

INTERNATIONAL STANDARD

AMENDMENT 1

**Multicore and symmetrical pair/quad cables for digital communications –
Part 6: Symmetrical pair/quad cables with transmission characteristics up to
1 000 MHz – Work area wiring – Sectional specification**



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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, R.F. and microwave passive components and accessories.

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

CDV	Report on voting
46C/955/CDV	46C/968/RVC

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

The committee has decided that the contents of this amendment and the base publication will remain unchanged until the stability date indicated on the IEC web site under "<http://webstore.iec.ch>" in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

A bilingual version of this publication may be issued at a later date.

2 Normative references

Add the following new reference to the existing list:

IEC 62153-4-5, *Metallic communication cables test methods – Part 4-5: Electromagnetic compatibility (EMC) – Coupling or screening attenuation – Absorbing clamp method*

6.2.2.2 Resistance unbalance between pairs

Delete this subclause.

6.2.7 Transfer impedance

Add the following new note after Table 2:

NOTE The screen longitudinal d.c. resistance of 30 mΩ/m or less is an indicator for fulfilling transfer impedance requirement of Grade 2. A measurement of d.c. resistance cannot replace a transfer impedance measurement.

6.2.8 Coupling attenuation

Replace the existing text of this subclause, including Table 3, by the following:

Four types of performance are recognized for coupling attenuation. When measured using the absorbing clamp method (IEC 62153-4-5) or the triaxial method (IEC 62153-4-9), the coupling attenuation in the frequency range from $f = 30$ MHz to 1 000 MHz shall meet the requirements indicated in Table 3. For screened cables, Type II is the minimum coupling attenuation requirement.

Table 3 – Coupling attenuation

Coupling attenuation type	Frequency range MHz	Coupling attenuation dB
Type I	30 to 100	> 85
Type I	100 to 1 000	$> 85 - 20 \times \log_{10} (f/100)$
Type Ib	30 to 100	> 70
Type Ib	100 to 1 000	$> 70 - 20 \times \log_{10} (f/100)$
Type II	30 to 100	> 55
Type II	100 to 1 000	$> 55 - 20 \times \log_{10} (f/100)$
Type III	30 to 100	> 40
Type III	100 to 1 000	$> 40 - 20 \times \log_{10} (f/100)$

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