

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

Product line **PERFAS**

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	

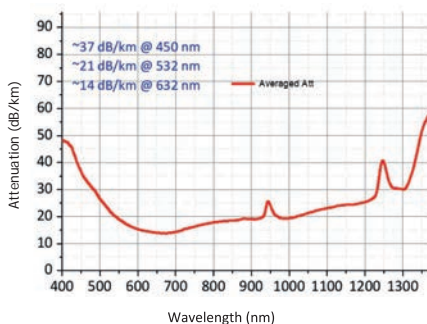
⁽¹⁾ For a 7cm bending diameter applied along a few meters from the fibre input

⁽²⁾ Calculated value from simulation

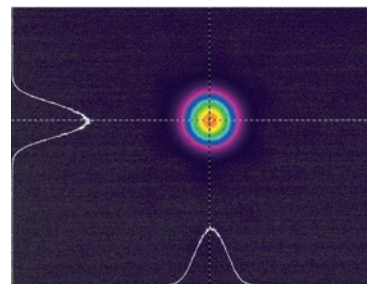
⁽³⁾ Definition of the core diameter as 4λ-d with d the diameter of Fluosil inclusions and λ the distance between inclusion centers

⁽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



Multiple options and configurations are available. Please contact Photonics Bretagne to find the best fit.

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