

# LC OptiCam® Pre-Polished Fiber Optic Connectors



## SPECIFICATION SHEET

### specifications

LC small form factor (SFF) pre-polished connectors with rear pivot latch shall be TIA/EIA-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

<b>Standards requirements:</b>	TIA/EIA-604 FOCIS-10 compatible; exceeds TIA/EIA-568-B.3 requirements
<b>Fiber compatibility:</b>	62.5/125µm OM1, 50/125µm OM2, 10Gig™ 50/125µm laser optimized OM3/OM4 and 9/125µm OS1/OS2
<b>Fiber cable type:</b>	900µm tight-buffered cable only
<b>Fiber cable size:</b>	1.6mm – 2.0mm and 3.0mm jacketed cable with optional boots
<b>Ferrule type:</b>	Zirconia ceramic with a pre-polished fiber stub
<b>Insertion loss:</b>	Ceramic: 0.3dB average (multimode and singlemode)
<b>Return loss:</b>	Ceramic: >20dB (multimode), >26dB (10Gig™ multimode), >50dB (singlemode)

### key features and benefits

<b>LC OptiCam® Connectors</b>	
<b>Factory pre-polished fiber stub endface</b>	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
<b>Dual cam design with fiber and buffer clamps</b>	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
<b>PATENTED</b>	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
<b>Translucent housing assembly</b>	Facilitates inspection of the fiber termination quality; results in rapid installations, improved termination yields, and lower installed costs
<b>Non-optical disconnect</b>	Maintains data transmission under tensile loads for jacketed cable
<b>Mechanical cable retention</b>	Consistently provides higher than industry standard cable retention; requires no adhesive, speeding installation
<b>Zirconia ceramic ferrules</b>	Provide the highest durability for repeated matings
<b>OptiCam® Termination Tool</b>	
<b>Universal termination tool</b>	Secures both fiber and buffer in one action for all OptiCam® Connectors with connector specific cradles (included); ensures fast, consistent, and optimal terminations
<b>Integrated visual termination indicator (VTI)</b>	Provide the highest durability for repeated matings

### 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® Termination Tool gives installers the flexibility to terminate in very close proximity to the application without having to switch tools or find benchtop space.

[www.panduit.com](http://www.panduit.com)

### LC OptiCam® Pre-Polished Connectors with Zirconia Ceramic Ferrules

<b>10Gig™ 50/125µm (laser optimized) simplex:</b>	FLCSMCXAQY <sup>▲</sup>
<b>10Gig™ 50/125µm (laser optimized) duplex:</b>	FLCDMCXAQY
<b>50/125µm simplex:</b>	FLCSMC5BLY <sup>▲</sup>
<b>50/125µm duplex:</b>	FLCDMC5BLY
<b>62.5/125µm simplex:</b>	FLCSMC6BLY <sup>▲</sup>
<b>62.5/125µm duplex:</b>	FLCDMC6BLY
<b>9/125µm simplex:</b>	FLCSSCBUY <sup>▲</sup>
<b>9/125µm duplex:</b>	FLCDSCBUY

### OptiCam® 1.6/2.0mm Boots

<b>10Gig™ multimode (aqua):</b>	FMCBT2AQ-X*
<b>Multimode (black):</b>	FMCBT2BL-X
<b>Singlemode (blue):</b>	FSCBT2BU-X

### OptiCam® 3.0mm Boots

<b>10Gig™ multimode (aqua):</b>	FMCBT3AQ-X*
<b>Multimode (black):</b>	FMCBT3BL-X
<b>Singlemode (blue):</b>	FSCBT3BU-X

\*X = Bag of 10 Boots; 100 per carton.

### OptiCam® Termination Tooling

<b>OptiCam® Termination Kit:</b>	FCAMKIT
<b>OptiCam® Conversion Kit (upgrades Opti-Crimp® Kit to also terminate OptiCam® Connectors):</b>	FPPKIT-CVY
<b>Field Polish Kit Upgrade (upgrades Field Polish Kit to also terminate OptiCam® Connectors):</b>	FIELDKITUPG
<b>LC cradles (2 per pkg.):</b>	FLCC

### LC Fiber Optic Adapters

<b>10Gig™ multimode:</b>	FADJLCAQ-L*
<b>Multimode:</b>	FADJLCEI-L
<b>Singlemode:</b>	FADJLCZBU-L

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

### Mini-Com® LC Adapter Modules

<b>10Gig™ multimode:</b>	CMDJAQLC**
<b>Multimode:</b>	CMDJEILC**
<b>Singlemode:</b>	CMDJLCZBU

\*\*Substitute for module color: EI = Electric Ivory, BU = Blue, BL = Black, IW = Off White, AW = Arctic White

### Opticom® LC Fiber Adapter Panels

<b>6 duplex MM adapters:</b>	FAP6WEIDL
<b>6 duplex SM adapters:</b>	FAP6WBUDLCZ
<b>12 duplex MM adapters:</b>	FAP12WEIDL
<b>12 simplex SM adapters:</b>	FAP12WBULCZ

### Opti-Core® LC Patch Cords

<b>Duplex LC to LC:</b>	F <sup>▲</sup> E10-10M‡Y
<b>Simplex LC to LC:</b>	F <sup>▲</sup> F10-10M‡Y
<b>Duplex SC to LC:</b>	F <sup>▲</sup> E3-10M‡Y
<b>Simplex SC to LC:</b>	F <sup>▲</sup> F3-10M‡Y

### LC Lock-in Duplex Clip

<b>LC lock-in duplex clip:</b>	FLCCLIW-X
--------------------------------	-----------

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

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

‡Substitute for length in meters: 1, 2, 3, 5 or 10. Contact Customer Service for other available lengths.

# LC OptiCam® Pre-Polished Fiber Optic Connectors

## performance information

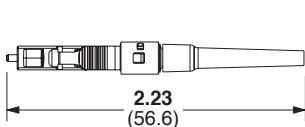
Test Parameter	Description	Result
Qualification test suite (TIA/EIA-568-B.3 requirements)	Complete testing protocol per TIA/EIA-568-B.3 using TIA/EIA FOTPs that include mechanical, environmental and optical test sequences	Exceeds TIA/EIA-568-B.3 requirements
Connector intermatability	Dimensional and material compliance to TIA/EIA standards	All connectors are FOCIS compatible with TIA/EIA-604-10
Repeated mating	500 mate/unmate cycles Max. insertion loss: 0.75dB Min. return loss: 20dB	Exceeds TIA/EIA-568-B.3 test requirements: <0.1dB additional insertion loss
Cable retention (straight pull): 900µm tight-buffered fiber  Jacketed cable	TIA/EIA-568-B.3 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 TIA/EIA-568-B.3 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	10 GbE 50/125µm (laser optimized) OM3/OM4	SPC	Aqua	Aqua	0.3dB	>26dB
FLCDMCXAQY	Duplex							
FLCSMC5BLY	Simplex	Zirconia Ceramic	50/125µm OM2	SPC	Black	Black	0.3dB	>20dB
FLCDMC5BLY	Duplex							
FLCSMC6BLY	Simplex	Zirconia Ceramic	62.5/125µm OM1	SPC	Electric Ivory	Black	0.3dB	>20dB
FLCDMC6BLY	Duplex							
FLCSSCBUY	Simplex	Zirconia Ceramic	9/125µm OS1/OS2	UPC	Blue	Blue	0.3dB	>50dB
FLCDSCBUY	Duplex							

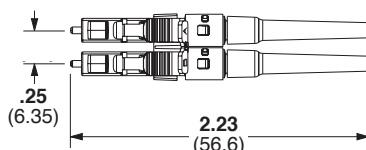
\*All connector insertion loss values calculated from tests taken with precision launch jumper assemblies per TIA/EIA-FOTP-171.

LC OptiCam® Pre-Polished Simplex Connector



FLCSMC\*\*\*Y

LC OptiCam® Pre-Polished Duplex Connector



FLCDMC\*\*\*Y

OptiCam® Termination Tool



OCTT

(Patch cords available separately or in termination kits)

LC Lock-In Duplex Clip



FLCCLIW-X

Dimensions are in inches [Dimensions in brackets are in millimeters].

### WORLDWIDE SUBSIDIARIES AND SALES OFFICES

PANDUIT CANADA  
Markham, Ontario  
cs-cdn@panduit.com  
Phone: 800.777.3300

PANDUIT EUROPE LTD.  
London, UK  
cs-emea@panduit.com  
Phone: 44.20.8601.7200

PANDUIT SINGAPORE PTE. LTD.  
Republic of Singapore  
cs-ap@panduit.com  
Phone: 65.6305.7575

PANDUIT JAPAN  
Tokyo, Japan  
cs-japan@panduit.com  
Phone: 81.3.6863.6000

PANDUIT LATIN AMERICA  
Guadalajara, Mexico  
cs-la@panduit.com  
Phone: 52.33.3777.6000

PANDUIT AUSTRALIA PTY. LTD.  
Victoria, Australia  
cs-aus@panduit.com  
Phone: 61.3.9794.9020

For a copy of Panduit product warranties, log on to [www.panduit.com/warranty](http://www.panduit.com/warranty)

For more information

Visit us at [www.panduit.com](http://www.panduit.com)

Contact Customer Service by email: [cs@panduit.com](mailto:cs@panduit.com)  
or by phone: 800.777.3300

**PANDUIT®**

©2015 Panduit Corp.  
ALL RIGHTS RESERVED.  
FBSP19--WW-ENG  
3/2015