



## TECHNICAL DATA SHEET | INDOOR - OUTDOOR CABLE |

#### 4

## Toneable Flat Drop Indoor/Outdoor Dual Cable

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

## **Applications**



























\*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.

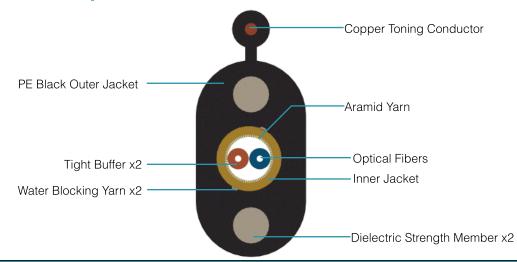
Each Waveoptics® cable meets the highest quality standards in the industry and contains a compliance certificate in which the performed tests in our quality laboratory are physically attached.

Folio El-067-01-EN Last Review 2/8/2024



**Dimensions & Properties** 

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	<b>D</b> esign						
Fiber per Tube	2						
Fiber Color Code	1 2						
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)							

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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## **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**

=/MONTH//YEAR/ WAVEOPTICS OPTICAL CABLE==FLAT DROP INDOOR/OUTDOOR==TONEABLE == DUAL==



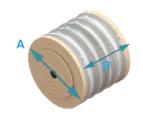
- Printed in white and resistant to physical tests on marking
- Marking interval: every 2 feet + 1%
  The marking can be changed according to customer requirements

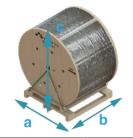
#### **Printed Information on Sub-Unit**

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

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

### **Drum Dimensions and Pallet Packaging Information**





Drum Length	Fiber	A	В	Drum and Pallet Total weight		Total Packaging(±	5%)
(ft)(m)(±5%)	Count	(mm)(in)(±5%)	(mm)(in)(±5%)	(kg)(lb) (±10%)	A (mm)(in)	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:\*

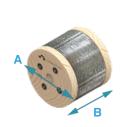
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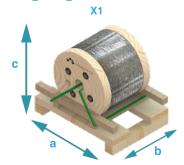
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## **Drum Dimensions and Pallet Packaging Information**





Drum Length	Fiber	A (mm) (in) (±	B (mm) (in) (±	Drum and Pallet Total weight Pallet capacity  (# Total weight Pallet capacity Pallet capacity Pallet capacity			l Packaging(±	:5%)
(ft) (m) (± 5\delta\delta)	Count	5%)	5%)	(kg) (lb) (±10%)	(ft) (m) (+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)

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.

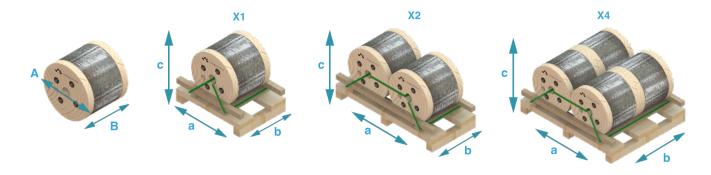
#### All drums include:\*

4. End cable marking



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## **Drum Dimensions and Pallet Packaging Information**



Drum Length	Fiber A		В	Drum and Pallet	Pallet Capacity	Total Packaging(±5%)		
(ft)(m)(±5%)	Count		(mm)(in)(±5%)	Total weight (kg)(lb) (±10%)	(ft)(m)(+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)

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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## **Transmission Performance by Fiber Type**

Fiber Type	Single Mode				
Waveoptics Fiber Type	G657.A1	G657.A2	G657.B3		
Waveoptics Fiber Code	Т	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:

## **Part Number Configuration**

## FOSPC-002-X-TFDDL-FTXXX-US

**Optical Cable Compliance** 

**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 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

www.waveoptics.net info@waveoptics.net

<sup>(1)</sup> Maximum attenuation after cabling process