

Endlessly Single Mode Fiber

IXF-ESM

Those fibers display an endlessly single mode behavior and do not exhibit a high order mode cut off. They are therefore ideally suited for excellent mode delivery in the visible and above.

Partnership with **PHOTONICS
BRETAGNE**
Product line **PERFOS**

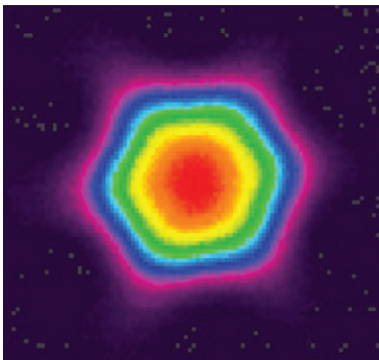


FEATURES & BENEFITS

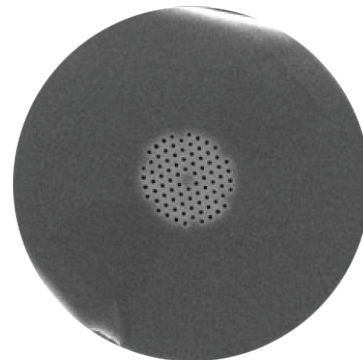
- Singlemode over the whole wavelength range
- Standard and PM versions

APPLICATIONS

- Singlemode light delivery



*Measured fundamental mode shape
of the ESM-5-125-PM @ 532 nm*

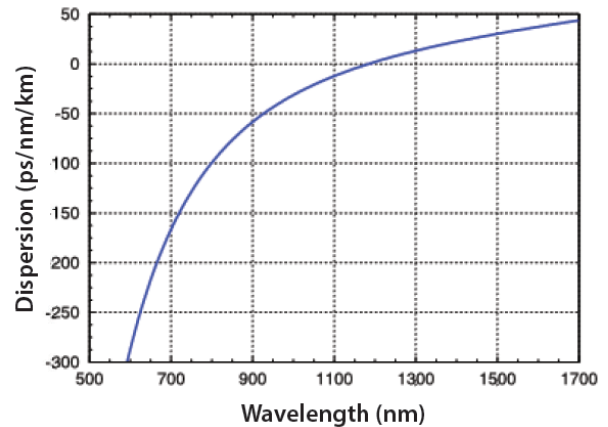
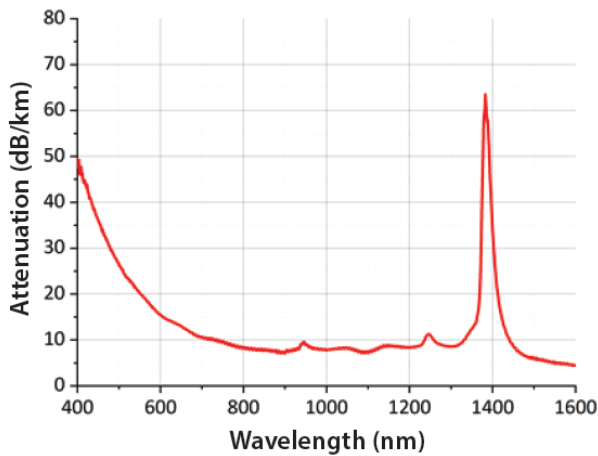


IXF-ESM TECHNICAL SPECIFICATIONS

Parameters

P/N: IXF-ESM	5-125	5-125-PM	10-125	10-225-PM
Material	silica			
Core diameter (μm)	5 ± 0.3	5 ± 0.3	10 ± 0.6	10 ± 0.6
Cladding diameter (μm)	125 ± 2	125 ± 3	125 ± 5	225 ± 5
Coating outside diameter (μm)	245 ± 10	240 ± 10	250 ± 10	355 ± 10
Coating type	dual coat high index acrylate			
Numerical aperture @ 1064 nm	0.20 ± 0.02	0.20 ± 0.02	0.1 ± 0.02	0.1 ± 0.02
LP ₁₁ cut-off wavelength (nm)	none			
Background loss @ 532 nm (dB/km)	< 50	< 38	< 40	< 38
Background loss @ 1060 nm (dB/km)	< 20	< 20	< 12	< 15
Background loss @ 1550 nm (dB/km)	< 15	< 30	< 5	< 10
Mode Field diameter @ 1064 nm (μm)	4.6 ± 0.3	4.5 ± 0.3	8.8 ± 0.4	8.7 ± 0.4
Effective area @ 1064 nm (μm^2)	14 ± 2	16 ± 2	60 ± 6	59 ± 6
Birefringence	$2.3 \pm 0.1 \times 10^{-4}$		$2.0 \pm 0.1 \times 10^{-4}$	

Specifications are subject to change without notice



Typical measured fibre attenuation and dispersion