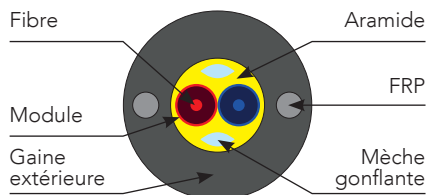


DROPTIC CABLE LM8BK - 2FO

OUTDOOR IN AERIAL

1 - STRUCTURE



Optical fiber	2FO G657A2 Color: red, blue
Module: 900µm buffered fiber	Diameter : 900µm ± 50µm Color : red, blue The buffered fiber is a colored 900µm semi-tight type. The 900µm buffered fiber coating is easy to remove with a wire stripper.
Strength member	Aramid yarn 2x0.5mm diameter FRP
Outer sheath	Diameter: 4.0 ± 0.15 mm Thickness: 1.0 ± 0.1 mm Color: black RAL 9005 Property of the material : Halogen free type, resistant to flame propagation, resistant to acid, base, mineral oil or solvent type chemical aggression
Ovalling	Ovalling ≤ 10% according to IEC 60811-203
Marking	White, every 2m ± 1%
Operating and storage temperature range	Operation: -30 °C / +70 °C Storage: -40 °C / +70 °C
Access to the optical module	Access to the module with no special tools
Water penetration	Complete longitudinal seal of the cable based on dry swelling products outside the optical module
Weight	18.8 kg/km

2 - PACKING AND MARKING

Packing:

- Drum of 1000 m or 1500 m.

Marking on the outer sheath:

- DROPTIC – BATCH NUMBER – LM8BK – 2FO – G657A2 – xxxxm

3 - MECHANICAL AND ENVIRONMENTAL REQUIREMENTS

Mechanical resistance requirements:

REQUIREMENT	COMPLIANCE	STANDARD
Tensile strength	400 N	IEC 60794-1-2 - Method E1
Impact	3 Nm : reversible and without sheath breakage 5 Nm : reversible	IEC 60794-1-2 - Method E4
Cut-through resistance	100 N	IEC 60794-1-2 - Method E12
Static bending	R = 20 mm	IEC 60794-1-2 - Method E11
Kink	R = 15 mm	IEC 60794-1-2 - Method E10
Torsion	20 cycles ; L = 1m ; load = 25 N ; ± 180° ; Δα ≤ 0.1 dB	IEC 60794-1-2 - Method E7
Crush	Final level = 15 daN/cm (Δα ≤ 0.1 dB) - reversibility checked at 20 daN/cm	IEC 60794-1-2 - Method E3
Abrasion resistance of cable sheath	N = 1000 cycles ; F = 4 N	IEC 60794-1-2 Method E2A
Resistance of sheath holding	400 N during 5 minutes	In house specification
Stiffness	Compliant	IEC 60794-1-2 - Method E17B
Resistance to aeolian vibrations	Δα ≤ 0,1 dB	IEC 60794-1-2-A1 - Method E19
Anchoring	No sliding at 800 N	In house specification

Environmental resistance requirements:

REQUIREMENT	COMPLIANCE	STANDARD
Temperature cycling	Δα reversible and Δα ≤ 0.1 dB/km between -30 °C and +70 °C (1550 nm) Δα reversible between -40 °C and +70 °C (1550 nm) Δα ≤ 0.2 dB/km between -30 °C and +70 °C (1625 nm)	IEC 60794-1-2 - Method F1
Thermal ageing	(14 days at 70 °C) Δα ≤ 0.2 dB/km and reversible	In house specification
Fire resistance	CPR certified: Dca-S2,d1,a1	IEC 60332-2-2
Resistance to UV radiation	Compliant	IEC 50289-4-17 - Method C
Chemical behaviour	Oil, Acids, bases and solvents resistant	IEC 60811-404 - IEC 60811-501
Water penetration	Compliant	IEC 60794-1-2 - Method F5