





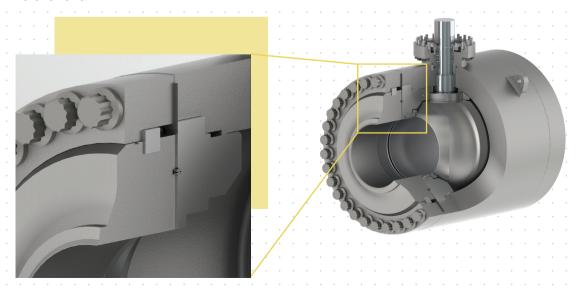
introduction

PETROLVALVES is a leading manufacturer of valves for the oil and gas industry. Formed in 1956, PETROLVALVES has grown to a company with sales, services and manufacturing facilities throughout the world with direct presence in the United States, Norway, United Kingdom, Italy, Singapore and Australia.

The continuous investment in development of new technology has resulted in the growth and ongoing success of our company. PETROLVALVES line of production includes some of the most sophisticated valve products in the world with a strong focus on the development of custom or niche products designed according to customer's specific requirements.

ball and check COMPACT VALVE PHILOSOPHY

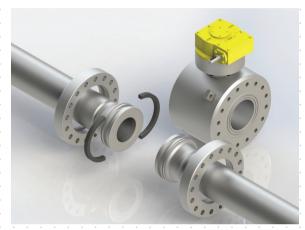
Ball and Check Compact manifold valves are specifically developed to operate where space and weight are a major concern. Our designs offer reduced space and weight, using swivel flanges or integral flange designs. Both allow easy disassembly of the valve in line. Any thermal fluctuations and changes of the imposed loads of the pipeline are recovered by the split ring placed between the slip on flange and the buttweld flange. Bolt pattern is the same on both fastener types to guarantee maximum flexibility & full inter-changeability of installations.



compact valves INSTALLATION PROCEDURE



01. Cut pipe and create the space to accomodate valve



02. Weld valve ends to pipe ends and slide swivel flanges over welded ends; Install half rings in position onto welded valve ends



03. Slide swivel flanges over half rings



04.Insert body and tighten bolts

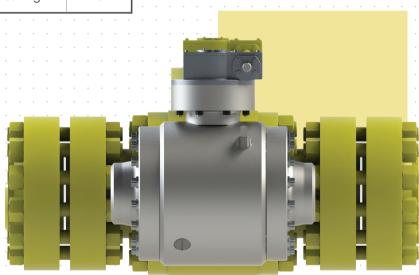
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normal / compact VALVE COMPARISON

The picture and summary table below illustrate the comparison between a conventional Class 1500 DN 250 valve and flanged assembly, and a compact design equivalent valve. Our compact design provides substantial reductions in weight and space, as well as associated cost.

| | STANDARD VALVE + FLANGE ASSEMBLY | COMPACT VALVE | SAVING |
|--------|---|------------------|--------|
| LENGHT | 1060 mm | 736 mm | 30% |
| WEIGHT | 1506 kg | 890 kg | 41% |



compact manifold design features COMPACT BALL VALVE 281

| MAIN DESIGN FEATURES | SPECIAL FEATURES / OPTIONS | ACCESSORIES |
|--|---|--|
| API 6A / API 6D ASME BI6.34 Single or double ball in one body Metal seat / soft seat Fire Safe Full Bore Bidirectional/ Unidirectional Self Relieving Anti blow out stem Anti static device | NACE Requirement Large variety of seals available Negligible pressure drop Piggability Special bore Trunnion mounted or floating ball design Full/partial cladding Equalizing hole in ball Extended stem Extended bonnet Double Block & Bleed (*) Specially engineered design for horizontal stem installation and / or vertical pipeline installation Custom engineering to meet customer project requirements | Vent & Drain: Plugged Flanged With valve Any type of connection upon request Seat / Stem Injection: Plugged Flanged With isolation valve Any type of connection upon request |

(*) upon request

PETROLVALVES' engineering department is specialized to fulfill all customer requirements and project specifications.

compact valves

compact manifold design features COMPACT CHECK VALVE 136 / 913

| MAIN DESIGN FEATURES | SPECIAL FEATURES | ACCESSORIES |
|---|---|---------------------------------------|
| API 6A / API 6D Swing check valve Fire Safe Regular or full port | NACE Requirement Renewable trim Large variety of seal available Special bore | ► Any type of connection upon request |

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materials

PETROLVALVES' compact valves have been designed for use with various combinations of materials which are selected to better suit service conditions

| AVAILABLE BODY | AVAILABLE TRIM | AVAILABLE |
|---|---|---|
| MATERIAL | MATERIAL | COATING |
| SELECTION | SELECTION | SELECTION |
| Cast or Forged: LTCS; Inconel Cladded Forged: Low Alloy Steel; Inconel Cladded Cast or Forged: Stainless Steel, Duplex, SuperDuplex, Ni Alloy | Cast or Forged: LTCS; Inconel cladded Forged: Low Alloy Steel; Inconel cladded Cast or Forged: Stainless Steel, Duplex, SuperDuplex, Ni Alloy | Ball valves: Electroless Ni Plating, Tungsten Carbide Coating, Chromium Carbides Coating Check valves: Stellite HardFacing |



MANUFACTURING PLANT

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