

# MiDia® FX PLUS Cable

## Loose Tube

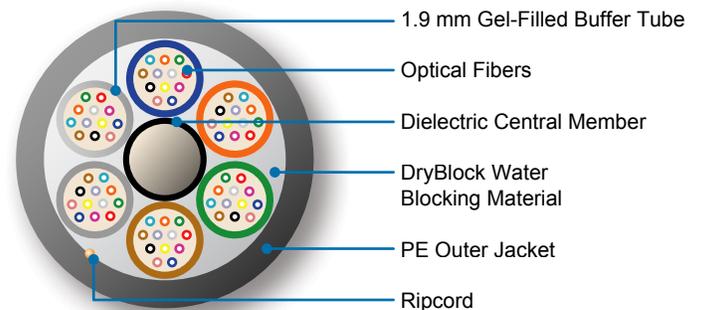
### Maximizing the Capacity and Cost-Effectiveness of Metropolitan Fiber Access

#### Product Description

The OFS MiDia® FX PLUS Cable is a reduced diameter cable that can help dramatically lower the cost of fiber optic deployment while maximizing capacity in congested metropolitan networks. Specifically designed for air-blown installation using microduct systems, MiDia FX PLUS Cable is size-optimized for fiber counts up to 144.

To construct this all-dielectric cable, the optical fibers are placed in space-efficient, gel-filled buffer tubes that protect the fibers. The color-coded tubes are then stranded around a dielectric central member using the reverse oscillating lay (ROL) stranding technique for easy, mid-span fiber access. DryBlock® water-blocking material is then applied for exceptional water penetration resistance and faster cable preparation. A ripcord and a highly durable polyethylene (PE) jacket complete the cable construction.

MiDia® FX PLUS Cable



#### Why the MiDia FX PLUS Cable?

The MiDia FX PLUS Cable's small outer diameter and high fiber density help maximize capacity in heavily congested duct systems where space is at a premium (as in city networks).

The lightweight, flexible design of MiDia FX PLUS Cable can also save time and money with fast and easy air-blown installation. By using the air-blown method with inexpensive microduct networks, this cable further helps save on build costs by eliminating the need for expensive and disruptive excavation along with procuring costly rights-of-way.

MiDia FX PLUS Cable also helps service providers to reduce their initial network build investment by deploying fiber only as needed to meet demand. This capability can help providers in the future to consistently maintain the highest performance fibers in their networks, while avoiding the cost of procuring additional rights-of-way and constructing new ducts.

#### Features and Benefits

- Optimized for air-blown, microduct installations, including networks in heavily congested metropolitan areas
- Lower deployment costs with fast and easy installation
- Reduced diameter and high fiber density ratio maximize capacity in limited spaces
- Deferred build costs with fiber deployed only as needed
- DryBlock design for quicker, cleaner cable preparation for jointing
- Meets Telcordia Technologies GR-20 standards for environmental and mechanical performance
- 300 pound/1335 N Maximum Rated Cable Load (MRCL)
- Available with OFS application-specific fibers, including AllWave® Zero Water Peak (ZWP) Single-Mode Fiber, TrueWave® RS Low Water Peak (LWP) Single-Mode Fiber and Multimode Fibers

## Specifications

Fiber Count:	2-72	74-96	98-144
Cable Outer Diameter in. (mm):	0.29 (7.3)	0.34 (8.7)	0.45 (11.3)
Cable Weight lb/kft (kgm/km):	30.2 (45)	45 (67)	73.8 (110)

## Performance Standard

Tested per Applicable Requirements of ANSI/ICEA S-87-640, TIA/EIA 455 (IEC 60794) and Telcordia GR-20-CORE Issue 2

## Handling

Minimum Bend Radius, With Load:	20 x OD*
Minimum Bend Radius, With No Load:	10 x OD
Minimum Bend Radius, Storage Coils:	10 x OD
Maximum Rated Cable Load (MRCL):	300 lbf (1335 N)
Maximum Long Term Load	90 lbf (400N)
Temperature	Installation: -15°C to 60°C (5°F to 140°F) Operation: -40°C to 70°C (-40°F to 158°F) Storage: -40°C to 70°C (-40°F to 158°F)

\* OD = Outer Diameter of Cable

**Note:** Due to the small cable diameters involved, OFS does not recommend that the buffer tubes for MiDia FX PLUS Cable be express routed at access points.

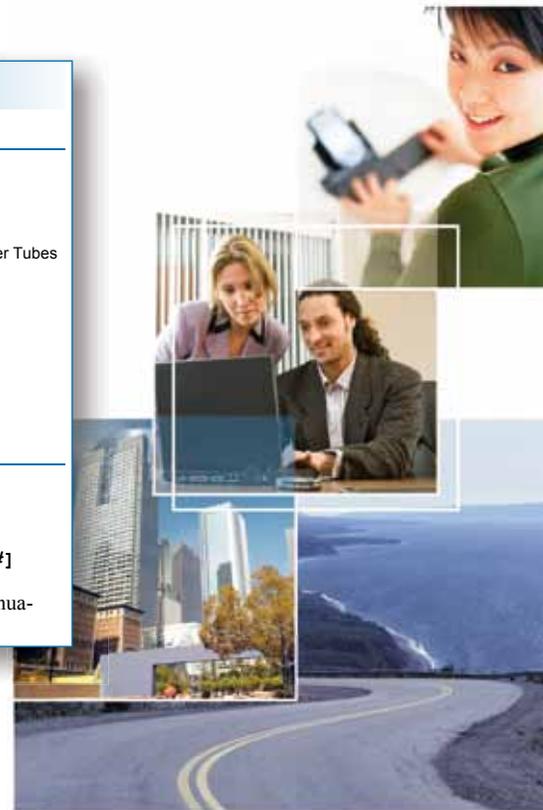
## MiDia FX PLUS Cable Ordering Information

**Example: AT-3BE43ST-NNN<sup>1</sup>**

	Fiber <sup>2</sup>	Sheath	Core	Fiber Count
Part Number:	AT-	<u>S1</u> <u>S2</u> <u>SF</u>	<u>S3</u> <u>S4</u>	<u>S5</u> <u>S6</u> - <u>NNN</u>
<b>S1 = Fiber Selection</b>	3 = 1310/1550 nm (AllWave® ZWP Fiber) 6 = 1550 nm (TrueWave® RS LWP Fiber) R = 850/1300 nm (Multimode)	<b>SF = Fiber Type</b> E = AllWave ZWP 6 = TrueWave RS LWP 9 = 62.5/125 µm Multimode 2 = 50/125 µm Multimode	<b>S5 = Core Type</b> S = 1.9 mm Gel-Filled Buffer Tubes	
<b>S2 = Fiber Transmission Performance</b>	B = 0.35/0.31/0.27/0.25/0.27 dB/km @ 1310/1385/1490/1550/1625 nm (AllWave ZWP) 2 = 0.25 dB/km @ 1550 nm (TrueWave RS LWP) U = 3.4/1.0 dB/km and 200/500 MHz-km @ 850/1300 nm (62.5 µm Multimode) K = 2.5/0.7 dB/km and 500/500 MHz-km @ 850/1300 nm (50 µm Multimode)	<b>S3 = Sheath Construction</b> 4 = MiDia FX PLUS	<b>S6 = Fibers Per Tube</b> T = 12 fibers	<b>NNN = Fiber Count</b> = 002 to 144
	<b>S4 = Tensile Load</b> 3 = 300 lb (1335 N)			

<sup>1</sup> Part Number shown is for standard AllWave ZWP attenuation and standard cable print:  
Maximum AllWave ZWP attenuation: 0.35/0.31/0.27/0.25/0.27 dB/km (1310/1385/1490/1550/1625 nm)  
Standard Print, example (MiDia FX PLUS Cable):  
**OFS OPTICAL CABLE AT-3BE43ST-NNN [MM-YY] [HANDSET SYMBOL] [NNN] F [SERIAL #]**

<sup>2</sup> Contact OFS Order Management for information on other cable variations, including additional fiber types, attenuation, and custom cable print.



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For additional information please contact your sales representative. You can also visit our website at [www.ofsoptics.com](http://www.ofsoptics.com) or call 1-888-fiberhelp (1-888-342-3743) from inside the USA or 1-770-798-5555 from outside the USA.

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