Multimode OM1

Fibre type	62.5/125 µm
OPK code	OM1
Optical Characteristics	
Attenuation coefficient Loose Tube Cables (Typical / Maximum) [1,2]	
at 850 nm	2.6 / 3.5 dB/km
at 1300 nm	0.5 / 1.5 dB/km
Attenuation coefficient Tight Buffered Cables (Typical / Maximum) [1,2]	
at 850 nm	2.6 / 3.5 dB/km
at 1300 nm	0.5 / 1.5 dB/km
Attenuation discontinuity [2]	≤ 0.2 dB
Zero dispersion wavelength	1320–1365 nm
Zero dispersion slope $1320 \leq \lambda_0 \leq 1348$ nm	≤ 0.11 ps/(nm^2·km)
Zero dispersion slope $1348 \leq \lambda_0 \leq 1365$ nm	$\leq 0.001 \cdot (1458 - \lambda_0)$ ps/(nm^2·km)
Numerical Aperture	0.275 ± 0.015
Effective group index of refraction at 850 nm	1.497
Effective group index of refraction at 1300 nm	1.493
Performance Characteristics	
Bandwidth (Overfilled launch)	
at 850 nm	≥ 160 – ≥ 250 MHz·km [3]
at 1300 nm	≥ 500 – ≥ 800 MHz·km
Transmission Link Lengths at 1Gb/s	
at 850 nm	≥ 300 – ≥ 500 m [3]
at 1300 nm	≥ 550 – ≥ 1000 m
Geometrical Characteristics	
Core diameter	62.5 ± 2.5 µm
Core non–circularity	≤ 5.0 %
Core/Cladding concentricity error	≤ 1 µm
Cladding diameter	125.0 ± 1.0 µm
Cladding non–circularity	≤ 1.0 %
Primary coating diameter (uncoloured fibre)	242 ±7 µm
Primary coating diameter (coloured fibre)	250 ±10 µm
Coating–Cladding concentricity	≤ 10 µm
Macrobending loss	
100 turns, mandrel radius 37.5 mm at 850 nm	≤ 0.5 dB
100 turns, mandrel radius 37.5 mm at 1300 nm	≤ 0.5 dB
Mechanical Characteristics	
Proof test level	≥ 0.69 GPa (≥ 8.8 N)
Coating strip force	1.9 N
Dynamic fatigue resistance parameter	≥ 23

(1) Unless stated otherwise directly in the cable specification
(2) Cabled fibre
(3) For both, bandwidth and link lengths special combinations and values are available.

- Typical attenuation is the value measured for at least 90% of the fibers in the cable.
- OTDR measurement values can only be guaranteed for cable lengths of 1000 m and more.
- Cable on the reel may show a discontinuity of the OTDR curve caused by winding of the cable on the reel.
- The above values apply, unless otherwise stated directly in the cable specification