



Standard Specification for Style 1 Stainless Steel Metric Nuts (Metric)¹

This standard is issued under the fixed designation F836M; 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 chemical and mechanical requirements for stainless steel metric nuts with nominal thread diameters M1.6 through M36 and intended for use in engineering applications requiring general corrosion resistance.

1.2 Eight groups of stainless steel alloys are covered, including three austenitic (Grades A1, A2, and A4), one ferritic (Grade F1), three martensitic (Grades C1, C3, and C4), and one precipitation hardening (Grade P1).

1.3 Seventeen property classes are covered, including nine austenitic, one ferritic, six martensitic, and one precipitation hardening. The property classes with the permissible alloys for each are listed in [Table 1](#).

1.4 This specification is based in concept and content on ISO 3506. The chemical and mechanical requirements specified for all property classes, except as given in [1.4.1](#), are essentially identical with classes of the same designation in ISO 3506.

1.4.1 This specification includes 13 of the 16 property classes covered in ISO 3506. Additionally, it includes property classes A1-70, A2-70, A4-70, A1-80, A2-80, and A4-80 for products with nominal thread diameters larger than M20; and four non-ISO property classes, C1-110, C4-110, C3-120, and P1-90.

1.5 Supplementary requirements of an optional nature are provided, applicable only when agreed upon between the manufacturer and the purchaser at the time of the inquiry and order.

1.6 Suitable bolts, hex cap screws, and studs for use with nuts included in this specification are covered by Specification [F738M](#). Unless otherwise specified, all bolts, hex cap screws, and studs used with these nuts shall conform to the requirements of Specification [F738M](#) and shall be of the same alloy group.

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

2. Referenced Documents

2.1 ASTM Standards:²

[A262](#) Practices for Detecting Susceptibility to Intergranular Attack in Austenitic Stainless Steels

[A342/A342M](#) Test Methods for Permeability of Weakly Magnetic Materials

[A380](#) Practice for Cleaning, Descaling, and Passivation of Stainless Steel Parts, Equipment, and Systems

[A493](#) Specification for Stainless Steel Wire and Wire Rods for Cold Heading and Cold Forging

[A555/A555M](#) Specification for General Requirements for Stainless Steel Wire and Wire Rods

[A564/A564M](#) Specification for Hot-Rolled and Cold-Finished Age-Hardening Stainless Steel Bars and Shapes

[A582/A582M](#) Specification for Free-Machining Stainless Steel Bars

[A751](#) Test Methods, Practices, and Terminology for Chemical Analysis of Steel Products

[D3951](#) Practice for Commercial Packaging

[E29](#) Practice for Using Significant Digits in Test Data to Determine Conformance with Specifications

[F606M](#) Test Methods for Determining the Mechanical Properties of Externally and Internally Threaded Fasteners, Washers, and Rivets (Metric)

[F738M](#) Specification for Stainless Steel Metric Bolts, Screws, and Studs (Withdrawn 2014)³

[F1470](#) Practice for Fastener Sampling for Specified Mechanical Properties and Performance Inspection

2.2 ISO Standard:⁴

[ISO 3506](#) Corrosion-Resistant Stainless Steel Fasteners

¹ This specification is under the jurisdiction of ASTM Committee [F16](#) on Fasteners and is the direct responsibility of Subcommittee [F16.04](#) on Nonferrous Fasteners.

Current edition approved May 1, 2016. Published July 2016. Originally approved in 1983. Last previous edition approved in 2015 as F836M – 02(2015). DOI: 10.1520/F0836M-16.

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 The last approved version of this historical standard is referenced on www.astm.org.

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