
**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*

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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.

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 of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 20, *Aircraft and space vehicles*, Subcommittee SC 4, *Aerospace fastener systems*.

This third edition cancels and replaces the second edition (ISO 12261:2016), which has been technically revised.

The main changes are as follows:

- addition of a description of the thread in [Figure 1](#);
- editorial update of the document.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

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 document 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 document is applicable to the compilation of aerospace product standards.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. 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 Terms and definitions

No terms and definitions are listed in this document.

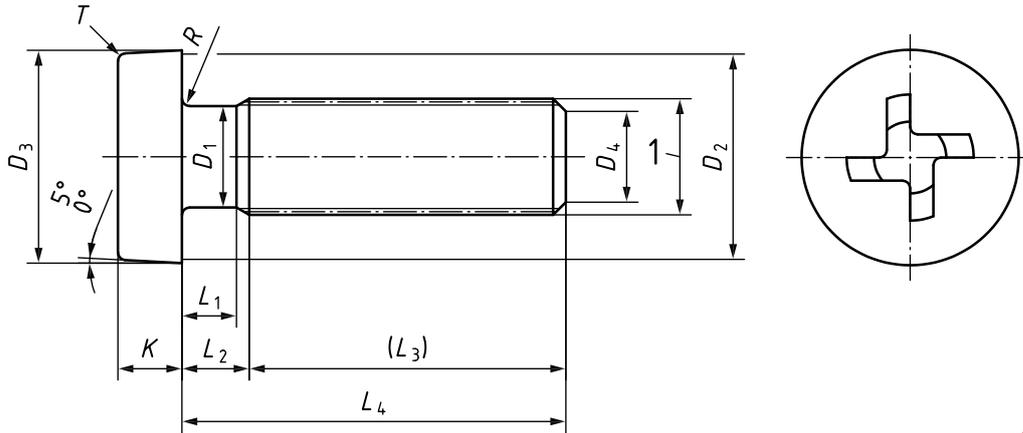
ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <https://www.electropedia.org/>

4 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.



Key

1 thread

Break sharp edges 0,1 to 0,4.

Figure 1 — Configuration

Lead and runout threads shall be in accordance with the ISO 3353 series.

Threads shall be in accordance with ISO 5855-2.

Table 1 — Dimensions

Diameter code	Thread ^a	D_1	D_2^a	D_3	D_4		K		L_1^{bcd}	L_2^{bcd}	L_3	L_4^d	R		T		Drive code	
		±0,13	min.	0 -0,3	nom.	tol.	nom.	tol.	min.	max.		±0,3	nom.	tol.	max.	min.		
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			4	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			20	24 to 98	0,7			2,8		0,7
080	MJ8×1 - 4h6h	7,35	14,7	16	6,2		4,8	0 -0,3			22	26 to 112				3,2		0,8
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 D_2 represents the bearing surface of the head.

^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 $L_4 > 100$

The drive code shall be in accordance with ISO 14275 or ISO 14276.