

**BS EN 13501-6:2014**



**BSI Standards Publication**

# **Fire classification of construction products and building elements**

Part 6: Classification using data from  
reaction to fire tests on electric cables

**BS EN 50575:2014+A1:2016**



**BSI Standards Publication**

**Power, control and  
communication cables —  
Cables for general applications  
in construction works subject  
to reaction to fire requirements**

**bsi.**

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**BS EN 50399:2011**



**BSI Standards Publication**

**Common test methods for  
cables under fire conditions  
— Heat release and smoke  
production measurement  
on cables during flame  
spread test — Test apparatus,  
procedures, results**

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EUROPEAN STANDARD

**EN 60332-1-2**

NORME EUROPÉENNE

EUROPÄISCHE NORM

November 2004

ICS 13.220.40; 29.020; 29.060.20

Supersedes EN 50265-2-1:1998

English version

**Tests on electric and optical fibre cables under fire conditions**  
**Part 1-2: Test for vertical flame propagation**  
**for a single insulated wire or cable -**  
**Procedure for 1 kW pre-mixed flame**  
**(IEC 60332-1-2:2004)**

Essais des câbles électriques  
et à fibres optiques soumis au feu  
Partie 1-2: Essai de propagation verticale  
de la flamme sur conducteur  
ou câble isolé -  
Procédure pour flamme  
à prémélange de 1kW  
(CEI 60332-1-2:2004)

Prüfungen an Kabeln, isolierten Leitungen  
und Glasfaserkabeln im Brandfall  
Teil 1-2: Prüfung der vertikalen  
Flammenausbreitung an einer Ader,  
einer isolierten Leitung oder einem Kabel -  
Prüfverfahren mit 1 kW-Flamme  
mit Gas-/Luftgemisch  
(IEC 60332-1-2:2004)

This European Standard was approved by CENELEC on 2004-09-01. CENELEC 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 Central Secretariat or to any CENELEC member.

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Comité Européen de Normalisation Electrotechnique  
Europäisches Komitee für Elektrotechnische Normung

**Central Secretariat: rue de Stassart 35, B - 1050 Brussels**

## **Annex ZA** (normative)

### **Normative references to international publications with their corresponding European publications**

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.

NOTE Where an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60332-1-1	- <sup>1)</sup>	Tests on electric and optical fibre cables under fire conditions Part 1-1: Test for vertical flame propagation for a single insulated wire or cable – Apparatus	EN 60332-1-1	2004 <sup>2)</sup>
IEC 60695-4	- <sup>1)</sup>	Fire hazard testing Part 4: Terminology concerning fire tests	EN 60695-4	1995 <sup>2)</sup>
IEC Guide 104	- <sup>1)</sup>	The preparation of safety publications and the use of basic safety publications and group safety publications	-	-

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<sup>1)</sup> Undated reference.

<sup>2)</sup> Valid edition at date of issue.



IEC 60754-2

Edition 2.0 2011-11

# INTERNATIONAL STANDARD

## NORME INTERNATIONALE

GROUP SAFETY PUBLICATION  
PUBLICATION GROUPÉE DE SÉCURITÉ

**Test on gases evolved during combustion of materials from cables –  
Part 2: Determination of acidity (by pH measurement) and conductivity**

**Essai sur les gaz émis lors de la combustion des matériaux prélevés sur  
câbles –  
Partie 2: Détermination de la conductivité et de l'acidité (par mesure du pH)**

INTERNATIONAL  
ELECTROTECHNICAL  
COMMISSION

COMMISSION  
ELECTROTECHNIQUE  
INTERNATIONALE

PRICE CODE  
CODE PRIX

R





IEC 60794-1-21

Edition 1.0 2015-03

# INTERNATIONAL STANDARD



Optical fibre cables –  
Part 1-21: Generic specification – Basic optical cable test procedures –  
Mechanical test methods



# IEC 60794-1-22

Edition 2.0 2017-10

# INTERNATIONAL STANDARD



**Optical fibre cables –  
Part 1-22: Generic specification – Basic optical cable test procedures –  
Environmental test methods**

I n t e r n a t i o n a l   T e l e c o m m u n i c a t i o n   U n i o n

# ITU-T

TELECOMMUNICATION  
STANDARDIZATION SECTOR  
OF ITU

# G.652

(11/2016)

SERIES G: TRANSMISSION SYSTEMS AND MEDIA,  
DIGITAL SYSTEMS AND NETWORKS

Transmission media and optical systems characteristics –  
Optical fibre cables

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## Characteristics of a single-mode optical fibre and cable

Recommendation ITU-T G.652

**NORME  
INTERNATIONALE  
INTERNATIONAL  
STANDARD**

**CEI  
IEC**

**61034-2**

Troisième édition  
Third edition  
2005-04

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PUBLICATION GROUPEE DE SÉCURITÉ  
GROUP SAFETY PUBLICATION

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**Mesure de la densité de fumées  
dégagées par des câbles brûlant  
dans des conditions définies –**

**Partie 2:  
Procédure d'essai et exigences**

**Measurement of smoke density of cables  
burning under defined conditions –**

**Part 2:  
Test procedure and requirements**



Numéro de référence  
Reference number  
CEI/IEC 61034-2:2005





# IEC 60794-5-10

Edition 1.0 2014-02

# INTERNATIONAL STANDARD

# NORME INTERNATIONALE



**Optical fibre cables –**

**Part 5–10: Family specification – Outdoor microduct optical fibre cables, microducts and protected microducts for installation by blowing**

**Câbles à fibres optiques –**

**Partie 5–10: Spécification de famille – Câbles extérieurs à fibres optiques en micro-conduit, micro-conduits et micro-conduits protégés pour installation par soufflage**





IEC 60794-4-20

Edition 2.0 2018-08

# INTERNATIONAL STANDARD

## NORME INTERNATIONALE



**Optical fibre cables –**

**Part 4-20: Sectional specification – Aerial optical cables along electrical power lines – Family specification for ADSS (all dielectric self-supported) optical cables**

**Câbles à fibres optiques –**

**Partie 4-20: Spécification intermédiaire – Câbles optiques aériens le long des lignes électriques de puissance – Spécification de famille pour les câbles optiques autoporteurs entièrement diélectriques (ADSS)**





IEC 60794-3-20

Edition 3.0 2016-09

# INTERNATIONAL STANDARD

## NORME INTERNATIONALE



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**Optical fibre cables –**

**Part 3-20: Outdoor cables – Family specification for self-supporting aerial telecommunication cables**

**Câbles à fibres optiques –**

**Partie 3-20: Câbles extérieurs – Spécification de famille pour les câbles de télécommunication aériens autoporteurs**



IEC 60794-3-11

Edition 2.0 2010-06

# INTERNATIONAL STANDARD



**Optical fibre cables –  
Part 3-11: Outdoor cables – Product specification for duct, directly buried, and  
lashed aerial single-mode optical fibre telecommunication cables**



IEC 60794-3-10

Edition 3.0 2015-01

# INTERNATIONAL STANDARD

## NORME INTERNATIONALE



**Optical fibre cables –**

**Part 3-10: Outdoor cables – Family specification for duct, directly buried or  
lashed aerial optical telecommunication cables**

**Câbles à fibres optiques –**

**Partie 3-10: Câbles extérieurs – Spécification de famille pour les câbles optiques  
de télécommunication destinés à être installés dans des conduites, directement  
enterrés ou attachés en aérien**



IEC 60794-1-23

Edition 2.0 2019-10

# INTERNATIONAL STANDARD

## NORME INTERNATIONALE



**Optical fibre cables –**

**Part 1-23: Generic specification – Basic optical cable test procedures – Cable element test methods**

**Câbles à fibres optiques –**

**Partie 1-23: Spécification générique – Procédures fondamentales d'essai des câbles optiques – Méthodes d'essai des éléments de câble**

