

# MIXO series

## Main features

### Inserts CX 04 SC

The new MIXO inserts **CX 04 SC** enables use of **fibre optic SC contacts**, up to 4 SC contacts per connector, for indoor or outdoor heavy duty industrial applications, with ILME connector enclosures.

The female inserts are provided with 4 **ceramic** (zirconia) type **split alignment sleeves**, for minimal insertion loss (e.g. critical network connections) and best suitable for single-mode F/O cable connections.

As optional accessory, **metallic** (phosphor bronze) **split alignment sleeves** are also available for more durable (less prone to cracking) applications, but less demanding precision alignment, thus most suitable for multi-mode fibre applications.

The **fibre optic SC contacts** (genderless, to be purchased separately) are available both for multi-mode fibres (50/125 µm or 62,5/125 µm) and single-mode fibre (9/125 µm).

The fibre optic SC contacts are also available for the hard-clad silica (HCS) or polymer-clad fibre (PCF) 200/230 µm fibre optic cables and for the less demanding, with shorter transmission distance covered, but more cost effective POF Ø 1 mm applications, available with crimp technique version (crimping tool required).

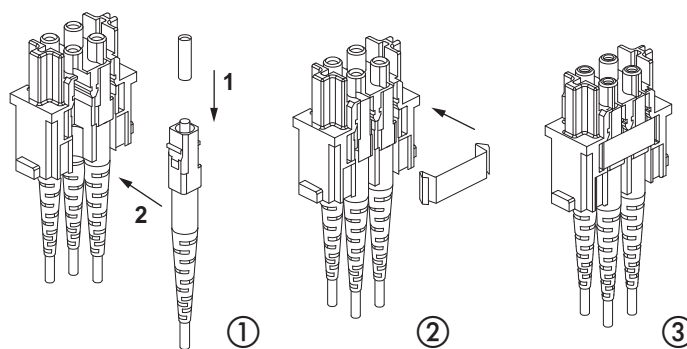
### NOTE

Due to the higher skill and training required to produce an effectively performing fibre optic junction for a single-mode type fibre-optic cable than for a multi-mode one, dedicated contacts for single-mode are available only upon request. Contact our Commercial Department for a quotation. It is more practical in such case to equip the MIXO inserts with ready-to-use fibre optic patch cords.

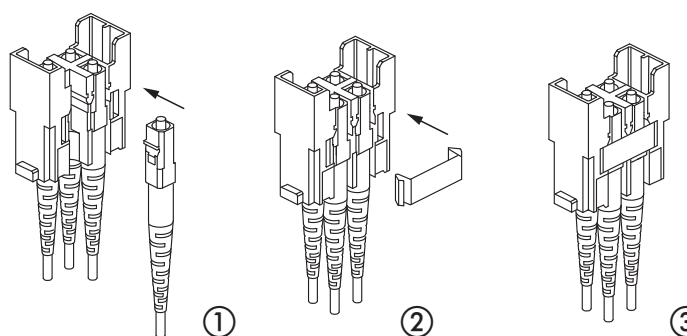
Quick assembly technique version (tool-less) for POF Ø 1 mm cables are also available only upon request, please send inquiry to our Commercial Department.

Part No. of inserts		CX 04 SC
No. of seats/poles	seats for optical contacts	4
ambient temperature limit (°C)	min	-40
	max	+85
degree of protection	with enclosures (according to type)	IP65/IP66/IP67, IP66/IP68, IP69K
conductor connections		crimp
mechanical endurance (mating cycles)		≥ 500
self-extinguishing capacity UL 94		V0

CX 04 SCF / CX 04 SCF-H



CX 04 SCM



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

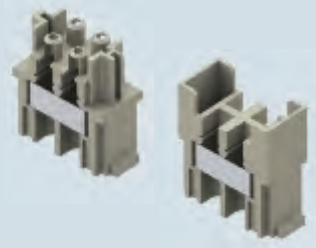
frames for modular units ..... page: 214 - 215

refer to catalogue page CN.16

- insulation resistance:  $\geq 10 \text{ G}\Omega$
- are made of self-extinguishing thermoplastic resin UL 94 V0
- mechanical life:  $\geq 500$  cycles
- temperature range: from  $-40 \text{ }^\circ\text{C}$  to  $+85 \text{ }^\circ\text{C}$

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

module adaptor for SC connectors



**AVAILABLE  
NOVEMBER 2017**

crimp FO contacts



description	part No.	part No.
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module insert with seats for 4 SC contacts (metal fixing plate included)  
- female insert, with ceramic sleeve  
- female insert, with metallic sleeve  
- male insert

**CX 04 SCF**  
**CX 04 SCF-H**  
**CX 04 SCM**

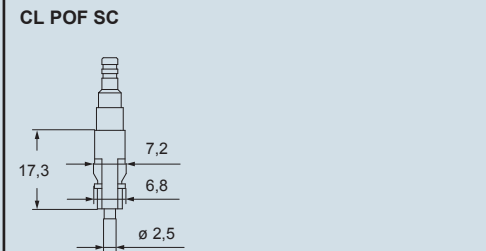
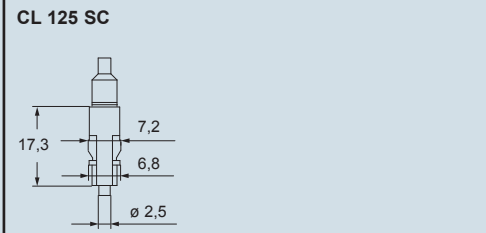
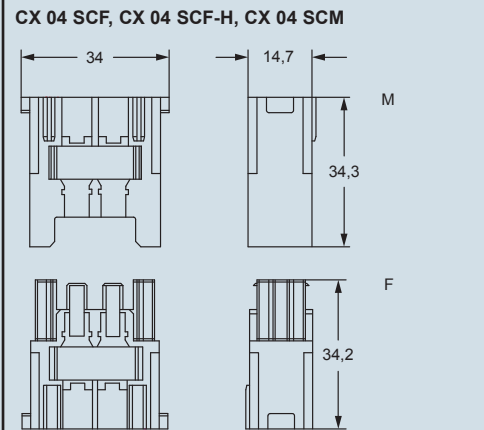
**CL 125 SC**  
**CL POF SC**

SC contact for GI FIBRE 50/125  $\mu\text{m}$  or 62.5/125  $\mu\text{m}$   
SC contact for  $\varnothing$  POF 1 mm

- adaptor insert fitted with metal plate and sleeve (female only) fixing

dimensions in mm

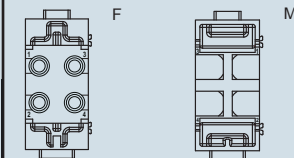
dimensions in mm



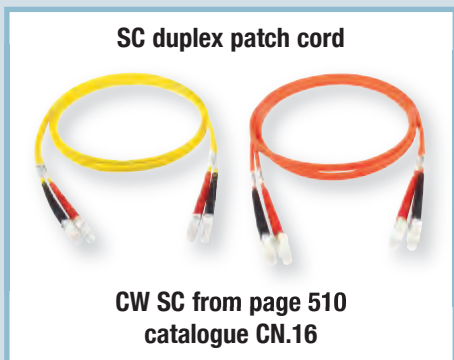
- adaptor insert designed to be used with SC contacts
- SC contact for SI FIBRE (HCS<sup>®</sup>) 200/230  $\mu\text{m}$ : **CL 230 SC** (on request)
- base equipment for SC contact GI FIBRE: **CLKZ 125 SC**  
If this application is required, please contact ILME SpA.
- supplementary set for POF: **CLKZ POF**  
(to be ordered with CLKZ 125 SC)  
If this application is required, please contact ILME SpA.

contacts side (front view)

side with reference arrow ▲



- 1 frame slot



dimensions shown are not binding and may be changed without notice

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

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

refer to catalogue page CN.16

modular units,  
crimp connections



**AVAILABLE  
NOVEMBER 2017**

crimp coaxial contacts



**AVAILABLE  
NOVEMBER 2017**

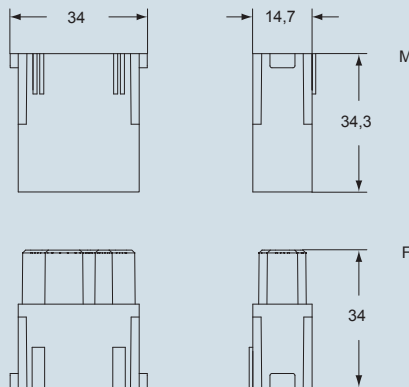
description	part No.	part No.
without contacts (to be ordered separately) - female inserts for female contacts - male inserts for male contacts	<b>CX 04 RF</b> <b>CX 04 RM</b>	
female coaxial contacts 50Ω male coaxial contacts 50Ω		<b>CX 50 RF</b> <b>CX 50 RM</b>
female coaxial contacts 75Ω male coaxial contacts 75Ω		<b>CX 75 RF</b> <b>CX 75 RM</b>

- inserts are made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: ≥ 500 cycles
- in accordance with standard DIN 41626-T2
- finishing: contact surfaces, body, back end and ferrule gold plated
- impedance: 50 Ω
- frequency: DC to 6 GHz
- return loss: ≥ 21 dB, DC to 2 GHz  
≥ 19 dB, 2 to 6 GHz
- insertion loss: ≤ 0,1 x √f(GHz) dB
- center contact resistance: ≤ 10 mΩ
- outer contact resistance: ≤ 3 mΩ
- test voltage: 750V rms
- working voltage: 250V rms
- RF-leakage: ≥ 80 dB up to 0,5 GHz  
≥ 65 dB up to 1,5 GHz
- to crimp contacts CX 50 RM/RF, CX 75 RM/RF use tool COPZ R (see the crimping tool section on page 552 catalogue CN.16)

**Warnings:**  
We recommend the use of code pins **CRF CX / CRM CX**.

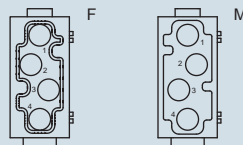
dimensions in mm

**CX 04 RF / RM**



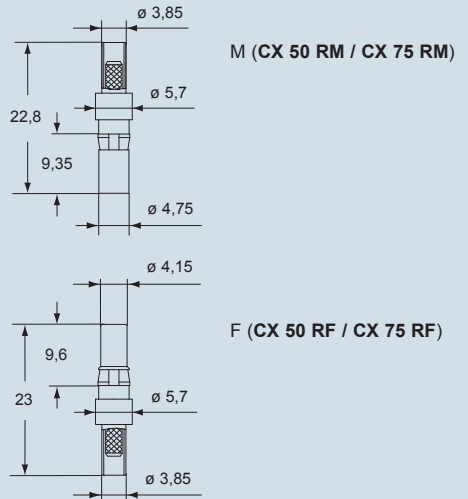
contacts side (front view)

side with reference arrow ▲

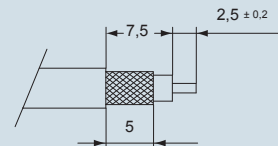


- 1 frame slot

dimensions in mm



conductor stripping



coaxial contacts	for cables	ø external	part No.
50Ω	RG 316/U	2,49 ±0,1	CX 50 RF
	RG 174 A/U	2,79 ±0,127	CX 50 RM
	RG 188 A/U	2,79 max	
75Ω	RG 179 B/U	2,54 ±0,127	CX 75 RF
	RG 187 A/U	2,79 max	CX 75 RM
	TZC 75 101	2,79 max	

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