LC OptiCam® Pre-Polished Fiber Optic Connectors

PANDUIT®

SPECIFICATION SHEET

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.
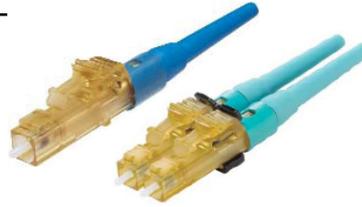
TECHNICAL INFORMATION

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
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
Robust design:	FOCIS-10 compliant design with rear latch for easy deployment; operating temperature range of 32°F to 140°F (0°C 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 2 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.

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

*Add -C to indicate bulk packages of 100 pieces per package to reduce single-use plastic

-X indicates bulk packages of 10 pieces per package to reduce single-use plastic

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.

ENGINEERING DRAWINGS

LC OptiCam® Pre-Polished Simplex Connector

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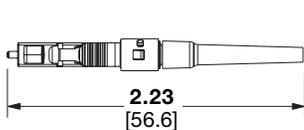
LC OptiCam® Pre-Polished Duplex Connector

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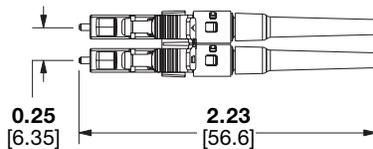
OptiCam® 2 Termination Tool

FOCTT2-PKIT2

Precision Cleaver

FSPCVR

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

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