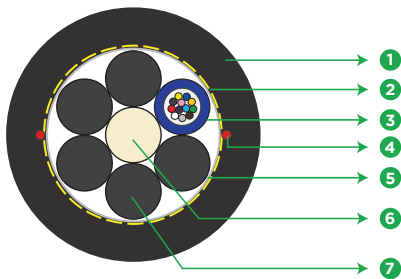


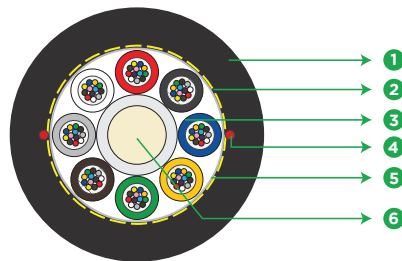
Aerial-Lite

Multitube Gel Free ADSS OFC

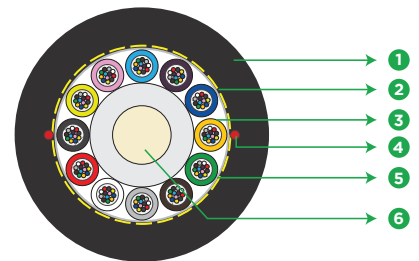
12F - 288F | OH Lite - G.652.D Single Mode Fiber



6 Elements



8 Elements



12 Elements

1 OUTER JACKET

2 ARAMID YARN

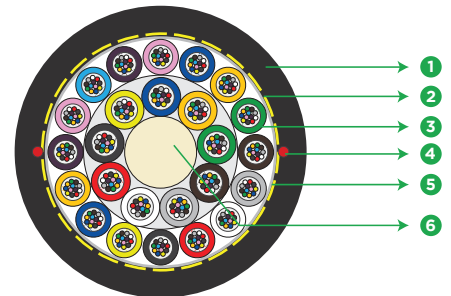
3 GEL FREE LOOSE TUBE

4 RIPCORDS

5 WATER BLOCKING TAPE

6 STRENGTH MEMBER

7 FILLER



24 Elements

* Typical Construction Diagram - Not to Scale

Features & Benefits

- This cable can be designed to suit specific requirements of span length, wind speed and other loading conditions
- Dry water-blocking technology for gel free core helps in quicker end preparation
- Easily removable rugged thermoplastic jacket
- Flexible, light weight, easy to handle & install
- Tensile and crush resistant

Product Details

STL AERIAL-LITE Gel Free Multi-tube Single Jacket ADSS Cables are smaller in diameter and lighter in weight that enables them to be installed aerially in moderate field conditions. This cable is a stranded loose tube cable with optical fibers placed inside robust buffer tubes stranded around a fiber reinforced plastic (FRP) central strength member. In addition to optical fibers, the buffer tubes contain water-swellable yarns, and the cable core is surrounded with water-swellable tape to prevent water ingress in the interstices of the cable core. High strength yarns are distributed over the core to provide the required tensile strength for aerial self-supporting applications.

Cable Performance Standards

Cable complies with the following standards IEC 60793, IEC 60794, ITU-T, RoHS and REACH.

Printing Details

Printing: STL SM NOVA “FIBER COUNT” AERIAL OFC SPAN LENGTH LASER SYMBOL TELEPHONE SYMBOL “YEAR OF MANUFACTURE” “LENGTH CODE” “FEET/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 Type	STL Fiber ITU-T G.652.D
Maximum Cabled Attenuation (dB/km)	1310nm : 0.35 & 1550nm : 0.25
PMD LDV (ps/sqrt.km)	≤ 0.1
Fibers per Tube	12
Central Strength Member	FRP (Fiber Reinforced Plastic)
Fillers (if required)	Black Polyethylene Material
Water Blocking Elements	Water Swellable Yarns and Tape
Core Wrapping	Binder and Water Swellable Tape
Peripheral Strength Members	High Strength Aramid Yarns
No of Ripcords Below Tape	2
Outer Sheath Material	UV Proof Black Polyethylene

Fiber Color Sequence (AS per EIA/TIA 598C)

Blue	Orange	Green	Brown	Slate	White	Red	Black	Yellow	Violet	Rose	Aqua
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Cable Design with G.652.D Fiber

Product Code	Fiber Count	No. of Tubes	Tube Color Sequence	No. of Fillers	Cable Diameter mm (inch) (±5%)	Cable Weight Kg/Km (lbs./ft.) (±10%)
A10012S301FAP100L1	12	1	Blue, Filler, Filler, Filler, Filler, Filler	5	11.5 (0.45)	92 (0.06)
A10024S302FAP100L1	24	2	Blue, Orange, Filler, Filler, Filler, Filler	4	11.5 (0.45)	92 (0.06)
A10036S303FAP100L1	36	3	Blue, Orange, Green, Filler, Filler, Filler	3	11.5 (0.45)	92 (0.06)
A10048S304FAP100L1	48	4	Blue, Orange, Green, Brown, Filler, Filler	2	11.5 (0.45)	92 (0.06)
A10072S306FAP100L1	72	6	Blue, Orange, Green, Brown, Slate, White	0	11.5 (0.45)	92 (0.06)
A10096S308FAP100L1	96	8	Blue, Orange, Green, Brown, Slate, White, Red, Black	0	13.2 (0.51)	120 (0.08)
A10144S312FAP100L1	144	12	Blue, Orange, Green, Brown, Slate, White, Red, Black, Yellow, Violet, Rose, Aqua	0	16.5 (0.65)	200 (0.13)
A10288S324FAP100L1	288	24	1st Layer - Blue, Orange, Green, Brown, Slate, White, Red, Black, Yellow 2nd Layer - Blue, Orange, Green, Brown, Slate, White, Red, Black, Yellow, Violet, Rose, Aqua, Blue#, Orange#, Green#	0	19.4 (0.76)	265 (0.18)

Note: Refer Product offering section for Span length.

Specifications

Mechanical & Environmental Characteristics		
Cable Characteristics	Cable Performance	Testing Standard
Tensile Strength (N) (lbf)	As mentioned in below tables	IEC-60794-1-21-E1
Crush Resistance (N/cm) (lbf/in)	200 (114.20)	IEC-60794-1-21-E3
Impact Strength (Nm) (lbf.in)	5 (44.25)	IEC-60794-1-21-E4
Torsion	±180°	IEC-60794-1-21-E7
Min. Bend Radius	15 D	IEC-60794-1-21-E11
Repeated Bending	20 D Radius, 50 N, 25 Cycles	IEC-60794-1-21-F6
Water Penetration Test	1m head, 3m samples, 24 hrs	IEC-60794-1-21-F5
Temperature Performance	Max. change in attenuation shall be ≤ 0.15 dB/km	IEC-60794-1-21-F1
Installation	-30° C to +70° C	
Operation	-40° C to +70° C	
Storage	-40° C to +70° C	

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 Fiber.

Loading Conditions	NESC Light @ 1% Installation Sag		
Wind Speed	97 kmph	Ice Load	0 mm

12F-72F (6 Elements)							
Span Details				Without Load		With Load	
Span (m)	Span (ft)	Sag (m)	Sag (ft)	N	lbs	N	lbs
20	66	0.2	0.7	233	52	612	138
40	131	0.4	1.3	466	105	1096	246
60	197	0.6	2.0	699	157	1527	343
80	262	0.8	2.6	93	210	1928	433
100	328	1.0	3.3	1165	262	2308	519

96F (8 Elements)							
Span Details				Without Load		With Load	
Span (m)	Span (ft)	Sag (m)	Sag (ft)	N	lbs	N	lbs
20	66	0.2	0.7	319	72	762	171
40	131	0.4	1.3	638	143	1377	310
60	197	0.6	2.0	957	215	1931	434
80	262	0.8	2.6	1275	287	2447	550
100	328	1.0	3.3	1594	358	2938	661

144F (12 Elements)

Span Details				Without Load		With Load	
Span (m)	Span (ft)	Sag (m)	Sag (ft)	N	lbs	N	lbs
20	66	0.2	0.7	503	113	964	217
40	131	0.4	1.3	1006	226	1774	399
60	197	0.6	2.0	1508	339	2516	566
80	262	0.8	2.6	2011	452	3216	723
100	328	1.0	3.3	2514	565	3888	874

288F (24 Elements)

Span Details				Without Load		With Load	
Span (m)	Span (ft)	Sag (m)	Sag (ft)	N	lbs	N	lbs
20	66	0.2	0.7	662	149	1039	234
40	131	0.4	1.3	1325	298	1964	442
60	197	0.6	2.0	1987	447	2831	637
80	262	0.8	2.6	2649	596	3662	823
100	328	1.0	3.3	3311	744	4467	1004

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