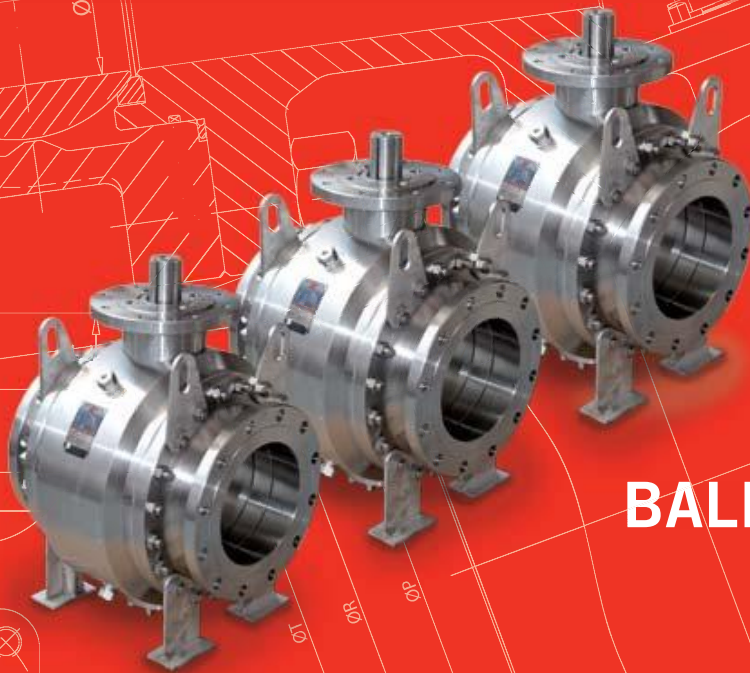


# JC VALVES

*The quality option*



## BALL VALVES

DN-300 (12 ) to DN-400 (16)  
Class-150 & 300  
DN-150 (6 ) to DN-300

| BALL VALVES |

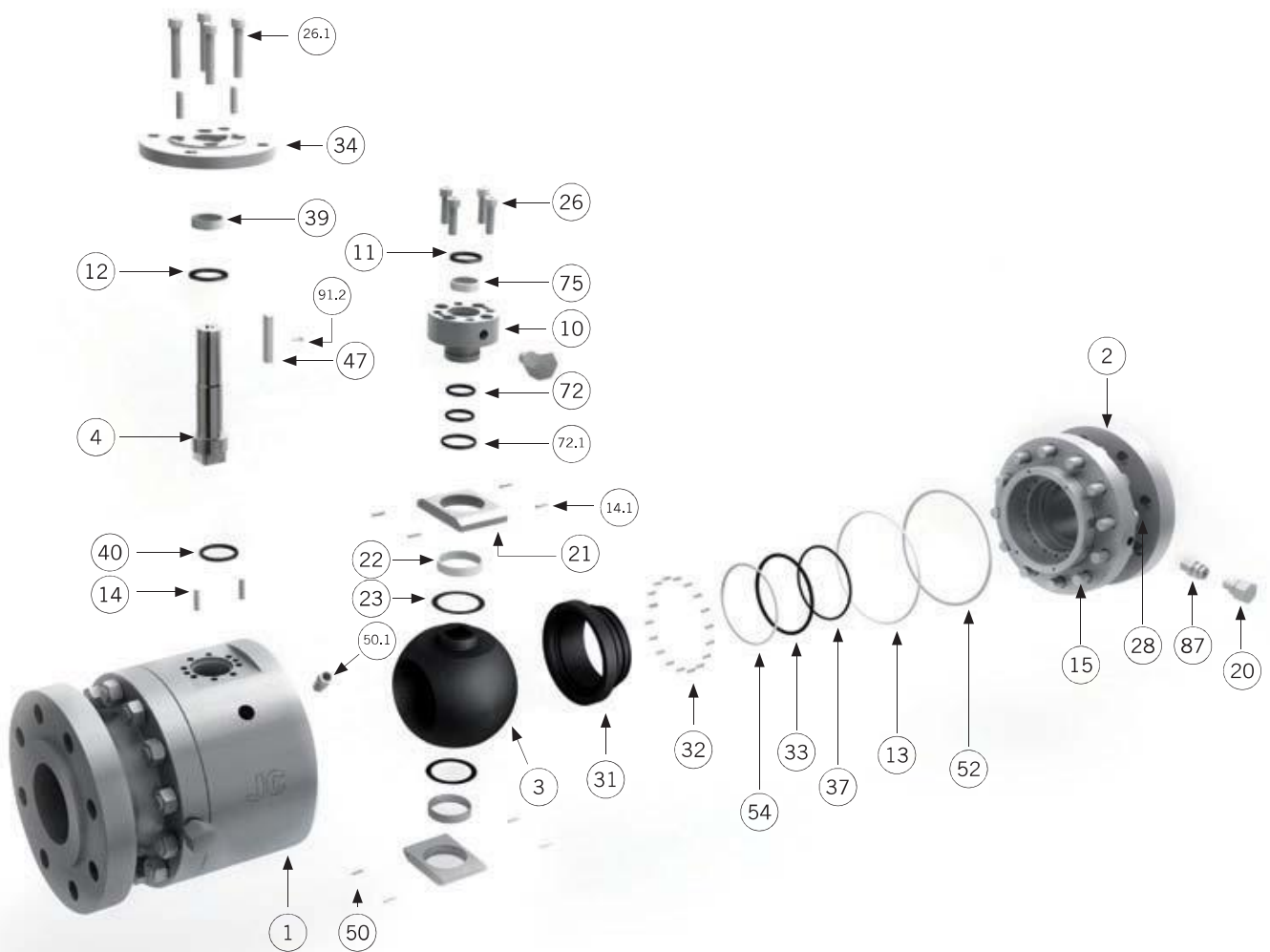
# METAL SEATED 3-PIECE FORGED TRUNNION MOUNTED

## 2" - 24" | Class 150 - Class 1500

A trunnion ball valve has additional mechanical anchoring of the ball at the top and the bottom, suitable for larger and higher pressure valves.

The JC trunnion mounted ball valves are suitable to stand the harsh service conditions often presented in the hydrocarbon industry and in the gas storage and transportation field. In general, they are recommended for tight shut-off in high pressure and double block and bleed applications.





# Materials

## SERIES 6000(M) & 7000(M)

| Item       | Description          | AIM                           | LIM  | IIM             |
|------------|----------------------|-------------------------------|--|-----------------|
| 1          | Body                 | A 105N                        | A 350 Gr. LF2 Class. 1                                       | A182 F316       |
| 2          | Body Connector       | A 105N                        | A 350 Gr. LF2 Class. 1                                       | A182 F316       |
| 3          | Ball                 |                               | A182 F316 or A351Gr. CF8M (Treatments HT-65, CT-70 or CC-60) |                 |
| 4          | Stem                 |                               | A 479 Tp.316   |                 |
| 10         | Gland                | A 105N                        | A 350 Gr. LF2 Class-1  | A 479 Tp.316    |
| 11         | Gland Packing        |                               | Graphite   |                 |
| 12         | Stem Thrust Seal     |                               | AISI 316 + HT-65   |                 |
| 13         | Body Connector Seal  |                               | Graphite   |                 |
| 14 / 14.1  | Pin                  | Carbon St.                    | Carbon Steel   | Stainless Steel |
| 15         | Stud                 | A 193 Gr. B7M Zinc dichromate | A 320 Gr. L7M  | A 193 Gr. B8M   |
| 19         | Antistatic Device    |                               | Stainless St.  |                 |
| 20         | Sealant Injector     | Carbon Steel                  | Carbon Steel   | Stainless Steel |
| 21         | Ball Trunnion        |                               | A 479 Tp.316   |                 |
| 22*        | Trunnion Bearing     |                               | AISI 316 with inside in PTFE                                 |                 |
| 23*        | Bearing              |                               | PTFE   |                 |
| 26 / 26.1  | Bolt                 | A 193 Gr. B7M Zinc dichromate | A 320 Gr. L7M  | A 193 Gr. B8M   |
| 28         | Nut                  | A 194 Gr. 2HM Zinc dichromate | A 194 Gr. 7M   | A 194 Gr. 8M    |
| 31         | Seat                 |                               | A 479 Tp.316 / A182 F316 (Treatments HT-65, CT-70 or CC-60)  |                 |
| 32         | Spring               |                               | Inconel - 750  |                 |
| 33*        | "O" Ring             |                               | AFLAS  |                 |
| 34         | Mounting Flange      | A 105N                        | A 350 Gr. LF2 Class-1  | A 479 Tp.316    |
| 37*        | "O" Ring             |                               | AFLAS  |                 |
| 39*        | Stem Bushing         |                               | AISI 316 with inside in PTFE                                 |                 |
| 40         | Gasket               |                               | Graphite   |                 |
| 47         | Key                  | Carbon Steel                  | Carbon Steel   | Stainless St.   |
| 50         | Drain Plug           | A 105                         | A 350 Gr. LF2 Class-1  | AISI 316        |
| 50.1       | Relieve Plug         | A 105                         | A 350 Gr. LF2 Class-1  | AISI 316        |
| 52*        | "O" Ring             |                               | AFLAS  |                 |
| 54         | Seat Carrier Seal    |                               | Graphite   |                 |
| 72* / 72.1 | "O" Ring             |                               | AFLAS  |                 |
| 75*        | Stem Bushing         |                               | AISI 316 with inside in PTFE                                 |                 |
| 87         | Check Valve          |                               | Stainless St.  |                 |
| 89         | Identification plate |                               | Stainless St.  |                 |
| 912        | Bolt                 |                               | DIN 912 A2   |                 |

(\*) In case of extreme high temperature it could be changed to another material.

METAL SEATED FORGED BALL VALVES 6015 / 6030 / 6060 / 6090 / 6050

Full Bore

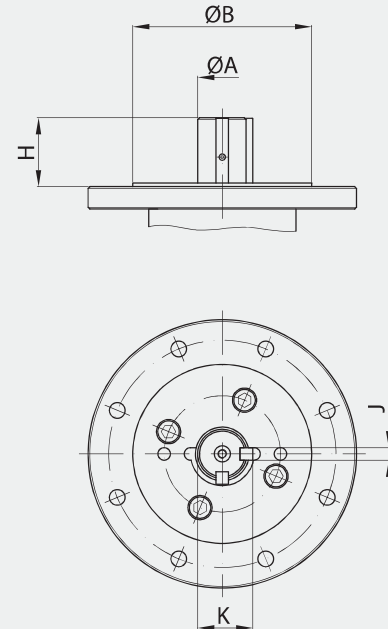
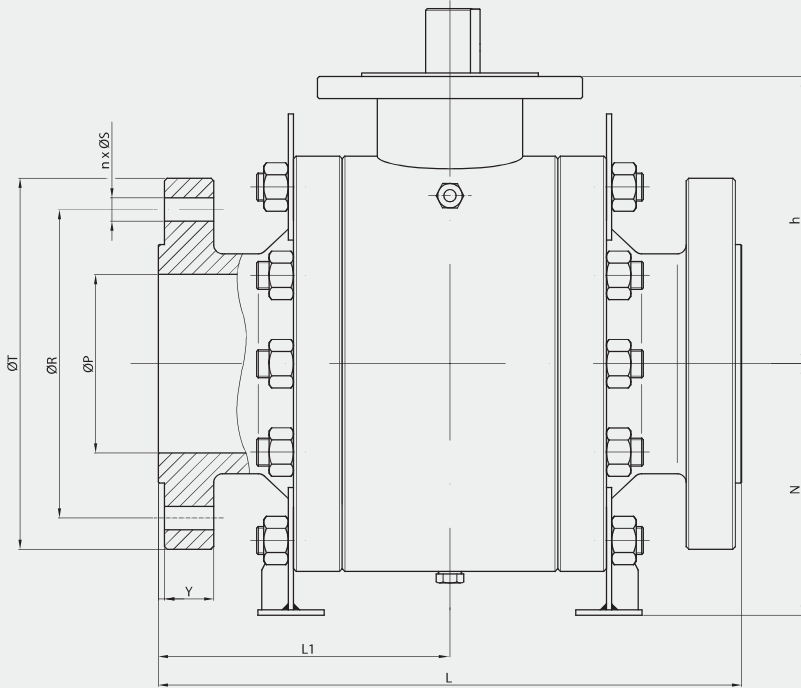
Class 150.  
From 2" to 24" (1)

Class 300.  
From 2" to 24" (1)

Class 600.  
From 2" to 24" (1)

Class 900.  
From 2" to 12" (1)

Class 1500.  
From 2" to 8" (1)



(\*) Dimensions of diameters of drills ISO 5211 refer to table from page 60.

Pressure - Temperature

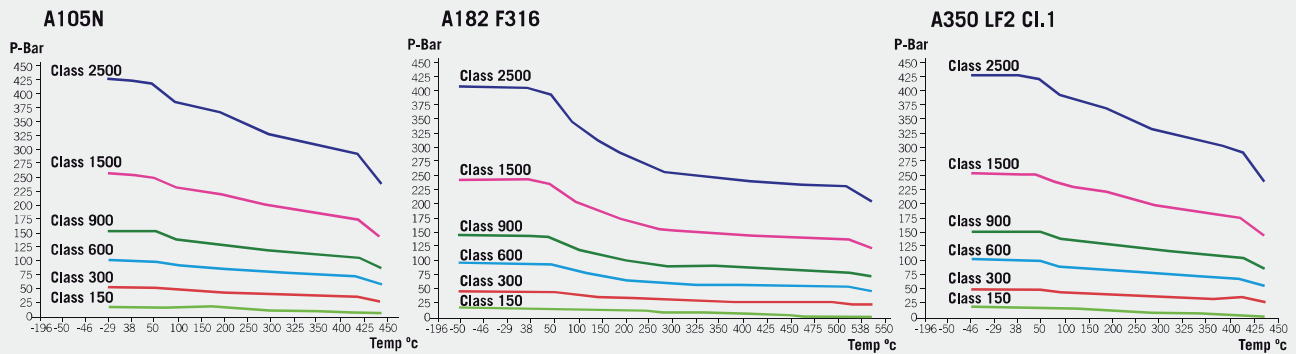


Fig. 6015 (Class 150)

| DN  | øP  | L     | L1    | øR    | n x øS    | øT  | Y  | h     | N     | ISO 5211 | H     | øA   | J  | K     | WEIGHT | TORQUE | Kv     |
|-----|-----|-------|-------|-------|-----------|-----|----|-------|-------|----------|-------|------|----|-------|--------|--------|--------|
| 2"  | 49  | 178   | 89    | 120.7 | 4 x 19    | 150 | 14 | 125   | 100   | F10      | 36,5  | 20   | 8  | 22,5  | 52     | 41     | 366    |
| 3"  | 76  | 203   | 101,5 | 152.4 | 4 x 19    | 190 | 18 | 156,5 | 133,5 | F12      | 37,5  | 26   | 10 | 30    | 59     | 97     | 938    |
| 4"  | 102 | 229   | 114,5 | 190.5 | 8 x 19    | 230 | 22 | 175   | 167   | F12      | 54    | 30   | 10 | 34    | 110    | 170    | 1.465  |
| 6"  | 152 | 394   | 197   | 241.3 | 8 x 22    | 280 | 24 | 269   | 277   | F16      | 71    | 39,9 | 14 | 48,9  | 171    | 457    | 3.297  |
| 8"  | 203 | 457   | 228,5 | 298.5 | 8 x 22.2  | 345 | 27 | 325   | 325   | F25      | 77    | 49,9 | 14 | 58,4  | 334    | 845    | 5.861  |
| 10" | 254 | 533   | 266,5 | 362   | 12 x 25.4 | 405 | 29 | 362   | 319   | F25      | 84,5  | 59,9 | 16 | 67    | 458    | 1.396  | 9.454  |
| 12" | 305 | 610   | 305   | 431.8 | 12 x 25.4 | 485 | 30 | 423   | 399   | F25      | 104   | 69,9 | 18 | 78    | 736    | 2.836  | 13.631 |
| 14" | 337 | 686   | 343   | 476.3 | 12 x 28.5 | 535 | 33 | 455   | 439   | F30      | 119   | 79,9 | 22 | 87,9  | 1.019  | 3.411  | 16.641 |
| 16" | 387 | 762   | 381   | 539.8 | 16 x 28.5 | 595 | 35 | 490   | 472   | F30      | 134   | 84,9 | 22 | 94,9  | 1.778  | 4.501  | 23.554 |
| 18" | 438 | 864   | 432   | 577.9 | 16 x 31.8 | 635 | 38 | 542   | 596   | F30      | 147,5 | 99,9 | 28 | 111,9 | 1.860  | 6.543  | 29.672 |
| 20" | 488 | 914   | 457   | 635   | 20 x 31.8 | 700 | 41 | 577   | 610   | F30      | 147,5 | 99,9 | 28 | 111,9 | 2.439  | 8.238  | 36.633 |
| 24" | 589 | 1.067 | 533,5 | 749.3 | 20 x 34.9 | 815 | 46 | 599   | 692   | F40      | 152   | 120  | 32 | 134   | 4.302  | 20.908 | 52.751 |

(\*) Dimensions in mm and weight in kg.  
(\*\*) Weights and dimensions can be changed without notice.  
(1) Bigger sizes available under customers request.

Fig. 6030 (Class 300)

| DN  | øP  | L     | L1    | øR    | n x øS    | øT  | Y  | h     | N     | ISO 5211 | H     | øA   | J  | K     | WEIGHT | TORQUE | Kv     |
|-----|-----|-------|-------|-------|-----------|-----|----|-------|-------|----------|-------|------|----|-------|--------|--------|--------|
| 2"  | 49  | 216   | 108   | 127   | 8 x 19    | 165 | 21 | 125   | 95    | F10      | 36,5  | 20   | 8  | 22,5  | 60     | 83     | 366    |
| 3"  | 76  | 283   | 141,5 | 168,3 | 8 x 22,2  | 210 | 27 | 156,5 | 133,5 | F12      | 37,5  | 26   | 10 | 30    | 72     | 208    | 938    |
| 4"  | 102 | 305   | 152,5 | 200   | 8 x 22,2  | 255 | 30 | 175   | 167   | F12      | 54    | 30   | 10 | 34    | 120    | 380    | 1.465  |
| 6"  | 152 | 403   | 201,5 | 269,9 | 12 x 22,2 | 320 | 35 | 269   | 277   | F16      | 71    | 39,9 | 14 | 48,9  | 195    | 1.089  | 3.297  |
| 8"  | 203 | 502   | 251   | 330,2 | 12 x 25,4 | 380 | 40 | 325   | 325   | F25      | 77    | 49,9 | 14 | 58,4  | 352    | 2.060  | 5.861  |
| 10" | 254 | 568   | 284   | 387,4 | 16 x 28,5 | 445 | 46 | 362   | 319   | F25      | 84,5  | 59,9 | 16 | 67    | 534    | 3.497  | 9.454  |
| 12" | 305 | 648   | 324   | 450,8 | 16 x 31,8 | 520 | 49 | 423   | 399   | F25      | 104   | 69,9 | 18 | 78    | 847    | 7.256  | 13.631 |
| 14" | 337 | 762   | 381   | 514,4 | 20 x 31,8 | 585 | 52 | 455   | 439   | F30      | 119   | 79,9 | 22 | 87,9  | 1.221  | 8.579  | 16.641 |
| 16" | 387 | 838   | 419   | 571,5 | 20 x 34,9 | 650 | 56 | 490   | 472   | F30      | 134   | 84,9 | 22 | 94,9  | 1.831  | 11.344 | 23.554 |
| 18" | 438 | 914   | 457   | 628,6 | 24 x 34,9 | 710 | 59 | 542   | 596   | F30      | 147,5 | 99,9 | 28 | 111,9 | 2.057  | 16.348 | 29.672 |
| 20" | 488 | 991   | 495,5 | 685,8 | 24 x 34,9 | 775 | 62 | 577   | 610   | F30      | 147,5 | 99,9 | 28 | 111,9 | 2.721  | 20.945 | 36.633 |
| 24" | 589 | 1.143 | 571,5 | 812,8 | 24 x 41,3 | 915 | 68 | 599   | 673   | F40      | 152   | 120  | 32 | 134   | 5.525  | 44.489 | 52.751 |

Fig. 6060 (Class 600)

| DN  | øP  | L     | L1    | øR    | n x øS    | øT  | Y   | h     | N     | ISO 5211 | H     | øA    | J  | K     | WEIGHT | TORQUE | Kv     |
|-----|-----|-------|-------|-------|-----------|-----|-----|-------|-------|----------|-------|-------|----|-------|--------|--------|--------|
| 2"  | 49  | 292   | 146   | 127   | 8 x 19    | 165 | 25  | 125   | 100   | F10      | 36,5  | 20    | 8  | 22,5  | 63     | 153    | 366    |
| 3"  | 76  | 356   | 178   | 168,3 | 8 x 22,2  | 210 | 32  | 156,5 | 138,5 | F12      | 37,5  | 26    | 10 | 30    | 78     | 355    | 938    |
| 4"  | 102 | 432   | 216   | 213,9 | 8 x 25,4  | 275 | 38  | 175   | 164   | F12      | 54    | 30    | 10 | 34    | 132    | 716    | 1.465  |
| 6"  | 152 | 559   | 279,5 | 292,1 | 12x 28,5  | 355 | 48  | 268,5 | 277,5 | F16      | 71    | 44,9  | 14 | 51,4  | 262    | 2.211  | 3.297  |
| 8"  | 203 | 660   | 330   | 349,2 | 12 x 31,8 | 420 | 56  | 325   | 296   | F25      | 77    | 54,9  | 14 | 61,4  | 490    | 4.131  | 5.861  |
| 10" | 254 | 787   | 393,5 | 431,8 | 16 x 34,9 | 510 | 64  | 362   | 365   | F25      | 84,5  | 59,9  | 16 | 67    | 728    | 6.891  | 9.454  |
| 12" | 305 | 838   | 419   | 489   | 20 x 34,9 | 560 | 67  | 423   | 418   | F25      | 104   | 69,9  | 18 | 78    | 1.218  | 13.065 | 13.631 |
| 14" | 337 | 889   | 444,5 | 527   | 20 x 38,1 | 605 | 70  | 455   | 450   | F30      | 119   | 79,9  | 22 | 87,9  | 1.374  | 15.373 | 16.641 |
| 16" | 387 | 991   | 495,5 | 603,2 | 20 x 41,3 | 685 | 76  | 490   | 504   | F30      | 134   | 84,9  | 22 | 94,9  | 2.474  | 20.339 | 23.554 |
| 18" | 438 | 1.092 | 546   | 654   | 20 x 44,5 | 745 | 83  | 542   | 567,5 | F30      | 147,5 | 99,9  | 28 | 111,9 | 2.595  | 29.257 | 29.672 |
| 20" | 488 | 1.194 | 597   | 723,9 | 24 x 44,5 | 815 | 89  | 577   | 581   | F35      | 147,5 | 99,9  | 28 | 111,9 | 3.183  | 37.645 | 36.633 |
| 24" | 589 | 1.397 | 698,5 | 838,2 | 24 x 50,8 | 940 | 102 | 599   | 694   | F40      | 157,5 | 119,8 | 32 | 133,6 | 6.250  | 76.800 | 52.751 |

Fig. 6090 (Class 900)

| DN  | øP  | L   | L1    | øR    | n x øS    | øT  | Y    | h   | N   | ISO 5211 | H   | øA | J  | K  | WEIGHT | TORQUE | Kv     |
|-----|-----|-----|-------|-------|-----------|-----|------|-----|-----|----------|-----|----|----|----|--------|--------|--------|
| 2"  | 51  | 368 | 184   | 165,1 | 8 x 25,4  | 215 | 38,1 | 120 | 101 | F10      | 35  | 23 | 8  | 27 | 52     | 518    | 366    |
| 3"  | 77  | 381 | 190,5 | 190,5 | 8 x 25,4  | 240 | 38,1 | 153 | 124 | F14      | 37  | 33 | 10 | 38 | 80     | 1.193  | 938    |
| 4"  | 102 | 457 | 228,5 | 235   | 8 x 31,8  | 290 | 44,5 | 170 | 151 | F16      | 37  | 33 | 10 | 38 | 170    | 1.843  | 1.465  |
| 6"  | 152 | 610 | 305   | 317,5 | 12 x 31,8 | 380 | 55,6 | 214 | 380 | F25      | 59  | 46 | 14 | 53 | 390    | 3.339  | 3.297  |
| 8"  | 203 | 737 | 368,5 | 393,7 | 12 x 38,1 | 470 | 63,5 | 258 | 428 | F25      | 75  | 58 | 18 | 67 | 640    | 8.596  | 5.861  |
| 10" | 254 | 838 | 419   | 469,9 | 16 x 38,1 | 545 | 69,9 | 303 | 489 | F25      | 113 | 68 | 20 | 78 | 1.070  | 12.271 | 9.454  |
| 12" | 305 | 965 | 482,5 | 533,4 | 20 x 38,1 | 610 | 79,4 | 348 | 525 | F25      | 111 | 68 | 20 | 78 | 1.610  | 19.382 | 13.631 |

Fig. 6050 (Class 1500)

| DN | øP  | L <sup>(2)</sup> | L1    | øR    | n x øS    | øT  | Y    | h   | N   | ISO 5211 | H     | øA | J  | K  | WEIGHT | TORQUE | Kv    |
|----|-----|------------------|-------|-------|-----------|-----|------|-----|-----|----------|-------|----|----|----|--------|--------|-------|
| 2" | 51  | 371              | 185,5 | 165,1 | 8 x 25,4  | 215 | 38,1 | 129 | 107 | F12      | 31    | 23 | 8  | 27 | 55     | 866    | 366   |
| 3" | 77  | 473              | 236,5 | 203,2 | 8 x 31,8  | 265 | 47,7 | 156 | 137 | F14      | 36    | 33 | 10 | 38 | 105    | 2.253  | 938   |
| 4" | 102 | 549              | 274,5 | 241,3 | 8 x 34,9  | 310 | 54   | 193 | 168 | F16      | 39,5  | 38 | 10 | 43 | 205    | 3.105  | 1.465 |
| 6" | 146 | 711              | 355,5 | 317,5 | 12 x 38,1 | 395 | 82,6 | 242 | 395 | F25      | 69,5  | 46 | 14 | 53 | 525    | 5.428  | 3.297 |
| 8" | 194 | 841              | 420,5 | 393,7 | 12 x 44,5 | 485 | 92,1 | 292 | 445 | F25      | 112,5 | 68 | 20 | 78 | 890    | 15.333 | 5.861 |

(\*) Dimensions in mm and weight in kg.

(\*\*) Weights and dimensions can be changed without notice.

(1) Bigger sizes available under customers request.

METAL SEATED FORGED BALL VALVES 7015 / 7030 / 7060 / 7090 / 7050

Reduced Bore

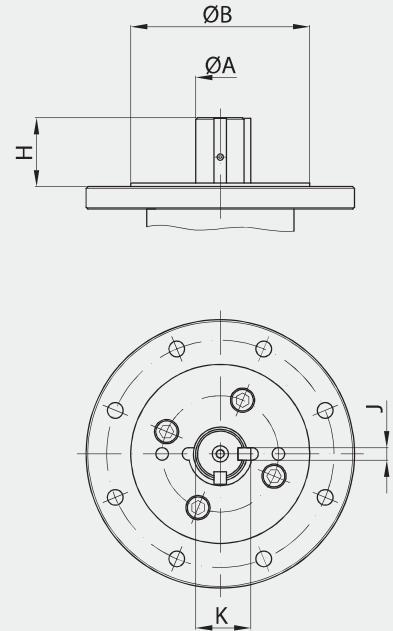
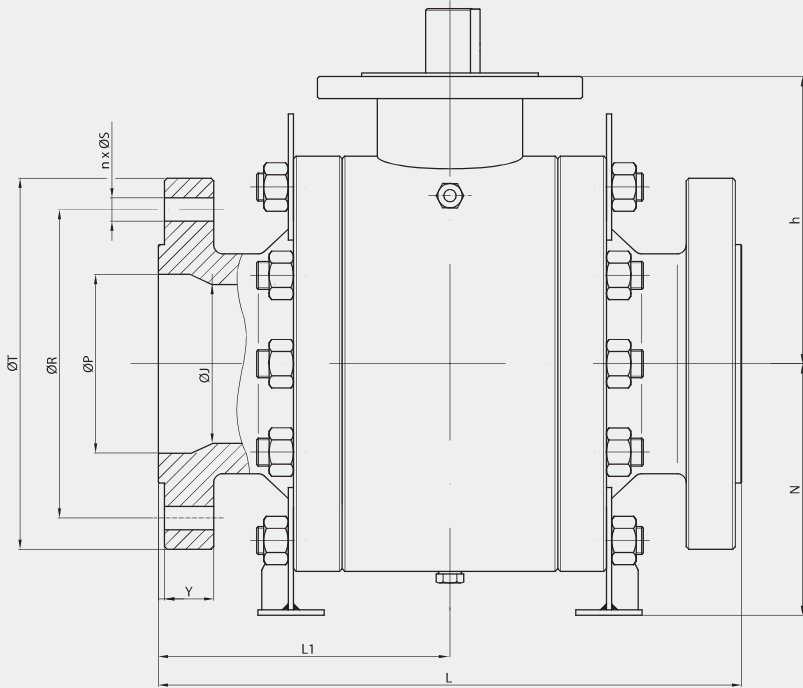
Class 150.  
From 2" to 24" (1)

Class 300.  
From 2" to 24" (1)

Class 600.  
From 2" to 24" (1)

Class 900.  
From 2" to 12" (1)

Class 1500.  
From 2" to 8" (1)



(\*) Dimensions of diameters of drills ISO 5211 refer to table from page 60.

Pressure - Temperature

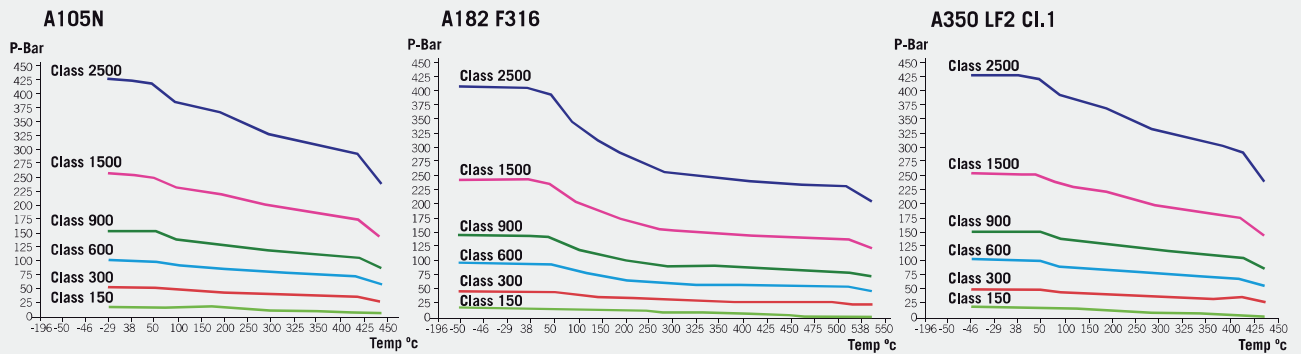


Fig. 7015 (Class 150)

| DN        | øP  | øS  | L     | L1    | øR    | n x øS    | øT  | Y  | h     | N     | ISO 5211 | H     | øA   | J  | K     | WEIGHT | TORQUE | Kv     |
|-----------|-----|-----|-------|-------|-------|-----------|-----|----|-------|-------|----------|-------|------|----|-------|--------|--------|--------|
| 3" x 2"   | 76  | 49  | 203   | 101,5 | 152,4 | 4 x 19    | 190 | 18 | 125   | 100   | F10      | 36,5  | 20   | 8  | 22,5  | 66     | 41     | 190    |
| 4" x 3"   | 102 | 76  | 229   | 114,5 | 190,5 | 8 x 19    | 230 | 22 | 156,5 | 133,5 | F12      | 37,5  | 26   | 10 | 30    | 75     | 97     | 567    |
| 6" x 4"   | 152 | 102 | 394   | 197   | 241,3 | 8 x 22    | 280 | 24 | 175   | 167   | F12      | 54    | 30   | 10 | 34    | 115    | 170    | 815    |
| 8" x 6"   | 203 | 152 | 457   | 228,5 | 298,5 | 8 x 22,2  | 345 | 27 | 269   | 277   | F16      | 71    | 39,9 | 14 | 48,9  | 205    | 457    | 2.021  |
| 10" x 8"  | 254 | 203 | 533   | 266,5 | 362   | 12 x 25,4 | 405 | 29 | 325   | 325   | F25      | 77    | 49,9 | 14 | 58,4  | 375    | 845    | 4.205  |
| 12" x 10" | 305 | 254 | 610   | 305   | 431,8 | 12 x 25,4 | 485 | 30 | 362   | 319   | F25      | 84,5  | 59,9 | 16 | 67    | 565    | 1.396  | 7.348  |
| 14" x 12" | 337 | 305 | 686   | 343   | 476,3 | 12 x 28,5 | 535 | 33 | 423   | 399   | F25      | 104   | 69,9 | 18 | 78    | 825    | 2.836  | 10.120 |
| 16" x 14" | 387 | 337 | 762   | 381   | 538,8 | 16 x 28,5 | 595 | 35 | 455   | 439   | F30      | 119   | 79,9 | 22 | 87,9  | 1.250  | 3.411  | 12.000 |
| 18" x 16" | 438 | 387 | 864   | 432   | 577,9 | 16 x 31,8 | 635 | 38 | 490   | 472   | F30      | 134   | 84,9 | 22 | 94,9  | 1.820  | 4.501  | 17.269 |
| 20" x 18" | 488 | 438 | 914   | 457   | 635   | 20 x 31,8 | 700 | 41 | 542   | 596   | F30      | 147,5 | 99,9 | 28 | 111,9 | 2.450  | 6.543  | 18.647 |
| 24" x 20" | 589 | 488 | 1.067 | 533,5 | 749,3 | 20 x 34,9 | 815 | 46 | 577   | 610   | F30      | 147,5 | 99,9 | 28 | 111,9 | 2.790  | 8.238  | 27.010 |
| 30" x 24" | 735 | 589 | 1.295 | 647,5 | 857   | 28 x 35   | 985 | 73 | 599   | 692   | F40      | 152   | 120  | 32 | 134   | 5.530  | 20.908 | 32.150 |

(\*) Dimensions in mm and weight in kg.  
(\*\*) Weights and dimensions can be changed without notice.  
(1) Bigger sizes available under customers request.

Fig. 7030 (Class 300)

| DN        | øP  | øS  | L     | L1    | øR    | n x øS    | øT    | Y  | h     | N     | ISO 5211 | H     | øA   | J  | K     | WEIGHT | TORQUE | Kv     |
|-----------|-----|-----|-------|-------|-------|-----------|-------|----|-------|-------|----------|-------|------|----|-------|--------|--------|--------|
| 3" x 2"   | 76  | 49  | 283   | 141,5 | 168,3 | 8 x 22.2  | 210   | 27 | 125   | 95    | F10      | 36,5  | 20   | 8  | 22,5  | 65     | 83     | 190    |
| 4" x 3"   | 102 | 76  | 305   | 152,5 | 200   | 8 x 22.2  | 255   | 30 | 156,5 | 133,5 | F12      | 37,5  | 26   | 10 | 30    | 85     | 208    | 567    |
| 6" x 4"   | 152 | 102 | 403   | 201,5 | 269,9 | 12 x 22.2 | 320   | 35 | 175   | 167   | F12      | 54    | 30   | 10 | 34    | 135    | 380    | 815    |
| 8" x 6"   | 203 | 152 | 502   | 251   | 330,2 | 12 x 25.4 | 380   | 40 | 269   | 277   | F16      | 71    | 39,9 | 14 | 48,9  | 225    | 1.089  | 2.021  |
| 10" x 8"  | 254 | 203 | 568   | 284   | 387,4 | 16 x 28.5 | 445   | 46 | 325   | 325   | F25      | 77    | 49,9 | 14 | 58,4  | 385    | 2.060  | 4.205  |
| 12" x 10" | 305 | 254 | 648   | 324   | 450,8 | 16 x 31.8 | 520   | 49 | 362   | 319   | F25      | 84,5  | 59,9 | 16 | 67    | 650    | 3.497  | 7.348  |
| 14" x 12" | 337 | 305 | 762   | 381   | 514,4 | 20 x 31.8 | 585   | 52 | 423   | 399   | F25      | 104   | 69,9 | 18 | 78    | 995    | 7.256  | 10.120 |
| 16" x 14" | 387 | 337 | 838   | 419   | 571,5 | 20 x 34.9 | 650   | 56 | 455   | 439   | F30      | 119   | 79,9 | 22 | 87,9  | 1.460  | 8.579  | 12.000 |
| 18" x 16" | 438 | 387 | 914   | 457   | 628,6 | 24 x 34.9 | 710   | 59 | 490   | 472   | F30      | 134   | 84,9 | 22 | 94,9  | 1.925  | 11.344 | 17.269 |
| 20" x 18" | 488 | 438 | 991   | 495,5 | 685,8 | 24 x 34.9 | 775   | 62 | 542   | 596   | F30      | 147,5 | 99,9 | 28 | 111,9 | 2.450  | 16.348 | 18.647 |
| 24" x 20" | 589 | 488 | 1.143 | 571,5 | 812,8 | 24 x 41.3 | 915   | 68 | 577   | 610   | F30      | 147,5 | 99,9 | 28 | 111,9 | 3.250  | 20.945 | 27.010 |
| 30" x 24" | 735 | 589 | 1.397 | 698,5 | 857   | 28 x 48   | 1.092 | 90 | 599   | 673   | F40      | 152   | 120  | 32 | 134   | 5.900  | 44.489 | 32.150 |

Fig. 7060 (Class 600)

| DN        | øP  | øS  | L     | L1    | øR    | n x øS    | øT    | Y   | h     | N     | ISO 5211 | H     | øA    | J  | K     | WEIGHT | TORQUE | Kv     |
|-----------|-----|-----|-------|-------|-------|-----------|-------|-----|-------|-------|----------|-------|-------|----|-------|--------|--------|--------|
| 3" x 2"   | 76  | 49  | 356   | 178   | 168,3 | 8 x 22.2  | 210   | 32  | 125   | 100   | F10      | 36,5  | 20    | 8  | 22,5  | 72     | 153    | 190    |
| 4" x 3"   | 102 | 76  | 432   | 216   | 215,9 | 8 x 25.4  | 275   | 38  | 156,5 | 138,5 | F12      | 37,5  | 26    | 10 | 30    | 93     | 355    | 567    |
| 6" x 4"   | 152 | 102 | 559   | 279,5 | 292,1 | 12 x 28.5 | 355   | 48  | 175   | 164   | F12      | 54    | 30    | 10 | 34    | 169    | 716    | 815    |
| 8" x 6"   | 203 | 152 | 660   | 330   | 349,2 | 12 x 31.8 | 420   | 56  | 268,5 | 277,5 | F16      | 71    | 44,9  | 14 | 51,4  | 301    | 2.211  | 2.021  |
| 10" x 8"  | 254 | 203 | 787   | 393,5 | 431,8 | 16 x 34.9 | 510   | 64  | 325   | 296   | F25      | 77    | 54,9  | 14 | 61,4  | 555    | 4.131  | 4.205  |
| 12" x 10" | 305 | 254 | 838   | 419   | 489   | 20 x 34.9 | 560   | 67  | 362   | 365   | F25      | 84,5  | 59,9  | 16 | 67    | 829    | 6.891  | 7.348  |
| 14" x 12" | 337 | 305 | 889   | 444,5 | 527   | 20 x 38.1 | 605   | 70  | 423   | 418   | F25      | 104   | 69,9  | 18 | 78    | 1.426  | 13.065 | 10.120 |
| 16" x 14" | 387 | 337 | 991   | 495,5 | 603,2 | 20 x 41.3 | 685   | 76  | 455   | 450   | F30      | 119   | 79,9  | 22 | 87,9  | 1.751  | 15.373 | 12.000 |
| 18" x 16" | 438 | 387 | 1.092 | 546   | 654   | 20 x 44.5 | 745   | 83  | 490   | 504   | F30      | 134   | 84,9  | 22 | 94,9  | 2.625  | 20.339 | 17.269 |
| 20" x 18" | 488 | 438 | 1.194 | 597   | 723,9 | 24 x 44.5 | 815   | 89  | 542   | 567,5 | F30      | 147,5 | 99,9  | 28 | 111,9 | 3.111  | 29.257 | 18.647 |
| 24" x 20" | 589 | 488 | 1.397 | 698,5 | 838,2 | 24 x 50.8 | 940   | 102 | 577   | 581   | F35      | 147,5 | 99,9  | 28 | 111,9 | 4.250  | 37.645 | 27.010 |
| 30" x 24" | 735 | 589 | 1.651 | 825,5 | 857   | 28 x 54   | 1.130 | 108 | 599   | 694   | F40      | 157,5 | 119,8 | 32 | 133,6 | 7.125  | 76.800 | 32.150 |

Fig. 7090 (Class 900)

| DN        | øP  | øS  | L     | L1    | øR    | n x øS    | øT  | Y    | h   | N   | ISO 5211 | H   | øA | J  | K  | WEIGHT | TORQUE | Kv     |
|-----------|-----|-----|-------|-------|-------|-----------|-----|------|-----|-----|----------|-----|----|----|----|--------|--------|--------|
| 3" x 2"   | 77  | 51  | 381   | 190,5 | 190,5 | 8 x 25.4  | 240 | 38,1 | 120 | 101 | F10      | 35  | 23 | 8  | 27 | 62     | 518    | 190    |
| 4" x 3"   | 102 | 77  | 457   | 228,5 | 235   | 8 x 31.8  | 290 | 44,5 | 153 | 124 | F14      | 37  | 33 | 10 | 38 | 105    | 1.193  | 567    |
| 6" x 4"   | 152 | 102 | 610   | 305   | 317,5 | 12 x 31.8 | 380 | 55,6 | 170 | 151 | F16      | 37  | 33 | 10 | 38 | 201    | 1.843  | 815    |
| 8" x 6"   | 203 | 152 | 737   | 368,5 | 393,7 | 12 x 38.1 | 470 | 63,5 | 214 | 380 | F25      | 59  | 46 | 14 | 53 | 436    | 3.339  | 2.021  |
| 10" x 8"  | 254 | 203 | 838   | 419   | 469,9 | 16 x 38.1 | 545 | 69,9 | 258 | 428 | F25      | 75  | 58 | 18 | 67 | 735    | 8.596  | 4.205  |
| 12" x 10" | 305 | 254 | 965   | 482,5 | 533,4 | 20 x 38.1 | 610 | 79,4 | 303 | 489 | F25      | 113 | 68 | 20 | 78 | 1.200  | 12.271 | 7.348  |
| 14" x 12" | 324 | 305 | 1.029 | 514,5 | 558,8 | 20 x 41.3 | 640 | 85,8 | 348 | 525 | F25      | 111 | 68 | 20 | 78 | 1.795  | 19.382 | 10.120 |

Fig. 7050 (Class 1500)

| DN       | øP  | øS  | L     | L1    | øR    | n x øS    | øT  | Y    | h   | N   | ISO 5211 | H     | øA | J  | K  | WEIGHT | TORQUE | Kv    |
|----------|-----|-----|-------|-------|-------|-----------|-----|------|-----|-----|----------|-------|----|----|----|--------|--------|-------|
| 3" x 2"  | 77  | 51  | 473   | 236,5 | 203,2 | 8 x 31.8  | 265 | 47,7 | 129 | 107 | F12      | 31    | 23 | 8  | 27 | 80     | 866    | 190   |
| 4" x 3"  | 102 | 77  | 549   | 274,5 | 241,3 | 8 x 34.9  | 310 | 54   | 156 | 137 | F14      | 36    | 33 | 10 | 38 | 156    | 2.253  | 567   |
| 6" x 4"  | 146 | 102 | 711   | 355,5 | 317,5 | 12 x 38.1 | 395 | 82,6 | 193 | 168 | F16      | 39,5  | 38 | 10 | 43 | 325    | 3.105  | 815   |
| 8" x 6"  | 194 | 146 | 841   | 420,5 | 393,7 | 12 x 44.5 | 485 | 92,1 | 242 | 395 | F25      | 69,5  | 46 | 14 | 53 | 603    | 5.428  | 2.021 |
| 10" x 8" | 241 | 194 | 1.000 | 500   | 482,6 | 12 x 50.8 | 585 | 108  | 292 | 445 | F25      | 112,5 | 68 | 20 | 78 | 950    | 15.333 | 4.205 |

(\*) Dimensions in mm and weight in kg.

(\*\*) Weights and dimensions can be changed without notice.

(1) Bigger sizes available under customers request.

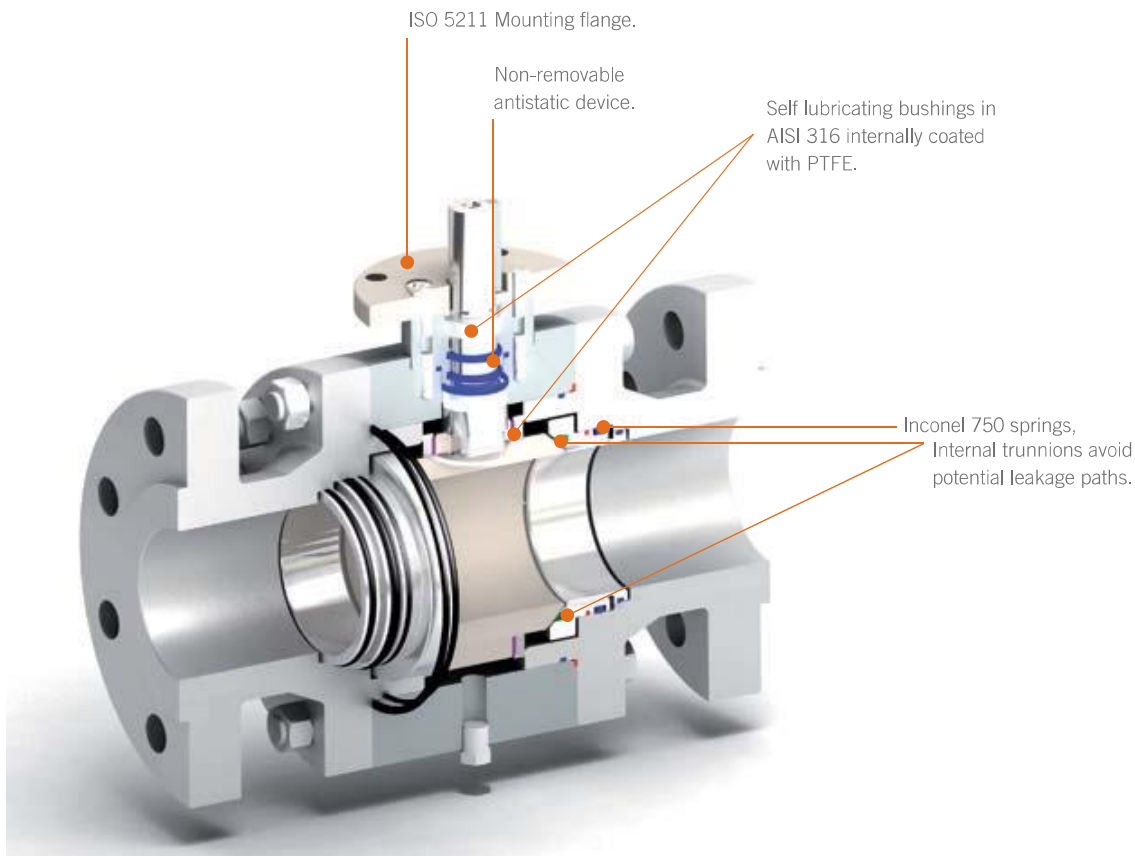
| BALL VALVES |

# 3-PIECE FORGED TRUNNION MOUNTED

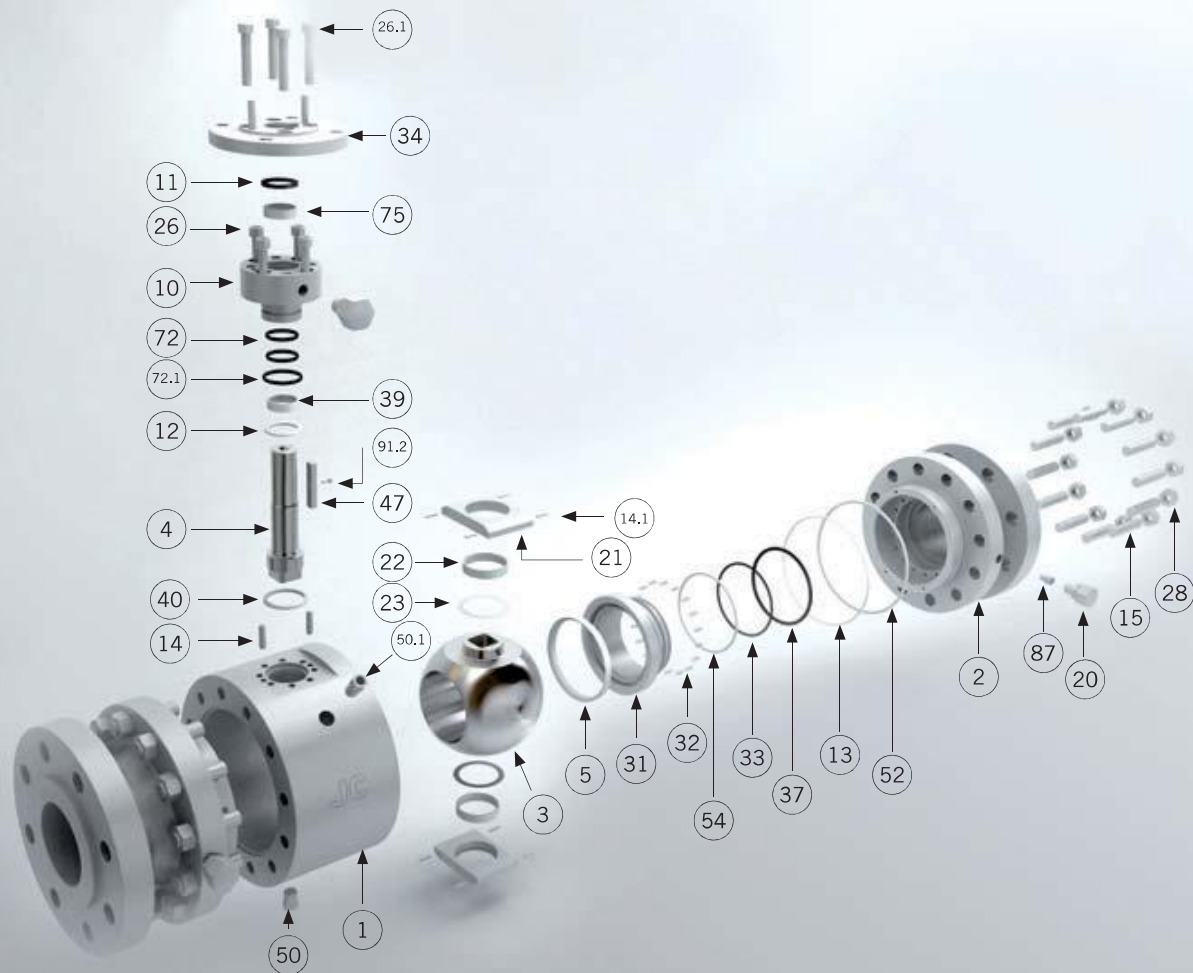
## 2" - 42" | Class 150 - Class 2500

A trunnion ball valve has additional mechanical anchoring of the ball at the top and the bottom, suitable for larger and higher pressure valves.

The JC trunnion mounted ball valves are suitable to stand the harsh service conditions often presented in the hydrocarbon industry and in the gas storage and transportation field. In general, they are recommended for tight shut-off in high pressure and double block and bleed applications.







## Materials SERIES 6000 & 7000

| Item      | Description          | AIT                           | LIT                          | IIT             |
|-----------|----------------------|-------------------------------|------------------------------|-----------------|
| 1         | Body                 | A 105N                        | A 350 Gr. LF2 Class. 1       | A182 F316       |
| 2         | Body Connector       | A 105N                        | A 350 Gr. LF2 Class. 1       | A182 F316       |
| 3         | Ball                 |                               | A182 F316 or A351Gr. CF8M    |                 |
| 4         | Stem                 |                               | A 479 Tp.316                 |                 |
| 5         | Seat Ring            |                               | RPTFE, PEEK, DEVLON          |                 |
| 10        | Gland                | A 105N                        | A 350 Gr. LF2 Class-1        | A 479 Tp.316    |
| 11        | Gland Packing        |                               | Graphite                     |                 |
| 12        | Stem Thrust Seal     |                               | 25% G.F. + PTFE              |                 |
| 13        | Body Connector Seal  |                               | Graphite                     |                 |
| 14 / 14.1 | Pin                  | Carbon St.                    | Carbon Steel                 | Stainless Steel |
| 15        | Stud                 | A 193 Gr. B7M Zinc dichromate | A 320 Gr. L7M                | A 193 Gr. B8M   |
| 19        | Antistatic Device    |                               | Stainless St.                |                 |
| 20        | Sealant Injector     | Carbon Steel                  | Carbon Steel                 | Stainless Steel |
| 21        | Ball Trunnion        |                               | A 479 Tp.316                 |                 |
| 22        | Trunnion Bearing     |                               | AISI 316 with inside in PTFE |                 |
| 23        | Bearing              |                               | PTFE                         |                 |
| 26 / 26.1 | Bolt                 | A 193 Gr. B7M Zinc dichromate | A 320 Gr. L7M                | A 193 Gr. B8M   |
| 28        | Nut                  | A 194 Gr. 2HM Zinc dichromate | A 194 Gr. 7M                 | A 194 Gr. 8M    |
| 31        | Seat Carrier         |                               | A 479 Tp.316 / A182 F316     |                 |
| 32        | Spring               |                               | Inconel - 750                |                 |
| 33        | "O" Ring             |                               | FKM                          |                 |
| 34        | Mounting Flange      | A 105N                        | A 350 Gr. LF2 Class-1        | A 479 Tp.316    |
| 37        | "O" Ring             |                               | FKM                          |                 |
| 39        | Stem Bushing         |                               | AISI 316 with inside in PTFE |                 |
| 40        | Gasket               |                               | Graphite                     |                 |
| 47        | Key                  | Carbon Steel                  | Carbon Steel                 | Stainless St.   |
| 50        | Drain Plug           | A 105                         | A 350 Gr. LF2 Class-1        | AISI 316        |
| 50.1      | Relieve Plug         | A 105                         | A 350 Gr. LF2 Class-1        | AISI 316        |
| 52        | "O" Ring             |                               | FKM                          |                 |
| 54        | Seat Carrier Seal    |                               | Graphite                     |                 |
| 72 / 72.1 | "O" Ring             |                               | FKM                          |                 |
| 75        | Stem Bushing         |                               | AISI 316 with inside in PTFE |                 |
| 87        | Check Valve          |                               | Stainless St.                |                 |
| 89        | Identification plate |                               | Stainless St.                |                 |
| 91.2      | Bolt                 |                               | DIN 912 A2                   |                 |

**FORGED BALL VALVES** 6015 / 6030 / 6060 / 6090 / 6050 / 6042

**Full Bore**

Class 150.  
From 2" to 42" (1)

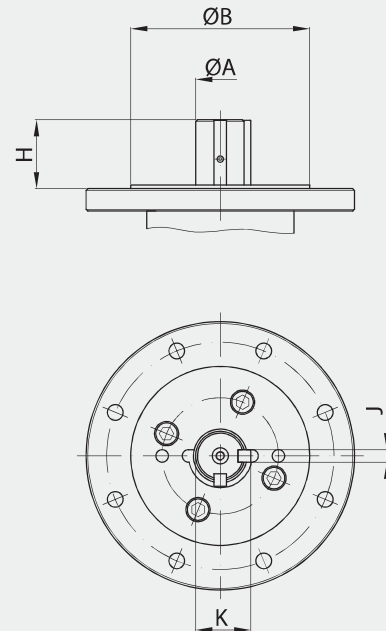
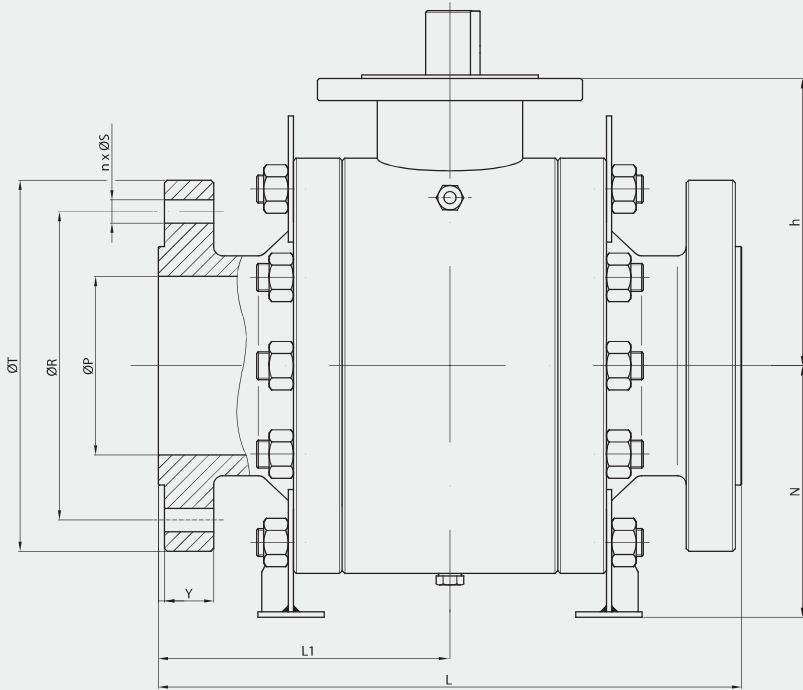
Class 300.  
From 2" to 42" (1)

Class 600.  
From 2" to 24"

Class 900.  
From 2" to 24"

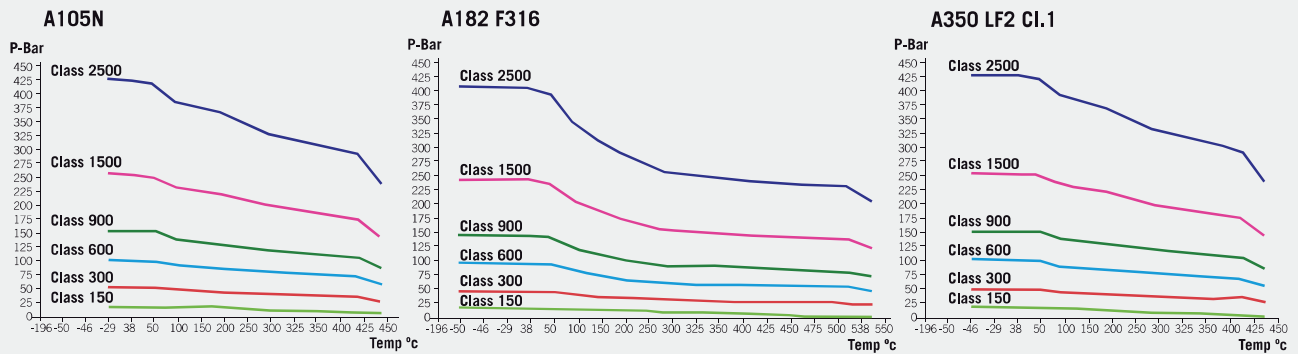
Class 1500.  
From 2" to 12"

Class 2500.  
From 2" to 8"



(\*) Dimensions of diameters of drills ISO 5211 refer to table from page 60.

**Pressure - Temperature**



**Fig. 6015 (Class 150)**

| DN  | øP  | L     | L1    | øR    | n x øS    | øT  | Y  | h     | N     | ISO 5211 | H     | øA   | J  | K     | WEIGHT | TORQUE | Kv     |
|-----|-----|-------|-------|-------|-----------|-----|----|-------|-------|----------|-------|------|----|-------|--------|--------|--------|
| 2"  | 49  | 178   | 89    | 120.7 | 4 x 19    | 150 | 14 | 125   | 100   | F10      | 36,5  | 20   | 8  | 22,5  | 52     | 27     | 366    |
| 3"  | 76  | 203   | 101,5 | 152.4 | 4 x 19    | 190 | 18 | 156,5 | 133,5 | F12      | 37,5  | 26   | 10 | 30    | 59     | 52     | 938    |
| 4"  | 102 | 229   | 114,5 | 190.5 | 8 x 19    | 230 | 22 | 175   | 167   | F12      | 54    | 30   | 10 | 34    | 110    | 98     | 1.465  |
| 6"  | 152 | 394   | 197   | 241.3 | 8 x 22    | 280 | 24 | 269   | 277   | F16      | 71    | 39,9 | 14 | 48,9  | 171    | 225    | 3.297  |
| 8"  | 203 | 457   | 228,5 | 298.5 | 8 x 22.2  | 345 | 27 | 325   | 325   | F25      | 77    | 49,9 | 14 | 58,4  | 334    | 450    | 5.861  |
| 10" | 254 | 533   | 266,5 | 362   | 12 x 25.4 | 405 | 29 | 362   | 319   | F25      | 84,5  | 59,9 | 16 | 67    | 458    | 668    | 9.454  |
| 12" | 305 | 610   | 305   | 431.8 | 12 x 25.4 | 485 | 30 | 423   | 399   | F25      | 104   | 69,9 | 18 | 78    | 736    | 1.317  | 13.631 |
| 14" | 337 | 686   | 343   | 476.3 | 12 x 28.5 | 535 | 33 | 455   | 439   | F30      | 119   | 79,9 | 22 | 87,9  | 1.019  | 1.547  | 16.641 |
| 16" | 387 | 762   | 381   | 539.8 | 16 x 28.5 | 595 | 35 | 490   | 472   | F30      | 134   | 84,9 | 22 | 94,9  | 1.778  | 2.000  | 23.554 |
| 18" | 438 | 864   | 432   | 577.9 | 16 x 31.8 | 635 | 38 | 542   | 596   | F30      | 147,5 | 99,9 | 28 | 111,9 | 1.860  | 3.027  | 29.672 |
| 20" | 488 | 914   | 457   | 635   | 20 x 31.8 | 700 | 41 | 577   | 610   | F30      | 147,5 | 99,9 | 28 | 111,9 | 2.439  | 3.803  | 36.633 |
| 24" | 589 | 1.067 | 533,5 | 749.3 | 20 x 34.9 | 815 | 46 | 599   | 692   | F40      | 152   | 120  | 32 | 134   | 4.302  | 9.100  | 52.751 |

(\*\*) Dimensions in mm and weight in kg.  
(\*\*\*) Weights and dimensions can be changed without notice.  
(1) Bigger sizes available under customers request.

Fig. 6030 (Class 300)

| DN  | øP  | L     | L1    | øR    | n x øS    | øT  | Y  | h     | N     | ISO 5211 | H     | øA   | J  | K     | WEIGHT | TORQUE | Kv     |
|-----|-----|-------|-------|-------|-----------|-----|----|-------|-------|----------|-------|------|----|-------|--------|--------|--------|
| 2"  | 49  | 216   | 108   | 127   | 8 x 19    | 165 | 21 | 125   | 95    | F10      | 36,5  | 20   | 8  | 22,5  | 60     | 49     | 366    |
| 3"  | 76  | 283   | 141,5 | 168,3 | 8 x 22,2  | 210 | 27 | 156,5 | 133,5 | F12      | 37,5  | 26   | 10 | 30    | 72     | 107    | 938    |
| 4"  | 102 | 305   | 152,5 | 200   | 8 x 22,2  | 255 | 30 | 175   | 167   | F12      | 54    | 30   | 10 | 34    | 120    | 210    | 1.465  |
| 6"  | 152 | 403   | 201,5 | 269,9 | 12 x 22,2 | 320 | 35 | 269   | 277   | F16      | 71    | 39,9 | 14 | 48,9  | 195    | 522    | 3.297  |
| 8"  | 203 | 502   | 251   | 330,2 | 12 x 25,4 | 380 | 40 | 325   | 325   | F25      | 77    | 49,9 | 14 | 58,4  | 352    | 1.060  | 5.861  |
| 10" | 254 | 568   | 284   | 387,4 | 16 x 28,5 | 445 | 46 | 362   | 319   | F25      | 84,5  | 59,9 | 16 | 67    | 534    | 1.559  | 9.454  |
| 12" | 305 | 648   | 324   | 450,8 | 16 x 31,8 | 520 | 49 | 423   | 399   | F25      | 104   | 69,9 | 18 | 78    | 847    | 3.125  | 13.631 |
| 14" | 337 | 762   | 381   | 514,4 | 20 x 31,8 | 585 | 52 | 455   | 439   | F30      | 119   | 79,9 | 22 | 87,9  | 1.221  | 3.642  | 16.641 |
| 16" | 387 | 838   | 419   | 571,5 | 20 x 34,9 | 650 | 56 | 490   | 472   | F30      | 134   | 84,9 | 22 | 94,9  | 1.831  | 4.732  | 23.554 |
| 18" | 438 | 914   | 457   | 628,6 | 24 x 34,9 | 710 | 59 | 542   | 596   | F30      | 147,5 | 99,9 | 28 | 111,9 | 2.057  | 7.000  | 29.672 |
| 20" | 488 | 991   | 495,5 | 685,8 | 24 x 34,9 | 775 | 62 | 577   | 610   | F30      | 147,5 | 99,9 | 28 | 111,9 | 2.721  | 8.959  | 36.633 |
| 24" | 589 | 1.143 | 571,5 | 812,8 | 24 x 41,3 | 915 | 68 | 599   | 673   | F40      | 152   | 120  | 32 | 134   | 5.525  | 23.400 | 52.751 |

Fig. 6060 (Class 600)

| DN  | øP  | L     | L1    | øR    | n x øS    | øT  | Y   | h     | N     | ISO 5211 | H     | øA    | J  | K     | WEIGHT | TORQUE | Kv     |
|-----|-----|-------|-------|-------|-----------|-----|-----|-------|-------|----------|-------|-------|----|-------|--------|--------|--------|
| 2"  | 49  | 292   | 146   | 127   | 8 x 19    | 165 | 25  | 125   | 100   | F10      | 36,5  | 20    | 8  | 22,5  | 63     | 85     | 366    |
| 3"  | 76  | 356   | 178   | 168,3 | 8 x 22,2  | 210 | 32  | 156,5 | 138,5 | F12      | 37,5  | 26    | 10 | 30    | 78     | 196    | 938    |
| 4"  | 102 | 432   | 216   | 213,9 | 8 x 25,4  | 275 | 38  | 175   | 164   | F12      | 54    | 30    | 10 | 34    | 132    | 392    | 1.465  |
| 6"  | 152 | 559   | 279,5 | 292,1 | 12 x 28,5 | 355 | 48  | 268,5 | 277,5 | F16      | 71    | 44,9  | 14 | 51,4  | 262    | 1.007  | 3.297  |
| 8"  | 203 | 660   | 330   | 349,2 | 12 x 31,8 | 420 | 56  | 325   | 296   | F25      | 77    | 54,9  | 14 | 61,4  | 490    | 2.057  | 5.861  |
| 10" | 254 | 787   | 393,5 | 431,8 | 16 x 34,9 | 510 | 64  | 362   | 365   | F25      | 84,5  | 59,9  | 16 | 67    | 728    | 3.013  | 9.454  |
| 12" | 305 | 838   | 419   | 489   | 20 x 34,9 | 560 | 67  | 423   | 418   | F25      | 104   | 69,9  | 18 | 78    | 1.218  | 6.079  | 13.631 |
| 14" | 337 | 889   | 444,5 | 527   | 20 x 38,1 | 605 | 70  | 455   | 450   | F30      | 119   | 79,9  | 22 | 87,9  | 1.374  | 7.062  | 16.641 |
| 16" | 387 | 991   | 495,5 | 603,2 | 20 x 41,3 | 685 | 76  | 490   | 504   | F30      | 134   | 84,9  | 22 | 94,9  | 2.474  | 9.196  | 23.554 |
| 18" | 438 | 1.092 | 546   | 654   | 20 x 44,5 | 745 | 83  | 542   | 567,5 | F30      | 147,5 | 99,9  | 28 | 111,9 | 2.595  | 13.485 | 29.672 |
| 20" | 488 | 1.194 | 597   | 723,9 | 24 x 44,5 | 815 | 89  | 577   | 581   | F35      | 147,5 | 99,9  | 28 | 111,9 | 3.183  | 17.381 | 36.633 |
| 24" | 589 | 1.397 | 698,5 | 838,2 | 24 x 50,8 | 940 | 102 | 599   | 694   | F40      | 157,5 | 119,8 | 32 | 133,6 | 6.250  | 40.100 | 52.751 |

Fig. 6090 (Class 900)

| DN  | øP  | L     | L1    | øR    | n x øS    | øT    | Y     | h   | N   | ISO 5211 | H   | øA  | J  | K   | WEIGHT | TORQUE | Kv     |
|-----|-----|-------|-------|-------|-----------|-------|-------|-----|-----|----------|-----|-----|----|-----|--------|--------|--------|
| 2"  | 51  | 368   | 184   | 165,1 | 8 x 25,4  | 215   | 38,1  | 120 | 101 | F10      | 35  | 23  | 8  | 27  | 52     | 199    | 366    |
| 3"  | 77  | 381   | 190,5 | 190,5 | 8 x 25,4  | 240   | 38,1  | 153 | 124 | F14      | 37  | 33  | 10 | 38  | 80     | 545    | 938    |
| 4"  | 102 | 457   | 228,5 | 235   | 8 x 31,8  | 290   | 44,5  | 170 | 151 | F16      | 37  | 33  | 10 | 38  | 170    | 786    | 1.465  |
| 6"  | 152 | 610   | 305   | 317,5 | 12 x 31,8 | 380   | 55,6  | 214 | 380 | F25      | 59  | 46  | 14 | 53  | 390    | 1.330  | 3.297  |
| 8"  | 203 | 737   | 368,5 | 393,7 | 12 x 38,1 | 470   | 63,5  | 258 | 428 | F25      | 75  | 58  | 18 | 67  | 640    | 2.536  | 5.861  |
| 10" | 254 | 838   | 419   | 469,9 | 16 x 38,1 | 545   | 69,9  | 303 | 489 | F25      | 113 | 68  | 20 | 78  | 1.070  | 4.950  | 9.454  |
| 12" | 305 | 965   | 482,5 | 533,4 | 20 x 38,1 | 610   | 79,4  | 348 | 525 | F25      | 111 | 68  | 20 | 78  | 1.610  | 7.850  | 13.631 |
| 14" | 324 | 1.029 | 514,5 | 558,8 | 20 x 41,3 | 640   | 85,8  | 381 | 545 | F25      | 110 | 88  | 24 | 100 | 1.760  | 10.868 | 16.641 |
| 16" | 375 | 1.130 | 565   | 616   | 20 x 44,5 | 705   | 88,9  | 418 | 580 | F25      | 110 | 88  | 24 | 100 | 2.240  | 18.112 | 23.554 |
| 18" | 425 | 1.219 | 609,5 | 685,8 | 20 x 50,8 | 785   | 101,6 | 464 | 630 | F35      | 130 | 120 | 32 | 136 | 3.000  | 28.738 | 29.672 |
| 20" | 473 | 1.321 | 660,5 | 749,3 | 20 x 54   | 855   | 108   | 507 | 672 | F35      | 130 | 120 | 32 | 136 | 4.360  | 43.470 | 36.633 |
| 24" | 571 | 1.549 | 774,5 | 901,7 | 20 x 66,7 | 1.040 | 139,7 | 596 | 760 | F35      | 127 | 148 | 32 | 164 | 7.050  | 55.555 | 52.751 |

Fig. 6050 (Class 1500)

| DN  | øP  | L <sup>(2)</sup> | L1    | øR    | n x øS    | øT  | Y     | h   | N   | ISO 5211 | H     | øA | J  | K   | WEIGHT | TORQUE | Kv     |
|-----|-----|------------------|-------|-------|-----------|-----|-------|-----|-----|----------|-------|----|----|-----|--------|--------|--------|
| 2"  | 51  | 371              | 185,5 | 165,1 | 8 x 25,4  | 215 | 38,1  | 129 | 107 | F12      | 31    | 23 | 8  | 27  | 55     | 369    | 366    |
| 3"  | 77  | 473              | 236,5 | 203,2 | 8 x 31,8  | 265 | 47,7  | 156 | 137 | F14      | 36    | 33 | 10 | 38  | 105    | 942    | 938    |
| 4"  | 102 | 549              | 274,5 | 241,3 | 8 x 34,9  | 310 | 54    | 193 | 168 | F16      | 39,5  | 38 | 10 | 43  | 205    | 1.425  | 1.465  |
| 6"  | 146 | 711              | 355,5 | 317,5 | 12 x 38,1 | 395 | 82,6  | 242 | 395 | F25      | 69,5  | 46 | 14 | 53  | 525    | 2.795  | 3.297  |
| 8"  | 194 | 841              | 420,5 | 393,7 | 12 x 44,5 | 485 | 92,1  | 292 | 445 | F25      | 112,5 | 68 | 20 | 78  | 890    | 4.468  | 5.861  |
| 10" | 241 | 1.000            | 500   | 482,6 | 12 x 50,8 | 585 | 108   | 336 | 505 | F25      | 110,5 | 78 | 20 | 88  | 1.560  | 7.486  | 9.454  |
| 12" | 289 | 1.146            | 573   | 571,5 | 16 x 54   | 675 | 123,9 | 399 | 565 | F25      | 110   | 88 | 24 | 100 | 2.355  | 10.626 | 13.631 |

Fig. 6042 (Class 2500)

| DN | øP   | L <sup>(2)</sup> | L1    | øR    | n x øS   | øT  | Y    | h   | N   | ISO 5211 | H     | øA | J  | K  | WEIGHT | TORQUE | Kv    |
|----|------|------------------|-------|-------|----------|-----|------|-----|-----|----------|-------|----|----|----|--------|--------|-------|
| 2" | 44,5 | 454              | 227   | 171,4 | 8 x 28,6 | 235 | 50,9 | 150 | 125 | F16      | 39    | 33 | 10 | 38 | 110    | 786    | 366   |
| 3" | 64   | 584              | 292   | 228,6 | 8 x 34,9 | 305 | 66,7 | 182 | 151 | F16      | 39    | 38 | 10 | 43 | 215    | 1.932  | 938   |
| 4" | 89   | 683              | 341,5 | 273,0 | 8 x 41,3 | 355 | 76,2 | 214 | 187 | F25      | 66    | 46 | 14 | 53 | 385    | 2.042  | 1.465 |
| 6" | 133  | 927              | 463,5 | 368,3 | 8 x 54   | 485 | 108  | 282 | 430 | F25      | 78,5  | 58 | 18 | 67 | 840    | 4.368  | 3.297 |
| 8" | 181  | 1.038            | 519   | 438,2 | 12 x 54  | 550 | 127  | 356 | 495 | F25      | 105,5 | 78 | 20 | 88 | 1.435  | 8.211  | 5.861 |

(\*) Dimensions in mm and weight in kg.

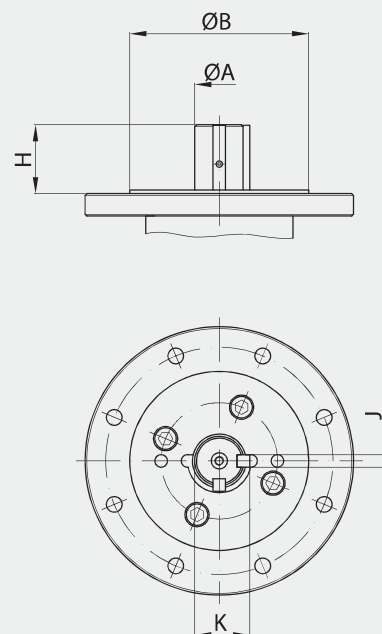
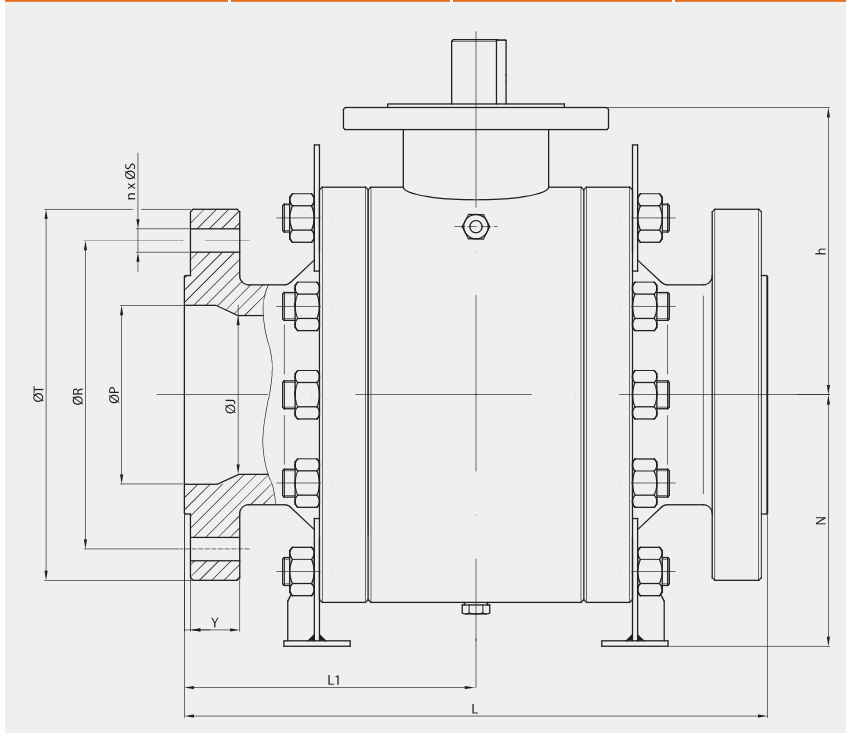
(\*\*) Weights and dimensions can be changed without notice.

(1) Bigger sizes available under customers request. (2) With RTS Flanges.

**FORGED BALL VALVES 7015 / 7030 / 7060 / 7090 / 7050 / 7042**

**Reduced Bore**

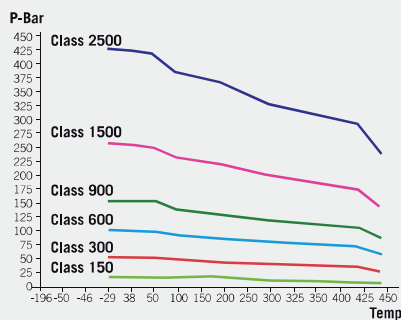
|                                  |                                  |                              |                              |                               |                               |
|----------------------------------|----------------------------------|------------------------------|------------------------------|-------------------------------|-------------------------------|
| Class 150.<br>From 3" to 42" (1) | Class 300.<br>From 3" to 42" (1) | Class 600.<br>From 3" to 30" | Class 900.<br>From 3" to 30" | Class 1500.<br>From 3" to 14" | Class 2500.<br>From 3" to 10" |
|----------------------------------|----------------------------------|------------------------------|------------------------------|-------------------------------|-------------------------------|



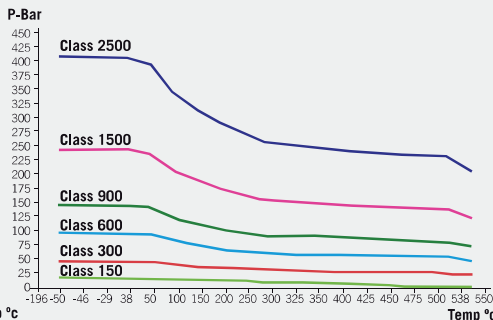
(\*) Dimensions of diameters of drills ISO 5211 refer to table from page 60.

**Pressure - Temperature**

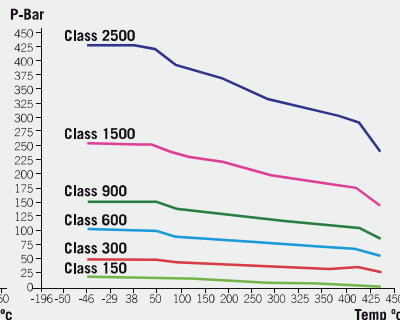
**A105N**



**A182 F316**



**A350 LF2 Cl.1**



**Fig. 7015 (Class 150)**

| DN        | øP  | øS  | L     | L1    | øR    | n x øS    | øT  | Y  | h     | N     | ISO 5211 | H     | øA   | J  | K     | WEIGHT | TORQUE | Kv     |
|-----------|-----|-----|-------|-------|-------|-----------|-----|----|-------|-------|----------|-------|------|----|-------|--------|--------|--------|
| 3" x 2"   | 76  | 49  | 203   | 101,5 | 152,4 | 4 x 19    | 190 | 18 | 125   | 100   | F10      | 36,5  | 20   | 8  | 22,5  | 66     | 27     | 190    |
| 4" x 3"   | 102 | 76  | 229   | 114,5 | 190,5 | 8 x 19    | 230 | 22 | 156,5 | 133,5 | F12      | 37,5  | 26   | 10 | 30    | 75     | 52     | 567    |
| 6" x 4"   | 152 | 102 | 394   | 197   | 241,3 | 8 x 22    | 280 | 24 | 175   | 167   | F12      | 54    | 30   | 10 | 34    | 115    | 98     | 815    |
| 8" x 6"   | 203 | 152 | 457   | 228,5 | 298,5 | 8 x 22,2  | 345 | 27 | 269   | 277   | F16      | 71    | 39,9 | 14 | 48,9  | 205    | 225    | 2.021  |
| 10" x 8"  | 254 | 203 | 533   | 266,5 | 362   | 12 x 25,4 | 405 | 29 | 325   | 325   | F25      | 77    | 49,9 | 14 | 58,4  | 375    | 450    | 4.205  |
| 12" x 10" | 305 | 254 | 610   | 305   | 431,8 | 12 x 25,4 | 485 | 30 | 362   | 319   | F25      | 84,5  | 59,9 | 16 | 67    | 565    | 668    | 7.348  |
| 14" x 12" | 337 | 305 | 686   | 343   | 476,3 | 12 x 28,5 | 535 | 33 | 423   | 399   | F25      | 104   | 69,9 | 18 | 78    | 825    | 1.317  | 10.120 |
| 16" x 14" | 387 | 337 | 762   | 381   | 538,8 | 16 x 28,5 | 595 | 35 | 455   | 439   | F30      | 119   | 79,9 | 22 | 87,9  | 1.250  | 1.547  | 12.000 |
| 18" x 16" | 438 | 387 | 864   | 432   | 577,9 | 16 x 31,8 | 635 | 38 | 490   | 472   | F30      | 134   | 84,9 | 22 | 94,9  | 1.820  | 2.000  | 17.269 |
| 20" x 18" | 488 | 438 | 914   | 457   | 635   | 20 x 31,8 | 700 | 41 | 542   | 596   | F30      | 147,5 | 99,9 | 28 | 111,9 | 2.450  | 3.027  | 18.647 |
| 24" x 20" | 589 | 488 | 1.067 | 533,5 | 749,3 | 20 x 34,9 | 815 | 46 | 577   | 610   | F30      | 147,5 | 99,9 | 28 | 111,9 | 2.790  | 3.803  | 27.010 |
| 30" x 24" | 735 | 589 | 1.295 | 647,5 | 857   | 28 x 35   | 985 | 73 | 599   | 692   | F40      | 152   | 120  | 32 | 134   | 5.530  | 9.100  | 32.150 |

(\*\*) Dimensions in mm and weight in kg.  
(\*\*\*) Weights and dimensions can be changed without notice.  
(1) Bigger sizes available under customers request.

Fig. 7030 (Class 300)

| DN        | øP  | øS  | L     | L1    | øR    | n x øS    | øT    | Y  | h     | N     | ISO 5211 | H     | øA   | J  | K     | WEIGHT | TORQUE | Kv     |
|-----------|-----|-----|-------|-------|-------|-----------|-------|----|-------|-------|----------|-------|------|----|-------|--------|--------|--------|
| 3" x 2"   | 76  | 49  | 283   | 141,5 | 168,3 | 8 x 22.2  | 210   | 27 | 125   | 95    | F10      | 36,5  | 20   | 8  | 22,5  | 65     | 49     | 190    |
| 4" x 3"   | 102 | 76  | 305   | 152,5 | 200   | 8 x 22.2  | 255   | 30 | 156,5 | 133,5 | F12      | 37,5  | 26   | 10 | 30    | 85     | 107    | 567    |
| 6" x 4"   | 152 | 102 | 403   | 201,5 | 269,9 | 12 x 22.2 | 320   | 35 | 175   | 167   | F12      | 54    | 30   | 10 | 34    | 135    | 210    | 815    |
| 8" x 6"   | 203 | 152 | 502   | 251   | 330,2 | 12 x 25.4 | 380   | 40 | 269   | 277   | F16      | 71    | 39,9 | 14 | 48,9  | 225    | 522    | 2.021  |
| 10" x 8"  | 254 | 203 | 568   | 284   | 387,4 | 16 x 28.5 | 445   | 46 | 325   | 325   | F25      | 77    | 49,9 | 14 | 58,4  | 385    | 1.060  | 4.205  |
| 12" x 10" | 305 | 254 | 648   | 324   | 450,8 | 16 x 31.8 | 520   | 49 | 362   | 319   | F25      | 84,5  | 59,9 | 16 | 67    | 650    | 1.559  | 7.348  |
| 14" x 12" | 337 | 305 | 762   | 381   | 514,4 | 20 x 31.8 | 585   | 52 | 423   | 399   | F25      | 104   | 69,9 | 18 | 78    | 995    | 3.125  | 10.120 |
| 16" x 14" | 387 | 337 | 838   | 419   | 571,5 | 20 x 34.9 | 650   | 56 | 455   | 439   | F30      | 119   | 79,9 | 22 | 87,9  | 1.460  | 3.642  | 12.000 |
| 18" x 16" | 438 | 387 | 914   | 457   | 628,6 | 24 x 34.9 | 710   | 59 | 490   | 472   | F30      | 134   | 84,9 | 22 | 94,9  | 1.925  | 4.732  | 17.269 |
| 20" x 18" | 488 | 438 | 991   | 495,5 | 685,8 | 24 x 34.9 | 775   | 62 | 542   | 596   | F30      | 147,5 | 99,9 | 28 | 111,9 | 2.450  | 7.000  | 18.647 |
| 24" x 20" | 589 | 488 | 1.143 | 571,5 | 812,8 | 24 x 41.3 | 915   | 68 | 577   | 610   | F30      | 147,5 | 99,9 | 28 | 111,9 | 3.250  | 8.959  | 27.010 |
| 30" x 24" | 735 | 589 | 1.397 | 698,5 | 857   | 28 x 48   | 1.092 | 90 | 599   | 673   | F40      | 152   | 120  | 32 | 134   | 5.900  | 23.400 | 32.150 |

Fig. 7060 (Class 600)

| DN        | øP  | øS  | L     | L1    | øR    | n x øS    | øT    | Y   | h     | N     | ISO 5211 | H     | øA    | J  | K     | WEIGHT | TORQUE | Kv     |
|-----------|-----|-----|-------|-------|-------|-----------|-------|-----|-------|-------|----------|-------|-------|----|-------|--------|--------|--------|
| 3" x 2"   | 76  | 49  | 356   | 178   | 168,3 | 8 x 22.2  | 210   | 32  | 125   | 100   | F10      | 36,5  | 20    | 8  | 22,5  | 72     | 85     | 190    |
| 4" x 3"   | 102 | 76  | 432   | 216   | 215,9 | 8 x 25.4  | 275   | 38  | 156,5 | 138,5 | F12      | 37,5  | 26    | 10 | 30    | 93     | 196    | 567    |
| 6" x 4"   | 152 | 102 | 559   | 279,5 | 292,1 | 12 x 28.5 | 355   | 48  | 175   | 164   | F12      | 54    | 30    | 10 | 34    | 169    | 392    | 815    |
| 8" x 6"   | 203 | 152 | 660   | 330   | 349,2 | 12 x 31.8 | 420   | 56  | 268,5 | 277,5 | F16      | 71    | 44,9  | 14 | 51,4  | 301    | 1.007  | 2.021  |
| 10" x 8"  | 254 | 203 | 787   | 393,5 | 431,8 | 16 x 34.9 | 510   | 64  | 325   | 296   | F25      | 77    | 54,9  | 14 | 61,4  | 555    | 2.057  | 4.205  |
| 12" x 10" | 305 | 254 | 838   | 419   | 489   | 20 x 34.9 | 560   | 67  | 362   | 365   | F25      | 84,5  | 59,9  | 16 | 67    | 829    | 3.013  | 7.348  |
| 14" x 12" | 337 | 305 | 889   | 444,5 | 527   | 20 x 38.1 | 605   | 70  | 423   | 418   | F25      | 104   | 69,9  | 18 | 78    | 1.426  | 6.079  | 10.120 |
| 16" x 14" | 387 | 337 | 991   | 495,5 | 603,2 | 20 x 41.3 | 685   | 76  | 455   | 450   | F30      | 119   | 79,9  | 22 | 87,9  | 1.751  | 7.062  | 12.000 |
| 18" x 16" | 438 | 387 | 1.092 | 546   | 654   | 20 x 44.5 | 745   | 83  | 490   | 504   | F30      | 134   | 84,9  | 22 | 94,9  | 2.625  | 9.196  | 17.269 |
| 20" x 18" | 488 | 438 | 1.194 | 597   | 723,9 | 24 x 44.5 | 815   | 89  | 542   | 567,5 | F30      | 147,5 | 99,9  | 28 | 111,9 | 3.111  | 13.485 | 18.647 |
| 24" x 20" | 589 | 488 | 1.397 | 698,5 | 838,2 | 24 x 50.8 | 940   | 102 | 577   | 581   | F35      | 147,5 | 99,9  | 28 | 111,9 | 4.250  | 17.381 | 27.010 |
| 30" x 24" | 735 | 589 | 1.651 | 825,5 | 857   | 28 x 54   | 1.130 | 108 | 599   | 694   | F40      | 157,5 | 119,8 | 32 | 133,6 | 7.125  | 40.100 | 32.150 |

Fig. 7090 (Class 900)

| DN        | øP  | øS  | L     | L1    | øR    | n x øS    | øT    | Y     | h   | N   | ISO 5211 | H   | øA  | J  | K   | WEIGHT | TORQUE | Kv     |
|-----------|-----|-----|-------|-------|-------|-----------|-------|-------|-----|-----|----------|-----|-----|----|-----|--------|--------|--------|
| 3" x 2"   | 77  | 51  | 381   | 190,5 | 190,5 | 8 x 25.4  | 240   | 38,1  | 120 | 101 | F10      | 35  | 23  | 8  | 27  | 62     | 199    | 190    |
| 4" x 3"   | 102 | 77  | 457   | 228,5 | 235   | 8 x 31.8  | 290   | 44,5  | 153 | 124 | F14      | 37  | 33  | 10 | 38  | 105    | 545    | 567    |
| 6" x 4"   | 152 | 102 | 610   | 305   | 317,5 | 12 x 31.8 | 380   | 55,6  | 170 | 151 | F16      | 37  | 33  | 10 | 38  | 201    | 786    | 815    |
| 8" x 6"   | 203 | 152 | 737   | 368,5 | 393,7 | 12 x 38.1 | 470   | 63,5  | 214 | 380 | F25      | 59  | 46  | 14 | 53  | 436    | 1.330  | 2.021  |
| 10" x 8"  | 254 | 203 | 838   | 419   | 469,9 | 16 x 38.1 | 545   | 69,9  | 258 | 428 | F25      | 75  | 58  | 18 | 67  | 735    | 2.536  | 4.205  |
| 12" x 10" | 305 | 254 | 965   | 482,5 | 533,4 | 20 x 38.1 | 610   | 79,4  | 303 | 489 | F25      | 113 | 68  | 20 | 78  | 1.200  | 4.950  | 7.348  |
| 14" x 12" | 324 | 305 | 1.029 | 514,5 | 558,8 | 20 x 41.3 | 640   | 85,8  | 348 | 525 | F25      | 111 | 68  | 20 | 78  | 1.795  | 7.850  | 10.120 |
| 16" x 14" | 375 | 324 | 1.130 | 565   | 616   | 20 x 44.5 | 705   | 88,9  | 381 | 545 | F25      | 110 | 88  | 24 | 100 | 2.105  | 10.868 | 12.000 |
| 18" x 16" | 425 | 375 | 1.219 | 609,5 | 685,8 | 20 x 50.8 | 785   | 101,6 | 418 | 580 | F25      | 110 | 88  | 24 | 100 | 2.720  | 18.112 | 17.269 |
| 20" x 18" | 473 | 425 | 1.321 | 660,5 | 749,3 | 20 x 54   | 855   | 108   | 464 | 630 | F35      | 130 | 120 | 32 | 136 | 4.050  | 28.738 | 18.647 |
| 24" x 20" | 571 | 473 | 1.549 | 774,5 | 901,7 | 20 x 66.7 | 1.040 | 139,7 | 507 | 672 | F35      | 130 | 120 | 32 | 136 | 4.650  | 43.470 | 27.010 |
| 30" x 24" | 712 | 571 | 1.803 | 901,5 | 857,0 | 20 x 72   | 1.232 | 142,0 | 596 | 760 | F35      | 127 | 148 | 32 | 164 | 7.950  | 55.555 | 32.150 |

Fig. 7050 (Class 1500)

| DN        | øP  | øS  | L     | L1    | øR    | n x øS    | øT  | Y     | h   | N   | ISO 5211 | H     | øA | J  | K   | WEIGHT | TORQUE | Kv     |
|-----------|-----|-----|-------|-------|-------|-----------|-----|-------|-----|-----|----------|-------|----|----|-----|--------|--------|--------|
| 3" x 2"   | 77  | 51  | 473   | 236,5 | 203,2 | 8 x 31.8  | 265 | 47,7  | 129 | 107 | F12      | 31    | 23 | 8  | 27  | 80     | 369    | 190    |
| 4" x 3"   | 102 | 77  | 549   | 274,5 | 241,3 | 8 x 34.9  | 310 | 54    | 156 | 137 | F14      | 36    | 33 | 10 | 38  | 156    | 942    | 567    |
| 6" x 4"   | 146 | 102 | 711   | 355,5 | 317,5 | 12 x 38.1 | 395 | 82,6  | 193 | 168 | F16      | 39,5  | 38 | 10 | 43  | 325    | 1.425  | 815    |
| 8" x 6"   | 194 | 146 | 841   | 420,5 | 393,7 | 12 x 44.5 | 485 | 92,1  | 242 | 395 | F25      | 69,5  | 46 | 14 | 53  | 603    | 2.795  | 2.021  |
| 10" x 8"  | 241 | 194 | 1.000 | 500   | 482,6 | 12 x 50.8 | 585 | 108   | 292 | 445 | F25      | 112,5 | 68 | 20 | 78  | 950    | 4.468  | 4.205  |
| 12" x 10" | 289 | 241 | 1.146 | 573   | 571,5 | 16 x 54   | 675 | 123,9 | 336 | 505 | F25      | 110,5 | 78 | 20 | 88  | 1.825  | 7.486  | 7.348  |
| 14" x 12" | 318 | 289 | 1.276 | 638   | 635   | 16 x 60   | 750 | 133,4 | 399 | 565 | F25      | 110   | 88 | 24 | 100 | 2.750  | 10.626 | 10.120 |

Fig. 7042 (Class 2500)

| DN       | øP  | øS   | L     | L1    | øR    | n x øS   | øT  | Y    | h   | N   | ISO 5211 | H     | øA | J  | K  | WEIGHT | TORQUE | Kv    |
|----------|-----|------|-------|-------|-------|----------|-----|------|-----|-----|----------|-------|----|----|----|--------|--------|-------|
| 3" x 2"  | 64  | 44,5 | 584   | 292   | 228,6 | 8 x 34.9 | 305 | 66,7 | 150 | 125 | F16      | 39    | 33 | 10 | 38 | 140    | 786    | 190   |
| 4" x 3"  | 89  | 64   | 683   | 341,5 | 273,0 | 8 x 41.3 | 355 | 76,2 | 182 | 151 | F16      | 39    | 38 | 10 | 43 | 250    | 1.932  | 567   |
| 6" x 4"  | 133 | 89   | 927   | 463,5 | 368,3 | 8 x 54   | 485 | 108  | 214 | 187 | F25      | 66    | 46 | 14 | 53 | 520    | 2.042  | 815   |
| 8" x 6"  | 181 | 133  | 1.038 | 519   | 438,2 | 12 x 54  | 550 | 127  | 282 | 430 | F25      | 78,5  | 58 | 18 | 67 | 1.000  | 4.368  | 2.021 |
| 10" x 8" | 226 | 181  | 1.292 | 646   | 539,8 | 12 x 66  | 675 | 165  | 356 | 495 | F25      | 105,5 | 78 | 20 | 88 | 1.850  | 8.211  | 4.205 |

(\*) Dimensions in mm and weight in kg.  
 (\*\*\*) Weights and dimensions can be changed without notice.  
 (1) Bigger sizes available under customers request.