







THE TRADITION OF INNOVATION SINCE 1945

ILME designs and manufactures complete solutions for industrial connections.

Headquartered in Milan and with subsidiaries in the key countries driving the progress of automation, ILME is an industry leader in the main world markets.

People are vital to success and growth at ILME, sharing a passion for innovation, utmost responsibility and participation.

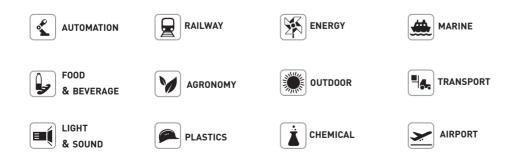
The Company is committed to developing technology in the areas that most impact the future of the industries it serves: original solutions and safe wiring, research on the most suitable materials, rapid turnaround and readily available services while striving for energy saving and environmental safeguard.

COMMITMENT TO INDUSTRY

Technological innovation is the main pillar of ILME competitiveness.

In the electrical connection sector of industrial automation, characterized by the need for top performance and reliability, ILME is an acknowledged leader with its own patents, and a global benchmark supplier of major companies worldwide.

ILME offers a fully integrated range of high-quality products and services for every type of connection to suit any application requirements.



IMPORTANT NOTES

- 1 ILME designs and manufactures complete solutions for Heavy Duty electrical power connections. The connector (although offered to the user as a variety of elements, usually inserts and enclosures, to allow the selection of the ideal combination) has been **designed as a complete connector** and tested to be compliant with the essential safety requirements of the EU Low Voltage Directive 2014/35/EU and in particular the EN 61984 standard. The design of this "whole" system guarantees that every allowed combination of inserts, enclosures and accessories cannot result as improper.
- The products in this catalogue alone cannot guarantee the best functionality upon installation, as this depends also on their correct "putting into service" which must be performed in compliance with the applicable system safety standards and according to the "rule of the art". Therefore the effectiveness of the installation of the connector depends on the choices of the end user who must also take into account the following safety requirements.
- 3 Connectors must not be connected or disconnected when live or under load.
- 4 After wiring the inserts it is necessary to verify the continuity of the protective earth connections.
- The **correct coupling of the inserts** is guaranteed only if they are installed (with the four fixing screws supplied *) inside the corresponding enclosures or onto compatible accessories in this catalogue. ILME S.p.A. is not responsible for any different application.
- Wiring of **screw-type terminal connections** must be carried out applying the correct tightening torque in order to avoid false contacts or damage to the conductor, the screw or the terminal.
- 7 Crimping tools and crimp contacts used should preferably be supplied by the same manufacturer to avoid difficulties with the insertion and retention or damaging of the contacts themselves.
- 8 Correct wiring of **spring-clamp connection inserts** is guaranteed only when the correct screwdriver indicated in the specific catalogue, or possibly on the insert, is used **.
- Avoid forcing the contacts during **connection and disconnection**. Connectors must be coupled and uncoupled in the axial direction with respect to the contacts, without bending and pulling the attached conductor bundles or cables.
- 10 Installation of two **inserts side by side,** in enclosures with two bays, must respect the polarity drawing marked on the insert (or the contact side view, as shown in this catalogue) to avoid inverted coupling.
- 11 Installation of two or more identical **connectors side by side** is recommended only with the use of **coding pins** in order to avoid mismatched couplings.
- 12 In order to keep the declared **degree of protection** (IP code according to EN 60529, or Enclosure Type Rating according to ANSI/UL 50E), enclosures must be completed with cable glands and/or other accessories with at least an equal degree of protection.
- 13 Moreover, the declared **degree of protection** (IP code according to EN 60529, or Enclosure Type Rating according to ANSI/UL 50E) is guaranteed when the enclosures, complete with inserts, are coupled and locked with their locking levers (or devices).
- 14 Connector inserts and their enclosures are generally compatible with similar/equivalent products from other manufacturers, according to the last samples tested. Full compatibility cannot be guaranteed in the event of technical changes made by other manufacturers. In particular, maximum performance of IP68 enclosures (CG-MG, CGK-MGK Series) cannot be guaranteed when coupled with other manufacturers' products.
- 15 **Spare parts** are supplied in minimum quantities only with the purpose to replace damaged parts. To avoid invalidation of warranty, products should be modified or repaired only by ILME: the integrity of their functionality e.g. their degree of protection can no longer be guaranteed if products are modified/repaired by end-users. In any case, the liability for correct choice, assembly and use is totally at charge of the installer and the end-user.
- 16 ILME S.p.A. takes no responsibility in verifying whether the components herein contained comply with any specific regulations of fields of application.
- 17 ILME cannot be held responsible for individual components in uses other than those described in this catalogue.

 ILME cannot be held responsible for incorrect connector selection in relation to the environmental conditions of the application (e.g.: influence of ambient temperature, moisture, environmental pollution, etc.).
- * Except one fixing screw for size "21.21" inserts, two fixing screws for size "32.13" inserts.
- ** Except for **SQUICH**® inserts (with spring-clamp terminals with actuator button) that do not require any tool to operate the terminal.



CE MARKING

As from 1st January 1997, in order to make available electrical products on the European market, the manufacturer must ensure that these bear the relevant **CE marking,** in line with the Low Voltage Directive 73/23/ EEC* (implemented in Italy as L. D. 18-10-1977 no. 791) and its modification 93/68/EEC* (implemented in Italy as L.D. 25-11-1996 no. 626/96, published in the supplement to the Gazzetta Ufficiale of 14-12-1996).

The CE marking must be visible on the product or, if this is not possible, on the packaging, the instructions for use or on the warranty certificate. It acts as a declaration by the manufacturer that the product complies with all relevant EU directives regarding its field of application.

ILME products bear the CE marking on the actual product or its packaging.

Almost all ILME products fall within the scope of the Low Voltage Directive. An EU declaration of conformity is required in order to be able to apply the CE marking. This declaration, to which the market is not directly entitled, must be made available to the controlling authorities (in Italy, the Ministry of Economic Development) at all times. In it, the manufacturer declares the technical safety standard(s) followed in the design and manufacture of the product. These standards must be, in decreasing order of preference:

- a European standard (EN prefix)
- a European harmonisation document (HD prefix)
- an international IEC standard
- a national standard
- in the absence of reference standards, the manufacturer's internal specifications guaranteeing compliance with the basic safety requirements of the directive.

Conformity with harmonised technical standards (i.e. ratified by CENELEC) also constitutes presumption of conformity with the basic safety requirements of the directives.

The CE marking of ILME products results from the declaration of conformity of the product to harmonised standards or international IEC standards.

Through the CE marking, ILME declares full compliance, not merely with the directive's basic safety requirements, but also with those international or national standards on which voluntary safety certification markings are based (e.g. IMQ and VDE). In this way, ILME intends to give the CE marking the value of self-certification in terms of safety, given the loss in legal value of voluntary certifications issued by third parties, ratified by directive 93/68/EEC *.

Notwithstanding the above, practically all ILME products still bear voluntary conformity markings.

The above mentioned EU declaration of conformity becomes null and void when the assembly of products includes one or more components not manufactured by ILME and without CE marking.

A The information contained in this catalogue is not binding and may be changed without notice.

* **Note:** The subsequent legal reference for the Low Voltage Directive was 2006/95/EC, as consolidation of the original Directive 73/23/EEC + Directive 93/68/EEC. On 29th March 2014, the Official Journal of the European Union published the new Low Voltage directive 2014/35/EU dd. 26th February 2014, a recast version of directive 2006/95/EC, which is in force since 20th April 2016.



Visit ilme.com website to discover all the main features:





Technical datasheets to get all the information about our products.





Application pages to focus on installation locations, field requirements and technical details.





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Q search



Over 50 million connector combinations.

choose



Easy selection
of individual parts
for key applications
and recommendations
for custom
environmental
conditions.

📥 download



Smart suggestion to get the most suitable configuration.



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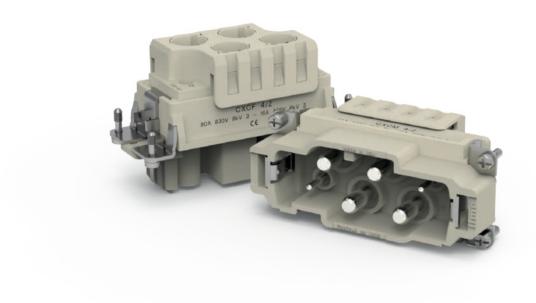
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CXC SERIES - CRIMP COMBINED CONNECTOR CXCF /M 4/2



CXC Combined power/auxiliaries crimp connector Series

4 poles + ⊕: 80 A 830 V 8 kV 3

2 poles + ⊕: 16 A 400 V 6 kV 3





TECHNICAL FEATURES CXCF /M 4/2

For use with up to 4 removable crimp contacts series **CX7** (power side) and up to 2 removable crimp contacts series **CC** (auxiliary/signal side).

For use with working current on power contacts up to 80 A (see focus on page 22) and on auxiliary contacts up to 16 A.

Interchangeable and intermateable with the screw-type version **CXF/M 4/0** and **CXF/M 4/2** (see CN.19 catalogue pages 200-201), same voltage and current ratings.

NOTE – Where screw-type version of connector exists, e.g. **CX 4/2**, **CX 4/8**, to identify the crimp variant a C is being added in the code of the "crimp" version. Crimp versions allow on power poles use of conductors with cross-sectional area up to 25 mm² / 4-3 AWG.

Inserts made by UL 94V-0 glass reinforced polycarbonate, EN 45545-2:2015 compliant.

By employing crimp contacts, it covers all applications demanding the highest vibration resistance (e.g. railway rolling stock).

CX7 contacts available in 4 sizes (6.0 /10 /16 /25) to match equally sized conductors (mm²).

Removal tool for CX7 contacts:

CX7ES (improved shape of existing C7ES to better fit application in these inserts).

Removal tool for CC contacts:

Max diameter of wire shealthings:

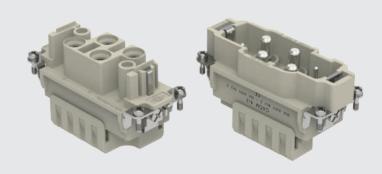
- 10 mm in the 4P power core section
- 4.5 mm in the 2P auxiliaries

cURus, CSA, CQC, DNV-GL, BV, EAC pending.

RoHS: compliant without exemptions. NOTE - The turned crimp contacts series **CX7** and **CC** are **RoHS** compliant with exemption **6(c)**.

crimp variant intermateable with corresponding screw-type version CX 4/2, CX 4/0, to cover all applications demanding the highest vibration resistance

Crimp contacts CX7 and CC series are separately available



CXCF /M 4/2 4 poles (80 A - 830 V) + 2 poles (16 A - 400 V) + (9)

enclosures: size "77.27 page: C-TYPE IP65 or IP66/IP69 402 - 411 402 - 411 439 - 440 454 - 458 470 - 471 484 - 485 491 C7 IP67, two levers V-TYPE IP65 or IP66/IP69, single lever V-1YPE IP65 or IP66/IP69, single lever BIG hoods T-TYPE IP65 insulating T-TYPE / W IP66/IP69 insulating HYGIENIC T-TYPE / C IP66/IP69 HYGIENIC T-TYPE / C IP66/IP69, -50 °C 503 508 W-TYPE for aggressive environments E-Xtreme® corrosion proof 534 - 535, 544, 554 523 555 580 Central lever LS-TYPE 609 - 611 622 - 623 IP68 640 - 643 panel supports: COB 652 - 653

bulkhead mounting housings, high construction housings or high construction hoods

refer to CN.19 pages

FROM SEPTEMBER 2021

inserts, crimp connections



80 A crimp contacts silver plated



description part No. part No. without contacts (to be ordered separately) CXCF 4/2 female inserts for female contacts

80 A female crimp contacts AWG 10 6 mm² 10 mm² AWG 8 - 7 16 mm² AWG 6 - 5 25 mm² AWG 4 - 3 80 A male crimp contacts

male inserts for male contacts

6 mm² AWG 10 AWG 8 - 7 AWG 6 - 5 16 mm² AWG 4 - 3 CXCM 4/2

CX7FA 10 **CX7FA 16** CX7FA 25

CX7FA 6.0

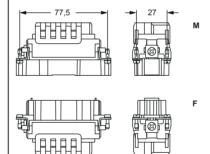
CX7MA 6.0 **CX7MA 10 CX7MA 16 CX7MA 25**

- characteristics according to EN/IEC 61984 ratings:

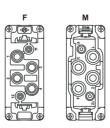
80 A 830 V 8 kV 3 16 A 400 V 6 kV 3

- cURus, CSA, CQC, DNV-GL, BV, EAC pending
- rated voltage according to UL/CSA: 600 V
- insulation resistance: ≥ 10 GΩ
- Lower and Upper Limiting Temperatures (LLT ... ULT): -40 °C ... +125 °C - made by UL 94V-0 glass reinforced polycarbonate,
- EN 45545-2:2015 compliant
- mechanical life: ≥ 500 cycles
- contact resistance: ≤ 0,3 m Ω (4 power poles) ≤ 1 mΩ (2 auxiliary poles)
- it is recommended to crimp the contacts with crimping tools homologated by ILME (please see the crimping tool section 70 A contacts CX7F and CX7M series and 16 A contacts CCF, CCM series, on pages 708 - 741 of CN.19 catalogue).
- for max. current load see the connector inserts derating diagrams under construction.

CXC 4/2

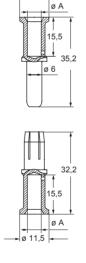


contacts side (front view)



CX7F and CX7M

ø 11,5 |



CX7F and CX7M contacts

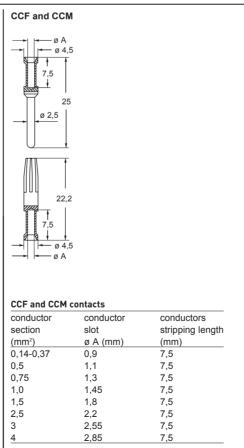
OMIT UITU	orer in contacto	
conductor	conductor slot	conductor
section	ø A	stripping length
(mm²)	(mm)	(mm)
6	3,5	15
10	4,3	15
16	5,5	15
25	7,0	15



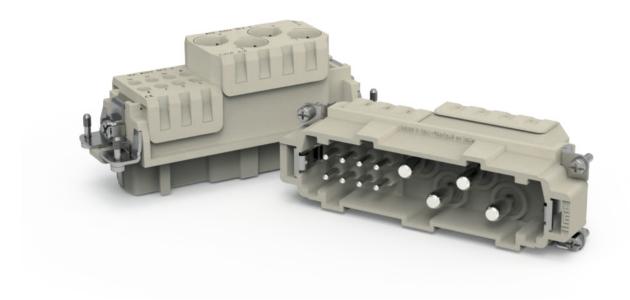
CXCF /M 4/2 4 poles (80 A - 830 V) + 2 poles (16 A - 400 V) + 🕀



			1	
description			part No.	
40 A famala asis				
16 A female crin 0,14-0,37 mm ²	AWG 26-22	one groove	CCFA 0.3	
0,14-0,37 IIIIII 0,5 mm²	AWG 20-22 AWG 20	one groove with no grooves	CCFA 0.5	<u>s.</u>
0,75 mm ²	AWG 20 AWG 18	one groove (back side)	CCFA 0.7	silver
1 mm ²	AWG 18	one groove	CCFA 1.0	9
1,5 mm ²	AWG 16	two grooves	CCFA 1.5	plated
2,5 mm ²	AWG 14	three grooves	CCFA 2.5	ate
3 mm ²	AWG 12	one wide groove	CCFA 3.0	g
4 mm ²	AWG 12	with no grooves	CCFA 4.0	
16 A male crimp	o contacte			
0,14-0,37 mm ²	AWG 26-22	one groove	CCMA 0.3	
0,14-0,37 mm ²	AWG 20-22 AWG 20	with no grooves	CCMA 0.5	
0,75 mm ²	AWG 18	one groove (back side)	CCMA 0.7	
1 mm ²	AWG 18	one groove	CCMA 1.0	
1,5 mm ²	AWG 16	two grooves	CCMA 1.5	
2,5 mm ²	AWG 14	three grooves	CCMA 2.5	
3 mm ²	AWG 12	one wide groove	CCMA 3.0	
4 mm ²	AWG 12	with no grooves	CCMA 4.0	
removal tools				
for CX7 series of				
for CC series co	ontacts			



CXC SERIES - CRIMP COMBINED CONNECTOR CXCF /M 4/8



CXC Combined power/auxiliaries crimp connector Series

4 poles + 🕀: 80 A 400 V 6 kV 3

8 poles + 🕀: 16 A 230/400 V 4 kV 3





TECHNICAL FEATURES CXCF /M 4/8

For use with up to 4 removable crimp contacts series **CX7** (power side) and up to 8 removable crimp contacts series **CC** (auxiliary/signal side).

For use with working current on power contacts up to 80 A (see focus on page 22) and on auxiliary contacts up to 16 A.

Interchangeable and intermateable with the screw-type version CXF /M 4/8 (see CN.19 catalogue page 204), same voltage and current ratings. Inserts made by UL 94V-0 glass reinforced polycarbonate, EN 45545-2:2015 compliant. NOTE – Where the screw-type version of a connector exists, e.g. CX 4/2, CX 4/8, to identify the crimp variant a C is being added in the code of the "crimp" version. Crimp versions allow on power poles use of conductors with cross-sectional area up to 25 mm² / 4-3 AWG

By employing crimp contacts, it covers all applications demanding the highest vibration resistance (e.g. railway rolling stock, ships).

CX7 contacts available in 4 sizes (6.0 /10 /16 /25) to match equally sized conductors (mm²).

Removal tool for CX7 contacts:

CX7ES (improved shape of existing C7ES to better fit application in these inserts).

Removal tool for CC contacts:

Max diameter of wire shealthings:

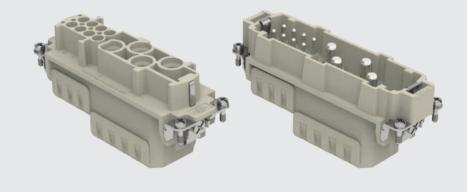
- 10 mm in the 4P power core section
- 4,5 mm in the 8P auxiliaries

cURus, CSA, CQC, DNV-GL, BV, EAC pending.

RoHS: compliant without exemptions NOTE - The turned crimp contacts series **CX7** and **CC** are **RoHS** compliant with exemption **6(c)**.

crimp variant of CXF /M 4/8, to cover all applications demanding the highest vibration resistance

crimp contacts CX7 and CC series are separately available



CXCF /M 4/8 4 poles (80 A - 400 V) + 8 poles (16 A - 230/400 V) + (9)

enclosures: size "104.27" page: C-TYPE IP65 or IP66/IP69 C7 IP67, two levers V-TYPE IP65 or IP66/IP69, single lever 412 - 423 412 - 423 441 - 442 459 - 463 472 - 473 486 - 487 492 504 509 V-1YPE IP65 or IP66/IP69, single lever BIG hoods T-TYPE IP65 insulating T-TYPE / W IP66/IP69 insulating HYGIENIC T-TYPE / C IP66/IP69 HYGIENIC T-TYPE / C IP66/IP69, -50 °C W-TYPE for aggressive environments E-Xtreme® corrosion proof 536 - 537, 545, 556 524 557 581 612 - 614 624 - 625 Central lever LS-TYPE IP68 644 - 647 panel supports: COB 652 - 653

6 mm²

10 mm²

16 mm²

25 mm²

bulkhead mounting housings, high construction housings or high construction hoods

refer to CN.19 pages

FROM SEPTEMBER 2021

inserts, crimp connections



80 A crimp contacts silver plated



description part No. part No.

CXCF 4/8

CXCM 4/8

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

80 A female crimp contacts AWG 10 AWG 8 - 7 AWG 6 - 5 AWG 4 - 3

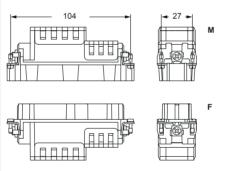
80 A male crimp contacts 6 mm² AWG 10 AWG 8 - 7 AWG 6 - 5 16 mm² AWG 4 - 3

- characteristics according to EN/IEC 61984 ratings:

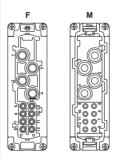
80 A 400 V 6 kV 3

- **16 A 230/400 V 4 kV 3** cURus, CSA, CQC, DNV-GL, BV, EAC pending
- rated voltage according to UL/CSA: 600 V
- insulation resistance: ≥ 10 GΩ
- ambient temperature limit: -40 °C ... +125 °C
- made by UL 94V-0 glass reinforced polycarbonate, EN 45545-2:2015 compliant
- mechanical life: ≥ 500 cycles
- contact resistance: ≤ 0,3 mΩ (4 power poles) ≤ 1 mΩ (8 auxiliary poles)
- it is recommended to crimp the contacts with $\begin{picture}(60,0) \put(0,0){\line(0,0){100}} \put(0,0){\line(0,0){100$ crimping tool section 70 Å contacts CX7F and CX7M series and 16 A contacts CCF, CCM series,on pages 708 - 741 of CN.19 catalogue).
- for max, current load see the connector inserts derating diagrams under construction

CXC 4/8



contacts side (front view)



CX7F and CX7M

ø 11,5 🛌

CX7FA 6.0

CX7FA 10

CX7FA 16

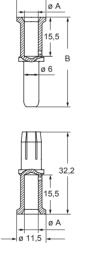
CX7FA 25

CX7MA 6.0

CX7MA 10

CX7MA 16

CX7MA 25



CX7F and CX7M contacts

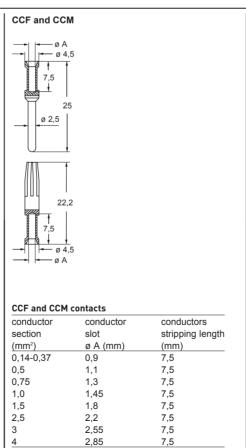
	OXIII GIIG OXIIII GOIIGGG								
conductor		conductor slot	В	conductor					
	section	ø A		stripping length					
	(mm²)	(mm)	(mm)	(mm)					
	6	3,5	36,0	15					
	10	4,3	35,2	15					
	16	5,5	35,2	15					
	25	7,0	35,2	15					



CXCF /M 4/8 4 poles (80 A - 400 V) + 8 poles (16 A - 230/400 V) + 🕀



			I	
description			part No.	
16 A female crin	nn contacts			
0,14-0,37 mm ²	AWG 26-22	one groove	CCFA 0.3	10
0,5 mm ²	AWG 20	with no grooves	CCFA 0.5	silver plated
0,75 mm ²	AWG 18	one groove (back side)	CCFA 0.7	<u>e</u>
1 mm ²	AWG 18	one groove	CCFA 1.0	8
1,5 mm ²	AWG 16	two grooves	CCFA 1.5	٦
2,5 mm ²	AWG 14	three grooves	CCFA 2.5	6
3 mm ²	AWG 12 AWG 12	one wide groove	CCFA 3.0	0
4 mm²	AWG 12	with no grooves	CCFA 4.0	
16 A male crimp	contacts			
0,14-0,37 mm ²	AWG 26-22	one groove	CCMA 0.3	
0,5 mm ²	AWG 20	with no grooves	CCMA 0.5	
0,75 mm ²	AWG 18	one groove (back side)	CCMA 0.7	
1 mm ²	AWG 18	one groove	CCMA 1.0	
1,5 mm ²	AWG 16	two grooves	CCMA 1.5	
2,5 mm ²	AWG 14	three grooves	CCMA 2.5	
3 mm ²	AWG 12	one wide groove	CCMA 3.0	
4 mm ²	AWG 12	with no grooves	CCMA 4.0	
removal tools				
for CX7 series c				
for CC series co	ntacts			



FOCUS ON

CX7 CRIMP CONTACTS SERIES CURRENT-CARRYING CAPACITY UP TO 80 A



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 80 A





TECHNICAL FEATURES CX7 CRIMP CONTACTS SERIES CURRENT-CARRYING CAPACITY UP TO 80 A

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

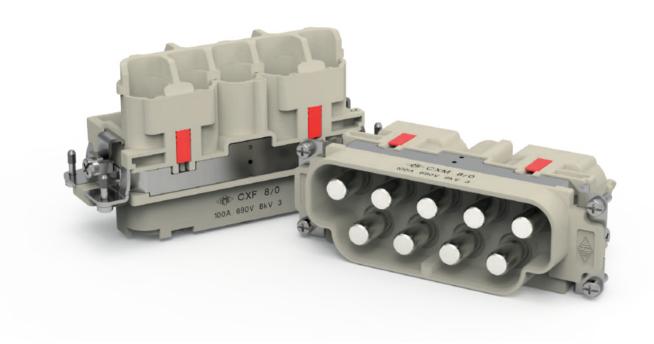
In the same series, a lower number of poles yields to a higher possible working current: a single module produces less heat and lower temperature than 6× the same module.

The **70 A** conventional "nickname" of series **CX7** was then attributed based on the worst case where 6× 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.



CX SERIES - POWER CRIMP CONNECTOR CXF /M 8/0



For use with up to 8 (+ 1 for \oplus) removable crimp contacts series CG, with working current up to 100 A 8 poles + \oplus : 100 A 690 V 8 kV 3





TECHNICAL FEATURES CXF /M 8/0

For use with up to 8 (+ 1 for ⊕) removable crimp contacts series CG (9 contacts required to fill the connector), for use with working current up to 100 A (derating diagrams under construction). Series CG contacts are available in four sizes (10, 16, 25, 35) covering the corresponding stranded conductor cross-sectional area (mm²) (class 5 per IEC 60228) and corresponding AWG

No auxiliary (signal) contact (in the same size, CX 6/6 has seats for $6 + \oplus 100$ A power contacts series CG and for 6 16 A auxiliary contacts series CC).

<u>Crimp connection technology</u>, providing benefits over the competing axial screw technology:

- higher resistance to mechanical stresses such as vibration, shock and strain on wire strands, e.g. creep due to thermal cycling;
- gas tightness providing outstanding corrosion resistance;
- faster connection time and more consistent results (independence from operator-applied tightening torque);
- higher connector efficiency (lower voltage drop).

Upon insert fitted with crimped connections, the contact holder is firmly locked in place by **four provided locking keys**, red coloured **(proprietary ILME design)**, ensuring quick fitting and removal of crimped connections. Removal by simple flat blade screwdriver (e.g. 0.5×3 mm, 0.6×4 mm or 0.8×4 mm).

Inserts made by UL 94V-0 glass reinforced polycarbonate, EN 45545-2:2015 compliant.

Crimping of **CG** series contacts to be carried out with the **hand-operated hydraulic pliers CPPZ C** to be fitted with the suitable locator **CGPZ LOC**. Suitable crimping dies **CGD..C** available on request (see CN.19 p. 720).

PE power crimp contact to be fitted in the centre of the insert of the same size of the (up to) 8 line power contacts; thanks to its deeper seat on the female insert it is a FMLB contact (*first-make*, *last-break*) and is made equipotential, by internal metal spring elements, to the integral outer PE busbar welded to the two lateral PE mounting plates, to bond to earth the enclosure (bonding to PE required for metal enclosures). Additional PE screw terminal with pressure plate for conductors up to 4 mm² / 12 AWG on PE plate closer to pole #1.

Interchangeable and intermateable with competitor products (available only with axial screw contacts and limited to 25 mm² / 4 AWG).

Power connector suitable for energizing e.g. two 3-phase + N AC motors.

Maximum overall diameter of wires: 11,5 mm (same as for the 6+PE power contacts of CXF/M 6/6 combined connector inserts).

cURus, CSA, CQC, DNV-GL, BV, EAC pending.

RoHS: compliant without exemptions.

NOTE - The turned crimp contacts series ${\bf CG}$ are ${\bf RoHS}$ compliant with exemption ${\bf 6(c)}$.

the four provided locking keys, red coloured (proprietary ILME design) firmly lock in place the contact holder

> CG series are separately available



CXF /M 8/0 8 poles (100 A - 690 V) + (9)

enclosures: size "104.27" page: C-TYPE IP65 or IP66/IP69 C7 IP67, two levers V-TYPE IP65 or IP66/IP69, single lever 412 - 423 412 - 423 441 - 442 459 - 463 V-TYPE IP65 or IP66/IP69, single lever BIG hoods 472 T-TYPE IP65 insulating 486 T-TYPE / W IP66/IP69 insulating HYGIENIC T-TYPE / H IP66/IP69 HYGIENIC T-TYPE / C IP66/IP69, -50 °C W-TYPE for aggressive environments E-Xtreme® corrosion proof 536 - 537, 545, 556 472 - 473 486 - 487 492 504 509 524 - 557 581 EMC Central lever LS-TYPE 612 - 614 624 - 625 **IP68** 644 - 647 panel supports:

enclosures:

. СОВ

bulkhead mounting housings, high construction housings or high construction hoods

refer to CN.19 pages

inserts, crimp connections



FROM SEPTEMBER 2021

100 A crimp contacts silver plated



description part No. part No.

without contacts (to be ordered separately) CXF 8/0 female inserts for female contacts male inserts for male contacts CXM 8/0 100A female crimp contacts 8 - 10 mm² . AWG 8 - 7 16 mm² AWG 6 - 5 25 mm² AWG 4 - 3 35 mm² AWG 2

652 - 653

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

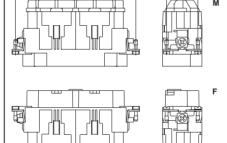
CXF 8/0, CXM 8/0

104

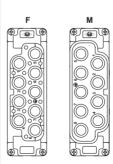
CGFA 10 CGFA 16 CGFA 25 CGFA 35 CGMA 10 CGMA 16 CGMA 25

CGMA 35

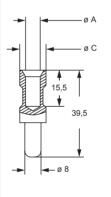
- characteristics according to EN/IEC 61984 ratings: 100 A 690 V 8 kV 3
- cURus, CSA, CQC, DNV-GL, BV, EAC pending
- rated voltage according to UL/CSA: 600 V
- insulation resistance: ≥ 10 GΩ
- Lower and Upper Limiting Temperatures (LLT ... ULT): -40 °C ... +125 °C
- made by UL 94V-0 glass reinforced polycarbonate, EN 45545-2:2015 compliant
- mechanical life: ≥ 500 cycles
- contact resistance: ≤ 0,3 mΩ
- it is recommended to crimp the contacts with crimping tools homologated by ILME (please see the crimping tool section 100 A contacts CGF, CGM series, on pages 708 - 741 of CN.19 catalogue).
- for max. current load see the connector inserts derating diagrams under construction.

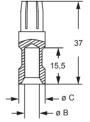


contacts side (front view)



CGF and CGM





CGF and CGM contacts								
conductor	condu	conductor						
section	øΑ	øΒ	øС	stripping length				
(mm ²)	(mm)	(mm)	(mm)	(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				



ASSEMBLY INSTRUCTIONS

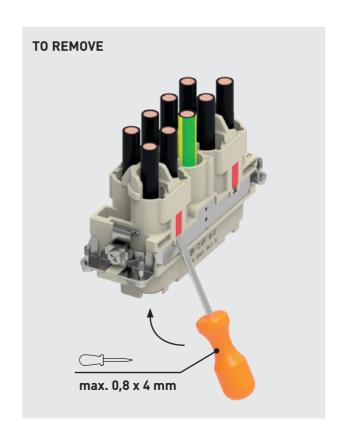
CXF /M 8/0



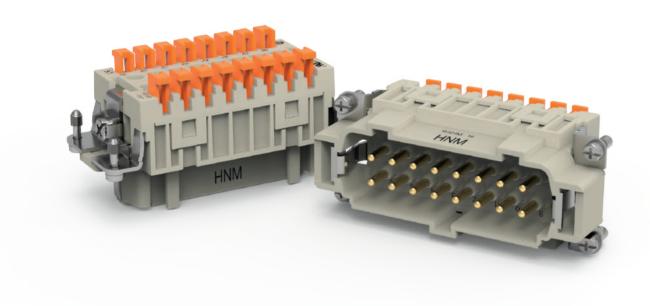








RSH-SQUICH® CONNECTOR SERIES HNM VERSION RSHF /M 06 / 10 / 16 / 24



RSH-SQUICH® Series
(HNM version of CSH-SQUICH®)
16 A 500 V 6 kV 3





TECHNICAL FEATURES RSHF /M 06 / 10 / 16 / 24

The new RSH-SQUICH® is the HNM (High Number of Matings) version of the original CSH-SQUICH® series.

Inherits all benefits of the ILME proprietary SQUICH® technology: operator skill independence, fast and reliable wiring, high resistance to vibration.

Boosts mechanical lifecycle of **CSH** from ≥ 500 to 10.000 cycles of **RSH**, for applications requiring frequent connection and disconnection (e.g. measuring/controlling drawer-mounted equipment, control equipment on moulds and replaceable tools, etc.).

- Available in four classical sizes "44.27" (6-pole) through "104.27" (24-pole).

NOTE – 2-insert combinations "77.62" (32-pole) or "104.62" (48-pole) not available: size "77.62" and "104.62" enclosures are not foreseen in the HNM range.

- Same ratings (voltage, current including derating diagrams, range of conductor cross-sectional areas, limiting temperatures) as series **CSH.**

- Suitable for up to **10.000 operating cycles** when installed in compatible HNM enclosures, equally rated (10.000 locking and unlocking cycles).
- Spring clamp contacts with actuator pushbutton, selectively high thickness gold plated and specially lubricated.
- Lateral sliding PE contacts specially lubricated.
- Identified by specific RSH.. part No. and HNM on the insert.
- Interchangeable and intermateable with already available series **RCE** (crimp) HNM inserts.
- cURus, CSA, CQC, DNV-GL, BV, EAC pending.
- RoHS: compliant with exemption 6(c).

special gold plating and lubrication to reduce the wear of the contacts during frequently repeated mating/ unmating operations



RSH-SQUICH® 6 poles + (a) 16 A - 500 V HNM (High Number of Matings)

enclosures:

size "44.27"

HNM 592 - 593 inserts,

page:

spring terminal connections without tools



Q 10 000 MATINGS WITH HNM ENCLOSURES

∰ FROM JUNE 2021

refer to CN.19 pages

description

part No.

spring terminals with actuator button female inserts with female contacts male inserts with male contacts

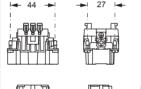
RSHF 06 RSHM 06

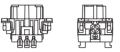
- characteristics according to EN 61984:

16 A 500 V 6 kV 3

- cURus, CSA, CQC, DNV-GL, BV, EAC pending
- rated voltage according to UL/CSA: 600 V
- insulation resistance: ≥ 10 GΩ
- ambient temperature limit: -40 °C ... +125 °C
- made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: ≥ 10.000 cycles
- contact resistance: ≤ 3 mΩ
- for max. current load see the connector inserts derating diagrams below; for more information see page 28 of CN.19 catalogue

RSH 06



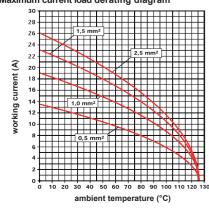


contacts side (front view)



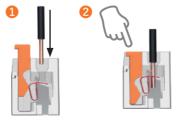
- inserts for conductors with the following sections: 0,14 - 2,5 mm² - AWG 26 - 14
- conductors stripping length: 7 mm

RSH 06 poles connector inserts Maximum current load derating diagram



SQUICH®-spring connection technology

WIRING



Deeply insert a stripped conductor into a round terminal.

Push the actuator button to close the

terminal.

RE-OPENING



Insert a 0,5 x 3,5 mm flat blade screwdriver in the actuator button side window and pull it up by levering down.

RSH-SQUICH® 10 poles + 🕀 16 A - 500 V HNM (High Number of Matings)



enclosures: size "57.27"

page:

HNM 594 - 595 inserts,

spring terminal connections without tools



Q 10 000 MATINGS WITH HNM ENCLOSURES

∰ FROM JUNE 2021

refer to CN.19 pages

description

part No.

spring terminals with actuator button female inserts with female contacts male inserts with male contacts

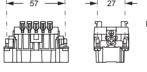
RSHF 10 RSHM 10

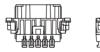
- characteristics according to EN 61984:

16 A 500 V 6 kV 3

- cURus, CSA, CQC, DNV-GL, BV, EAC pending
- rated voltage according to UL/CSA: 600 V
- insulation resistance: ≥ 10 GΩ
- ambient temperature limit: -40 °C ... +125 °C
- made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: ≥ 10.000 cycles
- contact resistance: ≤ 3 mΩ
- for max. current load see the connector inserts derating diagrams below; for more information see page 28 of CN.19 catalogue

RSH 10





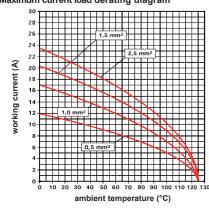


contacts side (front view)



- inserts for conductors with the following sections: 0,14 - 2,5 mm² - AWG 26 - 14
- conductors stripping length: 7 mm

RSH 10 poles connector inserts Maximum current load derating diagram



SQUICH®-spring connection technology

WIRING



Deeply insert a stripped conductor into a round terminal.

Push the actuator button to close the terminal.

RE-OPENING



Insert a 0,5 x 3,5 mm flat blade screwdriver in the actuator button side window and pull it up by levering down.

RSH-SQUICH® 16 poles + 🕀 16 A - 500 V HNM (High Number of Matings)

enclosures: size "77.27

page:

HNM 596 - 597 inserts,

spring terminal connections without tools



Q 10 000 MATINGS WITH HNM ENCLOSURES

∰ FROM JUNE 2021

refer to CN.19 pages

description

part No.

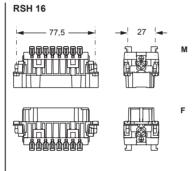
spring terminals with actuator button female inserts with female contacts male inserts with male contacts

- characteristics according to EN 61984:

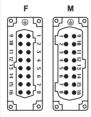
16 A 500 V 6 kV 3

- cURus, CSA, CQC, DNV-GL, BV, EAC pending
- rated voltage according to UL/CSA: 600 V
- insulation resistance: ≥ 10 GΩ
- ambient temperature limit: -40 °C ... +125 °C
- made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: ≥ 10.000 cycles
- contact resistance: ≤ 3 mΩ
- for max, current load see the connector inserts derating diagrams below; for more information see page 28 of CN.19 catalogue

RSHF 16 RSHM 16



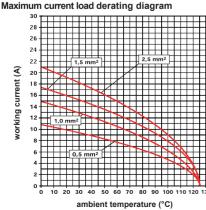
contacts side (front view)



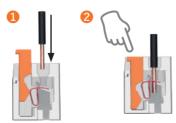
- inserts for conductors with the following sections: 0,14 - 2,5 mm² - AWG 26 - 14
- conductors stripping length: 7 mm

SQUICH®-spring connection technology

RSH 16 poles connector inserts



WIRING



Deeply insert a stripped conductor into a round terminal.

Push the actuator button to close the terminal.

RE-OPENING



Insert a 0,5 x 3,5 mm flat blade screwdriver in the actuator button side window and pull it up by levering down.



RSH-SQUICH® 24 poles + (a) 16 A - 500 V HNM (High Number of Matings)

enclosures: size "104.27"

page:

HNM 598 - 599

inserts, spring terminal connections without tools



Q 10 000 MATINGS WITH HNM ENCLOSURES

∰ FROM JUNE 2021

refer to CN.19 pages

description

part No.

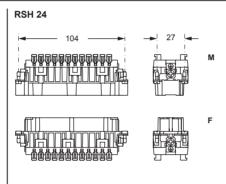
spring terminals with actuator button female inserts with female contacts male inserts with male contacts

- characteristics according to EN 61984:

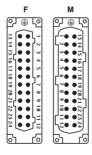
16 A 500 V 6 kV 3

- cURus, CSA, CQC, DNV-GL, BV, EAC pending
- rated voltage according to UL/CSA: 600 V
- insulation resistance: ≥ 10 GΩ
- ambient temperature limit: -40 °C ... +125 °C
- made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: ≥ 10.000 cycles
- contact resistance: ≤ 3 mΩ
- for max. current load see the connector inserts derating diagrams below; for more information see page 28 of CN.19 catalogue

RSHF 24 RSHM 24

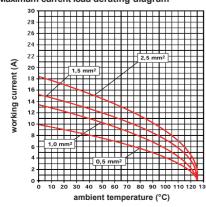


contacts side (front view)



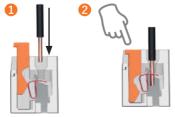
- inserts for conductors with the following sections: 0,14 2,5 mm² AWG 26 14
- conductors stripping length: 7 mm

RSH 24 poles connector inserts Maximum current load derating diagram



SQUICH®-spring connection technology

WIRING



Deeply insert a stripped conductor into a round terminal.

Push the actuator button to close the terminal.

RE-OPENING



Insert a **0,5 x 3,5 mm** flat blade screwdriver in the actuator button side window and pull it up by levering down.

RDSH-SQUICH® CONNECTOR SERIES HNM VERSION RDSHF /M 09 / 18 / 27 / 42



RDSH-SQUICH® Series
(HNM version of CDSH-SQUICH®)
10 A 400 V 6 kV 3
10 A 400/690 V 6 kV 2





TECHNICAL FEATURES RDSHF /M 09 / 18 / 27 / 42

The new **RDSH-SQUICH®** is the HNM (High Number of Matings) version of the original **CDSH-SQUICH®** series.

Inherits all benefits of the ILME proprietary SQUICH® technologyalso in its most compact evolution: operator skill independence, fast and reliable wiring, high resistance to vibration.

Boosts mechanical lifecycle of **CDSH** from \geq 500 to 10.000 cycles of **RDSH**, for applications requiring the higher density of contacts of this series (up to 42-pole in the "104.27" size) and frequent connection and disconnection (e.g. measuring/controlling drawer-mounted equipment, control equipment on moulds and replaceable tools, etc.).

- Available in four classical sizes "44.27" (6-pole) through "104.27" (24-pole).

NOTE - 2-insert combinations "77.62" (54-pole) and "104.62" (84-pole) not available, as size "77.62" and "104.62" enclosures are not foreseen in the HNM range.

- Same ratings (voltage, current including derating diagrams, range of conductor cross-sectional areas, limiting temperatures) as CDSH.
- Suitable for up to **10.000 operating cycles** when installed in compatible HNM enclosures, equally rated (10.000 locking and unlocking cycles).
- Spring clamp contacts with actuator pushbutton, selectively high thickness gold plated and specially lubricated.
- Lateral sliding PE contacts specially lubricated.
- Identified by specific **RDSH...** part No. and **HNM** on the insert.
- CR CDS plastic coding pin that enables the polarisation of inserts in a wide range of combinations.
- cURus, CSA, CQC, DNV-GL, BV, EAC pending.
- RoHS: compliant with exemption 6(c).

spring clamp contacts with actuator pushbutton, selectively high thickness gold plated and specially lubricated



RDSH-SQUICH® 9 poles + (a) 10 A - 400 V HNM (High Number of Matings)

enclosures: size "44.27"

page: 592 - 593

HNM

inserts,

spring terminal connections without tools



coding pins



Q 10 000 MATINGS WITH HNM ENCLOSURES

∰ FROM JUNE 2021

refer to CN.19 pages

description part No. part No.

spring terminals with actuator button female inserts with female contacts male inserts with male contacts

RDSHF 09 RDSHM 09

plastic coding pins

- characteristics according to EN 61984: 10 A 400 V 6 kV 10 A 400/690 V 6 kV 2

- cURus, CSA, CQC, DNV-GL, BV, EAC pending
- rated voltage according to UL/CSA: 600 V
- insulation resistance: ≥ 10 GΩ
- ambient temperature limit: -40 °C ... +125 °C
- made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: ≥ 10.000 cycles
- contact resistance: ≤ 3 mΩ
- for max. current load see the connector inserts derating diagram below; for more information see page 28 of CN.19 catalogue

RDSH 09









12 mm

CR CDS

CR CDS

3,8 mm

Size of connectors	coding pins		Possible codings
9P + ⊕	3 (M) + 3 (F)	3 2 (M) + 1 (F)	3

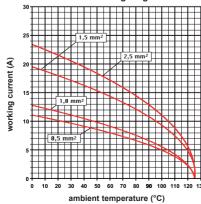
contacts side (front view)





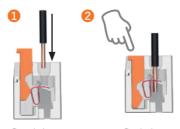
- inserts for conductors cross-sectional areas: 0,14 - 2,5 mm² - AWG 26 - 14
- for wires with crimped ferrule, usable section: up to 1,5 mm² (AWG 16)
- conductors stripping length: 9...11 mm

RDSH 09 poles connector inserts Maximum current load derating diagram



SQUICH®-spring connection technology

WIRING



Deeply insert a stripped conductor into a round terminal.

Push the actuator button to close the terminal.

RE-OPENING



Insert a 0,5 x 3,5 mm flat blade screwdriver in the actuator button side window and pull it up by levering down.

RDSH-SQUICH® 18 poles + (a) 10 A - 400 V HNM (High Number of Matings)

enclosures: size "57.27

nage:

HNM 594 - 595 inserts,

spring terminal connections without tools



coding pins

CR CDS

CR CDS

3,8 mm

_12 mm-



Q 10 000 MATINGS WITH HNM ENCLOSURES

∰ FROM JUNE 2021

refer to CN.19 pages

description part No. part No.

spring terminals with actuator button female inserts with female contacts male inserts with male contacts

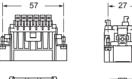
RDSHF 18 RDSHM 18

plastic coding pins

- characteristics according to EN 61984: 10 A 400 V 6 kV

- 10 A 400/690 V 6 kV 2
- cURus, CSA, CQC, DNV-GL, BV, EAC pending - rated voltage according to UL/CSA: 600 V
- insulation resistance: ≥ 10 GΩ
- ambient temperature limit: -40 °C ... +125 °C
- made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: ≥ 10.000 cycles
- contact resistance: ≤ 3 mΩ
- for max. current load see the connector inserts derating diagram below; for more information see page 28 of CN.19 catalogue

RDSH 18

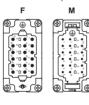




RDSH series - Coding with CR CDS pins

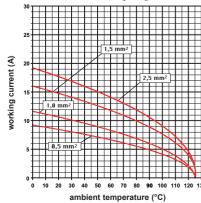
Size of connectors	coding pins		Possible codings		
18P + ⊕	6 (M) + 6 (F)	6 3 (M) + 3 (F)	20		

contacts side (front view)



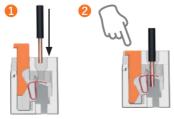
- inserts for conductors cross-sectional areas:
- 0,14 2,5 mm² AWG 26 14
- for wires with crimped ferrule, usable section: up to 1,5 mm² (AWG 16)
- conductors stripping length: 9...11 mm

RDSH 18 poles connector inserts Maximum current load derating diagram



SQUICH®-spring connection technology

WIRING



Deeply insert a stripped conductor into a round terminal.



Push the actuator button to close the terminal.

RE-OPENING



Insert a 0,5 x 3,5 mm flat blade screwdriver in the actuator button side window and pull it up by levering down.

RDSH-SQUICH® 27 poles + ⊕ 10 A - 400 V HNM (High Number of Matings)

enclosures: size "77.27"

page:

HNM 596 - 597

inserts,

spring terminal connections without tools



Q 10 000 MATINGS WITH HNM ENCLOSURES

∰ FROM JUNE 2021

coding pins



refer to CN.19 pages

description part No. part No.

spring terminals with actuator button female inserts with female contacts male inserts with male contacts

RDSHF 27 RDSHM 27

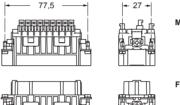
plastic coding pins

- characteristics according to EN 61984:

10 A 400 V 6 kV 3 10 A 400/690 V 6 kV 2

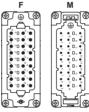
- cURus, CSA, CQC, DNV-GL, BV, EAC pending
- rated voltage according to UL/CSA: 600 V
- insulation resistance: ≥ 10 GΩ
- ambient temperature limit: -40 °C ... +125 °C
- made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: ≥ 10.000 cycles
- contact resistance: ≤ 3 mΩ
- for max. current load see the connector inserts derating diagram below; for more information see page 28 of CN.19 catalogue

RDSH 27



contacts side (front view)

(dydydydydydydydydyd



- inserts for conductors cross-sectional areas: 0,14 2,5 mm² AWG 26 14
- for wires with crimped ferrule, usable section: up to 1,5 mm² (AWG 16)
- conductors stripping length: 9...11 mm

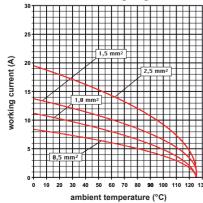
CR CDS



RDSH series - Coding with CR CDS pins

connectors coding pins (M) = male			Possible codings
27P + ⊕	9 (M) + 9 (F)	9 5 (M) + 4 (F)	126

RDSH 27 poles connector inserts Maximum current load derating diagram



SQUICH®-spring connection technology

WIRING



Deeply insert a stripped conductor into a round terminal.

Push the actuator button to close the terminal.

RE-OPENING



Insert a **0,5 x 3,5 mm** flat blade screwdriver in the actuator button side window and pull it up by levering down.

RDSH-SQUICH® 42 poles + (a) 10 A - 400 V HNM (High Number of Matings)

enclosures: size "104.27"

nage:

HNM 598 - 599 inserts,

spring terminal connections without tools



Q 10 000 MATINGS WITH HNM ENCLOSURES

∰ FROM JUNE 2021

coding pins



refer to CN.19 pages

description part No. part No.

spring terminals with actuator button female inserts with female contacts male inserts with male contacts

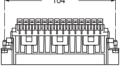
RDSHF 42 RDSHM 42

plastic coding pins

- characteristics according to EN 61984: 10 A 400 V 6 kV

- 10 A 400/690 V 6 kV 2 - cURus, CSA, CQC, DNV-GL, BV, EAC pending
- rated voltage according to UL/CSA: 600 V
- insulation resistance: ≥ 10 GΩ
- ambient temperature limit: -40 °C ... +125 °C
- made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: ≥ 10.000 cycles
- contact resistance: ≤ 3 mΩ
- for max. current load see the connector inserts derating diagram below; for more information see page 28 of CN.19 catalogue

RDSH 42

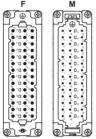








contacts side (front view)



- inserts for conductors cross-sectional areas: 0,14 - 2,5 mm² - AWG 26 - 14
- for wires with crimped ferrule, usable section: up to 1,5 mm² (AWG 16)
- conductors stripping length: 9...11 mm

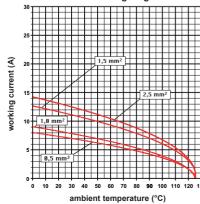
CR CDS



RDSH series - Coding with CR CDS pins

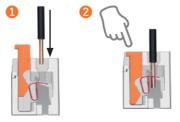
Size of connectors			Possible codings
42P + ⊕	14 (M) + 14 (F)	14 7 (M) + 7 (F)	3.432

RDSH 42 poles connector inserts Maximum current load derating diagram



SQUICH®-spring connection technology

WIRING



Deeply insert a stripped conductor into a round terminal.

Push the actuator button to close the terminal.

RE-OPENING



Insert a 0,5 x 3,5 mm flat blade screwdriver in the actuator button side window and pull it up by levering down.

MIXO SERIES

GENERAL OVERVIEW

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: 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 constrained positioning. Once the modules have been inserted and locked with the special tabs, the connector can be placed into the enclosure.

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

ILME MIXO series of modular connectors is an open connector system that provides versatile configuration to the users' individual requirements, giving the **freedom to assemble a customized connector** from a range of 63 modules for power electrical, data transmission, optical signals or air. The module range is continuously expanded, allowing new configurations to be realised.

The use of enclosures provides the possibility of innumerable **applications**.



POWER/ SIGNAL



POWER



DATA TRANSMISSION



FIBRE OPTIC



PNEUMATIC





The MIXO series can be used with 5 different frame sizes:

one or two-lever metallic enclosures
size "49.16"
size "44.27"
size "57.27"
size "77.27"
size "104.27"
size "77.62"
size "104.62"

Single sized modules, where specified, can also be installed directly inside **MIXO ONE** enclosures.



CX 01 T 1 module



CX 02 TF/TM 2 modules



CX 04 TF/TM 4 modules



Possibility – to be verified case-by-case – to use the recently added MIXO **HNM frames** (provided with special gold plated PE contacts) together with R series of crimp contacts and the relevant

CX 03 TF/TM 3 modules



CX 06 TF/TM 6 modules



connector hoods and housings, to produce, where required, an **HNM connector** (High Number of Matings, up to 10.000 cycles of operation).

Fill the unused frame slots with CX FM dummy module



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

Frames	COB 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		

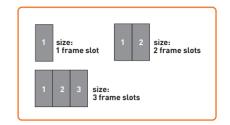
Frames	COB panel supports part No.			
CX 04 TM/TF	fixed: COB 16 BC and COB TCQ			
	mobile: COB TSF, COB TSFS and COB 16 CMS			
CX 06 TM/TF	fixed: COB 24 BC and COB TCQ			
	mobile: COR TSE COR TSES and COR 24 CMS			

THE COMPLETE RANGE

2021 products are marked with the **1** symbol.

Calculate the number of frame slots taken up by the required inserts (frame slot 1, 2 or 3 modules) and select the right frame according to the number of required modules (available 1, 2, 3, 4 and 6 modules).

Single sized modules, where specified, can also be installed directly inside MIXO ONE enclosures.



Inserts	Contact type	Signal type	Kind of connection	Rated current (A)	Rated voltage (V)	Number of frame slots
CX 01 YF/M	main	electric	crimp	200	1000	2
CX 01 YPEF/M	PE	_	crimp	200	_	2
CX 01 GF/M	main	electric	crimp	100	830	1
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 02 4F/M	main	electric	crimp	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 / auxiliary	electric	crimp	40/10	830	1
CX 04 XF/M	main	electric	crimp	40	830	1
CX 05 SF/M A	main	electric	spring	16	400	1
CX 05 SHF/M	main	electric	SQUICH®-spring	16	400	1
CX 06 CF/M	main	electric	crimp	16	500	1
CX 06P CF/M	main	electric	crimp	16	830	1
CX 08 CF/M	main	electric	crimp	16	400	1
CX 08 I6F/M	main + shield	electric	crimp	5	50	1
CX 08 16GF/16GM	main + shield	electric	crimp	5	50	1
RX 08 I6F/M (HNM)	main + shield	electric	crimp	5	50	1
RX 08 I6GF/I6GM (HNM)	main + shield	electric	crimp	5	50	1
CX 08 D5F/F2 M/M2	main + shield	electric	crimp	10	50	1
CX 08 D5GF/F2 GM/GM2	main + shield	electric		10	50	1
RX 08 D5F/F2 M/M2 (HNM)			crimp			1
	main + shield	electric	crimp	10	50	
RX 08 D5GF/F2 GM/GM2 (HNM)	main + shield	electric	crimp	10	50	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	11
CX 42 DF/M	main / auxiliary	electric	crimp	10	150	2
CX 25 IBF/M	main / auxiliary	electric	crimp	4	50	1
CX 25 IF/M A	main / auxiliary	electric	crimp	4	50	1
CX 20S IF/M	main / auxiliary + shield	electric	crimp	4	32	1
CX 20S IGF/IGM	main / auxiliary + shield	electric	crimp	4	32	1
RX 20S IF/M (HNM)	main / auxiliary + shield	electric	crimp	4	32	1
RX 20S IGF/IGM (HNM)	main / auxiliary + shield	electric	crimp	4	32	1
CX 36 IF/M	main / auxiliary	electric	crimp	4	32	1
CX 02 CHF/M	main	electric	crimp	16	2500	1
CX 02 HF/M	main	electric	crimp	16	2900 / 5000	2
CX 02 4HF/M	main	electric	crimp	40	2900 / 5000	2
CX 02 BF/M	seat for two shielded connectors (r	efer to CX 04 B,	CX 01 B, CX 01 BC, C	X 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 plastic Ø 1,6 - 3,0 - 4,0 mm		push-in	_	_	1
CX 03 MP	pneumatic metal Ø 3,0 - 4,0 - 6,0 mm	air	push-in / quick-fitting	_	_	1
CX 02 P	pneumatic plastic Ø 6,0 mm	air	push-in	_	_	1
CX FM	none (dummy module)	_	_	_	_	1
CX 01 J8F/M/IM	RJ45	electric	crimp / IDC		_	1
CX 01 J8AIF/BIF/PIF	RJ45 + shield	electric	IDC	1	50	1
CX 01 J8UM	RJ45	electric	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 01 9VF2/M2	D-SUB + shield	electric	crimp	5	50	1
CX 01 7VF2/M2	D-SUB	electric	screw	5	50	1
CX 01 MIF/MIM	HDMI	electric	—	_	_	1
	POF / MOST				_	1
CX 04 LF/M		optic	crimp			
CX 04 RF/M	coaxial	electric	crimp		_	1
CX 04 SCF/M	SC fibre optic	optic	crimp/glue	_	_	1

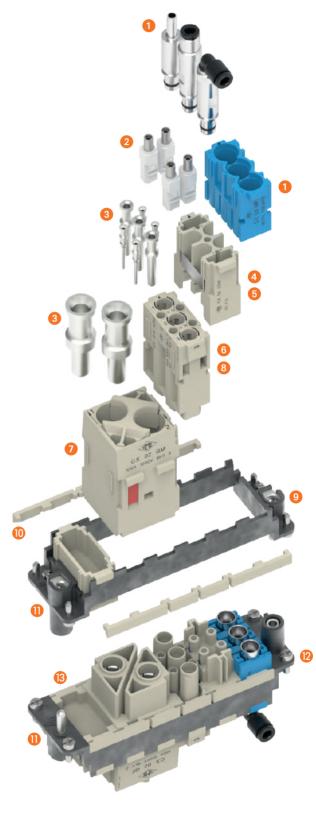


TECHNICAL CHARACTERISTICS

- Pneumatic contacts in metal (or plastic) with hose barb or quick-fitting connection.
- Pibre optic contacts SC type.
- 3 Electric contacts in silver-plated or gold-plated brass with connections to the conductors via crimping, spring clamp or axial screw.
- Modular inserts of identical size with insertion system for forming the complete module and frame lock tab.
- 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.
- Inserts in conformance with the requirements of the EN 61984 standard and certified and marked with the UL, CSA, CQC, DNV-GL. BV. EAC marks.
- Inserts with patented "swallowtails" to prevent incorrect coupling.
- Osition of contacts identified with numbers or codes on both sides of every insert.
- Male/female module carrier frames with mandatory housings and polarity, in die-cast zinc alloy.
- Module lock tab, may be divided according to the number of modules used; it guarantees a perfect stability of the modules during wiring and coupling/uncoupling of the connectors.
- Asymmetric protective earth contacts (two per frame) with wide contact surface to prevent incorrect coupling; when two or more identical connectors of the MIXO series are used, coded pins may prevent incorrect coupling.
- 2 Captive frame fastening screws, with spring washer.
- Dummy module for unused frame slots.

ADVANTAGES

- ☐ Easy and user-friendly assembly of the complete multi-module insert before fixing it on the relevant sized metal frame;
- use of proprietary ILME technology providing each module with "swallowtails" (lateral keys/keyways), for reciprocal locking of modules and overall assembly of the insert into rigid (non hinged) frames with snap-in locking strips;
- ☐ faster and easier assembly compared with competitor solutions (easier handling of modules as a complete block than e.g. 6 independent parts);
- □ intermateability at "complete connector" (modules in frame) with other industry standard products;
- □ robust and long lasting prevailing crimp connection technology (largely preferred over screw type technology in high vibration and shock environments).





MIXO NOVELTIES

The MIXO series, featuring a flexible modular design for utmost versatile connector creation with easy and safe installation, is furtherly expanded, with the addition of 10 new modules (all single-sized, 2 completely new, 8 variants of existing ones for special applications), widening the MIXO portfolio to 63 modules, as follows:

 CX 01 J8UM New MIXO RJ45 universal patch cord adapter single-sized, for 1 RJ45 male connector of a patch cord 	46
 CX 08 D5GF /D5GM and CX 08 D5GF2 /D5GM2 New MIXO Megabit module with additional shield to PE (frame) bonding connection single-sized, 8 poles + shield, 10 A (crimp) – 50 V 0,8 kV 3 with relevant accessories 	52
 RX 08 D5GF /D5GM and RX 98 D5GF2 /D5GM2 New MIXO HNM (High Number of Matings) Megabit module with additional shield to PE (frame) bonding connection single-sized, 8 poles + shield, 10 A (crimp) – 50 V 0,8 kV 3 for use with RD turned crimp HNM contacts in HNM MIXO frames 	54
 CX 08 I6GF /I6GM New MIXO Gigabit module with additional shield to PE (frame) bonding connection single-sized, 8 poles + shield, 5 A (crimp) – 50 V 0,8 kV 3 for use with CI turned crimp contacts 	60
 RX 08 I6GF /I6GM New MIXO HNM (High Number of Matings) Gigabit module with additional shield to PE (frame) bonding connection single-sized, 8 poles + shield, 5 A (crimp) – 50 V 0,8 kV 3 for use with RI HNM turned crimp contacts in HNM MIXO frames 	62
 CX 20S IGF /IGM New MIXO Shielded 4 A module with additional shield to PE (frame) bonding connection single-sized, 20 poles + shield, 4 A (crimp) – 32 V 0,8 kV 3 for use with CI turned crimp contacts 	66
 RX 20S IGF /IGM New MIXO HNM (High Number of Matings) Shielded module with additional shield to PE (frame) bonding connection single-sized, 20 poles + shield, 4 A (crimp) – 32 V 0,8 kV 3 for use with RI HNM turned crimp contacts in HNM MIXO frames 	68
 CX 03 MP New MIXO Pneumatic Metal module for New pneumatic metal contacts single-sized, 3 ways, for use with new pneumatic metal contacts CX MPM /MPF / MPV /MPQM /MPQF /MPQV /MPAM /MPAF /MPAV, up to 10 000 mating cycles only in HNM MIXO frames (in standard MIXO frames up to 500 cycles) 	72





MIXO NOVELTIES ADVANTAGES

In addition to MIXO series advanges at page 41, each of the new modules adds the following individual features:

- universal RJ45 patch cord adapter in single-module size, exports the "21.21" CJK 8UM universal RJ45 adapter concept to the MIXO world, enabling incorporation of off-the-shelf RJ45 patch cords of broader choice into a MIXO modular connector (CX 01 J8UM);
- new variants of the Gigabit module (8-way shielded module for high-speed shielded Gigabit Ethernet connection), the Megabit module (fully shielded connections for two 4-way data bus cables in a single-sized module miniaturizing trend) and the Shielded module (20-pole shielded module) with additional shield-to-PE (frame) bonding contacts (two lateral spring clips on the shield), for applications demanding the lowest impedance of the earthing path at the expenses of separation of shielding from PE usually preferred to avoid "grounding loops" (MIXO Gigabit CX 08 IG6F/IG6M, MIXO Megabit CX 08 D5GF/D5GM and D5GF2/D5GM2, MIXO Shielded CX 20S IGF/IGM);
- HNM versions with additional shield-to-PE (frame) bonding contacts of the Gigabit module, the Megabit module and the Shielded module, for use when these modules are foreseen for frequent operation in combination with HNM MIXO frames RX ... TF/TM and HNM enclosures (MIXO Gigabit HNM RX 08 IG6F/IG6M, MIXO Megabit HNM RX 08 D5GF/D5GM and D5GF2/D5GM2, MIXO Shielded HNM RX 20S IGF/IGM);
- increased versatility and improved robustness for pneumatic connections when combined in pneumatic/electrical/data MIXO modular connectors, with the new "pneumatic metal" module and relevant new pneumatic metal contacts, the module holding up to 3 contacts also for the highest size Ø 6 mm (inner or outer diameter, depending on either hose barbs push-over connection or quick-fitting push-in connection) for straight connection and even with 90° angled connection, with or without shut-off valve, for compressed air with pressure up to 10 bar (CX 03 MP module, CX 3.0 /4.0 /6.0 MP...F/M metal pneumatic contacts).



MIXO RJ45 UNIVERSAL PATCH CORD ADAPTER CX 01 J8UM



MIXO Module RJ45 male patch cord universal adapter





TECHNICAL FEATURES CX 01 J8UM

Watch
our technical
clip

Extending the current offer of male patch cord or plug adapters:

- CX 01 J8M for crimp type CX 8 J6M RJ45 Cat. 6_A plug connector or CW ... J2M87 patch cord, and
- CX 01 J8IM, for IDC type CX 8 J6IM RJ45 Cat. 6 plug connector,

mating with

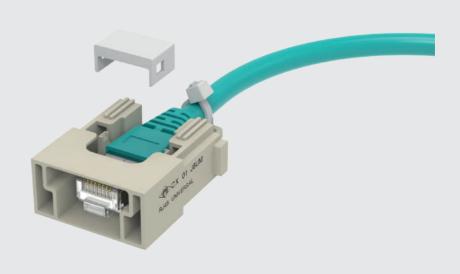
- CX 01 J8F RJ45 Cat. 6_A female/female coupler, or
- CX 01 J8AIF / CX 01 J8BIF / CX 01 J8PIF RJ45 Cat. 6_A female/IDC connector,

the new male module adapter **CX 01 J8UM** is suitable to lock in place RJ45 plugs of patch cords with maximum overall dimensions 13,5 mm x 9,5 mm on the shell, 34 mm max length (see drawing on page 48).

NOTE – International Standard IEC 60603-7 covering RJ45 interface standardizes only the mating face and latch, and the connector performance, leaving the shell dimensions free.

Suitable for mating on counterpart F/F module adapter **CX 01 J8F** or any of the **CX 01 J8xIF** (x = A, B or P) presenting an RJ45 Cat. 6_A jack (female) connector on both the mating side and the cable side, to accept suitable patch cord.

snap-in, releasable, plastic latch for securing the plug and cable tie for strain relief



CX 01 J8UM RJ45 universal patch cord adapter

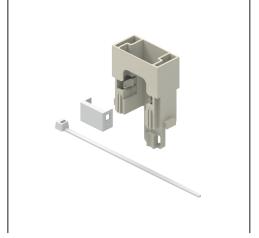
The modular inserts must be installed in suitable frames which are then mounted in traditional housings or in COB panel support. Single-sized modular units may be directly mounted inside MIXO ONE enclosures.

page:

frames for modular units 76

MIXO ONE enclosures 369

■



RJ45 universal patch cord adapter

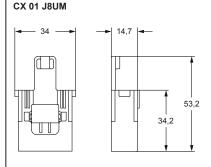
refer to CN.19 pages

description part No.

RJ45 universal patch cord adapter

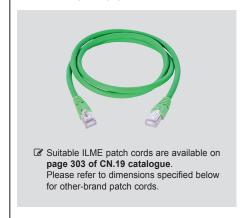
- UL, DNV-GL, BV pending
- insulation resistance: ≥ 10 GΩ
- ambient temperature limit: -40 °C ... +125 °C
- made of self-extinguishing thermoplastic resin UL 94V-0

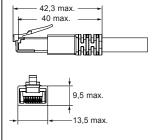
CX 01 J8UM





CW PATCH CORD RJ45

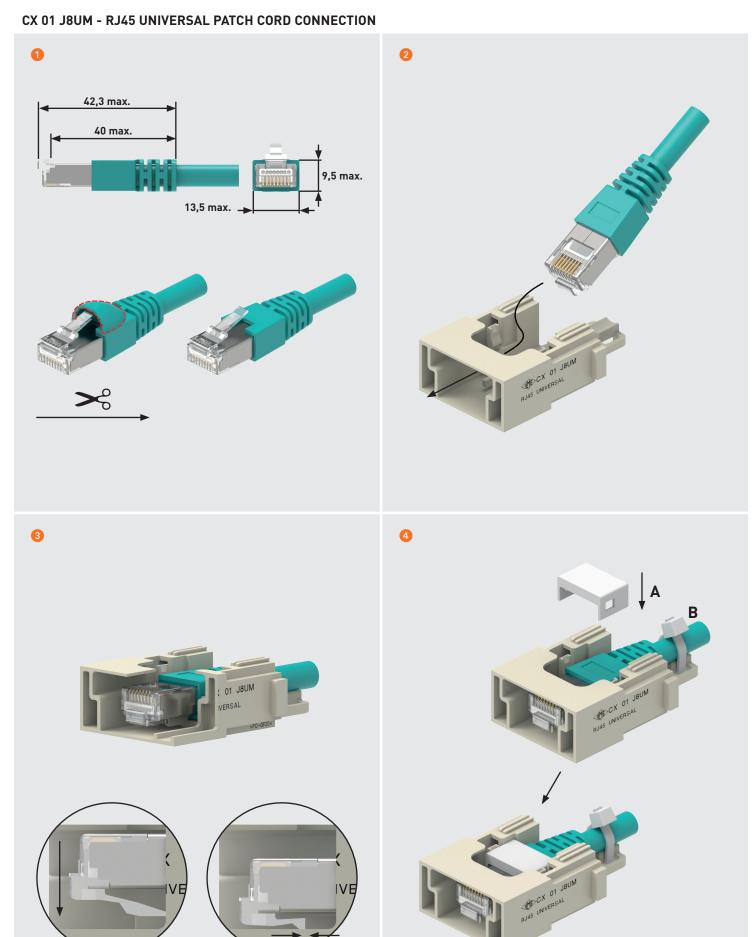




- 1 frame slot



ASSEMBLY INSTRUCTIONS



MIXO MEGABIT - GIGABIT - SHIELDED WITH ADDITIONAL SHIELD BONDING CONTACTS TO THE MIXO FRAME



MIXO DATA

MEGABIT - GIGABIT - SHIELDED

STANDARD and HNM version





TECHNICAL FEATURES

MEGABIT

CX 08 D5GF/GM /D5GF2/GM2 RX 08 D5GF/GM /D5GF2/GM2

SHIELDED

CX 20S IGF /IGM RX 20S IGF /IGM

All these three data connector modules (Gigabit, Megabit, Shielded) and their three HNM versions, sharing the same shield, are now made available also in new versions including two additional side contacts on the shield, consisting of riveted stainless steel springs in correspondence of the MIXO metal frame, so as to realize equipotential bonding between the shield (and the connected screen of the incoming data cable(s) and the PE potential established by the relevant PE terminal(s) on the MIXO frame.

The part numbers identifying these new models are built from those of standard versions by adding letter G as for "grounding" in the suffix before the letter identifying its gender.

E.g.: CX 08 D5F becomes CX 08 D5GF

GIGABIT

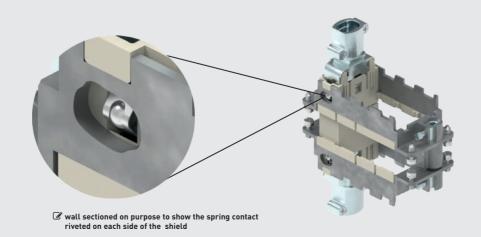
CX 08 I6GF /I6GM RX 08 I6GF /I6GM

Whereas it is common practice to keep separate the shielding potential of a data line from that of the PE protective earthing, in order not to establish ground loops that could yield undesired interference on the signals shielded by the cable screen and the connector shield, in special applications, e.g. in railway rolling stock, the motto is "the higher the number of bonding contacts, the better" as the "Earth" zero volt refence relies only upon multiple parallel touch contacts between the rail and the wheels on all bogies of the entire train, and these "contacts" are definitely not permanent, being continuously "rolling".

The feature now available through these new versions of already existing MIXO Gigabit, MIXO Megabit, and MIXO Shielded modules, satisfies such special need for more common, shared "grounding". Each connector module in this new version maintains the same characteristics of the corresponding standard version without additional shield bonding contacts.

MIVO Manahit	CX 08 D5GF /D5GM	single cable entry/clamp		
MIXO Megabit	CX 08 D5GF2 /D5GM2	double cable entry/clamp		
HNM version	RX 08 D5GF /D5GM	single cable entry/clamp	For up to 10 000 operating cycles with series RD HNM crimp	
HIMM VELSION	RX 08 D5GF2 / D5GM2	double cable entry/clamp	contacts and HNM MIXO frames RX TF /TM	
MIXO Gigabit	CX 08 I6GF /I6GM			
HNM version	RX 08 16GF /16GM		For up to 10 000 operating cycles with series RI HNM crimp contacts and HNM MIXO frames RX TF/TM	
MIXO Shielded	CX 20S IGF /IGM			
HNM version	RX 20S IGF /IGM		For up to 10 000 operating cycles with series RI HNM crimp contacts and HNM MIXO frames RX TF /TM	

additional PE contacts (both sides) via spring to MIXO frame



Megabit 8 poles + shield bonding connection 10 A - 50 V

The modular inserts must be installed in suitable frames which are then mounted in traditional housings or in COB panel support. Single-sized modular units may be directly mounted inside MIXO ONE enclosures.

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frames for modular units 76

MIXO ONE enclosures 369

■

modular units, crimp connection single cable entry



modular units, crimp connection double cable entry



refer to CN.19 pages

description part No. part No.

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

CX 08 D5GF CX 08 D5GM

CX 08 D5GF, CX 08 D5GM

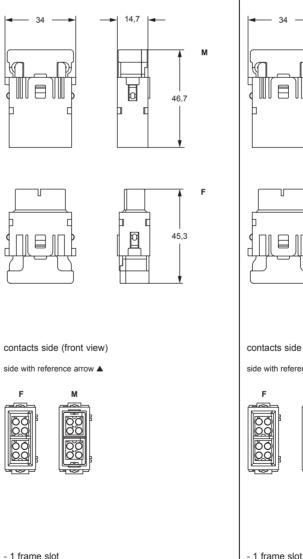
without contacts (to be ordered separately) female inserts for female contacts male inserts for male contacts

- characteristics according to EN/IEC 61984 ratings: 10 A 50 V 0,8 kV 3

- cUL (UL for USA and Canada), CSA, CQC, DNV-GL, BV pending
- rated voltage according to UL/CSA: 50 V
- insulation resistance: ≥ 10 GΩ
- ambient temperature limit: -40 °C ... +85 °C
- fully shielded connector module for data transmission, Megabit Ethernet Category 5e (5 in the code), Class D, frequencies up to 100 MHz, data rate up to 100 Mbit/s
- made of self-extinguishing thermoplastic resin UL 94V-0
- shield made by zinc-alloy
- mechanical life: ≥ 500 cycles
- contact resistance: ≤ 3 mΩ
- it is recommended to crimp the contacts with crimping tools homologated by ILME (please see the crimping tool section 10 A contacts CDF, CDM series pages 708 - 741 of CN.19 catalogue).

For 10 A contacts CDF, CDM series, see also the new pneumatic crimping tool CCPZP RN (see NEWS 2020 page 145).

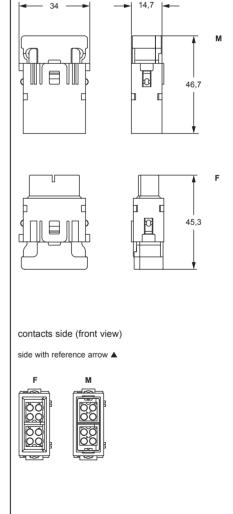
we recommend the use of CRF / CRM coding pins together with relevant MIXO frame



CX 08 D5GM2

CX 08 D5GF2, CX 08 D5GM2

CX 08 D5GF2



CX...CA Cable clamp - CD 10 A Crimp contacts



cable clamp







CD (10 A) crimp contacts gold plated



			· ·	<u>'</u>	
description			part No.	part No.	
cable clamp for	5-7 mm cable d	iameter	CX 5/7 CA		
cable clamp for	7-10 mm cable	diameter	CX 7/10 CA		
cable clamp for	10-12 mm cable	e diameter 1)	CX 10/12 CA		
10 A female cor	ntacts				
0,14-0,37 mm ²	AWG 26-22	identification No. 1		CDFD 0.3	
0,5 mm ²	AWG 20	identification No. 2		CDFD 0.5	go
0,75 mm ²	AWG 18	identification No. ②		CDFD 0.7	<u>r</u>
1 mm ²	AWG 18	identification No. 3		CDFD 1.0	0
1,5 mm ²	AWG 16	identification No. 4		CDFD 1.5	lat
2,5 mm ²	AWG 14	identification No. 5		CDFD 2.5	e e
					e C +
10 A male conta	acts				
0,14-0,37 mm ²	AWG 26-22	identification No. 1		CDMD 0.3	
0,5 mm ²	AWG 20	identification No. 2		CDMD 0.5	
0,75 mm ²	AWG 18	identification No. 2		CDMD 0.7	
1 mm ²	AWG 18	identification No. 3		CDMD 1.0	
1,5 mm ²	AWG 16	identification No. 4		CDMD 1.5	
2,5 mm ²	AWG 14	identification No. 5		CDMD 2.5	

¹⁾ only for single cable entry modules

Upon request we can supply crimp flange and crimp sleeves of different diameters that must be chosen according to the specific cable shield and insulation diameter, please contact ILME Commercial Offices.

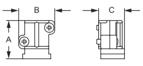




crimp sleeves



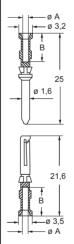
CX 5/7 CA, CX 7/10 CA, CX 10/12 CA



part No.	Α	В	С
CX 5/7 CA	19,1	18	12,95
CX 7/10 CA	19,1	18	12,95
CX 10/12 CA	19 1	20.8	12 95

for basic or high thickness gold plating, please refer to page 674 of CN.19 catalogue

CDF and CDM



CDF and CDM contacts

CDI and CDM contacts						
conductor	conductor	conductors				
section	slot	stripping length				
mm²	ø A (mm)	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				

Megabit 8 poles + shield bonding connection 10 A - 50 V HNM (High Number of Matings)

The modular inserts must be installed in suitable frames which are then mounted in HNM enclosures.

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frames for modular units

modular units, crimp connection single cable entry



Q 10 000 MATINGS WITH HNM FRAMES
AND HNM ENCLOSURES

modular units, crimp connection double cable entry

RX 08 D5GF2

RX 08 D5GM2



Q 10 000 MATINGS WITH HNM FRAMES
AND HNM ENCLOSURES

description part No. part No.

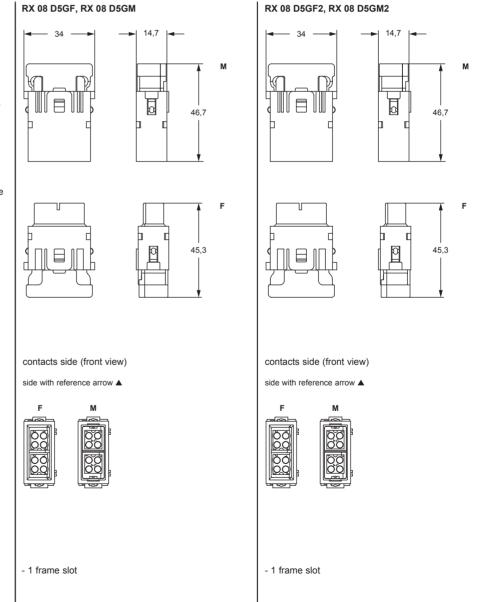
without contacts (to be ordered separately) female inserts for female contacts male inserts for male contacts

RX 08 D5GF RX 08 D5GM

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

- characteristics according to EN/IEC 61984 ratings: 10 A 50 V 0,8 kV 3
- cUL (UL for USA and Canada), CSA, CQC, DNV-GL, BV pending
- rated voltage according to UL/CSA: 50 V
- insulation resistance: ≥ 10 GΩ
- ambient temperature limit: -40 °C ... +85 °C
- fully shielded connector module for data transmission, Megabit Ethernet Category 5e (5 in the code), Class D, frequencies up to 100 MHz, data rate up to 100 Mbit/s
- made of self-extinguishing thermoplastic resin UL 94V-0
- shield made by zinc-alloy
- mechanical life: ≥ 10.000 cycles
- contact resistance: ≤ 3 mΩ
- it is recommended to crimp the contacts with crimping tools homologated by ILME (please see the crimping tool section 10 A contacts RDF2D, RDM2D series, pages 708 - 741 of CN.19 catalogue).
 For 10 A contacts RDF2D, RDM2D series, see also the new pneumatic crimping tool CCPZP RN (see NEWS 2020 page 145).

we recommend the use of CRF / CRM coding pins together with relevant MIXO frame



CX...CA Cable clamp - HNM RD 2D 10 A Crimp contacts



cable clamp







RD 2D (10 A) crimp contacts gold plated



			I	
description			part No.	part No.
cable clamp for			CX 5/7 CA	
cable clamp for			CX 7/10 CA	
cable clamp for	10-12 mm cable	e diameter 1)	CX 10/12 CA	
10 A female con	ntacts			
0,14-0,37 mm ²	AWG 26-22	identification No. 1		RDF2D 0.3
0,5 mm ²	AWG 20	identification No. 2		RDF2D 0.5
0,75 mm ²	AWG 18	identification No. 2		RDF2D 0.7
1 mm ²	AWG 18	identification No. 3		RDF2D 1.0 👨
1,5 mm ²	AWG 16	identification No. 4		RDF2D 1.5
2,5 mm ²	AWG 14	identification No. 5		RDF2D 1.0 RDF2D 1.5 RDF2D 2.5
10 A male conta	icts			
0,14-0,37 mm ²	AWG 26-22	identification No. 1		RDM2D 0.3
0,5 mm ²	AWG 20	identification No. 2		RDM2D 0.5
0,75 mm ²	AWG 18	identification No. 2		RDM2D 0.7
1 mm ²	AWG 18	identification No. 3		RDM2D 1.0
1,5 mm ²	AWG 16	identification No. 4		RDM2D 1.5
2,5 mm ²	AWG 14	identification No. 5		RDM2D 2.5

¹⁾ only for single cable entry modules

Upon request we can supply crimp flange and crimp sleeves of different diameters that must be chosen according to the specific cable shield and insulation diameter, please contact ILME Commercial Offices.

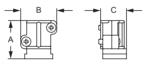




crimp sleeves

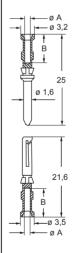


CX 5/7 CA, CX 7/10 CA, CX 10/12 CA



part No.	Α	В	С
CX 5/7 CA	19,1	18	12,95
CX 7/10 CA	19,1	18	12,95
CX 10/12 CA	19 1	20.8	12 95

RDF2D and RDM2D



RDF2D and RDM2D contacts

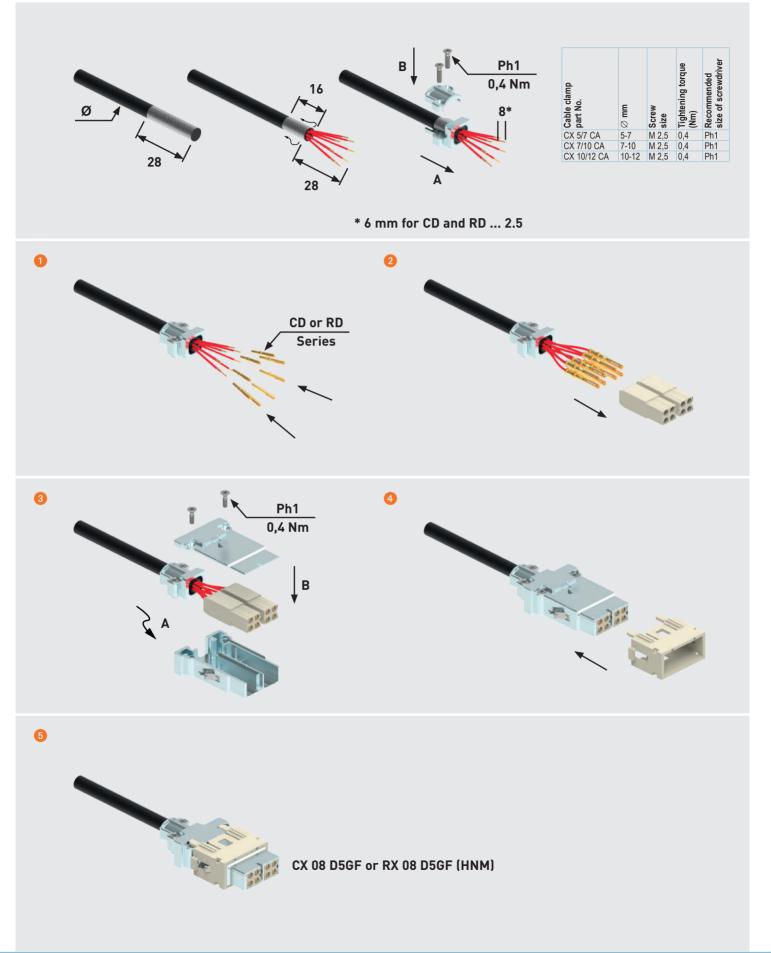
conductor	conductor	conductors
section	slot	stripping length
mm²	ø A (mm)	B (mm)
0,14-0,37	0,9	8
0,5	1,1	8
0,75	1,3	8
1,0	1,45	8
1,5	1,8	8
2,5	2,2	6

Megabit 8 poles + shield 10 A - 50 V

ASSEMBLY INSTRUCTIONS

MIXO MEGABIT "SINGLE CABLE ENTRY" CX 08 D5GF OR RX 08 D5GF (HNM)



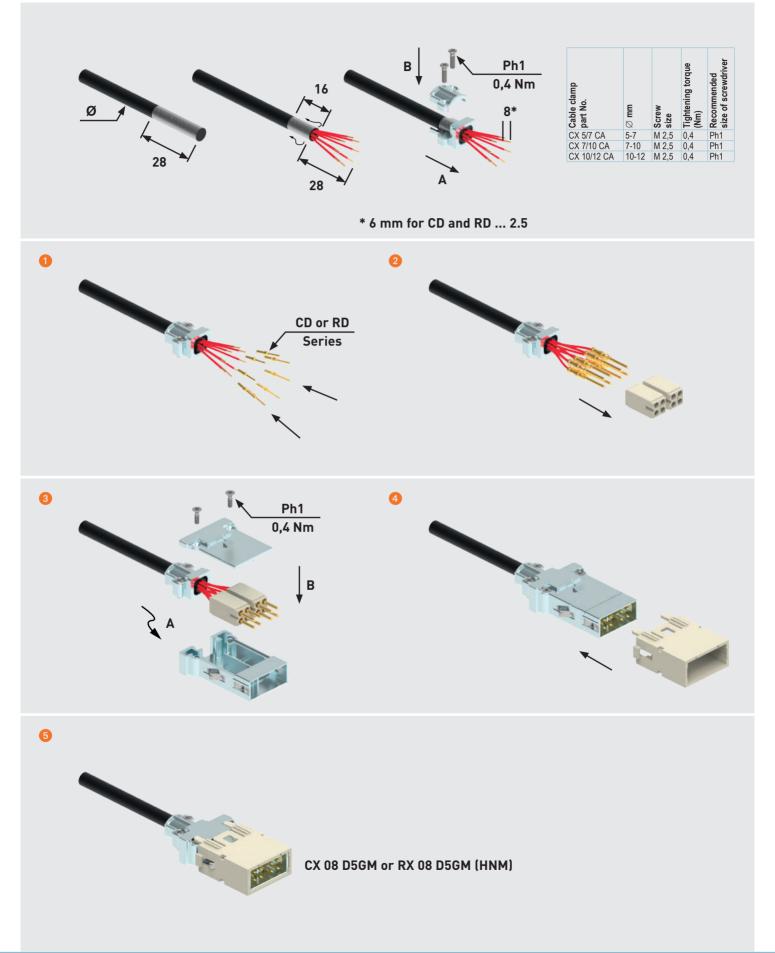




ASSEMBLY INSTRUCTIONS

MIXO MEGABIT "SINGLE CABLE ENTRY" CX 08 D5GM OR RX 08 D5GM (HNM)



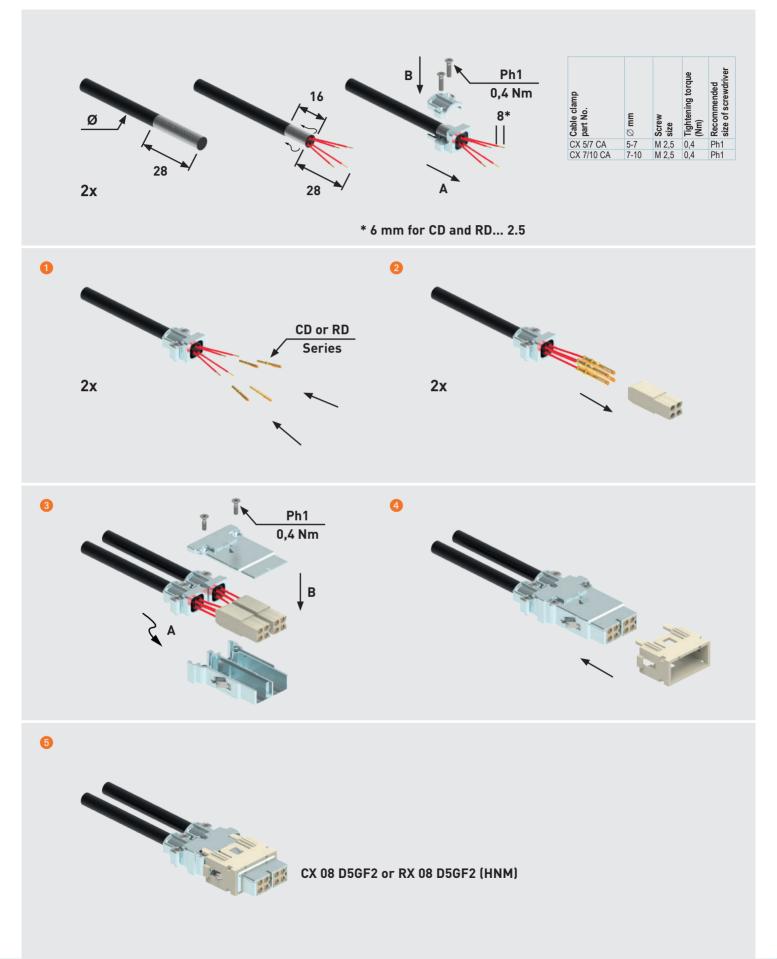


Megabit 8 poles + shield 10 A - 50 V

ASSEMBLY INSTRUCTIONS

MIXO MEGABIT "DOUBLE CABLE ENTRY" CX 08 D5GF2 OR RX 08 D5GF2 (HNM)



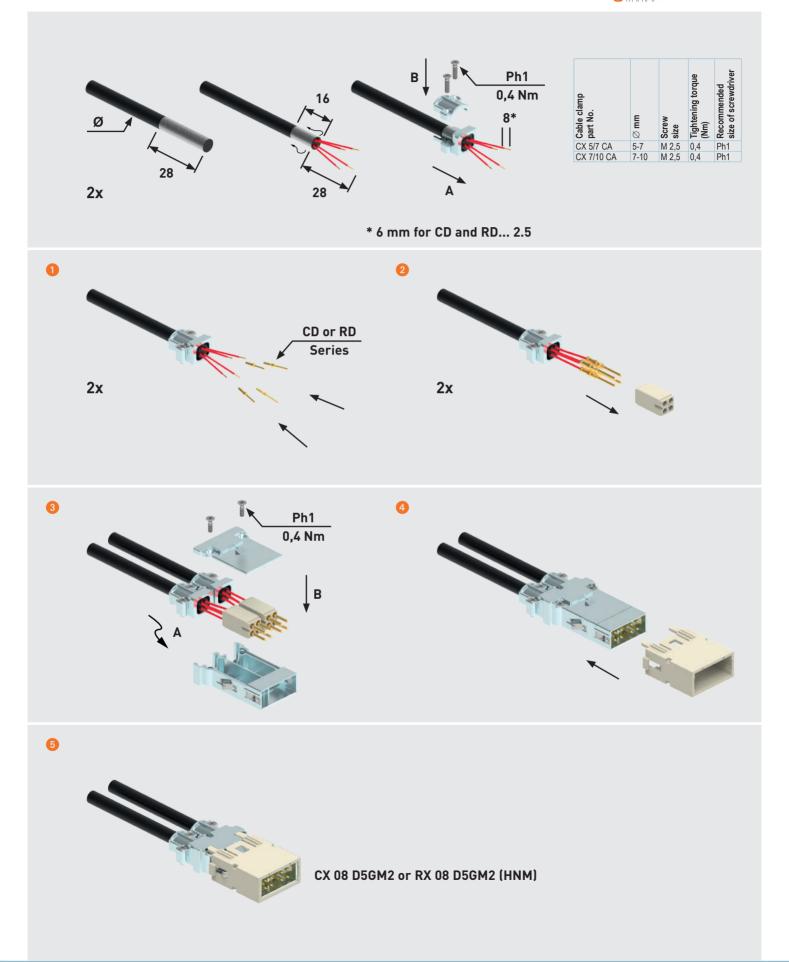




ASSEMBLY INSTRUCTIONS

MIXO MEGABIT "DOUBLE CABLE ENTRY" CX 08 D5GM2 OR RX 08 D5GM2 (HNM)





8 poles + shield connection 5 A - 50 V Gigabit

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

page:

frames for modular units*

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* enclosures: bulkhead mounting housings, high construction housings or high construction hoods modular units, crimp connection



cable clamp



refer to CN.19 pages

description part No. part No. without contacts (to be ordered separately) CX 08 I6GF female inserts for female contacts CX 08 I6GM male inserts for male contacts cable clamp for 5-7 mm cable diameter CX 5/7 CA cable clamp for 7-10 mm cable diameter

- cable clamp for 11-14 mm cable diameter - characteristics according to EN/IEC 61984 ratings: 5 A 50 V 0,8 kV 3
- UL, CSA, CQC, DNV-GL, BV pending
- rated voltage according to UL/CSA: 50 V

cable clamp for 10-12 mm cable diameter

- insulation resistance: ≥ 10 GΩ
- ambient temperature limit: -40 °C ... +85 °C
- suitable for bus signals, in particular for Ethernet Cat. 6A (Gigabit)
- made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: ≥ 500 cycles
- contact resistance: ≤ 4 mΩ
- for crimp contacts CI series use:

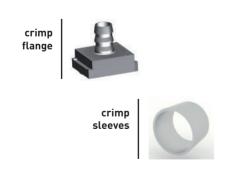
CIPZ D crimping tool

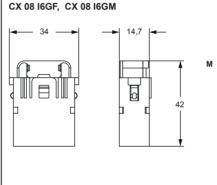
CIPZP D pneumatic crimping tool (see NEWS 2020 page 144)

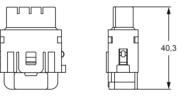
CITP D turret head

CIES insertion / removal tool for contacts 0,2 - 0,5 mm² (see pages 716 - 719 of CN.19 catalogue)

- If we recommend the use of CRF / CRM coding pins together with relevant MIXO frame
- ☑ Upon request we can supply crimp flange and crimp sleeves of different diameters that must be chosen according to the specific cable shield and insulation diameter, please contact ILME Commercial Offices.

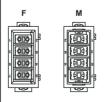






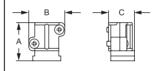
contacts side (front view)

side with reference arrow A



- 1 frame slot

CX 5/7 CA, CX 7/10 CA, CX 10/12 CA



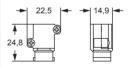
part No.	Α	В	С
CX 5/7 CA	19,1	18	12,95
CX 7/10 CA	19,1	18	12,95
CX 10/12 CA	19,1	20,8	12,95

CX 11/14 CA

CX 7/10 CA

CX 10/12 CA

CX 11/14 CA





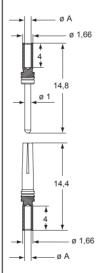
CI (5 A) crimp contacts gold plated



		'			
description			part No.		
CI (5 A) female	crimo contacts				
0.08-0.21 mm ²			CIFD 0.2		
-,,					
0,13-0,33 mm ²	AWG 26-22		CIFD 0.3	7	
0.33-0.52 mm ²	AWG 22-20		CIFD 0.5	a	
0,00 0,02	0 == =0		J 2 J	lated+	
				<u> </u>	
CI (5 A) male cr	imp contacts			d	
0.08-0.21 mm ²	AWG 28-24		CIMD 0.2	0	
0,13-0,33 mm ²			CIMD 0.3	gold	
				0	
0,33-0,52 mm ²	AWG 22-20		CIMD 0.5		

† for basic or high thickness gold plating, please refer to page 74 of NEWS 2020 catalogue

CIF and CIM



CIF and CIM 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

Gigabit 8 poles + shield connection 5 A - 50 V

HNM (High Number of Matings)

The modular inserts must be installed in suitable frames which are then mounted in HNM enclosures.

page:

frames for modular units*

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* enclosures: bulkhead mounting housings, high construction housings or high construction hoods modular units, crimp connections



cable clamp







Q 10 000 MATINGS WITH HNM FRAMES **AND HNM ENCLOSURES**

descr	ription	part No.	part No.
femal	ut contacts (to be ordered separately) e inserts for female contacts inserts for male contacts	RX 08 I6GF RX 08 I6GM	
cable cable	clamp for 5-7 mm cable diameter clamp for 7-10 mm cable diameter clamp for 10-12 mm cable diameter clamp for 11-14 mm cable diameter		CX 5/7 CA CX 7/10 CA CX 10/12 CA CX 11/14 CA

- characteristics according to EN/IEC 61984 ratings: $\bf 5~A~50~V~0,8~kV~3$
- UL, CSA, CQC, DNV-GL, BV pending
- rated voltage according to UL/CSA: 50 V
- insulation resistance: ≥ 10 GΩ
- ambient temperature limit: -40 °C ... +85 °C
- suitable for bus signals, in particular for Ethernet Cat. 6A (Gigabit)
- made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: ≥ 10.000 cycles
- contact resistance: ≤ 4 mΩ
- for crimp contacts RI series use:

CIPZ D crimping tool

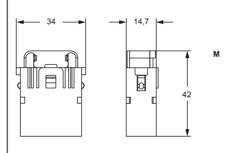
CIPZP D pneumatic crimping tool (see NEWS 2020 page 144)
CITP D turret head

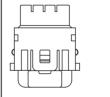
CIES insertion / removal tool for contacts 0,2 - 0,5 mm² (see pages 716 - 719 of CN.19 catalogue)

- If we recommend the use of CRF / CRM coding pins together with relevant MIXO frame
- sleeves of different diameters that must be chosen according to the specific cable shield and insulation diameter, please contact ILME Commercial Offices.

crimp flange crimp sleeves

RX 08 I6GF, RX 08 I6GM

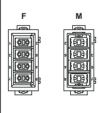






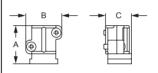
contacts side (front view)

side with reference arrow A



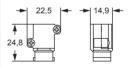
- 1 frame slot

CX 5/7 CA, CX 7/10 CA, CX 10/12 CA

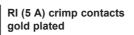


oart No.	Α	В	С	
CX 5/7 CA	19,1	18	12,95	
CX 7/10 CA	19,1	18	12,95	
CX 10/12 CA	19,1	20,8	12,95	

CX 11/14 CA

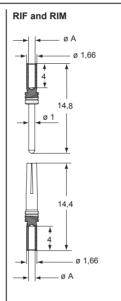








	description		part No.	
			p-0.1-1-1-1	
ŀ	RI (5 A) female crim	p contacts		
(0,08-0,21 mm ² A\	NG 28-24	RIFD 0.2	
(0.13-0.33 mm ² A\	NG 26-22	RIFD 0.3	
	-,,		RIFD 0.5	
(0,33-0,52 mm ² A\	NG 22-20	מיט מאוא	
			<u></u>	
F	RI (5 A) male crimp	contacts	0	
(0.08-0.21 mm²	NG 28-24	RIMD 0.2	
	0.13-0.33 mm ² A\		RIMD 0.2 RIMD 0.3	
(0.33-0.52 mm ² A\	NG 22-20	RIMD 0.5	



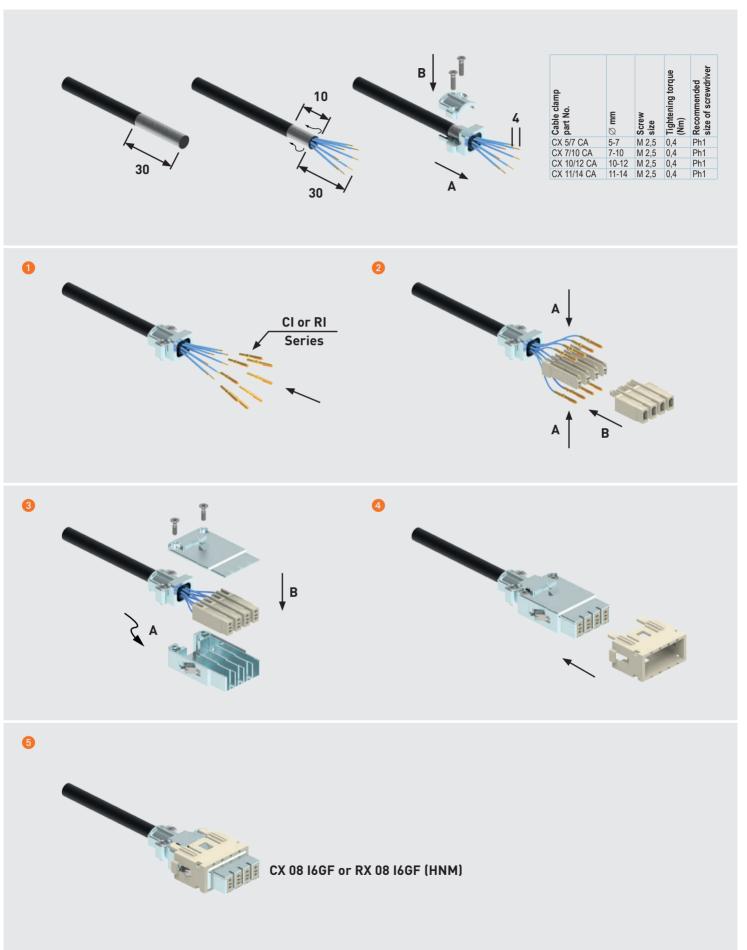
RIF and RIM	RIF and RIM contacts					
conductor	conductor	conductors				
section	slot	stripping length				
(mm²)	ø A (mm)	(mm)				
0,08-0,21	0,64	4				
0,13-0,33	0,90	4				
0,33-0,52	1,12	4				

Gigabit 8 poles + shield 5 A - 50 V

ASSEMBLY INSTRUCTIONS

MIXO GIGABIT CX 08 16GF OR RX 08 16GF (HNM) - FEMALE MODULE



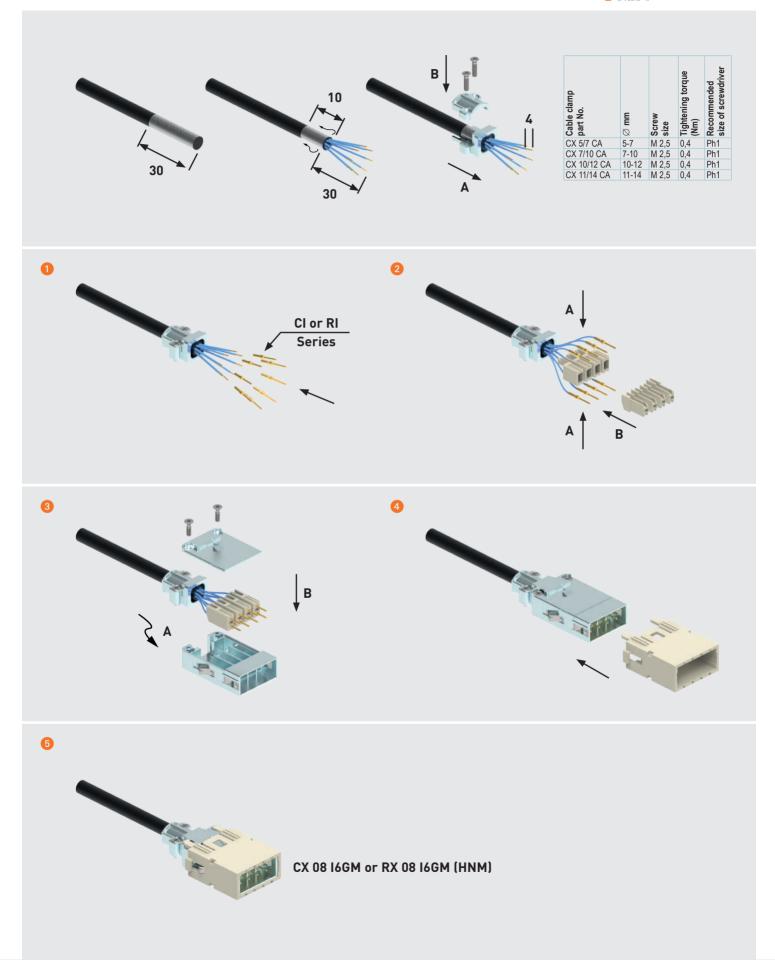




ASSEMBLY INSTRUCTIONS

MIXO GIGABIT CX 08 16GM OR RX 08 16GM (HNM) - MALE MODULE





Shielded 20 poles + shield connection 4 A - 32 V

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

page:

frames for modular units

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modular units, crimp connection



cable clamp







refer to CN.19 pages

description part No. part No.

CX 20S IGF, CX 20S IGM

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

CX 20S IGF CX 20S IGM

cable clamp for 5-7 mm cable diameter cable clamp for 7-10 mm cable diameter cable clamp for 10-12 mm cable diameter cable clamp for 11-14 mm cable diameter CX 5/7 CA CX 7/10 CA CX 10/12 CA CX 11/14 CA

- characteristics according to EN/IEC 61984 ratings: 4 A 32 V 0,8 kV 3 UL, CSA, CQC, DNV-GL, BV pending
- rated voltage according to UL/CSA: 32 V
- insulation resistance: ≥ 10 GΩ
- Lower and Upper Limiting Temperatures (LLT ... ULT): -40 °C ... +85 °C
- made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: ≥ 500 cycles
- contact resistance: ≤ 4 mΩ
- for crimp contacts CI series use:

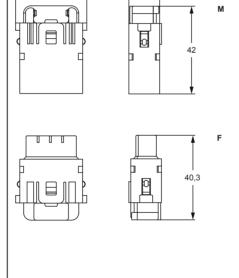
CIPZ D crimping tool

CIPZP D pneumatic crimping tool (see NEWS 2020 page 144)

CITP D turret head

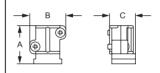
(see pages 716 - 719 of CN.19 catalogue)

- for max. current load see the connector inserts derating diagrams under construction.
- If we recommend the use of CRF / CRM coding pins together with relevant MIXO frame
- sleeves of different diameters that must be chosen according to the specific cable shield and insulation diameter, please contact ILME Commercial Offices.



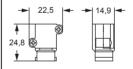
14.7

CX 5/7 CA, CX 7/10 CA, CX 10/12 CA



part No.	Α	В	С
CX 5/7 CA	19,1	18	12,95
CX 7/10 CA	19,1	18	12,95
CX 10/12 CA	19,1	20,8	12,95

CX 11/14 CA



crimp flange

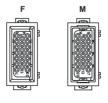


crimp sleeves



contacts side (front view)

side with reference arrow A



- 1 frame slot



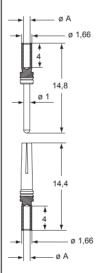
CI (4 A) crimp contacts gold plated



description		part No.	
CI (4 A) female	crimp contacts		
0.08-0.21 mm ²	•	CIFD 0.2	
0.13-0.33 mm ²		CIFD 0.3 ±	
0,33-0,52 mm ²	AWG 22-20	CIFD 0.3 CIFD 0.5	
		<mark>#</mark>	
CI (4 A) male cr	imp contacts	<u> </u>	
0,08-0,21 mm ²	AWG 28-24	CIMD 0.2	
0,13-0,33 mm ²	AWG 26-22	CIMD 0.2 P CIMD 0.3 B	
0,33-0,52 mm ²	AWG 22-20	CIMD 0.5	

† for basic or high thickness gold plating, please refer to page 74 of NEWS 2020 catalogue

CIF and CIM



CIF and CIM 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

20 poles + shield connection 4 A - 32 V **HNM (High Number of Matings)** Shielded

The modular inserts must be installed in suitable frames which are then mounted in HNM enclosures.

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frames for modular units*

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* enclosures: bulkhead mounting housings, high construction housings or high construction hoods modular units, crimp connections



cable clamp









Q 10 000 MATINGS WITH HNM FRAMES AND HNM ENCLOSURES

description part No. part No. without contacts (to be ordered separately) RX 20S IGF female inserts for female contacts male inserts for male contacts RX 20S IGM cable clamp for 5-7 mm cable diameter CX 5/7 CA cable clamp for 7-10 mm cable diameter CX 7/10 CA cable clamp for 10-12 mm cable diameter CX 10/12 CA cable clamp for 11-14 mm cable diameter CX 11/14 CA

- characteristics according to EN/IEC 61984 ratings:
- 4 A 32 V 0,8 kV 3
- UL, CSA, CQC, DNV-GL, BV pending
- rated voltage according to UL/CSA: 32 V
- insulation resistance: ≥ 10 GΩ
- Lower and Upper Limiting Temperatures (LLT ... ULT): -40 °C ... +85 °C
- made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: ≥ 10.000 cycles
- contact resistance: ≤ 4 mΩ
- for crimp contacts RI series use:

CIPZ D crimping tool

CIPZP D pneumatic crimping tool (see NEWS 2020 page 144)

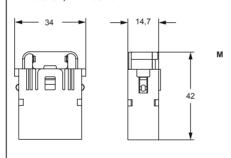
CITP D turret head

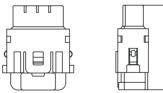
(see pages 716 - 719 of CN.19 catalogue)

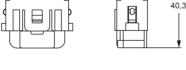
- for max. current load see the connector inserts derating diagrams under construction.
- If we recommend the use of CRF / CRM coding pins together with relevant MIXO frame
- sleeves of different diameters that must be chosen according to the specific cable shield and insulation diameter, please contact ILME Commercial Offices.



RX 20S IGF, RX 20S IGM

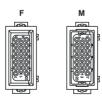






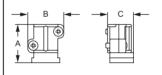
contacts side (front view)

side with reference arrow A



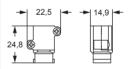
- 1 frame slot

CX 5/7 CA, CX 7/10 CA, CX 10/12 CA

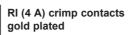


part No.	Α	В	С
CX 5/7 CA	19,1	18	12,95
CX 7/10 CA	19,1	18	12,95
CX 10/12 CA	19,1	20,8	12,95

CX 11/14 CA

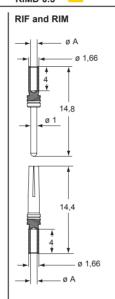








	description		part No.		
	RI (4 A) female of	rimp contacts			
	0.08-0.21 mm ²		RIFD 0.2		
	0,13-0,33 mm ²			70	
	, ,		RIFD 0.3	ā	
	0,33-0,52 mm ²	AWG 22-20	RIFD 0.5	#	
				plated	
	RI (4 A) male crir	mn contacto			
				0	
	0,08-0,21 mm ²		RIMD 0.2	7	
	0.13-0.33 mm ²	AWG 26-22	RIMD 0.3	gold	
	0.33-0.52 mm ²	AWG 22-20	RIMD 0.5		



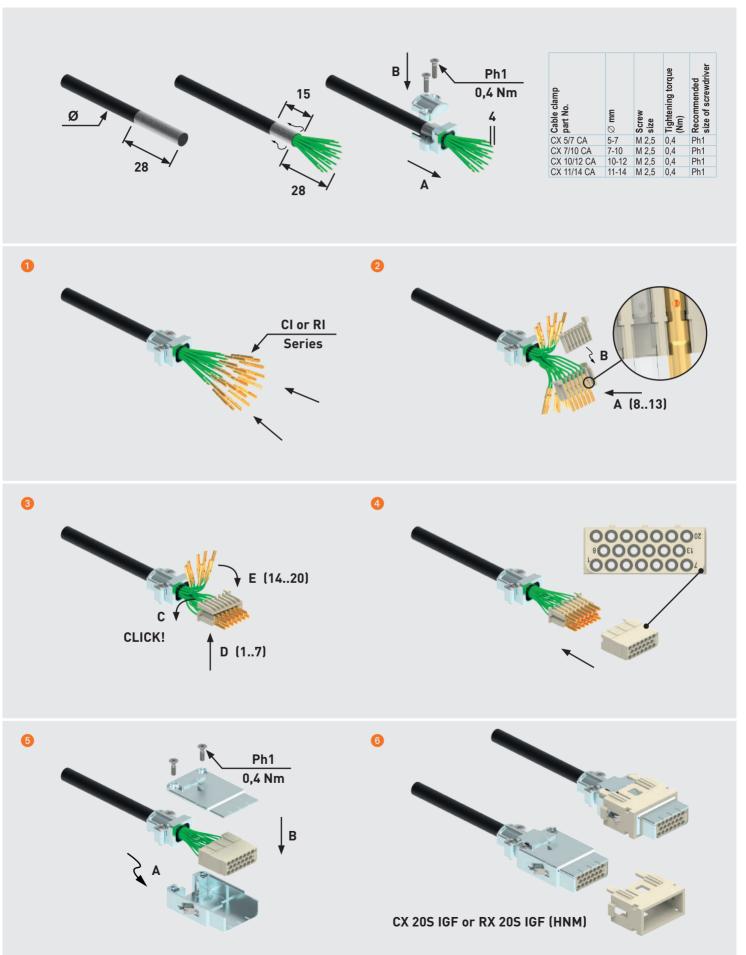
RIF and RIM contacts					
conductor	conductor	conductors			
section	slot	stripping length			
(mm²)	ø A (mm)	(mm)			
0,08-0,21	0,64	4			
0,13-0,33	0,90	4			
0,33-0,52	1,12	4			

MIXO Shielded 20 poles + shield 4 A - 32 V

ASSEMBLY INSTRUCTIONS

MIXO SHIELDED CX 20S IGF OR RX 20S IGF (HNM) - FEMALE MODULE



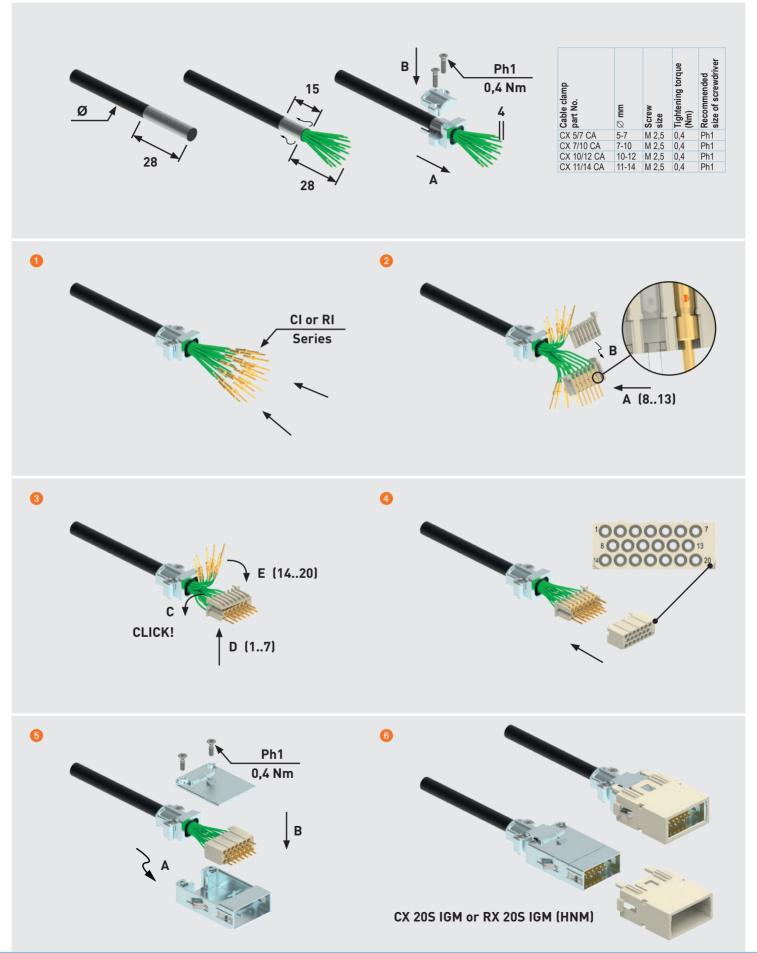




ASSEMBLY INSTRUCTIONS

MIXO SHIELDED CX 20S IGM OR RX 20S IGM (HNM) - MALE MODULE





MIXO PNEUMATIC METAL CX 03 MP



Connector module and metal removable pneumatic contacts

- for transmission of clean and compressed air
- straight and angled versions
- with hose barbs push-over tube attachment or with quick-fitting push-in tube attachment
- female contacts with/without shut-off valve
- <u>CMPES</u> removal tool





TECHNICAL FEATURES CX 03 MP



- Connector module **for up to 3 metal removable pneumatic contacts** of <u>any of the three sizes available</u>: 3.0, 4.0, 6.0.
- Contacts with hose barbs, push-over tube attachment, straight version only.
- Contacts with quick-fitting, push-in tube attachment, both straight and angled versions.
- All **contacts removable** without damaging the module or the contact, with **CMPES** dedicated removal tool.
- Straight version for use with hoods with vertical cable outlet.

- Angled version for use with hoods with horizontal cable outlet.
- For tubes Ø 3 mm, Ø 4 mm and Ø 6 mm (see Table 1. below):
- <u>outer</u> diameter OD (push-in attachment of tubes to the quick-fitting contacts), or
- <u>inner</u> diameter ID (push-over attachment of tubes over barbed straight contacts).
- RoHS

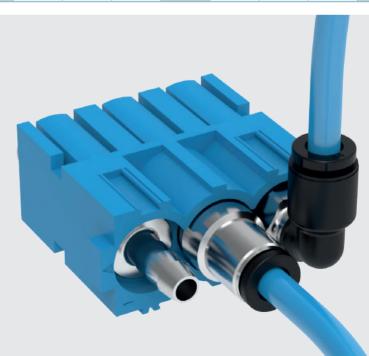
<u>pneumatic metal module</u>: compliant without exemptions <u>metal pneumatic contacts</u>: compliant with exemption **6(c)**.

Table 1. Pneumatic contacts

		Tube Ø 3 mm			Tube Ø	4 mm		Tube Ø 6 mm				
	hose barbs (ID - inner Ø)		quick-fitting (OD - outer Ø)				quick-fitting (OD - outer Ø)	hose barbs (ID - inner Ø)		quick-fitting (OD - outer Ø)		
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Straight without shut-off valve	CX 3.0 MPM	CX 3.0 MPF	CX 3.0 MPQM	CX 3.0 MPQF	CX 4.0 MPM	CX 4.0 MPF	CX 4.0 MPQM	CX 4.0 MPQF	CX 6.0 MPM	CX 6.0 MPF	CX 6.0 MPQM	CX 6.0 MPQF
Straight with shut-off valve		CX 3.0 MPV		CX 3.0 MPQV		CX 4.0 MPV		CX 4.0 MPQV		CX 6.0 MPV		CX 6.0 MPQV
Angled without shut-off valve			CX 3.0 MPAM	CX 3.0 MPAF			CX 4.0 MPAM	CX 4.0 MPAF			CX 6.0 MPAM	CX 6.0 MPAF
Angled with shut-off valve				CX 3.0 MPAV				CX 4.0 MPAV				CX 6.0 MPAV

straight version and angled version available for use with different cable outlets

> with hose barbs push-over tube attachment or with quick-fitting push-in tube attachment



CX 03 MP metal removable pneumatic contacts

The modular inserts must be installed in suitable frames which are then mounted in traditional housings or in COB panel support. Single-sized modular units may be directly mounted inside MIXO ONE enclosures.

page:

frames for modular units 76

MIXO ONE enclosures 369

■

modular units with 3 seats



Q 10 000 MATINGS WITH HNM FRAMES
AND HNM ENCLOSURES

FROM OCTOBER 2021

metal pneumatic contacts, straight hose barbs

tube ID inner Ø 3 - 4 - 6 mm



∰ FROM OCTOBER 2021

refer to CN.19 pages

description	part No.	part No.
without contacts (to be ordered separately) inserts with 3 housings for tube Ø 3 - 4 - 6 mm	CX 03 MP	
hose barbs (ID inner Ø) male contacts, without shut-off valve without shut-off valve without shut-off valve		CX 3.0 MPM CX 4.0 MPM CX 6.0 MPM
hose barbs (ID inner Ø) female contacts, without shut-off valve without shut-off valve without shut-off valve		CX 3.0 MPF CX 4.0 MPF CX 6.0 MPF
hose barbs (ID inner Ø) female contacts, with shut-off valve with shut-off valve with shut-off valve		CX 3.0 MPV CX 4.0 MPV CX 6.0 MPV

- UL, CSA, DNV-GL, BV pending
- insulation resistance: ≥ 10 GΩ
- made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life:
- ≥ 10.000 cycles
- with HNM frame and HNM enclosures
- ≥ 500 cycles
- with MIXO frames and standard enclosures
- working temperature range 40 °C \div + 80 °C

Use of units for metal pneumatic contacts

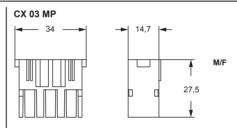
- identical male and female modular units
- pneumatic contacts for pressure values up to 10 bar, for use with clean and dry compressed air
- use of tubes with Ø 3 4 and 6 mm (ID inner Ø for hose barbs contacts, OD outer Ø for quick-fitting contacts), and possible replacement of tubes with assembled units
- possibility of using tubes with different diameters in the same modular unit
- female contacts with or without closing valve
- working temperature range 40 °C ÷ + 80 °C
- CMPES removal tool *

* CMPES removal tool



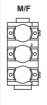
Warnings:

- CRM/F CX coding and guiding pins must be used for pneumatic contacts modules.
- These pins also provide coding if pneumatic contacts modules are used exclusively.
- The use of pneumatic contacts requires an appropriate filtering and dehydration system to prevent dangerous condensation.

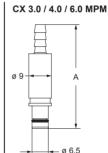


contacts side (front view)

side with reference arrow A

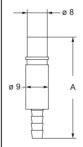


- 1 frame slot



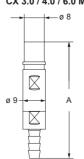
part No.	A (mm)
CX 3.0 MPM	37,6
CX 4.0 MPM	41,3
CX 6.0 MPM	40.2

CX 3.0 / 4.0 / 6.0 MPF



part No.	A (mm)
CX 3.0 MPF	36,5
CX 4.0 MPF	40,2
CX 6.0 MPF	39 1

CX 3.0 / 4.0 / 6.0 MPV



part No.	A (mm)
CX 3.0 MPV	42,5
CX 4.0 MPV	46,2
CX 6.0 MPV	45,1



metal pneumatic contacts, straight quick-fitting

tube OD outer Ø 3 - 4 - 6 mm



∰ FROM OCTOBER 2021

metal pneumatic contacts, angled quick-fitting

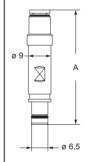
tube OD outer Ø 3 - 4 - 6 mm



∰ FROM OCTOBER 2021

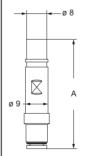
	'	•
description	part No.	part No.
quick-fitting (OD outer Ø) male contacts, without shut-off valve without shut-off valve without shut-off valve	straight CX 3.0 MPQM CX 4.0 MPQM CX 6.0 MPQM	angled CX 3.0 MPAM CX 4.0 MPAM CX 6.0 MPAM
quick-fitting (OD outer Ø) female contacts, without shut-off valve without shut-off valve without shut-off valve	straight CX 3.0 MPQF CX 4.0 MPQF CX 6.0 MPQF	angled CX 3.0 MPAF CX 4.0 MPAF CX 6.0 MPAF
quick-fitting (OD outer Ø) female contacts, with shut-off valve with shut-off valve with shut-off valve	straight CX 3.0 MPQV CX 4.0 MPQV CX 6.0 MPQV	angled CX 3.0 MPAV CX 4.0 MPAV CX 6.0 MPAV





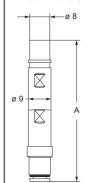
part No.	A (mm)
CX 3.0 MPQM	45,5
CX 4.0 MPQM	45,5
CX 6.0 MPQM	47,5

CX 3.0 / 4.0 / 6.0 MPQF



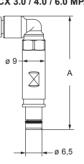
part No.	A (mm)
CX 3.0 MPQF	44,4
CX 4.0 MPQF	43,4
CX 6.0 MPQF	46.4

CX 3.0 / 4.0 / 6.0 MPQV



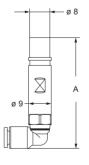
part No.	A (mm)
CX 3.0 MPQV	48,7
CX 4.0 MPQV	56,2
CX 6.0 MPQV	58,2

CX 3.0 / 4.0 / 6.0 MPAM



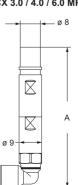
part No.	A (mm)
CX 3.0 MPAM	45,5
CX 4.0 MPAM	45,1
CX 6.0 MPAM	47,5

CX 3.0 / 4.0 / 6.0 MPAF



part No.	A (mm)
CX 3.0 MPAF	44,4
CX 4.0 MPAF	44,0
CX 6.0 MPAF	46.4

CX 3.0 / 4.0 / 6.0 MPAV



part No.	A (mm)
CX 3.0 MPAV	48,7
CX 4.0 MPAV	55,8
CX 6.0 MPAV	58,2

CX 02 TM/TF, CX 03 TM/TF, CX 04 TM/TF, CX 06 TM/TF

enclosures:	page:
C-TYPE IP65 or IP66/IP69	387 - 430
C7 IP67	436 - 442
V-TYPE IP65 or IP66/IP69	444 - 463
BIG hoods	466 - 473
T-TYPE IP65 insulating	480 - 487
T-TYPE / W IP66/IP69 insulating	489 - 492
HYGIENIC T-TYPE / H IP66/IP69	501 - 504
HYGIENIC T-TYPE / C IP66/IP69, -50 °C	506 - 509
W-TYPE for aggressive environments	521 - 526
E-Xtreme® corrosion proof	530 - 537
	542 - 547
	550 - 557
EMC	578 - 581
Central lever	603 - 614
LS-TYPE	618 - 625
IP68	632 - 647
panel supports:	
COB	652 - 653

frames for modular units with lock-in tab (included)

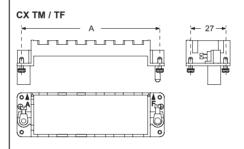
	I	
description	part No.	part No.
frames for modular units, with lock-in tab included	type for hoods*	type for housings*
for 2 modular units - for housing size 44.27	CX 02 TM	CX 02 TF
for 3 modular units - for housing size 57.27	CX 03 TM	CX 03 TF
for 4 modular units - for housing size 77.27 and 77.62	CX 04 TM	CX 04 TF
for 6 modular units - for housing size 104.27 and 104.62	CX 06 TM	CX 06 TF

- die-cast zinc alloy frames

refer to CN.19 pages

- protective earth (PE)
- possibility of mounting female and male modular units on the same frame
- frames supplied with lock-in tab to attach units
- polarisation on frames
- coding pins CR..CX
- for spare lock-in tab **CX CFM** see SPARE SPARTS catalogue

* Assignment of attribute "for hoods" or "for housings" is merely conventional: both types can be mounted either in a hood or in a housing. In a modular connector coupling there shall be always a frame type "M" and a frame type "F".



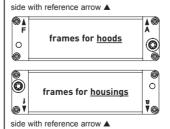
part No.	A (mm)	for housings size
CX 02 TM / TF	44	44.27
CX 03 TM / TF	57	57.27
CX 04 TM / TF	77,5	77.27 and 77.62
CX 06 TM / TF	104	104.27 and 104.62

Earth terminal

- large: for cables from 4-6 $\mbox{mm}^{2},$ AWG 12-10
- small: for cables from 1-2,5 mm², AWG 18-14

In order to accommodate larger PE conductor cross-sectional area, use CGT PE adapters, see page 319.

position of modules (contact side view)

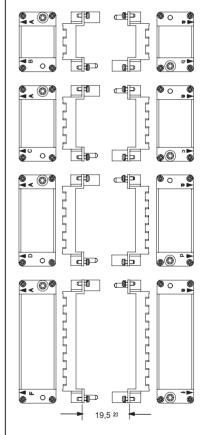


CX CFM (lock-in tab)



Polarisation of frames with relative identification letters and couplings

frame for hoods 1) frames for housings 1)



1) Warning:

The module support frames are marked:

- FOR HOODS: upper-case A-B, A-C, A-D and A-F
- FOR HOUSINGS: <u>lower-case</u> a-b, a-c, a-d and a-f

Positioning the modules in the frames according to the respective letters is ensuring the specular assembly of modules, for which the hood will be coupled correctly to the housing.

- 2) Distance for:
- electric and fibre optic contacts: max 21 mm
- pneumatic contacts: max 20,5 mm



RX 02 TM/TF, RX 03 TM/TF, RX 04 TM/TF, RX 06 TM/TF HNM (High Number of Matings)

enclosures size:		pages:
"44.27"	HNM	592 - 593
	C-TYPE IP65/IP66, single lever	387 - 392
	V-TYPE IP65/IP66, single lever	444 - 447
	E-Xtreme® corrosion proof530-53	1, 542, 550-551
"57.27"	HNM	594 - 595
	C-TYPE IP65/IP66, single lever	393 - 401
	V-TYPE IP65/IP66, single lever	448 - 453
	E-Xtreme® corrosion proof532-53	3, 543, 552-553
"77.27"	HNM	596 - 597
	C-TYPE IP65/IP66, single lever	402 - 411
	V-TYPE IP65/IP66, single lever	454 - 458
	E-Xtreme® corrosion proof534-53	5, 544, 554-555
"104.27"	HNM	598 - 599
	C-TYPE IP65/IP66, single lever	412 - 423
	V-TYPE IP65/IP66, single lever	459 - 463
	E-Xtreme® corrosion proof536-53	7, 545, 556-557
"77.62"	C-TYPE IP65/IP66, single lever	424 - 429
	E-Xtreme® corrosion proof	546
"104.62"	C-TYPE IP65/IP66, single lever	430
	E-Xtreme® corrosion proof	547

refer to CN.19 pages

frames for modular units with lock-in tab (included)



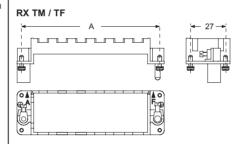
Q 10 000 MATINGS WITH HNM FRAMES AND HNM ENCLOSURES

description	part No.	part No.
frames for modular units, with lock-in tab included for 2 modular units - for housing size 44.27 for 3 modular units - for housing size 57.27 for 4 modular units - for housing size 77.27 and 77.62 for 6 modular units - for housing size 104.27 and 104.62	type for hoods* RX 02 TM RX 03 TM RX 04 TM RX 06 TM	type for housings* RX 02 TF RX 03 TF RX 04 TF RX 06 TF

C-TYPE and V-TYPE 2-lever versions cannot be used to reach 5.000 matings.

- die-cast zinc alloy frames
- protective earth (PE)
- possibility of mounting female and male modular units on the same frame
- frames supplied with lock-in tab to attach units
- polarisation on frames
- coding pins CR..CX
- for spare lock-in tab CX CFM see SPARE SPARTS catalogue

* Assignment of attribute "for hoods" or "for housings" is merely conventional: both types can be mounted either in a hood or in a housing. In a modular connector coupling there shall be always a frame type "M" and a frame type "F".



part No.	A (mm)	for housings size
RX 02 TM / TF	44	44.27
RX 03 TM / TF	57	57.27
RX 04 TM / TF	77,5	77.27 and 77.62
RX 06 TM / TF	104	104.27 and 104.62

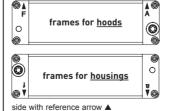
Earth terminal

- large: for cables from 4-6 mm², AWG 12-10
- small: for cables from 1-2,5 mm², AWG 18-14

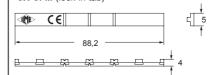
In order to accommodate larger PE conductor cross-sectional area, use CGT PE adapters, see page 319 CN.19 catalogue.

position of modules (contact side view)

side with reference arrow \blacktriangle

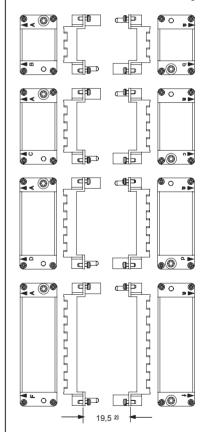


CX CFM (lock-in tab)



Polarisation of frames with relative identification letters and couplings

frame for hoods 1) frames for housings 1)



1) Warning:

The module support frames are marked:

- FOR HOODS: upper-case A-B, A-C, A-D and A-F
- FOR HOUSINGS: <u>lower-case</u> a-b, a-c, a-d and a-f

Positioning the modules in the frames according to the respective letters is ensuring the specular assembly of modules, for which the hood will be coupled correctly to the housing.

2) Distance for:

- electric and fibre optic contacts: max 21 mm
- pneumatic contacts: max 20,5 mm

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



SAFE

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.

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).

UNSAFE

tip made by polycarbonate light grey colour for fingerproof safety

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

inserts

page:

266

MIXO (CX 02 7M)

70 A

70 A silver plated fingerproof male crimp contacts



■ refer to CN.19 pages

description

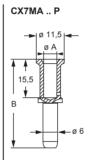
part No.

70 A male crimp contacts fingerproof 6 mm² AWG 10

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 25 P



- it is recommended to crimp the contacts with crimping tools homologated by ILME (please see the crimping tool section 70A contacts, CX7MA...P series) on pages 720 - 721 of CN.19 catalogue
- C7ES removal tool (see page 720 of CN.19 catalogue)



CX7MA .. P contacts

part No.	øΑ	В	stripping length
	(mm)	(mm)	(mm)
CX7MA 6.0 P	3,5	36,6	15
CX7MA 10 P	4,3	35,8	15
CX7MA 16 P	5,5	35,8	15
CX7MA 25 P	7,0	35,8	15



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



PCB INTERFACE ADAPTER CIF X17 2.4



New CIF X17 2.4 (CIF 5 2.4 5P interface adapter + 2× CIF 2.4, 6P interface adapter) for MIXO CX 17 DF/M module





TECHNICAL FEATURES CIF X17 2.4

CIF X17 2.4 (complete set of 2× CIF 2.4 + new CIF 5 2.4)

Interface PCB adapter for up to 2,4 mm thick PCBs, gold plated contacts suitable for high-density MIXO module **CX 17 DF/ DM.**

CIF 5 2.4 (5P interface adapter alone)

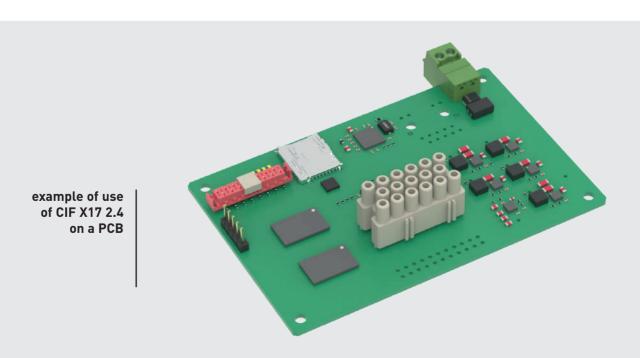
For customers already using CIF 2.4* available also as CIF 5 2.4, stand-alone additional 5P interface adapter, to be completed by 2× CIF 2.4.

* See CN.19 p. 670, 6-pole PCB adapter, suitable in multiple units to provide PCB interface for series **CDD** inserts size **24** (4 units) **42** (7 units), **72** (12 units) and **108** (13 units), the 24-pole section of combined connector inserts CX 8/24 (3 units) or the 36-pole section of CX 6/36 (6 units), and MIXO **CX 12 DF/ DM** modules (2 units), see CN.19 p. 282.

The new 5-pole interface adapter connector CIF 5 2.4 of series CIF, once mounted in-between 2× CIF 2.4, 6-pole interface adapter connectors, forms a 17-pole PCB interface "block" equipped with female gold-plated contacts with rear post for soldering to the PCB.

Either so grouped, or conveniently purchased in the dedicated complete set CIF X17 2.4, it serves as interface for either a male or a female high-density module CX 17 DF or CX 17 DM of series MIXO, each equipped with corresponding interface contacts CDFA 6A or CDMA 6A32 (silver plated) with rear post Ø 1 mm suitable for mating with the CIF adapter female contacts.

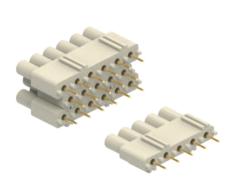
RoHS: compliant with exemption 6(c).



PCB interface adapter for CX 17 DF /DM modular inserts **CIF X17 2.4**

page: inserts

MIXO (CX DF /DM) 17 poles 282 PCB interface adapter for CX 17 DF /DM modular inserts



6 A interface contacts, silver plated, terminal Ø 1 mm



refer to CN.19 pages

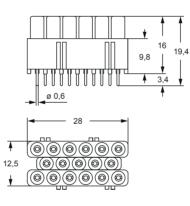
description	part No.	part No.
PCB interface adapter, complete set, with 17 contacts for up to 2,4 mm thick PCBs	CIF X17 2.4	
PCB interface adapter, <u>5P alone</u> , to be combined with 2x CIF 2.4	CIF 5 2.4	
6A interface contacts for female inserts with terminal Ø 1 mm		CDFA 6A
6A interface contacts for male inserts with terminal Ø 1 mm		CDMA 6A32

FROM JULY 2021

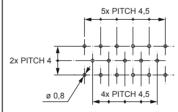
- characteristics according to EN/IEC 61984 ratings:
- 7,5 A 160 V 2,5 kV 3
 cUL (UL for USA and Canada), CSA, CQC, DNV-GL, BV pending
- rated voltage according to UL/CSA: 160 V
- insulation resistance: ≥ 10 GΩ
- ambient temperature limit: -40 °C ... +125 °C
- material (insert): polycarbonate

- material (contacts): copper alloy RoHS: compliant with exemption RoHS exemptions: 6c Copper alloy containing up to 4% lead by weight
- The adapter is soldered on the printed circuit on which the multipole connector (female or male) equipped with interface contacts will then be inserted.

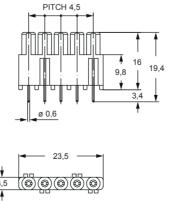
CIF X17 2.4



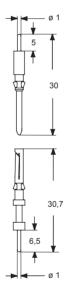
PCB LAYOUT



CIF 5 2.4



CDFA 6A and CDMA 6A32

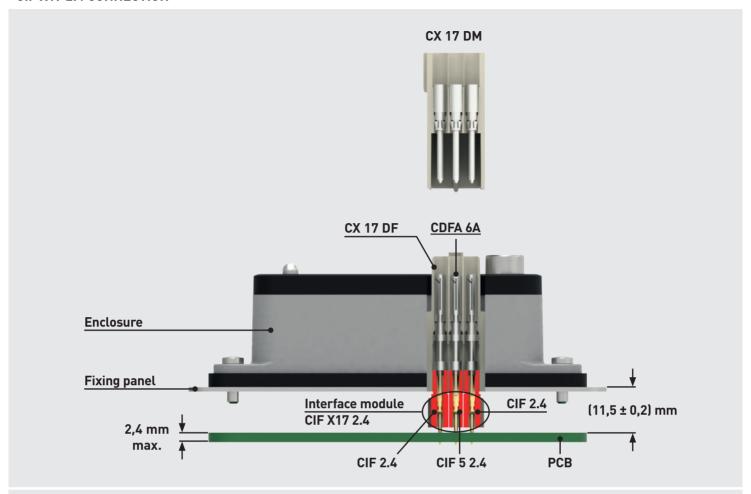


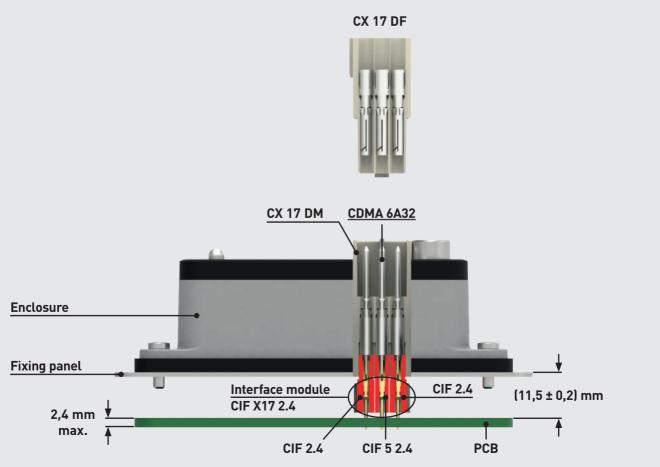
CIF X17 2.4 COMPLETE SET





ASSEMBLY INSTRUCTIONS CIF X17 2.4 CONNECTION





RJ45 COUPLER IN ANGLED BULKHEAD MOUNTING HOUSINGS CJZA 8 IA4, CJZAX 8 IA4, CJZAXX 8 IA4



90° angled RJ45 female-female coupler in bulkhead-mount angled "21.21" metal housing with 4 fixing screws





TECHNICAL FEATURES CJZA 8 IA4, CJZAX 8 IA4, CJZAXX 8 IA4

This new 90° angled female-female RJ45 coupler, housed in a sturdy bulkhead-mounting angled "21.21" metal housing with 4 fixing screw on the flange, once installed on the vertical wall of a control panel enclosure, enables the corresponding male RJ45 connector being oriented vertically, along the wall of the control panel, so as to avoid undue torque (leverage effect) on the connector locking lever, due to the weight of the attached cable and the lever arm that a horizontally placed hood and gland would imply.

This RJ45 female/female adapter is fitted with two PCB-mounted **RJ45 Cat. 5** female connectors (jacks) on a specially designed PCB, and allows use of patch cords both on the inside and the outside of a control panel, e.g. using the universal patch cord adapter CJK 8M in corresponding hood on the outside of the panel.

IP66/IP67/IP69 degree of protection when mated and locked.

NOTE - The sealing on the 4 pass-through fixing screw must be verified by the customer.

RoHS: compliant without exemptions.



avoids undue leverage on the connector locking lever

CJZAX - CJZA RJ45 coupler

angled bulkhead mounting housings with RJ45 coupler



STAINLESS STEEL LEVER ∰ FROM SEPTEMBER 2021 angled bulkhead mounting housings with RJ45 coupler



☑ GALVANIZED STEEL RIGID LEVER **## FROM SEPTEMBER 2021**

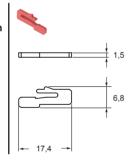
description part No. part No.

angled bulkhead mounting housings with RJ45 coupler with stainless steel lever

angled bulkhead mounting housings with RJ45 coupler with galvanized steel rigid lever

- IP66/IP67/IP69 degree of protection (EN 60529)
- RJ45 coupler, CAT. 5 Ethernet
- rated current: 2.1A at 70 °C
- rated voltage: 50V DC / 35V AC temperature limit: -40 °C, +120 °C
- nickel-plated brass shielding insert coding pin: CR KC *
- self-extinguishing: UL 94V-0
- enclosures in zinc alloy

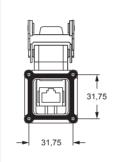
* CR KC insert coding pin

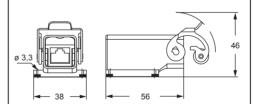


How to use CR KC coding pins (see page 224 of CN.19 Catalogue)

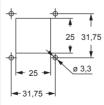
CJZAX 8 IA4

CJZAX 8 IA4

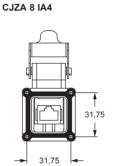


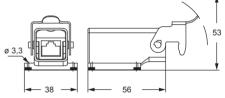


panel cut-out for CJZAX 8 IA4

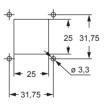


CJZA 8 IA4



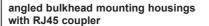


panel cut-out for CJZA 8 IA4



RJ45 coupler **CJZAXX**







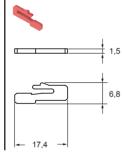
STAINLESS STEEL RIGID LEVER ∰ FROM SEPTEMBER 2021

description part No.

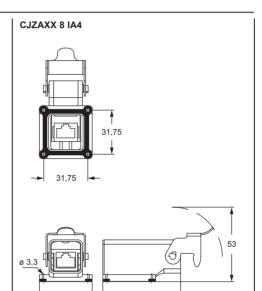
angled bulkhead mounting housings with RJ45 coupler with stainless steel rigid lever

- CJZAXX 8 IA4
- IP66/IP67/IP69 degree of protection (EN 60529) RJ45 coupler, CAT. 5 Ethernet
- rated current: 2.1A at 70 °C
- rated voltage: 50V DC / 35V AC temperature limit: -40 °C, +120 °C
- nickel-plated brass shieldinginsert coding pin: CR KC *
- self-extinguishing: UL 94V-0 enclosures in zinc alloy

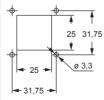
* CR KC insert coding pin



How to use CR KC coding pins (see page 224 of CN.19 Catalogue)



panel cut-out for CJZAXX 8 IA4



M32 BULKHEAD MOUNT HOUSING WITH FLANGE GASKET MKA IFC, MKAX IFC, MKAXX IFC



"21.21" bulkhead mount housings variant with flange sealing gasket with elevated edge instead of O-ring of MKA ... IF





TECHNICAL FEATURES MKA IFC, MKAX IFC, MKAXX IFC

Variant with flange sealing gasket with elevated edge instead of O-ring, of **MKA** ... **IF** bulkhead mounting connector housings, available with:

- standard galvanized steel rigid lever (no additional letter in the pre-code);
- "Class" stainless steel with rolls (additional letter **X** in the pre-code);
- rigid stainless steel lever (additional letters **XX** in the pre-code)

for all inserts size "21.21" suitable for metallic enclosures* with round M32 male threaded appendix underneath the flange, to be fixed on an M32 threaded hole on a panel, where the O-ring gasket is replaced by a flange gasket with elevated edge (ILME proprietary design).

* CDF /M 07, having pass-through PE contact, is not suitable for installation in metallic enclosures.

Whereas the O-ring gasket versions are mostly targeting applications where the threaded male appendix is used for screwing onto a female threaded hole, the new variants with flange plane gasket (suffix **C** as for "counternut") are best fitting applications on pass-through hole and M32 counternut, filling better the space below the flange.

Standard types available.

For **W-Type** (aggressive environment), **EMC** (improved shielding effectiveness) and **180 °C** (high temperatures) versions please contact ILME Commercial Offices.

IP44, IP66/IP67/IP69 with CKR 65(D)

Type 12, Type 4, 4X when used with CKR 65 (D)

RoHS: compliant with exemption 6(c).

flange sealing gasket with proprietary design elevated edge



standard metallic version with flange gasket **MKAX IFC**

inserts		🔳 page:
CK	3 and 4 poles + ⊕	58
CKS	3 and 4 poles + ⊕	-
CKSH	3 and 4 poles +	63
CD	8 poles	67
CQ4	2 poles + ⊕	182
CQ4 H	2 poles + ⊕	183
CQ4	3 poles + ⊕	184
CQ	5 poles + ⊕	186
CQ	7 poles + ⊕	187
CQ	12 poles + ⊕	189
CQ	21 poles	190
CJ KF	·	223
CJK 8FT		226
CJK 8IF1	ſ	228
CLK 04 S	SC SC	239
CX 1/2 B	D	243
CXL 2/4	SF/SM	250
CXL SF/S	SM	250
CXL 2/4	PF/PM	251
CXL 2/4	PFH/PMH	251
CXL PF/I	PM	251

bulkhead mounting housings with flange gasket



STAINLESS STEEL LEVER

description	part No. (entry M32)
M32 fixing thread 1)	MKAX IFC
gasket and screw kit for IP66/IP67/IP69 1)	CKR 65
gasket and screw kit for IP66/IP67/IP69 1) specific for CD 08 inserts	CKR 65 D

- 1) To obtain the IP66/IP67/IP69 degree of protection it is necessary to replace the fixing screw supplied with all inserts, with the one with gasket included in the kit (to be purchased separately) except for the inserts listed below (already supplied with a fixing screw with gasket):
 - CQF/M 07, CQF/M 12 CJ KF

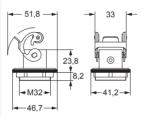
refer to CN.19 pages

- CJK 8FT /8IFT
- CX 1/2 BDF/M
- CLK 04 SCF /SCF-H /SCM CXL 2/4 PF /PM /PFH /PMH /SF /SM, CXL SF/M CXL PF /PM

here is an example. The screw and sealing gasket kit can be used with all enclosures' part nos. in this page



MKAX IFC



panel cut-out for MKAX IFC





(*) Locknut supplied with the enclosure



Type 12 Type 4/4X only with CKR 65 (D)



IP66/IP67/IP69 with CKR 65 (D) 1)



MKA IFC - MKAXX IFC standard metallic version with flange gasket

bulkhead mounting housings with flange gasket



bulkhead mounting housings with flange gasket



GALVANIZED STEEL RIGID LEVER

STAINLESS STEEL RIGID LEVER

	1	I .
description	part No. (entry M32)	part No. (entry M32)
M32 fixing thread 1)	MKA IFC	
M32 fixing thread 1)		MKAXX IFC
gasket and screw kit for IP66/IP67/IP69 1)	CKR 65	CKR 65
gasket and screw kit for IP66/IP67/IP69 1) specific for CD 08 inserts	CKR 65 D	CKR 65 D

- 1) To obtain the IP66/IP67/IP69 degree of protection it is necessary to replace the fixing screw supplied with all inserts, with the one with gasket included in the kit (to be purchased separately) except for the inserts listed below (already supplied with a fixing screw with gasket):
 - CQF/M 07, CQF/M 12 CJ KF

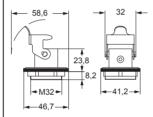
refer to CN.19 pages

- CJK 8FT /8IFT
- CX 1/2 BDF/M
- CLK 04 SCF /SCF-H /SCM
- CXL 2/4 PF /PM /PFH /PMH /SF /SM, CXL SF/M CXL PF /PM

here is an example. The screw and sealing gasket kit can be used with all enclosures' part nos. in this page



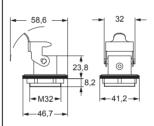
MKA IFC



panel cut-out for MKA IFC



MKAXX IFC



panel cut-out for MKAXX IFC



(*) Locknut supplied with the enclosure



(*) Locknut supplied with the enclosure



Type 12 Type 4/4X only with CKR 65 (D)



IP66/IP67/IP69 with CKR 65 (D) 1)

IP68 ANGLED HOUSING FOR 2 INSERTS "21.21" MGK 2AP25



New special IP68 angled surface-mount enclosure





TECHNICAL FEATURES MGK 2AP25



The **CGK-MGK** series of size "21.21" connector enclosures with **IP68** degree of protection (as well as IPX6 and IPX9, hence IP66/IP68/IP69) is enriched by this new special angled surface-mount enclosure, consisting of a flanged box with screw cover incorporating on one side the interface of two size "21.21" bulkhead-mounting IP68 housings (mateable to two "21.21" CGK-MGK hoods) so as to host 2 connector inserts size "21.21" and on the opposite side an **M25** thread for an equally rated cable gland or conduit fitting.

IP66/IP68/IP69 degree of protection per IEC 60529.

Vibration and shock proof per EN/IEC 61373 (railway rolling stock) **category 2** (bogie mounted).

Corrosion proof surface treatment and exposed parts up to **500 h** neutral salt spray chamber test according ISO 9227.

Suitable to build up a connectorized split/derivation (one line in, two connectors out).

Suitable for wall mounting with M6 head \emptyset 12,5 mm max. screws (length depending on the specific application) not supplied (see intruction sheet at page 98).

Couples with corresponding connector inserts inside **CGK-MGK** hoods.

RoHS: compliant without exemptions.

suitable to build up a connectorized split/ derivation (one line in, two connectors out)



MGK 2AP25 for 2 inserts high protection IP68 version

inserts		page:
CK CKS CKSH CD ¹⁾ CQ4 CQ4 H CQ4 CQ CQ	3 and 4 poles + ⊕ 3 and 4 poles + ⊕ 3 and 4 poles + ⊕ 8 poles 2 poles + ⊕ 2 poles + ⊕ 3 poles + ⊕ 5 poles + ⊕ 7 poles + ⊕ 12 poles + ⊕	58 63 67 182 183 184 186 187
CQ	21 poles	190
CJ KF (ca CJK 8FT CJK 8IFT CUK 2FT CUK 3FT CLK 04 S CX 1/2 BI	С	223 226 226, 228 236 236 239 243

angled bulkhead mounting housings for 2 inserts

refer to CN.19 pages		
description	part No.	entry M
with cable entry, bottom closed 2)	MGK 2AP25	25
internal PE terminal connection kit 3)	CR MBT	

- 1) To ensure IP68 degree of protection with CD 08 insert, purchase the kit CKR 65 D.
 - In this case do not use the gasket and screw kit supplied with the enclosure.
- 2) CDF /M 07 series inserts (with pass-through protective earth contact) are suitable only by separate earthing of the housing through its internal PE terminal (CR MBT kit separately available), see note 3) below.
- 3) to be employed:
 - for equipotential bonding connection between cover and housing PE terminals (2× required, see Instruction Sheet page 99);
 - for PE connection of the housing (1× required) when used with CDF/M 07 inserts, see note ²⁾ above

CR MBT kit consists of:

- Ø 4 mm eyelet crimp cable lug for 6 mm 2 max. PE wire, tin-plated brass;
- M3,5x6 self-tapping screw w/ Ph 2 head, stainless steel with \varnothing 4 mm washer.



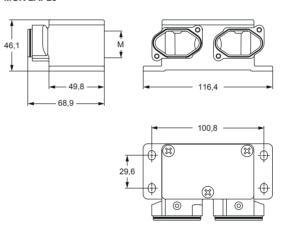
CGKCP FX
dust protection cover
(page 697 CN19 catalogue)



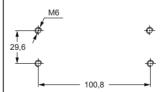
cURus Type 4/4X/12 pending



MGK 2AP25



panel cut-out for MGK 2AP25





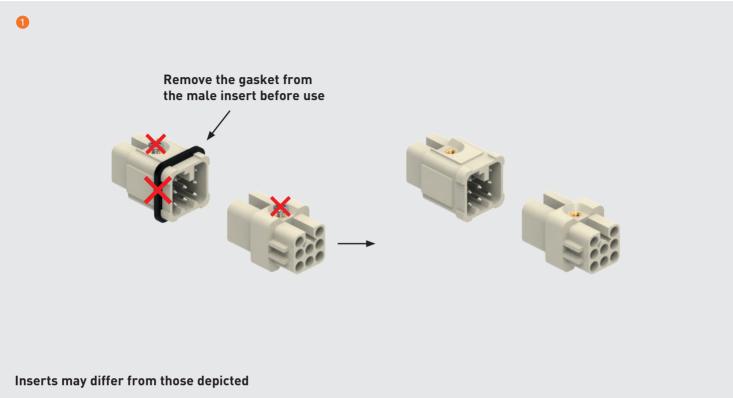
MGK 2AP25 - ANGLED BULKHEAD MOUNTING HOUSINGS FOR 2 INSERTS "21.21"

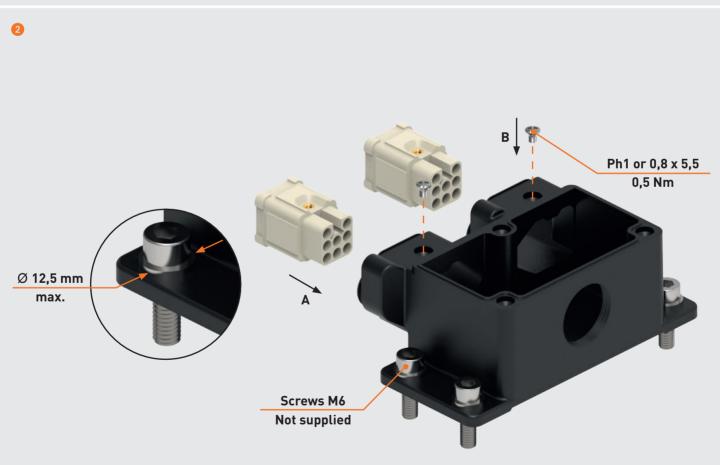


MGK 2AP25 for 2 inserts high protection IP68 version

ASSEMBLY INSTRUCTIONS

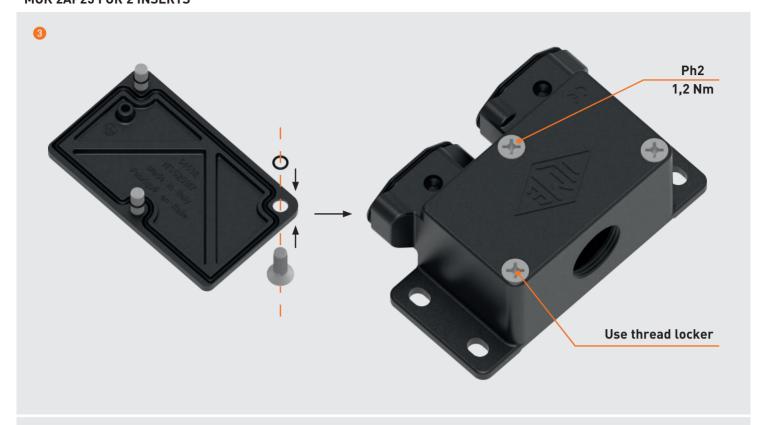
MGK 2AP25 FOR 2 INSERTS

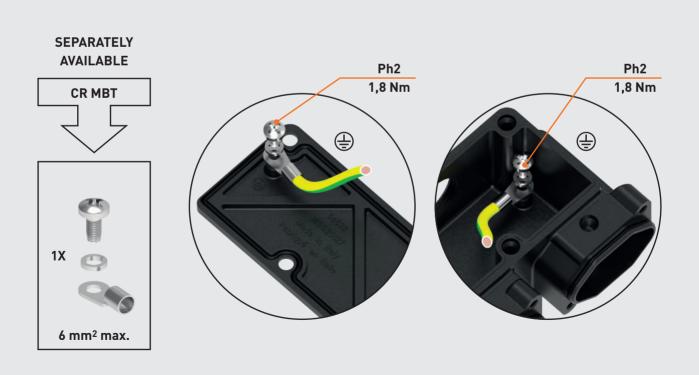






ASSEMBLY INSTRUCTIONS MGK 2AP25 FOR 2 INSERTS





T-TYPE HYGIENIC WITH METAL-DETECTABLE LEVERS



Locking lever(s)
made of metal detectable
thermoplastic material,
suitable for food contact





TECHNICAL FEATURES T-TYPE/H & T-TYPE/C



Series T-TYPE HYGIENIC enclosures with locking lever (both the /H and the /C versions), likewise the recently introduced CKH-MKH HYGIENIC size "21.21" series of enclosures (see ILME NEWS 2020 catalogue, pages 106-115), are now updated with the locking lever(s) made of metal detectable thermoplastic material, suitable for food contact.

Metal detection of foreign objects in food processing plants is widely used as a means to guarantee from accidental loss of such parts in food prior to its further processing, canning, bottling or packaging in general.

In addition to the blue colour, that helps to optically detect through surveillance cameras the presence of parts clearly alien to food (no blue natural food is known, hence the choice of this colour), metal detection comes in help, as already popular in food processing.

Part Numbers remain unchanged.
Zip code will be announced by a dedicated Product Info.

∰ FROM JUNE 2021

			T-TYPE HYGIENIC /H		T-TYPE HYGIENIC Cold /C	
Size	Cable outlet	Locking lever	part No.	part No.*	part No.	part No.*
44.27	-	single	THIH 06 L	THIH 06 LB	THIC 06 L	THIC 06 LB
57.27	-		THIH 10	THIH 10 B	THIC 10	THIC 10 B
77.27	-	double	THIH 16	THIH 16 B	THIC 16	THIC 16 B
104.27	-		THIH 24	THIH 24 B	THIC 24	THIC 24 B
44.27	M25		TAPH 06 L25	TAPH 06L25B	TAPC 06 L25	TAPC 06L25B
	M32	ain al a	TAPH 06 L32	TAPH 06L32B	TAPC 06 L32	TAPC 06L32B
	2xM25	single	TAPH 06 L225	TAPH06L225B	TAPC 06 L225	TAPC06L225B
	2xM32		TAPH 06 L232	TAPH06L232B	TAPC 06 L232	TAPC06L232B
	M25		TAPH 10.25	TAPH 10.25B	TAPC 10.25	TAPC 10.25B
F7 07	M32		TAPH 10.32	TAPH 10.32B	TAPC 10.32	TAPC 10.32B
57.27	2xM25		TAPH 10.225	TAPH10.225B	TAPC 10.225	TAPC10.225B
	2xM32		TAPH 10.232	TAPH10.232B	TAPC 10.232	TAPC10.232B
	M32		TAPH 16.32	TAPH 16.32B	TAPC 16.32	TAPC 16.32B
77.07	M40	double	TAPH 16.40	TAPH 16.40B	TAPC 16.40	TAPC 16.40B
77.27	2xM32	doubte	TAPH 16.232	TAPH16.232B	TAPC 16.232	TAPC16.232B
	2xM40		TAPH 16.240	TAPH16.240B	TAPC 16.240	TAPC16.240B
104.27	M32		TAPH 24.32	TAPH 24.32B	TAPC 24.32	TAPC 24.32B
	M40		TAPH 24.40	TAPH 24.40B	TAPC 24.40	TAPC 24.40B
	2xM32		TAPH 24.232	TAPH24.232B	TAPC 24.232	TAPC24.232B
	2xM40		TAPH 24.240	TAPH24.240B	TAPC 24.240	TAPC24.240B
44.27	M25	ale al a	TAVH 06 LG25	TAVH06LG25B	TAVC 06 LG25	TAVC06LG25B
44.27	M32	single	TAVH 06 LG32	TAVH06LG32B	TAVC 06 LG32	TAVC06LG32B
E7 07	M25		TAVH 10 G25	TAVH 10G25B	TAVC 10 G25	TAVC 10G25B
57.27	M32		TAVH 10 G32	TAVH 10G32B	TAVC 10 G32	TAVC 10G32B
77.27	M32	daubla	TAVH 16 G32	TAVH 16G32B	TAVC 16 G32	TAVC 16G32B
	M40	double	TAVH 16 G40	TAVH 16G40B	TAVC 16 G40	TAVC 16G40B
10/ 07	M32		TAVH 24 G32	TAVH 24G32B	TAVC 24 G32	TAVC 24G32B
104.27	M40		TAVH 24 G40	TAVH 24G40B	TAVC 24 G40	TAVC 24G40B

^{*} Enclosures with protective earth jumpers CR...BPE preassembled with part No. of base model plus letter B at the end.

		Covers for T-TYPE HYGIENIC	Covers for T-TYPE HYGIENIC Cold	
Size	With loop	Locking lever	part No.	part No.
44.27	C.	single	THCH 06 LG	THCC 06 LG
57.27			THCH 10 G	THCC 10 G
77.27		double	THCH 16 G	THCC 16 G
104.27			THCH 24 G	THCC 24 G

PLANARITY GASKETS FOR T-TYPE SURFACE MOUNTING HOUSING CR 06 /10 /16 /24 GTPC



Suitable for of all sizes of the T-TYPE HYGIENIC /H and /C





TECHNICAL FEATURES CR 06 /10 /16 /24 GTPC



Available in four dedicated sizes.

Suitable for closing the gap underneath wall-mounting housings of all sizes "44.27", "57.27", "77.27" and "104.27" of the **T-TYPE HYGIENIC** (both **/H** and **/C** for cold applications).

Re-establish planarity of the bottom (base) of these housings, thus avoiding the potential "nesting" of hazardous dirt in a gap otherwise difficult to be fully cleaned with washing in HYGIENIC applications.

Made with food grade silicone, blue coloured.



it closes the gap underneath wall-mounting housings of all sizes of the T-TYPE HYGIENIC

CR 06/10/16/24 GTPC planarity gaskets for T-TYPE surface mounting housing

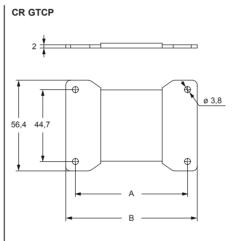
T-TYPE surface mounting housing:	page:
T-TYPE / H size "44.27" size "57.27" size "77.27"	501 502 503
size "104.27"	504
T-TYPE / C size "44.27" size "57.27"	506 507
size "77.27" size "104.27"	508 509



refer to CN.19 pages

description	part No.
planarity gasket for surface mount T-TYPE size "44.27" planarity gasket for surface mount T-TYPE size "57.27" planarity gasket for surface mount T-TYPE size "77.27" planarity gasket for surface mount T-TYPE size "104.27"	CR 06 GTPC CR 10 GTPC CR 16 GTPC CR 24 GTPC

- food grade silicone, blue colour

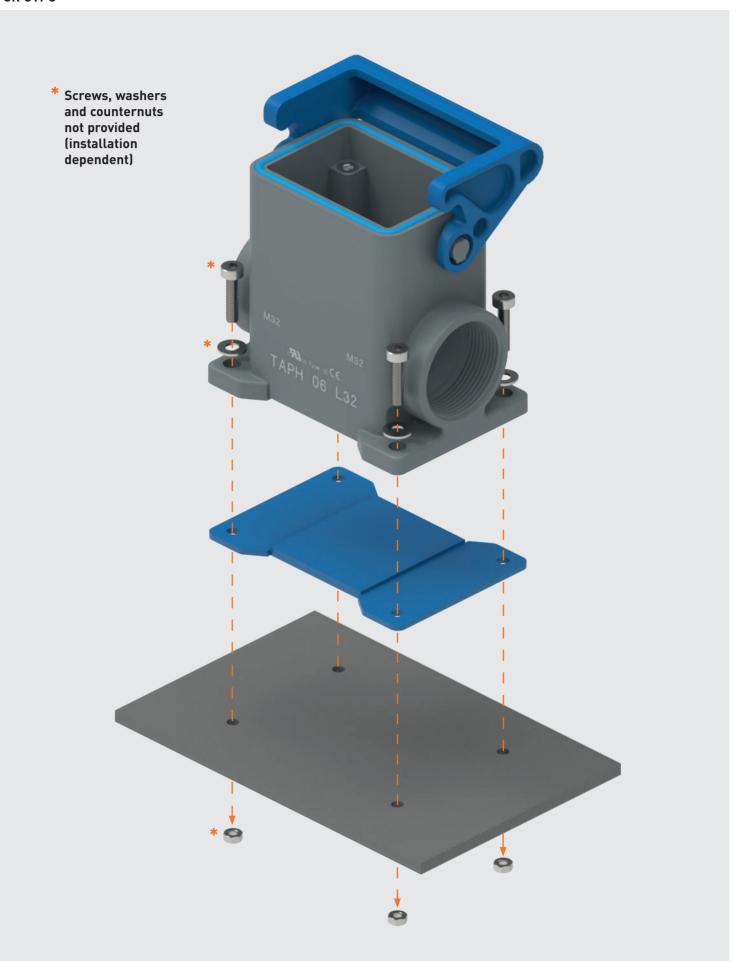


polarity	Α	В
06	69,7	81,7
10	81,7	93,9
16	104,7	116,7
24	131,7	143,6
	10 16	06 69,7 10 81,7 16 104,7



ASSEMBLY INSTRUCTIONS

CR GTPC



FLANGE GASKET FOR MKAS IVG20 CR 03 GKIVGR



The new replacement rubber flange sealing gasket allows a 180° reversed installation of the MKAS /MKAXS /MKAXXS IVG20 special EMC housings





TECHNICAL FEATURES CR 03 GKIVGR



The new **CR 03 GKIVGR** replacement rubber flange sealing gasket allows a 180° reversed installation of the special housings **MKAS IVG20**, so as to get the mating connector and the locking lever inside the cabinet and the M20 cable outlet outside the cabinet. This **allows installation of preassembled connector wirings on a cabinet wall**.

The **MKAS IVG20** special zinc alloy hoods with M20 rear cable entry with additional flange for the bulkhead mounting to a cabinet wall, for all connector inserts size "21.21" (available with different levers as MKAS, MKAXS or MKAXXS) are foreseen for being installed on the outside wall of a cabinet.

In the standard installation the cable outlet results inside the cabinet and the locking lever to mate and lock with the corresponding connector is outside the cabinet. To allow reverse mounting, the new **CR 03 GKIVGR** flange gasket must be fitted on the bare flange face, the captive gasket needs to be removed, then the **MKAS IVG20** housing is passed through a panel cut-out of suitably enlarged base, so as to let the locking lever and pegs pass-through the wall. Screws can then be fitted and tightened by suitable counternuts.

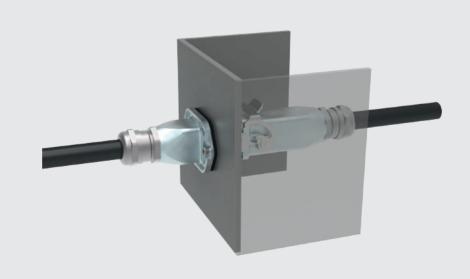
IP44, IP66/IP67/IP69 with CKR 65(D)

NOTE - The sealing on the 4 pass-through fixing screw must be duly restored by the customer

cURus pending [Type 12 / Type 4, 4X only with CKR 65(D)]

RoHS: compliant without exemptions.

the installation of preassembled connector wirings on a cabinet wall is allowed



CR 03 GKIVGR flange gasket for MKAS IVG20 reverse mounting

enclosures size "21.21" page:

571

MKAS IVG20 (bulkhead mounting housings)

flange gasket for MKAS IVG20 reverse mounting



refer to CN.19 pages

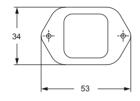
description

part No.

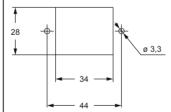
flange gasket for reverse installation

The new CR 03 GKIVGR replacement rubber flange sealing gasket allows a 180° reversed installation of the special housings MKAS IVG20, so as to get the mating connector and the locking lever inside the cabinet and the M20 cable outlet outside the cabinet. This allows installation of preassembled connector wirings on a cabinet wall. CR 03 GKIVGR





panel cut-out for reverse mounting with CR 03 GKIVGR

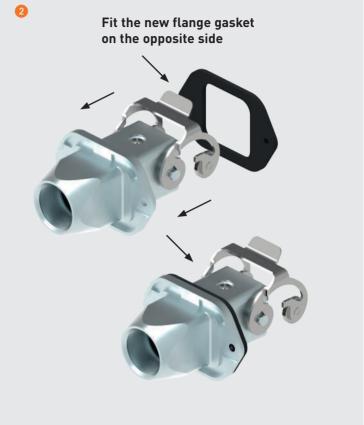


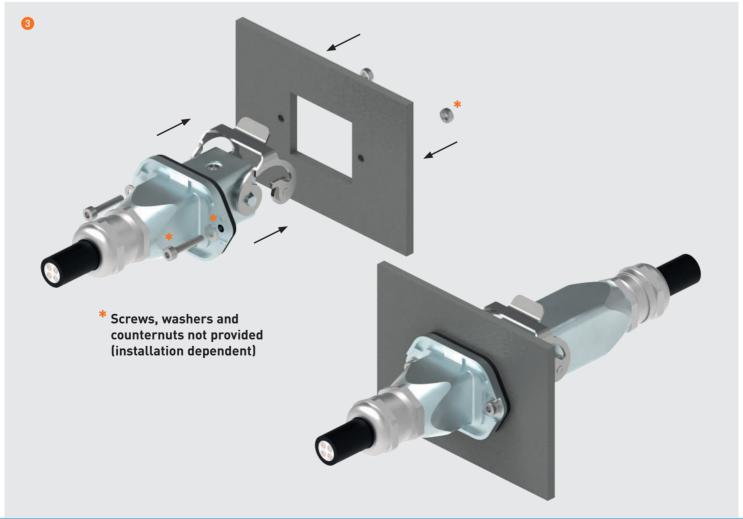


ASSEMBLY INSTRUCTIONS

CR 03 GKIVGR ON MKAS IVG20







COVER SIZE "104.62" WITH LEVER AND GASKET CHC 48 LG



Metal cover size "104.62" with stainless steel locking lever and gasket





TECHNICAL FEATURES CHC 48 LG

Equipped with stainless-steel locking lever and edge sealing gasket, this cover is suitable to close a "104.62" connector hood with 2 pegs (see CN.19 p. 430), to provide:

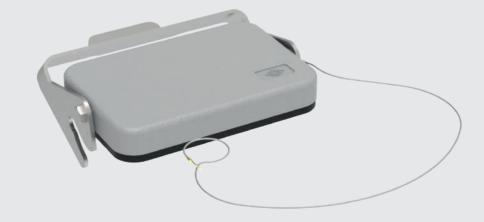
- **IP65** degree of protection if the cable gland or fitting is insulating type without gasket, or
- **IP66/IP69** if the cable gland/conduit fitting is equipped with O-ring,

in installations where the free connector would otherwise be expected to remain for prolonged time unmated, thus open and unduly exposed to environmental conditions affecting the contacts and relevant terminations.

Cover attachable to the free cable assembly terminating with a "104.62" connector hood by means of the dedicated stainless-steel loop cord.

RoHS: compliant without exemptions.

metal cover size "104.62" attachable to the free cable assembly by means of the dedicated stainless steel loop cord



CHC 48 LG cover for size "104.62" C-TYPE standard version

inserts		page:
CD CDD CDS CDSH CNE CSE CSH CSH CSH CSH CSH CSH CSH CSH CME	128 poles + ⊕ 216 poles + ⊕ 84 poles + ⊕ 84 poles + ⊕ 48 poles + ⊕	74 83 91 115 115 127 135 144
CMSH CSS CTSE (16A) *) CQE MIXO	20+4 (aux) poles + ⊕ 20+4 (aux) poles + ⊕ 48 poles + ⊕ 48 poles + ⊕ 92 poles + ⊕ 6 + 6 modules	144 144 153 165 173 262 - 317

*) can be used only in bulkhead mounting housings insert dimensions: 2 x (104 x 27) mm

refer to CN.19 pages

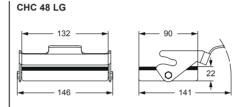
description

cover

with 1 lever and gasket (for hoods with 2 pegs)

- aluminium alloy die cast, epoxy polyester powder coated, grey RAL 7040
- stainless steel rigid locking lever and bolts
- stainless steel loop cord

part No. (with loop) CHC 48 LG





For fixing on hoods

cURus Type 4/4X/12 pending



insulating cable gland or fittings without gasket

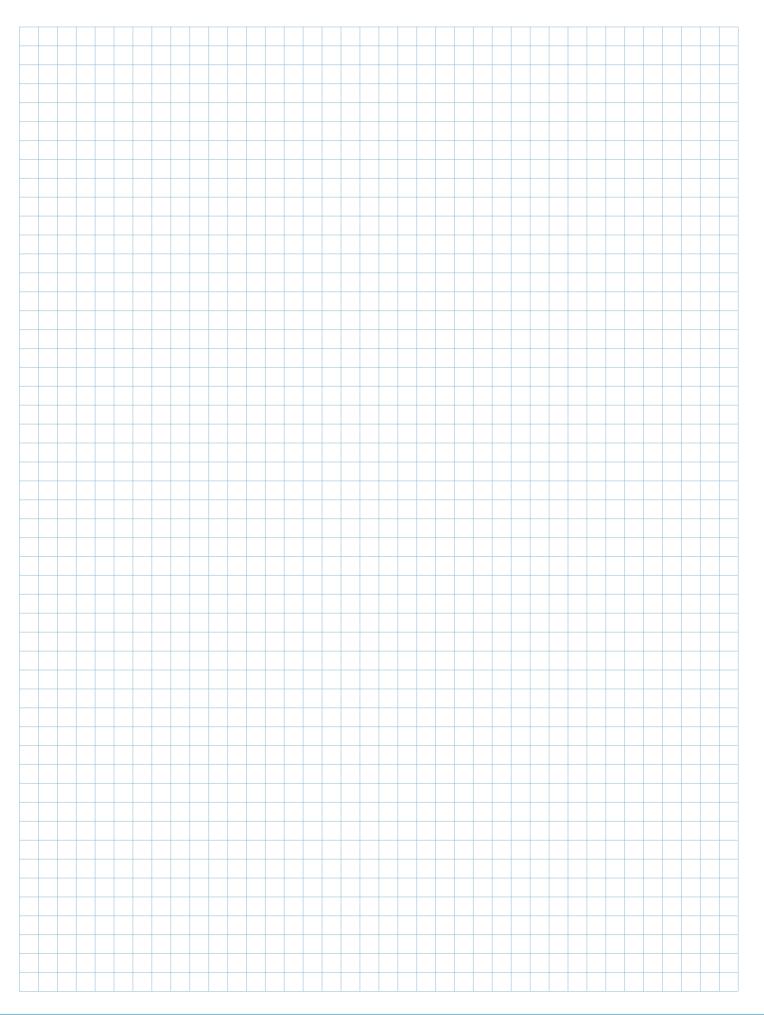


cable gland with O-Ring gasket

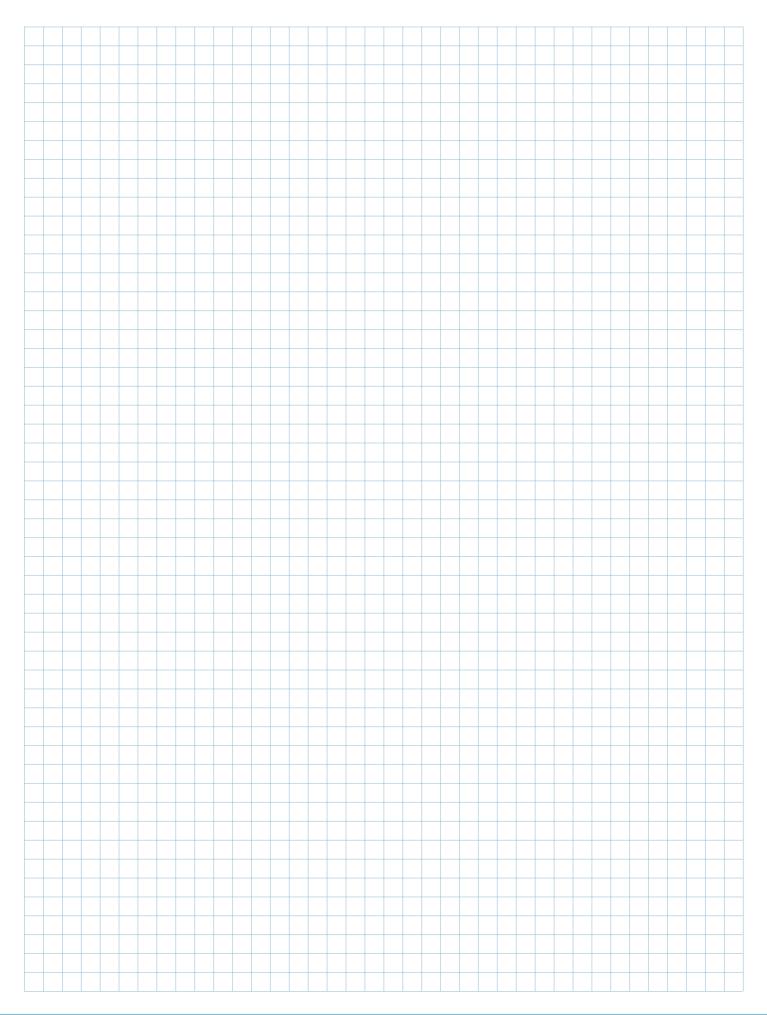


CHC 48 LG - COVER "104.62" WITH LEVER AND GASKET









С	CIMD 0.261, 67	CX 6.0 MPF74
	CIMD 0.3 61, 67	CX 6.0 MPM74
CCFA 0.317, 2	CINID 0.3 01, 07	CX 6.0 MPQF75
CCFA 0.517, 2	002,100,111111111111111111	CX 6.0 MPQM75
CCFA 0.717, 2	002/AX 0 1/44	CX 6.0 MPQV75
CCFA 1.017, 2	002/300 0 1/4-11111111111111111111111111111111111	CX 6.0 MPV74
CCFA 1.5 17, 2	0.1.1.00	CX 06 TF76
CCFA 2.5 17, 2	1 CKR 65 D92, 93	CX 06 TM76
CCFA 3.0 17, 2	1 CQES 17,21	CX 7/10 CA53
CCFA 4.0 17, 2	1 CR 03 GKIVGR108	CX7ES17, 21
CCMA 0.3 17, 2	1 CR 06 GTPC104	CX7FA 6.0 16, 20
CCMA 0.517, 2	1 CR 10 GTPC104	CX7FA 10 16, 20
CCMA 0.717, 2	1 CR 16 GTPC104	CX7FA 16 16, 20
CCMA 1.0 17, 2	1 CR 24 GTPC104	CX7FA 25 16, 20
CCMA 1.5 17, 2	1 CR CDS36	* CX7MA 6.0 16, 20
CCMA 2.5 17, 2	1 CR MBT96	CX7MA 6.0 P80
CCMA 3.0 17, 2	1 CX 01 J8UM48	CX7MA 10 16, 20
CCMA 4.0 17, 2	1 CX 02 TF76	CX7MA 10 P80
CDFA 6A8	4 CX 02 TM76	CX7MA 16 16, 20
CDFD 0.35	3 CX 3.0 MPAF75	CX7MA 16 P80
CDFD 0.55	3 CX 3.0 MPAM75	CX7MA 25 16, 20
CDFD 0.75	3 CX 3.0 MPAV75	CX7MA 25 P80
CDFD 1.05		
CDFD 1.55		
CDFD 2.55		CX 08 D5GM52
CDMA 6A328		CX 08 D5GM252
CDMD 0.35		
CDMD 0.55		
CDMD 0.75	27. 0.0 1	
CDMD 1.05		
CDMD 1.55		
CDMD 2.55		
CGFA 102		
CGFA 162		
CGFA 252		
CGFA 352		
CGMA 102		CXF 8/026
CGMA 162		CXM 8/026
CGMA 252		
CGMA 352		
CHC 48 LG11		
CIF 5 2.48		M
CIFD 0.261, 6		* MGK 2AP2596
CIFD 0.3 61, 6		
CIFD 0.5 61, 6		
CIF X17 2.48		
OII A17 2.709	- OA U.U IVIFAV	MICHAA IF 033

 $[\]ensuremath{^{*}}$ These items are also shown in various sections throughout the catalogue



R RDF2D 0.3.....55 RDF2D 0.5.....55 RDF2D 0.7.....55 RDF2D 1.0.....55 RDF2D 1.5.....55 RDF2D 2.5.....55 RDM2D 0.3.....55 RDM2D 0.5.....55 RDM2D 0.7.....55 RDM2D 1.0.....55 RDM2D 1.5.....55 RDM2D 2.5.....55 RDSHF 0936 RDSHF 1837 RDSHF 2738 RDSHF 4239 RDSHM 0936 RDSHM 1837 RDSHM 2738 RDSHM 4239 RIFD 0.2 63, 69 RIFD 0.3 63, 69 RIFD 0.5 63, 69 RIMD 0.2 63, 69 RIMD 0.3 63, 69 RIMD 0.5 63, 69 RSHF 06......30 RSHF 10.....31 RSHF 16.....32 RSHF 24......33 RSHM 06......30 RSHM 10.....31 RSHM 16.....32 RSHM 24......33 RX 02 TF77 RX 02 TM77 RX 03 TF77 RX 03 TM77 RX 04 TF77 RX 04 TM77 RX 06 TF77 RX 06 TM77 RX 08 D5GF.....54

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RX 08 D5GM	54
RX 08 D5GM2	54
RX 08 I6GF	62
RX 08 I6GM	62
RX 20S IGF	68
RX 20S IGM	68

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