SC Fiber Optic Connectors

specifications

SC field polish connectors are TIA/EIA-604 FOCIS-3 compliant. SC simplex and duplex connectors are field terminable. The fibers shall terminate in 2.5mm ceramic ferrules with non-optical disconnect functionality and an average insertion loss of 0.1dB (multimode) and 0.15dB (singlemode) per mated pair.

technical information

Standards requirements:	TIA/EIA-604 FOCIS-3 compliant; exceeds TIA/EIA-568-B.3 requirements
Fiber compatibility:	62.5/125µm OM1, 50/125µm OM2, 10Gig™ 50/125µm laser optimized OM3/OM4 and 9/125µm OS1/OS2
Fiber cable type:	900µm tight-buffered cable recommended
Fiber cable size:	3.0mm or 1.6mm – 2.0mm jacketed cable
Ferrule type:	Zirconia ceramic ferrule
Insertion loss:	0.1dB average (multimode), 0.15dB (singlemode)
Return loss:	>20dB (multimode), >40dB (singlemode)

key features and benefits

Free floating housing	Ensures complete latching even when inserted by the boot; valuable in high-density spacing applications
Pre-assembled inner inner housing	Fewer parts simplifies assembly and reduces installer error for lower installed cost
Full length adhesive fill tube	Prevents adhesive from entering internal cavity of connector to reduce installer error
Non-optical disconnect	Maintains data transmission under tensile loads for jacketed cable for network reliability
Anaerobic adhesive field installation	Simplifies and reduces installation time by 50% compared to heat cured epoxy terminations; curing oven/time not required
High temperature thermoplastic design	Allows use of high glass transition temperature epoxies with cure temperatures up to 150°C (302°F)
Simplex available with 900µm and 3.0mm or 1.6 – 2.0mm boots	One connector part number for both fiber types for easier ordering and stocking
Standard 2.5mm ceramic ferrules	Provide the highest durability for repeated matings

SC Simplex Fiber Optic Connectors for 900µm Buffered Fiber and 3.0mm Jacketed Cable

Multimode (black boots):	FSCM5BL
Multimode (black boots):	FSCMBL
Multimode (red boots):	FSCMRD
Singlemode (blue boots):	FSCSBU

SC Simplex Fiber Optic Connectors for 900µm Buffered Fiber and 1.6mm – 2.0mm Jacketed Cable

Multimode (black boots):	FSCM2.05BL
Multimode (black boots):	FSCM2.0BL
Multimode (red boots):	FSCM2.0RD
Singlemode (blue boots):	FSCS2.0BU

SC Duplex Fiber Optic Connectors for 3.0mm Jacketed Cable

Multimode (black boots)	FSCDM5BL
Multimode (black/red):	FSCDM

SC Fiber Optic Adapters

Duplex MM:	FADSCEI-L
Duplex MM:	FADSCBL-L
Duplex 10Gig™ (zirc):	FADSCZAQ-L
Simplex SM (zirc):	FASSCZBU-L
Simplex APC (zirc):	FASSCZAG-L

L = Bag of 50 adapters; 100 per carton.

Mini-Com® SC Adapter Modules

Duplex MM:	CMDEISCEI
Duplex MM:	CMDBLSCBL
Duplex 10Gig™ (zirc.):	CMSBUSCZBU
Simplex SM (zirc):	CMSBUSCZBU
Simplex APC (zirc):	CMSAGSCZBL

Opticom® SC Fiber Adapter Panels

6 duplex MM:	FAP6WEIDSC
6 duplex MM:	FAP6WBLDSC
6 duplex 10Gig™:	FAP6WAQDSCZ
6 duplex SM (zirc.):	FAP6WBUDSCZ
12 simplex SM (zirc.):	FAP12WBUSCZ

Opticom® QuickNet™ Pre-Terminated MTP* Cassettes

12 SC to MTP* (12f):	FC^-12-3S
6 SC to MTP* (12f):	FC^-12-3

Opti-Core® Fiber Optic Patch Cords

Duplex SC to SC:	F^D3-3M‡
Simplex SC to SC:	F^S3-3M‡
Simplex SC to pigtail:	F^B3-NM‡

SC Termination Tooling

Termination kit:	FJKITG
Refurbishment kit:	FJKITG-RFB

Additional Components for Singlemode

1µm diamond film:	FPF1-V
0.05µm lapping film:	FLCFPLF-X

HD Connector Removal Tool

For LC and SC:	PCRT1

Substitute for module color:
EI = Electric Ivory	BU = Blue
IG = International Gray	WH = White
TG = Technical Gray	BL = Black
AW = Arctic White	IW = Off White
EW = European White	

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

‡Substitute for length in meters: 1, 2, 3, 5 or 10 for patch cords, and 1, 2 or 3 for pigtails; singlemode patch cords are also available in 12,15, 25 or 30 meter lengths. Contact Customer Service for other available lengths.

applications

Panduit SC Fiber Optic Connectors are used for equipment cross-connects or interconnects in backbone, horizontal and work area applications. SC connectors are recommended by TIA/EIA-568-B.3 at the wall outlet and the telecommunications closet. Multimode connectors provide a robust and easy to terminate solution for lower cost fiber-to-the-desk applications. Singlemode connectors provide added bandwidth capacity for data hungry applications.

*MTP is a registered trademark of US Conec Ltd.

www.panduit.com

SC Fiber Optic Connectors

performance information

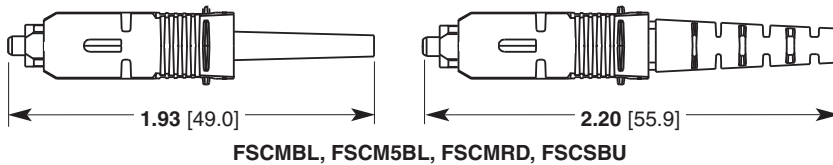| Test Parameter	Description	Result
Qualification test suite (TIA/EIA-568-B.3 requirements)	Complete testing protocol per TIA/EIA-568-B.3 using TIA/EIA FOTPs that include mechanical, environmental and optical test sequences	Compliant; exceeds TIA/EIA-568-B.3 requirements
Connector intermatability	Dimensional and material compliance to TIA/EIA standards	All connectors are FOCIS compliant with TIA/EIA-604-3

selection information

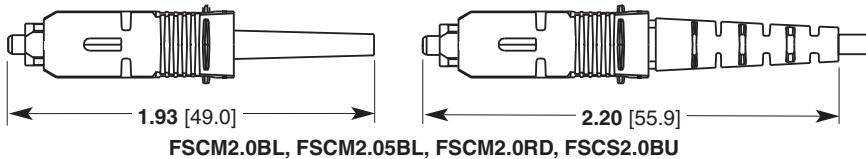| Part Number	Connector Type	Cable Type	Fiber	Ferrule	Housing Color	Boot Color	Average Insertion Loss*	Return Loss
FSCM5BL	Simplex	900 micron buffered fiber and 3.0mm jacketed cable	Multimode	Zirconia Ceramic	Black	Black	0.1dB	>20
FSCM2.05BL	Simplex	900 micron buffered fiber and 1.6 – 2.0mm jacketed cable						
FSCDM5BL	Duplex	3.0mm jacketed cable						
FSCMBL	Simplex	900µm buffered fiber and 3.0mm jacketed cable			Electric Ivory			
FSCMRD	Simplex	900µm buffered fiber and 3.0mm jacketed cable				Red		
FSCM2.0BL	Simplex	900µm buffered fiber and 1.6mm – 2.0mm jacketed cable				Black		
FSCM2.0RD	Simplex	900µm buffered fiber and 1.6mm – 2.0mm jacketed cable				Red		
FSCDM	Duplex	3.0mm jacketed cable				Red and Black		
FSCSBU	Simplex	900µm buffered fiber and 3.0mm jacketed cable	Singlemode	Zirconia Ceramic	Blue	Blue	0.15dB	>40
FSCS2.0BU	Simplex	900µm buffered fiber and 1.6mm – 2.0mm jacketed cable						

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

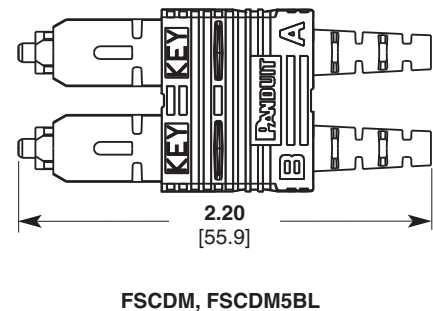## SC Simplex Connectors
For 900µm Fiber and 3.0mm Jacketed Cable

1.93 [49.0]   **2.20** [55.9]

FSCMBL, FSCM5BL, FSCMRD, FSCSBU

For 900µm Fiber and 1.6mm – 2.0mm Jacketed Cable

1.93 [49.0]   **2.20** [55.9]

FSCM2.0BL, FSCM2.05BL, FSCM2.0RD, FSCS2.0BU

SC Duplex Connector
For 3.0mm Jacketed Cable

2.20 [55.9]

FSCDM, FSCDM5BL

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

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