

**Bolts, reduced
bihexagonal head,
normal or pitch
diameter shank, long
length MJ threads,
metallic material,
coated or uncoated,
strength classes less
than or equal
to 1 275 MPa —
Dimensions**

ICS 49.030.20

National foreword

This British Standard reproduces verbatim ISO 12258:1998 and implements it as the UK national standard.

The UK participation in its preparation was entrusted by Technical Committee ACE/12, Aerospace fasteners and fastening systems, to Subcommittee ACE/12/1, Aerospace fasteners and fastening systems (International), which has the responsibility to:

- aid enquirers to understand the text;
- present to the responsible international/European committee any enquiries on the interpretation, or proposals for change, and keep the UK interests informed;
- monitor related international and European developments and promulgate them in the UK.

A list of organizations represented on this subcommittee can be obtained on request to its secretary.

Cross-references

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Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, the ISO title page, page ii, pages 1 and 2 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.

This British Standard, having been prepared under the direction of the Engineering Sector Board, was published under the authority of the Standards Board and comes into effect on 15 September 1998

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ISBN 0 580 30465 5

Amendments issued since publication

Amd. No.	Date	Comments

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INTERNATIONAL
STANDARD

ISO
12258

First edition
1998-07-15

Aerospace — Bolts, reduced bihexagonal head, normal or pitch diameter shank, long length MJ threads, metallic material, coated or uncoated, strength classes less than or equal to 1 275 MPa — Dimensions

Aéronautique et espace — Vis à tête bihexagonale réduite, à tige normale ou 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 1 275 MPa — Dimensions



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.

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.

International Standard ISO 12258 was prepared by Technical Committee ISO/TC 20, *Air craft and space vehicles*, Subcommittee SC 4, *Aerospace fastener systems*.

1 Scope

This International Standard specifies the dimensions of reduced bihexagonal head bolts, with normal or pitch diameter shank and long length MJ threads, in metallic material, coated or uncoated, of strength classes less than or equal to 1 275 MPa.

This International Standard is applicable for 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 3353:1992, *Aerospace — Rolled threads for bolts — Lead and runout requirements.*

ISO 4095:1998, *Aerospace — Bi-hexagonal drives — Wrenching configuration — Metric series.*

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.*

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.

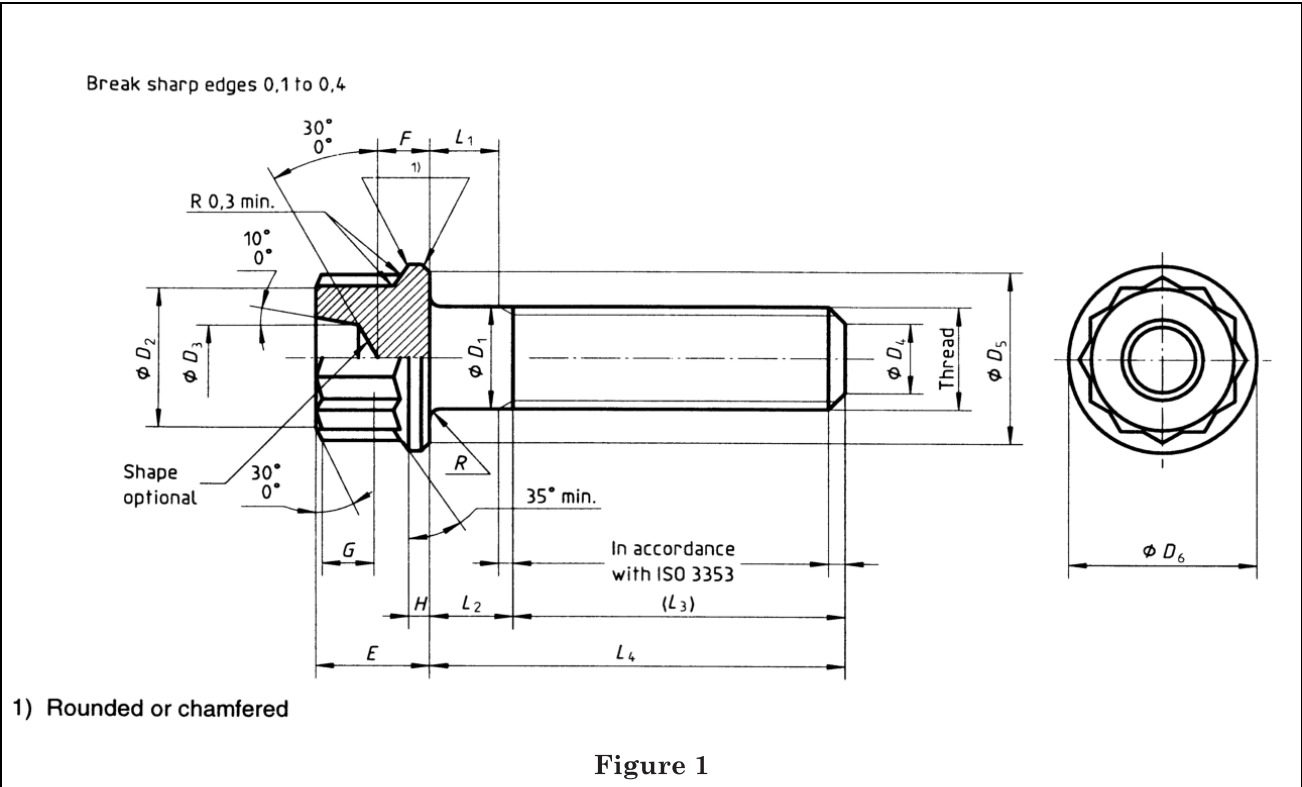


Table 1

Diameter code	Thread ^a	D_1				D_2 min.	D_3 $+0,5$ 0	D_4 $\pm 0,5$	D_5 min.	D_6 max.	E h15
		Normal		Pitch diameter							
		nom.	tol.	nom.	tol.						
050	MJ5 × 0,8 – 4h6h	5	h12	4,48	± 0,13	6,8	3,2	3,4	8,3	9,1	5,5
060	MJ6 × 1 – 4h6h	6		5,35		7,8	4,1	4,2	9,8	10,6	6
070	MJ7 × 1 – 4h6h	7		6,35		8,8	4,9	5,2	11,3	12,1	6,5
080	MJ8 × 1 – 4h6h	8		7,35		9,8	5,2	6,2	12,8	13,6	7
100	MJ10 × 1,25 – 4h6h	10		9,19		11,8	6,7	7,9	15,7	16,7	8
120	MJ12 × 1,25 – 4h6h	12		11,19		13,7	8	9,8	18,8	19,9	9,2

Diameter code	F	G	H	L_1^{bcd}	L_2^{bcd}	L_3	L_4^c $\pm 0,3$	R		Wrenching dash number ^e	
	$+0,4$ 0	min.	min.	min.	max.			nom.	tol.		
050	2,5	2	1	0,5	4	16	20 to 70	0,5	0 $-0,2$	07	
060	2,8	2,3	1,2	0,7		18	22 to 84	0,7		0,5	08
070	3,3	2,6	1,4			20	24 to 98				09
080	3,7	2,8	1,6			22	26 to 112				10
100	4,7	3,1	2		0,8	26	32 to 140		0,8		0,5
120	5,6	3,5	2,4	0,9	6	30	36 to 168	0,9	0 $-0,3$	14	

^a In accordance with ISO 5855-2.

^b First length corresponding to first L_4 length.

^c In order to provide a manufacturing tolerance, the distance L_2 max. – L_1 min. will be greater than the thread runout length specified in ISO 3353.

^d Increments:
2 for $L_4 \leq 100$
4 for $L_4 > 100$
If greater lengths are necessary, they shall be chosen using these increments.

^e In accordance with ISO 4095 over G min.

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