# Optical Fibre OM4 (50/125µm Multimode fibre)



850 nm LASER-OPTIMIZED 50/125 MULTIMODE OPTICAL FIBRE
IEC 60793-2-10 Type A1a.3 and ISO/IEC 11801 (OM4 cabled optical fibre)
For 10 Gb/s APPLICATION UP TO 550 m

## **OPTICAL PROPERTIES**

Attenuation	@ 850 nm	≤ 2.8 dB/km
	@ 1300 nm	≤ 0.8 dB/km
Overfilled Modal Bandwidth	@ 850 nm	≥ 3500 MHz.km
	@ 1300 nm	≥ 500 MHz.km
Effective Modal Bandwidth	@ 850 nm	≥ 4700 MHz.km
Numerical Aperture		0.200 ± 0.015
Chromatic Dispersion:		
Zero-Dispersion Wavelength	1295 - 1300 nm	$\leq 0.001(\lambda_0-1190) \text{ ps/nm}^2.\text{km}$
Zero-Dispersion Slope	1300 - 1320 nm	$\leq$ 0.11 ps/nm <sup>2</sup> .km
Attenuation Uniformity	Point or Step Defects	≤ 0.2 dB
	Extended variations	≤ 0.2 dB
Group Index of Refraction	(Typical) 850 nm	1.482
	1300 nm	1.477

### **MACROBENDING PROPERTIES**

2 turns around 30mm diameter	@850 nm	≤0.1 dB/km
2 turns around 30mm diameter	@1300 nm	≤0.3 dB/km
2 turn around 15mm diameter	@850 nm	≤0.2 dB/km
2 turn around 15mm diameter	@1300 nm	≤0.5 dB/km

#### **GEOMETRICAL PROPERTIES**

Core	50 ± 2 μm
Core Non-Circularity	≤ 5.0 %
Core / Cladding Concentricity Error	≤ 1 μm
Cladding Diameter	125.0 ± 1.0 μm
Cladding Non-Circularity	≤ 0.7 %
Coating Diameter	245 ± 10 μm
Coating Concentricity Error	≤ 12.5 μm
Coating Non-Circularity	≤ 6 %

## **MECHANICAL PROPERTIES**

Proof Test Level	≥ 0.69 GPa / ≥ 1.0 %