

## FlightGuide<sup>®</sup> Simplex 1.8 mm Single-Mode Fiber Optic Cable P/N: C10026



## **Overview**

With more than 35 years of experience manufacturing fiber optic products for the aerospace and defense markets, OFS is proud to offer a wide range of specialty solutions that meet stringent industry standards. We work to help ensure optimal quality, reliability, and safety to streamline and facilitate complex, sensitive operations.

The OFS family of FlightGuide aerospace fiber optic cables are available in both single-mode and multimode fiber constructions. The fibers are carbon coated with a silicone/ETFE buffer. The cable has a braided aramid layer for strength with an ETFE outer jacket.

These tight-buffered cables are compatible with connectors and/or termini designed for tight jacket construction.

## **Typical Applications**

Aircraft Sensors Communication Systems Corrosive Chemical Environments Data Transmission Harsh Industrial Environments



Product Description	
	FlightGuide Simplex 1.8 mm Single-Mode Cable
Physical Characteristics	
Cable Construction	Single-Mode Simplex
Cladding Diameter	125 ± 1 µm
Coating Type 1	Carbon
Coating Type 2 Diameter	450 ± 25 μm
Coating Type 2	Silicone
Buffer Diameter	900 ± 50 μm
Buffer Material	ETFE
Outer Cable Diameter	1.8 ± 0.1 mm
Cable Weight	4.0 kg/km
Outer Jacket Material	ETFE
Outer Jacket Color	Yellow
Optical Characteristics	
Attenuation @ 1310 nm	≤ 1.5 dB/km
Attenuation @ 1550 nm	≤ 1.4 dB/km
Mode Field Diameter @ 1310 nm	5.1 ± 1.0 μm
Mode Field Diameter @ 1550 nm	5.8 ± 1.0 μm
Fiber Cutoff Wavelength	1250 ± 45 μm
Operating Wavelength	1310 nm, 1550 nm
Numerical Aperture	0.21
Mechanical and Environmental	
Installation Load (Maximum)	90 lb. (400 N)
Operating Load (Maximum)	30 lb. (133 N)
Minimum Bend (Installation)	25 mm
Minimum Bend (Operating)	8 mm
Operating Temperature	-55 to +150 °C
Storage Temperature	-55 to +85 °C
Flammability: FAR 25.869	Extinguish Time: 0 Seconds Max Burn Length: 3 Inches
Proof Test Level	≥ 200 kpsi
Order by Part Number	C10026

**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.



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