

INTERNATIONAL STANDARD

**ISO
9618**

First edition
1996-12-15

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

Aéronautique et espace — Écrous hexagonaux à créneaux, hauteur réduite, surplats normaux, à filetage MJ, classifications: 450 MPa (à température ambiante)/120 °C, 450 MPa (à température ambiante)/235 °C, 600 MPa (à température ambiante)/425 °C, 900 MPa (à température ambiante)/235 °C, 900 MPa (à température ambiante)/315 °C, 900 MPa (à température ambiante)/650 °C, 1 100 MPa (à température ambiante)/235 °C, 1 100 MPa (à température ambiante)/730 °C et 1 250 MPa (à température ambiante)/600 °C — Dimensions



Reference number
ISO 9618:1996(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 9618 was prepared by Technical Committee ISO/TC 20, *Aircraft and space vehicles*, Subcommittee SC 4, *Aerospace fastener systems*.

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Introduction

The dimensions specified in this International Standard have been determined to satisfy the requirements of the procurement specification which will be the subject of a future International Standard.

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Aerospace — Nuts, hexagonal, slotted (castellated), reduced height, normal across flats, with MJ threads, classifications: 450 MPa (at ambient temperature)/120 °C, 450 MPa (at ambient temperature)/235 °C, 600 MPa (at ambient temperature)/425 °C, 900 MPa (at ambient temperature)/235 °C, 900 MPa (at ambient temperature)/315 °C, 900 MPa (at ambient temperature)/650 °C, 1 100 MPa (at ambient temperature)/235 °C, 1 100 MPa (at ambient temperature)/730 °C and 1 250 MPa (at ambient temperature)/600 °C — Dimensions

1 Scope

This International Standard specifies the dimensions of hexagon slotted (castellated) nuts, reduced height, normal across flats, with MJ threads, of classifications: 450 MPa^{1)/120 °C}2), 450 MPa^{1)/235 °C}2), 600 MPa^{1)/425 °C}2), 900 MPa^{1)/235 °C}2), 900 MPa^{1)/315 °C}2), 900 MPa^{1)/650 °C}2), 1 100 MPa^{1)/235 °C}2), 1 100 MPa^{1)/730 °C}2), and 1 250 MPa^{1)/600 °C}2).

These nuts are intended to be used with split pins in conformity with ISO 1234.

This International Standard is 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 1234:—³⁾, *Split pins*.

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*.

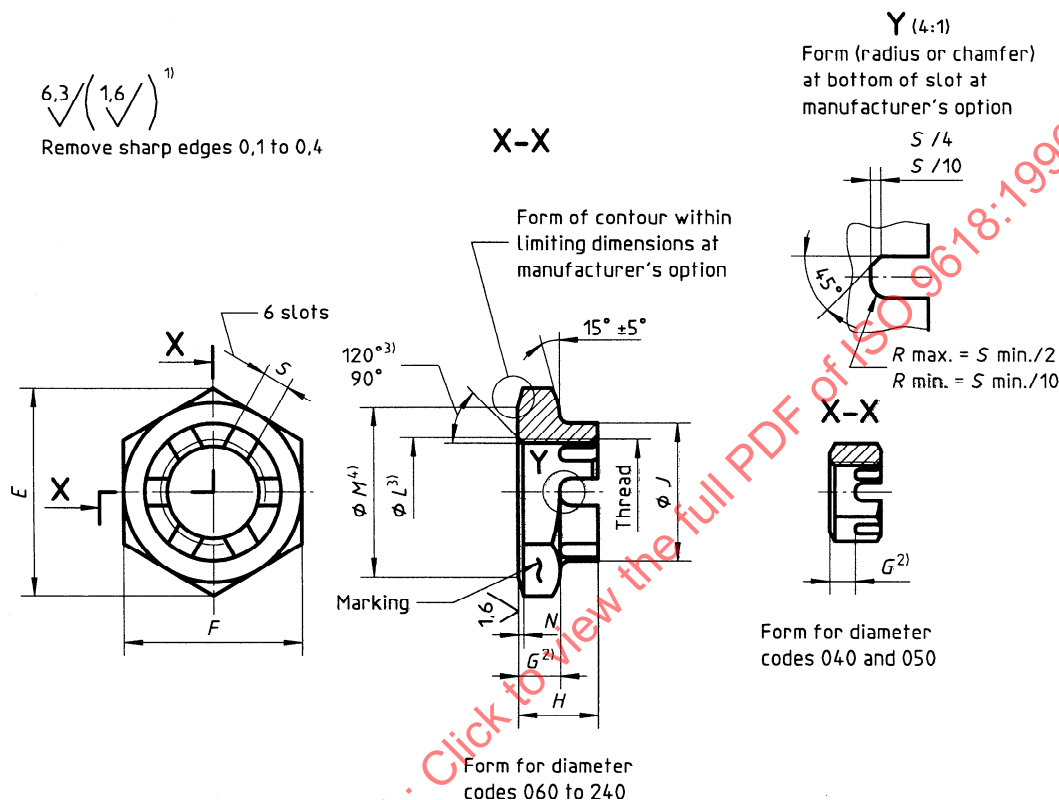
1) Corresponds to the minimum tensile stress which the nut is able to withstand at ambient temperature without breaking or cracking when tested with a bolt of a higher strength class.

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. (Revision of ISO 1234:1976)

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. Details of form not stated are at the manufacturer's discretion.

1) These values, in micrometres, 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) Applies to:

- height below slots;
- height of flats (diameter codes 060 to 240).

3) This dimension also applies to the upper chamfer. All forms of entry (chamfer or radius) permissible within these limiting dimensions.

4) Diameter *M* may be tangential to, but shall not intrude on the flats.

Figure 1