

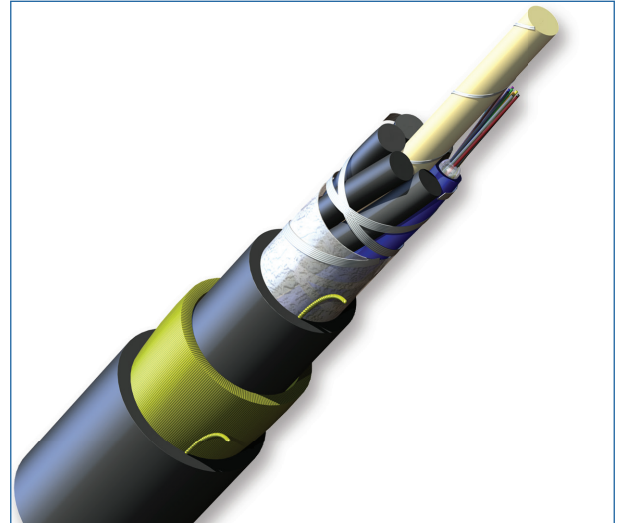
SOLO® ADSS Loose Tube, Gel-Filled, Dual-Jacket Cable

12 F, 50 µm multimode (OM2)

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Corning SOLO® ADSS optical cables are all-dielectric, self-supporting (ADSS) cables designed for easy and economical one-step installation in campus backbones with self-supporting installations where metallic messengers cannot be used. The loose tube design provides stable performance over a wide temperature range and is compatible with any telecommunications-grade optical fiber. The cable design can span distances in excess of 500 m (1650 ft) in NESC heavy conditions.

This cable incorporates innovative waterblocking materials, eliminating the need for traditional flooding compound and providing efficient and craft-friendly cable preparation. While the concentric, self-supporting cable design allows easy, one-step installation using standard hardware and installation methods, the SZ-stranded, loose tube design isolates optical fibers from installation and environmental rigors and facilitates mid-span access. The ADSS optical cables are also available with a proprietary track-resistant polyethylene (TRPE) jacket suitable for installation in electric field potentials up to 25 kV.



Part Number: 012TAE-T4A31A20

Features and Benefits

Loose tube design

Stable performance and compatibility with all common fiber types

Self-supporting

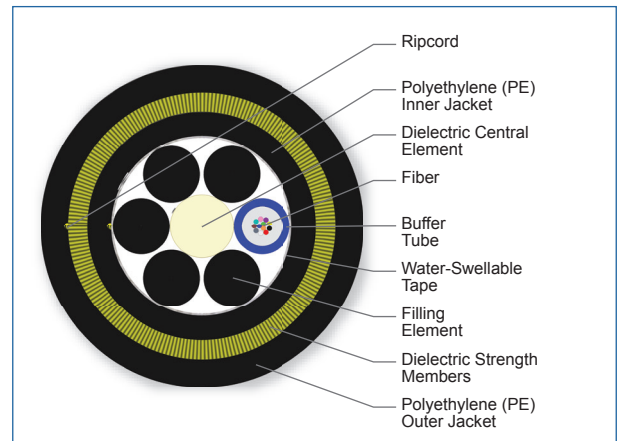
Easy, one-step installation

Track-resistant jacket available

Suitable for installations up to 25 kV electric field potential

Innovative waterblocking cable core

Provides efficient and craft-friendly cable preparation



Cross Section of Part Number: 012TAE-T4A31A20

Standards

Approvals and Listings	USDA Rural Development Programs
Common Installations	Outdoor self-supporting aerial
Design and Test Criteria	ANSI/ICEA S-87-640

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Specifications

General Specifications

Environment	Outdoor
Application	Self-Supporting
Cable Type	Loose Tube
Product Type	Self-Supporting
Fiber Category	50 µm MM (OM2)

Temperature Range

Storage	-40 °C to 75 °C (-40 °F to 167 °F)
Installation	-30 °C to 70 °C (-22 °F to 158 °F)
Operation	-40 °C to 70 °C (-40 °F to 158 °F)

Cable Design

Central Element	Dielectric
Fiber Count	12
Fiber Coloring	Blue, Orange, Green, Brown, Slate, White, Red, Black, Yellow, Violet, Rose, Aqua
Fibers per Tube	12
Number of Tube Positions	6
Number of Active Tubes	1
Buffer Tube Color Coding	Blue
Buffer Tube Diameter	2.85 mm (0.11 in)
Number of Filling Elements	5
Tape	Water-swellaable
Inner Jacket Material	Polyethylene (PE)
Tensile Strength Elements and/or Armoring - Layer 1	Dielectric strength members
Number of Ripcords	3
Outer Jacket Material	Polyethylene (PE)
Outer Jacket Color	Black

Mechanical Characteristics Cable

Weight	193 kg/km (130 lb/1000 ft)
Nominal Outer Diameter	16.2 mm (0.64 in)
Min. Bend Radius Installation	243 mm (9.6 in)

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Mechanical Characteristics Cable

Min. Bend Radius Operation	162 mm (6.4 in)
Span Code	A

Installation Conditions

Span m (ft)	Initial Installation		NESC Light		NESC Medium		NESC Heavy	
	SAG %	Tension N (lbf)	SAG %	Tension N (lbf)	SAG %	Tension N (lbf)	SAG %	Tension N (lbf)
213 (700)	1	5049 (1136)	1.3	7560 (1701)	2.7	8964 (2017)	3.6	12876 (2897)
244 (800)	1	5769 (1298)	1.4	8489 (1910)	2.8	10022 (2255)	3.7	14289 (3215)
274 (900)	1	6489 (1460)	1.4	9400 (2115)	2.8	11053 (2487)	3.8	15667 (3525)
305 (1000)	1	7213 (1623)	1.4	10302 (2318)	2.9	12062 (2714)	3.9	17009 (3827)
335 (1100)	1	7933 (1785)	1.4	11187 (2517)	2.9	13058 (2938)	-	
366 (1200)	1	8653 (1947)	1.4	12062 (2714)	3	14036 (3158)	-	
396 (1300)	1	9373 (2109)	1.5	12929 (2909)	3	15004 (3376)	-	
427 (1400)	1	10098 (2272)	1.5	13791 (3103)	3	15956 (3590)	-	
457 (1500)	1	10818 (2434)	1.5	14640 (3294)	3.1	16902 (3803)	-	
488 (1600)	1	11538 (2596)	1.5	15489 (3485)	-		-	
518 (1700)	1	12262 (2759)	1.5	16324 (3673)	-		-	
549 (1800)	1	12982 (2921)	1.5	17160 (3861)	-		-	

Chemical Characteristics

RoHS	Free of hazardous substances according to RoHS 2011/65/EU
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Fiber Specifications

Optical Characteristics (cabled)

Fiber Core Diameter	50 µm
Fiber Category	OM2
Fiber Code	T
Performance Option Code	31
Wavelengths	850 nm / 1300 nm
Maximum Attenuation	3.0 dB/km / 1.0 dB/km

Notes: 1) 50 µm multimode fiber macrobend loss ≤ 0.2 dB at 850 nm for two turns around 7.5 mm radius mandrel.
2) Improved attenuation and bandwidth options available.
3) Bend-insensitive single-mode fibers available on request.
4) Contact a Corning Customer Care Representative for additional information.

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Fiber Specifications

Optical Characteristics (cabled)	
Serial 1 Gigabit Ethernet	750 m / 500 m
Serial 10 Gigabit Ethernet	150 m / -
Min. Overfilled Launch (OFL) Bandwidth	700 MHz*km / 500 MHz*km
Minimum Effective Modal Bandwidth (EMB)	950 MHz*km / -

Notes: 1) 50 µm multimode fiber macrobend loss ≤ 0.2 dB at 850 nm for two turns around 7.5 mm radius mandrel.
2) Improved attenuation and bandwidth options available.
3) Bend-insensitive single-mode fibers available on request.
4) Contact a Corning Customer Care Representative for additional information.

Ordering Information

Part Number	012TAE-T4A31A20
Product Description	SOLO® ADSS Loose Tube, Gel-Filled, Dual-Jacket Cable, Span Code A, 12 F, 50 µm multimode (OM2)



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