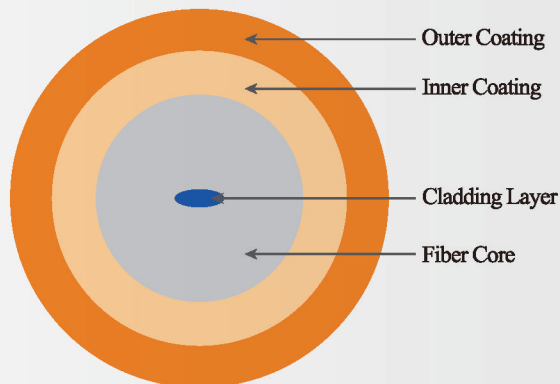


## Elliptical Core Polarization-Maintaining Fiber

### Product Description

YOEC elliptical core polarization-maintaining fiber has excellent temperature stability and birefringence performance, so it can be widely used in fiber optic gyroscope, current transformer and other polarization related devices. The YOEC elliptical core fiber improves the uniformity and birefringence of the fiber by improving the elliptical core structure and optimizing the core and cladding structure of the fiber. The elliptical core polarization-maintaining fiber belongs to the geometric birefringent polarization-maintaining fiber, which is less affected by ambient temperature and has better temperature stability.

### Optical Fiber Structure



### Product Application

- Fiber optic gyroscope
- Optical fiber current transformer
- Fiber laser and amplifier

### Product Features

- Low loss and high bending properties
- Good geometric uniformity
- High stability and reliability in use
- Temperature insensitive

## Product Specification

Properties	Unit	Product Specification			
		ECF13-125-U25	ECF13-80-U16	ECF15-80-U13	ECF15-80-U16
Product Type	/	ECF13-125-U25	ECF13-80-U16	ECF15-80-U13	ECF15-80-U16
<b>Optical Properties</b>					
Working Wavelength	nm	1310	1310	1550	1550
Cutoff Wavelength	nm	1100 ~ 1290	1100 ~ 1290	1290 ~ 1520	1290 ~ 1520
Mode Field Diameter	μm	6.0 ± 1.0	6.0 ± 1.0	6.5 ± 1.0	6.5 ± 1.0
Attenuation	dB/km	≤ 1.0	≤ 1.0	≤ 1.0	≤ 1.0
Beat Length	mm	3.0 ~ 80.0	3.0 ~ 80.0	3.0 ~ 80.0	3.0 ~ 80.0
Typical Crosstalk Value	dB	≤ -25	≤ -25	≤ -25	≤ -25
<b>Geometric Properties</b>					
Cladding Diameter	μm	125.0 ± 1.0	80.0 ± 1.0	80.0 ± 1.0	80.0 ± 1.0
Coating Type	/				
Coating Diameter	μm	245.0 ± 3.0	168.0 ± 3.0	135.0 ± 2.0	168.0 ± 3.0
Cladding Out-of-roundness	/	≤ 5.0%	≤ 5.0%	≤ 5.0%	≤ 5.0%
Core Concentricity	μm	≤ 1.0	≤ 1.0	≤ 1.0	≤ 1.0
<b>Environmental and Mechanical Properties</b>					
Operation Temperature Range	°C	-45 ~ +85	-45 ~ +85	-45 ~ +85	-45 ~ +85
Screening Tension	kpsi	100	100	100	100

## Customized Information

- Fiber cladding diameter and coating diameter can be customized according to customer requirements.
- The ratio of major and minor axes of optical fiber core can be customized according to customer requirements, and the maximum ratio is 4.
- The optical fiber beat length can be customized according to customer requirements.