PD ISO/TS 17165-2:2018

BSI Standards Publication

Hydraulic fluid power — Hose assemblies

Part 2: Practices for hydraulic hose assemblies

bsi.

National foreword

This Published Document is the UK implementation of ISO/TS 17165-2:2018. It supersedes PD ISO/TS 17165-2:2013, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee MCE/18/-/4, Connectors and associated components.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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Part 2: Practices for hydraulic hose assemblies

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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).

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For an explanation on 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 the following URL: www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 131, *Fluid power systems*, Subcommittee SC 4, *Connectors and similar products and components*.

This edition cancels and replaces the first edition (ISO/TS 17165-2:2013), which has been technically revised.

The main changes to the previous edition are:

— in 9.2.2, the shelf life of rubber hose in bulk form or hose assembly has been changed.

A list of all the parts in the ISO 17165 series can be found on the ISO website.

Introduction

In hydraulic fluid power systems, power is transmitted and controlled through a liquid under pressure within an enclosed circuit.

To allow fluid flow between components, components are interconnected by piping, both rigid (tubes and tube connectors) and flexible (hose assemblies, which consist of hose and hose fittings).

Hydraulic fluid power — Hose assemblies —

Part 2: Practices for hydraulic hose assemblies

1 Scope

This document provides guidelines for selection, routing, fabrication, installation, replacement, maintenance and storage of hose and hose assemblies for hydraulic fluid power systems which are manufactured from hoses conforming to ISO 1436, ISO 3862, ISO 3949, ISO 4079 and ISO 11237, and hose fittings conforming to the ISO 12151 series.

NOTE 1 Many of these practices also can be suitable for use with other types of hoses and systems.

NOTE 2 Annex A lists examples of actual failure resulting from improper use of hydraulic hose and hose assemblies.

2 Normative references

ISO 5598, *Fluid power systems and components — Vocabulary*

ISO 6605, *Hydraulic fluid power — Test methods for hoses and hose assemblies*

ISO 8330, *Rubber and plastics hoses and hose assemblies — Vocabulary*

ISO 8331, *Rubber and plastics hoses and hose assemblies — Guidelines for selection, storage, use and maintenance*

ISO 17165-1, *Hydraulic fluid power — Hose assemblies — Part 1: Dimensions and requirements*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 5598, ISO 8330 and the following apply.

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

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

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

3.1
manufacturing date of the hose assembly
date when hose and hose fittings were assembled into a hose assembly

4 Safety considerations

4.1 General

The list of potential conditions and situations that can lead to personal injury or property damage described in 4.2 through 4.8 is not necessarily all-inclusive. Reasonable and feasible means, including those described in this clause, shall be taken into consideration, to reduce the risk of personal injury, property damage or both. Training, including the information in this document, for operators,