# LC Connector for Polymer Coated Fiber (PCF) Industrial Fiber Cables

## technical information

Small form-factor simplex or duplex LC connectors are designed for use with graded index, OM1 and OM2, Polymer Coated Fiber (PCF), and are qualified to the general requirements of TIA 568-C.3. Panduit field installable LC connectors attach to the large diameter PCF fiber using simple-to-learn and easy to use Panduit strip, crimp, and cleave attachment tools. Panduit LC connectors for PCF fiber contain a unique push-pull mechanism which is attached to the strain relief boot. Connectors are engaged or disengaged from an INF-8074i (LC) compliant SFP transceiver by pushing or pulling on the connector strain relief boot. This makes fiber connections easier and more reliable inside of a control panel or a difficult to reach area located in machines.

### application

Provides easily terminated, equipment-level (direct-attach) fiber optic connections in industrial networks with minimal installer training. For use with Panduit Opti-Core<sup>™</sup> IndustrialNet<sup>™</sup> Graded Index (OM1 and OM2) PCF Fiber in zip cord and well-built breakout cable configurations.

#### construction

Interface standards:	TIA/EIA-604-10A Fiber Optic Connector Intermateability Standard, Type LC (FOCIS 10), March 2002 IEC 61754-20 Fiber Optic Interfaces – Part 20: Type LC Connector Family, August 2002
Body style:	Simplex or duplex
Fiber type:	62.5 micron core (OM1); 62.5/200/230 50.0 micron core (OM2); 50/200/230
Cable types	Zip cord (2.2mm outside diameter) Breakout cable (2 and 4 fiber)
Packaging:	Simplex or duplex, 1 per bag or 10 bags per box
Restriction of Hazardous Substances (RoHS) compliance:	All connector components meet the requirements of directive 2002/95/EC
Housing color	International gray
Ferrule material	Zirconia ceramic
Cladding diameter: coating diameter: buffer diameter:	200 microns 230 microns 500 microns
Jacket color:	OM1: Orange OM2: Orange Black outer jacket with colored 2.2mm diameter subunits as required (blue, orange, green, brown)

#### optical properties

Connector	0.9dB avg., 1.7dB max
insertion loss:	(OM1 and OM2)
Assembly return loss:	Uncontrolled due to being a gapped connector

### mechanical properties

Cable retention strength (per TIA 455-6)	22.2N @ 0° with 0.5dB max. increase in insertion loss
<i>Vibration (per GR-326 CORE 4.4.3.1)</i>	1.5mm amplitude continuously sweeping frequency from 10-55Hz for 2 hrs. in each of 3 mutually perpendicular axis with IL limited to 0.5dB max.
Cable flex (per TIA 455-1)	100 cycles @ 4.9N load with IL 1.7dB max.
Mating durability (per TIA 455-21)	500 cycles with IL 1.7dB max.
Cable twist (per TIA 455-36)	10 cycles @ 15N with IL 1.7dB max.

#### termination

Panduit installation	PCF-LCFTK
termination tool kit:	

environmental properties

-40°C to 70°C

Riser: -10°C to 60°C

## standards

installation temperature:

shipping temperature:

Storage and

Operating and

Meets or exceeds TIA/EIA-568-C.3, TIA-604-10A (FOCIS-10), IEC 61754-20





# LC Connector for Polymer Coated Fiber (PCF) Industrial

#### part number







## Simplex LC Connector for Polymer Coated Fiber (PCF) Industrial Fiber Cables



Dimensions are in inches. (Dimensions in parentheses are metric).

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