





## 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.

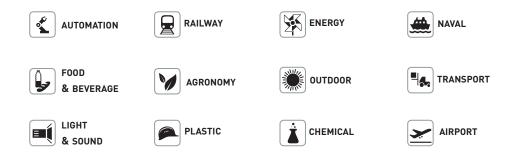
The Company is committed to developing technology in the areas that most impact the future of the industries it serves: high quality and safe cabling, research on the most suitable materials, rapid turnaround and readily available services while striving for energy saving and environmental safeguard.

## 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**

Striclty tied to our general conditions of sales

- 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 2006/95/EC (2014/35/EU from April 20, 2016) 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.
- 5 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.
- 6 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\*\*.
- 9 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 Series) cannot be guaranteed when coupled with other manufacturers' products.
- **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 Finally, Please note:
  - 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 next 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.





## 2019 PRODUCTS

Inserts		14	
CSH SQUICH® INSERT	"S" VERSION	14	
	CSHF/M 06 S, CSHF/M 10 S CSHF/M 16 S (16 SN), CSHF/M 24 S (24 SN) Technical features	<b>)</b> 15-21	
JSH SQUICH® INSERT	"S" VERSION	22	į
	JSHF/M 06 S, JSHF/M 10 S JSHF/M 16 S (16 SN), JSHF/M 24 S (24 SN) Technical features	23-29	
<b>CQ</b> SERIES		30	
	CQ4F/M 02 CQ4F/M 02 H Technical features	31-35	
HNM RX SERIES - HIG	H NUMBER OF MATINGS	36	
	RXF/M 12/2 Technical features	37-39	

MIXO modular units	40
MIXO SERIES THE COMPLETE RANGE OF MODULES	<b>40</b> 41
SQUICH® SERIES	42
CX 05 SHF/SHM Technical features	<b>42</b> 43 - 45
CX SERIES	46
CX 42 DF/DM Technical features	<b>46</b> 47 - 51
CX 42 DF/DM HNM VERSION	50
HNM MIXO FRAMES	51



Enclosures		52	
MIXO ONE ENCLOSURES		52	
	CXA - MXA SINGLE MODULE Technical features	53-57	
MKA IF METAL HOUS Main features	<b>58</b> 59		
C-TYPE STANDARD M	IETALLIC VERSION		
	MKAX IF		
	Technical features	60	
. 4 . 4	MKA IF - MKAXX IF		
	Technical features	61	
W-TYPE FOR AGGRESSIVE ENVIRONMENTS			
a D	MKAXW IF		
	Technical features	62	
1	MKAXXW IF		
	Technical features	63	
EMC VERSION FOR ELECTROMAGNETIC COMPATIBILITY			
	MKAXS IF		
	Technical features	64	
	MKAS IF - MKAXXS IF		
	Technical features	65	
180 °C VERSION FOR HIGH TEMPERATURES			
. R	MKAXR IF		
<b>(5)</b>	Technical features	66	
1	MKAXXR IF		
	Technical features	67	

	VERSION size "21.21" GNETIC COMPATIBILITY	<b>68</b> 69	
The state of the s	MKAXS  Technical features	70	
	MKAS - MKAXXS Technical features	71	
M25 INSULATING Main features	H00DS MK - MKG size "21.21"	<b>72</b> 73	
	MK - MKG Technical features	74 - 75	
	<b></b>		
	MK - MKG Technical features	76- 77	
Main features	. HOODS M25 CABLE ENTRY	<b>78</b> 79	
C-TYPE STANDAR	RD METALLIC VERSION		
6	MKAX Technical features	80	
	MKA - MKAXX		
	Technical features	81	
W-TYPE FOR AGGRESSIVE ENVIRONMENTS			
	MKAXW VG25		
S	Technical features	82	
	MKAXXW VG25		
6	Technical features	83	
EMC VERSION FO	R ELECTROMAGNETIC COMPATIBILI	TY	
	MKAXS IF		
E	Technical features	84	
000 D	MKAS IF - MKAXXS IF		
	Technical features	85	



	MGK V25 E	- IP68 HIGH PROTECTION	<b>86</b> 87
		MGK	
		Technical features	88
la fa		MGK B	
		Technical features	89
		FOR CENTRAL LEVER	00
Main featu	GYC, CFV/N	MEN GAC	<b>90</b> 91
- Main Teatu			
		CA - MA / CF - MF	
		Technical features	92 - 95
		LESS STEEL RIGID LEVER	<b>96</b> 97
		CHIX - CHPX Technical features	98 - 99
	IPLEX SELF	G HOUSINGS -CLOSING HINGED COVER	<b>100</b> 101
		CV - CVA / MVP - MVAP	
		Technical features	102 - 105
-		CZ - MZ / CZA - MZA	
-		Technical features	106 - 107

Accessories		108
LOCKING DEVICE FOR "CLASS" LOCKING LEVERS		108
	CR CLK Technical features	109 - 111
LOCKING DEVICE FOR ENCLOSURE SIZE "104.27" WITH CENTRAL LEVER		
	CR YLK24 - CR YLK24 SL Technical features	113 - 115
ANCHORAGES FOR MI	116	
AA	CR 16 SSD - CR 24 SSD Technical features	117 - 119
PE TERMINAL ADAPTERS FOR MIXO FRAMES 120		
	CGT 6.0 - 10 - 16 - 25 Technical features	121 - 123
1 1		





Part numbers index 132

# CSHF/M SQUICH® INSERTS **"S"** VERSION (06, 10, 16, 24, 32, 48 poles)



CSH S inserts series
with actuator button,
now with <u>stamped</u>
<u>silver-plated contacts</u>





## TECHNICAL FEATURES CSHF/M 06, 10, 16 (16 SN), 24 (24 SN) S

Demand for cost-effective solutions for large serial production is constantly growing and stamped contacts meet the basic needs fur such applications.

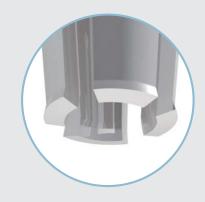
 Silver plating of the contacts, suitable for up to 500 mating cycles;





- features all the well-known advantages of the SQUICH® proprietary technology:
- reduced wiring time (spring-clamp terminals are presented "open", with the actuator button lifted up); up to 50% saving time compared to screw connection;
- **operator skill independence** (no need to open the spring-clamp terminals by direct operation of a possibly unsuitable tool on the spring);
- no special wire preparation (only stripping at the correct length);
- no wiring tool needed;
- resistance to strong vibrations typical of the self-compensating spring-clamp technology;
- possibility to use rigid and flexible stranded copper conductors with range of cross sectional area between 0,14 mm<sup>2</sup> and 2,5 mm<sup>2</sup> (26 - 14 AWG);
- possibility to insert the **test probe** of a measurement instrument in the cavity of the actuator button (proprietary design);
- simple re-opening of a terminal (if needed) using a flat blade screwdriver on the actuator button dedicated side window.

new stamped silver-plated contacts





## CSHF/M 06 S 6 poles + 🕀 16A - 500V SQUICH®

enclosures: page: size "44.27" C-TYPE IP65/IP66 240-243 C7 IP67, single lever 274 V-TYPE IP65/IP66, single lever 280-284, 286 304-306 **BIG** hoods T-TYPE IP65 insulating 326-327 T-TYPE / W IP66 insulating 336-337 HYGIENIC T-TYPE / H IP66/IP69 350-351 HYGIENIC T-TYPE / C IP66/IP69, -50 °C 358-359 W-TYPE for aggressive environments 373 **EMC** 392 Central lever 404-405 420-423 IP68 LS-TYPE 450-451 E-Xtreme® corrosion proof 42-43, 55, 62-63 \* panel supports: page: 462-463

\* refer to NEWS 2017 pages ■ refer to CN.16 pages inserts, spring terminal connections



Q STAMPED CONTACTS, SILVER PLATED 
AVAILABLE NOVEMBER 2019

description

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

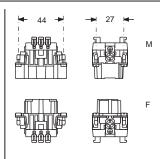
- characteristics according to EN 61984:

## 16A 500V 6kV 3 16A 400/690V 6kV 2

- cURus, CSA, CQC, DNV-GL, BV, EAC pending
- rated voltage according to UL/CSA: 600V
- insulation resistance: ≥ 10 GΩ
- ambient temperature limit: -40 °C ... +125 °C
- made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: ≥ 500 cycles
- contact resistance: ≤ 3 mΩ

### CSHF 06 S CSHM 06 S

part No.



contacts side (front view)



 inserts for connectors with the following conductor cross-sectional areas: 0,14 - 2,5 mm² - AWG 26 - 14
 conductors stripping lenght: 9...11 mm

## $\textbf{SQUICH}^{\texttt{@}}\textbf{-spring connection technology}$

### CLOSING



Deeply insert the stripped conductor in its round seat.



Press the actuator button to close the terminal.

## RE-OPENING



## CSHF/M 10 S 10 poles + 🕀 16A - 500V SQUICH®



enclosures: size "57.27" page: C-TYPE IP65/IP66 244-249 C7 IP67, two levers 275 V-TYPE IP65/IP66, single lever 281-288, 291 308-311 **BIG** hoods T-TYPE IP65 insulating 328-329 T-TYPE / W IP66 insulating 338-339 **HYGIENIC T-TYPE / H IP66/IP69** 352-353 HYGIENIC T-TYPE / C IP66/IP69, -50 °C 360-361 374 W-TYPE for aggressive environments **EMC** 393 Central lever 406-407 424-427 IP68 LS-TYPE 452-453 E-Xtreme® corrosion proof 44-45, 56, 64-65 \* panel supports: page: 462-463

\* refer to NEWS 2017 pages ■ refer to CN.16 pages inserts, spring terminal connections



Q STAMPED CONTACTS, SILVER PLATED 
AVAILABLE NOVEMBER 2019

description

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

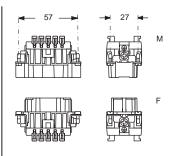
- characteristics according to EN 61984:

## 16A 500V 6kV 3 16A 400/690V 6kV 2

- cURus, CSA, CQC, DNV-GL, BV, EAC pending
- rated voltage according to UL/CSA: 600V
- insulation resistance: ≥ 10 GΩ
- ambient temperature limit: -40 °C ... +125 °C
- made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: ≥ 500 cycles
- contact resistance: ≤ 3 mΩ

CSHF 10 S CSHM 10 S

part No.



contacts side (front view)



 inserts for connectors with the following conductor cross-sectional areas: 0,14 - 2,5 mm² - AWG 26 - 14
 conductors stripping lenght: 9...11 mm

## $\textbf{SQUICH}^{\texttt{@}}\textbf{-spring connection technology}$

### CLOSING



Deeply insert the stripped conductor in its round seat.



Press the actuator button to close the terminal.

## RE-OPENING



## CSHF/M 16 S 16 poles + (a) 16A - 500V SQUICH®

enclosures: size "77.27" page: C-TYPE IP65/IP66 250-256 C7 IP67, two levers 276 V-TYPE IP65/IP66, single lever 282-292, 295 312-315 **BIG** hoods T-TYPE IP65 insulating 330-331 T-TYPE / W IP66 insulating 340-341 HYGIENIC T-TYPE / H IP66/IP69 354-355 HYGIENIC T-TYPE / C IP66/IP69, -50 °C 362-363 W-TYPE for aggressive environments 375 **EMC** 394 Central lever 408-409 428-431 IP68 LS-TYPE 454-455 E-Xtreme® corrosion proof 46-47, 57, 66-67 \* panel supports: page: 462-463

\* refer to NEWS 2017 pages ■ refer to CN.16 pages inserts, spring terminal connections



Q STAMPED CONTACTS, SILVER PLATED 
AVAILABLE NOVEMBER 2019

description

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

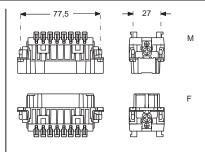
- characteristics according to EN 61984:

## 16A 500V 6kV 3 16A 400/690V 6kV 2

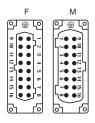
- cURus, CSA, CQC, DNV-GL, BV, EAC pending
- rated voltage according to UL/CSA: 600V
- insulation resistance: ≥ 10 GΩ
- ambient temperature limit: -40 °C ... +125 °C
- made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: ≥ 500 cycles
- contact resistance: ≤ 3 mΩ

### CSHF 16 S CSHM 16 S

part No.



contacts side (front view)



 inserts for connectors with the following conductor cross-sectional areas: 0,14 - 2,5 mm² - AWG 26 - 14
 conductors stripping lenght: 9...11 mm

## SQUICH®-spring connection technology

### CLOSING



Deeply insert the stripped conductor in its round seat.



Press the actuator button to close the terminal.

## RE-OPENING



#### **CSHF/M 24 S** 24 poles + (9) 16A - 500V **SQUICH®**



enclosures: size "104.27" page: C-TYPE IP65/IP66 258-266 C7 IP67, two levers 277 V-TYPE IP65/IP66, single lever 283-296, 299 316-319 **BIG** hoods T-TYPE IP65 insulating 332-333 T-TYPE / W IP66 insulating 342-343 **HYGIENIC T-TYPE / H IP66/IP69** 356-357 HYGIENIC T-TYPE / C IP66/IP69, -50 °C 364-365 W-TYPE for aggressive environments 376 **EMC** 395 Central lever 410-412 432-435 IP68 LS-TYPE 456-457 E-Xtreme® corrosion proof 48-49, 58, 68-69 \* panel supports: page: 462-463

\* refer to NEWS 2017 pages refer to CN.16 pages

inserts. spring terminal connections



**Q STAMPED CONTACTS, SILVER PLATED MAYAILABLE NOVEMBER 2019** 

description

part No.

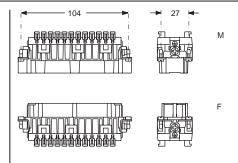
spring terminals with actuator button female inserts with female contacts male inserts with male contacts

- characteristics according to EN 61984:

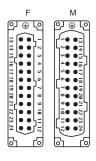
## 16A 500V 6kV 3 16A 400/690V 6kV 2

- cURus, CSA, CQC, DNV-GL, BV, EAC pending
- rated voltage according to UL/CSA: 600V
- insulation resistance: ≥ 10 GΩ
- ambient temperature limit: -40 °C ... +125 °C
- made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: ≥ 500 cycles
- contact resistance: ≤ 3 mΩ

### CSHF 24 S CSHM 24 S



contacts side (front view)



- inserts for connectors with the following conductor cross-sectional areas: 0,14 - 2,5 mm2 - AWG 26 - 14
- conductors stripping lenght: 9...11 mm

## SQUICH®-spring connection technology

### CLOSING



Deeply insert the stripped conductor in its round seat.



Press the actuator button to close the terminal.

## **RE-OPENING**



## CSHF/M SN 32 poles + (a) 16A - 500V SQUICH®

enclosures: page: size "77.62" C-TYPE IP65/IP66 250-256 C7 IP67, two levers 276 V-TYPE IP65/IP66, single lever 282-292, 295 312-315 **BIG** hoods T-TYPE IP65 insulating 330-331 T-TYPE / W IP66 insulating 340-341 **HYGIENIC T-TYPE / H IP66/IP69** 354-355 HYGIENIC T-TYPE / C IP66/IP69, -50 °C 362-363 W-TYPE for aggressive environments 375 **EMC** 394 Central lever 408-409 428-431 IP68 LS-TYPE 454-455 E-Xtreme® corrosion proof 57, 66-67 \* panel supports: page: 462-463

\* refer to NEWS 2017 pages ■ refer to CN.16 pages inserts, spring terminal connections

Q STAMPED CONTACTS, SILVER PLATED

AVAILABLE NOVEMBER 2019

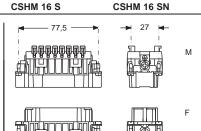
description part No. part No.

spring terminals with actuator button female inserts with female contacts, No. (1-16) & (17-32) male inserts with male contacts, No. (1-16) & (17-32)

- characteristics according to EN 61984:

## 16A 500V 6kV 3 16A 400/690V 6kV 2

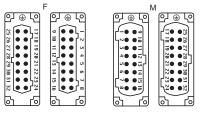
- cURus, CSA, CQC, DNV-GL, BV, EAC pending
- rated voltage according to UL/CSA: 600V
- insulation resistance: ≥ 10 GΩ
- ambient temperature limit: -40 °C ... +125 °C
- made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: ≥ 500 cycles
- contact resistance: ≤ 3 mΩ



CSHF 16 SN

contacts side (front view)

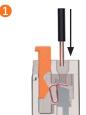
CSHF 16 S



- inserts for connectors with the following conductor cross-sectional areas: 0,14 2,5 mm² AWG 26 14
- conductors stripping lenght: 9...11 mm

## SQUICH®-spring connection technology

### CLOSING



Deeply insert the stripped conductor in its round seat.



Press the actuator button to close the terminal.

## RE-OPENING



## CSHF/M SN 48 poles + (4) 16A - 500V SQUICH®



enclosures: size "104.62" page: C-TYPE IP65/IP66 258-266 C7 IP67, two levers 277 V-TYPE IP65/IP66, single lever 283-296, 299 316-319 **BIG** hoods T-TYPE IP65 insulating 332-333 T-TYPE / W IP66 insulating 342-343 **HYGIENIC T-TYPE / H IP66/IP69** 356-357 HYGIENIC T-TYPE / C IP66/IP69, -50 °C 364-365 W-TYPE for aggressive environments 376 **EMC** 395 Central lever 410-412 432-435 IP68 LS-TYPE 456-457 E-Xtreme® corrosion proof 58, 68-69 \* panel supports: page: 462-463

\* refer to NEWS 2017 pages ■ refer to CN.16 pages Q STAMPED CONTACTS, SILVER PLATED

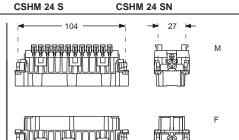
description part No. part No.

spring terminals with actuator button female inserts with female contacts, No. (1-24) & (25-48) male inserts with male contacts, No. (1-24) & (25-48)

- characteristics according to EN 61984:

## 16A 500V 6kV 3 16A 400/690V 6kV

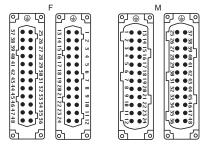
- cURus, CSA, CQC, DNV-GL, BV, EAC pending
- rated voltage according to UL/CSA: 600V
- insulation resistance: ≥ 10 GΩ
- ambient temperature limit: -40 °C ... +125 °C
- made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: ≥ 500 cycles
- contact resistance: ≤ 3 mΩ



CSHF 24 SN

contacts side (front view)

CSHF 24 S

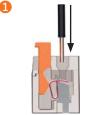


 inserts for connectors with the following conductor cross-sectional areas: 0,14 - 2,5 mm² - AWG 26 - 14
 conductors stripping lenght: 9...11 mm

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

## $\textbf{SQUICH}^{\texttt{@}}\textbf{-spring connection technology}$

### CLOSING

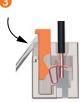


Deeply insert the stripped conductor in its round seat.



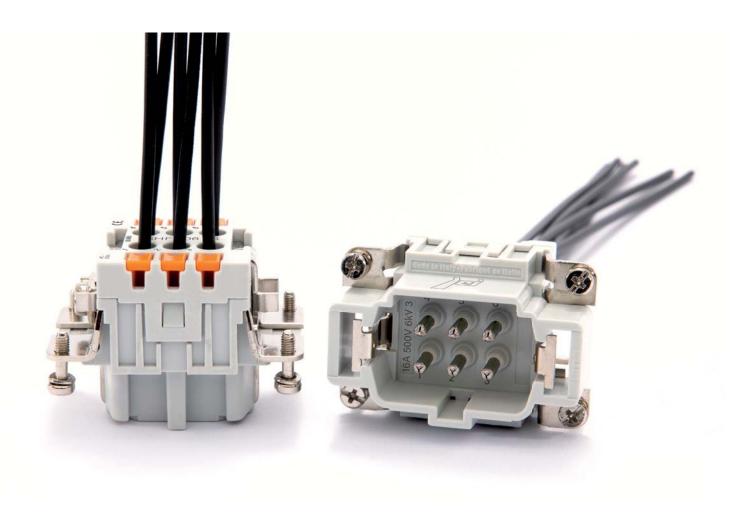
Press the actuator button to close the terminal.

## **RE-OPENING**



JEI® SQUICH® INSERTS "S" VERSION (06, 10, 16, 24, 32, 48 poles)





JEI® series inserts
with actuator button,
now with <u>stamped</u>
<u>tin-plated contacts</u>





## TECHNICAL FEATURES JSHF/M 06, 10, 16 (16 SN), 24 (24 SN) S

Demand for cost-effective solutions for large serial production is constantly growing and stamped contacts meet the basic needs fur such applications.

Stamped contacts meet the ILME patented SQUICH® technology connector inserts with actuator button, featuring all the well-known advantages of the ILME quick connection technology:

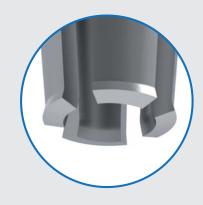
- JEI® series variant of the ILME patented CSH-SQUICH® series spring-clamp connector inserts with actuator button, featuring a new type of stamped contacts;
- tin plating of the contacts, suitable for up to 200 mating cycles:





- provides a cost-effective choice for all fields of application neither requiring the extended number of operating cycles nor the superior robustness of solid machined brass contacts of CSH series;
- features all the well-known advantages of the SQUICH® proprietary technology:
  - reduced wiring time (spring-clamp terminals are presented "open", with the actuator button lifted up); up to **50% saving time** compared to screw connection;
  - **operator skill independence** (no need to open the spring-clamp terminals by direct operation of a possibly unsuitable tool on the spring);
  - **no special wire preparation** (only stripping at the correct length);
  - · no wiring tool needed;
  - resistance to strong vibrations typical of the self-compensating spring-clamp technology;
  - possibility to use rigid and flexible stranded copper conductors with range of cross sectional area between 0,14 mm<sup>2</sup> and 2,5 mm<sup>2</sup> (26 - 14 AWG);
  - possibility to insert the **test probe** of a measurement instrument in the cavity of the actuator button (proprietary design);
  - simple re-opening of a terminal (if needed) using a flat blade screwdriver on the actuator button dedicated side window.

new stamped and tin-plated contacts suitable for up to 200 mating cycles





## JSHF/M 06 S 6 poles + ⊕ 16A - 500V SQUICH®

enclosures:

size "44.27" page:

JEI®-P thermoplastic lever92 - 93JEI®-V zinc-plated steel lever102 - 104T-TYPE IP65 insulating134 - 135

panel supports:

COB 143 - 144

inserts, spring terminal connections



Q STAMPED CONTACTS, TIN PLATED 
AVAILABLE NOVEMBER 2019

refer to JEI catalogue

description

spring terminals with actuator button female inserts with female contacts

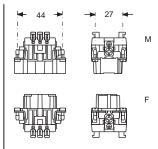
- characteristics according to EN 61984:

16A 500V 6kV 3 16A 400/690V 6kV 2

male inserts with male contacts

- cURus, CSA, CQC, DNV-GL, BV, EAC pending
- rated voltage according to UL/CSA: 600V
- insulation resistance: ≥ 10 GΩ
- ambient temperature limit: -40 °C ... +125 °C
- made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: ≥ 200 cycles
- contact resistance: ≤ 3 mΩ

JSHF 06 S JSHM 06 S



contacts side (front view)



- inserts for connectors with the following conductor cross-sectional areas: 0,14 2,5 mm<sup>2</sup> AWG 26 14
- conductors stripping lenght: 9...11 mm

## SQUICH®-spring connection technology

### CLOSING



Deeply insert the stripped conductor in its round seat.



Press the actuator button to close the terminal.

## RE-OPENING



## JSHF/M 10 S 10 poles + ⊕ 16A - 500V SQUICH®



enclosures: size "57.27"

page: JEI®-P thermoplastic lever 94 - 95

JEI®-V zinc-plated steel lever 105 - 109 T-TYPE IP65 insulating 136 - 137

panel supports: page:

СОВ 143 - 144 inserts. spring terminal connections



**Q STAMPED CONTACTS, TIN PLATED M** AVAILABLE NOVEMBER 2019

## refer to JEI catalogue

### description

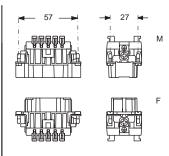
spring terminals with actuator button female inserts with female contacts male inserts with male contacts

- characteristics according to EN 61984:

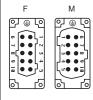
16A 500V 6kV 3 16A 400/690V 6kV 2

- cURus, CSA, CQC, DNV-GL, BV, EAC pending
- rated voltage according to UL/CSA: 600V
- insulation resistance: ≥ 10 GΩ
- ambient temperature limit: -40 °C ... +125 °C
- made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: ≥ 200 cycles
- contact resistance: ≤ 3 mΩ

JSHF 10 S JSHM 10 S



contacts side (front view)



- inserts for connectors with the following conductor cross-sectional areas: 0,14 - 2,5 mm<sup>2</sup> - AWG 26 - 14
- conductors stripping lenght: 9...11 mm

## SQUICH®-spring connection technology

### CLOSING



Deeply insert the stripped conductor in its round seat.



Press the actuator button to close the terminal.

## **RE-OPENING**



## **JSHF/M 16 S** 16 poles + ⊕ 16A - 500V **SQUICH**®

enclosures: size "77.27"

page: JEI®-P thermoplastic lever 96 - 97 JEI®-V zinc-plated steel lever 110 - 114

T-TYPE IP65 insulating 138 - 139

panel supports: page:

СОВ 143 - 144 inserts. spring terminal connections



**Q STAMPED CONTACTS, TIN PLATED M** AVAILABLE NOVEMBER 2019

refer to JEI catalogue

description

spring terminals with actuator button

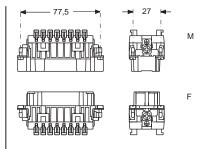
female inserts with female contacts male inserts with male contacts

- characteristics according to EN 61984:

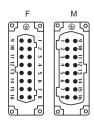
## 16A 500V 6kV 3 16A 400/690V 6kV 2

- cURus, CSA, CQC, DNV-GL, BV, EAC pending
- rated voltage according to UL/CSA: 600V
- insulation resistance: ≥ 10 GΩ
- ambient temperature limit: -40 °C ... +125 °C
- made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: ≥ 200 cycles
- contact resistance: ≤ 3 mΩ

JSHF 16 S JSHM 16 S



contacts side (front view)



- inserts for connectors with the following conductor cross-sectional areas: 0,14 - 2,5 mm<sup>2</sup> - AWG 26 - 14
- conductors stripping lenght: 9...11 mm

## SQUICH®-spring connection technology

### CLOSING

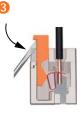


Deeply insert the stripped conductor in its round seat.



Press the actuator button to close the terminal.

## **RE-OPENING**



## JSHF/M 24 S 24 poles + ⊕ 16A - 500V SQUICH®



enclosures: size "104.27"

page: JEI®-P thermoplastic lever 98 - 99

JEI®-V zinc-plated steel lever 115 - 119 T-TYPE IP65 insulating 140 - 141

panel supports: page:

СОВ 143 - 144 inserts. spring terminal connections



**Q STAMPED CONTACTS, TIN PLATED M** AVAILABLE NOVEMBER 2019

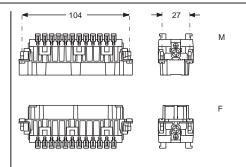
## refer to JEI catalogue

description

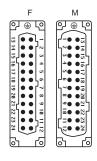
spring terminals with actuator button female inserts with female contacts male inserts with male contacts

- characteristics according to EN 61984:
- 16A 500V 6kV 3 16A 400/690V 6kV 2
- cURus, CSA, CQC, DNV-GL, BV, EAC pending
- rated voltage according to UL/CSA: 600V
- insulation resistance: ≥ 10 GΩ
- ambient temperature limit: -40 °C ... +125 °C
- made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: ≥ 200 cycles
- contact resistance: ≤ 3 mΩ

JSHF 24 S JSHM 24 S



contacts side (front view)



- inserts for connectors with the following conductor cross-sectional areas: 0,14 - 2,5 mm<sup>2</sup> - AWG 26 - 14
- conductors stripping lenght: 9...11 mm

SQUICH®-spring connection technology

### CLOSING



Deeply insert the stripped conductor in its round seat.



Press the actuator button to close the terminal.

## **RE-OPENING**



## JSHF/M S 32 poles + ⊕ 16A - 500V SQUICH®

enclosures: size "77.62"

JEI®-P thermoplastic lever JEI®-V zinc-plated steel lever page:

120-121

inserts, spring terminal connections



Q STAMPED CONTACTS, TIN PLATED 
AVAILABLE NOVEMBER 2019

## refer to JEI catalogue

description part No. part N

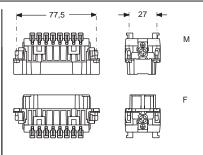
spring terminals with actuator button female inserts with female contacts, No. (1-16) & (17-32) male inserts with male contacts, No. (1-16) & (17-32)

JSHF 16 S JSHF 16 SN JSHM 16 S JSHM 16 SN

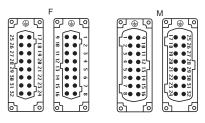
- characteristics according to EN 61984:

## 16A 500V 6kV 3 16A 400/690V 6kV 2

- cURus, CSA, CQC, DNV-GL, BV, EAC pending
- rated voltage according to UL/CSA: 600V
- insulation resistance: ≥ 10 GΩ
- ambient temperature limit: -40 °C ... +125 °C
- made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: ≥ 200 cycles
- contact resistance: ≤ 3 mΩ



contacts side (front view)



- inserts for connectors with the following conductor cross-sectional areas: 0,14 2,5 mm² AWG 26 14
- conductors stripping lenght: 9...11 mm

## SQUICH®-spring connection technology

### CLOSING



Deeply insert the stripped conductor in its round seat.



Press the actuator button to close the terminal.

## RE-OPENING



## JSHF/M S 48 poles + ⊕ 16A - 500V SQUICH®



enclosures: size "104.62"

JEI®-V zinc-plated steel lever

page:

122

spring terminal connections

inserts.

JSHF 24 S



Q STAMPED CONTACTS, TIN PLATED 
AVAILABLE NOVEMBER 2019

## refer to JEI catalogue

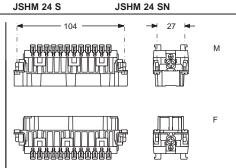
description part No. part N

spring terminals with actuator button female inserts with female contacts, No. (1-24) & (25-48) male inserts with male contacts, No. (1-24) & (25-48)

- characteristics according to EN 61984:

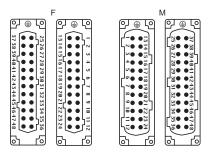
## 16A 500V 6kV 3 16A 400/690V 6kV 2

- cURus, CSA, CQC, DNV-GL, BV, EAC pending
- rated voltage according to UL/CSA: 600V
- insulation resistance: ≥ 10 GΩ
- ambient temperature limit: -40 °C ... +125 °C
- made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: ≥ 200 cycles
- contact resistance: ≤ 3 mΩ



JSHF 24 SN

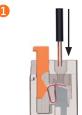
contacts side (front view)



- inserts for connectors with the following conductor cross-sectional areas: 0,14 2,5 mm² AWG 26 14
- conductors stripping lenght: 9...11 mm

## SQUICH®-spring connection technology

### CLOSING

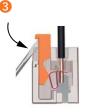


Deeply insert the stripped conductor in its round seat.



Press the actuator button to close the terminal.

## RE-OPENING



## CQ CONNECTOR INSERTS CQ4F/M 02 - CQ4F/M 02 H



Crimp connector inserts for high current needs, single phase AC or DC, compact size "21.21", 2 poles + PE for CX crimp contacts (including the PE pre-leading one) fingerproof IP2X, standard version: 40A 400V 6kV 3 higher voltage (H version): 40A 830V 6kV 3



## TECHNICAL FEATURES CQ4F/M 02

- 2P+PE compact size connector inserts for high current (40A - 400V 6kV 3); size 21.21;
- male and female connector inserts fingerproof IP2X also on the mating face (useful e.g. when a male connector is on the motor side of a drive, including capacitors, potentially charged for residual time);
- special polarisation key on the connector bodies mating face to avoid the mismating with the higher voltage CQ4F /M 02 H 830V version:
- suitable for CX crimp contacts series (<u>including the PE pre-leading one</u>), covering stranded copper conductors cross sectional area range 1,5 mm² to 10 mm² (16 AWG to 8 AWG);
- possibility of up to 16 different codings thanks to the use of two optional CR Q02 coding pins (it is possible to install two pins with 4 positions each);
- in combination with high cross-sectional area conductors (large cable diameter), it is advisable to use size "21.21" enclosures with large M25 threaded cable entry (MK, MKA, MGK);
- extends series CQ4 that now includes the 2P+PE CQ4F/M 02 H higher voltage version and the already available 3P+PE CQ4F/M 03 connector insert.

## CQ4F/M 02 H

- 2P+PE compact size connector inserts for high current and higher voltage needs (40A - 830V 6kV 3); size "21.21";
- male and female connector inserts fingerproof IP2X also for the mating face (useful e.g. when a male connector is on the motor side of a drive including capacitors, potentially charged for residual time);
- supplied with a special insulating heat-shrinking tube that provides the required additional insulation towards a metal housing;
- special polarisation key on the connector bodies mating face to avoid the mismating with the lower voltage CQ4F/M 02 400V version;
- specific 830V rated voltage duly marked on the inserts, to avoid any possible confusion with similar CQ4F/M 02 for 400V;
- suitable for CX crimp contacts series (<u>including the PE pre-leading one</u>), covering stranded copper conductors cross sectional area range 1,5 mm² to 10 mm² (16 AWG to 8 AWG);
- possibility of up to 16 different codings thanks to the use of two optional CR Q02 coding pins (it is possible to install two pins with 4 positions each);
- in combination with high cross-sectional area conductors (large cable diameter), it is advisable to use size "21.21" enclosures with large M25 threaded cable entry (MK, MKA, MGK);
- extends series CQ4 that now includes the 2P+PE CQ4F/M 02 H higher voltage version and the already available 3P+PE CQ4F/M 03 connector insert.

special polarisation key on the connector bodies mating face to avoid the mismating with the higher 830V voltage version



CQ4F/M 02 Lower voltage version



CQ4F/M 02 H Higher 830V voltage version

#### 2 poles + 🖶 40A - 400V CQ4F/M 02

enclosures: size "21.21" page: Insulating type 221 - 222 74 - 77 \*\* Metallic type 223 - 225 80 - 85 \*\* W-TYPE for aggressive environments 369 387 IP68 416 - 418 88 - 89 \*\* 50 - 51 \* E-Xtreme® corrosion proof

- cannot be used in angled enclosures (IA/IAP/VA version)

\* refer to NEWS 2017 pages \*\* refer to 2019 Multipole connectors pages

refer to CN.16 pages

inserts, crimp connections





40A crimp contacts silver plated



**M** AVAILABLE JUNE 2019

part No. description part No.

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

CQ4F 02 CQ4M 02

40A female crimp contacts 1,5 mm<sup>2</sup> AWG 16 2,5 mm<sup>2</sup> AWG 14 4 mm² AWG 12 6 mm<sup>2</sup> AWG 10 10 mm<sup>2</sup> AWG 8 40A male crimp contacts 1,5 mm<sup>2</sup> AWG 16 2,5 mm<sub>2</sub> AWG 14 4 mm<sup>2</sup> AWG 12

6 mm<sup>2</sup> AWG 10 10 mm<sup>2</sup> AWG 8

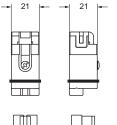
**CXFA 1.5 CXFA 2.5** CXFA 4.0 CXFA 6.0 CXFA 10

**CXMA 1.5 CXMA 2.5 CXMA 4.0 CXMA 6.0** CXMA 10

- characteristics according to EN 61984:

### 40A 400V 6kV 3

- cURus, CSA, CQC, DNV-GL, BV, EAC pending
- rated voltage according to UL/CSA: 600V
- insulation resistance: ≥ 10 GΩ
- ambient temperature limit: -40 °C ... +125 °C
- made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: ≥ 500 cycles
- contact resistance: ≤ 0,3 mΩ
- it is recommended to crimp the contacts with  $\begin{center} \textbf{crimping tools homologated by ILME} \end{center} \label{eq:crimping} \end{center}$ see the crimping tool section 40Å contacts CXF and CXM series) on pages 531-539 and 544-549 of CN.16 catalogue



M

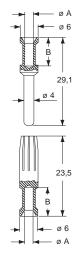


contacts side (front view)





- wire diameter: up to 7,5 mm conductor cross-sectional area: up to 10 mm²



## **CXF and CXM contacts**

conductor cross-sectional area (mm²)	conductor slot ø A (mm)	conductor stripping length B (mm)	
1,5	1,8	9	
2,5	2,2	9	
4	2,85	9,6	
6	3,5	9,6	
10	4,3	15	

#### CQ4F/M 02 H 2 poles + ⊕ 40A - 830V



enclosures: size "21.21" page: Insulating type 221 - 222 74 - 77 \*\* Metallic type 223 - 225 80 - 85 \*\* W-TYPE for aggressive environments 369 387 IP68 416 - 418 88 - 89 \*\* 50 - 51 \* E-Xtreme® corrosion proof

- cannot be used in angled enclosures (IA/IAP/VA version)

- \* refer to NEWS 2017 pages \*\* refer to 2019 Multipole connectors pages
- refer to CN.16 pages

inserts, crimp connections heat-shrinking tube



**☑** HIGHER VOLTAGE 830V **M** AVAILABLE JUNE 2019

40A crimp contacts silver plated



part No. description part No.

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

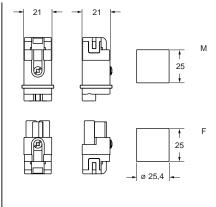
CQ4F 02 H **CQ4M 02 H** 

1,5 mm<sup>2</sup> AWG 16 2,5 mm<sup>2</sup> AWG 14 4 mm<sup>2</sup> AWG 12 6 mm<sup>2</sup> AWG 10 10 mm<sup>2</sup> AWG 8 40A male crimp contacts 1,5 mm<sup>2</sup> AWG 16 2,5 mm<sub>2</sub> AWG 14 4 mm<sup>2</sup> AWG 12 6 mm<sup>2</sup> AWG 10 10 mm<sup>2</sup> AWG 8

40A female crimp contacts

CXFA 10 **CXMA 1.5** CXMA 2.5 **CXMA 4.0 CXMA 6.0** CXMA 10

- characteristics according to EN 61984:
- 40A 830V 6kV 3
- cURus, CSA, CQC, DNV-GL, BV, EAC pending
- rated voltage according to UL/CSA: 600V
- insulation resistance: ≥ 10 GΩ
- ambient temperature limit: -40 °C ... +125 °C
- made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: ≥ 500 cycles
- contact resistance: ≤ 0,3 mΩ
- it is recommended to crimp the contacts with  $\begin{center} \textbf{crimping tools homologated by ILME} \end{center} \label{eq:crimping} \end{center}$ see the crimping tool section 40Å contacts CXF and CXM series) on pages 531-539 and 544-549 of CN.16 catalogue

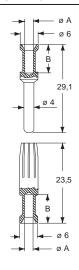


contacts side (front view)





- wire diameter: up to 7,5 mm conductor cross-sectional area: up to 10 mm²



**CXFA 1.5** 

**CXFA 2.5** 

CXFA 4.0

CXFA 6.0

### CXF and CXM contacts

CAT and CAM contacts			
conductor slot ø A (mm)	conductor stripping length B (mm)		
1,8	9		
2,2	9		
2,85	9,6		
3,5	9,6		
4,3	15		
	conductor slot Ø A (mm) 1,8 2,2 2,85 3,5		

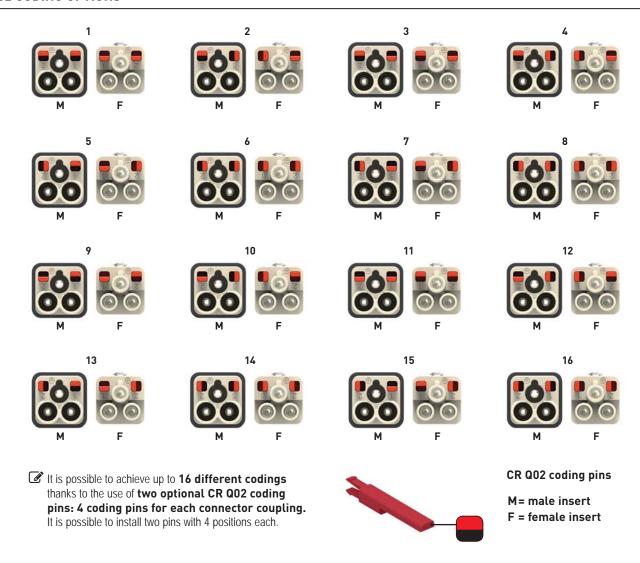
## CR Q02 coding pins



coding pins (optional) for CQ4 02 inserts

CR Q02

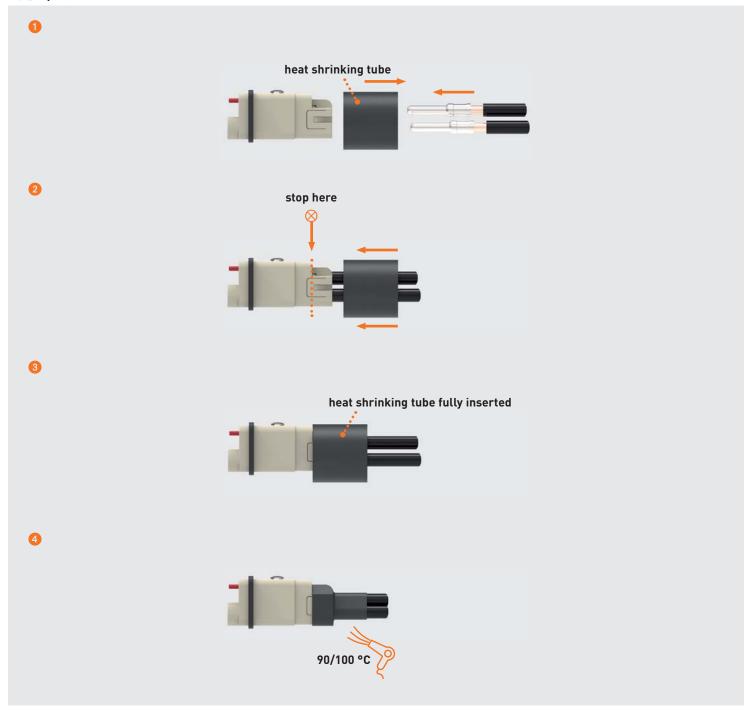
## **CR Q02 CODING OPTIONS**



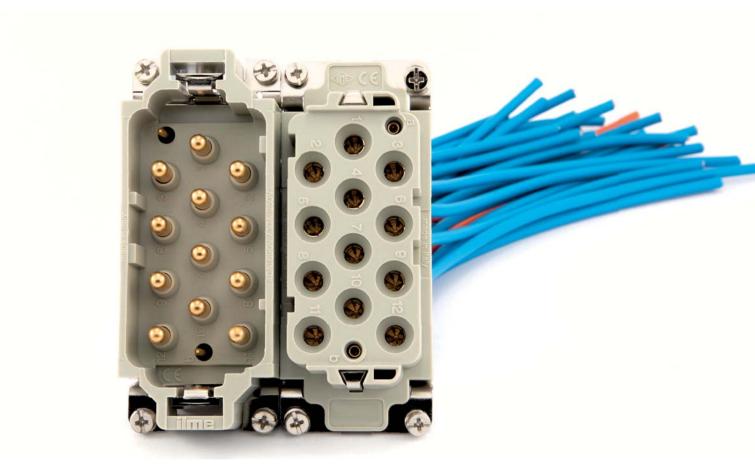


## **ASSEMBLY INSTRUCTIONS**

## CQ4F/M 02 H



## HIGH NUMBER OF MATINGS RXF/M 12/2 CRIMP CONNECTOR INSERTS



12 poles (power) connector

40A - 690V for RX series HNM crimp contacts,

+ 2 poles (auxiliary)

10A - 250V for RD series HNM crimp contacts + PE



Find more information on our products at www.ilme.com



# TECHNICAL FEATURES RXF/M 12/2

- special **HNM** version (**High Number of Matings** up to 10.000 cycles) of CXF/M 12/2 connector inserts, to be used in combination with:
  - up to 12 40A HNM gold plated removable crimp contacts of the new RX series,
  - 2 10A HNM gold plated removable crimp contacts of the already available RD series;
- crimp connector inserts with a combination of 12 power contacts (40A) plus 2 auxiliary contacts (10A) + PE;
- suitable for the operation of 4 three-phase AC motors with 2 auxiliary contacts;
- **10.000 matings** with HNM enclosures; **5.000 matings** with standard enclosures, single lever.

featuring a special antifriction treatment to guarantee up to 10.000 mating cycles



#### 12 poles (40A - 690V) + 2 poles (10A - 250V) + 🕀 RX

page:

### **High Number of Matings**

enclosures: size "77.27"

94-95 \* HNM C-TYPE IP65/IP66, single lever 250-256 V-TYPE IP65/IP66, single lever 282-292, 295 inserts, crimp connections



**MARCH 2019** 

40A and 10A crimp contacts gold plated





## 40A: AVAILABLE MARCH 2019

\* refer to NEWS 2017 pages

refer to CN.16 pages

description

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

male inserts for male contacts 40A female crimp contacts

1,5 mm<sup>2</sup> 2,5 mm<sup>2</sup> 4 mm<sup>2</sup> AWG 14 AWG 12 AWG 10 40A male crimp contacts

AWG 16 AWG 14 1,5 mm<sup>2</sup> 2,5 mm<sub>2</sub> 4 mm<sup>2</sup> AWG 12 **AWG 10** 6 mm<sup>2</sup> 10A female contacts

AWG 26-22 identification No. 1 0.14-0.37 mm<sup>2</sup> 0,5 mm AWG 20 identification No. 2 0.75 mm<sup>2</sup> **AWG 18** identification No ② AWG 18 1 mm<sup>2</sup> identification No. 3 identification No. 4 identification No. 5 1,5 mm<sup>2</sup> AWG 16 2,5 mm<sup>2</sup> AWG 14

10A male contacts

0,14-0,37 mm<sup>2</sup> AWG 26-22 identification No. 1 0,5 mm<sup>2</sup> 0,75 mm<sup>2</sup> AWG 20 identification No. 2 AWG 18 identification No. ② 1 mm<sup>2</sup> **AWG 18** identification No. 3 AWG 16 identification No. 4 1.5 mm<sup>2</sup> AWG 14 identification No. 5 part No.

**RXF 12/2 RXM 12/2** 

> **RXF2D 1.5** RXF2D 2.5 RXF2D 4.0 plated **RXF2D 6.0**

part No

0 **RXM2D 1.5** RXM2D 2.5 RXM2D 4.0 **RXM2D 6.0** 

**RDF2D 0.3** RDF2D 0.5 **RDF2D 0.7** RDF2D 1.0 RDF2D 1.5 RDF2D 2.5

plated gold

**RDM2D 0.3** RDM2D 0.5 RDM2D 0.7 **RDM2D 1.0 RDM2D 1.5 RDM2D 2.5** 

- characteristics according to EN 61984:

40A 690V 8kV 3 250V 4kV

- cURus, CSA, CQC, DNV-GL, BV, EAC pending
- rated voltage according to UL/CSA: 600V 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: ≤ 0,3 m $\Omega$  (12 poles), ≤ 1 m $\Omega$  (2 poles)
- for maximum current load refer to the following connector inserts derating diagram

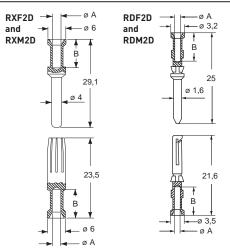
# M

contacts side (front view)





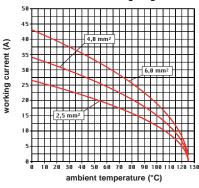
- it is recommended to crimp the contacts with crimping tools homologated by ILME (please see the crimping tool section 40A contacts, RXF2D, RXM2D series and 10A contacts RDF2D\_RDM2D series) on pages 531-539 and 544-549 of CN.16 catalogue



conductor cross-sectional	conductor slot	conductor stripping length
area mm²	ø A (mm)	B (mm)
1,5	1,8	9
1,5 2,5	2,2	9
4	2,85	9.6
6	3,5	9,6
RDF2D and RDM	2D contacts	

RDF2D and RDM2D contacts			
0,14-0,37	0,9	8	
0,5	1,1	8	
0,75	1,3	8	
1,0	1,45	8	
1,5 2,5	1,8	8	
2,5	2,2	6	

#### RX 12/2 power poles connector inserts Maximum current load derating diagram







## **MIXO SERIES**

The MIXO series, featuring a flexible modular design for an easy and safe installation, is continuously expanded with new modules allowing more possibilities and performance to built connectors more and more customized:

- CX 05 SHF/M, MIXO 16A
   SQUICH® module with spring clamp contacts actuator buttons single-sized, 5 poles, 16A 400V
- CX 42 DF/DM, MIXO 10A crimp module, double-sized, 42 poles, 10A – 150V

Besides the new modules, MIXO series widens its portofolio with the following novelties:

- MIXO ONE series of housings for the single sized modules, see page 52
- CR 16 SSD / 24 SSD anchorages for off-axis fastening, see page 116
- CGT 6.0, CGT 10 and CGT PE adapters for MIXO frames in addition to the existing CGT 16, see page 120

#### **MIXO SERIES AT A GLANCE**





# THE COMPLETE RANGE OF MODULES

**2019 products** are marked with the **!** symbol.

Inserts	Contact type	Signal type	Kind of connection	Rated current (A)	Rated voltage (V)	No. of frame slots	HNM suitable
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	yes
CX 03 4BF/BM	main	electric	crimp	40	500	1	yes
CX 3/4 XDF/M	main	electric	crimp	40/10	830	1	_
CX 04 XF/M	main	electric	crimp	40	830	1	yes
CX 05 SF/M	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	yes
CX 06P CF/M	main	electric	crimp	16	830	1	yes
CX 08 CF/M	main	electric	crimp	16	400	1	yes
CX 08 I6F/M	main	electric	crimp	5	50	1	_
CX 20 CF/M	main	electric	crimp	16	500	2	yes
CX 12 DF/M	main / auxiliary	electric	crimp	10	250	1	yes
CX 17 DF/M	main / auxiliary	electric	crimp	10	160	1	yes
CX 42 DF/M	main / auxiliary	electric	crimp	10	150	2	yes
CX 25 IBF/M	main / auxiliary	electric	crimp	4	50	1	_
CX 25 IF/M	main / auxiliary	electric	crimp	4	50	1	_
CX 02 CHF/M	main	electric	crimp	16	2500	1	_
CX 02 HF/M	main	electric	crimp	16	2900/5000	2	_
CX 02 BF/M	seat for two shielded connectors		<u> </u>		27007000	2	_
CX 01 BCF/M	main / auxiliary + shield	electric	crimp	16	50	_	_
CX 01 BF/M	main / auxiliary + shield	electric	crimp	10	50	_	_
CX 04 BF/M	main / auxiliary + shield	electric	crimp	10	50	_	_
CX 08 BF/M	main / auxiliary + shield	electric	crimp	5	50	_	_
CX 03 P	pneumatic Ø 1,6 - 3,0 - 4,0 mm	air	push-in	_	_	1	_
CX 02 P	pneumatic Ø 6,0 mm	air	push-in	_	_	1	_
CX FM	none (dummy module)	_	_	_	_	1	yes
CX 01 J8F/M/IM	RJ45	electric	crimp/IDC		_	1	_
CX 01 JF/M	RJ45 + auxiliary	electric	crimp	10	250	2	_
CX 02 JF/M	RJ45 + auxiliary	electric	crimp	10	250	3	_
CX 01 UF/M	USB	electric	—	_	_	1	_
CX 01 9VF/M	D-SUB	electric	crimp	5	50	1	
CX 01 9VTF	D-SUB	electric	screw	5	50	1	
CX 04 LF/M	POF / MOST	optic	crimp	_	_	1	
CX 04 LF/M	coaxial	electric	crimp			1	
CX 04 KF/M	SC fibre optic	optic	crimp/glue			1	

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). For more information refer to pages 45, 49.

1

size: 1 frame slot

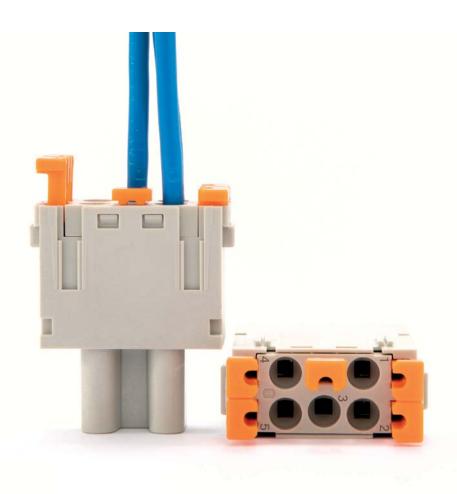


size: 2 frame slots



size: 3 frame slots

# MIXO - SQUICH® CX 05 SHF/SHM



MIXO 5 poles, SQUICH® version spring with actuator buttons 16A 400V 6kV 3



Watch our SQUICH® video



# TECHNICAL FEATURES CX 05 SHF/SHM

- SQUICH® technology has now been applied to the ILME MIXO series of modular connectors.
   Main aim is to make wiring an installation easier and safer on every possible connector. On this purpose, the new MIXO SQUICH® 5 poles is the improved version of the CX 05 SF/SM spring clamp module;
- consistently reduced wiring time, as the actuator buttons are supplied lifted, in "open terminal" position, so that the stripped wires can be directly inserted;
- operator skill independence: thanks to the SQUICH® proprietary technology a simple pressure on the top of the actuator button triggers the locking of the conductor in the terminal, avoiding the need of a specific screwdriver and the relevant skill in its correct choice and application;
- great resistance to strong vibrations inherent to self-compensating spring-clamp technology;
- no special wire preparation (only stripping at the correct length);

- it allows the **use of both rigid and flexible** copper conductors, with a range of cross-sectional area between 0,14 mm<sup>2</sup> and 2,5 mm<sup>2</sup> (26 AWG to 14 AWG);
- for conductors prepared with crimped ferrules, the maximum cross-sectional area is 1,5 mm<sup>2</sup>;
- possibility to insert the **test probe** of a measurement instrument in the dedicated cavity on the actuator button (proprietary design);
- silver plated contacts;
- simple re-opening of a terminal (if needed) using a 0,5 x 3 mm flat blade screwdriver on the actuator button dedicated side window (on terminal #3 use the same screwdriver under any of the two lateral projections of the actuator button head; after removing the wire from the relevant terminal #1 or #4).

features new patented actuator buttons in a compact version



### CX 05 SHF/SHM 5 poles 16A - 400V SQUICH®

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

pages: frames for modular units 45, 49

enclosures:

MIXO ONE 52

modular units, SQUICH®-spring terminal connection



#### **M** AVAILABLE JULY 2019

description

part No.

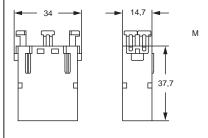
spring terminals with actuator button female inserts with female contacts male inserts with male contacts

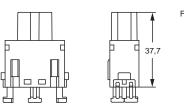
CX 05 SHF CX 05 SHM

- characteristics according to EN 61984:

16A 400V 6kV 3 16A 500V 6kV 2

- cURus, CSA, CQC, DNV-GL, BV, EAC pending
- rated voltage according to UL/CSA: 600V
- insulation resistance: ≥ 10 GΩ
- ambient temperature limit: -40 °C ... +125 °C
- made of self-extinguishing thermoplastic resin UL 94V-0  $\,$
- mechanical life: ≥ 500 cycles
- contact resistance: ≤ 3 mΩ
- for maximum current load refer to the connector inserts derating diagram here below
- Suitable for every conductor type (prepared with ferrule, unprepared and solid) up to cross-sectional area 2,5 mm<sup>2</sup>





contacts side (front view)

rear view, side with reference arrow  $\blacktriangle$ 





- 1 frame slot
- inserts for cables with the following cross-sectional area: 0,14 2,5 mm² AWG 26 14
- conductors stripping length: 9...11 mm

#### MIXO CX 05 SHF/M SQUICH®-spring connection technology

#### CLOSING



Deeply insert the stripped conductor in its round seat.



Press the actuator button to close the terminal.

#### **RE-OPENING**



SIDE (#1 - #2 - #4 - #5)

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



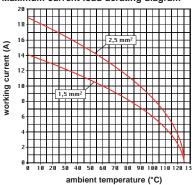
CENTRE (#3)

Free and re-close (per 3 above) terminal #1 or #4.



Insert the screwdriver under the projection of actuator button head #3 and pull it up by levering down.

#### CX 05 SHF/SHM power poles connector inserts Maximum current load derating diagram



#### **CX 01 T**



enclosures: size "49.16" page:

frames for modular units

IL-BRID 230 - 232 W-TYPE 370 **EMC** 390

panel supports:

COB + adapter 462 - 464



#### ■ refer to CN.16 pages

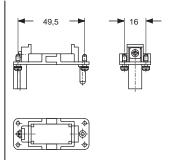
description

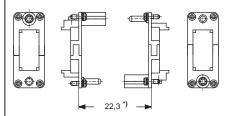
part No.

for CZ enclosures

#### CX 01 T

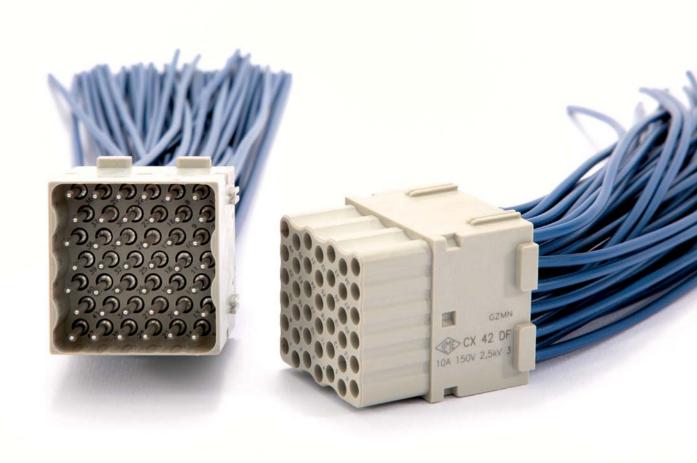
- die-cast zinc alloy framepre-leading protective earth (PE)coding pins CR..CX





- \*) distance for electric contacts: max 24 mm distance for pneumatic contacts: max 23,5 mm
- small protective earth terminal for conductors with cross-sectional area range 1-2,5 mm², AWG 18-14

# MIXO CX 42 DF/DM



MIXO 42 poles (crimp), for use with max 10A CD series, 10A 150V 2,5kV 3

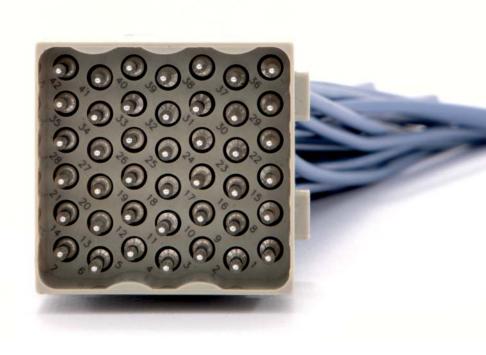




# TECHNICAL FEATURES MIXO CX 42 DF/DM

- double-sized module, for max 10A removable crimp contacts of CD series;
- high contacts density allowing to accomodate up to 42 contacts, while using the same space of two CX 17 DF/DM modules and relevant 34 contacts (suitable to obtain e.g. a 126-pole with a 6-slot MIXO frame);
- suitable for realizing HNM connectors (Hign Number of Matings up to 10.000 cycles) when used in combination with: HNM MIXO frames, HNM crimp contacts RD series and HNM enclosures;
- supplied with dedicated black coloured 2-slot sized lock-in tabs (2, one per each side).

42 contacts.
Contacts density
raised by 20%
(compared
to previous
solution)



#### 42 poles 10A - 150V CX 42 DF/DM

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

pages: frames for modular units \*

modular units, crimp connections



**MAY 2019 AVAILABLE MAY 2019** 

10A crimp contacts, silver and gold plated



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

description part No. part No

49

without contacts (to be ordered separately), supplied with 2 dedicated black coloured 2-slot sized lock-in tabs female inserts for female contacts

**CX 42 DF** CX 42 DM

male inserts for male contacts

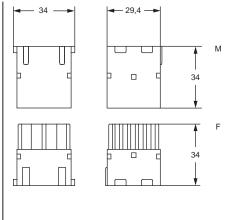
-,,		
0,5 mm <sup>2</sup>	AWG 20	identification No. 2
0,75 mm <sup>2</sup>	AWG 18	identification No. 2
1 mm <sup>2</sup>	AWG 18	identification No. 3
1,5 mm <sup>2</sup>	AWG 16	identification No. 4
2,5 mm <sup>2</sup>	AWG 14	identification No. 5
10A male crimp	contacts	
0,14-0,37 mm <sup>2</sup>	AWG 26-22	identification No. 1
0,5 mm <sup>2</sup>	AWG 20	identification No. 2
0,75 mm <sup>2</sup>	AWG 18	identification No. 2
1 mm <sup>2</sup>	AWG 18	identification No. 3
1,5 mm <sup>2</sup>	AWG 16	identification No. 4
2,5 mm <sup>2</sup>	AWG 14	identification No. 5

10A female crim	p contacts				
0,14-0,37 mm <sup>2</sup>	AWG 26-22	identification No. 1	CDFA 0.3	CDFD 0.3	
0,5 mm <sup>2</sup>	AWG 20	identification No. 2	CDFA 0.5	CDFD 0.5	÷
0,75 mm <sup>2</sup>	AWG 18	identification No. 2	CDFA 0.7 to	CDFD 0.7	te
1 mm <sup>2</sup>	AWG 18	identification No. 3	CDFA 1.0 🔼	CDFD 1.0	plated.
1,5 mm²	AWG 16	identification No. 4	CDFA 1.5		
2,5 mm²	AWG 14	identification No. 5	CDFA 2.5 ≥	CDFD 2.5	gold
			<u>.8</u>		g
10A male crimp	contacts				
0,14-0,37 mm <sup>2</sup>	AWG 26-22	identification No. 1	CDMA 0.3	CDMD 0.3	
),5 mm²	AWG 20	identification No. 2	CDMA 0.5	CDMD 0.5	
),75 mm²	AWG 18	identification No. 2	CDMA 0.7	CDMD 0.7	
1 mm²	AWG 18	identification No. 3	CDMA 1.0	CDMD 1.0	
1,5 mm²	AWG 16	identification No. 4	CDMA 1.5	CDMD 1.5	
2,5 mm²	AWG 14	identification No. 5	CDMA 2.5	CDMD 2.5	

- characteristics according to EN 61984:

#### 10A 150V 2,5kV 3

- cURus, CSA, CQC, DNV-GL, BV, EAC pending
- rated voltage according to UL/CSA: 250V
- insulation resistance: ≥ 10 GΩ
- ambient temperature limit: -40 °C ... +125 °C
- made of self-extinguishing thermoplastic resin
- 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 10A contacts, CDF and CDM series) on pages 531-539 and 544-549 of CN.16 catalogue



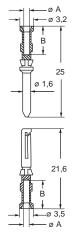
contacts side (front view)

rear view, side with reference arrow ▲





- 2 frame slots



#### **CDF 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

for basic or high thickness gold plating, please refer to page 480 of CN 16





enclosures: page: T-TYPE IP65/IP66 240 - 271 **C7 IP67** 274 - 277 V-TYPE IP65/IP66 280 - 299 BIG 304 - 319 **T-TYPE IP65** 326 - 333 T-TYPE/W IP66 336 - 343 **HYGIENIC T-TYPE/H** 350 - 357 **HYGIENIC T-TYPE/C** 358 - 365 W-TYPE 373 - 378 **EMC** 392 - 395 **CENTRAL LEVER** 404 - 412 IP68 420 - 435 LS-TYPE 450 - 457

panel supports:

COB + adapter 462 - 463 frames for modular units with lock-in tabs (included)



lock-in tabs



refer to CN.16 pages

description part No. part No. frames for modular units type for hoods type for housings

(module lock-in tabs included)

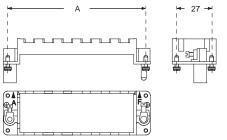
- for 2 modular units for housing size 44.27 - for 3 modular units - for housing size 57.27
- for 4 modular units for housing size 77.27 and 77.62
- for 6 modular units for housing size 104.27 and 104.62
- lock-in tabs (6 units) dividable
- **CX 06 TM CX 06 TF** CX CFM

**CX 02 TM** 

**CX 03 TM** 

**CX 04 TM** 

- 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 tabs to attach units
- polarisation on frames
- code pins CR..CX



57,27

77,27 and 77,62

104,27 and 104,62

CX 02 TF

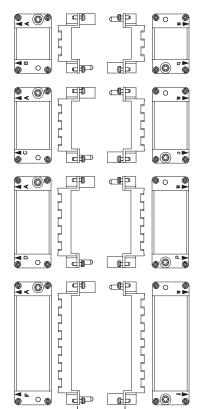
**CX 03 TF** 

**CX 04 TF** 

•		
oart No.	A (mm)	for housings size
CX 02 TM / TF	44	44,27

#### Polarisation of frames with relative identification letters and couplings

#### frames for hoods 1) frames for housings 1)



19.5 2)

#### CX 06 TM / TF Earth terminal

CX 03 TM / TF

CX 04 TM / TF

- large: for cables from 4-6 mm<sup>2</sup>, AWG 12-10

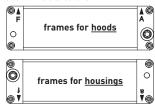
77.5

104

- small: for cables from 1-2,5 mm2, AWG 18-14

position of modules (contact side view)

side with reference arrow A

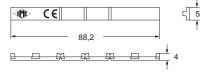


side with reference arrow A

- 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



#### CX 42 DF/DM 42 poles 10A - 150V

### **High Number of Matings**

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

frames for modular units \*

page: 51 modular units, crimp connections



- Q 10.000 MATINGS WITH HNM FRAMES AND HNM ENCLOSURES
- Q 5.000 MATINGS WITH HNM FRAMES AND STANDARD ENCLOSURES, SINGLE LEVER

**MAY 2019** 

10A crimp contacts gold plated



description part No. part No.

without contacts (to be ordered separately), supplied with 2 dedicated black coloured 2-slot sized lock-in tabs female inserts for female contacts

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

male inserts for male contacts

CX 42 DF CX 42 DM

10A female contacts
0,14-0,37 mm² AWG 26-22 identification No. 1
0,5 mm² AWG 20 identification No. 2
0,75 mm² AWG 18 identification No. ②
1 mm² AWG 18 identification No. ③
1,5 mm² AWG 16 identification No. 4
2,5 mm² AWG 14 identification No. 5

10A male contacts
0,14-0,37 mm² AWG 26-22 identification No. 1
0,5 mm² AWG 20 identification No. 2
0,75 mm² AWG 18 identification No. 2
1 mm² AWG 18 identification No. 3
1,5 mm² AWG 16 identification No. 4
2,5 mm² AWG 14 identification No. 5

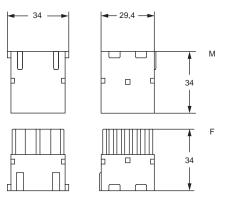
RDF2D 0.3 RDF2D 0.5 RDF2D 0.7 RDF2D 1.0 RDF2D 1.5 RDF2D 2.5

plated\*

RDM2D 0.3 RDM2D 0.5 RDM2D 0.7 RDM2D 1.0 RDM2D 1.5 RDM2D 2.5

- characteristics according to EN 61984:

- **10A 150V 2,5kV 3** cURus, CSA, CQC, DNV-GL, BV, EAC pending
- rated voltage according to UL/CSA: 250V
- 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
- it is recommended to crimp the contacts with crimping tools homologated by ILME (please see the crimping tool section 10A contacts, RDF2D and RDM2D series) on pages 531-539 and 544-549 of CN.16 catalogue



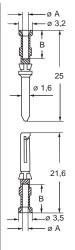
contacts side (front view)

rear view, side with reference arrow  $\blacktriangle$ 





- 2 frame slots



RDF2D and RDM	RDF2D and RDM2D contacts			
conductor cross-sectional area mm <sup>2</sup>	conductor slot ø A (mm)	conductor stripping length B (mm)		
0,14-0,37	0,9	8		
0,5	1,1	8		
0,75	1,3	8		
1,0	1,45	8		
1,5	1,8	8		
2.5	22	6		

for basic or high thickness gold plating, please refer to page 480 of CN.16 catalogue

## RX 02 - RX 03 - RX 04 - RX 06 TM/TF

### **High Number of Matings**



enclosure	s size:	page:
"44.27"	HNM	90 - 91 *
	C-TYPE IP65/IP66, single lever	240 - 243
	V-TYPE IP65/IP66, single lever	284 - 286
	E-Xtreme® corrosion proof	42 - 43, 55, 62 - 63 *
"57.27"	HNM	92 - 93 *
	C-TYPE IP65/IP66, single lever	244 - 249
	V-TYPE IP65/IP66, single lever	288 - 291
	E-Xtreme® corrosion proof	44 - 45, 56, 64 - 65 *
"77.27"	HNM	94 - 95 *
	C-TYPE IP65/IP66, single lever	250 - 256
	V-TYPE IP65/IP66, single lever	292 - 295
	E-Xtreme® corrosion proof	46 - 47, 57, 66 - 67 *
"104.27"	HNM	96 - 97 *
	C-TYPE IP65/IP66, single lever	258 - 266
	V-TYPE IP65/IP66, single lever	296 - 299
	E-Xtreme® corrosion proof	48-49, 58, 68 - 69 *
"77.62"	C-TYPE IP65/IP66, single lever	267 - 270
	E-Xtreme® corrosion proof	59 *
"104.62"	C-TYPE IP65/IP66, single lever	267 - 270
	E-Xtreme® corrosion proof	60 *

\* refer to NEWS 2017 pages ■ refer to CN.16 pages frames for modular units with lock-in tabs (included)



Q 10.000 MATINGS WITH HNM INSERTS AND HNM ENCLOSURES

Q 5.000 MATINGS WITH HNM INSERTS AND STANDARD ENCLOSURES, SINGLE LEVER

type for housings

lock-in tabs

CX CFM



description part No. part No.

type for hoods

frames for modular units (module lock-in tabs 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

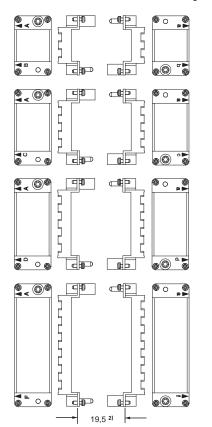
RX 02 TM RX 02 TF RX 03 TM RX 03 TF RX 04 TM RX 04 TF RX 06 TM RX 06 TF

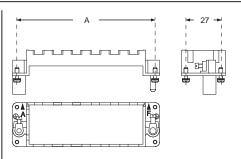
lock-in tabs (6 units) dividable

- die-cast zinc alloy frames
- pre-leading protective earth (PE) contacts
- possibility of mounting female and male modular units on the same frame
- frames supplied with lock-in tabs to attach units
- polarisation on frames
- code pins CR..CX

# Polarisation of frames with relative identification letters and couplings

frames for hoods 1) frames for housings 1)





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

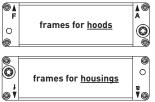
#### Earth terminal

- large: for cables from 4-6 mm<sup>2</sup>, AWG 12-10
- small: for cables from 1-2,5 mm², AWG 18-14

In order to accomodate larger PE conductor cross-sectional area, use CGT PE adapters, see page 124.

position of modules (contact side view)

rear view, side with reference arrow  $\blacktriangle$ 



rear view, side with reference arrow A

- 1) Warning: The module support frames are marked:
- FOR HOODS: upper-case A-B, A-C, A-D and A-F
- FOR HOUSINGS: lower-case 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



# MIXO ONE ENCLOSURES CXA - MXA SINGLE MODULE



MIXO ONE
Aluminium die-cast
housings system,
smart solution for single-sized
MIXO modules





# TECHNICAL FEATURES CXA - MXA

MIXO ONE is the new aluminium housings system designed by ILME to accept the wide range of MIXO series single-sized modules.

These **robust connector enclosures** (3 hood variants and 1 bulkhead mounting housing) transform each single MIXO module into a **completely independent** connector.

The **MIXO ONE** enclosures incorporate a pre-leading (first-make, last-break) PE connection terminal and contact, for the safest connector operation and allow mounting of single MIXO module only in one guided way, to avoid incorrect match with the mating connector.

The pins protruding from the bulkhead mounting housing act also as key guide, in cooperation with the corresponding keyway sockets in the hoods, to avoid incorrect 180° reversed mating with corresponding connector.

#### **Key features:**

- aluminium die cast alloy, nickel plated;
- rigid stainless steel locking lever, releasably mounted on moulted pegs that include a stopping teeth;
- hoods split in two parts (front, rear), to allow MIXO module mounting and simplify the PE connection.
   Supplied with four stainless steel self-threading screws and self-retaining sealing gasket;
- bulkhead mounting housing supplied with fixing frame for MIXO modules and self-retaining flange gasket;
- four optional coding pins CR CX... available, made by self-extinguishing thermoplastic material (UL 94V-0) for up to 16 different codings, as a provision against mismatching when identical connectors are installed side by side;
- **protection covers** for hoods and housings made in shock-proof self-extinguishing thermoplastic material (UL 94V-2) suitable for outdoor exposure, either **with pegs** (for enclosures with locking lever and sealing gasket) or with **locking lever and sealing gasket** (for enclosures with pegs) available either with eyelet-terminated string (for fastening to housings) or with loop-terminated cord (for fastening to hoods, around the incoming cable).

robust and compact design for a new modules concept



### MIXO ONE CXA - MXA

bulkhead mounting housing with single lever



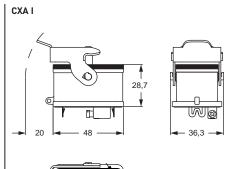
#### **M** AVAILABLE SEPTEMBER 2019

#### hoods with 2 pegs



### **MAYAILABLE SEPTEMBER 2019**

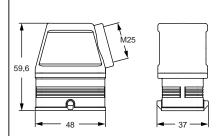
	I and the second	1	
description	part No.	part No.	entry M
with lever	CXA 01 I		
with pegs, side entry (in 2 parts)		MXA 01 O25	25
with pegs, top entry (in 2 parts)		MXA 01 V25	25
with pegs, top entry (in 2 parts)		MXA 01 V32	32



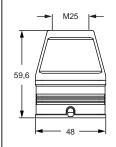


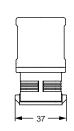
\* for M3 fixing screws (not supplied) with maximum 6 mm head diameter

#### MXA 025

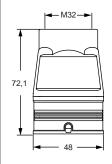


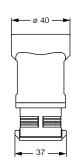
#### MXA V25



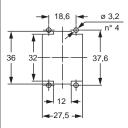


#### MXA V32





panel cut-out for bulkhead mounting housings



Watch our video

cURus Type 4/4X/12 pending



according to IEC/EN 60529

#### CXP covers







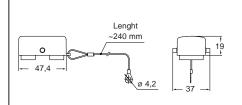
plastic covers with lever and gasket

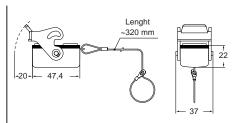


#### **MAYAILABLE SEPTEMBER 2019**

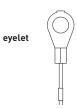
### **MAYAILABLE SEPTEMBER 2019**

description	part No. (with eyelet)	part No. (with loop)
with 2 pegs (for enclosures with 1 lever with gasket)	CXP 01 C	
with 1 lever and gasket (for hoods with 2 pegs)		CXP 01 CLG





#### For fixing on housings



#### For fixing on hoods

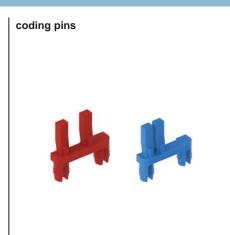


cURus Type 4/4X/12 pending



according to IEC/EN 60529

# CR CX coding pins



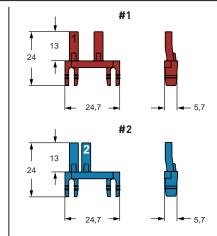


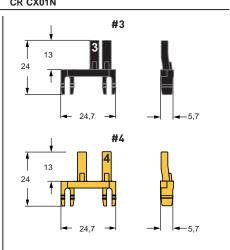


#### **MAYAILABLE SEPTEMBER 2019**

## **MATERIAL SEPTEMBER 2019**

part No.	part No.	
CR CX01R		
CR CX01B		
	CR CX01G	
	CR CX01N	
	CR CX01R	CR CX01R CR CX01B CR CX01G





#### **CR CX01 CODING OPTIONS**



Example
of coding option 6
of 16 different codings
possible (4 coding pins
per each connector
coupling)



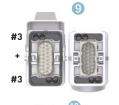
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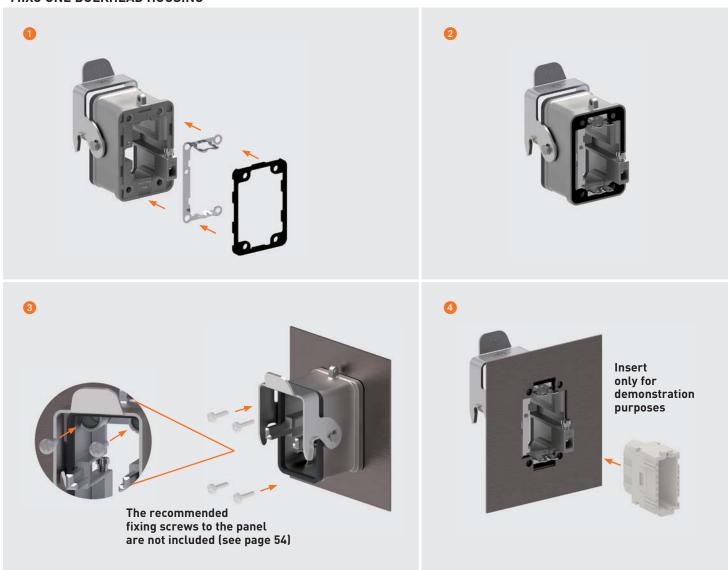




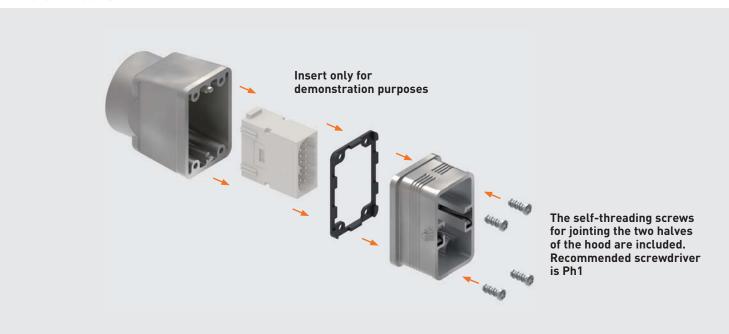


#### **ASSEMBLY INSTRUCTIONS**

#### MIXO ONE BULKHEAD HOUSING



#### **MIXO ONE HOODS**



# METAL HOUSINGS MKA IF size "21.21"



"21.21" size
metal bulkhead
connector housings,
with M32 male
threaded appendix



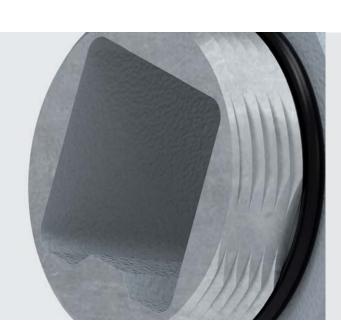


# TECHNICAL FEATURES MKA IF

- metal bulkhead connector housing for all connector inserts size "21.21" with round M32 male threaded appendix underneath the flange, to be fixed to an M32 threaded hole on a panel;
- possibility of panel mounting by means of a plain, unthreaded hole, by an M32 counter nut (to be provided separately);
- full compatibility with all the existing range of size "21.21" hoods;

- available with all variants of locking lever:
   I =standard rigid galvanized steel;
- **X** = "Class" stainless steel with rolls;
- **XX** = rigid stainless steel;
- in standard, W-Type (aggressive environment),
   EMC (improved shielding effectiveness)
   and 180 °C (high temperatures) versions.

round M32 male threaded appendix



#### MKAX standard metallic version

inserts		page:
CK CKS CKSH CD CQ4	3 and 4 poles + ⊕ 3 and 4 poles + ⊕ 3 and 4 poles + ⊕ 8 poles 2 poles + ⊕	48 49 7 ** 54 32 ***
CQ4 CQ CQ CQ CQ	2 poles + ⊕ 3 poles + ⊕ 5 poles + ⊕ 7 poles + ⊕ 12 poles + ⊕ 21 poles + ⊕	23 * 166 8 ** 165 11 **
CJ KF CJK 8FT CLK 04 S CX 1/2 BI CXL 2/4 S CXL SF/S CXL 2/4 F CXL 2/4 F CXL PF/P	D SF/SM SM PF/PM PFH/PMH	503 506 509 512 524 525 525 525

bulkhead mounting housings



# **STAINLESS STEEL LEVER AVAILABLE MAY 2019**

*** refer to 2019 Multipole connectors pages  refer to CN.16 pages
description

\* refer to NEWS 2016 pages \*\* refer to NEWS 2017 pages

M32 fixing thread 1) (*)	MKAX IF
gasket and screw kit for IP66/IP67/IP69 1)	CKR 65
gasket and screw kit for IP66/IP67/IP69 1)	CKR 65 D

part No.

 To obtain the IP66/IP67/IP69 degree of protection, a kit with insert fixing screw and gasket can be purchased separately.

Several inserts size "21.21" are already supplied with fixing screw and gasket, which ensures IP66/IP67/IP69 degree of protection. See list below, not including any special version:

- CQF/M 07, CQF/M 12

specific for CD 08 inserts

- CJ KF/M, CJF/M 4 /4/2 /8 /8/2
- CJK 8FT /8IFT /8MT /8IMT, CJK 8M
- CUK 2FT /3FT
- CX 1/2 BDF/M
- CLK 04 SCF /SCF-H /SCM
- CXL 2/4 PF /PM /PFH /PMH /SF /SM, CXL SF/M

NOTE: Housing type and colour may vary upon specific part No.



(\*) Locknut supplied on request, see Cable glands catalogue (article AS M32N metallic).

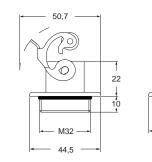


☑ NOTE: Lever type and housing colour may vary upon specific part No.

cURus Type 4/4X/12 pending



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



33

0



### MKA - MKAXX standard metallic version



inserts		page:
CK CKS CKSH CD CQ4 CQ4 CQ CQ	3 and 4 poles + ⊕ 3 and 4 poles + ⊕ 3 and 4 poles + ⊕ 8 poles 2 poles + ⊕ 3 poles + ⊕ 5 poles + ⊕ 7 poles + ⊕ 12 poles + ⊕ 21 poles + ⊕	48 49 7 ** 54 32 ** 23 * 166 8 ** 165
CJ KF CJK 8FT CLK 04 S CX 1/2 B CXL 2/4 S CXL SF/S CXL 2/4 I	SC D SF/SM SBM SBM PF/PM PF/PMH	503 506 509 512 524 525 525 525

\* refer to NEWS 2016 pages \*\* refer to NEWS 2017 pages \*\*\* refer to 2019 Multipole connectors pages

■ refer to CN.16 pages

## bulkhead mounting housings



# ☑ GALVANIZED STEEL RIGID LEVER ☐ AVAILABLE MAY 2019

#### bulkhead mounting housings



# ☑ STAINLESS STEEL RIGID LEVER ☐ AVAILABLE MAY 2019

description	part No.	part No.
M32 fixing thread 1) (*)	MKA IF	
M32 fixing thread 1) (*)		MKAXX IF
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, a kit with insert fixing screw and gasket can be purchased separately.

Several inserts size "21.21" are already supplied with fixing screw and gasket, which ensures IP66/IP67/IP69 degree of protection. See list below, not including any special version:

- CQF/M 07, CQF/M 12
- CJ KF/M, CJF/M 4 /4/2 /8 /8/2
- CJK 8FT /8IFT /8MT /8IMT, CJK 8M
- CUK 2FT /3FT
- CX 1/2 BDF/M
- CLK 04 SCF /SCF-H /SCM
- CXL 2/4 PF /PM /PFH /PMH /SF /SM, CXL SF/M

NOTE: Housing type and colour may vary upon specific part No.



(\*) Locknut supplied on request, see Cable glands catalogue (article AS M32N metallic).

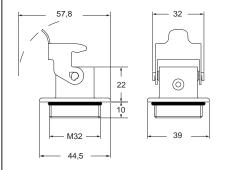


NOTE: Lever type and housing colour may vary upon specific part No.

cURus Type 4/4X/12 pending

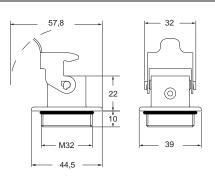


IP66/IP67/IP69 with CKR 65 (D) 1)



panel cut-out for enclosures







#### for aggressive environments **MKAXW**

inserts		page:
CK CKS CKSH	3 and 4 poles + ⊕ 3 and 4 poles + ⊕ 3 and 4 poles + ⊕	48 49 7 **
CD CQ4 CQ4	8 poles 2 poles + ⊕ 3 poles + ⊕	54 32 *** 23 *
CQ CQ CQ	5 poles + ⊕ 7 poles + ⊕ 12 poles + ⊕	166 8 ** 165
CQ CJ KF	21 poles + ⊕	11 ** 503
CJK 8FT CLK 04 S CX 1/2 BI CXL 2/4 S	D SF/SM	506 509 512 524
CXL SF/S CXL 2/4 F CXL 2/4 F CXL PF/F	PF/PM PFH/PMH	524 525 525 525

bulkhead mounting housings



**STAINLESS STEEL LEVER MAY AVAILABLE MAY 2019** 

# \* refer to NEWS 2016 pages \*\* refer to NEWS 2017 pages

- \*\*\* refer to 2019 Multipole connectors pages
  refer to CN.16 pages

description	part No.
M32 fixing thread (*) 1)	MKAXW IF
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, a kit with insert fixing screw and gasket can be purchased separately.

Several inserts size "21.21" are already supplied with fixing screw and gasket, which ensures IP66/IP67/IP69 degree of protection. See list below, not including any special version:

- CQF/M 07, CQF/M 12
- CJ KF/M, CJF/M 4 /4/2 /8 /8/2
- CJK 8FT /8IFT /8MT /8IMT, CJK 8M
- CUK 2FT /3FT
- CX 1/2 BDF/M
- CLK 04 SCF /SCF-H /SCM
- CXL 2/4 PF /PM /PFH /PMH /SF /SM, CXL SF/M

☑ NOTE: Housing type and colour may vary upon specific part No.



(\*) Locknut supplied on request, see Cable glands catalogue (article AS M32N metallic).

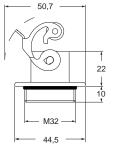


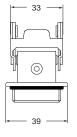
may vary upon specific part No.

cURus Type 4/4X/12 pending



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







## for aggressive environments



inserts		page:
CK CKS CKSH	3 and 4 poles + ⊕ 3 and 4 poles + ⊕ 3 and 4 poles + ⊕	48 49 7 **
CD CQ4 CQ4	8 poles 2 poles + ⊕ 3 poles + ⊕	54 32 *** 23 *
CQ	5 poles + ⊕ 7 poles + ⊕	166 8 **
CQ	12 poles + ⊕ 21 poles + ⊕	165 11 **
CJ KF CJK 8FT CLK 04 S	SC.	503 506 509
CX 1/2 BI CXL 2/4 S CXL SF/S	D SF/SM	512 524 524
CXL 2/4 I	PF/PM	524 525 525
CXL PF/F	PM	525

bulkhead mounting housings



### **STAINLESS STEEL RIGID LEVER MAY AVAILABLE MAY 2019**

^ I	reter 1	to r	VEWS:	2016	pages
**	refer	to	<b>NEWS</b>	2017	pages

\*\*\* refer to 2019 Multipole connectors pages

■ refer to CN.16 pages

description	part No.
M32 fixing thread (*) 1)	MKAXXW IF
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, a kit with insert fixing screw and gasket can be purchased separately.

Several inserts size "21.21" are already supplied with fixing screw and gasket, which ensures IP66/IP67/IP69 degree of protection. See list below, not including any special version:

- CQF/M 07, CQF/M 12
- CJ KF/M, CJF/M 4 /4/2 /8 /8/2
- CJK 8FT /8IFT /8MT /8IMT, CJK 8M
- CUK 2FT /3FT
- CX 1/2 BDF/M
- CLK 04 SCF /SCF-H /SCM
- CXL 2/4 PF /PM /PFH /PMH /SF /SM, CXL SF/M

☑ NOTE: Housing type and colour may vary upon specific part No.



(\*) Locknut supplied on request, see Cable glands catalogue (article AS M32N metallic).

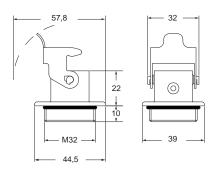


may vary upon specific part No.

cURus Type 4/4X/12 pending



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





#### for electromagnetic compatibility **MKAXS EMC** version

inserts		page:
CK CKS	3 and 4 poles + ⊕ 3 and 4 poles + ⊕	48 49
CKSH	3 and 4 poles +   3 and 4 poles +	7 **
CD	8 poles	54
CQ4	2 poles + ⊕	32 ***
CQ4	3 poles + ⊕	23 *
CQ CQ	5 poles + ⊕ 7 poles + ⊕	166 8 **
CQ	7 poles + ⊕ 12 poles + ⊕	165
čã	21 poles + (#)	11 **
CJ KF	,	503
CJK 8FT		506
CLK 04 S CX 1/2 BI		509 512
CXL 2/4 S		512 524
CXL SF/S		524 524
CXL 2/4 F	PF/PM	525
CXL 2/4 F		525
CXL PF/F	'M	525

bulkhead mounting housings



\* refer to NEWS 2016 pages \*\* refer to NEWS 2017 pages

\*\*\* refer to 2019 Multipole connectors pages
refer to CN.16 pages

### **STAINLESS STEEL LEVER MAY AVAILABLE MAY 2019**

description	part No.
M32 fixing thread (*) 1)	MKAXS IF
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, a kit with insert fixing screw and gasket can be purchased separately.

Several inserts size "21.21" are already supplied with fixing screw and gasket, which ensures IP66/IP67/IP69 degree of protection. See list below, not including any special version:

- CQF/M 07, CQF/M 12
- CJ KF/M, CJF/M 4 /4/2 /8 /8/2
- CJK 8FT /8IFT /8MT /8IMT, CJK 8M
- CUK 2FT /3FT
- CX 1/2 BDF/M
- CLK 04 SCF /SCF-H /SCM
- CXL 2/4 PF /PM /PFH /PMH /SF /SM, CXL SF/M

☑ NOTE: Housing type and colour may vary upon specific part No.



(\*) Locknut supplied on request, see Cable glands catalogue (article AS M32N metallic).

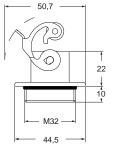


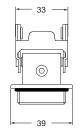
may vary upon specific part No.

cURus Type 4/4X/12 pending

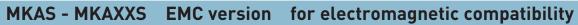


IP66/IP67/IP69 with CKR 65 (D) 1)











inserts		page:
CK	3 and 4 poles + ⊕	48
CKS	3 and 4 poles +	49
CKSH	3 and 4 poles +	7 **
CD	8 poles	54
CQ4	2 poles + ⊕	32 ***
CQ4	3 poles + ⊕	23 *
CQ	5 poles + ⊕	166
CQ	7 poles + ⊕	8 **
CQ	12 poles + ⊕	165
CQ	21 poles + ⊕	11 **
CJ KF		503
CJK 8FT	•	506
CLK 04 9	SC	509
CX 1/2 B		512
CXL 2/4	SF/SM	524
CXL SF/		524
CXL 2/4		525
	PFH/PMH	525
CXL PF/		525
OVE LL	1 141	323

- \* refer to NEWS 2016 pages \*\* refer to NEWS 2017 pages
- \*\*\* refer to 2019 Multipole connectors pages
- refer to CN.16 pages

bulkhead mounting housings



### **GALVANIZED STEEL RIGID LEVER MAY AVAILABLE MAY 2019**

bulkhead mounting housings



# **STAINLESS STEEL RIGID LEVER MAYAILABLE MAY 2019**

description	part No.	part No.
M32 fixing thread (*)1)	MKAS IF	
M32 fixing thread (*) 1)		MKAXXS IF
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, a kit with insert fixing screw and gasket can be purchased separately.

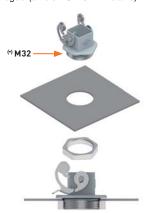
Several inserts size "21.21" are already supplied with fixing screw and gasket, which ensures IP66/IP67/IP69 degree of protection. See list below, not including any special version:

- CQF/M 07, CQF/M 12
- CJ KF/M, CJF/M 4 /4/2 /8 /8/2
- CJK 8FT /8IFT /8MT /8IMT, CJK 8M
- CUK 2FT /3FT
- CX 1/2 BDF/M
- CLK 04 SCF /SCF-H /SCM
- CXL 2/4 PF /PM /PFH /PMH /SF /SM, CXL SF/M

☑ NOTE: Housing type and colour may vary upon specific part No.



(\*) Locknut supplied on request, see Cable glands catalogue (article AS M32N metallic).

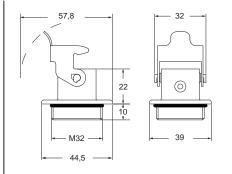


may vary upon specific part No.

cURus Type 4/4X/12 pending

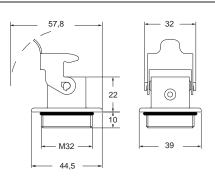


IP66/IP67/IP69 with CKR 65 (D) 1)



panel cut-out for enclosures







### MKAXR 180 °C version

inserts

page:

**CK RY** 3 poles + ⊕ **CK RY** 4 poles + ⊕ 51 51 bulkhead mounting housings



# **STAINLESS STEEL LEVER MAYAILABLE MAY 2019**

description

part No.

M32 fixing thread (\*)

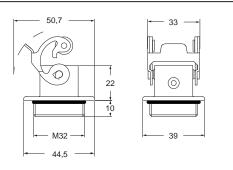
refer to CN.16 pages

(\*) Locknut supplied on request, see Cable glands catalogue (article AS M32N metallic).



NOTE: Lever type and housing colour may vary upon specific part No.

MKAXR IF



panel cut-out for enclosures



cURus Type 12 pending



#### 180 °C version MKAXXR



inserts

page:

51 51

3 poles + (9) 4 poles + (9) CK RY **CK RY** 

bulkhead mounting housings



## **STAINLESS STEEL RIGID LEVER MAYAILABLE MAY 2019**

description

refer to CN.16 pages

part No. MKAXXR IF

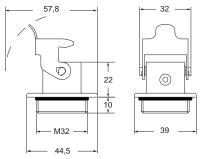
#### M32 fixing thread (\*)

# (\*) Locknut supplied on request, see Cable glands catalogue (article AS M32N metallic).



may vary upon specific part No.

# 57,8



panel cut-out for enclosures



cURus Type 12 pending



# BULKHEAD MOUNTING HOUSINGS SIZE "21.21" EMC VERSION FOR ELECTROMAGNETIC COMPATIBILITY



MKAS IVG20 size "21.21" for bulkhead mounting with additional flange



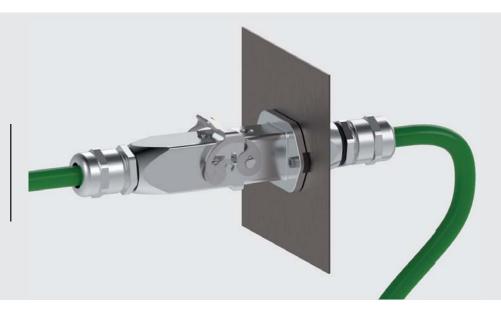


# TECHNICAL FEATURES MKAS IVG20 size "21.21"

- special zinc alloy die cast hood with additional flange for the bulkhead mounting to a cabinet wall, for all connector inserts size "21.21";
- provides **full shielding** not only outside the cabinet, but also **inside the cabinet**, for very sensitive applications;
- captively built-in flange sealing/gasket allowing direct contact between metal flange and metal mounting surface. Good EMC shielding granted without the need of conductive sealing material;
- **EMC type** (with conductive surface);
- M20 rear cable entry;
- stainless steel "Class" locking lever with rolls;
- full compatibility with all the existing range of size "21.21" hoods;

- upon request, also available in several variants that differ by:
- locking lever material (galvanized steel, by RoHS 2 conform electroplating, or stainless steel - "X" in the code same rigid geometry but different corrosion resistance);
- locking lever stiffness:
- resilient, "Class" type with rolls, preferable for frequent disconnection and moderate mechanical load from the cable;
- rigid, for higher mechanical load from the cable and less frequently expected operations;
- **corrosion resistance:** W-Type versions, for aggressive environments;
- **EMC shielding:** S-Type, with conductive surface (to be combined with use of EMC cable gland).

full shielding also inside the cabinet for very sensitive applications (using EMC cable gland)



#### for electromagnetic compatibility **MKAXS EMC** version

inserts		page:
CK	3 and 4 poles + ⊕	48
CKS	3 and 4 poles +	49
CKSH	3 and 4 poles +	7 **
CD	8 poles	54
CQ4	2 poles +	32 ***
CQ4	3 poles + ⊕	23 *
CQ	5 poles + ⊕	166
CQ	7 poles + ⊕	8 **
CQ	12 poles + 🖶	165
CQ	21 poles +	11 **
CJ KF	·	503
CJK 8FT	•	506
CLK 04 \$	SC	509
CX 1/2 B	iD.	512
CXL 2/4 PF/PM		525
CXL 2/4 PFH/PMH		525
CXL PF/	PM	525

bulkhead mounting housings



**STAINLESS STEEL LEVER MARCH 2019** 

- \* refer to NEWS 2016 pages \*\* refer to NEWS 2017 pages
- \*\*\* refer to 2019 Multipole connectors pages
- refer to CN.16 pages

specific for CD 08 inserts

description	part No.
M20 cable entry 1)	MKAXS IVG20
gasket and screw kit for IP66/IP67/IP69 1)	CKR 65
gasket and screw kit for IP66/IP67/IP69 1)	CKR 65 D

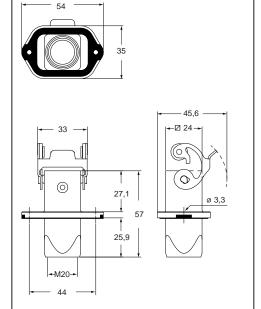
1) To obtain the IP66/IP67/IP69 degree of protection, a kit with insert fixing screw and gasket can be purchased separately.

Several inserts size "21.21" are already supplied with fixing screw and gasket, which ensures IP66/IP67/IP69 degree of protection. See list below, not including any special version:

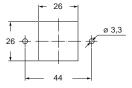
- CQF/M 07, CQF/M 12
- CJ KF/M, CJF/M 4 /4/2 /8 /8/2
- CJK 8FT /8IFT /8MT /8IMT, CJK 8M
- CUK 2FT /3FT
- CX 1/2 BDF/M
- CLK 04 SCF /SCF-H /SCM
- CXL 2/4 PF /PM /PFH /PMH /SF /SM, CXL SF/M

☑ NOTE: Housing type and colour may vary upon specific part No.





panel cut-out for enclosures



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



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

#### EMC version for electromagnetic compatibility **MKAS - MKAXXS**



inserts		page:
CK	3 and 4 poles + ⊕	48
CKS	3 and 4 poles + ⊕	49
CKSH	3 and 4 poles +	7 **
CD	8 poles	54
CQ4	2 poles + ⊕	32 ***
CQ4	3 poles + ⊕	23 *
CQ	5 poles + ⊕	166
CQ	7 poles + ⊕	8 **
CQ	12 poles + ⊕	165
CQ	21 poles + ⊕	11 **
CJ KF	·	503
CJK 8FT		506
<b>CLK 04 S</b>	SC SC	509
CX 1/2 B	D	512
CXL 2/4 PF/PM		525
CXL 2/4 PFH/PMH		525
CXL PF/F	PM	525

- \* refer to NEWS 2016 pages \*\* refer to NEWS 2017 pages
- \*\*\* refer to 2019 Multipole connectors pages
- refer to CN.16 pages

description

bulkhead mounting housings



## **GALVANIZED STEEL RIGID LEVER MARCH 2019**

bulkhead mounting housings

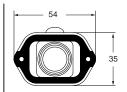


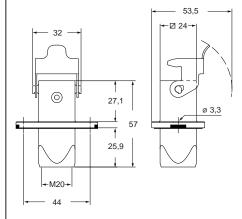
## **STAINLESS STEEL RIGID LEVER MARCH 2019**

document	part No.	part vo.
M20 cable entry 1)	MKAS IVG20	
M20 cable entry 1)		MKAXXS IVG20
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

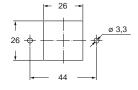
- 1) To obtain the IP66/IP67/IP69 degree of protection, a kit with insert fixing screw and gasket can be purchased separately.
  - Several inserts size "21.21" are already supplied with fixing screw and gasket, which ensures IP66/IP67/IP69 degree of protection. See list below, not including any special version:
  - CQF/M 07, CQF/M 12
  - CJ KF/M, CJF/M 4 /4/2 /8 /8/2
  - CJK 8FT /8IFT /8MT /8IMT, CJK 8M
  - CUK 2FT /3FT
  - CX 1/2 BDF/M
- CLK 04 SCF /SCF-H /SCM
- CXL 2/4 PF /PM /PFH /PMH /SF /SM, CXL SF/M
- ☑ NOTE: Housing type and colour may vary upon specific part No.

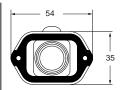


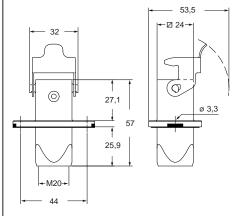




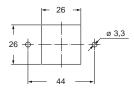
panel cut-out for enclosures







panel cut-out for enclosures



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



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

# M25 INSULATING HOODS MK - MKG



MK - MKG insulating hoods with M25 cable entry size "21.21"



Find more information on our products at



# TECHNICAL FEATURES MK - MKG

- insulating hoods with pegs or with locking lever ("G" in suffix), with M25 cable entry, for all connector inserts size "21.21", light grey RAL 7035; available also in black colour RAL 9005 (suffix VN 25,VGN 25);
- suitable for the wiring with cables with large diameter (high conductor cross-sectional areas e.g. in combination with CQ4 40A inserts or large number of individual conductors e.g. in combination with CQ 21 inserts);
- full compatibility with all range of existing "21.21" housings;
- available also the variants MKG with glued sealing gasket, suitable for all male connector inserts without gasket (like CX 1/2 BDM, CJ KM, CJK 8MT, CJK 8IMT, CLK 04 SCM and DESINA® ISO 23570 conform electro/optical inserts except CXL 2/4 SF/M).

M25 cable entry, available in light grey RAL 7035 and black RAL 9005 versions





#### standard insulating version MK

inserts		nago:
moerts		page:
CK	3 and 4 poles + ⊕	48
CKS	3 and 4 poles +	49
CKSH	3 and 4 poles + ⊕	7 '
CD	7 poles + ⊕	53
CD	8 poles	54
CQ4	2 poles + ⊕	32 '
CQ4	3 poles + ⊕	23 '
ÇQ	5 poles + ⊕	166
ČQ CQ	7 poles + ⊕	8 '
ÇQ	12 poles + ⊕	165
CQ	21 poles +	_11 '
CJ KM	_	503
CJK 8M		506
CJK 8IM		506
CLK 04		509
CX 1/2 B		512
CXL 2/4		524
CXL SF/		524
CXL 2/4		525
	PFH/PMH	525
CXL PF/	PIVI	525
* rofor to	NEWS 2016 pages	
	NEWS 2016 pages	
^^ refer t	o NEWS 2017 pages	

insulating hoods



insulating hoods



**MAYAILABLE APRIL 2019** 

**MAYAILABLE APRIL 2019** 

description	part No.	part No.
with pegs, top entry	MK V25 (light grey RAL 7035)	
with pegs, top entry		MK VN25 (black)
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, a kit with insert fixing screw and gasket can be purchased separately.

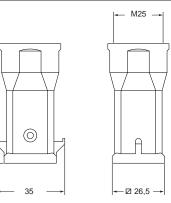
\*\*\* refer to 2019 Multipole connectors pages
refer to CN.16 pages

Several inserts size "21.21" are already supplied with fixing screw and gasket, which ensures IP66/IP67/IP69 degree of protection. See list below, not including any special version:

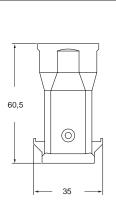
- CQF/M 07, CQF/M 12 CJ KF/M, CJF/M 4 /4/2 /8 /8/2
- CJK 8FT /8IFT /8MT /8IMT, CJK 8M
- CUK 2FT /3FT
- CX 1/2 BDF/M
- CLK 04 SCF /SCF-H /SCM
- CXL 2/4 PF /PM /PFH /PMH /SF /SM, CXL SF/M

 NOTE: Housing type and colour may vary upon specific part No.





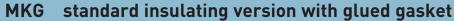
60,5





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







inserts				
CK CKS CKSH CD CQ4 CQ4 CQ4 CQ CQ CQ CJ CJK 8MT CJK 98MT CJK 04 S CXL 2/4 S CXL 2/4 F CXL 2/4 F CXL 2/4 F	8 23 3 5 7 12 21 21 5C C D SF/SM SM PF/PM PFH/PMH	poles	+++ +++++	
* refer to	NEWS 2	บาช ๒๕	iaes	

\*\*\* refer to 2019 Multipole connectors pages

insulating hoods with glued gasket



insulating hoods

with glued gasket



**MAYAILABLE APRIL 2019** 

**MAYAILABLE APRIL 2019** 

description	part No.	part No.
with pegs and glued gasket, top entry	MKG V25 (light grey RAL 7035)	
with pegs and glued gasket, top entry		MKG VN25 (black)
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, a kit with insert fixing screw and gasket can be purchased separately.

Several inserts size "21.21" are already supplied with fixing screw and gasket, which ensures IP66/IP67/IP69 degree of protection. See list below, not including any special version:

- CQF/M 07, CQF/M 12

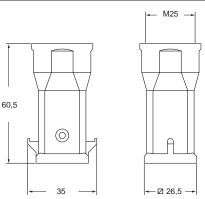
\*\* refer to NEWS 2017 pages

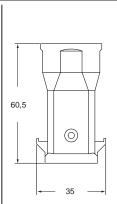
■ refer to CN.16 pages

- CJ KF/M, CJF/M 4 /4/2 /8 /8/2
- CJK 8FT /8IFT /8MT /8IMT, CJK 8M
- CUK 2FT /3FT
- CX 1/2 BDF/M
- CLK 04 SCF /SCF-H /SCM
- CXL 2/4 PF /PM /PFH /PMH /SF /SM, CXL SF/M

☑ NOTE: Housing type and colour may vary upon specific part No.





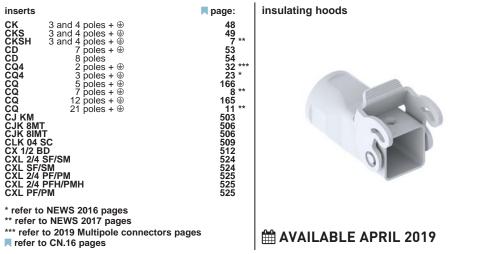




cURus Type 12 / Type 4/4X only with CKR 65 (D) pending



#### MK standard insulating version



description	part No.		
with lever, top entry	MK VG25 (light grey RAL 7035)		
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		

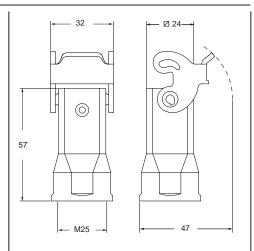
 To obtain the IP66/IP67/IP69 degree of protection, a kit with insert fixing screw and gasket can be purchased separately.

Several inserts size "21.21" are already supplied with fixing screw and gasket, which ensures IP66/IP67/IP69 degree of protection. See list below, not including any special version:

- CQF/M 07, CQF/M 12
- CJ KF/M, CJF/M 4 /4/2 /8 /8/2
- CJK 8FT /8IFT /8MT /8IMT, CJK 8M
- CUK 2FT /3FT
- CX 1/2 BDF/M
- CLK 04 SCF /SCF-H /SCM
- CXL 2/4 PF /PM /PFH /PMH /SF /SM, CXL SF/M

NOTE: Housing type and colour may vary upon specific part No.





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





### MK standard insulating version

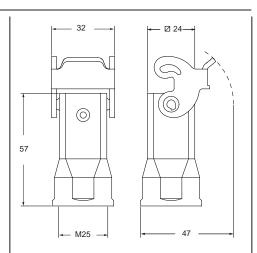
inserts		page:	insulating hoods
CXL SI CXL 2/	ΛΤ MT ↓ SC BD 4 SF/SM F/SM 4 PF/PM 4 PF/PMH	48 49 7 ** 53 54 23 * 166 8 ** 165 11 ** 503 506 509 512 524 525 525	
** refer	to NEWS 2016 pages to NEWS 2017 pages		
	r to 2019 Multipole connectors page to CN.16 pages	<del>2</del> 5	<b>■ AVAILABLE APRIL 2019</b>

	·
description	part No.
with lever, top entry	MK VGN25 (black)
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

- To obtain the IP66/IP67/IP69 degree of protection, a kit with insert fixing screw and gasket can be purchased separately.
  - Several inserts size "21.21" are already supplied with fixing screw and gasket, which ensures IP66/IP67/IP69 degree of protection. See list below, not including any special version:
  - CQF/M 07, CQF/M 12
  - CJ KF/M, CJF/M 4 /4/2 /8 /8/2
  - CJK 8FT /8IFT /8MT /8IMT, CJK 8M
  - CUK 2FT /3FT
- CX 1/2 BDF/M
- CLK 04 SCF /SCF-H /SCM
- CXL 2/4 PF /PM /PFH /PMH /SF /SM, CXL SF/M

NOTE: Housing type and colour may vary upon specific part No.





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



# METAL HOODS WITH M25 CABLE ENTRY AND LOCKING LEVER



MKA VG25 metal (zinc alloy) hoods with locking lever and M25 cable entry





# TECHNICAL FEATURES MKA VG25 size "21.21"

- metal (zinc alloy) hoods with locking lever and M25 cable entry, for all connector inserts size "21.21";
- suitable for realizing free cable-to-cable joints, ideally in combination with corresponding MKA V25 metal hood with pegs with M25 cable entry (declined to the corresponding variant, see following paragraphs);
- suitable for the wiring with cables with large diameter (high conductor cross-sectional areas e.g. in combination with CQ4 40A inserts, or large number of individual conductors e.g. in combination with CQ 21 inserts);
- full compatibility with all range of existing "21.21" hoods and housings;

- available in several variants that differs by:
- <u>locking lever material:</u> *galvanized steel* (RoHS 2 conform electroplating), or *stainless steel;*
- <u>locking lever stiffness:</u> *resilient,* "Class type with rolls", preferable for frequent disconnection and moderate load from the cable, or *rigid,* for higher mechanical load from the cable and less frequent operations;
- corrosion resistance: standard or "W-Type" for aggressive environments;
- <u>EMC shielding:</u> S-Type with conductive surface, to be combined with use of EMC cable gland.

suitable for realizing free cable-to-cable joints



#### MKAX standard metallic version

C ) SF/SM M PF/PM PFH/PMH	## page:  48 49 7 *** 54 32 *** 23 * 166 8 ** 165 11 ** 503 506 506 506 509 512 524 524 525 525
 neno zon pages	

hoods



### **STAINLESS STEEL LEVER M** AVAILABLE FEBRUARY 2019

*** refer to NEWS 2017 pages  *** refer to 2019 Multipole connectors pages  refer to CN.16 pages	<b> </b>
description	part No.
top entry	MKAX VG25
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

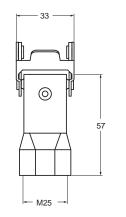
1) To obtain the IP66/IP67/IP69 degree of protection, a kit with insert fixing screw and gasket can be purchased separately.

Several inserts size "21.21" are already supplied with fixing screw and gasket, which ensures IP66/IP67/IP69 degree of protection. See list below, not including any special version:

- CQF/M 07, CQF/M 12
- CJ KF/M, CJF/M 4 /4/2 /8 /8/2
- CJK 8FT /8IFT /8MT /8IMT, CJK 8M
- CUK 2FT /3FT
- CX 1/2 BDF/M
- CLK 04 SCF /SCF-H /SCM
- CXL 2/4 PF /PM /PFH /PMH /SF /SM, CXL SF/M

☑ NOTE: Housing type and colour may vary upon specific part No.







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



#### MKA - MKAXX standard metallic version



inserts page: 3 and 4 poles + ⊕
3 and 4 poles + ⊕
3 and 4 poles + ⊕
8 poles
2 poles + ⊕
3 poles + ⊕
5 poles + ⊕
7 poles + ⊕
12 poles + ⊕
21 poles + ⊕ 48 49 7 \*\* 54 32 \*\*\* 23 \*\* 166 8 \*\* 165 11 \*\* 506 506 509 512 524 525 525 525

hoods



hoods



\* refer to NEWS 2016 pages \*\* refer to NEWS 2017 pages **GALVANIZED STEEL RIGID LEVER** \*\*\* refer to 2019 Multipole connectors pages **MAYAILABLE FEBRUARY 2019** 

**STAINLESS STEEL RIGID LEVER M** AVAILABLE FEBRUARY 2019

description	part No.	part No.
top entry	MKA VG25	
top entry		MKAXX VG25
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, a kit with insert fixing screw and gasket can be purchased separately.

Several inserts size "21.21" are already supplied with fixing screw and gasket, which ensures IP66/IP67/IP69 degree of protection. See list below, not including any special version:

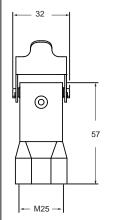
- CQF/M 07, CQF/M 12

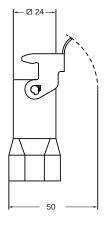
refer to CN.16 pages

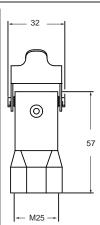
- CJ KF/M, CJF/M 4 /4/2 /8 /8/2
- CJK 8FT /8IFT /8MT /8IMT, CJK 8M
- CUK 2FT /3FT
- CX 1/2 BDF/M
- CLK 04 SCF /SCF-H /SCM
- CXL 2/4 PF /PM /PFH /PMH /SF /SM, CXL SF/M

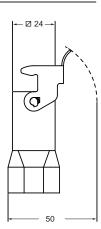
☑ NOTE: Housing type and colour may vary upon specific part No.











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



#### for aggressive environments **MKAXW**

inserts CK CKS CKSH CD CQ4	3 and 4 poles + ⊕ 3 and 4 poles + ⊕ 3 and 4 poles + ⊕ 8 poles 2 poles + ⊕	page: 48 49 7 ** 54 32 ***
CXL PF/F	T SC D SF/SM SM PF/PM PFH/PMH	166 8 ** 165 11 ** 503 506 509 512 524 524 525 525

hoods



### **STAINLESS STEEL LEVER M** AVAILABLE FEBRUARY 2019

**	refer	to I	NEWS	2017	pag	es
***	refe	r to	2019	Multip	oole	СО

onnectors pages

refer to CN.16 pages

aescription	рап но.
top entry	MKAXW VG25
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

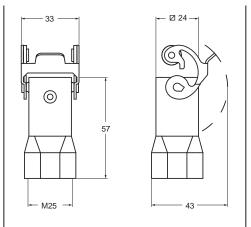
1) To obtain the IP66/IP67/IP69 degree of protection, a kit with insert fixing screw and gasket can be purchased separately.

Several inserts size "21.21" are already supplied with fixing screw and gasket, which ensures IP66/IP67/IP69 degree of protection. See list below, not including any special version:

- CQF/M 07, CQF/M 12
- CJ KF/M, CJF/M 4 /4/2 /8 /8/2
- CJK 8FT /8IFT /8MT /8IMT, CJK 8M
- CUK 2FT /3FT
- CX 1/2 BDF/M
- CLK 04 SCF /SCF-H /SCM
- CXL 2/4 PF /PM /PFH /PMH /SF /SM, CXL SF/M

☑ NOTE: Housing type and colour may vary upon specific part No.





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





#### MKAXXW for aggressive environments

hoods



# **☑** GALVANIZED STEEL RIGID LEVER **Ⅲ** AVAILABLE FEBRUARY 2019

	·
description	part No.
top entry	MKAXXW VG25
gasket and screw kit for IP66/IP67/IP69 1)	CKR 65
gasket and screw kit for IP66/IP67/IP69 1)	CKR 65 D

 To obtain the IP66/IP67/IP69 degree of protection, a kit with insert fixing screw and gasket can be purchased separately.

\*\*\* refer to 2019 Multipole connectors pages

Several inserts size "21.21" are already supplied with fixing screw and gasket, which ensures IP66/IP67/IP69 degree of protection. See list below, not including any special version:

- CQF/M 07, CQF/M 12

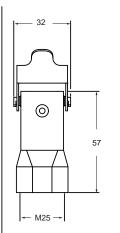
\* refer to NEWS 2016 pages \*\* refer to NEWS 2017 pages

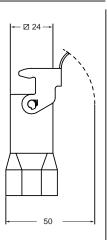
■ refer to CN.16 pages

- CJ KF/M, CJF/M 4 /4/2 /8 /8/2
- CJK 8FT /8IFT /8MT /8IMT, CJK 8M
- CUK 2FT /3FT
- CX 1/2 BDF/M
- CLK 04 SCF /SCF-H /SCM
- CXL 2/4 PF /PM /PFH /PMH /SF /SM, CXL SF/M

NOTE: Housing type and colour may vary upon specific part No.







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



### MKAXS EMC version for electromagnetic compatibility

inserts CK CKS CKSH CD CQ4 CQ4 CQ CQ CQ CQ CQ CJ KM CJK 8MT CJK 8MT CJK 04 S CX 1/2 B	T SC D	page:  48 49 7 ** 54 32 *** 23 * 166 8 ** 165 11 ** 503 506 509 512
CQ4	3 poles + ⊕	23 *
CO	7 poles + ⊕	8 **
ÇĞ		11 **
CJK 8MT		506
CLK 04 S	SC	509
CXL 2/4	SF/SM	524
CXL SF/S CXL 2/4 I		524 525
CXL 2/4 I	PFH/PMH	525 525
** refer to	NEWS 2016 pages o NEWS 2017 pages	



# **STAINLESS STEEL LEVER AVAILABLE FEBRUARY 2019**

description	part No.
top entry	MKAXS VG25
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

 To obtain the IP66/IP67/IP69 degree of protection, a kit with insert fixing screw and gasket can be purchased separately.

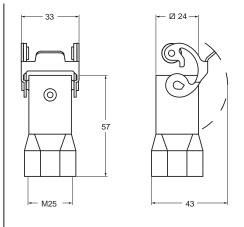
\*\*\* refer to 2019 Multipole connectors pages
refer to CN.16 pages

Several inserts size "21.21" are already supplied with fixing screw and gasket, which ensures IP66/IP67/IP69 degree of protection. See list below, not including any special version:

- CQF/M 07, CQF/M 12
- CJ KF/M, CJF/M 4 /4/2 /8 /8/2
- CJK 8FT /8IFT /8MT /8IMT, CJK 8M
- CUK 2FT /3FT
- CX 1/2 BDF/M
- CLK 04 SCF /SCF-H /SCM
- CXL 2/4 PF /PM /PFH /PMH /SF /SM, CXL SF/M

NOTE: Housing type and colour may vary upon specific part No.





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







inserts

CK 3 and 4 poles + ⊕
CKS 3 and 4 poles + ⊕
CKSH 3 and 4 poles + ⊕
CCSH 3 and 4 poles + ⊕
CD 8 poles
CQ4 2 poles + ⊕
CQ 5 poles + ⊕
CQ 7 poles + ⊕
CQ 12 poles + ⊕
CQ 21 poles + ⊕
CQ 21 poles + ⊕
CQ 21 poles + ⊕
CQ 5 poles + ⊕
CQ 5 poles + ⊕
CQ 12 poles + ⊕
CQ 12 poles + ⊕
CQ 12 poles + ⊕
CJK MMT
CJK 8IMT
CJK 8IMT
CJK 8IMT
CJK 124 PFHPM
CXL 2/4 PFHPM
CXL 2

\*\*\* refer to 2019 Multipole connectors pages

refer to CN.16 pages

hoods



hoods



**GALVANIZED STEEL RIGID LEVER AVAILABLE FEBRUARY 2019** 

description	part No.	part No.
top entry	MKAS VG25	
top entry		MKAXXS VG25
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

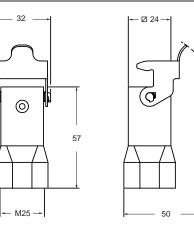
1) To obtain the IP66/IP67/IP69 degree of protection, a kit with insert fixing screw and gasket can be purchased separately.

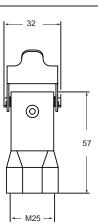
Several inserts size "21.21" are already supplied with fixing screw and gasket, which ensures IP66/IP67/IP69 degree of protection. See list below, not including any special version:

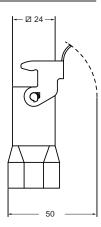
- CQF/M 07, CQF/M 12
- CJ KF/M, CJF/M 4 /4/2 /8 /8/2
- CJK 8FT /8IFT /8MT /8IMT, CJK 8M
- CUK 2FT /3FT
- CX 1/2 BDF/M
- CLK 04 SCF /SCF-H /SCM
- CXL 2/4 PF /PM /PFH /PMH /SF /SM, CXL SF/M

NOTE: Housing type and colour may vary upon specific part No.









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



## METAL HOODS M25 MGK V25, MGK V25 B – IP68 HIGH PROTECTION



MGK V25 - MGK V25 B size "21.21", metal hoods (zinc alloy) with two-point screw locking or bayonet locking and M25 cable entry





# TECHNICAL FEATURES MGK V25, MGK V25 B

- metal hoods (zinc alloy) size "21.21" with two-point screw locking or bayonet locking and M25 cable entry, degree of protection IP66/IP68/IP69;
- suitable for all inserts size "21.21";
- suitable for the wiring with cables with large diameter (high conductor cross-sectional areas e.g. in combination with CQ4 40A inserts, or large number of individual conductors e.g. in combination with CQ 21 inserts);
- full compatibility with all the existing range of IP66/IP68/IP69
   CGK/MGK "21.21" connector enclosures and covers;
- inherent EMC shielding with conductive surface, to be combined with use of EMC cable gland;
- dust protection cover CGKCP MB available (for more information please refer to page 497 CN.16 catalogue).



suitable for the wiring with large diameter cables



## MGK high protection IP68 version (screw locking)

inserts		page:	hoods
CK CK CKS CKSH CKSH CD 1) CQ4 CQ4 CQ CQ CQ CQ CQ CQ CJ KM CJK 8MT CJK 8IMT CJK 8JMT CJK 8JMT CJK 8JMT	3 poles + ⊕ 4 poles + ⊕ 3 poles + ⊕ 4 poles + ⊕ 4 poles + ⊕ 3 poles + ⊕ 4 poles + ⊕ 8 poles 2 poles + ⊕ 3 poles + ⊕ 7 poles + ⊕ 12 poles + ⊕ 21 poles + ⊕	48 48 49 49 7 *** 7 ** 23 * 166 8 ** 165 11 ** 503 506 509 512	
** refer to N	EWS 2016 pages IEWS 2017 pages 2019 Multipole connectors pages N.16 pages	;	<b> </b>

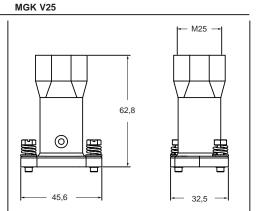
description

part No.

#### top entry

- Eliminate the gasket and the fixing screw; provided with the insert
- To fix the insert, use the screw with gasket provided with the enclosure (except CD 08 see note below).
- To ensure IP68 degree of protection with CD 08 insert, purchase the kit CKR 65 D.

 $\ensuremath{ \ensuremath{ \en$ 



CGKCP MB dust protection cover



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



according to IEC/EN 60529



### MGK B high protection IP68 version (bayonet locking)

inserts		page:	hoods
CK CK CKS CKSH CKSH CD 1) CQ4 CQ CQ CQ CQ CQ CQ CX	3 poles + ⊕ 4 poles + ⊕ 3 poles + ⊕ 4 poles + ⊕ 4 poles + ⊕ 3 poles + ⊕ 8 poles 2 poles + ⊕ 3 poles + ⊕ 7 poles + ⊕ 7 poles + ⊕ 12 poles + ⊕ 21 poles + ⊕	48 48 49 7 ** 7 ** 54 32 *** 23 * 166 8 ** 165 11 ** 503 506 509 512	
** refer to N	EWS 2016 pages EWS 2017 pages 2019 Multipole connectors page N.16 pages	s	<b>≅</b> AVAILABLE APRIL 2019

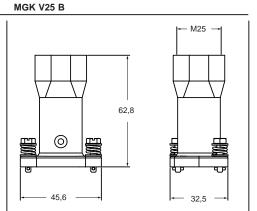
description

part No.

#### top entry

- Eliminate the gasket and the fixing screw; provided with the insert
- To fix the insert, use the screw with gasket provided with the enclosure (except CD 08 see note below).
- 1) To ensure IP68 degree of protection with CD 08 insert, purchase the kit CKR 65 D.

 $\ensuremath{ \ensuremath{ \mathcal{S}}}$  In this case do not use the screw supplied with the enclosure.



CGKCP MB dust protection cover



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



according to IEC/EN 60529

# HOODS WITH PEGS FOR CENTRAL LEVER CAV/MAV GYC, CFV/MFV GYC



Hoods with pegs for central lever cable-to-cable connector joints available in all sizes





# TECHNICAL FEATURES CAV/MAV GYC, CFV/MFV GYC

- aluminium die cast high construction connector hoods with pegs (two, stainless steel, with roller bearing), centrally mounted along the long sides, and edge sealing gasket, available in all sizes ("44.27", "57.27", "77.27" and "104.27") with top cable entry of various Pg thread sizes or M... metric sizes;
- intended for realizing a **free cable-to-cable connector joint** in combination with connector inserts (male and female) and correspondingly sized connector **hood with central locking lever**, either <u>top cable entry</u> (CAV/MAV ... YX...), or <u>side cable entry</u> (CAO/MAO ... YX...) <u>with adapter</u> (or with alternative variants <u>without adapter</u> identified by **F** in the pre-code, which are available upon request), or only for the available sizes "77.27" and "104.27" with **inclined hood with central locking lever**, <u>either top cable entry</u> (CIV/MIV ... XY...) or <u>side cable entry</u> (CIO/MIO ... XY...);
- intended also for realizing cable-to-panel connection with central lever housings (either bulkhead or surface mounting);

- possibility to secure the locking of a central lever connector coupling size "104.27" by means of the new locking device CR YLK 24/24 SL (see page 113);
- available either:
- with adapter (A in the pre-code, nickel-plated brass or integral with the hood), for use with semi-gland (sealing gasket, rings and pressure nut) to be provided separately, or
- without adapter (F in the pre-code) with throughthread cable entry, for use with a complete cable gland or conduit fitting of suitable size, to be provided separately;
- available only in standard version.
   NOTE: For feasibility of variants, please contact ILME offices.

free cable-to-cable connector joint in combination with connector inserts



#### CA - MA and CF - MF central lever

inserts		page:
CDD	24 poles + ⊕	67
CDS	9 poles + ⊕	78
CDSH	9 poles + ⊕	9 *
CDSH NC	6 poles + ⊕	19 *
CSH	6 poles + ⊕	91
CSE	6 poles + ⊕	104
CNE	6 poles + ⊕	104
CCE	6 poles + ⊕	110
CSS	6 poles + ⊕	122
CQE	10 poles + ⊕	138
MIXO	2 modules	179 - 215

#### hoods for central lever



#### hoods for central lever



\* refer to NEWS 2016 pages ■ refer to CN.16 pages

**MARCH 2019** 

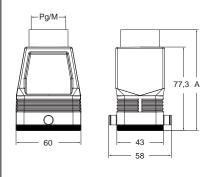
**MARCH 2019** 

description	part No.	entry Pg	part No	entry M	part No.	entry Pg	part No.	entry M
with pegs, top entry, high construction with pegs, top entry, high construction with pegs, top entry, high construction	CAV 06 GYC21 CAV 06 GYC29		MAV 06 GYC25 MAV 06 GYC32 MAV 06 GYC40	32				
with pegs, top entry, high construction, without adapter * with pegs, top entry, high construction, without adapter * with pegs, top entry, high construction, without adapter *					CFV 06 GYC21 CFV 06 GYC29		MFV 06 GYC25 MFV 06 GYC32 MFV 06 GYC40	32

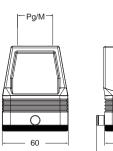
\* enclosure without adapter, threaded on the body, to be used only with a complete cable gland.

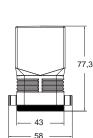
☑ Even when coding is not required, it is recommended to use CRM and CRF pins with CD and CDD inserts and CRM CX and CRF CX pins with MIXO inserts to reduce movements when fitting and removing the connectors and to avoid contact damages.

Within this scope, the EN 175301-801 standard (former DIN 43 652) requires a maximum angular fluctuation of ±5° on the long side, ±2° on the short side.



part No.	Α	
CAV 06 GYC21	92,3	
CAV 06 GYC29	93,8	
MAV 06 GYC25	92,3	
MAV 06 GYC32	93,3	
MAV 06 GYC40	96,3	







\* refer to NEWS 2016 pages

refer to CN.16 pages

### CA - MA and CF - MF central lever



inserts		page:
CDD	42 poles + ⊕	69
CDS	18 poles + ⊕	79
CDSH	18 poles + ⊕	10 *
CSH	10 poles + ⊕	92
CSE	10 poles + ⊕	105
CNE	10 poles + ⊕	105
CCE	10 poles + ⊕	111
CSS	10 poles + ⊕	123
CQE	18 poles + ⊕	139
MIXO	3 modules	179 - 215

hoods for central lever



hoods for central lever



**MATERIAL AND LE MARCH 2019** 

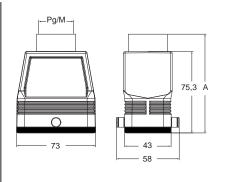
l		A	V۸	IL.	AB	LΕ	M	AR	CH	20	1	9
---	--	---	----	-----	----	----	---	----	----	----	---	---

description	part No.	entry Pg	part No	entry M	part No.	entry Pg	part No.	entry M
with pegs, top entry, high construction with pegs, top entry, high construction with pegs, top entry, high construction	CAV 10 GYC21 CAV 10 GYC29		MAV 10 GYC25 MAV 10 GYC32 MAV 10 GYC40	32				
with pegs, top entry, high construction, without adapter * with pegs, top entry, high construction, without adapter * with pegs, top entry, high construction, without adapter *					CFV 10 GYC21 CFV 10 GYC29		MFV 10 GYC25 MFV 10 GYC32 MFV 10 GYC40	32

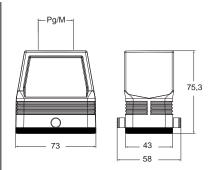
\* enclosure without adapter, threaded on the body, to be used only with a complete cable gland.

Beven when coding is not required, it is recommended to use CRM and CRF pins with CD and CDD inserts and CRM CX and CRF CX pins with MIXO inserts to reduce movements when fitting and removing the connectors and to avoid contact damages.

Within this scope, the EN 175301-801 standard (former DIN 43 652) requires a maximum angular fluctuation of  $\pm 5^{\circ}$  on the long side,  $\pm 2^{\circ}$  on the short side.



part No.	Α	
CAV 10 GYC21	90,3	
CAV 10 GYC29	91,8	
MAV 10 GYC25	90,3	
MAV 10 GYC32	91,3	
MAV 10 GYC40	94,3	





### CA - MA and CF - MF central lever

inserts		page:
CD	40 poles + ⊕	57
CDD	72 poles + ⊕	70
CDS	27 poles + ⊕	80
CDSH	27 poles + ⊕	11 *
CSH	16 poles + ⊕	93
CSE	16 poles + ⊕	106
CNE	16 poles + ⊕	106
CCE	16 poles + ⊕	112
CSS	16 poles + ⊕	124
CQE	32 poles + ⊕	140
CQEE	40 poles + ⊕	146
MIXO	4 modules	179 - 215

hoods for central lever



hoods for central lever



\* refer to NEWS 2016 pages

■ refer to CN.16 pages

## AVAILABLE MARCH 2019

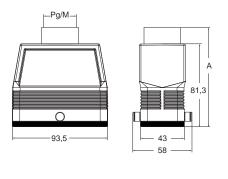
**■ AVAILABLE MARCH 2019** 

description	part No.	entry Pg	part No	entry M	part No.	entry Pg	part No.	entry M
with pegs, top entry, high construction with pegs, top entry, high construction with pegs, top entry, high construction	CAV 16 GYC21 CAV 16 GYC29		MAV 16 GYC25 MAV 16 GYC32 MAV 16 GYC40	32				
with pegs, top entry, high construction, without adapter * with pegs, top entry, high construction, without adapter * with pegs, top entry, high construction, without adapter *					CFV 16 GYC21 CFV 16 GYC29		MFV 16 GYC25 MFV 16 GYC32 MFV 16 GYC40	32

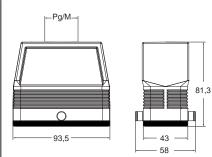
\* enclosure without adapter, threaded on the body, to be used only with a complete cable gland.

Even when coding is not required, it is recommended to use CRM and CRF pins with CD and CDD inserts and CRM CX and CRF CX pins with MIXO inserts to reduce movements when fitting and removing the connectors and to avoid contact damages.

Within this scope, the EN 175301-801 standard (former DIN 43 652) requires a maximum angular fluctuation of  $\pm 5^{\circ}$  on the long side,  $\pm 2^{\circ}$  on the short side.



part No.	Α	
CAV 16 GYC21	96,3	
CAV 16 GYC29	97,8	
MAV 16 GYC25	96,3	
MAV 16 GYC32	97,6	
MAV 16 GYC40	100,3	





### CA - MA and CF - MF central lever



inserts		page:
CD	64 poles + ⊕	59
CDD	108 poles + ⊕	72
CDS	42 poles + ⊕	81
CDSH	42 poles + ⊕	12 '
CSH	24 poles + ⊕	94
CSE	24 poles +	107
CNE	24 poles + ⊕	107
CCE	24 poles + ⊕	113
CSS	24 poles + ⊕	125
CQE	46 poles + ⊕	141
CQEE	64 poles + ⊕	147
MIXO	6 modules	179 - 215

hoods for central lever



hoods for central lever



**☆ AVAILABLE MARCH 2019 ★ AVAILABLE MARCH 2019** 

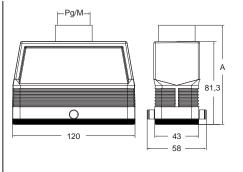
#### \* refer to NEWS 2016 pages ■ refer to CN.16 pages

description	part No.	entry Pg	part No	entry M	part No.	entry Pg	part No.	entry M
with pegs, top entry, high construction with pegs, top entry, high construction with pegs, top entry, high construction	CAV 24 GYC21 CAV 24 GYC29		MAV 24 GYC25 MAV 24 GYC32 MAV 24 GYC40	32				
with pegs, top entry, high construction, without adapter * with pegs, top entry, high construction, without adapter * with pegs, top entry, high construction, without adapter *					CFV 24 GYC21 CFV 24 GYC29		MFV 24 GYC25 MFV 24 GYC32 MFV 24 GYC40	32

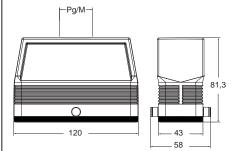
\* enclosure without adapter, threaded on the body, to be used only with a complete cable gland.

Even when coding is not required, it is recommended to use CRM and CRF pins with CD and CDD inserts and CRM CX and CRF CX pins with MIXO inserts to reduce movements when fitting and removing the connectors and to avoid contact damages.

Within this scope, the EN 175301-801 standard (former DIN 43 652) requires a maximum angular fluctuation of  $\pm 5^{\circ}$  on the long side,  $\pm 2^{\circ}$  on the short side.



Α	
96,3	
97,8	
96,3	
97,6	
100,3	
	96,3 97,8 96,3 97,6





# SIZE "77.62" HOUSINGS WITH SINGLE STAINLESS STEEL RIGID LEVER



CHIX - CHPX
bulkhead and surface
mounting housings with single
stainless steel rigid lever

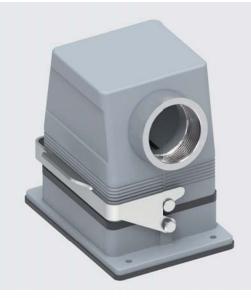




# TECHNICAL FEATURES CHIX - CHPX

- bulkhead and surface mounting housings with single stainless steel rigid lever;
- suitable for coupling in combination with hoods with 2 pegs of same size and - as applicable - covers with two pegs, same size (CN.16 pages 269-270);
- best choice in case of high mechanical load from the cable or use in combination with a connector coupling employing a high number of pneumatic and/or optical fibre contacts;
- IP66 degree of protection for versions without hinged cover, when "mated and locked" with the locking lever to a corresponding hood or to a free cover;
- **IP65 degree of protection** for versions with hinged metal cover when "mated and locked" with the locking lever, either to the cover or to the corresponding hood;
- available upon request in **"W-Type"** version for aggressive environment and in **180 °C** version for high temperatures.

single stainless steel rigid lever



#### CHIX **C-TYPE** standard version

inserts		page:
CD CDD CDS CDSH CSH CSE CNE CCE CCE CCS CTSE (16A) 1)	80 poles + ⊕ 144 poles + ⊕ 54 poles + ⊕ 54 poles + ⊕ 32 poles + ⊕	60 73 82 13 * 95 108 108 114 126
CQE CMCE CME CMSH CP MIXO	64 poles + ⊕ 12+4 (aux) poles + ⊕ 12+4 (aux) poles + ⊕ 12+4 (aux) poles + ⊕ 12 poles + ⊕ 4 + 4 modules	142 154 155 155 163 179 - 215

insert dimensions: 2 x (77,5 x 27) mm

description

\* refer to NEWS 2016 pages ■ refer to CN.16 pages

bulkhead mounting housings with single lever



**MARCH 2019** 

bulkhead mounting housings with single lever, with cover



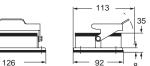
**MATERIAL MARCH 2019** 

with lever	CHIX 32 L	
with lever and aluminum cover		CHIX 32 LS
with lever and plastic cover		CHIX 32 LP

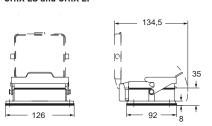
 $\ensuremath{\text{\ensuremath{\textit{G}}}}$  The enclosures ensure IP66 degree of protection (or IP65 for cover versions) rating when mated and locked with the closing levers.

1) can be used only in bulkhead mounting housings

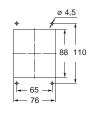
CHIX L



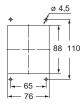
CHIX LS and CHIX LP



panel cut-out for enclosures



panel cut-out for enclosures



cURus Type 12 / Type 4/4X (except enclosures with plastic cover) pending





### **CHPX C-TYPE standard version**



inserts		page:
CD CDD CDS CDSH CSH CSE CNE CCE CCS CTSE (16A) 1) CQE CMCE CMCE CMCE CMSH CP MIXO	80 poles + ⊕ 144 poles + ⊕ 54 poles + ⊕ 54 poles + ⊕ 32 poles + ⊕ 42 poles + ⊕ 12+4 (aux) poles + ⊕ 14+4 modules	60 73 82 13 * 95 108 108 114 126 134 142 155 155 155 163 179 - 215

insert dimensions: 2 x (77,5 x 27) mm

\* refer to NEWS 2016 pages ■ refer to CN.16 pages surface mounting housings with single lever



**MATERIAL MARCH 2019** 

surface mounting housings with single lever, with cover



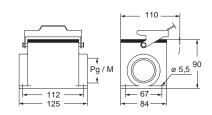
**MATERIAL AND LE MARCH 2019** 

description	part No.	entry Pg	part No	entry M	part No.	entry Pg	part No.	entry M
with lever with lever	CHPX 32 L29 CHPX 32 L	29 36	MHPX 32 L40	40				
with lever and aluminum cover with lever and aluminum cover					CHPX 32 LS29 CHPX 32 LS	29 36	MHPX 32 LS40	40
with lever and plastic cover with lever and plastic cover with lever and plastic cover					CHPX 32 LP29 CHPX 32 LP	29 36	MHPX 32 LP40 MHPX 32 LP50	

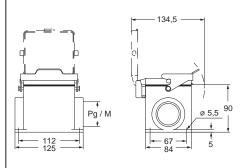
The enclosures ensure IP66 degree of protection (or IP65 for cover versions) rating when mated and locked with the closing levers.

1) can be used only in bulkhead mounting housings

CHPX L and MHPX L



CHPX LS - MHPX LS and CHPX LP - MHPX LP



cURus Type 12 / Type 4/4X (except enclosures with plastic cover) pending





# SURFACE MOUNTING HOUSINGS WITH SIMPLEX SELF-CLOSING HINGED COVER



CVP/MVP...LSP - CZP/MZP...LSP surface mounting housings with SIMPLEX self-closing hinged cover in self-extinguish thermoplastic material reinforced with glass fibre





# TECHNICAL FEATURES CVP/MVP...LSP - CZP/MZP...LSP

- die cast aluminium alloy surface mounting housings with SIMPLEX self-closing hinged cover in self-extinguish thermoplastic material reinforced with glass fibre, UL approved;
- complete the already available range of bulkhead mounting housings equipped with SIMPLEX self-closing hinged cover;
- V-Type locking lever for CVP /MVP or CVAP /MVAP 06 /10 /16 /24 LSP... housings;
- **IL-BRID locking lever** for CZP /MZP 15 LSP... or CZAP /MZAP 25LSP... housings;

- <u>V-Type locking lever equipped models:</u>
- IP44 degree of protection when not "mated and locked",
- IP65 degree of protection when "mated and locked" with the closing lever;
- IL-BRID locking lever equipped models:
- **IP65** degree of protection when "mated and locked" with the closing lever.

SIMPLEX self-closing hinged cover. V-Type lever version



#### V-TYPE lever SIMPLEX self-closing cover CV - CVA and MVP - MVAP

CDD       24 poles + ⊕       67         CDS       9 poles + ⊕       78         CDSH       9 poles + ⊕       9         CDSH NC       6 poles + ⊕       19         CSH       6 poles + ⊕       91         CSE       6 poles + ⊕       104         CNE       6 poles + ⊕       104	
CDSH       9 poles + ⊕       9         CDSH NC       6 poles + ⊕       19         CSH       6 poles + ⊕       91         CSE       6 poles + ⊕       104	
CDSH NC         6 poles + ⊕         19           CSH         6 poles + ⊕         91           CSE         6 poles + ⊕         104	
CSH 6 poles + ⊕ 91 CSE 6 poles + ⊕ 104	*
CSE 6 poles + ⊕ 104	*
CNF 6 noles + (4) 104	
ONE O POICS I S	
CCE 6 poles + ⊕ 110	
CSS 6 poles + ⊕ 122	
CQE 10 poles + ⊕ 138	
<b>MIXO</b> 2 modules <b>179 - 215</b>	

surface mounting housings with stainless steel single lever and SIMPLEX cover

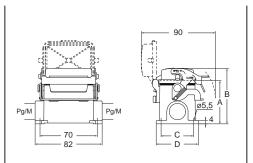


\* refer to NEWS 2016 pages

**MARCH 2019** ■ refer to CN.16 pages

description	part No.	entry Pg	part No	entry M
with lever and cover with lever and cover, high construction with lever and cover, high construction with lever and cover, high construction	CVP 06 LSP16 CVAP 06LSP21 CVAP 06LSP29	16 21 29	MVP 06 LSP20 MVAP 06LSP25 MVAP 06LSP32 MVAP 06LSP40	32

The enclosures ensure IP65 degree of protection when mated and locked with the closing lever, or IP44 degree of protection when not mated and locked with lever.



part No.	Α	В	С	D	
CVP / MVP 6 LSP	53	68	40	52	
CVAP / MVAP 6 LSP	74	89	45	57	



\* refer to NEWS 2016 pages ■ refer to CN.16 pages



### CV - CVA and MVP - MVAP V-TYPE lever SIMPLEX self-closing cover

inserts		page:
CDD	42 poles + ⊕	69
CDS	18 poles + ⊕	79
CDSH	18 poles + ⊕	10 *
CSH	10 poles + ⊕	92
CSE	10 poles + ⊕	105
CNE	10 poles + ⊕	105
CCE	10 poles + ⊕	111
CSS	10 poles + ⊕	123
CQE	18 poles + ⊕	139
CMCE	3+2 (aux) poles + ⊕	148
CMSH	3+2 (aux) poles +	149
CX	8/24 poles + ⊕	169
MIXO	3 modules	179 - 215

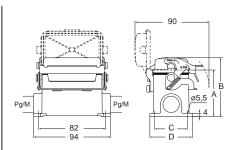
surface mounting housings with stainless steel single lever and SIMPLEX cover



#### **MATERIAL AND LE MARCH 2019**

description	part No.	entry Pg	part No	entry M
with lever and cover with lever and cover with lever and cover, high construction with lever and cover, high construction with lever and cover, high construction	CVP 10 LSP16 CVAP 10LSP21 CVAP 10LSP29	21		20 25 25 32 40

The enclosures ensure IP65 degree of protection when mated and locked with the closing lever, or IP44 degree of protection when not mated and locked with lever.



part No.	Α	В	С	D
CVP / MVP 10 LSP	57	72	40	52
CVAP / MVAP 10 LSP	74	89	45	57



## CV - CVA and MVP - MVAP V-TYPE lever SIMPLEX self-closing cover

inserts		page:
CD	40 poles + ⊕	57
CDD	72 poles + ⊕	70
CDS	27 poles + ⊕	80
CDSH	27 poles + ⊕	11 *
CSH	16 poles + ⊕	93
CSE	16 poles + ⊕	106
CNE	16 poles + ⊕	106
CCE	16 poles + ⊕	112
CSS	16 poles + ⊕	124
CQE	32 poles + ⊕	140
CQEE	40 poles + ⊕	146
CMCE, C	MSH 6+2 (aux) poles + ⊕	150 - 151
CP	6 poles + ⊕	162
CX	6/36, 6/12 and 12/2 poles +	170 - 171
CX	4/0 and 4/2 poles + ⊕	172
MIXO	4 modules	179 - 215

surface mounting housings with stainless steel single lever and SIMPLEX cover

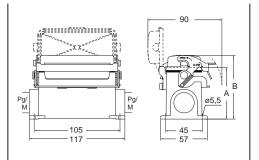


#### **MATERIAL MARCH 2019**

*	refer	to	NEWS	2016	pages
	refe	r to	CN.16	page	s

description	part No.	entry Pg	part No	entry M
with lever and cover with lever and cover, high construction with lever and cover, high construction with lever and cover, high construction	CVP 16 LSP21 CVAP 16LSP21 CVAP 16LSP29	21	MVAP 16LSP25 MVAP 16LSP32	

The enclosures ensure IP65 degree of protection when mated and locked with the closing lever, or IP44 degree of protection when not mated and locked with lever.



part No.	Α	В	
CVP / MVP 16 LSP	63	78	
CVAP / MVAP 16 LSP	81	96	





## CV - CVA and MVP - MVAP V-TYPE lever SIMPLEX self-closing cover

inserts		page:
CD	64 poles + ⊕	59
CDD	108 poles + ⊕	72
CDS	42 poles + ⊕	81
CDSH	42 poles + ⊕	12 *
CSH	24 poles + ⊕	94
CSE	24 poles + ⊕	107
CNE	24 poles + ⊕	107
CCE	24 poles + ⊕	113
CSS	24 poles + ⊕	125
CQE	46 poles + ⊕	141
CQEE	64 poles + ⊕	147
CMCE	10+2 (aux) poles +	152
CMSH	10+2 (aux) poles +	153
СХ	4/8 and 6/6 poles + @	173, 175
MIXO	6 modules	179 - 215

surface mounting housings with stainless steel single lever and SIMPLEX cover

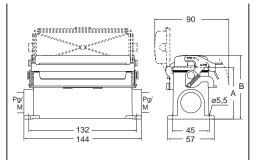


#### **MARCH 2019**

*	refer t	o NE	WS 2	2016	pages
	refer	to CN	N.16	page	s

description	part No.	entry Pg	part No	entry M
with lever and cover with lever and cover, high construction with lever and cover, high construction with lever and cover, high construction	CVP 24 LSP21 CVAP 24LSP21 CVAP 24LSP29	21	MVP 24 LSP25 MVAP 24LSP25 MVAP 24LSP32 MVAP 24LSP40	32

The enclosures ensure IP65 degree of protection when mated and locked with the closing lever, or IP44 degree of protection when not mated and locked with lever.



part No.	Α	В	
CVP / MVP 24 LSP	63	78	
CVAP / MVAP 24 LSP	81	96	



## CZ - MZ IL-BRID lever standard version SIMPLEX self-closing cover

inserts		page:
CD CSAH CDA CDC MIXO	15 poles + ⊕ 10 poles + ⊕ 10 poles + ⊕ 10 poles + ⊕ 10 poles + ⊕ 1 module	55 87 98 99 179 - 214

surface mounting housings with single lever and SIMPLEX cover

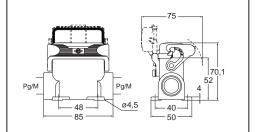


#### **MATERIAL MARCH 2019**

refer to CN.16 pages

description	part No.	entry Pg	part No	entry M
with lever and cover with lever and cover	CZP 15 LSP16	16	MZP 15 LSP20	20
	CZP 15 LSP21	21	MZP 15 LSP25	25

The enclosures ensure IP65 degree of protection when mated and locked with the closing lever.







## CZA - MZA IL-BRID lever standard version SIMPLEX self-closing cover

inserts		page:
CD	25 poles + ⊕	56
CDD	38 poles + ⊕	68
CSAH	16 poles + ⊕	88
CDA	16 poles + ⊕	100
CDC	16 poles + ⊕	101

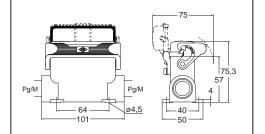
surface mounting housings with single lever and SIMPLEX cover



#### **MATERIAL MARCH 2019**

description	part No.	entry Pg	part No	entry M
with lever and cover, high construction with lever and cover, high construction	CZAP 25LSP16 CZAP 25LSP21		MZAP 25LSP20 MZAP 25LSP25	

The enclosures ensure IP65 degree of protection when mated and locked with the closing lever.





# LOCKING DEVICE FOR "CLASS" LOCKING LEVERS CR CLK



Locking device for bulkhead and surface mounting housings, low profile, with two "Class" locking levers





# TECHNICAL FEATURES CR CLK

- locking device, made in stainless steel, that can be easily placed on the "Class" locking lever handle of a two-lever bulkhead mounting housing or a "low profile" surface mounting housing of sizes "57.27", "77.27" and "104.27", in order to avoid unwanted and potentially hazardous accidental opening of the locking lever while the connectors are under working condition;
- possibility to apply, optionally, a padlock (TM BLC125, separately available, 5 mm shackle diameter, 40 mm arc clearance) with anti-tamper function, i.e. to secure the locking against unauthorized attempts to open the locking lever and disconnect the connector coupling;

- with eyelet cord end, for fastening the locking device to the intended housing when not in use.

Anti-tamper function by TM BLC125 padlock (to be ordered separately)



# CR CLK CLASS lever lock device

enclosures

page:

CHI CHP and MHP 10/16/24 poles + ⊕ **244, 250, 258** 10/16/24 poles + ⊕ **245, 251, 259** 

stainless steel locking device for two-lever housings



**MARCH 2019** 

padlock, 40 mm arc clearance, optional



part No.

TM BLC125

refer to CN.16 pages

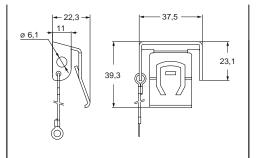
description part No. (with eyelet)

CR CLK

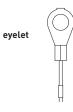
stainless steel locking device, with eyelet, for fixing on the housings

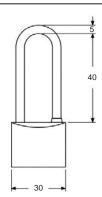
padlock, supplied with 2 keys

NOTE: Not suitable neither for hoods with locking levers and gasket nor for surface-mounting housings, high profile.



For fixing on housings





cURus pending

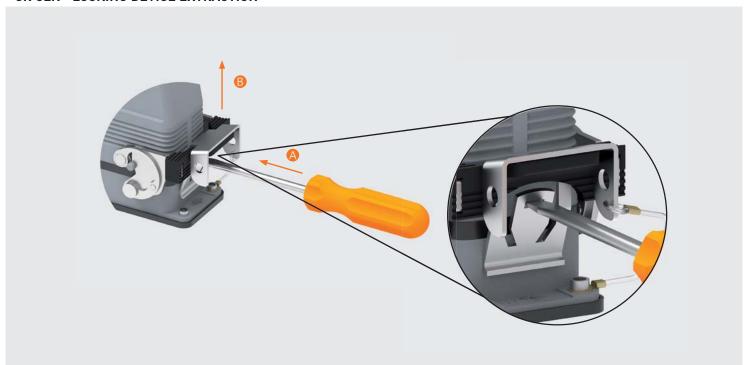


# **ASSEMBLY INSTRUCTIONS**

# **CR CLK - LOCKING DEVICE INSERTION**



### **CR CLK - LOCKING DEVICE EXTRACTION**



# LOCKING DEVICE FOR ENCLOSURE SIZE "104.27" WITH CENTRAL LEVER



Locking device for single stainless steel central locking lever





# TECHNICAL FEATURES CR YLK24 - CR YLK24 SL

- **locking device**, made in **stainless steel**, with **proprietary design**, that can be easily placed on the side of the central lever of a "104.27" hood in order to lock the opening movement of the locking lever, thus avoiding any unwanted and potentially hazardous accidental opening of the connector coupling under working condition;
- possibility to apply, optionally, a padlock (CR BLC622, separately available, 6 mm shackle diameter, 22 mm arc clearance) with anti-tamper function, to secure the locking against any unauthorized attempt to open the locking lever and disconnect the connector coupling;
- two versions available:
   with eyelet cord end, CR YLK24
   for the fastening to a housing of a central lever coupling when not in use;
   with "loop" cord end, CR YLK24 SL
   for the fastening to a hood when not in use (around the

incoming cable).



CR YLK24 SL locking device with loop for fixing on hoods

# CR YLK24 - CR YLK24 SL

enclosures

central lever size "104.27"

page:

Locking device for enclosure with central lever size "104.27"



**MAYAILABLE APRIL 2019** 

Padlock, 22 mm arc clearance, optional



refer to CN.16 pages

description part No. (with eyelet)

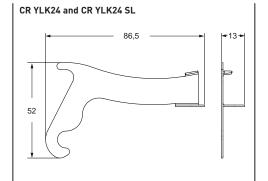
part No. (with loop) part. No.

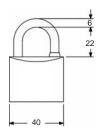
locking device with eyelet for fixing on housings locking device with loop for fixing on hoods

CR YLK24 SL

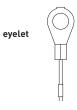
padlock, supplied with 2 keys CR BLC622

CR YLK24





For fixing on housings



For fixing on hoods



cURus pending



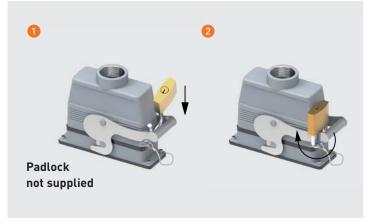
### **ASSEMBLY INSTRUCTIONS**

### **CR YLK24 WITH EYELET**

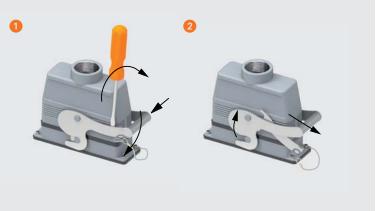
# **CABLE-TO-PANEL LOCKING**



# PADLOCK INSERTION



# UNLOCKING

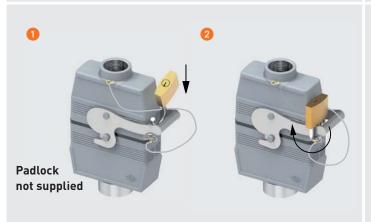


# CR YLK24 SL WITH LOOP

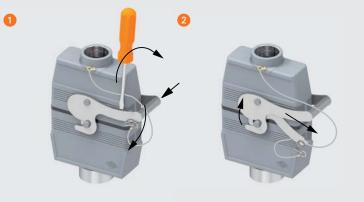
# **CABLE-TO-CABLE LOCKING**



### PADLOCK INSERTION



# UNLOCKING



# ANCHORAGES FOR MIXO FRAMES CR 16 SSD - CR 24 SSD



Anchorages for off-axis fastening made of zinc plated steel sizes "77.27" and "104.27"

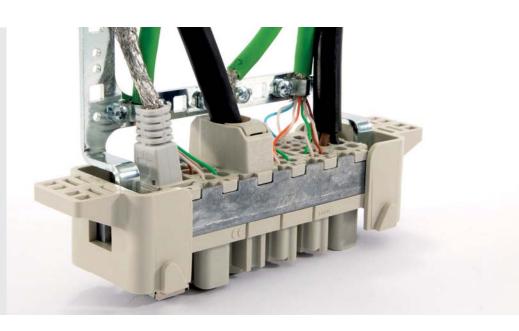




# TECHNICAL FEATURES CR 16 SSD - CR 24 SSD

- intended for connecting to earth (protective bonding) several individual PE conductors and/or the screen of shielded cables;
- to be mounted on a correspondingly sized MIXO frame mounted on suitably sized COB supports or docking frames CR ... DF for a connector foreseen for use without enclosures (e.g. inside a control panel);
- made of zinc plated steel and available in sizes "77.27" and "104.27";
- they can be used also in combination with CR SP supports for the installation on non-modular (i.e. non-MIXO) connector inserts (except for series CT, CTS and CTSE connector inserts);
- useful also for securing high diameter cables with clamps, in order to prevent the transmission of mechanical strain to the contacts;
- grip handle makes disconnection of the coupled connectors easier.

for off-axis fastening, for use without enclosures, e.g. inside a control panel



### **CR 16 SSD - CR 24 SSD**

anchorage for cables outside enclosure, equipped with fixing screws and washers



support, screws and clamps for grip panels of cables outside enclosure



**MAYAILABLE FEBRUARY 2019** 

for cables, to be mounted on: inserts size "77.27"\* with CR SP support

**CR 16 SSD** 

CR 16 SSD

part No.

CR 24 SSD

part No.

and MIXO frames for 4 inserts without support inserts size "104.27"\* with CR SP support and MIXO frames for 6 inserts without support support in die-cast zinc, 2 pcs. equipped with

fixing screws and rings for earth connecting short screws in zinc plated steel, 2 pcs. long screws in zinc plated steel, 2 pcs.

to be mounted on CR..SS anchorage clamp for (shielded) cables ø 5 mm clamp for (shielded) cables ø 10 mm

CR SP CR 26 V **CR 42 V** 

> **CR 05 CA CR 10 CA**

part. No.

#### \* Except CT, CTS and CTSE

description

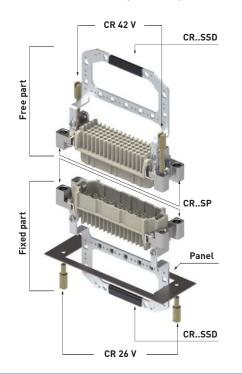
In the fixed part, a pair of CR SP supports is fitted on the connector insert, using the insert's fixing screws.

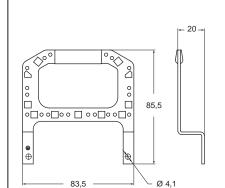
A CR..SSD anchorage is then fitted on the CR SP supports, using the supplied fixing screws and washers.

All parts are secured on the rear panel with a pair of CR 26 V special short screws.

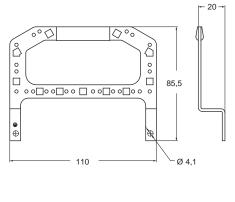
Also in the free part, a pair of CR SP supports is fitted on the connector insert and a CR..SSD anchorage is similarly secured on it. A pair of CR 42 V long screws fasten the free part to the fixed part.

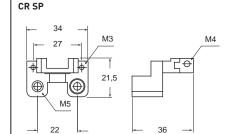
☑ NOTE: By unscrewing the CR 26 V special short screws, the whole assembly (free part + fixed part) can be removed from the panel for inspection.

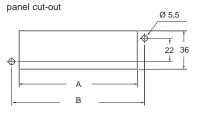




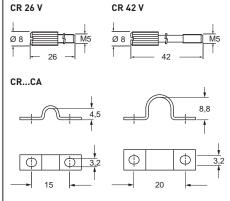
CR 24 SSD





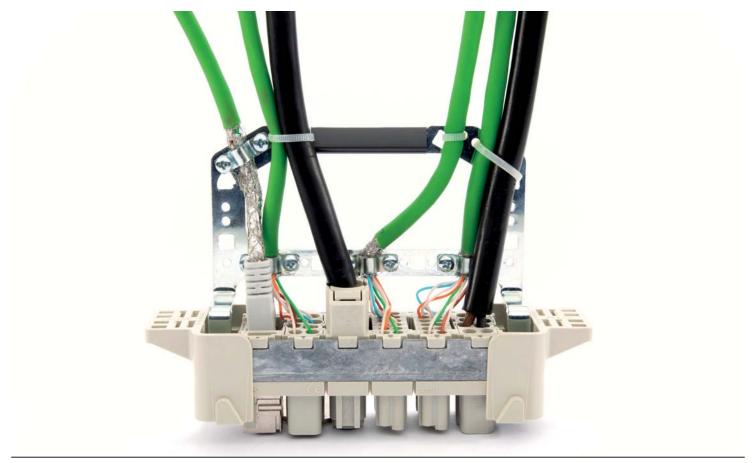


poles	06	10	16	24	_
Α	52	65	85,5	112	_
В	65	78	98,5	125	





# **CR 24 SSD ANCHORAGE FOR MIXO FRAMES**



# PE TERMINAL ADAPTERS FOR MIXO FRAMES CGT 6.0 - CGT 10 - CGT 25



CGT 6.0 for small PE terminal CGT 10 and CGT 25 for large PE terminal





# TECHNICAL FEATURES CGT 6.0 – CGT 10 – CGT 25

- **PE terminal adapter CGT 6.0** made of nickel plated brass that allows to connect by crimping a 6 mm² / 10 AWG flexible copper conductor **to the small PE terminal** (2,5 mm² / 14 AWG) of a MIXO frame, in case the connector needs a second PE line sized 6 mm²/10 AWG when the large PE terminal (6 mm²/10 AWG) of the MIXO frame is already occupied by a large size PE conductor, by using the existing PE terminal adapter **CGT 16**, or the new ones for the large PE terminal, **CGT 10 or CGT 25**.
- PE terminal adapters CGT 10 and CGT 25 made of nickel plated brass that allow to connect by crimping respectively a 10 mm<sup>2</sup> / 8 AWG or a 25 mm<sup>2</sup> / 4 AWG flexible copper conductor to the large PE terminal (6 mm<sup>2</sup>/10 AWG) of a MIXO frame.
- They are offered in addition to the existing PE terminal adapter CGT 16 for 16 mm² / 6 AWG protective earth conductor - introduced with MIXO 100A modules CX 02 G and CX 01 G - to give more flexibility for the combination of MIXO 100A and 70A high power modules with multicore cables, that have the PE conductor of the same size of the phase conductors.
- Crimping is achieved by using the already available manual hydraulic crimping tool CGPZ (Cembre HT 45) with hexagonal crimping dies CGD 10 C (for CGT 10 with 10 mm² / 8 AWG and for CGT 6.0 with 6 mm² / 10 AWG flexible copper conductors) and CGD 25 C (for CGT 25 with 25 mm² / 4 AWG flexible copper conductors).

PE terminal adapters for small and large PE terminals







# **CGT 6.0 - CGT 10 - CGT 25**

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

page:

frames for modular units

214 - 215



headless screw M4X6

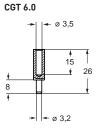


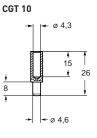
refer to CN.16 pages

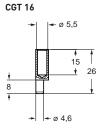
description	part No.	part No.
PE wire terminal adapter 6 mm <sup>2</sup> (10 AWG) PE wire terminal adapter 10 mm <sup>2</sup> (8 AWG)	CGT 6.0 CGT 10	
PE wire terminal adapter 16 mm² (6 AWG) * PE wire terminal adapter 25 mm² (4 AWG)	CGT 16 CGT 25	
headless screw M4X6, stainless steel, kit of 10 pcs. (see point 5 below)		CR VGM4

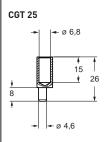
#### How to use the PE terminal adapter

- 1) Strip 15 mm of flexible PE wire.
- 2) Crimp the cable on the CGT adapter by using the CGPZ pliers with the dies as follows:
  - CGD 10 C for 6 mm<sup>2</sup> and 10 mm<sup>2</sup>
  - CGD 16 C for 16 mm<sup>2</sup>
  - CGD 25 C for 25 mm<sup>2</sup>
- Fix the adapter tip in the larger earth terminal (6 mm²) for CGT 10, CGT 16, CGT 25 or in the smaller earth terminal (2,5 mm²) for CGT 6.0 of frames CX...TM/TF.
- 4) To be used with bulkhead mounting housings or high construction hoods.
- 5) Cannot be used with T-TYPE surface mounting housings and horizontal cable outlet hoods. For the use within bulkhead housings and vertical entry hoods it is needed to replace the M4 screw of the 6 mm² PE contact of the frame with the headless screw CR VGM4.
- \* CGT 16 already available









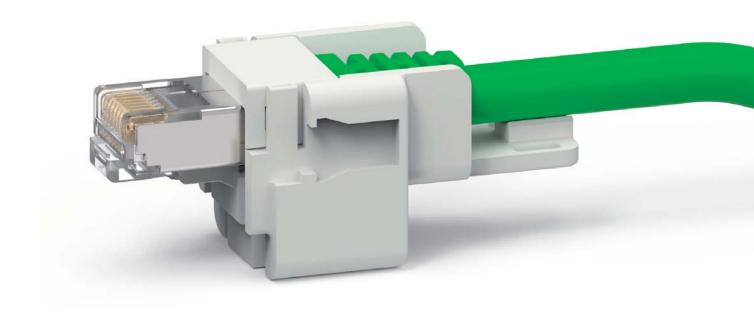
cURus pending



# **CGT 25 PE TERMINAL ADAPTERS FOR MIXO FRAMES**



# RJ45 UNIVERSAL PATCH CORD ADAPTER CJK 8M



CJK 8M RJ45 universal patch cord adapter



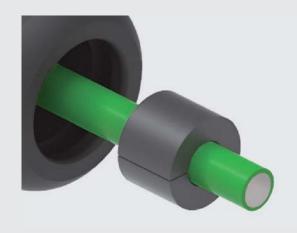


# TECHNICAL FEATURES CJK 8M

- CJK 8M adapter insert size "21.21" for placing an RJ45 plug (male connector) of a pre-assembled patch cord into a M25 size "21.21" top cable entry hood, either metal or insulating;
- it allows a **truly "universal"** use thanks to the possibility to install virtually any RJ45 patch cord plugs available on the market (of any Category: Cat. 5, 5e, 6, 6<sub>A</sub>, 7, or 8) inside the growing range of size "21.21" top entry hoods with glued gasket, **without any disassembly of the patch cord.** A straighforward smart solution, all the more so if compared with more complex and expensive solutions;
- the proprietary ILME design of this adapter foresees a two-part insulating carrier (the first part acting as carrier, the second as latch) that can quickly and easily make captive the RJ45 plug (male connector), the assembly is then introduced in the relevant "21.21" M25 top entry hood and fastened to it by the usual screw;
- a metallic (nickel plated brass) or insulating (light grey or black colour) M25 cable gland with suitable internal diameter to let the patch cord RJ45 plug passthrough is separately available;

- the **special sealing gasket**, provided with the RJ45 adapter **CJK 8M**, **is longitudinally cut** on its flank and must be applied over the cable to increase its diameter in the portion to introduce in the cable gland sealing, according to instructions;
- suitable for the combination of an RJ45 patch cord with one or both RJ45 plug extremities mounted inside suitable size "21.21" insulating or metal M25 top entry hood with glued gasket, with an RJ45 jack counterpart (female connector), e.g. a CJ KF adapter combined with the relevant female/female RJ45 connector CX 8 JF or CX 8/2 JF (4-way version CX 4 JF or 4/2-way version CX 4/2 JF are available upon request), mounted inside a corresponding counterpart hood or housing with locking lever size "21.21";
- optional four coding positions with **CR KC** insert coding pin (4 pins required for each connector coupling).

equipped with a special longitudinally cut sealing gasket



# CJK 8M

enclosures: page:
size "21.21"

MKG V25 77

MKAG V25 MKG VN25 77

RJ45 universal patch cord adapter



**MAYAILABLE APRIL 2019** 

#### M25 cable gland



**MAYAILABLE APRIL 2019** 

	ı.	'	
description	part No	part No.	entry M
universal patch cord adapter	CJK 8M		
insert coding pin for RJ45 adapters (optional)*	CR KC		
plastic cable gland, light grey (RAL 7035)		AW M25IJ	25
plastic cable gland, black (RAL 9005)		AW M25INJ	25
nickel plated brass cable gland		AW M25PJ	25

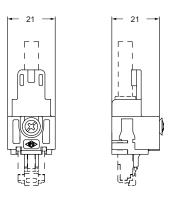
\* Optional four coding positions with **CR KC** insert coding pin (4 pins required for each connector coupling).

# How to use CR KC coding pins (cannot be used with IP68 enclosures)

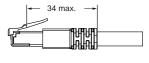


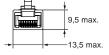
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### CJK 8M

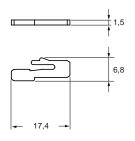




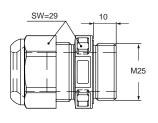




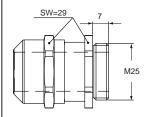
#### CR KC



#### AW M25IJ and AW M25INJ



#### AW M25PJ

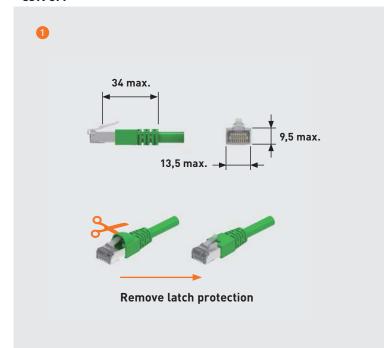


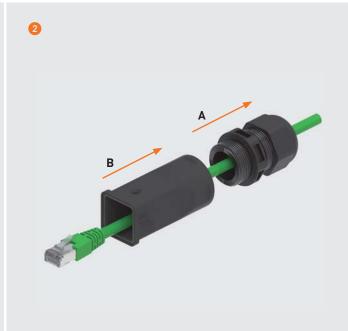


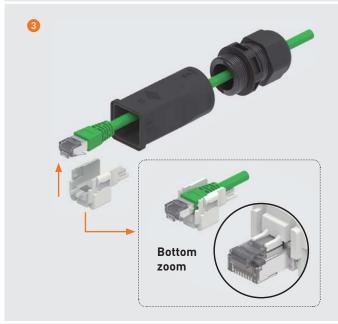
# **ASSEMBLY INSTRUCTIONS**

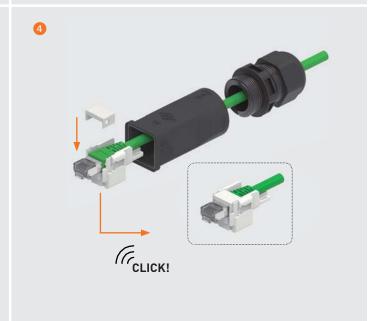
### CJK 8M

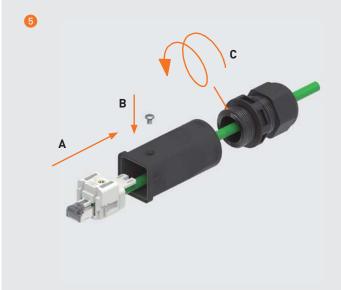


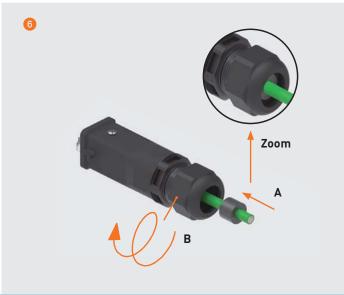












# HYGIENIC CABLE GLANDS AH M25IF(L) - AH M32IF(L)



Cable glands for food industry

- IP68/IP69 degree of protection
- according to EHEDG guidelines





# TECHNICAL FEATURES AH M25IF(L) - AH M32IF(L)

- cable glands made in materials approved for the use in the food industry, with degree of protection **IP68/IP69**;
- designed and certified in accordance with the **EHEDG** guidelines;
- they are resistant to the most common cleaning products (disinfectants, acids, alkalis and condensates) used in the food industry;
- good complement of T-TYPE /H Hygienic enclosures;
- for each thread size (M25 and M32) these glands are available in two versions, each suitable for a different range of cable diameters;
- temperature range **-20 °C ... +85 °C** (special versions with extended range -40 °C ... +85 °C available upon request).

designed and certified in accordance with the EHEDG guidelines



# **AH M25IF(L) - AH M32IF(L)**

enclosures:

page: HYGIENIC T-TYPE / H IP66/IP69 350 - 357 (only M25 or M32)

**HYGIENIC M25** cable gland

**HYGIENIC M32** cable gland







refer to CN.16 pages

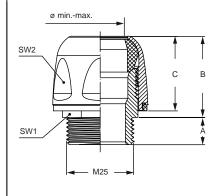
### **MAYAILABLE ON FEBRUARY**

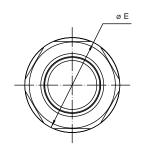
**M** AVAILABLE ON FEBRUARY

	•		•	
description	part No.	entry M	part No.	entry M
cable glands M25X1,5 for cable ø 12,0-15,0 for cable ø 15,0-18,0	AH M25IF AH M25IFL	M25 M25		
cable glands M32X1,5 for cable ø 18,0-21,0 for cable ø 20,0-23,0			AH M32IF AH M32IFL	M32 M32

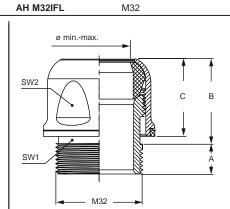
instruction sheet accompanying the product:

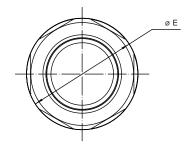
- ECOLAB compliant
- EHEDG compliant
- IP68, IP69 degree of protection
- ambient temperature limit: -20 °C ... +85 °C
- cURus, cULus, EAC certifications





part No. B C SW1 SW2 ø E ø min.-max. **AH M25IF** 10 30 27 24 32 34,9 12,0-15,0 AH M25IFL 10 30 27 34,9 15,0-18,0





part No. B C SW1 SW2 ø E ø min.-max. **AH M32IF** 11 32 28 30 38 40,9 18,0-21,0 AH M32IFL 11 32 28 40,9 20,0-23,0





A	CHIX 32 L98	CVP 16 LSP21104
	CHIX 32 LP98	CVP 24 LSP21105
<b>AH M25IF</b> 130	CHIX 32 LS98	<b>CX 01 T</b> 45
<b>AH M25IFL</b> 130	CHPX 32 L99	<b>CX 02 TF</b> 49
<b>AH M32IF</b> 130	CHPX 32 L2999	<b>CX 02 TM</b> 49
<b>AH M32IFL</b> 130	CHPX 32 LP2999	<b>CX 03 TF</b> 49
<b>AW M25IJ</b> 126	CHPX 32 LP99	<b>CX 03 TM</b> 49
<b>AW M25INJ</b> 126	CHPX 32 LS99	<b>CX 04 TF</b> 49
<b>AW M25PJ</b> 126	CHPX 32 LS2999	<b>CX 04 TM</b> 49
	<b>CJK 8M</b> 126	CX 05 SHF44
	CKR 6560*	CX 05 SHM44
C	CKR 65 D60*	CX 06 TF49
	CQ4F 0232	<b>CX 06 TM</b> 49
CAV 06 GYC2192	CQ4F 02 H	CX 42 DF48, 50
<b>CAV 06 GYC29</b> 92	CQ4M 0232	CX 42 DM 48, 50
CAV 10 GYC2193	CQ4M 02 H33	CXA 01 I54
CAV 10 GYC2993	CR 05 CA118	CX CFM
CAV 16 GYC2194	CR 10 CA118	CXFA 1.532, 33
CAV 16 GYC2994	CR 16 SSD118	CXFA 2.5
CAV 24 GYC2195	CR 24 SSD118	CXFA 4.0
CAV 24 GYC2995	CR 26 V118	CXFA 6.0
CDFA 0.348	CR 42 V118	CXFA 1032, 33
CDFA 0.548		CXMA 1.532, 33
CDFA 0.748	CR BLC622114	CXMA 2.532, 33
CDFA 1.048	CR CLK110	CXMA 4.032; 33
CDFA 1.548	CR CX01B56	CXMA 4.032, 33
<b>CDFA 2.5</b> 48	CR CX01G56	
<b>CDFD 0.3</b> 48	CR CX01N56	CXMA 10 32, 33
CDFD 0.548	CR CX01R56	CXP 01 C55
<b>CDFD 0.7</b> 48	CR KC126	<b>CXP 01 CLG</b> 55
<b>CDFD 1.0</b> 48	CR Q0234	CZAP 25LSP16107
<b>CDFD 1.5</b> 48	<b>CR SP</b> 118	<b>CZAP 25LSP21</b> 107
<b>CDFD 2.5</b> 48	<b>CR VGM4</b> 122	<b>CZP 15 LSP16</b> 106
CDMA 0.348	<b>CR YLK24</b> 114	<b>CZP 15 LSP21</b> 106
CDMA 0.548	CR YLK24 SL114	
CDMA 0.748	<b>CSHF 06 S</b> 16	
CDMA 1.048	<b>CSHF 10 S</b> 17	J
CDMA 1.548	<b>CSHF 16 S</b> 18, 20	
CDMA 2.548	<b>CSHF 16 SN</b> 20	<b>JSHF 06 S</b> 24
CDMD 0.348	<b>CSHF 24 S</b> 19, 21	<b>JSHF 10 S</b> 25
CDMD 0.548	<b>CSHF 24 SN</b> 21	<b>JSHF 16 NS</b> 28
CDMD 0.748	<b>CSHM 06 S</b> 16	<b>JSHF 16 S</b> 26, 28
CDMD 1.048	<b>CSHM 10 S</b> 17	<b>JSHF 24 NS</b> 29
CDMD 1.548	<b>CSHM 16 S</b> 18, 20	<b>JSHF 24 S</b> 27, 29
CDMD 2.548	<b>CSHM 16 SN</b> 20	<b>JSHM 06 S</b> 24
CFV 06 GYC2192	<b>CSHM 24 S</b> 19, 21	<b>JSHM 10 S</b> 25
CFV 06 GYC2992	<b>CSHM 24 SN</b> 21	<b>JSHM 16 NS</b> 28
CFV 10 GYC2193	CVAP 06LSP21102	<b>JSHM 16 S</b> 26, 28
CFV 10 GYC2993	CVAP 06LSP29102	<b>JSHM 24 S</b> 27, 29
CFV 16 GYC2194	CVAP 10LSP21103	
CFV 16 GYC2994	CVAP 10LSP29103	
CFV 24 GYC2195	<b>CVAP 16LSP21</b> 104	M
<b>CFV 24 GYC29</b> 95	<b>CVAP 16LSP29</b> 104	1*1
<b>CGT 6.0</b> 122	CVAP 24LSP21105	MAV 06 GYC2592
<b>CGT 10</b> 122	CVAP 24LSP29105	MAV 06 GYC3292
<b>CGT 16</b> 122	CVP 06 LSP16102	MAV 06 GYC4092
CGT 25122	CVP 10 LSP16103	MAV 10 GYC2593

 $<sup>\</sup>ensuremath{^{*}}$  These items are also shown in various sections throughout the catalogue



MAV 10 GYC3293	<b>MVAP 10LSP25</b> 103
MAV 10 GYC4093	MVAP 10LSP32103
MAV 16 GYC2594	<b>MVAP 10LSP40</b> 103
MAV 16 GYC3294	MVAP 16LSP25104
MAV 16 GYC4094	MVAP 16LSP32104
MAV 24 GYC2595	MVAP 16LSP40104
MAV 24 GYC3295	MVAP 24LSP25105
MAV 24 GYC4095	MVAP 24LSP32105
MFV 06 GYC2592	MVAP 24LSP40105
MFV 06 GYC3292	MVP 06 LSP20102
MFV 06 GYC4092 MFV 10 GYC2593	MVP 10 LSP20103
	<b>MVP 10 LSP25</b> 103 <b>MVP 16 LSP25</b> 104
MFV 10 GYC3293 MFV 10 GYC4093	MVP 24 LSP25105
MFV 16 GYC2594	MXA 01 O2554
MFV 16 GYC2594 MFV 16 GYC3294	MXA 01 V2554
MFV 16 GYC4094	MXA 01 V3254
MFV 16 GYC4094 MFV 24 GYC2595	MZAP 25LSP20107
MFV 24 GYC3295	MZAP 25LSP25107
MFV 24 GYC4095	MZP 15 LSP20106
MGK V2588	MZP 15 LSP25106
MGK V25 B89	WIZF 13 L3F23100
MHPX 32 L4099	
MHPX 32 LP4099	_
MHPX 32 LP5099	R
MHPX 32 LS4099	BDE2D 0.2
MKA IF61	<b>RDF2D 0.3</b> 38, 50 <b>RDF2D 0.5</b> 38, 50
MKAS IF65	<b>RDF2D 0.7</b> 38, 50
MKAS IVG2071	<b>RDF2D 1.0</b> 38, 50
MKAS VG2585	<b>RDF2D 1.5</b> 38, 50
MKA VG2581	<b>RDF2D 2.5</b> 38, 50
MKAX IF60	<b>RDM2D 0.3</b> 38, 50
MKAXR IF66	<b>RDM2D 0.538</b> , 50
MKAXS IF64	<b>RDM2D 0.738,</b> 50
MKAXS IVG2070	<b>RDM2D 1.0</b> 38, 50
MKAXS VG2584	<b>RDM2D 1.5</b> 38, 50
MKAX VG2580	
WINAX VG2300	<b>RDM2D 2.5</b> 38, 50
MKAXW IF62	<b>RDM2D 2.5</b> 38, 50 <b>RX 02 TF</b> 51
	<b>RDM2D 2.5</b> 38, 50 <b>RX 02 TF</b> 51 <b>RX 02 TM</b> 51
MKAXW IF62	<b>RX 02 TF</b> 51 <b>RX 02 TM</b> 51
MKAXW IF62 MKAXW VG2582	<b>RX 02 TF</b> 51
MKAXW IF82 MKAXW VG2582 MKAXX IF61	RX 02 TF51 RX 02 TM51 RX 03 TF51
MKAXW IF82 MKAXW VG2561 MKAXX IF67	RX 02 TF51 RX 02 TM51 RX 03 TF51 RX 03 TM51
MKAXW IF	RX 02 TF51 RX 02 TM51 RX 03 TF51 RX 03 TM51 RX 04 TF51
MKAXW IF	RX 02 TF
MKAXW IF       .62         MKAXW VG25       .82         MKAXX IF       .61         MKAXXR IF       .67         MKAXXS IF       .65         MKAXXS IVG20       .71         MKAXXS VG25       .85         MKAXX VG25       .81         MKAXXW IF       .63         MKAXXW VG25       .83         MKG V25       .75         MKG VN25       .75         MK V25       .74         MK VG25       .76	RX 02 TF
MKAXW IF	RX 02 TF

T	
TM BLC125	110

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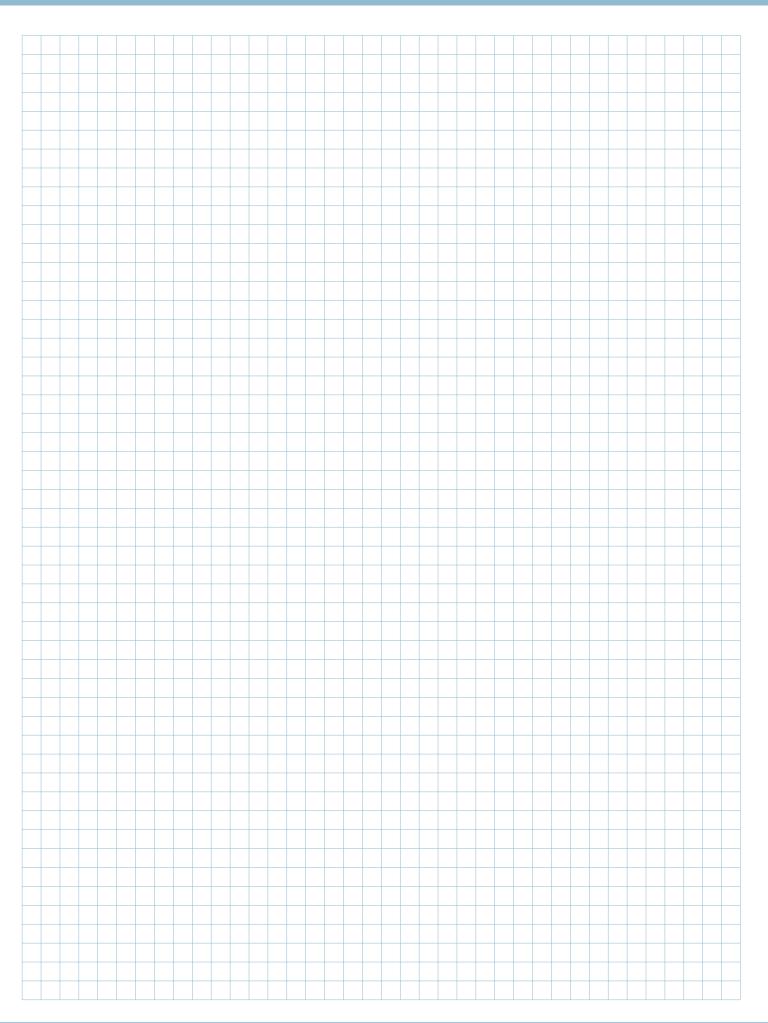
Easy selection of individual parts for key applications and recommendations for custom environmental conditions.



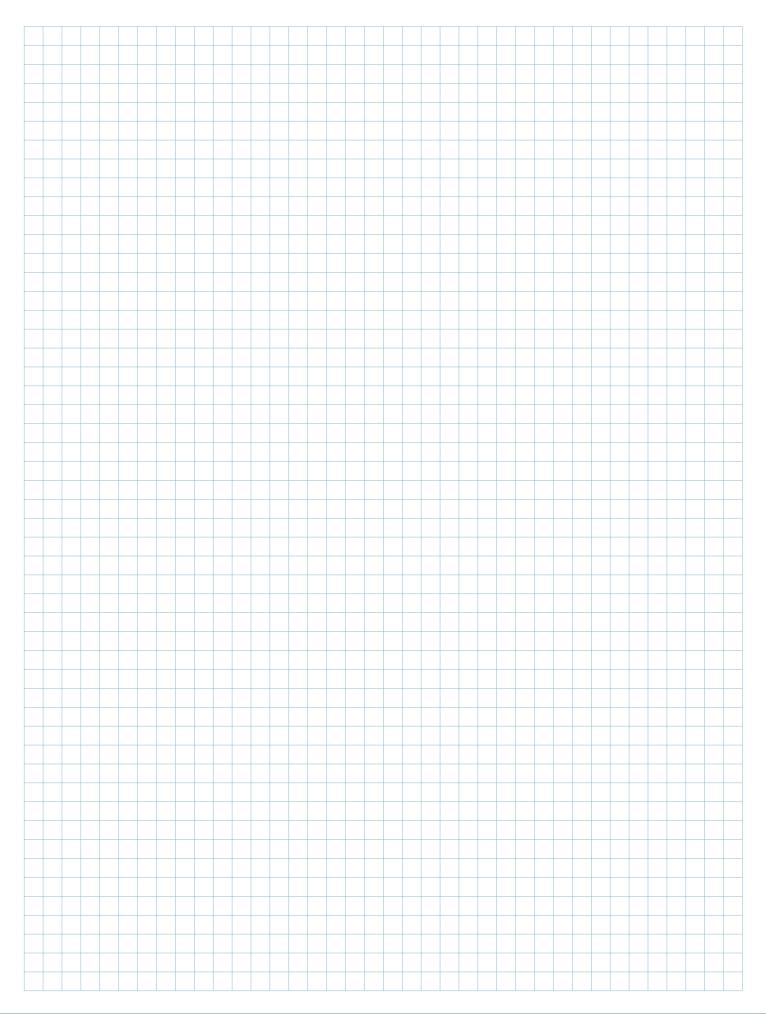
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**Smart suggestion** to get the most suitable configuration.







# Worldwide Sales Organization

Headquarters ILME S.p.A.

Via M.A. Colonna, 9 20149 Milano, Italia T +39 0234560522 info@ilme.com

France ILME FRANCE S.A.R.L.

Rue Roland Garros

Parc d'Activités de l'Aéroport 42160 Andrézieux-Bouthéon T +33 04 7736 2336 ilme-france@ilme.fr

Germany ILME GmbH

Max-Planck-Straße 12

51674 Wiehl

T +49 (0)2261 7955 0 technik@ilme.de

Sweden

ILME NORDIC AB

and Nordic Countries

Transportvägen 18
246 42 Löddeköpinge
T +46 4618 2800

T +46 4618 2800 info@ilme.se

United Kingdom ILME UK LIMITED

50 Evans Road, Venture Point Speke, Liverpool L24 9PB T +44 0151 336 9321 sales@ilmeuk.co.uk

China ILME CHINA CO. LTD.

Room 101, Building 3,

188 Xinjunhuan Road, Minhang

Shanghai 201114 T +86 21 6248 9961 info@ilmechina.com

Japan ILME JAPAN CO. LTD.

K.I.B.C. Bldg 5-2,

Minatojima Minamimachi 5-Chome,

Chuo-Ku, Kobe 650-0047 T +81 78 302 2005 info@ilmejapan.co.jp

www.ilme.com





ILME S.p.A. Via M.A. Colonna 9 20149 Milano, Italy www.ilme.com































































































