

CONSTRUCTION & DESIGN

Full bore
 Split body
 Floating ball
 Trunnion mounted ball
 Double stuffing box
 Relief seats
 Anti-static device
 Fire safe
 Pressure balance hole in ball
 Blow-out proof stem

{1/2 - 8}
 {10 - 16}

FB
PN 10-40
Class 150-300



B A C V A L V E S

STANDARDS

| | | |
|--------------|---------------------------|--------------------------|
| Design | DIN 3357 | ANSI BS 5351 |
| Flanges | EN 1092 part 1 | ASME B16.5 RF |
| Face to face | EN 558-1 serie 27 | ASME B16.10 long pattern |
| | EN 558-1 serie 1 | |
| | Están. fab. - Manuf. std. | |
| | DIN 3202/4 M1 | |
| | ISO 5211 | |
| | EN 12266/1 | |
| | BS 6755/2, API 607 4ed | |

FB
FB-L
FB-M
FR

Top flange
 Testings
 Fire safe tested

FEATURES

High performance double stuffing box and low emissions
 Internal wetted parts are acc.NACE Standard MRO175

OPTIONS

Face to face BS 2080: **FB-L/ANSI**
 API 6D
 Metal to metal tightness
 Cryogenic service
 Emissions control port

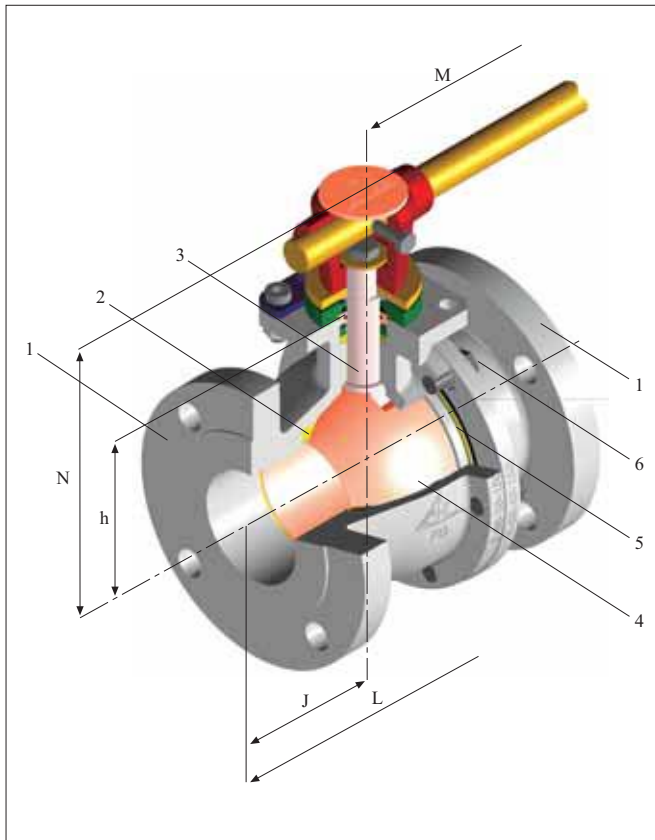
Trunnion mounted ball DN 50 (2) to DN 200 (8)

APPROVALS

Fire safe
 Gas-HL-VO
 Type approval

Lloyd s Register; Bureau Veritas
 Vd TÜV Merkblatt Rohrleitun 1065
 Bureau Veritas
 Det Norske Veritas
 Germanischer Lloyd
 Bureau Veritas
 T V S dwest (TA-Luft)

Clean air



| MATERIALS | | SS | CS | DI |
|-----------|---------|--|-------------------|--|
| 1 | Bodies | DIN | EN 10213-4 1.4408 | EN 10213-2 1.0619 / DIN 17243 C22.8 |
| | | ANSI | ASTM A-351 CF8M | ASTM A-216 WCC / ASTM A-105 N |
| 2 | Seats | PTFE-MOD | | |
| 3 | Stem | DIN | ASTM A-479 316 | ASTM A-479 304** |
| | | ANSI | ASTM A-479 316 | |
| 4 | Ball | DIN | EN 10213-4 1.4408 | EN 10213-4 1.4308* |
| | | ANSI | ASTM A-351 CF8M | |
| 5 | Gaskets | PTFE - GRAPHITE (<DN50 (2")) /GRAPHITE | | |
| 6 | Bolts | DIN | A4-70 | 8,8 |
| | | ANSI | A4-70 (SS 316) | ASTM A-193 B7 |

* <DN 80 EN10213-4 1.4408

**<DN 80 ASTM A-479 316

| DN | NPS | DIN | | | | ANSI | | DIN | ANSI | ISO 5211 | Cv | DIN-ANSI | | DIN | | | | | | ANSI | | | | | | | |
|-----|--------|----------|------|------|-----|------|------------------|-----|------|----------|-----|----------|------|------|---------------------------|------|--------|-------|-------|------|-------|-------|------|------|-----|-------|------|
| | | PN 16-40 | | | | 150# | 300# | | | | | PN10 | PN16 | PN25 | PN40 | | | 150# | 300# | | | | | | | | |
| | | FB | FB-L | FB-M | FR | FB | FB | | | | | | | | FB-L | FB | FB-M | | | FR | FB | | | | | | |
| | | D | L | | | | J ⁽¹⁾ | | | | | M | N | h | PAR-TORQUE ^(*) | | WEIGHT | | | | | | | | | | |
| mm | | | | | | | | | | | Nm | | Kg | | | | | | | | | | | | | | |
| 15 | 1/2" | 14 | 115 | 130 | 88 | 65 | 108 | 140 | 55 | 50 | 150 | 90 | 42,5 | F05 | 16 | 5 | 5 | - | - | - | - | 2,8 | 3,5 | 2,2 | 1,2 | 2,8 | 3,7 |
| 20 | 3/4" | 19 | 120 | 150 | 91 | 75 | 117 | 152 | 53 | 53 | 200 | 98 | 52 | F05 | 32 | 7 | 8 | - | - | - | - | 3,6 | 4,2 | 3 | 1,5 | 3,6 | 5 |
| 25 | 1" | 24 | 125 | 160 | 100 | 90 | 127 | 165 | 55 | 60 | 200 | 106 | 58 | F05 | 56 | 8 | 10 | - | - | - | - | 4,9 | 5,2 | 3,5 | 2,2 | 5,2 | 7 |
| 32 | | 30 | 130 | 180 | 109 | 105 | - | - | 56 | - | 240 | 124 | 67 | F05 | 93 | 20 | 20 | - | - | - | - | 7,1 | 7,6 | 5 | 3 | - | - |
| 40 | 1 1/2" | 38 | 140 | 200 | 121 | 120 | 165 | 191 | 60,5 | 69 | 240 | 121 | 72 | F05 | 160 | 22 | 25 | - | - | - | - | 8,3 | 8,9 | 6 | 4,3 | 8,3 | 11,5 |
| 50 | 2" | 50 | 150 | 230 | 133 | 140 | 178 | 216 | 63 | 80 | 290 | 150 | 89 | F07 | 301 | 34 | 38 | - | - | - | - | 12,7 | 14 | 10,5 | 7,8 | 12,5 | 14,2 |
| 65 | | 62 | 170 | 290 | - | - | - | - | 72 | - | 290 | 161 | 96 | F07 | 491 | 51 | 74 | - | 16 | 13,4 | - | 17 | 18,2 | - | - | - | - |
| 80 | 3" | 76 | 180 | 310 | - | - | 203 | 283 | 77 | 95 | 350 | 182 | 117 | F10 | 783 | 109 | 218 | - | 22 | 25,5 | - | 24 | 27,2 | - | - | 24,5 | 30 |
| 100 | 4" | 100 | 190 | 350 | - | - | 229 | 305 | 86 | 104 | 350 | 202 | 135 | F10 | 1465 | 182 | 272 | - | 31 | 36,5 | - | 34 | 39 | - | - | 38 | 46 |
| 125 | | 120 | 325 | - | - | - | - | - | 140 | 140 | 550 | 225 | 173 | F12 | 2201 | 212 | 343 | - | 56 | - | - | 61 | - | - | - | - | - |
| 150 | 6" | 151 | 350 | - | - | - | 394 | 403 | 175 | 175 | 550 | 304 | 195 | F12 | 3720 | 404 | 895 | - | 69 | - | - | 75 | - | - | - | 71 | 83 |
| 200 | 8" | 202 | 400 | - | - | - | 457 | 502 | 200 | 200 | 700 | 353 | 237 | F14 | 7223 | 617 | 878 | - | 120 | - | - | 135 | - | - | - | 136 | 187 |
| 250 | 10" | 254 | 450 | - | - | - | 533 | 569 | 225 | 225 | | | 255 | F14 | 12173 | 1098 | 1300 | 245,4 | 246,8 | - | 259,5 | 274,4 | - | - | - | 265,2 | 311 |
| 300 | 12" | 305 | 500 | - | - | - | 610 | 648 | 250 | 250 | | | 315 | F16 | 18462 | 1660 | 2100 | 346,8 | 352,5 | - | 369,9 | 393,2 | - | - | - | 393,8 | 452 |
| 350 | 14" | 337 | 550 | - | - | - | 686 | 762 | 280 | 280 | | | 340 | F25 | 23157 | 2372 | 3120 | 481,7 | 490,5 | - | 515,9 | 548,6 | - | - | - | 544,2 | 636 |
| 400 | 16" | 387 | 600 | - | - | - | 762 | - | 300 | 300 | | | 388 | F25 | 31605 | 4500 | - | 717,7 | 730,9 | - | 770 | - | - | - | - | 756,2 | - |

(1) For valves type FR: J=L/2

(*) Normally expected torque, in clean conditions. For actuator sizing allow adequate safety factor.