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STN	**Letectvo a kozmonautika Svorky, strmene (typu P) zo zliatiny hliníka s gumeným obložením Rozmery a hmotnosti**	**STN EN 4114 31 3628**

Aerospace series - Clamps, loop ("P" type) in aluminium alloy with rubber cushioning - Dimensions, masses

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

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English Version

Aerospace series - Clamps, loop ("P" type) in aluminium alloy with rubber cushioning - Dimensions, masses

Série aérospatiale - Colliers, boucle en P en alliage d'aluminium avec profilé en élastomère - Dimensions, masses

Luft- und Raumfahrt - Schellen in Schlaufenform (P-Form) aus Aluminiumlegierung mit Profilgummi - Maße, Massen

This European Standard was approved by CEN on 15 October 2023.

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European foreword

This document (EN 4114:2023) 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 European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by June 2024, and conflicting national standards shall be withdrawn at the latest by June 2024.

This document supersedes EN 4114:2009.

EN 4114:2023 includes the following significant technical changes with respect to EN 4114:2009:

— normative references were updated;

— abbreviation “FPM” was changed to “FKM” throughout the document.

Any feedback and questions on this document should be directed to the users’ national standards body. A complete listing of these bodies can be found on the CEN website.

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1 Scope

This document specifies the required characteristics of loop style clamps (“P” type) in aluminium alloy with various cushion materials.

These clamps are used for supporting aerospace pipe assemblies and electrical cable bundles.

They are used up to 80 °C max.

Usage at a higher temperature is at the option of the user.

For temperature range and environmental considerations, see the various cushion material standards.

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 2261, *Aerospace series — Silicone rubber (VMQ) — Hardness 70 IRHD*

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

EN 2437, *Aerospace series — Chromate conversion coatings (yellow) for aluminium and aluminium alloys*

EN 2566, *Aerospace series — Fluorocarbon rubber (FKM) — Hardness 70 IRHD*

EN 2693, *Aerospace series — Aluminium alloy AL-P5086-H111 — Sheet and strip — 0,3 mm ≤ a ≤ 6 mm*

EN 3078:—[1] *Aerospace series — P, Q and saddle clamps with rubber cushion — Technical specification*

EN 3825, *Aerospace series — Fluorosilicone rubber (FVMQ) — Hardness 60 IRHD*

EN 3826, *Aerospace series — Fluorosilicone rubber (FVMQ) — Hardness 70 IRHD*

EN 4115, *Aerospace series — Cushion, rubber for clamps — Dimensions, masses*

[1] Published as ASD-STAN Prestandard at the date of publication of this standard by AeroSpace and Defence Industries Association of Europe – Standardization (ASD-STAN) (https://asd-stan.org/).