

TECHNICAL DATA SHEET in

OUTDOOR CABLE

Loose Tube Double-Armored Triple-Jacket Cable Dry / PP

FOSPC-XXX-X-TJDAD-FT000-US/2-216 Fibers

Applications





Direct-buried

Protections

Duct Installation









LOOSE TUBE DOUBLE-ARMORED TRIPLE-JACKET CABLE DRY 96F G652.D FIBER FT

Description

Waveoptics® Loose Tube Double-Armored Triple-Jacket Cable Dry is designed for direct-buried installation, as well as for duct and aerial (lashed) installation.

Loose tubes made of PP are more flexible and allow an easier installation and routing. Dry water blocking technology allows a cleaner and quicker installation as well as a cost-friendly cable preparation.

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

The SZ-stranded method for loose tubes and six ripcords ensure a quick and easy mid-span access.

Dielectric central strength member requires no bonding or grounding.

Corrugated steel armor makes a rugged cable and offers exceptional performance against compression. Double-armored triple jacket design offers the best protection against rodents

Quality

 $Wave optics \ensuremath{\mathbb{B}}$ 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-87-640: Standard for optical fiber outside plant communications 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.

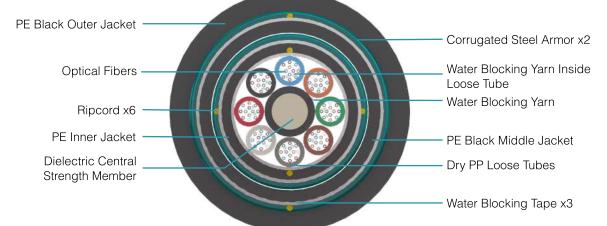
Folio PE-420-01-EN

Last Review 8/12/2022



FOSPC-XXX-X-TJDAD-FT000-US / 2 - 216 Fibers

Dimensions & Properties



| Design | | | | | | |
|---|--|--|--|--|--|--|
| Fiber per Tube | 2 - 12 | | | | | |
| Fiber Color Code / Loose Tube Color Code | 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 | | | | | |
| Dielectric Central Strength Member | FRP | | | | | |
| Outer Jacket Material / Thickness | Polyethylene / 1.6 mm (0.06 in) | | | | | |
| Middle Jacket Material / Thickness | Polyethylene / 1 mm (0.04 in) | | | | | |
| Inner Jacket Material / Thickness | Polyethylene / 0.8 mm (0.03 in) | | | | | |
| Loose Tube Material / Diameter | PP / 2.5 mm (0.1 in) | | | | | |
| Drum Length | 10,000 ft & 15,000 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) | 4,400 N/100 mm / 2,200 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.

Folio PE-420-01-EN



FOSPC-XXX-X-TJDAD-FT000-US / 2 - 216 Fibers

Dimensions & Properties

| Fiber Count | Loose Tube / Fillers | Cable Weight (kg/km) (lb/kft) (±10%) | Tensile Strength (N) (lbf) Long-Term/Short-Term | Nominal Outer Dimensions (mm) (in) (±5%) | Dielectric Central Strength Member Diameter (in) (Without PE / With PE) |
|----------------|----------------------|--|---|--|---|
| 2 - 12 | 1/5 | 330 (221) | 890/2,700 (200/607) | 18.3 (0.72) | 2.6 (0.1) |
| 24 | 2/4 | 330 (221) | 890/2,700 (200/607) | 18.3 (0.72) | 2.6 (0.1) |
| 36 | 3/3 | 330 (221) | 890/2,700 (200/607) | 18.3 (0.72) | 2.6 (0.1) |
| 48 | 4/2 | 330 (221) | 890/2,700 (200/607) | 18.3 (0.72) | 2.6 (0.1) |
| 60 | 5/1 | 330 (221) | 890/2,700 (200/607) | 18.3 (0.72) | 2.6 (0.1) |
| 72 | 6/0 | 330 (221) | 890/2,700 (200/607) | 18.3 (0.72) | 2.6 (0.1) |
| 96 | 8/0 | 370 (249) | 890/2,700 (200/607) | 19.9 (0.78) | 3/4.2 (0.12 / 0.17) |
| 144 | 12/0 | 482 (324) | 890/2,700 (200/607) | 23.1 (0.91) | 3/7.4 (0.12 / 0.29) |
| 192 | 16/2 | 506 (340) | 890/2,700 (200/607) | 23.8 (0.94) | 2.6 (0.1) |
| 216 | 18/0 | 506 (340) | 890/2,700 (200/607) | 23.8 (0.94) | 2.6 (0.1) |

F

Printed Information on Outer Jacket

=/MONTH//YEAR/WAVEOPTICS/OPTICAL CABLE + ==TJDAD== PP ==

==/FIBER TYPE/==/FIBER COUNT/==/FEET*/FT==/LOT#/=

Printed in white and resistant to physical tests on marking

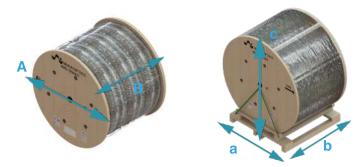
Marking interval: every 2 feet + 1% The marking can be changed according to customer requirements

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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%) | Total Packaging (±5%) | | | |
|-------------------------------|----------------|--------------------------|--------------------------|--|-----------------------|----------------|----------------|--|
| | | | | | a (mm) (in) | b (mm) (in) | c (mm) (in) | |
| 10,000 (3,048) | 2 - 72 | 1,650 (65) | 1,000 (39) | 1,258 (2,774) | 1,650 (65) | 1,219 (48) | 1,771 (70) | |
| | 96 | 1,770 (70) | 1,000 (39) | 1,404 (3,095) | 1,770 (70) | 1,219 (48) | 1,891 (74) | |
| | 144 | 1,950 (77) | 1,000 (39) | 1,805 (3,980) | 1,950 (77) | 1,219 (48) | 2,071 (82) | |
| | 192-216 | 1,950 (77) | 1,000 (39) | 1,879 (4,142) | 1,950 (77) | 1,219 (48) | 2,071 (82) | |
| 15,000 (4,572) | 2 -72 | 1,770 (70) | 1,000 (39) | 1,772 (3,907) | 1,770 (70) | 1,219 (48) | 1,891 (74) | |
| | 96 | 2,060 (81) | 974 (38) | 2,060 (4,541) | 2,060 (81) | 1,219 (48) | 2,181 (86) | |

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.

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 | | | | Multi Mode | | | | |
|---|---------------------|---------------|---------|-----------|------------|---------|----------|----------|--|
| Waveoptics® Fiber Type | G652.D | G657.A1 | G657.A2 | G655.C | OM1 | OM2 | ОМЗ | OM4 | |
| Waveoptics® Fiber Code | F | Т | E | G | В | L | М | Р | |
| OFS® Fiber Type | G652.D | AllWave® FLEX | - | - | - | - | - | - | |
| OFS® Fiber Code | 1 2 | | - | - | - | - | - | - | |
| Wavelength (nm) | 1310/1550 1550/1625 | | | | 850/1300 | | | | |
| Max.attn. (dB/km) (1) | 0.35/0.25 | 0.35/0.25 | 0.4/0.3 | 0.25/0.27 | 3.4/1 | 3/1 | | | |
| Min. Bandwidth (MHz*km) (2) | | | | | 200/500 | 750/500 | 1500/500 | 3500/500 | |
| 1-Gigabit Ethernet Distance (m) (3) | - | | | | 300 | 750 | >550 | >550 | |
| 10-Gigabit Ethernet Distance (m) (4) | - | | | | - | 150 | 300 | 400 | |
| 40/100-Gigabit Ethernet Distance (m) | - | | | | - | - | 100/70 | 150/100 | |
| Cable Marking Specifications | G652.D | G657.A1 | G657.A2 | G655.C | OM1 | OM2 | ОМЗ | OM4 | |
| Notes: | | | | | | | | | |

Notes:

(1) Maximum attenuation after cabling process

(2) OFL (overfilled launch) bandwidth measurement

(3) 1-Gb/sat 850 nm transmissions based on IEEE 802.3z test protocol

*For more information about the optical fibers, consult the corresponding data sheets.

(4) 10-Gb/sat 850 nm transmissions based on IEEE 802.3ae test protocol

(5) 40/100-Gb/sat 850 nm transmissions based on IEEE P802.3ba test protocol

Part Number Configuration

FOSPC-XXX-X-TJDAD-FT000-US

1 - SM G652.D

Fiber Count

002 - 2 Fibers

004 - 4 Fibers

006 - 6 Fibers

008 - 8 Fibers

012 - 12 Fibers

024 - 24 Fibers

036 - 36 Fibers

Waveoptics® Fiber Type

OFS® Fiber Type

Optical Cable Compliance

US - Waveoptics® Standard AC - Buy American Act Compliance

- F SM G652.D T - SM G657.A1 E - SM G657.A2 G - SM G655.C B - MM OM1
 - L MM OM2 TRUE BEND
 - M MM OM3 TRUE BEND P - MM OM4 TRUE BEND
- 048 48 Fibers 060 - 60 Fibers 072 - 72 Fibers
- 096 96 Fibers

144 - 144 Fibers

192 - 192 Fibers

216 - 216 Fibers

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

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