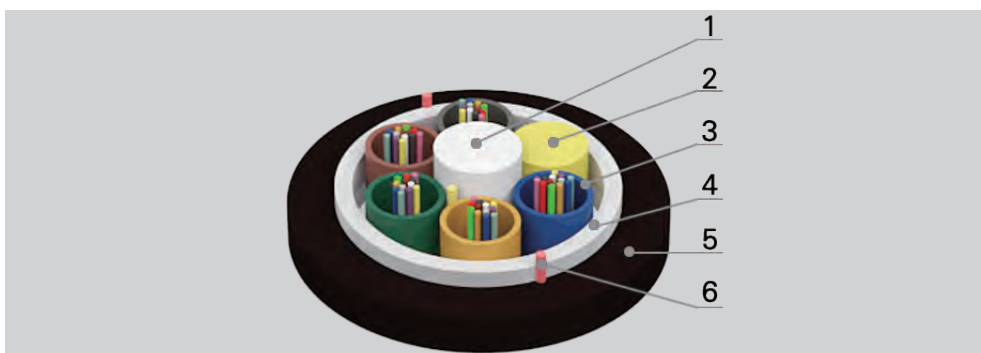




Stranded Loose Tube All dielectric Semi-dry Cable (GYFY)

Cable Description



- | | |
|--|--|
| <p>1. Central Strength Member (CSM): glass fibre reinforced plastic rod (FRP), coated with polyethylene when needed.</p> <p>2. Filler Elements: thermoplastic rods.</p> <p>3. Loose Tube: thermoplastic material, containing optical fibres and filled with gel.</p> | <p>4. Longitudinal Water Blocking Material: water blocking tape.</p> <p>5. Outer Sheath: black polyethylene.</p> <p>6. Ripcord</p> |
|--|--|

Features and Applications

- Non-metallic structure
- Lighting resistance
- Duct installation or aerial installation.
- Semi-dry core design, easy for installation and splice

Optical Characteristics

		G.652.D	G.655	50/125µm	62.5/125µm
Attenuation	@850nm	-	-	≤ 3.0 dB/km	≤ 3.0 dB/km
	@1300nm	-	-	≤ 1.0 dB/km	≤ 1.0 dB/km
	@1310nm	≤ 0.36 dB/km	≤ 0.40 dB/km	-	-
	@1550nm	≤ 0.22 dB/km	≤ 0.23 dB/km	-	-
Bandwidth	@850nm	-	-	≥ 500 MHz • km	≥ 200 MHz • km
	@1300nm	-	-	≥ 1000 MHz • km	≥ 600 MHz • km
Polarization mode dispersion	Individual fibre	≤ 0.20 ps/√km	≤ 0.20 ps/√km	-	-
	Design link value (M=20, Q=0.01%)	≤ 0.1 ps/√km	≤ 0.1 ps/√km	-	-



Technical Data

Item	Contents	Value					
		Fibre Count	24	48	72	96	144
Loose Tube	No. of tubes*fibres per tube	4*6	4*12	6*12	8*12	12*12	24*12
	Outer diameter (mm)	1.9	2.4				
Central Strength Member	Material	FRP					
	Diameter (mm)	2.0	2.0	2.6	2.6	2.6	2.6
	Coated CSM diameter (mm)	-	-	-	4.2	7.4	4.8
Water blocking material	Material	Water blocking tape					
Sheath	Thickness (mm)	Nominal:1.8					
Cable Diameter(mm) Approx.		10.0	10.8	11.6	13.2	16.4	19.2
Cable Weight(kg/km) Approx.		85	100	120	155	220	275
Operating Temperature Range(°C)		-40~+70					
Tensile Strength Short/ Long Term(N)		2000/600					
Crush Resistance Short/Long Term (N/100mm)		1000/300					

- * The colour arrangement of fibre and tube is specified in the color identification table.
- * Other structure and fibre count are also available according to customer requirements.

Main Mechanical and Environmental Performances

Items	Test Standard	Specified Value	Requirements
Tension	IEC 60794-1-2-E1	See Technical data	Additional attenuation: ≤ 0.1 dB after test
Crush	IEC 60794-1-2-E3	See Technical data	Additional attenuation: ≤ 0.1 dB after test
Impact	IEC 60794-1-2-E4	R=300mm, 10Nm, one in 3 different places	Additional attenuation: ≤ 0.1 dB after test
Repeated Bending	IEC 60794-1-2-E6	R=20*D	Additional attenuation: ≤ 0.1 dB after test
Water Penetration	IEC 60794-1-2-F5	Sample length=3m, Water height=1m, 24 hours	No water leakage
Temperature Cycling	IEC 60794-1-2-F1	-40°C~+70°C	Attenuation change: ≤ 0.05 dB/km after test

- * All optical measurements at 1550nm.

Packing and Reel Length

Standard wooden drum with protection

Standard reel length: 2/3 km/reel, other length is also available.

MaxBand® OM2+/OM3/OM4 Multimode Fibre

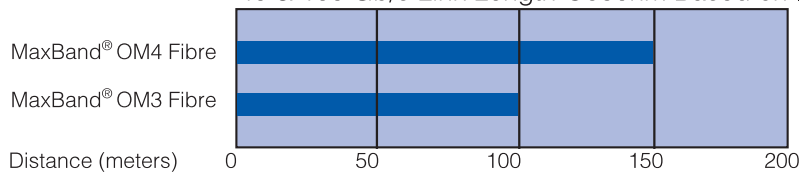
YOFC® MaxBand® OM2+ Multimode Fibre complies with or exceeds ISO/IEC 11801 OM2 specification, IEC 60793-2-10 type A1a.1 Optical Fibre Specification, and TIA/EIA-492AAAB-A detail specification.

YOFC® MaxBand® OM3/OM4 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/492AAAD detail specification.

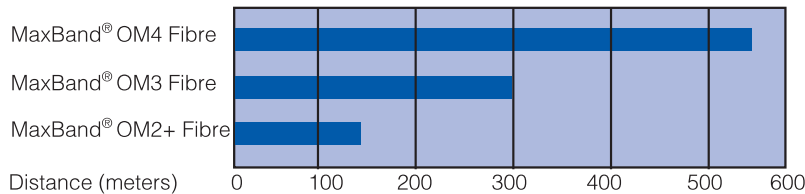
Features	Benefits and Applications
<ul style="list-style-type: none"> - 850nm laser-optimized - Extremely refined refractive index profile - Low differential mode delay (DMD) - Low attenuation - Superior geometry, uniformity 	<ul style="list-style-type: none"> - Data centers - Storage Area Networks - High performance computing centers - Central offices - Local Area Networks - 1 & 10 & 40 & 100 Gb/s Ethernet
<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

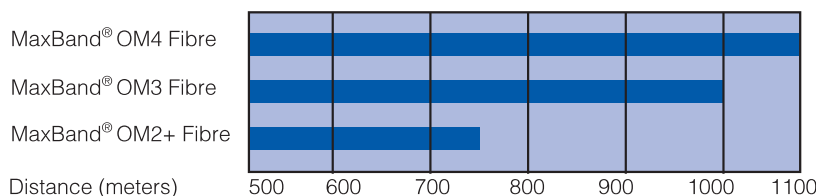
40 & 100 Gb/s Link Length @850nm Based on IEEE802.3ba



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



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



MaxBand® OM2+/OM3/OM4 Multimode Fibre

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		≤ 1.0	[%]
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]
	1300nm	≤ 0.6	[dB/km]
MaxBand® OM2+/OM3/OM4			
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			
40 & 100 Gigabit Ethernet	850nm	-/100/150	[m]
10GBASE-SR	850nm	150/300/550	[m]
1000BASE-SX	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_0		1295-1340	[nm]
Zero Dispersion Slope, S_0	1295nm ≤ λ_0 ≤ 1310nm	≤ 0.105	[ps/(nm ² · km)]
	1310nm ≤ λ_0 ≤ 1340nm	≤ 0.000375(1590 - λ_0)	[ps/(nm ² · km)]
Macrobending Loss			
100 Turns @ 37.5mm Radius	850nm	≤ 0.50	[dB]
	1300nm	≤ 0.50	[dB]
2 Turns @ 15 mm Radius	850nm	≤ 1.0	[dB]
	1300nm	≤ 1.0	[dB]
Backscatter Characteristics			
Step (Mean of Bidirectional Measurement)	1300nm	≤ 0.10	[dB]
Irregularities Over Fibre Length and Point Discontinuity		≤ 0.10	[dB]
Attenuation Uniformity		≤ 0.08	[dB/km]
Environmental Characteristics			
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]
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_d , typical)		27	