



SLOVENSKI STANDARD
SIST EN 175301-801:2002
01-september-2002

Detail specification: High density rectangular connectors, round removable crimp contacts

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Bauartspezifikation: Hochpolige Rechteck-Steckverbinder mit runden auswechselbaren Crimpkontakten

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Spécification particulière: Connecteurs rectangulaires haute densité à contacts circulaires demontables à sertir

[SIST EN 175301-801:2002](https://standards.iteh.ai/catalog/standards/sist/73ece173-3850-481b-9671-aaa83102ba64/sist-en-175301-801-2002)

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Ta slovenski standard je istoveten z: EN 175301-801:1999

ICS:

31.220.10 Xcã } Ácã } &VÁ [] ^ d !lä Plug-and-socket devices.
Connectors

SIST EN 175301-801:2002

en

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 175301-801

November 1999

ICS 31.220.10

Supersedes CECC 75 301-801:1994

English version

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High density rectangular connectors,
round removable crimp contacts**

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This European Standard was approved by CENELEC on 1999-10-01. 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.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

CENELEC

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

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

Foreword

At the request of the Technical Committee CENELEC TC 48B, LF connectors, the text of CECC 75 301-801:1994, Issue 1, was submitted to the formal vote for conversion into a European Standard. It was approved by CENELEC as EN 175301-801 on 1999-10-01.

The following date was fixed:

- latest date by which the EN has to be implemented
at national level by publication of an identical
national standard or by endorsement (dop) 2000-10-01

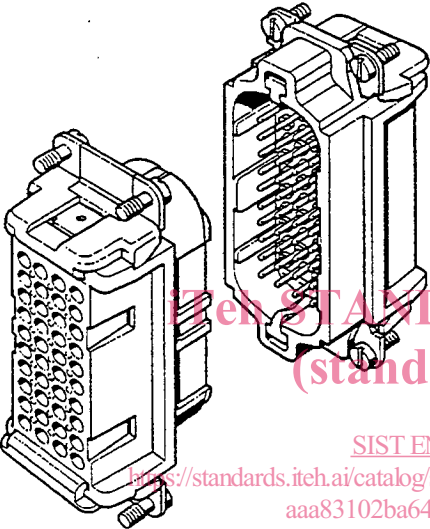
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<p>CECC WG25: LF Connectors</p> <p>Specification available from the addresses shown on the blue fly sheet</p> <p>ELECTRONIC COMPONENTS OF ASSESSED QUALITY</p> <p>– DETAIL SPECIFICATION IN ACCORDANCE WITH EN 175 300: 1991</p>	<p>EN 175301-801</p> <p>Page 3 of 39 pages</p>
<p>see 5 for dimensions</p>  <p><i>STANDARD REVIEW (standards.iteh.ai)</i></p> <p><i>SIST EN 175301-801:2002</i> <i>https://standards.iteh.ai/catalog/standards/sist/73e173-3850-481b-9671-aaa83102ba64/sist-en-175301-801-2002</i></p>	<p>1. SCOPE</p> <p>Draft – Detail specification for high-density rectangular connectors, round removable crimp contacts</p> <p>15, 25, 40 to 64 contacts + protective earth contacts (PE)</p> <p>Termination: Crimp</p> <p>Performance level: 1</p> <p>Assessment levels: B and G (*)</p>

Climatic category: see 7.1

Electrical characteristics: see 7.2

Mechanical characteristics: see 7.3

Ordering information: see 10

(*) see 8 and 9

Information about manufacturers who have components qualified to this detail specification is available in the current CECC 00 200 (Register of Firms, Products and Services Approved under the CECC System).

2 Related documents

The following documents contain provisions which, through reference in this text, constitute provisions of this specification. At the time of publication, the editions indicated were valid. All normative documents are subject to revision, and parties to agreements based on this specification are encouraged to investigate the possibility of applying the most recent editions of the documents indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

- EN 175 300 (1991): (CECC 75 300, Issue 1, 1989)
Rectangular connectors for frequencies below
3 MHz
- IEC 60068-1 (1988): Environmental testing
Part 1: General and guidance
- IEC 60352-2 (1990): Solderless connections
Part 2: Solderless crimped connections
General requirements, test methods and practical
guidance
- IEC 60410 (1973): Sampling plans and procedures for inspections by
attributes
- IEC 60512-1 (1984): Electromechanical components for electronic
equipment; basic testing procedures and measuring
methods
Part 1: General
Amendment No. 1 (1988)
- IEC 60512-2 (1985): Part 2: General examination, electrical continuity and
contact resistance tests, insulation tests and voltage
stress tests
- IEC 60512-3 (1976): Part 3: Current-carrying capacity tests
- IEC 60512-5 (1992): Part 5: Impact tests (free components), static load
tests (fixed components), endurance tests and over-
load tests
- IEC 60512-7 (1993): Part 7: Mechanical operating tests and sealing tests
- IEC 60512-8 (1984): Part 8: Connector tests (mechanical) and mechani-
cal tests on contacts and terminations
Amendment No. 1 (1985)
- IEC 60512-9 (1992): Part 9: Miscellaneous tests
- IEC 60529 (1989): Degrees of protection provided by enclosures
(IP code)

- IEC 60807-1 (1991): Rectangular connectors for frequencies below 3 MHz
Part 1: Generic specification; general requirements and guide for the preparation of detail specifications for connectors with assessed quality
- IEC 60664-1 (1992): Insulation co-ordination for equipment within low-voltage systems; Part 1: Principles, requirements and tests
- ISO 468 (1982): Surface roughness. Parameters, their values and general rules for specifying requirements
- ISO 1043-1 (1990): Plastics; Symbols; Part 1: Basic polymers and their special characteristics
- ISO 1043-2 (1990): Plastics; Symbols; Part 2: fillers and reinforcing materials

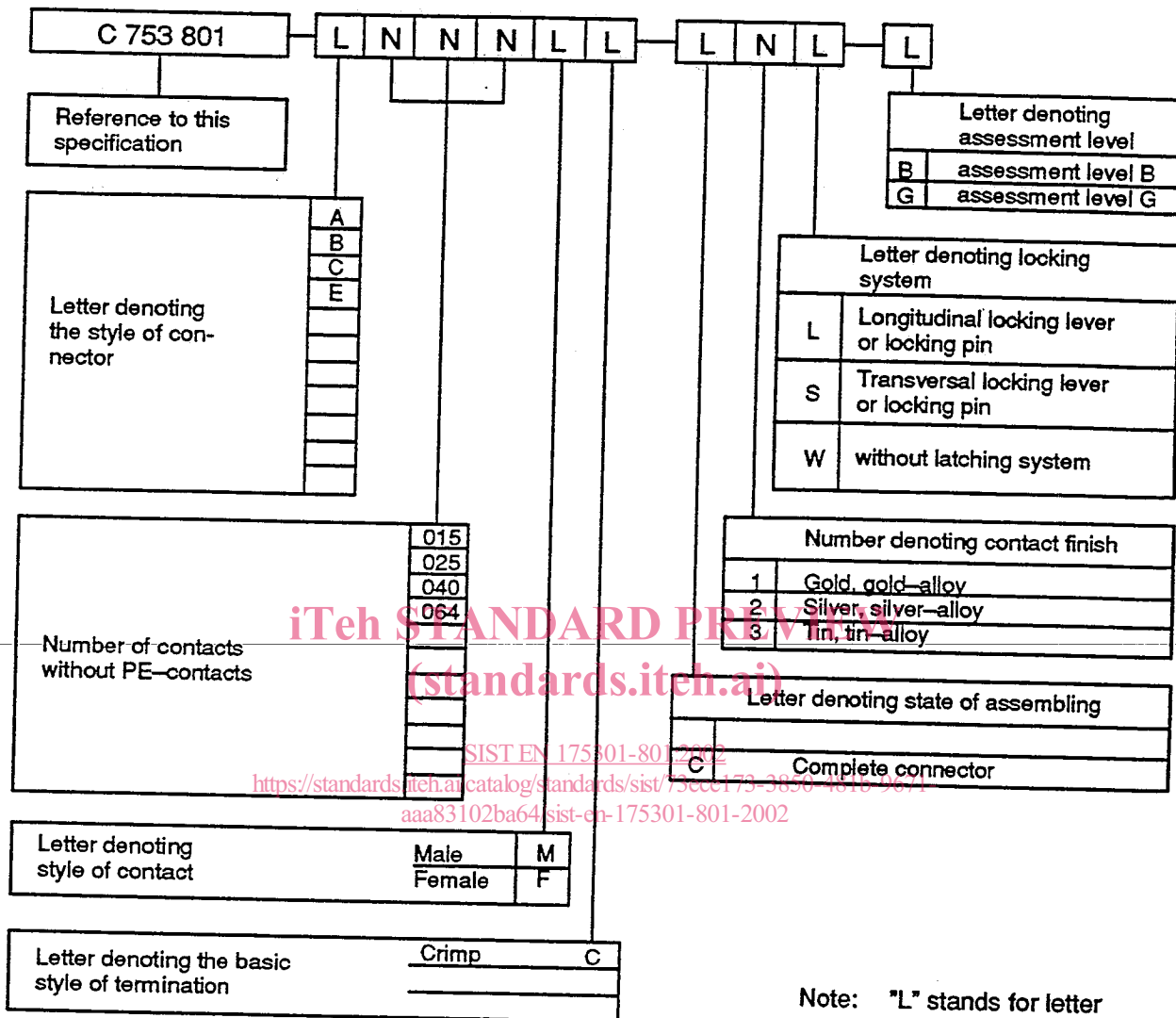
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3 Type designation

Connectors, performance level and assessment level according to this specification shall be designated by the following system:



Note: "L" stands for letter
"N" stands for number

Examples: Connector style E, having 15 male contacts with silver alloy contact finish with crimp terminations. Complete connector without latching system and with assessment level G:
C 753 801-E015MC-C2W-G

Connector style A, having 25 female contacts with silver alloy contact finish with crimp termination. Complete connector with latching system L and assessment level B:
C 753 801-A025FC-C2L-B

4 Common features

4.1 Isometric view

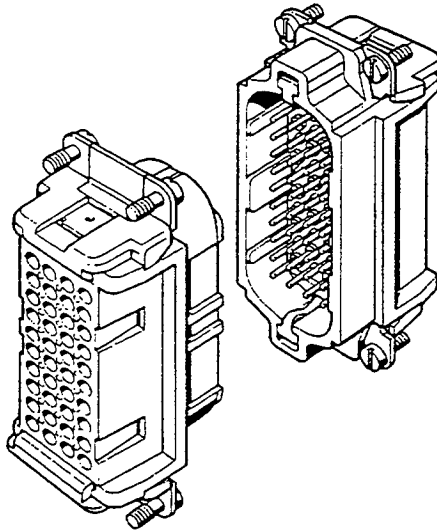


Figure 1

4.2 Mating information

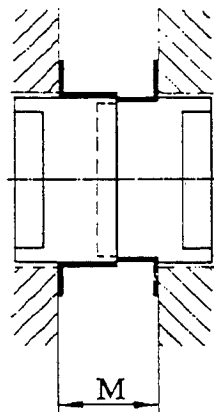
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4.2.1 Plug-in direction

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<https://standards.iteh.ai/catalog/standards/sist/73ece173-3850-481b-9671-aaa83102ba64/sist-en-175301-801-2002>

The specified contact resistance must be maintained on a mated pair, within the limits of the dimensions specified.



Specified contact resistance must also be met, if the fixed and free connectors could be engaged below dimension $M = 19,5$ mm resp. $22,3$ mm.

Figure 2

Table 1

No. of contacts	15, 25	40, 64
M (mm)	22,3 to 24	19,5 to 21

4.2.2 Perpendicular to plug-in direction

The design of the connectors is such that a displacement of at least 0,5 mm in transversal and longitudinal direction of the connectors can be accomodated, to achieve necessary alignment of both parts if one part to the connector pairs is float mounted.

For fixed mounted connector pairs, the mounting must be kept accordingly in a sufficient small range.

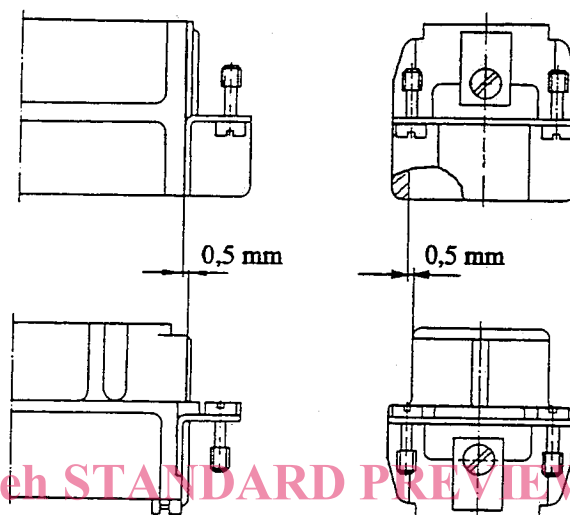


Figure 3

SIST EN 175301-801:2002

4.2.3 Inclination <https://standards.iteh.ai/catalog/standards/sist/73ece173-3850-481b-9671-aaa83102ba64/sist-en-175301-801-2002>

The design of the free and fixed connectors is such to allow for a misalignment of $\pm 5^\circ$ in longitudinal axis and $\pm 2^\circ$ in transverse axis. In the mated position the condition according to 4.2.1 must be met.

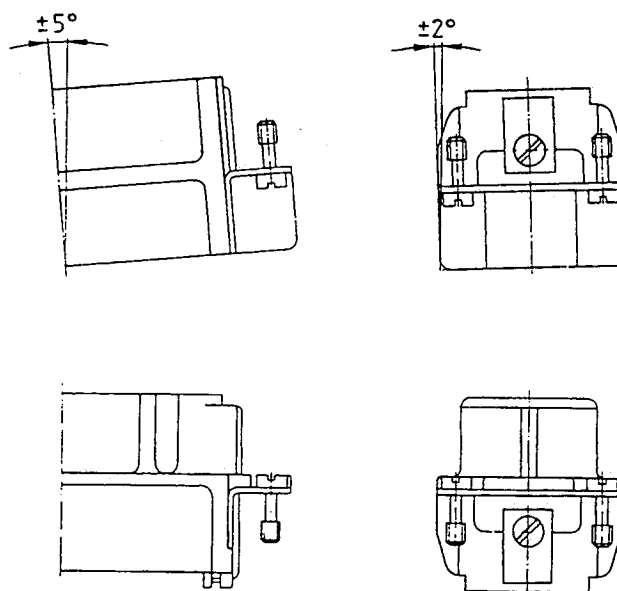


Figure 4

4.3 *Survey of styles*

Number of contacts: 15+PE; 25+PE; 40+PE; 64+PE

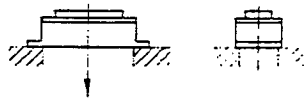
4.3.1 *Fixed connector*Style A
Bulkhead mounting
receptacle¹⁾Variant M,
male contacts (AM)Variant F,
female contacts (AF)

Figure 5

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Style B
box mounting
receptacle^{1) 2)}Variant M,
male contacts (BM)

<https://standards.iteh.ai/catalog/standards/sist/175301-801-2002/sist-en-175301-801-2002>
aaa83102ba64/sist-en-175301-801-2002

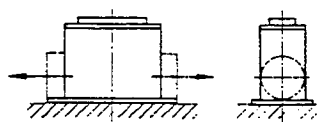
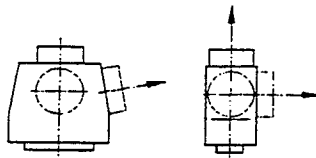
Variant F,
female contacts (BF)

Figure 6

NOTES 1) alternatively with cover or hinged cover
2) cable outlet alternatively

4.3.2 Free connector

Style C¹⁾
straight plug

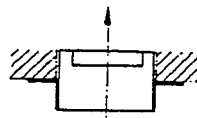


Variant M²⁾,
male contacts (CM)

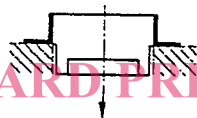
Variant F²⁾,
female contacts (CF)

Figure 7

Style E
connector insert



Variant M,
male contacts (EM)



Variant F,
female contacts (EF)

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SIST EN 175301-801:2002 Figure 8

<https://standards.iteh.ai/catalog/standards/sist/73ece173-3850-481b-9671-aaa83102ba64/sist-en-175301-801-2002>

NOTES ¹⁾ cable outlet alternatively
²⁾ outside view of variant M and F are identical