



BALL VALVES SIDE ENTRY

Trunnion Mounted

One of Pibiviesse core products, it is available with several design options and versions for Cryogenic, High Temperature, Subsea, DBB Double Ball and Control applications (see the dedicated product data sheets).

Description	Product Features and Options
Pibiviesse valve models	E series
Main Standards and Codes	API 6D & IOGP S-562, API 6A, ASME B16.34, ASME VIII, NACE MR 01-75/ISO 15156
Body design	2 or 3 piece Split Body Bolted
Size range	API 6D: from 1/2" to 64" API 6A: from 1.13/16" to 20"
Pressure Ratings	ASME 150# to 2500# API 6A 2000 to 15000 psi
Design Temperature range	-46 / 230°C
End Connections	Flanged RF/RTJ to ASME B16.5, ASME B16.47 Series A or B, EN 1092-1, API 6A Compact to Norsok L005 Clamped Hubs to Customer request Butt-Welded to ASME B31.3, ASME B31.4, or ASME B31.8. Profile as illustrated in ASME B16.25
General Design features	Full and Reduced Bore Long Pattern Spring Energized Floating seats Bidirectional, Bidirectional preferential or Unidirectional Anti-blow out stem Anti-static design Emergency sealant injection on stem and seats Fire Safe
Ball-to-Seats seal	Soft, Metal-to-Metal, Primary Metal Secondary Soft (PMSS)
Seat design	SPE (Self Relieving), DIB-1, DIB-2
Optional Design features	Special Bore (Controlled Bore for Pigging) Pup pieces on weld ends Double Block and Bleed Double Isolation & Bleed Pressure Equalizing Hole in the ball Extended stem Extended bonnet Locking devices Position indication Limit Switches Combined upstream Metal-to-Metal / downstream Soft ball-to-seats sealing Ball bearings and seat pockets protections from sand/debris in dirty service Quick operation ≤ 3 secs for HIPPS applications
Materials Selection	Mostly manufactured from forged materials CS, LTCS, 316ss, 6Mo, Duplex, S-Duplex, Monel, Nickel Alloys, Titanium CRA weld overlays in 316 St. Steel or Inconel 625 Tungsten Carbide Coating (TCC) and Chromium Carbide Coatings (CCC) Electroless Nickel Plating Compliance with NACE MR 01-75/ISO 15156 when applicable.
Seals and Gaskets	RPTFE, PEEK, PCTFE and NYLON grades seat inserts, Metal with TCC and CCC Elastomeric (HNBR, FKM, FFKM), PTFE lip-seals, Metallic, Graphite and V-Packings
Operation	Manual with Lever or Gearbox w/handwheel Actuation: Electric, Pneumatic and Hydraulic actuators
Product Certifications and Qualifications	API 6D, API 6A, PED 2014/68/EU, SIL 3 to IEC 61508 Parts 1-7:2010 ISO 15848-1 for Fugitive Emissions (to be confirmed case by case) Fire Safe ISO 10497, API 607 or API 6FA
Applications	The Side Entry Ball design is the most commonly used in the upstream, midstream and downstream sectors of the Oil & Gas Industry. Onshore LNG Plant and Offshore FLNG Onshore Production Onshore Transportation Refining & Petrochemical Onshore Treatment Offshore Platform & FPSO Onshore Storage Power Generation, Hydropower, Desalination (Water Service)