



BSI Standards Publication

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 data transmission with frequencies up to 500 MHz and current-carrying capacity in industrial environments

This is a preview of "BS EN IEC 61076-3-12...". [Click here to purchase the full version from the ANSI store.](#)

National foreword

This British Standard is the UK implementation of EN IEC 61076-3-122:2021. It is identical to IEC 61076-3-122:2021. It supersedes [BS EN 61076-3-122:2017](#), which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee EPL/48, Electromechanical components and mechanical structures for electronic equipment.

A list of organizations represented on this committee can be obtained on request to its committee manager.

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Amendments/corrigenda issued since publication

Date	Text affected
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EUROPÄISCHE NORM

June 2021

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Supersedes EN 61076-3-122:2017 and all of its amendments and corrigenda (if any)

English Version

**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 data transmission with frequencies up to 500 MHz and current-carrying capacity in industrial environments
(IEC 61076-3-122:2021)**

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 les entrées/sorties et la transmission des données à des fréquences jusqu'à 500 MHz avec courant limite admissible dans des environnements industriels
(IEC 61076-3-122:2021)

Steckverbinder für elektrische und elektronische Einrichtungen - Produktanforderungen - Teil 3-122: Bauartspezifikation für geschirmte freie und feste Steckverbinder, 8-polig, für I/O- und Datenübertragung und Strombelastbarkeit in industriellen Umgebungen
(IEC 61076-3-122:2021)

This European Standard was approved by CENELEC on 2021-05-26. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

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European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

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European foreword

The text of document 48B/2864/FDIS, future edition 2 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 IEC 61076-3-122:2021.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2022-02-26
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2024-05-26

This document supersedes EN 61076-3-122:2017 and all of its amendments and corrigenda (if any).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC shall not be held responsible for identifying any or all such patent rights.

Endorsement notice

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(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 Where 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>	<u>EN/HD</u>	<u>Year</u>
IEC 60050-581	-	International Electrotechnical Vocabulary - 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 IEC 60068-2-38	-
IEC 60512-1	-	Connectors for electrical and electronic equipment - Tests and measurements - Part 1: Generic specification	EN IEC 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	-
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	-

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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 operation 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	-
IEC 60512-28-100	-	Connectors for electrical and electronic equipment - Tests and measurements - Part 28-100: Signal integrity tests up to 2 000 MHz - Tests 28a to 28g	EN IEC 60512-28-100	-

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IEC 60512-99-002	-	Connectors for electrical and electronic equipment - Tests and measurements - Part 99-002: Endurance test schedules - Test 99b: Test schedule for unmating under electrical load	EN IEC 60512-99-002	-
IEC 60664-1	-	Insulation coordination for equipment within low-voltage supply systems - Part 1: Principles, requirements and tests	EN IEC 60664-1	-
IEC 61076-1	2006	Connectors for electronic equipment - Product requirements - Part 1: Generic specification	EN 61076-1	2006
+ A1	2019		+ A1	2019
IEC 61076-3	-	Connectors for electronic equipment - Product requirements - Part 3: Rectangular connectors - Sectional specification	EN 61076-3	-
IEC/TR 63040	-	Guidance on clearances and creepage distances in particular for distances equal to or less than 2 mm - Test results of research on influencing parameters	-	-
ISO/IEC 11801-1	-	Information technology - Generic cabling for customer premises - Part 1: General requirements	-	-

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CONTENTS

FOREWORD	4
1 Scope	7
2 Normative references	7
3 Terms and definitions	9
4 Mating information	9
4.1 General.....	9
4.2 Contacts – Mating conditions	11
4.3 Fixed connectors Type I and II	11
4.4 Free connectors Type I and II	14
5 Characteristics	15
5.1 General.....	15
5.2 Pin and pair grouping assignment	16
5.3 Classification into climatic category	17
5.4 Electrical characteristics	17
5.4.1 Voltage proof.....	17
5.4.2 Voltage rating	17
5.4.3 Creepage and clearance distances	17
5.4.4 Current-temperature derating.....	18
5.4.5 Insulation resistance.....	19
5.5 Mechanical characteristics	19
5.5.1 Mechanical operation.....	19
5.5.2 Insertion and withdrawal forces	19
5.5.3 Vibration, sinusoidal	19
5.5.4 Shock	19
5.6 Transmission performance	20
5.6.1 General	20
5.6.2 Insertion loss	20
5.6.3 Return loss	20
5.6.4 Near-end cross talk (NEXT).....	20
5.6.5 Far-end cross talk (FEXT).....	21
5.6.6 Transverse conversion loss (TCL)	21
5.6.7 Transverse conversion transfer loss (TCTL)	21
5.6.8 Transfer impedance	21
5.6.9 Propagation delay.....	21
5.6.10 Delay skew	22
6 Tests and test schedule.....	22
6.1 General.....	22
6.2 Arrangement for input-to-output resistance test.....	22
6.3 Arrangement for vibration and shock test (test phase EP1)	23
6.4 Test procedures and measuring methods.....	24
6.5 Preconditioning.....	24
6.6 Test schedules.....	24
6.6.1 General	24
6.6.2 Basic (minimum) test schedule	24
6.6.3 Full test schedule	24
6.7 Mounting of specimens	31

This is a preview of "BS EN IEC 61076-3-12...". [Click here to purchase the full version from the ANSI store.](#)

Bibliography.....	32
Figure 1 – Product overview	6
Figure 2 – Contact interface of a free male connector (right side) mated with a fixed female connector (left side).....	11
Figure 3 – Fixed connectors.....	12
Figure 4 – Free connectors Type I (left) and Type II (right)	14
Figure 5 – Fixed connector pin and pair grouping assignment for Type I and Type II, mating face view of connector.....	16
Figure 6 – Connector derating curve	18
Figure 7 – Arrangement for input-to-output resistance test.....	23
Figure 8 – Arrangement for vibration test	23
Table 1 – Mating faces of the individual connector styles	10
Table 2 – Dimensions for Figure 2 and Figure 3	13
Table 3 – Dimensions for Figure 4	15
Table 4 – Pin and pair assignment for 10/100 Mbps Ethernet.....	16
Table 5 – Pin and pair assignment for 1/10 Gbps Ethernet.....	16
Table 6 – Climatic category.....	17
Table 7 – Voltage proof.....	17
Table 8 – Creepage and clearance distances of the mating interface	18
Table 9 – Vibration, sinusoidal.....	19
Table 10 – Shock.....	19
Table 11 – Test group P	25
Table 12 – Test group AP	26
Table 13 – Test group BP	27
Table 14 – Test group CP	29
Table 15 – Test group DP	30
Table 16 – Test group EP	30
Table 17 – Test group FP	31

This is a preview of "BS EN IEC 61076-3-12...". [Click here to purchase the full version from the ANSI store.](#)

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 data transmission with frequencies up to 500 MHz and current-carrying capacity in industrial 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 second edition cancels and replaces the first edition published in 2017. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- a) Title modified.
- b) Introduction of two sets of requirements for connectors of "class A" and "class B" where class A matches the requirements defined in the previous edition.