PowerGuide® TTH Cable

Single Jacket, All-Dielectric Self-Supporting, Aerial cable offers an ideal, cost-effective solution for fiber-to-the-home and short-span aerial applications

Product Overview

PowerGuide® TTH all-dielectric self-supporting loose tube fiber optic cable offers an excellent solution for short aerial spans up to 300 feet (91 meters)*. This cable's small diameter, low-cost installation, and special design make it an ideal, cost-effective cabling solution for duct, fiber-to-the-home (FTTH), and short-span, self-supporting aerial drop applications.

Applications

- Duct and duct-to-lashed aerial
- Fiber to the home (FTTH)
- Ideal for short aerial self-supporting spans up to 300 feet (91 meters)*

* Under NESC medium loading conditions; span lengths vary depending on sag and loading conditions.

Design

PowerGuide® TTH cable delivers outstanding long-term performance and reliability through our proven loose tube design and construction. With this design, 1 to 4 optical fibers are placed within color-coded, gel-filled buffer tubes to protect the fibers from mechanical and environmental forces - creating a stress-free operating environment within the cable's designed load and temperature rating. Next, the buffer tubes are stranded around a dielectric central member using the reverse oscillating lay (ROL) stranding method. Unlike other stranding techniques, ROL enables fast mid-span entry. DryBlock™ water-blocking material and dielectric strength elements are then applied to the cable core. Finally, a layer of durable medium-density polyethylene (MDPE) sheathing completes the cable construction.
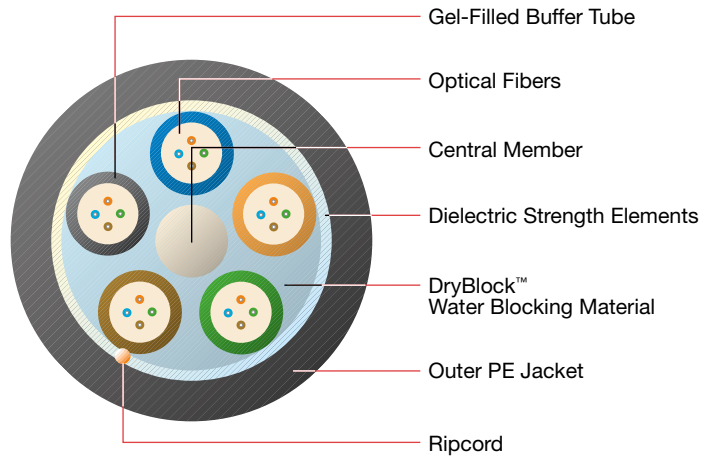
Features

- Fiber counts to 20
- Wide range of fiber types for the performance you need
- Small nominal cable diameter (9.1 mm)
- All-dielectric construction with a maximum of four fibers per buffer tube
- 600 lb. rated pulling tension for duct installations

Benefits

- Outstanding, cost-effective alternative for short aerial spans and fiber-to-the-home (FTTH) applications
- Lightweight and easy to handle and install for duct and aerial use
- Single medium-density polyethylene (MDPE) jacket for fast, convenient cable preparation
- ISO 9001 and ISO 14001 certified manufacturer; TL 9000 registered quality management system

- Minimum Bend Radius 15x cable outer diameter during installation; 10x cable outer diameter post installation

- Operating Temperature Range -40º F to 158º F (-40ºC to 70ºC)

- Cable diameter tolerance typically within 5% of nominal

Gel-Filled Buffer Tube
Optical Fibers
Central Member
Dielectric Strength Elements
DryBlock™ Water Blocking Material
Outer PE Jacket
Ripcord

Ordering Information

Select one character from each category to construct the product part number:

	Fiber			Sheath		Core		Fiber Count							
	S1	S2	SF	S3	S4	S5	S6					[C]	[M]	[C]	[A]
AT –							–								

002 to 020

S1 – Select Fiber Transmission Performance

  3 = 1310/1550 nm (AllWave®)

  6 = 1550 nm (TrueWave® RS Singlemode)

  R = 850/1300 nm (Multimode)

S2 – Select Maximum Fiber Attenuation

  B = 0.35/0.25 dB/km (1310/1550 nm AllWave)

  4 = 0.40/0.30 dB/km (1310/1550 nm AllWave)

  2 = 0.25 dB/km (TrueWave RS Singlemode)

  U = 3.4/1.0 dB/km and 200/500 MHz-km (850/1300 µm Multimode)

  G = 2.4/0.7 dB/km and 500/900 MHz-km (850/1300 nm 50µm Multimode)

SF – Select Fiber Type

  E = AllWave® Matched Clad Singlemode

  6 = TrueWave® RS Nonzero-Dispersion Singlemode

  9 = 62.5/125µm Multimode

  2 = 50/125 um Multimode

S3 – Select Sheath Construction

  1 = Dielectric Central Member (one MDPE jacket)

S4 – Select Tensile Load

  7 = PowerGuide®

S5 – Select Core Type

  S = DryBlock™

S5 – Select Fibers Per Tube

  2 = 2 fibers

  4 = 4 fibers

Example: AT-34E17S4-004-CMCA = 4 Fiber PowerGuide TTH Dielectric Central Member AllWave Singlemode Fiber

Please contact us for additional fiber and cable options.

Leading Optical Innovations

For additional information please contact your sales representative. You can also visit our website at http://www.ofsoptics.com or call 1-800-366-3483 or 1-888-fiberhelp.

www.ofsoptics.com