

Optical Fibres Geometrical and Transmission Parameters

Fibre type to ITU-T	OS2 (9/125) ^A G.652.D	OS2 (9/125) ^A G.657.A1	9/125 G.655.D	9/125 G.655.E, G.656
TK DIXI Fibre Nomenclature	S2	S7	S5	S6
Mode Field Diameter (μm) @ 1310 nm @ 1550 nm	9.2 ± 0.4 10.4 ± 0.5		8.4 ± 0.6	8.6 ± 0.4
Cladding Diameter (μm)	125 ± 0.7			
Coating Diameter (μm)	240 ± 5			
Attenuation ^B (dB/km) typical / max. (single fibre) @ 1310 nm typical / max. (single fibre) @ 1550 nm typical / max. (single fibre) @ 1625 nm	0.31 / 0.36 0.20 / 0.25 0.21 / 0.27		0.25 / 0.30 0.27 / 0.34	

Fibre type	OM1 (62,5/125)	OM2 (50/125) ^A	OM3 (50/125) ^A	OM4 (50/125) ^A
TK DIXI Fibre Nomenclature	M1	M2	M3	M4
Numerical Aperture(μm)	0.275 ± 0.015	0.200 ± 0.015		
Core Diameter (μm)	62.5 ± 2.5	50.0 ± 2.5		
Cladding Diameter (μm)	125 ± 1.0			
Coating Diameter (μm)	242 ± 5			
Overfilled Modal Bandwidth (Mhz.km)				
@ 850 nm	≥ 200	≥ 500	≥ 1500	≥ 3500
@ 1300 nm	≥ 500	≥ 500	≥ 500	≥ 500
Link Length (m)				
1 Gb/s	≤ 220	≤ 550	≤ 1000	≤ 1100
10Gb/s	≤ 33	≤ 82	≤ 300	≤ 550
Attenuation ^B (dB/km)				
typical / max. (single fibre) @ 850 nm	2.7 / 3.3	2.5 / 3.5		
typical / max. (single fibre) @ 1300 nm	0.6 / 1.1	0.6 / 1.5		

Notes:

A - Bend-insensitive fibres

B - Attenuation values valid for loose-tube cables