

## POLARIZER

# IXS-POL-1053-125

## PZ Fiber-Based Polarizer

Contrary to In-line Polarizers, the PZ fiber-based polarizer is an All-Fiber solution offering superior polarization extinction ratio, low loss and excellent stability over temperature.

An all-fiber polarizer IXS-POL is a polarizing fiber with the optimal length coiled at the appropriate diameter to operate at the operational wavelength.

Exail also offers customized solutions including connectors, various packages, patch-cords and cables.



### Benefits & Features

- Polarizing wavelengths available: 780, 840, 980, 1060, 1310 or 1550 nm
- Fiber diameter: 80 or 125  $\mu\text{m}$
- Tiger design
- > 100 nm polarizing window
- > 30 dB extinction ratio

### Applications

- Quantum optics, cold atoms
- All-Fiber polarizer
- Fiber optics current sensors and gyros

### Parameters

20 dB fast edge* (nm)	< 1015
3 dB slow edge* (nm)	> 1105
Extinction ratio (dB)	< -30
Attenuation @1053nm (dB/km)	< 20
Mode field diameter @1053nm ( $\mu\text{m}$ )	$7 \pm 2$
Numerical aperture	$0.11 \pm 0.01$
Core/Clad concentricity ( $\mu\text{m}$ )	< 1
Cladding diameter ( $\mu\text{m}$ )	$125 \pm 2$
Coating diameter ( $\mu\text{m}$ )	$245 \pm 10$
Proof test level (kpsi)	100

### Design parameters

Operating wavelength (nm)	1053
Design	Tiger
Core shape	Round
Coating material	Dual acrylate
Operating temperature range ( $^{\circ}\text{C}$ )	-40 to +85

#### Comments:

*\*Typical polarization performance with deployment conditions of 5m length in a 80mm coil.*

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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