With the FiberExpressSystems, Belden takes a complete approach to fiber optic cabling. Our systems are uniquely positioned to support everything from legacy fiber systems and current backbone and data center fiber links, to future high-speed fiber transmission and long-reach fiber applications.
Belden FiberExpress® Systems
Reduce Complexity and Increase Flexibility

Involved in the development of optical fiber components for over 40 years, Belden is a leading supplier of high-quality, cost-effective optical fiber cabling systems. The FX Systems are the culmination of Belden’s experience and expertise in a variety of applications, including data centers, premise and campus network backbone infrastructures, fiber-to-the-desk (FTTD) applications, and horizontal and centralized cabling systems. Guaranteed to meet or exceed all applicable TIA/EIA, ISO/IEC and IEEE standards, each end-to-end FX System is designed to offer reduced complexity, increased flexibility, and rapid installation.

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<td>Back Cover</td>
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www.belden.com
A Complete Approach to Fiber Optic Cabling

Belden FX Systems are available in a variety of performance levels to meet the value and price point for a wide variety of applications. Each system is uniquely color-coded for easy identification in the field.

The following is a recap of the five Belden FX Systems that are offered today:

<table>
<thead>
<tr>
<th>Belden System</th>
<th>FX OM1</th>
<th>FX OM2</th>
<th>FX OM3</th>
<th>FX OM4</th>
<th>FX SM</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ethernet Applications</strong></td>
<td>1G up to 275 m</td>
<td>Not Recommended for New Designs</td>
<td>1G up to 550 m 10G up to 300 m 40G/100G up to 100 m</td>
<td>10G up to 400 m 40G/100G up to 150 m</td>
<td>10G up to 30/40 km 40G/100G up to 10/40 km</td>
</tr>
<tr>
<td><strong>Fibre Channel Applications</strong></td>
<td>Legacy 1G up to 300 m</td>
<td>Not Recommended for New Designs</td>
<td>4G up to 380 m 8G up to 300 m 16G up to 100 m</td>
<td>16G up to 125 m</td>
<td>4/8/16G up to 10 km</td>
</tr>
<tr>
<td><strong>Fiber Cable Assemblies</strong></td>
<td><strong>Jacket Color</strong></td>
<td>Orange</td>
<td>Orange</td>
<td>Aqua</td>
<td>Erika Violet Aqua (optional)*</td>
</tr>
<tr>
<td></td>
<td><strong>Connector &amp; Adapter Color</strong></td>
<td>Beige</td>
<td>Beige</td>
<td>Beige</td>
<td>Beige</td>
</tr>
<tr>
<td></td>
<td><strong>Pre-Term Connector Loss</strong></td>
<td>MPO-12 0.35 dB LC/SC/ST 0.3 dB</td>
<td>MPO-12 0.35 dB LC/SC/ST 0.3 dB</td>
<td>MPO-12 0.35 dB LC/SC/ST 0.3 dB</td>
<td>MPO-12 0.35 dB LC/SC/ST 0.3 dB</td>
</tr>
<tr>
<td></td>
<td><strong>Fiber Loss</strong></td>
<td>Tight Buffer (900 um) 3.5 dB @ 850nm 1.5 dB @ 1300nm Loose Tube (250 um) 3.5 dB @ 850nm 1.0 dB @ 1300nm</td>
<td>Tight Buffer (900 um) 3.5 dB @ 850nm 1.5 dB @ 1300nm Loose Tube (250 um) 3.0 dB @ 850nm 1.0 dB @ 1300nm</td>
<td>Tight Buffer (900 um) 3.5 dB @ 850nm 1.5 dB @ 1300nm Loose Tube (250 um) 3.0 dB @ 850nm 1.0 dB @ 1300nm</td>
<td>Tight Buffer (900 um) 3.5 dB @ 850nm 1.5 dB @ 1300nm Loose Tube (250 um) 0.36 dB @ 850nm 0.22 dB @ 1300nm</td>
</tr>
<tr>
<td></td>
<td><strong>Min. OFL Bandwidth (MHz-km)</strong></td>
<td>200 @ 850 nm 500 @ 1300 nm</td>
<td>700 @ 850 nm 500 @ 1300 nm</td>
<td>1500 @ 850 nm 550 @ 1300 nm</td>
<td>3500 @ 850 nm 550 @ 1300 nm</td>
</tr>
</tbody>
</table>

* Belden Standard OM4 products use Erika Violet Cable (Aqua is optional), OM3 product use Aqua Cable, OM1/OM2 product use Orange Cable, OS2 product product use Yellow Cable.
Faster.
Easier.
Better.

Fiber Express® Brilliance® Universal
FIELD-INSTALLABLE FIBER OPTIC CONNECTORS

> FASTER.
> EASIER.
> BETTER.
FiberExpress Field Termination
FX Brilliance Universal Connectors

Brilliant in design and universal in implementation, FX Brilliance Universal no-epoxy, no-polish, no-crimp field-installable connectors make fiber field termination faster, easier and better with our industry-leading design.

FASTER
- Faster fiber termination in as few as 5 seconds
- Faster installation proficiency through simple termination technique

EASIER
- Easier with no epoxy or polishing
- Easier no-crimp design
- Easier with duplex clips to hold TX/RX pairs together

BETTER
- Better termination yield with integrated VFL feedback
- Better universal cable support for 250 μm, 900 μm, 2 mm Jacketed, 3 mm Jacketed
- Better universal fiber support for OM1, OM2, OM3, OM4 as well as OS2

Three Simple Steps

1. Insert Fiber

2. Activate Tab

3. Install Boot

<table>
<thead>
<tr>
<th>Connector Performance</th>
<th>Maximum Insertion Loss</th>
<th>Typical Insertion Loss</th>
<th>Return Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multimode</td>
<td>0.5 dB</td>
<td>0.2 dB</td>
<td>25 dB</td>
</tr>
<tr>
<td>Singlemode UPC</td>
<td>0.5 dB</td>
<td>0.3 dB</td>
<td>50 dB</td>
</tr>
<tr>
<td>Singlemode APC</td>
<td>0.5 dB</td>
<td>0.3 dB</td>
<td>60 dB</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Description</th>
<th>Belden Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC with 900 μm Boot, 25 per package</td>
<td>AX105200-B25</td>
</tr>
<tr>
<td>SC with 900 μm Boot, 25 per package</td>
<td>AX105201-B25</td>
</tr>
<tr>
<td>ST with 900 μm Boot, 25 per package</td>
<td>AX105210-B25</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Description</th>
<th>Belden Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC with 900 μm Boot</td>
<td>AX105020-3-S1</td>
</tr>
<tr>
<td>SC with 900 μm Boot</td>
<td>AX105028-3-S1</td>
</tr>
<tr>
<td>ST with 900 μm Boot</td>
<td>AX1050213-3-S1</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Description</th>
<th>Belden Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 mm Jacketed Boot, 25 per package</td>
<td>AX105214-25</td>
</tr>
<tr>
<td>3 mm Jacketed Boot, 25 per package</td>
<td>AX105215-25</td>
</tr>
<tr>
<td>250um Boot, 25 per package</td>
<td>FXBUB025ΦB25N</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Description</th>
<th>Belden Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC Duplex Clip (Black), 25 per package</td>
<td>FXBUCLLDB25N</td>
</tr>
<tr>
<td>SC Duplex Clip (Black), 25 per package</td>
<td>FXBUCLSDB25N</td>
</tr>
</tbody>
</table>
FiberExpress Field Termination (continued)
FX Brilliance Universal Installation Kits and Accessories

Improve Installer Comfort, Repeatability and Performance

Although termination of the FX Brilliance Universal connector can be done with no specialized tools, installation kits are available with all the tools necessary to prepare the fiber as well as to provide a stable work platform to achieve optimal installation results.

FX Brilliance Installation Kit

<table>
<thead>
<tr>
<th>Description</th>
<th>Belden Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Precision Installation Kit (Basic Kit, Fiber Preparation Tools, Precision Cleaver and Visual Fault Locator)</td>
<td>AX104271</td>
</tr>
</tbody>
</table>

FX Brilliance Accessories

<table>
<thead>
<tr>
<th>Description</th>
<th>Belden Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Precision Cleaver</td>
<td>AX104286</td>
</tr>
<tr>
<td>Precision Cleaver Replacement Blade (for FC-7 cleaver)</td>
<td>AX104293</td>
</tr>
<tr>
<td>Precision Cleaver Replacement Blade (for FC-7R cleaver)</td>
<td>AX104593</td>
</tr>
<tr>
<td>Support Handle with Adapters</td>
<td>AX104276</td>
</tr>
<tr>
<td>Support Handle LC Adapter</td>
<td>AX104289</td>
</tr>
<tr>
<td>Support Handle SC Adapter</td>
<td>AX104290</td>
</tr>
<tr>
<td>Support Handle ST Adapter</td>
<td>AX104291</td>
</tr>
<tr>
<td>Visual Fault Locator (VFL-250) with Adapter Cords</td>
<td>AX104283</td>
</tr>
<tr>
<td>Visual Fault Locator (VFL-125) LC-LC Adapter Cord</td>
<td>AX203567</td>
</tr>
<tr>
<td>Visual Fault Locator (VFL-125/250) LC-SC Adapter Cord (valid for ST also)</td>
<td>AX203568</td>
</tr>
<tr>
<td>Visual Fault Locator (VFL-250) SC-SC Adapter Cord (valid for ST also)</td>
<td>AX203569</td>
</tr>
<tr>
<td>Visual Fault Locator (VFL-125) LC-SC/SC Adapter Cord &amp; Support Handle SC/APC Adapter</td>
<td>AX203895</td>
</tr>
<tr>
<td>Visual Fault Locator (VFL-250) SC-SC/SC Adapter Cord &amp; Support Handle SC/APC Adapter</td>
<td>AX203930</td>
</tr>
<tr>
<td>Fiber/Cable Stripper</td>
<td>AX103151</td>
</tr>
<tr>
<td>Pen Marker</td>
<td>AX104279</td>
</tr>
<tr>
<td>Refurbishing Materials (80 alcohol wipes and a black pen marker)</td>
<td>AX100951</td>
</tr>
<tr>
<td>Safety Glasses</td>
<td>AX104282</td>
</tr>
<tr>
<td>Scissors</td>
<td>AX104280</td>
</tr>
<tr>
<td>Tweezers</td>
<td>AX104278</td>
</tr>
<tr>
<td>Waste Bottle</td>
<td>AX104281</td>
</tr>
</tbody>
</table>

Ensure Durable Rugged Installation on 250 µm Fiber

Field Breakout kits are available to provide a durable 900 µm coating for 250 µm fibers to ensure optimal retention, flex and twist support without sacrificing the outdoor performance of loose-tube cables or the small diameter of mini-distribution cables.

Breakout Kits

<table>
<thead>
<tr>
<th>Description</th>
<th>Belden Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breakout Kit for 2.0 mm Subunits, 6-fiber, 1-Pack</td>
<td>AX101100</td>
</tr>
<tr>
<td>Breakout Kit for 3.0 mm Subunits, 12-fiber, 1-Pack</td>
<td>AX101101</td>
</tr>
<tr>
<td>Breakout kit for 5.2 mm Subunits (Central Tube), 6-fiber, 1-Pack</td>
<td>AX104695</td>
</tr>
<tr>
<td>Breakout kit for 5.2 mm Subunits (Central Tube), 12-fiber, 1-Pack</td>
<td>AX104696</td>
</tr>
</tbody>
</table>
FiberExpress Field Termination (continued)

FX Pigtails

Established technology with a pedigree of resilience. Traditional fusion splice-on connectors with pigtails provide factory-polished performance with field-termination convenience within harsh environments.

FASTER
- Faster connector identification with color-coded pigtail kits
- Faster delivery with standard LC, SC or ST 2 meter pigtail kits

EASIER
- Easier field-termination with factory pre-terminated connectors
- Easier ordering with intuitive SmartPart numbers

BETTER
- Better quality with precision factory-polished connectors
- Insertion loss ≤ 0.3dB

Fiber Express Field Termination Pigtail Kits (900 μm)

<table>
<thead>
<tr>
<th>Description</th>
<th>OM1</th>
<th>OM2</th>
<th>OM3</th>
<th>OM4</th>
<th>OS2</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC</td>
<td>TF1LC900PS01</td>
<td>TF2LC900PS01</td>
<td>TF3LC900PS01</td>
<td>TF4LC900PS01</td>
<td>TFSLC900PS01</td>
</tr>
<tr>
<td>SC</td>
<td>TF1SC900PS01</td>
<td>TF2SC900PS01</td>
<td>TF3SC900PS01</td>
<td>TF4SC900PS01</td>
<td>TFSSC900PS01</td>
</tr>
<tr>
<td>ST</td>
<td>TF1ST900PS01</td>
<td>TF2ST900PS01</td>
<td>TF3ST900PS01</td>
<td>TF4ST900PS01</td>
<td>TFSSST900PS01</td>
</tr>
<tr>
<td>FC</td>
<td>TF1FC900PS01</td>
<td>TF2FC900PS01</td>
<td>TF3FC900PS01</td>
<td>TF4FC900PS01</td>
<td>TFSSFC900PS01</td>
</tr>
</tbody>
</table>

See page 4 for standard fiber color code charts

Fusion Splice Heat Shrink Protector Sleeves

<table>
<thead>
<tr>
<th>Description</th>
<th>Belden Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heat Shrink Splice Protector Sleeves, 900 μm to 900 μm, 2.5 mm round x 30 mm long, 25/package</td>
<td>FXFUHS900AB25</td>
</tr>
<tr>
<td>Heat Shrink Splice Protector Sleeves, 900 μm to 250 μm, 2.0 mm round x 40 mm long, 25/package</td>
<td>FXFUHS9T2CB25</td>
</tr>
<tr>
<td>Heat Shrink Splice Protector Sleeves, 250 μm to 250 μm, 1.5 mm round x 40 mm long, 25/package</td>
<td>FXFUHS250DB25</td>
</tr>
<tr>
<td>Heat Shrink Splice Protector Sleeves, 250 μm 12 fiber Ribbon, oval x 40 mm long, 12/package</td>
<td>FXFUHSRIBEB12</td>
</tr>
</tbody>
</table>
FiberExpress Field Termination (continued)
FX Pigtails

Tailored Pigtails

Building a Smart Part Number

<table>
<thead>
<tr>
<th>Fiber Type</th>
<th>Connectors</th>
<th>Cable Type</th>
<th>Product Family</th>
<th>Packaging</th>
</tr>
</thead>
<tbody>
<tr>
<td>TF3</td>
<td>LC</td>
<td>900</td>
<td>P</td>
<td>S01</td>
</tr>
</tbody>
</table>

Fiber Type: 1 OM1, 2 OM2, 3 OM3, 4 OM4, S OS2
Connectors: LC LC Simplex, SC SC Simplex, ST ST, FC FC
Cable Type: 900 Tight Buffer
Product Family: P Fusion Pigtails
Packaging: S01 Single Unit, R12 Rainbow 12 Pk

Examples:
TF4LC900PS01 - FX Field-Termination Pigtails, OM4, LC Simplex, Tight Buffer, 900um, open-Ended, 2M
TFSC900PS01 - FX Field-Termination Pigtails, OS2, SC Simplex, Tight Buffer, 900um, open-Ended, 2M

Please contact Belden for custom Engineered solutions.
FiberExpress Patch Panel Systems
FX UHD Housings and Shelves

Elegantly simple yet uncompromisingly flexible, Ultra high-density rack-mount fiber connectivity system, crafted for effortless installation and maintenance.

**FASTER**
- Faster field-termination with high-accessibility sliding and tilting drawers
- Faster pre-term installation with simple fixed shelves and cassettes

**EASIER**
- Easier installation with tool-less removable drawers and lightweight housings
- Easier port identification with clear visible labeling
- Easier to configure with flexible port count LC, SC, ST and MPO modules

**BETTER**
- Better fiber protection with covered patch cord tray
- Better high density offering with 18-port modules for up to 72 LC Duplex ports per 1U
- Better visibility with light colored Titanium finish

**FX UHD Housings**

Feature-rich housings are fully enclosed to provide protection for exposed 250 μm and 900 μm fibers coupled with sliding and tilting drawers to speed up and simplify installation and maintenance.

<table>
<thead>
<tr>
<th>Description</th>
<th>Number of Module Bays</th>
<th>Total LC Duplex/MPO Ports using FX Ultra Frames and Cassettes</th>
<th>Total LC Duplex/MPO Ports using FX UHD Frames and Cassettes</th>
<th>Belden Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1U Housing with Front and Rear Cable Tray</td>
<td>4</td>
<td>48</td>
<td>72</td>
<td>AX104681</td>
</tr>
<tr>
<td>4U Housing with Front and Rear Cable Tray</td>
<td>16</td>
<td>192</td>
<td>288</td>
<td>AX104683</td>
</tr>
<tr>
<td>4U 23&quot; Housing with Front and Rear Cable Tray</td>
<td>20</td>
<td>240</td>
<td>360</td>
<td>AX105379</td>
</tr>
<tr>
<td>Optional 1U Splice Housing Kit, 144 splices</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>AX104684</td>
</tr>
<tr>
<td>Optional Patch Cord Tray Cover, 19in²</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>AX105162</td>
</tr>
</tbody>
</table>

1. Up to 4 splice housing kits can be added to 4U housing. Splice housing kits are only compatible with standard 19" rack mount housings.
2. Use with 1U or 4U housings to protect the contents of the topmost patch cord tray. Patch cord tray cover is included with 23" housings.

**FX UHD Shelves**

Entry-level cost effective solutions for pre-terminated systems.

<table>
<thead>
<tr>
<th>Description</th>
<th>Number of Module Bays</th>
<th>Total LC Duplex/MPO Ports using FX Ultra Frames and Cassettes</th>
<th>Total LC Duplex/MPO Ports using FX UHD Frames and Cassettes</th>
<th>Belden Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1U Standard Fixed Shelf</td>
<td>4</td>
<td>48</td>
<td>72</td>
<td>AX105164</td>
</tr>
<tr>
<td>1U Recessed Fixed Shelf</td>
<td>4</td>
<td>48</td>
<td>72</td>
<td>AX105165</td>
</tr>
<tr>
<td>4U Standard Fixed Shelf</td>
<td>10</td>
<td>120</td>
<td>180</td>
<td>AX105166</td>
</tr>
<tr>
<td>4U Recessed Fixed Shelf</td>
<td>10</td>
<td>120</td>
<td>180</td>
<td>AX105167</td>
</tr>
</tbody>
</table>

See the FX UHD System Product Bulletin (P8500) for further options.
**FiberExpress Patch Panel Systems** (continued)

**FX UHD and FX Ultra Cassettes**

Featuring the highest density at 72 LC Duplex or MPO ports per 19” rack unit FX UHD family is the ideal choice for high-port count applications such as in the data center.

Unique 1” pull-out feature of the FX Ultra family provides a medium density solution with a superior ease of use for day-to-day MAC (moves, adds and changes) within the enterprise or cross-connect within the data center.

### Standard Type-A Cassettes

<table>
<thead>
<tr>
<th>Description</th>
<th>Belden Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patch Ports (fibers)</td>
<td>Trunk Ports</td>
</tr>
<tr>
<td>LC Duplex to MPO-12(f)</td>
<td></td>
</tr>
<tr>
<td>18 (3)</td>
<td>3</td>
</tr>
<tr>
<td>12 (24)</td>
<td>2</td>
</tr>
<tr>
<td>LC Duplex w/Shutters to MPO-12(f)</td>
<td></td>
</tr>
<tr>
<td>6 (12)</td>
<td>1</td>
</tr>
<tr>
<td>SC Duplex to MPO-12(f)</td>
<td></td>
</tr>
<tr>
<td>12 (12)</td>
<td>1</td>
</tr>
<tr>
<td>SC Simplex to MPO-12(f)</td>
<td></td>
</tr>
<tr>
<td>6 (12)</td>
<td>1</td>
</tr>
<tr>
<td>SC Simplex w/Shutters to MPO-12(f)</td>
<td></td>
</tr>
<tr>
<td>6 (6)</td>
<td>1</td>
</tr>
</tbody>
</table>

*Optional HD Patch cord release tool AXI04685

### Standard Type-A-Alternate Cassettes*

<table>
<thead>
<tr>
<th>Description</th>
<th>Belden Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patch Ports (fibers)</td>
<td>Trunk Ports</td>
</tr>
<tr>
<td>LC Duplex to MPO-12(f)</td>
<td></td>
</tr>
<tr>
<td>18 (3)</td>
<td>3</td>
</tr>
<tr>
<td>12 (24)</td>
<td>2</td>
</tr>
<tr>
<td>LC Duplex w/Shutters to MPO-12(f)</td>
<td></td>
</tr>
<tr>
<td>6 (12)</td>
<td>1</td>
</tr>
</tbody>
</table>

* In order to maintain proper port numbering within a 10G installation and chart your path to 40G and beyond, please see the diagram on the following page that outlines when and where to use Type-A-Alternate Cassettes, as well as the process for migrating to 40G.

### Standard Splicing Cassettes

<table>
<thead>
<tr>
<th>Description</th>
<th>Belden Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patch Ports (fibers)</td>
<td>OM1 Beige Adapters</td>
</tr>
<tr>
<td>MPO Type-A (Key-Up/Key-Down)</td>
<td>FC1H12MPFS</td>
</tr>
<tr>
<td>LC Duplex</td>
<td>FC1H12LDFS</td>
</tr>
<tr>
<td>SC Duplex</td>
<td>FC1H06SF5</td>
</tr>
<tr>
<td>SC Simplex</td>
<td>FC1H12SDFS</td>
</tr>
<tr>
<td>ST (Metal Adapters)</td>
<td>FC5H12SF5</td>
</tr>
</tbody>
</table>

FX Brilliance Universal (page 6) or FX Pigtails (page 8) and Heat Shrink Splice Protector Sleeves (page 8) sold separately.

[Image of FiberExpress Patch Panel Systems]
### Tailored FX UHD and FX Ultra Cassettes

#### Building a SmartPart Number

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>FC</td>
<td>3</td>
<td>U</td>
<td>03</td>
<td>LD</td>
<td>MM</td>
<td>A</td>
<td>A</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fiber Type</th>
<th>Product Family</th>
<th>Port Count (Patch Side)</th>
<th>Connector (Patch Side)</th>
<th>Connector (Trunk Side)</th>
<th>Polarity (Trunk)</th>
<th>Adapter Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 OM1</td>
<td>H FX UHD</td>
<td>03</td>
<td>LD LC Duplex</td>
<td>MM MPO-12 (m)</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>3 OM3</td>
<td>U FX Ultra (1&quot; Pull)</td>
<td>06</td>
<td>LA LC/PC Duplex</td>
<td>MM MPO-12 (f)</td>
<td>1 Type-A ALT</td>
<td></td>
</tr>
<tr>
<td>4 OM4</td>
<td>R FX Ultra Angled Right</td>
<td>12</td>
<td>LS LC Duplex w/Shutters</td>
<td>MM MPO-12 (m)</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>S OS2</td>
<td>L FX Ultra Angled Left</td>
<td>18</td>
<td>LD LC Duplex w/Shutters</td>
<td>MM MPO-12 (f)</td>
<td>1 Type-A ALT</td>
<td></td>
</tr>
</tbody>
</table>

For further options contact Belden for custom Engineered solutions.

### Using Type-A Alternate Cassettes to maintain proper port numbering for 10G installations and migration to 40G

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PF3LDD003M</td>
<td>Patch Cord, LC Duplex, OM3, 3m</td>
</tr>
<tr>
<td>PF3MFMF003M</td>
<td>Patch Cord, MPO-12F, OM3, Type-B, 3m</td>
</tr>
<tr>
<td>FF3U12MP</td>
<td>FX Ultra Frame, 12 Port, MPO, OM3, KeyUp/KeyDown</td>
</tr>
<tr>
<td>FF3U122MP</td>
<td>FX Ultra Frame, 12 Port, MPO, OM3, KeyUp/KeyDown</td>
</tr>
<tr>
<td>FM3MB1025M (Reuse)</td>
<td>MPO Trunk Assembly, MPO-12F-M, OM3, Type B, 25m</td>
</tr>
<tr>
<td>FM3MB1025M (QTY 2)</td>
<td>MPO Trunk Assembly, MPO-12F-M, OM3, Type B, 25m</td>
</tr>
<tr>
<td>FC3U120MPF1A</td>
<td>FX Ultra Cassette, 12 Port (M), LC Duplex, OM3, Type-A ALT, MPO-12F</td>
</tr>
</tbody>
</table>

10G to 40G Migration

Simple Migration from 10G to 40G:
- Retain:
  - FiberExpress FX UHD Patch Panel Housings and Shelves
  - FiberExpress MPO Trunk Assemblies
- Upgrade:
  - Cost-effective FX Ultra/FX UHD Frames
  - Patch Cords

Keys to a Successful Upgrade:
- Be Ready to 40GBase-SR4 and future 100GBase-SR4
  - MPO 12-fiber Connectors and Trunk Assemblies
  - Male to Male Trunk Assemblies
- Simplify Port Numbers
  - Type-A Polarity Cassettes with Type-A Alternate Polarity on one end
- Reduce Replacement Parts
  - Identical Patch Cords on Both Ends
- Prevent Damage to Active Equipment
  - MPO Female to Female Patch Cords
**Faster. Easier. Better.**

---

**FiberExpress® Patch Panel Systems (continued)**

**FX UHD and FX Ultra Frames**

### Standard Frames

<table>
<thead>
<tr>
<th>Patch Ports (fibers)</th>
<th>Family</th>
<th>OM1 Beige Adapters</th>
<th>OM3 Aqua Adapters</th>
<th>OM4 Erika Violet Adapters</th>
<th>SM Blue Adapters</th>
<th>SM/APC Green Adapters</th>
</tr>
</thead>
<tbody>
<tr>
<td>MPO Type-A (Key-Up/Key-Down)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18 FX UHD</td>
<td>-</td>
<td>FF3H18MP</td>
<td>FF4H18MP</td>
<td>-</td>
<td>FF5H18MP</td>
<td></td>
</tr>
<tr>
<td>12 FX Ultra</td>
<td>-</td>
<td>FF3U12MP</td>
<td>FF4U12MP</td>
<td>-</td>
<td>FF5U12MP</td>
<td></td>
</tr>
<tr>
<td>LC Duplex</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18(36) FX UHD</td>
<td>-</td>
<td>FF3H18LD</td>
<td>FF4H18LD</td>
<td>FF5H18LD</td>
<td>FF6H18LD</td>
<td>FF7H18LA</td>
</tr>
<tr>
<td>12(24) FX Ultra</td>
<td>FF1U2LD</td>
<td>FF3U12LD</td>
<td>FF4U12LD</td>
<td>FF5U12LD</td>
<td>FF6U12LD</td>
<td>FF7U12LA</td>
</tr>
<tr>
<td>LC Duplex w/Shutters</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12(24) FX Ultra</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>FF5U06LS</td>
<td>FF6U06LQ</td>
</tr>
<tr>
<td>SC Duplex</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6(12) FX Ultra</td>
<td>FF1U06SD</td>
<td>FF3U06SD</td>
<td>FF4U06SD</td>
<td>FF5U06SD</td>
<td>FF6U06SA</td>
<td></td>
</tr>
<tr>
<td>SC Simplex</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12(12) FX Ultra</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>FF5U12SC</td>
<td>FF6U12SR</td>
<td></td>
</tr>
<tr>
<td>SC Simplex w/Shutters</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6(6) FX Ultra</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>FF5U06SR</td>
<td>FF6U06SP</td>
<td></td>
</tr>
<tr>
<td>ST</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12(12), Metal FX Ultra</td>
<td>-</td>
<td></td>
<td></td>
<td>FF5U12ST</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

### Tailored FX UHD and FX Ultra Frames

**Building a SmartPart Number**

1. Choose Fiber Type
2. Choose Product Family
3. Choose Port Count
4. Choose Connector for Patch Side
5. Choose Adapter Color

<table>
<thead>
<tr>
<th>Fiber Type</th>
<th>Product Family</th>
<th>Port Count (Patch Side)</th>
<th>Connector (Patch Side)</th>
<th>Adapter Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>OM1</td>
<td>FF UHD</td>
<td>LD</td>
<td>K Beige</td>
</tr>
<tr>
<td>3</td>
<td>OM3</td>
<td>FX Ultra (1” Pull)</td>
<td>LA</td>
<td>N Black</td>
</tr>
<tr>
<td>4</td>
<td>OM4</td>
<td></td>
<td>LS</td>
<td>A Aqua</td>
</tr>
<tr>
<td>5</td>
<td>OS2</td>
<td></td>
<td>LS</td>
<td>E Erika V</td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
<td>LD</td>
<td>B Blue</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>LI</td>
<td>G Green</td>
</tr>
</tbody>
</table>

[Images of FX UHD and FX Ultra Frames]
**FiberExpress Patch Panel Systems** (continued)

**FX UHD and FX Ultra Adapters and Accessories**

### Standard FX Ultra KeyConnect Frames

<table>
<thead>
<tr>
<th>Patch Ports</th>
<th>Description</th>
<th>Belden Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>FX Ultra KeyConnect Frame 6-Port</td>
<td>FFZH06KC</td>
</tr>
<tr>
<td>8</td>
<td>FX Ultra KeyConnect Frame 8-Port</td>
<td>FFZH08KC</td>
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</tbody>
</table>

### Standard Fiber KeyConnect Adapters

<table>
<thead>
<tr>
<th>Description</th>
<th>Belden Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC Duplex</td>
<td>AX104939, AX105641-BK, AX102421, AX105642-BK</td>
</tr>
<tr>
<td>SC Simplex</td>
<td>–, –, AX102688, AX105374</td>
</tr>
<tr>
<td>ST</td>
<td>AX102244</td>
</tr>
</tbody>
</table>

Above adapters are for Black Bezels. Contact your local Belden representative for a complete listing of KeyConnect adapters in other colors.

### Standard Copper KeyConnect Adapters

<table>
<thead>
<tr>
<th>Description</th>
<th>Belden Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>10GX RJ45 Coupler</td>
<td>AX104024, AX104019, AX104023</td>
</tr>
<tr>
<td>10GX RJ45 Modular Jack</td>
<td>AX102283, AX102288, AX102282</td>
</tr>
<tr>
<td>CAT6 RJ45 Coupler</td>
<td>AX104215, AX104210, AX104214</td>
</tr>
<tr>
<td>CAT6 RJ45 Modular Jack</td>
<td>AX101321, AX101326, AX101320</td>
</tr>
</tbody>
</table>

Above adapters are for Black Bezels. Contact your local Belden representative for a complete listing of KeyConnect adapters in other colors.

### Standard FX UHD Accessories

<table>
<thead>
<tr>
<th>Description</th>
<th>Belden Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>FX UHD Blank Plate</td>
<td>FFZH00BB</td>
</tr>
<tr>
<td>FX UHD Patch Cord Release Tool</td>
<td>AX104685</td>
</tr>
<tr>
<td>FX Ultra LC Duplex Color-coded Icon Kit</td>
<td>AX10457Z</td>
</tr>
</tbody>
</table>

**FiberExpress Patch Panel Systems** (continued)
FiberExpress Patch Panel Systems (continued)

FX Ultra Wall Mount and Accessories

Resolute protection while maintaining the utmost adaptability. Complete selection of fiber enclosures provides effortless security and protection while leveraging both the flexibility and density of the FX UHD frames and cassettes.

FASTER
• Faster installation with easy access and lightweight housing
• Faster installation with pre-terminated cassettes

EASIER
• Easier configuration with FX UHD and FX Ultra modules in LC, SC and ST
• Easier security with optical door lock
• Easier expansion with stackable design

BETTER
• Better with support for Pre-Term and Field-Term including splicing
• Better management with independent doors for trunk and patching sides
• Better density with up to 36 LC Duplex ports

**FX Ultra Wall Mount**

<table>
<thead>
<tr>
<th>Description</th>
<th>Number of Module Bays</th>
<th>Splice Trays</th>
<th>Belden Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stackable Wall Mount Patch Panel, Black</td>
<td>2</td>
<td>2 x 6” (Up to 48-Splices)</td>
<td>AX103928</td>
</tr>
<tr>
<td>Stackable Wall Mount Splice Enclosure</td>
<td>0</td>
<td>4 x 10” (Up to 144-Splices)</td>
<td>AX103930</td>
</tr>
</tbody>
</table>

Splice trays sold separately.

**FX Ultra Splice Trays**

<table>
<thead>
<tr>
<th>Description</th>
<th>Splices per Tray</th>
<th>Belden Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>8” Splice Tray</td>
<td>24</td>
<td>AX103912</td>
</tr>
<tr>
<td>10” Splice Tray</td>
<td>36</td>
<td>AX103913</td>
</tr>
</tbody>
</table>

All splice trays accommodate 2.5 mm OD single fiber splice protectors up to 80 mm in length.

**FX Ultra Wall Mount Accessories**

<table>
<thead>
<tr>
<th>Description</th>
<th>Belden Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-inch Spacer, Black</td>
<td>AX103932</td>
</tr>
<tr>
<td>Door Lock Kit</td>
<td>AX103934</td>
</tr>
</tbody>
</table>
FiberExpress Patch Panel Systems (continued)
FX Manager Patch Panels and Cassettes

Compact in size while being exceedingly serviceable. Unique feature-rich cassettes provide a compact solution for housing fusion splices, field-term or pre-term within a high-design fiber connectivity system.

**FASTER**
- Faster installation with simple lightweight housing
- Faster patch cord access for moves, adds and changes with 1” cassette pullout

**EASIER**
- Easier fusion splicing with unique splice cassette
- Easier field-termination with cassette entry from rear of the housing

**BETTER**
- Better cross-connect implementation with 4U vertical cassette mounting
- Better upgrade path with MPO pre-term solutions

**FX Manager**

<table>
<thead>
<tr>
<th>Description</th>
<th>Module Bays</th>
<th>Belden Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1U Rack-Mount Patch Panel</td>
<td>3</td>
<td>AX101943</td>
</tr>
<tr>
<td>1U Patch Cord Management Accessory</td>
<td>N/A</td>
<td>AX104632</td>
</tr>
<tr>
<td>4U Rack-Mount Patch Panel</td>
<td>12</td>
<td>AX101085</td>
</tr>
<tr>
<td>4U 23” Rack-Mount Patch Panel</td>
<td>16</td>
<td>AX100935</td>
</tr>
</tbody>
</table>

**Standard FX M Cassettes**

<table>
<thead>
<tr>
<th>Patch Ports (fibers)</th>
<th>Trunk Ports</th>
<th>Family</th>
<th>OM1 Beige Connectors</th>
<th>OM3 Aqua Connectors</th>
<th>OS2 Blue Connectors</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC Duplex to MPO-12(m)</td>
<td>12 (24)</td>
<td>FX M</td>
<td>AX102309</td>
<td>AX102308</td>
<td>AX102307</td>
</tr>
<tr>
<td>SC Duplex to MPO-12(m)</td>
<td>6 (12)</td>
<td>FX M</td>
<td>AX101091</td>
<td>AX101114</td>
<td>AX101090</td>
</tr>
<tr>
<td>ST to MPO-12(m)</td>
<td>12 (12)</td>
<td>FX M</td>
<td>AX101109</td>
<td>AX101190</td>
<td>AX101188</td>
</tr>
</tbody>
</table>
**FiberExpress Patch Panel Systems** (continued)

**FX Manager Frames and Accessories**

### Standard FX M Frames

<table>
<thead>
<tr>
<th>Patch Ports (fibers)</th>
<th>MPO Type-A (Key-Up/Key-Down)</th>
<th>Belden Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>6 FX M</td>
<td>AX101484 (Black Adapters)</td>
</tr>
<tr>
<td>LC Duplex</td>
<td>12 (24) FX M</td>
<td>AX102306, AX103070, AX102305</td>
</tr>
<tr>
<td></td>
<td>6 (12) FX M</td>
<td>AX101528, AX103071, AX101527</td>
</tr>
<tr>
<td>SC Duplex</td>
<td>6 (12) FX M</td>
<td>AX101714, AX101114, AX101713</td>
</tr>
<tr>
<td>SC Simplex</td>
<td>6 (6) FX M</td>
<td>AX100943</td>
</tr>
<tr>
<td>ST</td>
<td>12 (12), Metal</td>
<td>AX101186</td>
</tr>
<tr>
<td></td>
<td>6 (6), Metal</td>
<td>AX100936</td>
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</table>

### Standard Accessories

<table>
<thead>
<tr>
<th>Description</th>
<th>Belden Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>FX M Blank Module</td>
<td>AX104462</td>
</tr>
<tr>
<td>Flex Kit (Bend Limiting Tube, Transition Tube, Manifold)</td>
<td>AX100945</td>
</tr>
<tr>
<td>Splice Holder Kit (4 x 6-position splice holders &amp; Wiremarkers)</td>
<td>AX105538</td>
</tr>
</tbody>
</table>
FiberExpress Patch Panel Systems (continued)
FX Patch Rack Mount and Wall Mount Patch Panels

Economical yet effective. Low to medium density rack mount fiber panels with simple adapter strips are the mainstay for fiber field termination.

FASTER
- Faster access to rear side (trunk) connectivity without removing patch cords

EASIER
- Easier on the budget with economical adapter strips
- Easier access to the trunk side connectivity with swing out faceplate

BETTER
- Better support for mixed field-term connectivity including splicing
- Better use of valuable space through a compact footprint

### Rack Mount D-Series Draw Type Patch Panels

<table>
<thead>
<tr>
<th>Description</th>
<th>Maximum Number of Adapter Strips</th>
<th>Splice Trays</th>
<th>Belden Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1U Rack Mount</td>
<td>2</td>
<td>1 x 8” (Up to 24-Splices)</td>
<td>AX100041</td>
</tr>
<tr>
<td>2U Rack Mount</td>
<td>4</td>
<td>2 x 8” (Up to 48-Splices)</td>
<td>AX100068</td>
</tr>
<tr>
<td>4U Rack Mount</td>
<td>8</td>
<td>4 x 8” (Up to 96-Splices)</td>
<td>AX100116</td>
</tr>
</tbody>
</table>

### Wall Mount Patch Panels

<table>
<thead>
<tr>
<th>Description</th>
<th>Maximum Number of Adapter Strips</th>
<th>Splice Trays</th>
<th>Belden Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small Wall-Mount</td>
<td>2</td>
<td>1 x 8” (Up to 24-Splices)</td>
<td>AX1000495</td>
</tr>
<tr>
<td>Medium Wall-Mount</td>
<td>4</td>
<td>2 x 8” (Up to 48-Splices)</td>
<td>AX1000540</td>
</tr>
<tr>
<td>Large Wall-Mount</td>
<td>8</td>
<td>4 x 8” (Up to 96-Splices)</td>
<td>AX1000542</td>
</tr>
</tbody>
</table>

### Rack Mount Swing Out Style Patch Panel

<table>
<thead>
<tr>
<th>Description</th>
<th>Maximum Number of Adapter Strips</th>
<th>Splice Trays</th>
<th>Belden Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1U Rack Mount</td>
<td>2</td>
<td>1 x 8” (Up to 24-Splices)</td>
<td>AX100041</td>
</tr>
<tr>
<td>2U Rack Mount</td>
<td>4</td>
<td>2 x 8” (Up to 48-Splices)</td>
<td>AX100068</td>
</tr>
<tr>
<td>3U Rack Mount (Rear Access)</td>
<td>4</td>
<td>2 x 8” (Up to 48-Splices)</td>
<td>AX104934</td>
</tr>
<tr>
<td>4U Rack Mount</td>
<td>8</td>
<td>4 x 8” (Up to 96-Splices)</td>
<td>AX100116</td>
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</table>
FiberExpress Patch Panel Systems (continued)
FX Patch Adapter Strips and Accessories

### Standard Optical Fiber Adapter Strips for D-Series

<table>
<thead>
<tr>
<th>Patch Ports (fibers)</th>
<th>Family</th>
<th>Multimode Beige Adapters</th>
<th>Singlemode Blue Adapters</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC Duplex</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12 (24)</td>
<td>FX Patch</td>
<td>AP101741</td>
<td>AP101743</td>
</tr>
<tr>
<td>6 (12)</td>
<td>FX Patch</td>
<td>AP101729</td>
<td>AP101731</td>
</tr>
<tr>
<td>SC Duplex</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 (12)</td>
<td>FX Patch</td>
<td>AP100098</td>
<td>AP101409</td>
</tr>
<tr>
<td>3 (6)</td>
<td>FX Patch</td>
<td>AP100094</td>
<td>AP101407</td>
</tr>
<tr>
<td>SC Simplex</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12 (12)</td>
<td>FX Patch</td>
<td>–</td>
<td>AP100532</td>
</tr>
<tr>
<td>ST</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>12 (12)</td>
<td>FX Patch</td>
<td>–</td>
<td>AP100528</td>
</tr>
<tr>
<td>6 (6)</td>
<td>FX Patch</td>
<td>–</td>
<td>AP100534</td>
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</table>

### Standard Optical Fiber Accessories

<table>
<thead>
<tr>
<th>Description</th>
<th>Belden Part Number</th>
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<tbody>
<tr>
<td>Accessories for D-series Panel</td>
<td></td>
</tr>
<tr>
<td>FX Patch Blank Strip</td>
<td>AP100066</td>
</tr>
<tr>
<td>Splice Tray for D-series</td>
<td>AP100001</td>
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<tr>
<td>Accessories for Swing Out Panel</td>
<td></td>
</tr>
<tr>
<td>FX Patch Blank Strip</td>
<td>AX100066</td>
</tr>
<tr>
<td>1U Front Cover, Smoked Plexiglas</td>
<td>AX100045</td>
</tr>
<tr>
<td>8&quot; Splice Kit (Tray, Holders, Wiremarkers &amp; Cover)</td>
<td>AX0649869</td>
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</table>

### Standard Optical Fiber Adapter Strips for Swing out Style Panel

<table>
<thead>
<tr>
<th>Patch Ports (fibers)</th>
<th>Family</th>
<th>Multimode Beige Adapters</th>
<th>Singlemode Blue Adapters</th>
<th>Singlemode/APC Green Adapters</th>
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<tbody>
<tr>
<td>LC Duplex</td>
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<td>12 (24)</td>
<td>FX Patch</td>
<td>AX101741</td>
<td>AX101743</td>
<td>AX105561</td>
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<tr>
<td>6 (12)</td>
<td>FX Patch</td>
<td>AX101729</td>
<td>AX101731</td>
<td>AX105537</td>
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<tr>
<td>SC Duplex</td>
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<td></td>
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<tr>
<td>6 (12)</td>
<td>FX Patch</td>
<td>AX100098</td>
<td>AX101409</td>
<td>–</td>
</tr>
<tr>
<td>3 (6)</td>
<td>FX Patch</td>
<td>AX100094</td>
<td>AX101407</td>
<td>–</td>
</tr>
<tr>
<td>SC Simplex</td>
<td></td>
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<tr>
<td>12 (12)</td>
<td>FX Patch</td>
<td>–</td>
<td>AX100532</td>
<td>AC301420</td>
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<tr>
<td>ST</td>
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<tr>
<td>12 (12)</td>
<td>FX Patch</td>
<td>–</td>
<td>AX100528</td>
<td>–</td>
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<tr>
<td>6 (6)</td>
<td>FX Patch</td>
<td>–</td>
<td>AX100534</td>
<td>–</td>
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</tbody>
</table>
FiberExpress Pre-Terminated Assemblies

FX Patch Cords

Uncomplicated, robust, versatile and conveniently available. Superior quality and performance FX patch cords deliver a robust design to withstand the rigours of daily use in both off-the-shelf standard configurations and rapid custom tailored installations.

FASTER
- Faster delivery with off-the-shelf availability of standard items
- Faster identification of fiber type with Erika Violet for OM4 cable and Beige connectors

EASIER
- Easier installation in dense cable trays with small diameter cord options
- Easier ordering with simple intelligent SmartPart Numbers
- Easier polarity management with industry leading easy-to-use duplex clips

BETTER
- Better architectural flexibility with low-loss OM4 0.35 dB MPO and 0.3 dB LC connectors
- Better ruggedization with larger diameter cord options
- Better flexibility with multiple connector options including LC, SC, ST and MPO
- Better quality through exhaustive design validation against TIA standards

<table>
<thead>
<tr>
<th>Description</th>
<th>FX OM1</th>
<th>FX OM3</th>
<th>FX OM4</th>
<th>FX SM</th>
<th>FX SM/APC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cable Performance - LC/SC/ST</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>IL Max. 850 nm/1300 nm (dB/Km)</td>
<td>3.5/1.2</td>
<td>3.0/1.2</td>
<td>3.0/1.2</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>IL Max. 1310 nm/1550 nm (dB/Km)</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>0.5/0.5</td>
<td></td>
</tr>
<tr>
<td>Fire Rating</td>
<td>LC/SC/ST: Riser</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Cable Style</td>
<td>LC: 2 mm Duplex Zip Cord</td>
<td>SC/ST/Hybrid: 3 mm Duplex Zip Cord</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Connector Performance - LC/SC/ST</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IL Max. (dB)</td>
<td>0.3</td>
<td>0.3</td>
<td>0.3</td>
<td>0.3</td>
<td>0.3</td>
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<tr>
<td>Polish - RL Typ. (dB)</td>
<td>≥ 25</td>
<td>≥ 25</td>
<td>≥ 25</td>
<td>≥ 50</td>
<td>≥ 25</td>
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</table>
Faster.  
Easier.  
Better.

FiberExpress Pre-Terminated Assemblies (continued)

FX Patch Cords

Standard FX Patch Cords

<table>
<thead>
<tr>
<th>Length (m)</th>
<th>OM1 Beige/Orange</th>
<th>OM3 Aqua</th>
<th>OM4 Erika Violet</th>
<th>OS2 Blue/Yellow</th>
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<tbody>
<tr>
<td>LC Duplex to LC Duplex</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>PF1LDLD002ML3XO</td>
<td>PF3LDLD002ML3XA</td>
<td>PF4LDLD002ML3XE</td>
<td>PF5LDLD002ML3XY</td>
</tr>
<tr>
<td>3</td>
<td>PF1LDLD003ML3XO</td>
<td>PF3LDLD003ML3XA</td>
<td>PF4LDLD003ML3XE</td>
<td>PF5LDLD003ML3XY</td>
</tr>
<tr>
<td>5</td>
<td>PF1LDLD005ML3XO</td>
<td>PF3LDLD005ML3XA</td>
<td>PF4LDLD005ML3XE</td>
<td>PF5LDLD005ML3XY</td>
</tr>
<tr>
<td>SC Duplex to SC Duplex</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>PF1SDSD002ML3XO</td>
<td>PF3SDSD002ML3XA</td>
<td>PF4SDSD002ML3XE</td>
<td>PF5SDSD002ML3XY</td>
</tr>
<tr>
<td>3</td>
<td>PF1SDSD003ML3XO</td>
<td>PF3SDSD003ML3XA</td>
<td>PF4SDSD003ML3XE</td>
<td>PF5SDSD003ML3XY</td>
</tr>
<tr>
<td>5</td>
<td>PF1SDSD005ML3XO</td>
<td>PF3SDSD005ML3XA</td>
<td>PF4SDSD005ML3XE</td>
<td>PF5SDSD005ML3XY</td>
</tr>
<tr>
<td>ST to ST</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>PF1STST002ML4XO</td>
<td>PF3STST002ML4XA</td>
<td>PF4STST002ML4XE</td>
<td>PF5STST002ML4XY</td>
</tr>
<tr>
<td>3</td>
<td>PF1STST003ML4XO</td>
<td>PF3STST003ML4XA</td>
<td>PF4STST003ML4XE</td>
<td>PF5STST003ML4XY</td>
</tr>
<tr>
<td>5</td>
<td>PF1STST005ML4XO</td>
<td>PF3STST005ML4XA</td>
<td>PF4STST005ML4XE</td>
<td>PF5STST005ML4XY</td>
</tr>
<tr>
<td>Hybrid: LC Duplex to SC Duplex</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>PF1LDSD003ML3XO</td>
<td>PF3LDSD003ML3XA</td>
<td>PF4LDSD003ML3XE</td>
<td>PF5LDSD003ML3XY</td>
</tr>
<tr>
<td>Hybrid: SC Duplex to ST</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>PF1SDST003ML7XO</td>
<td>PF3SDST003ML7XA</td>
<td>PF4SDST003ML7XE</td>
<td>PF5SDST003ML7XY</td>
</tr>
</tbody>
</table>

* These are some typical part, you can find more options or parts available in the SmartPart Number chart below.

FX Patch Cords

Building a SmartPart Number

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
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<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PF</td>
<td>3</td>
<td>LD</td>
<td>LD</td>
<td>003M</td>
<td>R</td>
<td>3</td>
<td>X</td>
<td>A</td>
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</tbody>
</table>

Fiber Type

<table>
<thead>
<tr>
<th>Fiber Type</th>
<th>Connector 1</th>
<th>Connector 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 OM1</td>
<td>LC Duplex</td>
<td>LC Duplex</td>
</tr>
<tr>
<td>2 OM2</td>
<td>LC Simplex</td>
<td>LC Simplex</td>
</tr>
<tr>
<td>3 OM3</td>
<td>SC Duplex</td>
<td>SC Duplex</td>
</tr>
<tr>
<td>4 OM4</td>
<td>SC Simplex</td>
<td>SC Simplex</td>
</tr>
<tr>
<td>S OS2</td>
<td>ST</td>
<td>ST</td>
</tr>
<tr>
<td>X OM3(BI)</td>
<td>FC</td>
<td>FC</td>
</tr>
<tr>
<td>Y OM4(BI)</td>
<td>LA</td>
<td>LA</td>
</tr>
<tr>
<td>Z OS5/1(A)</td>
<td>LU</td>
<td>LU</td>
</tr>
<tr>
<td></td>
<td>SA</td>
<td>SA</td>
</tr>
<tr>
<td></td>
<td>SB</td>
<td>SB</td>
</tr>
<tr>
<td></td>
<td>FA</td>
<td>FA</td>
</tr>
<tr>
<td></td>
<td>LH</td>
<td>LH</td>
</tr>
<tr>
<td></td>
<td>UH</td>
<td>UH</td>
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</tbody>
</table>

Length*

<table>
<thead>
<tr>
<th>Length* (001M to 300M)</th>
<th>Fire Rating</th>
<th>Cable Construction</th>
<th>Polarity</th>
<th>Jacket Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>001M to 300M M-Meters</td>
<td>D Fiber</td>
<td>Plenum</td>
<td>X A/B</td>
<td>Yellow</td>
</tr>
<tr>
<td></td>
<td>P Plenum</td>
<td>Plenum</td>
<td>S A/A</td>
<td>Yellow</td>
</tr>
<tr>
<td></td>
<td>L LSZH</td>
<td>LSZH</td>
<td>T A/B</td>
<td>Orange</td>
</tr>
<tr>
<td></td>
<td>U LSZH</td>
<td>LSZH</td>
<td>R A/A</td>
<td>Aqua</td>
</tr>
<tr>
<td></td>
<td>R LSZH</td>
<td>LSZH</td>
<td>R A/A</td>
<td>Erika V.</td>
</tr>
</tbody>
</table>

Examples:

PFSLDL001ML2XY - LC Duplex to LC Duplex, 10m in length, OS2 Singlemode LSZH (Low Smoke Zero Halogen) 2mm duplex zip cord with A-to-B polarity and a yellow cable jacket

PF4LHLH010MP7XE - LC HD to LC HD, 10m in length, OM4 multi mode Plenum 2.0mm round interconnector with type A-to-B polarity and a Erika Violet cable jacket

www.belden.com
Belden’s new LC-HD Patch Cord provides a high density solution with added benefit of installation flexibility. The new LC-HD Fiber Patch Cord comes with a unique pulling mechanism to help users remove fiber patch cords from high density installations without disturbing adjacent patch cords, maximizing its effectiveness in high density application.

Features
- 50% Increase in density
- Easy to release patch cords: The Belden LC-HD’s design utilizes a flexible “pull-tab” allowing for the connector to be disengaged easily from densely loaded panels without the need for special tools.

SOME STANDARD PRODUCTS WITH DESCRIPTION:

<table>
<thead>
<tr>
<th>Item*</th>
<th>Description</th>
<th>Colour</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>PF3LHLH002ML3XA</td>
<td>Fiber Patch Cord, OM3, LC Duplex HD, LSZH, Duplex Zipcord 3.0mm, A/B</td>
<td>Aqua</td>
<td>2m</td>
</tr>
<tr>
<td>PF3UHU002ML7XA</td>
<td>Fiber Patch Cord, OM3, LC Uni Boot HD, LSZH, Round 3.0mm, A/B</td>
<td>Aqua</td>
<td>2m</td>
</tr>
<tr>
<td>PF4LHLH002ML5SE</td>
<td>Fiber Patch Cord, OM4, LC Duplex HD, LSZH, Duplex Zipcord 3.0mm, A/A</td>
<td>Erika V.</td>
<td>2m</td>
</tr>
<tr>
<td>PF4UHU002ML7SE</td>
<td>Fiber Patch Cord, OM4, LC Uni Boot HD, LSZH, Round 3.0mm, A/A</td>
<td>Erika V.</td>
<td>2m</td>
</tr>
</tbody>
</table>

Note: * The standard fiber cable colors are Yellow for Single Mode; Orange for OM1 & OM2; Aqua for OM3; Erika V for OM4.

Examples:

Note: * The product numbers in the item are just example for the part number assignment, the full series code can be assigned as per the number chart accordingly.

**LC-HD Patch Cord**

<table>
<thead>
<tr>
<th>Fiber Type</th>
<th>Connector 1</th>
<th>Connector 2</th>
<th>Length*</th>
<th>Fire Rating</th>
<th>Cable Construction</th>
<th>Polarity</th>
<th>Jacket Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 OM1</td>
<td>LH Duplex HD</td>
<td>LH Duplex HD</td>
<td>001M to 300M M-Meters</td>
<td>R</td>
<td>Duplex 2.0 mm</td>
<td>X</td>
<td>Y Yellow</td>
</tr>
<tr>
<td>2 OM2</td>
<td>LH Uni Boot HD</td>
<td>LH Uni Boot HD</td>
<td></td>
<td>P</td>
<td>Duplex 3.0 mm</td>
<td></td>
<td>O Orange</td>
</tr>
<tr>
<td>3 OM3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>A</td>
<td>Aqua</td>
</tr>
<tr>
<td>4 OM4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>E</td>
<td>Erika V.</td>
</tr>
<tr>
<td>S OS2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>X OM3(B)</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Y OM4(B)</td>
<td></td>
<td></td>
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<tr>
<td>2 G657A1/A2</td>
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</tbody>
</table>

Note: * The standard fiber cable colors are Yellow for Single Mode; Orange for OM1 & OM2; Aqua for OM3; Erika V for OM4.
FiberExpress Pre-Terminated Assemblies (continued)

FX MPO Trunk Assemblies

Innovative performance with ingrained simplicity. Industry-leading low-loss MPO Trunks are the foundation of Easier, Faster and Better pre-terminated fiber connectivity solutions revolutionizing the data center.

FASTER
- Faster identification of fiber type with Erika Violet for OM4 Cable, Connectors and Adapters
- Faster installation with pre-terminated solutions

EASIER
- Easier ordering with simple intelligent SmartPart Numbers
- Easier upgradability to 40G and 100G with MPO pre-term solutions

BETTER
- Better architectural flexibility with high-performance 0.35 dB OM4 MPO connectors
- Better quality through exhaustive design validation against TIA standards

FX MPO Trunk Assemblies - Standard Performance

<table>
<thead>
<tr>
<th>Description</th>
<th>FX OM1</th>
<th>FX OM3</th>
<th>FX OM4</th>
<th>FX SM</th>
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<tbody>
<tr>
<td>Cable Performance</td>
<td></td>
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</tr>
<tr>
<td>IL Max. 850 nm/1300 nm (dB/Km)</td>
<td>3.5/1.2</td>
<td>3.0/1.0</td>
<td>3.0/1.0</td>
<td>-</td>
</tr>
<tr>
<td>IL Max. 1310 nm/1550 nm (dB/Km)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.35/0.25</td>
</tr>
<tr>
<td>Fire Rating</td>
<td>Plenum</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cable Style</td>
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<td>Connector Performance - MPO-12</td>
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<tr>
<td>IL Max. (dB)</td>
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<td>0.35</td>
<td>0.35</td>
<td>0.75</td>
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<tr>
<td>Polish - RL Typ. (dB)</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>50</td>
</tr>
<tr>
<td>Fanout Length</td>
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<td>Connector Performance - MPO-24</td>
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<tr>
<td>IL Max. (dB)</td>
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<td>0.35</td>
<td>0.35</td>
<td>0.75</td>
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<tr>
<td>Polish - RL Typ. (dB)</td>
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<td>20</td>
<td>20</td>
<td>50</td>
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</tbody>
</table>
**FiberExpress Pre-Terminated Assemblies** (continued)

**FX MPO Trunk Assemblies**

**Tailored FX MPO Trunk Assemblies (Up to 24F)**

**Building a Smart Part Number**

<table>
<thead>
<tr>
<th>Fiber Type</th>
<th>Connectors</th>
<th>Connector Gender</th>
<th>Polarities (outside)</th>
<th>Connector Count</th>
<th>Length</th>
<th>Fire Rating</th>
<th>Cable Tape</th>
<th>Pulling Eyes</th>
</tr>
</thead>
<tbody>
<tr>
<td>S OM3</td>
<td>M MPO-12</td>
<td>M Male to Male</td>
<td>A Type-A</td>
<td>1 Connector</td>
<td>100 M</td>
<td>R Riser</td>
<td>M Mini-D</td>
<td>N None</td>
</tr>
<tr>
<td>4 OM4</td>
<td>F Female to Female</td>
<td>B Type-B</td>
<td>2 Connectors</td>
<td>200 M</td>
<td>P Plenum</td>
<td>L LSZH</td>
<td>M Mini-D</td>
<td>B Both ends</td>
</tr>
<tr>
<td>S OS2</td>
<td></td>
<td></td>
<td>C Type-C</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>D Outside only</td>
</tr>
<tr>
<td>X OM3(B1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>T Inside only</td>
</tr>
<tr>
<td>Y OM4(B1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Z G657A1/A2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Examples:**

- **MF4MMA1025MPMO** - FX MPO Trunk, OM3, MPO-12(Male to Male), Type-A, 1 MPO(12 fibers), 25m, Plenum, Mini-Distribution (3.0mm sub-Units), Outside pulling eye
- **MFSMF81030MLNN** - FX MPO Trunk, OS2, MPO-12(Female to Female), Type-B, 1 MPO(12 fibers), 30m, LSZH, Mini-Distribution (4.5mm sub-Units), No pulling eye

**Multi-Fiber Cable Assemblies**

Superior consistent craftsmanship culminating in near instantaneous installation. Highly configurable multi-fiber pre-terminated cable assemblies are engineering for maximum performance and crafted ensuring superior quality.

**FASTER**

- Faster identification of fiber type with Erika Violet for OM4 cable, connectors and adapters
- Faster installation with pre-terminated solutions

**EASIER**

- Easier installation with 3-flange real and default pulling eye
- Easier ordering with simple intelligent Smart Part Numbers

**BETTER**

- Better quality through exhaustive design validation against TIA standards
- Better flexibility through absolute customizability

---

Multi-Fiber Cable Assembly
Faster.
Easier.
Better.

FiberExpress Pre-Terminated Assemblies (continued)
Multi-Fiber Cable Assemblies

Uniquely suited within dense fixed environments. Compact alternative for statically configured patch cords and pre-term cassettes eliminates connection points to improve performance and alleviate space constraints.

FASTER
• Faster deployment at the switch with MPO to LC fanout construction

EASIER
• Easier upgradability from 10G to 40G or 100G with MPO connectivity

BETTER
• Better identification of fiber type with Erika Violet for OM4 cable and connectors
• Better airflow with small transition point construction

FX Hydra Assemblies - Standard Performance

<table>
<thead>
<tr>
<th>Description</th>
<th>FX OM3</th>
<th>FX OM4</th>
<th>FX SM</th>
<th>FX SM/APC</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cable Performance - LC/SC/ST</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>II. Max. 850 nm/1300 nm (dB/Km)</td>
<td>3.0/1.0</td>
<td>3.0/1.0</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td>II. Max. 1310 nm/1550 nm (dB/Km)</td>
<td>–</td>
<td>–</td>
<td>0.35/0.25</td>
<td></td>
</tr>
<tr>
<td><strong>Fire Rating</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Fire Rating</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Cable Style</strong></td>
<td>MPO: 3.0 mm Round</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>LC: 2 mm Simplex Zip Cord</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Connector Performance - LC</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>II. Max. (dB)</td>
<td>0.3</td>
<td>0.3</td>
<td>0.3</td>
<td>0.3</td>
</tr>
<tr>
<td>Polish - RL Typ. (dB)</td>
<td>≥ 25</td>
<td>≥ 25</td>
<td>≥ 50</td>
<td>≥ 25</td>
</tr>
<tr>
<td>Fanout Length</td>
<td>0.5 m, In-Line</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Connector Performance - MPO</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>II. Max. (dB)</td>
<td>0.35</td>
<td>0.35</td>
<td>0.35</td>
<td>0.35</td>
</tr>
<tr>
<td>Polish - RL Typ. (dB)</td>
<td>≥ 20</td>
<td>≥ 20</td>
<td>≥ 20</td>
<td>≥ 50</td>
</tr>
</tbody>
</table>
FiberExpress Pre-Terminated Assemblies (continued)

Multi-Fiber Assemblies

**Standard FX Hydra Assemblies**

<table>
<thead>
<tr>
<th>Description</th>
<th>OM3 Aqua</th>
<th>OM4 Enka Violet</th>
<th>OS2 Blue</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>10G Transceiver Pinout</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MPO-12(f) to 6 x LC Duplex, 1 m In-Line Fanout, 2 m in length</td>
<td>FP3LDMF002M</td>
<td>FP4LDMF002M</td>
<td>FPSLDMF002M</td>
</tr>
<tr>
<td>MPO-12(f) to 6 x LC Duplex, 1 m In-Line Fanout, 3 m in length</td>
<td>FP3LDMF003M</td>
<td>FP4LDMF003M</td>
<td>FPSLDMF003M</td>
</tr>
<tr>
<td>MPO-12(f) to 6 x LC Duplex, 1 m In-Line Fanout, 5 m in length</td>
<td>FP3LDMF005M</td>
<td>FP4LDMF005M</td>
<td>FPSLDMF005M</td>
</tr>
</tbody>
</table>

**40G Transceiver Pinout**

<table>
<thead>
<tr>
<th>Description</th>
<th>OM3 Aqua</th>
<th>OM4 Enka Violet</th>
<th>OS2 Blue</th>
</tr>
</thead>
<tbody>
<tr>
<td>MPO-12(f) to 6 x LC Duplex, 1 m In-Line Fanout, 2 m in length</td>
<td>FP3LD4F002M</td>
<td>FP4LD4F002M</td>
<td>FPSLD4F002M</td>
</tr>
<tr>
<td>MPO-12(f) to 6 x LC Duplex, 1 m In-Line Fanout, 3 m in length</td>
<td>FP3LD4F003M</td>
<td>FP4LD4F003M</td>
<td>FPSLD4F003M</td>
</tr>
<tr>
<td>MPO-12(f) to 6 x LC Duplex, 1 m In-Line Fanout, 5 m in length</td>
<td>FP3LD4F005M</td>
<td>FP4LD4F005M</td>
<td>FPSLD4F005M</td>
</tr>
</tbody>
</table>

**900 µm Fan-out Assembly**

**FX Hydra Assembly — Traditional Pinout**

**FX Hydra Assembly — 40G Transceiver Pinout**
FiberExpress Pre-Terminated Assemblies (continued)

Multi-Fiber Cable Assemblies

Building a SmartPart Number

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. OM1</td>
<td>LD LC Duplex</td>
<td>S Single Jacket</td>
<td>D Double Jacket</td>
<td>4 Fibers</td>
<td>D 2.0mm</td>
<td>R Riser</td>
<td>N None</td>
</tr>
<tr>
<td>2. OM2</td>
<td>LC LC Duplex</td>
<td></td>
<td></td>
<td>6 Fibers</td>
<td>E 3.0mm</td>
<td>P Plenum</td>
<td>B Both ends</td>
</tr>
<tr>
<td>3. OM3</td>
<td>LD LC Simplex</td>
<td></td>
<td></td>
<td>8 Fibers</td>
<td>F 3.0mm</td>
<td>E 3.0mm</td>
<td>D Outside only</td>
</tr>
<tr>
<td>4. OM4</td>
<td>SC SC Simplex</td>
<td></td>
<td></td>
<td>12 Fibers</td>
<td>G 5.0mm</td>
<td>L LSZH</td>
<td>O Outside only</td>
</tr>
<tr>
<td>5. OS2</td>
<td>ST ST</td>
<td></td>
<td></td>
<td>16 Fibers</td>
<td>H 7.0mm</td>
<td>S Plenum</td>
<td>T Inside only</td>
</tr>
<tr>
<td>X OM3(BU)</td>
<td>LA LC/APC Simplex</td>
<td></td>
<td></td>
<td>24 Fibers</td>
<td>I 7.0mm</td>
<td>H SZH</td>
<td>None</td>
</tr>
<tr>
<td>Y OM4(BU)</td>
<td>LB LC/APC Simplex</td>
<td></td>
<td></td>
<td>32 Fibers</td>
<td>J 9.0mm</td>
<td>Z Plenum</td>
<td>F Inside only</td>
</tr>
<tr>
<td>Z G657A1/A2</td>
<td>LU SC/APC Simplex</td>
<td></td>
<td></td>
<td>48 Fibers</td>
<td>K 10.0mm</td>
<td>M MPO-12(M)</td>
<td>G Outside only</td>
</tr>
<tr>
<td></td>
<td>SA SC/APC Simplex</td>
<td></td>
<td></td>
<td>60 Fibers</td>
<td>L 10.0mm</td>
<td>M MPO-12(F)</td>
<td>H Inside only</td>
</tr>
<tr>
<td></td>
<td>SB SC/APC Simplex</td>
<td></td>
<td></td>
<td>72 Fibers</td>
<td>M 12.0mm</td>
<td>None</td>
<td>Z Outside only</td>
</tr>
</tbody>
</table>

Examples:

<table>
<thead>
<tr>
<th>PEC Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AF3LDL12D5010MRDN</td>
<td>Multi-Fiber cable assembly, distribution cable, Riser, OM3, 12 fibers,</td>
</tr>
<tr>
<td></td>
<td>LC-LC Duplex, Fan-out: 0.5m - in line, no pulling eye, 10m</td>
</tr>
<tr>
<td>AF3LDM12D5010MRDN</td>
<td>Multi-Fiber cable assembly, distribution cable, Riser, OM3, 12 fibers,</td>
</tr>
<tr>
<td></td>
<td>LC Duplex-MPO(Male), Fan-out: 0.5m - in line, no pulling eye, 10m</td>
</tr>
</tbody>
</table>

Notes:

1. The product numbers in the Item are just example for the part number assignment, the full series code can be assigned as per the number chart accordingly.

2. The fiber attenuation in cable are less than 0.4dB/km at 1310nm for single mode fibers and less than 3.5dB/km at 850nm for multimode fibers.

3. In a part number LC should always be shown as the first connector. (If there is LC). So MPO can only be second. So we need to flip the codes. (in the sample here, connector 1 should be LD and connector 2 can be MM, as if there is a LC connector at any end, that end by default is the first connector.)

4. The standard fiber cable colors are Yellow for Single Mode; Orange for OM1 & OM2; Aqua for OM3; Erika Violet for OM4.

www.belden.com
FiberExpress Workstation Outlets
MediaFlex Faceplate Kits, Workstation Outlets, and Window Covers

Tasteful designs balancing purpose and elegance. Grounded in the reconfigurable KeyConnect platform Belden workstation outlets provide a stylish footprint for copper, fiber and multimedia connectivity at the workstation.

FASTER
- Faster installation with support for standard NEMA type outlet boxes

EASIER
- Easier customizability for mixed copper, fiber and multimedia using the KeyConnect keystone-style system
- Easier port identification through elegant integrated label holders
- Easier mounting in constrained spaces with optional angled

BETTER
- Better cable management and bend radius control with surface adapter boxes
- Better looking modern curved styling available in a variety of colors

### MediaFlex Faceplate Kits

<table>
<thead>
<tr>
<th>Description</th>
<th>Belden Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>MediaFlex Faceplate Kit, KeyConnect-Style</td>
<td></td>
</tr>
<tr>
<td>2-port, Flush, Single-gang</td>
<td>AX104494, AX104495</td>
</tr>
<tr>
<td>4-port, Flush, Single-gang</td>
<td>AX102428, AX102429</td>
</tr>
<tr>
<td>6-port, Flush, Single-gang</td>
<td>AX102430, AX102431</td>
</tr>
<tr>
<td>2-port, Angled, Single-gang</td>
<td>AX104498, AX104499</td>
</tr>
<tr>
<td>4-port, Angled, Single-gang</td>
<td>AX102432, AX102433</td>
</tr>
</tbody>
</table>

### MediaFlex Workstation Outlets

<table>
<thead>
<tr>
<th>Description</th>
<th>Belden Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>MediaFlex Plates</td>
<td></td>
</tr>
<tr>
<td>Single-gang</td>
<td>AX101746, AX101747</td>
</tr>
<tr>
<td>Double-gang</td>
<td>AX101870, AX101871</td>
</tr>
<tr>
<td>MediaFlex Surface Adapter Boxes</td>
<td></td>
</tr>
<tr>
<td>Single-gang</td>
<td>AX102481, AX102482</td>
</tr>
<tr>
<td>Double-gang</td>
<td>AX101874, AX101875</td>
</tr>
</tbody>
</table>

Contact Customer Service for other colors and configurations.

### MediaFlex ID Window Covers

<table>
<thead>
<tr>
<th>Description</th>
<th>Belden Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Window Cover, Clear, bag of 25 units</td>
<td>AX101773</td>
</tr>
<tr>
<td>Window Cover, Gray, bag of 25 units</td>
<td>AX101774</td>
</tr>
<tr>
<td>Window Cover, Almond, bag of 25 units</td>
<td>AX101776</td>
</tr>
<tr>
<td>Window Cover, Elec. White, bag of 25 units</td>
<td>AX101776</td>
</tr>
<tr>
<td>Window Cover, Black, bag of 25 units</td>
<td>AX101777</td>
</tr>
</tbody>
</table>
### FiberExpress Workstation Outlets (continued)

**MediaFlex Multimedia Inserts and KeyConnect Adapters**

#### MediaFlex Inserts

<table>
<thead>
<tr>
<th>Description</th>
<th>Belden Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MediaFlex KeyConnect Module Insert</strong></td>
<td></td>
</tr>
<tr>
<td>2-port, Flush, bag of 10 pieces</td>
<td>AX102410, AX102411, AX102737</td>
</tr>
<tr>
<td>2-port, Angled, bag of 10 pieces</td>
<td>AX102412, AX101872, AX102735</td>
</tr>
<tr>
<td><strong>MediaFlex Filler Inserts</strong></td>
<td></td>
</tr>
<tr>
<td>1 unit, bag of 10 pieces</td>
<td>AX101758, AX101759, AX101760</td>
</tr>
<tr>
<td><strong>MediaFlex Multimedia Insert, Copper</strong></td>
<td></td>
</tr>
<tr>
<td>3-port RCA (Angled)</td>
<td>AX101878, AX101879, AX101880</td>
</tr>
<tr>
<td>SVHS Module (Angled)</td>
<td>AX101882, AX101883, AX101884</td>
</tr>
<tr>
<td>SVGA Module (IDC interface) (Angled)</td>
<td>AX101886, AX101887, AX101888</td>
</tr>
<tr>
<td>SVGA Feed Through (Angled)</td>
<td>AX102335, AX102336, AX102337</td>
</tr>
<tr>
<td>SVGA Feed Through, 3.5 mm Audio (Angled)</td>
<td>AX105158-AL, AX105158-EW, AX105158-BK</td>
</tr>
<tr>
<td><strong>MediaFlex Multimedia Insert, Fiber</strong></td>
<td></td>
</tr>
<tr>
<td>Duplex SC Multimode</td>
<td>AX101940, AX101941, AX101942</td>
</tr>
<tr>
<td>Duplex SC Simplex</td>
<td>AX101936, AX101937, AX101938</td>
</tr>
<tr>
<td>SC/APC Duplex</td>
<td>AX105638-AL, AX105638-EW, AX105638-BK</td>
</tr>
</tbody>
</table>

Contact Customer Service for other colors and configurations.

#### KeyConnect Adapters

<table>
<thead>
<tr>
<th>Description</th>
<th>Belden Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LC Duplex OM3 (Aqua Adapter)</strong></td>
<td>AX104937, AX104938, AX104939</td>
</tr>
<tr>
<td><strong>LC Duplex OM4 (Erika Violet Adapter)</strong></td>
<td>AX105641-AL, AX105641-EW, AX105641-BK</td>
</tr>
<tr>
<td><strong>LC Duplex SM (Blue Adapter)</strong></td>
<td>AX102419, AX102420, AX102421</td>
</tr>
<tr>
<td><strong>LC Duplex SM/APC (Green Adapter)</strong></td>
<td>AX105642-AL, AX105642-EW, AX105642-BK</td>
</tr>
<tr>
<td><strong>SC Simplex OM3 (Aqua Adapter)</strong></td>
<td>AX105643-AL, AX105643-EW, AX105643-BK</td>
</tr>
<tr>
<td><strong>SC Simplex SM (Blue Adapter)</strong></td>
<td>AX102686, AX102687, AX102688</td>
</tr>
<tr>
<td><strong>SC/APC Simplex SM (Green Adapter)</strong></td>
<td>AX105374-AL, AX105374-EW, AX105374-BK</td>
</tr>
</tbody>
</table>

Refer to the Belden copper catalog for a larger selection of multimedia adapters.
FiberExpress Workstation Connectivity
FX Multi Box (M-Box) and MDVO Multimedia Outlet Box

Strategically placed connectivity through overt design. Compact low-port count field-term or pre-term distributed consolidation points minimizing installation time by maximizing trunk capacity.

FASTER
• Faster installation with a variety of surface mount options

EASIER
• Easier distribution of low port count connectivity and breakouts with self-contained designs
• Easier field-termination with easily accessible consolidation points

BETTER
• Better options for pre-term and field-term including splicing

FX Multi Box (M-Box)
Extremely compact, the feature rich M-BOX is ideally suited for floor box and consolidation point applications. Supporting pre-terminated MPO-12(f) connectivity with an integrated fanout to LC, 1G and 10G Ethernet can be quickly deployed and re-deployed eliminating field termination. When the need arises additional versions of the M-Box are fully equipped to handle and protect field termination including both mechanical splice and pigtail fusion splicing techniques.

<table>
<thead>
<tr>
<th>Description</th>
<th>Belden Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>FX Multi-Box Pre-Term MPO-12(f) to 6 x LC Duplex</td>
<td>FW3MBP06LD FW4MBP06LD FWSMBP06LD FWSMBP06LA</td>
</tr>
<tr>
<td>FX Multi-Box Field-Term</td>
<td>FW3MSB06LD FW4MSB06LD FWSMSB06LD FWSMSB06LA</td>
</tr>
</tbody>
</table>

MDVO Multimedia Outlet Box
The MDVO Multimedia Outlet Box brings unique versatility for multimedia work area installations. The box design provides cable management and helps maintain cable bend radius. The low profile design and side-entry of the outlet box offers better protection for patch cords. The outlet box can accept up to six MDVO-style modules or three SC Duplex footprint adapters.

The MDVO Multimedia Outlet Box can be mounted directly on the wall or attached to standard electrical boxes. Included with the MDVO Multimedia box are three 1-port SC Duplex footprint mounting bezels and three 2-port MDVO adapters.

<table>
<thead>
<tr>
<th>Description</th>
<th>Belden Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>MDVO Multimedia Outlet Box, 6 Port</td>
<td>A0643206 A0643207</td>
</tr>
</tbody>
</table>

*See the Belden copper catalog for a larger selection.
FiberExpress Workstation Connectivity (continued)
Multi-User Outlet Box, MDVO-Style Fiber Modules, and Duplex Footprint Fiber Adapters

Multi-User Outlet Box

The Multi-User Outlet Box is a versatile box that can be used in many different applications. The outlet box can accommodate up to 24 connections of any type: UTP, fiber or coax. The outlet box is ideal for use as a multi-user telecommunications assembly, or simply as a high-density multimedia telecommunications outlet. The Multi-User Outlet Box can also be used as a wall mounted patch panel in confined areas, such as shallow rooms and cabinets.

<table>
<thead>
<tr>
<th>Description</th>
<th>Belden Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multi-User Outlet Box, 24-MDVO Ports (Empty)</td>
<td>AX100220, AX100221, AX100222</td>
</tr>
<tr>
<td>Multi-User KeyConnect 12-Port Adapter Strip</td>
<td>–, –, AX104615</td>
</tr>
</tbody>
</table>

MDVO-Style Fiber Modules

<table>
<thead>
<tr>
<th>Description</th>
<th>Belden Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC Duplex – OM3 (Aqua Adapter)</td>
<td>AX105696-AL, AX105696-EW, AX105696-BK</td>
</tr>
<tr>
<td>LC Duplex – SM (Blue Adapter)</td>
<td>AX102214, AX102215, AX102216</td>
</tr>
<tr>
<td>SC Simplex – OM3 (Aqua Adapter)</td>
<td>AX105697-AL, AX105697-EW, AX105697-BK</td>
</tr>
<tr>
<td>SC Simplex – SM (Blue Adapter)</td>
<td>AX104624-02, AX104624-03, AX104624-04</td>
</tr>
<tr>
<td>SC/APC Simplex – SM (Green Adapter)</td>
<td>AX105698-AL, AX105698-EW, AX105698-BK</td>
</tr>
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<td>ST – Metal</td>
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Standard Duplex Footprint Fiber Adapters

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>SC Duplex, Flangeless</td>
<td>AX105691-B25, AX105692-B25, AX105693-B25, AX105694-B25</td>
</tr>
<tr>
<td>SC Duplex w/Shutters, Flangeless</td>
<td>–, –, AX105695-B25</td>
</tr>
</tbody>
</table>

Refer to the Belden copper catalog for a larger selection of workstation connectivity options.
The FX Secure/Keyed LC System allows for physical segregation of network segments in secure fiber cabling infrastructures. All Secure/Keyed LC products are available with 12 different keying options each carrying a different color to facilitate network administration. The keying detail inside the connector is highly tamper-resistant and cannot be reproduced inside a standard LC connector to violate the network security. All products comply with the FOCIS 10 standard and optical performance exceeds all industry standards for SFF connectors.

The Secure/Keyed LC Adapter Modules, Frames, Cassettes and Adapter Strips can be used in all mounting hardware for workstation area, Consolidation Point or Telecom Room applications. The Secure/Keyed LC FX Manager Modules can be used in 19- and 23-inch FX Manager Shelves to provide a high-density management system.

The Secure/Keyed LC Ultra Frames and Cassettes can be used with the FX UHD Rack and FX Ultra Wall-mount Patch Panels to provide an Ultra high-density patching system that is easy to deploy, operate and maintain, while ensuring maximum patching, uninterrupted availability and superior performance.

The Secure/Keyed LC Patch Cords and Pigtales are offered in Multimode 62.5 μm (OM1), laser-optimized 50 μm (OM3 and OM4) and Singlemode (OS2) for the most demanding network performance.

The Secure/Keyed LC Brilliance Universal Field Installable Connectors are available in Multimode 50 μm laser-optimized (OM4, OM3 compatable) and Singlemode (OS2) fiber versions.

### FX Secure/Keyed LC System

<table>
<thead>
<tr>
<th>Description</th>
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</thead>
<tbody>
<tr>
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<tr>
<td>LC Key2</td>
<td>Green</td>
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<td>LC Key3</td>
<td>Yellow</td>
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<td>LC Key4</td>
<td>Black</td>
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<td>LC Key7</td>
<td>Violet</td>
</tr>
<tr>
<td>LC Key8</td>
<td>Rose</td>
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<td>LC Key9</td>
<td>Aqua</td>
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<td>Brown</td>
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<td>LC KeyB</td>
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<td>LC KeyC</td>
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For additional details, please refer to the Secure/Keyed LC System Product Bulletin PB275.
FiberExpress Optic Cables

Introduction

The optical fiber cables featured in this section have been expanded to meet advances in technology and the demands of both commercial and industrial applications. Refer to this page for selecting a fiber type, color coding information, and optical specifications. Belden’s extensive line of indoor and outdoor cable products is offered in tight buffer and loose tube designs. Armored, burial, and ruggedized designs are suited to a host of industrial environments. For each product design, items for OM1, OM2, OM3, OM4, and OS2 (Singlemode) items have been developed. Belden fiber products are third party tested by either ETL or UL and approved for use according to the National Electric Code.

Customer Service

Many fiber designs are available from stock through our Distributors. For your new or custom application that you do not locate in this section, contact Customer Service at your region for additional information or to request a quote. Further product and technical information is also available on our web site at www.belden.com.

Cable Selection Guide

<table>
<thead>
<tr>
<th>Jacket Color Chart</th>
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<tbody>
<tr>
<td><strong>Cable Type</strong></td>
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<tr>
<td>Indoor Cables: Interconnect, Breakout, Distribution and Tray Optic</td>
</tr>
<tr>
<td>OM1 &amp; OM2</td>
</tr>
<tr>
<td>OM3</td>
</tr>
<tr>
<td>OM4 (Standard)</td>
</tr>
<tr>
<td>OM4 (Optional)</td>
</tr>
<tr>
<td>OS2</td>
</tr>
<tr>
<td>Indoor/Outdoor &amp; Indoor Cables: Distribution, Loose Tube, OSP</td>
</tr>
<tr>
<td>OM1, OM2, OM3, OM4, OS2</td>
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<tr>
<td>Specialty Cables: Tactical</td>
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<tr>
<td>OM1, OM2, OM3, OM4, OS2</td>
</tr>
</tbody>
</table>

See page 4, FX Systems chart for technical performance.

The part numbers in the following pages represent standard fiber cables, many more constructions and more fiber counts are available, please contact your Belden representative for more informations.
FiberExpress Distribution Cables
Tight Buffer — Indoor Riser & LSZH Rated

Fast installation, easy termination. Sub-unitized cables provide easy routing and 900 um tight-buffered fiber supporter fast and robust field-termination.

**Additional Options**
- Horizontal distribution for Fiber-to-the-desk
- In building backbone
- Factor floor automation
- Data center EDA areas

### Indoor Specifications

<table>
<thead>
<tr>
<th>Bend Radius (vs. Cable OD)</th>
<th>Installation</th>
<th>Operation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>20 x OD</td>
<td>10 x OD</td>
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<table>
<thead>
<tr>
<th>Temperature Range</th>
<th>Storage</th>
<th>Operation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-20°C to 60°C</td>
<td>-20°C to 60°C</td>
</tr>
</tbody>
</table>

### Legend
- Numbered Sub-Unit Aramid Yarn
- Central Strength Member
- 900 µm Tight Buffered Fiber
- Outer Jacket

### Compliance
- IEC 60794-1
- IEC794-1
- IEC 60332-3C (LSZH)
- IEC 60332-1 (LSZH)
- NEC/CEC OFNR FT.4 (RISER - PVC)

### Description Construction Fiber Sub-Unit OD Cable OD Weight Tensile Strength

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<thead>
<tr>
<th>Description</th>
<th>Construction</th>
<th>Fiber Count</th>
<th>Fiber</th>
<th>Sub-Unit OD</th>
<th>Cable OD</th>
<th>Weight Kg/km</th>
<th>Tensile Strength</th>
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<td>16.0</td>
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<td>8.8</td>
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<td>50.3</td>
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| Unitized 6-Fiber Sub-Units | 36 | 900 µm TB | 3.5 | 14.4 | 12.4 | 155.0 | 149.0 | 400 | 660 |
|                           | 72 | 900 µm TB | 3.5 | 15.6 | 13.5 | 187.0 | 185.0 |

| Unitized 12-Fiber Sub-Units | 48 | 900 µm TB | 5 | 15.9 | 14.7 | 174.0 | 177.0 |
|                           | 72 | 900 µm TB | 5 | 17.4 | 16.0 | 215.0 | 217.0 |
|                           | 96 | 900 µm TB | 5 | 18.9 | 17.4 | 265.0 | 266.0 |
|                           | 108| 900 µm TB | 5 | 22.4 | 20.6 | 385.0 | 382.0 |
|                           | 144| 900 µm TB | 5 | 29.4 | 26.9 | 711.0 | 687.0 |

Above specification provide a general representation for the product family. Consult individual technical data sheets for exact specifications.

### Standard Indoor Configurations

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<th>Belden Part Number</th>
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<td>OM1 Orange</td>
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<td>Non-unitized - Riser</td>
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<td>NTBL62A0220GAA</td>
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<tr>
<td>24</td>
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Non-Unitized - LSZH IEC60332-3C

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<tr>
<td>4</td>
<td>NTZL62A0040GAA</td>
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<td>8</td>
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<tr>
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Non-Unitized - LSZH IEC60332-1

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<td>NTAP62A0180GAA</td>
</tr>
<tr>
<td>20</td>
<td>NTAP62A0200GAA</td>
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<td>22</td>
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</tr>
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Unitized 6-Fiber Sub-Units - Riser

<table>
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<tr>
<td>36</td>
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Unitized 6-Fiber Sub-Units - LSZH IEC60332-2C

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Unitized 6-Fiber Sub-Units - LSZH IEC60332-1

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<td>36</td>
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Unitized 12-Fiber Sub-Units - Riser

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Unitized 12-Fiber Sub-Units - LSZH IEC60332-2C

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Unitized 12-Fiber Sub-Units - LSZH IEC60332-1

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<td>84</td>
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</tbody>
</table>
FiberExpress Distribution Cables (continued)
Tight Buffer — Indoor/Outdoor Riser Rated

- UV Resistant Jacket
- Moisture Resistant Jacket
- Fungus Resistant Jacket
- Water Blocking Aramid
- Water Blocking Tape

### Indoor/Outdoor Specifications

<table>
<thead>
<tr>
<th>Bend Radius (vs. Cable OD)</th>
<th>Installation</th>
<th>Operation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>20 x OD</td>
<td>10 x OD</td>
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<table>
<thead>
<tr>
<th>Temperature Range</th>
<th>Storage</th>
<th>Operation</th>
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<tbody>
<tr>
<td></td>
<td>-20°C to 60°C</td>
<td>-20°C to 60°C</td>
</tr>
</tbody>
</table>

### Legend

- Non-Unitized
- Unitized 6-Fiber Sub-Units
- Unitized 12-Fiber Sub-Units

### Compliance

- IEC 60794-1
- IEC794-1
- NEC/CEC OFNR FT.4 (RISER - PVC)

### Table

<table>
<thead>
<tr>
<th>Description</th>
<th>Construction</th>
<th>Fiber Count</th>
<th>Fiber</th>
<th>Sub-Unit OD</th>
<th>Cable OD</th>
<th>Weight</th>
<th>Tensile Strength</th>
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<td>mm</td>
<td>mm</td>
<td>Kg/km</td>
<td>Operation</td>
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**FiberExpress Distribution Cables (continued)**

**Tight Buffer — Indoor/Outdoor Riser Rated**

**Standard Indoor/Outdoor Configurations**

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www.belden.com
Single Jacket, All Dielectric Loose Tube Cables
Loose Tube — Outdoor, PE & Armored/PE Single Jacket

Gel-filled buffer tube prevents water migration. All dielectric strength member. Full dielectric construction, no grounding required. Available with up to 144 fibers. Length marking in meter for easy determination of cable length.

Applications
- Medium to high fiber count requirements
- Inter-building duct installations
- Lashed aerial
- Outdoor

Jacket Specifications

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Specifications

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Min. Bend Radius
- Installation: 20 x OD
- Long Term: 10 x OD

Optical Specifications

Legend

Compliance
- EIA/TIA-455
- IEC 60974-1
- IEC794-1
## Single Jacket, All Dielectric Loose Tube Cables (continued)

### Loose Tube — Outdoor, PE & Armored/PE Single Jacket

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Double Jacket, All Dielectric Loose Tube Cables
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<th>Jacket Material</th>
<th>Specifications</th>
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Temperature Range
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Central Tube Cables
Loose Tube — Indoor/Outdoor LSZH, Outdoor Armored

Economical option for low fiber counts. Quick and easy end preparation. Fully waterblocked with gel-filled buffer tube. No rods - easy handling. Crush, impact and abrasion resistant.

Applications
• Campus OSP backbones
• Drop cable
• Telecommunications and data trunk
• Direct burial (armored only)
• Lashed aerial

Jacket Specifications

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Specifications

| Temperature Range | Storage -40°C to 70°C |
|                  | Operating -40°C to 70°C |
| Min. Bend Radius  | Installation 20 x OD, Long Term 10 x OD |

Optical Specifications

See page 4

Central Tube Series

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Central Tube Cables
Loose Tube — Outdoor Armored / Single PE Jacket

Economical option for low fiber counts. Quick and easy end preparation. Fully waterblocked with gel-filled buffer tube. No rods - easy handling. Crush, impact and abrasion resistant.

Applications
- Campus OSP backbones
- Drop cable
- Telecommunications and data trunk
- Direct burial (armored only)
- Lashed aerial

Jacket Specifications
- Jacket Material: PE
- Buffer Tube: PBT
- Strength Member: Glass yarn, Aramid Yarn
- Armor: Steel Tape
- Color Codes (Jacket and Fibers): Per TIA/EIA 598-B, See page 4
- Jacket Color: Black

Specifications
- Temperature Range
  - Storage: -40°C to 70°C
  - Operating: -40°C to 70°C
- Min. Bend Radius
  - Installation: 20 x OD
  - Long Term: 10 x OD
- Optical Specifications: See page 4

Legend
- Outer Jacket
- Steel Armor
- Strength Member
- Gel-filled Buffer Tube
- Optical Fibers

Central Tube Series

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