

MiDia® Microduct Cables

Increasing the Capacity and Cost-Effectiveness of Metropolitan Fiber Access



Features and Benefits

- Reduced diameter, lightweight cable for easier handling and faster deployment
- Optimised for air-blown installation using micro-duct systems
- Allows deployment of fiber only as needed
- Increased fiber density ratio
- Excellent solutions for new and existing duct systems
- Fiber Counts
 - MiDia Micro EX: 144-576
 - MiDia Micro FX: 12-144
 - MiDia Micro GX: 12-288

- Dry, "water-swellable"
 waterblocking technology for
 excellent water penetration
 resistance
- Tested to IEC 60794-1-2 and 60794-5 for reliable performance Available with OFS leading-edge optical fibers
- Eliminates the need for excavation and procuring costly rights-of-way
- Helps to increase capacity in limited spaces
- Helps to defer initial build costs



Outdoor Microduct optical fiber cable installation by blowing

Product Description

To implement or upgrade a modern metropolitan optical network, especially through urban areas, service providers can face challenges such as space limitations to excavation disruption to upgradability. To help make these intricate networks simpler and less costly, OFS developed the MiDia Microcable product line.

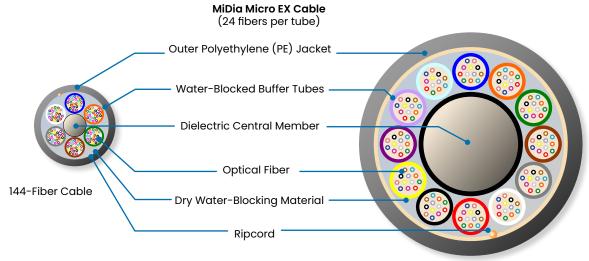
An ideal solution for congested metro networks, the MiDia Microcables can help dramatically lower the cost of fiber optic deployment while increasing and enhancing capacity and fiber density in limited spaces. Whether your application involves overriding cables installed in existing ducts, deployment into unused inner ducts or greenfield "grow-as-you go" deployments, the MiDia Microcables are an excellent solution.

By reducing or eliminating the need for expensive and disruptive excavation along with procuring costly rights-of-way, the MiDia Microcables offer a more cost-effective solution that requires fewer deployment resources. With the ability to deploy fiber only as needed, these microcables can help to defer initial investment costs while also allowing the flexibility to add newer fiber types or technologies as they become available. Finally, the MiDia Microcables offer the exceptional performance and reliability you've come to expect from OFS.



MiDia Micro EX, FX and GX Cables

To construct these microduct, the optical fibers are placed in space-efficient, water-blocked buffer tubes to protect the fibers from external forces. The optical fibers and buffer tubes are both color-coded for ready identification. The buffer tubes are then stranded around a dielectric central member using the reverse oscillating lay (ROL) stranding technique that allows fast and easy, mid-span fiber access. Dry, "water-swellable" waterblocking material is then applied to the cable core to provide exceptional water penetration resistance and faster cable preparation. In the final step, a ripcord and a durable polyethylene (PE) jacket are added to complete the cable construction.

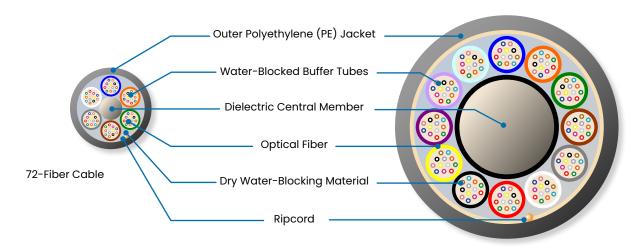


288-Fiber Cable

Cable Specifications - MiDia Micro EX Cable				
Fiber Count	144	192	288	576
Outer Diameter (mm)	6.8	7.9	10.5	12.4
Cable Weight (kg/km)	50	60	95	120
Tensile Performance (Short Term)	980 N	1175 N	1860 N	2350 N
Crush Performance (Short Term)	700 N	700 N	800 N	800 N
Bending Performance (Radius)				
Installed	135 mm	160 mm	210 mm	250 mm
During Installation	270 mm	320 mm	420 mm	500 mm
Temperature				
Operation:	-40° C to +70° C	-40° C to +70° C	-40° C to +70° C	-30° C to +70° C
Installation:	-15° C to +40° C			
Storage/Shipping:	-40° C to +70° C			
Recommended minimum duct I.D.	10 mm	10 mm	14 mm	16 mm

Standard Microcable Lengths - MiDia Micro EX Cable						
Length	2000 Meters	4000 Meters	6000 Meters	8000 Meters		
144 Fibers	✓	✓	✓	✓		
192 Fibers	✓	✓	✓	✓		
288 Fibers	✓	✓	✓	✓		
576 Fibers	✓	✓	✓	✓		

MiDia Micro FX Cable (12 Fibers per tube)



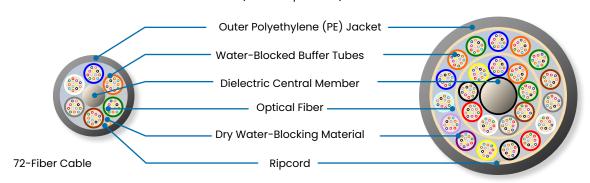
144-Fiber Cable

Cable Specifications - MiDia Micro FX Cable					
Fiber Count	12-72	96	144		
Outer Diameter (mm)	6.3	7.6	9.6		
Cable Weight (kg/km) 35		55	85		
Tensile Performance (Short Term)	800 N	1100 N	1700 N		
Crush Performance (Short Term)	1000 N	1000 N	1500 N		
Bending Performance (Radius)					
Installed	90 mm	140 mm	150 mm		
During Installation 180 mm		280 mm	300 mm		
Temperature					
Operation:	-40° C to +70° C	-40° C to +70° C	-40° C to +70° C		
Installation:	-15° C to +40° C	-15° C to +40° C	-15° C to +40° C		
Storage/Shipping:	-40° C to +70° C	-40° C to +70° C	-40° C to +70° C		
Recommended minimum duct I.D.	8 mm	10 mm	12 mm		

Standard Microcable Lengths - MiDia Micro FX Cable					
Length	2000 Meters	4000 Meters	6000 Meters	8000 Meters	
12-72 Fibers	✓	✓	✓	✓	
96 Fibers	✓	✓	✓	✓	
144 Fibers	✓	✓	✓	✓	



MiDia Micro GX Cable (12 Fibers per tube)



288-Fiber Cable

Cable Specifications - MiDia Micro GX Cable					
Fiber Count	12-72	96	144	288	
Outer Diameter (mm)	5.2	6.0	8.0	9.6	
Cable Weight (kg/km)	25	35	60	80	
Tensile Performance (Short Term)	850 N	1600 N	2600 N	3000 N	
Crush Performance (Short Term)	600 N	600 N	600 N	600 N	
Bending Performance (Radius)					
Installed	60 mm	100 mm	100 mm	125 mm	
During Installation	120 mm	200 mm	200 mm	250 mm	
Temperature					
Operation:	-40° C to +70° C	-40° C to +70° C	-40° C to +70° C	-40° C to +60° C	
Installation:	-15° C to +40° C				
Storage/Shipping:	-40° C to +70° C				
Recommended minimum duct I.D.	8 mm	8 mm	10 mm	12 mm	

Standard Microcable Lengths - MiDia Micro GX Cable					
Length	2000 Meters	4000 Meters	6000 Meters	8000 Meters	
12-72 Fibers	✓	✓	✓	✓	
96 Fibers	✓	✓	✓	✓	
144 Fibers	✓	✓	✓	✓	
288 Fibers	✓	✓	✓	✓	

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) USA or 1-770-798-5555 outside the USA.









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