Toneable Micro Flat Drop Cable

FOSPC-XXX-X-TMCFDX-FTXXX-EX / 1-2 Fibers

Applications

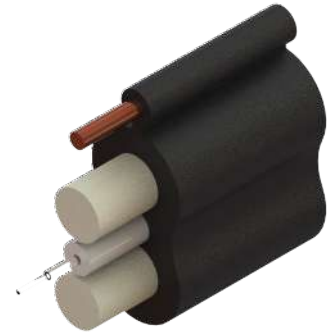*Indoor · Outdoor · Self-supporting · Aerial · Direct-buried · Toneable · Duct Installation

Protections

UV Resistant · Crush Resistant · Water Blocking · *Flame Retardant · *LSZH Cable · *Low Smoke Emission

Note: Protections marked with "*" are only applicable for the tight buffer in the 900um configurations. The rest are only applicable for the outer jacket.

TONEABLE MICRO FLAT DROP UV RESISTANT CABLE 900UM LSZH TIGHT BUFFER 01F G657.A1 FIBER FT

Description

Waveoptics® Toneable Micro Flat Drop Cable is designed for self-supporting, direct-buried and duct installations. Ideal for drop applications, offering ease of access as well as easy installation. Compact and robust design provides ease of handling and also reduces transportation and storage costs. Available in 250 micron bare (1 to 2 fibers) and 900 (01 fiber) micron tight-buffered (1 fiber) configurations.

PE single jacket with additives makes a resistant, durable and easy to strip cable, providing superior protection against UV radiation, fungus, abrasion and other environmental factors.

Two parallel dielectric strength members that offer exceptional crush resistance. The FRP strength members are coated with EAA for improved adherence.

Copper toning conductor allows effortless detection in direct-buried installation.

Quality

Waveoptics® is a ISO-9001:2015 certified company.

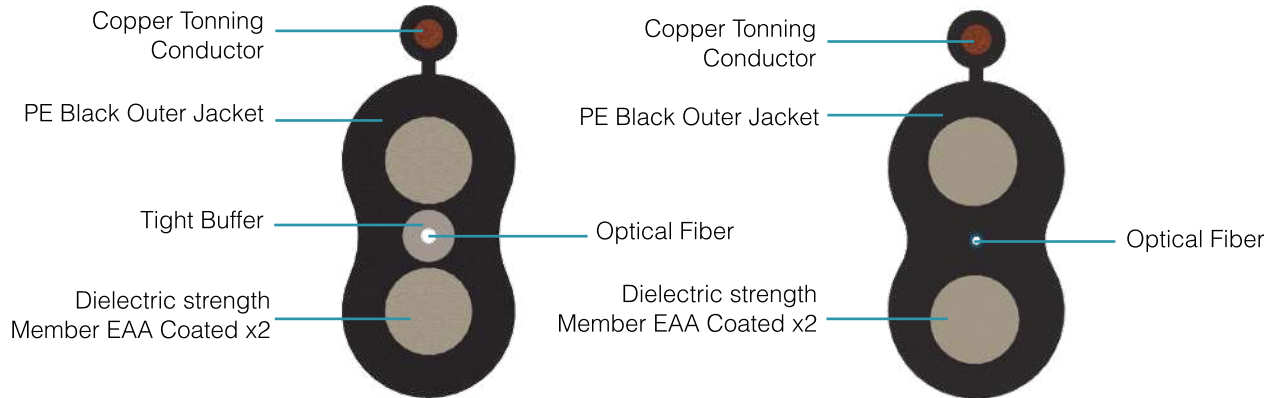We meet or exceed the following international standards:

- Telcordia GR-20: Generic requirements for optical fiber and optical fiber cable.
- IEC 60794: Basic requirements for optical fiber and cable elements.
- ANSI/ICEA S-110-717: Standard for optical fiber drop cable.

Each Waveoptics® cable meets the highest quality standards in the industry and contains a compliance certificate in which the performed tests in our quality laboratory are physically attached.

Dimensions & Properties

Copper Tonning Conductor

PE Black Outer Jacket

Tight Buffer

Dielectric strength Member EAA Coated x2

Optical Fiber

Copper Tonning Conductor

PE Black Outer Jacket

Dielectric strength Member EAA Coated x2

Optical Fiber

Design	
Fiber Count	1 - 2
Fiber Color Code (250 um Configuration / 900um Tight Buffer Configuration)	**1** **2** **3** **4** / ☐
Dielectric Strength Member Material / DIameter	EAA Coated FRP / 1.35 mm
Toning Conductor	24 AWG Copper Wire
Outer Jacket Material	LLDPE
Tight Buffer Material (900 um Configuration)	LSZH
Drum Length	5,000 ft, 10,000 ft & 20,000 ft (±5%)
Temperature Range	
Operation	-40°C to 70°C (-40° F to 158° F)
Installation	-30°C to 70°C (-22° F to 158° F)
Storage / Transport	-40°C to 70°C (-40° F to 158° F)
Mechanical Properties	
Crush Resistance (Short-Term / Long-Term)	2,200 N/100 mm / 1,100 N/100 mm
Minimum Bend Radius (Operation / Installation)	10 x OD / 20 x OD

Note: Waveoptics® recommends storing cable in a proper temperature environment prior to installation to allow the cable temperature to meet installation temperature range specifications for best installation results.

Dimensions & Properties

Cable Configuration	Fiber Count	Tight Buffer Material	Cable Weight (kg/km)(lb/kft)(±10%)	Tensile Strength (N)(lbf) Long-Term/ Short-Term	Nominal Outer Dimensions (mm)(in)	Dielectric Strength Member Diameter (mm) (in)
Bare fiber (250um)	1-2	N/A	22 (14.8)	210 / 700 (47 / 157)	6.6 x 3.0 (0.26 x 0.12)	1.35
Tight buffer (900um)	1	LSZH	23 (14.8)	210 / 700 (47 / 157)	6.6 x 3.0 (0.26 x 0.12)	1.35

Printed Information on Outer Jacket for 250um Configuration.

= /XXXX/FT*==/MONTH//YEAR/ WAVEOPTICS/ OPTICAL CABLE = =   = = /LOT#/ TMCFD==/250 um/==/FIBER COUNT/= = /FIBER TYPE/=

- Printed in white and resistant to physical tests on marking
- Marking interval: every 2 feet + 1%
- The marking can be changed according to customer requirements

Printed Information on Outer Jacket for 900um Configuration.

= /XXXX/FT*==/MONTH//YEAR/ WAVEOPTICS/ OPTICAL CABLE = =   = = /LOT#/ TMCFD==/900 um/==/FIBER COUNT/= = /FIBER TYPE/=
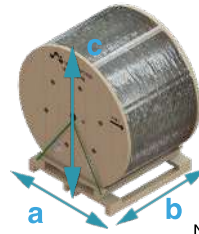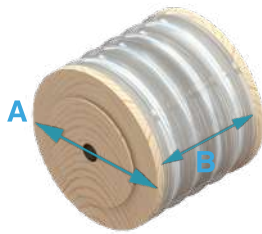
- Printed in black, except for dark colored cables, which will be printed in white.
- Marking interval: every 2 feet + 1%
- The marking can be changed according to customer requirements.

Drum Dimensions and Pallet Packaging Information

Note: Reference Image

Cable Configuration	Drum Length (ft)(m) (±5%)	Fiber Count	A (mm)(in) (±5%)	B (mm)(in) (±5%)	Drum and Pallet Total Weight (kg)(lb) (±10%)	Pallet Capacity (ft)(m)(+5%)	Total Packaging(±5%)		
							a (mm)(in)	b (mm)(in)	c (mm)(in)
250 um	10,000 (3,048)	1-2	570 (22)	560 (22)	92 (203)	10,000 (3,048)	760 (30)	760 (30)	730 (29)
	20,000 (6,096)		780 (31)	630 (25)	167 (368)	20,000 (6,096)	810 (32)	760 (30)	890 (35)
900 um	10,000 (3,048)	1	570 (22)	560 (22)	92 (203)	10,000 (3,048)	760 (30)	760 (30)	730 (29)
	20,000 (6,096)		780 (31)	630 (25)	167 (368)	20,000 (6,096)	810 (32)	760 (30)	890 (35)
250 um	10,000 (3,048)	1-2	570 (22)	560 (22)	184 (406)	20,000 (6,096)	1220 (48)	760 (30)	730 (29)
	20,000 (6,096)		780 (31)	630 (25)	334 (736)	40,000 (12,192)	760 (30)	1400 (55)	880 (34)
900 um	10,000 (3,048)	1	570 (22)	560 (22)	184 (406)	20,000 (6,096)	1220 (48)	760 (30)	730 (29)
	20,000 (6,096)		780 (31)	630 (25)	334 (736)	40,000 (12,192)	760 (30)	1400 (55)	880 (34)
250 um	10,000 (3,048)	1-2	570 (22)	560 (22)	368 (811)	40,000 (12,192)	1220 (48)	1450 (57)	710 (28)
	20,000 (6,096)		780 (31)	630 (25)	668 (1,473)	80,000 (24,384)	1450 (57)	1450 (57)	900 (35)
900 um	10,000 (3,048)	1	570 (22)	560 (22)	368 (811)	40,000 (12,192)	1220 (48)	1450 (57)	710 (28)
	20,000 (6,096)		780 (31)	630 (25)	668 (1,473)	80,000 (24,384)	1450 (57)	1450 (57)	900 (35)

Note 1: Please contact your sales agent for higher fiber counts or different drum lengths available.

Note 2: All documentation included in each drum of cable is in English, if a different language is needed, please contact your sales agent.

Note 3: Drums should be stored indoors avoiding environmental exposures such as: sunlight, humidity, precipitation or dust. Therefore, FONCS does not guarantee the drum performance once exposed to any type of environmental exposure.

All drums include:*

1. Drum handling instructions
2. Test report certificate
3. Product description (weight, dimensions, lot and part number)
4. End cable marking
5. Both ends include end caps to protect against humidity

Drum Dimensions and Pallet Packaging Information

Note: Reference Image

Cable Configuration	Drum Length (ft)(m) (±5%)	Fiber Count	A (mm)(in) (±5%)	B (mm)(in) (±5%)	Drum and Pallet Total Weight (kg)(lb) (±10%)	Pallet Capacity (ft)(m)(+5%)	Total Packaging(±5%)		
							a (mm)(in)	b (mm)(in)	c (mm)(in)
250 um	5,000 (1,524)	1-2	480 (19)	440 (17)	63 (139)	5,000 (1,524)	760 (30)	550 (21)	610 (24)
	10,000 (3,048)		570 (22)	530 (21)	97 (214)	10,000 (3,048)	760 (30)	650 (26)	700 (27)
	20,000 (6,096)		750 (30)	620 (24)	167 (368)	20,000 (6,096)	760 (30)	760 (30)	880 (35)
900 um	5,000 (1,524)	1	480 (19)	440 (17)	63 (139)	5,000 (1,524)	760 (30)	550 (21)	610 (24)
	10,000 (3,048)		570 (22)	530 (21)	97 (214)	10,000 (3,048)	760 (30)	650 (26)	700 (27)
	20,000 (6,096)		750 (30)	620 (24)	167 (368)	20,000 (6,096)	760 (30)	760 (30)	880 (35)
250 um	5,000 (1,524)	1-2	480 (19)	440 (17)	126 (278)	10,000 (3,048)	1000 (39)	550 (21)	620 (25)
	10,000 (3,048)		570 (22)	530 (21)	194 (428)	20,000 (6,096)	1220 (48)	650 (26)	710 (28)
900 um	5,000 (1,524)	1	480 (19)	440 (17)	126 (278)	10,000 (3,048)	1000 (39)	550 (21)	620 (25)
	10,000 (3,048)		570 (22)	530 (21)	194 (428)	20,000 (6,096)	1220 (48)	650 (26)	710 (28)

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Drum Dimensions and Pallet Packaging Information

Note: Reference Image

Cable Configuration	Drum Length (ft)(m) (±5%)	Fiber Count	A (mm)(in) (±5%)	B (mm)(in) (±5%)	Drum and Pallet Total Weight (kg)(lb) (±10%)	Pallet Capacity (ft)(m)(+5%)	Total Packaging(±5%)		
							a (mm)(in)	b (mm)(in)	c (mm)(in)
250 um	5,000 (1,524)	1-2	480 (19)	440 (17)	252 (555)	20,000 (6,096)	1000 (39)	1050 (41)	610 (24)
	10,000 (3,048)		570 (22)	530 (21)	388 (855)	40,000 (12,192)	1220 (48)	1200 (47)	710 (28)
900 um	5,000 (1,524)	1	480 (19)	440 (17)	252 (555)	20,000 (6,096)	1000 (39)	1050 (41)	610 (24)
	10,000 (3,048)		570 (22)	530 (21)	388 (855)	40,000 (12,192)	1220 (48)	1200 (47)	710 (28)

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3. Product description (weight, dimensions, lot and part number)

4. End cable marking
5. Both ends include end caps to protect against humidity

Drum Dimensions and Pallet Packaging Information

Cable Configuration	Drum Length (ft)(m) (±5%)	Fiber Count	A (mm)(in) (±5%)	B (mm)(in) (±5%)	Drum and Pallet Total Weight (kg)(lb) (±10%)	Pallet Capacity (ft)(m)(+5%)	Total Packaging(±5%)		
							a (mm)(in)	b (mm)(in)	c (mm)(in)
250 um	10,000 (3,048)	1-2	780 (31)	535 (21)	77 (170)	10,000 (3,048)	1000 (39)	760 (30)	1110 (44)
900 um	10,000 (3,048)	1	780 (31)	535 (21)	77 (170)	10,000 (3,048)	1000 (39)	760 (30)	1110 (44)
250 um	10,000 (3,048)	1-2	780 (31)	535 (21)	154 (339)	20,000 (6,096)	1000 (39)	1220 (48)	1090 (43)
900 um	10,000 (3,048)	1	780 (31)	535 (21)	154 (339)	20,000 (6,096)	1000 (39)	1220 (48)	1090 (43)

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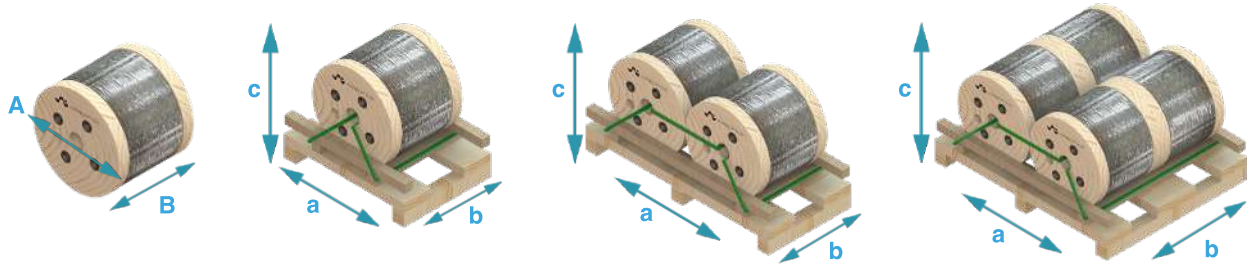
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Drum Dimensions and Pallet Packaging Information

Cable Configuration	Drum Length (ft)(m) (±5%)	Fiber Count	A (mm)(in) (±5%)	B (mm)(in) (±5%)	Drum and Pallet Total Weight (kg)(lb) (±10%)	Pallet Capacity (ft)(m)(+5%)	Total Packaging(±5%)		
							a (mm)(in)	b (mm)(in)	c (mm)(in)
250 um	5,000 (1,524)	1-2	510 (20)	440 (17)	43 (95)	5,000 (1,524)	760 (30)	550 (22)	610 (24)
900 um	5,000 (1,524)	1	510 (20)	440 (17)	43 (95)	5,000 (1,524)	760 (30)	550 (22)	610 (24)
250 um	5,000 (1,524)	1-2	510 (20)	440 (17)	85 (187)	10,000 (3,048)	1220 (48)	550 (22)	620 (25)
900 um	5,000 (1,524)	1	510 (20)	440 (17)	85 (187)	10,000 (3,048)	1220 (48)	550 (22)	620 (25)
250 um	5,000 (1,524)	1-2	510 (20)	440 (17)	156 (344)	20,000 (6,096)	1220 (48)	1000 (39)	610 (24)
900 um	5,000 (1,524)	1	510 (20)	440 (17)	156 (344)	20,000 (6,096)	1220 (48)	1000 (39)	610 (24)

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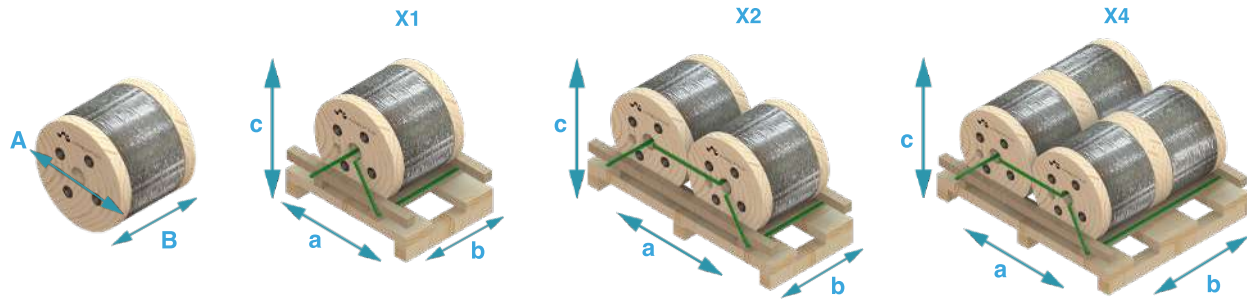
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4. End cable marking
5. Both ends include end caps to protect against humidity

FOSPC-0XX-X-MCFDX-FTXXX-EX / 1-4 Fibers

Drum Dimensions and Pallet Packaging Information

Cable Configuration	Drum Length (ft)(m) (±5%)	Fiber Count	A (mm)(in) (±5%)	B (mm)(in) (±5%)	Drum and Pallet Total Weight (kg)(lb) (±10%)	Pallet Capacity (ft)(m)(+5%)	Total Packaging(±5%)		
							a (mm)(in)	b (mm)(in)	c (mm)(in)
250 um	10,000 (3,048)	1-2	590 (23)	540 (21)	86 (190)	10,000 (3,048)	760 (30)	650 (26)	700 (28)
900 um	10,000 (3,048)	1	590 (23)	540 (21)	86 (190)	10,000 (3,048)	760 (30)	650 (26)	700 (28)
250 um	10,000 (3,048)	1-2	590 (23)	540 (21)	171 (377)	20,000 (6,096)	1220 (48)	650 (26)	710 (28)
900 um	10,000 (3,048)	1	590 (23)	540 (21)	171 (377)	20,000 (6,096)	1220 (48)	650 (26)	710 (28)
250 um	10,000 (3,048)	1-2	590 (23)	540 (21)	328 (723)	40,000 (12,192)	1220 (48)	1200 (47)	710 (28)
900 um	10,000 (3,048)	1	590 (23)	540 (21)	328 (723)	40,000 (12,192)	1220 (48)	1200 (47)	710 (28)

Note 1: Please contact your sales agent for higher fiber counts or different drum lengths available.

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Note 3: Drums should be stored indoors avoiding environmental exposures such as: sunlight, humidity, precipitation or dust. Therefore, FONCS does not guarantee the drum performance once exposed to any type of environmental exposure.
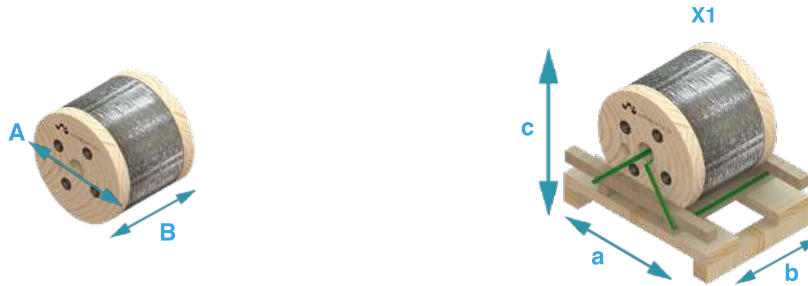
All drums include:*

1. Drum handling instructions
2. Test report certificate
3. Product description (weight, dimensions, lot and part number)

4. End cable marking
5. Both ends include end caps to protect against humidity

FOSPC-0XX-X-MCFDX-FTXXX-EX / 1-4 Fibers

Drum Dimensions and Pallet Packaging Information

Cable Configuration	Drum Length (ft)(m) (±5%)	Fiber Count	A (mm)(in) (±5%)	B (mm)(in) (±5%)	Drum and Pallet Total Weight (kg)(lb) (±10%)	Pallet Capacity (ft)(m)(+5%)	Total Packaging(±5%)		
							a (mm)(in)	b (mm)(in)	c (mm)(in)
250 um	20,000 (6,096)	1-2	730 (29)	620 (24)	161 (355)	20,000 (6,096)	760 (30)	760 (30)	880 (35)
900 um	20,000 (6,096)	1	730 (29)	620 (24)	161 (355)	20,000 (6,096)	760 (30)	760 (30)	880 (35)

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WAVEOPTICS

Transmission Performance by Fiber Type

Fiber Type	Single Mode		
Waveoptics® Fiber Type	G657.A1	G657.A2	G657.B3
Waveoptics® Fiber Code	T	E	N
Wavelength (nm)	1310 / 1550		
Max.attn. (dB/km) (1)	0.36/0.25	0.35/0.21	0.40/0.30
Cable Marking Specifications	G657.A1	G657.A2	G657.B3

Notes:
(1) Maximum attenuation after cabling process

Part Number Configuration

FOSPC-0XX-X-TMCFDX-FTXXX-EX

Fiber Count

01 - 1 Fiber
02 - 2 Fibers

Waveoptics® Fiber Type

T - SM G657.A1
E - SM G657.A2
N - SM G657.B3

Tight buffer material / Fiber configuration

N/A - Bare Fiber / 250um
L - LSZH / 900um (only 1 fiber)

Drum Length

0C1 - 5,000 ft
0C2 - 10,000 ft
0C3 - 20,000 ft

Optical Cable Compliance

EX - Waveoptics® Slim Standard

Note: please contact your Waveoptics® distributor if you need any additional compliance or if you have questions about the part number configuration.