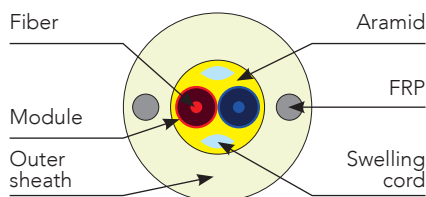


DROPTIC CABLE LM8 - 2FO INDOOR/OUTDOOR 90434

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, 1 meter in 10 seconds, without altering the primary coating of the fibre.
Strength member	Aramid yarn 2x0.5mm diameter FRP
Outer sheath	Diameter: 4.0 ± 0.15 mm Thickness: 1.0 ± 0.1 mm Color: white RAL 9010 Property of the material: Halogen free type, resistant to flame propagation and conforming with standard IEC 50290-2-27, resistant to acid, base, mineral oil or solvent type chemical aggression
Ovalling	Ovalling ≤ 10% according to IEC 60811-203
Marking	Yellow, 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 over 1 m in 1 minute with no special tools
Water penetration	Complete longitudinal seal of the cable based on dry swelling products outside the optical module
Weight	16.9 kg/km

2 - PACKING AND MARKING

Packing:

- 250 m dispenser or 1500 m drum.

Marking on the outer sheath:

- DROPTIC – BATCH NUMBER – LM8 – 2FO – G657A2 – xxxxmm

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 marking	N = 1000 cycles ; F = 4 N	IEC 60794-1-2 - Method E2A
Abrasion resistance of cable sheath	400 N during 5 minutes	In house specification
Stiffness	Compliant	IEC 60794-1-2 - Method E17B
Friction	f ≤ 0.25	In house specification

Environmental resistance requirements:

REQUIREMENT	COMPLIANCE	STANDARD
Temperature cycling	Δα ≤ 0.1 dB/km between -30 °C and +70 °C (1550 nm) Δα reversible between -40 °C and +70 °C (1550 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: Eca class	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