



## TECHNICAL DATA SHEET

### INDOOR - OUTDOOR CABLE

# Toneable Flat Drop Indoor/Outdoor Dual Cable

## FOSPC-002-X-TFDDL-FTXXX-US / 2 Fibers

### Applications



\* Indoor



Outdoor



Aerial



Duct Installation



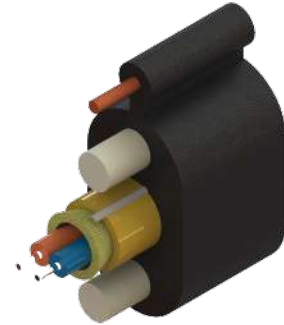
Toneable



Self-supporting



Direct-buried



### Protections



\* Flame Retardant



Crush Resistant



\* Low Smoke Emission



UV Resistant



\* LSZH Cable

Note: Protections marked with "\*" are only applicable for the inner jacket. The rest are only applicable for the outer jacket

### Description

Waveoptics® Toneable Flat Drop Indoor/Outdoor Dual Cable is designed to meet the requirements for Indoor/Outdoor drop cables with a fully dielectric construction, simplifying the transition from the outdoor environment to an indoor Optical Network Terminal (ONT).

Small sub-unit diameter and bend radius that allow an easy installation in space-constrained areas.

PE outer 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 require no bonding or grounding, offering 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.

Folio EI-067-01-EN

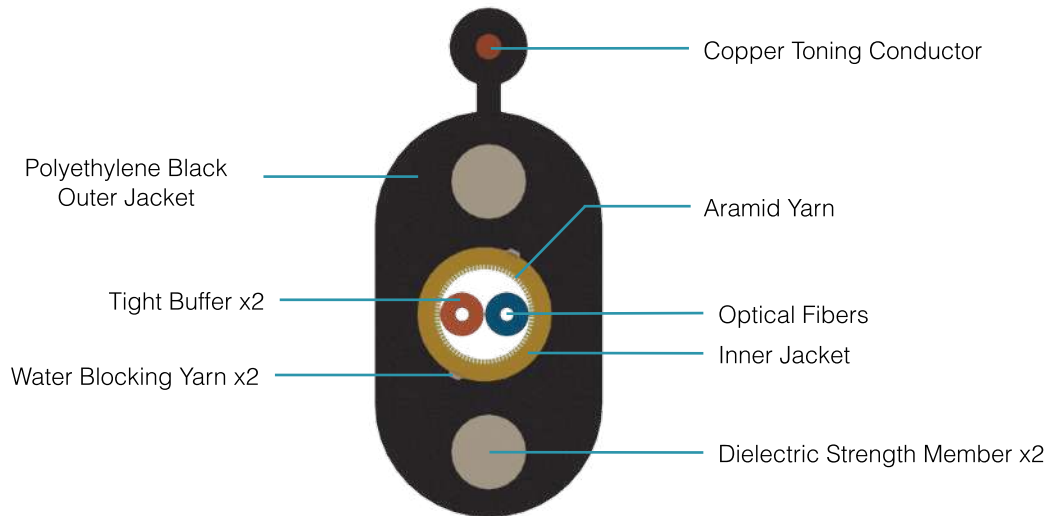
Last Review 4/15/2024



# TECHNICAL DATA SHEET

## OUTDOOR CABLE

FOSPC-002-X-TFDDL-FTXXX-US / 2 Fibers

### Dimensions & Properties



Design	
Fiber per Tube	2
Fiber Color Code	 
Dielectric Strength Member Material / Diameter	EAA Coated FRP / 1.65 mm (0.06 in)
Toning Conductor	24 AWG Copper Wire
Outer Jacket Material	Polyethylene
Inner Jacket Material	LSZH
Drum Length	2,000 ft, 5,000 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/100mm / 1,100 N/100mm
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.

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**Last Review 4/15/2024**

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## OUTDOOR CABLE

FOSPC-002-X-TFDDL-FTXXX-US / 2 Fibers

### Dimensions & Properties

Fiber Count	Sub-Unit Diameter (mm)(in)(±5%)	Cable Weight (kg/km)(lb/kft) (±10%)	Tensile Strength (N)(lbf) Long-Term / Short-Term	Nominal Outer Dimensions (mm)(in)(±5%)	Dielectric Strength Member Diameter (mm) (in)
2	3.00 (0.11)	44 (30)	400 / 1,350 (90 / 303)	10 x 4.5 (0.39 x 0.18)	1.65 (0.06)

### Printed Information on Outer Jacket

=/XXXX/FT\* = /MONTH//YEAR/WAVEOPTICS/ OPTICAL CABLE==  ==/LOT#//==FLAT DROP INDOOR/OUTDOOR==TONEABLE == DUAL==/FIBER COUNT//==/FIBER TYPE /==

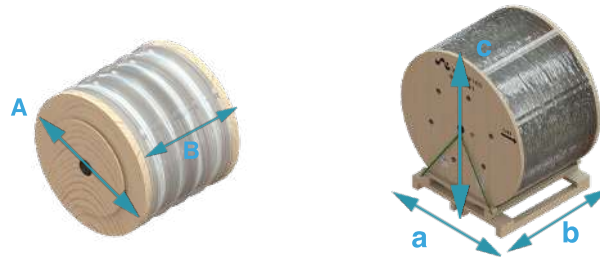
- Printed in white and resistant to physical tests on marking
- Marking interval: every 2 feet + 1%
- The marking can be changed according to customer requirements

### Printed Information on Sub-Unit

=/XXXX/FT\*==/MONTH//YEAR/ WAVEOPTICS/ OPTICAL CABLE == /LOT#/ ROUND DUAL == LSZH == /FIBER COUNT/ == /FIBER TYPE/=

- Printed in white and resistant to physical tests on marking
- Marking interval: every 2 feet + 1%

### Drum Dimensions and Pallet Packaging Information



Drum Length (ft)(m)(±5%)	Fiber Count	A (mm)(in)(±5%)	B (mm)(in)(±5%)	Drum and Pallet Total weight (kg)(lb) (±10%)	Total Packaging(±5%)		
					A (mm)(in)	B (mm)(in)	C (mm)(in)
5,000 (1,524)	2	650 (26)	550 (22)	284 (626)	700 (28)	700 (28)	2350 (93)

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

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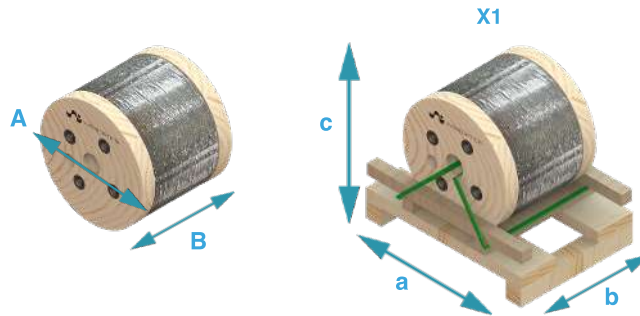
# WAVEOPTICS

## TECHNICAL DATA SHEET

### OUTDOOR CABLE

FOSPC-002-X-TFDDL-FTXXX-US / 2 Fibers

## Drum Dimensions and Pallet Packaging Information



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)
5,000 (1,524)	2	630 (25)	580 (23)	86 (190)	5,000 (1,524)	760 (30)	760 (30)	860 (34)
20,000 (6,096)	2	930 (37)	750 (30)	311 (686)	20,000 (6,096)	960 (38)	910 (36)	1120 (44)

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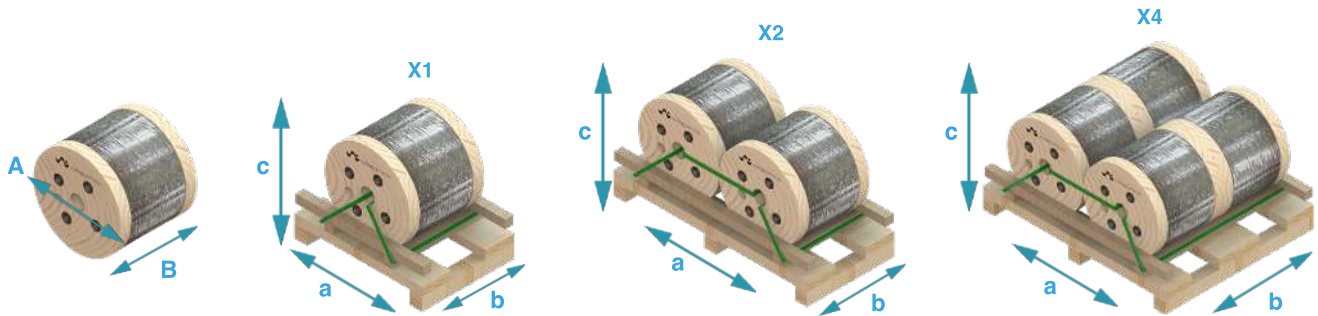
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## OUTDOOR CABLE

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### Drum Dimensions and Pallet Packaging Information



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)
2,000 (610)	2	550 (22)	430 (17)	49 (108)	2,000 (610)	760 (30)	550 (22)	690 (27)
2,000 (610)	2	550 (22)	430 (17)	97 (214)	4,000 (1,220)	1220 (48)	550 (22)	690 (27)
2,000 (610)	2	550 (22)	430 (17)	180 (397)	8,000 (2,440)	1220 (48)	1000 (39)	690 (27)

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WAVEOPTICS

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### 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)	0.35/0.25	0.35/0.25	0.35/0.25
Cable Marking Specifications	G657.A1	G657.A2	G657.B3
Notes: (1) Maximum attenuation after cabling process			

### Part Number Configuration

FOSPC-002-**X**-TFDDL-FT**XXX**-**US**

#### Waveoptics® Fiber Type

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

#### Drum Length

C5D\* - 2,000 ft  
C4Q - 5,000 ft  
C4T - 20,000 ft

#### Optical Cable Compliance

US - Waveoptics® Standard

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

\*: This configuration is configurable only with G657.A1 (T) fiber

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