

STN	Prípojky na hydrauliku a na všeobecné používanie Otvory a koncovky s metrickými závitmi podľa ISO 261 a s tesnením O-krúžkom Časť 1: Otvory so šikmým vsadením tesniaceho O-krúžku (ISO 6149-1: 2022)	STN EN ISO 6149-1 13 7885
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Connections for hydraulic fluid power and general use - Ports and stud ends with ISO 261 metric threads and O-ring sealing - Part 1: Ports with truncated housing for O-ring seal (ISO 6149-1:2022)

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 09/22

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Connections for hydraulic fluid power and general use - Ports and stud ends with ISO 261 metric threads and O- ring sealing - Part 1: Ports with truncated housing for O- ring seal (ISO 6149-1:2022)

Raccordements pour transmissions hydrauliques et applications générales - Orifices et éléments mâles à filetage métrique ISO 261 et joint torique - Partie 1: Orifices à joint torique dans un logement tronconique (ISO 6149-1:2022)

Leitungsanschlüsse für Fluidtechnik und allgemeine Anwendung - Einschraublöcher und Einschraubzapfen mit metrischem Gewinde nach ISO 261 und O-Ring-Abdichtung - Teil 1: Einschraublöcher mit Ansenkung für O-Ring-Abdichtung (ISO 6149-1:2022)

This European Standard was approved by CEN on 2 June 2022.

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EN ISO 6149-1:2022 (E)

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European foreword

This document (EN ISO 6149-1:2022) has been prepared by Technical Committee ISO/TC 131 "Fluid power systems" in collaboration with Technical Committee CEN/TC 459/SC 10 "Steel tubes, and iron and steel fittings" the secretariat of which is held by UNI.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by December 2022, and conflicting national standards shall be withdrawn at the latest by December 2022.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

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Endorsement notice

The text of ISO 6149-1:2022 has been approved by CEN as EN ISO 6149-1:2022 without any modification.

INTERNATIONAL STANDARD

ISO 6149-1

Fourth edition
2022-06

Connections for hydraulic fluid power and general use — Ports and stud ends with ISO 261 metric threads and O-ring sealing —

Part 1: Ports with truncated housing for O-ring seal

*Raccordements pour transmissions hydrauliques et applications
générales — Orifices et éléments mâles à filetage métrique ISO 261 et
joint torique —*

Partie 1: Orifices à joint torique dans un logement tronconique



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ISO 6149-1:2022(E)

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).

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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*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 459, *ECISS - European Committee for Iron and Steel Standardization*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This fourth edition cancels and replaces the third edition (ISO 6149-1:2019), of which it constitutes a minor revision. The changes are as follows:

— corrections have been made to references in [Figure 1](#) and [Table 2](#).

A list of all the parts in the ISO 6149 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.

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 (liquid or gas) may be conveyed under pressure.

Components are connected through their threaded ports by fluid conductor connectors to tubes and pipes or to hose connectors and hoses.

Ports are an integral part of fluid power components, i.e. pumps, motors, valves, cylinders.

For threaded ports and stud ends specified in new designs in hydraulic fluid power applications, ISO/TC 131/SC 4 recommends that the ISO 6149 series be used because these International Standards specify ports and stud ends with metric threads and O-ring sealing and because the subcommittee would like to help users by recommending one preferred system. ISO/TC 131/SC 4 further recommends that threaded ports and stud ends in accordance with the ISO 1179 series, the ISO 9974 series and the ISO 11926 series not be used for new designs in hydraulic fluid power applications; these International Standards are maintained because they specify ports and stud ends that are currently used in hydraulic systems worldwide

Connections for hydraulic fluid power and general use — Ports and stud ends with ISO 261 metric threads and O-ring sealing —

Part 1: Ports with truncated housing for O-ring seal

1 Scope

This document specifies dimensions for metric ports for use with the adjustable and non-adjustable stud ends as described in ISO 6149-2 and ISO 6149-3.

Ports in accordance with this document can be used at working pressures up to 63 MPa (630 bar¹⁾) for non-adjustable stud ends and 40 MPa (400 bar) for adjustable stud ends. The permissible working pressure depends upon port size, materials, design, working conditions, application, etc. See ISO 6149-2 and ISO 6149-3 for pressure ratings.

NOTE The Introduction of this document gives recommendations for ports and stud ends to be used for new designs in hydraulic fluid power applications.

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 261, *ISO general purpose metric screw threads — General plan*

ISO 965-1, *ISO general purpose metric screw threads — Tolerances — Part 1: Principles and basic data*

ISO 2306, *Drills for use prior to tapping screw threads*

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

ISO 6149-2, *Connections for hydraulic fluid power and general use — Ports and stud ends with ISO 261 metric threads and O-ring sealing — Part 2: Dimensions, design, test methods and requirements for heavy-duty (S series) stud ends*

ISO 6149-3, *Connections for hydraulic fluid power and general use — Ports and stud ends with ISO 261 metric threads and O-ring sealing — Part 3: Dimensions, design, test methods and requirements for light-duty (L series) stud ends*

koniec náhľadu – text ďalej pokračuje v platenej verzii STN

1) 1 bar = 0,1 MPa = 10⁵ Pa; 1 MPa = 1 N/mm².