CC crimp contacts

inserts		page:
CDC CCE	10, 16 poles + ⊕ 6, 10, 16, 24, 32, 48 poles + ⊕	104 - 105 130 - 135
CMCE	3+2, 6+2, 10+2,	
	12+4, 20+4 (aux) poles + 🕀	137 - 145
CQE	10, 18, 32, 46, 64, 92 poles + 🕀	168 - 173
CQEE	40, 64 poles + 🕀	176 - 177
CQ	5 poles + 🕀	186
СХ	<u>8</u> /24 poles + ⊕	194
СХ	6/ <u>6</u> poles + 🕀	206
MIXO (1	6A)	275 - 289



iron (Fe) crimp contacts



M

description	part No.	part No.
16A, 0,3 mm ² , AWG 22 female contacts	CCFC 0.3	CCFF 0.3
1CA 0.0 mm ² AMIC 00 male contecto	CCMC 0.2	COME 0.2

16A, 0,3 mm ² , AWG 22 male contacts	CCMC 0.3	CCMF 0.3
16A, 0,5 mm ² , AWG 20 female contacts	CCFC 0.5	CCFF 0.5
16A, 0,5 mm ² , AWG 20 male contacts	CCMC 0.5	CCMF 0.5

Note:

A mixed combination of iron, constantan and silver and gold plated contacts can be fitted in the same insert.

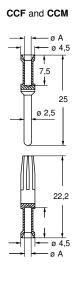
- it is recommended to crimp the contacts with crimping tools homologated by ILME (please see the crimping tool section 16A contacts, CCF and CCM on pages 705 741)
 for type J (iron constantan) thermocouples compliant with EN 60584-1
- contact resistance ≤ 1 Ohm

øΑ ø 4,5 ł 7.5 Í 25 ø 2,5 22.2 ø 4.5 øΑ

CCF and CCM

CCF and CCM contacts

conductor	conductors
COnductor	
slot	stripping length
ø A (mm)	mm
1,1	7,5
1,1	7,5
	ø A (mm) 1,1

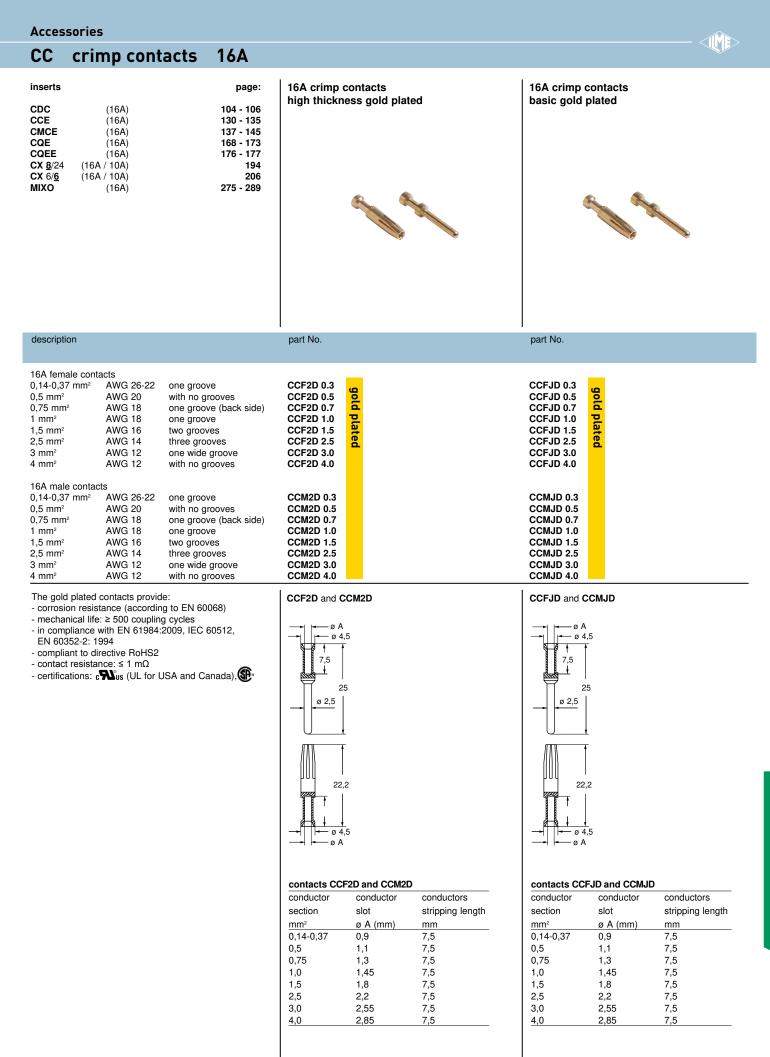


CCF and CCM contacts

conductor	conductor	conductors
section	slot	stripping length
mm²	ø A (mm)	mm
0,3	1,1	7,5
0,5	1,1	7,5

dimensions shown in mm are not binding and may be changed without notice

Accessories				
CD crimp contacts 10A				
inserts page: CD (10A) 66 - 74 CDD (10A) 76 - 83 CQ (10A) 187 - 193 CX 8/24 (16A / 10A) 194 CX 6/36 (10A) 198 CX 12/2 (10A) 199 MIXO (10A) 271 - 283	10A crimp contacts high thickness gold plated	10A crimp contacts basic gold plated		
description	part No.	part No.		
10A female contacts 0,14-0,37 mm² AWG 26-22 identification No. 1 0,5 mm² AWG 20 identification No. 2 0,75 mm² AWG 18 identification No. 2 1,0 mm² AWG 18 identification No. 3 1,5 mm² AWG 16 identification No. 4 2,5 mm² AWG 14 identification No. 5 10A male contacts 0,14-0,37 mm² AWG 26-22 0,14-0,37 mm² AWG 20 identification No. 1 0,5 mm² AWG 20 identification No. 2 0,75 mm² AWG 18 identification No. 3 1,5 mm² AWG 16 identification No. 4 2,5 mm² AWG 14 identification No. 5	CDF2D 0.3 CDF2D 0.5 CDF2D 0.7 CDF2D 1.0 CDF2D 1.5 CDF2D 2.5 CDM2D 0.3 CDM2D 0.5 CDM2D 0.7 CDM2D 1.0 CDM2D 1.0 CDM2D 1.5 CDM2D 1.5 CDM2D 1.5 CDM2D 1.5 CDM2D 1.5	CDFJD 0.3 CDFJD 0.5 CDFJD 0.7 CDFJD 1.0 CDFJD 1.5 CDFJD 2.5 CDMJD 0.3 CDMJD 0.3 CDMJD 0.5 CDMJD 1.5 CDMJD 1.5 CDMJD 1.5 CDMJD 1.5 CDMJD 1.5 CDMJD 1.5 CDMJD 1.5		
 The gold plated contacts provide: corrosion resistance (according to EN 60068) mechanical life: ≥ 500 coupling cycles in compliance with EN 61984:2009, IEC 60512, EN 60352-2: 1994 compliant to directive RoHS2 contact resistance: ≤ 3 mΩ certifications: coupling (UL for USA and Canada), for 	CDF2D and CDM2D $\overrightarrow{1}$ $\overrightarrow{1}$ $\overrightarrow{25}$ $\overrightarrow{25}$ $\overrightarrow{25}$ $\overrightarrow{25}$ $\overrightarrow{25}$ $\overrightarrow{21,6}$ $\overrightarrow{1}$ $\overrightarrow{21,6}$ $\overrightarrow{1}$ $\overrightarrow{21,6}$ $\overrightarrow{1}$ $\overrightarrow{21,6}$ $\overrightarrow{1}$ $\overrightarrow{21,6}$ $\overrightarrow{1}$ $\overrightarrow{21,6}$ $\overrightarrow{1}$ $\overrightarrow{21,6}$ $\overrightarrow{1}$ $\overrightarrow{21,6}$ $\overrightarrow{1}$ $\overrightarrow{1}$	CDFJD and CDMJD $\xrightarrow{25}$ $\xrightarrow{25}$ $\xrightarrow{21,6}$ $\xrightarrow{21,5}$ $\xrightarrow{21,2}$ $\xrightarrow{21,6}$		



ACCESSORIES

CI SERIES CRIMP CONTACTS (5 A) BASIC GOLD PLATING HIGH THICKNESS GOLD PLATING



5 A crimp contacts with basic gold plating, with high thickness gold plating



TECHNICAL FEATURES CIF<u>2D</u> /CIM<u>2D</u> 0.2/0.3/0.5/0.7 - CIF<u>JD</u> /CIM<u>JD</u> 0.2/0.3/0.5/0.7

Contacts gold plating in electrical connectors is particularly indicated for noiseless transmission of sensitive signals, thanks to the low contact resistance and the reduced galvanic potential that this plating provides.

To complete the offer of turned crimp contacts of series **CI** (5 A) pairing it to that already available for series **CD** (10 A) and **CC** (16 A) (see CN.19 pages 674-675), also **series CI** (5 A) is now **available with two additional gold platings:**

- a basic gold plated version, provided with a low thickness gold plating over a high thickness substrate of nickel-phosphorus, identified by "JD" in the first portion of their part no. (CIFJD/CIMJD);
- a high thickness gold plated version, provided with a 2µm gold plating over a substrate of nickel, identified by "2D" in the first portion of their part number (CIF2D/ CIM2D).

Both series are already approved with the cPNus mark in files ECBT2.E115072 and ECBT8.E115072.

All versions of series **CI** – like the equivalent versions already available for series **CD** (10 A) and series **CC** (16 A) turned crimp contacts – comply with the RoHS 2 EU Directive with exemption 6c (lead as alloying element in copper alloys).

The **basic gold plated** version (version "**JD**") is an economical alternative to the "**D**" standard gold plated version of series **CI** (**CIFD/CIMD**) that, by employing a special nickel-phosphorus hard and durable plating substrate, maintains the <u>corrosion resistance</u> (tested according EN 60068), the <u>mechanical life</u> (≥500 mating cycles) and the <u>full compliance to the connectors' safety standard</u> **EN 61984**:2009, that uses test methods of series **IEC 60512,** and <u>to the crimped connection standard</u> **EN 60352-2**:1994 (Ed.1.0 more demanding for turned contacts in terms of pull-out force) at the same level of the standard gold plated version **CIFD/CIMD**.

The second, **high thickness gold plated** version (version "**2D**") expands the performance of the "**D**" standard gold plated version of series **CI** (**CIFD/CIMD**) by using a high thickness gold plating over the usual migration barrier nickel plating substrate, for those harsher applications that demand the lowest porosity of the gold plating even after sustained number of mating cycles (up to 500 and more) in corrosive environments. IME

inserts page: CQ 21 21 poles 190 CX 08 B (MIXO BUS) 8 poles + shield 293 CX 08 B (MIXO DATA) 8 poles 286 CX 25 IB (MIXO) 25 poles 284 CX 36 I (MIXO) 36 poles 30 * CX 20S I (MIXO) 20 poles + shield 36 * CX 01 9V (MIXO DATA) 9 poles + shield 70 *	5 A crimp contacts high thickness gold plated	5 A crimp contacts basic gold plated
■ refer to CN.19 pages * refer to NEWS 2020 pages	∰ FROM MAY 2020	🛗 FROM MAY 2020
description	part No.	part No.
CI (5 A) female crimp contacts 0,08-0,21 mm ² AWG 28-24 0,13-0,33 mm ² AWG 26-22 0,33-0,52 mm ² AWG 22-20 0,52-0,75 mm ² AWG 20-18 CI (5 A) male crimp contacts 0,08-0,21 mm ² AWG 28-24	CIF2D 0.2 CIF2D 0.3 CIF2D 0.5 CIF2D 0.7 CIF2D 0.7 CIM2D 0.2 CIM2D 0.2	CIFJD 0.2 CIFJD 0.3 CIFJD 0.5 CIFJD 0.7 CIFJD 0.7 CIMJD 0.2
0,13-0,33 mm ² AWG 26-22 0,33-0,52 mm ² AWG 22-20 0,52-0,75 mm ² AWG 20-18	CIM2D 0.3 CIM2D 0.5 CIM2D 0.7	CIMJD 0.3 CIMJD 0.5 CIMJD 0.7
 The gold plated contacts provide: corrosion resistance (according to EN 60068) mechanical life: ≥ 500 coupling cycles in compliance with EN 61984:2009, IEC 60512, EN 60352-2: 1994 compliant to directive RoHS2 contact resistance: ≤ 3 mΩ for crimp contacts CI series use, on page 716 - 719 of CN.19 catalogue CIPZ D crimping tool CIPZ D preumatic crimping tool (see page 144) CITP D turret head CIES B insertion / removal tool for contacts 0,2 - 0,5 mm² certifications: cM^{sus} (UL for USA and Canada), for the current rating depends on the contact size and on the connector in which they are installed. See derating diagrams of each connector. 		
	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	

CI SERIES CRIMP CONTACTS (5 A) - BASIC GOLD PLATED - HIGH THICKNESS GOLD PLATED CIF<u>2D</u> /CIM<u>2D</u> 0.2/0.3/0.5/0.7 - CIF<u>JD</u> /CIM<u>JD</u> 0.2/0.3/0.5/0.7



SI SERIES STAMPED CRIMP CONTACTS (5 A) SIF..D /SIM..D



Contacts for wires with conductor cross-sectional area: 28-24 AWG (0,08 – 0,21 mm²) and 24-20 AWG (0,21 – 0,52 mm²)



TECHNICAL FEATURES SIF..D /SIM..D

- Alternative (but not equivalent) to the <u>turned</u> crimp contacts series **CI**, for less demanding applications e.g. reduced current-carrying capacity, not relevant for signal applications (widely used in the D-Sub connector field).
- Available with different selective gold plating thickness (over nickel) according to three required performance levels: 1D – 2D – 3D, respectively for 500, 250 and 50 mating cycles.
- **Open crimp barrel** contacts **with insulation grip**, providing tensile strength (pull out force) compliant with EN/IEC 60352 Ed. 2, lower than corresponding turned, closed crimp barrel contacts series CI (EN/IEC 60352-2 Ed.1.0 had two different curves A and B, later consolidated in the lower demanding curve B, whereas ILME CI turned contacts still claim conformity to curve A).
- Compatible with inserts CQ 21, and MIXO modules
 CX 25 IB, CX 36 I, CX 08 B (MIXO BUS 8P),
 CX 01 9V (9-pin shielded D-SUB for 1 cable),
 CX 01 9V2 (9-pin shielded D-SUB for 2 cables).

CAUTION – Only selected inserts are suitable for stamped contacts! Respect the indications provided in the additional catalogue pages (under construction) in combination with these new **SI** stamped contacts.

- Derating diagrams of above inserts / modules are under construction: <u>expected to show ca. 10% less current-</u> <u>carrying capacity than when inserts employ corresponding</u> <u>turned contacts series Cl</u>.
 NOTE: Not suitable for MIXO Shielded CX 20S IF /IM.
- Available in 2 sizes:
 - **0.2** for wires with conductor cross-sectional area 28-24 AWG (0,08 0,21 mm²);
 - **0.5** for wires with conductor cross-sectional area 24-20 AWG (0,21 0,52 mm²).

- Available in **3 possible packaging** depending on volumes used and associated crimp tooling:
- <u>as loose parts</u> (no suffix), in 200 pcs per box package, for use with manual crimp tool SIPZ W;
- <u>as coil package</u> (suffix C), 500 pcs in a compact-sized coil, for use with manual crimp tools able to host the coil, SIPZC W;
- <u>as reel (bandolier) package</u> (suffix **R**), 10 000 pcs in a large-sized reel, for use with semi-automatic crimping machine.

- Possible performance levels (mating cycles):

PL1 (≥500 cycles)	PL2* (≥250 cycles)	PL3 (≥50 cycles)	mm ²	AWG
SIF1D 0.2	SIF2D 0.2	SIF3D 0.2	0,08 – 0,21	28 – 24
SIF1D 0.5	SIF2D 0.5	SIF3D 0.5	0,21 – 0,52	24 – 20
SIM1D 0.2	SIM2D 0.2	SIM3D 0.2	0,08 – 0,21	28 – 24
SIM1D 0.5	SIM2D 0.5	SIM3D 0.5	0,21 – 0,52	24 – 20

- * NOTE **PL2 available on stock**, PL1 and PL3 available upon request.
- Stripping length: 3 mm

Environmental conformities:

- RoHS 2: conform without exemptions
- China RoHS: conform without exemption
- EFUP 50 (years no marking required)
- REACH SVHC substance: none

IME

Crimp contacts

refer to CN.19 pages

* refer to NEWS 2020 pages

SIF /SIM..D 5 A stamped size 0.2

inserts		📕 page:
CQ 21	21 poles	190
CX 08 B (MIXO BUS)	8 poles + shield	293
CX 25 IB (MIXO)	25 poles	284
CX 36 I (MIXO)	36 poles	30 *
CX 01 9V (MIXO DATA)	9 poles + shield	296
CX 01 9V 2 (MIXO DATA)	9 poles + shield	70 *

SI..D (5 A) crimp contacts



Q STAMPED CONTACTS

FROM FEBRUARY 2020

description		part No.	pcs. (1 packaging unit)
SIFD (5 A) fer 0,08-0,21 mm ² 0,08-0,21 mm ² 0,08-0,21 mm ²	AWG 28-24	SIF1D 0.2 SIF2D 0.2 SIF3D 0.2	200
SIMD (5 A) ma 0,08-0,21 mm ² 0,08-0,21 mm ² 0,08-0,21 mm ²		SIM1D 0.2 SIM2D 0.2 SIM3D 0.2	200
SIFD C (5 A) 1 0,08-0,21 mm ² 0,08-0,21 mm ² 0,08-0,21 mm ²		SIF1D 0.2C SIF2D 0.2C SIF3D 0.2C	500
$\begin{array}{l} SIMD \ \ C \ (5 \ A) \\ 0,08\text{-}0,21 \ mm^2 \\ 0,08\text{-}0,21 \ mm^2 \\ 0,08\text{-}0,21 \ mm^2 \end{array}$		SIM1D 0.2C SIM2D 0.2C SIM3D 0.2C	500
0,08-0,21 mm ²	emale stamped crimp contacts (reel package) AWG 28-24 AWG 28-24 AWG 28-24 AWG 28-24	SIF1D 0.2R SIF2D 0.2R SIF3D 0.2R	10 000
SIMD R (5 A) 0,08-0,21 mm ² 0,08-0,21 mm ² 0,08-0,21 mm ²	male stamped crimp contacts (reel package) AWG 28-24 AWG 28-24 AWG 28-24	SIM1D 0.2R SIM2D 0.2R SIM3D 0.2R	10 000

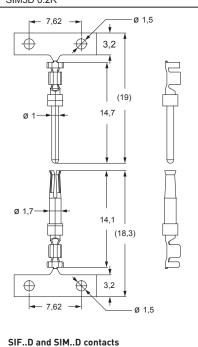
- cUL (UL for USA and Canada), CSA pending

INOTE:

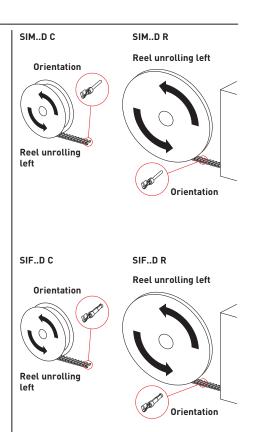
The SIF1D/SIM1D and SIF3D/SIM3D crimp contacts are available only upon request.

Recommended crimping tools loose parts: SIPZ W (see page 142) coil package: SIPZC W (see page 143) reel package: suitable for stripping / crimping automated machines to be used with 10 000 pieces reels, please contact ILME S.p.A.

The current rating depends on the contact size and on the connector in which they are installed. See derating diagrams of each connector.



Shine and Shine contacts			
conductors	max		
stripping	insulation		
length (mm)	Ø (mm)		
3	1		
3	1.5		
	conductors stripping		



Crii	np	co	nta	cts

refer to CN.19 pages

* refer to NEWS 2020 pages

SIF /SIM..D 5 A stamped size 0.5

inserts		📕 page:
CQ 21	21 poles	190
CX 08 B (MIXO BUS)	8 poles + shield	293
CX 25 IB (MIXO)	25 poles	284
CX 36 I (MIXO)	36 poles	30 *
CX 01 9V (MIXO DATA)	9 poles + shield	296
CX 01 9V 2 (MIXO DATA)	9 poles + shield	70 *

SI..D (5 A) crimp contacts



Q STAMPED CONTACTS

FROM FEBRUARY 2020

description		part No.	pcs. (1 packaging unit)
SIFD (5 A) fe 0,21-0,52 mm ² 0,21-0,52 mm ² 0,21-0,52 mm ²	AWG 24-20	SIF1D 0.5 SIF2D 0.5 SIF3D 0.5	200
SIMD (5 A) m 0,21-0,52 mm ² 0,21-0,52 mm ² 0,21-0,52 mm ²	AWG 24-20	SIM1D 0.5 SIM2D 0.5 SIM3D 0.5	200
SIFD C (5 A) 0,21-0,52 mm ² 0,21-0,52 mm ² 0,21-0,52 mm ²	female stamped crimp contacts (coil package AWG 24-20 AWG 24-20 AWG 24-20 AWG 24-20) SIF1D 0.5C SIF2D 0.5C SIF3D 0.5C	500
SIMD C (5 A) 0,21-0,52 mm ² 0,21-0,52 mm ² 0,21-0,52 mm ²	AWG 24-20	SIM1D 0.5C SIM2D 0.5C SIM3D 0.5C	500
SIFD R (5 A) 0,21-0,52 mm ² 0,21-0,52 mm ² 0,21-0,52 mm ²	female stamped crimp contacts (reel package AWG 24-20 AWG 24-20 AWG 24-20 AWG 24-20) SIF1D 0.5R SIF2D 0.5R SIF3D 0.5R	10 000
SIMD R (5 A) 0,21-0,52 mm ² 0,21-0,52 mm ² 0,21-0,52 mm ²		SIM1D 0.5R SIM2D 0.5R SIM3D 0.5R	10 000

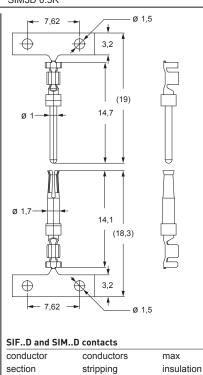
- cUL (UL for USA and Canada), CSA pending

INOTE:

The SIF1D/SIM1D and SIF3D/SIM3D crimp contacts are available only upon request.

Recommended crimping tools loose parts: SIPZ W (see page 142) coil package: SIPZC W (see page 143) reel package: suitable for stripping / crimping automated machines to be used with 10 000 pieces reels, please contact ILME S.p.A.

The current rating depends on the contact size and on the connector in which they are installed. See derating diagrams of each connector.



 SIM..D C
 SIM..D R

 Orientation
 Reel unrolling left

 Image: Construction of the second second

length (mm)

3

3

Ø (mm)

1 1,5

(mm²)

0,08-0,21

0,21-0,52

RI SERIES HNM CRIMP CONTACTS (5 A) RIFD /MD



Turned crimp contacts designed to meet high number of matings (HNM) and high durability needs



TECHNICAL FEATURES RIFD /MD

Especially high thickness gold plated/lubricated contacts series **RI** enable **HNM** feature on suitable MIXO connectors that when mounted on dedicated MIXO HNM frames part nos. **RX 02 /03 /04 /06 TF /TM** also employing especially gold plated PE contacts, allow the creation of HNM MIXO modular inserts, useful when connectors are foreseen for frequent operation, providing <u>up to 10 000 matings</u> compared to the 500 matings provided by series **CI** turned crimp contacts.

Part no.	Conductor sections	
RIFD /MD 0.2	0,08 – 0,21 mm ²	AWG 28-24
RIFD /MD 0.3	0,13 – 0,33 mm ²	AWG 26-22
RIFD /MD 0.5	0,33 – 0,52 mm ²	AWG 22-20
RIFD /MD 0.7	0,52 – 0,75 mm ²	AWG 20-18

Available in **four sizes**, 0.2 through 0.7, to cover the conductor cross-sectional area range 0,08 mm² through 0,75 mm² (AWG 28 through AWG 18).

 $\mathsf{NOTE}-\mathsf{The}$ largest size 0.7 contacts are suitable only for CX 25 IBF /IBM inserts.

Stripping length: 4 mm (same as per series CI)

Series **RI** HNM crimp contacts use the same tools (crimping tools, insertion and removal tools) recommended for series **CI** turned crimp contacts.

Series **RI** HNM crimp contacts provide the same current ratings of series CI turned contacts.

The connector modules of series MIXO that by using HNM 5A contacts series **RI** together with MIXO HNM frames **RX 02...06 TF/TM** can create MIXO HNM modular connector inserts are:

- MIXO CX 25 IBF /IBM
- MIXO CX 36 IF /IM

Series **RI** HNM crimp contacts must be used in special (new, see page 54) HNM variants of MIXO Gigabit module and (new, see page 38) MIXO Shielded module:

- HNM MIXO Gigabit RX 08 I6F /I6M - HNM MIXO Shielded RX 20S IF /IM

NOTE – CQ 21 is not suitable for HNM applications due to lack of HNM hoods and housings size "21.21". RI contacts are also not suitable for D-Sub 9-pin modules CX 01 9VF /9VM and the new two cable outlet version CX 01 9VF2 /9VM2, not foreseen for HNM applications.

Environmental conformities:

- RoHS 2: conform with exemption 6(c) (lead in copper alloys)
- China RoHS: conform with exemption EFUP 50 (years no marking required)
- REACH SVHC substance: lead

widening of the ILME portfolio of HNM inserts: 10, 16, 40 and now 5 A



Crimp contacts

RI..D 5 A HNM (High Number of Matings)

inserts		📕 page:	RI (5 A) crimp contacts
CX 25 IB (MIXO) CX 36 I (MIXO) RX 08 D5 (MEGABIT) RX 08 D5 2 (MEGABIT)	25 poles 36 poles 8 poles + shield 8 poles + shield	284 30 * 46 * 46 *	gold plated

FROM MAY 2020

gold plated

part No.

RIFD 0.2

RIFD 0.3 RIFD 0.5 RIFD 0.7

RIMD 0.2 RIMD 0.3

refer to CN.19 pages * refer to NEWS 2020 pages

description

accomption		
RI (5 A) female of	crimp contacts	
0,08-0,21 mm ²		
0,13-0,33 mm ²	AWG 26-22	
0,33-0,52 mm ²	AWG 22-20	
0,52-0,75 mm ²	AWG 20-18 *	
RI (5 A) male cri	mp contacts	
0,08-0,21 mm ²	AWG 28-24	
0,13-0,33 mm ²	AWG 26-22	
0,33-0,52 mm ²	AWG 22-20	
0,52-0,75 mm ²	AWG 20-18 *	

* suitable only for CX 25 IBF/IBM

- for crimp contacts RI series use:

CIPZ D crimping tool

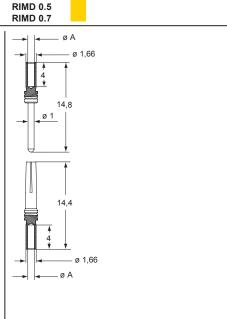
CIPZP D pmeumatic crimping tool (see page 144) **CITP D** turret head

CIES insertion / removal tool for contacts 0,2 - 0,5 mm² **CIES B** insertion / removal tool for contacts 0,75 mm²

- cUL (UL for USA and Canada), CSA pending

C NOTE:

The current rating depends on the contact size and on the connector in which they are installed. See derating diagrams of each connector.

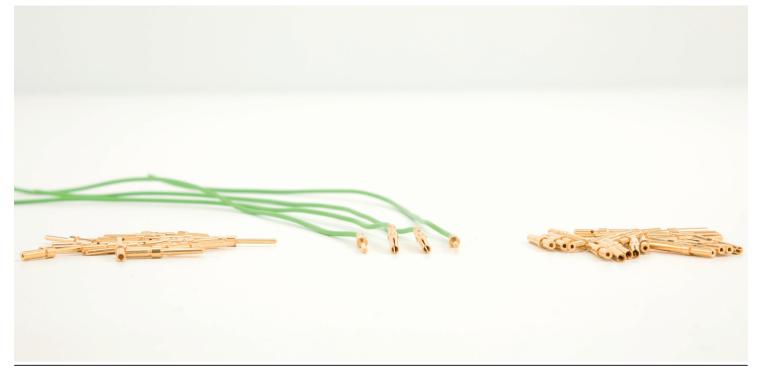


RIF and RIM contacts

conductor	conductor	conductors
section	slot	stripping length
(mm²)	ø A (mm)	(mm)
0,08-0,21	0,64	4
0,13-0,33	0,90	4
0,33-0,52	1,12	4
0,52-0,75	1,12	4



RI SERIES HNM CRIMP CONTACTS (5 A) - RIFD /MD



CX7 SERIES SIZE 6.0 CRIMP CONTACTS (6 mm² / 10 AWG)



70 A crimp contacts suitable for 6 mm² wires



TECHNICAL FEATURES CX7FA /MA 6.0

This new size **6.0** adds to the existing sizes 10 - 16 - 25 of series **CX7** removable crimp contacts, to allow lower wire size 6 mm² / 10 AWG (stranded copper conductors only), expanding this series to cover conductor cross-sectional area range 6 mm² through 25 mm² (10 AWG through 4 AWG).

Environmental conformities:

- RoHS 2: conform with exemption 6(c) (lead in copper alloys)
- <u>China RoHS</u>: conform with exemption EFUP 50 (years no marking required)
- REACH SVHC substance: lead

- Suitable for use in MIXO module CX 02 7F /7M
- Crimping with CPPZ C (CEMBRE HT 45) manual crimp tool, crimping dies CGD 10 C for CX7 contacts with 6 mm² / 10 AWG cross-sectional area, and locator CX7PZ LOC.
 With these tools they provide crimped connections in compliance with EN/IEC 60352-2. Their tensile strength still in conformity with the values of former curve A (closed crimp barrel) of Ed.1.0 of that standard.

increases the range of wire cross sections that can ben used in ILME 70A MIXO modules



Crimp contacts

70 A CX7..6.0

inserts CX 02 7F /M (MIXO) 2 poles

📕 page: 70 A silver plated crimp contacts

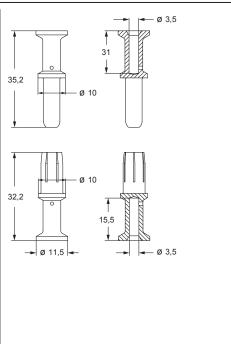
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refer to CN.19 pages

description	part No.	
70 A female crimp contacts 6 mm ² AWG 10 70 A male crimp contacts 6 mm ² AWG 10	CX7FA 6.0 CX7MA 6.0	silver plated
 cUL (UL for USA and Canada) pending mechanical life: ≥ 500 cycles contact resistance: ≤ 0,5 mΩ it is recommended to crimp the contacts with crimping tools homologated by ILME. Crimping with CPPZ C (CEMBRE HT 45) manual crimp tool, crimping dies CGD 10 C for CX7 contacts with 6 mm² / 10 AWG cross-sectional area, and locator CX7PZ LOC 	35,2 35,2 32,2 Ø 11,	Ø



CX CRIMP CONTACTS 70 A 6 mm²



FOCUS ON

CX7 CRIMP CONTACTS SERIES CURRENT-CARRYING CAPACITY UP TO <u>80 A</u>



When employed in the new crimp combined connector inserts CXC 4/2 and CXC 4/8, the current-carrying capacity of CX7 crimp contacts rises up to <u>80 A</u>



TECHNICAL FEATURES CX7 CRIMP CONTACTS SERIES CURRENT-CARRYING CAPACITY UP TO <u>80 A</u>

Series **CX7** removable crimp contacts have been conventionally described as "70 A contacts", lacking until now any application other than in series MIXO **CX 02 7F/7M** "70 A" modules.

When employed in the new crimp connector inserts **CXC 4/2** (see page 14-17) and **CXC 4/8** (see page 18-21), which are combined connectors with power contacts up to **80 A**, the **CX7 current-carrying capacity, only for this specific use, is extended to 80 A**.

As for any series of crimp contacts, the current-carrying capacity depends on:

- the contact size

As the mating side (male and female) is standardized, the rear side, consisting of the crimp barrel, is available in four different sizes: 6.0, 10, 16 and 25, and the highest possible working current belongs to the largest contact size and the associated largest conductor cross-sectional area;

the target connector insert

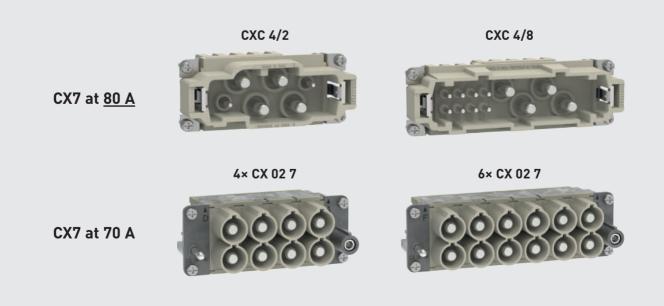
The higher the number of poles loaded in the same enclosure, i.e. the higher the contact density, the lower the available working current before the upper limiting temperature (ULT) of materials is reached, including that of cable sheathing (that has not to be ignored);

- the connector polarity

In the same series, a lower number of poles yields to a higher possible working current: a single module produces less heat and lower temperature than 6× the same module.

The **70 A** conventional "nickname" of series **CX7** was then attributed based on the worst case where $6 \times CX 02 7F/7M$ were used in a size "104.27" MIXO frame CX 06 TF/TM. However, it is possible that the same **CX7** contacts, in a smaller amount than 12 in a "104.27" housing or 8 in a "77.27" housing, are able to carry up to 80 A, as they do in the new connectors **CXC 4/2** (only 4 power poles in a "77.27" connector) and **CXC 4/8** (only 4 power poles + 8 aux poles in a "104.27" insert).

The **80 A** higher current-carrying capacity, based on the derating diagrams, belongs to the larger 16 mm² / 6 AWG and 25 mm² / 4-3 AWG cross-sectional area conductors for the new crimp inserts.



CX7 SERIES FINGERPROOF MALE CRIMP CONTACTS CX7MA 6.0 / 10 / 16 / 25 P



CX7 series male crimp contacts, variants with insulating cap



TECHNICAL FEATURES CX7MA 6.0 / 10 / 16 / 25 P

For the benefit of male MIXO module **CX 02 7M**, the **CX7** series is now expanded by adding a variant of **male contacts with insulating cap** on their tip, likely to determine in combination with this male module the **fingerproof safety** feature.

This feature is particularly advantageous in all applications where male connector inserts feed electric motors equipped with power drives, such drives being often equipped motor side with **capacitors** that may remain charged with hazardous voltage present on the pin contacts of the connector for a few times after switching off the motor and unplugging the connector.

NOTE – The new crimp combined connector inserts CXM 4/2 and CXM 4/8 for use with CX7MA power male crimp contacts and CCMA auxiliary male crimp contacts, cannot take advantage of CX7MA ... P fingerproof contacts, in that these inserts, for legacy with the traditional screw-type models, could not be provided with shrouded seats for male contacts as in MIXO CX 02 7M.



our technical clip

Tip made by polycarbonate (same as those of the inserts), light grey colour.

All other features are in common with **CX7** contacts (i.e. crimping tools, dimensions, materials, etc.).

RoHS: compliant with exemption 6(c).



CX7MA 6.0 / 10 / 16 / 25 P 70 A FINGERPROOF

CX/MA 6.U / IU / I6 / 25 P /	U A FINGERPRUUF
inserts page: MIXO (CX 02 7M) 70 A 266	70 A silver plated fingerproof male crimp contacts
description	part No.
70 A male crimp contacts fingerproof 6 mm² AWG 10 10 mm² AWG 7 16 mm² AWG 5 25 mm² AWG 3	CX7MA 6.0 P CX7MA 10 P CX7MA 16 P CX7MA 16 P CX7MA 25 P
 it is recommended to crimp the contacts with crimping tools homologated by ILME (please see the crimping tool section 70A contacts, CX7MAP series) on pages 720 - 721 of CN.19 catalogue C7ES removal tool (see page 720 of CN.19 catalogue) 	CX7MA P Image: product of the system Image: product of the syst

CX7MA 6.0 / 10 / 16 / 25 P - 70 A FINGERPROOF MALE CRIMP CONTACTS



RX7 SERIES FINGERPROOF MALE CRIMP CONTACTS

HNM VERSION WITH INSULATING CAP



MIXO module **CX 02 7M**, when mounted in dedicated HNM MIXO is used in combination with the **RX7 HNM** series of 70 A crimp contacts which is now expanded by adding a variant of **male contacts with insulating cap** on their tip, to determine the **fingerproof safety** (IPXXB or IP20) feature.

This feature is particularly advantageous in all applications where male connector inserts feed electric motors equipped with power drives, such drives being often equipped motor side with **capacitors** that may remain charged with hazardous voltage present on the pin contacts of the connector for a few times after switching off the motor and unplugging the connector.

- NOTE The new HNM crimp combined connector inserts RXM 4/2 and RXM 4/8 for use with RX7 power male crimp contacts and RC auxiliary male crimp contacts, cannot take advantage of RX7M2D..P fingerproof contacts, in that these inserts, for legacy with the traditional screw-type models, could not be provided with shrouded seats for male contacts as in MIXO CX 02 7M.
- Q Tip made by polycarbonate (same as those of the inserts), light grey colour.
- Q All other features are in common with RX7 contacts (i.e., crimping tools, dimensions, materials, etc.).
- Q RoHS: compliant with exemption 6(c).





RX7M2D 25 P

25 mm²	(Class 5)	AWG 4 - 3
removal tools		

for **RC** series contacts

it is recommended to crimp the contacts with crimping tools homologated by ILME (please see the crimping tool section 70 A contacts, RX7 series) on pages 720 - 721 of CN.19 catalogue

15,5 ↓			
	→ ø6		
	J		
	.		
RX7M2D section	P contacts ø A	В	stripping length
(mm²)	(mm)	(mm)	(mm)
6	3,5	36,6	15
10	4,3	35,8	15
16	5,5	35,8	15
16 (XF)	6,1	35,8	15
25	7,0	35,8	15

CX7ES