



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

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This standard has been approved for use by agencies of the U.S. 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:²

- A125 Specification for Steel Springs, Helical, Heat-Treated
- A193/A193M Specification for Alloy-Steel and Stainless Steel Bolting for High Temperature or High Pressure Service and Other Special Purpose Applications
- A194/A194M Specification for Carbon and Alloy Steel Nuts for Bolts for High Pressure or High Temperature Service, or Both
- A231/A231M Specification for Chromium-Vanadium Alloy Steel Spring Wire
- A276 Specification for Stainless Steel Bars and Shapes
- A313/A313M Specification for Stainless Steel Spring Wire
- A689 Specification for Carbon and Alloy Steel Bars for Springs
- B21/B21M Specification for Naval Brass Rod, Bar, and Shapes

B26/B26M Specification for Aluminum-Alloy Sand Castings

B61 Specification for Steam or Valve Bronze Castings

B62 Specification for Composition Bronze or Ounce Metal Castings

B148 Specification for Aluminum-Bronze Sand Castings

B150/B150M Specification for Aluminum Bronze Rod, Bar, and Shapes

B637 Specification for Precipitation-Hardening and Cold Worked Nickel Alloy Bars, Forgings, and Forging Stock for Moderate or High Temperature Service

B689 Specification for Electroplated Engineering Nickel Coatings

F467 Specification for Nonferrous Nuts for General Use

F468 Specification for Nonferrous Bolts, Hex Cap Screws, Socket Head Cap Screws, and Studs for General Use

F593 Specification for Stainless Steel Bolts, Hex Cap Screws, and Studs

F594 Specification for Stainless Steel Nuts

2.2 ANSI Standards:³

ANSI B1.1 Unified Screw Threads

ANSI B1.12 Class 5 Interference, Fit Thread

2.3 ISA Standards:⁴

S75.01 Flow Equations for Sizing Control Valves

S75.02 Control Valve Capacity Test Procedure

2.4 Federal Specifications:⁵

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

¹ This specification is under the jurisdiction of ASTM Committee F25 on Ships and Marine Technology and is the direct responsibility of Subcommittee F25.11 on Machinery and Piping Systems.

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² For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

³ Available from American National Standards Institute (ANSI), 25 W. 43rd St., 4th Floor, New York, NY 10036, <http://www.ansi.org>.

⁴ Available from Instrumentation, Systems, and Automation Society, 67 Alexander Dr., Research Triangle Park, NC 27709.

⁵ Available from Standardization Documents Order Desk, DODSSP, Bldg. 4, Section D, 700 Robbins Ave., Philadelphia, PA 19111-5098, <http://dodssp.daps.dla.mil>.