Designation: F1836M – 15 (Reapproved 2023)

An American National Standard

Standard Specification for Stuffing Tubes, Nylon, and Packing Assemblies (Metric)[1]

This standard is issued under the fixed designation F1836M; 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 U.S. Department of Defense.

1. Scope

1.1 This specification covers the general requirements for nylon stuffing tubes and packing assemblies. Nylon stuffing tubes are intended for making electric cable penetrations in marine shipboard enclosures for electrical equipment. The following types are suitable for both thin-wall enclosures up to 5 mm (3⁄16 in.) thick and thick-wall enclosures, bulkheads, and decks of 5 mm to 19 mm (3⁄16 in. to ¾ in.) thick.

1.2 This specification does not cover metal stuffing tubes.

1.3 The values stated in SI units are to be regarded as standard. No other units of measurement are included in this standard.

1.4 *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.*

1.5 *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]

D2000 Classification System for Rubber Products in Automotive Applications

D4066 Classification System for Nylon Injection and Extrusion Materials (PA)

2.2 *NEMA Standard:*[3]

Standard 250 Enclosures for Electrical Equipment (1000 V Max)

2.3 *ASME Standard:*[4]

ASME B1.1 Unified Inch Screw Threads (UN and UNR Thread Form)

2.4 *IEC Standard:*[5]

Standard 68-2-6 Environmental Testing–Part 2: Tests–Test FC: Vibration (Sinusoidal) Sixth Edition

3. Terminology

3.1 *Definitions of Terms Specific to This Standard:*

3.1.1 *nylon stuffing tube, n*—a marine electrical fitting used for the sealing of cable penetration into shipboard enclosures while maintaining or exceeding the degree of protection for which the enclosure is rated.

3.1.2 *packing assembly, n*—the compressible insert for the nylon stuffing tube. It consists of one neoprene bushing and three nylon washers.

3.1.3 *enclosure, n*—an electrical panel, cabinet, junction box, light fixture, electrical equipment, control box, or panel.

4. Classification

4.1 Nylon stuffing tubes shall be of the following types (see Fig. 1):

4.1.1 *Type 1*—straight—Unified Form Thread.

4.1.2 *Type 2*—90°—Unified Form Thread.

4.1.3 *Type 3*—NPT—American Standard Pipe Thread.

4.1.4 *Type 4*—Y—Unified Form Thread.

[1] This specification is under the jurisdiction of ASTM Committee F25 on Ships and Marine Technology and is the direct responsibility of Subcommittee F25.10 on Electrical.

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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 National Electrical Manufacturers Association (NEMA), 1300 N. 17th St., Suite 900, Arlington, VA 22209, http://www.nema.org.

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

[5] Available from International Electrotechnical Commission (IEC), 3, rue de Varembé, 1st floor, P.O. Box 131, CH-1211, Geneva 20, Switzerland, https://www.iec.ch.

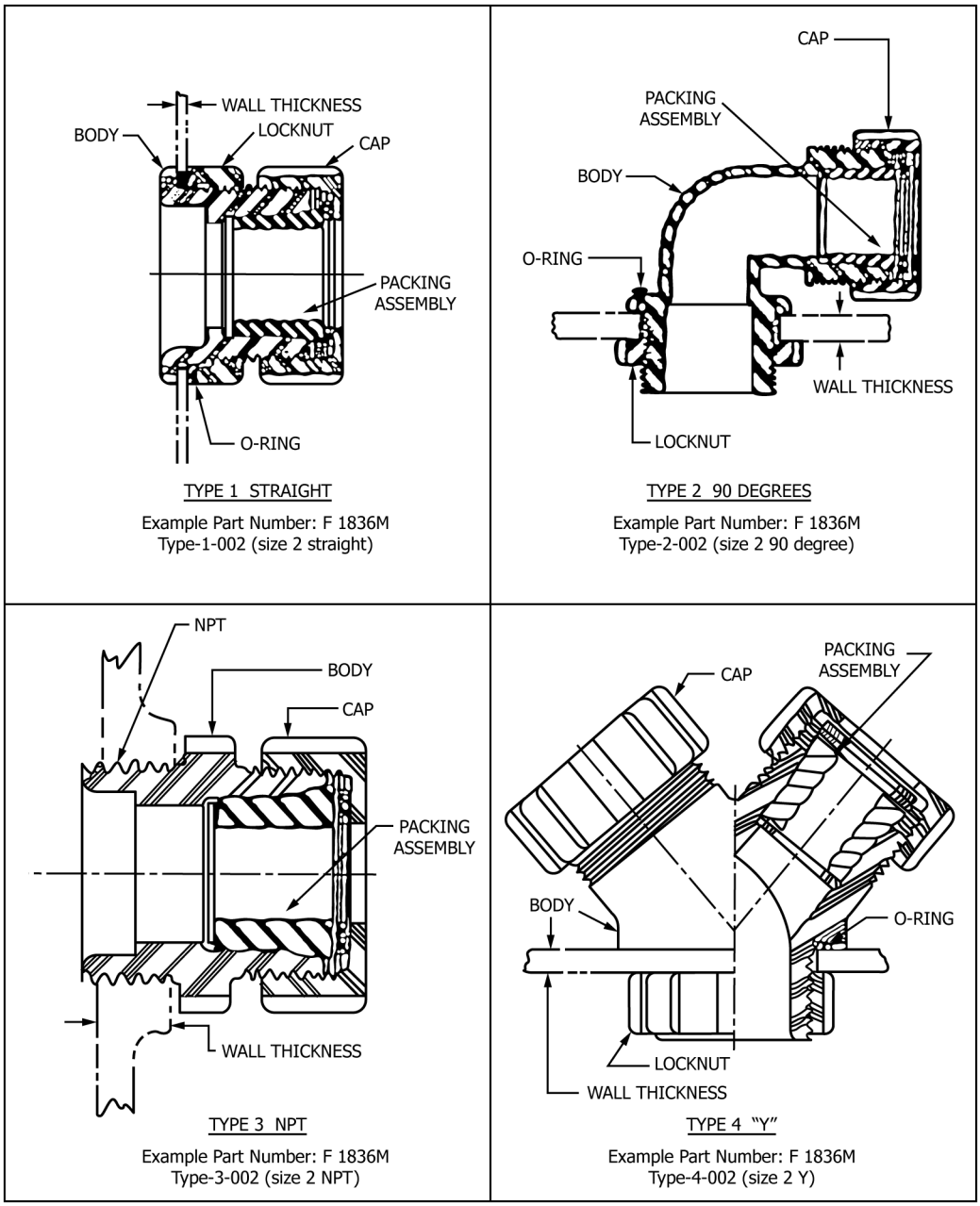

FIG. 1 Stuffing Tube Types

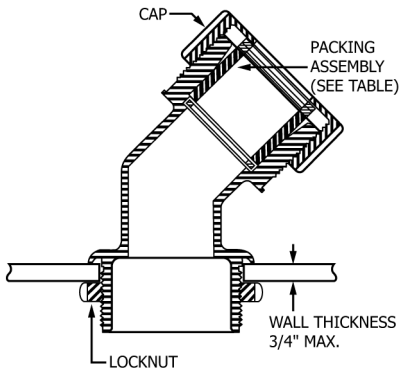

FIG. 1 Stuffing Tube Types *(continued)*