

Nomenclature for bolts, screws, nuts and accessories

[ISO title: Bolts, screws, nuts and accessories — Terminology and nomenclature]

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The Mechanical Engineering Standards Committee, under whose direction this British Standard was prepared, consists of representatives from the following:

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Association of Consulting Engineers	Department of Transport
Association of Hydraulic Equipment Manufacturers	Electricity Supply Industry in England and Wales
Association of Mining Electrical and Mechanical Engineers	Engineering Equipment Users' Association
British Compressed Air Society	Federation of Manufacturers of Construction Equipment and Cranes
British Electrical and Allied Manufacturers' Association (BEAMA)*	Health and Safety Executive
British Gas Corporation	Institution of Gas Engineers
British Gear Manufacturers' Association	Institution of Mechanical Engineers
British Internal Combustion Engine Manufacturers' Association*	Institution of Plant Engineers
British Pump Manufacturers' Association	Institution of Production Engineers*
British Steel Corporation	Lloyd's Register of Shipping
British Steel Industry*	London Transport Executive
British Valve Manufacturers' Association Ltd.	Machine Tool Industry Research Association
Cbmpe	Ministry of Defence*
Chartered Institution of Building Services	National Coal Board*
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Department of the Environment (PSA)	Process Plant Association
Department of Industry (Mechanical Engineering)	Society of Motor Manufacturers and Traders Limited*
Department of Industry (National Engineering Laboratory)*	Telecommunication Engineering and Manufacturing Association (TEMA)*

The organizations marked with an asterisk in the above list, together with the following, were directly represented on the Technical Committee entrusted with the preparation of this British Standard:

British Constructional Steelwork Association	Electronic Engineering Association
British Industrial Fasteners Federation	Federation of British Hand Tool Manufacturers
British Railways Board	Washer Manufacturers' Association of Great Britain
British Steel Industry (Wire Section)	

This British Standard, having been prepared under the direction of the Mechanical Engineering Standards Committee, was published under the authority of the Executive Board and comes into effect on 30 January 1981

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Amd. No.	Date of issue	Comments

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National foreword

This British Standard, which has been prepared under the direction of the Mechanical Engineering Standards Committee, is identical With ISO 1891:1979 *“Bolts, screws, nuts and accessories — Terminology and nomenclature”* published by the International Organization for Standardization (ISO). The United Kingdom has taken an active part in the work of Technical Committee ISO/TC 2, Fasteners.

In publishing ISO 1891 as a British Standard it has been accepted that the terms included are the result of the differing requirements of the many countries involved. It is hoped that this first edition will provide a useful basis for international fastener terminology and that amendments incorporated in the future as a result of its use will greatly increase its value as an international reference standard.

Terminology and conventions. The text of the International Standard has been approved as suitable for publication, without deviation, as a British Standard. Some terminology and certain conventions are not identical with those used in British Standards; attention is especially drawn to the following.

Where the words “International Standard” appear, referring to this standard, they should be read as “British Standard”.

Additional information. When adopting the text of this International Standard, the omission given below was noticed. It has been reported to ISO in a proposal to amend the text of the International Standard.

An asterisk and its associated footnote has been omitted from the entry for item no. 6.13. Therefore that entry should be read as if there were an asterisk against the item no. and with the following footnote:

“The name “Pozidriv” is a registered trade mark”.

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

Compliance with a British Standard does not of itself confer immunity from legal obligations.

Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, pages 1 to 55 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.

1 SCOPE AND FIELD OF APPLICATION

This International Standard lays down the terminology and nomenclature of bolts, screws, nuts and accessories in English, French, Russian, German, Italian and Spanish, recommended for use unless otherwise specified in the appropriate product standard.

At present, not all of the fasteners and accessories listed are covered by ISO publications. For the main part, the items have been selected from existing national standards. Also included are obsolescent types (those being used up from stock) in order that their terminology may be standardized at the same time.

The drawings are essentially diagrammatic, in particular those showing bolts and screws having special characteristics dealt with, for example, in clauses 18 and 19. However, it is recommended that these drawings be used as a base whenever possible.

NOTE — The equivalent terms in German, Italian and Spanish have been included at the request of 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) respectively. However, only the terms given in the three official ISO languages (English, French and Russian) can be considered as ISO terms.

Successive order of languages :

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

1 OBJET ET DOMAINE D'APPLICATION

La présente Norme internationale fixe la terminologie et la nomenclature des vis, écrous et accessoires, en anglais, français, russe, allemand, italien et espagnol, recommandées pour l'utilisation, sauf en cas de spécification contraire, dans la norme de produit appropriée.

Les pièces représentées ne font que dans certains cas, pour l'instant, l'objet de normes ISO. Elles ont, pour l'essentiel, été sélectionnées dans les normes nationales existantes, où encore figurent des pièces qui ne sont plus d'usage courant (en voie d'épuisement), cela afin d'en normaliser également la terminologie.

La représentation des pièces est purement schématique, ceci particulièrement pour les vis à caractéristiques spéciales, par exemple, incluses dans les chapitres 18 et 19. Cependant, il est recommandé d'utiliser, si possible, ces figures comme base.

NOTE — Les termes équivalents en allemand, italien et espagnol ont été inclus à la demande du TC 2 et sont publiés sous la responsabilité des comités membres de l'Allemagne, R.F. (DIN), de l'Italie (UNI) et de l'Espagne (IRANOR), respectivement. Toutefois, seuls les termes donnés dans les trois langues officielles de l'ISO (anglais, français et russe) peuvent être considérés comme termes ISO.

Ordre successif des langues

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

1 ОБЪЕКТ И ОБЛАСТЬ ПРИМЕНЕНИЯ

Настоящий Международный Стандарт предлагает терминологию и номенклатуру болтов, винтов и деталей крепления на английском, французском, русском, немецком, итальянском и испанском языках, рекомендованную для использования, если только такая не оговорена специально в соответствующих стандартах на изделия.

Не все перечисленные крепежные изделия и детали крепления охвачены публикациями ИСО в настоящее время. Объекты были выбраны, в большей части, из существующих национальных стандартов. Вышедшие из употребления (но могущие быть использованными со складов) типы крепежа также включены с тем, чтобы их терминология могла быть стандартизована одновременно.

Приводимые в стандарте чертежи по существу схематичны; в частности те, которые относятся к болтам и винтам, имеющим специальные характеристики и относящиеся к разделам 19 и 20. Тем не менее, рекомендуется, чтобы эти чертежи были использованы в качестве основы повсюду, где это возможно.

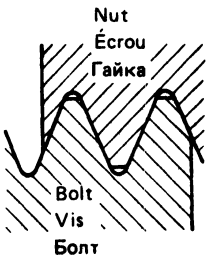
ПРИМЕЧАНИЕ — Эквивалентные термины на немецком, итальянском и испанском языках включены по просьбе Технического Комитета ИСО/ТК 2 и публикуются под ответственность Членов Организации Германии, Ф.Р., (ДИН), Италии (УНИ) и Испании (ИРАНОР) соответственно. Однако, только термины, приведенные на трех официальных языках ИСО (английском, французском и русском) могут считаться терминами ИСО.

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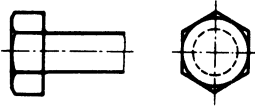
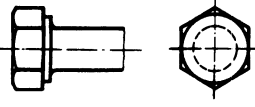
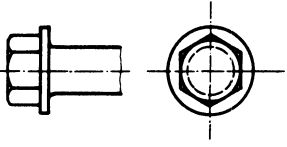
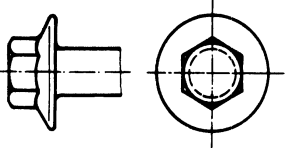
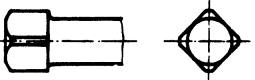
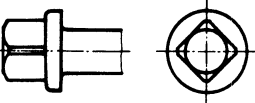
E : английский
F : французский
R : русский
D : немецкий
I : итальянский
S : испанский

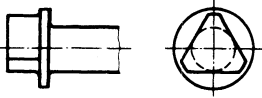
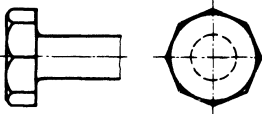
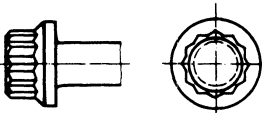
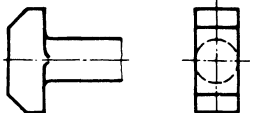
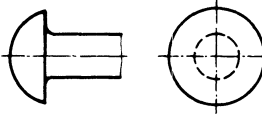
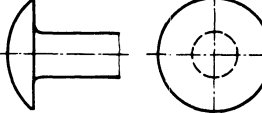
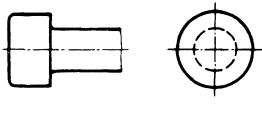
2 SCREW THREADS**FILETAGES****РЕЗЬБА****GEWINDE****FILETTATURE****ROSCAS**

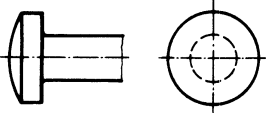
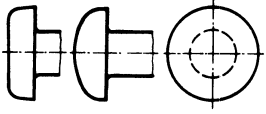
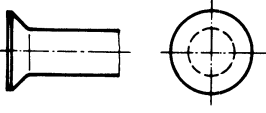
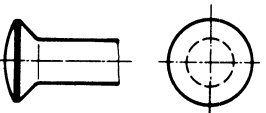
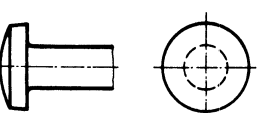
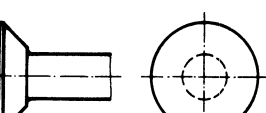
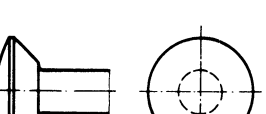
No. No №	Figure Чертеж	Designation Dénomination Наименование
2.1		E : screw thread F : filetage cylindrique R : резьба D : Gewinde I : filettatura S : rosca cilíndrica
2.2		E : taper screw thread F : filetage conique R : коническая резьба D : kegeliges (konisches) Gewinde I : filettatura conica S : rosca cónica
2.3		E : tapping screw thread (spaced thread) F : filetage de vis à tôle R : самонарезающая резьба D : Blechschraubengewinde I : filettatura autofilettante S : rosca autorroscante
2.4		E : wood screw thread F : filetage de vis à bois R : шурупная резьба D : Holzschraubengewinde I : filettatura per legno S : rosca para madera

No. N° №	Figure Чертеж	Designation Dénomination Наименование
2.5		E : metric thread (SI) F : filetage métrique (SI) R : метрическая резьба D : metrisches Gewinde I : filettatura metrica S : rosca métrica
		E : ISO metric thread F : filetage métrique ISO R : метрическая резьба ИСО D : metrisches ISO-Gewinde I : filettatura metrica ISO S : rosca métrica ISO
		E : metric fine pitch thread F : filetage métrique à pas fin R : метрическая резьба с мелким шагом D : metrisches Feingewinde I : filettatura metrica a passo fine S : rosca métrica fina
		E : ISO metric fine pitch thread F : filetage métrique ISO à pas fin R : метрическая резьба ИСО с мелким шагом D : metrisches ISO-Feingewinde I : filettatura metrica ISO a passo fine S : rosca métrica fina ISO
		E : inch thread F : filetage en inch R : дюймовая резьба D : Zollgewinde I : filettatura in pollici S : rosca en pulgadas
		E : unified screw thread (ISO inch) F : filetage ISO en inch (filetage UN) R : унифицированная дюймовая резьба D : ISO-Zollgewinde (UN-Gewinde) I : filettatura ISO in pollici (filettatura UN) S : rosca unificada (UN)
		E : Whitworth thread F : filetage Whitworth R : резьба Витворта D : Whitworth-Gewinde I : filettatura Whitworth S : rosca gas Whitworth
		E : pipe thread F : filetage au pas du gaz R : трубная резьба D : Rohrgewinde I : filettatura gas S : rosca gas
		E : Whitworth pipe thread F : filetage Whitworth (filetage au pas du gaz) R : трубная резьба Витворта D : Whitworth-Rohrgewinde (Gasrohrgewinde) I : filettatura Whitworth per tubi (filettatura gas) S : rosca gas (Whitworth)

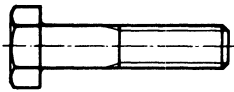
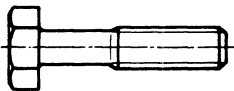
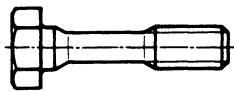
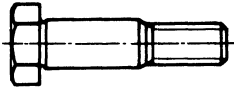
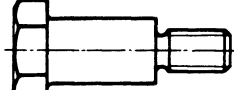
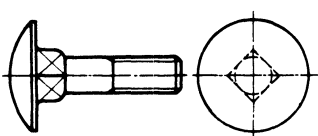
3 SHAPES OF HEADS
 FORMES DE TÊTE
 ФОРМЫ ГОЛОВОК
 KOPFFORMEN
 FORME DI TESTA
 FORMAS DE CABEZA

No. Nº №	Figure Чертеж	Designation Dénomination Наименование
3.1		E : hexagon head F : tête hexagonale R : шестигранная головка D : Sechskantkopf I : testa esagonale S : cabeza exagonal
3.2		E : hexagon head with washer face F : tête hexagonale à collerette R : шестигранная головка с опорным подголовком D : Sechskantkopf mit Telleransatz I : testa esagonale con collarino S : cabeza exagonal con collarín
3.3		E : hexagon head with collar F : tête hexagonale à embase cylindrique R : шестигранная головка с цилиндрическим буртом D : Sechskantkopf mit Bund I : testa esagonale con collarino S : cabeza exagonal con collar
3.4		E : hexagon head with flange F : tête hexagonale à embase cylindro-tronconique R : шестигранная головка со скошенным буртом D : Sechskantkopf mit Flansch (Flanschkopf) I : testa esagonale con flangia S : cabeza exagonal con collar biselado
3.5		E : square head F : tête carrée R : четырехгранная головка D : Vierkantkopf I : testa quadra S : cabeza cuadrada
3.6		E : square head with collar F : tête carrée à embase cylindrique R : четырехгранная головка с буртом D : Vierkantkopf mit Bund I : testa quadra con bordino S : cabeza cuadrada con collar

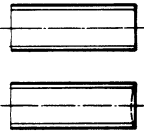
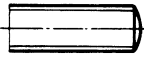
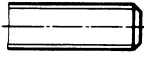
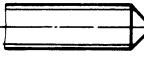
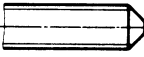
No. Nº №	Figure Чертеж	Designation Dénomination Наименование
3.7		E : triangle head with collar F : tête triangulaire à embase cylindrique R : трехгранная головка с буртом D : Dreikantkopf mit Bund I : testa triangolare con bordino S : cabeça triangular con collar
3.8		E : octagonal head F : tête octogonale R : восьмигранная головка D : Achtkantkopf I : testa ottagonale S : cabeça octogonal
3.9		E : 12 point flange head (bi-hexagonal head) F : tête bihexagonale R : двенадцатигранная головка D : Zwölfzahnkopf I : testa biesagonale S : cabeça bi-exagonal
3.10		E : T-head (hammer head) F : tête rectangulaire à angles abattus R : Т-образная головка D : Hammerkopf I : testa a martello S : cabeça de martillo
3.11		E : round head F : tête ronde R : полукруглая головка D : Halbrundkopf I : testa tonda S : cabeça redonda
3.12		E : mushroom head (truss head) F : tête bombée R : низкая полукруглая головка D : Flachrundkopf I : testa tonda larga S : cabeça abombada
3.13		E : cheese head F : tête cylindrique R : цилиндрическая головка D : Zylinderkopf I : testa cilindrica S : cabeça cilíndrica

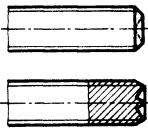
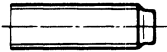
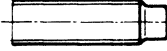
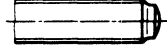
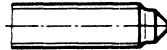
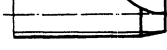
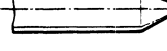
No. Nº №	Figure Чертеж	Designation Dénomination Наименование
3.14		E : raised cheese head (fillister head) F : tête cylindrique bombée R : цилиндрическая головка со сферой D : Linsenzylinderkopf I : testa cilindrica con calotta S : cabeça cilíndrica abombada
3.15		E : pan head F : tête cylindrique à dépouille; tête cylindrique plate R : цилиндрическая скругленная головка D : Flachkopf (pan head) I : testa bombata S : cabeça cilíndrica redondeada
3.16		E : countersunk head (flat head) F : tête fraisée R : потайная головка D : Senkkopf I : testa svasata piana S : cabeça avellanada
3.17		E : raised countersunk head (oval head) F : tête fraisée bombée R : полупотайная головка D : Linsensenkkopf I : testa svasata con calotta S : cabeça avellanada abombada
3.18		E : binding head F : tête cylindrique bombée R : низкая цилиндрическая головка со сферой D : Linsenkopf I : testa cilindrica ridotta con calotta S : cabeça cilíndrica baja abombada
3.19		E : undercut countersunk head (undercut flat head) F : tête fraisée à épaulement R : потайная головка с заплечиком D : abgesetzter Senkkopf I : testa svasata con spallamento S : cabeça avellanada con apoio
3.20		E : undercut raised countersunk head (undercut oval head) F : tête fraisée bombée à épaulement R : полупотайная головка с заплечиком D : abgesetzter Linsensenkkopf I : testa svasata con calotta e spallamento S : cabeça avellanada abombada con apoio

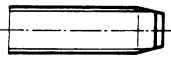
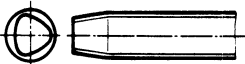
4 FORMS OF SHANK
 FORMES DE TIGE
 ФОРМЫ СТЕРЖНЕЙ
 SCHAFTFORMEN
 FORME DI GAMBO
 FORMAS DE VASTAGO

No. № Nº	Figure Чертеж	Designation Dénomination Наименование
4.1		E : normal shank (nominal shank diameter = nominal thread diameter) F : tige normale (diamètre de la partie lisse = diamètre de la partie filetée) R : диаметр стержня = номинальному диаметру резьбы D : Vollschaft (Schaftdurchmesser = Gewindedurchmesser) I : gambo normale (diametro della parte liscia = diametro esterno del filetto) S : vástago normal (forma cortada)
4.2		E : reduced shank (shank diameter $\approx$ effective pitch diameter) F : tige réduite (diamètre de la partie lisse $\approx$ diamètre sur flancs de filets) R : диаметр стержня $\approx$ среднему диаметру резьбы D : Dünnschaft (Schaftdurchmesser $\approx$ Flankendurchmesser) I : gambo ridotto (diametro della parte liscia $\approx$ diametro media del filetto) S : vástago normal (rosca laminada)
4.3		E : waisted shank (shank diameter < minor diameter) F : tige allégée (diamètre de la partie lisse < diamètre à fond de filet) R : диаметр стержня < внутреннего диаметра резьбы D : Dehnschaft (Schaftdurchmesser < Kerndurchmesser) I : gambo ridotto (diametro del gambo < diametro del nocciolo) S : vástago reducido (diámetro de caña < que el diámetro de núcleo)
4.4		E : increased shank (shank diameter > thread diameter) F : tige ajustable R : диаметр стержня > диаметра резьбы D : Paßschaft (Schaftdurchmesser mit Paßsitz) I : gambo calibrato S : vástago con caña calibrada
4.5		E : shoulder F : tige ajustable à bout fileté réduit R : ступенчатый болт D : Ansatzschaft (Schulter) I : gambo calibrato rinforzato S : vástago con caña de apoyo
4.6		E : square neck F : tige à collet carré R : стержень с квадратным подготовком D : Schaft mit Vierkant I : gambo con quadro sottotesta S : vástago con cuello cuadrado

5 SCREW AND BOLT ENDS
 EXTRÉMITÉS DE VIS
 КОНЦЫ БОЛТОВ И ВИНТОВ
 SCHRAUBENENDEN
 ESTREMITÀ VITI
 EXTREMOS DE TORNILLOS

No. Nº №	Figure Чертеж	Designation Dénomination Наименование
	Ends for general use (5.1 to 5.3) Pour usage général (5.1 à 5.3) Концы общего применения	
5.1		E : as-rolled end F : bout plat R : плоский конец D : ohne Kuppe I : estremità piana non lavorata S : extremo plano
5.2		E : rounded end F : bout bombé R : скругленный конец D : Linsenkuppe I : estremità bombata S : extremo abombado
5.3		E : chamfered end F : bout chanfreiné R : конец с фаской D : Kegelkuppe I : estremità smussata S : extremo biselado
5.4	Ends for special purposes (5.4 to 5.10) Pour usages spéciaux (5.4 à 5.10) Концы специального применения 	E : cone point F : bout pointu R : конический конец D : Spitze I : estremità a punta S : extremo cónico
5.5		E : truncated cone point F : bout pilote R : конический притупленный конец D : Spitze, abgeflacht I : estremità tronco conica S : extremo tronco-cónico

No. N° N	Figure Чертеж	Designation Dénomination Наименование
5.6	 Normal cup point Cuvette normale Нормальный конус W cup point Cuvette en W W-образный конус	E : cup point F : cuvette R : конец с внутренним конусом (засверленный) D : Ringschneide I : estremità a coppa S : extremo biselado hueco
5.7		E : short dog point F : téton court R : укороченный цилиндрический конец D : Kernansatz I : estremità cilindrica ridotta S : extremo con pivote
5.8		E : long dog point F : téton long R : цилиндрический конец D : Zapfen I : estremità cilindrica S : extremo con pivote largo
5.9		E : short dog point with rounded end F : téton court bombé R : закругленный конец D : Ansatzkuppe I : estremità cilindrica bombata S : extremo con pivote abombado
5.10		E : short dog point with truncated cone end F : téton tronconique R : ступенчатый конец D : Ansatzpitze, abgeflacht I : estremità cilindrica tronco conica S : extremo con pivote de punta tronco-cónica
5.11		E : scrape point F : bout tronconique de vis à tôle (hauteur de filet constante) R : конец самонарезающего винта конический с притуплением D : Schneidschraubenende mit Schabenut I : estremità tronco-conica per viti autofilettanti S : extremo de tornillo autorroscante (entrada tronco-cónica)
5.12		E : end for self-tapping screw (tapping screw type AB point) F : bout pointu de vis à tôle R : конец самонарезающего винта конический D : Blehschrauben-Spitze I : estremità a punta S : extremo de tornillo autorroscante tipo AB

No. N° N	Figure Чертеж	Designation Dénomination Наименование
5.13		E : end for self-tapping screw (tapping screw type B point) F : bout plat de vis à tôle R : конец самонарезающего винта плоский D : Blehschrauben-Zapfen I : estremità piana S : extremo de tornillo autorroscante tipo B
5.14		E : end for thread rolling screw (thread formed by deformation) F : bout de vis auto-taraudeuse par déformation de matière R : конец резбовыдавливающего винта D : Gewindeformendes Schraubenende I : estremità a sezione triangolare S : extremidad de sección trilobular

6 DRIVING FEATURES

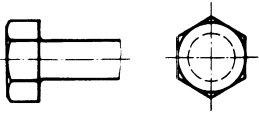
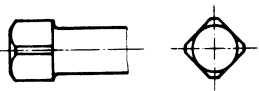
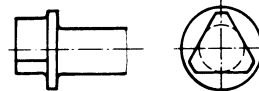
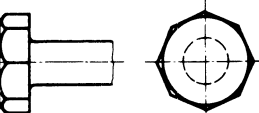
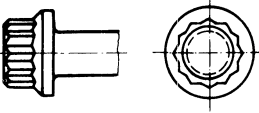
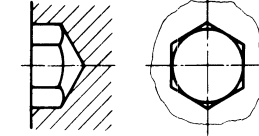
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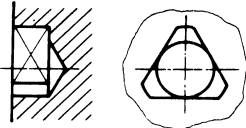
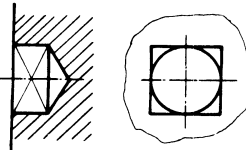
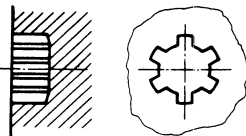
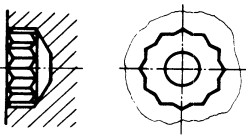
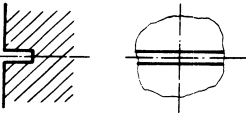
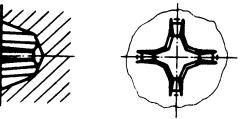
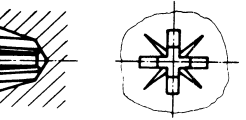
ЭЛЕМЕНТЫ, ПЕРЕДАЮЩИЕ ВРАЩЕНИЕ

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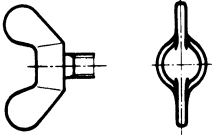
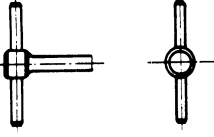
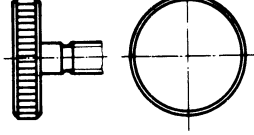
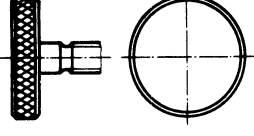
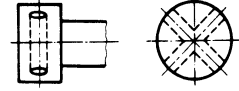
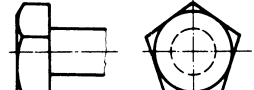
TRASCINAMENTO

FORMAS PARA ACCIONAMIENTO

No. Nº №	Figure Чертеж	Designation Dénomination Наименование
6.1		E : hexagon F : hexagonal R : шестигранник D : Sechskant I : esagonale S : exagonal
6.2		E : square F : carré R : четырехгранник (квадрат) D : Vierkant I : quadro S : cuadrado
6.3		E : triangle F : triangulaire R : трехгранник D : Dreikant I : triangolare S : triangular
6.4		E : octagon F : octogonal R : восьмигранник D : Achtkant I : ottagonale S : octogonal
6.5		E : 12 point (bihexagon) F : bihexagonal R : двенадцатигранник D : Zwölfzahn I : biesagonale S : dodecagonal o bi-exagonal
6.6		E : hexagon socket F : six pans creux R : шестигранное углубление D : Innensechskant I : esagono incassato S : hueco exagonal

No. Nº №	Figure Чертеж	Designation Dénomination Наименование
6.7		E : triangle F : triangle creux R : трехгранное углубление D : Innendreikant I : triangolo incassato S : hueco triangular
6.8		E : square socket F : carré creux R : четырехгранное углубление D : Innenvierkant I : quadro incassato S : hueco cuadrado
6.9		E : six-spline socket F : empreinte six cannelures R : шлицевое углубление D : Innenkeilprofil I : scanalature incassata S : hueco de seis canales
6.10		E : 12 point socket (bihexagon socket) F : empreinte bihexagonale R : зубчатое углубление D : Innenzwölfzahn I : biesagono incassato S : hueco bi-exagonal
6.11		E : slot F : fente R : прямой шлиц D : Schlitz I : intaglio S : ranura
6.12		E : cross recess (Phillips) F : empreinte cruciforme (type Phillips) R : крестообразный шлиц D : Kreuzschlitz (Phillips) I : impronta a croce (tipo Phillips) S : hueco cruciforme (tipo Phillips)
* 6.13		E : cross recess (Pozidriv) F : empreinte cruciforme (type Pozidriv) R : крестообразный шлиц (Позидрив) D : Kreuzschlitz (Pozidriv) I : impronta a croce (tipo Pozidriv) S : hueco cruciforme (tipo Pozidriv)

*Reference should be made to the paragraphs headed 'Additional information' in the national foreword.

No. Nº Nº	Figure Чертеж	Designation Dénomination Наименование
6.14		E : wing F : oreilles R : барашек D : Flügel I : alette S : mariposa
6.15		E : tommy F : à deux bras ou à broche R : рукоятка D : Knebel I : traversino S : muletilla
6.16		E : straight knurl F : moleté R : накатанная головка D : Rändel I : zigrinatura parallela S : moleteado recto
6.17		E : diamond knurl F : moleté croisé R : рифленая головка D : Links-Rechtsrändel (Kordel) I : zigrinatura spinata S : moleteado cruzado
6.18		E : cross hole (set pin holes in side) F : perçage en croix R : накрест расположенные отверстия D : Kreuzloch I : fori a croce S : taladros en cruz
6.19		E : pentagon F : pentagonal R : пятигранник D : Fünfkant I : pentagonale S : pentagonal

7 HEXAGON BOLTS AND SCREWS

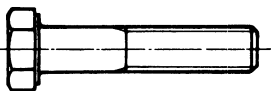
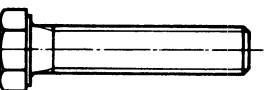
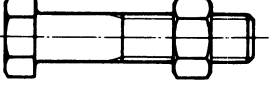
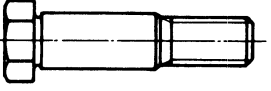
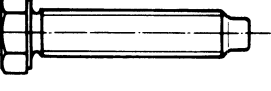
VIS ET BOULONS À TÊTE HEXAGONALE

ШЕСТИГРАННЫЕ БОЛТЫ И ВИНТЫ

SECHSKANTSCHRAUBEN

VITI E BULLONI ESAGONALI

TORNILLOS DE CABEZA EXAGONAL

No. Nº №	Figure Чертеж	Designation Dénomination Наименование
7.1		E : hexagon bolt F : vis à tête hexagonale (ou six pans) R : болт с шестигранной головкой D : Sechskantschraube I : vite a testa esagonale (parzialmente filettata) S : tornillo de cabeza exagonal parcialmente roscado
7.2		E : hexagon screw F : vis à tête hexagonale filetée jusqu'à proximité de la tête R : винт с шестигранной головкой D : Sechskantschraube (mit Gewinde bis Kopf) I : vite a testa esagonale (interamente filettata) S : tornillo de cabeza exagonal totalmente roscado
7.3		E : hexagon bolt with hexagon nut F : boulon à tête hexagonale (avec écrou hexagonal) R : болт с шестигранной головкой и шестигранной гайкой D : Sechskantschraube mit Mutter I : bullone a testa esagonale con dado esagonale S : tornillo de cabeza exagonal con tuerca exagonal
7.4		E : hexagon fit bolt (and undercut adjacent to head) F : corps de boulon ajustable à tête hexagonale avec gorge de dégagement R : ступенчатый болт с проточкой под головкой D : Sechskantschraube mit Paßschaft I : vite a testa esagonale con gola di scarico sottotesta e gambo calibrato S : tornillo de cabeza exagonal con caña calibrada y garganta
7.5		E : hexagon set screw with full dog point (and undercut adjacent to head) F : vis à tête hexagonale à téton avec gorge de dégagement R : винт установочный с шестигранной головкой и цилиндрическим концом D : Sechskantschraube mit Zapfen I : vite a testa esagonale con gola di scarico ed estremità cilindrica S : tornillo de cabeza exagonal con pivote y garganta