

APPLICABLE STANDARDS - BALL AND PLUG VALVES

ANSI - American National Standards Institute

ASME - American Society of Mechanical Engineers

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| ANSI/ASME B16.11 | Forged Steel Fitting Socket-welding and Threading |
| ANSI/ASME B16.5 | Steel Pipe Flanges and Flanged Fittings |
| ANSI/ASME B16.10 | Face to Face and End to End Dimensions of Ferrous Valves |
| ANSI/ASME B16.25 | Butt-welding Ends |
| ANSI/ASME B16.34 | Steel Valves – Flanged and Butt-welding Ends |
| ANSI/ASME B31.3 | Chemical Plant and Petroleum Refinery Piping Systems |
| ANSI/ASME B31.4 | Liquid Petroleum Transportation Piping Systems |
| ANSI/ASME B31.8 | Gas Transmission and Distribution Piping Systems |

API - American Petroleum Institute

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| API 6A | Specification for Wellhead and Christmas Tree Equipment |
| API 6D | Specification for Pipeline Valves |
| API RP6F | Recommended Practice for Fire Testing of Valves |
| API 6FA | Specification for Fire Testing of Valves |
| API 598 | Valve Inspection and Test |
| API 605 | Large Diameter Carbon Steel Flanges |
| API 607 | Fire Test for Soft Seated Quarter Turn Valves |

ASTM - American Society for Testing Materials

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| ASTM 01.01 | Steel Piping, Tubing and Fittings |
| ASTM 01.02 | Ferrous Castings; Ferro alloys |
| ASTM 02.01 | Copper and Copper Alloys |
| ASTM 02.04 | Nickel and Nickel Alloys |
| ASTM 03.01 | Metals – Mechanical Testing; Elevated and Low Temperature Test; Metallography |

NACE - National Association of Corrosion Engineers

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| NACE MR-01-75 | Sulfide Stress Cracking Resistant Metallic Materials for Oilfield Equipment |
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MSS - Manufacturers Standardization Society

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| MSS SP-06 | Standard Finishes for Contact Faces of Pipe Flanges and Connecting-end Flanges of Valves and Fittings |
| MSS SP-25 | Standard Marking System for Valves Fittings, Flanges and Unions |
| MSS SP-44 | Steel Pipeline Flanges |
| MSS SP-45 | By-pass and Drain Connection Standard |
| MSS SP-55 | Quality Standard for Steel Castings – Visual Method |
| MSS SP-61 | Hydrostatic Testing of Steel Valves |
| MSS SP-72 | Ball Valves with Flanged or Butt-welding Ends for General Service |

BS - British Standard

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| BS 1560 | Steel Pipe Flanges and Flanged Fittings |
| BS 2080 | Face to Face, Centre to Centre, End to End, and Centre to End Dimensions of Flanged and Butt-welding End Steel Valves for the Petroleum, Petrochemical and Allied Industries |
| BS 4504 | Flanges and Boltings for Pipe Valves and Fittings |
| BS 5146 | Inspection and Test of Steel Valves for the Petroleum, Petrochemical and Allied Industries |
| BS 5351 | Steel Ball Valves for the Petroleum, Petrochemical and Allied Industries |
| BS 6755 | Testing of Valves |

ISO - International Organization for Standardization

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| ISO 9001 | Quality Systems – Model for Quality Assurance in Design/Development, Production, Installation and Servicing |
| ISO 5208 | Pressure Testing of Valves - Industrial |
| ISO 5752 | Metal Valves for Use in Flanged Pipe Systems - Face-to-face and Centre-to-face Dimensions |
| ISO 7121 | Flanged Steel Ball Valves |
| ISO 10423 (API 6A) | Specification for Wellhead and Christmas Tree Equipment |
| ISO 10497 (API 607) | Testing of Valves - Fire Type - Test Requirements (Fire Test for Soft Seated Quarter-Turn Valves) |
| ISO 14313 (API 6D) | Specification for Pipeline Valves |
| ISO 15156 | NACE MR0175, Petroleum and Natural Gas Industries - Materials for Use in H ₂ S-containing Environments in Oil and Gas Production |
| ISO 15848-1 | Industrial valves - Measurement, Test and Qualification Procedures for Fugitive Emission Part 1: Classification System and Qualification Procedures for Type Testing of Valves |
| ISO 17292 | Metal Ball Valves for Petroleum, Petrochemical and Allied Industries |

MAIN DESIGN STANDARDS - BALL AND PLUG VALVES

Profluid pipeline ball and plug valves are manufactured to the following API and ASME Standards which dictate all facets of design, firesafe testing, wall thickness, hydrostatic testing, end connections, etc.

API - American Petroleum Institute

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| API 598 | API 6FA |
| API 599 | API 607 |
| API 6D | |

ASME - American Society of Mechanical Engineers

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| ASME B16.10 | ASME B31.8 |
| ASME B16.25 | ASME B46.1 |
| ASME B16.34 | ASME B16.5 |
| ASME B31.3 | |

STANDARD MATERIALS

Standard Valve Materials Grades

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|----------------|---------------|
| AISI 4140 | ASTM A182 F53 |
| API 6A 60K | ASTM A182 F55 |
| ASTM A105 N | ASTM A182 F6A |
| ASTM A182 F304 | ASTM A350 LF2 |
| ASTM A182 F316 | ASTM A350 LF3 |
| ASTM A182 F44 | ASTM A564 630 |
| ASTM A182 F51 | ASTM A694 F60 |