

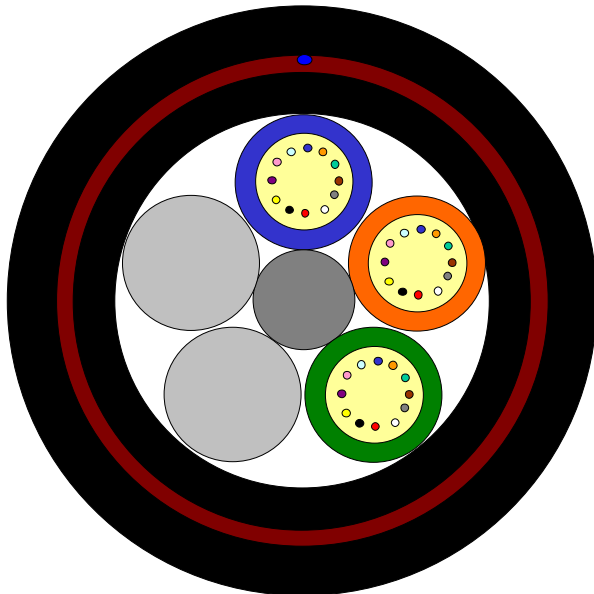
All-Dielectric, Self Supporting (ADSS) Aerial Loose Tube Fiber Optic Cable

Dry core design

PowerGuide® Short Span



Issue July 2014
according to **OFS Generic Specification**



Design

- Optical Fibres
- Gel-filled Buffer Tubes (2,0/3,0^{±0,1} mm)
- Non-metallic Central Member
- Water Blocking Threads
- Inner PE-Jacket
- Non-metallic Aramid Strength Elements
- Ripcords
- Outer PE-Jacket 1,4 mm

Benefits

- Outstanding optical performance, durability, and field reliability
- Fast, one-step installation for valuable time and cost savings
- Easily strippable sheath for quick, convenient cable preparation

Version illustrated is the 36 Fibre Cable

Fibre Count	Tubes	Core Design	Outer Diameter [mm]	Cable Weight [kg/km]	Standard Length [m]	AT-Code**
36	3 (12F)	1+5 (2 Filler*)	13.4	145	2000 / 4000 / 6000 / 8000	AT-3BE27DT-036-CMDB

This table shows nominal diameter and weight values which may differ in shipments.

*Fillers are natural coloured **Please refer to the OFS AT- Code. The blanks specify the fibre type.

Identification

Tube and Fibre Colour Code:

1	Blue	2	Orange	3	Green	4	Brown	5	Grey	6	White
7	Red	8	Black	9	Yellow	10	Violet	11	Rose	12	Aqua

Alternative tube and fibre colour code available on request

Sheath Marking:

OFS OPTICAL CABLE [ID] [MM/YYYY] [Handset Sign] 036 F [Meter Marking]

Alternative sheath printing available on request.

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Sag and Tension Calculation

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Loading Conditions

Ice Thickness	0 mm
Wind Pressure	431 N/m ² (95,5 km/h)
Temperature	- 1,1 °C
Safety Factor	0,73 N/m

Tension @ Maximum Span for 0,7% Installation Sag

Short Term	789 kg
Long Term	446 kg

Maximum Span	400 m
Cable Weight	145 kg/km
Cable Diameter	13,4 mm
Installation Temperature	20 °C
Linear Expansion Coefficient	0,00001009 1/°C
Breaking Load	1142 kg

No Loading @ Install Temperature 20 C				All Loading Conditions @ Temperature -1,1 C				
Span	Sag	Install Sag	Tension	Vertical Sag	Tension	Vertical Sag	Horizontal Sag	Angle
m	m	%	kg	% of Span	kg	m	m	Deg
25	0,4	1,5	28	0,5	96	0,1	0,5	77
50	0,8	1,5	56	0,6	164	0,3	1,3	77
75	1,1	1,5	84	0,6	222	0,5	2,1	77
100	1,5	1,5	111	0,7	275	0,7	3	77
125	1,9	1,5	139	0,7	325	0,9	4	77
150	2,3	1,5	167	0,8	373	1,1	5	77
175	2,6	1,5	195	0,8	419	1,4	6	77
200	3	1,5	223	0,8	464	1,6	7,1	77
225	3,4	1,5	251	0,8	507	1,9	8,3	77
250	3,8	1,5	279	0,9	550	2,1	9,4	77
275	4,1	1,5	307	0,9	591	2,4	10,6	77
300	4,5	1,5	334	0,9	632	2,7	11,8	77
325	4,9	1,5	362	0,9	672	2,9	13	77
350	5,3	1,5	390	0,9	711	3,2	14,2	77
375	5,6	1,5	418	0,9	750	3,5	15,5	77
400	6	1,5	446	0,9	789	3,8	16,8	77

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The recommended maximum space potential at ADSS attachment point is 12 kV

Dead End Assembly:

MOSDORFER Dead-End: AS30-FDES-0500, Max. Tension: 2,500 lbs. (1,134 kg)
PLP Dead-End: 2872005C1E1, Max. Tension: 2,500 lbs. (1135 kg)

Fixed Tangent Support (Line Angle Changes <= 20 deg & Spans <= 600 ft (183 m))

MOSDORFER: Support Clamp: FOSC 0575
PLP: Dielectric block: 44009823
PLP: Aluminum Support: 4450101

Suspended Support (Line Angle Changes <= 20 deg & Spans <= 600 ft (183 m))

PLP: Aluminum Suspension: 4450201-S

Low Tension / Short Span Hardware:

MOSDORFER: Light Tension DE: FOLT1285-TE, Max. Tension: 800 lbs. (362 kg)
PLP: Lite Tension DE: 2875004TE, Max. Tension: 800 lbs. (362 kg)
PLP: Lite Support: 4800114, Max.Span 300 ft (91 m)
PLP PGTTH Dead End: Not Available

Slack Storage Devices: Not recommended for TR cables

PLP Fiberign[®] CLAS Storage System w/cable guide: 710012375U

Heliformed Suspension Units (Line angle changes <= 30 degrees):

PLP: 43009922YC :Spans 1200ft to 2000ft (365m to 610m)
PLP: 4470201-S Aluminum Suspension with SRR rods, Max Span: 1200 ft (365m)

Vibration Dampers, see Application Note 812 for recommendations:

MOSDORFER Vibration Dampers: SVD0462
PLP Vibration Dampers: 50502274

Down Lead Cushion & Abrasion Protector:

PLP: 8003042, Add "H1" - Wood Attachment Kit & "LTC1" - Lattice Clamp Kit
PLP Abrasion Protector: PTG-0203 Length: 6 ft

Corona coils not required

PLP: Sized to fit appropriate hardware, part numbers available upon request