



BSI Standards Publication

## **Aerospace Series - Electrical cables, installation - Protection sleeves - Test methods**

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Part 402: Bending properties

## National foreword

This British Standard is the UK implementation of EN 6059-402:2019.

The UK participation in its preparation was entrusted to Technical Committee ACE/6, Aerospace avionic electrical and fibre optic technology.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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**Aerospace Series - Electrical cables, installation  
- Protection sleeves - Test methods - Part 402:  
Bending properties**

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Luft- und Raumfahrt - Elektrische Leitungen,  
Installation - Schutzschläuche - Prüfverfahren  
- Teil 402: Biegeeigenschaften

This European Standard was approved by CEN on 14 October 2018.

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## European foreword

This document (EN 6059-402:2019) 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 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of an identical text or by endorsement, at the latest by September 2019, and conflicting national standards shall be withdrawn at the latest by September 2019.

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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## 1 Scope

This European Standard specifies a method to determine the bending properties of protection sleeve for electrical cable and cable bundles. It shall be used together with EN 6059-100.

## 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 6059-100, *Aerospace series — Electrical cables, installation — Protection sleeves — Test methods — Part 100: General*

## 3 Terms and definitions

For the purposes of this document, the following terms and definitions 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 Preparation of specimens

A specimen with a minimum length of 600 mm is taken from a finished sleeve.

## 5 Apparatus

A spiral wrapped bending spring which has the nominal inner diameter of the specimen to be tested and capable of bending with a minimum radius (radius is specified as five times the nominal inner diameter, measured to the centerline of the spring) as specified in the product standard. The sleeve shall be applied between two mandrels to bend the sleeve to both sides at the minimum specified bend radius. The sleeve shall be bent by means of a lever with a rotation point just above the mandrels, see Figure 1. The applied mass shall be in accordance with the product standard. A counter to measure the cycles with an interface between lever and counter.