

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Connectors for electrical and electronic equipment –
Part 6: Detail specification for 2-way and 4-way (data/power), shielded, free
and fixed connectors for power and data transmission with frequencies
up to 600 MHz**

**Connecteurs pour équipements électriques et électroniques –
Partie 6: Spécification particulière pour les fiches et les embases blindées
à 2 voies et 4 voies (données/puissance) pour la transmission de données
et de puissance à des fréquences jusqu'à 600 MHz**



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CONNECTORS FOR ELECTRICAL AND ELECTRONIC EQUIPMENT –**Part 6: Detail specification for 2-way and 4-way (data/power),
shielded, free and fixed connectors for power and data
transmission with frequencies up to 600 MHz**

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

FDIS	Report on voting
48B/2764/FDIS	48B/2777/RVD

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

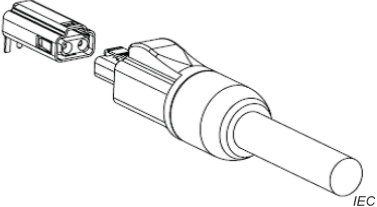
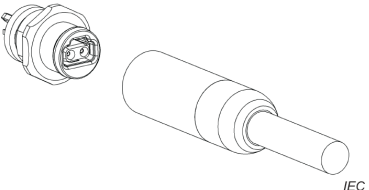
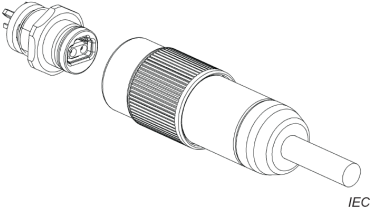
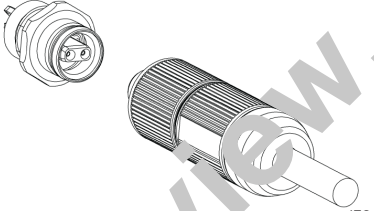
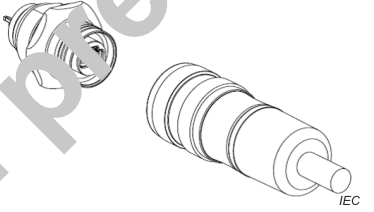
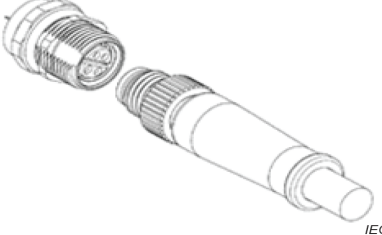
This document has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all parts in the IEC 63171 series, published under the general title *Connectors for electrical and electronic equipment*, 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 "<http://webstore.iec.ch>" in the data related to the specific document. At this date, the document will be

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 <p align="right">IEC</p>	<p align="center">2-way data IP65/IP67, snap-in locking</p>
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 <p align="right">IEC</p>	<p align="center">2-way data IP65/IP67, M8 screw locking</p>
 <p align="right">IEC</p>	<p align="center">2-way data IP65/IP67, M12 screw locking or push-pull locking (or both)</p>
 <p align="right">IEC</p>	<p align="center">4-way (2 power + 2 data) IP65/IP67, M8 screw locking</p>

CONNECTORS FOR ELECTRICAL AND ELECTRONIC EQUIPMENT –

Part 6: Detail specification for 2-way and 4-way (data/power), shielded, free and fixed connectors for power and data transmission with frequencies up to 600 MHz

1 Scope

This part of IEC 63171 covers 2-way and 4-way (data/power) shielded free and fixed connectors for data transmission with frequencies up to 600 MHz and specifies the common dimensions, mechanical, electrical and transmission characteristics and environmental requirements as well as test specifications respectively.

This document specifies several properties overlapping with specifications in the IEC 63171 series which have been drafted later. In case of conflict the specifications within this document prevail.

NOTE The connectors are intended to be used for single-pair Ethernet (SPE) according to the following IEEE Standards: 10BaseT1 (IEEE 802.3cg), 100Base-T1 (IEEE 802.3bw), 1000Base-T1 (IEEE 802.3bp), and optionally with Power over Data line (PoDL) power supply according to IEEE 802.3bu.

2 Normative references

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IEC 60050-581, *International Electrotechnical Vocabulary (IEV) – Chapter 581: Electromechanical components for electronic equipment*

IEC 60068-1, *Environmental testing – Part 1: General and guidance*

IEC 60068-2-38, *Environmental testing – Part 2-38: Tests – Test Z/AD: Composite temperature/humidity cyclic test*

IEC 60352 (all parts), *Solderless connections*

IEC 60512-1, *Connectors for electrical and electronic equipment – Tests and measurements – Part 1: General specification*

IEC 60512-1-1, *Connectors for electronic equipment – Tests and measurements – Part 1-1: General examination – Test 1a: Visual examination*

IEC 60512-1-2, *Connectors for electronic equipment – Tests and measurements – Part 1-2: General examination – Test 1b: Examination of dimension and mass*

IEC 60512-2-1, *Connectors for electronic equipment – Tests and measurements – Part 2-1: Electrical continuity and contact resistance tests – Test 2a: Contact resistance – Millivolt level method*

IEC 60512-3-1, *Connectors for electronic equipment – Tests and measurements – Part 3-1: Insulation tests – Test 3a: Insulation resistance*