

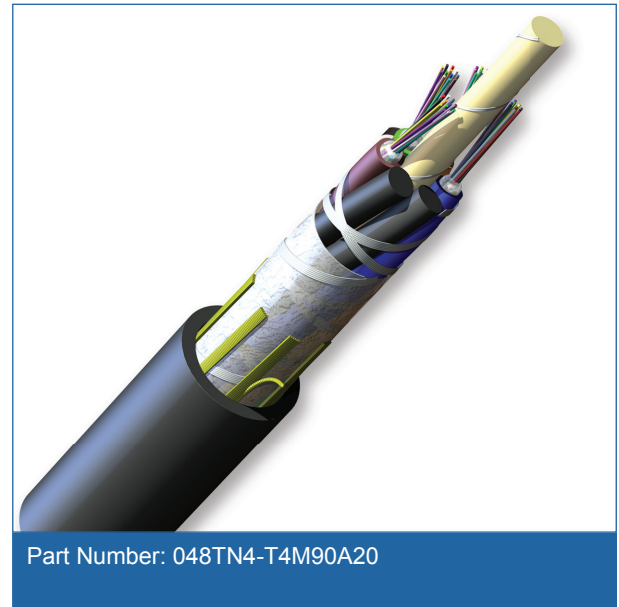
# SOLO® ADSS Medium-Span, Loose Tube, Gel-Filled Cable

48 F, 50 µm multimode (OM4)

CORNING

Corning SOLO® ADSS medium-span 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 economical single-jacket design can span distances of 800 ft in NESC light conditions, 650 ft in NESC medium conditions and 450 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: 048TN4-T4M90A20

## Features and Benefits

### Loose tube design

Stable performance and compatibility with all common fiber types

### Self-supporting

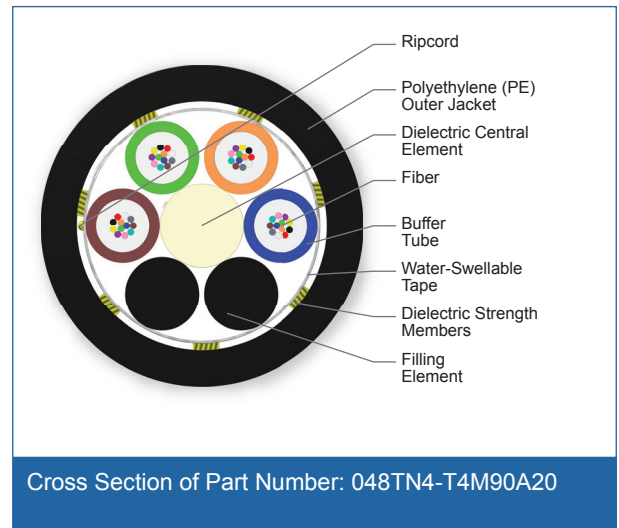
Easy, one-step installation

### 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: 048TN4-T4M90A20

## Standards

**Approvals and Listings** RDUP 7 CFR 1755.900 (formerly RUS)

**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 $\mu$ m MM (OM4)

### Temperature Range

Storage	-40 °C to 70 °C (-40 °F to 158 °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	48
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	4
Buffer Tube Color Coding	Blue, Orange, Green, Brown
Buffer Tube Diameter	2.5 mm (0.1 in)
Number of Filling Elements	2
Tape	Water-swellable
Tensile Strength Elements and/or Armoring - Layer 1	Dielectric strength members
Number of Ripcords	2
Outer Jacket Material	Polyethylene (PE)
Outer Jacket Color	Black

### Mechanical Characteristics Cable

Weight	97 kg/km (65 lb/1000 ft)
Nominal Outer Diameter	11.3 mm (0.45 in)
Min. Bend Radius Installation	170 mm (6.7 in)
Min. Bend Radius Operation	113 mm (4.5 in)

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## 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)
107 (350)	1.0	1283 (288)	0.6	2493 (560)	2.5	3337 (750)	3.7	4754 (1069)
122 (400)	1.0	1466 (330)	0.6	2777 (624)	2.6	3698 (831)	3.8	5248 (1180)
137 (450)	1.0	1649 (371)	0.6	3053 (686)	2.7	4048 (910)	3.9	5726 (1287)
152 (500)	1.0	1833 (412)	0.6	3324 (747)	2.7	4389 (987)	-	
168 (550)	1.0	2016 (453)	0.7	3590 (807)	2.8	4723 (1062)	-	
183 (600)	1.0	2199 (494)	0.7	3851 (866)	2.8	5050 (1135)	-	
198 (650)	1.0	2382 (536)	0.7	4108 (924)	2.9	5371 (1208)	-	
213 (700)	1.0	2566 (577)	0.7	4362 (981)	-		-	
229 (750)	1.0	2749 (618)	0.7	4613 (1037)	-		-	
244 (800)	1.0	2932 (659)	0.7	4861 (1093)	-		-	

## 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	OM4
Fiber Code	T
Performance Option Code	90
Wavelengths	850 nm / 1300 nm
Maximum Attenuation	3.0 dB/km / 1.0 dB/km
Serial 1 Gigabit Ethernet	1100 m / 600 m
Serial 10 Gigabit Ethernet	550 m / -
Min. Overfilled Launch (OFL) Bandwidth	3500 MHz*km / 500 MHz*km
Minimum Effective Modal Bandwidth (EMB)	4700 MHz*km / -

\* Assumes 1.0 dB maximum total connector/splice loss.

\* Meets 0.75 ns optical skew when used in all Corning Plug and Play™/EDGE™ systems solutions.

- 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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## Ordering Information

Part Number	048TN4-T4M90A20
Product Description	SOLO® ADSS Medium-Span, Loose Tube, Gel-Filled Cable, 48 F, 50 µm multimode (OM4)



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