

OTLMr ADSS

(cable armoring – laminated steel tape)

SINGLEMODE OPTICAL FIBRE

TYPE OF FIBER CHARACTERISTICS

Low-loss high performance fiber SM

Fiber used:

Corning® SMF-28® Ultra fiber

ITU-T G. 657 A1

OPTICAL CHARACTERISTICS

Wavelength attenuation	
850 nm	-
1300 nm	-
1310 nm	≤ 0,32 dB/km
1550 nm	≤ 0,18 dB/km
Mode field diameter	8,6-9,5 μm (1310 nm)
Cutoff wavelength	
λ _c (OF – 2 m)	1190-1330 nm
λ _{cc} (OF or OC – 22 m)	≤ 1260 nm
Chromatic dispersion	
1285 – 1330 nm	
1550 nm	≤ 18 pc/(nm·km)
1530 – 1565 nm	-
1525 – 1575 nm	
1625 nm	≤ 22 pc/(nm·km)
Band width	
λ = 850 nm	-
λ = 1300 nm	-
Wavelength range with zero variance value	1300 – 1324 nm
Maximum slope of dispersion curve at the point of its zero value	≤ 0,092 pc/(nm ² ·km)
Polarization mode dispersion (PMD) 1550 nm	≤ 0,2 pc·km ^{1/2}
Numerical aperture (NA)	-

GEOMETRICAL CHARACTERISTICS

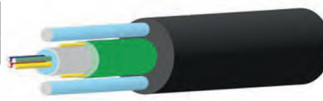
Non-circularity of core	-
Core diameter	-
Cladding diameter	125 ± 0,7 μm
Cladding Non-circularity	≤ 1,0 %
Excentricity	
- core / cladding	-
- mode field / cladding	≤ 0,5 μm
Coating diameter	245 ± 10 μm

MECHANICAL CHARACTERISTICS

Strength test	≥ 1,0 % (0,69 hPa)
Radius of own bend	≥ 4,0 m
Macrobend losses:	
- radius of mandrel, mm	10 15
- number of coils, pc.	10 1
- Increase in attenuation, dB at wavelength	
1550 nm	0,25 0,75
1625 nm	1,0 1,5

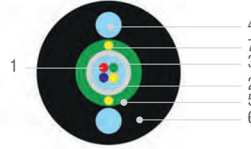
ENVIRONMENTAL IMPACTS

Dependence of attenuation in the temperature range (-60...+85) °C at wavelength	
850 nm	-
1300 nm	-
1310 nm	≤ 0,05 dB/km
1550 nm	≤ 0,05 dB/km



CABLE STRUCTURE

- 1 – UV Colored Optic Fibers
- 2 – thixotropic Hydrophobic Gel
- 3 – central tube with Thixotropic Water-Blocking Jelly
- 4 – strength Member – steel wires
- 5 – armoring – Corrugated laminated steel tape
- 6 – outer Sheath – Polyethylene
- 7 – ripcord



AREA OF APPLICATION

Cable is designed for direct installation in cable ducts, tubes, blocks, into grounds of all categories including high corrosivity grounds, in areas infested by rodents and through swamps, lakes, non-floated and innavigable rivers up to 15 m depth excluding areas subjected to freezing and other deformations

ADVANTAGES

- High performance
- Ease of preparation and installation

Material of protective coating : G.657 A1

singlemode optical fibre in accordance with recommendation of iTu-T g. 657 A1

OPERATING CHARACTERISTICS

Quantity of optical fibres, pcs.	24
Cable diameter, mm	11,0 ± 0,5
Cable weight, kg/km	90
Maximum allowed tensile force (short-term load), kN	1,5
Minimum bending radius, mm	20 x cable diameter
Crush resistance, N/100 mm	2 000
Operation temperature range, °C	- 40°C - +60°C
Storage temperature range, °C	- 20°C - +60°C
Installation temperature range, °C	- 10°C - +60°C
Factory length, km	2,00

International standard:

IEC60794; Telecordia gr-20; EN 50173; ISO/IEC 11801; ANSI/TIA - 588-C.3