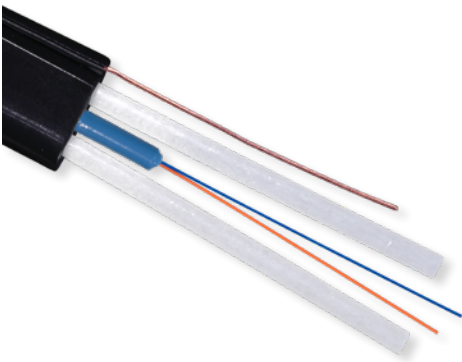




A Furukawa Company

# Toneable Mini LT Flat Drop Fiber Optic Cable

Compact and Easy-to-Locate Fiber Optic Cable for the Last Link in Your FTTx Network

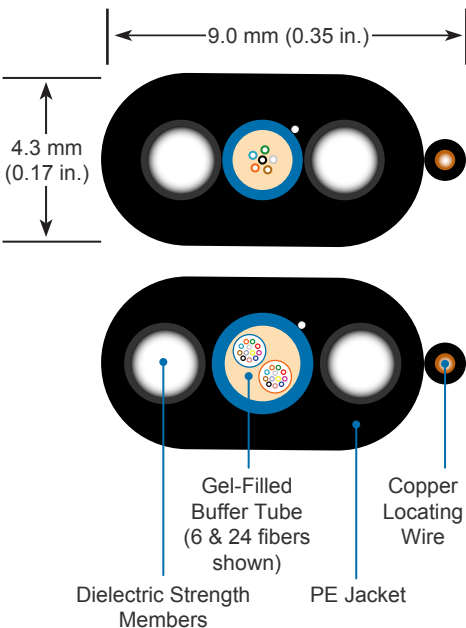


Toneable Mini LT Flat Drop Fiber Optic Cable

## Features and Benefits

- Easily removable copper wire allows fast cable location while facilitating bonding and grounding
- Compact, easy-to-access cable provides streamlined installation and handling
- Suitable for direct buried and duct FTTx drop installations, as well as aerial self-supporting applications
- Optimized for fiber counts of 1, 2, 4, 6, 12, and 24 for minimizing deployment costs
- 300 lb (1335 N) rated installation load
- RDUP (formerly RUS) listed and compliant with ANSI/ICEA, Telcordia, and IEC specifications for reliable performance
- Standard availability with AllWave® Zero Water Peak (ZWP) Optical Fiber
- AllWave FLEX ZWP Optical Fiber available as an option

## Toneable Mini LT Flat Drop Fiber Optic Cable Cross-Section



## Product Description

The OFS Toneable Mini LT Flat Drop Cable offers a compact, durable, and easy-to-locate optical fiber solution in a readily accessible construction. The fiber optic cable’s webbed design allows the locating wire to be easily separated from the main cable sheath by hand, providing simple, rapid routing and grounding of the locating wire.

To construct the cable, up to 12 optical fibers are placed in a 2.0 mm gel-filled buffer tube to create a flexible, easy-to-access core (a 3.0 mm buffer tube for 24-fiber cable). Next, two fiberglass rods are placed diametrically opposite on either side of the fiber core, providing excellent crush resistance and tensile strength during installation and over the lifetime of the cable. A 24 AWG copper wire is aligned along the outside edge of one of the fiberglass rods to provide locatability. The locating wire, strength member rods, and fiber core are then encapsulated in a durable polyethylene (PE) jacket to create a flat cable cross section and lend added protection to the cable core. Between the locating wire and the adjacent fiberglass rod, the jacket forms a thin web that is easily separated by hand, allowing quick removal of the copper wire from the main sheath.

## Why The Toneable Mini LT Flat Drop Cable?

Designed specifically for your below-grade installations, in ducts or open trenches, the Toneable Mini LT Flat Drop Cable provides locatability and easy handling. The buffer tube fiber core offers fast access with a familiar, easy-to-handle design. Leveraging the same proven sheath design of OFS’ aerial, all-dielectric Mini LT Flat Drop Cable, the Toneable Mini LT Flat Drop Cable adds an easily separable 24 AWG copper wire. This toning wire is compatible with commercial outside plant (OSP) cable locating equipment, and is easily peeled away from the main cable sheath at termination points so that the wire can be routed to a grounding point inside or outside the network terminal or cable closure. Minimizing the effort required to bond and ground the toning wire is key to reducing labor in the field, and the removal of the wire can be easily done by hand, without special tools. In addition, the Toneable Mini LT Cable’s webbed outer jacket is specifically designed to ensure that the removal of the toning wire does not compromise the main sheath. The result is a durable, easy-to-locate and handle cable solution for the last link in your FTTx deployment.

Toneable Mini LT Flat Drop Cable	
Specifications	
<b>Fiber Count</b>	1, 2, 4, 6, 12, and 24
<b>Cable Dimensions</b>	0.17 in. x 0.35 in. (4.3 mm x 9.0 mm)
<b>Weight - lb/kft (kgm/km)</b>	27 (40)
Handling (all cables)	
<b>Minimum Bend Radius, with Load</b>	6 in. (15 cm)
<b>Minimum Bend Radius, with No Load</b>	3 in. (7.5 cm)
<b>Minimum Bend Radius, Storage Coils</b>	6 in. (15 cm)
<b>Maximum Rated Cable Load (MRCL)</b>	300 lbf (1335 N)
<b>Maximum Long Term Load</b>	150 lbf (667 N)
<b>Temperature</b>	<b>Installation:</b> -22 °F to 140 °F (-30 °C to 60 °C) <b>Operation:</b> -40 °F to 158 °F (-40 °C to 70 °C) <b>Storage:</b> -40 °F to 167 °F (-40 °C to 75 °C)
Performance Standard (all cables)	

Tested per Applicable Requirements of ANSI/ICEA S-87-640 and Telcordia GR-20-CORE Issue 3

Fiber Type <sup>2</sup>							
Single-Mode Optical Fiber	Fiber (S1)	Fiber (S2)	Fiber (SF)	Fiber Standards	Wavelengths (nm)	Typical* Attenuation (dB/km)	Maximum Cable on Reel Attenuation (dB/km)
AllWave® ZWP Optical Fiber	3	B	E	G.652.D	1310/1385/1550	-	0.35/0.31/0.25
AllWave+ ZWP Optical Fiber	3	C	E	G.652.D/G.657.A1	1310/1385/1550	-	0.35/0.31/0.25
AllWave FLEX ZWP Optical Fiber	5	B	E	G.652.D/G.657.A1	1310/1385/1550	-	0.35/0.31/0.25
AllWave Low Loss Optical Fiber	3	A	E	G.652.D	1310/1385/1550	0.33/0.31/0.19	0.35/0.31/0.22
AllWave One Optical Fiber	3	F	E	G.652.D/G.657.A1	1310/1385/1550	0.33/0.31/0.19	0.35/0.31/0.22
Multimode Optical Fiber							
62.5 µm Optical Fiber*	R	U	9	OM1 62.5 µm	850/1300	-	3.4/1.0
LaserWave® FLEX 300 Optical Fiber*	L	F	2	OM3 50 µm	850/1300	-	2.4/0.7
LaserWave FLEX 550 Optical Fiber*	L	H	2	OM4 50 µm	850/1300	-	2.4/0.7

\* Not available for 24-fiber cables

### Toneable Mini LT Flat Drop Fiber Optic Cable Ordering Information

Example: **AT-3BE8T7T-NNN<sup>1</sup>**

Part Number: **AT- S1 S2 SF S3 S4 S5 S6 - NNN<sup>1</sup>**

<b>S1 = Fiber Selection</b> See S1 Fiber Table above	<b>S3 = Sheath Construction</b> 8 = All Central Core Products	<b>S5 = Sheath Design</b> 7 = Flat Drop
<b>S2 = Fiber Transmission Performance</b> See S2 Fiber Table above	<b>Cable Core Design</b>	<b>S6 = Central Core - Oversheath</b> T = Toneable
<b>SF = Fiber Type<sup>2</sup></b> See SF Fiber Table above	<b>S4 = T = Gel-Filled 2.0 mm Buffer Tube (3.0 mm Buffer Tube for 24-fiber cable)</b>	<b>NNN = Fiber Count</b> 001, 002, 004, 006, 012, or 024

<sup>1</sup> Part Number shown is for standard AllWave ZWP attenuation and standard cable print: Maximum AllWave ZWP attenuation: 0.35/0.31/0.27/0.25/0.27 dB/km (1310/1385/1490/1550/1625 nm)

Standard Print, example for Toneable Mini LT Flat Drop Cable:

**OFS OPTICAL CABLE AT-3BE8T7T-NNN [MM-YY] [HANDSET SYMBOL] [NNN] F [SERIAL #]**

<sup>2</sup> Contact OFS Order Management for information on other cable variations, including additional fiber types, attenuation, and custom cable print.

**NOTE:** For more information regarding typical attenuation as well as attenuation parameters on Link Design Value (LDV) (Maximum end-to-end attenuation over a concatenated span), please see OFS Application Note AN-111 which can be downloaded at [www.ofsoptics.com](http://www.ofsoptics.com) or contact your OFS representative.

**For additional information please contact your sales representative.**

You can also visit our website at [www.ofsoptics.com](http://www.ofsoptics.com) or call 1-888-fiberhelp (1-888-342-3743) USA or 1-770-798-5555 outside the USA.

Max Span and Loading Conditions - 2-12F Tonable Mini LT				
Storm Loading Region	1% Installation Sag		3% Installation Sag	
	Max Span	Installation Tension	Max Span	Installation Tension
<b>Heavy</b>	85 ft	29 lbf	110 ft	12 lbf
<b>Medium</b>	155 ft	52 lbf	220 ft	23 lbf
<b>Light</b>	255 ft	86 lbf	355 ft	40 lbf

Max Span and Loading Conditions - 24 F Tonable Mini LT				
Storm Loading Region	1% Installation Sag		3% Installation Sag	
	Max Span	Installation Tension	Max Span	Installation Tension
<b>Heavy</b>	100 ft	30 lbf	100 ft	10 lbf
<b>Medium</b>	200 ft	61 lbf	200 ft	20 lbf
<b>Light</b>	400 ft	121 lbf	400 ft	40 lbf



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