



Fiber**Express**® Brilliance®

# Universal

FIELD-INSTALLABLE FIBER OPTIC CONNECTORS

Product Bulletin  
PB139

The no-epoxy, no-polish, no-crimp field-installable connectors that are brilliant in design and universal in implementation to make fiber field termination faster, easier and better.

## FASTER

- Faster termination in as few as 5 seconds
- Faster deployment with no crimping

## EASIER

- Easier installation with no epoxy or polishing
- Easier ordering and inventory

## BETTER

- Better termination yield with integrated VFL
- Better efficiency with up to 5 reterminations



Our End-to-End Expertise  
Your End-to-End Solution

## Faster. Easier. Better.

Simple Termination in as Few as 5 Seconds

### Universal for all connector types

- LC
- SC
- SC/APC
- ST
- Duplex clips

### Universal for all fiber types

- OM1
- OM2
- OM3
- OM4
- OS1/OS2

### Universal for all cables

- 250  $\mu$ m looSetube<sup>1</sup>
- 900  $\mu$ m tightbuffered
- 2 mm jacketed<sup>1</sup>
- 3 mm jacketed<sup>1</sup>

### Universal for all applications

- Backbone, horizontal, FTTX
- Data Center and LAN
- Broadcast
- Industrial
- Defense
- Telco/MSO

After inserting the cleaved fiber into a connector, it's important to maintain a slight bow in the fiber before activating the termination and securing the boot. This helps to ensure pressure for proper glass-to-glass mating.

1

### Prepare and Insert the Fiber



2

### Close the Switch-like Activator Tab on the Connector



3

### Install the Boot



### Improve Termination Yield

Included in the FX Brilliance Precision Installation Kit, the Belden Support Handle with integrated Visual Fault Locator (VFL) injects visible laser light into the connector to instantly identify successful termination before testing.

### Integrate with 100% Confidence

As an established global leader in mission-critical signal transmission with extensive fiber optic expertise, Belden ensures support for projects of any size or complexity with 100% production testing backed by a 100% yield guarantee<sup>2</sup> and a best in class 25-year warranty<sup>2</sup>.

### Eliminate Cut-Offs

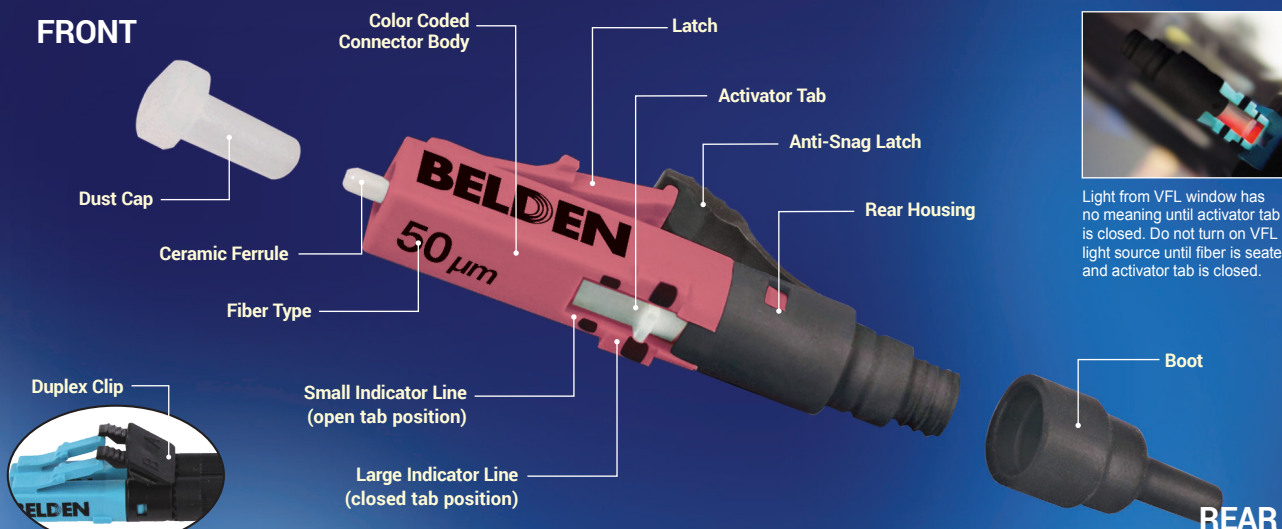
Unique no-crimp installation means connectors may be re-terminated up to 5 times, even after testing, which improves efficiency and eliminates connector waste.

### Reduce Training and Tooling Expense

With support for all connector, fiber and cable types, FX Brilliance Universal Connectors are ideal for the latest 10G and future 40G/100G networks. With one universal installation technique and toolkit, training and tooling expense is reduced so installers can easily handle any job.

### FiberExpress Brilliance Connector Detail

#### FRONT



Light from VFL window has no meaning until activator tab is closed. Do not turn on VFL light source until fiber is seated and activator tab is closed.

#### REAR

1. 250  $\mu$ m, 2 mm or 3 mm Boot is sold separately.  
2. Terms and conditions apply





## Ordering Information

When using OM4 fiber, choose Erika Violet Connectors rather than Aqua to avoid confusion with OM3 fiber and prevent the possibility of inadvertently connecting the two fiber types, which can cause a loss of bandwidth and increased bit errors.



Hermetically sealed contractor pack ensures connectors remain fresh and contaminate free



FXBUCLLDB25N and FXBUCLSDB25N Duplex Clips

### FiberExpress Optical Fiber Solutions Ordering Information

Belden FX optical fiber solutions consist of a full range of cable, patch panels, patch cords, cable assemblies, connectors and work area outlets that enable fast, seamless and reliable fiber network deployment with pre-validated components that ensure interoperability for reduced troubleshooting. Request a Belden Optical Fiber Catalog at [www.belden.com](http://www.belden.com) for our complete product offering.

### FX Brilliance Universal Connectors

Description	Belden Part Number			
	Multimode, OM1	Multimode, OM2	Multimode, OM3/OM4 - Aqua	Multimode, OM4 - Erika Violet
LC with 900 µm Boot, 25 per package	AX105200-B25	AX105201-B25	AX105202-B25	AX105252-B25
SC with 900 µm Boot, 25 per package	AX105205-B25	AX105206-B25	AX105207-B25	AX105253-B25
ST with 900 µm Boot, 25 per package	AX105210-B25	AX105211-B25	AX105212-B25	AX105254-B25

Replace -B25 with -S1 for sample 1 per package.

Description	Belden Part Number			
	Singlemode, OS2		Singlemode, OS2/APC	
	1 per package	25 per package	1 per package	25 per package
LC with 900 µm Boot	AX105203-S1	AX105203-B25	—	—
SC with 900 µm Boot	AX105208-S1	AX105208-B25	AX105209-S1	AX105209-B25
ST with 900 µm Boot	AX105213-S1	AX105213-B25	—	—

FX Brilliance Universal includes a boot for 900 µm Tight Buffered fiber. Boots for 2 mm/3 mm Jacketed fiber are sold separately.

Description	Belden Part Number
250 µm Boot, bag of 25	FXBUB0250B25N
2 mm jacketed Boot, bag of 25	AX105214-B25
3 mm jacketed Boot, bag of 25	AX105215-B25

Description	Belden Part Number
LC Duplex Clip (Black), 25 per package	FXBUCLLDB25N
SC Duplex Clip (Black), 25 per package	FXBUCLSDB25N

### FX Brilliance Installation Kit

Description	Belden Part Number
Precision Installation Kit (Basic Kit, Fiber Preparation Tools, Precision Cleaver and Visual Fault Locator)	AX104271

### FX Brilliance Accessories

Description	Belden Part Number
Precision Cleaver	AX104286
Precision Cleaver Replacement Blade (for FC-7 cleaver)	AX104293
Precision Cleaver Replacement Blade (for FC-7R cleaver)	AX104593
Support Handle with Adapters	AX104276
Support Handle LC Adapter	AX104289
Support Handle SC Adapter	AX104290
Support Handle ST Adapter	AX104291
Visual Fault Locator (VFL-250) with Adapter Cords	AX104283
Visual Fault Locator (VFL-125) LC-LC Adapter Cord	AX203567
Visual Fault Locator (VFL-125/250) LC-SC Adapter Cord (valid for ST also)	AX203568
Visual Fault Locator (VFL-250) SC-SC Adapter Cord (valid for ST also)	AX203569
Visual Fault Locator (VFL-125) LC-SC/APC Adapter Cord & Support Handle SC/APC Adapter	AX203895
Visual Fault Locator (VFL-250) SC-SC/APC Adapter Cord & Support Handle SC/APC Adapter	AX203930
Fiber/Cable Stripper	AX103151
Pen Marker	AX104279
Refurbishing Materials (80 alcohol wipes and a black pen marker)	AX100951
Safety Glasses	AX104282
Tweezers	AX104278
Waste Bottle	AX104281