

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

frames for modular units \* ..... page: 215

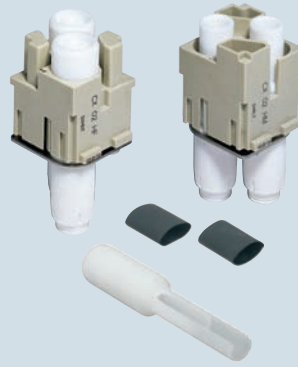
\* enclosures: bulkhead mounting housings, high construction housings or high construction hoods

- characteristics according to EN 61984 \*\*:

**16A 2900/5000V 15kV 3**

- \*\* used for guidance as applicable
- insulation resistance:  $\geq 10 \text{ G}\Omega$
- ambient temperature limit:  $-40 \text{ }^\circ\text{C} \dots +125 \text{ }^\circ\text{C}$
- are made of self-extinguishing thermoplastic resin UL 94 V0
- mechanical life:  $\geq 500$  cycles
- contact resistance:  $\leq 1 \text{ m}\Omega$
- for contact crimping, see the crimp tool section (16A CCF and CCM series contacts) on pages 534, 538, 544, 546, 548

**high voltage modular units, crimp connections contact holder removal tool**



**16A crimp contacts silver and gold plated**



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

silver plated

gold plated 1)

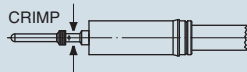
**How to use the MIXO HT module**

**Wiring and assembly:**

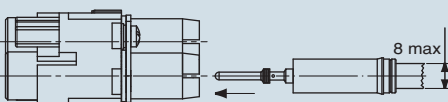
- Strip the wire by 9.5 mm length and insert it into the contact holder



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



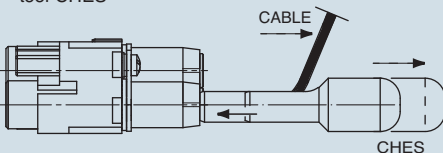
- Insert the contact holder into the module



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

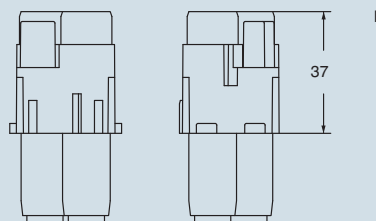
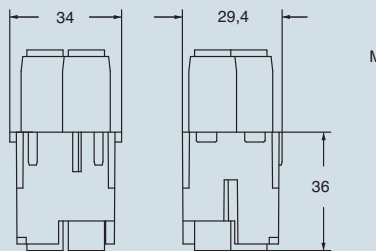
**Removal:**

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



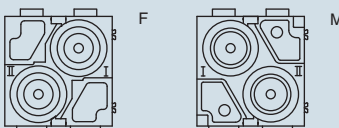
dimensions shown are not binding and may be changed without notice

**dimensions in mm**



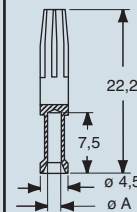
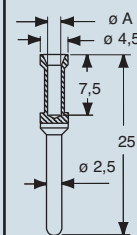
**contacts side (front view)**

side with reference arrow ▲



- 2 frame slots

**dimensions in mm**



**CCF, CCM contacts**

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

1) basic or high thickness gold plating page 481

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MIXO

CX 02 CHF/CHM

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MIXO High Voltage  
2 poles single module,  
16A (crimp),  
2500V AC or DC



Find more  
information on  
our products at  
[www.ilme.com](http://www.ilme.com)

## TECHNICAL FEATURES

### CX 02 CHF/CHM

A new **high-voltage single module** has been added to the ILME MIXO series of modular industrial connectors, allowing the transmission of power up to 16A rated current at very high working voltage of 2500V AC or DC with half space requirement compared with the previously available solution.

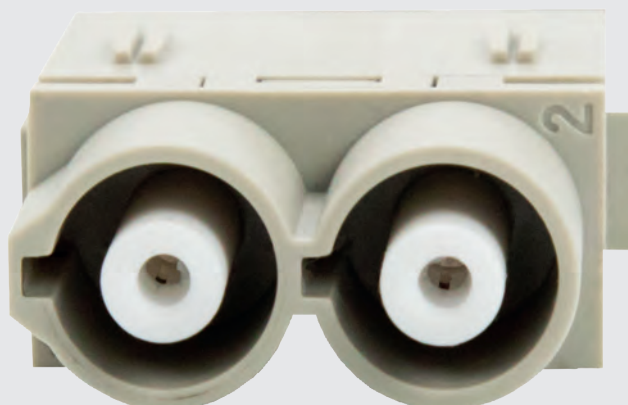
The new ILME **MIXO HT single module CX 02 CHF/CHM** is based on the space-saving design of MIXO 70A modules CX 02 7F/ 7M with two power contacts per module, incorporating in that module two contact holders made of PTFE that provides outstanding high-voltage insulation, for the installation of two removable crimp contacts **CC series**, that can handle stranded copper conductor connection with cross-sections 0,5 mm<sup>2</sup> (20 AWG) through 4 mm<sup>2</sup> (12 AWG).

This new **MIXO HV single module** allows – for example – to design a MIXO size “104.27” connector equipped with up to 12 power contacts rated 16A – 2500V AC or DC. The module can also be combined with other power modules (200A, 100A, 70A, 40A) for use at lower rated voltage (e.g. 500V or 690V or 1000V) or signal modules (10A, 5A), pneumatic modules and optical or data transmission modules.

#### The main features of the new MIXO HV single module CX 02 CHF/CHM are:

- single-sized module: halves the space required for power & high voltage for operating voltages ≤ 2500V AC or DC (CX 02 CHF/CHM double-sized module offers the same number of poles for 16A – 2900/5000V AC or DC);
- up to 16A rated current at up to 2500V AC or DC rated operating voltage, pollution degree 3 per IEC/EN 60664-1;
- contact holders and seats made of PTFE for outstanding dielectric withstand properties, external module support made by glass fibre reinforced polycarbonate;
- for 2 removable crimp contacts CC series; same crimping tools for these contacts;
- heat shrinking tube provided for the two contacts CC series to be applied after crimping on a suitably rated medium voltage wire, to establish the required insulation on the cable entry side;
- dedicated extraction tool **CH1ES** for contact removal;
- suitable for connection to appliances requiring high voltage even transient, e.g. starters for high power discharge lamps, storage capacitors, high voltage testing equipment, etc.

shielded module with  
9-pole D-Sub female  
connector



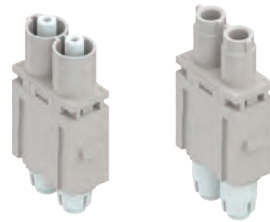
# HV 2 poles single module 16A - 2500V

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

frames for modular units\* pages  
44-45

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

high voltage modular units, crimp connections



AVAILABLE JUNE 2018

16A crimp contacts silver and gold plated



description	part No.	part No.
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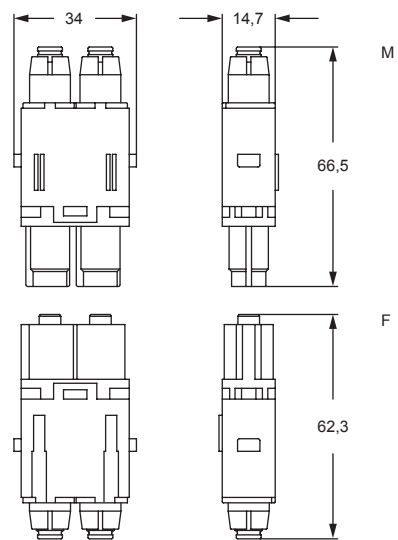
without contacts (to be ordered separately)		
- high voltage female inserts for female contacts	<b>CX 02 CHF</b>	
- high voltage male inserts for male contacts	<b>CX 02 CHM</b>	
contact holder removal tool	<b>CH1ES</b>	

16A female contacts					silver plated		gold plated <sup>+</sup>	
0,5 mm <sup>2</sup>	AWG 20	with no grooves	<b>CCFA 0.5</b>		<b>CCFD 0.5</b>			
0,75 mm <sup>2</sup>	AWG 18	one groove (back side)	<b>CCFA 0.7</b>		<b>CCFD 0.7</b>			
1 mm <sup>2</sup>	AWG 18	one groove	<b>CCFA 1.0</b>		<b>CCFD 1.0</b>			
1,5 mm <sup>2</sup>	AWG 16	two grooves	<b>CCFA 1.5</b>		<b>CCFD 1.5</b>			
2,5 mm <sup>2</sup>	AWG 14	three grooves	<b>CCFA 2.5</b>		<b>CCFD 2.5</b>			
3 mm <sup>2</sup>	AWG 12	one wide groove	<b>CCFA 3.0</b>		<b>CCFD 3.0</b>			
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16A male contacts			<b>CCMA 0.5</b>		<b>CCMD 0.5</b>			
0,5 mm <sup>2</sup>	AWG 20	with no grooves	<b>CCMA 0.7</b>		<b>CCMD 0.7</b>			
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3 mm <sup>2</sup>	AWG 12	one wide groove	<b>CCMA 4.0</b>		<b>CCMD 4.0</b>			
4 mm <sup>2</sup>	AWG 12	with no grooves						

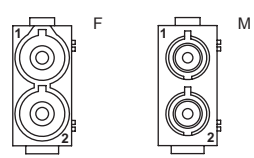
- characteristics according to EN 61984\*\*:
- 16A 2500V 15kV 3**
- \*\* used for guidance as applicable
- insulation resistance:  $\geq 10 \text{ G}\Omega$
- ambient temperature limit:  $-40 \text{ }^\circ\text{C} \dots +125 \text{ }^\circ\text{C}$
- made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life:  $\geq 500$  cycles
- contact resistance:  $\leq 1 \text{ m}\Omega$
- for contact crimping instructions, please refer to the crimping tool section (16A contacts, CCF and CCM series on pages 531-539 and 544-549 catalogue CN.16
- contact holder removal tool: **CH1ES**



CH1ES

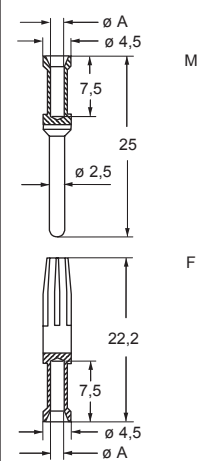


contacts side (front view)  
side with reference arrow ▲



- 1 frame slot

**CCF and CCM**



**CCF and CCM contacts**

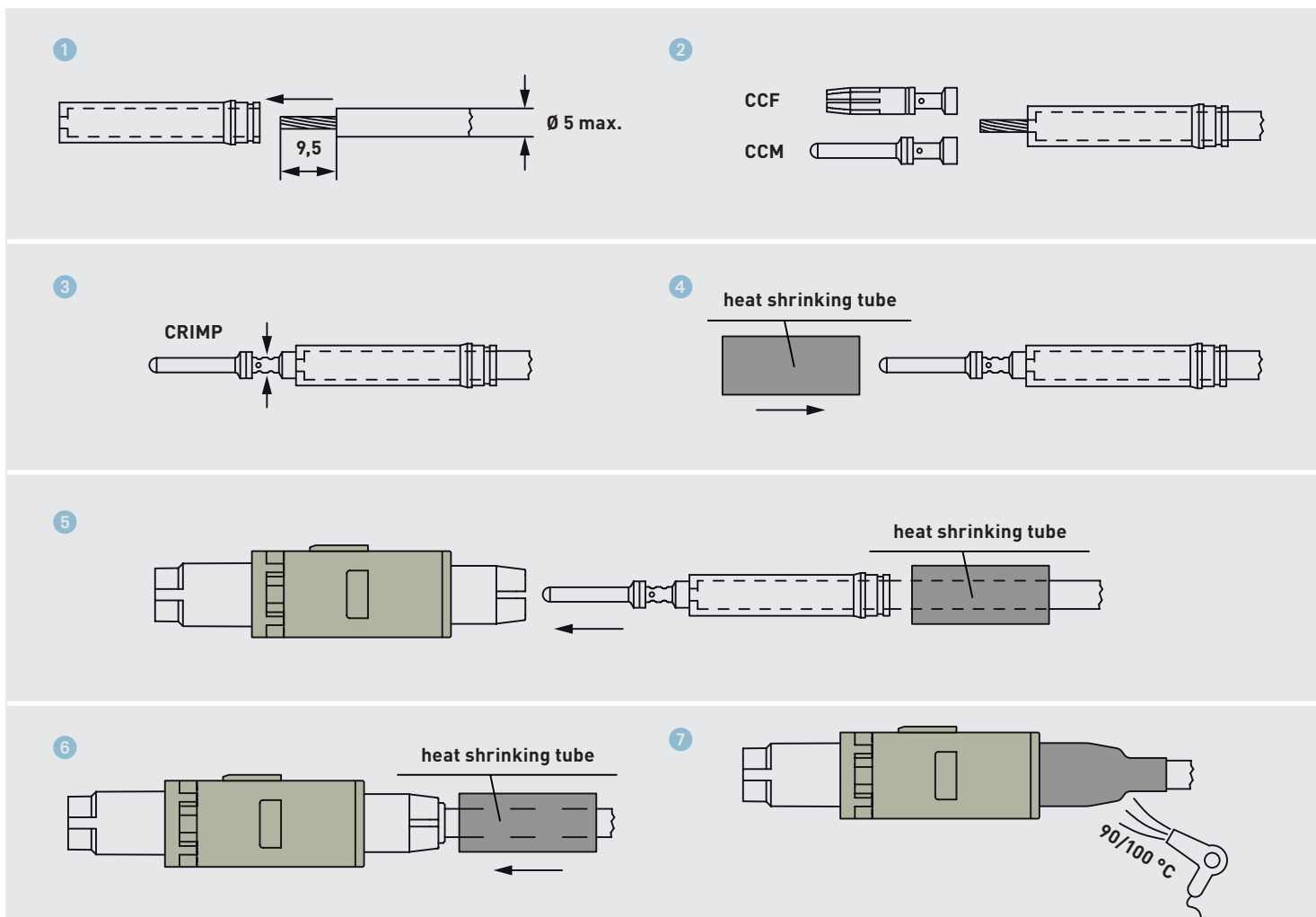
conductor section	conductor slot	conductors stripping length
mm <sup>2</sup>	ø A (mm)	(mm)
0,5	1,1	7,5
0,75	1,3	7,5
1,0	1,45	7,5
1,5	1,8	7,5
2,5	2,2	7,5
3	2,55	7,5
4	2,85	7,5

<sup>+</sup> for basic or high thickness gold plating, please refer to page 481 of catalogue CN.16

Watch our online tutorial

## ASSEMBLY INSTRUCTIONS

### CX 02 CHF/CHM



### CONTACT HOLDER REMOVAL

