

FlightLinx[®] PLUS Fiber Optic Cable

Overview

FlightLinx[®] PLUS Fiber Optic Cable designed for inflight entertainment, internet 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 μ m, 62.5 μ m and bend-insensitive single-mode OFS optical fiber offers increased bandwidth for data communications.



Typical Applications

Inflight Entertainment

Internet Access

Networking and Display Systems Used in Commercial Aircraft



FlightLinx® PLUS Fiber Optic Cable

Product Specifications

Physical Characteristics			
Cable Construction	Multimode Graded-Index Simplex	Multimode Graded-Index Simplex	Single-mode Bend-Insensitive Simplex
Core Diameter	50 ± 2.5 μm	62.5 ± 2.5 μm	
Cladding Diameter	125 ± 1 µm	125 ± 1.0 μm	125 ± 1 μm
Coating Type 2 Diameter	242 ± 5.0 μm	245 ± 10.0 μm	240 ± 5.0 μm
Buffer Diameter	400 ± 50 μm	400 ± 50 μm	400 ± 50 μm
Buffer Tube Diameter	950 ± 50 μm	950 ± 50 μm	950 ± 50 μm
Outer Cable Diameter	1.8 mm	1.8 mm	1.8 mm
Cable Weight	≤ 4 kg/km	≤ 4 kg/km	≤ 4 kg/km
Outer Jacket Material	Fluoropolymer	Fluoropolymer	Fluoropolymer
Outer Jacket Color	Light Purple	Light Purple	Light Purple
Optical Characteristics			
Attenuation @ 850nm	≤ 4 dB/km	≤ 6 dB/km	
Attenuation @ 1300nm	≤ 2 dB/km	≤ 3 dB/km	
Attenuation @ 1310nm			≤ 1.2 dB/km
Attenuation @ 1550nm			≤ 1.0 dB/km
Bandwidth @ 850nm	≥ 4700 MHz-km	≥ 200 MHz-km	
Bandwidth @ 1300nm	≥ 500 MHz-km	≥ 500 MHz-km	
Numerical Aperture	0.2 ± 0.01	0.275 ± 0.015	
Mechanical and Environmental			
Maximum Installation Tensile Load	19.3 lbs (85.85 N)	19.3 lbs (85.85 N)	19.3 lbs (85.85 N)
Maximum Operating Tensile Load	9.7 lbs (43.14 N)	9.7 lbs (43.14 N)	9.7 lbs (43.14 N)
Minimum Bend Radius Under Load	25 mm	25 mm	25 mm
Minimum Bend Radius Unloaded	8 mm	8 mm	8 mm
Operating Temperature	-65 to 135 °C	-65 to 135 °C	-65 to 135 °C
Storage Temperature	-55 to 85 °C	-55 to 85 °C	-55 to 85 °C
Standard	ARINC 802, Appendix I, cable bend & impact resistance to Appendix D	ARINC 802, Appendix B, cable bend & impact resistance to Appendix D	ARINC 802, Appendix L, cable bend & impact resistance to Appendix D

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.

For additional information please contact your sales representative.

You can also visit our website at www.ofsoptics.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.

Order by Part Number



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