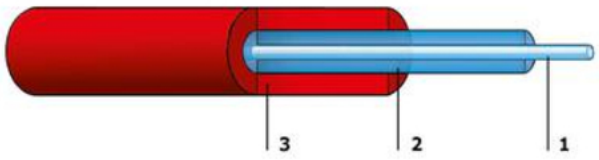
Single-mode fibre, E9/125/250, G.657.A2

bend optimized
in accordance with ITU-T G.657.A2



1 Core
2 Cladding
3 Coating

DESCRIPTION

Bend insensitive single-mode fibre with improved macrobending properties for the home connection and for the cabling in FTTH access networks (Fibre-to-the-home).
Full-spectrum singlemode fibre, suitable for the operating wavelengths in all FTTx networks.
Fully compatible with (and even exceeding) the standards ITU-T G.652.D and ITU-T G.657.A1.
Permitted bending radius: up to 7.5 mm

APPLICATION

Home connection, FTTH access network, FTTx indoor cabling.

OPTICAL PROPERTIES

Transmission Characteristics

Wavelength	**[nm]**	**1310**	**1383**	**1550**	**1625**
Maximum attenuation (cabled)	[dB/km]	0.36	0.36*	0.22	0.25
		* post hydrogen aging performance			
Maximum Chromatic Dispersion	[ps/(nm x km)]	3,5		18	23
Zero Dispersion Wavelength λ_0	[nm]	$1304 \leq \lambda_0 \leq 1324$			
Maximum Zero Dispersion Slope So	[ps/(nm^2 x km)]	0.092			
Mode-Field Diameter	[µm]	8.6 +/- 0.4		9.6 +/- 0.5	
Maximum Cable Cutoff Wavelength λcc	[nm]	1260			
Maximum Polarisation Mode Dispersion (PDM)	[ps/√km]	0.2		0.2	
Refractive index		1.4670		1.4677	

MECHANICAL PROPERTIES

Geometrical and mechanical characteristics

Cladding diameter	[µm]	125 +/- 0.7
Maximum Core / Cladding Concentricity Error	[µm]	0.5
Maximum Cladding Non-Circularity	[%]	0.7
Coating diameter	[µm]	242 +/- 5
Maximum Cladding/Coating Concentricity Error	[µm]	12
Operating temperature range	[°C]	-60 up to +85
Test load	[kpsi]	100

GENERAL PROPERTIES

Macrobending characteristics

Number of windings and bend radius	**Wavelength**	**Max. induced attenuation**
1 turn x 7.5 mm	1550 nm	≤ 0.4 dB
1 turn x 7.5 mm	1625 nm	≤ 0.8 dB

STANDARDS

Post hydrogen aging	IEC 60793-2-50-C.5
Fiber specifications	ITU-T G.657.A2, IEC 60793-2-50 Category B-657.A2

VERSIONS

Article No.