## ADSS CABLE - EKE Sheath

### SELF-SUPPORTED ADSS CABLES



#### **DESCRIPTION AND APPLICATION**

Fibre-optic ADSS cable with dielectric reinforcement elements and high density polyethylene sheath. This cable is designed for long aerial self-supported installations in poles along with overhead, telecommunication or high voltage transmission lines. It contains 6, 8 or 11 loose tubes of 12, 24 or 36 fibres each.

These cables are used for medium or long distance telecommunications networks designed with single mode fibre type ITU-T G 657A1 of 250 $\mu$ m, for cables from 12 to 144 fibres and G657A1 200 $\mu$ m for cables of 192, 288 and 396 fibres. Generally according to INFRATEL specification INF-ING-2017-008 v2.0 of 21/01/2019.

#### **CONSTRUCTION**

Colour

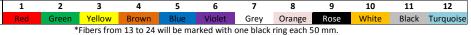
- Central element: Fibre-glass reinforced plastic rod.
- Loose Tubes: PBT loose tubes filled with thixotropic compound. Optional fillers depending on the cable structure. Colour coding according to tables below.
- Core formation: Tubes are stranded in SZ.

PRODUCT INFORMATION

- Core wrapping: Water-blocking tape and/or yarns to avoid water propagation.
- Inner sheath: Grey RAL7001 or black HDPE, nominal thickness 0.8 mm.
- Armour: Aramid yarns for traction reinforcement. (≥280000 dtex)
- Outer sheath: Grey RAL7001 or black HDPE, UV resistant outer jacket, nominal thickness 1,5 mm.
- Marking: The outer sheath shall be marked, at regular intervals, with the following information:
   CABLESCOM CAVO OTTICO TOLXD nf nt(n SM G657A1) T/EKE/S INF-ING-2017-008 v2.0 AENOR Year –
   Batch number Fibre supplier Lenght marks

Example of sheath marking: Cavo ottico 396 fibre ottice:
CABLESCOM CAVO OTTICO TOL11D 396 11(36 SM G657A1) T/EKE/S – INF-ING-2017-008 V2-AENOR-2019 xxxxx—AOF YYYYM

# LOOSE TUBE AND OPTICAL FIBRE COLOUR CODE Fibre 1 2 3 4 5 6



\*Fibers from 25 to 36 will be marked with two black rings each 50 mm.

<sup>\*</sup> In case of the black fiber, this could be natural fiber with one or two black rings.

Tube	Tube colour	Direction			
1	Red	Green			
2	Green	White			
3	White	Following white			
n	White	Red			

Filling rods, in natural colour













CABLE FIBRES		24	48	96	144	192	288	396		
Nominal OD (mm)		14.0	14.0	14.0	14.0	15.1	15.1	18.0		
Nominal weight (kg/km)		141	144	156	157	180	185	260		
Tubes Num.		2	4	4	6	8	8	11		
Passive Elements Num.		4	2	2	0	0	0	0		
Fibres Number per Tube		12	12	24	24	24	36	36		
MAX. TENSILE STRENGTH (daN) UNE-EN 60794-1-2, Met. E1 $\Delta \alpha \leq 0,1 \ dB/km \ after \ test$	MOT (Δεf ≤ 0,05%)	450								
	MAT (Δεf ≤ 0,25%)	1200								
<i>IMPACT</i> UNE-EN 60794-1-2, Met. E4		5 J, 300 mm, 3 impacts ; $\Delta\alpha$ reversible ( $\Delta\alpha \le 0.1$ dB/km after the test)								
<b>CRUSH</b> UNE-EN 60794-1-2, Met. E3		1500 N/ 10cm 1min; $\Delta \alpha$ reversible ( $\Delta \alpha \le 0.05$ dB/km after the test)								
<b>REPEATED BENDING</b> UNE-EN 60794-1-2, Met. E6		25 cycles: 20 x Ø cable $\Delta \alpha$ reversible ( $\Delta \alpha \leq 0.1$ dB/km after the test)								
<b>TORSION</b> UNE-EN 60794-1-2, Met. E7		2m cable ; 100N ; 5 cycles ; $\pm 180^\circ$ ; $\Delta \alpha$ reversible ( $\Delta \alpha \leq 0.1$ dB/km after the test)								
BENDING		ø=20 x ø cable; 4 turns; 3 cycles,								

All drawings, weights and dimensions details, as well as tube and fibre colours in this document are only indicative and must not be considered contractual.

 $\Delta \alpha$  reversible ( $\Delta \alpha \leq 0.1$  dB/km after the test)

-30°C / 60°C;  $\Delta \alpha < 0.05 \ dB/km$ 

No leakage

720 hours. Raw material tested by manufacturer. Supporting document.

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TEMPERATURE CYCLING

UNE-EN 60794-1-2, Met. F1

WATER PENETRATION

UNE-EN 60794-1-2, Met. F5B

UV RESISTANCE

ISO 4892-2 2013

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Certified Company ISO 9001 - ISO 14001



APPROVED BY DATE
O. Salomón 2019-04-30