

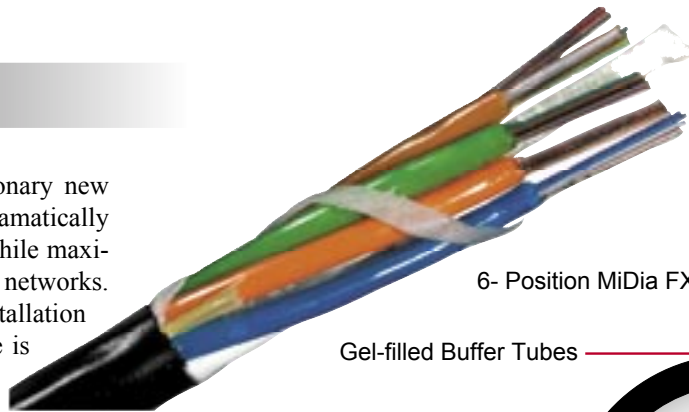
MiDia™ FX Cable

Maximizing the Capacity and Cost-effectiveness of Metropolitan Fiber Access

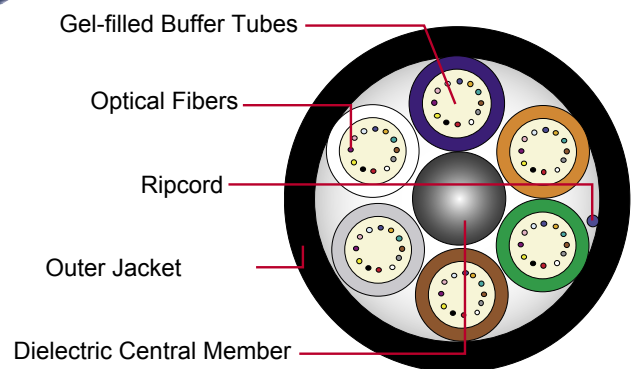
Product Description

The MiDia™ FX cable is a revolutionary new reduced diameter cable that can 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 cable is size-optimized for a maximum of 60 fibers (5-position design) and 72 fibers (6-position design).

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. Dry Core material is then applied for exceptional water-blocking performance and quicker cable preparation. A ripcord and a durable jacket complete the cable construction.



6- Position MiDia FX Cable Design



Why the MiDia FX Cable?

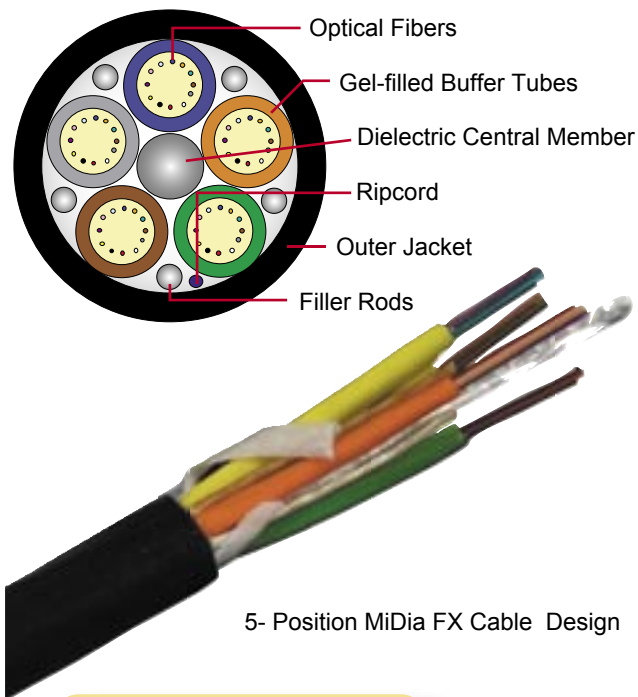
The MiDia FX cable's small outer diameter and high fiber density ratio maximize capacity in heavily congested duct systems where space is at a premium (as in existing city networks).

MiDia FX cable also allows service providers to reduce their initial network build costs with air-blown cable installation using inexpensive duct networks. This method further helps save on build costs by eliminating the need for expensive and disruptive excavation along with procuring costly rights-of-way.

Using MiDia FX cable, providers can also defer and better control build costs by deploying fiber only as needed to meet network demand. This capability helps providers in the future to consistently maintain the highest performance fibers in their networks, while avoiding the costs 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
- Stranded loose tube construction for easy, mid-span access and no preferential bending
- Dry Core Design – Cable core water blocked for quicker, cleaner cable preparation for jointing
- Tested in accordance with IEC 60794-1-2 and EN187000 for reliable performance
- Features OFS application-specific fibers, including AllWave® and TrueWave® fibers



5- Position MiDia FX Cable Design

Technical Specifications

Specifications	5-Position Design	6 Position Design
Fiber Count:	2-60	2-72
Outside Diameter:	6.2 mm (.25 in)	6.6 mm (.27 in)
Cable Weight:	35 kg/km (77 lb/kft)	45 kg/km (99 lb/kft)
Handling		
Minimum Bend Diameter: (with load)	220 mm (8.7 in)	300 mm (11.8 in)
Minimum Bend Diameter: (no load)	140 mm (5.5 in)	150 mm (6 in)
Maximum Operational Load:	200 N (45lbf)	175 N (40lbf)
Temperature		
Installation:	-15°C to 40°C (5°F to 104°F)	-15°C to 40°C (5°F to 104°F)
Operation:	-40°C to 70°C (-40°F to 158°F)	-30°C to 70°C (-22°F to 158°F)
Storage:	-40°C to 70°C (-40°F to 158°F)	-40°C to 70°C (-40°F to 158°F)

Test and Methods

Cable Test Method	Test Level	Requirement
Tensile Performance: EN 187105-5.5.4 IEC 60794-1-2-E1A and E2A	Short Term (installation) -Load of 2xW (5-position) or Load of 2xW (6-position)	No changes in attenuation* before versus after load. Max. fibre strain 0.33%
	Long Term (operating)- Load of 200N (5-position) or Load of 175N (6-position)	No attenuation increase. No fiber strain.
Crush Performance: EN 187105-5.5.3 IEC 60794-1-2-E3	Short Term (installation) Load of 100N/cm (5-position) or Load of 100N/cm (6-position)	No changes in attenuation* before versus after load. No Damage**
	Long Term (operating) Load of 30N/cm (5-position) or Load of 30N/cm (6-position)	No attenuation increase
Bending Performance: EN 187105-5.5.1 IEC 60794-1-2-E11	Short Term (installation) Bend diameter of 220mm (5-position) or Bend diameter of 300mm (6-position)	No changes in attenuation* before versus after load
	Long Term (Handling fixed installed) Bend diameter of 140mm (5-position) or Bend diameter of 150mm (6-position)	No attenuation increase
Temperature Cycling: EN 187105-5.6.1 IEC 60794-1-2-F1	Temperature extremes: -40 to +70°C (5-position) or -30 to +70°C (6-position)	No attenuation increase (see applicable temperatures in chart Tech. Spec.)

For additional information please contact your sales representative. You can also visit our website at <http://www.ofsoptics.com> or contact us directly at:

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Notes:

* No changes in attenuation means that any changes in measurement value, either positive or negative, within the uncertainty of measurement shall be ignored. The total uncertainty of measurement shall be less than or equal to 0.05 dB.
** Mechanical damage – when examined visually without magnification, there shall be no evidence of damage to the sheath. The imprint of plates will not be considered as damage.

Ordering Information

Cable Codes	Attenuation	
Single-mode AllWave Fiber	AT-3BE46CT-060 AT-3BE46CT-072	0.35/0.25dB/km @ 1310/1550 nm
Single-mode TrueWave Fiber	AT-62646-CT-060 AT-62646-CT-072	.25 dB/km @ 1550 nm