



Loose Tube Figure 8 Slim Cable / PBT

FOSPC-XXX-X-F8SJX-FT002-EX / 2-288 Fibers

Description

Waveoptics Loose Tube 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 PBT which provide great mechanical properties under a wide range of conditions such as crush test and impact test, 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.



LT F8 SLIM CABLE 1/4"
288F G652D DFT002 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:



Outdoor



Aerial



Self-supporting



LIGHT

NESC Light



MEDIUM

NESC Medium



HEAVY

NESC Heavy

Protections:




Water Blocking



UV Resistant

Dimensions and Properties
Steel Messenger
PE Black Outer Jacket
Gel-Filled PBT Loose Tube
Ripcord x2
Water Blocking Tape x2

Water Blocking Yarn
Dielectric Central Strength Member
Optical Fibers

Design	
Fiber per tube	
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	PBT / 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)

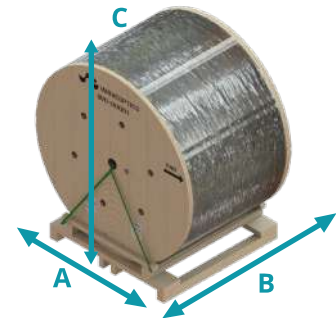
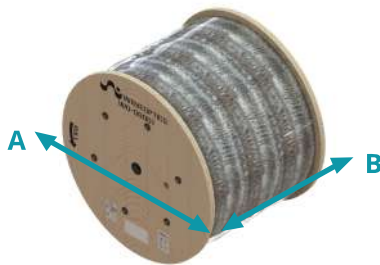
Note: Waveoptics recommends storing cable in a proper temperature environment prior to installation to allow the cable temperature to meet installation temperature range specifications for best installation results.

Messenger diameter	Fiber count	Cable weight (kg/km) (lb/kft) (±10%)	Nominal outer dimensions (mm) (in) (±5%)	Maximum span (ft/m) (NESC Light / Medium / Heavy)	Dielectric central strength member diameter (mm) (in) (Without PE / With PE)
1/4"	2 - 72	280 (188)	9.35 x 20.21 (0.37 x 0.8)	546 (1,791) / 200 (656) / 168 (551)	2 (0.08)
	96	301 (202)	9.9 x 21.42 (0.39 x 0.84)	509 (1,670) / 190 (623) / 159 (522)	3.2 (0.13)
	144	339 (228)	12.2 x 23.73 (0.48 x 0.93)	449 (1,473) / 175 (574) / 143 (469)	3 / 5.5 (0.12 / 0.22)
	192 - 216	342 (230)	13 x 24.53 (0.51 x 0.97)	441 (1,447) / 171 (561) / 139 (456)	2 (0.08)
	288	384 (258)	14.7 x 26.24 (0.58 x 1.03)	400 (1,312) / 160 (525) / 130 (427)	2.6 / 3.7 (0.1 / 0.15)
3/16"	2 - 72	200 (134)	8.7 x 18.65 (0.34 x 0.73)	398 (1,306) / 126 (413) / 98 (322)	2 (0.08)
	96	221 (149)	9.9 x 19.86 (0.39 x 0.78)	368 (1,207) / 120 (394) / 96 (315)	3.2 (0.13)
	144	259 (174)	12.2 x 22.17 (0.48 x 0.87)	315 (1,033) / 108 (354) / 86 (282)	3 / 5.5 (0.12 / 0.22)
	192 - 216	264 (177)	13 x 22.97 (0.51 x 0.9)	308 (1,011) / 106 (348) / 84 (276)	2 (0.08)
	288	304 (204)	14.7 x 24.68 (0.58 x 0.97)	275 (902) / 99 (325) / 78 (256)	2.6 / 3.7 (0.1 / 0.15)

Printed Information on Outer Jacket
FOSPC-XXX-X-F8SJX-FT002-EX / 2-288 fibers

=/MONTH//YEAR/ WAVEOPTICS = =F8SJ= =/MESSENGER DIAMETER/= =/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) (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)
1/4"	10,000 (3,048)	2 - 72	1,300 (51)	1,100 (43)	1,019 (2,247)	1,300 (51)	1,220 (48)	1,440 (57)
		96	1,300 (51)	1,100 (43)	1,083 (2,389)	1,300 (51)	1,220 (48)	1,440 (57)
		144	1,650 (65)	1,100 (43)	1,330 (2,933)	1,650 (65)	1,220 (48)	1,790 (70)
		192 - 216	1,650 (65)	1,100 (43)	1,339 (2,953)	1,650 (65)	1,220 (48)	1,790 (70)
		288	1,770 (69)	1,100 (43)	1,502 (3,312)	1,770 (69)	1,220 (48)	1,910 (75)
	15,000 (4,572)	2 - 72	1,650 (65)	1,100 (43)	1,577 (3,477)	1,650 (65)	1,220 (48)	1,790 (70)
		96	1,650 (65)	1,100 (43)	1,673 (3,689)	1,650 (65)	1,220 (48)	1,790 (70)
		144	1,770 (69)	1,100 (43)	1,869 (4,120)	1,770 (69)	1,220 (48)	1,910 (75)
		192 - 216	1,770 (69)	1,100 (43)	1,883 (4,150)	1,770 (69)	1,220 (48)	1,910 (75)
		288	1,950 (77)	1,100 (43)	2,126 (4,886)	1,950 (77)	1,220 (48)	2,090 (82)
	20,000 (6,096)	2 - 72	1,770 (69)	1,100 (43)	2,039 (4,495)	1,770 (69)	1,220 (48)	1,910 (75)
		96	1,770 (69)	1,100 (43)	2,154 (4,749)	1,770 (69)	1,220 (48)	1,910 (75)
3/16"	10,000 (3,048)	2 - 72	1,200 (47)	1,100 (43)	753 (1,659)	1,220 (48)	1,220 (48)	1,340 (63)
		96	1,200 (47)	1,100 (43)	787 (1,734)	1,220 (48)	1,220 (48)	1,340 (63)
		144	1,650 (65)	1,100 (43)	1,086 (2,395)	1,650 (65)	1,220 (48)	1,790 (70)
		192 - 216	1,650 (65)	1,100 (43)	1,102 (2,429)	1,650 (65)	1,220 (48)	1,790 (70)
		288	1,650 (65)	1,100 (43)	1,224 (2,698)	1,650 (65)	1,220 (48)	1,790 (70)
	15,000 (4,572)	2 - 72	1,300 (51)	1,100 (43)	1,080 (2,382)	1,300 (51)	1,220 (48)	1,440 (57)
		96	1,650 (65)	1,100 (43)	1,307 (2,882)	1,650 (65)	1,220 (48)	1,790 (70)
		144	1,770 (69)	1,100 (43)	1,516 (3,343)	1,770 (69)	1,220 (48)	1,910 (75)
		192 - 216	1,770 (69)	1,100 (43)	1,526 (3,364)	1,770 (69)	1,220 (48)	1,910 (75)
		288	1,950 (77)	1,100 (43)	1,760 (3,880)	1,950 (77)	1,220 (48)	2,090 (82)
	20,000 (6,096)	2 - 72	1,650 (65)	1,100 (43)	1,516 (3,343)	1,650 (65)	1,220 (48)	1,790 (70)
		96	1,770 (69)	1,100 (43)	1,679 (3,702)	1,770 (69)	1,220 (48)	1,910 (75)
		144	1,950 (77)	1,100 (43)	1,949 (4,297)	1,950 (77)	1,220 (48)	2,090 (82)
		192 - 216	1,950 (77)	1,100 (43)	1,979 (4,364)	1,950 (77)	1,220 (48)	2,090 (82)

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.

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

Transmission Performance by Fiber Type
FOSPC-XXX-X-F8SJX-FT002-EX / 2-288 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-F8SJX-FT002-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
 192 - 192 fibers
 216 - 216 fibers
 288 - 288 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.