

Designation: F 991M - 04 (Reapproved 2008)

An American National Standard

Standard Specification for Docking/Drain Plug and Boss Assemblies [Metric]¹

This standard is issued under the fixed designation F 991M; 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.

1. Scope

- 1.1 This specification provides design, construction, and purchasing criteria for docking/drain plug and boss assemblies.
- 1.2 Assemblies are intended for installation in shell, rudder, and tank bottom plate from 8 through 38 mm.
- 1.3 Assemblies shall be installed at the lowest point of a tank or rudder for draining during dry docking.
- 1.4 The values stated in SI units are to be regarded as the standard.

2. Referenced Documents

2.1 ASTM Standards:²

B 164 Specification for Nickel-Copper Alloy Rod, Bar, and Wire

2.2 Other Documents:

ABS Rules for Building and Classing Steel Vessels ³

ANSI B2.1 Standard Pipe Threads Except Dryseal⁴

3. Classification

- 3.1 Docking plugs and bosses shall be classified as follows:
- 3.1.1 Type I—Docking plug and bosses for plating from 8 to 15 mm (see Fig. 1).
- 3.1.2 Type II—Docking plug and bosses for plating greater than 15 to 38 mm (see Fig. 2).

4. Ordering Information

- 4.1 Orders for material under this specification shall include the following:
- 4.1.1 ASTM designation and year of issue.
- 4.1.2 Type (See Section 3).
- 4.1.3 Optional nonstandard materials.

5. Materials and Manufacture

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- 5.1 Materials:
- 5.1.1 Boss—ABS Grade A or B, plate or bar.
- 5.1.2 Plug—Specification B 164 rod or bar.
- 5.1.3 Other materials may be substituted to suit hull construction as approved by regulatory bodies.
- 5.2 Manufacture:
- 5.2.1 Plugs and bosses shall be machined.
- 5.2.2 Threads shall be in accordance with ANSI B2.1.

6. Dimensions and Tolerances

- 6.1 Dimensions shall be as indicated in Fig. 1 and Fig. 2.
- 6.2 Tolerance shall be ± 1.5 mm.

¹ This specification is under the jurisdiction of ASTM Committee F-25 on Shipbuilding and is the direct responsibility of Subcommittee F25.01 on Structures . Current edition approved Feb. 15, 1995. Published April 1995. Originally published as F991–86. Last previous edition F991–86.

¹ This specification is under the jurisdiction of ASTM Committee F25 on Ships and Marine Technology and is the direct responsibility of Subcommittee F25.01 on Structures.

Current edition approved Nov. 1, 2008. Published December 2008. Originally approved in 1986. Last previous edition approved in 2004 as F 991M - 04.

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 Vol 02.04.volume information, refer to the standard's Document Summary page on the ASTM website.

³ Available from American Bureau of Shipping, 2 World Trade Center, 106th Floor, New York, NY 10048.

Available from American Bureau of Shipping (ABS), ABS Plaza, 16855 Northchase Dr., Houston, TX 77060, http://www.eagle.org.

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

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