ICS 23.100.40 SLOVENSKÁ TECHNICKÁ NORMA Máj 2014

STN	**Spojky na všeobecné použitie a na tekutinové mechanizmy. Otvory a koncovky so závitmi podľa ISO 228-1 s pružným alebo kovovým tesnením. Časť 2: Koncovky s pružným tesnením (typ E) na veľké zaťaženie (skupina S) a malé zaťaženie (skupina L) (ISO 1179-2: 2013).**	**STN EN ISO 1179-2** 13 7886

Connections for general use and fluid power - Ports and stud ends with ISO 228-1 threads with elastomeric or metal-to-metal sealing - Part 2: Heavy-duty (S series) and light-duty (L series) stud ends with elastomeric sealing (type E) (ISO 1179-2:2013)

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

Obsahuje: EN ISO 1179-2:2013, ISO 1179-2:2013

Oznámením tejto normy sa ruší
STN EN ISO 1179-2 (13 7886) z októbra 2008

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN ISO 1179-2

November 2013

ICS 23.100.40

English Version

Connections for general use and fluid power - Ports and stud ends with ISO 228-1 threads with elastomeric or metal-to-metal sealing - Part 2: Heavy-duty (S series) and light-duty (L series) stud ends with elastomeric sealing (type E) (ISO 1179-2:2013)

Raccordements pour applications générales et transmissions hydrauliques et pneumatiques - Orifices et éléments mâles à filetage ISO 228-1 et joint en élastomère ou étanchéité métal sur métal - Partie 2: Éléments mâles de séries légère (série L) et lourde (série S) avec joint en élastomère (type E) (ISO 1179-2:2013)

Leitungsanschlüsse für allgemeine Anwendung und Fluidtechnik - Einschraublöcher und Einschraubzapfen mit Gewinde nach ISO 228-1 und Elastomerdichtung oder metallener Dichtkante - Teil 2: Einschraubzapfen mit Elastomerdichtung (Form E), schwere (S) und leichte Reihe (L) (ISO 1179-2:2013)

This European Standard was approved by CEN on 12 October 2013.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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Foreword

This document (EN ISO 1179-2:2013) has been prepared by Technical Committee ISO/TC 131 "Fluid power systems" in collaboration with Technical Committee ECISS/TC 110 “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 May 2014, and conflicting national standards shall be withdrawn at the latest by May 2014.

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

This document supersedes EN ISO 1179-2:2008.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Endorsement notice

The text of ISO 1179-2:2013 has been approved by CEN as EN ISO 1179-2:2013 without any modification.

INTERNATIONAL STANDARD

ISO 1179-2

Second edition
2013-11-01

Connections for general use and fluid power — Ports and stud ends with ISO 228-1 threads with elastomeric or metal-to-metal sealing —

Part 2: Heavy-duty (S series) and light-duty (L series) stud ends with elastomeric sealing (type E)

Raccordements pour applications générales et transmissions hydrauliques et pneumatiques — Orifices et éléments mâles à filetage ISO 228-1 et joint en élastomère ou étanchéité métal sur métal —

Partie 2: Éléments mâles de séries légère (série L) et lourde (série S) avec joint en élastomère (type E)

Reference number
ISO 1179-2:2013(E)

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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. www.iso.org/directives

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Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

The committee responsible for this document is ISO/TC 131, *Fluid power systems*, Subcommittee SC 4, *Connectors and similar products and components*.

This second edition cancels and replaces the first edition (ISO 1179-2:2007), which has been technically revised.

ISO 1179 consists of the following parts, under the general title *Connections for general use and fluid power — Ports and stud ends with ISO 228-1 threads with elastomeric or metal-to-metal sealing*:

— *Part 1: Threaded ports*

— *Part 2: Heavy-duty (S series) and light-duty (L series) stud ends with elastomeric sealing (type E)*

— *Part 3: Light-duty (L series) stud ends with sealing by O-ring with retaining ring (types G and H)*

— *Part 4: Stud ends for general use only with metal-to-metal sealing (type B)*

Introduction

In fluid power systems, power is transmitted and controlled through a fluid (liquid or gas) under pressure within a circuit. In general applications, a fluid can be conveyed under pressure. Components are connected through their threaded ports by fluid conductor connectors to tubes and pipes or to hose fittings and hoses.

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, ISO 9974 series and 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.

For threaded ports and stud ends specified in new designs in pneumatic fluid power applications, ISO/TC 131/SC 4 recommends that ISO 16030 be used, except where products are to interface with ISO 7-1 threads, 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 not be used for new designs in pneumatic fluid power applications; these International Standards are maintained because they specify ports and stud ends that are currently used in pneumatic systems worldwide.

Significant testing over more than 35 years of use has confirmed the performance requirements of connection ends made from carbon steel. The stud end connections specified in ISO 1179-2, ISO 1179-3 and ISO 1179-4 apply to connectors detailed in ISO 8434-1, ISO 8434-2 and ISO 8434-4.

INTERNATIONAL STANDARD **ISO 1179-2:2013(E)**

Connections for general use and fluid power — Ports and stud ends with ISO 228-1 threads with elastomeric or metal-to-metal sealing —

Part 2: Heavy-duty (S series) and light-duty (L series) stud ends with elastomeric sealing (type E)

CAUTION — The use of stud ends conforming to this part of ISO 1179 with ports conforming to the relevant parts of ISO 6149, ISO 9974 and ISO 11926 could lead to a hazardous situation.

1 Scope

This part of ISO 1179 specifies dimensions, performance requirements and test procedures for heavy-duty (S series) and light-duty (L series) stud ends with ISO 228-1 threads and the elastomeric sealing (type E) that is used with them.

Heavy-duty (S series) stud ends with type E sealing in accordance with this part of ISO 1179 can be used at working pressures up to 63 MPa (630 bar). Light-duty (L series) stud ends with type E sealing in accordance with this part of ISO 1179 can be used at working pressures up to 25 MPa (250 bar). The permissible working pressure depends upon size, materials, design, working conditions, application, etc.

Conformance to the dimensional information in this part of ISO 1179 does not guarantee rated performance. It is the responsibility of each manufacturer to perform testing according to the specification contained in this part of ISO 1179 in order to ensure that components made to this part of ISO 1179 comply with the performance ratings.

NOTE 1 This part of ISO 1179 applies to connectors detailed in ISO 8434-1 and ISO 8434-2.

NOTE 2 The introduction of this part of ISO 1179 gives recommendations for ports and stud ends to be used for new designs in hydraulic and pneumatic fluid power applications.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. 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 286-1, *Geometrical product specifications (GPS) — ISO code system for tolerances on linear sizes — Part 1: Basis of tolerances, deviations and fits*

ISO 286-2, *Geometrical product specifications (GPS) — ISO code system for tolerances on linear sizes — Part 2: Tables of standard tolerance classes and limit deviations for holes and shafts*

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

ISO 9974-2, *Connections for general use and fluid power — Ports and stud ends with ISO 261 threads with elastomeric or metal-to-metal sealing — Part 2: Stud ends with elastomeric sealing (type E)*

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