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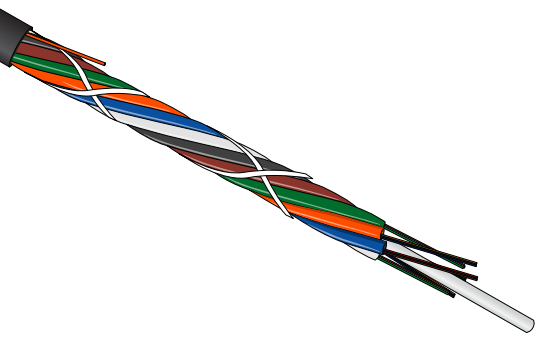
MiDia® Microduct Cables

Increasing the Capacity and Cost-Effectiveness of Metropolitan Fiber Access



MiDia Micro GX Cable

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: 24-288
- 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.

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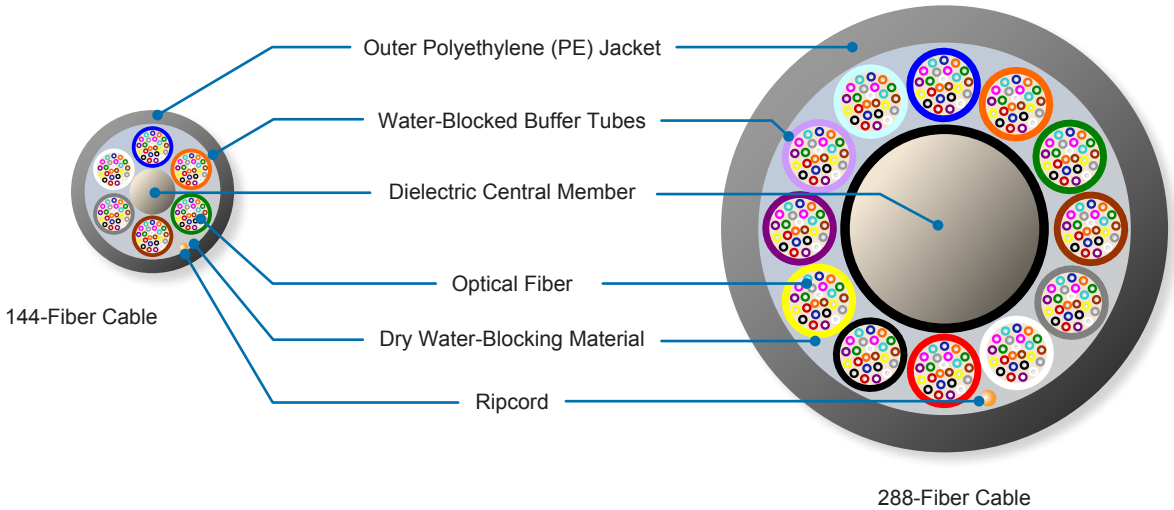
MiDia Micro EX, FX and GX Cables

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.

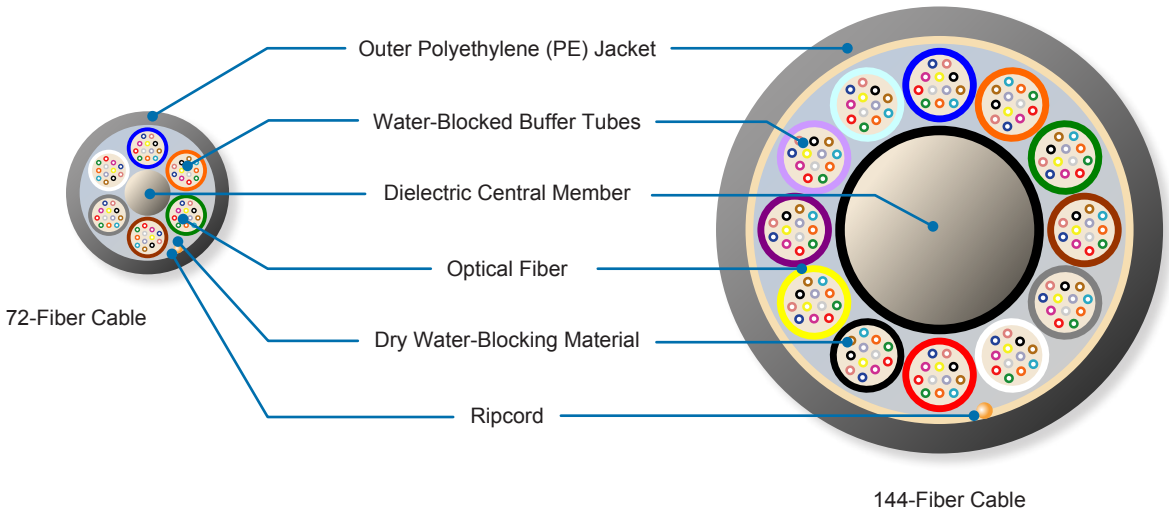
MiDia Micro EX Cable
(24 fibers per tube)



Cable Specifications - MiDia Micro EX Cable				
Fiber Count	**144**	**192**	**288**	**576**
Outer Diameter (mm)	6.8	7.9	10.5	12.0
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	75 mm	150 mm	120 mm	120 mm
During Installation	150 mm	240 mm	240 mm	240 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	-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	-40° C to +70° C
Recommended minimum duct I.D.	10 mm	10 mm	14 mm	15 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)



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)	700 N	1100 N	1700 N
Crush Performance (Short Term)	1000 N	1000 N	1500 N
Bending Performance (Radius)			
Installed	75 mm	150 mm	160 mm
During Installation	150 mm	300 mm	250 mm
Temperature			
Operation:	-30° C to +70° C	-30° C to +70° C	-30° 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	✓	✓	✓	✓

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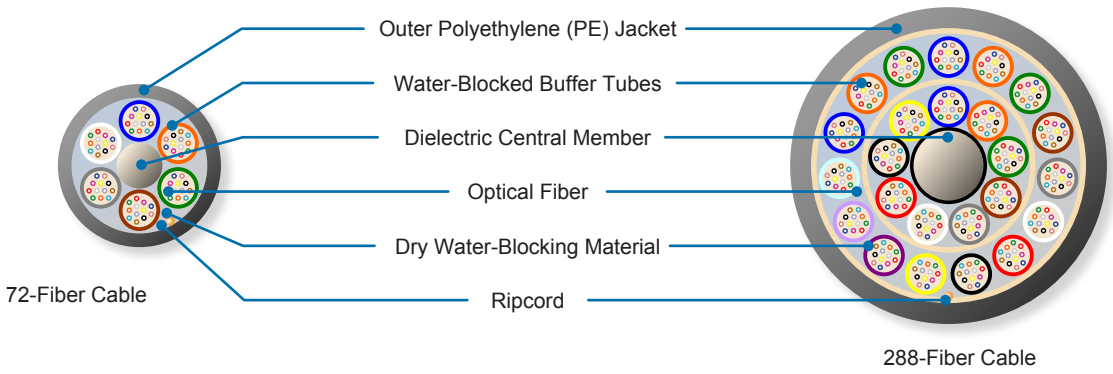
MiDia Micro GX Cable
(12 Fibers per tube)



Cable Specifications - MiDia Micro GX Cable				
Fiber Count	**24-72**	**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	50 mm	60 mm	90 mm	100 mm
During Installation	100 mm	120 mm	180 mm	200 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	-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	-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	✓	✓	✓	✓

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

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