

INTERNATIONAL STANDARD

ISO
5856

First edition
1991-12-15

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

ISO 5856:1991

<https://standards.iteh.ai/catalog/standards/sist/2734724c-12b2-41e9-bd13-493d491b9480/iso-5856-1991>

Aéronautique et espace — Vis à tête fraisée 100° normale, à empreinte cruciforme déportée avec saillies antidérapantes, avec tige normale et filetage MJ court ou de longueur moyenne, en matériau métallique, revêtues ou non revêtues, des classes de résistance inférieures ou égales à 1 100 MPa — Dimensions



Reference number
ISO 5856:1991(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 5856 was prepared by Technical Committee ISO/TC 20, *Aircraft and space vehicles*, Sub-Committee SC 4, *Aerospace fastener systems*.

<https://standards.iteh.ai/catalog/standards/sist/2734724c-12b2-41e9-bd13-a986bc467f86/iso-5856-1991>

© ISO 1991

All rights reserved. No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the publisher.

International Organization for Standardization
Case Postale 56 • CH-1211 Genève 20 • Switzerland

Printed in Switzerland

Aerospace — Screws, 100° normal countersunk head, internal offset cruciform ribbed drive, normal shank, short or medium 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 100° normal countersunk head screws with internal offset cruciform ribbed drive, close or large tolerance normal shank and short or medium length MJ threads, in metallic material, coated or uncoated, with strength classes less than or equal to 1100 MPa.

It is intended for the drawing up 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 3353:1976, *Aerospace construction — Rolled threads — Runout and lead threads.*

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

ISO 7994:1985, *Aerospace — Internal drive, offset cruciform recess (Torq-Set®) for rotary fastening devices — 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.

Details of form not stated are left to the manufacturer's discretion.

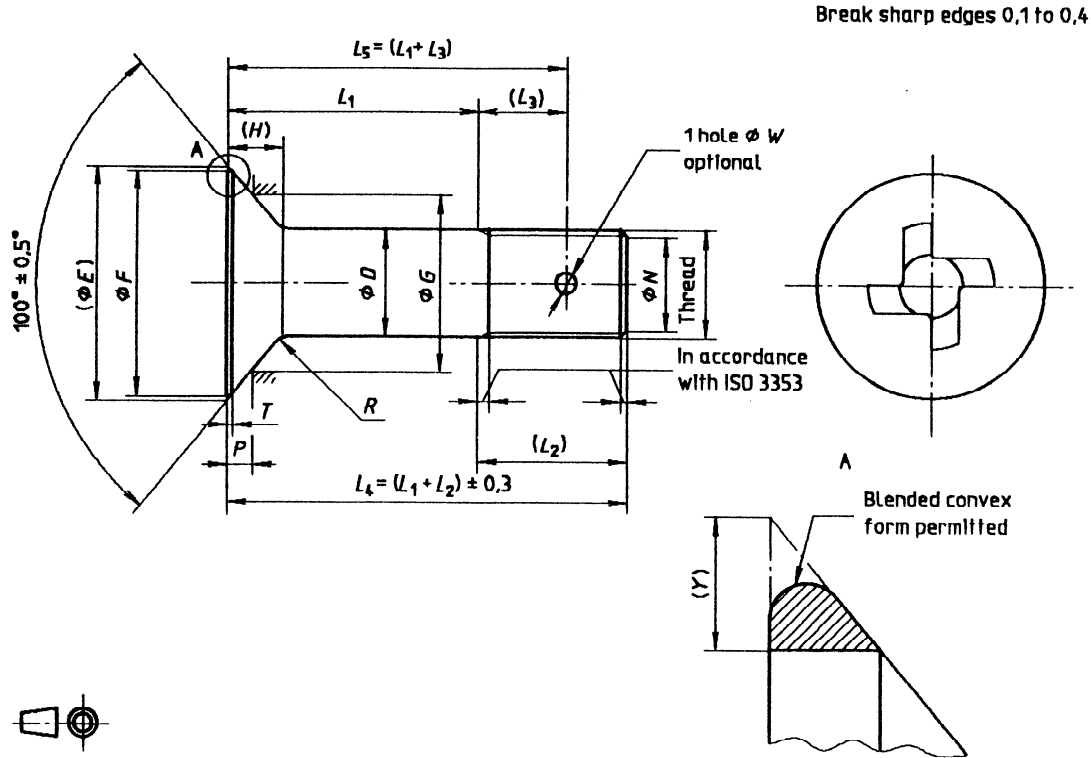


Figure 1
iTeh STANDARD PREVIEW
(standards.iteh.ai)

ISO 5856:1991
Table 1

<https://standards.iteh.ai/catalog/standards/sist/2734724e-12b2-41e9-bd13-a986bc467f86/iso-5856-1991>

Diameter code	Thread ^{1) 2)}	nom.	Coated screws		Uncoated screws		E max.	F min.	G	H	L ₁ ³⁾ ± 0,2
			close	Tol. large	close	Tol. large					
030	MJ3×0,5 – 4h6h	3	-0,007 -0,032				6	5,4	4,5	1,27	3 to 30
040	MJ4×0,7 – 4h6h	4					8	7,2	5,78	1,69	3 to 40
050	MJ5×0,8 – 4h6h	5	-0,010 -0,035				10	9	7,71	2,12	4 to 50
060	MJ6×1 – 4h6h	6					12	10,8	9	2,54	5 to 60
070	MJ7×1 – 4h6h	7					14	12,8	10,28	2,96	6 to 70
080	MJ8×1 – 4h6h	8	-0,013 -0,038	h124)	f74)	h124)	16	14,8	12,21	3,39	6 to 80
100	MJ10×1,25 – 4h6h	10					20	18,8	15,43	4,23	8 to 100
120	MJ12×1,25 – 4h6h	12					24	22,8	18	5,09	10 to 120
140	MJ14×1,5 – 4h6h	14					28	26,8	20,57	5,93	10 to 140
160	MJ16×1,5 – 4h6h	16	-0,016 -0,041				32	30,8	24,43	6,77	10 to 160
180	MJ18×1,5 – 4h6h	18					36	34,8	25,71	7,62	11 to 180
200	MJ20×1,5 – 4h6h	20	-0,020 -0,045				40	38,8	28,92	8,47	12 to 200

Diameter code	L ₂		L ₃		N		P 0 -0,08	R		T min.	W H134)	Y	Internal drive size ⁵⁾
	short	Thread medium	short	Thread medium	nom.	tol.		max.	min.				
030	6	7,5	—	—	2,3	± 0,5	0,63	0,4	0,2	0,06	—	0,3	R3
040	7,5	10	5	6	3		0,93			0,08	1,1	0,4	R4
050	9	12	6	7,5	3,4		0,96	0,5	0,3	0,1	1,5	0,5	R5
060	10	14	7	8,5	4,2		1,26	0,7	0,5			1,9	0,6
070	11	15		9,5	5,2		1,57				R8		
080	11,5	16,5	7,5	10,5	6,2		1,6	0,8	0,6		2,4	0,6	R10
100	14,5	20,5	9	13	7,9		1,93						0,9
120	16	22,5	10	14,5	9,8		2,53	1,1	0,8		3	0,6	R14
140	19	26	12	17	11,5		3,14						R16
160	20,5	28,5	13	18,5	13,5		3,2	1,3	1,0		3,8	0,6	R18
180	22,5	31	14,5	21	15,5		4,35						
200	24,5	33,5	15	22,5	17,5		4,68						

- 1) In accordance with ISO 5855-2.
- 2) For coated or uncoated screws with a close tolerance on *D*, the thread major diameter *d* shall be:
 $d \text{ max.} = D \text{ min.} - 0,025$

- 3) Increments:
1 if $L_1 \leq 30$
2 if $30 < L_1 \leq 100$
4 if $L_1 > 100$

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

- 4) In accordance with ISO 286-2. <https://standards.iteh.ai/catalog/standards/sist/2734724c-12b2-41e9-bd13-a986bc467f86/iso-5856-1991>
- 5) In accordance with ISO 7994.

iTeh STANDARD PREVIEW
(standards.iteh.ai)

iTeh STANDARD PREVIEW
(standards.iteh.ai)

This page intentionally left blank

ISO 5856:1991

<https://standards.iteh.ai/catalog/standards/sist/2734724c-12b2-41e9-bd13-a986bc467f86/iso-5856-1991>

iTeh STANDARD PREVIEW
(standards.iteh.ai)

This page intentionally left blank

ISO 5856:1991

<https://standards.iteh.ai/catalog/standards/sist/2734724c-12b2-41e9-bd13-a986bc467f86/iso-5856-1991>

iTeh STANDARD PREVIEW
(standards.iteh.ai)

ISO 5856:1991

<https://standards.iteh.ai/catalog/standards/sist/2734724c-12b2-41e9-bd13-a986bc467f86/iso-5856-1991>

UDC 629.7:621.882.6.091.6

Descriptors: aircraft industry, aircraft equipment, fasteners, bolts, screws, countersunk head screws, cross recessed screws, dimensions.

Price based on 3 pages
