INTERNATIONAL STANDARD

ISO 14585

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Hexalobular socket pan head tapping screws

Vis à tôle à tête cylindrique bombée large à six lobes internes

Reference number
ISO 14585:2001(E)

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established 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. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this International Standard may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

International Standard ISO 14585 was prepared by Technical Committee ISO/TC 2, *Fasteners*.

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Hexalobular socket pan head tapping screws

1 Scope

This International Standard specifies the characteristics of hexalobular socket pan head tapping screws with thread sizes from ST2,9 to ST6,3 inclusive.

If, in special cases, specifications other than those listed in this International Standard are required, they should be selected from existing International Standards, for example ISO 1478, ISO 2702, ISO 4759-1.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this International Standard. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

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

ISO 1478:1999, *Tapping screws thread*

ISO 2702:1992, *Heat-treated steel tapping screws — Mechanical properties*

ISO 3269:2000, *Fasteners — Acceptance inspection*

ISO 4042:1999, *Fasteners — Electroplated coatings*

ISO 4759-1:2000, *Tolerances for fasteners — Part 1: Bolts, screws, studs and nuts — Product grades A, B and C*

ISO 10664:1999, *Hexalobular internal driving feature for bolts and screws*

3 Dimensions

See Figure 1 and Table 1.

Symbols and designations of dimensions, except dimensions A and y, are specified in ISO 225.

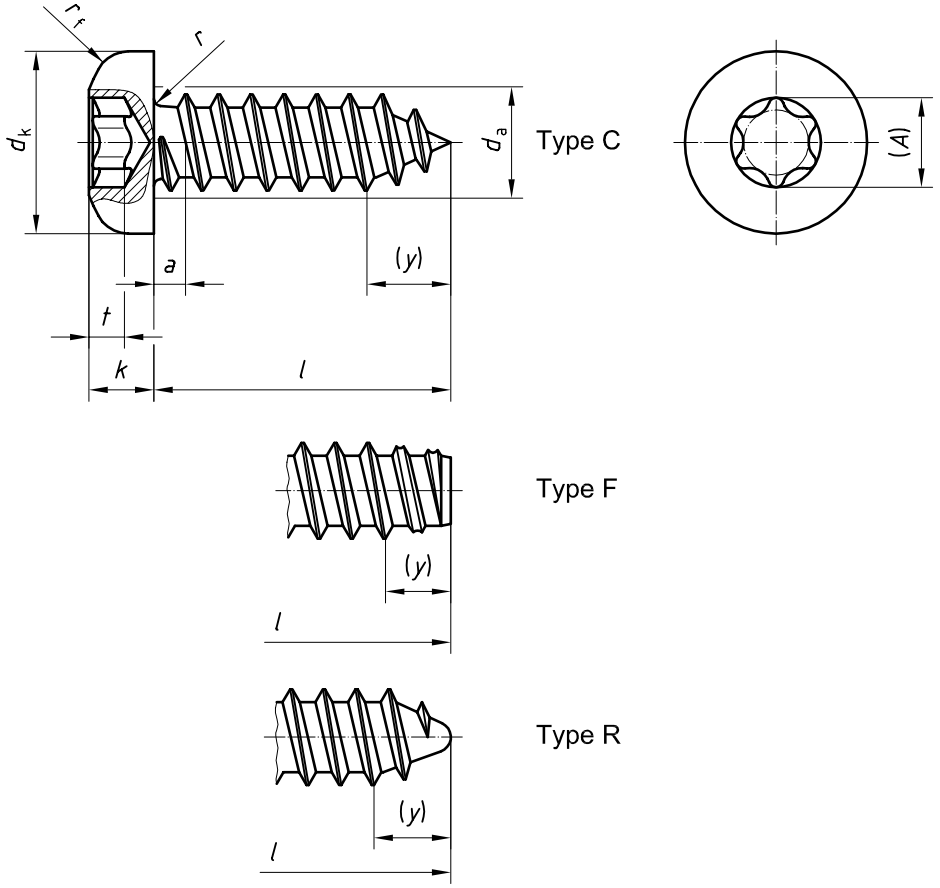

Figure 1

Table 1 — Dimensions

Dimensions in millimetres

Thread sizes				ST2,9	ST3,5	ST4,2	ST4,8	ST5,5	ST6,3
P [a]				1,1	1,3	1,4	1,6	1,8	1,8
a [b]				1,1	1,3	1,4	1,6	1,8	1,8
d_a			max.	3,5	4,1	4,9	5,6	6,3	7,3
d_k			nom. = max.	5,6	7,00	8,00	9,50	11,00	12,00
			min.	5,3	6,64	7,64	9,14	10,57	11,57
k			nom. = max.	2,40	2,60	3,1	3,7	4,0	4,6
			min.	2,15	2,35	2,8	3,4	3,7	4,3
r			max.	0,1	0,1	0,2	0,2	0,25	0,25
r_f			≈	5	6	6,5	8	9	10
y ref. [c]	Type C			2,6	3,2	3,7	4,3	5	6,0
	Type F			2,1	2,5	2,8	3,2	3,6	3,6
	Type R			—	2,7	3,2	3,6	4,3	5
Hexalobular socket	Socket No.			**10**	**15**	**20**	**25**	**25**	**30**
	A		ref.	2,8	3,35	3,95	4,5	4,5	5,6
	t		max.	1,27	1,40	1,80	2,03	2,03	2,42
			min.	1,01	1,14	1,42	1,65	1,65	2,02
l [d]	Type C and Type R		Type F						
nom.	min.	max.	min.	max					
4,5	3,7	5,3	3,7	4,5	—	—	—	—	—	—
6,5	5,7	7,3	5,7	6,5		—	—	—	—	—
9,5	8,7	10,3	8,7	9,5					—	—
13	12,2	13,8	12,2	13,5						
16	15,2	16,8	15,2	16,0						
19	18,2	19,8	18,2	19,0						
22	21,2	22,8	20,7	22,0						
25	24,2	25,8	23,7	25,0						
32	30,7	33,3	30,7	32,0						
38	36,7	39,3	36,7	38,0						
45	43,7	46,3	43,5	45,0						
50	48,7	51,3	48,5	50,0						

NOTE Commercial lengths are the ones between the bold stepped lines.

[a] P pitch of the thread.

[b] Distance from the underside of the head to the first major diameter of the thread within specified limits.

[c] Length of incomplete thread.

[d] Sizes with lengths market with a dash (—) in the table cannot be manufactured.

4 Specifications and reference International Standards

See Table 2.

Table 2 — Specifications and reference International Standards

Material		Steel, according to ISO 2702
Thread	International Standard	ISO 1478
Mechanical properties	International Standard	ISO 2702
Tolerances	Product grade	A
	International Standard	ISO 4759-1
Hexalobular socket	International Standard	ISO 10664
Finish		Plain Requirements for electroplating are covered in ISO 4042.
Acceptability		For acceptance procedure, see ISO 3269.

5 Designation

EXAMPLE A hexalobular socket pan head tapping screw with thread size ST3,5, nominal length *l* = 16 mm and cone end type C is designated as follows:

Tapping screw ISO 14585 - ST3,5 × 16 - C