

INTERNATIONAL STANDARD

IEC 60189-2

1981

AMENDMENT 2

1996-11

Amendment 2

Low-frequency cables and wires with PVC insulation and PVC sheath –

Part 2:

Cables in pairs, triples, quads and quintuples for inside installations

*This **English-language** version is derived from the original **bilingual** publication by leaving out all French-language pages. Missing page numbers correspond to the French-language pages.*

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Commission Electrotechnique Internationale
International Electrotechnical Commission
Международная Электротехническая Комиссия

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D

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FOREWORD

This amendment has been prepared by subcommittee 46C: Wires and symmetric cables, of IEC technical committee 46: Cables, wires, waveguides, r.f. connectors, and accessories for communication and signalling.

The text of this amendment is based on the following documents:

FDIS	Report on voting
46C/255/FDIS	46C/257/RVD

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

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2.5.2 Unit cables

Add, after the first sentence, the following:

In cables for digital exchanges the cabling elements, if necessary, shall be bunched together preferably in units of two, four or eight elements.

2.7 Total number of elements

Replace the first paragraph by the following new paragraph:

When the units of 20 cabling elements or the subunits of five or ten cabling elements are used, the preferred total number of cabling elements shall be a multiple of five elements for cables comprising a total of up to 30 elements ; a multiple of ten elements for cables comprising a total of more than 30, but not more than 60 elements ; and a multiple of 20 elements for cables comprising a total of more than 60 elements. When the units of two, four or eight cabling elements are used, the preferred total number of cabling elements shall be a multiple of four elements for cables comprising a total of up to 24 elements and a multiple of eight elements for cables comprising a total of more than 24 elements.

2.8 Identification of the cabling elements and of the insulated conductors

Replace the third sentence by the following:

The code is given in appendix A. For cables with unit stranding of 20 cabling elements or with subunits of five or ten cabling elements, the full colour code, or counting block n° 1 only may be used. For cables with unit stranding of two, four or eight cabling elements, the colour code is the same given in appendix A, with the exclusion of the colours corresponding to the cabling elements 5, 10, 15, 20, etc.

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2.13.2 *Sheath thickness*

Replace the first sentence by the following new text:

The sheath shall be perfectly continuous having a thickness as uniform as possible and not less than the value specified in appendix D for cables with unit stranding of 20 cabling elements or with sub-units of five or ten cabling elements and in appendix E for cables with unit stranding of four or eight cabling elements.

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2.14.1 *Diameter of cable over sheath*

Change at the end of the second sentence, "E" to "F".

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4.3 *Resistance to flame propagation*

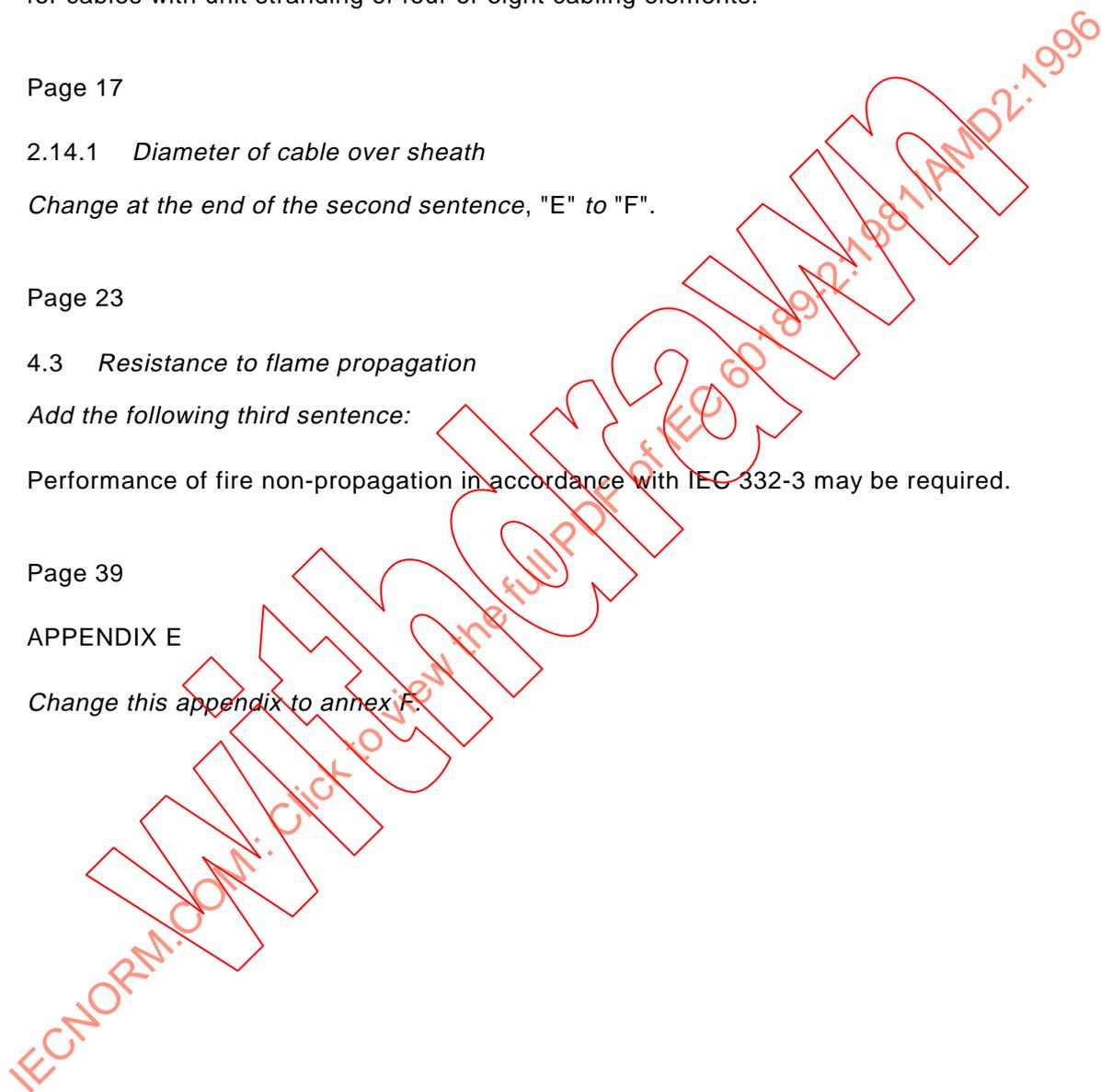
Add the following third sentence:

Performance of fire non-propagation in accordance with IEC 332-3 may be required.

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APPENDIX E

Change this appendix to annex F.



Insert the following new annex E:

Annex E

Cables in pairs for digital exchanges (with screening)

Number of cabling elements	0,4 mm diameter conductor						0,5 mm diameter conductor					
	Minimum sheath thickness			Maximum overall diameter of cable			Minimum sheath thickness			Maximum overall diameter of cable		
	(mm)			(mm) ¹⁾			(mm)			(mm) ¹⁾		
	Pairs			Pairs			Pairs			Pairs		
2	0,4			5			0,4			5,5		
4	0,4			6			0,6			6,5		
8	0,4			7			0,7			8,5		
12	0,6			8,5			0,7			9,5		
16	0,6			9,5			0,7			10,5		
24	0,7			11,5			0,8			12,5		
32	0,7			12,5			0,9			14,5		
48	0,7			14,5			–			–		
64	–			–			0,9			19		
128	0,9			22,5			–			–		

NOTE – For unscreened cables, the maximum outer diameter shall be reduced by 0,5 mm.

¹⁾ For engineering calculation purposes.