STN

Kovové rúrkové spoje na tekutinové mechanizmy a na všeobecné používanie Skúšobné metódy spojov na hydraulické tekutinové mechanizmy (ISO 19879: 2021)

STN EN ISO 19879

13 7881

Metallic tube connections for fluid power and general use - Test methods for hydraulic fluid power connections (ISO 19879:2021)

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. 08/21

Obsahuje: EN ISO 19879:2021, ISO 19879:2021

Oznámením tejto normy sa ruší STN EN ISO 19879 (13 7881) z marca 2011

EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

EN ISO 19879

March 2021

ICS 23.040.60; 23.100.40

Supersedes EN ISO 19879:2010

English Version

Metallic tube connections for fluid power and general use -Test methods for hydraulic fluid power connections (ISO 19879:2021)

Raccords de tubes métalliques pour transmissions hydrauliques et pneumatiques et applications générales - Méthodes d'essai pour raccords pour transmissions hydrauliques (ISO 19879:2021)

Metallische Rohrverschraubungen für Fluidtechnik und allgemeine Anwendung - Prüfverfahren für hydraulische Rohrverschraubungen in der Fluidtechnik (ISO 19879:2021)

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EN ISO 19879:2021 (E)

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European foreword

This document (EN ISO 19879:2021) 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.

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The text of ISO 19879:2021 has been approved by CEN as EN ISO 19879:2021 without any modification.

INTERNATIONAL STANDARD

ISO 19879

Third edition 2021-03

Metallic tube connections for fluid power and general use — Test methods for hydraulic fluid power connections

Raccords de tubes métalliques pour transmissions hydrauliques et pneumatiques et applications générales — Méthodes d'essai pour raccords pour transmissions hydrauliques



ISO 19879:2021(E)



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Published in Switzerland

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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).

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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/SC 10, *Steel tubes, and iron and steel fittings*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This third edition cancels and replaces the second edition (ISO 19879:2010), which has been technically revised.

The main changes compared to the previous edition are as follows:

- clarification of the language used to describe the connector end, and of the proper method for selecting tubes for test assemblies;
- minor changes to <u>10.1</u>, <u>10.2</u> (<u>Table 7</u>) and <u>12.2.2</u>.

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.

ISO 19879:2021(E)

Introduction

In hydraulic fluid power systems, power is transmitted and controlled through a liquid under pressure within an enclosed circuit. It is suggested that components be designed to meet these requirements under varying conditions. Testing of components to meet performance requirements provides a basis of assurance for determining design application and for checking component conformance with the stated requirements.

Metallic tube connections for fluid power and general use — Test methods for hydraulic fluid power connections

1 Scope

This document specifies uniform methods for the testing and performance evaluation of metallic tube connections, stud ends for ports and flange connections for use in hydraulic fluid power applications. This document does not apply to the testing of hydraulic quick-action couplings, which is covered by ISO 18869.

Tests outlined in this document are independent of each other and document the method to follow for each test. See the appropriate component International Standard for indications of which tests to conduct and for performance criteria.

For qualification of the connector, the minimum number of samples specified in this document is tested, unless otherwise specified in the relevant connector standard or as agreed upon by the manufacturer and the user.

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 48-2, Rubber, vulcanized or thermoplastic — Determination of hardness — Part 2: Hardness between 10 IRHD and 100 IRHD

ISO 3448, Industrial liquid lubricants — ISO viscosity classification

ISO 3601-3, Fluid power systems — O-rings — Part 3: Quality acceptance criteria

ISO 5598, Fluid power systems and components — Vocabulary

ISO 6508-1, Metallic materials — Rockwell hardness test — Part 1: Test method

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

ISO 6743-4, Lubricants, industrial oils and related products (class L) — Classification — Part 4: Family H (Hydraulic systems)

ISO 10763, Hydraulic fluid power — Plain-end, seamless and welded precision steel tubes — Dimensions and nominal working pressures

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