

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

ICS 49.030.20

Committees responsible for this British Standard

The preparation of this British Standard was entrusted to Technical Committee ACE/12, Aerospace fasteners and fastening systems, upon which the following bodies were represented:

British Industrial Fasteners Federation
Ministry of Defence
Society of British Aerospace Companies

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Contents

	Page
Committees responsible	Inside front cover
National foreword	ii
<hr/>	
1 Scope	1
2 Normative references	1
3 Configuration and dimensions	1
<hr/>	
Figure 1	1
<hr/>	
Table 1	2
<hr/>	
List of references	Inside back cover
<hr/>	

National foreword

This British Standard has been prepared by Technical Committee ACE/12. It is identical with ISO 12260:1996, *Aerospace — Screws, pan head, internal offset cruciform ribbed or unribbed drive, stepped shank, short or medium length MJ thread, metallic material, coated or uncoated, strength classes less than or equal to 1 100 MPa — Dimensions*, published by the International Organization for Standardization (ISO).

Cross-references

Publication referred to	Corresponding British Standard
ISO 286-2:1988	BS EN 20286-2:1993 <i>ISO system of limits and fits. Tables of standard tolerance grades and limit deviations for holes and shafts</i> (Identical)
ISO 3353:1992	BS 2A 231:1993 <i>Rolled threads for bolts. Lead and runout requirements</i> (Identical)
ISO 5855-2:1988	BS 6293 <i>Aerospace. MJ threads</i> Part 2:1994 <i>Limit dimensions for bolts and nuts</i> (Identical)
ISO 7913:1994	BS 2A 296:1995 <i>Bolts and screws, metric. Tolerances of form and position</i> (Identical)

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Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, pages 1 and 2, an inside back cover 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

This International Standard specifies the dimensions of pan head screws with internal offset cruciform ribbed or unribbed drive, stepped shank, short or medium 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 standards contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 286-2:1988, *ISO system of limits and fits — Part 2: Tables of standard tolerance grades and limit deviations for holes and shafts.*

ISO 3353:1992, *Aerospace — Rolled threads for bolts — Lead and runout requirements.*

ISO 5855-2:1988, *Aerospace — MJ threads — Part 2: Limit dimensions for bolts and nuts.*

ISO 7913:1994, *Aerospace — Bolts and screws, metric — Tolerances of form and position.*

ISO 14275:—¹⁾, *Aerospace — Drives, internal, offset cruciform, ribbed — Metric series.*

ISO 14276:—¹⁾, *Aerospace — Drives, internal, offset cruciform — Metric series.*

3 Configuration and dimensions

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

Tolerances of form and position are specified in ISO 7913.

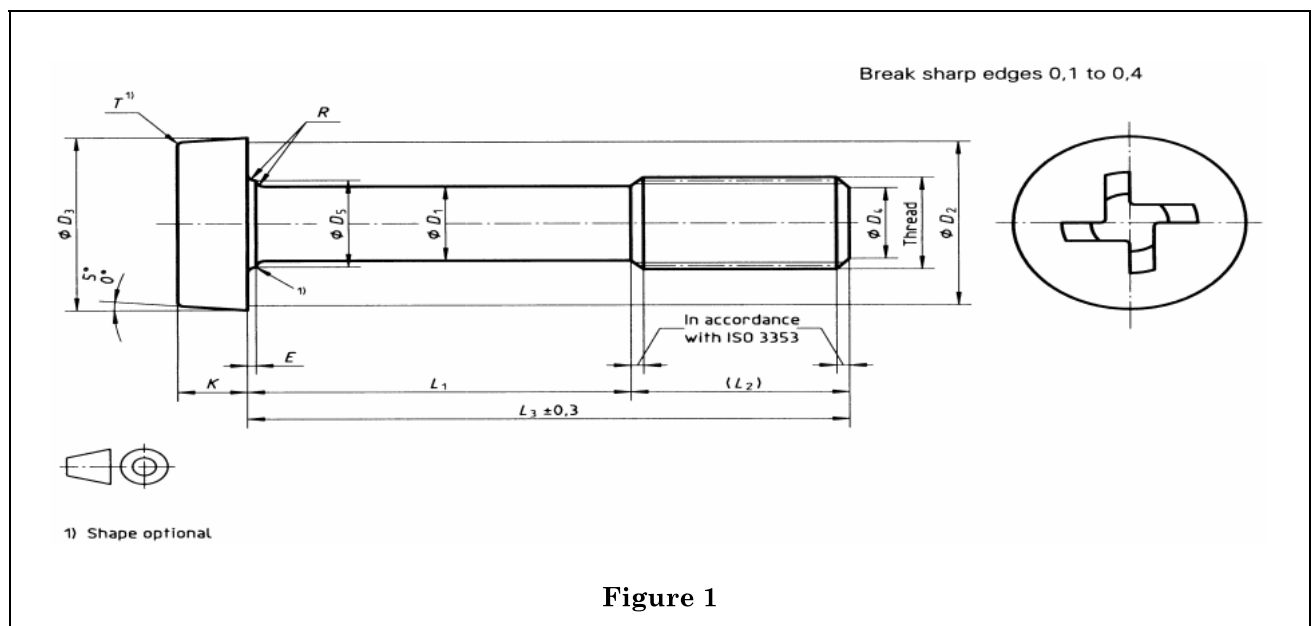


Figure 1

¹⁾ To be published.

Table 1

Diameter code	Thread ^a	D_1	D_2	D_3	D_4		D_5	E	K		L_1^c	L_2		R		T		Drive code
		$h12^b$	min.	$\begin{matrix} 0 \\ -0,3 \end{matrix}$	nom.	tol.	$h12^b + \begin{matrix} 0,2 \\ 0 \end{matrix}$	nom.	tol.	$\pm 0,2$	short	medium	nom.	tol.	max.	min.		
040	MJ4×0,7 – 4h6h	3	6,7	8	3	$\begin{matrix} 0 \\ -0,5 \end{matrix}$	4	0,4	2,4	$\begin{matrix} 0 \\ -0,2 \end{matrix}$	2 to 40	7,5	10	0,4	$\begin{matrix} 0 \\ -0,2 \end{matrix}$	1,6	0,4	R4
050	MJ5×0,8 – 4h6h	3,9	8,7	10	3,4		5	0,5	3		3 to 50	9	12	0,5		2	0,5	R5
060	MJ6×1 – 4 h6h	4,6	10,7	12	4,2		6		3,6		3 to 60	10	14			2,4	0,6	R6
070	MJ7×1 – 4h6h	5,6	12,7	14	5,2		7	0,7	4,2		4 to 70	11	15	0,7		2,8	0,7	
080	MJ8×1 – 4h6h	6,6	14,7	16	6,2	$\pm 0,5$	8		4,8	$\begin{matrix} 0 \\ -0,3 \end{matrix}$	4 to 80	11,5	16,5			3,2	0,8	R8
100	MJ10×1,25 – 4h6h	8,3	18,7	20	7,9		10	0,8	6		5 to 100	14,5	20,5	0,8		4	1	R10
120	MJ12×1,25 – 4h6h	10,3	22,7	24	9,8		12	0,9	7,2		6 to 120	16	22,5	0,9	$\begin{matrix} 0 \\ -0,3 \end{matrix}$	4,8	1,2	R12

^a In accordance with ISO 5855-2

^b See ISO 286-2.

^c Increments:

1 for $L_1 \leq 30$

2 for $30 < L_1 \leq 100$

4 for $L_1 > 100$

^d In accordance with ISO 14275 or ISO 14276

List of references

See national foreword.

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