



Range NPS: 1/4" ~ 40"



PED 97/23/EC
PED 2014/68/EU



TR TS 10/11,
12/11, 32/11



Range Class: 150 ~ 2500



CERTIFICATE
EN 12 569

Operating temperature: -196 °C ~ 550 °C

Connection into piping: Flanged, welded ends, threaded ends, combined execution



DESCRIPTION

C09 2 gate valves are controlled shut-off valves. They are designed to stop or allow the flow of the medium by external operation, either manually or via the installed drive. They are not intended to regulate the flow of the transported medium. The medium can flow in both directions. These gate valves are designed and manufactured to ensure maximum service life and reliability.

MATERIAL SPECIFICATION

C09 2 gate valves are made from carbon, alloyed and stainless steels. The material type can be adjusted according to the customer's request to optimally suit the operating conditions.

APPLICATION

C09 2 gate valves are mainly suitable for various chemicals and petrochemicals, liquids, gases and steam.

BASIC STANDARDS FOR DESIGN

Basic design

API 602, API 600, ASME B16.34

Pressure-temperature rating

ASME B16.34

Testing

API 598, EN 12 266 - 1, 2

Face-to-face dimensions

ANSI B16.10

Dimensions of the welded ends

ANSI B16.25, ASME B16.11

Top Flange dimensions

EN ISO 5210

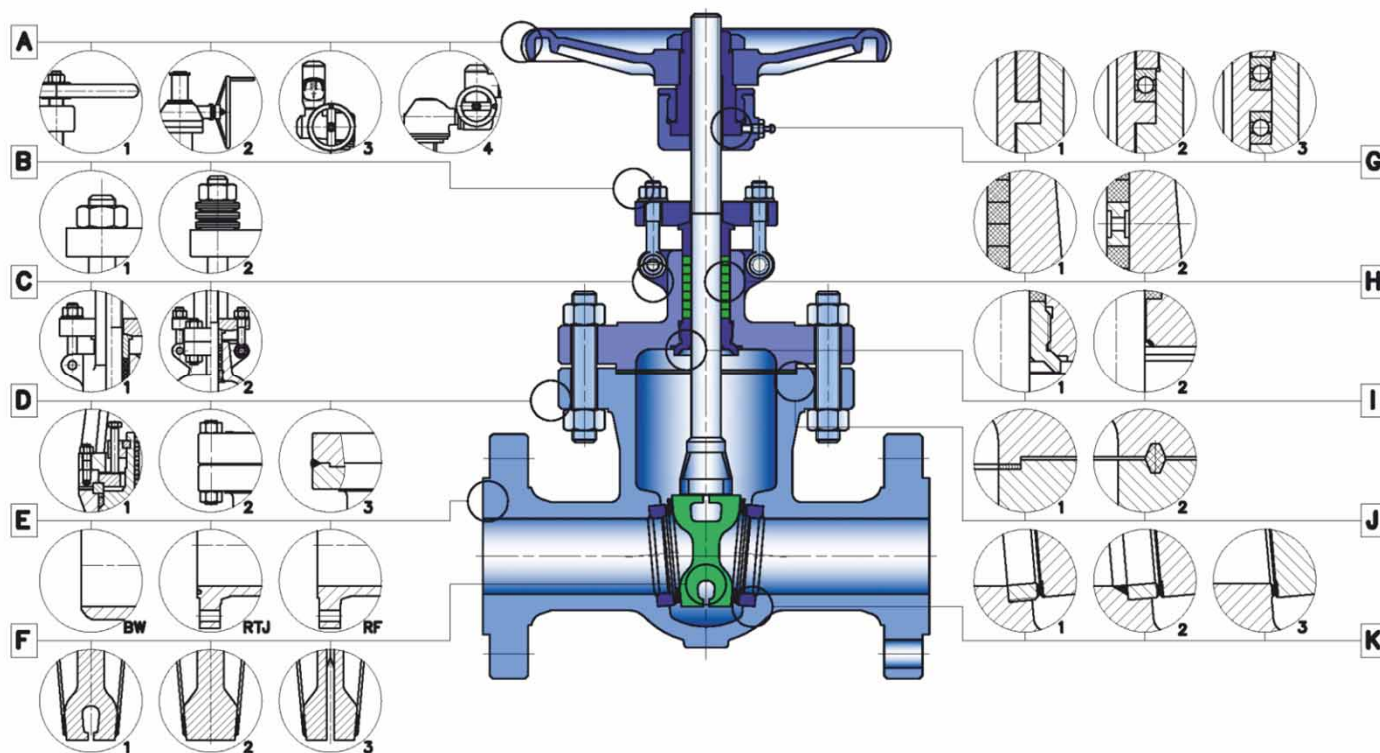
Flange dimensions

ANSI B 16.5, ANSI B16.47A

Special

NACE MR-0175

STRUCTURAL DESIGN



A - Control

- hand wheel
- hand wheel + gearbox
- electric actuator
- electric actuator with gearbox

B – Gland compression

- in case of valve operation with cyclic changes in pressure or at high pressures and temperatures, gland compression by means of Belleville springs, which ensure a constant pre-stress in packing, is preferred.

C – Yoke execution

- yoke is the separate detail fixed by bolts to the bonnet
- yoke as integral part of the bonnet (yoke-bonnet)

D - Bonnet execution

- pressure seal bonnet is used for high pressures, temperatures and operation with cyclic changes of pressure
- the bonnet bolted to the body
- the bonnet welded to the body

E – Connection to piping

- flanged
- threaded
- socket welding
- welded ends
- welded ends according to customer's requirements

F – Wedge execution

- solid
- flexible
- split wedge

G - Bedding of stem nut

- friction (sliding) type
- combination of sliding and rolling stem nut bedding
- bedding of stem nut between two axial rolling bearings

H – Execution of gland packing

- standard
- double-stem packing with lantern ring-shall be chosen according to working conditions

I - Back-seat execution

- screwed into the bonnet
- integral part of the bonnet

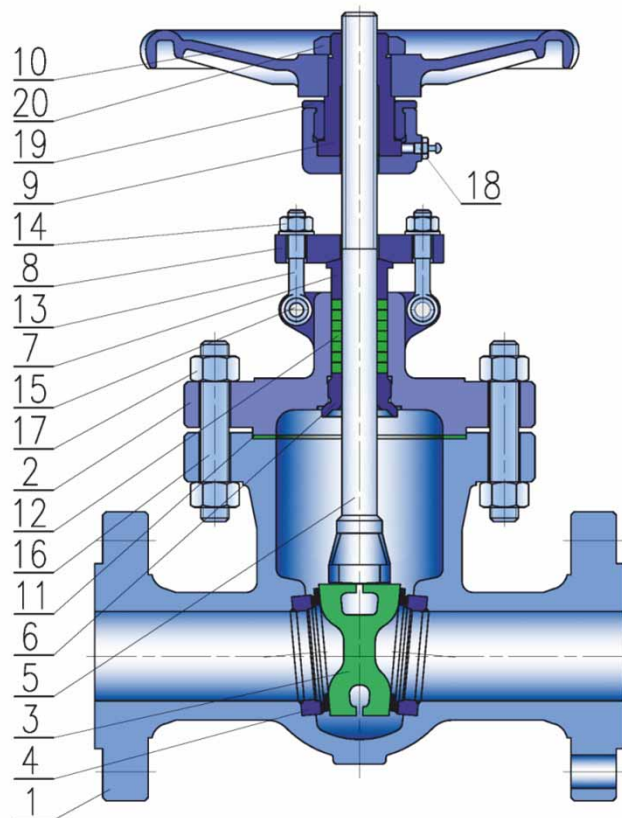
J - Bonnet sealing

- Class150,300 - by gasket for male-female body/bonnet connection
- Class600,900 – RTJ ring
- Class1500,2500 - by pressure seal bonnet

K - Seats execution

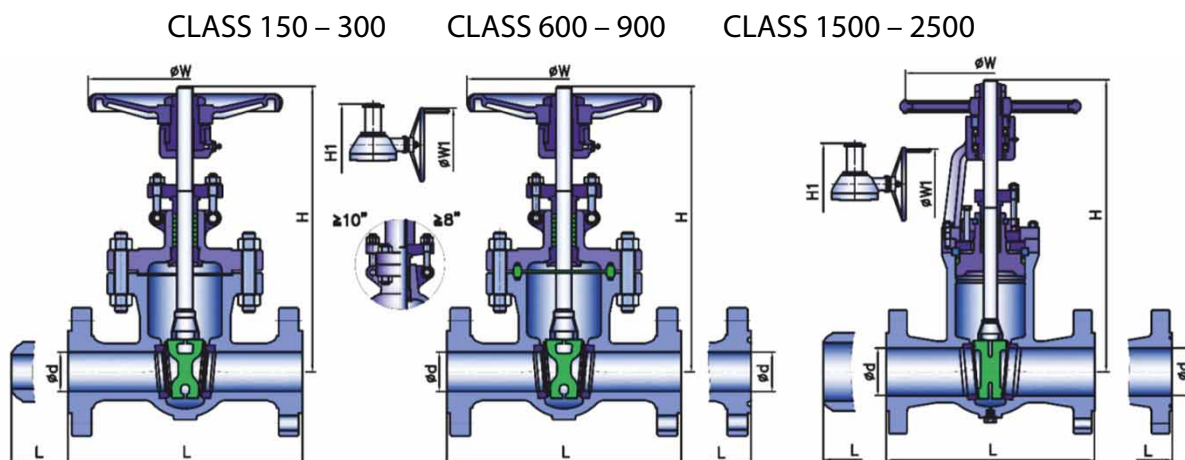
- the seats are screwed into the body
- the seats are inserted into the body and welded on
- the seats consist of a weld deposit on the body

MATERIAL SPECIFICATION - CAST



| Pos. | Designation | WCB | LCC | LCB | WC6 | WC9 | C5 | C12 | CF8 / 304 | CF8M / 316 |
|------|----------------------|--|-----------------------|-----------------------|-----------------------|-----------------------|----------------------|-----------------------|-----------------------|------------------------|
| 1 | Body | A216 WCB | A352 LCC | A352 LCB | A217 WC6 | A217 WC9 | A217 C5 | A217 C12 | A351 CF8 | A351 CF8M |
| 2 | Bonnet | A216 WCB | A352 LCC | A352 LCB | A217 WC6 | A217 WC9 | A217 C5 | A217 C12 | A351 CF8 | A351 CF8M |
| 3 | Wedge | A216 WCB + overlay | A352 LCC + overlay | A352 LCB + overlay | A217 WC6 + overlay | A217 WC9 + overlay | A217 C5 + overlay | A217 C12 + overlay | A351 CF8 + overlay | A351 CF8M + overlay |
| 4 | Seat | A105 + overlay | A350 LF2 + overlay | A350 LF2 + overlay | A182 F5 + overlay | A182 F5 + overlay | A182 F5 + overlay | A182 F5 + overlay | A351 CF8 + overlay | A351 CF8M + overlay |
| 5 | Stem | A182 F6a | A182 F6a | A182 F6a | A182 F6a | A182 F6a | A182 F6a | A182 F6a | A276 F304 | A276 F316 |
| 6 | Back Seat | A182 F6a | A182 F6a | A182 F6a | A182 F6a | A182 F6a | A182 F6a | A182 F6a | A351 CF8 | A351 CF8M |
| 7 | Stuffing Box Bushing | A182 F6a | A182 F6a | A182 F6a | A182 F6a | A182 F6a | A182 F6a | A182 F6a | A182 F304 | A182 F316 |
| 8 | Gland Flange | A216 WCB | A352 LCC | A352 LCB | A217 WC6 | A217 WC9 | A217 C5 | A217 C12 | A351 CF8 | A351 CF8M |
| 9 | Stem Nut | bronze, A439 D2 | | | | | | | | |
| 10 | Hand Wheel | cast iron | | | | | | | | |
| 11 | Bonnet Gasket | graphite, 304 + graphite, 316 + graphite | | | | | | | | |
| 12 | Gland Packing | graphite | | | | | | | | |
| 13 | Eye Bolt | A193 B7 | A320 L7 | A320 L7 | A193 B16 | A193 B16 | A193 B16 | A193 B16 | A193 B8 | A193 B8M |
| 14 | Nut | A194 2H | A194 4 | A194 4 | A194 2H | A194 2H | A194 2H | A194 2H | A194 8 | A194 8M |
| 15 | Pin | A276 410 | A276 410 | A276 410 | A276 410 | A276 410 | A276 410 | A276 410 | 304 | 316 |
| 16 | Bonnet Bolt | A193 B7 | A320 L7 | A320 L7 | A193 B16 | A193 B16 | A193 B16 | A193 B16 | A193 B8 | A193 B8M |
| 17 | Nut | A194 2H | A194 4 | A194 4 | A194 2H | A194 2H | A194 2H | A194 2H | A194 8 | A194 8M |
| 18 | Grease Nipple | carbon steel | | | | | | | | |
| 19 | Threaded Bushing | carbon steel | | | | | | | | |
| 20 | Nut | carbon steel | | | | | | | | |

DIMENSIONS - CAST



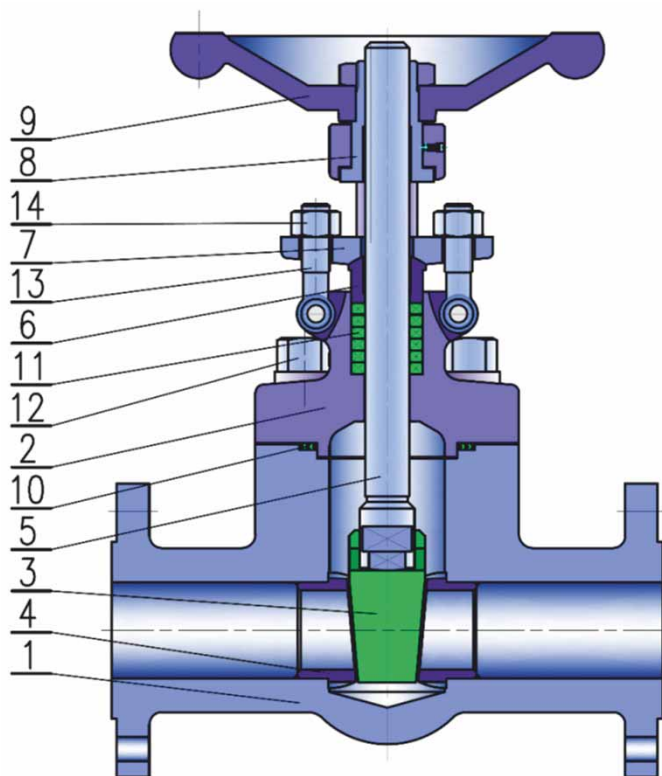
| Diameter | | CLASS 150 | | | | | | | | | CLASS 300 | | | | | | | | | | |
|----------|------|-----------|-------|------|-----|------|------|-----|-----|------|-----------|------|-------|------|-----|------|------|-----|-----|------|------|
| NPS | DN | L | | | d | H | H1 | W | W1 | (KG) | | L | | | d | H | H1 | W | W1 | (KG) | |
| | | 1/RF | 1/RTJ | 2 | | | | | | H.W. | G.O. | 1/RF | 1/RTJ | 2 | | | | | | H.W. | G.O. |
| 2 | 50 | 178 | 191 | 216 | 51 | 400 | - | 200 | - | 19 | - | 216 | 232 | 216 | 51 | 420 | - | 200 | - | 26 | - |
| 2 1/2 | 65 | 191 | 203 | 241 | 64 | 435 | - | 200 | - | 27 | - | 241 | 257 | 241 | 64 | 446 | - | 200 | - | 31 | - |
| 3 | 80 | 203 | 216 | 283 | 76 | 515 | - | 250 | - | 34 | - | 283 | 298 | 283 | 76 | 537 | - | 250 | - | 49 | - |
| 4 | 100 | 229 | 241 | 305 | 102 | 595 | - | 280 | - | 49 | - | 305 | 321 | 305 | 102 | 619 | 650 | 280 | 310 | 74 | 101 |
| 5 | 125 | 254 | 267 | 381 | 127 | 725 | - | 280 | - | 63 | - | 381 | 397 | 381 | 127 | 722 | 750 | 300 | 310 | 99 | 127 |
| 6 | 150 | 267 | 279 | 403 | 152 | 780 | 820 | 300 | 310 | 78 | 105 | 403 | 419 | 403 | 152 | 806 | 835 | 350 | 310 | 131 | 187 |
| 8 | 200 | 292 | 305 | 419 | 203 | 975 | 1020 | 350 | 310 | 125 | 151 | 419 | 435 | 419 | 203 | 1000 | 1030 | 400 | 310 | 209 | 236 |
| 10 | 250 | 330 | 343 | 457 | 254 | 1150 | 1200 | 400 | 310 | 188 | 217 | 457 | 473 | 457 | 254 | 1240 | 1280 | 450 | 310 | 336 | 387 |
| 12 | 300 | 356 | 368 | 502 | 305 | 1380 | 1430 | 450 | 310 | 288 | 317 | 502 | 518 | 502 | 305 | 1425 | 1460 | 500 | 310 | 452 | 503 |
| 14 | 350 | 381 | 394 | 572 | 337 | 1545 | 1580 | 500 | 310 | 387 | 437 | 572 | 588 | 572 | 337 | 1585 | 1620 | 600 | 460 | 706 | 757 |
| 16 | 400 | 406 | 419 | 610 | 387 | 1733 | 1780 | 500 | 460 | 502 | 554 | 610 | 626 | 610 | 387 | 1790 | 1830 | 500 | 460 | 925 | 966 |
| 18 | 450 | 432 | 445 | 660 | 438 | 1915 | 1990 | 500 | 460 | 603 | 655 | 660 | 676 | 660 | 438 | 1960 | 2000 | 650 | 460 | 1133 | 1226 |
| 20 | 500 | 457 | 470 | 711 | 489 | 2122 | 2220 | 600 | 460 | 766 | 818 | 711 | 727 | 711 | 489 | 2158 | 2220 | 750 | 460 | 1347 | 1402 |
| 24 | 600 | 508 | 521 | 813 | 591 | 2520 | 2600 | 600 | 460 | 1009 | 1187 | 813 | 829 | 813 | 591 | 2576 | 2620 | 900 | 600 | 2125 | 2387 |
| 26 | 650 | 559 | - | 864 | 633 | - | 2800 | - | 600 | - | 1552 | 1245 | 1270 | 1245 | 633 | - | 2850 | - | 600 | - | 3002 |
| 28 | 700 | 610 | - | 914 | 684 | - | 3050 | - | 600 | - | 1882 | 1346 | 1372 | 1346 | 684 | - | 3080 | - | 600 | - | 3302 |
| 30 | 750 | 610 | - | 914 | 735 | - | 3130 | - | 600 | - | 2300 | 1397 | 1422 | 1397 | 735 | - | 3180 | - | 600 | - | 3552 |
| 32 | 800 | 660 | - | 965 | 779 | - | 3280 | - | 600 | - | 2552 | 1524 | 1553 | 1524 | 779 | - | 3300 | - | 600 | - | 4400 |
| 34 | 850 | 762 | - | 1016 | 830 | - | 3500 | - | 600 | - | 2952 | 1626 | 1654 | 1626 | 830 | - | 3550 | - | 600 | - | 5202 |
| 36 | 900 | 711 | - | 1016 | 874 | - | 3720 | - | 600 | - | 3390 | 1727 | 1756 | 1727 | 874 | - | 3760 | - | 600 | - | 6052 |
| 40 | 1000 | 813 | - | 1067 | 976 | - | 3800 | - | 600 | - | 3750 | 1955 | - | 1955 | 976 | - | 3920 | - | 600 | - | 6260 |

DIMENSIONS - CAST

| Diameter | | CLASS 600 | | | | | | | | | | CLASS 900 | | | | | | | | | |
|----------|------|-----------|-------|------|-----|------|------|-----|-----|------|------|-----------|-------|------|-----|------|------|-----|-----|------|------|
| NPS | DN | L | | | d | H | H1 | W | W1 | (KG) | | L | | | d | H | H1 | W | W1 | (KG) | |
| | | 1/RF | 1/RTJ | 2 | | | | | | H.W. | G.O. | 1/RF | 1/RTJ | 2 | | | | | | H.W. | G.O. |
| 2 | 50 | 292 | 295 | 292 | 51 | 444 | - | 200 | - | 33 | - | 368 | 371 | 368 | 51 | 500 | - | 280 | - | 70 | - |
| 2 1/2 | 65 | 330 | 333 | 330 | 64 | 500 | - | 250 | - | 53 | - | 419 | 422 | 419 | 64 | 550 | - | 280 | - | 110 | - |
| 3 | 80 | 356 | 359 | 356 | 76 | 558 | 585 | 280 | 310 | 61 | 88 | 381 | 384 | 381 | 76 | 610 | 600 | 300 | 310 | 141 | 168 |
| 4 | 100 | 432 | 435 | 432 | 102 | 665 | 695 | 300 | 310 | 108 | 135 | 457 | 460 | 457 | 102 | 702 | 750 | 350 | 310 | 200 | 228 |
| 5 | 125 | 508 | 511 | 508 | 127 | 760 | 790 | 350 | 310 | 176 | 228 | 559 | 565 | 559 | 127 | 850 | 900 | 400 | 310 | 259 | 286 |
| 6 | 150 | 559 | 562 | 559 | 152 | 868 | 900 | 450 | 310 | 217 | 269 | 610 | 613 | 610 | 152 | 980 | 1060 | 500 | 460 | 359 | 411 |
| 8 | 200 | 660 | 664 | 660 | 203 | 1073 | 1110 | 500 | 310 | 399 | 452 | 737 | 740 | 737 | 203 | 1100 | 1140 | 650 | 460 | 551 | 602 |
| 10 | 250 | 787 | 791 | 787 | 254 | 1263 | 1300 | 650 | 460 | 606 | 658 | 838 | 841 | 838 | 254 | 1320 | 1370 | 700 | 460 | 1002 | 1102 |
| 12 | 300 | 838 | 841 | 838 | 305 | 1600 | 1650 | 700 | 460 | 852 | 894 | 965 | 968 | 965 | 305 | 1500 | 1560 | 900 | 460 | 1217 | 1312 |
| 14 | 350 | 889 | 892 | 889 | 337 | 1705 | 1750 | 900 | 460 | 1179 | 1234 | 1029 | 1039 | 1029 | 322 | 1900 | 1955 | 900 | 600 | 1600 | 1702 |
| 16 | 400 | 991 | 994 | 991 | 387 | 1835 | 1900 | 900 | 460 | 1515 | 1568 | 1130 | 1140 | 1130 | 373 | 2050 | 2100 | 900 | 600 | 2152 | 2332 |
| 18 | 450 | 1092 | 1095 | 1092 | 438 | - | 2020 | - | 600 | - | 1982 | 1219 | 1232 | 1219 | 438 | - | 2362 | - | 600 | - | 3000 |
| 20 | 500 | 1194 | 1200 | 1194 | 489 | - | 2172 | - | 600 | - | 2462 | 1321 | 1334 | 1321 | 489 | - | 2463 | - | 600 | - | 3800 |
| 24 | 600 | 1397 | 1407 | 1397 | 591 | - | 2650 | - | 600 | - | 3652 | - | - | - | - | - | - | - | - | - | - |
| 28 | 700 | 1549 | 1562 | 1549 | 684 | - | 2862 | - | 600 | - | 5547 | - | - | - | - | - | - | - | - | - | - |
| 32 | 800 | 1778 | 1794 | 1778 | 779 | - | 3100 | - | 600 | - | 6800 | - | - | - | - | - | - | - | - | - | - |
| 36 | 900 | 2083 | 2099 | 2083 | 876 | - | 3450 | - | 600 | - | 8100 | - | - | - | - | - | - | - | - | - | - |
| 40 | 1000 | 2149 | - | 2149 | 976 | - | 3600 | - | 600 | - | 9500 | - | - | - | - | - | - | - | - | - | - |

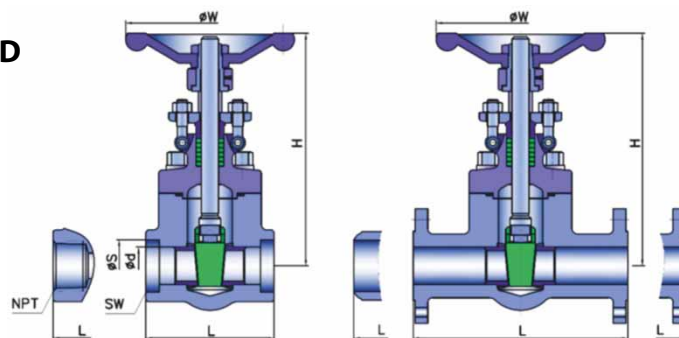
| Diameter | | CLASS 1500 | | | | | | | | | | CLASS 2500 | | | | | | | | | |
|----------|-----|------------|-------|------|-----|------|------|-----|-----|------|------|------------|-------|------|-----|------|------|-----|-----|------|------|
| NPS | DN | L | | | d | H | H1 | W | W1 | (KG) | | L | | | d | H | H1 | W | W1 | (KG) | |
| | | 1/RF | 1/RTJ | 2 | | | | | | H.W. | G.O. | 1/RF | 1/RTJ | 2 | | | | | | H.W. | G.O. |
| 2 | 50 | 368 | 371 | 368 | 51 | 510 | - | 280 | - | 71 | - | 451 | 454 | 451 | 42 | 530 | 580 | 280 | 310 | 100 | 130 |
| 2 1/2 | 65 | 419 | 422 | 419 | 64 | 560 | - | 300 | - | 111 | - | 508 | 514 | 508 | 52 | 580 | 630 | 300 | 310 | 150 | 180 |
| 3 | 80 | 470 | 473 | 470 | 76 | 620 | 670 | 350 | 310 | 175 | 202 | 578 | 584 | 578 | 62 | 650 | 700 | 350 | 310 | 245 | 275 |
| 4 | 100 | 546 | 549 | 546 | 102 | 728 | 770 | 400 | 310 | 270 | 300 | 673 | 683 | 673 | 87 | 750 | 800 | 400 | 310 | 390 | 420 |
| 5 | 125 | 673 | 676 | 673 | 127 | 870 | 920 | 450 | 310 | 378 | 405 | 794 | 807 | 794 | 96 | 900 | 960 | 500 | 460 | 550 | 580 |
| 6 | 150 | 705 | 711 | 705 | 144 | 1000 | 1070 | 500 | 460 | 520 | 575 | 914 | 927 | 914 | 131 | 1040 | 1100 | 600 | 460 | 780 | 835 |
| 8 | 200 | 832 | 841 | 832 | 192 | 1130 | 1180 | 750 | 460 | 820 | 915 | 1022 | 1098 | 1022 | 179 | 1150 | 1200 | 750 | 460 | 1260 | 1355 |
| 10 | 250 | 991 | 1000 | 991 | 239 | 1360 | 1410 | 900 | 600 | 1560 | 1750 | 1270 | 1292 | 1270 | 223 | 1400 | 1460 | 900 | 600 | 2380 | 2565 |
| 12 | 300 | 1130 | 1146 | 1130 | 287 | - | 1620 | - | 600 | - | 2120 | 1422 | 1445 | 1422 | 265 | - | 1660 | - | 600 | - | 3250 |
| 14 | 350 | 1257 | 1276 | 1257 | 315 | - | 2020 | - | 600 | - | 2600 | - | - | - | - | - | - | - | - | - | - |
| 16 | 400 | 1384 | 1407 | 1384 | 360 | - | 2180 | - | 600 | - | 3450 | - | - | - | - | - | - | - | - | - | - |

MATERIAL SPECIFICATION - FORGED



| Pos. | Designation | A350 LF2 | A105 | A182 F5 | A182 F9 | A182 F304 | A182 F316 |
|------|-------------------------|--|-------------------|----------------------|----------------------|------------------------|------------------------|
| 1 | Body | A350 LF2 | A105 | A182 F5 | A182 F9 | A182 F304 | A182 F316 |
| 2 | Bonnet | A350 LF2 | A105 | A182 F5 | A182 F9 | A182 F304 | A182 F316 |
| 3 | Wedge | A350 LF2 + overlay | A105 + overlay | A182 F5 + overlay | A182 F9 + overlay | A182 F304 + overlay | A182 F316 + overlay |
| 4 | Seat | A350 LF2 + overlay | A105 + overlay | A182 F5 + overlay | A182 F9 + overlay | A182 F304 + overlay | A182 F316 + overlay |
| 5 | Stem | A182 F6a | A182 F6a | A182 F6a | A182 F6a | A276 F304 | A276 F316 |
| 6 | Stuffing Box Bushing | A182 F6a | A182 F6a | A182 F6a | A182 F6a | A182 F304 | A182 F316 |
| 7 | Gland Flange | A350 LF2 | A105 | A182 F5 | A182 F9 | A182 F304 | A182 F316 |
| 8 | Stem Nut | bronze, A439 D2 | | | | | |
| 9 | Hand Wheel | cast iron | | | | | |
| 10 | Bonnet Gasket | graphite, 304 + graphite, 316 + graphite | | | | | |
| 11 | Gland Packing | graphite | | | | | |
| 12 | Bonnet Bolt | A320 L7 | A193 B7 | A193 B16 | A193 B16 | A193 B8 | A193 B8M |
| 13 | Eye Bolt | A320 L7 | A193 B7 | A193 B16 | A193 B16 | A193 B8 | A193 B8M |
| 14 | Nut | A194 4 | A194 2H | A194 2H | A194 2H | A194 8 | A194 8M |

DIMENSIONS - FORGED



| Diameter | | CLASS 150 | | | | | | | | | | CLASS 300 | | | | | | | | | |
|----------|----|-----------|-------|-----|-----|-----|------|------|-----|-----|------|-----------|------|-------|-----|-----|------|------|-----|-----|------|
| NPS | DN | L | | | | | d | S | H | W | (KG) | L | | | | | d | S | H | W | (KG) |
| | | 1/RF | 1/RTJ | 2 | 3 | 4 | | | | | | H.W. | 1/RF | 1/RTJ | 2 | 3 | | | | | |
| 1/8 | 6 | 108 | - | 108 | 79 | 79 | 3,2 | 14,2 | 166 | 100 | 2,2 | 140 | - | 140 | 79 | 79 | 3,2 | 14,2 | 166 | 100 | 2,5 |
| 3/8 | 10 | 108 | - | 108 | 79 | 79 | 5,9 | 17,6 | 166 | 100 | 2,2 | 140 | - | 140 | 79 | 79 | 5,9 | 17,6 | 166 | 100 | 2,5 |
| 1/2 | 15 | 108 | 119 | 108 | 79 | 79 | 9,5 | 21,8 | 166 | 100 | 3 | 140 | 151 | 140 | 79 | 79 | 9,5 | 21,8 | 166 | 100 | 3,5 |
| 3/4 | 20 | 117 | 130 | 117 | 92 | 92 | 12,7 | 27,1 | 169 | 100 | 3,5 | 152 | 165 | 152 | 92 | 92 | 12,7 | 27,1 | 169 | 100 | 5 |
| 1 | 25 | 127 | 140 | 127 | 111 | 111 | 17,5 | 33,8 | 193 | 125 | 5,5 | 165 | 178 | 165 | 111 | 111 | 17,5 | 33,8 | 193 | 125 | 7 |
| 1 1/2 | 40 | 165 | 178 | 165 | 120 | 120 | 28,6 | 48,7 | 246 | 160 | 10,5 | 190 | 203 | 190 | 120 | 120 | 28,6 | 48,7 | 246 | 160 | 13,5 |
| 2 | 50 | 178 | 190 | 216 | 140 | 140 | 36,5 | 61,1 | 283 | 180 | 14,5 | 216 | 232 | 216 | 140 | 140 | 36,5 | 61,1 | 283 | 180 | 18 |

| Diameter | | CLASS 600 | | | | | | | | | | CLASS 800 | | | | | | | | | |
|----------|----|-----------|-------|-----|-----|-----|------|------|-----|-----|------|-----------|------|-------|-----|-----|------|------|-----|-----|------|
| NPS | DN | L | | | | | d | S | H | W | (KG) | L | | | | | d | S | H | W | (KG) |
| | | 1/RF | 1/RTJ | 2 | 3 | 4 | | | | | | H.W. | 1/RF | 1/RTJ | 2 | 3 | | | | | |
| 1/8 | 6 | 165 | - | 165 | 79 | 79 | 3,2 | 14,2 | 166 | 100 | 3 | - | - | - | 79 | 79 | 3,2 | 14,2 | 166 | 100 | 2,2 |
| 3/8 | 10 | 165 | - | 165 | 79 | 79 | 5,9 | 17,6 | 166 | 100 | 3 | - | - | - | 79 | 79 | 5,9 | 17,6 | 166 | 100 | 2,2 |
| 1/2 | 15 | 165 | 165 | 165 | 79 | 79 | 9,5 | 21,8 | 166 | 100 | 4,5 | - | - | - | 79 | 79 | 9,5 | 21,8 | 166 | 100 | 2,2 |
| 3/4 | 20 | 190 | 190 | 190 | 92 | 92 | 12,7 | 27,1 | 169 | 100 | 6 | - | - | - | 92 | 92 | 12,7 | 27,1 | 169 | 100 | 2,2 |
| 1 | 25 | 216 | 216 | 216 | 111 | 111 | 17,5 | 33,8 | 193 | 125 | 9 | - | - | - | 111 | 111 | 17,5 | 33,8 | 193 | 125 | 5 |
| 1 1/2 | 40 | 241 | 241 | 241 | 120 | 120 | 28,6 | 48,7 | 246 | 160 | 16 | - | - | - | 120 | 120 | 28,6 | 48,7 | 246 | 160 | 7 |
| 2 | 50 | 292 | 295 | 292 | 140 | 140 | 36,5 | 61,1 | 283 | 180 | 19,5 | - | - | - | 140 | 140 | 36,5 | 61,1 | 283 | 180 | 11 |

| Diameter | | CLASS 900,1500 | | | | | | | | | | CLASS 2500 | | | | | | | | | |
|----------|----|----------------|-------|-----|-----|-----|------|------|-----|-----|------|------------|------|-------|-----|-----|------|------|-----|-----|------|
| NPS | DN | L | | | | | d | S | H | W | (KG) | L | | | | | d | S | H | W | (KG) |
| | | 1/RF | 1/RTJ | 2 | 3 | 4 | | | | | | H.W. | 1/RF | 1/RTJ | 2 | 3 | | | | | |
| 1/8 | 6 | 216 | - | 216 | 102 | 102 | 3,2 | 14,2 | 166 | 100 | 4 | 264 | - | 264 | 102 | 102 | 3,2 | 14,2 | 166 | 100 | 6 |
| 3/8 | 10 | 216 | - | 216 | 102 | 102 | 5,9 | 17,6 | 166 | 100 | 4 | 264 | - | 264 | 102 | 102 | 5,9 | 17,6 | 166 | 100 | 6 |
| 1/2 | 15 | 216 | 216 | 216 | 102 | 102 | 9,5 | 21,8 | 169 | 100 | 4 | 264 | 263 | 264 | 102 | 102 | 9,5 | 21,8 | 169 | 100 | 6 |
| 3.4 | 20 | 229 | 229 | 229 | 111 | 111 | 12,7 | 27,1 | 193 | 125 | 4 | 273 | 273 | 273 | 111 | 111 | 12,7 | 27,1 | 193 | 125 | 6 |
| 1 | 25 | 254 | 254 | 254 | 120 | 120 | 17,5 | 33,8 | 236 | 160 | 8 | 308 | 304 | 308 | 120 | 120 | 17,5 | 33,8 | 236 | 160 | 10 |
| 1 1/2 | 40 | 305 | 305 | 305 | 140 | 140 | 28,6 | 48,7 | 283 | 180 | 12 | 384 | 384 | 384 | 140 | 140 | 28,6 | 48,7 | 283 | 180 | 15 |
| 2 | 50 | 368 | 371 | 368 | 178 | 178 | 36,5 | 61,1 | 330 | 200 | 22 | 451 | 454 | 451 | 178 | 178 | 36,5 | 61,1 | 330 | 200 | 25 |

TYPE DESIGNATION

C09 2 C/D E M₁ Class/S

C

CONNECTION INTO PIPE

- 1 Flanged
- 2 Welded ends
- 3 Threaded
- 4 Socket welding
- 8 Combined

D

FLANGE FACING

ANSI B 16.5

- | | |
|------------|-------------------|
| PFF | Flat sealing face |
| RF | Raised face |
| LTF | Large tongue |
| STF | Small tongue |
| LGF | Large groove |
| SGF | Small groove |
| LMF | Large male |
| SMF | Small male |
| LFF | Large female |
| SFF | Small female |
| RTJ | Ring joint face |

E

CONTROL

- 1 Hand wheel
- 2 Gearbox + hand wheel
- 3 Electric actuators
- 4 Gearbox + electric actuators
- 5 Pneumatic actuators
- 9 Without control

M₁

BODY MATERIAL

- 0 Stainless steel
- 2 Cast alloy steel
- 3 Forged alloy steel
- 4 Forged carbon steel
- 5 Cast carbon steel
- LT Carbon steel for low temperatures

S

SPECIAL EXECUTION

- As** Antistatic execution
- B** With bypass

