

Ristsüvendiga lamepeitpeakruvid (tavaline peakuju). Tooteklass A. Osa 2: Teras materjaliklassist 8.8, roostevaba teras ja värvilised metallid

Cross recessed countersunk flat head screws (common head style) - Grade A - Part 2: Steel of property class 8.8, stainless steel and non-ferrous metals

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN ISO 7046-2:1999 sisaldab Euroopa standardi EN ISO 7046-2:1994 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 23.11.1999 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN ISO 7046-2:1999 consists of the English text of the European standard EN ISO 7046-2:1994.</p> <p>This document is endorsed on 23.11.1999 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p>Käsitlusala:</p> <p>ISO 7046 see osa määrab kindlaks selliste ristsüvendiga lamepeitpeakruvide parameetrid, mille keerme suurus on M2 - M10 (kaasa arvatud), mis on tooteklassist A ning materjaliklassist 8.8 terase, A2-70 roostevaba terase ja CU2 ja CU3 värviliste metallide puhul.</p>	<p>Scope:</p>
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ICS 21.060.10

Võtmesõnad: kinnitusdetailid, kruvid, lamepeitpeakruvid, mõõtmed, peitpeakruvid, ristpeakruvid, tehnilised andmed, tähistus

UDC 621.882.215.6.091.6

Descriptors: Fastener, screw, countersunk head screw, cross recessed head screw, steel, nonferrous metal.

English version

**Cross recessed countersunk flat head screws
(common head style); grade A**

**Part 2: Steel of property class 8.8, stainless steel and non-ferrous metals
(ISO 7046-2:1990)**

Vis à métaux à tête fraisée à empreinte
cruciforme; grade A. Partie 2: Acier de
classe de qualité 8.8, acier inoxydable et
métaux non ferreux (ISO 7046-2:1990)

Senkschrauben mit Kreuzschlitz
(Einheitskopf); Produktklasse A. Teil 2:
Stahl mit Festigkeitsklasse 8.8, nicht-
rostender Stahl und Nichteisenmetalle
(ISO 7046-2:1990)

This European Standard was approved by CEN on 1994-07-26 and is identical to the ISO Standard as referred to.

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 Central Secretariat or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Central Secretariat has the same status as the official versions.

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CEN

European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

Central Secretariat: rue de Stassart 36, B-1050 Brussels

Foreword

International Standard

ISO 7046-2 Cross recessed head countersunk flat head screws (common head style), grade A; steel of property class 8.8, stainless steel and nonferrous metals

has been taken over as a European Standard by Technical Committee CEN/TC 185 'Threaded and non-threaded mechanical fasteners and accessories' from the work of ISO/TC 2 'Fasteners' of the International Organization for Standardization (ISO).

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, and conflicting national standards withdrawn, by January 1995 at the latest.

In accordance with the CEN/CENELEC Internal Regulations, the following countries are bound to implement this European Standard:

Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

Endorsement notice

The text of the International Standard ISO 7046-2:1990 was approved by CEN as a European Standard without any modification.

NOTE: Normative references to international publications are listed in Annex ZA.

Introduction

Penetration depths of cross recesses for countersunk flat head screws

The penetration depth of cross recesses for countersunk flat head screws has to satisfy two requirements which act in opposite directions for a given head dimension.

First, there is the requirement for sufficient head strength to attain the proof and breaking loads of the respective property class. A shallow cross recess increases the head strength. On the other hand, the wrenchability of the screw should be satisfactory; this can only be achieved by a sufficiently deep cross recess.

ISO 7721-2 was developed in order to find a compromise which, as far as possible, would meet both requirements.

ISO 7721-2 specifies deep cross recesses for countersunk head screws of low strength: a good wrenchability is achieved and the head strength is still sufficient. This execution will be used in ISO 7046-1 (see the foreword).

For screws of higher strength, sufficient head strength can only be attained by a shallower penetration depth of the cross recesses. If such screws also require good wrenchability, then, under the conditions of the common head style, a shoulder has to be provided under the head, in addition to the larger penetration depth, in order to guarantee sufficient head strength. This part of ISO 7046 covers both possibilities.

This compromise, which unfortunately results in different, but interchangeable, types of cross recessed flat countersunk head screws, is at the moment the only way of reaching an agreement at the international level.

1 Scope

This part of ISO 7046 specifies the characteristics of recessed countersunk flat head screws with threads M2 up to and including M10, of grade A and of property class 8.8 for steel, A2-70 for stainless steel and CU2 and CU3 for non-ferrous metals.

If, in special cases, specifications other than those listed in this International Standard are required, they shall be selected from existing International Standards, for example ISO 261, ISO 888, ISO 898-1, ISO 965-2, ISO 3506, ISO 4759-1, ISO 8839.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this part of ISO 7046. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this part of ISO 7046 are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 225 : 1983, *Fasteners — Bolts, screws, studs and nuts — Symbols and designations of dimensions*.

ISO 261 : 1973, *ISO general purpose metric screw threads — General plan*.

ISO 888 : 1976, *Bolts, screws and studs — Nominal lengths, and thread lengths for general purpose bolts*.

ISO 898-1 : 1988, *Mechanical properties of fasteners — Part 1: Bolts, screws and studs*.

ISO 965-2 : 1980, *ISO general purpose metric screw threads — Tolerances — Part 2: Limits of sizes for general purpose bolt and nut threads — Medium quality*.

ISO 3269 : 1988, *Fasteners — Acceptance inspection*.

ISO 3506 : 1979, *Corrosion-resistant stainless steel fasteners — Specifications*.

ISO 4042 : 1989, *Threaded components — Electroplated coatings*.

ISO 4757 : 1983, *Cross recesses for screws*.

ISO 4759-1 : 1978, *Tolerances for fasteners — Part 1: Bolts, screws and nuts with thread diameters $\geq 1,6$ and ≤ 150 mm and product grades A, B and C*.

ISO 6157-1 : 1988, *Fasteners — Surface discontinuities — Part 1: Bolts, screws and studs for general requirements*.

ISO 6157-3 : 1988, *Fasteners — Surface discontinuities — Part 3: Bolts, screws and studs for special requirements*.

ISO 7721 : 1983, *Countersunk head screws — Head configuration and gauging*.

ISO 7721-2 : 1990, *Countersunk flat head screws — Part 2: Penetration depth of cross recesses*.

ISO 8839 : 1986, *Mechanical properties of fasteners — Bolts, screws, studs and nuts made of non-ferrous metals*.