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Connections for hydraulic fluid power and general use — Hose fittings —

Part 2: Hose fittings with ISO 8434-1 24° cone connector ends with O-rings

Raccordements pour transmissions hydrauliques et applications générales — Flexibles de raccordement —

Partie 2: Flexibles avec embouts à cône à 24 degrés et joints toriques conformes à l'ISO 8434-1

Reference number
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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 131, *Fluid power systems*, Subcommittee SC 4, *Connectors and similar products and components*.

This second edition cancels and replaces the first edition (ISO 12151-2:2003), which has been technically revised.

The main changes are as follows:

— all references to ISO 8434-4 have been removed as this International Standard has been withdrawn and replaced by ISO 8434-1;

— all references to ISO 8434-5 have been removed as this International Standard has been withdrawn and replaced by ISO 19879.

A list of all parts in the ISO 12151 series can be found on the ISO website.

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.

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Introduction

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

Components are connected through their ports by stud ends on fluid conductor fittings to tubes/pipes or to hose fittings and hoses.

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Connections for hydraulic fluid power and general use — Hose fittings —

Part 2: Hose fittings with ISO 8434-1 24° cone connector ends with O-rings

1 Scope

This document specifies the general and dimensional requirements for the design and performance of hose fittings with 24° cone connector ends with O-rings according to ISO 8434-1. These hose fittings are made of carbon steel and are intended for use with hoses with nominal inside diameters from 5 mm through 38 mm (inclusive).

NOTE For hose fittings used in hydraulic and pneumatic braking systems on road vehicles, see ISO 4038, ISO 4039-1 and ISO 4039-2.

These hose fittings are for use in hydraulic fluid power systems with hoses that meet the requirements of respective hose standards and in general applications with suitable hoses.

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 1302, *Geometrical Product Specifications (GPS) — Indication of surface texture in technical product documentation*

ISO 4759-1:2000, *Tolerances for fasteners — Part 1: Bolts, screws, studs and nuts — Product grades A, B and C*

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

ISO 8434-1, *Metallic tube connections for fluid power and general use — Part 1: 24° cone connectors*

ISO 9227, *Corrosion tests in artificial atmospheres — Salt spray tests*

3 Terms and definitions

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

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

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

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

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