

Konektory pre elektrické a elektronické zariadenia Požiadavky na výrobok Časť 3-122: Podrobná špecifikácia pre 8-pólové tienené, voľné a pevné konektory pre I/O a gigabitové ethernetové aplikácie v drsných podmienkach prostredia

STN EN 61076-3-122

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Connectors for electrical and electronic equipment - Product requirements - Part 3-122: Detail specification for 8-way, shielded, free and fixed connectors for I/O and Gigabit Ethernet applications in harsh environments

Táto norma obsahuje anglickú verziu európskej normy. This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 01/18

Obsahuje: EN 61076-3-122:2017, IEC 61076-3-122:2017

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Connectors for electrical and electronic equipment Product requirements - Part 3-122: Detail specification for 8-way,
shielded, free and fixed connectors for I/O and Gigabit Ethernet
applications in harsh environments
(IEC 61076-3-122:2017)

Connecteurs pour équipements électriques et électroniques -Exigences de produit - Partie 3-122 : Spécification particulière pour les fiches et les embases écrantées à 8 voies pour applications E/S et Gigabit dans les environnements sévères (IEC 61076-3-122:2017) Steckverbinder für elektrische und elektronische Einrichtungen - Produktanforderungen -Teil 3-122: Bauartspezifikation für geschirmte freie und feste Steckverbinder, 8-polig, für I/O- und Gigabit-Anwendungen in rauen Umgebungen (IEC 61076-3-122:2017)

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Ref. No. EN 61076-3-122:2017 E

European foreword

The text of document 48B/2554/FDIS, future edition 1 of IEC 61076-3-122, prepared by SC 48B "Electrical connectors", of IEC/TC 48 "Electrical connectors and mechanical structures for electrical and electronic equipment" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 61076-3-122:2017.

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Annex ZA

(normative)

Normative references to international publications with their corresponding European publications

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.

NOTE 1 When an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cenelec.eu.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	EN/HD	<u>Year</u>
IEC 60050-581	-	International Electrotechnical Vocabulary (IEV) - Part 581: Electromechanical components for electronic equipment	-	-
IEC 60068-1	-	Environmental testing - Part 1: General and guidance	EN 60068-1	-
IEC 60068-2-38	-	Environmental testing - Part 2-38: Tests - Test Z/AD: Composite temperature/humidity cyclic test	EN 60068-2-38	-
IEC 60512-1	-	Connectors for electronic equipment - Tests and measurements - Part 1: General	EN 60512-1	-
IEC 60512-1-1	-	Connectors for electronic equipment - Tests and measurements - Part 1-1: General examination - Test 1a: Visual examination	EN 60512-1-1	-
IEC 60512-1-2	-	Connectors for electronic equipment - Tests and measurements - Part 1-2: General examination - Test 1b: Examination of dimension and mass	EN 60512-1-2	-
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	EN 60512-2-1	-
IEC 60512-3-1	-	Connectors for electronic equipment - Tests and measurements - Part 3-1: Insulation tests - Test 3a: Insulation resistance	EN 60512-3-1	-

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<u>Publication</u>	<u>Year</u>	<u>Title</u>	EN/HD	<u>Year</u>
IEC 60512-4-1	-	Connectors for electronic equipment - Tests and measurements - Part 4-1: Voltage stress tests - Test 4a: Voltage proof	EN 60512-4-1	-
IEC 60512-5-2	-	Connectors for electronic equipment - Tests and measurements - Part 5-2: Current-carrying capacity tests - Test 5b: Current-temperature derating	EN 60512-5-2	-
IEC 60512-6-3	-	Connectors for electronic equipment - Tests and measurements - Part 6-3: Dynamic stress tests - Test 6c: Shock	EN 60512-6-3	-
IEC 60512-6-4	-	Connectors for electronic equipment - Tests and measurements - Part 6-4: Dynamic stress tests - Test 6d: Vibration (sinusoidal)	EN 60512-6-4	-
IEC 60512-9-1	-	Connectors for electronic equipment - Tests and measurements - Part 9-1: Endurance tests - Test 9a: Mechanical operation	EN 60512-9-1	-
IEC 60512-11-3	-	Connectors for electronic equipment - Tests and measurements - Part 11-3: Climatic tests - Test 11c: Damp heat, steady state	EN 60512-11-3	-
IEC 60512-11-4	-	Connectors for electronic equipment - Tests and measurements - Part 11-4: Climatic tests - Test 11d: Rapid change of temperature	EN 60512-11-4	-
IEC 60512-11-7	-	Connectors for electronic equipment - Tests and measurements - Part 11- 7: Climatic tests - Test 11g: Flowing mixed gas corrosion test	EN 60512-11-7	-
IEC 60512-11-9	-	Connectors for electronic equipment - Tests and measurements - Part 11-9: Climatic tests - Test 11i: Dry heat	EN 60512-11-9	-
IEC 60512-11-10	-	Connectors for electronic equipment - Tests and measurements - Part 11-10: Climatic tests - Test 11j: Cold	EN 60512-11-10	-
IEC 60512-13-2	-	Connectors for electronic equipment - Tests and measurements - Part 13-2: Mechanical operating tests - Test 13b: Insertion and withdrawal forces	EN 60512-13-2	-
IEC 60512-15-6	-	Connectors for electronic equipment - Tests and measurements - Part 15-6: Connector tests (mechanical) - Test 15f: Effectiveness of connector coupling devices	EN 60512-15-6	-
IEC 60512-26-100	-	Connectors for electronic equipment - Tests and measurements - Part 26-100: Measurement setup, test and reference arrangements and measurements for connectors according to IEC 60603-7 - Tests 26a to 26g	EN 60512-26-100	-

EN 61076-3-122:2017

<u>Publication</u>	<u>Year</u>	<u>Title</u>	EN/HD	<u>Year</u>
IEC 61076-1	2006	Connectors for electronic equipment - Product requirements - Part 1: Generic specification	EN 61076-1	2006
IEC 61076-3	-	Connectors for electronic equipment - Product requirements - Part 3: Rectangular connectors - Sectional specification	EN 61076-3	-



IEC 61076-3-122

Edition 1.0 2017-05

INTERNATIONAL STANDARD



Connectors for electrical and electronic equipment – Product requirements – Part 3-122: Detail specification for 8-way, shielded, free and fixed connectors for I/O and Gigabit Ethernet applications in harsh environments





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IEC 61076-3-122

Edition 1.0 2017-05

INTERNATIONAL STANDARD



Connectors for electrical and electronic equipment – Product requirements – Part 3-122: Detail specification for 8-way, shielded, free and fixed connectors for I/O and Gigabit Ethernet applications in harsh environments

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

CONNECTORS FOR ELECTRICAL AND ELECTRONIC EQUIPMENT – PRODUCT REQUIREMENTS –

Part 3-122: Detail specification for 8-way, shielded, free and fixed connectors for I/O and Gigabit Ethernet applications in harsh environments

FOREWORD

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International Standard IEC 61076-3-122 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 61076-3-122 published in 2015. This edition constitutes a technical revision.

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

FDIS	Report on voting	
48B/2554/FDIS	48B/2563/RVD	

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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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- replaced by a revised edition, or
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	IEC 61076-3-122:2017
Subcommittee 48B: Electrical connectors	
IEC.	Detail specification for 8-way, shielded, free and fixed connectors for I/O and Gigabit Ethernet applications in harsh environments
NOTE The above view shows a Type I connector pair, with coding edges on a short side; for Type II connectors the coding edges are located on a long side.	Fixed connectors are mounted on printed circuit board by means of soldering or press-in, the free connector is attached to wires by means of soldering, crimping, IDC or other termination technology.

CONNECTORS FOR ELECTRICAL AND ELECTRONIC EQUIPMENT – PRODUCT REQUIREMENTS –

Part 3-122: Detail specification for 8-way, shielded, free and fixed connectors for I/O and Gigabit Ethernet applications in harsh environments

1 Scope

This part of IEC 61076 covers 8-way, shielded, free and fixed rectangular connectors for I/O and Gigabit Ethernet applications, suitable for use in harsh environments, and is intended to specify the common dimensions, mechanical, electrical and environmental characteristics and tests for this family of 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, 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 60512-1, Connectors for electronic equipment – Tests and measurements – Part 1: General

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

IEC 60512-4-1, Connectors for electronic equipment – Tests and measurements – Part 4-1: Voltage stress tests – Test 4a: Voltage proof

IEC 60512-5-2, Connectors for electronic equipment – Tests and measurements – Part 5-2: Current-carrying capacity tests – Test 5b: Current-temperature derating

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IEC 60512-6-3, Connectors for electronic equipment – Tests and measurements – Part 6-3: Dynamic stress tests – Test 6c: Shock

IEC 60512-6-4, Connectors for electronic equipment – Tests and measurements – Part 6-4: Dynamic stress tests – Test 6d: Vibration (sinusoidal)

IEC 60512-9-1, Connectors for electronic equipment – Tests and measurements – Part 9-1: Endurance tests – Test 9a: Mechanical operation

IEC 60512-11-3, Connectors for electronic equipment – Tests and measurements – Part 11-3: Climatic tests – Test 11c: Damp heat, steady state

IEC 60512-11-4, Connectors for electronic equipment – Tests and measurements – Part 11-4: Climatic tests – Test 11d: Rapid change of temperature

IEC 60512-11-7, Connectors for electronic equipment – Tests and measurements – Part 11-7: Climatic tests – Test 11g: Flowing mixed gas corrosion test

IEC 60512-11-9, Connectors for electronic equipment – Tests and measurements – Part 11-9: Climatic tests – Test 11i: Dry heat

IEC 60512-11-10, Connectors for electronic equipment – Tests and measurements – Part 11-10: Climatic tests – Test 11j: Cold

IEC 60512-13-2, Connectors for electronic equipment – Tests and measurements – Part 13-2: Mechanical operation tests – Test 13b: Insertion and withdrawal forces

IEC 60512-15-6, Connectors for electronic equipment – Tests and measurements – Part 15-6: Connector tests (mechanical) – Test 15f: Effectiveness of connector coupling devices

IEC 60512-26-100, Connectors for electronic equipment – Tests and measurements – Part 26-100: Measurement setup, test and reference arrangements and measurements for connectors according to IEC 60603-7 – Tests 26a to 26g

IEC 61076-1:2006, Connectors for electronic equipment – Product requirements – Part 1: Generic specification

IEC 61076-3, Connectors for electronic equipment – Product requirements – Part 3: Rectangular connectors – Sectional specification

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