

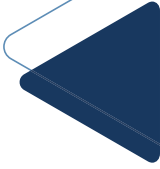
## BALL VALVES **TOP-ENTRY** TOPSIDE

**PetrolValves has been manufacturing Top-entry ball valves since the late 1960s and also owns a registered patent for the first Top Entry Ball Valves supplied to the market. This design enables maintenance “in line” and complies with main international standards and codes:**

- ANSI
- ASME
- ISO
- PED
- API
- BS
- NACE

### **API 6D Design Standard**

Ball support	Trunnion mounted	
Body Design	Split body 3 pieces	
Seat type	Metal seated	Soft seated
Material Selection	LTCS or Low Alloy Steel + CRA Cladding Duplex, Super Duplex, Ni Alloy Forged TCC or CCC Hardfacing	LTCS or Low Alloy Steel + CRA Cladding Duplex, Super Duplex, Ni Alloy Forged CRA weld overlay, Electroless Nickel plating PTFE, RPTFE, PCTFE, PEEK, DEVLON, NYLON Insert
Seals / Gaskets	Elastomers Thermoplastics / Metallic Graphite	Elastomers
Design features	Full/Reduced Bore Bidirectional/Unidirectional Self Relieving / Duoble Piston Anti blow out stem Anti static device Fire Safe	Full/Reduced Bore Bidirectional/Unidirectional Self Relieving Anti blow out stem Anti static device Fire Safe
Special features	NACE Requirement Special bore Piggable Double Block and Bleed Double Isolation & Bleed Equalizing hole Extended stem Extended bonnet Local position indicator Limit switch	NACE Requirement Special bore Piggable Equalizing hole Extended stem Extended bonnet Local position indicator Limit switch
End connection	Flanged (RF / RTJ, compact, studded) Buttwelded ends Hub	Flanged (RF / RTJ, compact, studded) Buttwelded ends Hub
Operators	Handwheel or manual gear Electric Multi-Turn Pneumatic quarter turn actuator Hydraulic quarter turn actuator	Handwheel or manual gear Electric Multi-Turn Pneumatic quarter turn actuator Hydraulic quarter turn actuator
Product Range	#150 to #600 - 2" to 60" #900 to #1500 - 2" to 48" #2500 - 2" to 30"	#150 to #600 - 2" to 60" #900 to #1500 - 2" to 48" #2500 - 2" to 30"



**▶ API 6A Design Standard**

Ball support	Trunnion mounted	
Body Design	Forging	
Seat type	Metal seated	Soft seated
Material Selection	LTCS or Low Alloy Steel + CRA Cladding Duplex, Super Duplex, Ni Alloy Forged TCC or CCC Hardfacing	LTCS or Low Alloy Steel + CRA Cladding Duplex, Super Duplex, Ni Alloy Forged PTFE / PEEK Insert
Seals / Gaskets	Elastomers Thermoplastics / Metallic	Elastomers
Design features	Full/Reduced Bore Bidirectional/Unidirectional Self Relieving / Double Piston Anti blow out stem Anti static device	Full/Reduced Bore Bidirectional/Unidirectional Self Relieving Anti blow out stem Anti static device
Special features	NACE Requirement Special bore Piggable Double Block and Bleed Double Isolation & Bleed Equalizing hole Extended stem Extended bonnet Local position indicator Limit switch	NACE Requirement Special bore Piggable Equalizing hole Extended stem Extended bonnet Local position indicator Limit switch
End connection	Flanged (RF / RTJ, compact, studded) Buttwelded ends Hub	Flanged (RF / RTJ, compact, studded) Buttwelded ends Hub
Operators	Handwheel or manual gear Electric Multi-Turn Pneumatic quarter turn actuator Hydraulic quarter turn actuator	Handwheel or manual gear Electric Multi-Turn Pneumatic quarter turn actuator Hydraulic quarter turn actuator
Product Range	3k to 5k - 1 <sup>3</sup> / <sub>16</sub> " to 34" 10k - 1 <sup>3</sup> / <sub>16</sub> " to 16" 15k - 1 <sup>3</sup> / <sub>16</sub> " to 11"	2k to 5k - 1 <sup>3</sup> / <sub>16</sub> " to 20" 10k - 1 <sup>3</sup> / <sub>16</sub> " to 16" 15k - 1 <sup>3</sup> / <sub>16</sub> " to 6"

