

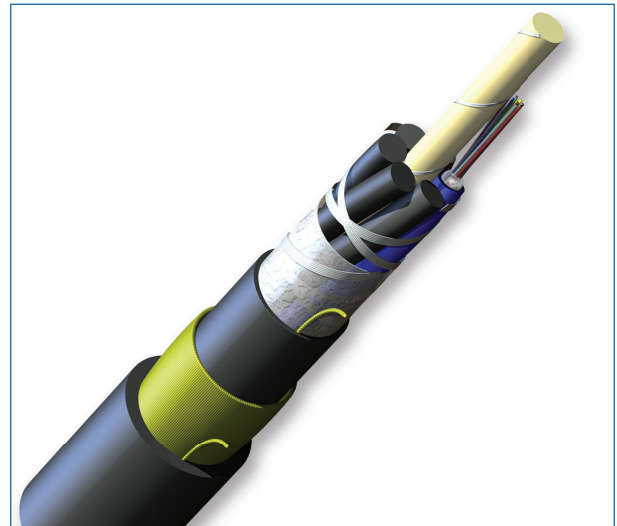
# SOLO® ADSS Loose Tube, Gel-Filled, Dual-Jacket Cable

12 F, Single-mode (OS2)

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: 012EAE-T4201A20

## Features and Benefits

### Loose tube design

Stable performance and compatibility with all common fiber types

### Self-supporting

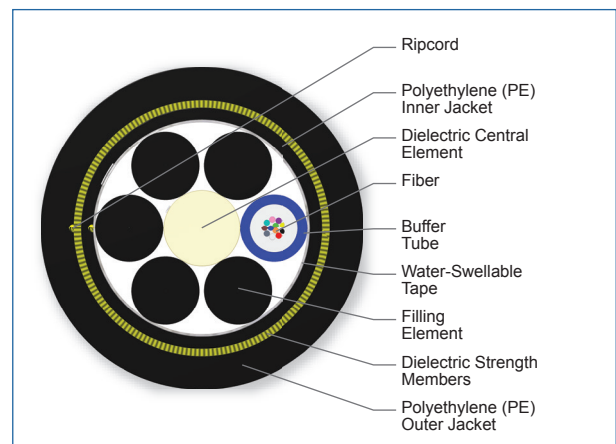
Easy, one-step installation

### 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: 012EAE-T4201A20

## 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                                         | 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                        | 138 kg/km (93 lb/1000 ft) |
| Nominal Outer Diameter        | 13.5 mm (0.53 in)         |
| Min. Bend Radius Installation | 203 mm (8.0 in)           |

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## Mechanical Characteristics Cable

|                            |                 |
|----------------------------|-----------------|
| Min. Bend Radius Operation | 135 mm (5.3 in) |
| Span Code                  | 2               |

## 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) |
| 30 (100)       | 1                    | 511 (115)          | 1.1        | 1098 (247)         | 2.2         | 1404 (316)         | 2.8        | 2151 (484)         |
| 61 (200)       | 1                    | 1022 (230)         | 1.3        | 1960 (441)         | 2.5         | 2458 (553)         | 3.3        | 3649 (821)         |
| 91 (300)       | 1                    | 1538 (346)         | 1.4        | 2742 (617)         | 2.7         | 3391 (763)         | 3.7        | 4951 (1114)        |
| 122 (400)      | 1                    | 2049 (461)         | 1.4        | 3478 (783)         | 2.9         | 4253 (957)         | 3.9        | 6152 (1384)        |
| 152 (500)      | 1                    | 2560 (576)         | 1.5        | 4178 (940)         | 3.1         | 5076 (1142)        | -          |                    |
| 183 (600)      | 1                    | 3071 (691)         | 1.6        | 4853 (1092)        | 3.2         | 5862 (1319)        | -          |                    |
| 213 (700)      | 1                    | 3582 (806)         | 1.6        | 5516 (1241)        | 3.3         | 6622 (1490)        | -          |                    |
| 244 (800)      | 1                    | 4093 (921)         | 1.6        | 6160 (1386)        | -           |                    | -          |                    |
| 274 (900)      | 1                    | 4611 (1037)        | 1.7        | 6796 (1529)        | -           |                    | -          |                    |

## 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         | 012EAE-T4201A20                                                                            |
| Product Description | SOLO® ADSS Loose Tube, Gel-Filled, Dual-Jacket Cable, Span Code 2, 12 F, Single-mode (OS2) |
| EAN Code            | 4056418198941                                                                              |



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