# 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 Plenum*Xcel*<sup>™</sup> 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<sup>TM</sup> water-blocking material, dielectric strength elements, and a UV and flame-resistant jacket encase the core to complete the cable construction.

# Dry Buffer Tube Optical Fibers Central Member Central Member Jacket Dielectric Strength Elements Outer Flame-retardant Jacket DryBlock Water Blocking Material

Plenum Xcel Indoor/Outdoor Cable Cross-Section

### Why the Plenum Xcel Cable?

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

By compartmentalizing the optical fibers within buffer tubes, Plenum*Xcel* 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.

### 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) 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) Operation: -20°C to 70°C (-4°F to 158°F) Storage: -20°C to 75°C (-4°F to 167°F)	

### Test and Methods:

Cable Test	Test Method
Tensile Performance	EIA/TIA-455-33 IEC 794-1-E1
Crush Performance	EIA/TIA-455-41 IEC 794-1-E3
Bending Performance	EIA/TIA-455-37 IEC 794-1-E11
Temperature Cycle	EIA/TIA-455-3 IEC 794-1-E1

Requirement: ICEA S-104-696
Parameter Single-Mode: 0.4 dB max
Parameter Multimode: 0.6 dB max

### 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			Single-Mode Options
		4	0.40/0.30 dB/km (AllWave)
		В	0.35/0.25 dB/km (AllWave)
	Fiber Attenuation	2	0.25 dB/km (TrueWave)
	Specification		`
			Multimode Options
		U	3.4/1.0 dB/km & 200/500 MHz-km
		G	2.4/0.7 dB/km and 500/900 MHz-km
	Fiber Type	Е	AllWave Single-mode
CE.		6	TrueWave RS Single-mode
SF		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 <a href="http://www.ofsoptics.com">http://www.ofsoptics.com</a> or call 1-888-fiberhelp. For regional assistance, contact:

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