INTERNATIONAL STANDARD

ISO 12261

Second edition
2016-02-15

Aerospace — Screws, pan head, internal offset cruciform ribbed or unribbed drive, pitch diameter shank, long length MJ threads, metallic material, coated or uncoated, strength classes less than or equal to 1 100 MPa — Dimensions

Aéronautique et espace — Vis à tête cylindrique, à empreinte cruciforme déportée, avec ou sans saillies antidérapantes, à tige de diamètre égal au diamètre sur flancs et filetage MJ long, en matériau métallique, revêtues ou non revêtues, des classes de résistance inférieures ou égales à 1 100 MPa — Dimensions

Reference number
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Foreword

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The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: Foreword - Supplementary information

The committee responsible for this document is ISO/TC 20, *Aircraft and space vehicles*, Subcommittee SC 4, *Aerospace fastener systems*.

This second edition cancels and replaces the first edition (ISO 12261:1996), of which it constitutes a minor revision.

Aerospace — Screws, pan head, internal offset cruciform ribbed or unribbed drive, pitch diameter shank, long length MJ threads, metallic material, coated or uncoated, strength classes less than or equal to 1 100 MPa — Dimensions

1 Scope

This International Standard specifies the dimensions of pan head screws with internal offset cruciform ribbed or unribbed drive, pitch diameter shank and long length MJ threads, in metallic material, coated or uncoated, with strength classes less than or equal to 1 100 MPa.

This International Standard is applicable to the compilation of aerospace product standards.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 3353 (all parts), *Aerospace — Lead and runout threads*

ISO 5855-2, *Aerospace — MJ threads — Part 2: Limit dimensions for bolts and nuts*

ISO 7913, *Aerospace — Bolts and screws, metric — Tolerances of form and position*

ISO 14275, *Aerospace — Drives, internal, offset cruciform, ribbed — Metric series*

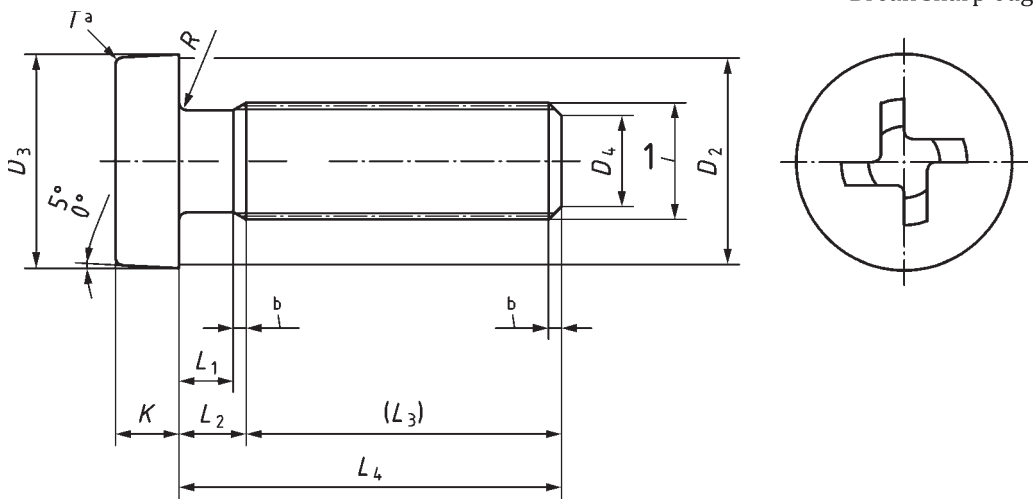
ISO 14276, *Aerospace — Drives, internal, offset cruciform — Metric series*

3 Configuration and dimensions

See Figure 1 and Table 1. Dimensions and tolerances are expressed in millimetres. They are applicable after any surface coating, but before the application of any lubricant.

Tolerances of form and position are specified in ISO 7913.

Break sharp edges 0,1 to 0,4



Key

a Shape optional.

b In accordance with ISO 3353 (all parts).

Figure 1

Table 1

Diameter code	Thread[a]	D_1 ± 0,13	D_2 min.	D_3 0 −0,3	D_4 nom.	D_4 tol.	K nom.	K tol.	L_1[bcd] min.	L_2[bcd] max.	L_3	L_4[d] ±0,3	R nom.	R tol.	T max.	T min.	Drive code[e]
040	MJ4×0,7 – 4h6h	3,54	6,7	8	3,0	0 −0,5	2,4	0 −0,2	0,4	2	14	16 to 56	0,4		1,6	0,4	R4
050	MJ5×0,8 – 4h6h	4,48	8,7	10	3,4		3,0		0,5		16	20 to 70	0,5		2,0	0,5	R5
060	MJ6× 1 – 4h6h	5,35	10,7	12	4,2		3,6				18	22 to 84		0 −0,2	2,4	0,6	R6
070	MJ7×1 – 4h6h	6,35	12,7	14	5,2		4,2		0,7	4	20	24 to 98	0,7		2,8	0,7	
080	MJ8×1 – 4h6h	7,35	14,7	16	6,2	± 0,5	4,8	0 −0,3			22	26 to 112			3,2	0,8	R8
100	MJ10×1,25 – 4h6h	9,19	18,7	20	7,9		6,0		0,8		26	32 to 140	0,8		4,0	1,0	R10
120	MJ12×1,25 – 4h6h	11,19	22,7	24	9,8		7,2		0,9	6	30	36 to 168	0,9	0 −0,3	4,8	1,2	R12

a In accordance with ISO 5855-2.

b First length corresponding to first L_4 length.

c Conditions L_1 min. and L_2 max. cannot be obtained simultaneously.

d Increments:

2 for $L_4 \leq 100$

4 for $L_4 > 100$

e In accordance with ISO 14275 or ISO 14276.

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