(PREVIEW) Indian Standard OPTICAL FIBRE CABLES

PART 1 GENERIC SPECIFICATION

Section 1 General

1 Scope

This part of IEC 60794 applies to optical fibre cables for use with telecommunication equipment and devices employing similar techniques and to cables having a combination of both optical fibres and electrical conductors.

The object of this standard is to establish uniform generic requirements for the geometrical, transmission, material, mechanical, ageing (environmental exposure) and climatic properties of optical fibre cables, and electrical requirements, where appropriate.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of IEC 60794. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this part of IEC 60794 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of IEC and ISO maintain registers of currently valid International Standards.

IEC 60189-1:1986, Low-frequency cables and wires with PVC insulation and PVC sheath - Part 1: General test and measuring methods

IEC 60331-11:1999, Tests for electric cables under fire conditions - Circuit integrity - Part 11: Apparatus - Fire alone at a flame temperature of at least 750 °C

IEC 60331-21:1999, Tests for electric cables under fire conditions - Circuit integrity - Part 21: Procedures and requirements - Cables of rated voltage up to and including 0,6/1,0 kV

IEC 60332-1:1993, Tests on electric cables under fire conditions - Part 1: Test on a single vertical insulated wire or cable

IEC 60332-3:1992, Tests on electric cables under fire conditions - Part 3: Tests on bunched wires or cables

IEC 60754-1:1994, Test on gases evolved during combustion of materials from cables - Part 1: Determination of the amount of halogen acid gas

IEC 60754-2:1991, Test on gases evolved during combustion of electric cables - Part 2: Determination of degree of acidity of gases evolved during the combustion of materials taken from electric cables by measuring pH and conductivity

IEC 60793-1-1:1995, Optical fibres - Part 1: Generic specification - Section 1: General

IEC 60793-1-4:1995, Optical fibres - Part 1: Generic specification - Section 4: Measuring methods for transmission and optical characteristics

IEC 60793-1-20:2001, Optical Fibres - Part 1-20: Measurement and test procedures - Fibre geometry measurement methods

IEC 60793-1-21:2001, Optical Fibres - Part 1-21: Measurement and test procedures - Coating geometry measurement methods

IEC 60793-1-22:2001, Optical Fibres - Part 1-22: Measurement and test procedures - Length measurement methods

IEC 60793-1-40:2001, Optical fibres - Part 1-40: Measurement methods and test procedures - Attenuation

IEC 60793-1-41:2001, Optical fibres - Part 1-41: Measurement methods and test procedures - Bandwidth

IEC 60793-1-42:2001, Optical fibres - Part 1-42: Measurement methods and test procedures - Chromatic dispersion

IEC 60793-1-43:2001, Optical fibres - Part 1-43: Measurement methods and test procedures - Numerical aperture

IEC 60793-1-44:2001, Optical fibres - Part 1-44: Measurement methods and test procedures - Cut-off wavelength

IEC 60793-1-45:2001, Optical fibres - Part 1-45: Measurement methods and test procedures - Mode field diameter

IEC 60793-1-46:—, Optical fibres - Part 1-46: Measurement and test procedures - Monitoring of changes in optical transmittance

IEC 60793-2:1998, Optical fibres - Part 2: Product specifications

IEC 60794-1-2:1999, Optical fibre cables - Part 1-2: Generic specification - Basic optical cable test procedures

IEC 60811-1-1:1993, Common test methods for insulating and sheathing materials of electric cables - Part 1: Methods for general application - Section 1: Measurement of thickness and overall dimensions - Tests for determining the mechanical properties

IEC 60885-1:1987, Electrical test methods for electric cables. Part 1: Electrical tests for cables, cords and wires for voltages up to and including 450/750 V

IEC 61034-1:1997, Measurement of smoke density of cables burning under defined conditions - Part 1: Test apparatus

IEC 61034-2:1997, Measurement of smoke density of cables burning under defined conditions - Part 2: Test procedure and requirement