INTERNATIONAL STANDARD

ISO 7319

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Aerospace — Fluid systems — Interface of 24° cone metric couplings

Aéronautique et espace — Systèmes de fluides — Interface des raccordements métriques à cône de 24°

Reference number
ISO 7319:1992(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 7319 was prepared by Technical Committee ISO/TC 20, *Aircraft and space vehicles*, Sub-Committee SC 10, *Aerospace fluid systems and components*.

This second edition cancels and replaces the first edition (ISO 7319:1982), the figure of which has been technically revised.

Annex A of this International Standard is for information only.

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Aerospace — Fluid systems — Interface of 24° cone metric couplings

1 Scope

This International Standard defines the geometry of the interface of removable 24° cone couplings for fluid systems in aircraft. The connection with the pipe of each one of the connecting elements may be of different design.

This International Standard specifies the dimensions which allow the interchangeability of the male and female elements and of the nut used for the connection.

The dimensions define the maximum volume of the male fitting.

2 Normative reference

The following standard contains provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the edition indicated was 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 edition of the standard indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 5855-3:1988, *Aerospace — MJ threads — Part 3: Limit dimensions for fittings for fluid systems.*

3 Coupling assembly and sealing principle

The coupling comprises three elements as follows.

a) A female element including a frustum with a cone angle equal to 24°, with which the male element comes into contact to provide sealing. The contact line is a circle with a theoretical diameter, E.

b) A male element, included inside a shell composed of two frustums connected by a spherical section with which the female element comes into contact to provide sealing. The contact line is a circle with a theoretical diameter, E.

c) A nut allowing assembly of the male and female elements of the coupling.

4 Dimensions

The dimensions shall be as shown in figure 1 and given in table 1.