

MaxBand® WideBand OM5 Bend Insensitive Multimode Fibre

Yangtze Optical Fibre and Cable Joint Stock Limited Company

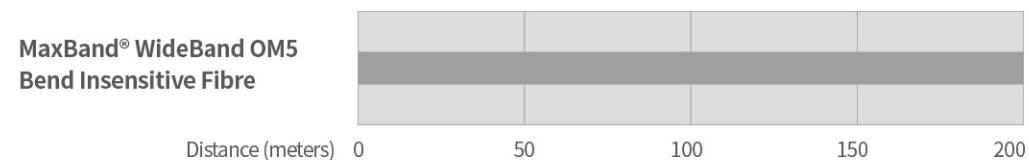
YOFC MaxBand® WideBand OM5 Bend Insensitive Multimode Fibre is a 50µm laser-optimized multimode fibre designed for short wavelength division multiplexing (SWDM) applications. Unlike traditional OM4 fibre with high bandwidth performance in a narrow band centred at 850nm, YOFC MaxBand® OM5 Bend Insensitive Multimode Fibre delivers OM4 performance in the 850-950nm window while maintaining compatibility with current multimode fibres. WideBand OM5 and multi-wavelength transceivers are a viable solution for future 100Gb/s and 400Gb/s multi-wavelength systems.

YOFC MaxBand® WideBand OM5 Bend Insensitive Multimode Fibre complies with or exceeds ISO/IEC 11801 OM5 specification, IEC 60793-2-10 type A1a.4 Optical Fibre Specification, and TIA/EIA-492AAAE detail specification.

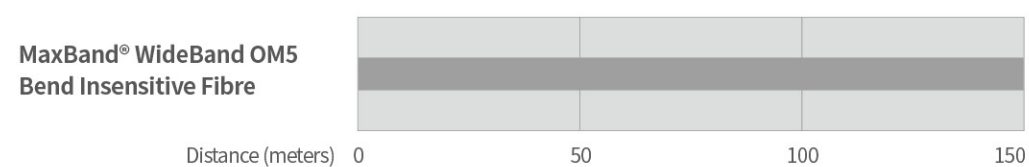
Features	Benefits and Applications
<ul style="list-style-type: none"> Designed for multi-wavelength systems Maintaining compatibility with current OM4 multimode optical fibre Very low macro-bending sensitivity 	<ul style="list-style-type: none"> Duplex transmission of 40&100&400 Gb/s using SWDM technology Supports today's application including 100Gb/s Ethernet Supports installation with small cable bend radii and compact organizers
<ul style="list-style-type: none"> Coated with YOFC's proprietary dual layer UV curable acrylate 	<ul style="list-style-type: none"> Optimized performance in tight-buffer cable applications High resistance to micro-bending Stable performance over a wide range of environmental conditions

System Link Length

40 & 100 Gb/s Link Length @850nm Based on IEEE802.3ba



100Gb/s Link Length Based on WDM



Characteristics	Conditions	Specified values	Units
Geometry Characteristics			
Core Diameter	--	50±2.5	[µm]
Core Non-Circularity	--	≤5.0	[%]
Cladding Diameter	--	125.0±1.0	[µm]
Cladding Non-Circularity	--	≤0.6	[%]
Coating Diameter	--	245±7	[µm]
Coating/Cladding Concentricity Error	--	≤10.0	[µm]
Coating Non-Circularity	--	≤6.0	[%]
Core/Cladding Concentricity Error	--	≤1.0	[µm]
Delivery Length	--	up to 8.8	[km/reel]
Optical Characteristics			
Attenuation	850nm	≤2.4	[dB/km]
	953nm	≤1.7	[dB/km]
	1300nm	≤0.6	[dB/km]
Overfilled Modal Bandwidth	850nm	≥3500	[MHz·km]
	953nm	≥1850	[MHz·km]
	1300nm	≥500	[MHz·km]
Effective Modal Bandwidth	850nm	≥4700	[MHz·km]
	953nm	≥2470	[MHz·km]
Application support distance on	--	--	--
100Gb/s WDM ¹	--	150	[m]
40Gb/s WDM ¹	--	440	[m]
40GBASE-SR4 / 100GBASE-SR10	850nm	200	[m]
Numerical Aperture	--	0.200±0.015	--
Group Refractive Index	850nm	1.482	--
	1300nm	1.477	--
Zero Dispersion Wavelength, λ ₀	--	1297-1328	[nm]
Zero Dispersion Slope, S ₀	--	≤4(-103)/(840(λ ₀ /840) ⁴)	[ps/(nm ² ·km)]
Macrobending Loss ²	--	@850nm	@1300nm
2 Turns @ 15 mm Radius	--	≤0.1	≤0.3
2 Turns @ 7.5 mm Radius	--	≤0.2	≤0.5
Backscatter Characteristics 850nm & 1300nm			
Step (Mean of Bidirectional Measurement)	--	≤0.10	[dB]
Irregularities Over Fibre Length and Point Discontinuity	--	≤0.10	[dB]
Attenuation Uniformity	--	≤0.08	[dB/km]
Environmental Characteristics 850nm & 1300nm			
Temperature Cycling	at -60°C to 85°C	≤0.10	[dB/km]
Temperature-Humidity Cycling	at -10°C to 85°C and 4% to 98% RH	≤0.10	[dB/km]
Water Immersion	at 23°C for 30 days	≤0.10	[dB/km]
Dry Heat	at 85°C for 30 days	≤0.10	[dB/km]
Damp Heat	at 85°C and 85% RH for 30 days	≤0.10	[dB/km]
Mechanical Specification			
Proof Test	--	≥9.0	[N]
	--	≥1.0	[%]
	--	≥100	[kpsi]
Coating Strip Force	typical average force	1.5	[N]
	peak force	≥1.3, ≤8.9	[N]
Dynamic Stress Corrosion Susceptibility Parameter (n ₁ , typical)	--	20	--

Remarks: 1. Support distance with SWDM transceivers <http://www.swdm.org/msa/>

2. The launch condition for the macrobending loss measurement fulfils that described in IEC 61280-4-1.