BS EN 4641-301:2022

BSI Standards Publication

Aerospace series — Cables, optical 125 µm diameter cladding

Part 301: Tight structure 50/125 µm GI, fibre nominal 1,8 mm, outside diameter — Product standard

bsi.

National foreword

This British Standard is the UK implementation of EN 4641-301:2022. It supersedes BS EN 4641-301:2011, which is withdrawn.

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 committee manager.

Contractual and legal considerations

This publication has been prepared in good faith, however no representation, warranty, assurance or undertaking (express or implied) is or will be made, and no responsibility or liability is or will be accepted by BSI in relation to the adequacy, accuracy, completeness or reasonableness of this publication. All and any such responsibility and liability is expressly disclaimed to the full extent permitted by the law.

This publication is provided as is, and is to be used at the recipient's own risk.

The recipient is advised to consider seeking professional guidance with respect to its use of this publication.

This publication is not intended to constitute a contract. Users are responsible for its correct application.

Published by BSI Standards Limited 2022

ISBN 978 0 539 15848 9

ICS 49.060; 49.090

Compliance with a British Standard cannot confer immunity from legal obligations.

This British Standard was published under the authority of the Standards Policy and Strategy Committee on 31 May 2022.

Amendments/corrigenda issued since publication

Date	Text affected

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 4641-301

March 2022

ICS 49.090

Supersedes EN 4641-301:2011

English Version

Aerospace series - Cables, optical 125 µm diameter cladding - Part 301: Tight structure 50/125 µm GI, fibre nominal 1,8 mm, outside diameter - Product standard

Série aérospatiale - Câbles, optiques, diamètre extérieur de la gaine optique 125 µm - Partie 301 : Câble à structure serrée, fibre à gradient d'indice 50/125 µm, diamètre extérieur 1,8 mm - Norme de produit

Luft- und Raumfahrt - Lichtwellenleiterkabel, Claddingdurchmesser 125 µm - Teil 301: Festaderaufbau GI 50/125 µm, Faser Kabelaußendurchmesser 1,8 mm - Produktnorm

This European Standard was approved by CEN on 25 January 2021.

EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

Ref. No. EN 4641-301:2022 E

Contents

Page

European foreword

This document (EN 4641-301:2022) 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 document 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 September 2022, and conflicting national standards shall be withdrawn at the latest by September 2022.

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 4641-301:2011.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this document: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

1 Scope

This document specifies the general characteristics, conditions for qualification, acceptance and quality assurance for a fibre optic cable with a 50/125 µm Graded Index fibre core, 1,8 mm outside diameter for non pull-proof contact designs.

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 2424, *Aerospace series — Marking of aerospace products*

EN 3475-601, *Aerospace series — Cables, electrical, aircraft use — Test methods — Part 601: Smoke density*

EN 3745- *, *Aerospace series — Fibres and cables, optical, aircraft use — Test methods*

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

EN 4641-001, *Aerospace series — Cables, Optical, 125 µm diameter cladding — Part 001: Technical specification*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 3745-100 apply.

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

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

* All parts quoted in this document.