
Aerospace — Nuts, anchor, self-locking, floating, self-aligning, two lug, with MJ threads, classifications: 900 MPa (at ambient temperature)/235 °C, 900 MPa (at ambient temperature)/315 °C and 900 MPa (at ambient temperature)/425 °C — Dimensions

Aéronautique et espace — Écrous à river, à freinage interne, flottants, orientables, double patte, à filetage MJ, classifications: 900 MPa (à température ambiante)/235 °C, 900 MPa (à température ambiante)/315 °C et 900 MPa (à température ambiante)/425 °C — 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 12273 was prepared by Technical Committee ISO/TC 20, *Aircraft and space vehicles*, Subcommittee SC 4, *Aerospace fastener systems*.

© ISO 1997

All rights reserved. Unless otherwise specified, 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
Internet central@iso.ch
X.400 c=ch; a=400net; p=iso; o=isocs; s=central

Printed in Switzerland

Introduction

The dimensions specified in this International Standard have been determined to satisfy the requirements of the procurement specification of ISO 5858.

STANDARDSISO.COM : Click to view the full PDF of ISO 12273:1997

This page intentionally left blank

STANDARDSISO.COM : Click to view the full PDF of ISO 12273:1997

Aerospace — Nuts, anchor, self-locking, floating, self-aligning, two lug, with MJ threads, classifications: 900 MPa (at ambient temperature)/235 °C, 900 MPa (at ambient temperature)/315 °C and 900 MPa (at ambient temperature)/425 °C — Dimensions

1 Scope

This International Standard specifies the dimensions of floating, self-aligning, two lug anchor nuts, with MJ threads and a self-locking feature achieved by forming the upper portion out-of-round, of classifications: 900 MPa ¹⁾/235 °C ²⁾, 900 MPa ¹⁾/315 °C ²⁾ and 900 MPa ¹⁾/425 °C ²⁾.

This International Standard is only 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 5855-2:1988, *Aerospace — MJ threads — Part 2: Limit dimensions for bolts and nuts*.

ISO 5858:1991, *Aerospace — Self-locking nuts with maximum operating temperature less than or equal to 425 °C — Procurement specification*.

ISO 8788:1987, *Aerospace — Fasteners — Tolerances of form and position for nuts*.

3 Configuration and dimensions

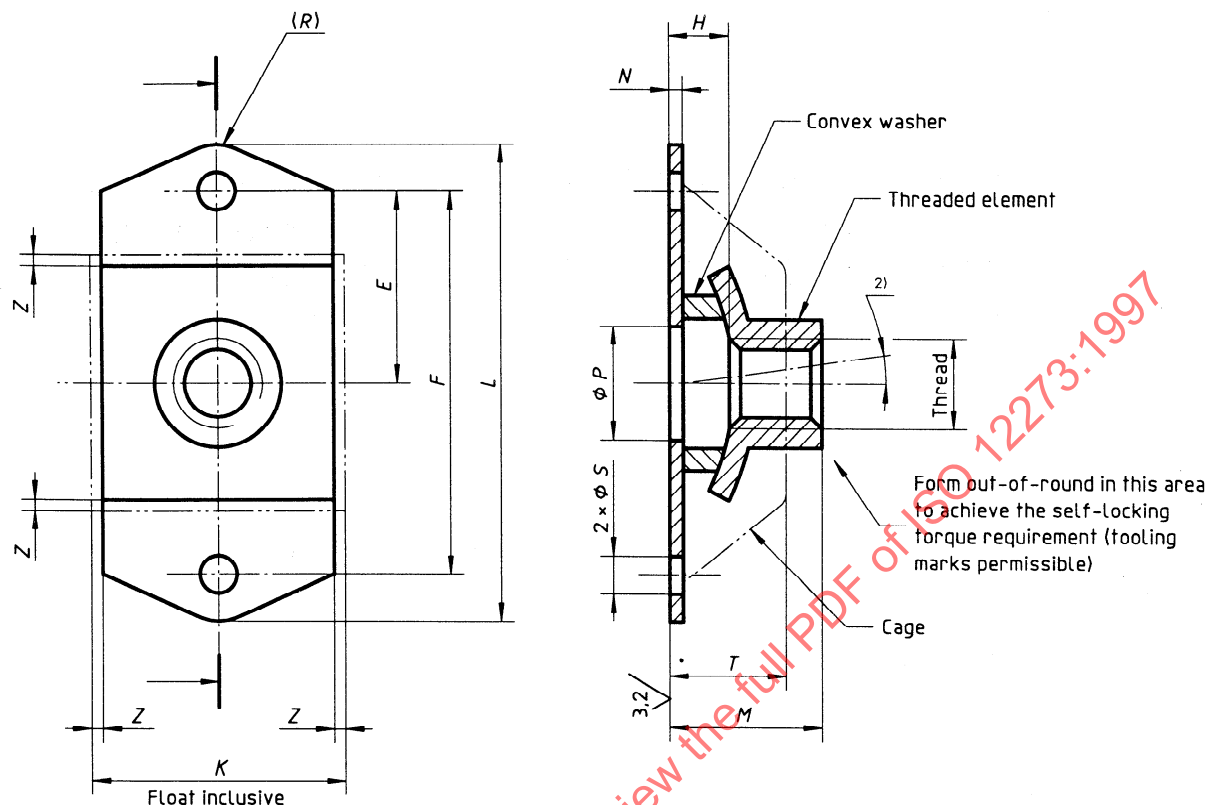
See figure 1 and table 1. Dimensions and tolerances are expressed in millimetres. They apply after any surface coating(s) but before the application of any lubricant.

1) Corresponds to the minimum tensile stress which the nut is able to withstand at ambient temperature without breaking or cracking when tested with a bolt of a higher strength class.

2) Maximum temperature that the nut is able to withstand, without permanent alteration to its original characteristics, after ambient temperature has been restored. The maximum temperature is conditioned by the material or by the surface treatment.

$$6,3 / \left(3,2 / \right)^{1)}$$

Remove sharp edges 0,1 to 0,4



NOTE — Tolerances of form and position shall conform to those specified in ISO 8788.

1) These values, in micrometers, apply before any surface coating(s) is(are) applied. The values do not apply to threads and sheared edges, the surface texture of which will be as achieved by the usual manufacturing methods.

2) Axial misalignment: 8° minimum in any direction from central position

Figure 1

Table 1

Diameter code	Thread ¹⁾	E	F	H min.	K max.	L max.	M max.	N ²⁾ max.	P min.	R	S +0,2 0	T max.	Radial floating Z min.
050	MJ5×0,8 – 4H6H	8,75	17,5	3,5	15,2	23,7	8,3	0,9	6,6	3	2,5	7,2	0,7
060	MJ6×1 – 4H5H	12,7	25,4	4	17	31,6	10,2		7,6			7,8	
080	MJ8×1 – 4H5H			5	20,5	32,6	11,8	1	11	3,5	3	8,4	0,75

1) In accordance with ISO 5855-2. In the self-locking zone, the tolerances apply before forming out-of-round.
2) Is applicable at the rivet hole location.