



SLOVENSKI STANDARD
oSIST prEN 3050:2024
01-september-2024

Aeronavtika - Tesnilni obročki O, izdelani iz fluorogljikove gume (FKM) z nizko stopnjo kompresije - Tehnična specifikacija

Aerospace series - O-rings, in fluorocarbon rubber (FKM), low compression set - Technical specification

Luft- und Raumfahrt - O-Ringe aus Fluorcarbon-Elastomer (FKM) mit niedrigem Druckverformungsrest - Technische Lieferbedingungen

Série aérospatiale - Joints toriques, en élastomère fluorocarbone (FKM), à faible déformation rémanente après compression - Spécification technique

Ta slovenski standard je istoveten z: prEN 3050

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ICS:

49.080	Letalski in vesoljski hidravlični sistemi in deli	Aerospace fluid systems and components
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oSIST prEN 3050:2024

en,fr,de

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

DRAFT
prEN 3050

June 2024

ICS 49.080

Will supersede EN 3050:1998

English Version

Aerospace series - O-rings, in fluorocarbon rubber (FKM), low compression set - Technical specification

Série aérospatiale - Joints toriques, en élastomère
fluorocarbure (FKM), à faible déformation rémanente
après compression - Spécification technique

Luft- und Raumfahrt - O-Ringe aus Fluorcarbon-
Elastomer (FKM) mit niedrigem Druckverformungsrest
- Technische Lieferbedingungen

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.

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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

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European foreword

This document (prEN 3050:2024) has been prepared by 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.

This document will supersede EN 3050:1998.

prEN 3050:2024 includes the following significant technical changes with respect to EN 3050:1998:

- normative references were updated;
- Subclause 4.1.1 was updated to include further information on qualification;
- Subclause 4.1.2, Hardness Test, was added;
- Bibliography was added.

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prEN 3050:2024 (E)

1 Scope

This document specifies the characteristics, qualification and acceptance requirements for O-rings in low compression set fluorocarbon rubber (FKM) to EN 2798.

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 2798, *Aerospace series — Fluorocarbon rubber (FKM) — Low compressions set — Hardness 80 IRHD*

ISO 48-2, *Rubber, vulcanized or thermoplastic — Determination of hardness — Part 2: Hardness between 10 IRHD and 100 IRHD*

ISO 188, *Rubber, vulcanized or thermoplastic — Accelerated ageing and heat resistance tests*

ISO 1817, *Rubber, vulcanized or thermoplastic — Determination of the effect of liquids*

ISO 2781, *Rubber, vulcanized or thermoplastic — Determination of density*

ISO 3601-3, *Fluid power systems — O-rings — Part 3: Quality acceptance criteria*

ISO 27996, *Aerospace fluid systems — Elastomer seals — Storage and shelf life*

ASTM D1414, *Standard Test Methods for Rubber O-Rings*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

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

— ISO Online browsing platform: available at <https://www.iso.org/obp>

— IEC Electropedia: available at <https://www.electropedia.org/>

3.1

production batch

quantity of O-rings manufactured from the same batch of rubber compound having the same section diameter vulcanized in the same oven load

3.2

inspection lot

quantity of O-rings from a single production batch with the same part number which completely defines them

3.3

rubber compound

homogeneous mixture of all constituents for a rubber