

# INTERNATIONAL STANDARD

# ISO 13595

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## **Aerospace — Inserts, with self-locking floating nut, with MJ threads, in metallic material, coated or uncoated — Dimensions**

*Aéronautique et espace — Douilles, avec écrou flottant, à freinage interne  
et filetage MJ, en matériau métallique, revêtues ou non revêtues —  
Dimensions*



Reference number  
ISO 13595:2000(E)

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## 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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

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.

Attention is drawn to the possibility that some of the elements of this International Standard may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

International Standard ISO 13595 was prepared by Technical Committee ISO/TC 20, *Aircraft and space vehicles*, Subcommittee SC 4, *Aerospace fastener systems*.



# Aerospace — Inserts, with self-locking floating nut, with MJ threads, in metallic material, coated or uncoated — Dimensions

## 1 Scope

This International Standard specifies the dimensions of inserts, with self-locking floating nut, with MJ threads, in metallic material, coated or uncoated, for honeycomb and composite materials. The classification referring to strength and temperature, depending on the core material and potting compound, is not specified.

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

## 2 Normative reference

The following normative document contains provisions which, through reference in this text, constitute provisions of this International Standard. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent edition of the normative document indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

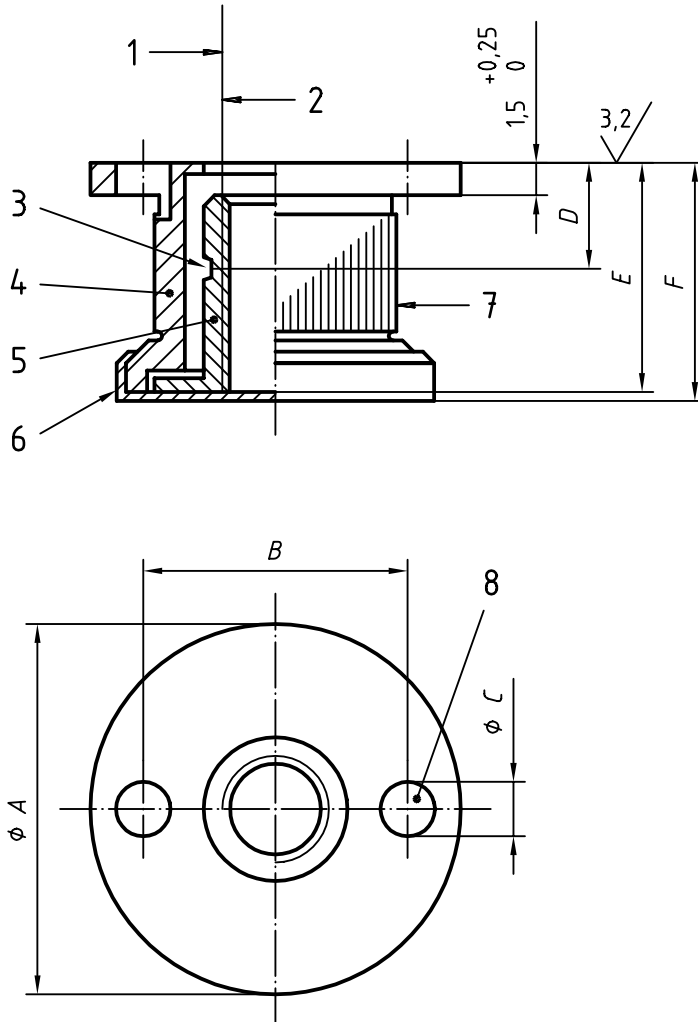
ISO 5855-2:1999, *Aerospace — MJ threads — Part 2: Limit dimensions for bolts and nuts*.

## 3 Configuration and dimensions

See Figure 1 and Table 1. Dimensions and tolerances are expressed in millimetres. They apply to inserts after any surface coating(s).

$12,5 / (3,2)^a$

Remove sharp edges 0,1 to 0,4



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

**Key**

- 1 Radial float of nut relative to housing  $\geq 0,75$
- 2 Thread
- 3 Shank deformed this area to provide thread lock
- 4 Housing
- 5 Nut
- 6 Cap
- 7 Antirotation knurl
- 8 Potting and vent hole

<sup>a</sup> These values, in micrometres, are valid prior to any surface coating(s). The values do not apply to threads having a surface texture obtained by usual manufacturing methods.

**Figure 1**

Table 1

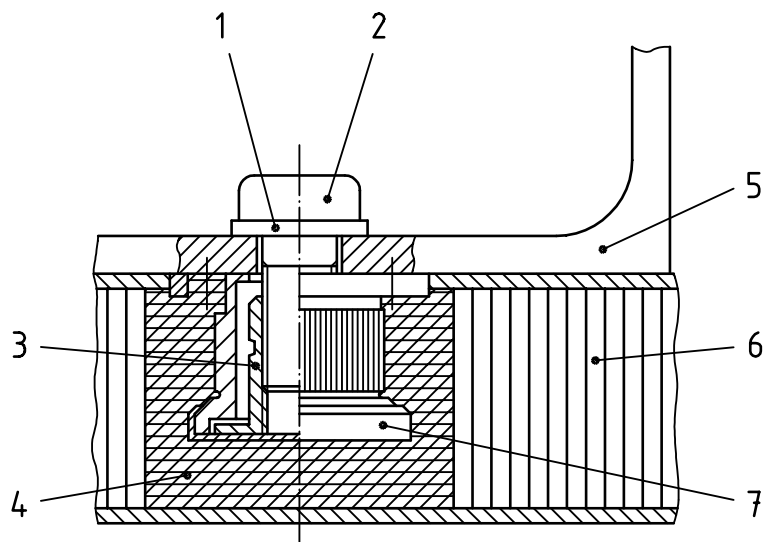
Diameter code	Thread <sup>a</sup>	<i>A</i>	<i>B</i>	<i>C</i>	<i>D</i>	<i>E</i> <sup>b</sup>	<i>F</i>
		0 -0,25	± 0,25	± 0,25	≈	min.	max.
<b>040</b>	MJ4 × 0,7-4H6H	17,5	12,7	2,4	4,7	9	9,4
<b>050</b>	MJ5 × 0,8-4H6H				5,7	10,5	10,9
<b>060</b>	MJ6 × 1-4H5H	19	15		6,7	13,8	14,2

<sup>a</sup> In accordance with ISO 5855-2

<sup>b</sup> Effective length of a bolt thread engagement

#### 4 Example of application

See Figure 2.



#### Key

- 1 Washer
- 2 Bolt
- 3 Nut
- 4 Potting compound
- 5 Attached component
- 6 Sandwich panel
- 7 Insert

Figure 2

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Price based on 3 pages

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