

MIXO series

Modular units for multipole connectors

Application

The MIXO series is a system of modular units for special applications that uses the traditional ILME enclosures.

Each enclosure can house different types of connections such as, for example: electric signals and contacts for the conduction of compressed air with pressure values of up to 8 bars.

The inserts are arranged side by side to form a single compact block which is inserted into metallic frames with mandatory housings. Once the modules have been inserted and locked with the special tabs, the connector can then be inserted into the enclosure.

The modular structure system makes it easy to access a series of contacts inserted in the frame (e.g., for substitution, checks or the addition of signals with new inserts for needs not foreseen during the initial installation) without having to disassemble the entire connector.

The use of enclosures provides the possibility of innumerable applications.

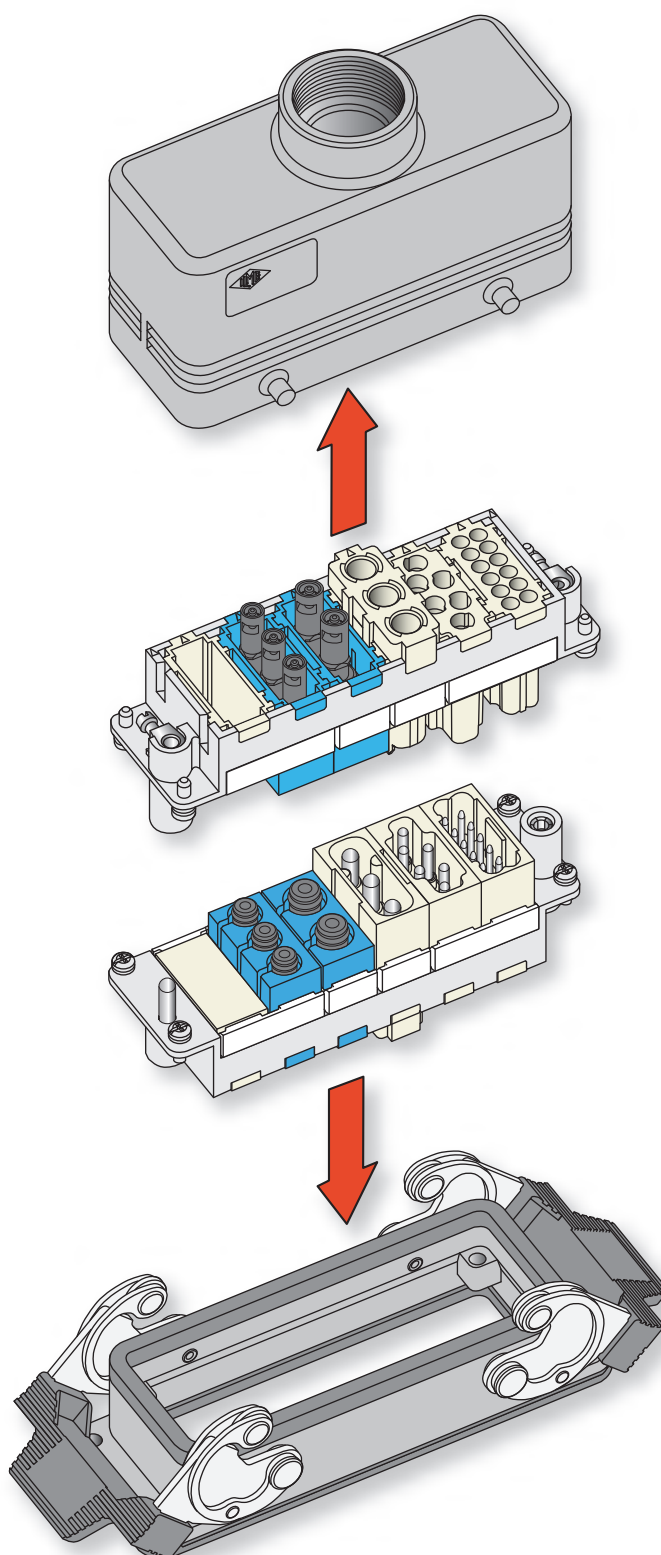
The MIXO series may be used with 5 different frame sizes. The following table lists the frames and the metallic enclosures that may be used.

frames	one or two-lever metallic enclosures
CX 01 T	size "49.16"
CX 02 TM/TF	size "44.27"
CX 03 TM/TF	size "57.27"
CX 04 TM/TF	size "77.27"
CX 06 TM/TF	size "104.27"
CX 04 TM/TF (x 2)	size "77.62"
CX 06 TM/TF (x 2)	size "104.62"

In addition, the MIXO series can be used with the COB series panel supports

frames	panel supports part No.
CX 02 TM/TF	fixed: COB 06 BC and COB TCQ
	mobile: COB TSF , COB TSFS and COB 06 CMS
CX 03 TM/TF	fixed: COB 10 BC and COB TCQ
	mobile: COB TSF , COB TSFS and COB 10 CMS
CX 04 TM/TF	fixed: COB 16 BC and COB TCQ
	mobile: COB TSF , COB TSFS and COB 16 CMS
CX 06 TM/TF	fixed: COB 24 BC and COB TCQ
	mobile: COB TSF , COB TSFS and COB 24 CMS

The MIXO series currently includes 6 different types of inserts. The field of application is provided in the table at the bottom of the next page.

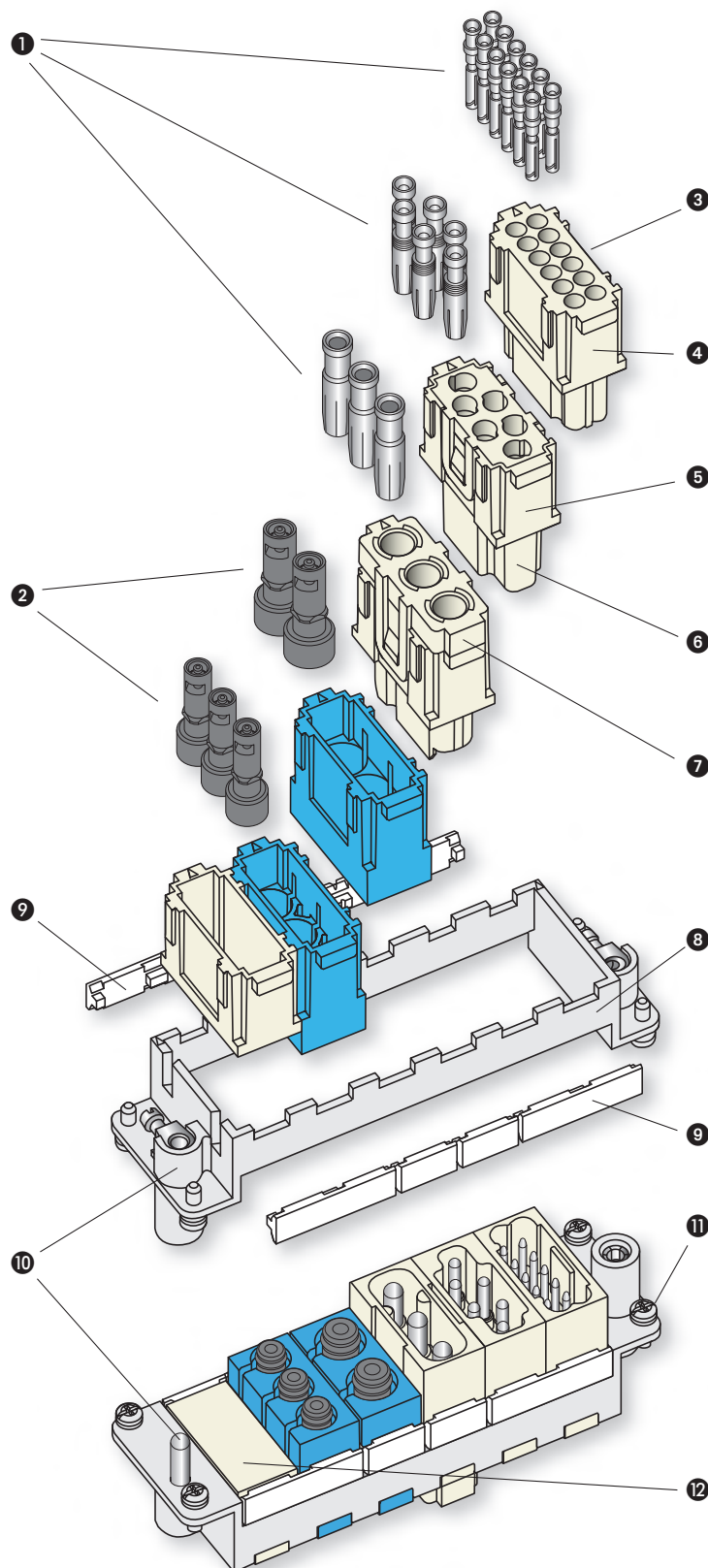


MIXO series

Modular units for multipole connectors

Characteristics

- ❶ Electric contacts in silver-plated or gold-plated brass with connections to the conductors via crimping, spring clamp or axial screw.
- ❷ Pneumatic contacts in plastic with insertion tube connection.
- ❸ Modular inserts of identical size with insertion system for forming the complete module and frame lock tab.
- ❹ Inserts in self-extinguishing thermoplastic material, reinforced with glass fibre, UL 94V-0 approved, with a working temperature range of -40 °C to +125 °C.
- ❺ Inserts in conformance with the requirements of the EN 61984 standard and certified and marked with the UL, CSA, CCC, DNV-GL, EAC marks.
- ❻ Inserts with asymmetric guide rails to prevent incorrect coupling.
- ❼ Position of contacts identified with numbers or codes on both sides of every insert.
- ❽ Male/female module carrier frames with mandatory housings and polarity, in die-cast zinc alloy.
- ❾ Module lock tab, may be divided according to the number of modules used; guarantees a perfect stability of the modules during wiring and coupling/uncoupling of the connectors.
- ❿ Asymmetric earth contacts (two for frame) with wide contact surface to prevent incorrect coupling; when two or more identical connectors of the MIXO series are used, coded pins prevent incorrect coupling (see pages 486, 487 and 491).
- ⓫ Captive frame fastening screws, with flexible spring washer.
- ⓬ Dummy module for unused frame slots.



MIXO series

Modular units for multipole connectors

Inserts	Contact type	Signal type	Connectors and tubes connections	Rated current (A)	Rated voltage (V)	No. of frame slots
CX 01 YF/M	main	electric	crimp	200	1000	2
CX 01 YPEF/M	PE	---	crimp	200	---	2
CX 02 GF/M	main	electric	crimp	100	1000	2
CX 02 7F/M	main	electric	crimp	70	1000	1
CX 02 4AF/M	main	electric	axial screw	40	1000	1
CX 02 4BF/M	main	electric	axial screw	40	1000	1
CX 03 4F/M	main	electric	crimp	40	400/690	1
CX 03 4BF/BM	main	electric	crimp	40	500	1
CX 3/4 XDF/M	main	electric	crimp	40/10	830	1
CX 04 XF/M	main	electric	crimp	40	830	1
CX 05 SF/M	main	electric	spring	16	400	1
CX 06 CF/M	main	electric	crimp	16	500	1
CX 08 CF/M	main	electric	crimp	16	400	1
CX 20 CF/M	main	electric	crimp	16	500	2
CX 12 DF/M	main / auxiliary	electric	crimp	10	250	1
CX 17 DF/M	main / auxiliary	electric	crimp	10	160	1
CX 25 IF/M	main / auxiliary	electric	crimp	4	50	1
CX 02 HF/M	main	electric	crimp	16	2900/5000	2
CX 02 BF/M	seat for two shielded connectors (see CX 04 B, CX 01 B, CX 01 BC, CX 08 B)					2
CX 01 BCF/M	main / auxiliary + shield	electric	crimp	16	50	---
CX 01 BF/M	main / auxiliary + shield	electric	crimp	10	50	---
CX 04 BF/M	main / auxiliary + shield	electric	crimp	10	50	---
CX 08 BF/M	main / auxiliary + shield	electric	crimp	5	50	---
CX 03 P	pneumatic Ø 1,6 - 3,0 - 4,0 mm	gas **	push-in	---	---	1
CX 02 P	pneumatic Ø 6,0 mm	gas **	push-in	---	---	1
CX FM	none (dummy module)	---	---	---	---	1
CX 01 J8F/M/IM	RJ45	electric	crimp/IDC	---	---	1
CX 01 JF/M	RJ45 + auxiliary	electric	crimp	10	250	2
CX 02 JF/M	RJ45 + auxiliary	electric	crimp	10	250	3
CX 01 UF/M	USB	electric	---	---	---	1
CX 01 9VF/M	D-SUB	electric	crimp	5	50	1
CX 04 LF/M	POF / MOST / coaxial	optic / electric	crimp / solder	---	---	1

** Warning:

The use of pneumatic contacts requires an appropriate filtering and dehydration system to prevent dangerous condensation. Contacts may be used for pressure values of up to a maximum of 8 bars/116 psi.

MIXO series (100A - 200A)

Main features

MIXO CX..G 100A and CX..Y 200A version modular inserts

The MIXO series has been enhanced with a **new insert, suitable for currents up to 200A** and with **new**, series crimp contacts featuring several benefits over conventional screw or axial screw contacts:

- More **resistant to mechanical stresses** such as vibrations, shock and cable loads.
 - More **corrosion resistant** (gas tight).
 - **Quicker to connect** and ensuring more **consistent results** (regardless of the operators "force").
 - The connector is **electrically more efficient** (reduced voltage drop).
- This innovative insert design, **patented by ILME**, ensures a quicker fitting and removal of crimped contacts.

The **four provided keys** firmly fasten the contact holder and; once

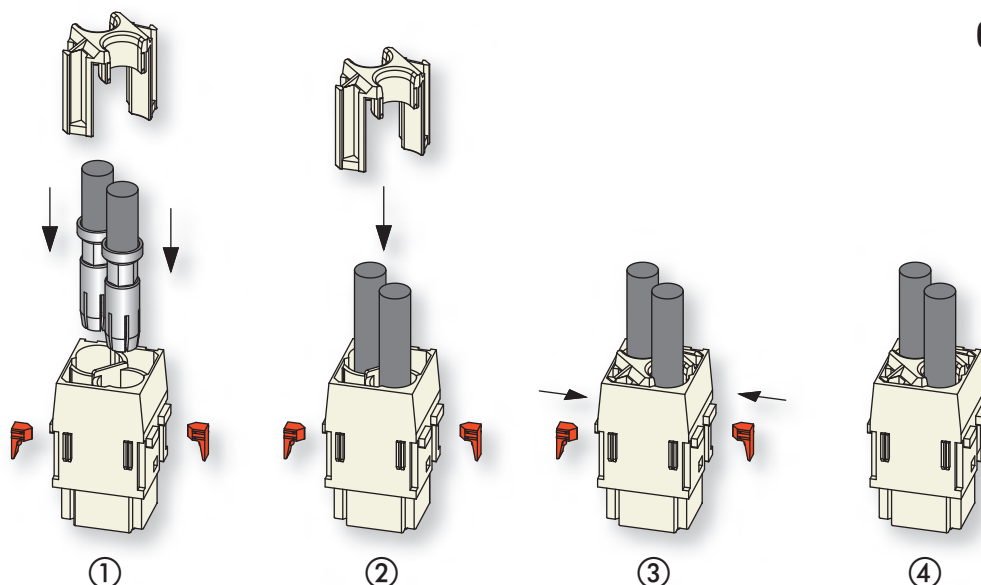
the insert is joined to other inserts (and it is installed in the corresponding MIXO frame) the connection is totally secure and **extremely resistant, even under the most severe stresses** such as vibration and shock.

The contacts can be removed **without any special tool**, using a simple screwdriver.

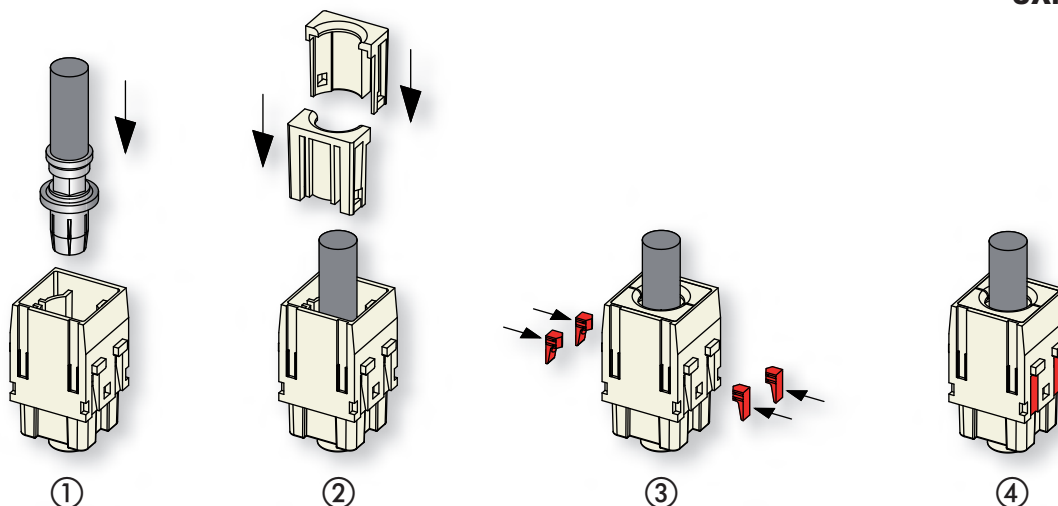
The crimping operation can be carried out quickly and efficiently with the **hand operated hydraulic pliers**, which is pre-fitted with the suitable locator.

Suitable crimp dies available on request.

CX..G 100A



CX..Y 200A



The modular inserts must be installed in suitable frames which are then mounted in traditional housings * or COB panel support.

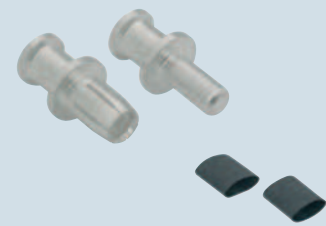
frames for modular units * page: 215

* enclosures: housings or high construction hoods

modular units,
crimp connections



200A silver plated crimp contacts
heat shrink tube



description

part No.

part No.

without contacts (to be ordered separately)
- female inserts for female contacts
- male inserts for male contacts

CX 01 YF
CX 01 YM

200A female crimp contacts
16 mm² AWG 6 one groove (back side)
25 mm² AWG 4 with no grooves
35 mm² AWG 2 one groove
50 mm² AWG 1 two grooves
70 mm² AWG 2/0 with no grooves

200A male crimp contacts
16 mm² AWG 6 one groove (back side)
25 mm² AWG 4 with no grooves
35 mm² AWG 2 one groove
50 mm² AWG 1 two grooves
70 mm² AWG 2/0 with no grooves

CYFA 16
CYFA 25
CYFA 35
CYFA 50
CYFA 70

CYMA 16
CYMA 25
CYMA 35
CYMA 50
CYMA 70

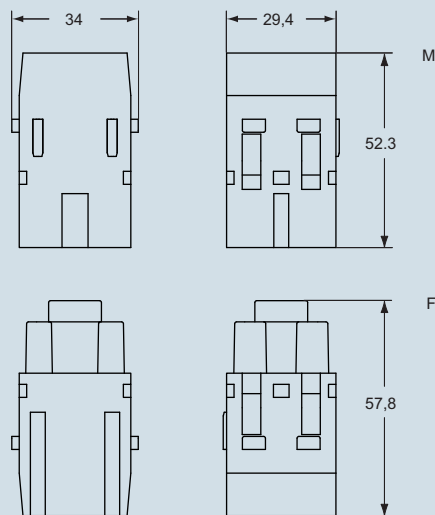
silver plated

heat shrink tube for CYFA/CYMA 16 contacts or for
conductor with total external Ø < 10 mm

CR TT

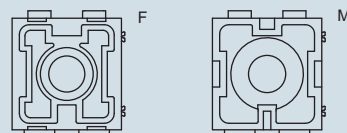
- characteristics according to EN 61984:
200A 1000V 8kV 3
200A 920/1600V 8kV 2
- cUL (UL for USA and Canada), CCC *, EAC certified
* CQC certification being applied for
- rated voltage according to UL/CSA: 600V
- insulation resistance: ≥ 10 GΩ
- ambient temperature limit: -40 °C ... +125 °C
- are made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: ≥ 500 cycles
- contact resistance: ≤ 0,2 mΩ
- for contact crimping instructions, please see the
crimping tool section (200A contacts, CYF and CYM
series) on page 542
- for maximum current load, see the following load
curves inserts, for more information see page 565

dimensions in mm



contacts side (front view)

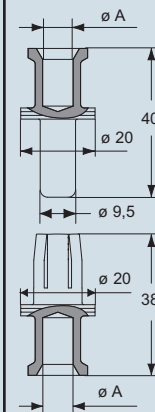
side with reference arrow ▲



- 2 frame slots

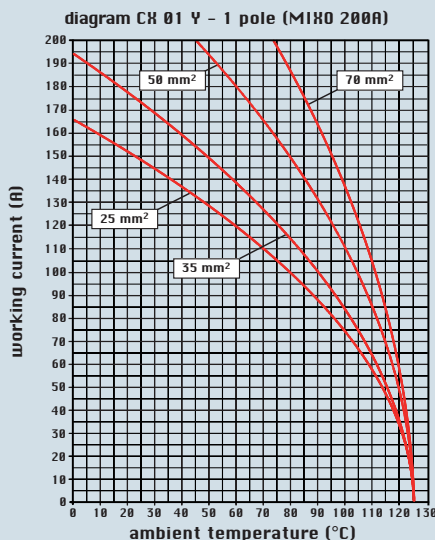
dimensions in mm

CYF and CYM

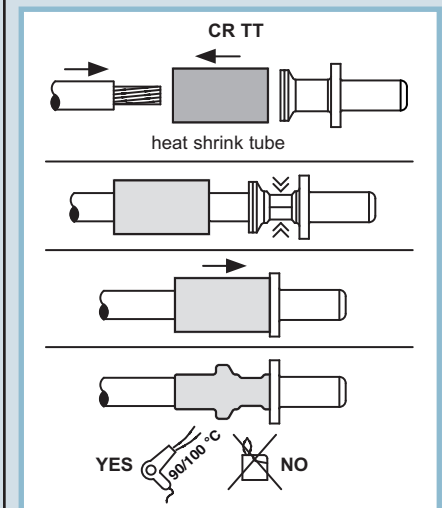


CYF and CYM contacts

conductor section (mm ²)	conductor slot Ø A (mm)	conductor stripping length (mm)
16	6,1	15
25	7,0	15
35	8,2	15
50	9,8	15
70	11,8	15



dimensions shown are not binding
and may be changed without notice



The modular inserts must be installed in suitable frames which are then mounted in traditional housings * or COB panel support.

frames for modular units * page: 215

* enclosures: housings or high construction hoods

modular units,
crimp connections
PE module for earth termination

200A silver plated crimp contacts



description

part No.

part No.

without contacts (to be ordered separately)
- PE female inserts for female contacts
- PE male inserts for male contacts

CX 01 YPEF
CX 01 YPEM

200A female crimp contacts
16 mm² AWG 6 one groove (back side)
25 mm² AWG 4 with no grooves
35 mm² AWG 2 one groove
50 mm² AWG 1 two grooves
70 mm² AWG 2/0 with no grooves

CYFA 16
CYFA 25
CYFA 35
CYFA 50
CYFA 70

silver plated

200A male crimp contacts
16 mm² AWG 6 one groove (back side)
25 mm² AWG 4 with no grooves
35 mm² AWG 2 one groove
50 mm² AWG 1 two grooves
70 mm² AWG 2/0 with no grooves

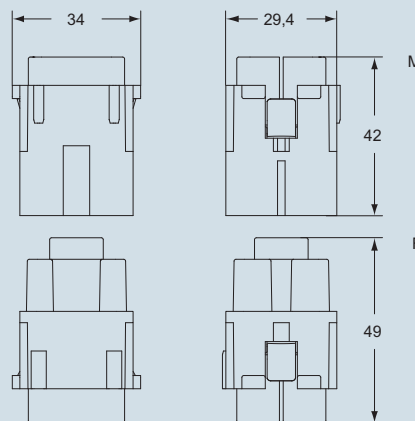
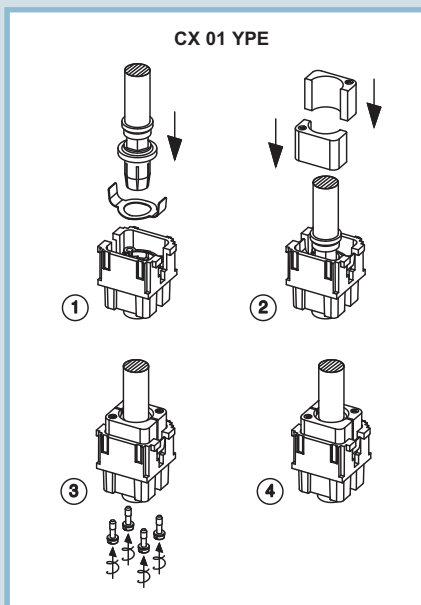
CYMA 16
CYMA 25
CYMA 35
CYMA 50
CYMA 70

- cUL (UL for USA and Canada), CCC *, EAC certified
* CQC certification being applied for
- ambient temperature limit: -40 °C ... +125 °C
- are made of self-extinguishing thermoplastic resin
UL 94V-0

dimensions in mm

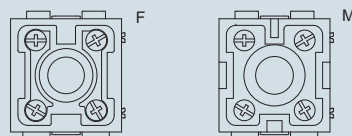
dimensions in mm

CYF and CYM

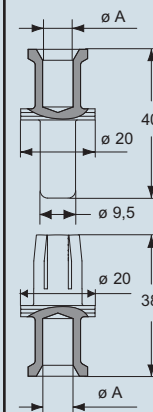


contacts side (front view)

side with reference arrow ▲



- 2 frame slots



CYF and CYM contacts

conductor section (mm ²)	conductor slot ø A (mm)	conductor stripping length (mm)
16	6,1	15
25	7,0	15
35	8,2	15
50	9,8	15
70	11,8	15

- for contact crimping instructions, please see the crimping tool section (200A contacts, CYF and CYM series) on page 542

dimensions shown are not binding
and may be changed without notice

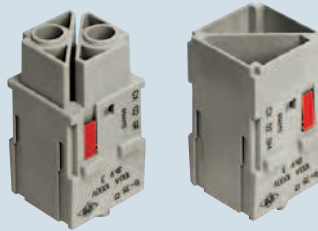
The modular inserts must be installed in suitable frames which in turn are installed in traditional housings * or COB panel support.

frames for modular units * page: 215

* enclosures: bulkhead mounting housings, high construction housings or high construction hoods

modular units,
crimp connections

100A silver plated crimp contacts,
PE adapter



description

part No.

part No.

without contacts (to be ordered separately)
- female inserts for female contacts **
- male inserts for male contacts **

CX 02 GF
CX 02 GM

100A female crimp contacts
8 - 10 mm² AWG 8 - 7
16 mm² AWG 6 - 5
25 mm² AWG 4 - 3
35 mm² AWG 2

100A male crimp contacts
8 - 10 mm² AWG 8 - 7
16 mm² AWG 6 - 5
25 mm² AWG 4 - 3
35 mm² AWG 2

CGFA 10
CGFA 16
CGFA 25
CGFA 35

CGMA 10
CGMA 16
CGMA 25
CGMA 35

silver plated

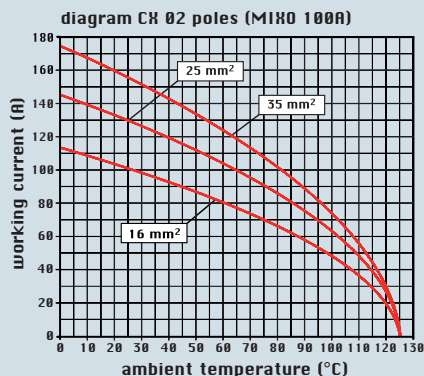
cable earthing adapter 16 mm² (AWG 6 - 5)

CGT 16

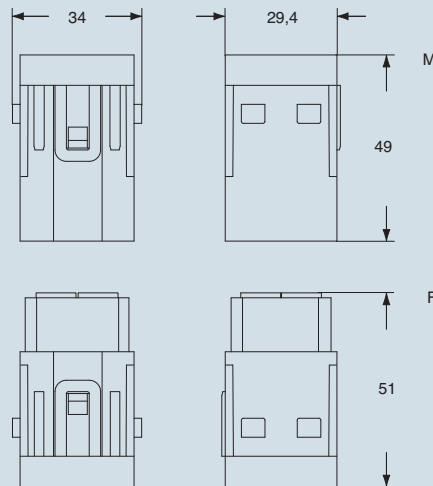
** on request, version with pole 3/4 numbering,
references: **CX 02 GFN**, **CX 02 GMN**

- characteristics according to EN 61984:

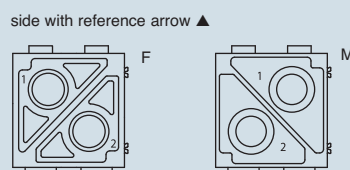
- 100A 1000V 8kV 3**
- 100A 920/1600V 8kV 2**
- cUL (UL for USA and Canada), CCC *, GL, EAC certified; * CQC certification being applied for
- rated voltage according to UL/CSA: 600V
- insulation resistance: $\geq 10 \text{ G}\Omega$
- ambient temperature limit: $-40^\circ\text{C} \dots +125^\circ\text{C}$
- are made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: ≥ 500 cycles
- contact resistance: $\leq 0.3 \text{ m}\Omega$
- for contact crimping instructions, please see the crimping tool section (100A contacts, CGF and CGM series) on page 542
- for maximum current load, see the following load curves inserts, for more information see page 565



dimensions in mm



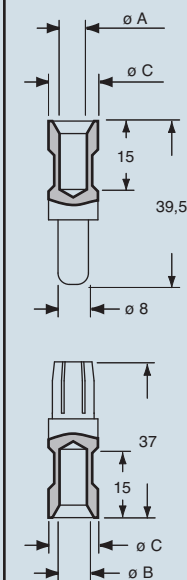
contacts side (front view)



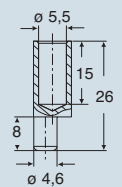
- 2 frame slots

dimensions in mm

CGF and CGM



CGT 16



CGF and CGM contacts

conductor section (mm ²)	conductor slot ø A (mm)	conductor slot ø B (mm)	conductor slot ø C (mm)	conductor stripping length (mm)
8-10	4,3	4,3	13	15
16	5,5	5,5	13	15
25	7,0	7,0	13	15
35	7,9	8,2	12,5	15

How to use the PE adapter (CGT 16):

- 1) Strip 15 mm of flexible PE protective cable
- 2) Crimp the cable on the CGT 16 adapter by using the CGPZ pliers with the CGD 16 C matrix
- 3) Fix the adapter tip in the larger earth terminal (6 mm²) of frames CX...TM/TF
- 4) To be used with bulkhead mounting housings or high construction hoods
- 5) Cannot be used with T-TYPE series

dimensions shown are not binding
and may be changed without notice

The modular inserts must be installed in suitable frames which in turn are installed in traditional housings * or COB panel support.

frames for modular units * ... page: 214 - 215

* enclosures: bulkhead mounting housings, high construction housings or high construction hoods

modular units,
crimp connections



70A silver plated crimp contacts



description

part No.

part No.

without contacts (to be ordered separately)
- female inserts for female contacts
- male inserts for male contacts

CX 02 7F
CX 02 7M

70A female crimp contacts
10 mm² AWG 8 - 7
16 mm² AWG 6 - 5
25 mm² AWG 4 - 3

70A male crimp contacts
10 mm² AWG 8 - 7
16 mm² AWG 6 - 5
25 mm² AWG 4 - 3

CX7FA 10
CX7FA 16
CX7FA 25

CX7MA 10
CX7MA 16
CX7MA 25

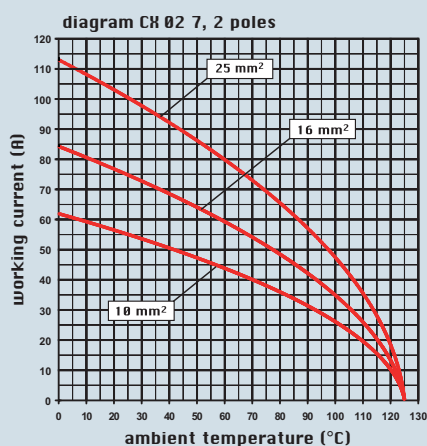
silver plated

- characteristics according to EN 61984:

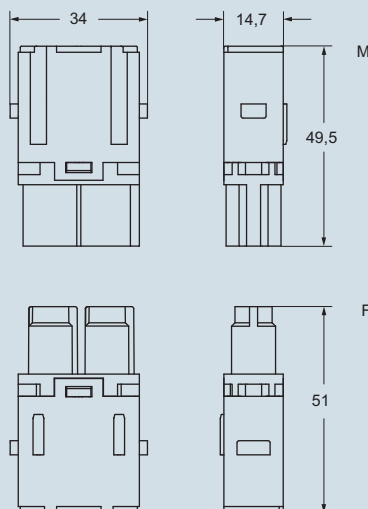
70A 1000V 8kV 3

70A 1600V 12kV 2

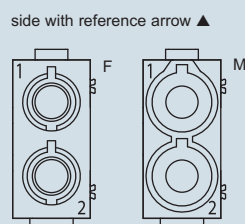
- cUL (UL for USA and Canada), EAC certified
- insulation resistance: $\geq 10 \text{ G}\Omega$
- ambient temperature limit: $-40^\circ\text{C} \dots +125^\circ\text{C}$
- are made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: ≥ 500 cycles
- for contact crimping instructions, please see the crimping tool section (70A contacts, CX7F and CX7M series) on page 542
- **C7ES** removal tool
- for maximum current load, see the following load curves inserts, for more information see page 565



dimensions in mm

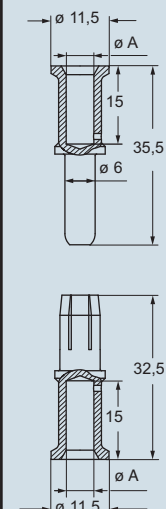


contacts side (front view)



- 1 frame slot

dimensions in mm



contacts CX7F and CX7M

conductor section (mm ²)	conductor slot $\varnothing A$ (mm)	conductor stripping length (mm)
10	4,3	15
16	5,5	15
25	7,0	15

dimensions shown are not binding and may be changed without notice

MIXO modular units

2 poles 40A - 1000V



The modular inserts must be installed in suitable frames which in turn are installed in traditional housings or COB panel support.

frames for modular units page: 214 - 215

- characteristics according to EN 61984:

40A 1000V 8kV 3
40A 1600V 12kV 2

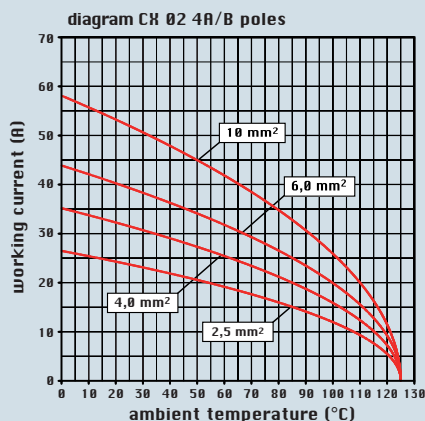
- UL, CSA, EAC certified
- rated voltage according to UL/CSA: 600V
- insulation resistance: $\geq 10 \text{ G}\Omega$
- ambient temperature limit: $-40^\circ\text{C} \dots +125^\circ\text{C}$
- are made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: ≥ 500 cycles
- contact resistance: $\leq 0.5 \text{ m}\Omega$

description

- female inserts with female contacts
- male inserts with male contacts

- female inserts with female contacts
- male inserts with male contacts

- for maximum current load, see the following load curves inserts, for more information see page 565



- use flexible cables with sections from 2,5 to 10 mm² or extra flexible cables with sections from 2,5 to 6 mm²
- do not twist the cables
- fully insert the braids in the rear section of the contact

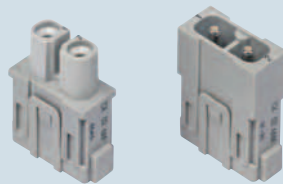
conductor section (mm²)	conductor stripping lenght (mm)	tightening torque (Nm)
2,5	5 ⁺¹	1,5
4	5 ⁺¹	1,5
6	8 ⁺¹	2
10	8 ⁺¹	2

- insert a 2 mm hexagonal key in the front section of the contact and tighten by keeping the cable held down in position
- a 2 mm hexagonal key can be supplied on request, reference **CX AS**



dimensions shown are not binding and may be changed without notice

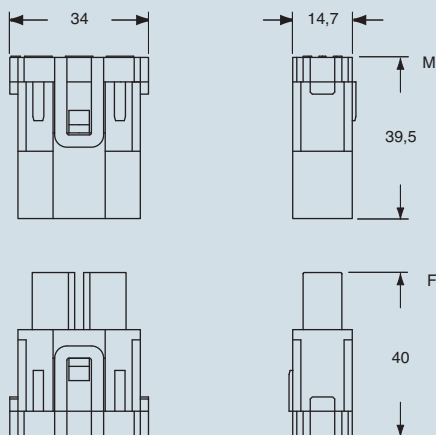
modular units,
screw terminal connection
2,5 - 8 mm²



part No.

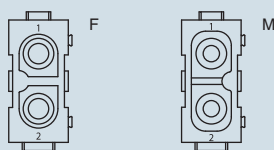
CX 02 4AF
CX 02 4AM

dimensions in mm



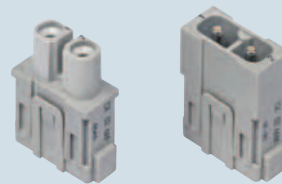
contacts side (front view)

side with reference arrow ▲



- inserts for Ø 4mm cables, section: 2,5-8 mm² - AWG 14-8
- 1 frame slot

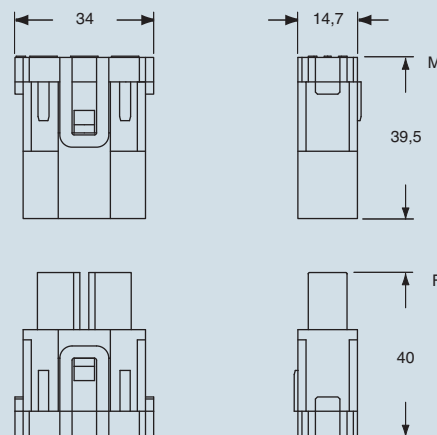
modular units,
screw terminal connection
6 - 10 mm²



part No.

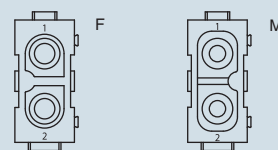
CX 02 4BF
CX 02 4BM

dimensions in mm



contacts side (front view)

side with reference arrow ▲



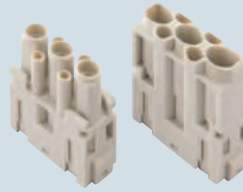
- inserts for Ø 4.8 mm cables, section: 6-10 mm² - AWG 10-8
- 1 frame slot

The modular inserts must be installed in suitable frames which are then mounted in traditional housings or COB panel support.

frames for modular units page: 214 - 215

- male and female contacts finger proof
- their key characteristic lies in the fact that they guarantee maximum safety even in case of accidental contact with fingers (IPXXB or IP2X). Safety is guaranteed as standard on female contacts, but also on male contacts. This feature is important as it ensures full compliance with the recent safety standard EN 60204-1, concerning electric equipment fitted on machines and in particular with the requirements of Article 6.2.4 concerning protection against residual voltage. *In the case of plugs or similar devices, the with drawal of which results in the exposure of conductors (for example pins), the discharge time shall not exceed 1 s, otherwise such conductors shall be protected against direct contact to at least an IP2X or IPXXB.*

modular units,
crimp connections



40A and 10A crimp contacts
silver and gold plated

40A

10A



description

part No.

part No.

part No.

- without contacts (to be ordered separately)
- female inserts for female contacts
- male inserts for male contacts

CX 3/4 XDF
CX 3/4 XDM

40A female crimp contacts

1,5 mm ²	AWG 16
2,5 mm ²	AWG 14
4 mm ²	AWG 12
6 mm ²	AWG 10

40A male crimp contacts

1,5 mm ²	AWG 16
2,5 mm ²	AWG 14
4 mm ²	AWG 12
6 mm ²	AWG 10

CXFA 1.5
CXFA 2.5
CXFA 4.0
CXFA 6.0

silver plated

CXMA 1.5
CXMA 2.5
CXMA 4.0
CXMA 6.0

10A female contacts

0,14-0,37 mm ²	AWG 26-22	identification No. 1
0,5 mm ²	AWG 20	identification No. 2
0,75 mm ²	AWG 18	identification No. ②
1 mm ²	AWG 18	identification No. 3
1,5 mm ²	AWG 16	identification No. 4
2,5 mm ²	AWG 14	identification No. 5

10A male contacts

0,14-0,37 mm ²	AWG 26-22	identification No. 1
0,5 mm ²	AWG 20	identification No. 2
0,75 mm ²	AWG 18	identification No. ②
1 mm ²	AWG 18	identification No. 3
1,5 mm ²	AWG 16	identification No. 4
2,5 mm ²	AWG 14	identification No. 5

CDFA 0.3
CDFA 0.5
CDFA 0.7
CDFA 1.0
CDFA 1.5
CDFA 2.5

silver plated

CDFD 0.3
CDFD 0.5
CDFD 0.7
CDFD 1.0
CDFD 1.5
CDFD 2.5

gold plated 1)

CDMA 0.3
CDMA 0.5
CDMA 0.7
CDMA 1.0
CDMA 1.5
CDMA 2.5

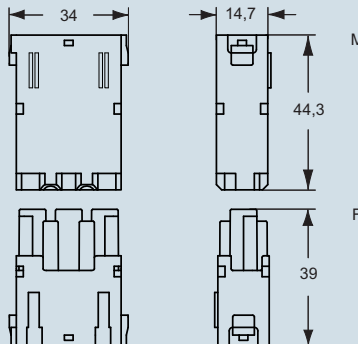
CDMD 0.3
CDMD 0.5
CDMD 0.7
CDMD 1.0
CDMD 1.5
CDMD 2.5

- characteristics according to EN 61984:

3 poles 40A 830V 8kV 3
4 poles 10A 830V 8kV 3

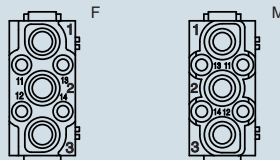
- cUL (UL for USA and Canada), CCC *, EAC certified
- * CQC certification being applied for
- rated voltage according to UL/CSA: 600V
- insulation resistance: $\geq 10 \text{ G}\Omega$
- ambient temperature limit: -40 °C ... +125 °C
- are made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: ≥ 500 cycles
- contact resistance: $\leq 0.3 \text{ m}\Omega$ (3 poles)
 $\leq 3 \text{ m}\Omega$ (4 poles)
- for maximum current load, see the following load curves inserts, for more information see page 565

dimensions in mm



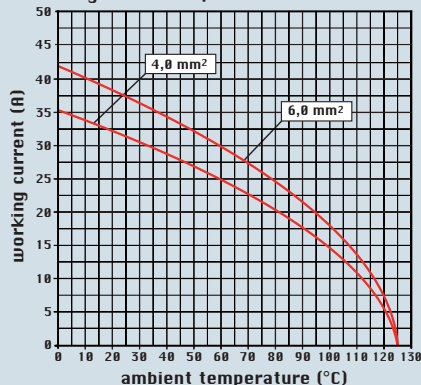
contacts side (front view)

side with reference arrow ▲



- 1 frame slot

diagram CX 3/4 poles

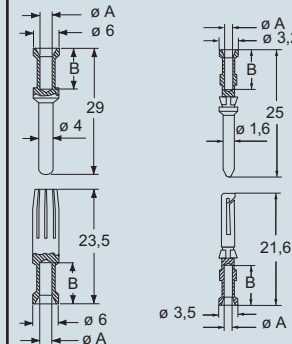


dimensions shown are not binding
and may be changed without notice

dimensions in mm

CXF and CXM

CDF and CDM



CDF and CDM contacts

conductor section (mm ²)	conductor slot ϕ A (mm)	conductors stripping length B (mm)
0,14-0,37	0,9	8
0,5	1,1	8
0,75	1,3	8
1,0	1,45	8
1,5	1,8	8
2,5	2,2	6

1) basic or high thickness gold plating page 480

CXF and CXM contacts

conductor section (mm ²)	conductor slot ϕ A (mm)	conductors stripping length B (mm)
1,5	1,8	9
2,5	2,2	9
4	2,85	9,6
6	3,5	9,6

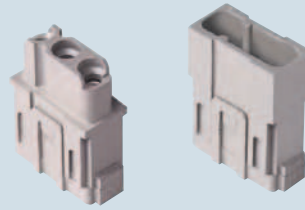
- for contact crimping, see the crimp tool section (40A contacts CXF, CXM series and 10A contacts CDF, CDM series) on pages 534, 536, 538, 544, 546, 548

The modular inserts must be installed in suitable frames which in turn are installed in traditional housings or COB panel support.

frames for modular units page: 214 - 215

modular units,
crimp connections

40A crimp contacts
silver plated



description

part No.

part No.

without contacts (to be ordered separately)
- female inserts for female contacts
- male inserts for male contacts

CX 03 4F *
CX 03 4M *

40A female crimp contacts

1,5 mm² AWG 16
2,5 mm² AWG 14
4 mm² AWG 12
6 mm² AWG 10

40A male crimp contacts

1,5 mm² AWG 16
2,5 mm² AWG 14
4 mm² AWG 12
6 mm² AWG 10

CXFA 1.5
CXFA 2.5
CXFA 4.0
CXFA 6.0

CXMA 1.5
CXMA 2.5
CXMA 4.0
CXMA 6.0

silver plated

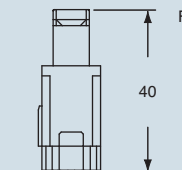
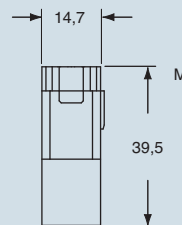
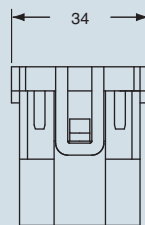
- characteristics according to EN 61984:

40A 400/690V 6kV 3

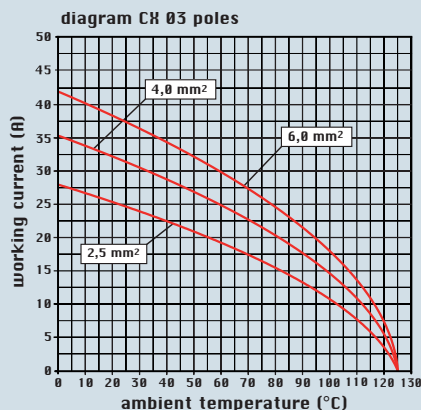
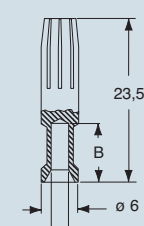
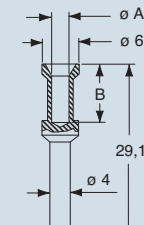
- UL, CSA, EAC certified
- rated voltage according to UL/CSA: 600V
- insulation resistance: $\geq 10 \text{ G}\Omega$
- ambient temperature limit: $-40^\circ\text{C} \dots +125^\circ\text{C}$
- are made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: ≥ 500 cycles
- contact resistance: $\leq 0.3 \text{ m}\Omega$
- for contact crimping instructions, please see the crimping tool section (40A contacts, CXF and CXM series) on pages 536 and 538
- for maximum current load, see the following load curves inserts, for more information see page 565

* cable diameter up to 5 mm

dimensions in mm

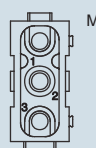
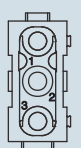


dimensions in mm



contacts side (front view)

side with reference arrow ▲



- 1 frame slot

CXF and CXM contacts

conductor section mm ²	conductor slot ø A (mm)	conductors stripping length B (mm)
1,5	1,8	9
2,5	2,2	9
4	2,85	9,6
6	3,5	9,6

dimensions shown are not binding
and may be changed without notice

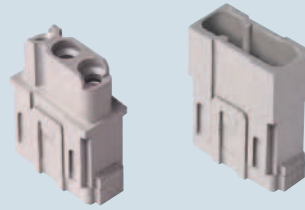
The modular inserts must be installed in suitable frames which in turn are installed in traditional housings * or COB panel support.

frames for modular units * page: 214 - 215

* enclosures: bulkhead mounting housings, high construction housings or high construction hoods

modular units,
crimp connections

40A crimp contacts
silver plated



description

part No.

part No.

without contacts (to be ordered separately)
- female inserts for female contacts
- male inserts for male contacts

CX 03 4BF *
CX 03 4BM *

40A female crimp contacts

1,5 mm² AWG 16
2,5 mm² AWG 14
4 mm² AWG 12
6 mm² AWG 10
10 mm² AWG 8

40A male crimp contacts

1,5 mm² AWG 16
2,5 mm² AWG 14
4 mm² AWG 12
6 mm² AWG 10
10 mm² AWG 8

CXFA 1.5
CXFA 2.5
CXFA 4.0
CXFA 6.0
CXFA 10

CXMA 1.5
CXMA 2.5
CXMA 4.0
CXMA 6.0
CXMA 10

silver plated

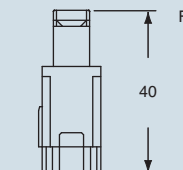
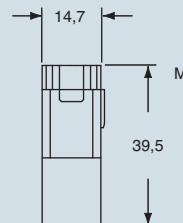
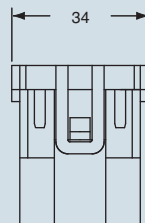
- characteristics according to EN 61984:

40A 500V 6kV 3

- cUL (UL for USA and Canada), EAC certified
- insulation resistance: $\geq 10 \text{ G}\Omega$
- ambient temperature limit: $-40^\circ\text{C} \dots +125^\circ\text{C}$
- are made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: ≥ 500 cycles
- contact resistance: $\leq 0.3 \text{ m}\Omega$
- for contact crimping instructions (1.5 ÷ 10 mm²), please see the crimping tool section (40A contacts, CXF and CXM series) on pages 536 and 538
- for maximum current load, see the following load curves inserts, for more information see page 565

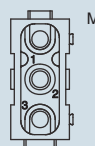
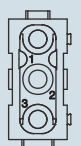
* cable diameter up to 7.5 mm
contact section up to 10 mm²

dimensions in mm



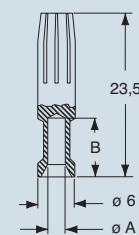
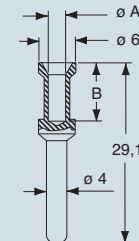
contacts side (front view)

side with reference arrow ▲



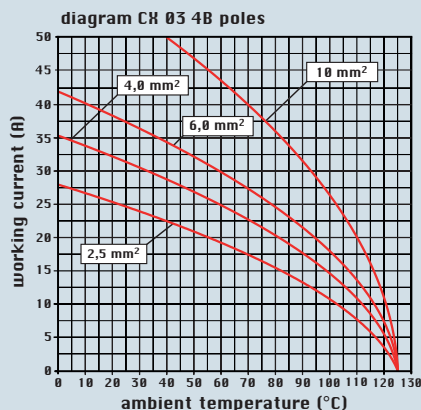
- 1 frame slot

dimensions in mm



CXF and CXM contacts

conductor section mm ²	conductor slot ø A (mm)	conductors stripping length B (mm)
1,5	1,8	9
2,5	2,2	9
4	2,85	9,6
6	3,5	9,6
10	4,3	15



dimensions shown are not binding
and may be changed without notice

The modular inserts must be installed in suitable frames which are then mounted in traditional housings * or COB panel support.

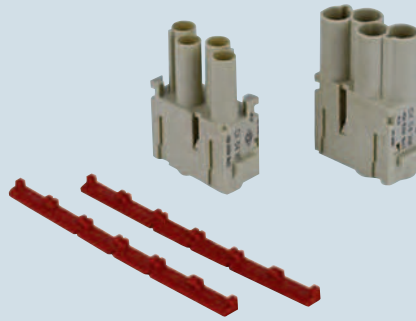
frames for modular units * page: 214 - 215

* enclosures: bulkhead mounting housings, high construction housings or high construction hoods

- male and female contacts finger proof
- their key characteristic lies in the fact that they guarantee maximum safety even in case of accidental contact with fingers (IPXXB or IP2X). Safety is guaranteed as standard on female contacts, but also on male contacts. This feature is important as it ensures full compliance with the recent safety standard EN 60204-1, concerning electric equipment fitted on machines and in particular with the requirements of Article 6.2.4 concerning protection against residual voltage.

In the case of plugs or similar devices, the with drawal of which results in the exposure of conductors (for example pins), the discharge time shall not exceed 1 s, otherwise such conductors shall be protected against direct contact to at least an IP2X or IPXXB.

modular units,
crimp connections



40A crimp contacts
silver plated



description

part No.

part No.

without contacts (to be ordered separately)

- female inserts for female contacts
- male inserts for male contacts

CX 04 XF
CX 04 XM

40A female crimp contacts

1,5 mm ²	AWG 16
2,5 mm ²	AWG 14
4 mm ²	AWG 12
6 mm ²	AWG 10

40A male crimp contacts

1,5 mm ²	AWG 16
2,5 mm ²	AWG 14
4 mm ²	AWG 12
6 mm ²	AWG 10

CXFA 1.5
CXFA 2.5
CXFA 4.0
CXFA 6.0

CXMA 1.5
CXMA 2.5
CXMA 4.0
CXMA 6.0

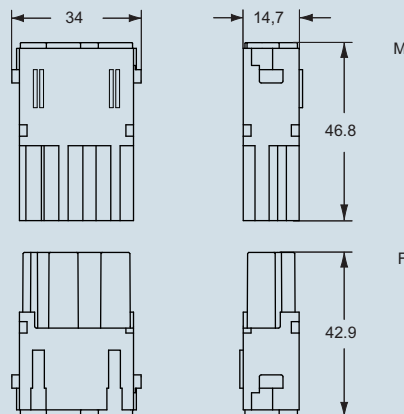
silver plated

- characteristics according to EN 61984:

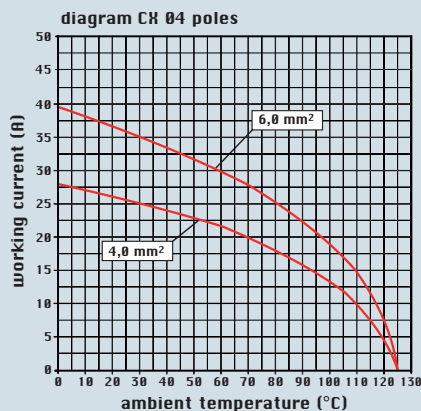
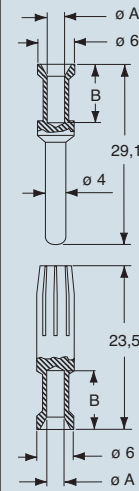
40A 830V 8kV 3
40A 1000V 8kV 2

- certifications: cUL (UL for USA and Canada), (CSA), (GL), EAC; the certifications shown in brackets are being applied for
- rated voltage according to UL/CSA: 600V
- insulation resistance: $\geq 10 \text{ G}\Omega$
- ambient temperature limit: -40 °C ... +125 °C
- are made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: ≥ 500 cycles
- contact resistance: $\leq 0.3 \text{ m}\Omega$
- for contact crimping instructions, please see the crimping tool section (40A contacts, CXF and CXM series) on pages 536 and 538
- for maximum current load, see the following load curves inserts, for more information see page 565

dimensions in mm

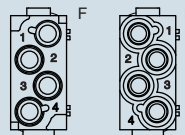


dimensions in mm

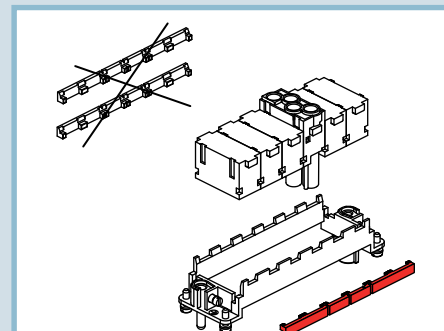


contacts side (front view)

side with reference arrow ▲



- 1 frame slot



Female inserts are supplied with two red lock tabs that must be used instead of those supplied with the frames.

CXF and CXM contacts

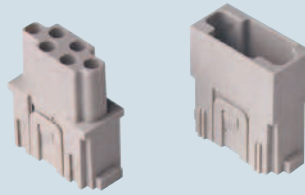
conductor section mm ²	conductor slot ø A (mm)	conductor stripping length B (mm)
1,5	1,8	9
2,5	2,2	9
4	2,85	9,6
6	3,5	9,6

dimensions shown are not binding
and may be changed without notice

The modular inserts must be installed in suitable frames which in turn are installed in traditional housings or COB panel support.

frames for modular units page: 214 - 215

modular units,
crimp connections



16A crimp contacts
normal or for advanced opening
silver and gold plated



description

part No.

part No.

part No.

without contacts (to be ordered separately)
- female inserts for female contacts
- male inserts for male contacts

CX 06 CF
CX 06 CM

16A female contacts

0,14-0,37 mm ²	AWG 26-22	one groove
0,5 mm ²	AWG 20	with no grooves
0,75 mm ²	AWG 18	one groove (back side)
1 mm ²	AWG 18	one groove
1,5 mm ²	AWG 16	two grooves
2,5 mm ²	AWG 14	three grooves
3 mm ²	AWG 12	one wide groove
4 mm ²	AWG 12	with no grooves

16A male contacts

0,14-0,37 mm ²	AWG 26-22	one groove
0,5 mm ²	AWG 20	with no grooves
0,75 mm ²	AWG 18	one groove (back side)
1 mm ²	AWG 18	one groove
1,5 mm ²	AWG 16	two grooves
2,5 mm ²	AWG 14	three grooves
3 mm ²	AWG 12	one wide groove
4 mm ²	AWG 12	with no grooves

16A male crimp contacts for advanced opening

0,5 mm ²	AWG 20	with no grooves
0,75 mm ²	AWG 18	one groove (back side)
1 mm ²	AWG 18	one groove
1,5 mm ²	AWG 16	two grooves
2,5 mm ²	AWG 14	three grooves

CCFA 0.3
CCFA 0.5
CCFA 0.7
CCFA 1.0
CCFA 1.5
CCFA 2.5
CCFA 3.0
CCFA 4.0

silver plated

CCFD 0.3
CCFD 0.5
CCFD 0.7
CCFD 1.0
CCFD 1.5
CCFD 2.5
CCFD 3.0
CCFD 4.0

gold plated 1)

CCMA 0.3
CCMA 0.5
CCMA 0.7
CCMA 1.0
CCMA 1.5
CCMA 2.5
CCMA 3.0
CCMA 4.0

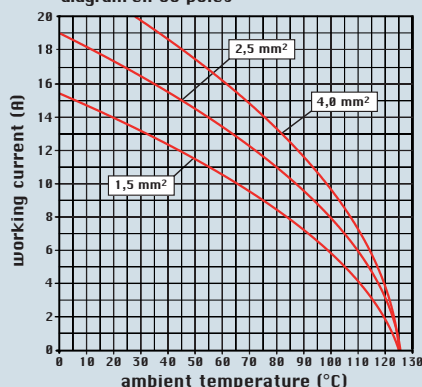
CCMD 0.3
CCMD 0.5
CCMD 0.7
CCMD 1.0
CCMD 1.5
CCMD 2.5
CCMD 3.0
CCMD 4.0

CC 0.5 AN
CC 0.7 AN
CC 1.0 AN
CC 1.5 AN
CC 2.5 AN

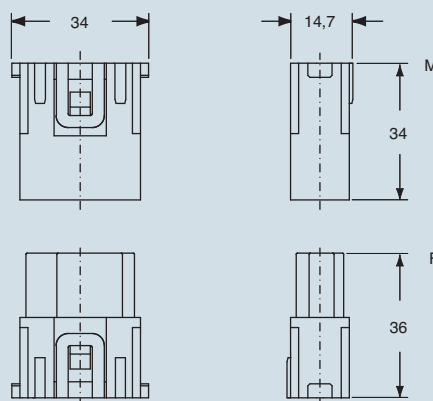
- characteristics according to EN 61984:

- 16A 500V 6kV 3**
- 16A 400/690V 6kV 2**
- UL, CSA, CCC *, GL, EAC certified
- * CQC certification being applied for
- rated voltage according to UL/CSA: 600V
- insulation resistance: $\geq 10 \text{ G}\Omega$
- ambient temperature limit: $-40^\circ\text{C} \dots +125^\circ\text{C}$
- are made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: ≥ 500 cycles
- contact resistance: $\leq 1 \text{ m}\Omega$
- for contact crimping instructions, please see the crimping tool section (16A contacts, CCF, CCM and CC...AN series) on pages 534, 538, 544, 546, 548
- for maximum current load, see the following load curves inserts, for more information see page 565

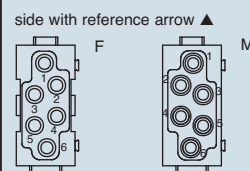
diagram CX 06 poles



dimensions in mm



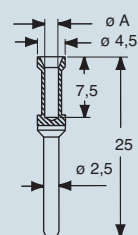
contacts side (front view)



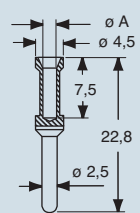
- 1 frame slot

dimensions in mm

CCF and CCM



CC...AN



CCF, CCM and CC...AN contacts

conductor section	conductor slot	conductors stripping length
mm ²	ø A (mm)	(mm)
0,14-0,37	0,9	7,5
0,5	1,1	7,5
0,75	1,3	7,5
1,0	1,45	7,5
1,5	1,8	7,5
2,5	2,2	7,5
3	2,55	7,5
4	2,85	7,5

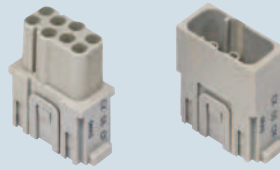
1) basic or high thickness gold plating page 481

The modular inserts must be installed in suitable frames which in turn are installed in traditional housings or COB panel support.

frames for modular units page: 214 - 215

modular units,
crimp connections

16A crimp contacts
normal or for advanced opening
silver and gold plated



description

part No.

part No.

part No.

without contacts (to be ordered separately)
- female inserts for female contacts
- male inserts for male contacts

CX 08 CF
CX 08 CM

16A female contacts

0,14-0,37 mm ²	AWG 26-22	one groove
0,5 mm ²	AWG 20	with no grooves
0,75 mm ²	AWG 18	one groove (back side)
1 mm ²	AWG 18	one groove
1,5 mm ²	AWG 16	two grooves
2,5 mm ²	AWG 14	three grooves
3 mm ²	AWG 12	one wide groove
4 mm ²	AWG 12	with no grooves

16A male contacts

0,14-0,37 mm ²	AWG 26-22	one groove
0,5 mm ²	AWG 20	with no grooves
0,75 mm ²	AWG 18	one groove (back side)
1 mm ²	AWG 18	one groove
1,5 mm ²	AWG 16	two grooves
2,5 mm ²	AWG 14	three grooves
3 mm ²	AWG 12	one wide groove
4 mm ²	AWG 12	with no grooves

16A male crimp contacts for advanced opening

0,5 mm ²	AWG 20	with no grooves
0,75 mm ²	AWG 18	one groove (back side)
1 mm ²	AWG 18	one groove
1,5 mm ²	AWG 16	two grooves
2,5 mm ²	AWG 14	three grooves

CCFA 0.3
CCFA 0.5
CCFA 0.7
CCFA 1.0
CCFA 1.5
CCFA 2.5
CCFA 3.0
CCFA 4.0

silver plated

CCFD 0.3
CCFD 0.5
CCFD 0.7
CCFD 1.0
CCFD 1.5
CCFD 2.5
CCFD 3.0
CCFD 4.0

gold plated 1)

CCMA 0.3
CCMA 0.5
CCMA 0.7
CCMA 1.0
CCMA 1.5
CCMA 2.5
CCMA 3.0
CCMA 4.0

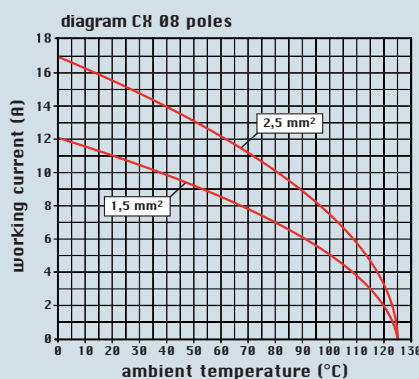
CCMD 0.3
CCMD 0.5
CCMD 0.7
CCMD 1.0
CCMD 1.5
CCMD 2.5
CCMD 3.0
CCMD 4.0

CC 0.5 AN
CC 0.7 AN
CC 1.0 AN
CC 1.5 AN
CC 2.5 AN

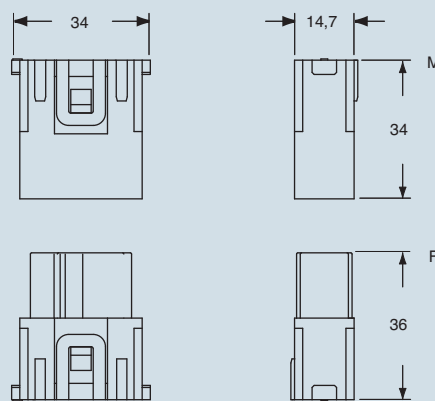
- characteristics according to EN 61984:

16A 400V 6kV 3
16A 400/690V 6kV 2

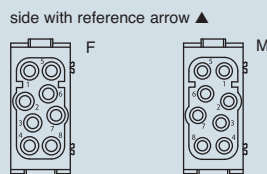
- UL, CSA, CCC *, EAC certified
* CQC certification being applied for
- rated voltage according to UL/CSA: 600V
- insulation resistance: $\geq 10 \text{ G}\Omega$
- ambient temperature limit: $-40^\circ\text{C} \dots +125^\circ\text{C}$
- are made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: ≥ 500 cycles
- contact resistance: $\leq 1 \text{ m}\Omega$
- for contact crimping instructions, please see the crimping tool section (16A contacts, CCF, CCM and CC...AN series) on pages 534, 538, 544, 546, 548
- for maximum current load, see the following load curves inserts, for more information see page 565



dimensions in mm



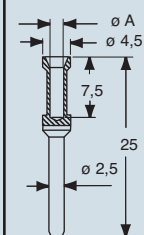
contacts side (front view)



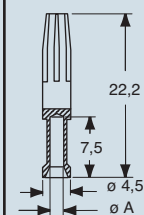
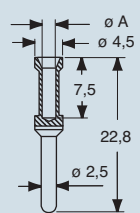
- 1 frame slot

dimensions in mm

CCF and CCM



CC...AN



CCF, CCM and CC...AN contacts

conductor section	conductor slot	conductors stripping length
mm ²	ø A (mm)	(mm)
0,14-0,37	0,9	7,5
0,5	1,1	7,5
0,75	1,3	7,5
1,0	1,45	7,5
1,5	1,8	7,5
2,5	2,2	7,5
3	2,55	7,5
4	2,85	7,5

1) basic or high thickness gold plating page 481

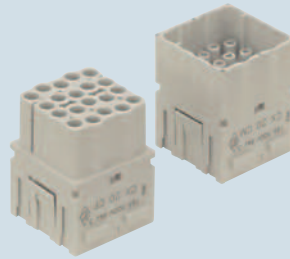
dimensions shown are not binding and may be changed without notice

The modular inserts must be installed in suitable frames which in turn are installed in traditional housings or COB panel support.

frames for modular units page: 215

* on request, version with 3 fastened CX 20 CF/CM inserts with poles numbered from 1 – 60
references: **CX 60 CF, CX 60 CM**

modular units,
crimp connections



16A crimp contacts
normal or for advanced opening
silver and gold plated



description

part No.

part No.

part No.

without contacts (to be ordered separately)
- female inserts for female contacts *
- male inserts for male contacts *

CX 20 CF
CX 20 CM

16A female contacts

0,14-0,37 mm ²	AWG 26-22	one groove
0,5 mm ²	AWG 20	with no grooves
0,75 mm ²	AWG 18	one groove (back side)
1 mm ²	AWG 18	one groove
1,5 mm ²	AWG 16	two grooves
2,5 mm ²	AWG 14	three grooves
3 mm ²	AWG 12	one wide groove
4 mm ²	AWG 12	with no grooves

16A male contacts

0,14-0,37 mm ²	AWG 26-22	one groove
0,5 mm ²	AWG 20	with no grooves
0,75 mm ²	AWG 18	one groove (back side)
1 mm ²	AWG 18	one groove
1,5 mm ²	AWG 16	two grooves
2,5 mm ²	AWG 14	three grooves
3 mm ²	AWG 12	one wide groove
4 mm ²	AWG 12	with no grooves

16A male crimp contacts for advanced opening

0,5 mm ²	AWG 20	with no grooves
0,75 mm ²	AWG 18	one groove (back side)
1 mm ²	AWG 18	one groove
1,5 mm ²	AWG 16	two grooves
2,5 mm ²	AWG 14	three grooves

CCFA 0.3
CCFA 0.5
CCFA 0.7
CCFA 1.0
CCFA 1.5
CCFA 2.5
CCFA 3.0
CCFA 4.0

silver plated

CCFD 0.3
CCFD 0.5
CCFD 0.7
CCFD 1.0
CCFD 1.5
CCFD 2.5
CCFD 3.0
CCFD 4.0

gold plated

CCMA 0.3
CCMA 0.5
CCMA 0.7
CCMA 1.0
CCMA 1.5
CCMA 2.5
CCMA 3.0
CCMA 4.0

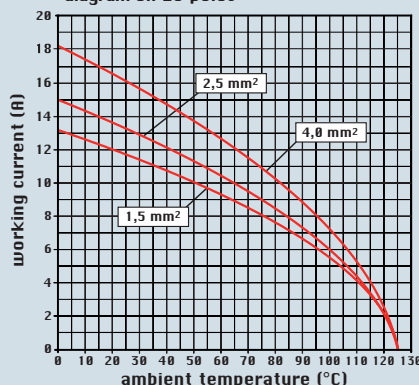
CCMD 0.3
CCMD 0.5
CCMD 0.7
CCMD 1.0
CCMD 1.5
CCMD 2.5
CCMD 3.0
CCMD 4.0

CC 0.5 AN
CC 0.7 AN
CC 1.0 AN
CC 1.5 AN
CC 2.5 AN

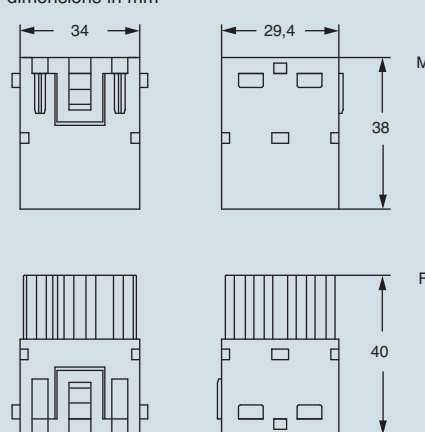
- characteristics according to EN 61984:

- 16A 500V 6kV 3**
- 16A 830V 8kV 2**
- cUL (UL for USA and Canada), CSA, EAC certified
- rated voltage according to UL/CSA: 600V
- insulation resistance: $\geq 10 \text{ G}\Omega$
- ambient temperature limit: $-40^\circ\text{C} \dots +125^\circ\text{C}$
- are made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: ≥ 500 cycles
- contact resistance: $\leq 1 \text{ m}\Omega$
- for contact crimping instructions, please see the crimping tool section (16A contacts, CCF, CCM and CC...AN series) on pages 534, 538, 544, 546, 548
- for maximum current load, see the following load curves inserts, for more information see page 565

diagram CX 20 poles

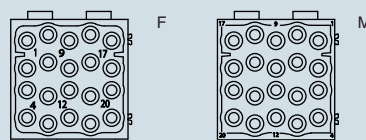


dimensions in mm



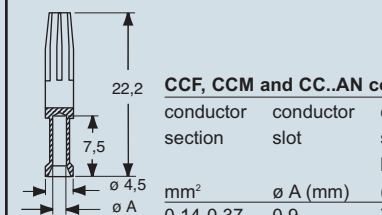
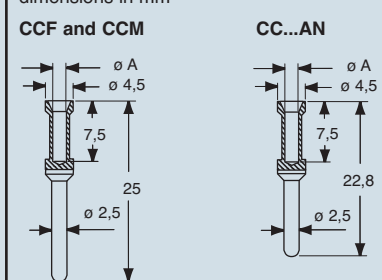
contacts side (front view)

side with reference arrow ▲



- 2 frame slots

dimensions in mm



CCF, CCM and CC...AN contacts

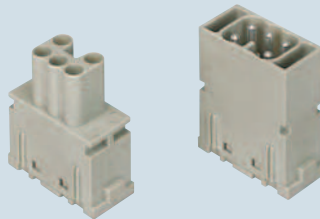
conductor section	conductor slot	conductors stripping length
mm ²	ø A (mm)	(mm)
0,14-0,37	0,9	7,5
0,5	1,1	7,5
0,75	1,3	7,5
1,0	1,45	7,5
1,5	1,8	7,5
2,5	2,2	7,5
3	2,55	7,5
4	2,85	7,5

1) basic or high thickness gold plating
page 481

The modular inserts must be installed in suitable frames which in turn are installed in traditional housings or COB panel support.

frames for modular units page: 214 - 215

modular units,
spring connection



description

- female inserts with female contacts
- male inserts with male contacts

part No.

CX 05 SF
CX 05 SM

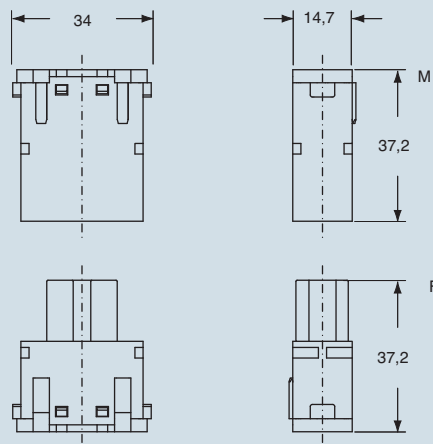
- characteristics according to EN 61984:

16A 400V 6kV 3

16A 500V 6kV 2

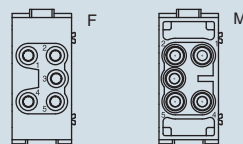
- UL, CSA, CCC *, GL, EAC certified
- * CQC certification being applied for
- rated voltage according to UL/CSA: 600V
- insulation resistance: $\geq 10 \text{ G}\Omega$
- ambient temperature limit: $-40^\circ\text{C} \dots +125^\circ\text{C}$
- are made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: ≥ 500 cycles
- contact resistance: $\leq 3 \text{ m}\Omega$
- for maximum current load, see the following load curves inserts, for more information see page 566

dimensions in mm

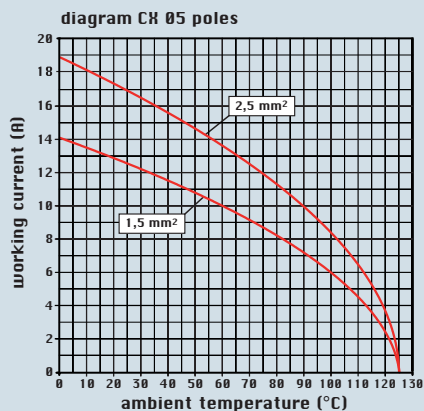


contacts side (front view)

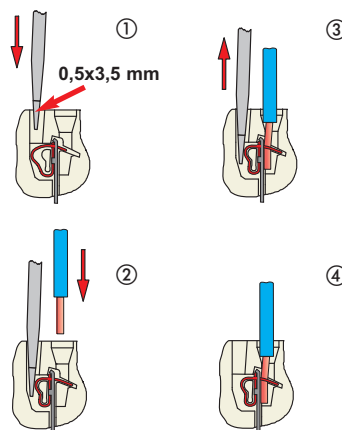
side with reference arrow ▲



- inserts for section conductors: 0,14 - 2,5 mm² - AWG 26 - 14
- conductors stripping length: 9...11 mm
- 1 frame slot



connection with spring terminal



dimensions shown are not binding
and may be changed without notice

The modular inserts must be installed in suitable frames which in turn are installed in traditional housings * or COB panel support.

frames for modular units * page: 215

* enclosures: bulkhead mounting housings, high construction housings or high construction hoods

- characteristics according to EN 61984 **: **16A 2900/5000V 15kV 3**

** used for guidance as applicable

- insulation resistance: $\geq 10 \text{ G}\Omega$
- ambient temperature limit: $-40^\circ\text{C} \dots +125^\circ\text{C}$
- are made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: ≥ 500 cycles
- contact resistance: $\leq 1 \text{ m}\Omega$
- for contact crimping, see the crimp tool section (16A CCF and CCM series contacts) on pages 534, 538, 544, 546, 548

high voltage modular units,
crimp connections
contact holder removal tool



16A crimp contacts
silver and gold plated



description	part No.	part No.	part No.
without contacts (to be ordered separately) - female inserts high voltage for female contacts - male inserts high voltage for male contacts	CX 02 HF CX 02 HM		
contact holder removal tool	CHES		
16A female contacts			
0,14-0,37 mm ² AWG 26-22 one groove		CCFA 0.3	CCFD 0.3
0,5 mm ² AWG 20 with no grooves		CCFA 0.5	CCFD 0.5
0,75 mm ² AWG 18 one groove (back side)		CCFA 0.7	CCFD 0.7
1 mm ² AWG 18 one groove		CCFA 1.0	CCFD 1.0
1,5 mm ² AWG 16 two grooves		CCFA 1.5	CCFD 1.5
2,5 mm ² AWG 14 three grooves		CCFA 2.5	CCFD 2.5
3 mm ² AWG 12 one wide groove		CCFA 3.0	CCFD 3.0
4 mm ² AWG 12 with no grooves		CCFA 4.0	CCFD 4.0
16A male contacts			
0,14-0,37 mm ² AWG 26-22 one groove		CCMA 0.3	CCMD 0.3
0,5 mm ² AWG 20 with no grooves		CCMA 0.5	CCMD 0.5
0,75 mm ² AWG 18 one groove (back side)		CCMA 0.7	CCMD 0.7
1 mm ² AWG 18 one groove		CCMA 1.0	CCMD 1.0
1,5 mm ² AWG 16 two grooves		CCMA 1.5	CCMD 1.5
2,5 mm ² AWG 14 three grooves		CCMA 2.5	CCMD 2.5
3 mm ² AWG 12 one wide groove		CCMA 3.0	CCMD 3.0
4 mm ² AWG 12 with no grooves		CCMA 4.0	CCMD 4.0

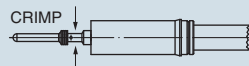
How to use the MIXO HT module

Wiring and assembly:

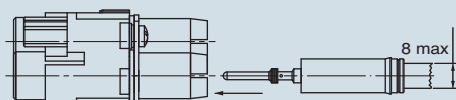
- 1) Strip the wire by 9.5 mm length and insert it into the contact holder



- 2) Crimp series CC contact (16A max) on the stripped wire



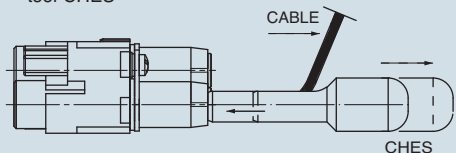
- 3) Insert the contact holder into the module



Heat shrinking tubes to be applied on the rear side of the module and over the contact holder are furnished together with the product

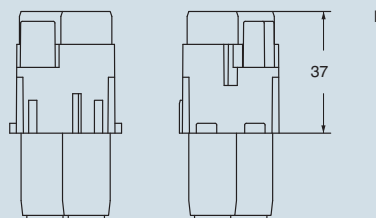
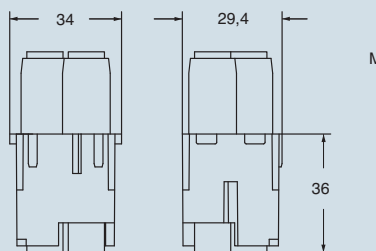
Removal:

- 1) Remove the contact holder by means of the proper tool CHES



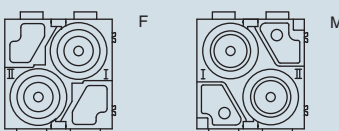
dimensions shown are not binding
and may be changed without notice

dimensions in mm



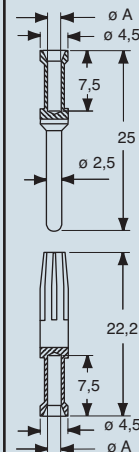
contacts side (front view)

side with reference arrow ▲



- 2 frame slots

dimensions in mm



CCF, CCM contacts

conductor section	conductor slot	conductors stripping length
mm ²	ø A (mm)	(mm)
0,14-0,37	0,9	7,5
0,5	1,1	7,5
0,75	1,3	7,5
1,0	1,45	7,5
1,5	1,8	7,5
2,5	2,2	7,5
3	2,55	7,5
4	2,85	7,5

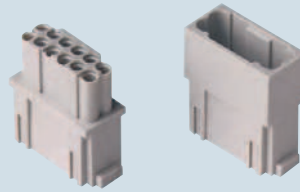
1) basic or high thickness gold plating
page 481

The modular inserts must be installed in suitable frames which in turn are installed in traditional housings or COB panel support.

frames for modular units page: 214 - 215

modular units,
crimp connections

10A crimp contacts
silver and gold plated



description

part No.

part No.

part No.

without contacts (to be ordered separately)
- female inserts for female contacts
- male inserts for male contacts

CX 12 DF
CX 12 DM

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 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 identification No. 1
0,5 mm² AWG 20 identification No. 2
0,75 mm² AWG 18 identification No. ②
1 mm² AWG 18 identification No. 3
1,5 mm² AWG 16 identification No. 4
2,5 mm² AWG 14 identification No. 5

CDFA 0.3
CDFA 0.5
CDFA 0.7
CDFA 1.0
CDFA 1.5
CDFA 2.5

silver plated

CDFD 0.3
CDFD 0.5
CDFD 0.7
CDFD 1.0
CDFD 1.5
CDFD 2.5

gold plated 1)

CDMA 0.3
CDMA 0.5
CDMA 0.7
CDMA 1.0
CDMA 1.5
CDMA 2.5

CDMD 0.3
CDMD 0.5
CDMD 0.7
CDMD 1.0
CDMD 1.5
CDMD 2.5

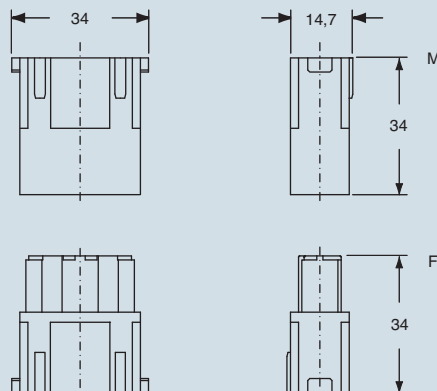
- characteristics according to EN 61984:

10A 160V 2,5kV 3

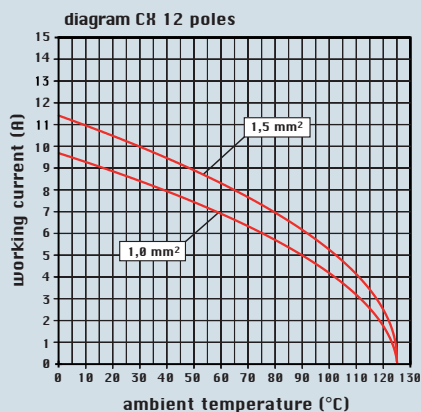
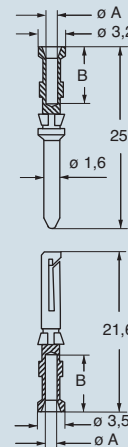
10A 250V 4kV 2

- UL, CSA, CCC *, GL, EAC certified
- * CQC certification being applied for
- rated voltage according to UL/CSA: 600V
- insulation resistance: $\geq 10 \text{ G}\Omega$
- ambient temperature limit: -40 °C ... +125 °C
- are made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: ≥ 500 cycles
- contact resistance: $\leq 3 \text{ m}\Omega$
- PCBs interface, see article CIF 2.4
- for contact crimping, see the crimp tool section (10A contacts, CDF and CDM series) on pages 534, 538, 544, 546, 548
- for maximum current load, see the following load curves inserts, for more information see page 566

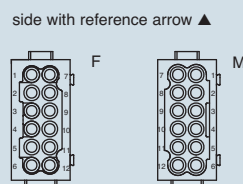
dimensions in mm



dimensions in mm



contacts side (front view)



- 1 frame slot

CDF and CDM contacts

conductor section mm ²	conductor slot ø A (mm)	conductors stripping length B (mm)
0,14-0,37	0,9	8
0,5	1,1	8
0,75	1,3	8
1,0	1,45	8
1,5	1,8	8
2,5	2,2	6

1) basic or high thickness gold plating page 480

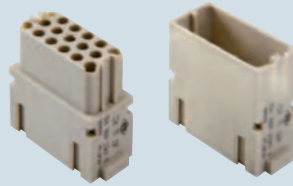
dimensions shown are not binding
and may be changed without notice

The modular inserts must be installed in suitable frames which are then mounted in traditional housings or COB panel support.

frames for modular units page: 214 - 215

modular units,
crimp connections

10A crimp contacts
silver and gold plated



description

part No.

part No.

part No.

without contacts (to be ordered separately)
- female inserts for female contacts
- male inserts for male contacts

CX 17 DF
CX 17 DM

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 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 identification No. 1
0,5 mm² AWG 20 identification No. 2
0,75 mm² AWG 18 identification No. ②
1 mm² AWG 18 identification No. 3
1,5 mm² AWG 16 identification No. 4
2,5 mm² AWG 14 identification No. 5

CDFA 0.3
CDFA 0.5
CDFA 0.7
CDFA 1.0
CDFA 1.5
CDFA 2.5

silver plated

CDFD 0.3
CDFD 0.5
CDFD 0.7
CDFD 1.0
CDFD 1.5
CDFD 2.5

gold plated 1)

CDMA 0.3
CDMA 0.5
CDMA 0.7
CDMA 1.0
CDMA 1.5
CDMA 2.5

CDMD 0.3
CDMD 0.5
CDMD 0.7
CDMD 1.0
CDMD 1.5
CDMD 2.5

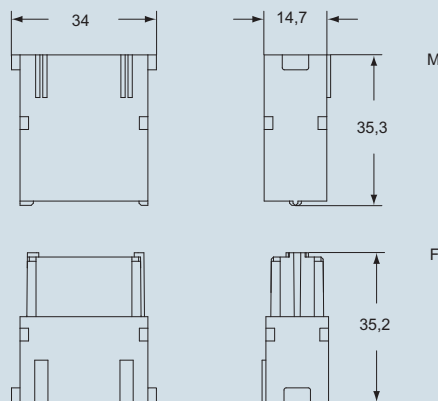
- characteristics according to EN 61984:

10A 160V 2,5kV 3

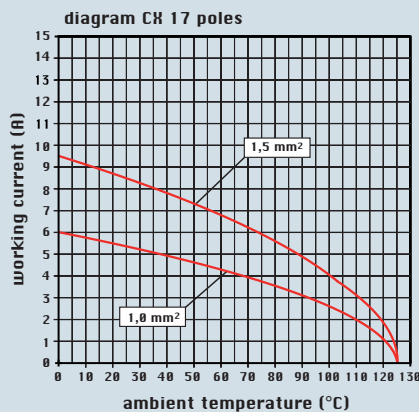
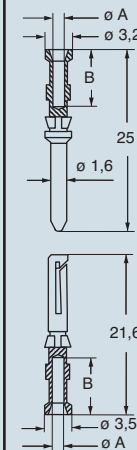
10A 250V 4kV 2

- cUL (UL for USA and Canada), CCC *, EAC certified
- * CQC certification being applied for
- rated voltage according to UL/CSA: 600V
- insulation resistance: $\geq 10 \text{ G}\Omega$
- ambient temperature limit: -40 °C ... +125 °C
- are made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: ≥ 500 cycles
- contact resistance: $\leq 3 \text{ m}\Omega$
- for contact crimping, see the crimp tool section (10A contacts, CDF and CDM series) on pages 534, 538, 544, 546, 548
- for maximum current load, see the following load curves inserts, for more information see page 566

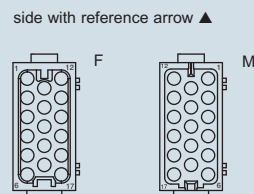
dimensions in mm



dimensions in mm



contacts side (front view)



- 1 frame slot

CDF and CDM contacts

conductor section mm ²	conductor slot ø A (mm)	conductors stripping length B (mm)
0,14-0,37	0,9	8
0,5	1,1	8
0,75	1,3	8
1,0	1,45	8
1,5	1,8	8
2,5	2,2	6

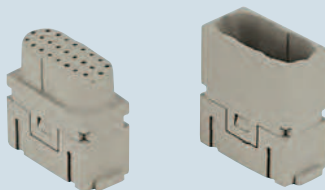
1) basic or high thickness gold plating page 480

The modular inserts must be installed in suitable frames which are then mounted in traditional housings or COB panel support.

frames for modular units page: 214 - 215

- we recommend the use of CRF / CRM code pins

modular units,
crimp connections



crimp contacts
gold plated



description

part No.

part No.

without contacts (to be ordered separately)
- female inserts for female contacts
- male inserts for male contacts

CX 25 IF
CX 25 IM

4A female crimp contacts
0,08-0,21 mm² AWG 28-24
0,13-0,33 mm² AWG 26-22
0,33-0,52 mm² AWG 22-20

CIFD 0.2
CIFD 0.3
CIFD 0.5

4A male crimp contacts
0,08-0,21 mm² AWG 28-24
0,13-0,33 mm² AWG 26-22
0,33-0,52 mm² AWG 22-20

CIMD 0.2
CIMD 0.3
CIMD 0.5

gold plated

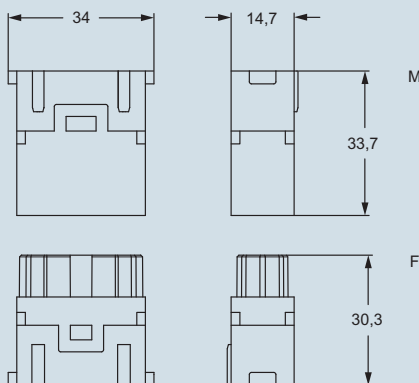
- characteristics according to EN 61984:

4A 50V 0,8kV 3

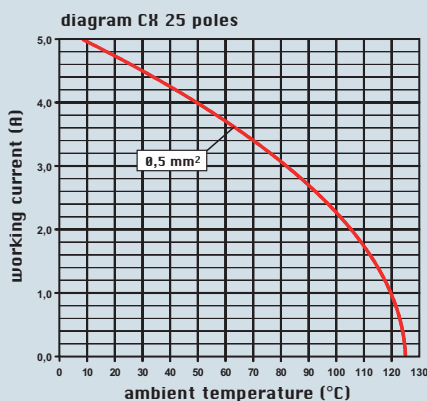
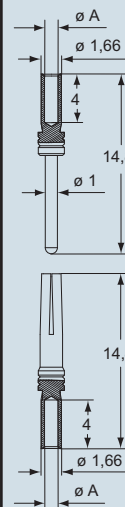
4A 160V 2,5kV 2

- cUL (UL for USA and Canada), EAC certified
- insulation resistance: $\geq 10 \text{ G}\Omega$
- ambient temperature limit: $-40^\circ\text{C} \dots +125^\circ\text{C}$
- made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: ≥ 500 cycles
- for crimp contacts CI series use, on page 540
- CIPZ D** crimping tool
- CITP D** turret head
- CIES** insertion / removal tool
- for maximum current load, see the following load curves inserts, for more information see page 566

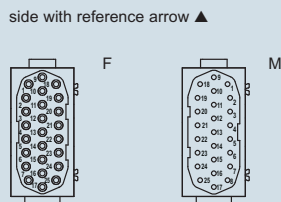
dimensions in mm



dimensions in mm



contacts side (front view)



- 1 frame slot

CIF, CIM contacts

conductor section mm ²	conductor slot ϕA (mm)	conductors stripping length (mm)
0,08-0,21	0,64	4
0,13-0,33	0,90	4
0,33-0,52	1,12	4

The modular inserts must be installed in suitable frames which in turn are installed in traditional housings * or COB panel support.

frames for modular units * page: 215

* enclosures: bulkhead mounting housings, high construction housings or high construction hoods

- characteristics according to EN 61984:

10A 50V 0,8kV 3

- UL, CSA, CCC *, EAC certified

* CQC certification being applied for

- rated voltage according to UL/CSA: 50V

- insulation resistance: $\geq 10 \text{ G}\Omega$

- ambient temperature limit:

-40 °C ... +70 °C (CX 01 B and CX 04 B)

- are made of self-extinguishing thermoplastic resin UL 94V-0

- mechanical life: ≥ 500 cycles

- contact resistance: $\leq 3 \text{ m}\Omega$ (no CX 02 B)

- coaxial connector CX 01 B cables with a typical

impedance of 75 Ω (attenuation see page 567)

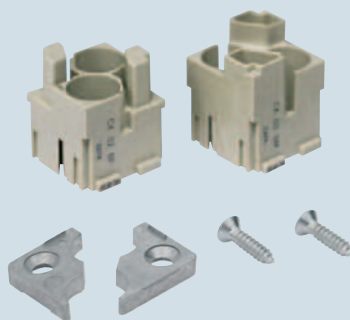
- CX 04 B multi-axial connector for STP cables with 2 pairs and terminations compliant with EN 50173 1 Cat. 5 (100 MHz)

terminations compliant with EN 50173-1 Cat. 5 (100 MHz), compatible with 4 wire field bus protocols

- extraction tool for BUIS shielded connectors from

- extraction tool for BUS shielded connectors from MIXO BUS insert part No. CX BES see page 502

seat for shielded connectors
metal adaptor



shielded connectors
10A crimp contacts, silver or gold plated

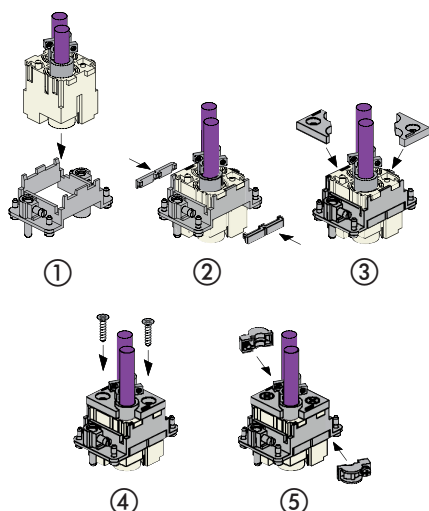


description	part No.	part No.	part No.
seat for two shielded connectors - female insert, two seats for BUS connectors - male insert, two seats for BUS connectors	CX 02 BF CX 02 BM		
shielded BUS multi axial connectors, 4 poles + shield - female insert, four contact seats + shield - male insert, four contact seats + shield		CX 04 BF CX 04 BM	
shielded BUS coaxial connectors, 1 pole + shield - female insert, one contact seats + shield - male insert, one contact seats + shield		CX 01 BF CX 01 BM	
metal adaptor (optional)	CR GND		
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 mm² AWG 18 identification No. 3 1,5 mm² AWG 16 identification No. 4 2,5 mm² AWG 14 identification No. 5		CDFA 0.3 CDFA 0.5 CDFA 0.7 CDFA 1.0 CDFA 1.5 CDFA 2.5	silver plated CDFD 0.3 CDFD 0.5 CDFD 0.7 CDFD 1.0 CDFD 1.5 CDFD 2.5 gold plated
10A male 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 mm² AWG 18 identification No. 3 1,5 mm² AWG 16 identification No. 4 2,5 mm² AWG 14 identification No. 5		CDMA 0.3 CDMA 0.5 CDMA 0.7 CDMA 1.0 CDMA 1.5 CDMA 2.5	CDMD 0.3 CDMD 0.5 CDMD 0.7 CDMD 1.0 CDMD 1.5 CDMD 2.5

Note: The shielded connectors have their shield insulated from the enclosure's earthing point.

If you wish to earth-connect the shield, install on the panel an anchorage for shielded cables CR..ST (see page 482) or the CR GND metal adaptor.

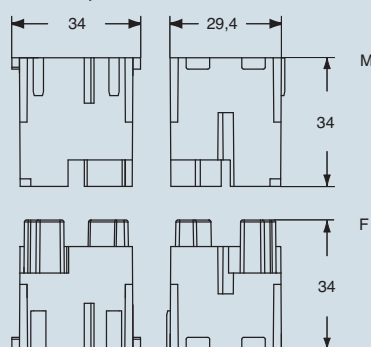
Use of the CR GND metal adaptor



dimensions shown are not binding
and may be changed without notice

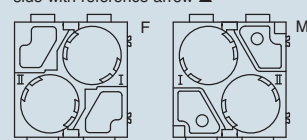
dimensions in mm

CX 02 BE CX 02 BM



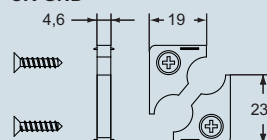
contacts side (front view)

side with reference arrow ▲

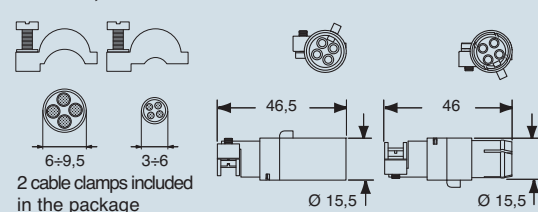


- 2 frame slots

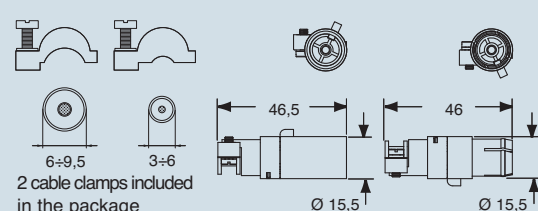
CR GND



CX 04 BF CX 04 BM



CX 01 BF, CX 01 BM



- conductors stripping length see page 195
- crimp contacts dimensions (CDF and CDM) see page 195
- for contact crimping, see the crimp tool section (10A contacts, CDF and CDM series) on pages 534, 538, 544, 546, 548

The modular inserts must be installed in suitable frames which are then mounted in traditional housings * or COB panel support.

frames for modular units * page: 215

* enclosures: bulkhead mounting housings, high construction housings or high construction hoods

- characteristics according to EN 61984:

16A 50V 0,8kV 3

- UL, CSA, CCC *, EAC certified

* CQC certification being applied for

- rated voltage according to UL/CSA: 50V

- insulation resistance: $\geq 10 \text{ G}\Omega$

- ambient temperature limit: $-40^\circ\text{C} \dots +70^\circ\text{C}$ (CX 01 BC)

- are made of self-extinguishing thermoplastic resin UL 94V-0

- mechanical life: ≥ 500 cycles

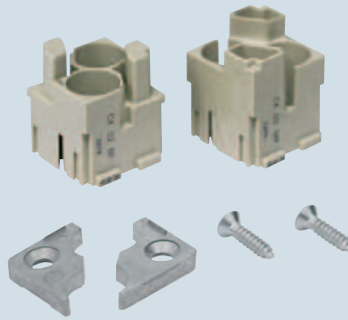
- contact resistance: $\leq 1 \text{ m}\Omega$ (no CX 02 B)

- CX 01 BC shielded connector for **cable with a typical impedance of 50Ω** (attenuation see page 567)

- for contact crimping instructions, please see the crimping tool section (16A contacts, CCF and CCM series) on pages 534, 538, 544, 546, 548

- extraction tool for BUS shielded connectors from MIXO BUS insert part No. CX BES see page 502

seat for shielded connectors
metal adaptor



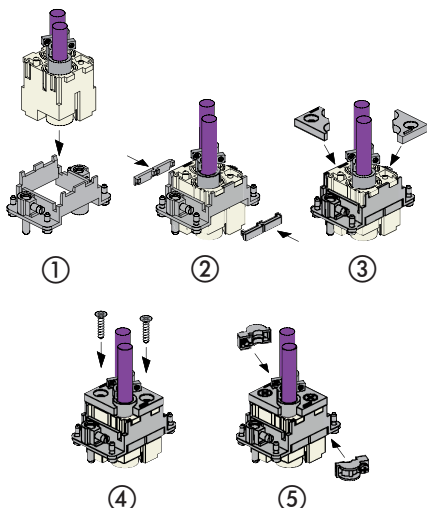
shielded connectors
16A crimp contacts, silver or gold plated



description	part No.	part No.	part No.
seat for two shielded connectors - female insert, two seats for BUS connectors - male insert, two seats for BUS connectors	CX 02 BF CX 02 BM		
shielded BUS coaxial connectors, 1 pole + shield - female insert, one contact seats + shield - male insert, one contact seats + shield		CX 01 BCF CX 01 BCM	
metal adaptor (optional)	CR GND		
16A female contacts 0,14-0,37 mm ² AWG 26-22 one groove 0,5 mm ² AWG 20 with no grooves 0,75 mm ² AWG 18 one groove (back side) 1 mm ² AWG 18 one groove 1,5 mm ² AWG 16 two grooves 2,5 mm ² AWG 14 three grooves 3 mm ² AWG 12 one wide groove 4 mm ² AWG 12 with no grooves 16A male contacts 0,14-0,37 mm ² AWG 26-22 one groove 0,5 mm ² AWG 20 with no grooves 0,75 mm ² AWG 18 one groove (back side) 1 mm ² AWG 18 one groove 1,5 mm ² AWG 16 two grooves 2,5 mm ² AWG 14 three grooves 3 mm ² AWG 12 one wide groove 4 mm ² AWG 12 with no grooves		CCFA 0.3 CCFA 0.5 CCFA 0.7 CCFA 1.0 CCFA 1.5 CCFA 2.5 CCFA 3.0 CCFA 4.0 silver plated CCFD 0.3 CCFD 0.5 CCFD 0.7 CCFD 1.0 CCFD 1.5 CCFD 2.5 CCFD 3.0 CCFD 4.0 gold plated 1)	CCMA 0.3 CCMA 0.5 CCMA 0.7 CCMA 1.0 CCMA 1.5 CCMA 2.5 CCMA 3.0 CCMA 4.0 CCMD 0.3 CCMD 0.5 CCMD 0.7 CCMD 1.0 CCMD 1.5 CCMD 2.5 CCMD 3.0 CCMD 4.0

Note: The shielded connectors have their shield insulated from the enclosure's earthing point. If you wish to earth-connect the shield, install on the panel an anchorage for shielded cables CR..ST (see page 482) or the CR GND metal adaptor.

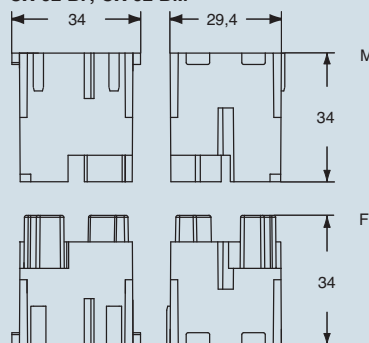
Use of the CR GND metal adaptor



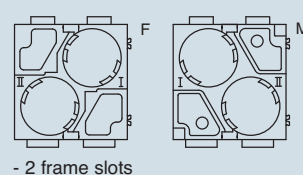
dimensions shown are not binding
and may be changed without notice

dimensions in mm

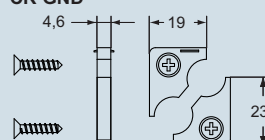
CX 02 BF, CX 02 BM



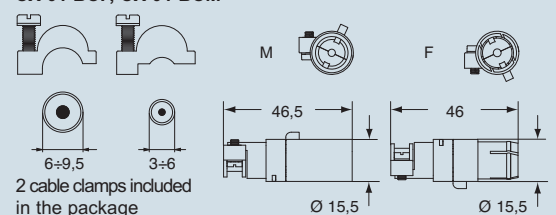
contacts side (front view)
side with reference arrow ▲



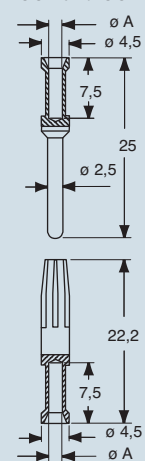
CR GND



CX 01 BCF, CX 01 BCM



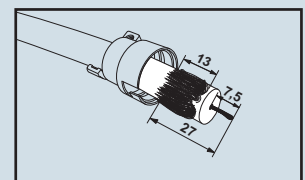
CCF and CCM



CCF and CCM contacts

conductor section mm ²	conductor slot ø A (mm)	conductors stripping length mm
0,14-0,37	0,9	7,5
0,5	1,1	7,5
0,75	1,3	7,5
1,0	1,45	7,5
1,5	1,8	7,5
2,5	2,2	7,5
3	2,55	7,5
4	2,85	7,5

1) basic or high thickness gold plating
page 481



The modular inserts must be installed in suitable frames which are then mounted in traditional housings or COB panel support.

frames for modular units page: 214 - 215

- characteristics according to EN 61984:

- 1A 50V 0,8kV 3**
- insulation resistance: $\geq 10 \text{ G}\Omega$
- are made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: ≥ 500 cycles
- temperature range: from -40°C to $+70^\circ\text{C}$
- we recommend to fix the cable with cable tie
- for contact crimping instructions see the crimping tool on page 554 and 555

WARNING:

inserts can be used on high enclosures or bulkhead housings only.

housing for RJ45 male connectors,
RJ45 female connectors



NEW

crimp and IDC termination,
RJ45 male connectors



NEW

description

part No.

part No.

- female insert with 1 RJ45 female connector,
- male insert for 1 RJ45 male crimp connector, 8 data contacts (without RJ45 connector, to be ordered separately)
- male insert for 1 RJ45 male IDC connector, 8 data contacts (without RJ45 connector, to be ordered separately)

CX 01 J8F
CX 01 J8M

CX 01 J8IM **

- RJ45 male crimp connector, 8 data contacts
- RJ45 male IDC connector, 8 data contacts

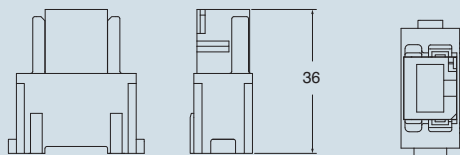
CX 8 J6M
CX 8 J6IM *

CX 01 J8F technical data:

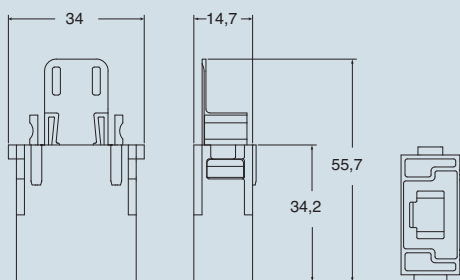
- RJ45 female insert, Cat. 6 Class E_A
- shielding housing: zinc diecast
- housing finish: nickel-plated
- current carrying capacity at 50°C : 1A
- adequate for Power over Ethernet: PoE according to IEEE 802.3af
- connectors: IEC 60603-7-5
- adequate for 10 Gigabit Ethernet: 10 Gigabit Ethernet acc. to IEEE 802.3an
- custom-designed cabling systems: PROFINET Installation Guideline
- generic cabling systems: ANSI/TIA/EIA-568-C.2 ISO/IEC 11801 EN 50173-1 ISO/IEC 24702 EN 61918
- Class E_A (channel): ISO/IEC 11801, EN 50173-1

dimensions in mm

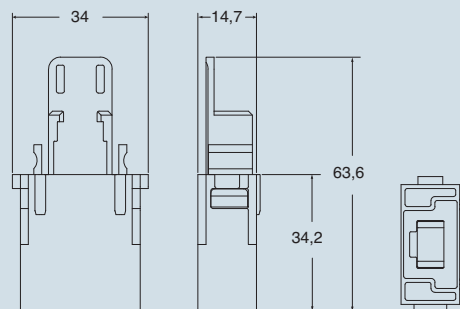
CX 01 J8F



CX 01 J8M



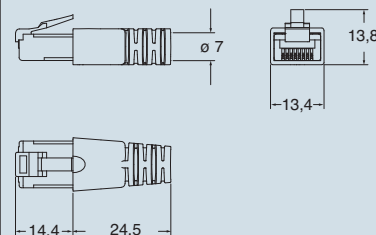
CX 01 J8IM **



dimensions in mm

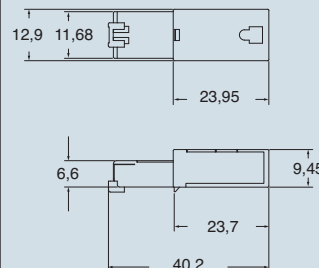
CX 8 J6M

can be used with CX 01 J8M



CX 8 J6IM

* can be used with CX 01 J8IM



CX 8 J6M technical data:

- RJ45 male crimp connectors Cat. 6_A
- crimp pliers: **CJPZ T**
- screened cable stripper: **CJST**
- Cu-conductor diameter solid: 0,40 - 0,51 mm (AWG 26/1 - 24/1) stranded: 0,46 - 0,61 mm (AWG 27/7 - 24/7)
- insulation diameter: 0,85 - 1,05 mm
- cable diameter: 5,0 - 6,6 mm
- connectors: IEC 60603-7-51
- 10 Gigabit Ethernet acc. to IEEE 802.3an: adequate for 10 Gigabit Ethernet
- category 6A: ISO/IEC 11801; EN 50173-1
- Class E_A: ISO/IEC 11801; EN 50173-1
- Category 6A: ANSI/TIA/EIA-568-C.2

CX 8 J6IM technical data:

- RJ45 male IDC connectors Cat. 6 Class E_A
- Cu-conductor diameter solid: 0,41 - 0,64 mm (AWG 26/1 - 22/1) stranded: 0,48 - 0,76 mm (AWG 26/7 - 22/7)
- insulation diameter: 0,85 - 1,6 mm
- cable diameter: 5,5 - 7,3 mm
- connectors: IEC 60603-7-5
- category 6A: ISO/IEC 11801; DIN EN 50173-1
- wrenches pliers for CX 8 J6IM: **CJPW K**
- 10 Gigabit Ethernet acc. to IEEE 802.3an: adequate for 10 Gigabit Ethernet
- Class E_A: ISO/IEC 11801; EN 50173-1
- Category 6: ANSI/TIA/EIA-568-C.2
- custom-designed cabling systems: according to PROFINET Installation Guideline

** CX 01 J8IM: to be used with high enclosures (T-TYPE hood M32/M40 only and CZAV/MZAV top entry hood only), bulkhead housings or COB ... BC/TCQ/TSF/TSFS only.

dimensions shown are not binding
and may be changed without notice

with 2 RJ45 male connectors



NEW

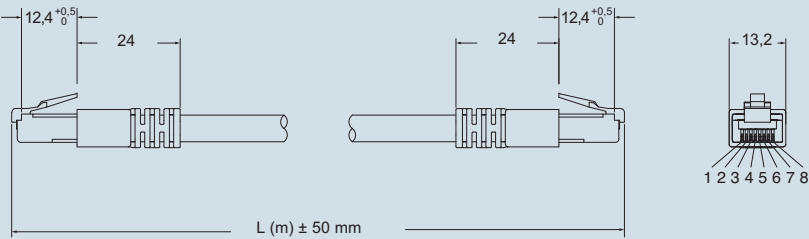
description	part No.	(L) meter
RJ45 male connector with 8 data contacts	CW 1 J2M87	1
	CW 2 J2M87	2
	CW 3 J2M87	3
	CW 5 J2M87	5
	CW 7.5 J2M87	7,5
	CW 10 J2M87	10
	CW 15 J2M87	15

RJ45 patch cord technical data:
- S/FTP Cat. 7, 4x2x AWG 27/7, PUR jacket
- temperature range: from -40 °C + +75 °C
- nickel plated brass screening
- green RAL 6018 colour

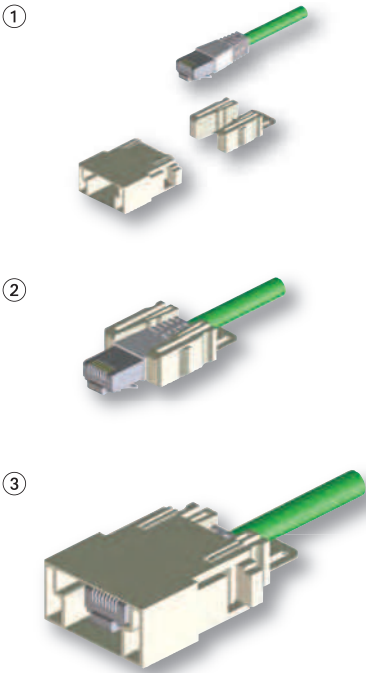
Can be used with:
- MIXO RJ45 CX 01 J8M male inserts

dimensions in mm

CW...J2M87



RJ45 male assembly



Wiring Diagram 1:1

1	_____	1
2	_____	2
3	_____	3
4	_____	4
5	_____	5
6	_____	6
7	_____	7
8	_____	8
S	_____	S

dimensions shown are not binding
and may be changed without notice

The modular inserts must be installed in suitable frames which are then mounted in traditional housings or COB panel support.

frames for modular units page: 215

- characteristics according to EN 61984:

- 10A 250V 4kV 3**
- insulation resistance: $\geq 10 \text{ G}\Omega$
- are made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: ≥ 500 cycles
- contact resistance: $\leq 3 \text{ m}\Omega$
- for contact crimping, see the crimp tool section (10A contacts, CDF and CDM series) on pages 534, 538, 544, 546, 548

** WARNING:

the female inserts can only be used on high or flush mounting enclosures

housing for RJ45 connectors,
RJ45 connectors



10A crimp contacts
silver and gold plated



description

part No.

part No.

part No.

without RJ45 connector and without contacts
(to be ordered separately)

- female inserts for 1 RJ45 female connector and for 4 10A (CDF) female contacts
- male inserts for 1 RJ45 male connector and for 4 10A (CDM) male contacts

CX 01 JF **

CX 01 JM

- RJ45 female connector, 8 data contacts
- RJ45 female connector, 8 data contacts / 2 power contacts

CX 8 JF *
CX 8/2 JF *

- RJ45 male connector, 4 data contacts
- RJ45 male connector, 4 data contacts / 2 power contacts
- RJ45 male connector, 6 data contacts / 2 power contacts
- RJ45 male connector, 8 data contacts
- RJ45 male connector, 4 data contacts cat. 5e profiNET®

CX 4 JM
CX 4/2 JM
CX 6/2 JM
CX 8 JM
CX 4E JM

10A female contacts

0,14-0,37 mm ²	AWG 26-22	identification No. 1
0,5 mm ²	AWG 20	identification No. 2
0,75 mm ²	AWG 18	identification No. ②
1 mm ²	AWG 18	identification No. 3
1,5 mm ²	AWG 16	identification No. 4
2,5 mm ²	AWG 14	identification No. 5

10A male contacts

0,14-0,37 mm ²	AWG 26-22	identification No. 1
0,5 mm ²	AWG 20	identification No. 2
0,75 mm ²	AWG 18	identification No. ②
1 mm ²	AWG 18	identification No. 3
1,5 mm ²	AWG 16	identification No. 4
2,5 mm ²	AWG 14	identification No. 5

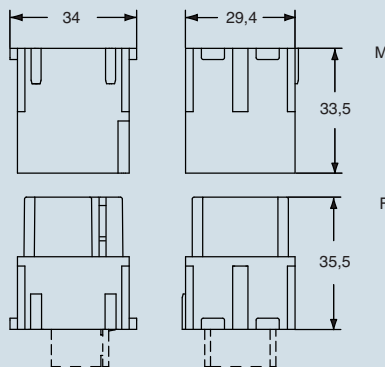
RJ45 connector features:

- RJ45 insert, Cat. 5 Ethernet
- rated current: 2,1A at 70 °C
- rated voltage: 50VDC / 35VAC
- IDC terminals:
- for 0,22 mm² (AWG 24/7) data contacts **CX 4 JM**
- for 0,14 mm² (AWG 26/7) or 0,22 mm² (AWG 24/7) data contacts **CX 4/2 JM**
- for 0,34 mm² (AWG 22/7) or 0,38 mm² (AWG 22/19) power contacts **CX 4/2 JM**
- for 0,14 mm² (AWG 26/7) data contacts **CX 6/2 JM**
- for 0,25 mm² (AWG 23/19) power contacts **CX 6/2 JM**
- for 0,14 mm² (AWG 26/7) data contacts **CX 8 JM**
- for 0,34 mm² (AWG 22/7) data contacts **CX 4E JM**
- /7 = 7-strands wire
- /19 = 19-strands wire
- $\varnothing_{\text{max}}$ insulating conductors 1 mm (data), 1,4 mm (power and CX 4E JM)
- $\varnothing_{\text{max}}$ complete cable 7 mm (CX 8 JM: 6,9 mm)
- temperature range: from -40°C to 120 °C
- nickel plated brass screening
- crimp pliers: **CJPZ Y**
- screened cable stripper: **CJST**

* 4 pole version on request, part No. **CX 4 JF** and **CX 4/2 JF** with "crossover" link

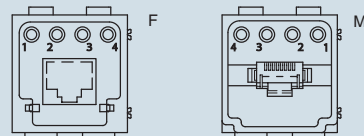
dimensions in mm

CX 01 JF, CX 01 JM



contacts side (front view)

side with reference arrow ▲

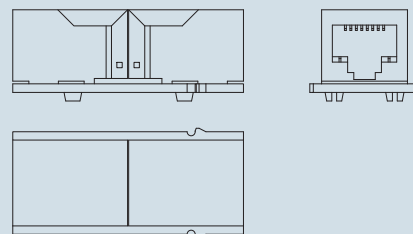


- 2 frame slots

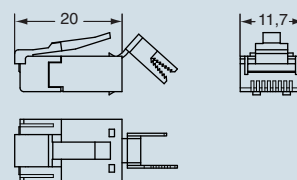
crimp contacts dimensions (CDF and CDM) see page 195

dimensions in mm

CX 4 JF, CX 4/2 JF, CX 8 JF, CX 8/2 JF



CX 4 JM, CX 4/2 JM, CX 6/2 JM, CX 8 JM, CX 4E JM



dimensions shown are not binding
and may be changed without notice

The modular inserts must be installed in suitable frames which are then mounted in traditional housings or COB panel support.

frames for modular units page: 215

- characteristics according to EN 61984:

- 10A 250V 4kV 3**
- insulation resistance: $\geq 10 \text{ G}\Omega$
- are made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: ≥ 500 cycles
- contact resistance: $\leq 3 \text{ m}\Omega$
- for contact crimping, see the crimp tool section (10A contacts, CDF and CDM series) on pages 534, 538, 544, 546, 548

** WARNING:

the female inserts can only be used on high or flush mounting enclosures

housing for RJ45 connectors,
RJ45 connectors



10A crimp contacts
silver and gold plated



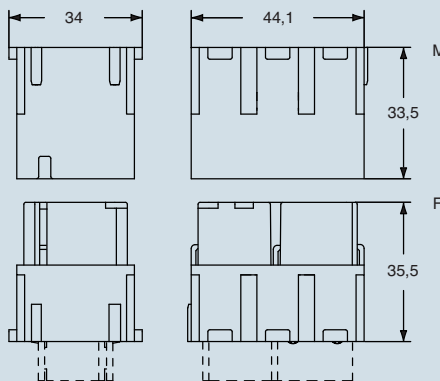
description	part No.	part No.	part No.
without RJ45 connector and without contacts (to be ordered separately)			
- female insert for 2 RJ45 female connectors and for 8 10A (CDF) female contacts	CX 02 JF **		
- male insert for 2 RJ45 male connectors and for 8 10A (CDM) male contacts	CX 02 JM		
- RJ45 female connector, 8 data contacts	CX 8 JF *		
- RJ45 female connector, 8 data contacts / 2 power contacts	CX 8/2 JF *		
- RJ45 male connector, 4 data contacts	CX 4 JM		
- RJ45 male connector, 4 data contacts / 2 power contacts	CX 4/2 JM		
- RJ45 male connector, 6 data contacts / 2 power contacts	CX 6/2 JM		
- RJ45 male connector, 8 data contacts	CX 8 JM		
- RJ45 male connector, 4 data contacts cat. 5e profiNET®	CX 4E JM		
10A female contacts			
0,14-0,37 mm ² AWG 26-22 identification No. 1		CDFA 0.3	CDFD 0.3
0,5 mm ² AWG 20 identification No. 2		CDFA 0.5	CDFD 0.5
0,75 mm ² AWG 18 identification No. ②		CDFA 0.7	CDFD 0.7
1 mm ² AWG 18 identification No. 3		CDFA 1.0	CDFD 1.0
1,5 mm ² AWG 16 identification No. 4		CDFA 1.5	CDFD 1.5
2,5 mm ² AWG 14 identification No. 5		CDFA 2.5	CDFD 2.5
10A male contacts			
0,14-0,37 mm ² AWG 26-22 identification No. 1		CDMA 0.3	CDMD 0.3
0,5 mm ² AWG 20 identification No. 2		CDMA 0.5	CDMD 0.5
0,75 mm ² AWG 18 identification No. ②		CDMA 0.7	CDMD 0.7
1 mm ² AWG 18 identification No. 3		CDMA 1.0	CDMD 1.0
1,5 mm ² AWG 16 identification No. 4		CDMA 1.5	CDMD 1.5
2,5 mm ² AWG 14 identification No. 5		CDMA 2.5	CDMD 2.5

RJ45 connector features:

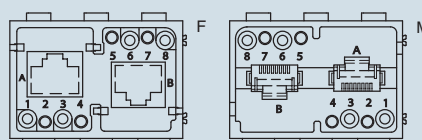
- RJ45 insert, Cat. 5 Ethernet
- rated current: 2,1A at 70 °C
- rated voltage: 50VDC / 35VAC
- IDC terminals:
- for 0,22 mm² (AWG 24/7) data contacts **CX 4 JM**
- for 0,14 mm² (AWG 26/7) or 0,22 mm² (AWG 24/7) data contacts **CX 4/2 JM**
- for 0,34 mm² (AWG 22/7) or 0,38 mm² (AWG 22/19) power contacts **CX 4/2 JM**
- for 0,14 mm² (AWG 26/7) data contacts **CX 6/2 JM**
- for 0,25 mm² (AWG 23/19) power contacts **CX 6/2 JM**
- for 0,14 mm² (AWG 26/7) data contacts **CX 8 JM**
- for 0,34 mm² (AWG 22/7) data contacts **CX 4E JM**
- /7 = 7-strands wire
- /19 = 19-strands wire
- $\varnothing_{\text{max}}$ insulating conductors 1 mm (data), 1,4 mm (power and CX 4E JM)
- $\varnothing_{\text{max}}$ complete cable 7 mm (CX 8 JM: 6,9 mm)
- temperature range: from -40°C to 120 °C
- nickel plated brass screening
- crimp pliers: **CJPZ Y**
- screened cable stripper: **CJST**

* 4 pole version on request, part No. **CX 4 JF** and **CX 4/2 JF** with "crossover" link

dimensions in mm
CX 02 JF, CX 02 JM



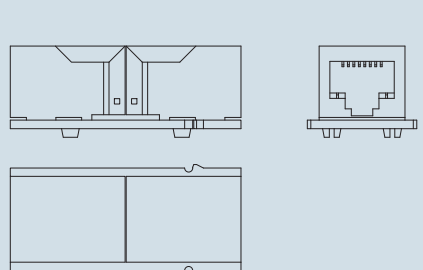
contacts side (front view)
side with reference arrow ▲



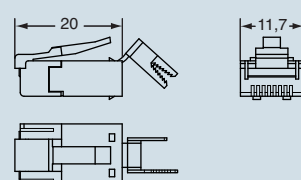
- 3 frame slots

crimp contacts dimensions (CDF and CDM) see page 195

dimensions in mm
CX 4 JF, CX 4/2 JF, CX 8 JF, CX 8/2 JF

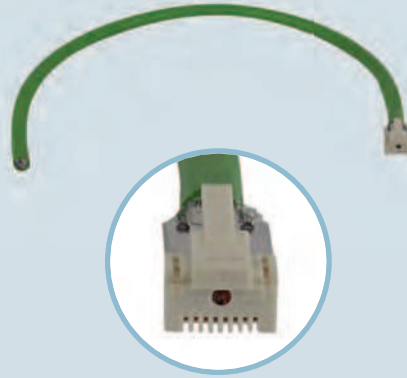


CX 4 JM, CX 4/2 JM, CX 6/2 JM, CX 8 JM, CX 4E JM

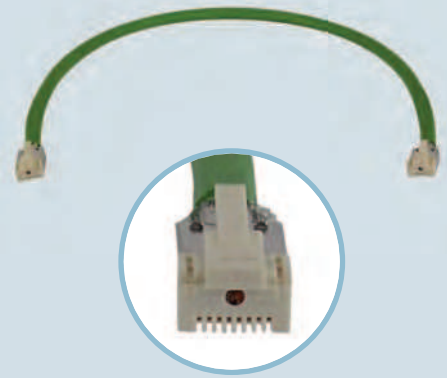


dimensions shown are not binding
and may be changed without notice

with 1 RJ45 male connector



with 2 RJ45 male connectors



description	part No.	(L) metre	part No.	(L) metre
RJ45 male connector with 4 data contacts / 2 power contacts	CW 0.5 JM4/2	0.5		
	CW 2 JM4/2	2		
	CW 5 JM4/2	5		
	CW 10 JM4/2	10		
RJ45 male connector with 8 data contacts	CW 0.5 JM8	0.5	CW 0.5 J2M8	0.5
	CW 2 JM8	2	CW 2 J2M8	2
	CW 5 JM8	5	CW 5 J2M8	5
	CW 10 JM8	10	CW 10 J2M8	10
RJ45 male connector with 4 data contacts, Class 5e	CW 0.5 JM4E	0.5	CW 0.5 J2M4E	0.5
	CW 2 JM4E	2	CW 2 J2M4E	2
	CW 5 JM4E	5	CW 5 J2M4E	5
	CW 10 JM4E	10	CW 10 J2M4E	10

RJ45 connector features:

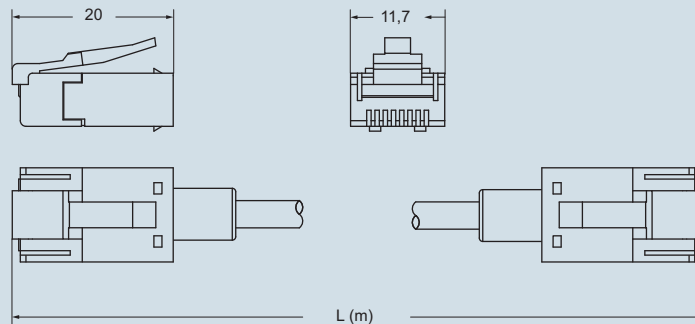
- insert RJ45, Cat. 5 Ethernet
- nominal current: 2,1A at 70 °C
- nominal voltage: 50V DC / 35V AC
- temperature range: from -40 °C to +120 °C
- nickel plated brass screening

Can be used with:

- MIXO RJ45: CX 01 JM and CX 02 JM male inserts
- see pages 202 and 203

dimensions in mm

CW JM 4/2, 8, 4E and CW J2M 4/2, 8, 4E



Wiring Diagram

J2M4/2	J2M8	J2M4E
1 — 1	1 — 1	1 — 1
2 — 2	2 — 2	2 — 2
3 — 3	3 — 3	3 — 3
4 — 4	4 — 4	4 — 4
5 — 5	5 — 5	5 — 5
6 — 6	6 — 6	6 — 6
7 — 7	7 — 7	7 — 7
8 — 8	8 — 8	8 — 8
A — A	A — A	A — A
B — B	B — B	B — B
VS — VS	VS — VS	VS — VS

MIXO modular units for 1 USB connector

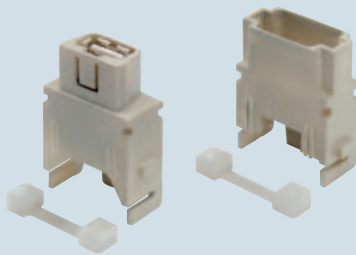


The modular inserts must be installed in suitable frames which are then mounted in traditional housings or COB panel support.

frames for modular units page: 214 - 215

WARNING
enclosures: bulkhead mounting housings, high construction housings or high construction hoods

housing for USB male connectors,
USB female - female connectors



patch cable USB

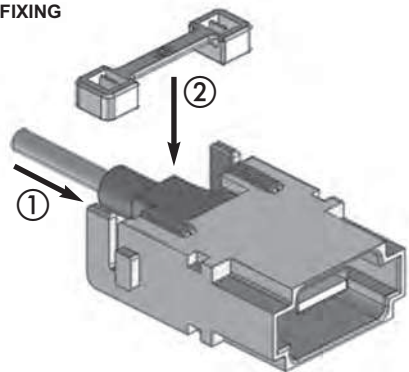


description
- female insert with USB female - female connector - male insert without USB male connector (patch cable to be ordered separately)
patch cable USB-A / USB-A, 2 m **

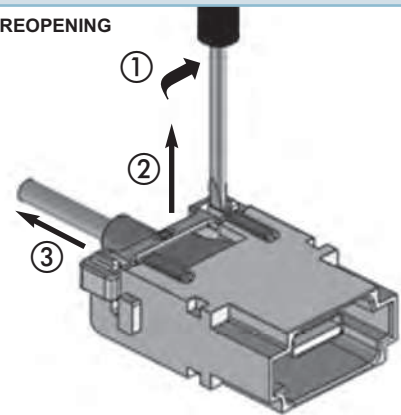
** 5 m on request

USB connector features:
- USB-A / USB-A Hi-Speed - 2.0 insert
- temperature range: from -25 °C to +80 °C

FIXING



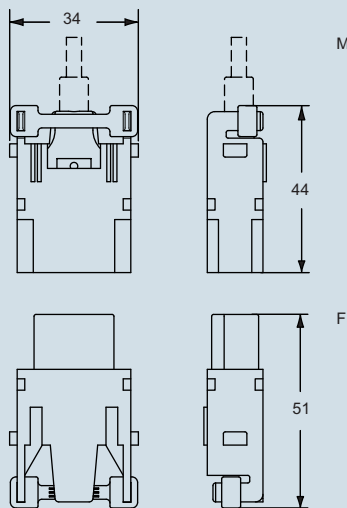
REOPENING



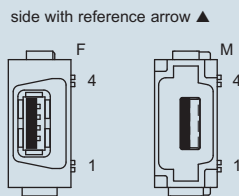
part No.
CX 01 UF ¹⁾
CX 01 UM ¹⁾

¹⁾ cUL (UL for USA and Canada), EAC certified

dimensions in mm



contacts side (front view)

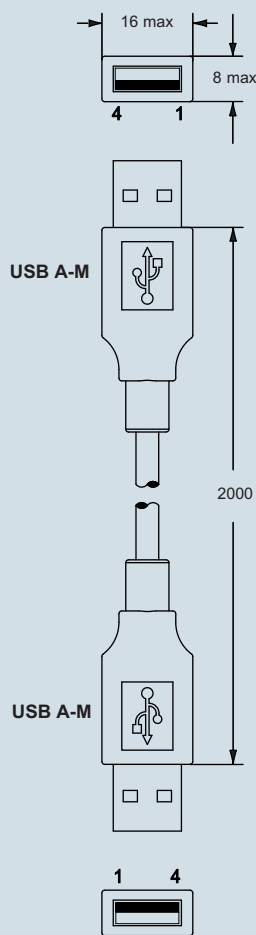


- 1 frame slot

part No.

CW 2 UAM

dimensions in mm



1	—	1
2	—	2
3	—	3
4	—	4
SHIELD	—	SHIELD

dimensions shown are not binding
and may be changed without notice

The modular inserts must be installed in suitable frames which are then mounted in traditional housings * or COB panel support.

frames for modular units * page: 214 - 215

* enclosures: housings or high construction hoods

- characteristics according to EN 61984:

5A 50V 0,8kV 3

- for crimp 5A contacts CI series using:

CIPZ D crimping tool

CIVTP D turret head

CIVES insertion / removal tool

module adapter for 1 D-SUB connector



5A crimp contacts for D-SUB, gold plated



description

part No.

part No.

seat for 1 D-SUB crimp contacts connector and shield (included)

- female insert with connector
- male insert with connector

CX 01 9VF
CX 01 9VM

5A female crimp contacts
0.08-0.13 mm² AWG 28-26
0.20-0.52 mm² AWG 24-20

5A male crimp contacts
0.08-0.13 mm² AWG 28-26
0.20-0.52 mm² AWG 24-20

CIVFD 0.1
CIVFD 0.5

CIVMD 0.1
CIVMD 0.5

gold plated

we recommend the use of CRF CX / CRM CX code pins

dimensions in mm

dimensions in mm

Alternatively:

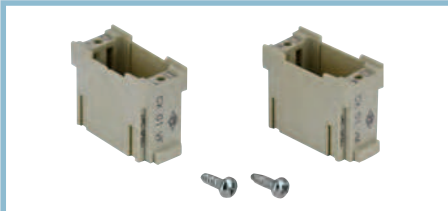
- Seat for 1 D-SUB connector (without connector and shield):

CX 01 VM (for male connector)

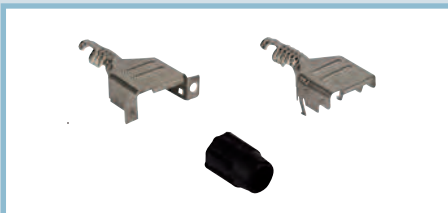
CX 01 VF (for female connector)

Can also be used with 15-pole D-SUB Hi-Density connectors.

For further information, please contact I.L.M.E. SpA.



- CR CX VS shield for CX 01 VM/VF inserts



- Special version with cable contacts section 0,32-0,82 mm² AWG 22-18

CIVFD 0.8 female

CIVMD 0.8 male



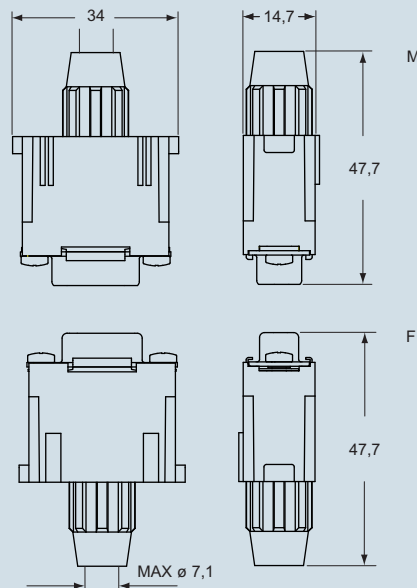
- Seats for 1 D-SUB screw connectors (without shield):

CX 01 9VFS (with female connectors)

CX 01 9VMS (with male connectors)

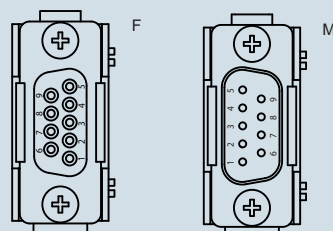
dimensions shown are not binding and may be changed without notice

CX 01 9VF, CX 01 9VM



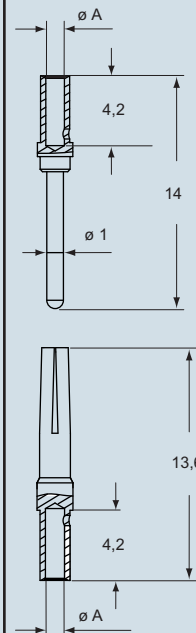
contacts side (front view)

side with reference arrow ▲



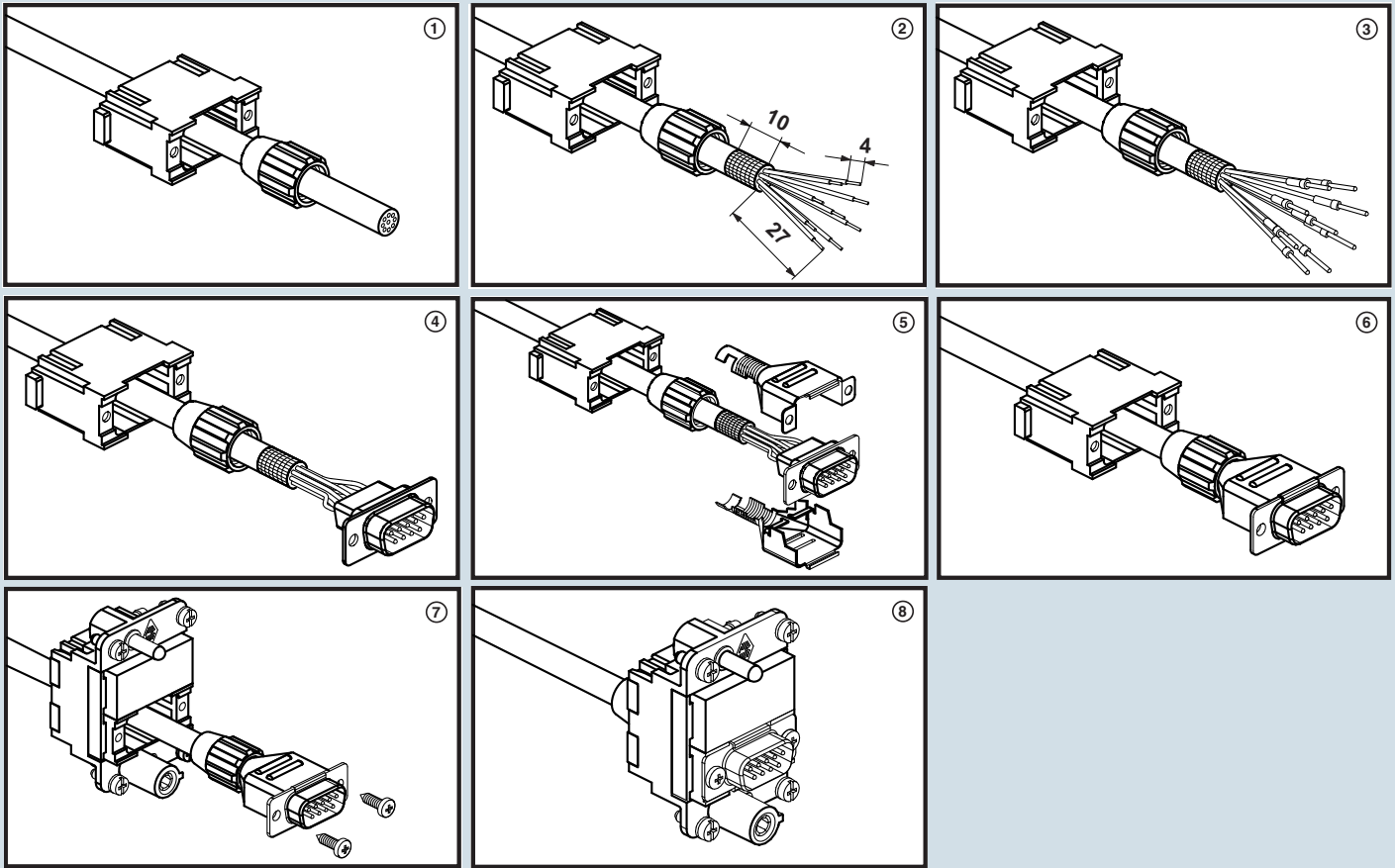
- 1 frame slot

CIVF and CIVM

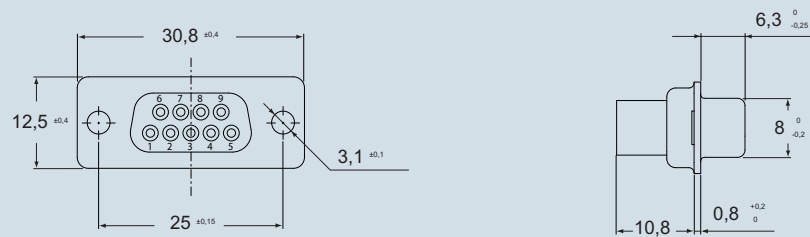


CIVF and CIVM contacts

conductor section mm ²	conductor slot ø A (mm)	conductors stripping length mm
0,08-0,13	0,63	4
0,20-0,52	1,14	4



9-pole female CRIMP D-SUB connector (can be used with CX 01 VF)



9-pole male CRIMP D-SUB connector (can be used with CX 01 VM)

