

English Version

Aerospace series - Pin, close tolerance, swage locking, 100°
countersunk reduced head, shear type, in aluminium alloy
7050, conversion coating - Inch series

Série aéronautique - Rivets de précision, boulon serti, à
tête fraisée 100° réduite, cisaillement-type, en alliage
d'aluminium 7050, film sec - Série en inches

Luft- und Raumfahrt - Passniete für
Quetschverriegelung mit reduziertem Senkkopf 100°,
für Scherbeanspruchung, aus Aluminiumlegierung
7050, Schmierfilm behandelt - Zoll-Reihe

This draft European Standard is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee ASD-STAN.

If this draft becomes a European Standard, CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

This draft European Standard was established by CEN in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and United Kingdom.

Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

Warning : This document is not a European Standard. It is distributed for review and comments. It is subject to change without notice and shall not be referred to as a European Standard.



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

Contents

Page

European foreword	3
1 Scope.....	4
2 Normative references.....	4
3 Terms and definitions	4
4 Requirements.....	4
4.1 Configuration, dimensions, tolerances and mass.....	4
4.2 Material and surface treatment.....	6
4.3 Mechanical properties	6
4.4 Pin version.....	7
5 Designation	7
6 Marking	7
7 Technical specification	7
8 Example of installation	7
9 Quality Management System	8
Bibliography	9

European foreword

This document (prEN 6050:2023) has been prepared by the Aerospace and Defence Industries Association of Europe — Standardization (ASD-STAN).

After enquiries and votes carried out in accordance with the rules of this Association, this document has received the approval of the National Associations and the Official Services of the member countries of ASD-STAN, prior to its presentation to CEN.

This document is currently submitted to the CEN Enquiry.

1 Scope

This document specifies the characteristics of close tolerance pins, swage locking, 100° countersunk reduced head, shear type, in aluminium alloy 7050-T73 with chemical film, inch series, with a maximum operating temperature of 80 °C for aerospace application.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 2424, *Aerospace series - Marking of aerospace products*

EN 6051,¹ *Aerospace series — Collar, swage locking, shear type, in aluminium alloy 3003, conversion coating — Inch series*

EN 6052¹, *Aerospace series - Rivet-collar-system, aluminium alloy, shear type, inch series - Technical Specification*

EN 6054¹, *Aerospace series — Collar, swage locking, shear type, in aluminium alloy 6061, conversion coating — Inch series*

MIL-C-5541E,² *Chemical Conversion Coatings on Aluminium and Aluminium Alloys*

MIL-L-87132B², *Lubricant, CETYL Alcohol, 1-Hexadecanol, Application to Fasteners*

FED-SPEC QQ-A-430,³ *Aluminium Alloy Rod and Wire; for Rivets and Cold Heading*

3 Terms and definitions

No terms and definitions are listed in this document.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <http://www.iso.org/obp>
- IEC Electropedia: available at <http://www.electropedia.org/>

4 Requirements

4.1 Configuration, dimensions, tolerances and mass

The configuration, dimensions, tolerances and mass shall conform to Figure 1 and Table 1, Table 2 and Table 5. Dimensions and tolerances are expressed in millimetres.

Pins with diameter code 040 shall be used in combination with collars as per EN 6051 only.

Pins with diameter code 050 shall be used in combination with collars as per EN 6054 only.

Values apply before lubrication.

¹ Published as ASD-STAN-Standard at the date of publication of this standard by AeroSpace and Defence Industries Association of Europe – Standardization (ASD-STAN) (www.asd-stan.org).

² Published by: Department of Defense (DoD), the Pentagon, Washington, D.C., 20301, USA.

³ Published by: Superintendent of Documents, U.S. Government Printing Office, Washington, D.C., 20402, USA