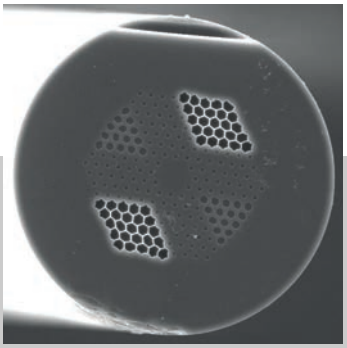
PHOTONICS BRETAGNE
Photonics Innovation Hub

SPECSHEET
07/2025

MICROSTRUCTURED FIBRES | SOLID-CORE
ALL-SOLID ENDLESSLY SINGLE-MODE FIBRES



Product line PERFOS

These fibres display an endlessly single mode behavior if a sufficient bending is applied along a few meters from the fibre input. They are therefore ideally suited for excellent mode delivery in the visible range and above. Their all-solid structure allows an easy cleaving, cleaning and patchcord integration.

MAIN CHARACTERISTICS

- All-solid microstructured cladding
- Low nonlinearity
- Singlemode over the whole wavelength range under conditions (1)
- PM and no PM versions

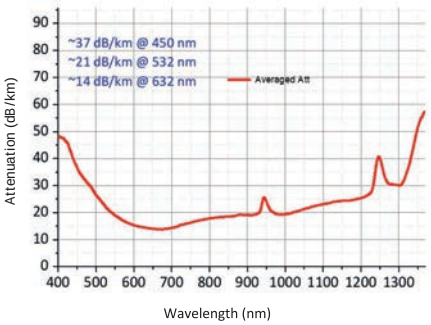
APPLICATIONS

- Light delivery

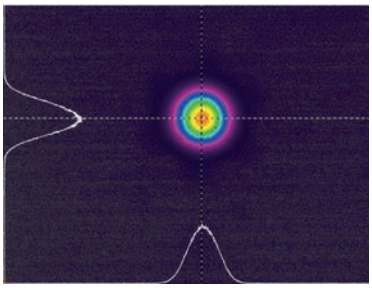
FIBRE SPECIFICATIONS	ASM-16-137	ASM-16-130-PM
Optical Parameters		
Mode Field Diameter @ 700 nm (µm) (2)	12 typical	
Numerical Aperture @ 700 nm (2)	0.05 typical	
Background Loss @ 500-532 nm (dB/km)	< 50	< 60
Background Loss @ 600-700 nm (dB/km)	< 20	< 30
Background Loss on the 1060 nm (dB/km)	< 20	< 40
Birefringence (x 10^{-4})	NA	> 1.1
Physical/Material Parameters		
Material	Pure Silica + Fluosil (and boron) inclusion	
Core Diameter (µm) (3)	16.5 +/- 1.0	
Cladding Diameter (µm) (4)	137 +/- 4	128 +/- 4
Coating Outside Diameter (µm)	272 +/- 5	242 +/- 5
Coating Type	Dual coat high index coating acrylate	
Proof-Testing (kpsi)	> 80	

(1) For a 7cm bending diameter applied along a few meters from the fibre input
(2) Calculated value from simulation
(3) Definition of the core diameter as 4λ-d with d the diameter of Fluosil inclusions and λ the distance between inclusion centers
(4) Variation of +/-1µm along the fibre drawing for a same batch - Other cladding size available on request

Typical measured attenuation for ASM-16-130-PM



Measured fundamental mode profile of the ASM-16-137 @ 750 nm



Sales: contact@cybel-llc.com | Web: www.cybel-llc.com | 62 Highland Ave., Bethlehem, PA 18017, USA | Tel: +1 (610) 691-7012

Copyright © 2024 Photonics Bretagne. All rights reserved. Photonics Bretagne reserves the right to modify the specifications without prior notice.

All our optical fibres and components are manufactured according to our ISO certified quality management system, which places the needs and values of customers and partners at the heart of our organization. Throughout the manufacturing process, our components and systems are subjected to rigorous tests and inspections, which guarantees their robustness and reliability in the most demanding environments.