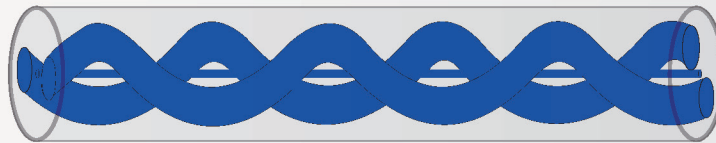


## Spun Optical Fiber

### Product Description

YOEC Spun optical fiber is mainly used in key sensitive devices of optical fiber current transformer, which has the ability of maintaining circular polarization and resisting environmental interference. The high birefringence fiber preform is used to rotate at high speed in the process of wire drawing. The two intrinsic modes of the rotating optical fiber manufactured by this special process are elliptically polarized, and its inherent birefringence can effectively resist the stress caused by external conditions (such as temperature, bending, vibration, etc.). In order to effectively maintain the characteristics of circularly polarized light. Spun optical fiber can not only maintain circularly polarized light, but also has a very outstanding ability to resist environmental interference, and can ensure extremely high working accuracy under the conditions of temperature fluctuation and vibration.

### Optical Fiber Structure



### Product Application

- Optical fiber current transformer based on Faraday effect
- Other DC/AC current sensing systems
- Switchgear
- Other polarization sensing systems

### Product Features

- Good geometric and optical properties
- With minimal phase difference, polarization transmission can be maintained over long distances
- Insensitive to temperature and stress

## Product Specification

Properties	Unit	Product Specification		
Product Type	/	SHB13-125-A	SHB13-125-B	SHB13-125-C
<b>Optical Properties</b>				
Structure Type	/	Elliptical core type	Panda type	Bow tie type
Working Wavelength	nm	1310	1310	1310
Cutoff Wavelength	nm	1100 ~ 1290	1100 ~ 1290	1100 ~ 1290
Mode Field Diameter	μm	6.5 ± 1.0	6.5 ± 1.0	6.5 ± 1.0
Attenuation	dB/km	≤ 2.0	≤ 2.0	≤ 2.0
Helical Distance	mm	2.0 ~ 5.0	2.0 ~ 5.0	2.0 ~ 5.0
Beat Length	mm	≤ 10.0 (before rotation)	≤ 10.0 (before rotation)	≤ 10.0 (before rotation)
<b>Geometric Properties</b>				
Cladding Diameter	μm	125.0 ± 1.0	125.0 ± 1.0	125.0 ± 1.0
Coating Type	/	Double UV curing acrylic resin		
Coating Diameter	μm	245.0 ± 5.0	245.0 ± 5.0	245.0 ± 5.0
Cladding Out-of-Roundness	/	≤ 2.0%	≤ 2.0%	≤ 2.0%
Core Concentricity	μm	≤ 1.0	≤ 1.0	≤ 1.0
Optical Fiber Twist	turns/m	≤ 1.0	≤ 1.0	≤ 1.0
<b>Environmental and Mechanical Properties</b>				
Operation Temperature Range	°C	-55 ~ +85	-55 ~ +85	-55 ~ +85
Screening Tension	kpsi	100	100	100

## Customized Information

- The type of optical fiber can be customized according to the customer.
- The spiral distance of optical fiber can be customized according to customer requirements.
- Low birefringence fiber can be customized according to customer requirements.