



Standard Specification for Sliding Watertight Door Control Systems¹

This standard is issued under the fixed designation F 1197; 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 covers the design, manufacture, and testing of controls and operating mechanisms for use with sliding watertight doors meeting the requirements of Specification F 1196.

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

2. Referenced Documents

2.1 ASTM Standards:

A 312/A 312M Specification for Seamless and Welded Austenitic Stainless Steel Pipes²

F 1196 Specification for Sliding Watertight Door Assemblies³

*2.2 Institute of Electrical and Electronic Engineers Standards:*⁴

IEEE 45 Recommended Practice for Electrical Installations on Shipboard

IEEE 100 IEEE Standard Dictionary of Electrical and Electronic Terms

*2.3 Society of Automotive Engineers Standards:*⁵

J524 Seamless Low Carbon Steel Tubing Annealed for Bending and Flaring

J525 Welded and Cold Drawn Low Carbon Steel Tubing Annealed for Bending and Flaring

2.4 Military Specification:

MIL-S-901 Shock Test, H.I. (High Impact); Shipboard Machinery, Equipment and Systems, Requirements for⁶

2.5 American Society of Mechanical Engineers:

Section VIII, Division 1, ASME Boiler and Pressure Vessel Code, Pressure Vessels⁷

*2.6 National Electrical Manufacturers' Association:*⁸

Publication Number IS1.1 Enclosures for Industrial Controls and Systems

3. Terminology

3.1 Definitions:

3.1.1 *control station*—a location from which a sliding watertight door may be closed.

3.1.2 *door control*—the device that must be physically activated by the operator to initiate the opening or closing of a sliding watertight door.

3.1.3 *door control system*—the system of components necessary to operate a sliding watertight door, consisting of the door control, operating mechanism, and interconnecting components.

3.1.4 *electrical control voltage*—the voltage applied to the door controls, indicators, and alarms.

3.1.5 *electrical system voltage*—the voltage generated by the electrical power sources at which the operating mechanism will operate.

3.1.6 *interconnecting components*—those components between the door control and the operating mechanism necessary to cause the operating mechanism to move a sliding watertight door as directed by the door control or between the door and the remote indicator. Interconnecting components form a mechanical, hydraulic, or electrical system between the control station and the door and between the door and the remote indicator.

3.1.7 *local control station*—a location adjacent to a sliding watertight door from which the door may be opened or closed.

3.1.8 *manual control*—a door control that requires the operator to apply a continuous cyclic force, for example, the turning of a handwheel or operating of a pump handle, to cause the operating mechanism to function.

3.1.9 *operating mechanism*—the device, be it mechanical, electric, or hydraulic, that directly causes a physical force to be placed upon a sliding watertight door to cause its movement.

power control—a door control that requires the operator to exert a minimal physical force, for example, pushing of a button, flipping of a switch, or holding of a lever, to cause the operating mechanism to function.

3.1.10 *remote control station*—a location from which a door or doors can be remotely closed.

¹ This specification is under the jurisdiction of Committee F-25 on Ships and Marine Technology and is the direct responsibility of Subcommittee F25.03 on Outfitting.

Current edition approved Jan. 18, 1989. Published March 1989.

² *Annual Book of ASTM Standards*, Vol 01.01.

³ *Annual Book of ASTM Standards*, Vol 01.07.

⁴ Available from Institute of Electrical and Electronics Engineers, 445 Hoes Lane, PO Box 1331, Piscataway, NJ 08855-1331.

⁵ Available from Society of Automotive Engineers, Inc., 400 Commonwealth Dr., Warrendale, PA 15096-0001.

⁶ Available from Standardization Documents Order Desk, Bldg. 4 Section D, 700 Robbins Ave., Philadelphia, PA 19111-5094, Attn: NPODS.

⁷ Available from American Society of Mechanical Engineers, Headquarters, Three Park Ave., New York, NY 10016-5990.

⁸ Available from National Electrical Manufacturers' Association, 1300 N. 17th St., Suite 1847, Rosslyn, VA 22209.