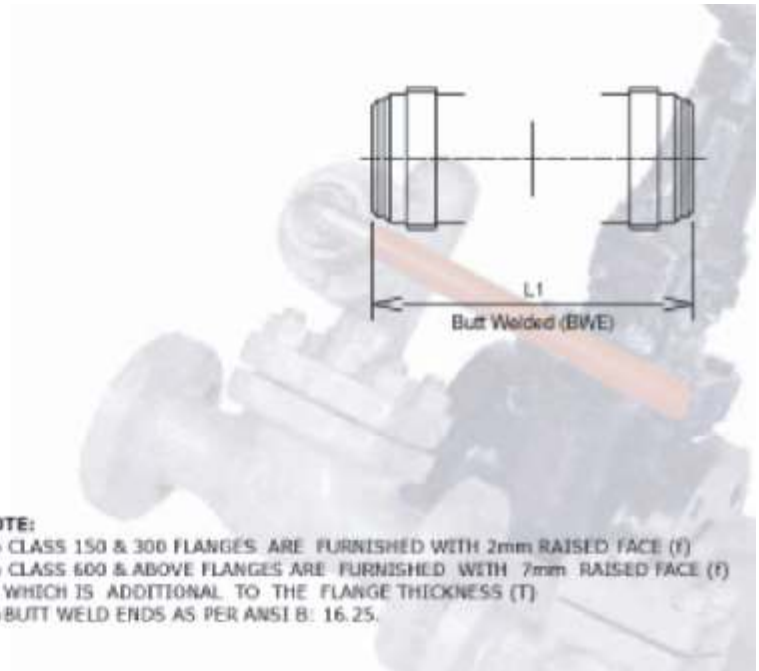
NOTE: The above data is subject to change without notice due to our continuing product improvement program.

CAST STEEL GATE VALVES- API600/BS 1414



NOTE:

- (1) CLASS 150 & 300 FLANGES ARE FURNISHED WITH 2mm RAISED FACE (F)
- (2) CLASS 600 & ABOVE FLANGES ARE FURNISHED WITH 7mm RAISED FACE (F) WHICH IS ADDITIONAL TO THE FLANGE THICKNESS (T)
- (3) BUTT WELD ENDS AS PER ANSI B: 16.25.





CAST STEEL GATE VALVES-API 600

•All dimensions in mm

| DIMENSIONAL DATA CLASS-300 | | | | | | | | | | | | | | | | | | |
|----------------------------|-------|------|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| DN | 40 | 50 | 65 | 80 | 100 | 125 | 150 | 200 | 250 | 300* | 350* | 400* | 450* | 500* | 600* | 650* | 750* | 900* |
| NPS | 1 ½" | 2" | 2½" | 3" | 4" | 5" | 6" | 8" | 10" | 12" | 14" | 16" | 18" | 20" | 24" | 26" | 30" | 36" |
| L | 190 | 216 | 241 | 282 | 305 | 381 | 403 | 419 | 457 | 502 | 762 | 838 | 914 | 991 | 1143 | 1245 | 1397 | 1727 |
| L1 | 190 | 216 | 241 | 282 | 305 | 381 | 403 | 419 | 457 | 502 | 762 | 838 | 914 | 991 | 1143 | ---- | ---- | ---- |
| L2 | 204 | 232 | 257 | 296 | 321 | 397 | 419 | 435 | 473 | 518 | 778 | 854 | 930 | 1010 | 1165 | 1270 | 1422 | 1755 |
| kD | 155 | 165 | 190 | 210 | 255 | 280 | 320 | 380 | 445 | 520 | 585 | 650 | 710 | 775 | 915 | 867 | 990.6 | 1270 |
| T | 19.1 | 20.7 | 23.9 | 27 | 30.2 | 33.4 | 35 | 39.7 | 46.1 | 49.3 | 54.4 | 55.6 | 58.8 | 62 | 68.3 | 89 | 93.7 | 104.6 |
| K(PCD) | 114.3 | 127 | 149.2 | 168.3 | 200 | 235 | 269.9 | 330.2 | 387.4 | 450.8 | 514.4 | 571.5 | 628.7 | 685.8 | 812.8 | 803.2 | 920.8 | 1168.4 |
| n | 04 | 08 | 08 | 08 | 08 | 08 | 12 | 12 | 16 | 16 | 20 | 20 | 24 | 24 | 24 | 32 | 36 | 36 |
| kd | 22.2 | 19 | 22.2 | 22.2 | 22.2 | 22.2 | 22.2 | 25.4 | 28.6 | 31.8 | 31.8 | 35 | 35 | 35 | 41 | 35 | 38.1 | 53.8 |
| ~H(Close) | 357 | 382 | 416 | 432 | 520 | 760 | 746 | 919 | 1169 | - | - | - | - | - | -- | - | - | - |
| ~H (Open) | 397 | 432 | 481 | 512 | 620 | 885 | 896 | 1119 | 1419 | - | - | - | - | - | - | - | - | - |
| ~H1 | - | - | - | - | - | - | - | - | - | 1237 | 1915 | 2000 | 2146 | 2760 | 3125 | - | - | 4450 |
| kHW | 210 | 210 | 210 | 225 | 310 | 310 | 400 | 450 | 450 | 450 | - | - | - | - | - | - | - | - |
| Aprox.wt.â | 24.5 | 29 | 47.1 | 55 | 80.5 | 161.6 | 167.6 | 263 | 458 | 610 | 920 | 1056 | 1145 | 2055 | 2730 | - | - | - |

| DIMENSIONAL DATA CLASS-600 | | | | | | | | | | | | | | | | | |
|----------------------------|-------|------|-------|-------|------|-------|-------|-------|-------|------|------|-------|------|------|-------|--|--|
| DN | 40 | 50 | 65 | 80 | 100 | 125 | 150 | 200 | 250 | 300* | 350* | 400* | 450* | 500* | 600* | | |
| NPS | 1 ½ | 2 | 2 ½ | 3 | 4 | 5 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 | 24 | | |
| L | 241 | 292 | 330 | 356 | 432 | 508 | 559 | 660 | 787 | 838 | 889 | 99 | 1092 | 1194 | 1397 | | |
| L1 | 241 | 292 | 330 | 356 | 432 | 508 | 559 | 660 | 787 | 838 | 889 | 99 | 1092 | 1194 | 1397 | | |
| L2 | 241 | 295 | 333 | 359 | 235 | 511 | 562 | 663 | 790 | 841 | 890 | 993 | 1095 | 1200 | 1407 | | |
| kD | 155 | 165 | 190 | 210 | 275 | 330 | 355 | 420 | 510 | 560 | 605 | 685 | 745 | 815 | 940 | | |
| T | 22.7 | 25.4 | 28.6 | 31.8 | 38.1 | 44.5 | 47.7 | 55.6 | 63.5 | 66.7 | 69.9 | 76.2 | 82.6 | 88.9 | 101.6 | | |
| K(PCD) | 114.3 | 127 | 149.3 | 168.1 | 216 | 266.7 | 292.1 | 349.2 | 431.8 | 489 | 527 | 603.2 | 654 | 724 | 838.2 | | |
| n | 04 | 08 | 08 | 08 | 08 | 08 | 12 | 12 | 16 | 20 | 20 | 20 | 20 | 24 | 24 | | |
| kd | 22.2 | 19 | 22.2 | 22.2 | 25.4 | 28.6 | 28.6 | 31.8 | 34.9 | 34.9 | 38.1 | 41.1 | 44.5 | 44.5 | 50.8 | | |
| ~H(Close) | 350 | 427 | 477 | 537 | 623 | 750 | 890 | 978 | 1040 | - | - | - | - | - | - | | |
| ~H(Open) | 390 | 477 | 542 | 617 | 723 | 875 | 1040 | 1178 | 1290 | - | - | - | - | - | - | | |
| ~H1 | - | - | - | - | - | - | - | - | - | 1725 | 2100 | 2155 | 2810 | 2750 | 3257 | | |
| kHW | 229 | 229 | 229 | 254 | 356 | 406 | 508 | 508 | 610 | 450 | 450 | 450 | 700 | 700 | 700 | | |
| Aprox.wt.â | 32.9 | 46 | 75 | 80 | 153 | 264 | 298.5 | 593 | 677 | 1015 | 1321 | 1760 | 2415 | 2920 | 4400 | | |

*For Gear Operated Valves

NOTE: The above data is subject to change without notice due to our continuing product improvement program. (©WEIGHT GIVEN IN KGS)

Flanges upto 24" as per ASME 16.5 and above 24" as per ASME 16.47 series A or B.



•All dimensions in mm

DIMENSIONAL DATA CLASS-900

| | | | | | | | | | | | | |
|---------------|-------|-------|-------|-------|-------|-------|-------|---------|-------|-------|-------|-------|
| DN | 50 | 80 | 100 | 150* | 200* | 250* | 300* | 350* | 400* | 450* | 500* | 600* |
| NPS | 2 | 3 | 4 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 | 24 |
| L | 368 | 381 | 457 | 610 | 737 | 838 | 965 | 1029 | 1130 | 1219 | 1321 | 1568 |
| L1 | 368 | 381 | 457 | 610 | 737 | 838 | 965 | 1029 | 1130 | 1219 | 1321 | 1568 |
| L2 | 371 | 421 | 473 | 549 | 711 | 841 | 968 | 1039 | 1140 | 1232 | 1334 | 1587 |
| kD | 215 | 240 | 290 | 380 | 470 | 545 | 610 | 640 | 705 | 787 | 855 | 1040 |
| T | 38.1 | 38.1 | 44.5 | 55.6 | 63.5 | 69.9 | 79.4 | 85.8 | 88.9 | 101.6 | 108 | 139.7 |
| K (PCD) | 165.1 | 190.5 | 234.5 | 317.5 | 393.7 | 469.9 | 533.4 | 558.8 | 615.9 | 685.8 | 749.3 | 901.7 |
| n | 08 | 08 | 08 | 12 | 12 | 16 | 20 | 20 | 20 | 20 | 20 | 20 |
| kd | 25.4 | 25.4 | 31.8 | 31.8 | 38.1 | 38.1 | 38.1 | 41.3 | 44.5 | 50.6 | 54 | 66.7 |
| ~H(Close)(H1) | 480 | 595 | 665 | 1321 | 1530 | 1780 | 1885 | 2030 | 2400 | 2589 | 2858 | 3532 |
| ~H(Open) | 530 | 675 | 765 | - | - | - | - | - | - | - | - | - |
| kHW | 300 | 300 | 400 | 450 | 700 | 700 | 700 | 700 | 700 | 1000 | 1000 | 1000 |
| Aprox.wt. ã | 88 | 182 | 275 | 478 | 710 | 810 | 1330 | 1937.36 | 2710 | - | - | 7789 |

DIMENSIONAL DATA CLASS-1500

| | | | | | | | | |
|---------------|-------|------|-------|-------|--------|-------|-------|-------|
| DN | 50 | 65 | 80* | 100* | 150* | 200* | 250* | 300* |
| NPS | 2 | 2 ½ | 3 | 4 | 6 | 8 | 10 | 12 |
| L | 368 | 419 | 470 | 546 | 705 | 832 | 991 | 1130 |
| L1 | 368 | 419 | 470 | 546 | 705 | 832 | 991 | 1130 |
| L2 | 371 | 421 | 473 | 549 | 711 | 842 | 1001 | 1146 |
| kD | 215 | 245 | 265 | 310 | 395 | 485 | 585 | 675 |
| T | 38.1 | 41.3 | 47.7 | 54 | 82.6 | 92.1 | 108 | 123.9 |
| K (PCD) | 165.1 | 190 | 203.2 | 241.3 | 317.5 | 393.7 | 482.6 | 571.5 |
| n | 08 | 08 | 08 | 08 | 12 | 12 | 12 | 16 |
| kd | 25.4 | 28.6 | 31.8 | 35 | 38.1 | 44.5 | 50.8 | 54 |
| ~H(Close)(H1) | 478 | 550 | 600 | 720 | 1144 | 1265 | 1385 | 1503 |
| ~H(Open) | 528 | 615 | - | - | - | - | - | - |
| kHW | 300 | 350 | 400 | 450 | 700 | 700 | 700 | 700 |
| Aprox.wt. ã | 93 | 140 | 173.5 | 327 | 633.81 | 1218 | 2405 | 3065 |

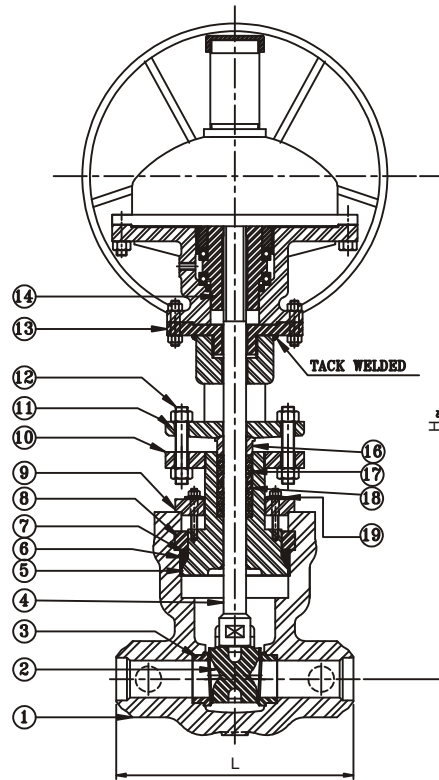
*For Gear Operated Valves

NOTE: The above data is subject to change without notice due to our continuing product improvement program. (©WEIGHT GIVEN IN KGS)
Flanges upto 24" as per ASME 16.5 and above 24" as per ASME 16.47 series A or B.

TEST PRESSURES

| CLASS | SHELL TEST (HYDROSTATIC) | | SEAT TEST | | | |
|-------|--------------------------|------------|-------------|------------|-----------|-----------|
| | | | HYDROSTATIC | | PNEUMATIC | |
| 150 | 30 Bar | 435 Psi g | 22 Bar | 319 Psi g | 6.9 bar | 100 Psi g |
| 300 | 77 Bar | 1102 Psi g | 57 Bar | 780 Psi g | 6.9 bar | 100 Psi g |
| 600 | 154 Bar | 2175 Psi g | 113 Bar | 1595 Psi g | 6.9 bar | 100 Psi g |
| 900 | 230 Bar | 3350 Psi g | 169 Bar | 2451 Psi g | 6.9 bar | 100 Psi g |
| 1500 | 384 Bar | 5568 Psi g | 282 Bar | 4075 Psi g | 6.9 bar | 100 Psi g |

**CAST STEEL
GATE VALVES
ASME B 16.34
PRESSURE SEAL
BONNE
OS & YOKE TYPE
RISING STEM,
BUTT WELD/
FLANGED ENDS**



STANDARD MATERIAL COMBINATION

| P. NO. | PART DESCRIPTION | Carbon steel to ASTM | | Alloy steel to ASTM | | | | | Stainless steel to ASTM | | | |
|--------|-----------------------|--|-----------|---------------------|-----------|-----------|-----------|-----------|-------------------------|-----------|-----------|-----------|
| | | Type WCB | Type LCB | Type WC1 | Type WC6 | Type WC9 | Type C5 | Type C12 | Type CF8 | Type CF8M | Type CF3 | Type CF3M |
| 1 | BODY | A216 WCB | A352 LCB | A217 WC1 | A217 WC6 | A217 WC9 | A217 C5 | A217 C12 | A351 CF8 | A351 CF8M | A351 CF3 | A351 CF3M |
| 2 | WEDGE | As per Trim Material Combination | | | | | | | | | | |
| 3 | SEAT RING | As per Trim Material Combination | | | | | | | | | | |
| 4 | STEM | As per Trim Material Combination | | | | | | | | | | |
| 5 | BONNET | A216 WCB | A352 LCB | A217 WC1 | A217 WC6 | A217 WC9 | A217 C5 | A217 C12 | A351 CF8 | A351 CF8M | A351 CF3 | A351 CF3M |
| 6 | PRESSURE SEAL GASKET | Graphoil | | | | | | | | | | |
| 7. | Pressure Seal Ring | A182 F6a | A182 F304 | A182 F6a | A182 F6a | A182 F6a | A182 F6a | A182 F6a | F-304 | F-316 | F-304L | F-316L |
| 8. | Seagmented Ring | A216 WCB | A352 LCB | A217 WC1 | A217 WC6 | A217 WC9 | A217 C5 | A217 C12 | A351 CF8 | A351 CF8M | A351 CF3 | A351 CF3M |
| 9 | BONNET RETAINER PLATE | A216 WCB | A352 LCB | A217 WC1 | A217 WC6 | A217 WC9 | A217 C5 | A217 C12 | A351 CF8 | A351CF8M | A351 CF3 | A351CF3M |
| 10 | CLAMP | A216 WCB | A352 LCB | A217 WC1 | A217 WC6 | A217 WC9 | A217 C5 | A217 C12 | A351 CF8 | A351 CF8M | A351 CF3 | A351 CF3M |
| 11 | GLAND FLANGE | A216 WCB | A352 LCB | A217 WC1 | A217 WC6 | A217 WC9 | A217 C5 | A217 C12 | A351 CF8 | A351CF8M | A351 CF3 | A351CF3M |
| 12 | STUD & NUTS | A194 2H | A194 Gr.4 | A194 Gr.4 | A194 Gr.4 | A194 Gr.4 | A194 Gr.4 | A194 Gr.4 | A194 Gr.8 | A194 Gr.8 | A194 Gr.8 | A194 Gr.8 |
| 13 | MOUNTING GEAR PLATE | A216 WCB | A352 LCB | A217 WC1 | A217 WC6 | A217 WC9 | A217 C5 | A217 C12 | A351 CF8 | A351CF8M | A351 CF3 | A351CF3M |
| 14 | YOKE SLEEVE | Al. Bronze BS1982 CC333G or Ni - resist to A439 D2 | | | | | | | | | | |
| 15 | THRUST BEARING | STEEL | | | | | | | | | | |
| 16 | GLAND | A182 F6a | A182 F304 | A182 F6a | A182 F6a | A182 F6a | A182 F6a | A182 F6a | F-304 | F-316 | F-304L | F-316L |
| 17 | PACKING | To Suit Service conditions | | | | | | | | | | |
| 18 | LOCKING SCREW | | | | | | | | STEEL | | IS:2062 | |
| 19 | BELLEVILLE WASHER | | | | | | | | STEEL | | IS:2062 | |

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CAST STEEL GATE VALVES PRESSURE SEAL BONNET ASME B16.34

TRIM MATERIAL COMBINATION (ON REQUEST)

| Trim No. | Seat Ring Face | Wedge Seat Face | Stem | Backseat Bush | Lantern Ring |
|----------|----------------|-----------------|--------------|---------------|--------------|
| 1 | F6a/13%Cr. | F6a/13%Cr. | F6a/AISI410 | F6a/AISI410 | F6a/AISI410 |
| 2 | F304 | F304 | F304/AISI304 | F304/AISI304 | F304/AISI304 |
| 5 | STELLITE | STELLITE | F6a/AISI410 | F6a/AISI410 | F6a/AISI410 |
| 8 | STELLITE | F6a/13%Cr. | F6a/AISI410 | F6a/AISI410 | F6a/AISI410 |
| 9 | MONEL | MONEL | MONEL | MONEL | MONEL |
| 10 | F316 | F316 | F316/AISI316 | F316/AISI316 | F316/AISI316 |
| 12 | 316+STELLITE | 316 | F316/AISI316 | F316/AISI316 | F316/AISI316 |
| 13 | ALLOY 20 | ALLOY 20 | ALLOY 20 | ALLOY 20 | ALLOY 20 |

NOTE: Other Trim Combination of API 600 Can Be Provided on Request. Lantern Ring Can Be Provided If Required.

Flanges as per ASME B16.5. Butt Weld Ends as per ANSI B 16.25.

DIMENSIONAL DATA CLASS-900

•All dimensions in mm

| DN | 50 | 80 | 100 | 150* | 200* | 250* | 300* | 350* | 400* | 450* | 500* | 600* |
|---------------|-------|-------|-------|-------|-------|-------|-------|---------|-------|-------|-------|-------|
| NPS | 2 | 3 | 4 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 | 24 |
| L | 368 | 381 | 457 | 610 | 737 | 838 | 965 | 1029 | 1130 | 1219 | 1321 | 1568 |
| L1 | 368 | 381 | 457 | 610 | 737 | 838 | 965 | 1029 | 1130 | 1219 | 1321 | 1568 |
| L2 | 371 | 421 | 473 | 549 | 711 | 841 | 968 | 1039 | 1140 | 1232 | 1334 | 1587 |
| kD | 215 | 240 | 290 | 380 | 470 | 545 | 610 | 640 | 705 | 787 | 855 | 1040 |
| T | 38.1 | 38.1 | 44.5 | 55.6 | 63.5 | 69.9 | 79.4 | 85.8 | 88.9 | 101.6 | 108 | 139.7 |
| K (PCD) | 165.1 | 190.5 | 234.5 | 317.5 | 393.7 | 469.9 | 533.4 | 558.8 | 615.9 | 685.8 | 749.3 | 901.7 |
| n | 08 | 08 | 08 | 12 | 12 | 16 | 20 | 20 | 20 | 20 | 20 | 20 |
| kd | 25.4 | 25.4 | 31.8 | 31.8 | 38.1 | 38.1 | 38.1 | 41.3 | 44.5 | 50.6 | 54 | 66.7 |
| ~H(Close)(H1) | 480 | 595 | 665 | 1321 | 1530 | 1780 | 1885 | 2030 | 2400 | 2589 | 2858 | 3532 |
| ~H(Open) | 530 | 675 | 765 | - | - | - | - | - | - | - | - | - |
| kHW | 300 | 300 | 400 | 450 | 700 | 700 | 700 | 700 | 700 | 1000 | 1000 | 1000 |
| Aprox.wt. ã | 88 | 182 | 275 | 478 | 710 | 810 | 1330 | 1937.36 | 2710 | - | - | 7789 |

DIMENSIONAL DATA CLASS-1500

| DN | 50 | 65 | 80* | 100* | 150* | 200* | 250* | 300* |
|---------------|-------|------|-------|-------|--------|-------|-------|-------|
| NPS | 2 | 2 ½ | 3 | 4 | 6 | 8 | 10 | 12 |
| L | 368 | 419 | 470 | 546 | 705 | 832 | 991 | 1130 |
| L1 | 368 | 419 | 470 | 546 | 705 | 832 | 991 | 1130 |
| L2 | 371 | 421 | 473 | 549 | 711 | 842 | 1001 | 1146 |
| kD | 215 | 245 | 265 | 310 | 395 | 485 | 585 | 675 |
| T | 38.1 | 41.3 | 47.8 | 54 | 82.6 | 92.1 | 108 | 123.9 |
| K (PCD) | 165.1 | 190 | 203.2 | 241.3 | 317.5 | 393.7 | 482.6 | 571.5 |
| n | 08 | 08 | 08 | 08 | 12 | 12 | 12 | 16 |
| kd | 25.4 | 28.6 | 31.8 | 35 | 38.1 | 44.5 | 50.8 | 54 |
| ~H(Close)(H1) | 478 | 550 | 600 | 720 | 1144 | 1265 | 1385 | 1503 |
| ~H(Open) | 528 | 615 | - | - | - | - | - | - |
| kHW | 300 | 350 | 400 | 450 | 700 | 700 | 700 | 700 |
| Aprox.wt. ã | 93 | 140 | 173.5 | 327 | 633.81 | 1218 | 2405 | 3065 |



CAST STEEL GATE VALVES PRESSURE SEAL BONNET ASME B16.34

| DIMENSIONAL DATA CLASS-2500 | | | | | | | |
|-----------------------------|-------|-------|-------|-------|-------|-------|-------|
| DN | 50 | 80* | 100* | 150* | 200* | 250* | 300* |
| NPS | 2 | 3 | 4 | 6 | 8 | 10 | 12 |
| L | 451 | 578 | 673 | 914 | 1022 | 1270 | 1422 |
| L1 | 451 | 578 | 673 | 914 | 1022 | 1270 | 1422 |
| L2 | 454 | 584 | 684 | 928 | 1038 | 1292 | 1445 |
| kD | 235 | 305 | 355 | 485 | 550 | 675 | 760 |
| T | 50.9 | 66.7 | 76.2 | 108 | 127 | 165.1 | 184.2 |
| K(PCD) | 171.5 | 228.6 | 273 | 368.3 | 438.2 | 539.8 | 619.2 |
| n | 08 | 08 | 08 | 08 | 12 | 12 | 12 |
| kd | 28.6 | 35 | 41.3 | 53.9 | 53.8 | 66.5 | 73.2 |
| ~H(Close)(H1) | 357 | 500 | 530 | 670 | 730 | 810 | 970 |
| ~H(Open) | 407 | - | - | - | - | - | - |
| kb | 38 | 57 | 73 | 111 | 146 | 184 | 219 |
| Aprox.wt.â | 110.7 | 217.2 | 340.5 | 637 | 1097 | 1865 | 2767 |

*For Gear Operated Valves

NOTE: The above data is subject to change without notice due to our continuing product improvement program. (WEIGHT GIVEN IN KGS)

Flanges upto 24" as per ASME 16.5 and above 24" as per ASME 16.47 series A or B. H1 for gear operated valves.

| TEST PRESSURES | | | | | | |
|----------------|--------------------------|------------|---------|------------|---------|-----------|
| CLASS | SHELL TEST (HYDROSTATIC) | | | | | |
| | | | | | | |
| 900 | 230 Bar | 3350 Psi g | 169 Bar | 2451 Psi g | 6.9 bar | 100 Psi g |
| 1500 | 384 Bar | 5568 Psi g | 282 Bar | 4075 Psi g | 6.9 bar | 100 Psi g |
| 2500 | 639 Bar | 9372 Psi g | 469 Bar | 6785 Psi g | 6.9 bar | 100 Psi g |

NOTE: The above data is subject to change without notice due to our continuing product improvement program.



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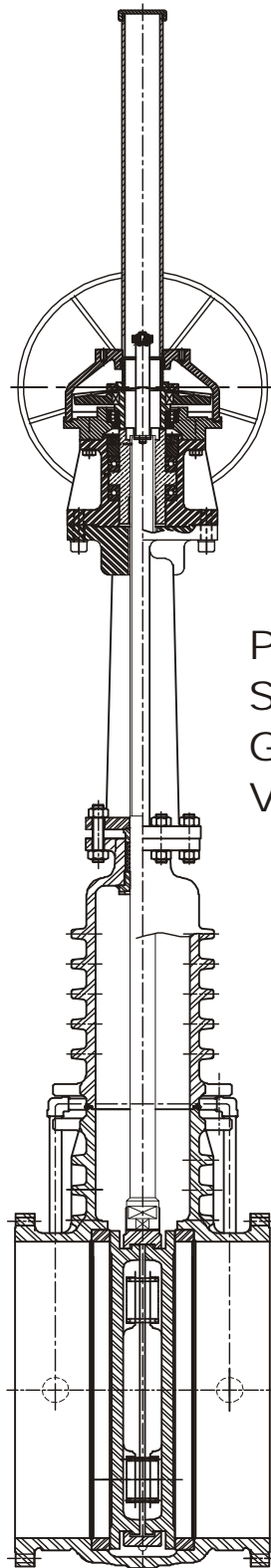
CAST STEEL PARALLEL SLIDE GATE VALVES

Features and benefits

- Self cleaning action between disk & seat
Welded in seats hard faced with Stellite or Equivalent.
- Low cost Maintenance
Lower operating forces than wedge gate design.
- Lower Pressure drop characteristic than wedge gate valve.
- Minimised flow turbulence
- Improved sealing assisted by line pressure.

Typical Applications

- Spray Water
- Blow Off Service
- Blow Down Service
- H.P Feed Heater Isolation & By-Pass
- Main Steam Isolation
- Boiler Feed Pump Isolation
- Steam Turbine Inlet Isolation



Parallel
Slide
Gate
Valve



CAST STEEL LOW TEMPERATURE CRYOGENIC GATE VALVES API 600, BS: 6364, EXTENDED BONNET

Features and benefits

- Adapted to Special Service
- Extended bonnets with sufficient gas column length, are supplied for all valves to keep stem packing at sufficient distance away from the cold fluid to remain functional.
- Flexible wedges with Stellite seating faces for cryogenic service.
- Cleaning: All cryogenic valves are thoroughly degreased and cleaned and pipe ends are sealed to prevent contamination.

