INTERNATIONAL STANDARD

ISO 12258

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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

Reference number
ISO 12258:1998(E)

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.*

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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

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.*

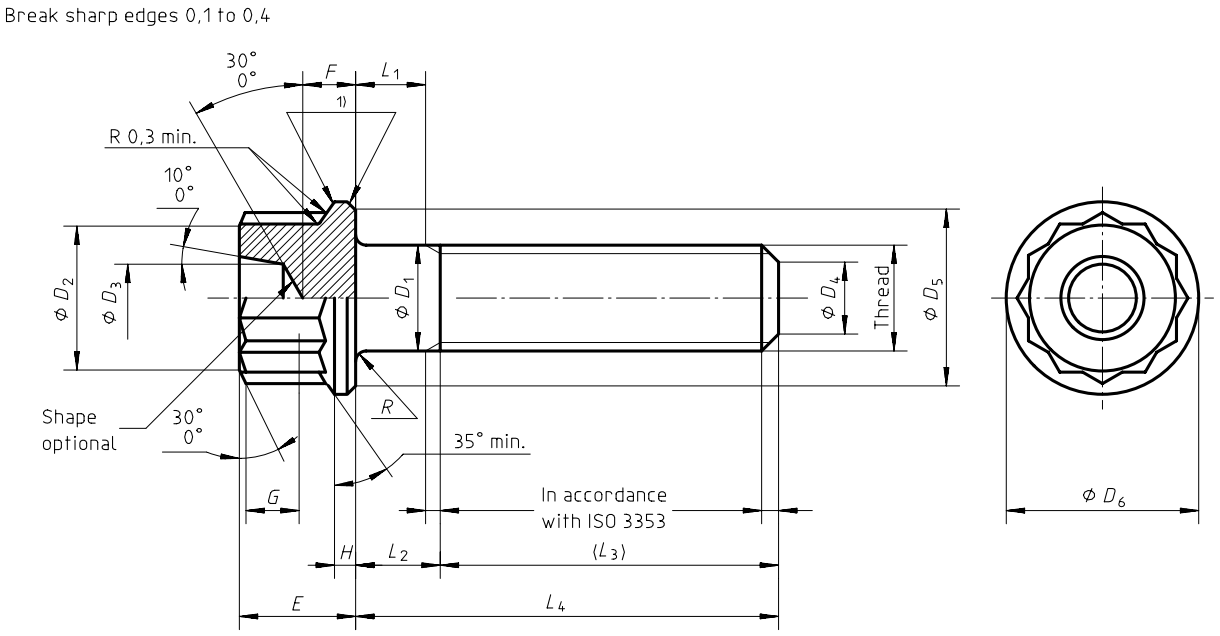
ISO 5855-2:1988, *Aerospace — MJ threads — Part 2: Limit dimensions for bolts and nuts.*

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.



1) Rounded or chamfered

Figure 1

Table 1

Diameter code	Thread[1]	D_1 Normal nom.	D_1 Normal tol.	D_1 Pitch diameter nom.	D_1 Pitch diameter tol.	D_2 min.	D_3 $^{+0,5}_{0}$	D_4 ± 0,5	D_5 min.	D_6 max.	E h15
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 $^{+0,4}_{0}$	G min.	H min.	L_1 [2) 3) 4)] min.	L_2 [2) 3) 4)] max.	L_3	L_4 [3)] ± 0,3	R nom.	R tol.	Wrenching dash number [5)]
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		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	6	26	32 to 140	0,8		12
120	5,6	3,5	2,4	0,9		30	36 to 168	0,9	$^{0}_{-0,3}$	14

1) In accordance with ISO 5855-2.

2) First length corresponding to first L_4 length.

3) 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.

4) Increments:

2 for $L_4 \leqslant 100$

4 for $L_4 > 100$

If greater lengths are necessary, they shall be chosen using these increments.

5) In accordance with ISO 4095 over G min.

ICS 49.030.30

Descriptors: aircraft industry, fasteners, MJ threads, bolts, form specifications, dimensions.

Price based on 2 pages