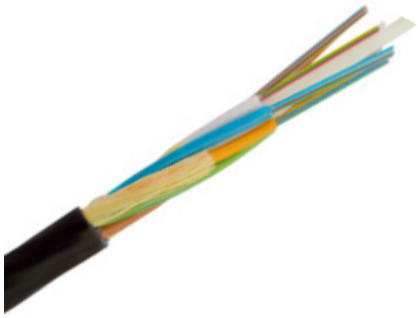


MiDia Micro FX Cable

MiDia® Micro FX Loose Tube Cable

Maximizing the Capacity and Cost-Effectiveness of Metropolitan Fiber Access

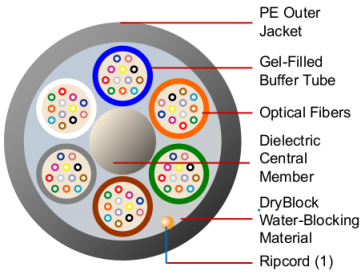
BEAD COMPLIANT AVAILABLE

Features

- Optimized for air-blown, microduct installation
- Reduced outer diameter and high fiber density
- Complies with Telcordia GR-20 standards (as a special applications cable)
- Passes ICEA-640 Section 7.34, Mid-Span Buffer Tube Storage Test
- Fiber counts of 2-144

Benefits

- Fast and easy installation helps to lower deployment costs
- Maximizes capacity in limited spaces
- Eliminates need for excavation and procuring rights-of-way
- Deferred build costs - deploy fiber only as needed
- Capable of buffer tube storage in above-ground pedestals underground closures



MiDia Micro FX Cable
72-Fiber Cross-section

Product Description

The reduced diameter MiDia Micro FX Cable can help to dramatically lower the cost of fiber optic deployment while maximizing capacity in congested networks. Specifically designed for air-blown installation using microduct systems, the MiDia Micro FX Cable is size-optimized for fiber counts up to 144. While the rifled outer jacket and optimized buffer tubes support long, continuous blowing distances, this cable also offers crush resistance that is similar to larger, heavier outside plant cables (200 N/cm). DryBlock® water-blocking material provides exceptional water penetration resistance and faster cable preparation.

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Why the Midia Micro FX Cable?	The MiDia Micro FX Cable's small outer diameter and high fiber density help to maximize capacity in heavily congested duct systems where space is at a premium (such as city networks). The lightweight, flexible cable design can also help to save time and money with fast and easy air-blown installation using microducts, saving time and money by eliminating the need for expensive, disruptive excavation along with procuring costly rights-of-way. The MiDia Micro FX Cable also helps service providers to reduce their initial network building 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 constructing new ducts.

Specifications

Fiber Count	**2-72**	**73-96**	**97-144**
Recommended Duct Size mm	12/10 (12.7/10)	12/10 (16/12)	16/13 (18/14)
Cable Outer Diameter in. (mm)	0.25 (6.4)	0.30 (7.5)	0.38 (9.7)
Cable Weight lb/kft (kgm/km)	22 (33)	34 (50)	55 (82)
Note	* First listed duct size is for duct installations only. Second listed duct size is for direct buried use.		

Performance Standard

Performance Standard	Tested per Applicable Requirements of ANSI/ICEA S-87-640, TIA/EIA-455 (IEC 60794) and Telcordia GR-20-CORE Issue 4
Note	The MiDia Micro FX Cable is not recommended for aerial applications.

Handling

Fiber Count	**2-72**	**73-96**	**97-144**
Static Condition in. (mm)	6 (150)	12 (300)	13 (320)
Dynamic Condition in. (mm)	12 (300)	24 (600)	26 (640)
Storage Coils in. (mm)	18 (460)		
Tensile Rating lb (N)	300 (1335)		

Temperature

Installation	-5 °F to 140 °F (-15 °C to 60 °C)
Operation	-40 °F to 158 °F (-40 °C to 70 °C)
Storage	-40 °F to 158 °F (-40 °C to 70 °C)

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Fiber Type[2]							
Single-Mode							
Single-Mode Fiber	**Fiber (S1)**	**Fiber (S2)**	**Fiber (SF)**	**Fiber Standards**	**Wavelengths (nm)**	**Typical* Attenuation (dB/km)**	**Maximum Cable on Reel Attenuation (dB/km)**
AllWave ZWP Fiber	3	B	E	G.652.D	1310/1385/1550	-	0.35/0.31/0.25
AllWave+ ZWP Fiber	3	C	E	G.652.D/G.657.A1	1310/1385/1550	-	0.35/0.31/0.25
AllWave FLEX ZWP Fiber	5	B	E	G.652.D/G.657.A1	1310/1385/1550	-	0.35/0.31/0.25
AllWave One Fiber	3	F	E	G.652.D/G.657.A1	1310/1385/1550	0.33/0.31/0.19	0.34/0.31/0.22
AllWave ULL Fiber	3	H	E	G.652.D/G.657.B	1310/1550	0.31/0.17	0.33/0.19
Multimode							
Multimode Fiber	**Fiber (S1)**	**Fiber (S2)**	**Fiber (SF)**	**Fiber Standards**	**Wavelengths (nm)**	**Typical* Attenuation (dB/km)**	**Maximum Cable on Reel Attenuation (dB/km)**
62.5 µm Fiber	R	U	9	OM1 62.5 µm	850/1300	-	3.4/1.0
LaserWave FLEX 300 Fiber	L	F	2	OM3 50 µm	850/1300	-	2.4/0.7
LaserWave FLEX 550 Fiber	L	H	2	OM4 50 µm	850/1300		2.4/0.7

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MiDia Micro FX Loose Tube Cable Ordering Information	
Example	**AT-3BE43CT-NNN[1]**
Part Number	**AT-S1 S2 SF S3 S4 S5 S6 - NNN**
S1	Fiber Selection. See S1 in Fiber Type table above
S2	Fiber Transmission Performance. See S2 in Fiber Type table above
SF	Fiber Type[2]. See SF in Fiber Type table above
S3	Sheath Construction. 4 = MiDia Micro FX Loose Tube Cable
S4	Tensile Load. 3 = 300 lb. (1335 N)
S5	Core Type. C = 1.7 mm Gel-Filled Buffer Tubes
S6	Fibers per Tube. T = 12 fibers per tube
NNN	Fiber Count = 002 – 144
Note	[1] Part Number shown is for a MiDia Micro FX Cable with standard AllWave FLEX ZWP attenuation and standard cable print. Maximum AllWave FLEX ZWP attenuation: 0.35/0.31/0.27/0.25/0.27 dB/km @ 1310/1385/1490/1550/1625 nm. Standard Print, example for MiDia Micro FX Cable: LIGHTERA OPTICAL CABLE AT-3BE43CT-NNN [MM-YY] (UL) US TYPE OFNR [HANDSET SYMBOL] [NNN] F [SERIAL #] [2] Contact Lightera Order Management for information on other cable variations, including additional fiber types, attenuation, and custom cable print. For more information regarding typical attenuation as well as attenuation parameters on Link Design Value (LDV) (Maximum end-to-end attenuation over a concatenated span), please see Lightera Application Note AN-111 which can be downloaded at www.lightera.com or contact your Lightera representative.

Contact Information	For additional information please contact your sales representative. You can also visit our website at www.lightera.com or call 1-888-FIBERHELP (1-888-342-3743) USA or 1-770-798-5555 outside the USA. For a full list of our certifications, visit our website.
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