



- 1 Core 2 Cladding
- 3 Coating

#### **DESCRIPTION**

Suitable for short transmission distances and medium transmission rates in the 850 nm and 1300 nm wavelengths (typically up to 1 GbE). The geometrical and mechanical characteristics meet all relevant international standards.

## **APPLICATION**

In premises cabling, e.g. for Fibre to the Desk (FTTD), primarily in existing/legacy installations.

## **OPTICAL PROPERTIES**

Transmission characteristics				
Wavelength	[nm]	850	1300	
Attenuation typical (cabled)	[dB/km]	2.8	0.6	
Attenuation maximum (cabled)	[dB/km]	3.0	0.7	
OFL bandwidth as per TIA/EIA 455-204 and IEC 60793-1-41	[MHz x km]	200	600	
RML bandwidth as per TIA/EIA 455-204 and IEC 60793-1-41	[MHz x km]	220		
Refractive Index		1.496	1.491	

# **MECHANICAL PROPERTIES**

## Geometrical and mechanical characteristics

Numerical Aperture		0.275 +/- 0.015
Core Ø	[m]	62,5 +/- 2.5
Maximum Core Non-Circularity	[%]	5
Cladding Ø	[µm]	125 +/- 2
Maximum Cladding Non-Circularity	[%]	1.0
Maximum Cladding/Core Concentricity Error	[µm]	1.5
Maximum Coating Concentricity Error	[µm]	12
Coating Ø	[µm]	245 +/- 5
Test load	[kpsi]	100

# **GENERAL PROPERTIES**

IEEE 802.3 Serie	Wavelength [nm]	Link length [m]	Explanation	
1000 Base-SX IEEE 802.3z	850	275 / 300*	Laser bandwidth RML (Restricted Mode Launch)	
1000 Base-LX IEEE 802.3z	1300	550	measurement is used to characterise indermediate	
10GBase-SR/SW	850	33	performance laser (typically up to 1 GbE) at 850 nm.	
10GBase-LX4	1300	300	Link length is achieved via 1300 nm "CWDM" using 4 channels (lanes) at 2.25 GbE: Lane 0 = 1269.0 - 1282.4 nm, Lane 1 = 1293.5 - 1306.9 nm Lane 2 = 1318.0 - 1331.4 nm, Lane 3 = 1342.5 - 1355.9 nm	

<sup>\*</sup> Link lengths of more than 300 m on request.

# **VERSIONS**

#### Article No.