

# SC OptiCam® Pre-Polished Fiber Optic Connectors

## specifications

SC pre-polished fiber optic connectors shall be ANSI/TIA-604-FOCIS-3 compliant and contain a factory-terminated fiber, eliminating field polishing and adhesive. SC pre-polished connectors shall have an average insertion loss of 0.3dB per mated pair for multimode and singlemode fiber. SC pre-polished connectors shall capture fiber and buffer in one action allowing for up to two re-terminations with no degradation in performance.



## technical information

<b>Standards requirements:</b>	ANSI/TIA-604-FOCIS-3 compliant; exceeds ANSI/TIA-568.3-D requirements
<b>Fiber compatibility:</b>	62.5/125µm OM1, 50/125µm OM2, 50/125µm OM3/OM4/OM5 and 9/125µm OS1/OS2
<b>Fiber cable type:</b>	900µm tight-buffered cable or 250µm cable with a 900µm build up
<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 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>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 inner 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>Robust design</b>	FOCIS-3 compliant design with rear latch for easy deployment; operating temperature range of 32° to 140°F (0° to 60°C)
<b>OptiCam® 2 Termination Tool</b>	Provides calculated insertion loss value at the time of termination, improving termination yields and reducing installed costs

## applications

SC fiber optic connectors are widely used in fiber optic backbone and horizontal applications for high-speed data transmission. Typical applications for SC 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.

SC 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.

### SC OptiCam® Pre-Polished Connectors

<b>10Gig™ 50/125µm simplex:</b>	FSC2MCXAQ^^
<b>10Gig™ 50/125µm duplex:</b>	FSC2DMCXAQ
<b>50/125µm simplex:</b>	FSC2MC5BL^^
<b>50/125µm duplex:</b>	FSC2DMC5BL
<b>62.5/125µm simplex:</b>	FSC2MC6EI^^
<b>62.5/125µm duplex:</b>	FSC2DMC6EI
<b>9/125µm simplex:</b>	FSC2SCBU^^

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

### OptiCam® 1.6/2.0mm Boots

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

### OptiCam® 3.0mm Boots

<b>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® 2 Termination Tooling

<b>Precision kit:</b>	FOCTT2-PKIT2
<b>General kit:</b>	FOCTT2-BKIT2
<b>Basic kit:</b>	FOCTT2-KIT
<b>SC cradles:</b>	FSCC2

### SC Fiber Optic Adapters

<b>Multimode (aqua):</b>	FADSCZAQ-L
<b>Singlemode (blue):</b>	FADSCZBU-L

L = Bag of 50 adapters; 100 per carton.

### Mini-Com® SC Adapter Modules

<b>Multimode (aqua):</b>	CMDAQSCZBL
<b>Multimode:</b>	CMDEISCZ**
<b>Singlemode:</b>	CMDBUSCZ**

### 900µm Build Up

<b>12-Fiber Fanout:</b>	FO12CB
<b>6-Fiber Fanout:</b>	FO6CB
<b>2" Build-Up Tube:</b>	F250BT-C

### SC Duplex Clip

<b>SC Duplex Clip:</b>	FSCCLIPBL-L
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\*\*Substitute for module color: EI = Electric Ivory, BU = Blue, BL = Black, IW = Off White, AW = Arctic White.

### Opticom® SC Fiber Adapter Panels

<b>10Gig™ Multimode:</b>	FAP6WAQSCZ FAP6WAQDSCZ
<b>Singlemode:</b>	FAP6WBUDSCZ
<b>Singlemode:</b>	FAP6WBUDSCZ
<b>Singlemode (APC):</b>	FAP6WAGDSCZ

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

# SC OptiCam® Pre-Polished Fiber Optic Connectors

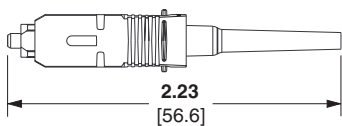
## performance information

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 compliant with ANSI/TIA-604-3-A
Repeated mating	500 mate/unmate cycles Max. insertion loss: 0.75dB Min. return loss: 20dB	Exceeds ANSI/TIA-569.3-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 lb. 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	ANSI/TIA-568.3-D requirements: 1.0 lb. 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

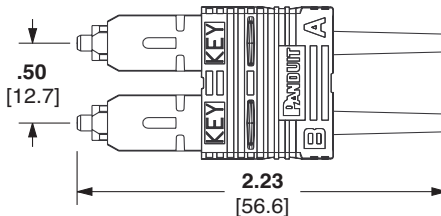
Part Number	Connector Type	Fiber	Ferrule Finish	Outer Housing Color	Backbone Color	Boot Color	Average Insertion Loss	Return Loss	
FSC2MCXAQ	Simplex	10GbE 50/125µm OM3/OM4/OM5	SPC	Black	Aqua	Aqua	.03dB	>26dB	
FSC2DMCXAQ	Duplex				Black	Black			Black
FSC2MC5BL	Simplex	50/125µm OM2						Beige	
FSC2DMC5BL	Duplex	62.5/125µm OM1		Blue	Blue	Blue			
FSC2MC6EI	Simplex			9/125µm OS1/OS2	UPC	Blue		Blue	Blue
FSC2DMC6EI	Duplex								
FSC2SCBU	Simplex								

SC OptiCam® Pre-Polished Simplex Connector



FSC2MC\*\*\*

SC OptiCam® Pre-Polished Duplex Connector



FSC2DMC\*\*\*

OptiCam® 2 Termination Tool



FOCTT2-PKIT2

\*\*\*Substitute for fiber type: For multimode, insert XAQ for 50/125µm, 5BL for 50/125µm, or 6EI for 62.5/125µm.

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

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