

# MaxBand® OM2+/OM3/OM4 Bend Insensitive Multimode Fibre

Yangtze Optical Fibre and Cable Joint Stock Limited Company

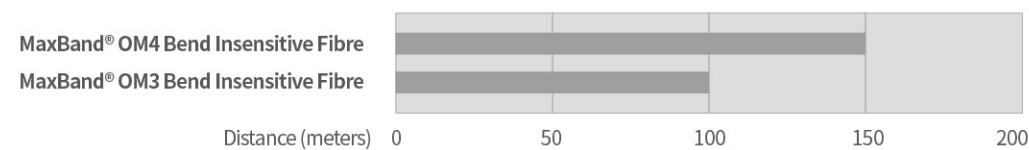
YOFC MaxBand® OM2+ Bend Insensitive Multimode Fibre complies with or exceeds ISO/IEC 11801 OM2 specification, IEC 60793-2-10 type A1a.1 Optical Fibre Specification, and TIA/EIA-492AAAB-A detail specification.

YOFC MaxBand® OM3/OM4 Bend Insensitive Multimode Fibres comply with or exceed ISO/IEC 11801 OM3/OM4 specification, IEC 60793-2-10 type A1a.2 and A1a.3 Optical Fibre Specification, and TIA/EIA-492AAAC/492AAD detail specification.

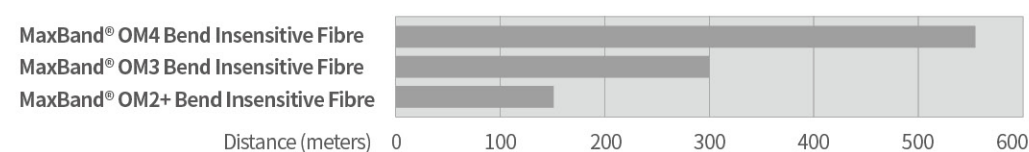
Features	Benefits and Applications
<ul style="list-style-type: none"> <li>Very low macro-bending sensitivity</li> <li>Low micro-bending sensitivity</li> </ul>	<ul style="list-style-type: none"> <li>The fibre is easier to handle and install without excessive care when storing the fibre, for example, in splicing cassettes</li> <li>Supports installation with small cable bend radii and compact organizers</li> <li>Facilitates jumper moves, adds and changes</li> </ul>
<ul style="list-style-type: none"> <li>Maintaining compatibility with current OM2+/OM3/OM4 multimode optical fibre</li> <li>Low differential mode delay (DMD)</li> <li>Low attenuation</li> </ul>	<ul style="list-style-type: none"> <li>Central offices</li> <li>Data centers</li> <li>High performance computing centers</li> <li>Local Area Networks</li> <li>Storage Area Networks</li> <li>Supporting 1 &amp; 10 &amp; 40 &amp; 100 &amp; 400 Gb/s applications</li> </ul>
<ul style="list-style-type: none"> <li>Coated with YOFC's proprietary dual layer UV curable acrylate</li> </ul>	<ul style="list-style-type: none"> <li>Optimized performance in tight-buffer cable applications</li> <li>High resistance to micro-bending</li> <li>Stable performance over a wide range of environmental conditions</li> </ul>

## System Link Length

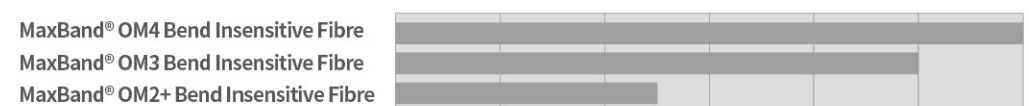
40 & 100 Gb/s Link Length @850nm Based on IEEE802.3ba



10 Gb/s Link Length @850nm Based on IEEE802.3ae



1 Gb/s Link Length @850nm Based on IEEE802.3z



Characteristics	Conditions	Specified values	Units
<b>Geometry Characteristics</b>			
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]
<b>Optical Characteristics</b>			
Attenuation	850nm	≤2.4	[dB/km]
	1300nm	≤0.6	[dB/km]
--	--	MaxBand® OM2+/OM3/OM4 Bend Insensitive	
Overfilled Modal Bandwidth	850nm	≥700/≥1500/≥3500	[MHz·km]
	1300nm	≥500/≥500/≥500	[MHz·km]
Effective Modal Bandwidth	850nm	≥950/≥2000/≥4700	[MHz·km]
Application support distance on	--	--	--
40GBASE-SR4 / 100GBASE-SR10	850nm	-/100/150	[m]
10GBASE-SR	850nm	150/300/500	[m]
1000BASE-SR	850nm	750/1000/1100	[m]
DMD Specification	Compliant with and more stringent than the requirements of IEC 60793-2-10		
Numerical Aperture	--	0.200±0.015	--
Group Refractive Index	850nm	1.482	--
	1300nm	1.477	--
Zero Dispersion Wavelength, λ <sub>0</sub>	--	1295-1340	[nm]
Zero Dispersion Slope, S <sub>0</sub>	1295nm ≤ λ <sub>0</sub> ≤ 1310nm	≤0.105	[ps/(nm <sup>2</sup> ·km)]
	1310nm ≤ λ <sub>0</sub> ≤ 1340nm	≤0.000375(1590-λ <sub>0</sub> )	[ps/(nm <sup>2</sup> ·km)]
Macrobending Loss <sup>1</sup>	--	--	--
2 Turns @ 15 mm Radius	850nm	≤0.1	[dB]
	1300nm	≤0.3	[dB]
2 Turns @ 7.5 mm Radius	850nm	≤0.2	[dB]
	1300nm	≤0.5	[dB]
<b>Backscatter Characteristics 1300nm</b>			
Step (Mean of Bidirectional Measurement)	--	≤0.10	[dB]
Irregularities Over Fibre Length and Point Discontinuity	--	≤0.10	[dB]
Attenuation Uniformity	--	≤0.08	[dB/km]
<b>Environmental Characteristics 850nm &amp; 1300nm</b>			
Temperature Cycling	-60°C to 85°C	≤0.10	[dB/km]
Temperature-Humidity Cycling	-10°C to 85°C, 4% to 98% RH	≤0.10	[dB/km]
Water Immersion	23°C, 30 days	≤0.10	[dB/km]
Dry Heat	85°C, 30 days	≤0.10	[dB/km]
Damp Heat	85°C, 85% RH, 30 days	≤0.10	[dB/km]
<b>Mechanical Specification</b>			
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 <sub>p</sub> , typical)	--	20	--

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