



## BALL VALVES SIDE ENTRY CRYOGENIC Trunnion Mounted

One of Pibiviesse core products, it is available with several design options and versions for Low and Cryogenic temperature

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 11"
Pressure Ratings	ASME 150# to 2500# API 6A 2000 to 10000 psi
Design Temperature range	-196 / 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 Extended bonnet Fire Safe
Ball-to-Seats seal	Soft, Metal-to-Metal
Seat design	SPE (Self Relieving), 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 Pressure Relif Hole in the ball Locking devices Position indication Limit Switches
Materials Selection	Mostly manufactured from forged materials LTCS, Stainless Steel CRA weld overlays in 316 St. Steel or Inconel 625 Tungsten Carbide Coating (TCC) and Chromium Carbide Coatings (CCC) Compliance with NACE MR 01-75/ISO 15156 when applicable.
Seals and Gaskets	RPTFE, PEEK and PCTFE seat inserts, Metal with TCC and CCC 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 Valves Low Temperature & Cryogenic design is the most commonly used in the upstream and midstream sectors of the Oil & Gas Industry.  Onshore LNG Plant and Offshore FLNG Onshore Production Refining & Petrochemical Onshore Treatment Offshore Platform & FPSO