



Dielectric Indoor/Outdoor Cable

Unitube | LSZH

OM1-OM2-OM3-OM4

4 - 6 - 8 - 12 - 16 - 24 fibres

Dca

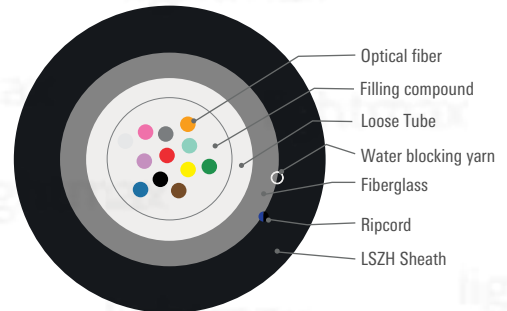
This *LightMax*[®] Dielectric indoor/outdoor cable has a central loose tube in which the optical fibers and a water protection gel are placed. This cable offers resistance to hostile environmental conditions during its installation and operation and it has an LSZH outer sheath. It contains laminated glass yarns as reinforcing and rodent protection.

Features:

- Dielectric cable.
- LSZH protected outer sheath.
- Fibre count from 4-6-8-12-16-24 fibres.
- OM1-OM2-OM3-OM4 fibre availability.
- Specific colour code on fibres.
- 1 ripcord.
- 1000 N max. tensile.
- CPR Euroclass Dca.



[Pictures for reference purposes only]



OM1 [62.5µm] FIBRE OPTIC SPECIFICATIONS		
Fibre type		OM1
Attenuation	@850 nm (A1a.1)	≤ 3.0 dB/km
	@1300 nm (A1a.1)	≤ 1.0 dB/km
Bandwidth	@850 nm (A1a.1)	≥ 160 MHz.km
	@1300 nm (A1a.1)	≥ 500 MHz.km
Cladding diameter		125 ±1 µm
Core diameter		62.5 ±2.5 µm
Cladding non circularity		≤ 2.0 %
Core non circularity		≤ 6.0 %
Core/Cladding concentricity error		≤ 3 µm
Fibre diameter with coating (uncoloured)		245 ±10 µm
Cladding/Coating concentricity error		≤ 12.5 µm
Macrobend loss	Φ75mm, 100 turns @850nm	≤ 0.5 dB
	Φ75mm, 100 turns @1300nm	≤ 0.5 dB
Standards		ISO/IEC 11801 IEC 60793-2-10

OM2 [50µm] FIBRE OPTIC SPECIFICATIONS		
Fibre type		OM2
Attenuation	@850 nm	≤ 3.0 dB/km
	@1300 nm	≤ 1.0 dB/km
Bandwidth	@850 nm	≥ 500 MHz.km
	@1300 nm	≥ 500 MHz.km
Cladding diameter		125 ±1 µm
Core diameter		50 ±2.5 µm
Cladding non circularity		≤ 2.0 %
Core non circularity		≤ 6.0 %
Core/Cladding concentricity error		≤ 1.5 µm
Fibre diameter with coating (uncoloured)		245 ±5 µm
Cladding/Coating concentricity error		≤ 12.5 µm
Macrobend loss	Φ75mm, 100 turns @850nm	≤ 0.5 dB
	Φ75mm, 100 turns @1300nm	≤ 0.5 dB
Standards		ISO/IEC 11801 IEC 60793-2-10



OM3 [50µm] FIBRE OPTIC SPECIFICATIONS		
Fibre type	OM3	
Attenuation	@850 nm	≤ 3.0 dB/km
	@1300 nm	≤ 1.0 dB/km
Bandwidth (Overfilled)	@850 nm	≥ 1500 MHz.km
	@1300 nm	≥ 500 MHz.km
Bandwidth (EMB)	@850 nm	≥ 2000 MHz.km
	@1300 nm	—
Cladding diameter	124.5 ±1 µm	
Core diameter	50 ±2.5 µm	
Cladding non circularity	≤ 2.0 %	
Core non circularity	≤ 6.0 %	
Core/Cladding concentricity error	≤ 1.5 µm	
Fibre diameter with coating (uncoloured)	245 ±10 µm	
Cladding/Coating concentricity error	≤ 12.5 µm	
Macrobend loss	100 turns, 37.5mm radius @850 nm	≤ 0.5 dB
	100 turns, 37.5mm radius @1300 nm	≤ 0.5 dB
Standards	ISO/IEC 11801 IEC 60793-2-10	

OM4 [50µm] FIBRE OPTIC SPECIFICATIONS		
Fibre type	OM4	
Attenuation	@850 nm	≤ 3.0 dB/km
	@1300 nm	≤ 1.0 dB/km
Bandwidth (Overfilled)	@850 nm	≥ 3500 MHz.km
	@1300 nm	≥ 500 MHz.km
Bandwidth (EMB)	@850 nm	≥ 4700 MHz.km
	@1300 nm	—
Cladding diameter	124.5 ±1.0 µm	
Core diameter	50 ±2.5 µm	
Cladding non circularity	≤ 2.0 %	
Core non circularity	≤ 6.0 %	
Core/Cladding concentricity error	≤ 1.5 µm	
Fibre diameter with coating (uncoloured)	245 ±10 µm	
Cladding/Coating concentricity error	≤ 12.5 µm	
Macrobend loss	100 turns, 37.5mm radius @850 nm	≤ 0.5 dB
	100 turns, 37.5mm radius @1300 nm	≤ 0.5 dB
Standards	ISO/IEC 11801 IEC 60793-2-10	

Fibres & tube colours

[France Télécom]

Fibres	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Tube
	Red	Blue	Green	Yellow	Violet	White	Orange	Grey	Brown	Black	Aqua	Pink	Red	Blue	Green	Yellow	Violet	White	Orange	Grey	Brown	Black	Aqua	Pink	Natural

Fibres & tube colours [8 Fibres count]

[TIA 598 | FOTAG]

Fibres	1	2	3	4	5	6	7	8	Tube
	Blue	Orange	Green	Brown	Gray	White	Red	Black	Natural

Rel. 3-EN/FEB23



CABLE SPECIFICATIONS								
Fibres count			4	6	8 ^(*)	12	16	24
Loose tube diameter		mm			3.6			4.1
Nominal cable diameter (D)		mm			6.0			6.5
Cable weight		kg/km			46			49
Outer sheath	Material Colour	–			LSZH Black			
Central loose tube	Material Colour	–			PBT Natural			
Water blocking		–			Gel inside loose tube			
Non metallic armour		–			Laminated glass yarns			
Ripcord		–			1			
Temperature	Storage	°C			-40 ~ 70			
	Operating	°C			-20 ~ 70			
Bend radius	Load	–			20 x D			
	Unload	–			10 x D			
Crush resistance		N/10 cm			1500			
Max. Tensile		N			1000			
Standard								
IEC 60794-1-2					E1 - Tensile			
					E3 - Crush			
					E4 - Impact			
					E6 - Repeated bending			
					E7 - Torsion			
					F1 - Temperature cycling			
EN 50575					Dca			

^(*) Colour code for 8 Fibres count - TIA598/FOTAG

Part Numbers		
OM1		
LMCAIOM1DU006FM06ZHPBD	LMCAIOM1DU012FM12ZHPBD	
OM2		
LMCAIOM2DU006FM06ZHPBD	LMCAIOM2DU008FM08ZHPBD	
LMCAIOM2DU012FM12ZHPBD	LMCAIOM2DU024FM24ZHPBD	
OM3		
LMCAIOM3DU004FM04ZHPBD	LMCAIOM3DU006FM06ZHPBD	LMCAIOM3DU008FM08ZHPBD
LMCAIOM3DU012FM12ZHPBD	LMCAIOM3DU024FM24ZHPBD	
OM4		
LMCAIOM4DU004FM04ZHPBD	LMCAIOM4DU006FM06ZHPBD	LMCAIOM4DU008FM08ZHPBD
LMCAIOM4DU012FM12ZHPBD	LMCAIOM4DU016FM16ZHPBD	LMCAIOM4DU024FM24ZHPBD