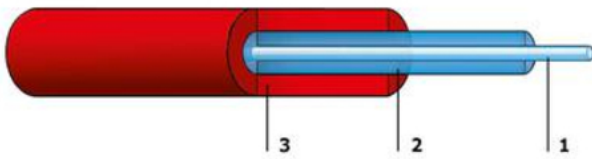


# Single-mode fibre, E9/125/250, OS2 / G.652.D BLO

low attenuation, bend loss optimized

in accordance with ITU-T G.652.D, compatible with ITU-T G.657.A1



- 1 Core
- 2 Cladding
- 3 Coating

## DESCRIPTION

Bend loss optimized (BLO) 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 single-mode fibre, suitable for the operating wavelengths in all FTTH networks. Fully compatible with (and even exceeding) the standards ITU-T G.652.D and ITU-T G.657.A1. Permitted bending radius: 15 mm up to 10 mm.

## APPLICATION

Home connection, FTTH access network, FTTH in-house cabling.

## OPTICAL PROPERTIES

### Transmission characteristics

Wavelength	[nm]	1310	1383	1550	1625
Maximum attenuation (cabled)	[dB/km]	0.34	0.34*	0.21	0.23
Maximum Chromatic Dispersion	[ps/(nm x km)]	* post hydrogen aging performance			22
Zero Dispersion Wavelength $\lambda_0$	[nm]	$1304 \leq \lambda_0 \leq 1324$			
Maximum Zero Dispersion Slope $S_0$	[ps/(nm <sup>2</sup> x km)]	0.091			
Mode-Field Diameter	[ $\mu$ m]	9.2+/-0.4		10.4+/-0.5	
Maximum Cable Cutoff Wavelength $\lambda_{cc}$	[nm]	1260			
<b>Polarisation Mode Dispersion</b>					
PMD Link Design Value	[ps/√km]	≤ 0.04			
Max. individual fibre PMD	[ps/√km]	≤ 0.1			
Max. individual cable PMD	[ps/√km]	≤ 0.2			
Refractive index		1.4676		1.4682	

## MECHANICAL PROPERTIES

### Geometrical and mechanical characteristics

Cladding diameter	[ $\mu$ m]	125 +/- 0.7
Maximum Core / Cladding Concentricity Error	[ $\mu$ m]	0.5
Maximum Cladding Non-Circularity	[%]	0.7
Coating diameter	[ $\mu$ m]	242 +/- 5
Maximum Cladding/Coating Concentricity Error	[ $\mu$ m]	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 10 mm	1550 nm	≤ 0.50 dB
1 turn x 10 mm	1625 nm	≤ 1.5 dB
10 turns x 15 mm	1550 nm	≤ 0.05 dB
10 turns x 15 mm	1625 nm	≤ 0.3 dB
100 turns x 30 mm	1625 nm	≤ 0.01 dB

## STANDARDS

# Single-mode fibre, E9/125/250, OS2 / G.652.D BLO

low attenuation, bend loss optimized

in accordance with ITU-T G.652.D, compatible with ITU-T G.657.A1



Post hydrogen aging

IEC 60793-2-50-C.5

Fiber specifications

ITU-T G.652.D, ITU-T G.657.A1, IEC 60793-2-50 Category B-652.D, B-657.A1

---

## VERSIONS

Article No.

---