

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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**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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CONTENTS

FOREWORD.....	6
1 Scope.....	9
2 Normative references	9
3 Terms and definitions	11
4 Technical information	12
4.1 Systems of levels.....	12
4.1.1 Performance levels	12
4.1.2 Compatibility levels, according to IEC 61076-1	12
4.2 Classification into climatic categories.....	12
4.3 Creepage and clearance distances	12
4.4 Current-carrying capacity	12
4.5 Marking.....	13
4.6 Safety aspects	13
5 Dimensional information	13
5.1 General.....	13
5.2 Survey of styles and variants	14
5.2.1 General	14
5.2.2 Contact terminations.....	14
5.2.3 Number of contacts or contact cavities	14
5.2.4 Fixed connectors	15
5.2.5 Free connectors.....	21
5.3 Interface dimensions.....	28
5.3.1 E-coding	28
5.3.2 F-coding	31
5.3.3 K-coding	35
5.3.4 L-coding	39
5.3.5 M-coding	43
5.3.6 S-coding	47
5.3.7 T-coding	50
5.4 Engagement (mating) information	52
5.5 Gauges – Sizing gauges and retention force gauges.....	54
6 Characteristics	55
6.1 General.....	55
6.2 Contact assignment and other definitions.....	55
6.3 Classification into climatic category	55
6.4 Electrical characteristics	55
6.4.1 Creepage and clearance distances	55
6.4.2 Voltage proof.....	57
6.4.3 Rated voltage – Rated impulse voltage – Pollution degree	57
6.4.4 Current-carrying capacity.....	58
6.4.5 Contact resistance.....	58
6.4.6 Insulation resistance.....	59
6.4.7 Impedance.....	59
6.5 Mechanical characteristics	59
6.5.1 Mechanical operation.....	59
6.5.2 Effectiveness of connector coupling devices	59

6.5.3	Insertion and withdrawal forces	59
6.5.4	Contact retention in insert	59
6.5.5	Polarizing method.....	60
6.6	Other characteristics.....	60
6.6.1	Vibration (sinusoidal)	60
6.6.2	Shock	60
6.6.3	Degree of protection provided by enclosures (IP-code)	60
6.6.4	Screen and shielding properties.....	60
6.7	Environmental aspects – Marking of insulation material (plastics)	60
7	Test schedule	61
7.1	General.....	61
7.1.1	Overview	61
7.1.2	Climatic category.....	61
7.1.3	Creepage and clearance distances	61
7.1.4	Arrangement for contact resistance measurements	61
7.1.5	Arrangement for dynamic stress tests (vibration)	62
7.1.6	Arrangement for testing static load; axial	63
7.1.7	Wiring of specimens	63
7.2	Test schedule	63
7.2.1	Test group P – Preliminary	63
7.2.2	Test group AP – Dynamic/ Climatic	64
7.2.3	Test group BP – Mechanical endurance	67
7.2.4	Test group CP – Electrical load	68
7.2.5	Test group DP – Chemical resistivity	69
7.2.6	Test group EP – Connection method tests	69
Annex A (informative)	Diameter of the female connector body and orientation of coding	70
A.1	Diameter of the female connector body	70
A.2	Orientation of coding.....	70
Figure 1	– Fixed connector, male contacts, mounting with thread M12 x 1, square flange 25 mm, front mounting.....	15
Figure 2	– Fixed connector, male contacts, mounting with thread M12 x 1, square flange 20 mm, front mounting.....	16
Figure 3	– Fixed connector, male contacts, mounting with thread M12 x 1, with wire ends, single hole mounting thread M16 x 1,5	16
Figure 4	– Fixed connector, male contacts, mounting with thread M12 x 1, with wire ends, single hole mounting thread M20 x 1,5	17
Figure 5	– Fixed connector, male contacts, mounting with thread M12 x 1 with wire ends, single hole mounting thread M16 x 1,5, mounting orientation	17
Figure 6	– Fixed connector, male contacts, mounting with thread M12 x 1, with wire ends, single hole mounting thread M20 x 1,5, mounting orientation	18
Figure 7	– Fixed connector, female contacts, mounting with thread M12 x 1, with wire ends, single hole mounting thread M16 x 1,5.....	18
Figure 8	– Fixed connector, female contacts, mounting with thread M12 x 1, with wire ends, single hole mounting thread M20 x 1,5.....	19
Figure 9	– Fixed connector, female contacts, mounting with thread M12 x 1, with wire ends, single hole mounting thread M16 x 1,5.....	19
Figure 10	– Fixed connector, female contacts, mounting with thread M12 x 1, with wire ends, single hole mounting thread M20 x 1,5, mounting orientation	20

Figure 11 – Fixed connector, male contacts, mounting with thread M12 × 1, with wire ends, single hole mounting thread M16 × 1,5, mounting orientation	20
Figure 12 – Fixed connector, female contacts, mounting with thread M12 × 1, with wire ends, single hole mounting thread M16 × 1,5, mounting orientation	21
Figure 13 – Rewireable connector, male contacts, straight version, with locking nut	22
Figure 14 – Rewireable connector, male contacts, right angled version, with locking nut.....	23
Figure 15 – Non-rewireable connector, male contacts, straight version, with locking nut	23
Figure 16 – Non-rewireable connector, male contacts, right angled version, with locking nut	24
Figure 17 – Rewireable connector, female contacts, straight version, with locking nut	25
Figure 18 – Rewireable connector, female contacts, right angled version, with locking nut	26
Figure 19 – Non-rewireable connector, female contacts, straight version, with locking nut	27
Figure 20 – Non-rewireable connector, female contacts, right angled version, with locking nut	28
Figure 21 – Male side E-coding.....	29
Figure 22 – Female side E-coding.....	30
Figure 23 – Contact position for E-coding front view	31
Figure 24 – Male side F-coding.....	32
Figure 25 – Female side F-coding.....	33
Figure 26 – Contact position for F-coding front view	34
Figure 27 – K-coding male side.....	35
Figure 28 – K-coding female side.....	37
Figure 29 – Contact position K-coding front view	38
Figure 30 – L-coding male side with one female contact	39
Figure 31 – L-coding female side with one male contact	41
Figure 32 – Contact position L-coding front view	42
Figure 33 – M-coding male site	43
Figure 34 – M-coding female side	45
Figure 35 – Contact position M-coding front view	46
Figure 36 – S-coding male side.....	47
Figure 37 – S-coding female side.....	49
Figure 38 – Contact position S-coding front view	49
Figure 39 – T-coding male side.....	50
Figure 40 – Contact position T-coding front view.....	52
Figure 41 – Engagement (mating) information.....	52
Figure 42 – Gauge dimensions	54
Figure 43 – Contact resistance arrangement.....	62
Figure 44 – Dynamic stress test arrangement	63
Figure A.1 – Diameter of the female connector body	70
Figure A.2 – Orientation of cable outlet in relation to the coding – Free male connectors according to Table 4	71
Table 1 – Ratings of connectors.....	13

Table 2 – Connector coding and number of contacts.....	14
Table 3 – Styles of fixed connectors	15
Table 4 – Styles of free connectors.....	21
Table 5 – Dimensions of style JM, figure 13.....	22
Table 6 – Dimensions of style KM, figure 14	23
Table 7 – Dimensions of style LM, figure 15.....	24
Table 8 – Dimensions of style MM, figure 16.....	24
Table 9 – Dimensions of style JF, figure 17.....	25
Table 10 – Dimensions of style KF, figure 18	26
Table 11 – Dimensions of style LF, figure 19	27
Table 12 – Dimensions of style MF, figure 20.....	28
Table 13 – Dimensions for figure 21.....	29
Table 14 – Dimensions for Figure 22.....	30
Table 15 – Dimensions for Figure 24.....	32
Table 16 – Dimensions for Figure 25.....	33
Table 17 – Dimensions for Figure 27.....	36
Table 18 – Dimensions for Figure 28.....	37
Table 19 – Dimensions for Figure 30.....	40
Table 20 – Dimensions for Figure 31.....	41
Table 21 – Dimensions for Figure 33.....	44
Table 22 – Dimensions for Figure 34.....	45
Table 23 – Dimensions for Figure 36.....	48
Table 24 – Dimensions for Figure 37.....	49
Table 25 – Dimensions for Figure 39.....	51
Table 26 – Connectors dimensions in mated and locked position	53
Table 27 – Gauges	55
Table 28 – Climatic category.....	55
Table 29 – Creepage distances.....	56
Table 30 – Clearance distances.....	56
Table 31 – Voltage proof.....	57
Table 32 – Rated voltage – Rated impulse voltage – Pollution degree	58
Table 33 – Performance level and number of mechanical operations	59
Table 34 – Insertion and withdrawal forces	59
Table 35 – Polarizing insertion forces	60
Table 36 – Number of test specimens	61
Table 37 – Test group P	64
Table 38 – Test group AP	65
Table 39 – Test group BP	67
Table 40 – Test group CP	68
Table 41 – Test group DP	69
Table 42 – Test group EP	69
Table A.1 – Diameter of the female connector body, dimension x, coding E, F, K, L, M, S, and T.....	70

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.

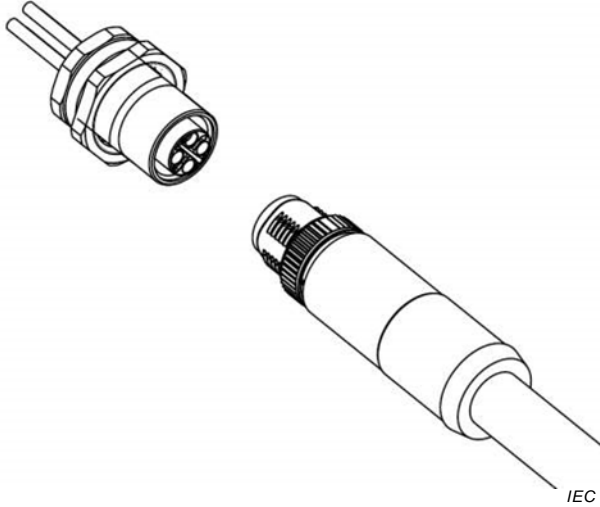
A list of all parts in the IEC 61076 series, published under the general title *Connectors for electrical and electronic equipment – Product requirements*, can be found on the IEC website.

Future standards in this series will carry the new general title as cited above. Titles of existing standards in this series will be updated at the time of the next edition.

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

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

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

<p>IEC SC 48B – Electrical connectors Specification available from: IEC General secretariat Or from the addresses shown on the inside cover.</p>	<p>IEC 61076-2-111 Ed. 1</p>
<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> <hr/> <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>

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*