
Aerospace — Nuts, hexagonal, slotted (castellated), 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 à créneaux, 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



Foreword

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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 4147 was prepared by Technical Committee ISO/TC 20, *Aircraft and space vehicles*, Subcommittee SC 4, *Aerospace fastener systems*.

This third edition cancels and replaces the second edition (ISO 4147:1983), of which it constitutes a technical revision.

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Printed in Switzerland

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 hexagonal slotted (castellated) nuts, normal height, normal across flats, with MJ threads, of classifications: 600 MPa¹/120 °C², 600 MPa¹/235 °C², 900 MPa¹/425 °C², 1 100 MPa¹/235 °C², 1 100 MPa¹/315 °C², 1 100 MPa¹/650 °C², 1 210 MPa¹/730 °C², 1 250 MPa¹/235 °C² and 1 550 MPa¹/600 °C².

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

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 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*.

ISO 9139:—⁴, *Aerospace — Nuts, plain or slotted (castellated) — Procurement specification*.

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)

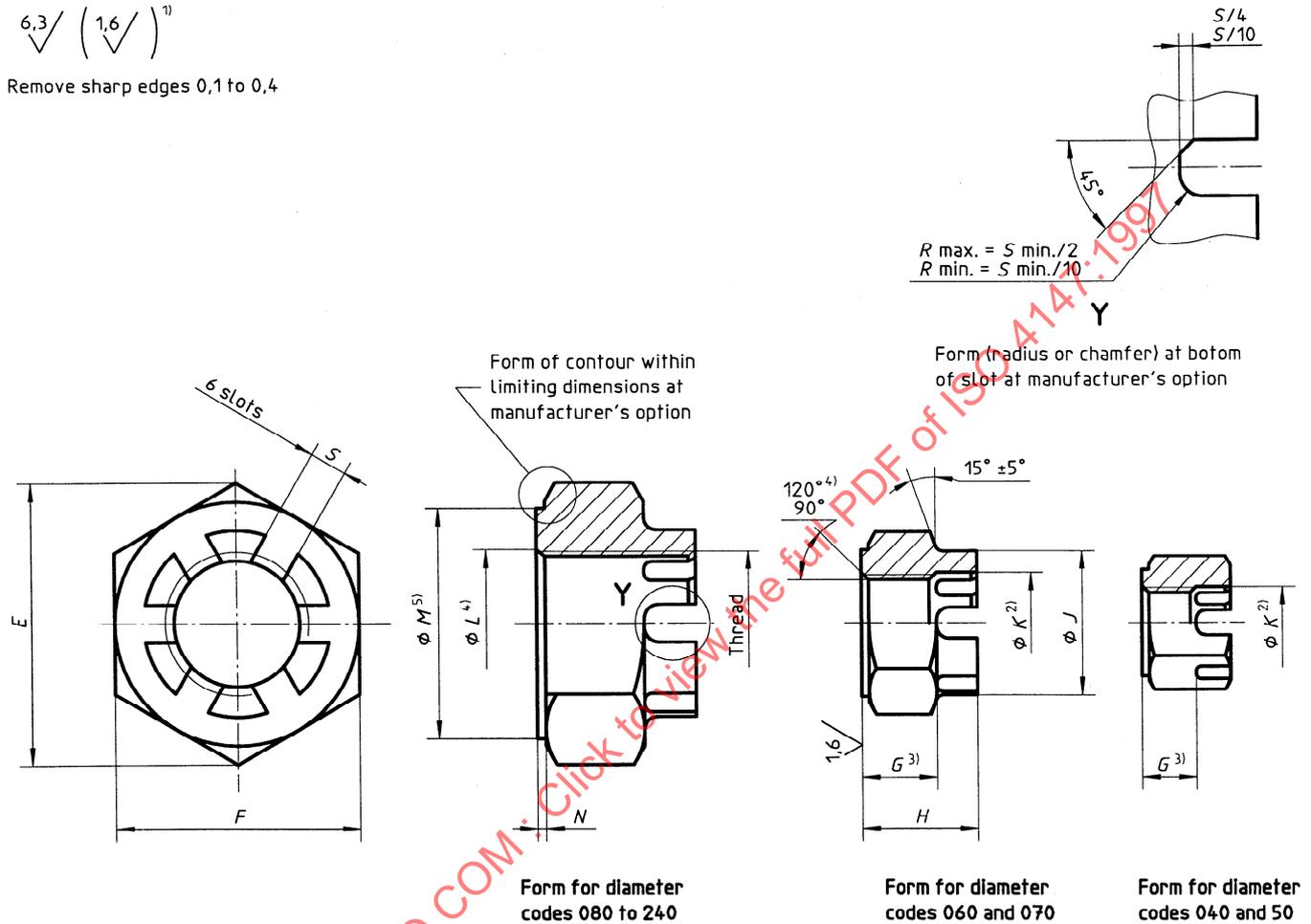
4) To be published.

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.

$$6.3 \sqrt{\left(1.6 \sqrt{\quad}\right)^n}$$

Remove sharp edges 0,1 to 0,4



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) Tooling marks permissible within counterbore.
- 3) Applies to:
 - height below slots;
 - height of flats (diameter codes 060 to 240);
 - bottom of counterbore.
- 4) This dimension also applies to the upper chamfer. All forms of entry (chamfer or radius) permissible within these limiting dimensions.
- 5) Diameter *M* may be tangential to, but shall not intrude on the flats.

Figure 1