



SLOVENSKI STANDARD
oSIST prEN IEC 61076-2-104:2024
01-december-2024

Konektorji za elektronsko opremo - Zahteve za izdelek - 2-104. del: Okrogli konektorji - Podrobna specifikacija za okrogle konektorje z vijaknim M8 ali zaskočnim zaklepanjem

Connectors for electronic equipment - Product requirements - Part 2-104: Circular connectors - Detail specification for circular connectors with m8 screw-locking or snap-locking

iTeh Standards
(<https://standards.iteh.ai>)

Connecteurs pour équipements électroniques - Exigences de produit - Partie 2-104: Connecteurs circulaires - Spécification particulière pour les connecteurs circulaires m8 à vis ou à encliquetage

[oSIST prEN IEC 61076-2-104:2024](https://standards.iteh.ai/standards/iec-c25/iec-61076-2-104-2024)

<https://standards.iteh.ai/standards/iec-c25/iec-61076-2-104-2024> **Ta slovenski standard je istoveten z: prEN IEC 61076-2-104:2024** [t-pren-iec-61076-2-104-2024](https://standards.iteh.ai/standards/iec-c25/iec-61076-2-104-2024)

ICS:

31.220.10 Vtiči in vtičnice, konektorji Plug-and-socket devices.
Connectors

oSIST prEN IEC 61076-2-104:2024 en



48B/3121/CDV

COMMITTEE DRAFT FOR VOTE (CDV)

PROJECT NUMBER: IEC 61076-2-104 ED3	
DATE OF CIRCULATION: 2024-10-18	CLOSING DATE FOR VOTING: 2025-01-10
SUPERSEDES DOCUMENTS: 48B/3070/CD, 48B/3104/CC	

IEC SC 48B : ELECTRICAL CONNECTORS	
SECRETARIAT: United States of America	SECRETARY: Mr Jeffrey Toran
OF INTEREST TO THE FOLLOWING COMMITTEES:	HORIZONTAL FUNCTION(S):
ASPECTS CONCERNED:	
<input checked="" type="checkbox"/> SUBMITTED FOR CENELEC PARALLEL VOTING Attention IEC-CENELEC parallel voting The attention of IEC National Committees, members of CENELEC, is drawn to the fact that this Committee Draft for Vote (CDV) is submitted for parallel voting. The CENELEC members are invited to vote through the CENELEC online voting system.	<input type="checkbox"/> NOT SUBMITTED FOR CENELEC PARALLEL VOTING

oSIST prEN IEC 61076-2-104:2024

This document is still under study and subject to change. It should not be used for reference purposes.

Recipients of this document are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

Recipients of this document are invited to submit, with their comments, notification of any relevant "In Some Countries" clauses to be included should this proposal proceed. Recipients are reminded that the CDV stage is the final stage for submitting ISC clauses. (SEE [AC/22/2007](#) OR [NEW GUIDANCE DOC](#)).

TITLE:

Connectors for electronic equipment - Product requirements - Part 2-104: Circular connectors - Detail specification for circular connectors with M8 screw-locking or snap-locking

PROPOSED STABILITY DATE: 2027

NOTE FROM TC/SC OFFICERS:

1	CONTENTS		
2	FOREWORD.....		6
3	Bibliography.....		63
4			
5	1 Scope.....		9
6	2 Normative references		9
7	3 Terms and definitions		11
8	3.1		11
9	mounting orientation.....		11
10	4 Technical information		12
11	4.1 Recommended method of termination for rewirable connectors		12
12	4.2 Connector coding, number of contacts, ratings and characteristics		12
13	4.3 Systems of levels		12
14	4.3.1 Performance level.....		12
15	4.3.2 Compatibility levels, according to IEC 61076-1		12
16	4.4 Classification into climatic categories		12
17	4.5 Creepage and clearance distances.....		12
18	4.6 Current-carrying capacity		13
19	4.7 Marking		13
20	4.8 Safety aspects.....		13
21	5 Dimensional information		14
22	5.1 General		14
23	5.2 Fixed connectors		14
24	5.2.1 Style BM.....		14
25	5.2.2 Style CM		15
26	5.2.3 Style EM.....		16
27	5.2.4 Style EF		16
28	5.3.1 Style JM		19
29	5.3.2 Style KM.....		20
30	5.3.3 Style NM		20
31	5.3.4 Style OM		21
32	5.3.5 Style LM		22
33	5.3.6 Style MM		23
34	5.3.7 Style JF		23
35	5.3.8 Style KF		24
36	5.3.9 Style NF		25
37	5.3.10 Style QF		25
38	5.3.11 Style LF.....		26
39	5.3.12 Style MF		27
40	5.4 Interface dimensions		28
41	5.4.1 Pin front and side view A-coding 3-way		28
42	5.4.2 Pin front and side view A-coding 4-way		29
43	5.4.3 Pin front and side view A-coding 6-way		31
44	5.4.4 Pin front and side view A-coding 8-way		33
45	5.4.5 Pin front and side view B-coding 5-way		34
46	5.4.6 Pin front and side view C-coding, 12-way		36
47	5.4.7 Pin side view for snap- and screw-, snap- and screw-locking.....		38

48	5.5	Engagement (mating) information.....	39
49	5.6	Gauges	41
50	5.6.1	Sizing gauges and retention force gauges	41
51	6	Characteristics	43
52	6.1	General	43
53	6.2	Pin assignment and other definitions	43
54	6.3	Classification into climatic categories	43
55	6.4	Electrical characteristics.....	43
56	6.4.1	Rated insulation voltage – Rated impulse voltage – Pollution degree	43
57	6.4.2	Voltage proof.....	44
58	6.4.3	Current-carrying capacity.....	44
59	6.4.4	Contact resistance.....	45
60	6.4.5	Insulation resistance.....	45
61	6.5	Mechanical characteristics	46
62	6.5.1	Mechanical operation	46
63	6.5.2	Insertion and withdrawal forces	46
64	6.5.3	Contact retention in insert.....	46
65	6.5.4	Polarizing and coding method.....	46
66	6.6	Other characteristics	47
67	6.6.1	Vibration (sinusoidal).....	47
68	6.6.2	Shock	47
69	6.6.3	Degree of protection provided by enclosures (IP code).....	47
70	6.7	Environmental aspects	47
71	6.7.1	Marking of insulation material (plastics).....	47
72	7	Test schedule.....	48
73	7.1	General.....	48
74	7.1.1	Climatic category.....	48
75	7.1.2	Creepage and clearance distances	48
76	7.1.3	Arrangement for contact resistance measurement	48
77	7.1.4	Arrangement for dynamic stress tests	49
78	7.1.5	Wiring of specimens	50
79	7.2	Test schedules	51
80	7.2.1	Basic (minimum) test schedule	51
81	7.2.2	Full test schedule	51
82	Annex A	(informative)	61
83	A.1	Diameter of the female connector body	61
84	Annex B	(informative)	62
85	B.1	Orientation of cable outlet in relation to coding.....	62
86			
87	Figure 1	– Connector insert with male contacts, dip solder long version with screw- and snap-locking	15
88			
89	Figure 2	– Connector insert with male contacts, dip solder short version with screw- and snap-locking.....	15
90			
91	Figure 3	– Fixed connector with wires, male contacts, single hole mounting	16
92	Figure 4	– Fixed connector with wires, female contacts, single hole mounting.....	17
93	Figure 5	– Fixed connector with wires, female contacts, single hole mounting.....	18
94	Figure 6	– Rewirable connector, male contacts, straight version with screw-locking.....	19
95	Figure 7	– Rewirable connector, male contacts, right angled version with screw-locking	20

96	Figure 8 – Non-rewirable connector, male contacts, straight version with screw- and	
97	snap-locking	20
98	Figure 9 – Non-rewirable connector, male contacts, straight version with snap-locking	21
99	Figure 10 – Non-rewirable connector, male contacts, angled version with snap-locking	22
100	Figure 11 – Non-rewirable connector, male contacts, straight version with screw-	
101	locking	22
102	Figure 12 – Non-rewirable connector, male contacts, right angled version with screw-	
103	locking	23
104	Figure 13 - Rewirable connector, female contacts, straight version with screw-locking.....	24
105	Figure 14 – Rewirable connector, female contacts, right angled version, with screw-	
106	locking	24
107	Figure 15 – Non-rewirable connector, female contacts, straight version with snap-	
108	locking	25
109	Figure 16 – Non-rewirable connector, female contacts, right angled version with snap-	
110	locking	26
111	Figure 17 – Non-rewirable connector, female contacts, straight version, with screw-	
112	locking	27
113	Figure 18 – Non-rewirable connector, female contacts, right angled version, with	
114	screw-locking.....	27
115	Figure 19 – Pin front and side view A-coding, 3-way	28
116	Figure 20 – Contact position A-coding, 3-way, front view	29
117	Figure 21 – Pin front and side view A-coding, 4-way	29
118	Figure 22 – Contact position A-coding, 4-way, front view	30
119	Figure 23 – Pin front and side view A-coding, 6-ways	31
120	Figure 24 – Contact position A-coding, 6-way, front view	32
121	Figure 25 – Pin front and side view A-coding, 8-ways	33
122	Figure 26 – Contact position A-coding, 8-way, front view	34
123	Figure 27 – Pin front and side view B-coding, 5-ways	34
124	Figure 28 – Contact position B-coding 5-way, front view	35
125	Figure 29 – Pin front and side view C-coding, 12-ways	36
126	Figure 30 – Contact position C-coding 12-way, front view	37
127	Figure 31 – Pin side view snap- and screw-, snap- and screw-locking.....	38
128	Figure 32 – Engagement (mating) information.....	40
129	Figure 33 – Gauge information.....	41
130	Figure 34 – Contact resistance arrangement.....	49
131	Figure 35 – Dynamic stress test arrangement	50
132		
133	Table 1 – Ratings of connectors.....	12
134	Table 2 – Styles of fixed connectors	14
135	Table 3 – Dimensions of style BM, Figure 1	15
136	Table 4 – Dimensions of style CM, Figure 2	15
137	Table 5 – Dimensions of style EM, Figure 3	16
138	Table 6 – Dimensions of style EF, Figure 4.....	17
139	Table 7 – Dimensions of style EF, Figure 5.....	18
140	Table 8 – Styles of free connectors	19
141	Table 9 – Dimensions of style JM, Figure 6.....	19

142	Table 10 – Dimensions of style KM, Figure 7	20
143	Table 11 – Dimensions of style NM, Figure 8	21
144	Table 12 – Dimensions of style NM, Figure 9	21
145	Table 13 – Dimensions of style PM, Figure 10	22
146	Table 14 – Dimensions of style LM, Figure 11	22
147	Table 15 – Dimensions of style MM, Figure 12	23
148	Table 16 – Dimensions of style JF, Figure 13	24
149	Table 17 – Dimensions of style KF, Figure 14	24
150	Table 18 – Dimensions of style NF, Figure 15	25
151	Table 19 – Dimensions of style QF, Figure 16	26
152	Table 20 – Dimensions of style LF, Figure 17	27
153	Table 21 – Dimensions of style MF, Figure 18	27
154	Table 22 – Dimensions for Figure 19	28
155	Table 23 – Dimensions for Figure 21	29
156	Table 24 – Dimensions for Figure 23	31
157	Table 25 – Dimensions for Figure 25	33
158	Table 26 – Dimensions for Figure 27	35
159	Table 27 – Dimensions for Figure 29	36
160	Table 28 – Dimensions for Figure 31	39
161	Table 29 – Connectors dimensions in mated and locked position	40
162	Table 30 – Gauges	42
163	Table 31 – Climatic category	43
164	Table 32 – Rated insulation voltage – Rated impulse voltage – Pollution degree	44
165	Table 33 – Voltage proof	44
166	Table 34 – Current-carrying capacity	45
167	Table 35 – Number of mechanical operations	46
168	Table 36 – Insertion and withdrawal forces	46
169	Table 37 – Number of test specimens	51
170	Table 38 – Test group P	52
171	Table 39 – Test group AP	53
172	Table 40 – Test group BP	56
173	Table 41 – Test group CP	58
174	Table 42 – Test group DP	59
175	Table 43 – Test group EP	59
176	Table 44 – Test group NP	60
177		
178		

INTERNATIONAL ELECTROTECHNICAL COMMISSION

**CONNECTORS FOR ELECTRICAL AND ELECTRONIC EQUIPMENT –
PRODUCT REQUIREMENTS –**
**Part 2-104: Circular connectors – Detail specification for circular
connectors with M8 screw-locking or snap-locking**

FOREWORD

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
- 2) The formal decisions or agreements of IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested IEC National Committees.
- 3) IEC Publications have the form of recommendations for international use and are accepted by IEC National Committees in that sense. While all reasonable efforts are made to ensure that the technical content of IEC Publications is accurate, IEC cannot be held responsible for the way in which they are used or for any misinterpretation by any end user.
- 4) In order to promote international uniformity, IEC National Committees undertake to apply IEC Publications transparently to the maximum extent possible in their national and regional publications. Any divergence between any IEC Publication and the corresponding national or regional publication shall be clearly indicated in the latter.
- 5) IEC itself does not provide any attestation of conformity. Independent certification bodies provide conformity assessment services and, in some areas, access to IEC marks of conformity. IEC is not responsible for any services carried out by independent certification bodies.
- 6) All users should ensure that they have the latest edition of this publication.
- 7) No liability shall attach to IEC or its directors, employees, servants or agents including individual experts and members of its technical committees and IEC National Committees for any personal injury, property damage or other damage of any nature whatsoever, whether direct or indirect, or for costs (including legal fees) and expenses arising out of the publication, use of, or reliance upon, this IEC Publication or any other IEC Publications.
- 8) Attention is drawn to the Normative references cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.
- 9) IEC draws attention to the possibility that the implementation of this document may involve the use of (a) patent(s). IEC takes no position concerning the evidence, validity or applicability of any claimed patent rights in respect thereof. As of the date of publication of this document, IEC [had/had not] received notice of (a) patent(s), which may be required to implement this document. However, implementers are cautioned that this may not represent the latest information, which may be obtained from the patent database available at <https://patents.iec.ch>. IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 61076-2-104 has been prepared by subcommittee 48B: Electrical connectors, of IEC technical committee 48: Electrical connectors and mechanical structures for electrical and electronic equipment.

This third edition cancels and replaces the second edition of IEC 61076-2-104 (2014). This edition constitutes a technical revision.

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

- 236 a) The structure of this international standard has been adapted to the new IEC
 237 template for standards. New subchapters have been added. Clauses 5 Dimensional
 238 information and 6 Characteristics technical specifications have been updated.
- 239 b) The mating face for a M8 12-pole connector has been added.
- 240 c) Annex B *Orientation of cable outlet in relation to coding* has been added.

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

Draft	Report on voting
XX/XX/FDIS	XX/XX/RVD

242
 243 Full information on the voting for its approval can be found in the report on voting indicated in
 244 the above table.

245 The language used for the development of this International Standard is **English**.

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

248 This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in
 249 accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement,
 250 available at www.iec.ch/members_experts/refdocs. The main document types developed by
 251 IEC are described in greater detail at www.iec.ch/standardsdev/publications.

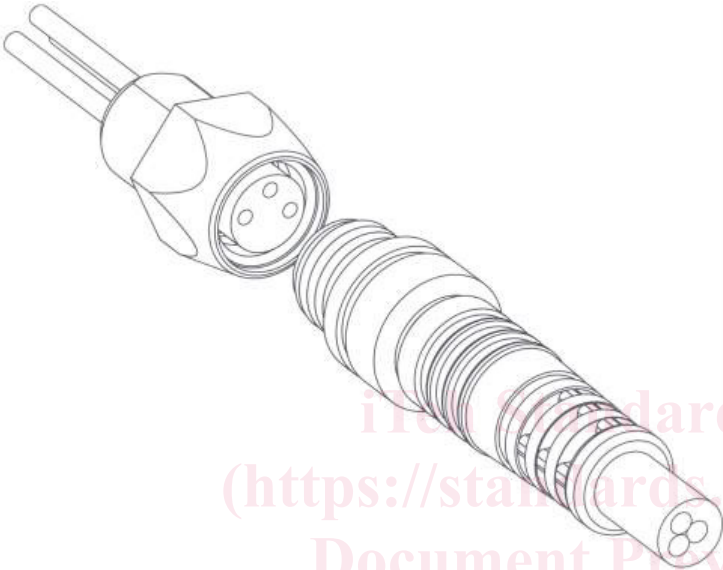
252 The committee has decided that the contents of this document will remain unchanged until the
 253 stability date indicated on the IEC website under webstore.iec.ch in the data related to the
 254 specific document. At this date, the document will be

- 255 • reconfirmed,
- 256 • withdrawn,
- 257 • replaced by a revised edition, or
- 258 • amended.

259

260

261

<p>IEC SC 48B – Electrical connectors</p> <p>Specification available from: IEC General secretariat or from the addresses shown on the inside cover.</p>	<p>IEC 61076-2-104 Ed 3</p>
<p>Electronic components of assessed quality in accordance with: IEC 61076-1</p>	
	<p>Circular connectors M8 - diameter 8 mm 3 to 12 way Male and female contacts Male and female connectors Rewirable – Non-rewirable</p>
	<p>Free cable connectors Straight and right angled connectors Fixed connectors Flange mounting Single hole mounting Connector insert Snap- and screw-locking</p>

262

263

264 1 Scope

265 This part of IEC 61076 describes circular connectors M8 screw-locking or with nominal 8 mm
266 snap-locking, for connection of automation devices with signal and power up to 50 V AC / 60
267 V DC rated voltage and up to 4 A rated current.

268 These connectors consist of fixed and free connectors either rewirable or non-rewirable. Male
269 connectors have round contacts \varnothing 0,48 mm, \varnothing 0,6 mm, \varnothing 0,7 mm and \varnothing 1,0 mm according to
270 the number of ways and coding, all contacts with the same size.

271 The different codings prevent the mating of differently coded male and female connectors.

272 NOTE 1 M8 is the dimension of the thread of the screw locking mechanism of these circular connectors.

273 NOTE 2 These connectors are typically used for connecting industrial automation devices for process
274 measurement and control.

275 2 Normative references

276 The following referenced documents are indispensable for the application of this document.
277 For dated references, only the edition cited applies. For undated references, the latest edition
278 of the referenced document (including any amendments) applies.

279 IEC 60050-581, *Advance edition of the International Electrotechnical Vocabulary – Chapter*
280 *581: Electromechanical components for electronic equipment*

281 IEC 60068-1, *Environmental testing – Part 1: General and guidance*

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

284 IEC 60352 (all parts), *Solderless connections*

285 IEC 60512-1, *Connectors for electronic equipment – Tests and measurements – Part 1:*
286 *General*

287 IEC 60512-1-1, *Connectors for electronic equipment – Tests and measurements – Part 1-1:*
288 *General examination – Test 1a: Visual examination*

289 IEC 60512-1-2, *Connectors for electronic equipment – Tests and measurements – Part 1-2:*
290 *General examination – Test 1b: Examination of dimension and mass*

291 IEC 60512-2-1, *Connectors for electronic equipment – Tests and measurements – Part 2-1:*
292 *Electrical continuity and contact resistance tests – Test 2a: Contact resistance – Millivolt level*
293 *method*

294 IEC 60512-2-2 *Connectors for electronic equipment – Tests and measurements – Part 2-2:*
295 *Electrical continuity and contact resistance tests – Test 2b: Contact resistance – Specified*
296 *test current method*

297 IEC 60512-2-5 *Connectors for electronic equipment – Tests and measurements – Part 2-5:*
298 *Electrical continuity and contact resistance tests – Test 2e: Contact disturbance*

299 IEC 60512-3-1, *Connectors for electronic equipment – Tests and measurements – Part 3-1:*
300 *Insulation tests – Test 3a: Insulation resistance*

- 301 IEC 60512-4-1, *Connectors for electronic equipment – Tests and measurements – Part 4-1:*
302 *Voltage stress tests – Test 4a: Voltage proof*
- 303 IEC 60512-5-2, *Connectors for electronic equipment – Tests and measurements – Part 5-2:*
304 *Current-carrying capacity tests – Test 5b: Current-temperature derating*
- 305 IEC 60512-6-3, *Connectors for electronic equipment – Tests and measurements – Part 6-3:*
306 *Dynamic stress tests – Test 6c: Shock*
- 307 IEC 60512-6-4, *Connectors for electronic equipment – Tests and measurements – Part 6-4:*
308 *Dynamic stress tests – Test 6d: Vibration (sinusoidal)*
- 309 IEC 60512-9-1, *Connectors for electronic equipment – Tests and measurements – Part 9-1:*
310 *Endurance tests – Test 9a: Mechanical operation*
- 311 IEC 60512-9-2, *Connectors for electronic equipment – Tests and measurements – Part 9-2:*
312 *Endurance tests – Test 9b: Electrical load and temperature*
- 313 IEC 60512-11-1, *Electromechanical components for electronic equipment – Basic testing 339*
314 *procedures and measuring methods – Part 11: Climatic tests – Section 1: Test 11a – Climatic*
315 *sequence*
- 316 IEC 60512-11-4, *Connectors for electronic equipment – Tests and measurements – Part 11-4:*
317 *Climatic tests – Test 11d: Rapid change of temperature*
- 318 IEC 60512-11-7, *Connectors for electronic equipment – Tests and measurements – Part 11-7:*
319 *Climatic tests – Test 11g: Flowing mixed gas corrosion test*
- 320 IEC 60512-11-9, *Connectors for electronic equipment – Tests and measurements – Part 11-9:*
321 *Climatic tests – Test 11i: Dry heat*
- 322 IEC 60512-11-10, *Connectors for electronic equipment – Tests and measurements – Part 11-*
323 *10: Climatic tests – Test 11j: Cold*
- 324 IEC 60512-11-12, *Connectors for electronic equipment – Tests and measurements – Part 11-*
325 *12: Climatic tests – Test 11m: Damp heat, cyclic*
- 326 IEC 60512-13-2, *Connectors for electronic equipment – Tests and measurements – Part 13-2:*
327 *Mechanical operation tests – Test 13b: Insertion and withdrawal forces*
- 328 IEC 60512-13-5, *Connectors for electronic equipment – Tests and measurements – Part 13-5:*
329 *Mechanical operation tests – Test 13e: Polarizing and keying method*
- 330 IEC 60512-14-7 *Electromechanical components for electronic equipment – Basic testing*
331 *procedures and measuring methods – Part 14: Sealing tests – Section 7: Test 14g: Impacting*
332 *water*
- 333 IEC 60512-15-1 *Connectors for electronic equipment – Tests and measurements – Part 15-1:*
334 *Connector tests (mechanical) – Test 15a: Contact retention in insert*
- 335 IEC 60512-16-5, *Connectors for electronic equipment – Tests and measurements – Part 16-5:*
336 *Mechanical tests on contacts and terminations – Test 16e: Gauge retention force (resilient*
337 *contacts)*

338 IEC 60512-19-3, *Electromechanical components for electronic equipment – Basic testing*
 339 *procedures and measuring methods – Part 19: Chemical resistance tests – Section 3: Test*
 340 *19c – Fluid resistance*

341 IEC 60512-23-3 *Connectors for electrical and electronic equipment – Tests and*
 342 *measurements – Part 23-3: Screening and filtering tests – Test 23c: Shielding effectiveness of*
 343 *connectors and accessories – Line injection method*

344 IEC 60529, *Degrees of protection provided by enclosures (IP code)*

345 IEC 60664-1, *Insulation coordination for equipment within low-voltage systems – Part 1:*
 346 *Principles, requirements and tests*

347 IEC 60998-2-1, *Connecting devices for low-voltage circuits for household and similar*
 348 *purposes – Part 2-1: Particular requirements for connecting devices as separate entities with*
 349 *screw-type clamping units*

350 IEC 60999-1, *Connecting devices – Electrical copper conductors – Safety requirements for*
 351 *screw-type and screwless-type clamping units – Part 1: General Requirements and particular*
 352 *requirements for clamping units for conductors from 0,2mm² up to 35mm² (included)*

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

355 IEC 61076-2, *Connectors for electronic equipment – Product requirements – Part 2: Sectional*
 356 *specification for circular connectors*

357 IEC 61984, *Connectors – Safety requirements and tests*

358 ISO 11469:2016, *Plastics – Generic identification and marking of plastic products*

359 ISO 21920-1 (2021), *Geometrical Product Specifications (GPS) – Surface texture: Profile –*
 360 *Part 1: Indication of surface texture*

361 **3 Terms and definitions**

362 For the purposes of this document, terms and definitions from IEC 60050-581, IEC 61076-1,
 363 IEC 60512-1 as well as the following apply.

364 ISO and IEC maintain terminological databases for use in standardization at the following
 365 addresses:

366 • ISO Online browsing platform: available at <https://www.iso.org/obp>

367 • IEC Electropedia: available at <http://www.electropedia.org/>

368 **3.1**

369 **mounting orientation**

370

371 circular mounting position of the connector in relation to the polarization of the mating
 372 interface.

373 4 Technical information

374 4.1 Recommended method of termination for rewirable connectors

375 The contact termination for rewirable connectors shall be of the following types: screw, crimp,
376 spring clamp, insulation piercing, insulation displacement, press-in connections according to
377 the respective part of IEC 60352 series and IEC 60999-1, as applicable, or solder.

378 4.2 Connector coding, number of contacts, ratings and characteristics

379 Table 1 provides the codings of these connectors as a function of their style, number of
380 contacts, rated voltage and rated current.

381 **Table 1 – Ratings of connectors**

Coding	Style	Number of contacts	Rated voltage AC or DC	Rated current A
A	3-way	3	50 V AC / 60 V DC	4
	4-way	4	50 V AC / 60 V DC	4
	6-way	6	32 V	1,5
	8-way	8	32 V	1,5
B	5-way	5	32 V	3
C	12-way	12	32 V	1

NOTE The rated current refers to the interface.

382

383 Insulation resistance: $10^8 \Omega$ min.

384 Contact spacing: see interface dimensions subclause 5.4

385 4.3 Systems of levels

386 4.3.1 Performance level

387 Connectors according to this standard are classified by mating performance level (MPL). See
388 6.5.1 for details.

389 4.3.2 Compatibility levels, according to IEC 61076-1

390 Connectors according to this standard are intermateable and interoperable according to IEC
391 61076-1 (level 3).

392 Interoperability is granted, provided that the same performance level as defined in 4.3.1 and
393 the same surface of contacts as defined in 6.2 is considered.

394 4.4 Classification into climatic categories

395 See 6.3 in this standard.

396 4.5 Creepage and clearance distances

397 The creepage and clearance distances shall be dimensioned according to rated insulation
398 voltage values specified in Table 32 (see 6.4.1), in accordance with IEC 60664-1 and shall be
399 measured only in mated position (see 4.8, COC unless otherwise specified by the
400 manufacturer) according to IEC 60512-1-2.