Connections for general use and fluid power - Ports and stud ends with ISO 228-1 threads with elastomeric or metal-to-metal sealing - Part 3: Light-duty (L series) stud ends with sealing by O-ring with retaining ring (types G and H)

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN ISO 1179-3:2008 sisaldab Euroopa standardi EN ISO 1179-3:2008 ingliskeelset teksti.	This Estonian standard EVS-EN ISO 1179-3:2008 consists of the English text of the European standard EN ISO 1179-3:2008.
Standard on kinnitatud Eesti Standardikeskuse 20.06.2008 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.	This standard is ratified with the order of Estonian Centre for Standardisation dated 20.06.2008 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.
Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 23.04.2008.	Date of Availability of the European standard text 23.04.2008.
Standard on kättesaadav Eesti standardiorganisatsioonist.	The standard is available from Estonian standardisation organisation.

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Võtmesõnad:

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN ISO 1179-3

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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 3: Light-duty (L series) stud ends with sealing by O-ring with retaining ring (types G and H) (ISO 1179-3:2007)

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 3: Éléments mâles série légère (série L) avec étanchéité par joint torique et bague de retenue (types G et H) (ISO 1179-3:2007)

Leitungsanschlüsse für allgemeine Anwendung und Fluidtechnik - Einschraublöcher und Einschraubzapfen mit Gewinde nach ISO 228-1 und Elastomerdichtung oder metallener Dichtkante - Teil 3: Einschraubzapfen mit O-Ring-Dichtung mit Stützring (Formen G und H), leichte Reihe (L) (ISO 1179-3:2007)

This European Standard was approved by CEN on 25 March 2008.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN Management Centre or to any CEN member.

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

Management Centre: rue de Stassart, 36 B-1050 Brussels

Ref. No. EN ISO 1179-3:2008: E

Foreword

The text of ISO 1179-3:2007 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 1179-3:2008 by Technical Committee ECISS/TC 29 “Steel tubes and fittings for steel tubes” 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 October 2008, and conflicting national standards shall be withdrawn at the latest by October 2008.

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.

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, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

Endorsement notice

The text of ISO 1179-3:2007 has been approved by CEN as a EN ISO 1179-3:2008 without any modification.

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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 may 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 sub-committee 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 will be 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 sub-committee 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 will be maintained because they specify ports and stud ends that are currently used in pneumatic systems worldwide.

Significant testing over more than 30 years of use has confirmed the performance requirements of connection ends made from carbon steel. The stud end connections specified in ISO 1179 parts 2, 3 and 4 apply to connectors detailed in ISO 8434 parts 1, 2 and 4.

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

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

1 Scope

This part of ISO 1179 specifies dimensions, performance requirements and test procedures for non-adjustable and adjustable light-duty (L series) stud ends with ISO 228-1 threads with sealing by O-ring with retaining ring (types G and H, respectively).

Light-duty (L series) stud ends in accordance with this part of ISO 1179 may be used at working pressures up to 31,5 MPa (315 bar) for non-adjustable stud ends (type G) and up to 20 MPa (200 bar) for adjustable stud ends (type H). 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. Each manufacturer shall perform testing according to the specification contained in this part of ISO 1179 to assure 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 8434-2.

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 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 3601-3:2005, *Fluid power systems — O-rings — Part 3: Quality acceptance criteria*

ISO 4759-1:2000, *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 19879, *Metallic tube connections for fluid power and general use — Test methods for hydraulic fluid power connections*