

Pipe couplings, loose flanges and seals — Seals in fluorocarbon rubber and armature in aluminium alloy — Technical specification

The European Standard EN 4054:2003 has the status of a
British Standard

ICS 49.080

National foreword

This British Standard is the official English language version of EN 4054:2003. The UK participation in its preparation was entrusted by Technical Committee ACE/12, Aerospace fasteners and fastening systems, to Subcommittee ACE/12/1, Aerospace fasteners and fastening systems (international), which has the responsibility to:

- aid enquirers to understand the text;
- present to the responsible international/European committee any enquiries on the interpretation, or proposals for change, and keep the UK interests informed;
- monitor related international and European developments and promulgate them in the UK.

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Summary of pages

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English version

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

This European Standard was approved by CEN on 2 June 2002.

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 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 Management Centre has the same status as the official versions.

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Foreword

This document (EN 4054:2003) has been prepared by the European Association of Aerospace Manufacturers – Standardization (AECMA-STAN).

After enquiries and votes carried out in accordance with the rules of this Association, this Standard has received the approval of the National Associations and the Official Services of the member countries of AECMA, 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 July 2003, and conflicting national standards shall be withdrawn at the latest by July 2003.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and the United Kingdom.

1 Scope

This standard specifies the characteristics, qualification and acceptance requirements for seals for flanged pipe couplings in fluorocarbon rubber with an armature in aluminium alloy.

It is applicable whenever referenced.

2 Normative references

- | | |
|------------|---|
| ISO 1817 | Rubber, vulcanized - Determination of the effect of liquids |
| ISO 2859-1 | Sampling procedures for inspection by attributes – Part 1: Sampling schemes indexed by acceptance quality limit (AQL) for lot-by-lot inspection |
| EN 2751 | Aerospace series – Storage conditions for rubber products – Requirements for storage, cleaning and maintenance ¹⁾ |
| EN 2798 | Aerospace series – Fluorocarbon rubber (FPM) – Low compression set – Hardness 80 IRHD ²⁾ |
| EN 3042 | Aerospace series – Quality assurance – EN aerospace products – Qualification procedure |
| EN 3376 | Aerospace series – Limits of surface imperfections of elastomeric toroidal sealing rings (o-rings) ²⁾ |

1) In preparation at the date of publication of this standard

2) Published as AECMA Prestandard at the date of publication of this standard

3 Definitions

For the purposes of this standard, the following definitions apply.

3.1 Production batch

Quantity of finished seals manufactured from the same batch of compound moulded onto the armature. The product standard of the material defining the armature shall be the same for the compound batch.

3.2 Compound

A homogeneous mixture of polymers or polymers with all ingredients required for the finished product