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**Screw threads and fasteners—
Vocabulary**

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Foreword

This translation has been made based on the original Japanese Industrial Standard revised by the Minister of Economy, Trade and Industry through deliberations at the Japanese Industrial Standards Committee as the result of proposal for revision of Japanese Industrial Standard submitted by The Japan Research Institute for Screw Threads and Fasteners (JFRI)/Japanese Standards Association (JSA) with the draft being attached, based on the provision of Article 12 Clause 1 of the Industrial Standardization Law applicable to the case of revision by the provision of Article 14.

Consequently, **JIS B 0101:1994** is replaced with this Standard.

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Screw threads and fasteners— Vocabulary

Introduction

This Japanese Industrial Standard has been prepared based on the second editions of **ISO 1891** and **ISO 5408** published in 2009 with some modifications of the technical contents intended to reflect the actual usage.

The portions with continuous sidelines or dotted underlines are the matters in which the contents of the corresponding International Standards have been modified. A list of modifications with the explanations is given in Annex JA.

1 Scope

This Standard specifies terms and definitions related to “fundamentals of screw threads” and “threaded fasteners (fasteners, washers, pins and rivets)” of screw threads to be used generally.

NOTE : The International Standards corresponding to this Standard and the symbol of degree of correspondence are as follows.

ISO 1891:2009 *Fasteners—Terminology*

ISO 5408:2009 *Screw threads—Vocabulary* (Overall evaluation: MOD)

In addition, symbols which denote the degree of correspondence in the contents between the relevant International Standards and **JIS** are **IDT** (identical), **MOD** (modified), and **NEQ** (not equivalent) according to **ISO/IEC Guide 21-1**.

2 Classification

The terms are classified into two large groups as “fundamentals of screw threads” and “threaded fasteners” as follows.

a) Fundamentals of screw threads

- 1) General
- 2) Fundamentals
- 3) Types
- 4) Engagement

b) Threaded fasteners

- 1) General
- 2) Shapes of head
- 3) Shapes of end
- 4) Machine screws, etc.
- 5) Bolts

- 6) Nuts
- 7) Washers
- 8) Pins
- 9) Rivets and other threaded fasteners

3 Terms and definitions

For the purpose of this Standard, the following terms and definitions apply.

The English equivalent is given for reference.

NOTE 1 If a term includes a bracketed word, the term can be used either with or without the bracketed word, and the term with the bracketed word has priority. However, when these terms are used as a compound word, the bracketed word may generally be omitted (This is only applicable to Japanese characters).

NOTE 2 When several terms are compounded into a term of threaded fasteners, it shall be made as given in the following example (This is only applicable to Japanese characters).

Example :	Term related to head [term given in b) 2]	Fundamental name of fastener [term given in b) 4 and b) 5]	Name of compounded fasteners
	六角 (頭) すりわり付き (頭) なべ (頭)	ボルト 小ねじ	六角ボルト すりわり付きなべ小ねじ

NOTE 3 The bracketed numerical value attached after the term in definition column indicates the term number in this Standard.

a) Fundamentals of screw threads

1) General

No.	Term (Japanese character)	Definition	English equivalent
1101	ねじ	cylinder or cone having ridges as a whole NOTE: See screw (2102).	screw thread
1102	おねじ	screw thread provided with ridges on the external face of cylinder or cone	external thread, bolt thread
1103	めねじ	screw thread provided with ridges on the internal face of cylinder or cone	internal thread, nut thread
1104	平行ねじ	screw thread provided with ridges on the external or internal face of cylinder	cylindrical screw thread, straight thread, parallel thread
1105	テーパねじ	screw thread provided with ridges on the external or internal face of cone	taper screw thread, taper thread
1106	一条ねじ	screw thread of which lead is equal to the pitch (figure 1106a and figure 1106b)	single-start thread

No.	Term (Japanese character)	Definition	English equivalent
1107	二条ねじ	screw thread of which lead is equal to two times the pitch (figure 1107)	two-start thread, double-start thread
1108	多条ねじ	screw thread of which lead is equal to two or more integer times the pitch	multi-start thread
1109	右ねじ	screw thread that the trace goes away in clockwise (in right-hand rotation) when viewed in axial direction (figure 1106a and figure 1106b)	right-hand thread
1110	左ねじ	screw thread that the trace goes away in counter-clockwise (in left-hand rotation) when viewed in axial direction (figure 1110)	left-hand thread

2) Fundamentals

No.	Term (Japanese character)	Definition	English equivalent
1201	つる巻き線	locus of a point of which the ratio of the travel in axial direction to the rotary angle around the axial line is constant along the surface of cylinder or cone (figure 1201a and figure 1201b)	helix
1202	ねじ山	substantial portion between two adjacent flanks (figure 1202a and figure 1202b)	ridge
1203	ねじ溝	space of the hollow between two adjacent flanks (figure 1202a and figure 1202b)	groove
1204	基準山形	theoretical profile of ridge of screw thread defined by the theoretical dimension and angle which the internal thread and the external thread share in the cross-section including axial line (figure 1204)	basic profile
1205	設計山形	profile of ridge in which crests and roots of the basic profile (1204) are rounded or flattened	design profile
1206	最大実体山形	profile of screw thread which takes maximum material limit when dimensional deviation is applied to the design profile (see JIS B 0401-1)	maximum material profile
1207	最小実体山形	profile of screw thread which takes least material limit when dimensional deviation is applied to the design profile (see JIS B 0401-1)	minimum material profile
1208	リード	distance advanced in axial direction when turning around the axis one time along the helix of screw thread (P_h in figure 1201a, P_h in figure 1201b, and P_h in figure 1107) NOTE: Quantitative symbol of lead is expressed as P_h . For single-start thread: $P_h = P$ For multi-start thread: $P_h = n \times P$ where, n : number of starts of screw thread P : pitch	lead

No.	Term (Japanese character)	Definition	English equivalent
1209	ピッチ	distance between corresponding two points of adjacent ridges each other measured in parallel to axial line in the cross-section including axial line of screw thread NOTE: Quantitative symbol of pitch is expressed as P (P in figure 1209).	pitch
1210	(25.4 mm 当たりの) 山数	value that 25.4 mm is divided by pitch	threads per inch
1211	リード角	angle between the helix of ridge and the plane perpendicular to the axis of screw thread passing through a point on it in the case of cylindrical screw thread, and angle between the conical helix of ridge and the plane perpendicular to the axis of screw thread passing through a point on it which is projected on the plane perpendicular to the radius line of screw thread passing through this point in the case of taper screw thread When not particularly designated, it is the lead angle as to the helix on the imaginary cylinder or cone used for defining the pitch diameter (φ in figure 1201a and φ in figure 1201b). NOTE: Quantitative symbol of lead angle is expressed as φ . Further, if lead (in the case of taper screw thread, the lead measured in axial direction) is P_h , and the radius of helix at this point is r , the lead angle φ may be calculated according to $\tan \varphi = P_h / (2\pi r)$.	lead angle
1212	ねじの軸線	axial line of imaginary cylinder or cone used for defining pitch diameter (figure 1201a and figure 1201b)	axis of pitch diameter, axis of screw thread
1213	ピッチ線	generating straight line of imaginary cylinder or cone used for defining pitch diameter (figure 1204 and figure 1209)	pitch line
1214	(おねじの) 外径	diameter of imaginary cylinder (or cone) tangential to crest of ridge of external thread (d in figure 1209)	major diameter of external thread
1215	おねじの谷の径	diameter of imaginary cylinder (or cone) tangential to root of external thread (d_3 in figure 1209)	minor diameter of external thread
1216	めねじの谷の径	diameter of imaginary cylinder (or cone) tangential to root of internal thread (D in figure 1209)	major diameter of internal thread
1217	(めねじの) 内径	diameter of imaginary cylinder (or cone) tangential to crest of ridge of internal thread (D_1 in figure 1209)	minor diameter of internal thread
1218	有効径	diameter of imaginary cylinder (or cone) in which the width of groove becomes equal to the width of ridge In this case, when the pitch is equal to the prescribed one, it is equal to the simple pitch diameter (1414) (d_2 and D_2 in figure 1209).	pitch diameter

No.	Term (Japanese character)	Definition	English equivalent
1219	呼び径	diameter representing the dimension of screw thread Basic dimension of the major diameter of external thread and the major diameter of internal thread are used.	nominal diameter, <u>nominal size</u>
1220	<u>基準径</u>	<u>diameter used as the base to define the dimension of diameter in taper screw thread</u>	<u>gauge diameter</u>
1221	<u>基準径の位置</u>	<u>position of plane perpendicular to axis to define the gauge diameter in taper screw thread</u>	<u>position of gauge plane</u>
1222	フランク	face connecting the crest and the root In sectional shape including axial line, in general, it represents a straight line (figure 1202b).	flank
1223	進み側フランク	flank which confronts the advancing direction of article at the time of screwing	leading flank
1224	追い側フランク	flank that is opposite the leading flank	following flank
1225	圧力側フランク	flank in side to be subjected to the load directly at the time when load is applied by screwing	load flank, <u>pressure flank</u>
1226	遊び側フランク	flank that is opposite the load flank	clearance flank
1227	山の頂 (やまのいただき)	face connecting two adjacent flanks at ridge (figure 1227)	crest
1228	谷底	face connecting two adjacent flanks at groove (figure 1202b)	root
1229	フランク角	angle formed by individual flank measured in sectional shape including axial line of screw thread and the straight line perpendicular to axial line (β in figure 1202b) NOTE 1 When basic profile of ridge is symmetrical section, the flank angle is also called “half angle of ridge”. NOTE 2 Quantifier of flank angle is expressed as β .	flank angle
1230	ねじ山の角度	angle formed by two adjacent flanks measured in sectional shape including axial line of screw thread (α in figure 1202b) NOTE 1 It is also called the “full angle of ridge”. NOTE 2 Quantifier of thread angle is expressed as α .	thread angle, <u>included angle</u>
1231	山の高さ	distance between straight line connecting crests of ridges and straight line connecting roots measured perpendicular to axial line in sectional shape including axial line of screw thread (figure 1202b)	thread height
1232	<u>山の頂の切取り高さ</u>	<u>distance between the straight line connecting crests of fundamental triangle and the straight line connecting crests measured perpendicular to axial line in sectional shape including axial line of screw thread (figure 1232)</u>	<u>crest truncation</u>

No.	Term (Japanese character)	Definition	English equivalent
1233	谷底の切取り高さ	distance between the straight line connecting roots of fundamental triangle and the straight line connecting roots measured perpendicular to axial line in sectional shape including axial line of screw thread (figure 1232)	root truncation
1234	とがり三角形	triangle per one pitch by taking the point of intersection of two adjacent flanks elongated in the direction of crest as the vertex and the straight line connecting the points of intersection elongated in the direction of roots as the base in sectional shape including axial line of screw thread (figure 1234)	fundamental triangle
1235	とがり山の高さ	height of fundamental triangle (figure 1234) NOTE: Quantifier of fundamental triangle height is expressed as H .	fundamental triangle height
1236	ひっかかりの高さ	distance between the straight line connecting crests of external thread and the straight line connecting crests of internal thread measured perpendicular to axial line in sectional shape including axial lines of external thread and internal thread fitted concentrically with each other (figure 1236)	thread overlap
1237	基準のひっかかりの高さ	thread overlap in basic profile (figure 1236)	basic thread overlap
1238	ひっかかり率	percentage of the substantial thread overlap to the basic thread overlap, which is calculated from the following formula (figure 1236) $\text{Percentage of thread} = \frac{H_1'}{H_1} \times 100 (\%)$ where, H_1 : basic thread overlap H_1' : substantial thread overlap	percentage of thread engagement
1239	(おねじの) 山頂すきま	distance between the straight line connecting roots of internal thread and the straight line connecting crests of external thread measured perpendicular to axial line in sectional shape including axial lines of external thread and internal thread fitted concentrically with each other (figure 1239)	major clearance, crest clearance
1240	(おねじの) 谷底すきま	distance between the straight line connecting crests of internal thread and the straight line connecting roots of external thread measured perpendicular to axial line in sectional shape including axial lines of external thread and internal thread fitted concentrically with each other (figure 1239)	minor clearance, root clearance

3) Types

No.	Term (Japanese character)	Definition	English equivalent
1301	ねじの呼び	nominal symbol representing type, nominal diameter and pitch of screw thread (see JIS B 0123) For example, “M10” represents the metric coarse thread of 10 mm in nominal diameter, “M8 × 1” the metric fine pitch thread of 8 mm in nominal diameter and 1 mm in pitch, and “3/8-16UNC” the unified coarse thread of 25.4 × 3/8 mm in outside diameter and 16 in number of threads per 25.4 mm.	nominal designation of thread
1302	並目ねじ (なみめねじ)	most ordinarily used screw thread of which combination of nominal diameter and pitch is common	coarse thread
1303	細目ねじ (ほそめねじ)	screw thread of which the ratio of pitch to nominal diameter is finer in comparison with coarse thread	fine pitch thread
1304	三角ねじ	generic term of screw thread of which shape of ridge is approximately regular triangle NOTE: Metric thread, unified screw thread, miniature screw thread, etc. are included to this.	triangular screw thread
1305	メートルねじ	triangular screw thread of 60° in thread angle defined taking the dimension of each part of the screw thread as 1 mm basis	metric thread
1306	メートル並目ねじ	metric thread of coarse (see JIS B 0205-2)	metric coarse thread
1307	メートル細目ねじ	metric thread of which pitch is finer than that of the coarse thread (see JIS B 0205-2)	metric fine pitch thread
1308	インチねじ	triangular screw thread of 60° in thread angle defined by taking the dimension of each part of the screw thread as 25.4 mm basis	inch thread
1309	ユニファイ並目ねじ	coarse inch thread of which basic profile is same as that of metric thread (see JIS B 0206)	unified coarse thread, UNC thread
1310	ユニファイ細目ねじ	screw thread of which basic profile is same as that of metric thread but pitch is finer than that of unified coarse thread (see JIS B 0208)	unified fine pitch thread, UNF thread
1311	メートル台形ねじ	trapezoidal screw thread of 30° in thread angle having the screw thread of symmetrical section with large truncation of crests and roots defined by taking the dimension of each part of the screw thread as 1 mm basis (see JIS B 0216-1 to JIS B 0216-3 and figure 1311)	metric trapezoidal screw thread
1312	29度台形ねじ	trapezoidal screw thread of 29° in thread angle having the screw thread of symmetrical section with large truncation of crests and roots defined by taking the dimension of each part of the screw thread as 1 mm basis NOTE: The pitch is expressed by the number of threads per 25.4 mm.	29-degree trapezoidal screw thread

No.	Term (Japanese character)	Definition	English equivalent
1313	角ねじ (かくねじ)	screw thread of which sectional shape of ridge is approximately square	square thread
1314	のこ歯ねじ	screw thread with asymmetrical sectional shape to be used when the force in axial direction acts only in one direction (figure 1314)	buttress thread
1315	丸ねじ	screw thread of which crests and roots of the trapezoidal screw threads are rounded largely (figure 1315)	round thread, knuckle thread
1316	ミニチュアねじ	screw thread of small nominal diameter and 60° in ridge angle to be used for timepieces, optical instruments, electric instruments, measuring instruments, etc. (see JIS B 0201)	miniature screw thread
1317	自転車ねじ	screw thread of 60° in ridge angle to be used for cycles and those similar (see JIS B 0225)	cycle thread
1318	管用ねじ (くだようねじ)	screw thread used for connection of pipes, pipe components, hydraulic equipment, etc. There are the parallel pipe thread and the taper pipe thread. NOTE: As to the taper screw thread, taper is ordinarily taken as 1/16.	pipe thread
1319	管用平行ねじ	pipe thread mainly intended for mechanical connection (see JIS B 0202)	parallel pipe thread
1320	管用テーパねじ	pipe thread mainly intended for tightness of threaded portion (see JIS B 0203)	taper pipe thread
1321	アメリカ管用ねじ	pipe thread used in America There are pipe thread with taper of 1/16 and parallel pipe thread. The thread angle is 60°. NOTE: Other than the pipe thread for general use, there are dry sealed pipe thread intended for improving the air tightness of ridges.	American Standard pipe thread
1322	電線管ねじ	screw thread for connecting conduit tube (see JIS C 8305) 1) thick steel duct thread screw thread of about 55° in thread angle for connecting thick steel duct [figure 1322 (1)] 2) conduit tube thread screw thread of about 80° in thread angle for connecting thin wall steel conduit tube [figure 1322 (2)]	1) thick steel duct thread 2) conduit tube thread
1323	電球ねじ	screw thread to be used for base and socket of electric lamp Screw thread of which shape of ridge is of a series of rounding of crest and rounding of root approximately the same in size (see JIS C 7709-0 to JIS C 7709-3 and figure 1323).	electric socket and lamp-base thread

4) Engagement

No.	Term (Japanese character)	Definition	English equivalent
1401	(ねじの) はめあい 長さ	length of portion measured in axial direction, where the external thread and the internal thread are contacting and fitting with each other	length of thread engagement
1402	標準のはめあい長 さ	irrespective of actual length of engagement, the length of engagement to be taken as reference, when calculating deviations NOTE: It is ordinarily allowed to conform to the length of the go screw gauge.	reference length of (thread) engagement
1403	ピッチ誤差	difference between the actual pitch and the prescribed pitch NOTE 1 When the actual pitch is larger than the prescribed one, it shall be expressed as positive, and when smaller as negative. NOTE 2 In general, it shall be designated on 1 pitch, but it may also be designated on 2 pitches or more.	pitch deviation, pitch error
1404	単一ピッチ誤差	pitch error with respect to 1 pitch	simple pitch error
1405	累積ピッチ誤差	pitch error with respect to the sum of pitches between ridges apart 2 pitches or more each other	cumulative pitch deviation, cumulative pitch error
1406	(リードの) よろめ き	such an error of lead that the advance of ridge within 1 lead increases and decreases with one frequency or several frequencies within 1 lead	drunkenness
1407	ピッチの許容差	tolerance defined with respect to the simple pitch error and cumulative pitch error between arbitrary two ridges in a definite length of threaded portion (the reference length of engagement is ordinarily taken)	pitch tolerance
1408	(山の) 角度誤差	difference between the actual thread angle and the prescribed thread angle NOTE: When the actual thread angle is larger than the prescribed one, it shall be expressed as positive, and when smaller as negative.	angle error
1409	(山の) 倒れ	angle formed between the centre line of both flanks of the ridge and the straight line perpendicular to the axial line (for a taper screw thread of which ridge is prescribed to be perpendicular to the taper surface, the taper surface) in the cross-section including axial line of screw thread	inclination
1410	フランク角誤差	difference between the actual flank angle and the prescribed flank angle NOTE: When the actual flank angle is larger than the prescribed one, it shall be expressed as positive, and when smaller as negative.	flank angle deviation, flank angle error
1411	(山の) 半角誤差	flank angle (half angle of ridge) error of the ridge when the basic profile is of symmetrical section	error of half angle

No.	Term (Japanese character)	Definition	English equivalent
1412	(山の) 半角の許容差	tolerance defined with respect to the error of half angle	tolerance on half angle
1413	有効径当量	numerical value of pitch error or half angle error of ridge converted to the pitch diameter The following conversion formulae are used ordinarily. $f_1 = 1.732\delta_p$ $f_2 = 0.436P\delta_{\alpha l}$ where, f_1 : pitch diameter equivalent to pitch error (μm) f_2 : pitch diameter equivalent to half angle error (μm) P : pitch (mm) δ_p : maximum value of simple or cumulative pitch error between optional ridges within length of engagement (μm) $\delta_{\alpha l}$: maximum value of absolute values of half angle error (min)	pitch diameter equivalent
1414	単独有効径	1) diameter of imaginary cylinder on which groove width measured along the axial line is 1/2 the prescribed pitch in the case of cylindrical screw thread (figure 1414) 2) diameter of the cone on which groove width measured along the taper surface is 1/2 the prescribed pitch measured along the taper surface in the case of taper screw thread	simple pitch diameter, thread groove diameter
1415	総合有効径	pitch diameter equivalent of pitch error and the pitch diameter equivalent of half angle error to the simple pitch diameter (in the case of the internal thread, that subtracted)	virtual pitch diameter, functional diameter

b) Threaded fasteners

1) General

No.	Term (Japanese character)	Definition	English equivalent
2101	ねじ部品	fasteners such as bolts and nuts having screws on a part thereof NOTE: The threaded fastener having external thread is called the externally threaded fastener, and that having internal thread, the internally threaded fastener.	threaded fastener
2102	ねじ	1) generic term of fasteners having ridges 2) generic term of fasteners, in contrast to the bolt (2501), having external thread to be used without combining nut NOTE: See screw thread (1101).	1) threaded fastener 2) screw

No.	Term (Japanese character)	Definition	English equivalent
2103	ねじ部	portion of external thread or internal thread of threaded fastener For the externally threaded fastener having the body (2109), the incomplete thread at the boundary between body and complete thread is not included in the threaded portion but the incomplete thread at the thread end is included in the threaded portion. For the externally threaded fastener of the continuous thread (whole shank is threaded without body), the incomplete thread at the underhead and the thread end are included in the threaded portion (figure 2103). Further, the chamfer of the thread end is part of the incomplete thread (figure 2103).	threaded portion
2104	完全ねじ部	threaded portion of which shapes of both the crest and the root are of complete profile (figure 2103)	complete thread
2105	不完全ねじ部	threaded portion with incomplete profile generated by chamfering part or leading part of threading tool (figure 2103) Incomplete thread is generated at the boundary between body and complete thread and the thread end also as for an external threaded fastener with body. The same is generated at underhead and thread end portion as for an external threaded fastener of continuous thread.	thread runout, vanish thread, washout thread, incomplete thread, run-out of thread
2106	面取り部	chamfered part provided at the end of threaded portion for facilitating the leading of the external thread with internal thread (figure 2103)	chamfer
2107	頭部	part of head of externally threaded fastener	head
2108	軸部	part except head of externally threaded fastener	shank
2109	円筒部	cylindrical part between the head and the threaded portion of externally threaded fastener (figure 2103)	body
2110	座面	part of the face directly subjected to the force in fastening the threaded fastener except for the flanks of screw thread	bearing surface
2111	頂面	face on the opposite side of bearing surface which is not subjected to the force at bolt head or nut	top face
2112	ねじ先	end of the threaded portion of externally threaded fastener	end, point
2113	首下丸み部	part of fillet attached to the transitional part from head to body	underhead fillet
2114	(ねじの) 逃げ溝	1) groove provided on the boundary between threaded portion and body of externally threaded fastener 2) groove provided on the underhead of continuous thread of externally threaded fastener (see JIS B 1018 and figure 2114)	thread undercut

No.	Term (Japanese character)	Definition	English equivalent
2115	すりわり	groove provided for the purpose of rotating the threaded fastener by inserting the tip of screw driver (figure 2115)	slot
2116	十字穴	cross-shaped recess provided for the purpose of rotating the threaded fastener by inserting tip of screwdriver for cross recessed head screws NOTE: As to the cross shapes, the following 3 types are specified in JIS B 1012 . 1) Type H [figure 2116 (1)] 2) Type Z [figure 2116 (2)] 3) Type S [figure 2116 (3)]	cross recess 1) recess type H 2) recess type Z 3) special (cross recess) type, recess type S
2117	六角穴	recess of hexagonal section provided for the purpose of rotating the threaded fastener by inserting hexagon socket screw keys (figure 2117)	hexagon socket
2118	ヘキサロビュラ穴	recess of hexalobular section provided for the purpose of rotating the threaded fastener by inserting socket screw keys of hexalobular section (figure 2118)	hexalobular socket
2119	四角穴	recess of square section provided for the purpose of rotating the threaded fastener by inserting socket screw keys of square section (figure 2119)	square socket
2120	ねじ部長さ	length of the threaded portion defined in threaded portion (2103)	thread length
2121	円筒部長さ	length from bearing surface to first complete ridge The underhead fillet or the thread undercut, and the incomplete thread are included.	body length
2122	呼び長さ	representative dimension expressing the length of externally threaded fastener In the case of the hexagon head bolt, it is the sum of thread length and body length, but the method to take dimension is somewhat different depending on the components (figure 2122).	nominal length
2123	グリップ長さ	distance between the both bearing surfaces of bolt and nut when fastening with bolt and nut In the case of the stud, this is equivalent to the thickness of the member to be fastened in contact with the nut. In the case of the countersunk head fastener, the distance between the large diameter side face of the pan head of the member provided with the countersink and the bearing surface of the nut (figure 2123)	grip length
2124	頭の径	diameter of the largest part of circular head (figure 2124)	head diameter
2125	円筒部径	diameter of the body (figure 2103)	body diameter

No.	Term (Japanese character)	Definition	English equivalent
2126	頭の高さ	distance between the top or upper face of head and the bearing surface in the case of the externally threaded fastener having plane bearing surface; in the case of having other bearing surface than plane, the method to take the dimension is somewhat different depending on the shapes of the head (figure 2126)	height of head
2127	ナットの高さ	distance between the upper face and the bearing surface of the nut (figure 2127)	thickness of nut
2128	二面幅	distance between two faces parallel to each other of the part for the threaded fastener to be engaged with the spanner (figure 2128)	width across flat
2129	対角距離	distance between two corners confronting each other of the part for the threaded fastener to be engaged with the spanner (figure 2129)	width across corner
2130	面取り角	chamfering angle processed on top face of head of bolt, etc. or top face, bearing surface and threaded hole of nut (figure 2130)	angle of chamfer
2131	首下丸み	radius of underhead fillet measured in sectional shape including axial line of screw thread (figure 2131)	radius underhead
2132	丸み移行円の径 (まるみいこうえんのけい)	diameter of circle where the bearing surface of head and the underhead fillet of externally threaded fastener contact with each other (figure 2132)	fillet transition diameter
2133	(ねじの) 有効断面積	sectional area of a screw thread mainly used for the calculation of stress of an externally threaded fastener, and also used for obtaining the proof load stress of a nut (see JIS B 1082)	tensile stress area
2134	ねじ山せん断面積	sum of the area of the ridge of external thread or the ridge of internal thread subjected to the shear force in the length of thread engagement of external thread and internal thread (figure 2134) NOTE: Normally, the shear area of the ridge of external thread is calculated as the area of the ridge of external thread that touches the virtual circular cylinder of which the diameter is minor diameter of internal thread, and the shear area of the ridge of internal thread is calculated as the area of the ridge of internal thread that touches the virtual cylinder of which the diameter is major diameter of external thread.	thread shear area

2) Shapes of head

No.	Term (Japanese character)	Definition	English equivalent
2201	六角（頭）	head having hexagonal shape (figure 2201)	hexagon head
2202	座付き六角（頭）	hexagon head equipped with the bearing surface of which diameter is smaller than the hexagon width across flats at the lower face of head (figure 2202)	hexagon head with washer face
2203	四角（頭）	head of square shape (figure 2203)	square head
2204	止め穴付き（頭）	hexagon head or square head drilled with lateral hole to insert wire for the purpose of whirl-stop (figure 2204)	head with hole, drilled head
2205	つば付き六角（頭）	hexagon head having the flat shaped collar of which diameter is larger than the hexagon width across corner in order to extend the area of bearing surface of head (figure 2205)	hexagon head with collar
2206	フランジ付き六角（頭）	hexagon head having the conical shaped flange of which diameter is larger than the hexagon width across corner in order to extend the area of bearing surface of head (figure 2206)	hexagon head with flange
2207	フランジ付きヘキサロビュラ（頭）	hexalobular head having the conical shaped flange of which diameter is larger than the width across corner in order to extend the area of bearing surface of head (figure 2207)	hexalobular head with flange
2208	フランジ付き12ポイント（頭）	head to which flange is attached in such a shape that hexagon of the same axis and the same size is shifted by 30° (figure 2208)	12 point flange head, bihexagonal head
2209	歯付きフランジ（頭）	head of which the bearing surface of flanged head is knurled in order to act as whirl-stop	serrated toothed flange head
2210	すりわり付き（頭）	head equipped with slot	slotted head
2211	十字穴付き（頭）	head equipped with cross-shaped recess on upper face (figure 2211)	cross recessed head
2212	六角穴付き（頭）	head equipped with hexagonal socket on upper face (figure 2212)	hexagon socket head
2213	ヘキサロビュラ穴付き（頭）	head equipped with hexalobular socket on upper face (figure 2213)	hexalobular socket head
2214	四角穴付き（頭）	head equipped with square recess on upper face (figure 2214)	square socket head
2215	刻み付き（頭）	head processed with knurling for facilitating fastening with fingers (figure 2215) NOTE: As to the knurling, there are flat pattern, crisscross pattern, etc. (see JIS B 0951).	knurled head
2216	丸（頭）	head of approximately semispherical shape (figure 2216)	round head, cup head
2217	丸平（頭）	flat fillister head with rounded upper face (figure 2217)	raised cheese head, fillister head