

# NEW! Keyed LC OptiCam® Pre-Polished Fiber Optic Connectors

# PANDUIT® SPECIFICATION SHEET

## specifications

Keyed LC small form factor (SFF) pre-polished connectors shall exceed TIA/EIA-568-B.3 performance requirements, and contain a factory-terminated fiber, eliminating field polishing and adhesive. Keyed LC pre-polished connectors shall be mechanically keyed with color-specific positive and negative keying features to prevent unintentional mating with unlike keyed or non-keyed adapters. Keyed LC pre-polished connectors shall have an average insertion loss 0.3dB per mated pair for multimode and singlemode fiber. Keyed 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>	Exceed TIA/EIA-568-B.3 performance requirements
<b>Fiber compatibility:</b>	62.5/125µm OM1, 50/125µm OM2, 50/125µm OM3/OM4, 9/125µm OS1/OS2
<b>Fiber size and type:</b>	900µm tight-buffered fiber 250µm coated fiber, by using F250BT-C 250 micron fiber build-up tube kit or FO6CB or FO12CB fan-out kit
<b>Jacketed 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>	0.3dB average (multimode and singlemode)
<b>Return loss:</b>	>20dB (multimode), >26dB (10Gig™ multimode), >50dB (singlemode)

## key features and benefits

<b>Color-specific keys with positive and negative keying features</b>	Mechanically and visually distinguish connections to prevent unintentional insertion into unlike keyed or non-keyed ports, allow network design flexibility and versatility, and accommodate more discrete networks
<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 (laser marked)</b>	Facilitates inspection of the fiber termination quality, resulting in rapid installations, improved termination yields, and lower installed costs; laser marked to identify fiber stub fiber type (9µm, 62.5, 50, or 50X)
<b>Non-optical disconnect design</b>	Maintains data transmission under tensile loads for jacketed cable
<b>Universal termination tool with integrated visual termination indicator (VTI)</b>	Ensures fast, consistent, and optimal terminations of all OptiCam® Connectors with connector specific cradles; offers visual indication of proper termination after the cam step has been completed to virtually eliminate operator error to deliver a lower installed cost

## applications

Secure networks require a level of visual and mechanical differentiation, and physical layer security that conventional LC connector solutions cannot provide. Typical applications for Keyed LC OptiCam® Connectors include maintenance or emergency restoration of secure fiber networks and retrofit/initial install of behind the wall (BTW) connections and the permanent side of interconnect

and cross-connect patch fields. Keyed LC OptiCam® Connectors eliminate the need for endface polishing and adhesive, enabling faster deployment, 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.

### Keyed LC OptiCam® Pre-Polished Multimode Simplex Connectors

<b>Keyed A (black):</b>	FLCSMC^ABL
<b>Keyed B (red):</b>	FLCSMC^BRD
<b>Keyed C (green):</b>	FLCSMC^CGR
<b>Keyed D (yellow):</b>	FLCSMC^DYL
<b>Keyed E (orange):</b>	FLCSMC^EOR
<b>Keyed F (dark blue):</b>	FLCSMC^FDB

### Keyed LC OptiCam® Pre-Polished Singlemode Simplex Connectors

<b>Keyed A (black):</b>	FLCSSCABL
<b>Keyed B (red):</b>	FLCSSCBRD
<b>Keyed C (green):</b>	FLCSSCCGR
<b>Keyed D (yellow):</b>	FLCSSCDYL
<b>Keyed E (orange):</b>	FLCSSCEOR
<b>Keyed F (dark blue):</b>	FLCSSCFDB

### OptiCam® 1.6/2.0mm Boots

<b>Black boots:</b>	FMCBT2BL-X*
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### OptiCam® 3.0mm Boots

<b>Black boots:</b>	FMCBT3BL-X*
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\*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

**Field polish kit upgrade (upgrades field polish kit to also terminate OptiCam® Connectors):** FIELDKITUPG  
**LC cradles (2 per pkg.):** FLCC

### Keyed LC Mini-Com® Duplex Adapter Modules (Ceramic Split Sleeves)

<b>Keyed A (black):</b>	CMDABLLCZ**
<b>Keyed B (red):</b>	CMDBRDL CZ**
<b>Keyed C (green):</b>	CMDCGRLCZ**
<b>Keyed D (yellow):</b>	CMDDDL CZ**
<b>Keyed E (orange):</b>	CMDEORLCZ**
<b>Keyed F (dark blue):</b>	CMDFDBLCZ**

### Keyed LC Opticom® Fiber Adapter Panels (Ceramic Split Sleeves)

<b>Keyed A (black):</b>	FAP‡WABLDLCZ
<b>Keyed B (red):</b>	FAP‡WBRDDL CZ
<b>Keyed C (green):</b>	FAP‡WCGRDL CZ
<b>Keyed D (yellow):</b>	FAP‡WDYLDLCZ
<b>Keyed E (orange):</b>	FAP‡WEORDL CZ
<b>Keyed F (dark blue):</b>	FAP‡WFDBDL CZ

### LC Lock-in Duplex Clip

<b>LC lock-in duplex clip:</b>	FLCCLIW-X
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^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 module color: AW for Arctic White, BL for Black, BU for Blue, EI for Electric Ivory, or IW for Off White.

‡Substitute for number of adapters: 6, 8, or 12.

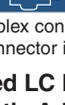
# Keyed LC OptiCam® Pre-Polished Fiber Optic Connectors

## 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
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	TIA/EIA-568-B.3 requirement: 0.5 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
Jacketed cable	11.24 lbs. load applied with <0.5dB increase in insertion loss after test	11.24 lbs. load applied with <0.1dB increase in insertion loss after test*

\*Jacketed cable retention tensile load may vary based on specific manufacturer's jacketed cable diameter and aramid yarn count.

## ordering information

Key Type and Backbone Color (Adapter Key Shown)	Part Number	Fiber Type	Connector/Cable Type	Boot Color	Ferrule Finish	Average Insertion Loss**	Return Loss
<b>A - Black</b> 	FLCSMCXABL	10Gig™ 50/125µm OM3/OM4	Simplex*/900µm tight-buffered cable	Black	SPC	0.3dB	>26dB
	FLCSMC5ABL	50/125µm OM2			SPC	0.3dB	>20dB
	FLCSMC6ABL	62.5/125µm OM1			SPC	0.3dB	>20dB
	FLCSSCABL	9/125µm OS1/OS2			UPC	0.3dB	>50dB
<b>B - Red</b> 	FLCSMCXBRD	10Gig™ 50/125µm OM3/OM4	Simplex*/900µm tight-buffered cable	Black	SPC	0.3dB	>26dB
	FLCSMC5BRD	50/125µm OM2			SPC	0.3dB	>20dB
	FLCSMC6BRD	62.5/125µm OM1			SPC	0.3dB	>20dB
	FLCSSCBRD	9/125µm OS1/OS2			UPC	0.3dB	>50dB
<b>C - Green</b> 	FLCSMCXCGR	10Gig™ 50/125µm OM3/OM4	Simplex*/900µm tight-buffered cable	Black	SPC	0.3dB	>26dB
	FLCSMC5CGR	50/125µm OM2			SPC	0.3dB	>20dB
	FLCSMC6CGR	62.5/125µm OM1			SPC	0.3dB	>20dB
	FLCSSCCGR	9/125µm OS1/OS2			UPC	0.3dB	>50dB
<b>D - Yellow</b> 	FLCSMCXDYL	10Gig™ 50/125µm OM3/OM4	Simplex*/900µm tight-buffered cable	Black	SPC	0.3dB	>26dB
	FLCSMC5DYL	50/125µm OM2			SPC	0.3dB	>20dB
	FLCSMC6DYL	62.5/125µm OM1			SPC	0.3dB	>20dB
	FLCSSCDYL	9/125µm OS1/OS2			UPC	0.3dB	>50dB
<b>E - Orange</b> 	FLCSMCXEOR	10Gig™ 50/125µm OM3/OM4	Simplex*/900µm tight-buffered cable	Black	SPC	0.3dB	>26dB
	FLCSMC5EOR	50/125µm OM2			SPC	0.3dB	>20dB
	FLCSMC6EOR	62.5/125µm OM1			SPC	0.3dB	>20dB
	FLCSSCEOR	9/125µm OS1/OS2			UPC	0.3dB	>50dB
<b>F - Dark Blue</b> 	FLCSMCXFDB	10Gig™ 50/125µm OM3/OM4	Simplex*/900µm tight-buffered cable	Black	SPC	0.3dB	>26dB
	FLCSMC5FDB	50/125µm OM2			SPC	0.3dB	>20dB
	FLCSMC6FDB	62.5/125µm OM1			SPC	0.3dB	>20dB
	FLCSSCFDB	9/125µm OS1/OS2			UPC	0.3dB	>50dB

\*For duplex connectors, replace the first S in the part number with a D.

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

### Keyed LC Mini-Com® Fiber Optic Adapter Modules



**CMD\*\*\*LCZIW**

### Keyed LC Opticom® Fiber Adapter Panels (FAPs)



**FAP6W\*\*\*DLCZ**

### Keyed LC Opti-Core® Patch Cords and Pigtails



**F^E10\*-10\*M‡**

### LC Lock-In Duplex Clip



**FLCCLIW-X**

\*\*\*Substitute for key type and color: ABL for A – Black, BRD for B – Red, CGR for C – Green, DYL for D – Yellow, EOR for E – Orange, or FDB for F – Dark Blue.

^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 – 10, 15, 20 or 30. Contact Customer Service for other available lengths or universal reference patch cords.

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