

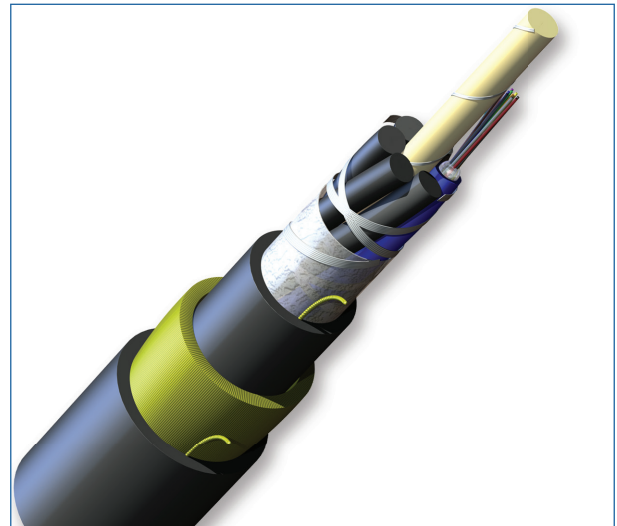
SOLO® ADSS Loose Tube, Gel-Filled, Dual-Jacket Cable

12 F, 50 μ m multimode (OM2)

CORNING

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-T4C31A20

Features and Benefits

Loose tube design

Stable performance and compatibility with all common fiber types

Self-supporting

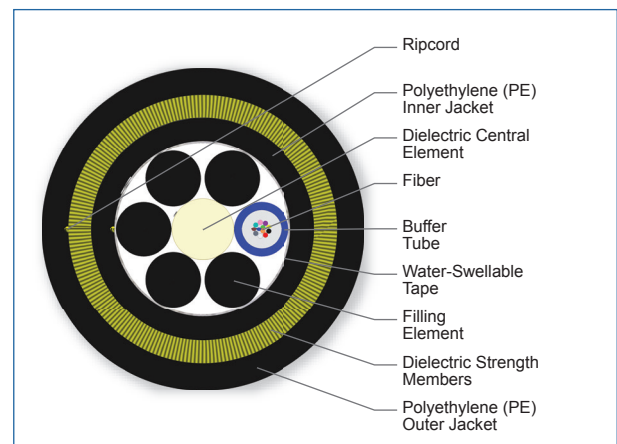
Easy, one-step installation

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-T4C31A20

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	207 kg/km (139 lb/1000 ft)
Nominal Outer Diameter	16.8 mm (0.66 in)
Min. Bend Radius Installation	252 mm (9.9 in)

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Mechanical Characteristics Cable

Min. Bend Radius Operation	168 mm (6.6 in)
Span Code	C

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)
274 (900)	1	6960 (1566)	1.3	9996 (2249)	2.7	11720 (2673)	3.6	16653 (3747)
305 (1000)	1	7733 (1740)	1.4	10960 (2466)	2.8	12800 (2880)	3.7	18089 (4070)
335 (1100)	1	8507 (1914)	1.4	11911 (2680)	2.8	13867 (3120)	3.8	19493 (4386)
366 (1200)	1	9280 (2088)	1.4	12853 (2892)	2.9	14916 (3356)	3.9	20871 (4696)
396 (1300)	1	10053 (2262)	1.4	13787 (3102)	2.9	15951 (3589)	-	
427 (1400)	1	10831 (2437)	1.4	14707 (3309)	2.9	16973 (3819)	-	
457 (1500)	1	11604 (2611)	1.4	15622 (3515)	3	17982 (4046)	-	
488 (1600)	1	12378 (2785)	1.4	16529 (3719)	3	18982 (4271)	-	
518 (1700)	1	13151 (2959)	1.5	17431 (3922)	3	19978 (4495)	-	
549 (1800)	1	13924 (3133)	1.5	18324 (4123)	3.1	20960 (4716)	-	
579 (1900)	1	14698 (3307)	1.5	19218 (4324)	-		-	
610 (2000)	1	15471 (3481)	1.5	20102 (4523)	-		-	
640 (2100)	1	16244 (3655)	1.5	21245 (4721)	-		-	

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

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)	
Maximum Attenuation	3.0 dB/km / 1.0 dB/km
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-T4C31A20
Product Description	SOLO® ADSS Loose Tube, Gel-Filled, Dual-Jacket Cable, Span Code C, 12 F, 50 µm multimode (OM2)



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