



Ball Valves PN 20/50 (Class 150/300) AIT & IIT Construction (Carbon Steel and Stainless Steel)



Fig. 715/730

API 6D and Fire Safe



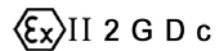
Certificado No: 108856



LICENSE NO. 6D-0197



Certificate No: 121493



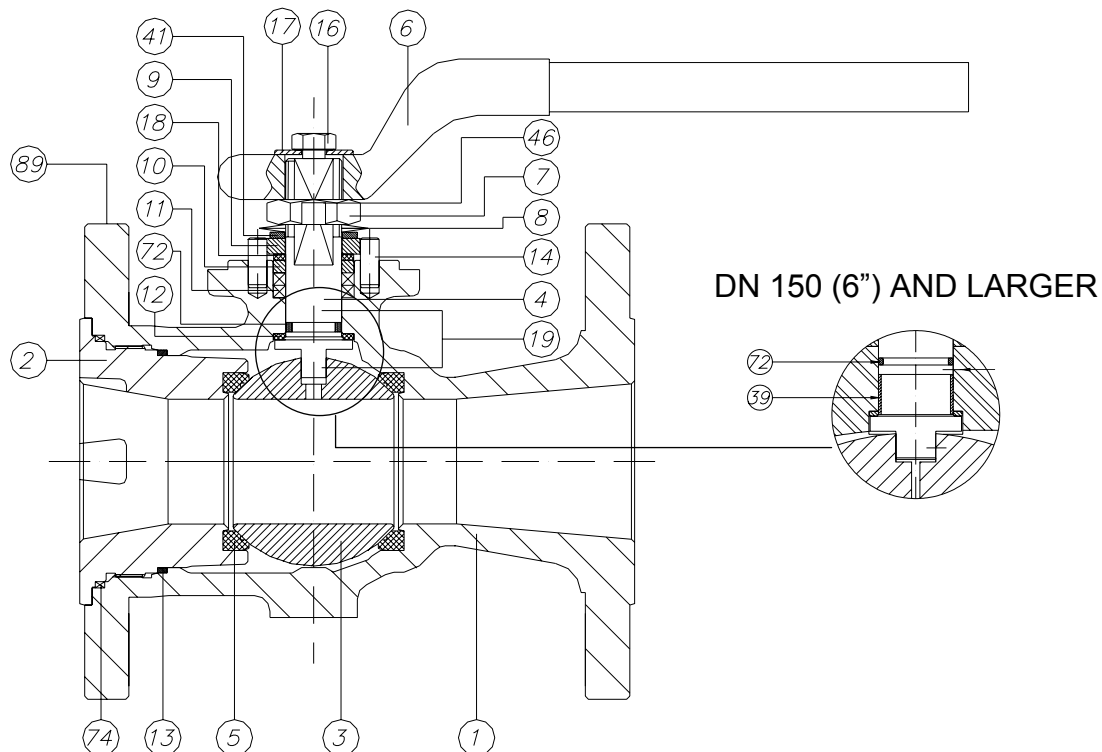


Ball Valves PN 20/50 (Class 150/300)

DN 15 - 200 (½" – 8") PN 20 (Class 150)

DN 25 - 200 (1" – 8") PN 50 (Class 300)

Parts and materials



| Item | Description | Material | |
|------|-----------------------|--|--|
| | | AIT | IIT |
| 1 | Body | A 216 Gr. WCB (C ≤ 0,25%) | A 351 Gr. CF8M |
| 2 | Body connector | A 105 | A 351 Gr. CF8M (DN 15 : 40 A 276/479 Tp.316) |
| 3 | Ball | A 351 Gr. CF8M (DN 15 : 25 A 479 Tp.316) | |
| 4 | Stem | A 479 Tp.316 | |
| 5 | Seat ring | PTFE | |
| 6 | Wrench | Nodular Iron | |
| 7 | Gland nut | Zinc plated carbon steel | AISI 303 |
| 8 | Disk spring | Carbon St. | E.N.P. Carbon St. |
| 9 | Stop plate | Carbon St. | AISI 304 |
| 10 | Gland | AISI 303 | AISI 316 |
| 11 | Gland packing | Graphite | |
| 12 | Stem thrust seal | 25% G.F. PTFE | |
| 13 | Body connector seal | PTFE | |
| 14 | Stop pin | Carbon St. | Stainless St. |
| 16 | Bolt | DIN 933 5.6 Zinc plated | DIN 933 A2 |
| 17 | Washer | Zinc plated carbon steel | AISI 304 |
| 18 | Thrust washer | 25% G.F. PTFE | |
| 19 | Antistatic device | Stainless St. | |
| 39 | Stem bushing | STANSIT | |
| 41 | Spacer (Dn 40 to 200) | Carbon St. | AISI 304 |
| 46 | Locking Washer | AISI 304 | |
| 72 | "O" Ring | FKM | |
| 74 | Insert seal | Graphite | |
| 89 | Identification plate | Stainless St. | |

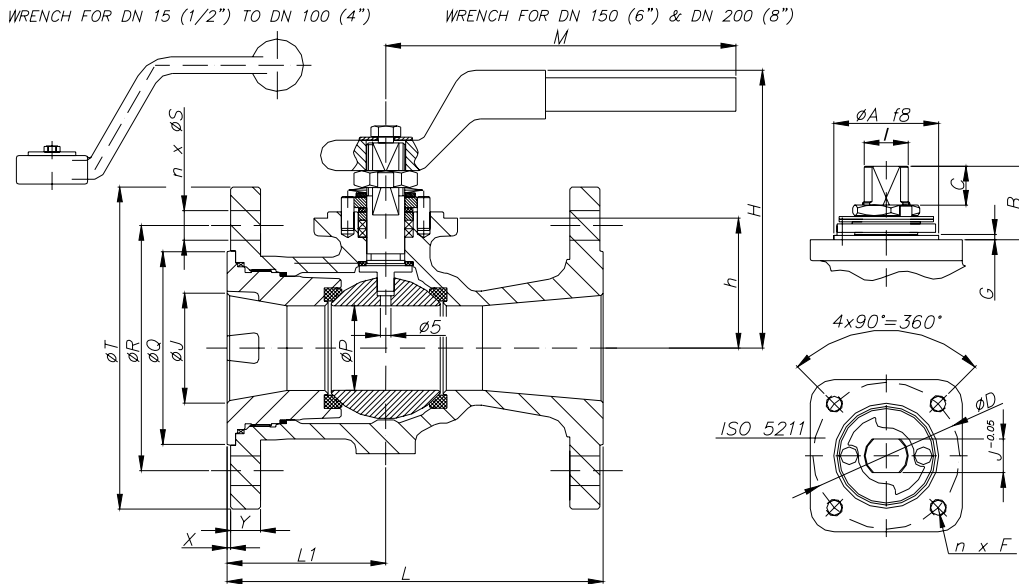


Ball Valves PN 20/50 (Class 150/300)

DN 15 - 200 (½" – 8") PN 20 (Class 150)

DN 25 - 200 (1" – 8") PN 50 (Class 300)

Dimensions



Series 715 (Class 150)

| DN | ØJ | ØP | L | L1 | ØQ | ØR | n x ØS | ØT | X | Y | h | H | M | WEIGHT |
|----------|--------|-----|-----|-------|-------|-------|--------|-------|-----|------|------|-------|-------|--------|
| 15 (½") | 14,8 | 9,5 | 108 | 54 | 34,9 | 60,3 | 4x15,9 | 88,9 | 1,6 | 9,5 | 21,5 | 95,5 | 166 | 1,6 |
| 20 (¾") | 19,9 | 15 | 117 | 60 | 42,9 | 69,8 | 4x15,9 | 98,4 | 1,6 | 11,1 | 26 | 102 | 166 | 2,1 |
| 25 (1") | 24,87 | 20 | 127 | 64,8 | 50,8 | 79,4 | 4x15,9 | 108 | 1,6 | 12,7 | 29 | 104,5 | 166 | 2,7 |
| 40 (1½") | 39,8 | 32 | 165 | 72 | 73 | 98,4 | 4x15,9 | 127 | 1,6 | 15,9 | 51 | 163 | 213,7 | 5,1 |
| 50 (2") | 49,82 | 40 | 178 | 75,1 | 92 | 120,6 | 4x19 | 152 | 1,6 | 17,5 | 61,5 | 178,5 | 213,7 | 7,9 |
| 80 (3") | 79,4 | 58 | 203 | 88 | 127 | 152,4 | 4x19 | 191 | 1,6 | 22,2 | 76 | 199,1 | 350 | 14,3 |
| 100 (4") | 101,6 | 80 | 229 | 104,1 | 157,2 | 190,5 | 8x19 | 229 | 1,6 | 22,2 | 92,5 | 215,5 | 450 | 25,9 |
| 150 (6") | 151 | 111 | 267 | 125 | 216 | 241,3 | 8x22,2 | 279,5 | 1,6 | 23,8 | 129 | 221,5 | 465 | 43,8 |
| 200 (8") | 198,75 | 144 | 292 | 135 | 270 | 298,4 | 8x22,2 | 343 | 1,6 | 27 | 158 | 251,5 | 715 | 77 |

(*) Dimensions in mm and weight in kg.

Series 730 (Class 300)

| DN | ØJ | ØP | L | L1 | ØQ | ØR | n x ØS | ØT | X | Y | h | H | M | WEIGHT |
|----------|--------|-----|-----|-------|-------|-------|---------|-------|-----|------|------|-------|-------|--------|
| 25 (1") | 24,87 | 20 | 165 | 64,8 | 50,8 | 88,9 | 4x19 | 123,8 | 1,6 | 15,9 | 29 | 104,5 | 166 | 4,1 |
| 40 (1½") | 39,8 | 32 | 190 | 72 | 73 | 114,3 | 4x22,2 | 155,6 | 1,6 | 19 | 51 | 163 | 213,7 | 8,2 |
| 50 (2") | 49,82 | 40 | 216 | 75,1 | 92 | 127 | 8x19 | 165,1 | 1,6 | 20,6 | 61,5 | 178,5 | 213,7 | 10,9 |
| 80 (3") | 79,4 | 58 | 283 | 88 | 127 | 168,3 | 8x22,2 | 210,5 | 1,6 | 26,9 | 76 | 199,1 | 350 | 21,4 |
| 100 (4") | 101,6 | 80 | 305 | 104,1 | 157,2 | 200 | 8x22,2 | 254 | 1,6 | 30,2 | 92,5 | 215,5 | 450 | 28,9 |
| 150 (6") | 151 | 111 | 403 | 125 | 216 | 269,9 | 12x22,2 | 317,5 | 1,6 | 35 | 129 | 221,5 | 465 | 70 |
| 200 (8") | 198,75 | 144 | 419 | 135 | 270 | 330,2 | 12x25,4 | 381 | 1,6 | 39,6 | 158 | 251,5 | 715 | 110,5 |

(*) Dimensions in mm and weight in kg.

Actuator connection

| DN | ISO 5211 | ØA | B | C | ØD | n x F | G | I | J |
|----------|----------|----|------|------|-----|-------|-----|---------|----|
| 15 (½") | F05 | 35 | 22 | 8,1 | 50 | 4x M6 | 1,5 | M10x1.5 | 7 |
| 20 (¾") | F05 | 35 | 23 | 7,1 | 50 | 4x M6 | 3 | M12x1.5 | 9 |
| 25 (1") | F05 | 35 | 23 | 7,7 | 50 | 4x M6 | 3 | M12x1.5 | 9 |
| 40 (1½") | F05 | 35 | 33,5 | 12,2 | 50 | 4xM6 | 3 | M16x1.5 | 12 |
| 50 (2") | F07 | 55 | 41,5 | 18,2 | 70 | 4x M8 | 3 | M18x1.5 | 13 |
| 80 (3") | F07 | 55 | 44 | 18 | 70 | 4x M8 | 3 | M22x1.5 | 16 |
| 100 (4") | F10 | 70 | 44,5 | 18,7 | 102 | 4xM10 | 3 | M25x1.5 | 18 |
| 150 (6") | F12 | 85 | 56,5 | 28,5 | 125 | 4xM12 | 3 | M28x1.5 | 20 |
| 200 (8") | F12 | 85 | 56 | 27,6 | 125 | 4xM12 | 3 | M35x2 | 25 |

(*) Dimensions in mm



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DN 15 - 200 (½" – 8") PN 20 (Class 150)

DN 25 - 200 (1" – 8") PN 50 (Class 300)

General Characteristics, Torque&KV, P&T Rating

| GENERAL CHARACTERISTICS | Fig.715/730 Series EFR | End Entry Body | Floating Ball | Reduced Bore |
|------------------------------------|--------------------------|----------------|-----------------------|---------------------------------|
| DESIGN STANDARDS | | | | |
| Valves design | API 6D | ASME B16.34 | BS 5351 | NF E 29-470 |
| Body design | ASME VIII Div.1 | | | |
| Shell thickness | ASME B16.34 | BS 5351 | | |
| Flanges | ASME B16.5 Raised face | | | |
| Face to face dimensions | ASME B16.10 Long pattern | API 6D | EN 558-2 Series 3 & 4 | |
| Actuator mounting flange | ISO 5211 | | | |
| Wetted parts materials and bolting | NACE MR.01.75 | | | |
| Shell finishing quality | MSS SP 55 | | | |
| Marking | API 6D | BS 5351 | NF E 29-470 | CE - PED EN 19 |
| TESTS AND CERTIFICATES | | | | |
| Quality Assurance | ISO 9001 | API Q1 | CE - PED | |
| Fire Safe certification | BS 6755 Part 2 | API 6FA | ISO 10497 | API 607 4 TH Edition |
| Pressure testing | API 598 | BS 6755 Part 1 | ISO 5208 | NF E 29-203 EN 12266 |
| Other | ISO 14001 | ATEX | | |

Torque Values in Nm

| VALVE SIZE | AT DIFFERENTIAL PRESSURE | | VALVE SIZE | AT DIFFERENTIAL PRESSURE | |
|-------------|--------------------------|-----------|-------------|--------------------------|-----------|
| | Class 150 | Class 300 | | Class 150 | Class 300 |
| | 20 bar | 50 bar | | 20 bar | 50 bar |
| DN 15 (½") | 6 | | DN 80 (3") | 40 | 60 |
| DN 20 (¾") | 9 | | DN 100 (4") | 90 | 150 |
| DN 25 (1") | 10 | 16 | DN 150 (6") | 180 | 280 |
| DN 40 (1½") | 21 | 30 | DN 200 (8") | 250 | 420 |
| DN 50 (2") | 25 | 35 | | | |

Kv Values in m³/h

| DN 15 (½") | DN 20 (¾") | DN 25 (1") | DN 40 (1½") | DN 50 (2") | DN 80 (3") | DN 100 (4") | DN 150 (6") | DN 200 (8") |
|------------|------------|------------|-------------|------------|------------|-------------|-------------|-------------|
| 7 | 10 | 26 | 107 | 140 | 300 | 600 | 1000 | 2000 |

Pressure-Temperature

For A216 Gr. WCB only. For other materials consult ASME B16.34

