ofs

A Furukawa Company

Microcable Solutions Guide

Implementing or upgrading modern Fiber-To-The-Subscriber (FTTx) or underground networks can be complex and challenging. To help make deployment faster and less costly, especially in locations where space is at a premium, OFS developed the MiDia® and AccuRibbon® DuctSaver® Microcable families. These microcables are specifically optimized for air-blown applications.

An ideal solution for congested networks, OFS microcables are available in a range of designs to meet the needs of virtually any air-blown installation. With a product line including Telcordia GR-20 compliant designs, ultra-high-density constructions and the world's first ribbon microcable, OFS offers a microcable suited for your most demanding application.

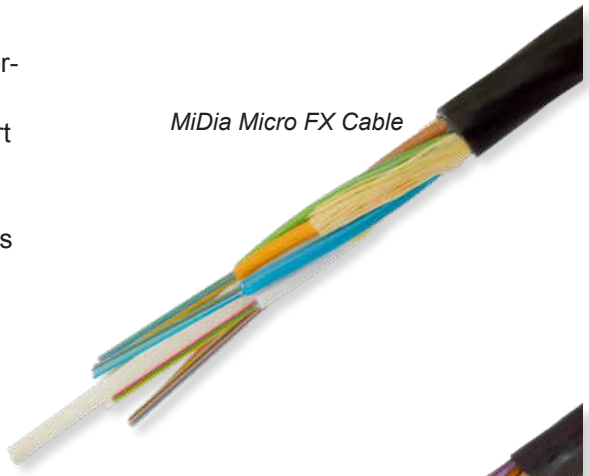
OFS microcables are an excellent choice whether your project involves overriding cables in existing ducts, installation into unused innerducts or greenfield "grow-as-you-go" deployments. Moreover, these cables offer the exceptional performance, reliability and value that you've come to expect from OFS.

MiDia® Loose Tube Microcables

For providers who prefer loose tube cable designs, OFS offers the MiDia portfolio of microcables. Specifically designed for exceptional air-blown installation performance, these microcables can help to lower deployment costs while increasing capacity and fiber density in limited spaces. By allowing providers to deploy fiber only as needed, MiDia microcables help to defer initial investment costs while providing the flexibility needed for future technology upgrades.

MiDia® Micro FX Cable

- Rifled outer jacket reduces friction for enhanced installation performance
- Optimized 1.7 mm buffer tubes and outer jacket thickness support long, continuous blowing distances.
- Telcordia GR-20 compliant (as a special applications cable)
- Crush resistance equivalent to larger, heavier outside plant cables (200 N/cm)
- Fiber counts from 2 to 144



MiDia Micro FX Cable

For higher-density applications

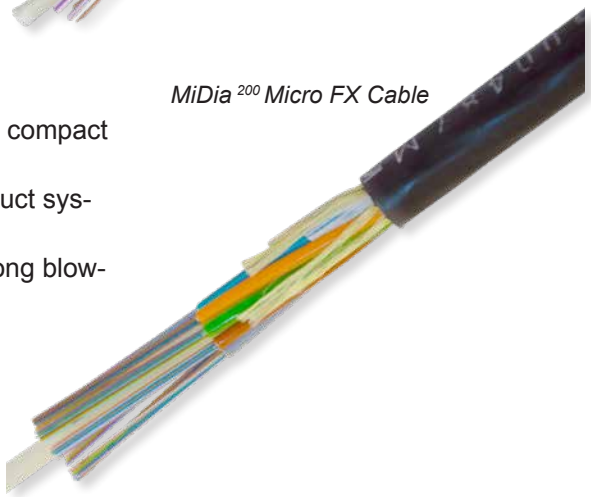
MiDia® Micro GX Cable

- Small diameter, lightweight design helps save time and money while retaining ease of installation
- 1.5 mm buffer tubes and outer jacket engineered to maximize air-blown installation performance
- High fiber density ratio helps further increase capacity in limited spaces
- Fiber counts of 2 to 288

MiDia Micro GX Cable

MiDia® 200 Micro FX Cable

- Even greater capacity for fiber density and cost saving opportunities
- Space-efficient, 200 micron bend-optimized fibers create a highly compact cable with a greater fiber count per buffer tube
- Up to a 100% higher density per cable helps maximize network duct systems and infrastructure
- Outer jacket and 1.7 mm buffer tubes optimized for continuous, long blowing distances
- Fiber counts of 96 to 288

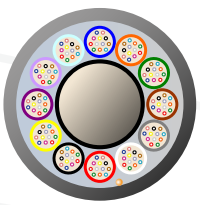


MiDia 200 Micro FX Cable

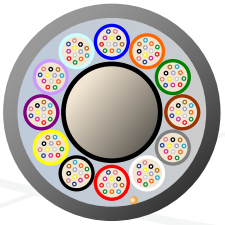
144-Fiber MiDia Microcables (examples)

MiDia200 Micro FX Cable
6.3 mm

MiDia Micro GX Cable
8.6 mm



MiDia Micro FX Cable
9.7 mm



AccuRibbon® DuctSaver® Ribbon Microcables

For service providers who prefer ribbon cables and the benefits of mass fusion splicing, OFS offers the AccuRibbon DuctSaver product line of microcables. While making optimum use of valuable duct space, these microcables also help maximize the key advantages of air-blown microduct installation - namely, rapid deployment and service activation.

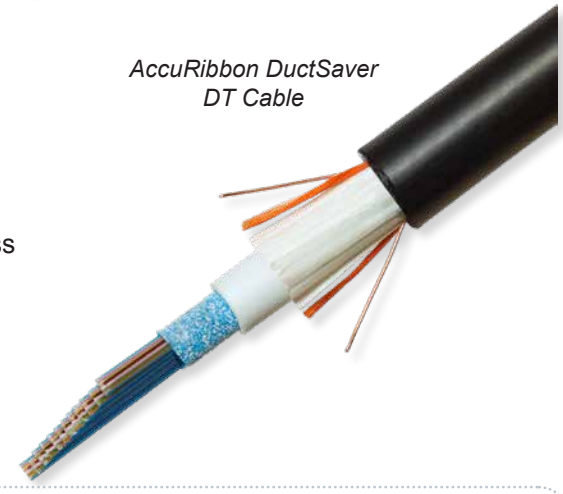
AccuRibbon® DuctSaver® FX Microcable

- Supports mass fusion splicing for rapid termination and efficient use of space
- Outer jacket improves friction coefficient to optimize air-blown deployment
- Complies with ICEA, Telcordia and IEC specifications for reliable performance
- Fiber counts of 6 to 96

AccuRibbon DuctSaver FX Cable

AccuRibbon® DuctSaver® DT Microcable

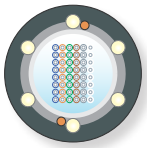
- Gel-free ribbon cable helps reduce cable end preparation time
- Helps reduce time spent on splicing and emergency restoration
- Removal of cable gels promotes faster splicing with higher first-pass yields for a cleaner work environment
- AccuRibbon units support mass fusion splicing
- Available with 144 fibers



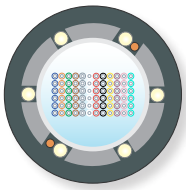
AccuRibbon DuctSaver DT Cable

AccuRibbon DuctSaver Microcables (examples)

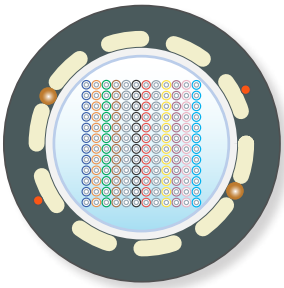
48-Fiber DuctSaver FX Cable



72-Fiber DuctSaver FX Cable



144-Fiber DuctSaver DT Cable



MIcrocable Specifications

The tables below provide key performance and dimensional specifications for OFS microcables. For questions or additional information on these products, please contact your OFS representative.

MiDia Micro FX Cable Specifications

Fiber Count	2 to 72	73 to 96	97 to 144
Buffer Tube Size (mm)	1.7 mm	1.7 mm	1.7 mm
Fibers per Tube	12	12	12
Outer Diameter (OD) mm(in)	6.4 (0.25)	7.5 (0.30)	9.7 (0.38)
Telcordia GR-20	Yes	Yes	Yes
Tensile Rating lb(N)	300 (1335)	300 (1335)	300 (1335)
Crush Resistance N/cm	220 N/cm	220 N/cm	220 N/cm
Weight lb/kft (kgf/km)	22 (33)	34 (50)	55 (82)
Minimum Storage Coil cm(in)	46 (18)	46 (18)	46 (18)
Operating Temperature	-40°F to 158°F (-40°C to 70°C)	-40°F to 158°F (-40°C to 70°C)	-40°F to 158°F (-40°C to 70°C)

MiDia Micro GX & MiDia^{200} Micro FX Cable Specifications

	MiDia Micro GX Cable				MiDia^{200} Micro FX Cable		
Fiber Count:	2-72	73-96	97-144	145-288	96 & 144	192	240 & 288
Buffer Tube Size (mm)	1.5	1.5	1.5	1.5	1.7	1.7	1.7
Fibers per Tube	12	12	12	12	24	24	24
Outer Diameter (OD) mm(in)	5.7 (0.23)	6.5 (0.26)	8.6 (0.34)	10.2 (0.40)	6.3 (0.25)	7.6 (0.30)	9.6 (0.38)
Telcordia GR-20	No	No	No	No	No	No	No
Tensile Rating lb(N)	135 (600)	180 (800)	337 (1500)	360 (1600)	157 (700)	243 (1079)	382 (1700)
Crush Resistance N/cm	50	50	50	80	100	100	100
Weight lb/kft (kgf/km)	20 (28)	26 (39)	44 (65)	61 (91)	26 (40)	37 (55)	61 (90)
Minimum Storage Coil cm(in)	46 (18)	46 (18)	46 (18)	46 (18)	46 (18)	46 (18)	46 (18)
Operating Temperature	-22°F to 158°F (-30°C to 70°C)	-22°F to 158°F (-30°C to 70°C)	-22°F to 158°F (-30°C to 70°C)	-22°F to 158°F (-30°C to 70°C)	-22°F to 158°F (-30°C to 70°C)	-22°F to 158°F (-30°C to 70°C)	-22°F to 158°F (-30°C to 70°C)

AccuRibbon DuctSaver Cable Specifications

	AccuRibbon DuctSaver FX Cable			AccuRibbon DuctSaver DT Cable
Fiber Count:	6 to 48	12 to 72	84 to 96	144 Only
Fibers per AccuRibbon Unit	6	12	12	12
Outer Diameter (OD) mm(in)	5.8 (0.23)	7.5 (0.30)	9.1 (0.36)	10.5 (0.41)
Telcordia GR-20	Yes	Yes	No	Yes
Tensile Rating lb(N)	135 (600)	300 (1334)	300 (1334)	300 (1334)
Crush Resistance N/cm	220 N/cm	220 N/cm	220 N/cm	220 N/cm
Weight lb/kft (kgf/km)	33 (49)	36 (54)	52 (72)	131 (190)
Minimum Storage Coil cm(in)	61 (24)	61 (24)	61 (24)	61 (24)
Operating Temperature	-40°F to 158°F (-40°C to 70°C)	-40°F to 158°F (-40°C to 70°C)	-40°F to 158°F (-40°C to 70°C)	-40°F to 158°F (-40°C to 70°C)

Microduct Recommendations

Selecting the right microduct is critical to the success of any microcable deployment. The formulation and surface finish of a microduct's low-friction layers are vitally important to achieving long, continuous blowing distances. In the same way, a microcable's optimized outer diameter, weight, stiffness and low-friction jacket also play a critical role in installation performance. When the most appropriate microcable for an application is used with the right microduct, these critical features combine, in a synergistic way, to deliver smooth, air-blown deployment with maximum, continuous blowing distances.

The tables below outline recommended microduct sizes based on application and microcable outer diameter. Consult with your OFS representative on selecting the right microduct for your application.

Microduct Recommendations

		Mininum Microduct Dimensions (OD/ID) mm**	
Cable & Fiber Count	Cable OD mm	Duct Installation	Direct Buried Instal-lation
MiDia Micro FX			
2-72	6.4	12/10	12.7/10
73-96	7.5	12/10	16/12
97-144	9.7	16/13	18/14
MiDia Micro GX			
2-72	5.8	10/8	12.7/10
73-96	6.5	12/10	12.7/10
97-144	8.6	16/13	18/14
144-288	10.2	18/14	22/17
MiDia^{200} Micro FX			
96 & 144	6.3	12/10	12.7/10
192	7.6	16/13	16/12
240 & 288	9.6	16/13	18/14
AccuRibbon DuctSaver FX			
6-48	5.8	10/8	12.7/10
12-72	7.5	12/10	16/12
84-96	9.1	16/13	18/14
AccuRibbon DuctSaver DT			
144	10.5	18/14	22/17

Maximum Fiber Count for a Given Microduct - Duct Installation

	Cable Type				
Microduct Dimensions (OD/ID) mm	MiDia Micro FX	MiDia MIcro GX	MiDia^{200} Micro FX	AccuRibbon DuctSaver FX	AccuRibbon DuctSaver DT
10/8	N/A*	72	N/A	48	N/A
12/10	96	96	144	72	N/A
16/12	96	144	192	72	N/A
16/13	144	144	288	96	N/A
18/14	-	288	288	96	144
18/15	-	288	288	96	144
22/17	-	288	288	96	144

Maximum Fiber Count for a Given Microduct - Direct Buried Installation

	Cable Type				
Microduct Dimensions (OD/ID) mm	MiDia Micro FX	MiDia Micro GX	MiDia^{200} Micro FX	AccuRibbon DuctSaver FX	AccuRibbon DuctSaver DT
12.7/10	72	96	144	48	N/A*
16/12	96	96	192	72	N/A
18/14	144	144	288	96	N/A
22/17	-	288	288	96	144

Note: N/A denotes"not applicable."

****Note: Minimum duct sizes apply to microduct that is blown into existing innerduct. For direct buried applications of bundled microducts, thick-walled products or the next larger-size microduct are recommended to account for deformation that may occur in the microduct in a direct buried environment. Contact OFS for additional information and recommendations.***

The Fiber is the Network™: Fiber Choices for Microcable Applications

Fiber selection is a critical component in the planning of FTTx and microcable deployments. Providers need the proven superior performance and reliability of OFS optical fiber. OFS offers a complete portfolio of leading-edge, zero water peak (ZWP) and bend-optimized ZWP single-mode optical fibers to meet the needs of your specific microcable application.

AllWave® Zero Water Peak (ZWP) Single-Mode Fiber

For peak performance today and maximum future upgrade capability, our patented, industry-first AllWave ZWP Single-Mode Fiber provides 50% more usable bandwidth, with low optical loss across the optical spectrum from 1260-1625 nm.

AllWave®+ and AllWave One ZWP Single-Mode Fibers

To support tighter bends and longer reach in FTTx, metropolitan and backhaul networks, OFS specifically designed AllWave+ Fiber. Our AllWave One ZWP Fiber focuses on these same applications, along with long haul networks, and is an excellent option where G.652.D fiber is specified and even greater bending performance is desired.

AllWave® *FLEX* ZWP Fiber

In deployments that demand benchmark bending performance, our AllWave *FLEX* ZWP Fiber offers low macrobend and microbend loss, along with excellent splicing and PMD performance.

AllWave *FLEX* and *FLEX*+ 200 Micron ZWP Fibers

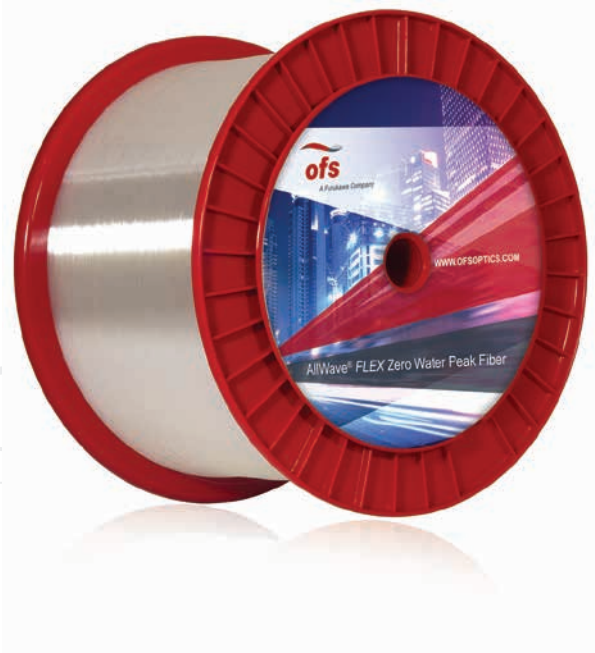
The 200 micron (µm) AllWave *FLEX* and AllWave *FLEX*+ Bend-Optimized Single-Mode Fibers require 46% less area than conventional 250 µm coated fibers, allowing smaller diameter cables and a greater number of fibers per buffer tube. These fibers offer all the advantages of standard AllWave *FLEX* fibers along with outstanding macrobend and microbend performance wherever small bend diameters may be encountered.

AllWave® Fiber Zero Water Peak	AllWave® + Fiber Zero Water Peak	AllWave® One Fiber Zero Water Peak
		15% lower bend loss for up to 15% longer reach
	G.657.A1. 50% lower bend loss vs. AllWave	G.657.A1. 67% lower bend loss vs. AllWave
	40% @ smaller min bend radius (10 mm)	40% @ smaller min bend radius (10 mm)
	33% better PMD LDV (0.04)	33% better PMD LDV (0.04)
Full Spectrum Zero Water Peak	Full Spectrum Zero Water Peak	Full Spectrum Zero Water Peak
9.2 MDF for seamless splicing and testing	9.2 MDF for seamless splicing and testing	9.2 MDF for seamless splicing and testing
100% Synthetic Silica Pure Reliable Glass	100% Synthetic Silica Pure Reliable Glass	100% Synthetic Silica Pure Reliable Glass
13% - 33% lower loss than G.652D	13% - 33% lower loss than G.652D	13% - 33% lower loss than G.652D
G.652.D	G.652.D	G.652.D

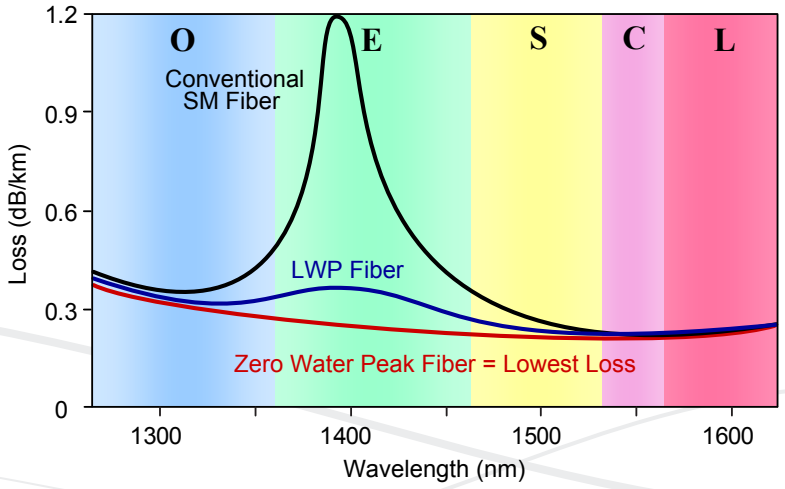
Outstanding Macrobend Performance

AllWave *FLEX* Fiber	AllWave *FLEX*+ Fiber
• 100 turns on a 25 mm radius mandrel ≤ 0.01 dB @ 1550 nm ≤ 0.05 dB @ 1625 nm	• 10 turns on a 15 mm radius mandrel ≤ 0.03 dB @ 1550 nm ≤ 0.1 dB @ 1625 nm
• 10 turns on a 15 mm radius mandrel ≤ 0.2 dB @ 1550 nm ≤ 0.5 dB @ 1625 nm	• 1 turn on a 10 mm radius mandrel ≤ 0.1 dB @ 1550 nm ≤ 0.2 dB @ 1625 nm
• 1 turn on a 10 mm radius mandrel ≤ 0.2 dB @ 1550 nm ≤ 0.5 dB @ 1625 nm	• 1 turn on a 7.5 mm radius mandrel ≤ 0.5 dB @ 1550 nm ≤ 1.0 dB @ 1625 nm

For help in selecting the right fiber for your microcable application, consult your OFS representative.



Attenuation After ITU Specified Hydrogen Aging



Installation Information

Before deploying any MiDia Microcable, please consult OFS Installation Practice IP-055 (March 2014).

The MiDia microcable family varies in tensile load ratings and diameters based on targeted design applications. MiDia Micro FX Cables comply with Telcordia GR-20 standards. Because of their reduced size and strength, MiDia Micro GX and MiDia^{200} Micro FX Cables do not comply with Telcordia GR-20 requirements, but do meet application and industry IEC performance standards. For this reason, extra care must be taken during the handling and installation of these cables.

MiDia Microcables are optimized for use in underground duct air-blown applications. In general, MiDia Microcables are not recommended for aerial applications since they are not designed to withstand exposure to aerial storm loads.

The MiDia Micro FX Cable meets the requirements of the ICEA-640, Section 7.34 Mid-Span Buffer Tube Storage test and is capable of buffer tube storage in above-ground pedestals or underground closures. However, MiDia Micro GX and MiDia^{200} Micro FX Microcables are not recommended for use in pedestal splicing applications. The combination of small buffer tube diameters, narrow splice trays and potential exposure to extremely low temperatures may create fiber macrobending and increased attenuation in these applications.

During installation, it is critical to avoid loading the microcables beyond their maximum rated tensile loads (see Table 1). In addition, care must be taken to avoid bending the cables below their minimum bend diameters (see Table 2).

Cable Temperature Characteristics (all fiber counts)

Temperature	All MiDia Microcables*	AccuRibbon DuctSaver FX	AcccuRibbon DuctSaver DT
Operation	-22°F to 158°F (-30°C to 70°C)	-40°F to 158°F (-40°C to 70°C)	-40°F to 158°F (-40°C to 70°C)
Installation	5°F to 104°F (-15°C to 40°C)	-22°F to 140°F (-30°C to 60°C)	-22°F to 140°F (-30°C to 60°C)
Storage/Shipping	-40°F to 158°F (-40°C to 70°C)	-40°F to 167°F (-40°C to 75°C)	-40°F to 167°F (-40°C to 75° C)

* MiDia Micro GX 288-Fiber Count Cables require a -22°F to 140°F (-30°C to 60°C) operational temperature

Table 1 – Maximum Microcable Loads

MiDia Micro FX	Short Term lb (N)	Long Term lb (N)
12-72 Fibers	300 (1335)	90 (400)
73-96 Fibers	300 (1335)	90 (400)
97-144 Fibers	300 (1335)	90 (400)
MiDia Micro GX		
24-72 Fibers	100 (440)	30 (130)
73-96 Fibers	130 (590)	40 (175)
97-144 Fibers	215 (960)	65 (290)
288 Fibers	270 (1205)	80 (360)
MiDia^{200} Micro FX		
96-144 Fibers	180 (800)	55 (240)
192 Fibers	245 (1100)	90 (400)
240-288 Fibers	380 (1700)	135 (600)
AccuRibbon DuctSaver FX		
6-48 Fibers	135 (600)	67 (298)
12-72 Fibers	300 (1335)	90 (400)
84-96 Fibers	300 (1335)	90 (400)
AccuRibbon DuctSaver DT		
144 Fibers	300 (1335)	90 (400)

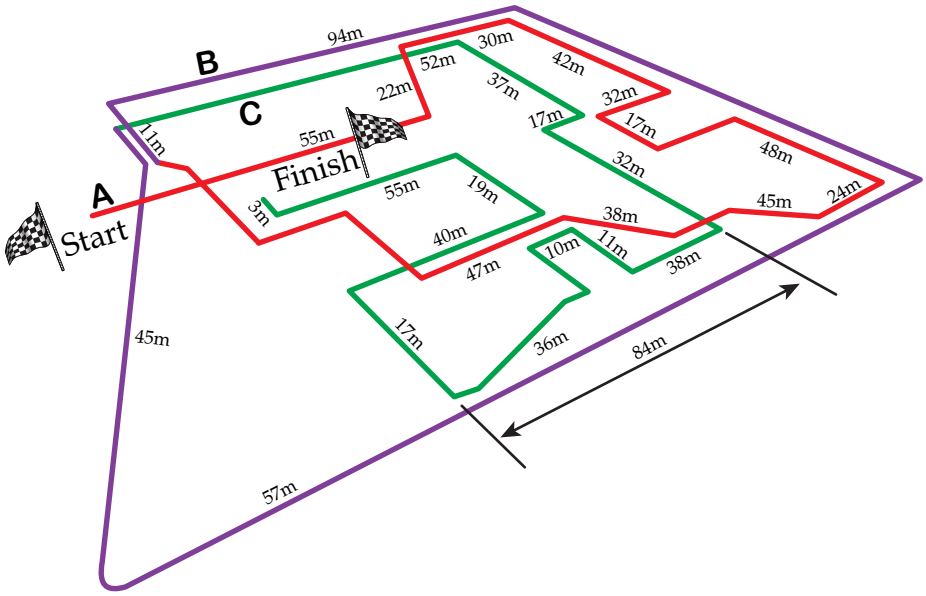
Table 2 – Minimum Bend Diameters

MiDia Micro FX	no load (in.)	with load (in.)	storage (in.)
2-72 Fibers	6	8	6
73-96 Fibers	6	8	6
97-144 Fibers	8	8	7
MiDia Micro GX			
2-72 Fibers	6	8	6
73-96 Fibers	6	8	6
97-144 Fibers	6	8	7
145-288 Fibers	8	10	7
MiDia^{200} Micro FX			
96-144 Fibers	6.0 (150)	12.0 (300)	18.0 (460)
192 Fibers	10.0 (250)	20.0 (500)	18.0 (460)
240-288 Fibers	12.0 (300)	20.0 (500)	18.0 (460)
AccuRibbon DuctSaver FX			
6-48 Fibers	7.0 (175)	10.0 (235)	24.0 (610)
12-72 Fibers	9.0 (225)	12.0 (300)	24.0 (610)
84-96 Fibers	11.0 (275)	15.0 (365)	24.0 (610)
AccuRibbon DuctSaver DT			
144 Fibers	13.0 (315)	17.0 (42.0)	24.0 (610)

The Microcable Experts

Did you know that OFS has years of experience in manufacturing and installing microcables?

- OFS microcables have been successfully blown into the testbed below, an extremely challenging scenario.
- Contact OFS for installation recommendations for your particular network.



Microcables are optimized for air-blown installation applications and, as such, are less robust than traditional cables.

Microcables are NOT designed for aggressive handling scenarios including, as an example, shared and undersized hand-holes. In these situations, cables are often exposed to excessive crush forces and are routinely accessed and removed (with coiling and recoiling)

Microcable relative performance versus Fortex™ DT Duct Cable (1-5, 5 is best)

Product	Fiber Density	Blowing performance (distance and speed)	Handling/Ruggedness in harsh environments – crush/kink resistance		Fiber handling
			Coiling & handling	Crush and Tensile	
Fortex DT	2	3	5	5	5
MiDia Micro FX	3	5	4 (GR-20 compliant)	4 (GR-20 compliant)	4
MiDia Micro GX	4	5	2	2	4
MiDia^{200} Micro FX	5	5	3	3	2 (24 fibers/tube, 200 µm fiber)

MiDia Microcable Ordering Information

Fiber Type[2]							
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 *Low Loss* Fiber	3	A	E	G.652.D	1310/1385/1550	0.33/0.31/0.19	0.34/0.31/0.22
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
TrueWave® *RS* LWP Fiber*	6	2	6	G.655.C&D	1550	0.21	0.25
TeraWave® Fiber*	6	2	R	G.654.B	1550	0.19	0.25
TeraWave ULL Fiber*	6	9	R	G.654.B	1550	0.18	0.22
Multimode Fiber							
62.5 µm Fiber	R	U	9	OM1 62.5 µm	850/1300	-	3.4/1.0
LaserWave® *FLEX* 300 Fiber	R	F	2	OM3 50 µm	850/1300	-	2.4/0.7
LaserWave *FLEX* 550 Fiber	R	H	2	OM4 50 µm	850/1300	-	2.4/0.7

MiDia Microcable Ordering Information

Example: **AT–5BE43CT-*NNN*** [1]

Fiber [2] Sheath Core Fiber Count

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 Loose Tube Microcable

S4 = **Tensile Load**
3 = MiDia Micro FX (300 lb/1335 N)
5 = MiDia Micro GX (by fiber count – see Table 1, page 4)
6 = MiDia[200] Micro FX (by fiber count – see Table 1, page 4)

S5 = **Core Type**
C = 1.7 mm Gel-Filled Buffer Tubes (MiDia Micro FX and MiDia[200] Micro FX)
3 = 1.5 mm Gel-Filled Buffer Tubes (MiDia Micro GX)

S6 = **Fibers per Buffer Tube**
C = 24 Fibers per Tube (MiDia [200] Micro FX only)
T = 12 Fibers per Tube (MiDia Micro FX and MiDia Micro GX)

NNN = **Fiber Count**
MiDia Micro FX - 012 to 144
MiDia Micro GX - 024 to 288
MiDia[200] Micro FX - 096 to 288

[1] Part Number shown is for standard AllWave FLEX ZWP attenuation and standard cable print. Maximum AllWave FLEX ZWP attenuation.
Standard Print, example (MiDia Micro FX Cable)
OFS OPTICAL CABLE AT-3BE43CT-NNN {MM-YY} {HANDSET SYMBOL} {NNN} F {SERIAL #}

[2] Contact OFS Order Management for information on other cable variations, including additional fiber types, attenuation, and custom cable print.

NOTE: 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 OFS Application Note AN-111 which can be downloaded at www.ofsoptics.com or contact your OFS representative.

* TeraWave ULL, TeraWave and TrueWave RS LWP Fiber Types are not available in MiDia GX Cables.






AccuRibbon DuctSaver Microcable Ordering Information

Fiber Type[2]							
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 *Low Loss* Fiber	3	A	E	G.652.D	1310/1385/1550	0.33/0.31/0.19	0.35/0.31/0.22
AllWave One Fiber	3	F	E	G.652.D/G.657.A1	1310/1385/1550	0.33/0.31/0.19	0.35/0.31/0.22
TrueWave® *RS* LWP Fiber	6	2	6	G.655.C&D	1550	0.21	0.25
TeraWave® Fiber	6	2	R	G.654.B	1550	0.20	0.25
Multimode Fiber							
62.5 µm Fiber	R	U	9	OM1 62.5 µm	850/1300	-	3.4/1.0
LaserWave® *FLEX* 300 Fiber	R	F	2	OM3 50 µm	850/1300	-	2.4/0.7
LaserWave *FLEX* 550 Fiber	R	H	2	OM4 50 µm	850/1300	-	2.4/0.7

AccuRibbon DuctSaver Microcable Ordering Information

Example: **AT – 5BE8M4X-***NNN*[1] (AccuRibbon DuctSaver FX – 6-fiber ribbons)
AT – 5BE8G4X-*NNN*[1] (AccuRibbon DuctSaver FX – 12-fiber ribbons)
AT – 5BE83AT-*NNN*[1] (AccuRibbon DuctSaver DT Toneable)
AT – 5BE83AX-*NNN*[1] (AccuRibbon DuctSaver DT Dielectric)

Fiber[2] Sheath Core Fiber Count

Part Number: **AT-***S1 S2 SF S3 S4 S5 S6* **-** *NNN*

S1 = **Fiber Selection**
See S1 in Fiber Table above

S2 = **Fiber Transmission Performance**
See S2 in Fiber Table above

SF = **Fiber Type**[2]
See S3 in Fiber Table above

S3 = **Sheath Construction**
8 = All Central Core Products

S4 = **Cable Core Design**
M = 6 Fibers per Ribbon – AccuRibbon DuctSaver FX only
G = 12 Fibers per Ribbon – AccuRibbon DuctSaver FX only
3 = 12 Fibers per Ribbon – AccuRibbon DuctSaver DT Dry-Core Cable

S5 = **Sheath Design**
4 = Gel-Filled All-Dielectric Central Core (AccuRibbon DuctSaver FX only)
A = DuctSaver DT (gel-free microcable, dielectric and toneable)

S6 = **Central Core - Oversheath**
T = Toneable (AccuRibbon DuctSaver DT only)
X = Dielectric/No Oversheath

NNN = **Fiber Count**
002 to **048** (AccuRibbon DuctSaver FX – 6-fiber ribbons)
012 to **074** (AccuRibbon DuctSaver FX – 12-fiber ribbons)
084 to **096** (AccuRibbon DuctSaver FX – 12 fiber ribbons)
144 (AccuRibbon DuctSaver DT only – 12-fiber ribbons)

[1] Part Numbers shown are for standard AllWave FLEX ZWP attenuation and standard cable print. Maximum AllWave FLEX ZWP attenuation. Standard Print, example (AccuRibbon DuctSaver FX Cable – 12 fiber ribbons)
OFS OPTICAL CABLE AT-5BE8G4X-NNN {MM-YY} {HANDSET SYMBOL} {NNN} F {SERIAL #}

[2] Contact OFS Order Management for information on other cable variations, including additional fiber types, attenuation, and custom cable print

[3] Contact your OFS Customer Care Representative on the positioning of ribbon requirements if TeraWave Fiber is being ordered.

NOTE: 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 OFS Application Note AN-111 which can be downloaded at www.ofsoptics.com or contact your OFS representative.

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

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