

## SPECIALTY OPTICAL FIBER

# IXF-PMF-1550-125-P-020-PI

## Polarization-Maintaining Fiber

The IXF-PM family regroups polarization-maintaining single-mode fibers designed for operation from UV to NIR wavelengths. Available with different numerical aperture, coating diameter and coating material. Exail proposes a wide range of polarization-maintaining fibers with 125  $\mu\text{m}$  cladding diameter.

The IXF-PMF-1550-125-P-020-PI fiber is designed for use in harsh environments with extreme temperatures and/or low to moderate radiation levels.

Polyimide offers excellent performance both at cryogenic and high temperatures up to +300 °C.



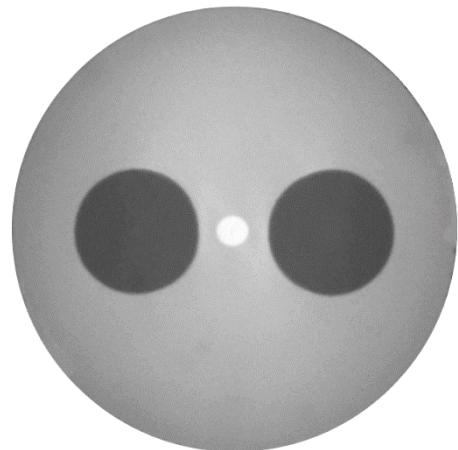
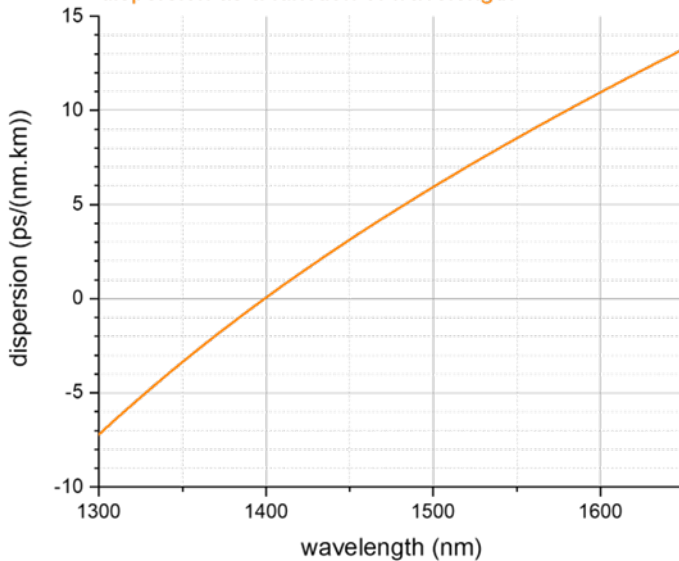
### Benefits & Features

- Operating temperature long term up to 300 °C
- Operating temperature short term up to 350 °C
- High birefringence
- Excellent polarization maintaining properties
- Low attenuation
- High-quality polyimide coating

### Applications

- High temperature sensing
- Oil and gas

IXF-PMF-1550-125-P-0.20-PI  
dispersion as a function of wavelength



## TECHNICAL SPECIFICATIONS

### Parameters

Cutoff wavelength (nm)	1430 ± 50
Attenuation @1550nm (dB/km)	< 1
Beat length @1550nm (mm)	< 3.8
Mode field diameter @1550nm (μm)	6.6 ± 0.5
Numerical aperture	0.20 ± 0.01
Core/Clad concentricity (μm)	< 1
Cladding diameter (μm)	125 ± 1
Coating diameter (μm)	160 ± 5
Proof test level (kpsi)	100

### Design parameters

Operating wavelength (nm)	1550
Design	Panda
Core ellipticity (%)	< 15
Holding parameter (m <sup>-1</sup> )	< 1.10 <sup>-5</sup>
Coating material	Polyimide
Operating temperature range (°C)	-60 to +300

Exail reserves the right to change, at any time and without notice, the specifications, design, function or form of its products described herein.

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