

Hydraulic fluid power — Hose assemblies —

Part 2: Recommended practices for hydraulic hose assemblies

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National foreword

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Part 2:

Recommended practices for hydraulic hose assemblies

Transmissions hydrauliques — Flexibles de raccordement —

*Partie 2: Pratiques recommandées pour les flexibles de raccordement
hydrauliques*



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Foreword

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In exceptional circumstances, when a technical committee has collected data of a different kind from that which is normally published as an International Standard ("state of the art", for example), it may decide by a simple majority vote of its participating members to publish a Technical Report. A Technical Report is entirely informative in nature and does not have to be reviewed until the data it provides are considered to be no longer valid or useful.

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ISO/TR 17165-2 was prepared by Technical Committee ISO/TC 131, *Fluid power systems*, Subcommittee SC 4, *Connectors and similar products and components*.

ISO/TR 17165 consists of the following parts, under the general title *Hydraulic fluid power — Hose assemblies*:

- *Part 1: Dimensions and requirements*
- *Part 2: Recommended practices for hydraulic hose assemblies* (Technical Report)

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, they 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: Recommended practices for hydraulic hose assemblies

1 Scope

This part of ISO 17165 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 1436-1, ISO 1436-2, ISO 3862-1, ISO 3862-2, ISO 3949, ISO 4079-1, ISO 4079-2, ISO 11237-1 and ISO 11237-2, and hose connectors conforming to ISO 12151-1 through ISO 12151-6.

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

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

2 Normative references

The following referenced documents are indispensable for the application 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 1436-1, *Rubber hoses and hose assemblies — Wire-braid-reinforced hydraulic types — Specification — Part 1: Oil-based fluid applications*

ISO 1436-2, *Rubber hoses and hose assemblies — Wire-braid-reinforced hydraulic types — Specification — Part 2: Water-based fluid applications*

ISO 2230, *Rubber products — Guidelines for storage*

ISO 3457, *Earth-moving machinery — Guards — Definitions and requirements*

ISO 3862-1, *Rubber hoses and hose assemblies — Rubber-covered spiral-wire-reinforced hydraulic types — Specification — Part 1: Oil-based fluid applications*

ISO 3862-2, *Rubber hoses and hose assemblies — Rubber-covered spiral-wire-reinforced hydraulic types — Specification — Part 2: Water-based fluid applications*

ISO 3949, *Plastics hoses and hose assemblies — Textile-reinforced types for hydraulic applications — Specification*

ISO 4079-1, *Rubber hoses and hose assemblies — Textile-reinforced hydraulic types — Specification — Part 1: Oil-based fluid applications*

ISO 4079-2, *Rubber hoses and hose assemblies — Textile-reinforced hydraulic types — Specification — Part 2: Water-based fluid applications*

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