

## Product Characteristics - Optical fibres

Fibre:		
type of fibre	hydrogen passivated, dispersion unshifted, matched cladding bending loss insensitive singlemode fibre 9/125µm	
	Full compatible with G.652.D fibre	
	Optical and geometrical properties exceed ITU-recommendations G.652.D and G.657.A1	
standard	IEC-60793-2-50, B6-a1	
standard	ITU-T G.657.A1	

Characteristics:	Properties	Unit
Mode field diameter; 1310nm	9.0 ± 0.3	µm
Mode field diameter; 1550nm	10.2 ± 0.4	µm
Core non-circularity	max. 6	%
Core/Cladding concentricity error	max. 0.4	µm
Cladding diameter	125.0 ± 0.5	µm
Cladding non-circularity	max. 0.6	%
Coating diameter, uncoloured	242 ± 5	µm
Coating diameter, coloured	254 ± 7	µm
Coating/Cladding concentricity error	max. 8	µm
Temperature sensitivity; -60°C to +85°C	max. 0.05	dB/km
Bending sensitivity - 10 turns around Ø30mm - 1550nm	max. 0.1	dB
Bending sensitivity - 10 turns around Ø30mm - 1625nm	max. 0.3	dB
Bending sensitivity - 1 turn around Ø20mm - 1550nm	max. 0.75	dB
Bending sensitivity - 1 turn around Ø20mm - 1625nm	max. 1.5	dB
Proof test level	min. 0.69	GPa
Fibre curl	min. 4	m
Cable cut-off wavelength	max. 1260	nm
Zero-dispersion wavelength	1300 - 1322	nm
Zero-dispersion slope	max. 0.090	ps/nm <sup>2</sup> .km
Chromatic dispersion; 1285nm - 1330 nm	max. 3.0	ps/nm.km
Chromatic dispersion; 1550nm	max. 17.0	ps/nm.km
Chromatic dispersion; 1625nm	max. 21.0	ps/nm.km
Polarisation mode dispersion; PMD <sub>0</sub>	max. 0.20	ps/√km
Max. attenuation at 1383nm (α <sub>1383</sub> ) [note a]	< max. α <sub>1310</sub>	
Effective Group Core Refractive Index; 1310 nm	1.465	-
Effective Group Core Refractive Index; 1550 nm	1.465	-
Effective Group Core Refractive Index; 1625 nm	1.465	-

note a: after hydrogen ageing