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Standards

Irish Standard
I.S. EN 4640-001:2009

Aerospace series - Connectors, optical, rectangular, rack and panel, multicontact, 1,25 diameter ferrule, with removable alignment sleeve holder - Part 001: Technical specification

I.S. EN 4640-001:2009

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English Version

Aerospace series - Connectors, optical, rectangular, rack and panel, multicontact, 1,25 diameter ferrule, with removable alignment sleeve holder - Part 001: Technical specification

Série aérospatiale - Connecteurs, optiques, rectangulaires, à contacts multiples, rackables, ferrule diamètre 1,25, équipés d'un porte sleeve démontable - Partie 001: Spécification technique

Luft- und Raumfahrt - Optischer Rechtecksteckverbinder, Gehäuse, Einschub, Steckverbinder, Multipin, Ferrulendurchmesser 1,25 mm, demontierbarer Zentrierhülsenhafter - Teil 001: Technische Lieferbedingungen

This European Standard was approved by CEN on 11 July 2008.

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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 Management Centre has the same status as the official versions.

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Foreword

This document (EN 4640-001:2009) 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of an identical text or by endorsement, at the latest by August 2009, and conflicting national standards shall be withdrawn at the latest by August 2009.

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

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Introduction

This family of fibre optic connectors is derived from ARINC Specification 600 connectors. It is suitable for use on aerospace onboard applications. It provides easy access for optical contact end face cleaning.

The optical contacts are capable of accepting single cable sizes up to a maximum of 2 mm outside diameter.

1 Scope

This standard specifies the general characteristics, the conditions for qualification, acceptance and quality assurance, as well as the test programs and groups for rectangular multipin fibre optic connectors.

2 Normative references

The following referenced documents are indispensable for the application 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 2591-100*, *Aerospace series — Elements of electrical and optical connection — Test methods — Part 100: General*

EN 3197, *Aerospace series — Installation of aircraft electrical and optical interconnection systems*¹

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

EN 4639-101, *Aerospace series — Connectors, optical, rectangular, modular, multicontact, 1,25 mm diameter ferrule, with removable alignment sleeve holder — Part 101: Optical contact for cable EN 4641-100 — Operating temperatures between – 65 °C and 125 °C — Product standard*

EN 4640-002, *Aerospace series — Connectors, optical, rectangular, rack and panel, multicontact, 1,25 diameter ferrule, with removable alignment sleeve holder — Part 002: Specification of performance and contact arrangements*

EN 4640-003, *Aerospace series — Connectors, optical, rectangular, rack and panel, multicontact, 1,25 diameter ferrule, with removable alignment sleeve holder — Part 003: Plug optical connector — Product standard*

EN 4640-004, *Aerospace series — Connectors, optical, rectangular, rack and panel, multicontact, 1,25 diameter ferrule, with removable alignment sleeve holder — Part 004: Receptacle optical connector — Product standard*

EN 9133, *Aerospace series — Quality management systems — Qualification procedure for aerospace standard parts*

ARINC Specification 600, *Air Transport Avionics Equipment Interfaces*²

MIL-I-81969/14, *Installing and removal tools, connector electrical contact, type III, class 2, composition B*³

* And all parts quoted in this standard.

1 Published as ASD Prestandard at the date of publication of this standard.

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3 Published by: Department of Defence (DOD), the Pentagon, Washington, D.C. 20301 USA.

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