

LTMC



LTMC - Loose Tube Mini Cable.

Loose Tube Mini Cable, non-metallic, longitudinal water-protected, with reduced outer diameter and low bend radius, no waterpeak G.657.A1 fibres, suitable for Access or FTTx applications. Installation: blowing into miniducts

Commercial information		Properties	Unit
Product group		Fibre optic cable	
Series		Fibre optic cable Single mode	
Type		LTMC	
Description		12x SM G.657.A1 (1x12)	
Net weight		26	kg/Km
Marking	ACE - TKF LTMC 12x SM G.657.A1 (1x12) A-DQ(ZN)2Y 74832 {Batch} {Year} {Length}		

Article number / standard length	EAN number	Properties	Unit
74832	8713182094652	Drum à 1	m

Construction		Properties	Unit
Cable type		LTMC	
Fibre type		Single mode	
Optical fibre standard		ITU-T G.657.A1	
Number of fibres		12	
Number of fibres per optical element		12	
Number of cores		1	
Optical element		Loose tube, gel filled	
Cable metal free		Yes	
Number of layers		1 Layer	
Strip method		1 Rip cord	
Strain relief		Yes	
Type of strain relief		FRP	
Material outer sheath		HDPE	
Colour outer sheath		Black	
Outer sheath thickness		0.45	mm
Outer diameter approx.		6.0	mm



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Characteristics for use		Properties	Unit
Application		Outside	
Blow in		Yes	

Technical characteristics		Properties	Unit
Standardization		IEC 60794-5-10	
Test procedures		IEC 60794-1-2	
Longitudinal water blocking		Yes	
Longitudinal watertight construction		Super Absorbing Polymer	
Installation temperature		-15 / 50	°C
Operation temperature range		-40 / 70	°C
UV resistant		Yes	
UV-protection		ISO 4892/2	

Mechanical characteristics		Properties	Unit
Tensile load short term (Tm)		1000	N
Max. fiber strain at Tm		0.5	%
Tensile load Long Term (Tl)		150	N
Bending radius after installation		90	mm
Bending radius during installation		120	mm
Crush resistance acc. meth.E3A		1200	N/dm
Impact strength		2	J
Torsion resistance		360	°/m
Kink resistance		90	mm

Optical characteristics		Properties	Unit
Attenuation @ 1310 nm		0.35	dB/km
Attenuation @ 1550 nm		0.22	dB/km
Attenuation @ 1625 nm		0.25	dB/km

Other characteristics/features		Properties	Unit
Halogen free (acc. EN 50267-2-2)		Yes	

Product Characteristics - Optical fibres

Fibre:			
	type of fibre	hydrogen passivated, dispersion unshifted, matched cladding bending loss insensitive singlemode fibre 9/125µm	
		Fully compatible with G.652.D fibre	
		Optical and geometrical properties exceed ITU-recommendations G.652.D and G.657.A1	
	standard	IEC-60793-2-50, B6-a1	
	standard	ITU-T G.657.A1	

Characteristics:	Properties	Unit
Mode field diameter; 1310nm	9.0 ± 0.3	µm
Mode field diameter; 1550nm	10.2 ± 0.4	µm
Core non-circularity	max 6	%
Core/Cladding concentricity error	max 0.4	µm
Cladding diameter	125.0 ± 0.5	µm
Cladding non-circularity	max 0.6	%
Coating diameter, uncoloured	242 ± 5	µm
Coating diameter, coloured	248 ± 6	µm
Coating/Cladding concentricity error	max 8	µm
Temperature sensitivity; -60°C to +85°C	max 0.05	dB/km
Bending sensitivity - 10 turns around Ø30mm - 1550nm	max 0.1	dB
Bending sensitivity - 10 turns around Ø30mm - 1625nm	max 0.3	dB
Bending sensitivity - 1 turn around Ø20mm - 1550nm	max 0.75	dB
Bending sensitivity - 1 turn around Ø20mm - 1625nm	max 1.5	dB
Proof test level	min 0.69	GPa
Fibre curl	min 4	m
Cable cut-off wavelength	max 1260	nm
Zero-dispersion wavelength	1300 - 1324	nm
Zero-dispersion slope	max 0.090	ps/nm ² .km
Chromatic dispersion; 1285nm - 1330 nm	max 3.2	ps/nm.km
Chromatic dispersion; 1550nm	max 17	ps/nm.km
Chromatic dispersion; 1625nm	max 21	ps/nm.km
Polarisation Mode Dispersion; maximum individual fibre	max 0.1	ps/√km
PMD _Q	max 0.08	ps/√km
Max attenuation at 1383nm (α ₁₃₈₃) [note a]	< max α ₁₃₁₀	
Effective Group Core Refractive Index; 1310 nm	1.4671	-
Effective Group Core Refractive Index; 1550 nm	1.4675	-
Effective Group Core Refractive Index; 1625 nm	1.4680	-

note a: after hydrogen ageing