

MDIC LSZH

MDIC LSZH - Indoor Access Cable. Micro Drop Installation Cable, special Access cable with low bend radius, no waterpeak (G.657.A1) fibres. Ruggedized construction with excellent installation performance, easy strippable for fast installation. This cable solves all in-house installation problems.

Commercial information		Properties	Unit
Product group		Fibre optic cable	
Series		Fibre optic cable Single mode	
Type		MDIC LSZH	
Description		4x SM G.657A1	
Net weight		16	kg/km
Marking	ACE-TKF MDIC LSZH 4x SM G.657A 69278 {Year} {Batch} {Length}		

Article number / standard length	EAN number	Properties	Unit
69278	8713182102302	Drum à 1	m
69278H X 400/20	8713182102319	Drum à 400	m

Construction		Properties	Unit
Test procedures		IEC 60794-1-2	
Application		Inside	
Cable metal free		Yes	
Strain relief		Yes	
UV resistant		Yes	
Halogen free (acc. EN 50267-2-2)		Yes	
Low smoke (acc. EN50268-2)		Yes	
Longitudinal water blocking		No	
Number of fibres		4	
Fibre Type		Single mode	
Optical fibre standard		ITU-T G.657.A1	
Type of strain relief		FRP	
Strip method		Double sided Rip seam	
Material outer sheath		LSZH	
Colour outer sheath		White	



MDIC LSZH



Characteristics for use	Properties	Unit
UV-protection	ISO 4892/2	
Outer sheath thickness	1	mm
Outer diameter approx.	3.7	mm
Bending radius during installation	56	mm
Bending radius after installation	37	mm
Bending radius cable single bend (max. 4x 90°)	30	mm
Bending radius fibre storage (<10 turns acc ITU rec)	15	mm
Tensile load short term (Tm)	150	N
Tensile load Long Term (TI)	50	N
Installation temperature	-10 / 50	°C
Operation temperature range	-30 / 70	°C
Transportation and storage temperature	-30 / 70	°C

Technical characteristics	Properties	Unit
Attenuation @ 1310 nm	0.4	dB/km
Attenuation @ 1550 nm	0.3	dB/km
Crush resistance acc. meth.E3A	1400	N/dm
Crush resistance acc. meth.E3B	1100	N/dm
Mandrel diameter by Crush meth. E3B	50	mm
Impact strength	3	J
Striking surface radius	10	mm
Torsion resistance	1800	°/m
Kink resistance	30	mm

Product Characteristics - Optical fibres

Fibre:		
type of fibre	hydrogen passivated, dispersion unshifted, matched cladding bending loss insensitive singlemode fibre 9/125µm	
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	254 ± 7	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 - 1322	nm
Zero-dispersion slope	max. 0.090	ps/nm ² .km
Chromatic dispersion; 1285nm - 1330 nm	max. 3.0	ps/nm.km
Chromatic dispersion; 1550nm	max. 17.0	ps/nm.km
Chromatic dispersion; 1625nm	max. 21.0	ps/nm.km
Polarisation mode dispersion; PMD _Q	max. 0.20	ps/√km
Max. attenuation at 1383nm (α ₁₃₈₃) [note a]	< max. α ₁₃₁₀	
Effective Group Core Refractive Index; 1310 nm	1.465	-
Effective Group Core Refractive Index; 1550 nm	1.465	-
Effective Group Core Refractive Index; 1625 nm	1.465	-

note a: after hydrogen ageing