LC OptiCam® Pre-Polished Fiber Optic Connectors
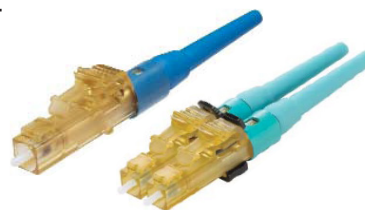
specifications

LC OptiCam® Pre-Polished Connectors with rear pivot latch shall be ANSI/TIA-604-FOCIS-10 compatible and contain a factory-terminated fiber, eliminating field polishing and adhesive. LC pre-polished connectors shall have an average insertion loss of 0.3dB per mated pair for multimode and singlemode fiber. LC pre-polished connectors shall captivate fiber and buffer in one action allowing for up to two re-terminations with no degradation in performance.

technical information

Standards requirements:	ANSI/TIA-604-FOCIS-10 compatible; exceeds ANSI/TIA-568.3-D requirements
Fiber compatibility:	62.5/125µm OM1, 50/125µm OM2, 10Gig™ 50/125µm OM3/OM4 /OM5 and 9/125µm OS1/OS2
Fiber cable type:	900µm tight-buffered cable or 250µm cable with a 900µm build up
Fiber cable size:	1.6mm – 2.0mm and 3.0mm jacketed cable with optional boots
Ferrule type:	Zirconia ceramic with a pre-polished fiber stub
Insertion loss:	0.3dB average (multimode and singlemode)
Return loss:	>20dB (multimode), >26dB (10Gig™ multimode), >50dB (singlemode)

key features and benefits

Factory pre-polished fiber stub endface	Eliminates inconsistent and time-consuming field polishing to deliver required optical performance; reduces termination time (less than half the time of field polish connectors) and the number of installation tools required
Dual cam design with fiber and buffer clamps	Secures both the fiber and the buffer during the camming step to facilitate consistent termination results; reduces the termination time compared to conventional termination methods
PATENTED	Allows up to two re-terminations to achieve optimum termination results; reduces the number of rejected connectors and terminations to provide yield rates approaching 100% for lower installed costs
Translucent housing assembly	Facilitates inspection of the fiber termination quality; results in rapid installations, improved termination yields, and lower installed costs
Non-optical disconnect	Maintains data transmission under tensile loads for jacketed cable
Mechanical cable retention	Consistently provides higher than industry standard cable retention; requires no adhesive, speeding installation
Zirconia ceramic ferrules	Provide the highest durability for repeated matings
Robust design	FOCIS-10 compliant design with rear latch for easy deployment; operating temperature range of 32° to 140°F (0° to 60°C)
OptiCam® 2 Termination Tool	Provides calculated insertion loss value at the time of termination, improving termination yields and reducing installed costs.

applications

LC fiber optic connectors are widely used in fiber optic backbone and horizontal applications for high-speed data transmission. Typical applications for LC OptiCam® Connectors include maintenance or emergency restoration of fiber networks and retrofit/initial install in both behind-the-wall (BTW) and in the permanent side of panelized interconnect and cross-connect. LC OptiCam®

Connectors eliminate the need for end face polishing and adhesive providing easier, faster installation, especially in remote areas and confined spaces. The hand-held OptiCam® 2 Termination Tool gives installers the flexibility to terminate in very close proximity to the application without having to switch tools or find benchtop space.

LC OptiCam® Pre-Polished Connectors

10Gig™ 50/125µm simplex:	FLCSMCXAQY▲
10Gig™ 50/125µm duplex:	FLCDMCXAQY
50/125µm simplex:	FLCSMC5BLY▲
50/125µm duplex:	FLCDMC5BLY
62.5/125µm simplex:	FLCSMC6BLY▲
62.5/125µm duplex:	FLCDMC6BLY
9/125µm simplex:	FLCSSCBUY▲
9/125µm duplex:	FLCDSCBUY

▲Add -C to simplex connector part numbers for bulk packs of 100 connectors.

OptiCam® 1.6/2.0mm Boots

Multimode (Aqua):	FMCBT2AQ-X*
Multimode (Black):	FMCBT2BL-X
Singlemode (Blue):	FSCBT2BU-X

OptiCam® 3.0mm Boots

Multimode (Aqua):	FMCBT3AQ-X*
Multimode (Black):	FMCBT3BL-X
Singlemode (Blue):	FSCBT3BU-X

*X = Bag of 10 boots; 100 per carton.

OptiCam® Termination Tooling

Precision kit:	FOCTT2-PKIT2
General kit:	FOCTT2-BKIT2
Basic kit:	FOCTT2-KIT
LC cradle:	FLCC2

LC Fiber Optic Adapters

10Gig™ Multimode:	FADSLCZAQ-L
Multimode:	FADSLCZEI-L
Singlemode:	FADSLCZBU-L

*L = Bag of 50 adapters; 100 per carton.

Mini-Com® LC Adapter Modules

10Gig™ Multimode:	CMDSAQLCZ**
Multimode:	CMDSEILCZ**
Singlemode:	CMDSLCZBU

**Substitute for color. See LC Fiber Optic Adapters specification sheet.

Opticom® LC Fiber Adapter Panels

10Gig™ Multimode:	FAP12WAQDLCZ
	FAP12WAQLCZ
Multimode:	FAP12WEIDLCZ
Singlemode:	FAP12WBUDLCZ
	FAP12WBULCZ

*Other options available. See OptiCam® Fiber Adapter Panels Specification Sheet

900µm Build Up

12-fiber fanout:	FO12CB
6-fiber fanout:	FO6CB
2" build-up tube:	F250BT-C

LC Duplex Clip

LC duplex clip:	FLCCLIPBL-L

^Substitute for fiber type: 6 = 62.5/125µm OM1, 5 = 50/125µm OM2, X = 10Gig™ 50/125µm OM3/OM4/OM5 or 9 = 9/125µm OS1/OS2.

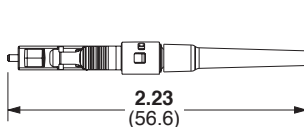# LC OptiCam® Pre-Polished Fiber Optic Connectors

performance information

Test Parameter	Description	Result
Qualification test suite (ANSI/TIA-568.3-D requirements)	Complete testing protocol per ANSI/TIA-568.3-D using ANSI/TIA FOTPs that include mechanical, environmental and optical test sequences	Exceeds ANSI/TIA-568.3-D requirements
Connector intermatability	Dimensional and material compliance to ANSI/TIA standards	All connectors are FOCIS compatible with ANSI/TIA-604-10
Repeated mating	500 mate/unmate cycles Max. insertion loss: 0.75dB Min. return loss: 20dB	Exceeds ANSI/TIA-568.3-D test requirements: <0.1dB additional insertion loss
Cable retention (straight pull): 900µm tight-buffered fiber Jacketed cable	ANSI/TIA-568.3-D requirement: 0.5 lbs. load applied with <0.5dB increase in insertion loss after test 11.24 lbs. load applied with <0.5dB increase in insertion loss after test	Exceeds ANSI/TIA-568.3-D requirements: 1.0 lbs. avg. load applied with <0.2dB increase in insertion loss after test 11.24 lbs. load applied with <0.1dB increase in insertion loss after test*

selection information

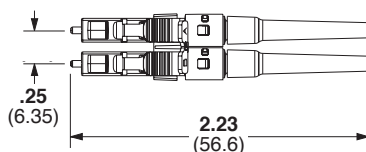| Part Number	Connector Type	Ferrule Material	Fiber	Ferrule Finish	Backbone Color	Boot Color	Average Insertion Loss**	Return Loss
FLCSMCXAQY	Simplex	Zirconia Ceramic	10GbE 50/125µm OM3/OM4	SPC	Aqua	Aqua	0.3dB	>26dB
FLCDMCXAQY	Duplex	Zirconia Ceramic	10GbE 50/125µm OM3/OM4	SPC	Aqua	Aqua	0.3dB	>26dB
FLCSMC5BLY	Simplex	Zirconia Ceramic	50/125µm OM2	SPC	Black	Black	0.3dB	>20dB
FLCDMC5BLY	Duplex	Zirconia Ceramic	50/125µm OM2	SPC	Black	Black	0.3dB	>20dB
FLCSMC6BLY	Simplex	Zirconia Ceramic	62.5/125µm OM1	SPC	Electric Ivory	Black	0.3dB	>20dB
FLCDMC6BLY	Duplex	Zirconia Ceramic	62.5/125µm OM1	SPC	Electric Ivory	Black	0.3dB	>20dB
FLCSSCBUY	Simplex	Zirconia Ceramic	9/125µm OS1/OS2	UPC	Blue	Blue	0.3dB	>50dB
FLCDSCBUY	Duplex	Zirconia Ceramic	9/125µm OS1/OS2	UPC	Blue	Blue	0.3dB	>50dB

*All connector insertion loss values calculated from tests taken with precision launch jumper assemblies per TIA/EIA-FOTP-171.

LC OptiCam® Pre-Polished Simplex Connector

2.23
(56.6)

FLCSMC***Y

LC OptiCam® Pre-Polished Duplex Connector

.25
(6.35)

2.23
(56.6)

FLCDMC***Y

OptiCam® 2 Termination Tool

FOCTT2-PKIT2

Precision Cleaver

FSPCVR

Dimensions are in inches (Dimensions in parenthesis are in millimeters).