



NSAI
Standards

Irish Standard
I.S. EN 4644-001:2017

Aerospace series - Connector, electrical and optical, rectangular, modular, rectangular inserts, operating temperature 175 °C (or 125 °C) continuous - Part 001: Technical specification

I.S. EN 4644-001:2017

Incorporating amendments/corrigenda/National Annexes issued since publication:

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National Foreword

I.S. EN 4644-001:2017 is the adopted Irish version of the European Document EN 4644-001:2017, Aerospace series - Connector, electrical and optical, rectangular, modular, rectangular inserts, operating temperature 175 °C (or 125 °C) continuous - Part 001: Technical specification

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EUROPEAN STANDARD

EN 4644-001

NORME EUROPÉENNE

EUROPÄISCHE NORM

October 2017

ICS 49.060; 49.090

Supersedes EN 4644-001:2012

English Version

**Aerospace series - Connector, electrical and optical,
rectangular, modular, rectangular inserts, operating
temperature 175 °C (or 125 °C) continuous - Part 001:
Technical specification**

Série aérospatiale - Connecteur, électrique et optique,
rectangulaire, modulaire, à inserts rectangulaires,
température de fonctionnement 175 °C (ou 125 °C)
continu - Partie 001: Spécification technique

Luft- und Raumfahrt - Elektrische und optische
Rechtecksteckverbinder, modular, rechteckige
Kontakteinsätze, Dauerbetriebstemperatur 175 °C
(oder 125 °C) konstant - Teil 001: Technische
Lieferbedingungen

This European Standard was approved by CEN on 12 June 2017.

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

Contents

	Page
European foreword	3
Introduction	4
1 Scope.....	4
2 Normative references.....	4
3 Terms and definitions.....	5
4 Description.....	6
5 Design.....	18
6 Dimensions and masses.....	20
7 Tests.....	80
8 Quality assurance.....	93
9 Designation and marking.....	98
10 Delivery conditions	99
11 Packaging.....	99
12 Storage	99

European foreword

This document (EN 4644-001:2017) 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 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 April 2018, and conflicting national standards shall be withdrawn at the latest by April 2018.

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.

This document supersedes EN 4644-001:2012.

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.

EN 4644-001:2017 (E)**Introduction**

The connectors defined by this standard are suitable for use on board of commercial and military aircraft for both disconnect panel and rack and panel applications in severe environmental conditions.

1 Scope

This European Standard specifies the required characteristics, the condition for qualification, acceptance and quality assurance for electrical and optical rectangular connectors with single or multiple removable rectangular inserts for use in a temperature range from – 65 °C to 175 °C continuous for electrical contact.

This family of connectors is particularly suitable for aeronautic use in zones of severe environmental conditions on board aircraft, applying EN 2282.

Inserts for fiber optic contacts or mixing fiber optic contacts and electrical contacts are described in EN 4639-002.

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 2267-003, *Aerospace series — Cables, electrical, for general purpose — Operating temperatures between – 55 °C and 260 °C — Part 003: Ink jet printable — Product standard*

EN 2282, *Aerospace series — Characteristics of aircraft electrical supplies*

EN 2591 (all parts), *Aerospace series — Elements of electrical and optical connection — Test methods*

EN 3155-002, *Aerospace series — Electrical contacts used in elements of connection — Part 002: List and utilization of contacts*

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

EN 4530-002, *Aerospace series — Sealing sleeves used in elements of connection — Part 002: List and utilization of sealing sleeves*

EN 4639-002, *Aerospace series — Connectors, optical, rectangular, modular, multicontact, 1,25 mm diameter ferrule, with removable alignment sleeve holder — Part 002: List of product standards*

EN 4644-002, *Aerospace series — Connector, electrical and optical, rectangular, modular, rectangular inserts, operating temperature 175 °C (or 125 °C) continuous — Part 002: Specification of performance and contact arrangements*

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

EN 9133, *Aerospace series — Quality Management Systems — Qualification Procedure for Aerospace Standard Products*

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