



Standard Specification for Pressure-Reducing Valves for Water Systems, Shipboard¹

This standard is issued under the fixed designation F 1370; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ε) indicates an editorial change since the last revision or reapproval.

This standard has been approved for use by agencies of the Department of Defense.

1. Scope

1.1 This specification covers self-contained, globe style, pressure-reducing valves for use in water systems of shipboard installations. These valves are limited to discharge pressure settings of 200 psig (1379 kPa) and below.

1.2 The values stated in inch-pound units are to be regarded as the standard. The values given in parentheses are for information only.

1.3 The following precautionary caveat pertains only to the tests portion, Section 8, of this specification: *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.*

2. Referenced Documents

2.1 ASTM Standards:

- A 125 Specification for Steel Springs, Helical, Heat Treated²
- A 193 Specification for Alloy-Steel and Stainless Steel Bolting Materials for High-Temperature Service³
- A 194 Specification for Carbon and Alloy Steel Nuts for Bolts for High-Pressure and High-Temperature Service³
- A 231 Specification for Chromium-Vanadium Alloy Steel Spring Wire⁴
- A 276 Specification for Stainless and Heat-Resisting Steel Bars and Shapes²
- A 313 Specification for Stainless and Heat-Resisting Steel Spring Wire⁴
- A 689 Specification for Carbon and Alloy Steel Bars for Springs²
- B 21 Specification for Naval Brass, Rod, Bar, and Shapes⁵
- B 26 Specification for Aluminum-Alloy Sand Castings⁶

- B 61 Specification for Steam or Valve Bronze Castings⁵
- B 62 Specification for Composition Bronze or Ounce Metal Castings⁵
- B 148 Specification for Aluminum-Bronze Sand Castings⁵
- B 150 Specification for Aluminum Bronze Rod, Bar, and Shapes⁵
- B 637 Specification for Precipitation Hardening Nickel Alloy Bars, Forgings, and Forging Stock for High-Temperature Service⁷
- B 689 Specification for Electroplated Engineering Nickel Coatings⁸
- F 467 Specification for Nonferrous Nuts for General Use⁹
- F 468 Specification for Nonferrous Bolts, Hex Cap Screws, and Studs for General Use⁹
- F 593 Specification for Stainless Steel Bolts, Hex Cap Screws, and Studs⁹
- F 594 Specification for Stainless Steel Nuts⁹
- 2.2 *ANSI Standards:*¹⁰
 - ANSI B1.1 Unified Screw Threads
 - ANSI B1.12 Class 5 Interference, Fit Thread
- 2.3 *ISA Standards:*¹¹
 - S75.01 Flow Equations for Sizing Control Valves
 - S75.02 Control Valve Capacity Test Procedure
- 2.4 *Federal Specifications:*¹²
 - QQ-B-637 Brass, Naval: Rod, Wire, Shapes, Forgings, and Flat Products with Finished Edges (Bar, Flat Wire, and Strip)
 - QQ-C-390 Copper Alloy Casting (Including Cast Bar)
 - QQ-C-465 Copper-Aluminum Alloys (Aluminum Bronze) (Copper Alloy Numbers 606, 6014, 630, 632M, and 642); Rod, Flat Products with Finished Edges (Flat Wire, Strip, and Bar) Shapes, and Forgings
 - QQ-N-281 Nickel-Copper Alloy Bar, Rod, Plate, Sheet, Strip, Wire, Forgings, and Structural and Special Shaped Sections

¹ This specification is under the jurisdiction of ASTM Committee F-25 on Ships and Marine Technology and is the direct responsibility of Subcommittee F25.13 on Piping Systems.

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² *Annual Book of ASTM Standards*, Vol 01.05.

³ *Annual Book of ASTM Standards*, Vol 01.01.

⁴ *Annual Book of ASTM Standards*, Vol 01.03.

⁵ *Annual Book of ASTM Standards*, Vol 02.01.

⁶ *Annual Book of ASTM Standards*, Vol 02.02.

⁷ *Annual Book of ASTM Standards*, Vol 02.04.

⁸ *Annual Book of ASTM Standards*, Vol 02.05.

⁹ *Annual Book of ASTM Standards*, Vol 15.08.

¹⁰ Available from American National Standards Institute, 11 W. 42nd St., 13th Floor, New York, NY 10036.

¹¹ Available from Instrumentation, Systems, and Automation Society, 67 Alexander Dr., Research Triangle Park, NC 27709.

¹² Available from Standardization Documents Order Desk, Bldg. 4 Section D, 700 Robbins Ave., Philadelphia, PA 19111-5094, Attn: NPODS.