



**NSAI**  
Standards

Irish Standard  
I.S. EN 4840-102:2019&LC:2020

Aerospace series - Heat shrinkable  
moulded shapes - Part 102: Elastomeric,  
semi-rigid, temperature range -75 to 150  
°C - Product Standard

**I.S. EN 4840-102:2019&LC:2020**

*Incorporating amendments/corrigenda/National Annexes issued since publication:*

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## National Foreword

I.S. EN 4840-102:2019&LC:2020 is the adopted Irish version of the European Document EN 4840-102:2019, Aerospace series - Heat shrinkable moulded shapes - Part 102: Elastomeric, semi-rigid, temperature range -75 to 150 °C - Product Standard

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## Correction Notice

**Reference:** EN 4840-102

**Title:** Aerospace series - Heat shrinkable moulded shapes - Part 102: Elastomeric, semi-rigid, temperature range -75 to 150 °C - Product Standard

**Work Item:** 04004379

Brussels, 2020-02-19

**Please include the following minor editorial correction(s) in the document related to:**

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- ☒ English
- ☐ French
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- ☐ PQ/UQ
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- ☐ UAP
- ☐ TC Approval
- ☐ 2<sup>nd</sup> TC Approval
- ☒ Publication
- ☐ Parallel Publication

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It has been brought to our attention that this document, issued on 2019-12-04, requires modification.

Clause "Scope": Adding the numbering for clause "Scope" and adjusting the numbering on all following clauses accordingly.

Clause "Terms and definitions": deletion of "and the following".

Clauses "Dimensions and mass", "Quality assurance", "Labelling and packaging" and "Technical specification": replace "see" by "according to".

Please find enclosed the updated English version.

We apologise for any inconvenience this may cause.

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**EUROPEAN STANDARD**  
**NORME EUROPÉENNE**  
**EUROPÄISCHE NORM**

**EN 4840-102**

December 2019

ICS 49.060

English Version

**Aerospace series - Heat shrinkable moulded shapes - Part  
102: Elastomeric, semi-rigid, temperature range -75 to 150  
°C - Product Standard**

Série aérospatiale - Manchons thermorétractables -  
Partie 102 : Semi-rigides en élastomère, plage de  
températures de -75 °C à 150 °C - Norme de produit

Luft- und Raumfahrt - Wärmeschrumpfende Formteile  
- Teil 102: Elastomer, halbstreif, Temperaturbereich -75  
°C bis 120 °C - Produktnorm

This European Standard was approved by CEN on 13 October 2019.

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## **European foreword**

This document (EN 4840-102:2019) 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 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 document shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by June 2020, and conflicting national standards shall be withdrawn at the latest by June 2020.

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.

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## **EN 4840-102:2019 (E)**

### **1 Scope**

This document specifies the required characteristics for heat-shrinkable elastomeric semi-rigid, boots for use in aircraft electrical systems at operating temperatures between -75 °C and 150 °C.

The moulded shapes may be supplied with a pre-coated adhesive. Refer to the manufacturers/suppliers for options. A guide to adhesive compatibility is given in Annex A (informative).

These moulded shapes are normally supplied in the styles and dimensions given in EN 4840-002 Table 1 to Table 22. The colour is normally black.

Styles and dimensions other than those specifically listed in EN 4840-002 Table 1 to Table 22 may be available as custom items. These items shall be considered to comply with this standard if they comply with the property requirements listed in Table 1 with the exception of dimensions.

### **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 3909, *Aerospace series — Test fluids and test methods for electrical and optical components and sub-assemblies*

EN 4840-001, *Aerospace series — Heat shrinkable moulded shapes — Part 001: Technical specification*

EN 4840-002, *Aerospace series — Heat shrinkable moulded shapes — Part 002: Index of product standards and product dimensions*

ISO 1817:2005, *Rubber, vulcanized or thermoplastic — Determination of the effect of liquids*

IEC 60757:1983, *Code for designation of colours*

IEC 62329-1, *Heat shrinkable moulded shapes — Part 001: Definitions and general requirements*

IEC 62329-2, *Heat shrinkable moulded shapes — Part 002: Methods of test*

### **3 Terms and definitions**

For the purposes of this document, the terms and definitions given in IEC 62329-1 apply.

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

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

### **4 Required characteristics**

#### **4.1 Dimensions and mass**

According to EN 4840-002.

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