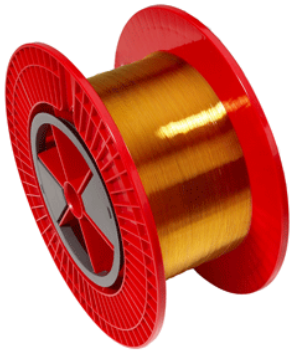
H1M2xxxxxxx- Ed1

OPTICAL FIBER. SINGLE MODE. G652D

ROHS
compliant

STANDARDS

ITU-T G.652D recommandation
IEC-EN 60793-2-50 Cat. B.1.1.
IEC-EN 60793-2-50 Cat. B.1.3.



DESCRIPTION AND APPLICATION

- Single Mode step index Optical fiber. The cladding is composed by SiO2 and the nucleus by SiO2 + GeO2. The coating is composed of UV-cured acrylate.
- Low Water Peak Fiber (LWP), that provides optimum performance in both the 1310 nm (2nd window) and 1550 nm (3rd window) wavelength with a low dispersion in the 1310 nm window. It can also be used in CWDM applications thanks to its low attenuation in the water peak region (1.383 nm).
- It is a full-spectrum fiber designed for optical transmission systems operating over the entire wavelength range from 1260 nm to 1625 nm.
- According to ITU-T G-652D recommendation (and former revisions A, B & C) and with IEC-EN 60793-2-50 Cat. B.1.3. (including Cat. B.1.1).
- Once cabled in loose tube cables the performance code is OS1 and OS2, according to IEC 60793-2-50 B.1.3.
- Compatible with ISO/IEC 11801:2002, category OS1 and ISO/IEC 24702:2006, categories OS1 & OS2.

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Certified Company **ISO 9001** - **ISO 14001**

CABLESCOM ZARAGOZA

OPTICAL FIBER. SINGLE MODE. G652D

OPTICAL CHARACTERISTICS

PARAMETER	VALUE	UNITS	TEST METHOD
Typ./Max. Individual fibre Attenuation at 1310 nm (*)	0,32 / 0,35	dB/km	UNE-EN 188000-303 IEC 60793-1-40
Typ./Max. Individual fibre Attenuation at 1383 nm (*)	0,28 / 0,31	dB/km	
Typ./Max. Individual fibre Attenuation at 1550 nm (*)	0,19 / 0,21	dB/km	
Typ./Max. Individual fibre Attenuation at 1625 nm (*)	0,20 / 0,24	dB/km	
Att. Uniformity (Point discontinuities at 1310 or 1550 nm)	< 0,05	dB	
Zero Dispersion Wavelength	$1302 < \lambda_0 < 1322$	nm	UNE-EN 188000-309 IEC 60793-1-42
Dispersion Slope at λ_0 (S_0)	≤ 0,092	ps/nm²·km	
Max. Chromatic Dispersion (1285 nm - 1330 nm)	≤ 3,5	ps/nm·km	
Max. Chromatic Dispersion at 1550 nm	≤ 18,0	ps/nm·km	
Max. Chromatic Dispersion at 1625 nm	≤ 22,0	ps/nm·km	
Polarization Mode Dispersion (PMD) (*)	≤ 0,2	ps/√km	IEC 60793-1-48
Link Design Value. (PMD_Q) (**)	≤ 0,06	ps/√km	
Cutoff Wavelength (cabled fiber)	$\lambda_{cc} < 1260$	nm	UNE-EN 188000-313 IEC 60793-1-44

(*) This parameter is subject to change once the fiber is cabled.

GEOMETRICAL PROPERTIES

PARAMETER	VALUE	UNITS	TEST METHOD
Mode Field Diameter at 1310 nm	9,2 ± 0,4	µm	UNE-EN 188000-315 IEC 60793-1-45
Mode Field Diameter at 1550 nm	10,4 ± 0,5	µm	
Cladding Diameter	125 ± 0,7	µm	IEC 60793-1-20
Cladding Non-Circularity	< 1	%	
Core-Cladding Concentricity Error	< 0,5	µm	
Coating Diameter (uncoloured)	245 ± 5	µm	IEC 60793-1-21
Coating-Cladding Concentricity Error	≤ 12	µm	
Fiber Curl Radius	≥ 4.0	m	IEC 60793-1-34

OTHER PROPERTIES

PARAMETER	VALUE	UNITS	TEST METHOD
Tensile Strength (“Proof test”)	≥1% (100kpsi / 0,7GPa)	%	IEC 60793-1-30
Effective group index of refraction at 1310 nm	1,467		
Effective group index of refraction at 1550 nm	1,468		
Coating strippability (peak value)	1,3 ≤ Fp ≤ 8,9	N	IEC 60793-1-32

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