

CLK 04 SC adapters

TECHNICAL FEATURES

The new adapter CLK 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 size “21.21” series CKA (IP66/IP67/IP69, metallic, both C-TYPE, grey-painted, for normal environments, and W-TYPE black-painted, for aggressive environments, only the hood models provided with sealing gasket), series CGK/ MGK (IP66/IP68/IP69, metallic, either Pg or metric-threaded cable outlet) and series CK (IP66/IP67/IP69, insulating, only the hood models provided with sealing gasket).

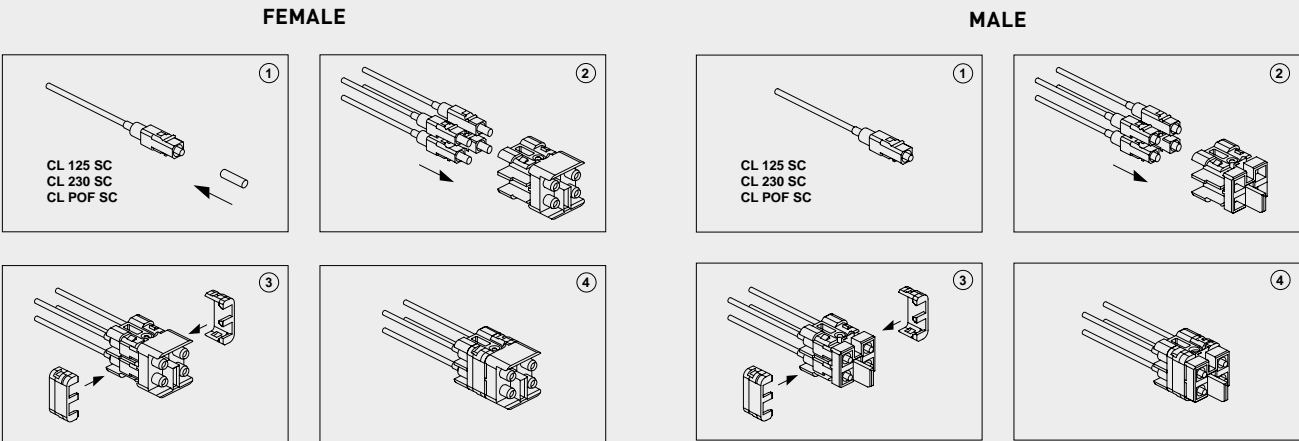
The fibre optic SC contacts (genderless, to be purchased separately) are available both for multi-mode fibres (50/125 µm or 62,5/125 µm) and single-mode fibre (9/125 µm). The fibre optic SC contacts are also available for the hard-clad silica (HCS) or polymer-clad fibre (PCF) 200/230 µm fibre optic cables 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 CLK 04 SC adaptor 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.

The female adapter 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.

Part No. of adapter	CLK 04 SC
No. of seats/poles for optical contacts	4
Ambient temperature limit (°C)	min -40 / max +70
Degree of protection with enclosures (according to type)	IP66/IP67/IP69, IP66/IP68/IP69
Conductor connections	crimp
Mechanical endurance (rating cycles)	≥ 500
Self-extinguishing capacity UL 94	V0

CLK 04 SC Assembling instructions



CLK adapters 4 seats for fibre optic SC contacts

enclosures:	page:
size "21.21"	
insulating type (CK IN, CKG/MKG VN)	346 - 348
metallic type (CKAX I, CKAX/MKAX IAP/AP/VG) (CKAG/MKAG V) (MKAX/MKA/MKAXXIAP/AP25) (MKAX/MKA/MKAXX VG25) (MKAX/MKA/MKAXX IF)	349 and 353 354 - 355 358 - 359 360 - 361 362 - 363
IP68 (CGK I, CGK/MGK IAP, CGK/MGK V)	628 - 631

adapter insert for SC connectors



crimp FO contacts



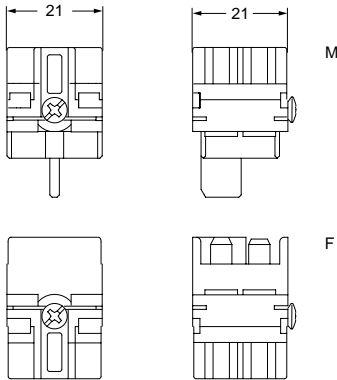
description	part No.	part No.
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adapter insert with seats for 4 SC contacts	CLK 04 SCF	CL 125 SC
female insert, with ceramic sleeve	CLK 04 SCF-H	CL POF SC
female insert, with metallic sleeve	CLK 04 SCM	
male insert		
SC contact for GI FIBRE 50/125 µm or 62.5/125 µm		
SC contact for 1 mm Ø POF		

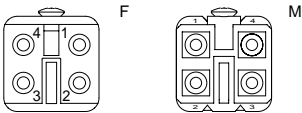
- inserts already supplied with stainless steel fixing screw with gasket, which ensures IP66/IP67/IP69 degree of protection
- adapter insert designed to be used with SC contacts
- SC contact for SI FIBRE (HCS®) 200/230 µm: **CL 230 SC** (on request)
- base equipment for SC contact GI FIBRE: **CLKZ 125 SC**  
If this application is required, please contact ILME S.p.A.
- supplementary set for POF: **CLKZ POF**  
(to be ordered with CLKZ 125 SC)  
If this application is required, please contact ILME S.p.A.

- **UL** (UL for USA and Canada), **DNV GL** certified
- insulation resistance: ≥ 10 GΩ
- temperature range: from -40 °C to +70 °C

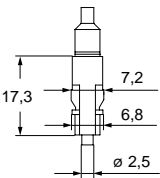
CLK 04 SCF, CLK 04 SCM



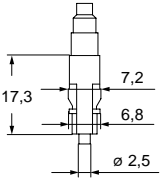
contacts side (front view)



CL 125 SC



CL POF SC



CW SC patch cord    F0 SC duplex patch cords

DATA CONNECTORS

SC duplex patch cord



SC duplex patch cord



description	part No.	(L) metre	part No.	(L) metre
SC duplex patch cord, GL fibre E9/125 (YELLOW)	<b>CW 1 SC9</b>	1		
	<b>CW 2 SC9</b>	2		
	<b>CW 3 SC9</b>	3		
	<b>CW 5 SC9</b>	5		
	<b>CW 10 SC9</b>	10		
SC duplex patch cord, GL fibre G50/125 (ORANGE)			<b>CW 1 SC50</b>	1
			<b>CW 2 SC50</b>	2
			<b>CW 3 SC50</b>	3
			<b>CW 5 SC50</b>	5
			<b>CW 10 SC50</b>	10
SC duplex connector, GL fibre G62,5/125 (ORANGE)			<b>CW 1 SC62</b>	1
			<b>CW 2 SC62</b>	2
			<b>CW 3 SC62</b>	3
			<b>CW 5 SC62</b>	5
			<b>CW 10 SC62</b>	10

- operating temperature: from -5 °C ÷ +55 °C
- storage temperature: from -30 °C ÷ +70 °C
- installation temperature: from -5 °C ÷ +50 °C
- flame retardancy: IEC 60332-1
- halogen-free acc. to: IEC 60754-2



# POF contacts series

## CLF DD and CLM DD

Fibre optic cables provide data transmission not subject to electromagnetic interference, contrary to copper-based (electric) data transmission.

The new fibre optic contacts **CL series (CLF DD and CLM DD)** can be used in combination with POF (polymer optical fibre) Ø 1,0 mm (core) / 2,2 mm (sheath) in ILME range of heavy duty multipole connectors, offering the following features:

- inherent immunity to EMI (electromagnetic interference);
- perfect electrical insulation;
- lightweight;
- high transmission capacity and high bandwidth;
- high data security;
- IP66/IP67 recommended to minimize impairing effect of dust contamination;
- male and female contacts CL series for POF Ø 1,0 mm (core) / 2,2 mm (sheath), with same geometry of crimp contacts CD series for conventional copper conductors;
- usable in connector inserts with contact cavities geometry of CDD series, including some modules of MIXO series and some inserts of CQ series, according to **Table 1**.  
Not for use in CD inserts series <sup>1)</sup>;

Table 1.

<b>CDD series</b>	CDDF/M 24
NOTE – Not suitable for CDDF/M 38 /38 N	CDDF/M 42
	CDDF/M 72, CDDF/M 72 N
	CDDF/M 108, CDDF/M 108 N
<b>CQ series</b>	CQF/M 07
	CQF/M 12
	CQF/M 17
<b>MIXO series</b>	CX 12 DF/DM
modular connectors	CX 17 DF/DM
<b>CX series</b>	CXF/M 8/ <b>24</b>
combined connectors – aux poles	CXF/M 6/ <b>36</b>
number of cavities highlighted in <b>bold</b>	CXF/M 12/ <b>2</b>

<sup>1)</sup> For CD inserts series a similar solution for use of POF Ø 1 mm may be developed upon request: please contact our Sales Department or our local Subsidiaries/Distributors.



- use of **alignment/coding pins on connectors/connector modules is mandatory** for fibre optic applications, in order to avoid damages to contacts and in order to minimize the natural attenuation of light signal which is mainly due to inaccuracy of the mating surfaces of the POF (polishing and perfect cleanliness of the two mating fibres) and to axial misalignment;
- POF to be stripped, crimped, cut and polished according to instructions on pages besides.
- for size “77.62” 2-insert combinations use JCHI 32 L/LP (page 120 catalogue XDG JEI 415) or a special version with stainless steel rigid lever available upon request.
- for the installation of fibre optic, **it is recommended to use only bulkhead mounting housings and corresponding hoods with vertical cable outlet.**



Watch  
our  
online  
tutorial



CLF DD / CLM DD

inserts:		page:
CDD	(10A)	76 - 83
CQF/M 07	(10A)	187
CQF/M 12	(10A)	189
CQF/M 17	(10A)	193
CXF/M 8/24	(10A)	194
CXF/M 6/36	(10A)	198
CXF/M 12/2	(10A)	199
MIXO CX 12 DF/DM	(10A)	281
MIXO CX 17 DF/DM	(10A)	282

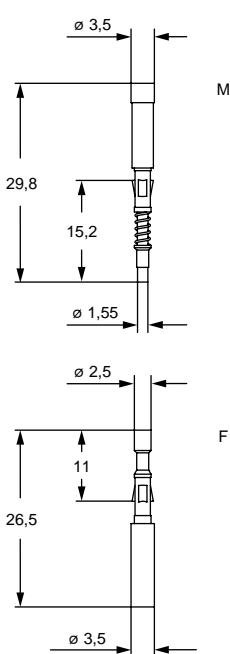
POF crimp contacts



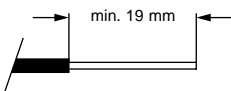
description	part No.
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female contacts for POF*	CLF DD
male contacts for POF*	CLM DD

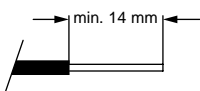
- \*POF = Polymer Optical Fibre
- ambient temperature limit: -40 °C ... +85 °C
  - max external diameter: 2,2 mm (POF)
  - polymer fibre diameter: 1 mm (POF)
  - to crimp contacts CLF DD and CLM DD please use tool CLPZ R
  - we recommend use of guide pins CRM/CRF (refer to page 685)



conductor stripping



male contacts



female contacts