INTERNATIONAL STANDARD

ISO 8279

Second edition
1997-09-01

Aerospace — Nuts, hexagonal, plain, normal height, normal across flats, with MJ threads, classifications: 600 MPa (at ambient temperature/120 °C, 600 MPa (at ambient temperature)/235 °C, 900 MPa (at ambient temperature)/425 °C, 1 100 MPa (at ambient temperature)/235 °C, 1 100 MPa (at ambient temperature)/315 °C, 1 100 MPa (at ambient temperature)/650 °C, 1 210 MPa (at ambient temperature)/730 °C, 1 250 MPa (at ambient temperature)/235 °C and 1 550 MPa (at ambient temperature)/600 °C — Dimensions

Aéronautique et espace — Écrous hexagonaux ordinaires, hauteur normale, surplats normaux, à filetage MJ, classifications: 600 MPa (à température ambiante)/120 °C, 600 MPa (à température ambiante)/235 °C, 900 MPa (à température ambiante)/425 °C, 1 100 MPa (à température ambiante)/235 °C, 1 100 MPa (à température ambiante)/315 °C, 1 100 MPa (à température ambiante)/650 °C, 1 210 MPa (à température ambiante)/730 °C, 1 250 MPa (à température ambiante)/235 °C et 1 550 MPa (à température ambiante)/600 °C — Dimensions

Reference number
ISO 8279:1997(E)

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 8279 was prepared by Technical Committee ISO/TC 20, *Aircraft and space vehicles*, Subcommittee SC 4, *Aerospace fastener systems*.

This second edition cancels and replaces the first edition (ISO 8279:1985), of which it constitutes a technical revision.

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Introduction

The dimensions specified in this International Standard have been determined to satisfy the requirements of the procurement specification of ISO 9139.

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1 Scope

This International Standard specifies the dimensions of plain, hexagonal nuts, normal height, normal across flats, with MJ threads, of classifications: 600 MPa [1]/120 °C [2], 600 MPa [1]/235 °C [2], 900 MPa [1]/425 °C [2], 1 100 MPa [1]/235 °C [2], 1 100 MPa [1]/315 °C [2], 1 100 MPa [1]/650 °C [2], 1 210 MPa [1]/730 °C [2], 1 250 MPa [1]/235 °C [2] and 1 550 MPa [1]/600 °C [2].

Nuts provided with holes are intended to be used with lockwire in conformity with ISO 245.

This International Standard is only applicable for the compilation of aerospace product standards.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 245:1986, *Aircraft — Lockwire.*

ISO 5855-2:1988, *Aerospace — MJ threads — Part 2: Limit dimensions for bolts and nuts.*

ISO 8788:1987, *Aerospace — Fasteners — Tolerances of form and position for nuts.*

ISO 9139:— [3], *Aerospace — Nuts, plain or slotted (castellated) — Procurement specification.*

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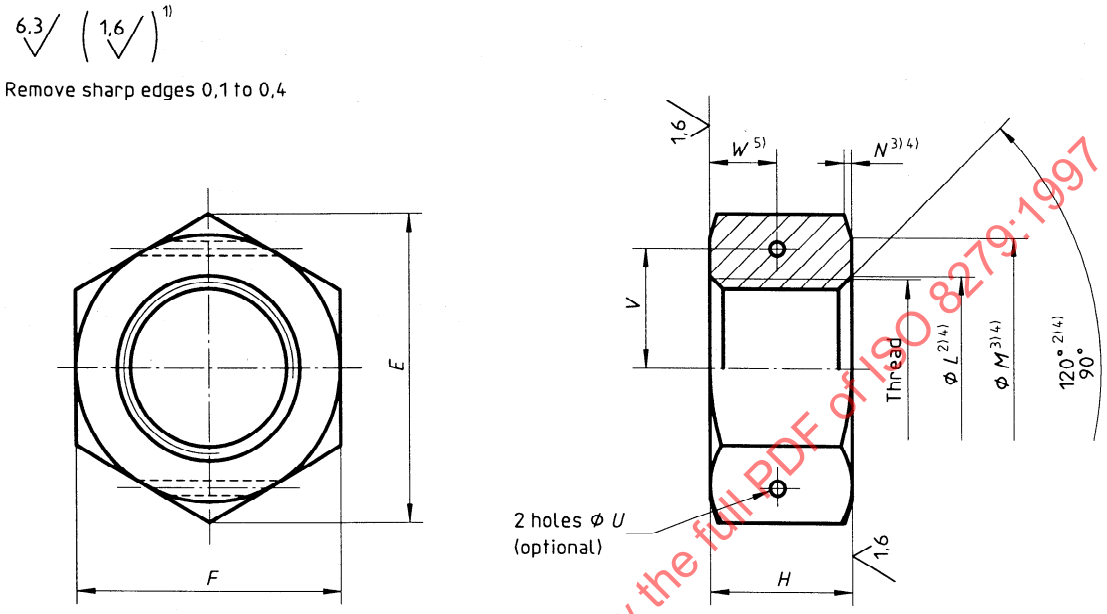
1) Corresponds to the minimum tensile stress which the nut is able to withstand at ambient temperature without breaking or cracking when tested with a bolt of a higher strength class.

2) Maximum temperature that the nut is able to withstand, without permanent alteration to its original characteristics, after ambient temperature has been restored. The maximum temperature is conditioned by the material or by the surface treatment.

3) To be published.

3 Configuration and dimensions

See figure 1 and table 1. Dimensions and tolerances are expressed in millimetres. They apply after any surface coating(s) but before the application of any lubricant.



NOTE — Tolerances of form and position shall conform to those specified in ISO 8788.

1) These values, in micrometers, apply before any surface coating(s) is(are) applied. The values do not apply to threads the surface texture of which will be as achieved by the usual manufacturing methods.

2) All forms of entry (chamfer or radius) permissible within these limiting dimensions.

3) Form of contour, within limiting dimensions, is left to the manufacturer's discretion. Diameter *M* may be tangential to, but shall not intrude on the flats.

4) Applicable to both faces

5) From either face

Figure 1