



# SLOVENSKI STANDARD SIST EN ISO 4757:1996

01-april-1996

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## Križne zareze za vijake

Cross recesses for screws (ISO 4757:1983)

Kreuzschlitze für Schrauben (ISO 4757:1983)

Empreintes cruciformes pour vis (ISO 4757:1983)

Ta slovenski standard je istoveten z: **EN ISO 4757:1994**

[SIST EN ISO 4757:1996](https://standards.iteh.ai/catalog/standards/sist/e6e367a7-5574-424b-809-7319b67bfd19/sist-en-iso-4757-1996)

<https://standards.iteh.ai/catalog/standards/sist/e6e367a7-5574-424b-809-7319b67bfd19/sist-en-iso-4757-1996>

### **ICS:**

21.060.10      Sorniki, vijaki, stebelni vijaki      Bolts, screws, studs

**SIST EN ISO 4757:1996**

**en**

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EUROPEAN STANDARD

EN ISO 4757

NORME EUROPÉENNE

EUROPÄISCHE NORM

July 1994

UDC 621.882.215.6

Descriptors: fasteners, screws, cruciform recessed screws, dimensions

English version

**Cross recesses for screws (ISO 4757:1983)**

Empreintes cruciformes pour vis (ISO 4757:1983)

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This European Standard was approved by CEN on 1994-07-26. 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.

The European Standards exist 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.

CEN members are the national standards bodies of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

**CEN**

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

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

Page 2  
EN ISO 4757:1994

### Foreword

This European Standard has been taken over by the 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, at the latest by January 1995, and conflicting national standards shall be withdrawn at the latest by January 1995.

According to 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, United Kingdom.

### Endorsement notice

The text of the International Standard ISO 4757:1983 was approved by CEN as a European Standard without any modification.

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https://standards.iteh.ai/catalog/standards/sist/e6e367a7-5574-424b-80f9-7319b67bfd19/sist-en-iso-4757-1996](https://standards.iteh.ai/catalog/standards/sist/e6e367a7-5574-424b-80f9-7319b67bfd19/sist-en-iso-4757-1996)

# International Standard



# 4757

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION • МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ • ORGANISATION INTERNATIONALE DE NORMALISATION

## Cross recesses for screws

*Empreintes cruciformes pour vis*

First edition — 1983-08-01

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

[SIST EN ISO 4757:1996](#)

<https://standards.iteh.ai/catalog/standards/sist/e6e367a7-5574-424b-80f9-7319b67bfd19/sist-en-iso-4757-1996>

UDC 621.882.215.6

Ref. No. ISO 4757-1983 (E)

Descriptors : fasteners, screws, cruciform recessed screws, dimensions.

## Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of developing International Standards is carried out through ISO technical committees. Every member body interested in a subject for which a technical committee has been authorized 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.

Draft International Standards adopted by the technical committees are circulated to the member bodies for approval before their acceptance as International Standards by the ISO Council.

International Standard ISO 4757 was developed by Technical Committee ISO/TC 2, *Fasteners*, and was circulated to the member bodies in December 1981.

It has been approved by the member bodies of the following countries:

Australia	Germany, F.R.	Norway
Austria	Hungary	Poland
Belgium	India	Romania
Brazil	Ireland	South Africa, Rep. of
Canada	Italy	Spain
China	Japan	Sri Lanka
Czechoslovakia	Korea, Dem. P. Rep. of	Sweden
Denmark	Korea, Rep. of	Switzerland
Egypt, Arab Rep. of	Mexico	USA
Finland	Netherlands	USSR
France	New Zealand	

The member body of the following country expressed disapproval of the document on technical grounds:

United Kingdom

## Cross recesses for screws

### iTeh STANDARD PREVIEW (standards.iteh.ai)

#### 1 Scope and field of application

[SIST EN ISO 4757:1996](#)

This International Standard defines two types of cross recesses for screws: [a7-5574-424b-80f9-7319b67bfd19/sist-en-iso-4757-1996](#)

- recess type H;
- recess type Z.

Included in this International Standard is a method of penetration gauging for both types.

## ISO 4757-1983 (E)

## 2 Recess type H

## 2.1 Dimensions

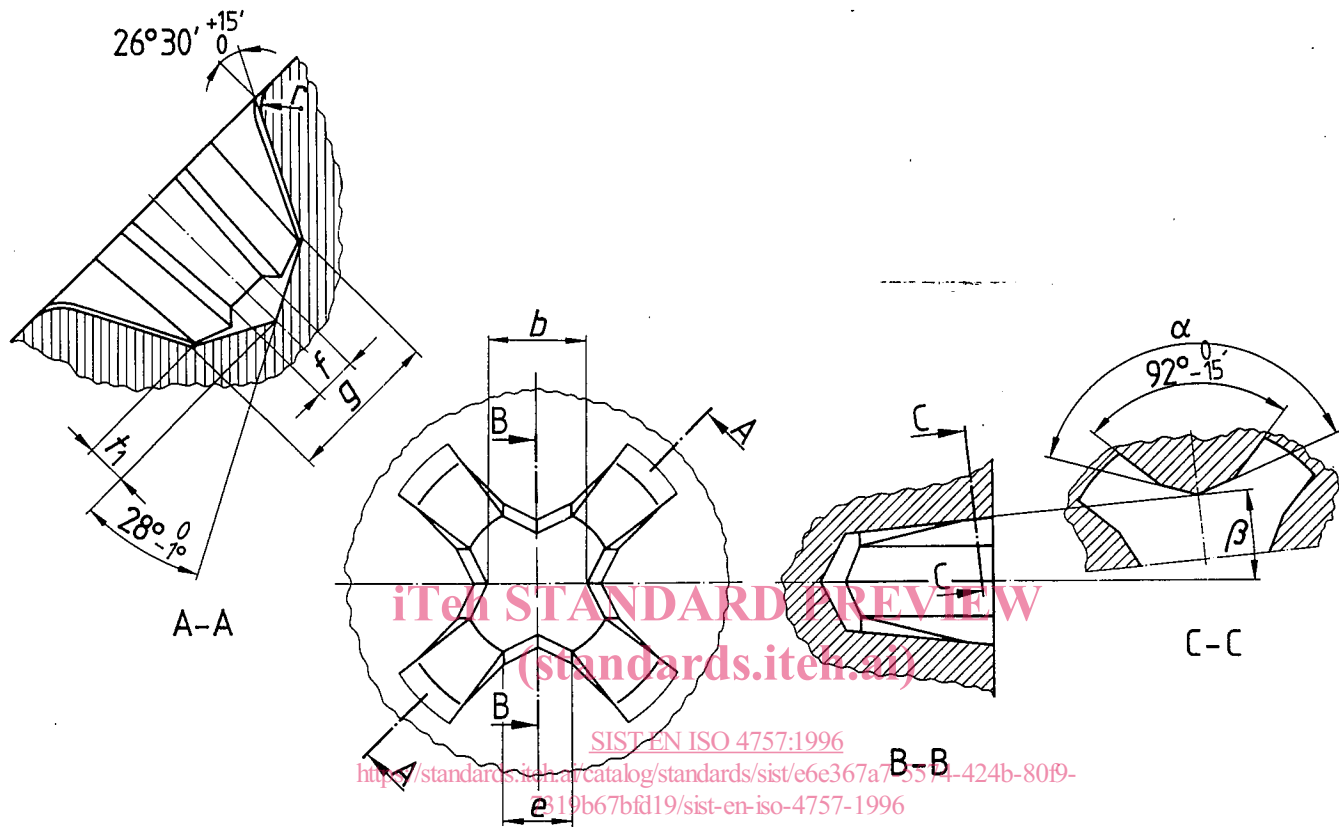




Table 1 – Recess type H

Dimensions in millimetres

Recess No.	0	1	2	3	4
$b$ $\begin{smallmatrix} 0 \\ -0,03 \end{smallmatrix}$	0,61	0,97	1,47	2,41	3,48
$e$	0,26 - 0,36	0,41 - 0,46	0,79 - 0,84	1,98 - 2,03	2,39 - 2,44
$g$ $\begin{smallmatrix} +0,05 \\ 0 \end{smallmatrix}$	0,81	1,27	2,29	3,81	5,08
$f$	0,31 - 0,36	0,51 - 0,56	0,66 - 0,74	0,79 - 0,86	1,19 - 1,27
$r$ nom.	0,3	0,5	0,6	0,8	1
$t_1$ ref.	0,22	0,34	0,61	1,01	1,35
$\alpha$ $\begin{smallmatrix} 0 \\ -15' \end{smallmatrix}$	1)	138°	140°	146°	153°
$\beta$ $\begin{smallmatrix} +15' \\ 0 \end{smallmatrix}$	7°	7°	5° 45'	5° 45'	7°

1) This will be replaced by  $r$  min. 0,25 mm;  $r$  max. 0,36 mm.

Dimensions shown are theoretical values.

## 2.2 Recess penetration gauging and gauge dimensions for recess type H

The penetration depth of the depth gauge (minimum dimension) is indicated in the different product standards. It is the test dimension for the usability of the cross recess.

The point of the gauge is identical with the point of the respective screwdriver. A sleeve serves to guide the gauge and fix the reference plane. This plane passes through the point of intersection of the recess wings and the top surface of the screw head. It corresponds thus to the surface of a screw with flat head. In the case of crowned screw heads, it lies below the crown in the transition area from the recess wings to the surface of the head. For these screw heads, the reference plane is fixed with the help of the bearing surfaces of the gauge sleeve.

The penetration depth of the gauge is measured from the reference plane by using a dial gauge. The zero and control positions of the depth gauge can be found on a flat surface.

Due to the permissible error for the core thickness  $b$  of the gauge point, an inaccuracy of up to 0,13 mm can arise when measuring the penetration depth.