

Fasteners — Bolts, screws, studs and nuts — Symbols and designations of dimensions

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Ireland	National Standards Authority of Ireland
Italy	Ente Nazionale Italiano di Unificazione
Luxembourg	Inspection du Travail et des Mines
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National foreword

This British Standard has been prepared under the direction of the General Mechanical Engineering Standards Policy Committee and is the English language version of EN 20225:1991, *“Fasteners — Bolts, screws and nuts — Symbols and designations of dimensions”*, published by the European Committee for Standardization (CEN). It is identical with ISO 225:1983, published by the International Organization for Standardization (ISO). EN 20225:1991 was produced as a result of international discussion in which the UK took an active part.

BS 6565:1985 was identical to ISO 225:1983 but is now superseded and withdrawn.

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Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, the EN title page, pages 2 to 22, an inside back cover and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

UDC 621.882.2/.3

Descriptors: Fasteners, bolts, screws, studs, nuts: fasteners, dimensions, dimensioning, symbols, designation

English version

Fasteners — Bolts, screws, studs and nuts — Symbols and designations of dimensions

(ISO 225:1983)

Eléments de fixation — Boulons, vis, goujons
et écrous — Symboles et désignations des
dimensions
(ISO 225:1983)

Mechanische Verbindungselemente —
Schrauben und Muttern — Bemaßung
(ISO 225:1983)

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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.

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CEN

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

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Foreword

In 1990, ISO 225:1983 was submitted to the CEN P.Q. procedure.
Following the positive result of the P.Q., CEN/BT agreed to submit ISO 225:1983 with the following modifications to Formal Vote.
In the French version, replace “boulon, vis” by “vis”.
In accordance with the Common CEN/CENELEC Rules, the following countries are bound to implelement this European Standard:
Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

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Fasteners — Bolts, screws, studs and nuts — Symbols and designations of dimensions

1 Scope and field of application

This International Standard lays down the method of dimensioning bolts, screws, studs and nuts, recommended for use unless otherwise specified in the appropriate product standards.

It includes common symbols and describes the feature.

NOTES

- 1) The figures of the fasteners in this International Standard are only examples.
- 2) In addition to terms used in the three official ISO languages (English, French and Russian), this International Standard gives the equivalent terms in German, Italian and Spanish; these have been included at the request of ISO Technical Committee ISO/TC 2 and are published under the responsibility of the member bodies for Germany, F.R. (DIN), Italy (UNI) and Spain (IRANOR). However, only the terms given in the official languages can be considered as ISO terms.

Successive order of languages :

E : English
F : French
R : Russian
D : German
I : Italian
S : Spanish

2 References

ISO 3508, *Thread run-outs for fasteners with thread in accordance with ISO 261 and ISO 262.*

ISO 4753, *Fasteners — Ends of parts with external metric ISO thread.*

ISO 4755, *Fasteners — Thread undercuts for external metric ISO threads.*

Éléments de fixation — Boulons, vis, goujons et écrous — Symboles et désignations des dimensions

Objet et domaine d'application

La présente Norme internationale définit la méthode de cotation des boulons, vis, goujons et écrous, d'usage recommandé, sauf spécification contraire figurant dans les normes de produit.

Elle inclut les symboles communs et décrit l'élément.

NOTES

- 1) Les figures d'éléments de fixation figurant dans la présente Norme internationale ne sont données qu'à titre d'exemples.
- 2) En supplément aux désignations des dimensions données dans les trois langues officielles de l'ISO (anglais, français, russe), la présente Norme internationale donne les désignations équivalentes en allemand, italien et espagnol. Ces désignations ont été incluses à la demande du Comité technique ISO/TC 2, et sont publiées sous la responsabilité des comités membres de l'Allemagne, R.F. (DIN), de l'Italie (UNI) et de l'Espagne (IRANOR). Toutefois, seules les désignations données dans les langues officielles peuvent être considérées comme désignations ISO.

Ordre successif des langues :

E : anglais
F : français
R : russe
D : allemand
I : italien
S : espagnol

Références

ISO 3508, *Filets incomplets pour les éléments de fixation avec un filetage selon ISO 261 et ISO 262.*

ISO 4753, *Éléments de fixation — Extrémités des éléments à filetage extérieur métrique ISO.*

ISO 4755, *Éléments de fixation — Gorges de dégagement pour éléments à filetage extérieur métrique ISO.*

Детали крепления — Болты, винты, шпильки и гайки — Символы и обозначения размеров

Объект и область применения

Настоящий Международный Стандарт устанавливает метод определения размеров болтов, винтов, шпилек и гаек, рекомендованный для применения, за исключением других методов, установленных в соответствующих стандартах на продукцию.

Он содержит обычные символы и описание деталей.

ПРИМЕЧАНИЯ

- 1) Изображения деталей крепления приводятся в настоящем Международном Стандарте в качестве примеров.
- 2) В дополнение к обозначениям размеров на трех официальных языках ИСО (английском, французском и русском) настоящий Международный Стандарт приводит эквивалентные обозначения на немецком, итальянском и испанском языках. Эти обозначения включены по просьбе Технического Комитета ИСО/ТК 2, и публикуются под ответственность комитетов-членов Федеративной Республики Германии (ДИН), Италии (УНИ) и Испании (ИРАНОР). Однако, только обозначения на трех официальных языках могут считаться обозначениями ИСО.

Порядок языков :

E : английский
F : французский
R : русский
D : немецкий
I : итальянский
S : испанский

Ссылки

ИСО 3508, *Сход резьбы для деталей крепления с резьбой в соответствии с ИСО 261 и ИСО 262.*

ИСО 4753, *Детали крепления — Концы деталей с наружной метрической резьбой ИСО.*

ИСО 4755, *Детали крепления — Резьбовые проточки для деталей с наружной метрической резьбой ИСО.*

3 Bolts, screws and studs

For thread run-out, see ISO 3508.

Boulons, vis et goujons

Pour les filets incomplets, voir ISO 3508.

Болты, винты и шпильки

Для неполных резьб, см. ИСО 3508.

3.1 Hexagon head products

Éléments à tête hexagonale

Детали с шестигранной головкой

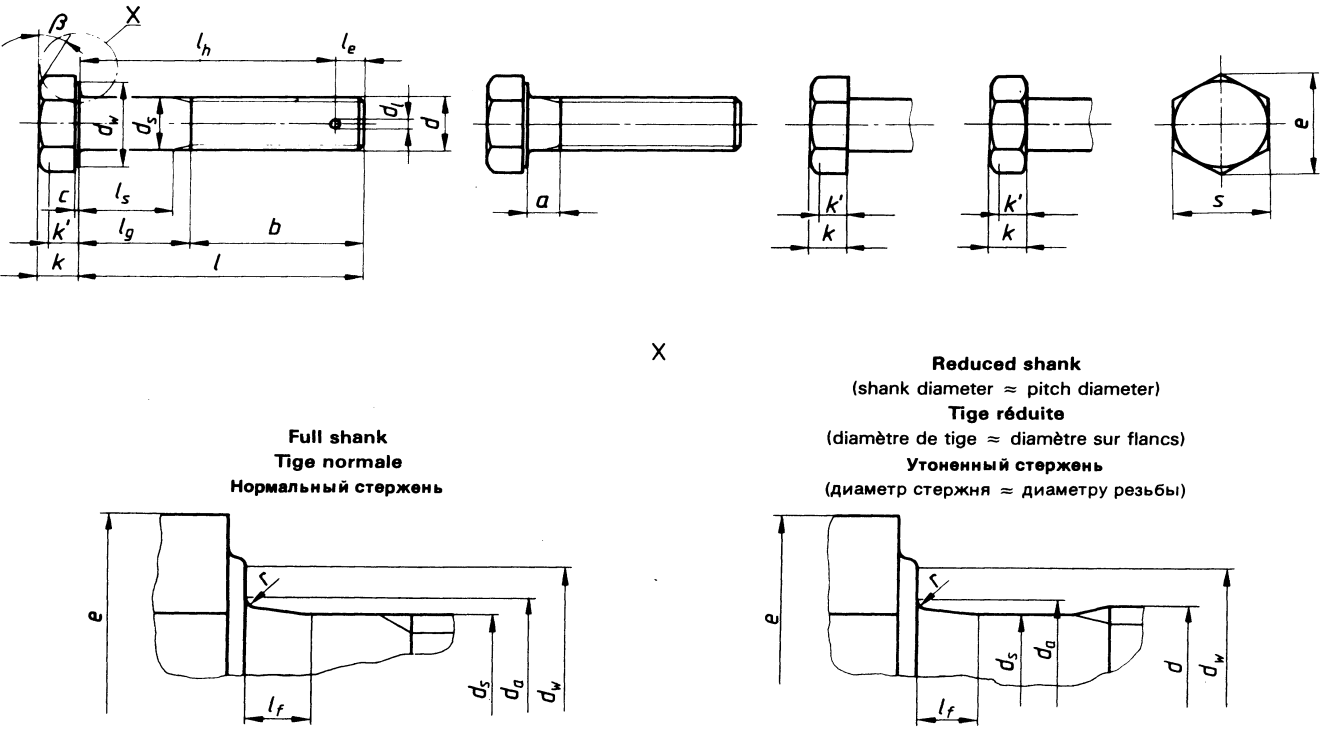


Figure 1
Рисунок 1

3.2 Hexagon head screw
with flange

Vis à tête hexagonale à embase
cylindro-tronconique

Винт с шестигранной головкой
со скошенным буртом

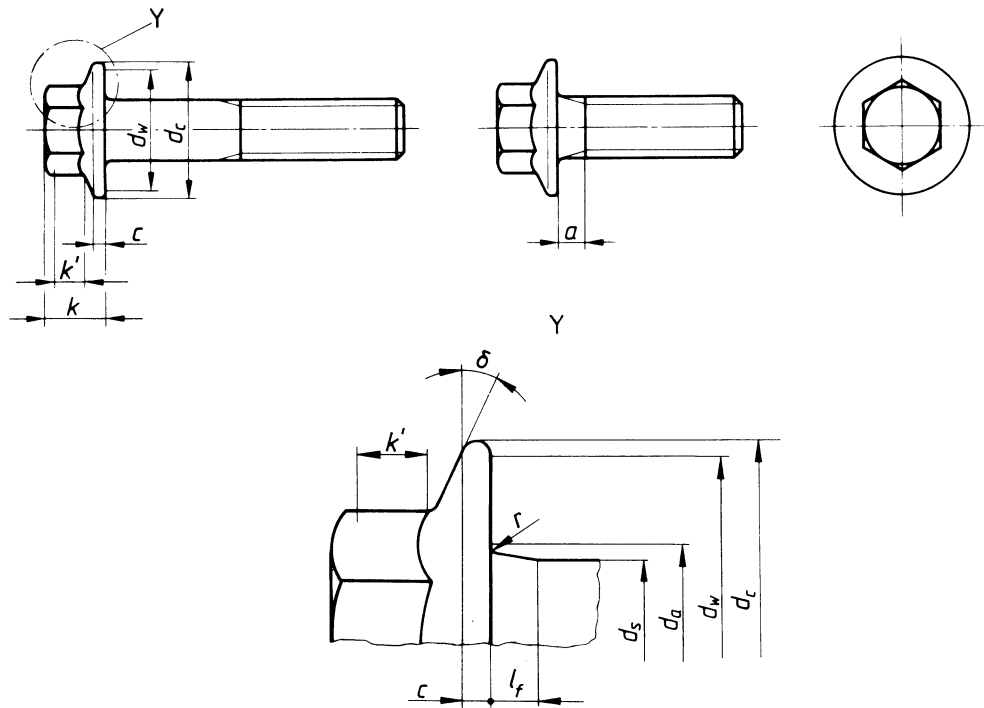


Figure 2
Рисунок 2