

LLCAU9+

Armored – Singlemode 9/125 OS1 & OS2

General standards

- General UniLooseTube cable, outdoor, PE, metallic armouring, two steel wires, singlemode — Corrugated steel tape armouring PE sheath
- Standards: EN 50173-1:2002, cat. OS1/OS2 - ISO/IEC 11801:2002 2nd ed., cat. OS1/OS2 - IEEE 802.3-2002

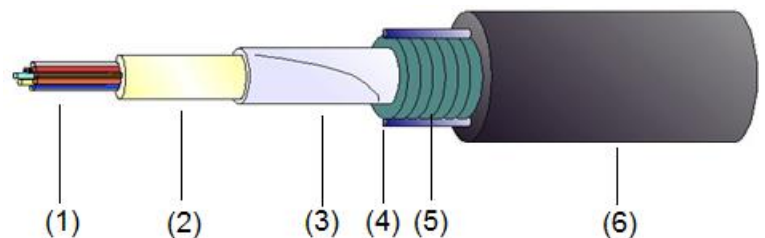


Application

Developed to be the ultimate option of the central-loose-tube outdoor cables family, featuring a metallic armouring. The plastic core with a jelly-filled helical coated channel, Spiral Space® design, contains up to 24 fibers, wrapped longitudinally with swelling tape, followed by an overlapping corrugated steel tape, and finally coated by a PE outer-sheath with two high tensile strength steel wires. Suitable for duct or direct burial installations. Also for arctic climate when the soil around the cable can be frozen; extra high crush strength.

CABLE DIAGRAMM CONSTRUCTION

- 1 – Optical Fibers: up to 24 x 9/125µm colors red, green, blue, yellow, white, grey, brown, violet, turquoise, black, orange, pink, (>12-fo colored synthetic binder)
- 2 – Central Plastic core (Jelly-Filled):
 - Diameter: 5,0mm (nominal)
 - Thickness: 0,5mm – 0,7mm (nominal)
 - Color: white
- 3 – Wrapping: swelling tape material
- 4 – Corrugated Steel Tape:
 - Thickness: 0,155mm (nominal)
 - Overlap: 3,0mm (nominal)
- 5 – Strength Members:
 - Material: steel wires
 - Diameter: up to 1,4mm (nominal) Diameter: up to 11,7mm (nominal)



6 – Outer Sheath:

- Material: PE (Polyethylene) black
- Thickness: 2,4mm (nominal)
- Diameter: up to 11,7mm (nominal) according to fibers count

MECHANICAL PERFORMANCE - CABLE

Features			Test Method
WEIGHT	kg/km	175	IEC 60794-1-F1
TEMPERATURE RANGE	°C	-10 up to + 60	IEC 60794-1-E11
BENDING RADIUS	mm	oper.: 240 / inst.: 270	IEC 60794-1-E1
TENSILE STRENGTH	N	oper.: 3500 / inst.: 5000	IEC 60794-1-E3
CRUSH RESISTANCE	N/10cm	4000	IEC 60794-1-E3
IMPACT RESISTANCE	Nm	25	IEC 60794-1-E4

OPTICAL PERFORMANCE – FIBERS (acc. to ITU-T G.652.D, IEC60793-2-50 Cat. B1.3, EN60793-2-50 Class B1.3)

Item		Singlemode (ITU-T G.652.D)	Test Method
CORE DIAMETER	µm	9,2 ± 0,4	IEC 60793-1-45
CLADDING DIAMETER	µm	125 ± 1	IEC 60793-1-20
CLADDING NON-CIRCULARITY	%	≤1	IEC 60793-1-20
CORE/CLADDING CONCENTR.	µm	≤0,6	IEC 60793-1-20
TYP. ATTENUATION @ 1310-1625nm	dB/km	≤0,93	IEC 60793-2-50
TYP. ATTENUATION @ 1550nm	dB/km	≤0,25	IEC 60793-2-50
CHROM. DISP. @ 1285-1330nm	ps/nm*km	≤3	IEC 60793-1-42
CHROM. DISP. @ 1270-1340nm	ps/nm * km	≤6	IEC 60793-1-42
CHROM. DISPERSION @ 1550nm	ps/nm * km	≤18	IEC 60793-1-42
CUT-OFF WAVELENGTH	λ _c nm	high: 1330 / low: 1150	IEC 60793-1-44
AVERAGE	λ _{cc} nm	≤1260	IEC 60793-1-44
POLARISATION MODE DISP. (PMD)	ps/√km	≤0,5	IEC 60793-1-48
PMDQ LINK DESIGN VALUE	ps/√km	≤0,2	IEC 60794-3
ENTIRE RANGE OF SPEC'S FOR sm FIBER REFER TO		LL-F-003-smD	

— On request, fibers featuring other than the above stated specifications can be quoted —

OTHER CHARACTERISTICS

Wavelength range (nm)	
Fiber requirements	ISO/IEC 11801:2002 cat. OS1/OS2, EN50173-1:2002 cat. OS1/OS2, IEEE 802.3-2003, IEEE 802.3ae
Marking	ww / yyyy LightLine LL-CA-126+ no. fo. E9/125 metric
Typical delivery length	4000m ± 300m per drum

The information contained within this document must not be copied, reprinted or reproduced in any form. Either wholly or in part, without the written consents of Fumo. The information is believed correct at the time of issue. Fumo reserves the right to amend this specification without notice. Specification is not contractually valid unless specifically authorized by Fumo.

