

FlightLinx® PLUS Fiber Optic Cable - Multimode Graded-Index Simplex

P/N: C79598

Overview

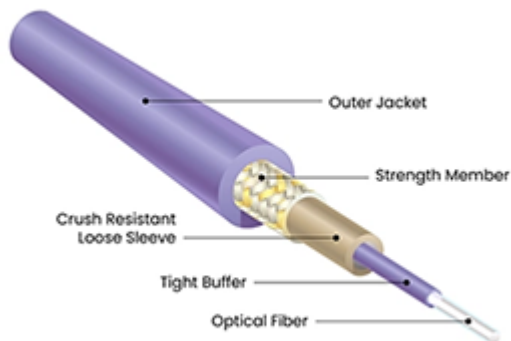
FlightLinx® PLUS Fiber Optic Cable designed for inflight entertainment, ethernet access, networking and display systems used in commercial aircraft.

FlightLinx PLUS Fiber Optic Cable is a 1.8 mm ruggedized single jacket cable designed to meet or exceed ARINC 802 performance requirements without the need for a double jacket. The high performing construction consists of a tight buffered fiber within a loose structure cable which allows for reliable pull-proof termination and helps prevent kinking, epoxy wicking and fiber breakage during and after deployment. The buffer tube provides additional crush and impact protection for harsh installations in aircraft. The braided strength member allows for high strength, flexibility and reliability during bending. The FlightLinx PLUS Fiber Optic Cable design provides proven stability over temperature and thermal shock for low shrinkage.

This 1.8 mm cable design addresses the demand for lighter weight and improved aircraft fuel efficiency. Premium 50 μm , 62.5 μm and bend-insensitive single-mode Lightera optical fiber offers increased bandwidth for data communications.

Typical Applications

- Inflight Entertainment
- Ethernet Access
- Networking and Display Systems Used in Commercial Aircraft



Product Specifications
Physical Characteristics

Cable Construction	Multimode Graded-Index Simplex
Core Diameter	62.5 ± 2.5 µm
Cladding Diameter	125 ± 1.0 µm
Coating Type 2 Diameter	245 ± 10.0 µm
Buffer Diameter	400 ± 50 µm
Buffer Tube Diameter	950 ± 50 µm
Outer Cable Diameter	1.8 mm
Cable Weight	≤ 4.0 kg/km
Outer Jacket Material	Fluoropolymer
Outer Jacket Color	Light Purple

Optical Characteristics

Attenuation @ 850 nm	≤ 4 dB/km
Attenuation @ 1300 nm	≤ 2 dB/km
Attenuation @ 1310 nm	
Attenuation @ 1550 nm	
Bandwidth @ 850 nm	≥ 200 MHz-km
Bandwidth @ 1300 nm	≥ 500 MHz-km
Numerical Aperture	0.275 ± 0.015

Mechanical and Environmental

Installation Tensile Load (Maximum)	19.3 lbs. (85.85 N)
Operating Tensile Load (Maximum)	9.7 lbs. (43.14 N)
Minimum Bend Radius Under Load	25 mm
Minimum Bend Radius Unloaded	8 mm
Operating Temperature	-65 to +135 °C
Storage Temperature	-55 to +85 °C
Standard	ARINC 802, Appendix B, cable bend & impact resistance to Appendix D

Order by Part Number
C79598
NOTE

The operating temperature ranges are general guidelines. Consult with our Technical Sales department to determine the optimal coating and jacketing material for your specific application. 1.860.678.6636.

Contact Information	For additional information please contact your sales representative. You can also visit our website at www.lightera.com or call 1-888-FIBERHELP (1-888-342-3743) USA or 1-770-798-5555 outside the USA. For a full list of our certifications, visit our website.
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