



# Loose Tube Single-Armored Figure 8 Slim Cable / PP

## FOSPC-XXX-X-F8SJSAX-FT000-EX / 2-144 Fibers

### Description

Waveoptics Loose Tube Single-Armored Figure 8 Slim Cable is designed for self-supporting applications. Galvanized steel messenger composed of 7 steel wire strands is incorporated. Messenger diameters of 1/4" and 3/16" are available.

Easy one-step installation with standard hardware and installation methods. Self-supporting design requires no lashing, reducing installation time and costs.

Loose tubes made of PP are more flexible and allow an easier installation and routing, and are filled with water blocking gel.

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 ripcords ensure a quick fiber access.

Corrugated steel armor makes a rugged cable rodent resistant and offers exceptional performance against compression.



LT SA F8 SLIM CABLE 1/4"  
72F G652D DFT000 S EX

### Quality

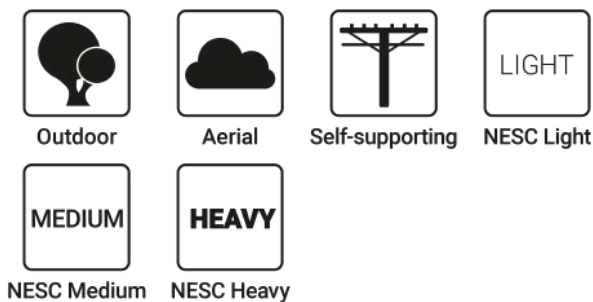
Waveoptics is a ISO-9001: 2015 certified company.

We meet or exceed the following international standards:

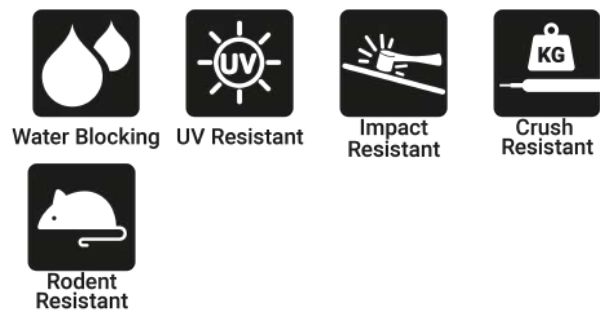
- Telcordia GR-20: Generic requirements for optical fiber and optical fiber cable.
- IEC 60794: Basic requirements for optical fiber and cable elements.
- ANSI/ICEA S-87-640: Standard for optical fiber outside plant communications cable.

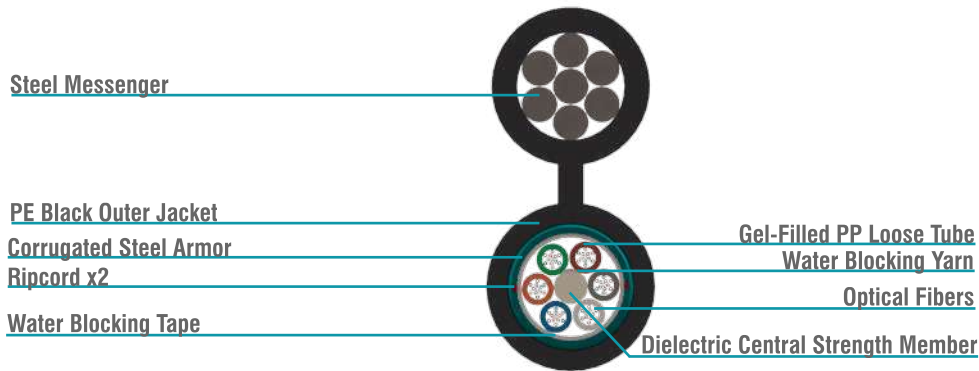
Each Waveoptics cable meets the highest quality standards in the industry and contains a compliance certificate in which the performed tests in our quality laboratory are physically attached.

### Applications:



### Protections:



**Dimensions and Properties**
**FOSPC-XXX-X-F8SJSAX-FT000-EX / 2-144 fibers**


| Design  |  |
|---|--|
| Fiber per tube  | 2 - 12   |
| Fiber color code / loose tube color code                            |  |
| Messenger material / diameter                                       | Galvanized steel / 1/4" & 3/16"  |
| Outer jacket material / thickness                                   | Polyethylene / 1.2 mm (0.05 in)  |
| Loose tube material / diameter                                      | PP / 1.9 mm (0.07 in)  |
| Drum length   | 10,000 ft, 15,000 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  |
| Tensile strength without messenger (N) (lbf) long-term / short-term | 890 / 2,700 (200 / 607)  |
| Messenger breaking strength (1/4" / 3/16") (N) (lbf)                | 26,143 (5,877) / 14,929 (3,356)  |

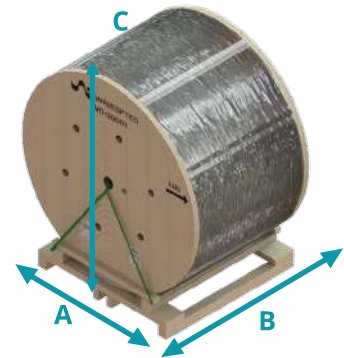
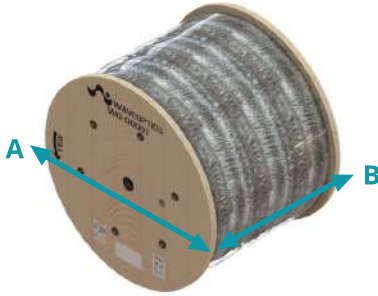
Note: Waveoptics recommends storing cable in a proper temperature environment prior to installation to allow the cable temperature to meet installation temperature range specifications for best installation results.

| Messenger diameter | Fiber count | Cable weight (kg/km) (lb/kft) (±10%) | Nominal outer dimensions (mm) (in) (±5%) | Maximum span (NESC Light / Medium / Heavy) (m) (ft) | Dielectric central strength member diameter (mm) (in) (Without PE / With PE) |
|--------------------|-------------|--------------------------------------|--|---|--|
| 1/4"               | 2 - 72      | 318 (213)                            | 9.9 x 21.42 (0.39 x 0.84)                | 490 (1,608) / 187 (614) / 157 (515)                 | 2 (0.08)   |
|                    | 96          | 341 (229)                            | 11.1 x 22.63 (0.44 x 0.89)               | 454 (1,490) / 178 (584) / 147 (482)                 | 3.2 (0.13)   |
|                    | 144         | 384 (258)                            | 13.4 x 24.93 (0.53 x 0.98)               | 438 (1,437) / 169 (554) / 138 (453)                 | 3 / 5.5 (0.12 / 0.22)  |
| 3/16"              | 2 - 72      | 238 (160)                            | 9.9 x 19.86 (0.39 x 0.78)                | 346 (1,135) / 117 (384) / 95 (312)                  | 2 (0.08)   |
|                    | 96          | 261 (175)                            | 11.1 x 21.06 (0.44 x 0.83)               | 319 (1,047) / 111 (364) / 89 (292)                  | 3.2 (0.13)   |
|                    | 144         | 304 (205)                            | 13.4 x 23.37 (0.53 x 0.92)               | 276 (906) / 101 (331) / 81 (266)                    | 3 / 5.5 (0.12 / 0.22)  |

**Printed Information on Outer Jacket**
**FOSPC-XXX-X-F8SJSAX-FT000-EX / 2-144 fibers**

=/MONTH/YEAR/ WAVEOPTICS= =F8SJSAX= =/MESSENGER DIAMETER/= =PP= =/FIBER TYPE/= =/FIBER COUNT/= =/FEET\*/ FT= =/LOT #/=

- Printed in white and resistant to physical tests on marking.
- Marking interval: every 2 feet + 1% or 1 meter + 1%.
- The marking can be changed according to customer requirements.
- \*The standard marking interval is every 2 feet, in case the marking requirement is in meters, a notification on the purchase order would be necessary.

**Drum Dimensions and Pallet Packaging Information**


| Messenger diameter | Drum length (ft)<br>(m) (±5%) | Fiber count | A (mm) (in) (±5%) | B (mm) (in) (±5%) | Drum and pallet total weight<br>(kg) (lb) (±10%) | Total packaging (±5%) |             |             |
|--------------------|-------------------------------|-------------|-------------------|-------------------|--|-----------------------|-------------|-------------|
|                    |                               |             |                   |                   |  | A (mm) (in)           | B (mm) (in) | C (mm) (in) |
| 1/4"               | 10,000<br>(3,048)             | 2 - 72      | 1,300 (51)        | 1,100 (43)        | 1,223 (2,696)                                    | 1,300 (51)            | 1,220 (48)  | 1,440 (57)  |
|                    |                               | 96          | 1,470 (58)        | 1,100 (43)        | 1,293 (2,851)                                    | 1,470 (58)            | 1,220 (48)  | 1,610 (63)  |
|                    |                               | 144         | 1,650 (65)        | 1,100 (43)        | 1,467 (3,235)                                    | 1,650 (65)            | 1,220 (48)  | 1,790 (70)  |
|                    | 15,000<br>(4,572)             | 2 - 72      | 1,770 (69)        | 1,100 (43)        | 1,786 (3,937)                                    | 1,770 (69)            | 1,220 (48)  | 1,910 (75)  |
|                    |                               | 96          | 1,770 (69)        | 1,100 (43)        | 1,891 (4,169)                                    | 1,770 (69)            | 1,220 (48)  | 1,910 (75)  |
|                    |                               | 144         | 2,060 (81)        | 1,100 (43)        | 2,126 (4,686)                                    | 2,060 (81)            | 1,220 (48)  | 2,200 (87)  |
| 3/16"              | 10,000<br>(3,048)             | 2 - 72      | 1,200 (47)        | 1,100 (43)        | 872 (1,923)                                      | 1,200 (47)            | 1,168 (46)  | 1,340 (63)  |
|                    |                               | 96          | 1,200 (47)        | 1,000 (39)        | 940 (2,071)                                      | 1,200 (47)            | 1,168 (46)  | 1,340 (63)  |
|                    |                               | 144         | 1,650 (65)        | 1,100 (43)        | 1,224 (2,698)                                    | 1,650 (65)            | 1,220 (48)  | 1,790 (70)  |
|                    | 15,000<br>(4,572)             | 2 - 72      | 1,650 (65)        | 1,100 (43)        | 1,385 (3,054)                                    | 1,650 (65)            | 1,220 (48)  | 1,790 (70)  |
|                    |                               | 96          | 1,470 (58)        | 1,100 (43)        | 1,447 (3,191)                                    | 1,470 (58)            | 1,220 (48)  | 1,610 (63)  |
|                    |                               | 144         | 2,060 (81)        | 1,100 (43)        | 1,801 (3,970)                                    | 2,060 (81)            | 1,220 (48)  | 2,200 (87)  |
|                    | 20,000<br>(6,096)             | 2 - 72      | 1,770 (69)        | 1,100 (43)        | 1,783 (3,931)                                    | 1,770 (69)            | 1,220 (48)  | 1,910 (75)  |
|                    |                               | 96          | 1,770 (69)        | 1,100 (43)        | 1,923 (4,240)                                    | 1,770 (69)            | 1,220 (48)  | 1,910 (75)  |

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.

**Transmission Performance by Fiber Type**
**FOSPC-XXX-X-F8SJSAX-FT000-EX / 2-144 fibers**

| Fiber type                               | Single Mode |               |                |              | Multi Mode              |                    |                     |                     |
|--|-------------|---------------|----------------|--------------|-------------------------|--------------------|---------------------|---------------------|
| Waveoptics fiber type                    | G652.D      | G657.A1       | G657.A2        | G655.C       | OM1                     | OM2                | OM3                 | OM4                 |
| Waveoptics fiber code                    | F           | T             | E              | G            | B                       | L                  | M                   | P                   |
| OFS® fiber type                          | G652.D      | AllWave® FLEX | AllWave® FLEX+ | TrueWave® LA | 62.5 um Laser Optimized | 50 um Graded Index | LaserWave® FLEX 300 | LaserWave® FLEX 550 |
| OFS® fiber code                          | 1           | 2             | 3              | 7            | 5                       | 8                  | 9                   | 0                   |
| Wavelength (nm)                          | 1310/1550   |               |                | 1550/1625    | 850/1300                |                    |                     |                     |
| Max. attn. (dB/km) (1)                   | 0.35/0.25   | 0.35/0.25     | 0.35/0.25      | 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) (5) | -           |               |                |              | -                       | -                  | 100/70              | 150/100             |
| Cable marking specifications             | G652.D      | G657.A1       | G657.A2        | G655.C       | OM1                     | OM2                | OM3                 | OM4                 |

Notes:  
 (1) Maximum attenuation after cabling process.  
 (2) OFL (overfilled launch) bandwidth measurement.  
 (3) 1-Gb/s at 850 nm transmissions based on IEEE 802.3z test protocol.  
 (4) 10-Gb/s at 850 nm transmissions based on IEEE 802.3ae test protocol.  
 (5) 40/100-Gb/s at 850 nm transmissions based on IEEE P802.3ba test protocol.  
 \*For more information about the optical fibers, consult the corresponding data sheets.

**Part Number Configuration**
**FOSPC-XXX-X-F8SJSAX-FT000-EX**
**Fiber count**

- 002 - 2 fibers
- 004 - 4 fibers
- 006 - 6 fibers
- 008 - 8 fibers
- 012 - 12 fibers
- 024 - 24 fibers
- 036 - 36 fibers
- 048 - 48 fibers
- 060 - 60 fibers
- 072 - 72 fibers
- 096 - 96 fibers
- 144 - 144 fibers

**Waveoptics fiber type**

- 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

**Optical cable compliance**

- EX - Waveoptics standard
- AC - Buy American Act compliance

**OFS® fiber type**

- 1 - SM G652.D
- 2 - AllWave® FLEX
- 3 - AllWave® FLEX+
- 7 - TrueWave® LA
- 5 - 62.5 um Laser Optimized
- 8 - 50 um Graded Index
- 9 - LaserWave® FLEX 300
- 0 - LaserWave® FLEX 550

**Messenger diameter**

- 6 - 1/4"
- 5 - 3/16"

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