

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

24 F, 62.5 µm multimode (OM1)

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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.

## Features and Benefits

### Loose tube design

Stable performance and compatibility with all common fiber types

### Self-supporting

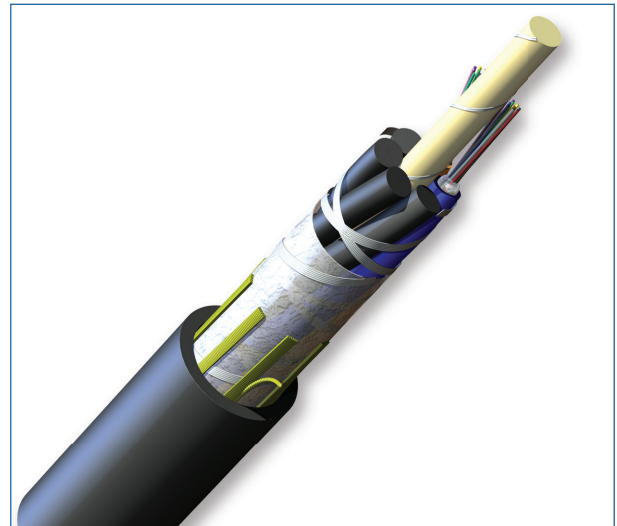
Easy, one-step installation

### Track-resistant jacket available

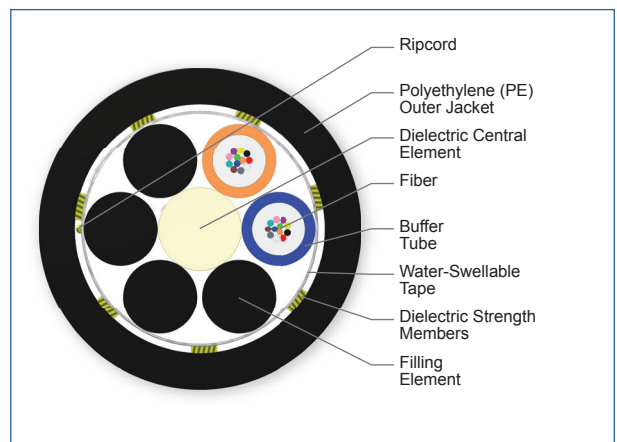
Suitable for installations up to 25 kV electric field potential

### Innovative waterblocking cable core

Provides efficient and craft-friendly cable preparation



Part Number: 024KN4-T4M30A20



Cross Section of Part Number: 024KN4-T4M30A20

## Standards

|                               |                                    |
|-------------------------------|------------------------------------|
| <b>Approvals and Listings</b> | RDUP 7 CFR 1755.900 (formerly RUS) |
|-------------------------------|------------------------------------|

|                             |                                |
|-----------------------------|--------------------------------|
| <b>Common Installations</b> | Outdoor self-supporting aerial |
|-----------------------------|--------------------------------|

|                                 |                    |
|---------------------------------|--------------------|
| <b>Design and Test Criteria</b> | 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         | 62.5 µm MM (OM1) |

| 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                                         | 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                                | 2.5 mm (0.1 in)                                                                  |
| Number of Filling Elements                          | 4                                                                                |
| Tape                                                | Water-swellaable                                                                 |
| 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<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) |
| 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 |
|------|-----------------------------------------------------------|

## Fiber Specifications

### Optical Characteristics (cabled)

|                                         |                         |
|-----------------------------------------|-------------------------|
| Fiber Core Diameter                     | 62.5 µm                 |
| Fiber Category                          | OM1                     |
| Fiber Code                              | K                       |
| Performance Option Code                 | 30                      |
| Wavelengths                             | 850 nm / 1300 nm        |
| Maximum Attenuation                     | 3.4 dB/km / 1.0 dB/km   |
| Serial 1 Gigabit Ethernet               | 300 m / 550 m           |
| Serial 10 Gigabit Ethernet              | 33 m / -                |
| Min. Overfilled Launch (OFL) Bandwidth  | 200 MHz*km / 500 MHz*km |
| Minimum Effective Modal Bandwidth (EMB) | 220 MHz*km / -          |

Notes: 1) Improved attenuation and bandwidth options available.  
2) Bend-insensitive single-mode fibers available on request.  
3) Contact a Corning Customer Care Representative for additional information.

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## Ordering Information

|                     |                                                                                     |
|---------------------|-------------------------------------------------------------------------------------|
| Part Number         | 024KN4-T4M30A20                                                                     |
| Product Description | SOLO® ADSS Medium-Span, Loose Tube, Gel-Filled Cable, 24 F, 62.5 µm multimode (OM1) |
| EAN Code            | 4056418187730                                                                       |



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