



**International
Standard**

ISO 10583

**Aerospace fluid systems — Test
methods for fitting on tube
assemblies**

*Circuits de fluides pour l'aérospatiale — Méthodes d'essai pour
les raccords sur les assemblages de tubes*

**Second edition
2026-05**

Sample Document

get full document from standards.iteh.ai

Sample Document

get full document from standards.iteh.ai



COPYRIGHT PROTECTED DOCUMENT

© ISO 2026

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

Contents

Page

Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Quality conformity inspection procedures	1
5 Qualification test procedures	2
5.1 Proof pressure test.....	2
5.2 Pneumatic pressure test.....	2
5.3 Impulse test.....	2
5.4 Hydrostatic burst pressure test.....	2
5.5 Flexure test.....	2
5.6 Stress corrosion test.....	2
5.7 Re-use capability.....	3
5.7.1 Port connections.....	3
5.7.2 Tube fittings.....	3
5.8 Tensile test.....	4
5.9 Thermal shock test.....	4
5.10 Fire test.....	4
6 Test specimens and test fluid	4
6.1 Test specimens.....	4
6.2 Test fluid.....	5
Bibliography	6

Sample Document

get full document from standards.iteh.ai

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 document 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).

ISO draws attention to the possibility that the implementation of this document may involve the use of (a) patent(s). ISO takes no position concerning the evidence, validity or applicability of any claimed patent rights in respect thereof. As of the date of publication of this document, ISO had not received notice of (a) patent(s) which may be required to implement this document. However, implementers are cautioned that this may not represent the latest information, which may be obtained from the patent database available at www.iso.org/patents. ISO shall not be held responsible for identifying any or all such patent rights.

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 10583:1993), which has been technically revised.

The main changes are as follows:

- deletion of ISO 6771 from [Clause 2](#);
- revision of [subclause 5.10](#);
- revision of [Table 1](#);
- addition of Bibliography.

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.

Introduction

The intention of this document is to standardize test methods for the qualification of fittings on tube assemblies used in aircraft fluid systems. The tests are intended to simulate the most strenuous demands encountered in aircraft. These test methods are relevant for fittings on tube assemblies which are used in systems where a malfunction would affect the safety of flight.

Sample Document

get full document from standards.iteh.ai