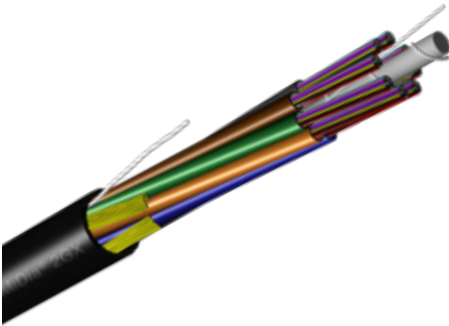# MiDia® *200* Micro GX Cable

High Fiber Density Cables Help Maximize Fiber Capacity, Cost Effectiveness and Performance for Metropolitan Fiber Access

MiDia *200* Micro GX Cable (192 Fibers)

Features and Benefits

- OFS 200 micron bend-optimized AllWave® FLEX and AllWave® FLEX+ Fibers help create a smaller diameter, high-performance microcable and can be used in all fibre count options
- OFS 200 micron AllWave® + fiber with 9.2 micron mode field diameter offers seamless splicing, testing and faster network turn-up. Can be used in 144/192/288f cables
- OFS 200 micron AllWave® One fiber with 9.2 micron mode field diameter offers both seamless splicing and improved attenuation values for extended reach applications. Can be used in 144/192/288/576f cables
- Fiber counts from 48 to 576
- Dry Core design enables faster, cleaner cable preparation for jointing
- Lighter weight, more compact microcable optimised to achieve longer air-blown installation distances
- Tested to IEC 60794-1-2 and IEC 60794-5 for reliable performance
- Helps to reduce deployment costs and eliminate the need for expensive, disruptive excavation and procuring additional costly rights-of-way
- May help to reduce the number of fiber cables needed for deployment
- Allows the use of smaller, more cost-efficient microducts to help further reduce costs for a faster return on investment
- Outstanding macrobend and microbend attenuation performance

Product Description

The MiDia 200 Micro GX Cable was specifically designed to meet the ever-increasing demand for higher fiber capacity in today's congested, underground urban optical networks. This latest-generation cabling solution can help take metro networks to the next level with increased fiber density, enhanced performance and significantly greater cost-saving opportunities on deployment.

The MiDia 200 Micro GX Cable capitalizes on OFS advancements in optical fiber, leading to the development of 200 micron (µm) bend-optimized fibers that meet or exceed ITU and IEC standards (see Performance Standard for details). These 200 µm fibers require 36 percent less area than conventional 250 µm coated fibers, enabling reduced diameter cables with a higher fiber count per tube. This achievement propelled the creation of a microcable that offers greater fiber density while also providing outstanding macrobend and microbend performance with tight, low bending loss.

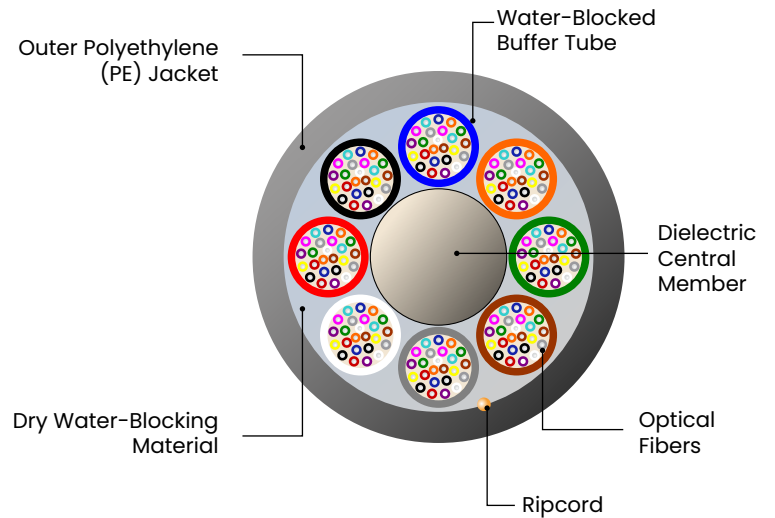## Why the MiDia *200* Micro GX Cable?

With the MiDia 200 Micro GX Cable, service providers can achieve up to a 100 percent increase in fibre density in a single, reduced diameter cable. This gain in density allows providers to maximize the use of their network duct systems and infrastructure. For example, a deployment requiring two 96-fibre cables could now be replaced by a single 192-fiber MiDia 200 Micro GX Cable installed into an 8/10 mm (ID/OD) microduct. This capability makes it easier to increase fiber counts, even in highly congested duct systems while helping to save on material and installation costs and retaining space for future upgrades or lease.

The light weight, highly compact MiDia 200 Micro GX Cable is designed for seamless installation into existing microduct networks. This microcable can help customers achieve longer air-blown installation distances and reduce the number of splice points and setups required. These capabilities can help customers to potentially save both time and money on deployment.

Design

To construct the MiDia 200 Micro GX Cable, 200 micron single-mode optical fibers are placed in water-blocked buffer tubes to protect the fibers from external forces. The optical fibers and buffer tubes are color coded for ready identification. The buffer tubes are then stranded around a dielectric central member using the reverse oscillating lay (ROL) stranding technique and dry, water-blocking materials are applied. The 48f and 96f cable designs also incorporate interstitial filler rods. In the final step, a ripcord and a durable polyethylene (PE) jacket are added to complete the cable construction.

Specifications						
Fiber Count	**48**	**96**	**144**	**192**	**288**	**576**
Cable Outer Diameter - mm	3.9	4.5	5.7	6.0	8.0	9.6
Cable Weight - kg/km	15	18	35	40	60	95

Performance Standard

The MiDia *200* Micro GX Cable is tested to IEC 60794-1-2 and IEC 60794-5 for reliable performance.

The 200 micron bend optimised AllWave+, AllWave One and AllWave *FLEX* ZWP fiber meets ITU-T G.657.A1 and IEC 60793-2-50 B-657.A1

The 200 micron bend optimised AllWave *FLEX+* ZWP fiber meets ITU-T G.657.A2 and IEC 60793-2-50 B-657.A2

Handling						
Fiber Count	**48**	**96**	**144**	**192**	**288**	**576**
Tensile Performance (short-term) N	500	750	600	1600	2600	2500
Crush Performance (short-term) N	1000	500	500	500	500	600
Bending Performance (radius) mm — Installed	45	50	100	100	100	125
Bending Performance (radius) mm — During Installation	90	100	200	200	200	250
Recommended minimum duct I.D.	5.5 mm	6 mm	8 mm	8 mm	10 mm	14 mm

Temperature

Installation: -15ºC to 40ºC

Operation: -30ºC to 70ºC

Storage: -40ºC to 70ºC

Standard Microcable Lengths

The 48 to 288-fiber MiDia 200 Micro GX Cables are available in 2000, 4000, 6000 and 8000 meter lengths.

The 576-fiber MiDia 200 Micro GX Cable is available in 2000, 4000 and 6000 meter lengths.

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.