

# INTERNATIONAL STANDARD

## NORME INTERNATIONALE



**Optical fibre cables –  
Part 3-40: Outdoor cables – Family specification for cables for storm and  
sanitary sewers**

**Câbles à fibres optiques –  
Partie 3-40: Câbles extérieurs – Spécification de famille pour les câbles destinés  
aux évacuations d'eaux sanitaires et pluviales**



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## OPTICAL FIBRE CABLES –

**Part 3-40: Outdoor cables –  
Family specification for cables for storm and sanitary sewers**

## FOREWORD

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IEC 60794-3-40 has been prepared by subcommittee 86A: Fibres and cables, of IEC technical committee 86: Fibre optics. It is an International Standard.

This second edition cancels and replaces the first edition published in 2008. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- a) this document follows the new structure for family specifications: symbols and abbreviations were included in Clause 3, and Clause 4 became the General requirements with 4.1 Optical fibres, 4.2 Cable element and 4.3 Optical fibre cable construction;
- b) Annex D has been removed as it is part of IEC TR 62691;
- c) this document has been streamlined by cross-referencing IEC 60794-1-1, IEC 60793-2, IEC 60794-3 and the IEC 60794-1-2x series;
- d) the fibre strain allowance for tensile tests was updated;

e) characteristics Table 5, Table 6, Table 7 were moved to the Annex A (informative).

The text of this International Standard is based on the following documents:

Draft	Report on voting
86A/2189/FDIS	86A/2191/RVD

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at [www.iec.ch/members\\_experts/refdocs](http://www.iec.ch/members_experts/refdocs). The main document types developed by IEC are described in greater detail at [www.iec.ch/standardsdev/publications](http://www.iec.ch/standardsdev/publications).

A list of all parts in the IEC 60794 series, published under the general title *Optical fibre cables*, can be found on the IEC website.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under [webstore.iec.ch](http://webstore.iec.ch) in the data related to the specific document. At this date, the document will be

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## OPTICAL FIBRE CABLES –

### Part 3-40: Outdoor cables – Family specification for cables for storm and sanitary sewers

#### 1 Scope

This part of IEC 60794 is a family specification that covers sewer cables and conduits for installation by blowing and/or pulling in man accessible and non-man accessible storm and sanitary sewers. Systems built with components covered by this document are subject to the requirements of sectional specification IEC 60794-3.

Sewer cable and conduit constructions need to meet the different requirements of the sewer operating companies and/or associations regarding chemical, environmental, operational, cleaning and in general maintenance conditions.

Preferential applications, describing sewer cable characteristics versus methods of installation is reported in Annex A and Annex B for non-man accessible sewer.

Clause 5 describes characteristics of sewer cables and conduits for installation by blowing, pulling or other means in storm and sanitary sewers.

Detail specifications can be prepared on the basis of this family specification.

It is important that acceptance criteria are interpreted with respect to this consideration. The number of fibres tested is representative of the sewer cable and is agreed between the customer and the supplier.

#### 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.

IEC 60793-2, *Optical fibres – Part 2: Product specifications – General*

IEC 60794-1-1, *Optical fibre cables – Part 1-1: Generic specification – General*

IEC 60794-1-2, *Optical fibre cables – Part 1-2: Generic specification – Basic optical cable test procedures – General guidance*

IEC 60794-1-21, *Optical fibre cables – Part 1-21: Generic specification – Basic optical cable test procedures – Mechanical tests methods*

IEC 60794-1-22, *Optical fibre cables – Part 1-22: Generic specification – Basic optical cable test procedures – Environmental tests methods*

IEC 60794-1-23, *Optical fibre cables – Part 1-23: Generic specification – Basic optical cable test procedures – Cable element test methods*

IEC 60794-1-215, *Optical fibre cables – Part 1-215: Generic specification – Basic optical cable test procedures – Environmental test methods – Cable external freezing test, Method F15*