



Standard Specification for Line-Blind Valves for Marine Applications¹

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1. Scope

1.1 This specification provides the minimum requirements for design fabrication, pressure rating, and testing for line-blind valves.

1.2 The values stated in inch-pound units are to be regarded as standard. The values given in parentheses are mathematical conversions to SI units that are provided for information only and are not considered standard.

1.3 The following safety hazards caveat pertains only to the test methods portion, Section 5, 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, health, and environmental practices and determine the applicability of regulatory limitations prior to use.*

1.4 *This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.*

2. Referenced Documents

2.1 ASTM Standards:²

A53/A53M Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless

2.2 ANSI Standards:³

B16.5 Pipe Flanges and Flanged Fittings, Steel-Nickel Alloy and Other Special Alloys

B31.1 Power Piping

2.3 MSS Standards:⁴

SP-6 Finish for Contact Faces of Pipe Flanges and Connecting End Flanges of Valves and Fittings

SP-25 Marking System for Valves, Fittings, Flanges, and Unions

SP-55 Quality Standard for Steel Castings for Valves, Flanges and Fittings, and Other Piping Components (Visual Method)

2.4 ASME Standards:⁵

ASME Boiler and Pressure Vessel Code Sections II, VIII, IX

3. Terminology

3.1 Definitions of Terms Specific to This Standard:

3.1.1 *blank, n*—a solid one-piece circular unit inserted into a pipeline to prevent flow.

3.1.2 *line-blind valve, n*—an assembly consisting of a spectacle plate, bolting, and body, the purpose of which is to provide a convenient means to align a piping system to an open or positively closed configuration. The assembly is designed to provide a simplified method of changing over the flow control spectacle plate without the necessity of plate removal from the valve body.

3.1.3 *spectacle plate (also spectacle blind), n*—a figure-eight-shaped unit with one end open for flow and the other solid to prevent flow.

4. Materials and Manufacture

4.1 Materials:

4.1.1 Materials for spectacle plates, bolting, and body shall be those contained in ASME Section II. For the purpose of stress calculations, ASME Section VIII values shall be used.

4.1.2 All welding shall be done with procedures and welders qualified in accordance with ASME Section IX and 80 % weld efficiency factor shall be used.

4.1.3 All castings shall be visually inspected and acceptable in accordance with MSS-SP-55.

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 Manufacturers Standardization Society of the Valve and Fittings Industry (MSS), 127 Park St., NE, Vienna, VA 22180-4602, <http://www.mss-hq.org>.

⁵ Available from American Society of Mechanical Engineers (ASME), ASME International Headquarters, Two Park Ave., New York, NY 10016-5990, <http://www.asme.org>.