

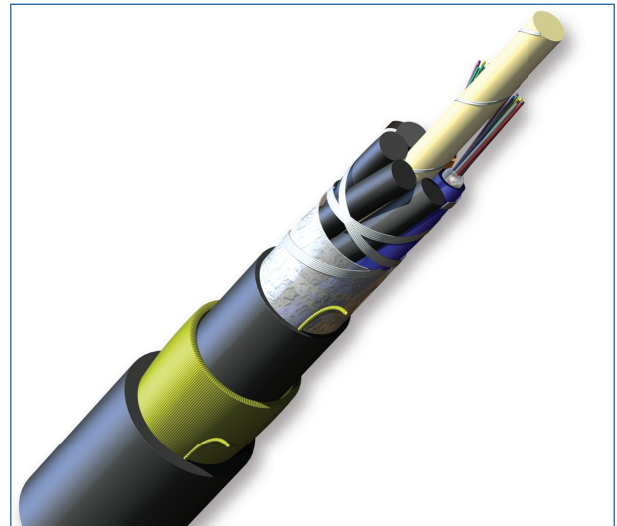
# SOLO® ADSS Loose Tube, Gel-Filled, Dual-Jacket Cable

24 F, Single-mode (OS2)

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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: 024EAE-T4501A20

## Features and Benefits

### Loose tube design

Stable performance and compatibility with all common fiber types

### Self-supporting

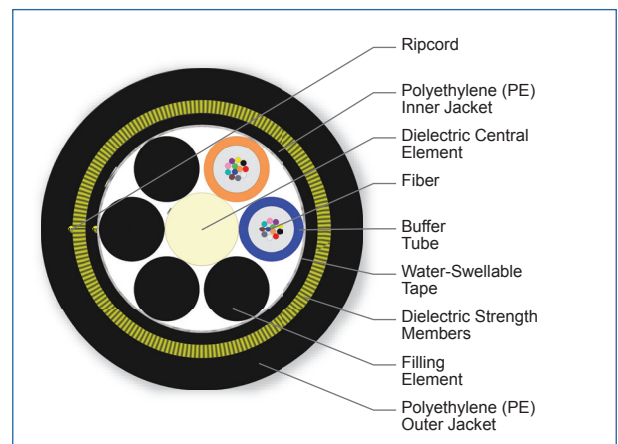
Easy, one-step installation

### 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: 024EAE-T4501A20

## 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 | Single-mode (OS2) |

### 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                                         | 24                                                                               |
| 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                              | 2                                                                                |
| Buffer Tube Color Coding                            | Blue, Orange                                                                     |
| Buffer Tube Diameter                                | 2.85 mm (0.11 in)                                                                |
| Number of Filling Elements                          | 4                                                                                |
| 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                        | 148 kg/km (99 lb/1000 ft) |
| Nominal Outer Diameter        | 14.0 mm (0.55 in)         |
| Min. Bend Radius Installation | 210 mm (8.3 in)           |

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## Mechanical Characteristics Cable

|                            |                 |
|----------------------------|-----------------|
| Min. Bend Radius Operation | 140 mm (5.5 in) |
| Span Code                  | 5               |

## Installation Conditions

| Span<br>m (ft) | Initial Installation |                    | NESC Light |                    | NESC Medium |                    | NESC Heavy |                    |
|----------------|----------------------|--------------------|------------|--------------------|-------------|--------------------|------------|--------------------|
|                | SAG<br>%             | Tension<br>N (lbf) | SAG<br>%   | Tension<br>N (lbf) | SAG<br>%    | Tension<br>N (lbf) | SAG<br>%   | Tension<br>N (lbf) |
| 122 (400)      | 1                    | 2182 (491)         | 1.4        | 3787 (852)         | 2.3         | 4676 (1052)        | 3.6        | 6889 (1550)        |
| 152 (500)      | 1                    | 2729 (614)         | 1.4        | 4569 (1028)        | 2.7         | 5605 (1261)        | 3.8        | 8164 (1837)        |
| 183 (600)      | 1                    | 3276 (737)         | 1.5        | 5324 (1198)        | 2.9         | 6492 (1461)        | 3.9        | 9382 (2111)        |
| 213 (700)      | 1                    | 3818 (859)         | 1.5        | 6062 (1364)        | 3           | 7342 (1652)        | 4.1        | 10551 (2374)       |
| 244 (800)      | 1                    | 4364 (982)         | 1.5        | 6782 (1526)        | 3.1         | 8173 (1839)        | -          |                    |
| 274 (900)      | 1                    | 4911 (1105)        | 1.5        | 7484 (1684)        | 3.2         | 8987 (2022)        | -          |                    |
| 305 (1000)     | 1                    | 5458 (1228)        | 1.6        | 8178 (1840)        | 3.2         | 9782 (2201)        | -          |                    |
| 335 (1100)     | 1                    | 6000 (1350)        | 1.6        | 8862 (1994)        | 3.3         | 10564 (2377)       | -          |                    |
| 366 (1200)     | 1                    | 6547 (1473)        | 1.6        | 9538 (2146)        | -           |                    | -          |                    |

## Chemical Characteristics

|      |                                                           |
|------|-----------------------------------------------------------|
| RoHS | Free of hazardous substances according to RoHS 2011/65/EU |
|------|-----------------------------------------------------------|

## Fiber Specifications

### Optical Characteristics (cabled)

|                         |                                   |
|-------------------------|-----------------------------------|
| Fiber Name              | Single-mode (OS2)                 |
| Fiber Category          | G.652.D                           |
| Fiber Code              | E                                 |
| Performance Option Code | 01                                |
| Wavelengths             | 1310 nm / 1383 nm / 1550 nm       |
| Maximum Attenuation     | 0.4 dB/km / 0.4 dB/km / 0.3 dB/km |

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## Ordering Information

|                     |                                                                                            |
|---------------------|--------------------------------------------------------------------------------------------|
| Part Number         | 024EAE-T4501A20                                                                            |
| Product Description | SOLO® ADSS Loose Tube, Gel-Filled, Dual-Jacket Cable, Span Code 5, 24 F, Single-mode (OS2) |
| EAN Code            | 4056418198552                                                                              |



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