



Indoor Dielectric Cable

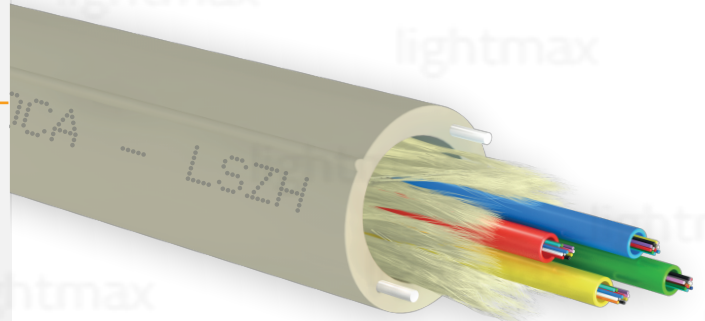
Micromodule of 6* and 12 Fibres

Singlemode G.652D/G.657.A2

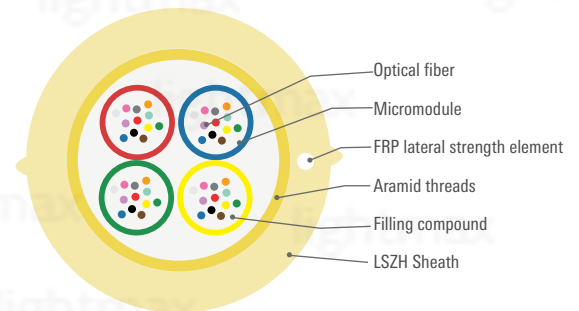
LSZH - 6* | 12 | 24 | 36 | 48 | 72 | 96 | 144 fibres

Dca

LightMax® LSZH micromodule cable is suitable for indoor duct installations. Micromodules containing the fibres are made of thermoplastic for easy stripping. This cable includes two FRP guides in order to provide excellent tensile performance and mechanical strength during and after installation.



[Images only for reference purposes]



G.652.D FIBRE OPTIC SPECIFICATIONS

Fibre type		Single Mode
Core diameter		9 µm
MFD	@1310 nm	9.2 ± 0.4 µm
	@1550 nm	10.4 ± 0.5 µm
Cladding diameter		125 ± 0.7 µm
Coating diameter : Before colour		245 ± 10 µm
Cladding non circularity		≤ 0.7 %
Core/Cladding concentricity error		≤ 0.5 µm
Chromatic Dispersion	@1300 +30/-15 nm	≤ 3.5 ps/(nm.km)
	@1550 nm	≤ 18 ps/(nm.km)
	@1625 nm	≤ 22 ps/(nm.km)
	Zero-Dispersion wavelength	1300 nm ~ 1324 nm
PMD	Zero-Dispersion slope	≤ 0.092 ps/(nm².km)
	Max. (fibre on the reel)	0.20 ps/√km
	Max. (link designed value)	0.10 ps/√km
Attenuation	@1310 nm	≤ 0.40 dB/km
	@1383 nm	≤ 0.34 dB/km
	@1550 nm	≤ 0.30 dB/km
	@1625 nm	≤ 0.24 dB/km
Standard		
ITU-T		G.652.D

G.657.A2 FIBRE OPTIC SPECIFICATIONS

Fibre type		Singlemode
Core diameter		9 µm
MFD	@1310 nm	8.8 ± 0.4 µm
	@1550 nm	9.8 ± 0.5 µm
Cladding diameter		125 ± 0.7 µm
Coating diameter	Before colour	245 ± 10 µm
	Coloured	250 ± 10 µm
Cladding non-circularity		≤ 0.7 %
Core/Cladding concentricity error		≤ 0.5 µm
Attenuation	@1310 nm	≤ 0.40 dB/km
	@1550 nm	≤ 0.30 dB/km
	@1285 ~ 1330 nm	-3.5 ~ 3.5 ps/(nm.km)
Chromatic Dispersion	@1550 nm	≤ 18 ps/(nm.km)
	@1625 nm	≤ 22 ps/(nm.km)
	Zero Dispersion wavelength	1300 nm ~ 1324 nm
	Zero Dispersion slope	≤ 0.092 ps/(nm².km)
PMD	Max. (fibre on the reel)	0.20 ps/√km
	Max. (link designed value)	0.10 ps/√km
	10 mm radius, 1 turn, @1550 nm	≤ 0.10 dB
Macrobend loss	10 mm radius, 1 turn, @1625 nm	≤ 0.20 dB
	10 mm radius, 1 turn, @1550 nm	≤ 0.50 dB
	10 mm radius, 1 turn, @1625 nm	≤ 1.0 dB
Standard		
ITU-T		G.657.A2

Colours of Fibres & Micromodules

[France Télécom]

Fibres	1	Red	7	Orange	Micromodules	1	Red	7	Orange
	2	Blue	8	Slate		2	Blue	8	Slate
	3	Green	9	Brown		3	Green	9	Brown
	4	Yellow	10	Black		4	Yellow	10	Black
	5	Violet	11	Aqua		5	Violet	11	Aqua
	6	White	12	Pink		6	White	12	Pink

From the 13th to the 24th micromodule, colours will be black ring marked. Black micromodule will be white ring marked.

Characteristics

- CPR Dca
- Dielectric cable
- LSZH ivory outer jacket
- FRP traction guides
- Micromodules filled with hydrofuge gel
- 6*|12|24|36|48|72|96|144 fibres availability
- Singlemode fibre - G.652.D or G.657.A2
- France Télécom colour code

Applications

- Indoor
- Duct
- Facade

CABLE CHARACTERISTICS										
Fibre count			6*	12	24	36	48	72	96	144
Fibres per micromodule			–	6	12					
Cable diameter nominal (D)			mm	6.0 ±0.5	6.5 ±0.5	7.0 ±0.5	7.5±0.5	8.5±0.5	9.5±0.5	11.0±0.5
Cable weight			kg/km	30	37	40	47	58	75	100
Outer sheath			Material Colour	LSZH Ivory white						
Humidity protection			–	Filling compound						
Reinforcement elements			–	Aramid yarns						
Temperature	Storage	°C	-40 ~ 70							
	Operation	°C	-20 ~ 60							
Radius of curvature	Load	–	20 x D							
	Unload	–	15 x D							
Crush resistance			N/10 cm	1000						
Max. tensile			N	600						1000
Standards										
IEC 60794-1-2						E1 - Traction				
						E3 - Crush				
						E4 - Impact				
						E6 - Flexion				
						E7 - Torsion				
EN 50575 IEC 60332-1 / NF C32-070 C2 IEC 50399 IEC 60754-2						F1 - Temperature cycle				
						Dca				
						Flame retardant				
						Flame propagation, energy, smoke formation and burning droplets				
						Measurement of the acidity level of gases				

Part Numbers

G.652.D	LMCAIN2DMD006FM06ZHTPD	G.657.A2	LMCAINA2MD006FM06ZHTPD
	LMCAIN2DMD012FM12ZHTPD		LMCAINA2MD012FM12ZHTPD
	LMCAIN2DMD024FM12ZHTPD		LMCAINA2MD024FM12ZHTPD
	LMCAIN2DMD036FM12ZHTPD		LMCAINA2MD036FM12ZHTPD
	LMCAIN2DMD048FM12ZHTPD		LMCAINA2MD048FM12ZHTPD
	LMCAIN2DMD072FM12ZHTPD		LMCAINA2MD072FM12ZHTPD
	LMCAIN2DMD096FM12ZHTPD		LMCAINA2MD096FM12ZHTPD
	LMCAIN2DMD144FM12ZHTPD		LMCAINA2MD144FM12ZHTPD

Rel. 5-EN/FEB23