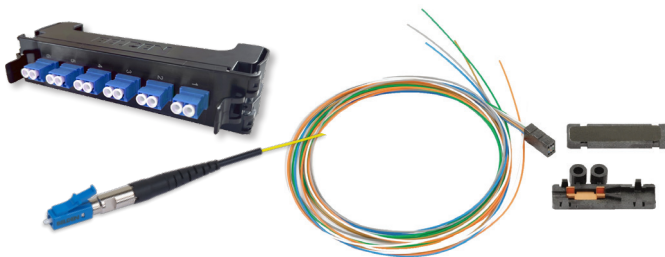


OptiTuff® Connectivity & Cable Management

Belden now offers field-termination connectivity for OptiTuff Mini Fiber Cables. By creating new systems and making improvements to the transition points, connectors and patch panels in our existing FiberExpress (FX) line, installers now benefit from fast, easy installation plus compatibility with our popular FX Fusion Splice-On Connector and FX ECX Patch Panel System. This continues the revolutionary breakthrough that OptiTuff Mini Fiber Cables provide for fiber installations, enabling installers to utilize OptiTuff across a wider range of applications.

There are three options for field termination with OptiTuff Mini Fiber Cable using the FX ECX Patch Panel System:

1. FX ECX Fiber Frame
2. FX ECX Field-Terminated Cassette
3. FX ECX Splice Cassette preloaded with pigtails



Option 1: FX ECX Fiber Frame

This option allows the use of OptiTuff Mini Fiber Cable with the FX ECX Fiber Frame, FX Fusion Splice-On Connectors and FX Breakout Kit. Below are the items number that will help you build a system.

Note: This option allows for a maximum of two breakout kits per frame (maximum of 24 breakout kits per 4U).

- Step 1:** Select OptiTuff Mini Fiber Cable (fiber count), Table 1
- Step 2:** Select FX ECX Fiber Frame, Table 2
- Step 3:** Select the FX Fusion Splice-On Connector, Table 3
- Step 4:** Select the FX Breakout Kit suitable for your fiber count

Description	Belden Part Number
OptiTuff Breakout Kit for 4.0 mm - 6 x 900 µm	AX109703
OptiTuff Breakout Kit for 4.0 mm - 12 x 900 µm	AX109704

- Step 5:** Select the FX Fusion Holder that is compatible with your FX Fusion Splicer, Table 4

Option 2: FX ECX Field-Terminated Cassette

This option allows the use of OptiTuff Mini Fiber Cable with FX Fusion Splice-On Connectors and the FX ECX Cassette.

Note: This option allows for a maximum of two OptiTuff Mini Fiber Cables per cassette (maximum of 24 OptiTuff Mini Fiber Cables per 4U). If you need more than two OptiTuff Mini Fiber Cables per cassette, then an FX Transition Kit is required.

- Step 1:** Select OptiTuff Mini Fiber Cable (fiber count), Table 1
- Step 2:** Determine the number of OptiTuff Mini Fiber Cables per cassette
 - » If two or less, then go to Step 3.
 - » If three or more, then an FX Transition Kit is required. Choose the most appropriate item number from the table below.

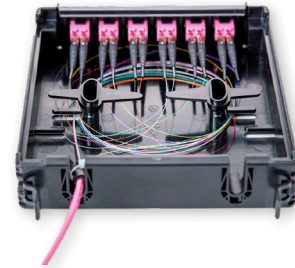
Description	Belden Part Number
OptiTuff Mini Fiber Cable Transition Kit 2f x 2 mm Heat Shrink Yellow	AX109696
OptiTuff Mini Fiber Cable Transition Kit 2f x 2 mm Heat Shrink Erika Violet	AX109697
OptiTuff Mini Fiber Cable Transition Kit 6f/12f/24f x 3 mm Heat Shrink Yellow	AX109699
OptiTuff Mini Fiber Cable Transition Kit 6f/12f/24f x 3 mm Heat Shrink Erika Violet	AX109700
OptiTuff Mini Fiber Cable Transition Kit 24f to 2 x 3 mm Heat Shrink Yellow	AX109701
OptiTuff Mini Fiber Cable Transition Kit 24f to 2 x 3 mm Heat Shrink Erika Violet	AX109702

- Step 3:** Select the FX ECX Field-Terminated Cassette

Description - Patch Ports (fibers)	OM4 (Erika Violet Adapters)	OS2 (Blue Adapters)	OS2 APC (Green Adapters)
LC Duplex			
6 (12)	FC4X06LDFT	FCSX06LDFT	FCSX06LAFT
12 (24)	FC4X12LDFT	FCSX12LDFT	FCSX12LAFT
SC Duplex			
6 (12)	FC4X06SDFT	FCSX06SDFT	FCSX06SAFT
SC Simplex			
6 (6)	FC4X06SCFT	FCSX06SCFT	FCSX06SBFT
12 (12)	FC4X12SCFT	FCSX12SCFT	FCSX12SBFT

- Step 4:** Select the FX Fusion Splice-On Connector, Table 3
- Step 5:** Select the Fusion Holder that is compatible with your Fusion Splicer, Table 4

OptiTuff Connectivity & Cable Management System Guide



Option 3: FX ECX Splice Cassette

This option allows the use of OptiTuff Mini Fiber Cable with the FX ECX Splice Cassette preloaded with pigtails.

Note: This option allows for a maximum of two OptiTuff Mini Fiber Cables per cassette (maximum of 24 OptiTuff Mini Fiber Cables per 4U). If you need more than two OptiTuff Mini Fiber Cables per cassette, then an FX Transition Kit will be required.

- Step 1:** Select OptiTuff Mini Fiber Cable (fiber count), Table 1
- Step 2:** Determine the number of OptiTuff Mini Fiber Cables per cassette
 - » If two or less, then go to Step 3.
 - » If three or more, then an FX Transition Kit will be required. Choose the most appropriate item number from the table below.

Description	Belden Part Number
OptiTuff Mini Fiber Cable Transition Kit 2f x 2 mm Heat Shrink Yellow	AX109696
OptiTuff Mini Fiber Cable Transition Kit 2f x 2 mm Heat Shrink Erika Violet	AX109697
OptiTuff Mini Fiber Cable Transition Kit 6f/12f/24f x 3 mm Heat Shrink Yellow	AX109699
OptiTuff Mini Fiber Cable Transition Kit 6f/12f/24f x 3 mm Heat Shrink Erika Violet	AX109700
OptiTuff Mini Fiber Cable Transition Kit 24f to 2 x 3 mm Heat Shrink Yellow	AX109701
OptiTuff Mini Fiber Cable Transition Kit 24f to 2 x 3 mm Heat Shrink Erika Violet	AX109702

- Step 3:** Select FX ECX Splice Cassette preloaded with pigtails

Description - Patch Ports (fibers)	OM4 (Erika Violet Adapters)	OS2 (Blue Adapters)	OS2 APC (Green Adapters)
LC Duplex			
6 (12)	FC4X06LDFP	FCSX06LDFP	FCSX06LAFP
12 (24)	FC4X12LDFP	FCSX12LDFP	FCSX12LAFP
SC Duplex			
3 (6)	FC4X03SDFP	FCSX03SDFP	FCSX03SAFP
6 (12)	FC4X06SDFP	FCSX06SDFP	FCSX06SAFP

Reference Tables

Table 1: OptiTuff Mini Fiber Cable

Fiber Count	OM4 Erika Violet	OS2 Yellow
2	FI4X002W0	FISX002W0
6	FI4X006W0	FISX006W0
12	FI4X012W0	FISX012W0
24	FI4X024W0	FISX024W0

Table 2: FX ECX Fiber Frame

Description - Patch Ports (fibers)	OM4 (Erika Violet Adapters)	OS2 (Blue Adapters)	OS2 APC (Green Adapters)
LC Duplex			
6 (12)	FF4X06LD	FFSX06LD	FFSX06LA
12 (24)	FF4X12LD	FFSX12LD	FFSX12LA
SC Duplex			
3 (6)	FF4X03SD	FFSX03SD	FFSX03SA
6 (12)	FF4X06SD	FFSX06SD	FFSX06SA

Table 3: FX Fusion Splice-On Connector

Description	Multimode, OM4 - Erika Violet	Singlemode, OS2 - Blue	Singlemode, OS2/APC - Green
LC with 900/250 μm Boot, 1/Pack	FT4LC900FS01	FTSLC900FS01	FTSLB900FS01
SC with 900/250 μm Boot, 1/Pack	FT4SC900FS01	FTSSC900FS01	FTSSB900FS01

Table 4: FX Fusion Splice Holder

See [AEN-1701](#) for holder options and splicer compatibility

Description	Belden Part Number
Splice Holder Family 1 LB	FXFSSHFM1LB
Splice Holder Family 2 LB	FXFSSHFM2LB



© 2024 | Belden and its affiliated companies claim and reserves all rights to its graphic images and text, trade names and trademarks, logos, service names, and similar proprietary marks, and any other intellectual property rights associated with this publication. BELDEN® and other distinctive identifiers of Belden and its affiliated companies as used herein are or may be pending or registered or unregistered trademarks of Belden, or its affiliates, in the United States and/or other jurisdictions throughout the world. Belden's trade names, trademarks, logos, service names, and similar proprietary marks shall not be reprinted or displayed without Belden's or its affiliated companies' permission and/or in any form inconsistent with Belden's business interests. Belden reserves the right to demand the discontinuation of any improper use at any time.