

Panda Polarization-Maintaining Fiber Series

Product Description

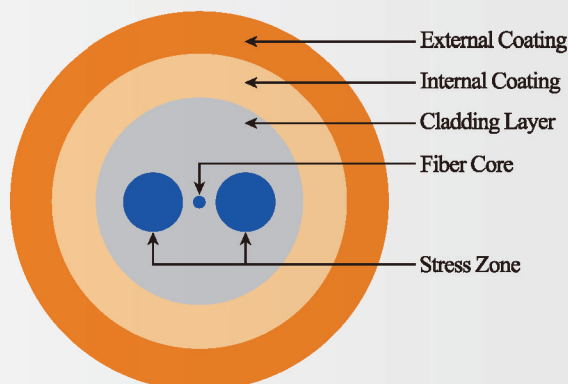
YOEC Panda polarization-maintaining fiber series can be used in fiber optic gyroscope and other polarization related devices. This optical fiber product has excellent attenuation characteristics, birefringence, temperature stability, lot-to-lot geometric consistency, long-term reliability and anti-radiation performance, and can meet a variety of application requirements.

Panda Polarization-Maintaining Fiber for Fiber Optic Gyroscope Coil Winding

Product Description

Panda polarization-maintaining optical fiber for YOEC fiber optic gyro winding is mainly used in fiber optic gyro sensitive coil. According to its application environment, the mechanical reliability, temperature stability, environmental adaptability and radiation resistance of optical fiber are improved. The axial uniformity and lot-to-lot consistency of optical fiber are optimized, and the internal and external coating of optical fiber uses self-developed coating material, which has good full temperature stability, environmental adaptability and mechanical reliability. It can be used in the temperature range of -50°C to $+105^{\circ}\text{C}$. According to the application and development trend of fiber optic gyroscope, 60 micron fine diameter polarization-maintaining fiber is provided, which can wind small size optical fiber coil, low temperature sensitivity, and the performance of optical fiber is more stable at full temperature, which can meet the requirements of various environments.

Optical Fiber Structure



Product Application

- Fiber optic coil for Fiber optic gyroscope
- Delay coil
- Polarization-maintaining cable
- Polarization sensitive device
- Optical fiber polarization sensor

Product Features

- High lot-to-lot geometry consistency of batches and
- Excellent radiation resistance
- Excellent bending properties
- Wide operating temperature range and good full temperature stability
- Excellent long-term reliability
- Excellent birefringence effect

Product Specification

Properties	Unit	Product Specification					
Product Type	/	PM13G-60-U10	PM13G-80-U13 PM13G-80-U16	PM13G-125-U25	PM15G-60-U10	PM15G-80-U13 PM15G-80-U16	PM15G-125-U25
Optical Properties							
Working Wavelength	nm	1310	1310	1310	1550	1550	1550
Cutoff Wavelength	nm	1100 ~ 1290	1100 ~ 1290	1100 ~ 1290	1290 ~ 1520	1290 ~ 1520	1290 ~ 1520
Mode Field Diameter	μm	6.0 ± 0.5	6.0 ± 0.5	6.0 ± 0.5	6.5 ± 0.5	6.5 ± 0.5	6.5 ± 0.5
Attenuation	dB/km	≤ 0.6	≤ 0.6	≤ 0.6	≤ 0.5	≤ 0.5	≤ 0.5
Beat Length	mm	≤ 2.5	≤ 2.5	≤ 2.5	≤ 3.0	≤ 3.0	≤ 3.0
Typical Crosstalk	dB/km	≤ -23	≤ -30	≤ -30	≤ -23	≤ -30	≤ -30
Geometric Properties							
Cladding Diameter	μm	60.0 ± 1.0	80.0 ± 1.0	125.0 ± 1.0	60.0 ± 1.0	80.0 ± 1.0	125.0 ± 1.0
Coating Type	/	Double Layer UV curing acrylic resin					
Coating Diameter	μm	105.0 ± 2.0	135.0 ± 1.0 168.0 ± 1.0	245.0 ± 2.0	105.0 ± 2.0	135.0 ± 1.0 168.0 ± 1.0	245.0 ± 2.0
Core Concentricity	μm	≤ 1.0	≤ 1.0	≤ 1.0	≤ 0.5	≤ 0.5	≤ 0.5
Cladding Out-of-roundness	/	≤ 1.0%	≤ 1.0%	≤ 1.0%	≤ 1.0%	≤ 1.0%	≤ 1.0%
Environmental and Mechanical Properties							
Operation Temperature Range	°C	-50 ~ +105	-50 ~ +105	-50 ~ +105	-50 ~ +105	-50 ~ +105	-50 ~ +105
Screening Tension	kpsi	100	100	100	100	100	100

Customized Information

- The diameter of optical fiber coating can be customized according to customer requirements, and the accuracy can be controlled within the central value of ±1 μm.
- According to customer requirements to provide other specifications of polarization-maintaining fiber products or other types of polarization-maintaining fiber products.