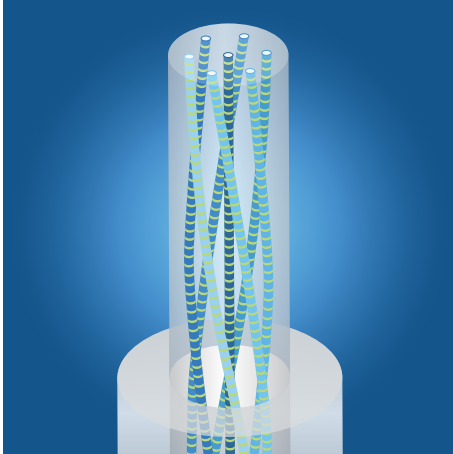


Shape Sensing Solutions



Twisted Multicore Fiber with Continuous Grating

Key Features

- Multicore fiber with continuous FBGs
- Designed for shape sensing applications
- Multicore connectorization and fan-outs
- Low back reflection termination

Overview

High quality continuous gratings without stripping and recoating preserve the fiber's mechanical integrity. This manufacturing platform enables us to customize and optimize the product to meet various customers' demands more economically.*

* For further details and applications, request a copy of our white paper, entitled "Multicore Optical Fiber Grating Arrays for Sensing Applications."

Product Specifications

Fiber Dimensions/Geometric Properties

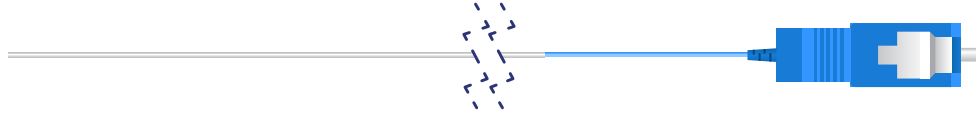
Fiber Core Geometry	6 around 1
Cladding Diameter	125 μm
Coating Type	Acrylate
Coating Diameter	200 μm
Coating Concentricity	< 8 μm
Core-to-Core Spacing	35 μm
Center Core Concentricity in Glass	0.5 μm
Twist Rate	50 twists/m
Numerical Aperture	0.21
Mode Field Diameter at 1550 nm	6 μm
Fiber Proof Strength	100 kpsi

Typical Gratings Characteristics

Grating Length	1 - 35 mm
Typical Spacing Between Gratings	0.2 - 1mm
Grating Center Wavelength	1538 - 1542 nm
Typical integrated Grating Reflectivity in each Core for 1cm of Grating	-70 dB

NOTE: Custom products are available to achieve specific requirements.

Shape Sensing Probe

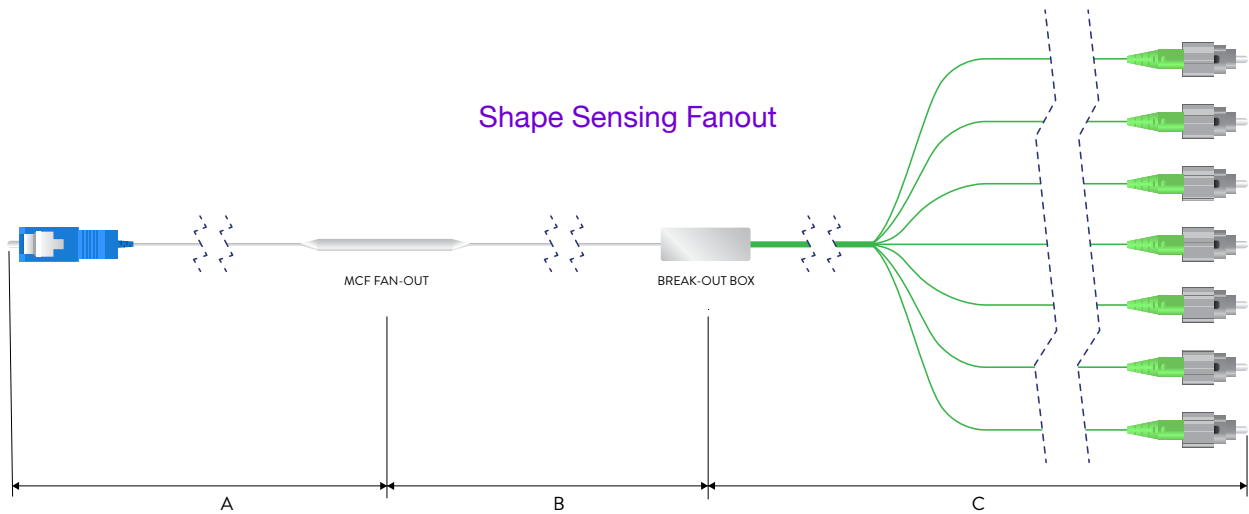


Probe Characteristics

Probe Length	1-10m
MultiCore End Connector	SC/UPC
Compatible Interrogators	OFDR

NOTE: Custom products are available to achieve specific requirements.

Shape Sensing Fanout



Typical Fanout Characteristics

		Length	Outer Diameter	Connector
A	MultiCore Connector to MultiCore Fan-Out Length	0.5m	3mm	
B	MultiCore Fan-Out to Break-Out Box Length	0.5m	3mm	
C	Break-out Box length to Single Core Connector Length	0.5m	3mm	
	MultiCore Connector			SC/UPC
	Single Core Connector			FC/APC

NOTE: Custom products are available to achieve specific requirements.

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.