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

**Part 6:
Hose fittings with ISO 8434-6 60° cone
ends**

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

*Partie 6: Flexibles avec embouts à cône à 60° conformes
à l'ISO 8434-6*



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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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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.

ISO 12151-6 was prepared by Technical Committee ISO/TC 131, *Fluid power systems*, Subcommittee SC 4, *Connectors and similar products and components*.

ISO 12151 consists of the following parts, under the general title *Connections for hydraulic fluid power and general use — Hose fittings*:

- Part 1: *Hose fittings with ISO 8434-3 O-ring face seal ends*
- Part 2: *Hose fittings with ISO 8434-1 and ISO 8434-4 24° cone connector ends with O-rings*
- Part 3: *Hose fittings with ISO 6162-1 or ISO 6162-2 flange ends*
- Part 4: *Hose fittings with ISO 6149 metric stud ends*
- Part 5: *Hose fittings with ISO 8434-2 37° flared ends*
- Part 6: *Hose fittings with ISO 8434-6 60° cone ends*

Introduction

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

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

ISO/TC 131/SC 4 recommends that hose fittings that conform to ISO 12151-1 and ISO 12151-2 be used because these International Standards represent the state of the art. However, this part of ISO 12151 has been developed because it specifies hose fittings that are currently used worldwide.

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

Part 6: Hose fittings with ISO 8434-6 60° cone ends

1 Scope

This part of ISO 12151 specifies the general and dimensional requirements for the design and performance of hose fittings made of carbon steel with 60° cone ends for hose sizes 5 to 51 inclusive, in accordance with ISO 4397.

These hose fittings (see Figure 1 for a typical example) are for use in hydraulic fluid power systems with hoses that meet the requirements of the respective hose standards and in general applications with suitable hoses.

NOTE 1 Other materials can be supplied as agreed between the manufacturer and user.

NOTE 2 For hose fittings used in hydraulic and pneumatic braking systems on road vehicles (as defined in the scope of ISO/TC 22), see ISO 4038, ISO 4039-1 and ISO 4039-2.

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 228-1, *Pipe threads where pressure-tight joints are not made on the threads — Part 1: Dimensions, tolerances and designation*

ISO 4397, *Fluid power systems and components — Connectors and associated components — Nominal outside diameters of tubes and nominal sizes of hoses*¹⁾

ISO 4759-1, *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 6605, *Hydraulic fluid power — Hoses and hose assemblies — Test methods*

ISO 8434-6, *Metallic tube connections for fluid power and general use — Part 6: 60° cone connectors with or without O-ring*²⁾

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

ISO 19879, *Metallic tube connections for fluid power and general use — Test methods for hydraulic fluid power connections*

1) Under development. (Revision of ISO 4397:1993)

2) To be published.