

INTERNATIONAL STANDARD

**Connectors for electrical and electronic equipment – Product requirements –
Part 2-111: Circular connectors – Detail specification for power connectors with
M12 screw-locking**





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M12 screw-locking**

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

ICS 31.220.10

ISBN 978-2-8322-5109-6

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**CONNECTORS FOR ELECTRICAL AND ELECTRONIC EQUIPMENT –
PRODUCT REQUIREMENTS –**

**Part 2-111: Circular connectors –
Detail specification for power connectors with M12 screw-locking**

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International Standard IEC 61076-2-111 has been prepared by subcommittee 48B: Electrical connectors, of IEC technical committee 48: Electrical connectors and mechanical structures for electrical and electronic equipment.

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

| FDIS | Report on voting |
|---------------|------------------|
| 48B/2601/FDIS | 48B/2616/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 electrical and electronic equipment – Product requirements*, can be found on the IEC website.

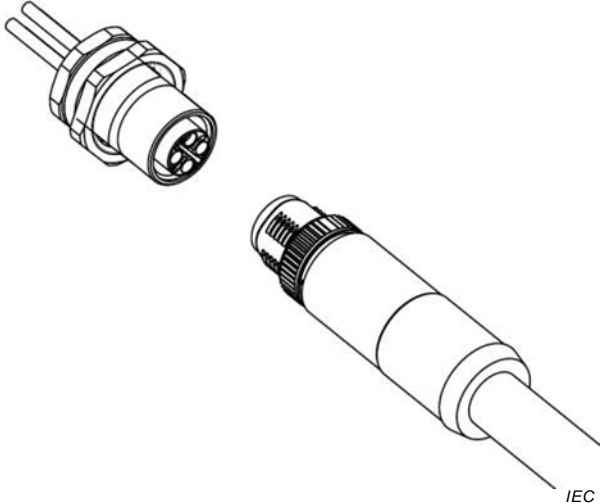
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| <p>DETAIL SPECIFICATION in accordance with IEC 61076-1</p> | |
|  | <p>Circular connectors</p> <p>Power connectors with M12 screw-locking</p> <p>Male and female connectors</p> <p>Male and female contacts</p> <p>Rewireable – Non-rewireable</p> <p>Free cable connectors</p> <p>Straight and right angle connectors</p> <p>Fixed connectors</p> <p>Flange mounting</p> <p>Single hole mounting</p> |

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CONNECTORS FOR ELECTRICAL AND ELECTRONIC EQUIPMENT – PRODUCT REQUIREMENTS –

Part 2-111: Circular connectors – Detail specification for power connectors with M12 screw-locking

1 Scope

This part of IEC 61076-2 specifies 4 to 6-way circular connectors with M12 screw-locking with current ratings up to 16 A and voltage ratings of 63 V or 630 V, that are typically used for power supply and power applications in industrial premises. These connectors consist of both fixed and free connectors either rewirable or non-rewirable, with M12 screw-locking. Male connectors have round contacts Ø1,0 mm and Ø1,5 mm.

The different codings provided by this document prevent the mating of accordingly coded male or female connectors to any other similarly sized interfaces, covered by other standards and the cross-mating between the different codings provided by this document.

NOTE M12 is the dimension of the thread of the screw-locking mechanism of these circular connectors.

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 60068-2-60, *Environmental testing – Part 2-60: Tests – Test Ke: Flowing mixed gas corrosion test*

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

IEC 60352-3, *Solderless connections – Part 3: Solderless accessible insulation displacement connections – General requirements, test methods and practical guidance*

IEC 60352-4, *Solderless connections – Part 4: Solderless non-accessible insulation displacement 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 60352-6, *Solderless connections – Part 6: Insulation piercing connections – General requirements, test methods and practical guidance*

IEC 60352-7, *Solderless connections – Part 7: Spring clamp connections – General requirements, test methods and practical guidance*