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.

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 airblown installation. By using the airblown 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.

MiDia[®] FX PLUS Cable





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-NNN¹ Fiber² Sheath Core Fiber Count Part Number: AT- <u>S1 S2 SF S3 S4</u> S5 S6 - NNN SF = Fiber Type E = AllWave ZWP S5 = Core Type S = 1.9 mm Gel-Filled Buffer Tubes S1 = Fiber Selection 3 = 1310/1550 nm (AllWave® ZWP Fiber) 6 = 1550 nm (TrueWave® RS LWP Fiber) 6 = TrueWave RS LWP R = 850/1300 nm (Multimode) 9 = 62.5/125 um Multimode S6 = Fibers Per Tube 2 = 50/125 µm Multimode T = 12 fibers S2 = Fiber Transmission Performance B = 0.35/0.31/0.27/0.25/0.27 dB/km @ 1310/1385/1490/1550/1625 nm (AllWave ZWP) NNN = Fiber Count = 002 to 144 S3 = Sheath Construction 4 = MiDia FX PLUS 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) S4 = Tensile Load 3 = 300 lb (1335 N) κ = 2.5/0.7 dB/km and 500/500 MHz-km @ 850/1300 nm (50 μm Multimode) 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 #] 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 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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