

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

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN ISO 19879:2010 sisaldab Euroopa standardi EN ISO 19879:2010 ingliskeelset teksti.

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English Version

Metallic tube connections for fluid power and general use - Test methods for hydraulic fluid power connections (ISO 19879:2010)

Raccords de tubes métalliques pour transmissions hydrauliques et pneumatiques et applications générales - Méthodes d'essai pour raccords pour transmissions hydrauliques (ISO 19879:2010)

Metallische Rohrverschraubungen für Fluidtechnik und allgemeine Anwendung - Prüfverfahren für hydraulische Rohrverschraubungen in der Fluidtechnik (ISO 19879:2010)

This European Standard was approved by CEN on 14 September 2010.

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Foreword

The text of ISO 19879:2010 has been prepared by Technical Committee ISO/TC 131 “Fluid power systems” of the International Organization for Standardization (ISO) and has been taken over as EN ISO 19879:2010 by Technical Committee ECISS/TC EC110 “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of an identical text or by endorsement, at the latest by March 2011, and conflicting national standards shall be withdrawn at the latest by March 2011.

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Endorsement notice

The text of ISO 19879:2010 has been approved by CEN as a EN ISO 19879:2010 without any modification.

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Introduction

In hydraulic fluid power systems, power is transmitted and controlled through a liquid under pressure within an enclosed circuit. It is required 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 compliance with the stated requirements.

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WARNING — Some of the tests described in this International Standard are considered hazardous. It is, therefore, essential that, in conducting these tests, all appropriate safety precautions be strictly adhered to. Attention is drawn to the danger of burst, fine jets (which can penetrate the skin) and energy release of expanding gases. To reduce the hazard of energy release, bleed air out of test specimens prior to pressure testing. Tests shall be set up and performed by properly trained personnel.

1 Scope

This International Standard 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 International Standard does not apply to the testing of hydraulic quick-action couplings, which is covered by ISO 7241-2.

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

For qualification of the connector, the minimum number of samples specified in this International Standard 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 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 48, *Rubber, vulcanized or thermoplastic — Determination of hardness (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 (all parts), *Metallic materials — Rockwell hardness test*

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

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