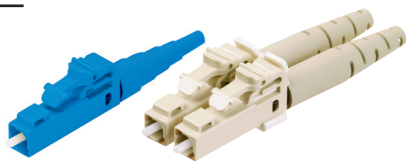
LC Fiber Optic Connectors

PANDUIT®

SPECIFICATION SHEET

specifications

LC small form factor (SFF) field polish connectors with rear pivot latch shall be TIA/EIA-604 FOCIS-10 compatible. LC simplex and duplex connectors shall be field terminable. The fibers shall terminate in 1.25mm ceramic ferrules with non-optical disconnect functionality and an average insertion loss of 0.1dB per mated pair for multimode and singlemode fiber.



technical information

Standards requirements:	TIA/EIA-604 FOCIS-10 compatible; 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
Fiber cable type:	900µm tight-buffered fiber recommended 250µm coated fiber, by using F250BT-C 250 micron fiber build-up tube kit or FO6CB or FO12CB fan-out kit
Jacketed cable size:	1.6mm – 2.0mm jacketed cable
Ferrule type:	Zirconia ceramic
Insertion loss:	0.1dB average (multimode and singlemode)
Return loss:	>20dB (multimode), >40dB (singlemode)

key features and benefits

Rear pivot latch design, robust construction	Longer beam reduces deflection during mating and unmating to reduce latch fatigue, leading to longer cycle life
Anti-snag latch	Low profile latch resists cable snagging
Wide "positive grip" thumb latch	Multi-grooved, full body width thumb latch improves grip for better control during matings/unmatings; promotes fast, easy MACs (moves, adds, changes) in high-density applications
Audible "click" upon successful mating	Provides user with a definitive signal of successful connector mating
Field installable duplex clip with integrated polarity markers	Allows fast, easy field polarity changes without tools; quick identification of polarity
One connector body design for both simplex and duplex applications	A single connector design is used for both simplex and duplex patch cords and inside the wall applications to simplify installation
Protective cap locks onto connector latch with audible "click"	Protective cap automatically locks onto connector latch, completely covering connector end; prevents ferrule end face damage by providing protection from contamination and impact
Anaerobic adhesive field installation	Simplifies and reduces installation time by 50% compared to heat cured epoxy terminations; curing oven/time not required
Rugged body construction	Stable performance under side loads for improved reliability
Independent free-floating ferrules	Ensures physical fiber contact for consistent low return loss, unlike unitary multi-fiber ferrule connectors
1.25mm ceramic ferrules	Provide the highest durability for repeated matings

applications

Panduit LC Fiber Optic Connectors provide a rugged solution for high-density telecommunication rooms, LANs, public networks and fiber-to-the-desk applications. LC simplex and duplex connectors are used for equipment cross-connects or interconnects in backbone, horizontal and work area applications for high-speed data transmissions. The high-density design and 1.25mm ferrules double the port density (compared to SC connectors) to reduce space requirements on racks, enclosures, panels and faceplates.

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LC Simplex Fiber Optic Connectors for 900µm Buffered Fiber and 1.6mm – 2.0mm Jacketed Cable	
OM1 Multimode:	FLCSMEIY
OM2, OM3, OM4 Multimode:	FLCSMBLY
OS2 Singlemode:	FLCSSBUY
LC Simplex Fiber Optic Connectors for 3.0mm Jacketed Cable	
OM1 Multimode:	FLCSM3.0EI
OM2, OM3, OM4 Multimode:	FLCSM3.0BL
OS2 Singlemode:	FLCSS3.0BU
LC Duplex Fiber Optic Connectors for 900µm Buffered Fiber	
MOM1 Multimode:	FLCDM900EIY
OM2, OM3, OM4 Multimode:	FLCDM900BLY
OS2 Singlemode:	FLCDS900BUY
LC Duplex Fiber Optic Connectors for 1.6mm – 2.0mm Jacketed Cable	
OM1 Multimode:	FLCDMEIY
OM2, OM3, OM4 Multimode:	FLCDMBLY
OS2 Singlemode:	FLCDSBUY
LC Duplex Fiber Optic Connectors for 3.0mm Jacketed Cable	
OM1 Multimode:	FLCDM3.0EI
OM2, OM3, OM4 Multimode:	FLCDM3.0BL
OS2 Singlemode:	FLCDS3.0BU
Mini-Com® Sr./Jr. LC Adapter Modules	
1Duplex MM:	CMDJLC**
Duplex 10 GbE (zirc.):	CMDJAQLCZBL
Duplex SM (zirc.):	CMDJLCZ**
For Sr./Sr., replace J in part number with S.	
Opticom® LC Fiber Adapter Panels	
16 duplex 10 GbE (zirc.):	FAP6WAQDLCZ
6 duplex MM:	FAP6WEIDLC
6 duplex SM (zirc.):	FAP6WBUDLCZ
12 duplex MM:	FAP12WEIDLC
12 simplex SM (zirc.):	FAP12WBULCZ
QuickNet™ MTP* Cassettes	
6 LC to MTP* (12f):	FC^-12-10Y
12 LC to 2 MTP* (24f):	FC^-24-10Y
QuickNet™ Optimized 10 GbE MTP* Cassettes	
6 LC to MTP* (12f):	FCXO-12-10Y
12 LC to 2 MTP* (24f):	FCXO-24-10Y
Opti-Core® Fiber Optic Patch Cords	
Duplex LC to LC:	F^E10-10M‡Y
Simplex LC to LC:	F^F10-10M‡Y
Duplex SC to LC:	F^E3-10M‡Y
Simplex SC to LC:	F^F3-10M‡Y
Simplex LC to pigtail:	F^B10-NM‡Y
LC Termination Tooling	
110V termination kit:	FIELDKIT
230V termination kit:	FIELDKIT-G
Refurbishment kit:	FIELDKITRFB
HD Connector Removal Tool	
For LC and SC:	HDCRT
LC Lock-in Duplex Clip	
LC lock-in duplex clip:	FLCCLIW-X

**Substitute for module color:

EI = Electric Ivory	BU = Blue
IG = International Gray	WH = White
TG = Technical Gray	BL = Black
AW = Arctic White	W = Off White
EW = European White	

^Substitute for fiber type: Z (OM4-10 GbE 50/125µm), X (OM3-10 GbE 50/125µm), 5 (OM2-50/125µm), 6 (OM1-62.5/125µm) or 9 (OS1-9/125µm).

‡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.

LC 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 compatible with TIA/EIA-604-3

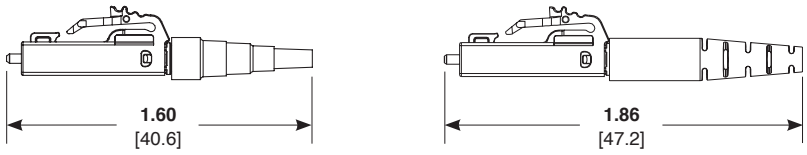
selection information

Part Number	Connector Type	Cable Type	Fiber	Ferrule	Housing Color	Boot Color	Average Insertion Loss**	Return Loss
FLCSMEIY	Simplex	900µm buffered fiber and 1.6mm – 2.0mm jacketed cable	OM1 Multimode	Zirconia Ceramic	Electric Ivory	Electric Ivory	0.1dB	>20
FLCSM3.0EI	Simplex	3.0mm jacketed cable						
FLCDMEIY	Duplex	1.6mm – 2.0mm jacketed cable						
FLCDM900EIY	Duplex	900µm buffered fiber						
FLCDM3.0EI	Duplex	3.0mm jacketed cable						
FLCSMBLY	Simplex	900µm buffered fiber and 1.6mm – 2.0mm jacketed cable	OM2, OM3, OM4 Multimode	Zirconia Ceramic	Black	Aqua	0.1dB	>20
FLCSM3.0BL	Simplex	3.0mm jacketed cable						
FLCDMBLY	Duplex	1.6mm – 2.0mm jacketed cable						
FLCDM900BLY	Duplex	900µm buffered fiber						
FLCDM3.0BL	Duplex	3.0mm jacketed cable						
FLCSSBUY	Simplex	900µm buffered fiber and 1.6mm – 2.0mm jacketed cable	Singlemode	Zirconia Ceramic	Blue	Blue	0.1dB	>40
FLCSS3.0BU	Simplex	3.0mm jacketed cable						
FLCDSBUY	Duplex	1.6mm – 2.0mm jacketed cable						
FLCDS900BUY	Duplex	900µm buffered fiber						
FLCDS3.0BU	Duplex	3.0mm jacketed cable						

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

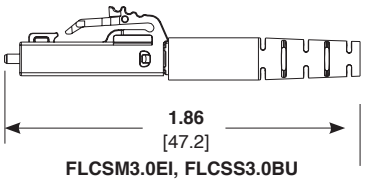
LC Simplex Connectors

For 900µm Buffered Fiber or 1.6mm – 2.0mm Jacketed Cable



FLCSMEIY, FLCSSBUY

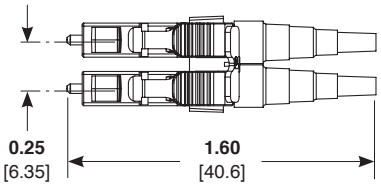
For 3.0mm Jacketed Cable



FLCSM3.0EI, FLCSS3.0BU

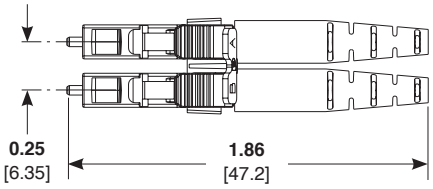
LC Duplex Connectors

For 900µm Buffered Fiber



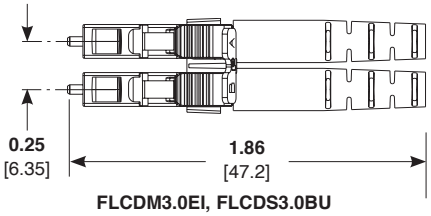
FLCDM900EIY, FLCDS900BUY

For 1.6mm – 2.0mm Jacketed Cable



FLCDMEIY, FLCDSBUY

For 3.0mm Jacketed Cable



FLCDM3.0EI, FLCDS3.0BU

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

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