

Spun | Fibers

By spinning the preform during the fiber drawing, it is possible to preserve circular polarization on Polarization Maintaining Optical Fibers that are originally highly birefringent.

iXblue Photonics is offering fibers for 1310 and 1550 nm applications with an optimized spinning rate to minimize the thermal and vibrational dependence of the output polarization.

Elliptical core design is available for low temperature dependence applications

Key Features

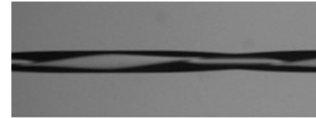
- Elliptical Core and tiger designs available
- Wavelength: 1310 or 1550 nm
- Cladding diameter: 80 or 125 μm
- Matched PM fiber for current sensors available

Related Products

- Polarization maintaining fibers
- Polarizing fibers and polarizers

Application

- Fiber optics current sensors



Main Specifications

Product Name	Operating wavelength (nm)	Design	Spin pitch (mm)	Cladding Diameter (μm)	Coating Diameter (μm)	Beat Length* (mm)	Core NA (+/-0.02)	MFD** (μm)	Attenuation** (dB/km)	Cutoff Wavelength (nm)
IXF-SPUN-1310-80	1310	Tiger	2.5	80 +/- 2	170 +/- 5	10 +/- 4	0.15	7 +/- 0.5	< 5	< 1250
IXF-SPUN-1310-125-EC	1310	E-Core	2.5	125 +/- 3	245 +/- 15	8 +/- 1.7	0.24	4 +/- 1	< 5	< 1250
IXF-SPUN-1550-80	1550	Tiger	2.5	80 +/- 2	170 +/- 5	11 +/- 4	0.15	9.5 +/- 2	< 3	< 1480
IXF-SPUN-1550-125-EC	1550	E-Core	2.5	125 +/- 3	245 +/- 15	9.5 +/- 2	0.24	6 +/- 2	< 3	< 1480

* Linear Phase Beat Length of Unspun Fiber measured at Operating Wavelength

** Measured at Operating Wavelength

Spun Fiber parameters can be optimized depending on your application requirements (beat length, spin pitch, cladding and coating diameters,...)

