SLOVENSKI STANDARD
SIST EN 4809:2017

01-oktober-2017

Aeronavtika - Prirobnične spojke - Robno tesnilo s fluorokarbonsko zalivko na aluminijski plošči s 3 pritrdilnimi luknjami - Palčne mere

Aerospace series - Flange couplings - Gasket seal with fluorocarbon seal on aluminium plate with 3 fastening holes - Inch series

Luft- und Raumfahrt - Rohrverschraubung mit Flanschen - Flachdichtung aus Fluorocarbon-Elastomer, mit Aluminiumarmierung mit 3 Befestigungslöchern - Inch-Reihe

Série aérospatiale - Raccordement à bride - Joint plaque avec joint en fluorocarbone sur plaque en aluminium avec 3 trous de fixation - Série en inches

Ta slovenski standard je istoveten z: **EN 4809:2017**

ICS:

23.040.60	Prirobnice, oglavki in spojni elementi	Flanges, couplings and joints
49.025.20	Aluminij	Aluminium
49.080	Letalski in vesoljski hidravlični sistemi in deli	Aerospace fluid systems and components

SIST EN 4809:2017 **en,fr,de**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 4809

June 2017

ICS 49.080

English Version

Aerospace series - Flange couplings - Gasket seal with fluorocarbon seal on aluminium plate with 3 fastening holes - Inch series

Série aérospatiale - Raccordement à bride - Joint plaque avec joint en fluorocarbone sur plaque en aluminium avec 3 trous de fixation - Série en inches

Luft- und Raumfahrt - Rohrverschraubung mit Flanschen - Flachdichtung aus Fluorocarbon-Elastomer, mit Aluminiumarmierung mit 3 Befestigungslöchern - Inch-Reihe

This European Standard was approved by CEN on 14 November 2016.

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. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists 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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.

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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

Ref. No. EN 4809:2017 E

Contents

Page

European foreword **3**

1 Scope **4**

2 Normative references **4**

3 Required characteristics **5**

4 Designation **7**

5 Identification marking **7**

6 Technical specification **7**

7 Quality Assurance **7**

European foreword

This document (EN 4809:2017) 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 European Standard has received the approval of the National Associations and the Official Services of the member countries of ASD, 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 December 2017, and conflicting national standards shall be withdrawn at the latest by December 2017.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

1 Scope

This European Standard specifies the characteristics of gasket seal with fluorocarbon seal on aluminium plate, 3 holes, for pipe couplings for inch series aerospace applications.

Nominal pressure: up to 21 000 kPa; depends on the associated tube material and tube wall thickness in the assembly (see EN 4814).

Temperature range: –20 °C to 200 °C.

NOTE Assembly in accordance with TR 4815.

This part should not be reused after disassembling.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 2284, *Aerospace series — Sulphuric acid anodizing of aluminium and wrought aluminium alloys*

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

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

EN 2699, *Aerospace series — Aluminium alloy (5086) — Annealed and straightened (H111) — Drawn bar 6 ≤ D ≤ 50 mm*[1)]

EN 2798, *Aerospace series — Fluorocarbon rubber (FPM) — Low compression set — Hardness 80 IRHD*[1)]

EN 4054, *Aerospace series — Pipe couplings, loose flanges and seals — Seals in fluorocarbon rubber and armature in aluminium alloy — Technical specification*

EN 4814, *Aerospace series — Flange couplings up to 21 000 kPa — Technical specification — Inch series*

EN 9100, *Quality Management Systems — Requirements for Aviation, Space and Defense Organizations*

TR 4815, *Aerospace series — Flange couplings up to 21 000 kPa — Design standard — Inch series*[2)]

1) Published as ASD-STAN Prestandard at the date of publication of this European Standard. (http://www.asd-stan.org/)

2) Published as ASD-STAN Technical Report at the date of publication of this European Standard. (http://www.asd-stan.org/)

3 Required characteristics

3.1 Configuration – Dimensions – Tolerances – Masses

See Figure 1 and Table 1. Dimensions and tolerances are in millimetres, except otherwise specified.

3.2 Material

Plate: EN 2693 or EN 2699.

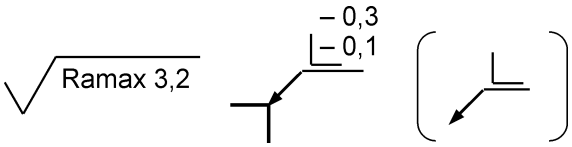
Seal: EN 2798.

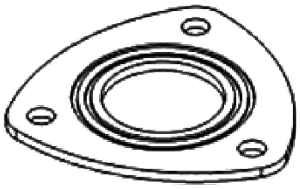
3.3 Surface treatment

Plate: EN 2284BC – Green.

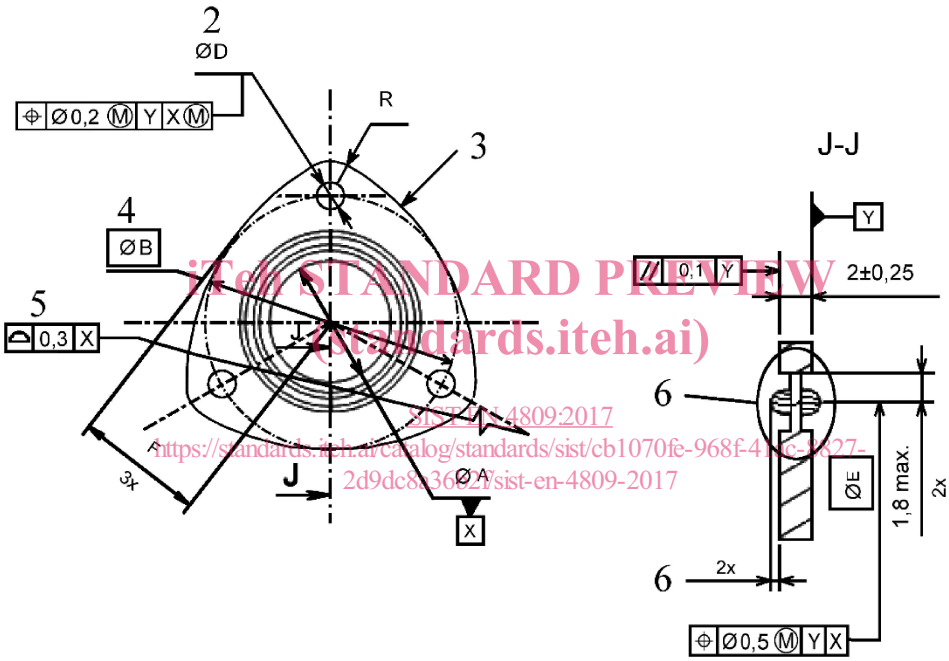
3.4 Adherence

Two parts of seal shall be adhere to the plate and bonded together through equally spaced holes.





1



Key

1 3D view
2 3 equally spaced holes
3 Marking
4 Location of holes
5 Radius (3×). Surface geometric tolerance applies to *F* and *R*
6 Form not stated are left to the manufacturer's discretion. Design and manufacturing of sealing parts dimensioning shall not allow any bead outside lateral cavities while assembling the coupling.

Figure 1