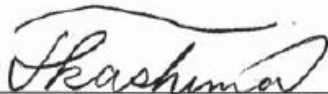


Messrs. FEL / CERN

SPECIFICATION

FOR

Single Mode Fiber (Type B)



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General remarks:

Fibre consist of core, cladding and coating

The fibre's cladding is SiO₂ doped with Fluor, as well as the fibre's core.

Specification for Single Mode Fiber (Type B)

1. General

This specification covers a Single Mode Fiber, optimized at a wavelength of 1.3um region.

2. Specification

*Material	
- Fiber	F-SiO ₂
- Coating	UV cured resin
* Attenuation (fiber)	
- Attenuation @ 1310 nm	<=0.60 dB/km
- Attenuation @ 1550 nm	<=0.50 dB/km
* Bending loss @ 1550 nm	
- 100 turns around 60 mm	<=0.05 dB
* Cut-off wavelength (in cable)	<=1260 nm
* Dispersion	
- Polarization mode dispersion	<=0.5 ps/km ^{1/2}
- Minimum zero dispersion wavelength	1290 nm
- Maximum zero dispersion wavelength	1324 nm
- Zero dispersion slope	<=0.093 ps/nm ² .km
* Mode field diameter	
- @ 1310 nm	8.6+/-0.7 um
* Geometrical characteristics	
- Cladding diameter	125+/-1 um
- Cladding non circularity	<=1.0 %
- Core/cladding concentric error	<=0.8 um
- Coating diameter	245+/-5 um
- Coating/cladding concentric error	<=12 um
- Standard spool length	>=8000m: 60% or more 6000m +/-2000m: 40% or less
* Mechanical properties	
- Proof test	>=0.7 GN/m ²
- Dynamic tensile force	>=4 GPa
- Coating stripping force (Average)	1N - 4N