



## BALL VALVES SIDE and TOP ENTRY

## Subsea

Pibiviesse designs and manufactures a range of Ball Valves for Subsea applications in the Oil & Gas industry, suitable for shallow-water and deepwater installations. Products are manufactured in the Split Body Bolted, Top Entry and Fully Welded designs, in a broad range of design configurations and materials to meet the specific application and Customer's requirements. Various options are available for the body construction, dynamic and static sealing

Description	Product Features and Options
	Split Body Bolted E series
Pibiviesse valve models	Fully Welded W series Top Entry T series
Main Standards & Codes	API 6DSS, API 6A, API 17D/ISO 13628-4, ASME VIII, ASME B16.34, NACE MR 01-75 / ISO 15156
Body design	2 or 3 piece Split Body Bolted and Welded 1 piece body Top Entry
Size range	API 6DSS: from 1" to 60" API 6A: from 1.13/16" to 11"
Pressure Ratings	API 6DSS: ANSI 150# to 2500# API 6A: up 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	Trunnion mounted ball Full and Reduced Bore Long Pattern Spring Energized Floating seats Bidirectional or Unidirectional Anti-blow out stem Anti-static design
Ball-to-Seats seal	Soft and Metal-to-Metal
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 Emergency sealant injection on stem and seats Combined upstream Metal-to-Metal / downstream Soft ball-to-seats sealing Primary metal sealing on valve body pressure boundaries Boundary environmental seals on body and stem to prevent the ingress of seawater Primary metal stem sealing Ball bearings and seat pockets protections from sand/debris in dirty service
Materials Selection	Manufactured from forged and cast 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) 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 and V-Packings
Operation	Lever or Gearbox with handwheel for operation by Diver ROV direct interface receptacle Gearbox with ROV interface receptacle Hydraulic Actuator with or without ROV receptacle / manual override Gearbox / Actuator fixed or retrievable ROV interface receptacle designed to API 17H / ISO 13628-8 Any taylor made operator coupling required by Customer
Product Certifications & Qualifications	API 6DSS, 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)
Applications	Subsea Pipelines Isolation (SSIV) Subsea Pipeline End Manifolds (PLEM) Pipeline End Terminations (PLET) Jacket Flooding Systems CALM Buoy Systems