Signal and communication cables 77360

LTMC-S

The Loose Tube Mini Cable 'Slim' (LTMC-S) is a non-metallic, longitudinal water-protected fibre optic cable, with smallest possible outer diameter and optimized fibre density, suitable for Access or FTTx applications. Installation: blowing into miniducts.

Commercial information	Specifications	Unit
Article class	Fibre optic cable	
Serie	Fibre optic cable Single mode	
Type	LTMC-S	
Description	192x SM G.657.A1 (8x24)	
Nett Weight	59	kg/km
Marking	ACE - TKF LTMC-S 192x SM G.657.A1 (8x24) A-DQ(ZN)2Y 77360 {Batch} {Year} {Length}	

Ordercode	EAN code	Specifications	Unit
77360	8713182338916	1	m

Construction	Specifications	Unit
Cable type	LTMC	
Cable metal free	Yes	
Strain relief	Yes	
Type of strain relief	FRP	
Longitudinal water blocking	Yes	
Number of layers	1 Layer	
Colour outer sheath	Black	
Outer diameter approx.	8.1	mm
Outer sheath thickness	0.4	mm
Material outer sheath	HDPE	
Number of fibres	192	
Number of cores	8	
Number of fibres per tube	24	

Characteristics for use	Specifications	Unit
Application	Outside	
Blowable	Yes	
Type of tube	Loose tube, gel filled	
Strip method	1 Rip cord	
Operational temperature range Ta1 - Tb1	-40 / 70	°C
Max. attenuation increase during Ta1 - Tb1	0.05	dB
TC sample length for TC acc F1 or F12	1000	m
Installation temperature	-15 / 55	°C
Transportation and storage temperature	-45 / 70	°C

Technical characteristics	Specifications	Unit
Standardization	EN IEC 60794-5-10	
Test procedures	IEC 60794-1-2	

BV Twentsche Kabelfabriek
Spinnerstraat 15 - Postbus 6 - 74800 AA Haaksbergen - Nederland
Tel: +31 (0)53 573 22 55 - Fax: +31 (0)53 573 21 85 - info@tkf.nl - www.tkf.nl

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Technical characteristics	Specifications	Unit
Longitudinal watertight construction	Super Absorbing Polymer	

Mechanical characteristics	Specifications	Unit
Tensile load short term (Tm)	4000	N
Max. fiber strain at Tm	0.4	%
Tensile load long term (Tl)	1000	N
Max. fibre elongation at Tl	0.0	%
Min. bending radius during installation	165	mm
Min. bending radius after installation	125	mm
Crush resistance E3A short (1min)	1250	N/dm
Crush resistance E3A long	500	N/dm
Crush load E3A long application time	10	min
Impact strength	2	J
Striking surface radius	10	mm
Torsion resistance	360	°/m
Kink resistance	110	mm

Optical characteristics	Specifications	Unit
Fibre type	Single mode 9/125	
Optical fibre standard	ITU-T G.657.A1	
Fibre category	OS2	
Max. attenuation @ 1310 nm	0.36	dB/km
Max. attenuation @ 1550 nm	0.22	dB/km
Max. attenuation @ 1625 nm	0.25	dB/km

Other characteristics/features	Specifications	Unit
Halogen free	IEC 60754-1/2	
Halogen free (acc. EN 60754-1/2)	Yes	
Euro fire class according to EN 13501-6	Fca	
UV resistant	Yes	

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Fibre:	Product Characteristics - Optical fibres
type of fibre	Hydrogen passivated, dispersion unshifted, matched cladding. Bending loss insensitive singlemode fibre 9/125µm.
	Full 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, B-657.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. 0.7	%
Coating diameter	242 ± 5	µm
Coating/Cladding concentricity error	max. 8	µm
Temperature sensitivity; -60°C to +85°C	max. 0.05	dB/km
Bending sensitivity - 100 turns around Ø50mm - 1550nm	max. 0.05	dB
Bending sensitivity - 100 turns around Ø60mm - 1625nm	max.0.05	dB
Bending sensitivity - 10 turn around Ø30mm - 1550nm	max.0.1	dB
Bending sensitivity - 10 turn 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. 0.7	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/nm².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
PMDq	max. 0.06	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