



Fibre optic cable
CTMC

Article number: 74935

11-01-2022

Description

12x SM G.657.A1 200 µm

The Central Tube Mini Cable (CTMC) is a customer drop cable, consisting of a central tube filled with low bend radius, no water peak G.657.A1 fibres, finished with aramid yarns (as strength-elements) and a polypropylene outer jacket. This cable has a small outside diameter and is ideal for blowing in micro-tubes in the Access Network. Installation: blowing into micro ducts of 5.5 mm. (inside diameter)



* This image may differ from the actual product.

Trading information

Product group	Fibre optic cable
Type	CTMC
Net. Weight	12 kg/km
Sheath marking	ACE - TKF CTMC 12x SM G.657.A1 (1x12) A-DQ(ZN)9Y 74935 {Batch} {Year} {Length}

Trade lengths

	Minimal order
(74935 / 8713182204884)	1 MTR



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Construction characteristics

Cable type	CTMC
Cable metal free	Yes
With strain relief	Yes
Type of strain relief	Aramid fibre
Longitudinal water blocking cable	Yes
Longitudinal water blocking	Yes
Colour outer sheath	Black
Outer diameter approx.	3.9 mm
Outer sheath thickness	0.25 mm
Material outer sheath	Polypropylene (PP)
Number of fibres	12
Number of cores	1
Number of fibres per tube	12

Properties

Application	Outside
Blow in	Yes
Type of tube	Loose tube, gel filled
Operational temperature range Ta1 - Tb1	-30 / 70 °C
Max. attenuation increase during Ta1 - Tb1	0.05 dB
Operational temperature range Ta2 - Tb2	-40 / 70 °C
Max. attenuation increase during Ta2 - Tb2	0.15 dB
Installation temperature	-15 / 55 °C
Transportation and storage temperature	-40 / 70 °C



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Technical characteristics

Standardization	EN IEC 60794-5-10
Test procedures	IEC 60794-1-2

Mechanical characteristics

Tensile load short term (Tm)	320 N
Tensile load long term (Tl)	80 N
Min. bending radius during installation	55 mm
Min. permitted bending radius, stationary application/permanent installation	45 mm

Optical characteristics

Fibre type	Single mode 9/125
Optical fibre standard	ITU-T G.657.A1 200 µm
Max. attenuation @ 1310 nm	0.38 dB/km
Max. attenuation @ 1550 nm	0.25 dB/km
Max. attenuation @ 1625 nm	0.28 dB/km

Other characteristics/features

Halogen free according to EN 60754-1/2	Yes
Reaction-to-fire according to EN 13501-6: Class	Fca
UV resistant	Yes



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
	Reduced coating diameter
Standard	IEC-60793-2-50, B-657.A1
Standard	ITU-T G.657.A1

Characteristics:	Properties	Unit
Mode field diameter; 1310nm	9.0 ± 0.4	µm
Mode field diameter; 1550nm	10.2 ± 0.5	µm
Core non-circularity	max. 6	%
Core/Cladding concentricity error	max. 0.5	µm
Cladding diameter	125.0 ± 0.5	µm
Cladding non-circularity	max. 0.7	%
Coating diameter	198 ± 6	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. 0.25	dB
Bending sensitivity - 10 turn around Ø30mm - 1625nm	max. 1.0	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/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
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