

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Connectors for electrical and electronic equipment – Product requirements –
Part 3-119: Rectangular connectors – Detail specification for shielded and unshielded,
free and fixed 10-way connectors with push-pull coupling for industrial environments
for data transmission with frequencies up to 100 MHz**

**Connecteurs pour équipements électriques et électroniques – Exigences de produit –
Partie 3-119: Connecteurs rectangulaires – Spécification particulière pour les fiches et
les embases rectangulaires écrantées et non écrantées à 10 pôles, à accouplement
pousser-tirer, destinées à être utilisées dans des environnements industriels, pour les
transmissions de données avec des fréquences allant jusqu'à 100 MHz**



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ELECTROTECHNICAL
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INTERNATIONALE

ICS 31.220.10

ISBN 978-2-8322-8929-7

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**CONNECTORS FOR ELECTRICAL AND ELECTRONIC EQUIPMENT –
PRODUCT REQUIREMENTS –****Part 3-119: Rectangular connectors – Detail specification for shielded and
unshielded, free and fixed 10-way connectors with push-pull coupling
for industrial environments for data transmission with frequencies
up to 100 MHz**

FOREWORD

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International Standard IEC 61076-3-119 has been prepared by subcommittee 48B: Electrical connectors, of IEC technical committee 48: Electrical connectors and mechanical structures for electrical and electronic equipment.

This first edition cancels and replaces IEC PAS 61076-3-119 published in 2013. This edition constitutes a technical revision.

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

FDIS	Report on voting
48B/2602/FDIS	48B/2617/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 61076 series, published under the general title *Connectors for electronic equipment – Product requirements*, 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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INTRODUCTION

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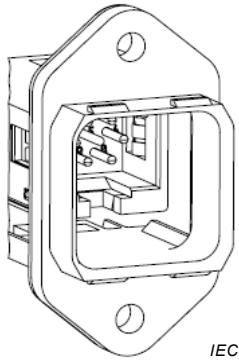
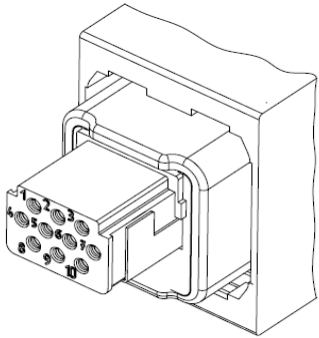
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<p>Outline drawing</p>  <p>IEC</p>	 <p>IEC</p>	<p>10-way rectangular connector</p> <p>round contacts Ø 1 mm</p> <p>screw or crimp terminations, solder or printed board connections upon agreement between manufacturer and user</p> <p>shielded and unshielded, fixed and removable</p> <p>for data transmission with frequencies up to 100 MHz</p> <p>with push-pull coupling</p>
		Fixed and removable connectors, for industrial environments

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CONNECTORS FOR ELECTRICAL AND ELECTRONIC EQUIPMENT – PRODUCT REQUIREMENTS –

Part 3-119: Rectangular connectors – Detail specification for shielded and unshielded, free and fixed 10-way connectors with push-pull coupling for industrial environments for data transmission with frequencies up to 100 MHz

1 Scope

This part of IEC 61076-3 establishes specifications and test requirements for 10-way shielded and unshielded rectangular, free and fixed connectors, with push-pull coupling, for data transmission with frequencies up to 100 MHz and for use in industrial environments.

This document specifies free and fixed connectors with round contacts, suitable for screw or crimp terminations. Other terminations techniques, such as solder or printed board connections are upon agreement between manufacturer and user. The free and fixed connectors have a push-pull locking mechanism for IP65 and IP67 protection according to IEC 60529.

Connectors according this document are without breaking capacity COC according to 3.9 of IEC 61984:2008, therefore they are not intended to be engaged or disengaged in normal use when live or under load, if not otherwise specified by the manufacturer.

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 60050-581:2008, *International Electrotechnical Vocabulary – Part 581: Electromechanical components for electronic equipment*

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

IEC 60068-2-20:2008, *Environmental testing – Part 2-20: Tests – Test T: Test methods for solderability and resistance to soldering heat of devices with leads*

IEC 60352-2, *Solderless connections – Part 2: Crimped connections – General requirements, test methods and practical guidance*

IEC 60352-5, *Solderless connections – Part 5: Press-in connections – General requirements, test methods and practical guidance*

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*