

# PlenumXcel™ Cable



Indoor Outdoor

Totally Dry, Dual-Purpose Cable Offers Enhanced Value and Durability for Outside Plant to Inside Optical Network Applications

## Product Description

The OFS PlenumXcel™ Indoor/Outdoor Loose Tube Plenum Cable is a completely dry cable that innovatively combines the flame resistance and safety features of a plenum-rated cable with the durability critical to outside plant use. The result is a unique, dual-purpose cable that saves time and money by allowing outside plant applications to flow seamlessly indoors, using a single plenum-rated cable and no splices.

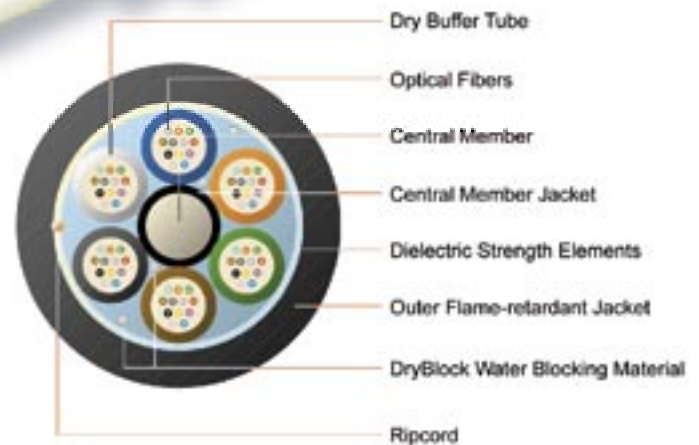
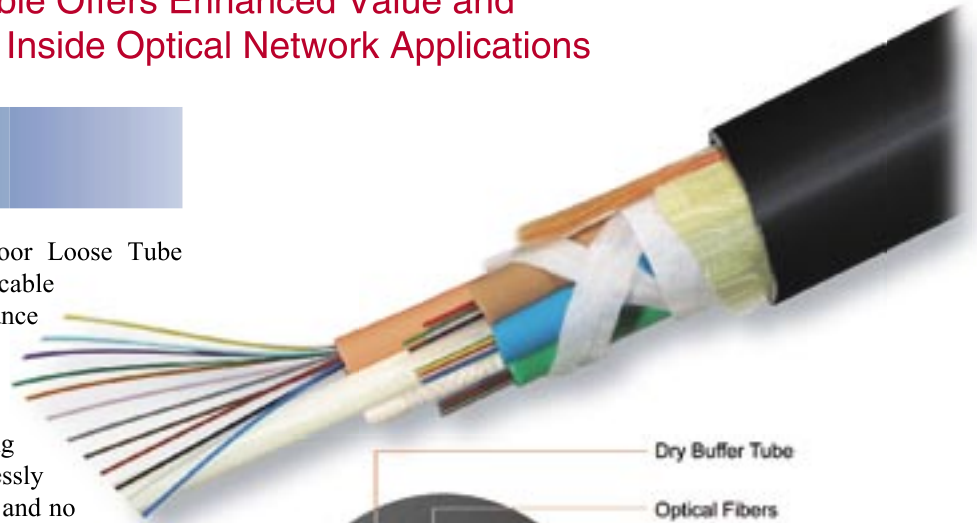
The construction of this cable begins by placing 12 optical fibers within each dry, color-coded buffer tube. The buffer tubes are then stranded around a dielectric central member using the reverse oscillating lay (ROL) technique. In the final step, DryBlock™ water-blocking material, dielectric strength elements, and a UV and flame-resistant jacket encase the core to complete the cable construction.

## Why the PlenumXcel Cable?

The PlenumXcel Indoor/Outdoor Cable is specifically designed for customers requiring a plenum-rated cable who also want to save on installation time and money by eliminating the use of multiple cables and splicing. With its totally dry design, this cable further streamlines cable handling and routing by eliminating messy gels and filling compounds, while delivering excellent water penetration resistance.

The PlenumXcel Cable also enhances system performance by avoiding the attenuation loss created by multiple splice points.

By compartmentalizing the optical fibers within buffer tubes, PlenumXcel Cable makes it easy to locate specific fibers for drop-off applications without disturbing other active fibers and tubes. ROL stranding of the buffer tubes enables easy mid-span access and cable entry.



PlenumXcel Indoor/Outdoor Cable Cross-Section

## Features and Benefits:

- Streamlined installation with direct outdoor-to-indoor cable transitions
- Totally dry cable design for faster and easier cable handling and routing
- Enhances system performance by avoiding additional splice point attenuation loss
- Suitable for installations including outside plant to building transitions, campus environments, Local Area Networks (LANs), private networks, and inter-building installations
- Fiber counts from 2 to 144 fibers
- All-dielectric, plenum-rated construction with OFNP approval [OFNP/CSA FT-6 per NEC 770-51(a) and 770-53(a)]
- Meets UL 1666 (plenum-rated) and CSA FT4 for flame resistance
- Features OFS application-specific fibers including AllWave® and TrueWave® fibers

## Specifications:

|                                    |  |
|------------------------------------|--|
| Fiber Count:                       | Fiber counts from 2 to 144   |
| Cable Outside Diameter (mm):       | .313 in.(7.9 mm) to .482 in. (12.2 mm)   |
| Cable Weight kg/km (lb/kft):       | 68.5 kg/km (46 lb/kft) to 146 kg/km (98.1mm)   |
| Bend Radius:                       | 10 x cable diameter under static load (installed)<br>20 x cable diameter under dynamic load (during installation)                |
| Compressive Load – N/cm (lbf/in.): | 263N/cm (150 lb/in.)   |
| Maximum Rated Tension:             | 1350N (300 lb)   |
| Temperature (all fiber counts):    | Installation: 0°C to 60°C (-22°F to 140°F)<br>Operation: -20°C to 70°C (-4°F to 158°F)<br>Storage: -20°C to 75°C (-4°F to 167°F) |

## Test and Methods:

| Cable Test          | Test Method                     | Requirement:           | ICEA S-104-696 |
|---------------------|---------------------------------|------------------------|----------------|
| Tensile Performance | EIA/TIA-455-33<br>IEC 794-1-E1  | Parameter Single-Mode: | 0.4 dB max     |
| Crush Performance   | EIA/TIA-455-41<br>IEC 794-1-E3  | Parameter Multimode:   | 0.6 dB max     |
| Bending Performance | EIA/TIA-455-37<br>IEC 794-1-E11 |                        |                |
| Temperature Cycle   | EIA/TIA-455-3<br>IEC 794-1-E1   |                        |                |

## Ordering Information:

| Position   | Description                     | Options                            |
|--|---------------------------------|------------------------------------|
| S1   | Fiber Transmission Performance  | 3 AllWave Single-mode 1310/1550nm  |
|  |                                 | 6 TrueWave RS Single-mode 1550nm   |
|  |                                 | R Multimode 850/1300nm             |
| S2   | Fiber Attenuation Specification | <b>Single-Mode Options</b>         |
|  |                                 | 4 0.40/0.30 dB/km (AllWave)        |
|  |                                 | B 0.35/0.25 dB/km (AllWave)        |
|  |                                 | 2 0.25 dB/km (TrueWave)            |
|  |                                 | <b>Multimode Options</b>           |
|  |                                 | U 3.4/1.0 dB/km & 200/500 MHz-km   |
| G 2.4/0.7 dB/km and 500/900 MHz-km   |                                 |                                    |
| SF   | Fiber Type                      | E AllWave Single-mode              |
|  |                                 | 6 TrueWave RS Single-mode          |
|  |                                 | 9 62.5/125 µm Multimode            |
|  |                                 | 2 50/125 µm Multimode              |
| S3   | Central Member                  | 1 Dielectric Central Member        |
| S4   | Tensile Load                    | 3 300 lb. (1350N)                  |
| S5   | Core Type                       | P Indoor/Outdoor Plenum Loose Tube |
| S6   | Fibers Per Tube                 | T 12 fibers                        |
| Example: AT-3BE13PT-024 = 24 Fiber Indoor/Outdoor Plenum Dielectric Central Member AllWave Fiber |                                 |                                    |

For additional information please contact your sales representative. You can also visit our website at <http://www.ofsoptics.com> or call 1-888-fiberhelp. For regional assistance, contact:

|   |  |
|---|--|
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