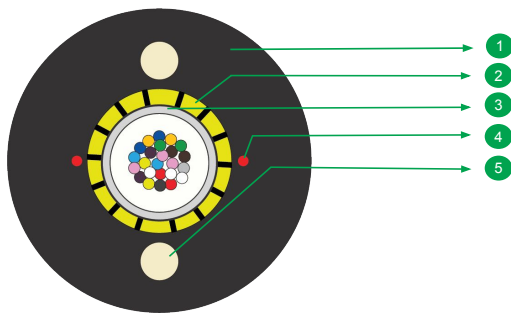


Aerial Drop Lite

24F (12F MCF & 12F G.657A1 Nova) Optical Fibre Cable



1 OUTER JACKET

2 ARAMID YARNS

3 GEL FILLED TUBE

4 RIPCORD(S)

5 STRENGTH MEMBER

** Typical construction diagram - Not to scale*

Features & Benefits

- Can be tailored to meet specific span lengths, drop configurations, wind loads, and mechanical conditions.
- Central loose tube design allows quick access to fibers and uses filling gel for added fiber protection.
- High-strength aramid yarns provide excellent tensile performance for aerial self-supporting installations.
- Outer thermoplastic PE jacket offers reliable mechanical and environmental protection.
- Rugged jacket is easy to strip, simplifying installation and termination.
- Lightweight and flexible construction makes it easy to transport, handle, and install in the field.
- Resistant to tensile stress and crushing, ensuring long-term durability and performance.
- Ideal for last mile aerial applications in both urban and rural deployment scenarios.

Product Details

24F (12F MCF & 12F G.657A1 Nova) Aerial Drop Lite Optical Fibre Cable is a uni-tube, single-jacket design tailored for last mile aerial deployments. It features a central loose tube housing a combination of 12F Multi Core Fiber (MCF) and 12F G.657A1 Nova fibers, offering a balance of high density and bend-insensitive performance. High-strength aramid yarns are evenly distributed around the tube, providing the tensile strength required for aerial self-supporting applications. A thermoplastic polyethylene outer sheath safeguards the cable against mechanical stress and harsh environmental conditions. Its lightweight and flexible construction allows for easy handling and quick installation. This cable is well-suited for residential, business, and rural connectivity where reliable, space-efficient drop solutions are essential.

Fibres and Cable Performance Standards

Cable complies to the following standards IEC 60793, IEC 60794, TEC GR 85200-2022

Printing Details

STERLITE TELEPHONE SYMBOL LASER SYMBOL "FIBER TYPE" 24F UNITUBE YEAR OF MANUFACTURING USER ID LENGTH CODE METER MARKING

Note: The accuracy of marking shall be + 0.5%. Occasional loss of printing & remarking shall be as per Bell core GR 20 and this supersedes the earlier markings.

Specifications

Physical Characteristics	
Fiber Count	24
Fiber Type	Sterlite Fiber ITU.T - G.657A1 & MCF
Maximum Cabled Attenuation (dB/km)	For G657A1 Nova: 1310nm : 0.36 & 1550nm : 0.22 & 1625 nm : 0.25 For MCF: 1550nm : 0.3
PMDq Cabled Fiber (1310nm & 1550nm)	≤ 0.3 ps/ $\sqrt{\text{km}}$
Fibers per Tube	24
Fiber Color Sequence	MCF: Blue, Orange, Green, Brown, Slate, White, Red, Black, Yellow, Violet, Pink, Aqua, G657A1 Nova: Blue*, Orange*, Green*, Brown*, Slate*, White*, Red*, Natural, Yellow*, Violet*, Pink*, Aqua* *Is the ring marked fiber with interspacing of 50mm
Tube Material	Thermoplastic Material (PBTP)
Tube Filling Compound	Thixotropic jelly
Tube Size (mm)	ID-2.4+0.1mm & OD-3.0±0.1 mm
No of Tubes & Color	1 & Natural
Embedded Strength Member Size & numbers	FRP (Fiber Reinforced Plastic) 1.0+0.1,-0 mm & 2 (180 degree apart)
Peripheral Strength Members	Aramid Yarns are added for tensile strength (3.9+0.4 Kg/Km)
Outer Sheath Material	UV Proof Black HDPE Sheath
Sheath Thickness (mm)	1.8 mm Minimum Thickness
No of Ripcords Below Outer Sheath	2 (nos.)
Cable Dimensions (mm)	7.5± 0.5
Cable Weight (kg/km)	50+10%

Mechanical & Environmental Characteristics		
Cable Characteristics	Testing Standard	Cable Performance
Tensile Strength (N)	IEC-60794-1-21-E1	2.5xWx9.81 or 1000N Whichever is higher @ 0.25% Fiber Strain, (W-cable weight in kg/km)
Crush Resistance (N/100 mm)	IEC-60794-1-21-E3	2000N/100x100mm
Impact Strength(Nm)	IEC-60794-1-21-E4	25N, 0.5m, 3 impact at 3 position.
Torsion	IEC-60794-1-21-E7	±180°
Repeated Bending	IEC-60794-1-21-E6	20 D (D is cable diameter)
Cable Bend Radius	IEC-60794-1-2-E11	10 D (D is cable diameter)
Water Penetration Test	IEC-60794-1-22-F5	1m Water Head, 3m samples, 24 Hr
Drip Test	IEC-60794-1-21-E14	30 cm, 70°C, 24 Hr
Temperature Performance	IEC-60794-1-22-F1	
Installation		-20°C to +70°C
Operation & Storage		-40°C to +70°C
Tensile Strength (N)	IEC-60794-1-21-E1	2.5xWx9.81 or 1000N Whichever is higher @ 0.25% Fiber Strain, (W-cable weight in kg/km)
Crush Resistance (N/100 mm)	IEC-60794-1-21-E3	2000N/100x100mm

Note: All tests shall be carried out as per IEC standards. Change in attenuation after and before testing shall be ≤ 0.05 dB/ km for Single Mode fibre.

Packing and Lengths

Drum Type	Length Multiple (km)	Short Lengths	Order Tolerance
Wooden Drums	2 Km + 5% or 4 Km + 5%	Max 5%, Customer Approval	± 5%

Loading Conditions				
Span Length(mtr)	Maximum sag allowed without excess load	Maximum sag allowed with excess load	Ice Load(mm)	Wind Speed(km/hr)
100	1% of span length	2% of span length	NA	75
80	1% of span length	2% of span length	1 Kg/m	NA

For additional information please contact your sales representative.

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