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Aircraft — High temperature convoluted hose assemblies in polytetrafluoroethylene (PTFE)

Aéronefs — Tuyauterie flexible, haute température, convolutée, en polytétrafluoréthylène (PTFE)

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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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 20, *Aircraft and space vehicles*, Subcommittee SC 10, *Aerospace fluid systems and components*.

This second edition cancels and replaces the first edition (ISO 7313:1984), which has been technically revised. The main changes compared to the previous edition are as follows:

— Clause 2, normative references, has been updated;

— the structure of the document has been changed.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Aircraft — High temperature convoluted hose assemblies in polytetrafluoroethylene (PTFE)

1 Scope

This document specifies characteristics of hose assemblies with corrosion-resistant metallic braid and convoluted polytetrafluoroethylene (PTFE) inner tube for use in aircraft fluid systems at temperatures between -55 °C and +200 °C and at nominal pressures, depending on bore size, up to 6,8 MPa. Special approval from the proper national authority can be required if these hoses are to be part of a pressurized gas storage system.

Two types of hose assembly are covered in this document:

— Type 1: Non-conductive inner tube; and

— Type 2: Conductive inner tube.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 756-1, *Propan-2-ol for industrial use — Methods of test — Part 1: General*

3 Terms and definitions

No terms and definitions are listed in this document.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at http://www.electropedia.org/

4 Requirements

4.1 Qualification

The hose assemblies furnished in accordance with this document shall be a product identical to that which has passed the qualification tests herein and shall be suitable for use in aircraft fluid systems under the conditions specified herein.

4.2 Materials

4.2.1 General

The hose assemblies shall be uniform in quality and free from defects in material as is consistent with good manufacturing practice. Materials shall conform to applicable specifications and the requirements specified herein.