SUMITOMO ELECTRIC LIGHTWAVE

NEXT GENERATION THINKING™

FutureFLEX®
AIR-BLOWN FIBER® SOLUTIONS

ORDERING GUIDE

ARROW

A FutureFLEX Distributor

www.arrowwire.com

Developed and implemented since 1995,
FutureFLEX® Air-Blown Fiber® provides a fiber optic
solution that can grow along with your fiber optic network.

FutureFLEX®
Air-Blown Fiber Solution

Sumitomo Electric Lightwave's breadth of product families and solutions combine to provide a complete end-to-end passive network that are both a fit for today's requirements and flexible to quickly respond to growing and evolving demands.

Sumitomo Electric Lightwave's FutureFLEX® Air-Blown Fiber offers unprecedented ease of installation, flexibility, and cost savings for current and future network requirements. As the first to introduce the air blown fiber technology in North America, the FutureFLEX® solution offers competitive features and benefits to make it compatible with any network infrastructure design. The revolutionary technology and design of the FutureFLEX® Air-Blown Fiber solution provides immediate scalability with installations of exact fiber types and counts required in real time. Conduct fast and easy installs, upgrades, and MACs in minutes or hours versus weeks or months associated with traditional cabling. Some of the key features and benefits include:

Quick and Easy Installation

- Fiber Bundles are installed at speeds up to 150 feet per minute

- Installing 3,000 feet takes only 2 installers 30 minutes compared to up to 8 hours and 4 installers for conventional cable solutions

No Worksite Disruption and Improved Safety

- Fiber Bundles are installed point-to-point through hazardous areas

- No need to have crews working overhead, on cable trays, or over operating equipment

- No need for lifts, ladders or other equipment which can present hazards to crews

Tube Cable Pathway Provides Valuable Flexibility

- Changes to the routes can be made by re-connecting push fit couplers at TDUs

- Vacant tubes provide future proofing and flexibility

- Future requirements can be installed in hours instead of days, weeks or months

Once the pathway is installed and the fibers blown in our connectivity and hardware offerings give network designers and installers the widest range of options as well as flexibility to tackle the varying nuances and complexities of any network build. These options and flexible solutions include…

Lynx2 CustomFit Fusion Splice-On Connectors

- Largest range of connector and media options in the industry covering single fiber, duplex and even 8ct and 12ct MPO (multiple SMF and MMF options)

- Aesthetically Appealing, High Quality, Quick and Easy Terminations EVERY TIME!

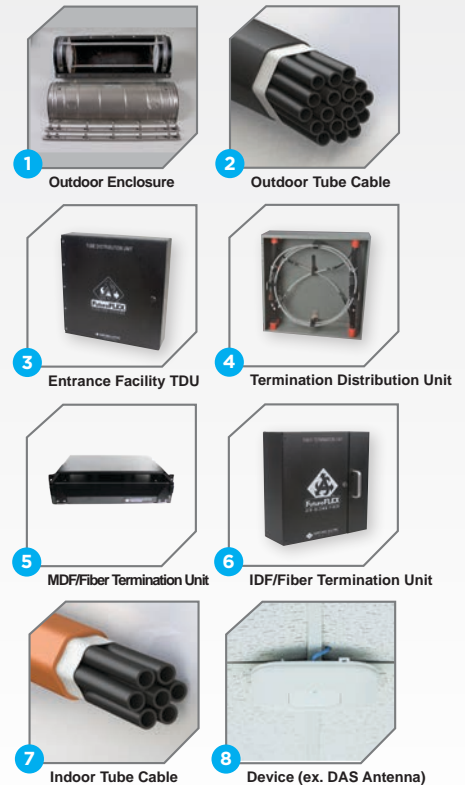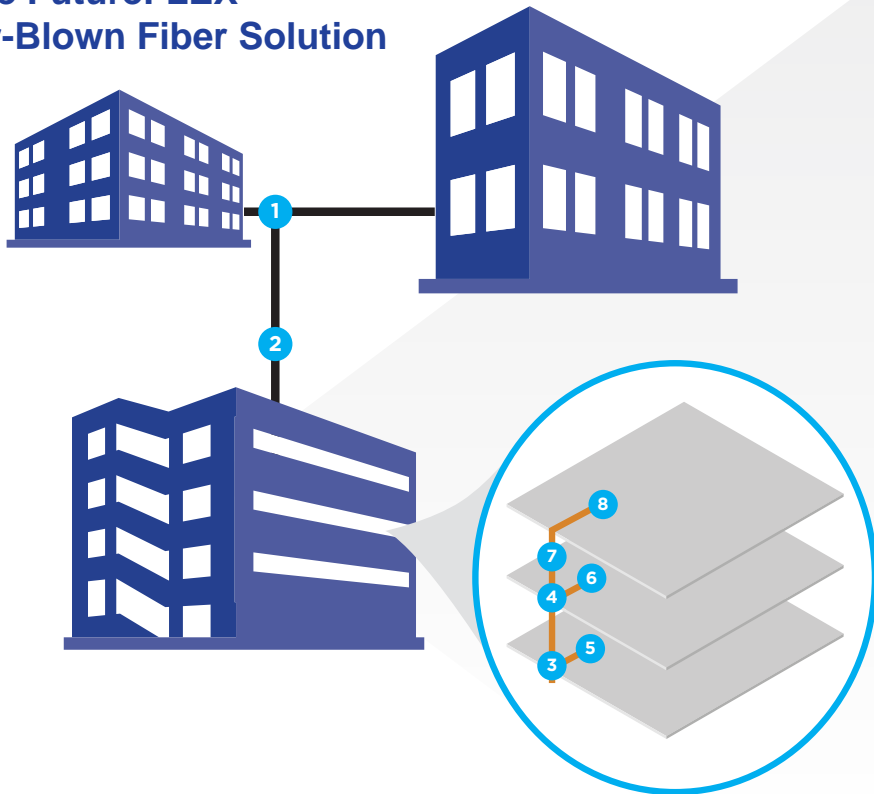- Utilizing Sumitomo Fusion Splicers ensures instant quality results and no reset-up or rework

ABF and 4th Level Product Families = Wide Range of Hardware Options

- Wall and Rack Mount Panel Options with a wide range of features and benefits to accommodate varying network requirements and budgets (Such as…Stationary, Simple Slide-Out or Flexible Slide-Out for Front/Rear and Angle Down)

- Robust offering of cassette modules for LGX to High Density requirements PLUS the highly sought after FOX Splice-Cassette that allows for the utmost flexibility

- Pre-term cable assemblies and hardware options for the fastest of deployment requirements

Sumitomo Electric Fusion Splicers and Accessories

- Large breadth of Fusion Splicer products including 12ct Ribbon, Core and Active Clad Alignment, Fixed V-Groove and Smallest HandHeld fusion splicers

- The Quantum series splicers and accessories boast first and only value add features such as dual independent heater ovens to eliminate splicing bottle neck, auto adjusting cleavers that keep technicians going and eliminate requirement for sending equipment in for repair

- Fastest product support via 24 hour technical support hotline (888-SPLICER) and ONLY one day repair turnaround when needed

- All splicers are compatible with the Lynx2 CustomFit Fusion Splice-On Connectors

The FutureFLEX™ Air-Blown Fiber Solution

1. Outdoor Enclosure
2. Outdoor Tube Cable
3. Entrance Facility TDU
4. Termination Distribution Unit
5. MDF/Fiber Termination Unit
6. IDF/Fiber Termination Unit
7. Indoor Tube Cable
8. Device (ex. DAS Antenna)

Step 1: Create an End-to-End Tube Cable Pathway that consists of:
Tube Cable
    Tube Cable Considerations
        Jacket and material rating (OSP, Riser, Plenum, Armored, etc.)
Tube Distribution Units

Step 2: Install the Fiber Bundle
Appropriately selected Fiber Bundles are blown through the Tube Cable Pathway
Fiber Bundle selection considerations include:
    • Fiber Count (2,4,6,12,24,48, or 72)
    • Fiber Type (SMF, MMF, LOMM, etc.)
Blowing Equipment and Accessories

Step 3: Terminate the Fiber Bundles at Fiber Termination Units
Fiber Termination Units (Enclosures/Hardware)
    • Wall Mount
    • Rack Mount
Various Termination Options Available
    • Fusion Splice to Fan-out
    • Fusion Splice Directly to Connector
    • Fusion Splice to Cassette/Module

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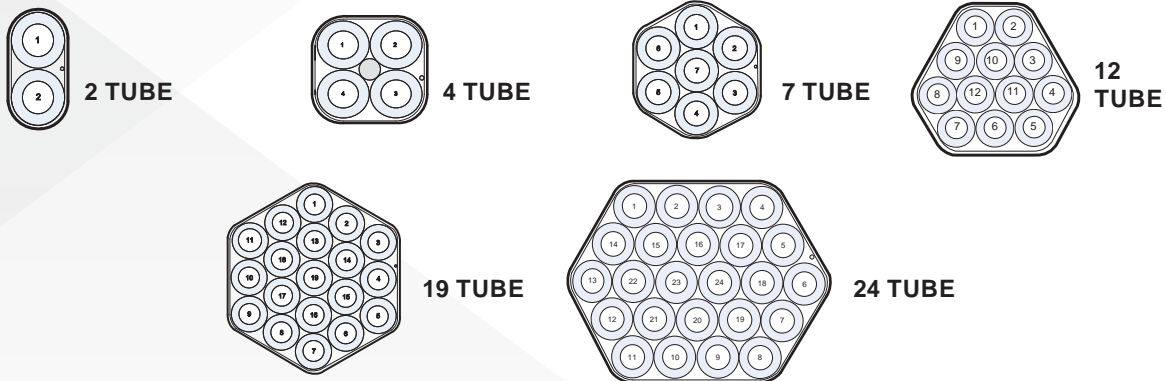   • Rack Mount
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Step 1 - Create an End-to-End Tube Cable Pathway

Tube Cable Variations by Environment

Indoor Riser Rated Tube Cable	Page 5
Indoor Plenum Rated Tube Cable	Page 6
Indoor/Outdoor Special Applications Tube Cable	Page 7
Outdoor Tube Cable	Page 8
Armored Tube Cable	Page 9

Tube Counts

2 TUBE · 4 TUBE · 7 TUBE · 12 TUBE · 19 TUBE · 24 TUBE

How are tube cables connected?

Tube Distribution Units (TDU) and other related accessories are used to connect tube cables - making a continuous path for the fiber bundle. The TDUs can also be used to transition between one environment to another.

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Indoor/Riser Rated

TC02TRC-1

TC02TRC

TC04TRC-1

TC04TRC

TC07TRC-1

TC07TRC

TC12TRC-1

TC12TRC

TC19TRC-1

TC19TRC

Description:
These multi-tube cables are used for creating indoor tube cable infrastructures. They are UL OFNR listed for riser transitions between building floors. They are ideal for intrabuilding backbones.

Features
- Flame resistant PVC jacket materials
- Flame barrier tape
- Ripcords
- Cable length markings at 2 foot intervals
- Tube ID numbers marked at 2 inch intervals
- UL 1666 OFNR / CUL FT4
- All-dielectric
- Meets ICEA, TIA and UL standards

Specifications

Property	Specification
OFNR Riser-Rated	UL 1666 / CUL FT4
Operation Temperature Range	-4° F to + 158°F (-20° C to +70° C) ICEA 596
Minimum Bend Radius (During/After Installation)	20/10 x cable diameter
Standard Reel Length	3,000 ft. (+30 ft./-0 ft.)
Maximum Reel Length	3,000 ft. (+30 ft./-0 ft.)
Inner Tube ID / OD	6mm / 8mm

Physical Characteristics

Part Number	Description	Outside Diameter (in.)	Max Weight (lbs./kft.)	Max Tensile Load (lbs.)	Std Length	Max Length
TC02TRC	UL/CUL OFNR Rated Tube Cable/Single Jacket; 2 tubes	0.80	140	120	3,000	3,000
TC04TRC	UL/CUL OFNR Rated Tube Cable/Single Jacket; 4 tubes	0.90	210	200	3,000	3,000
TC07TRC	UL/CUL OFNR Rated Tube Cable/Single Jacket; 7 tubes	1.00	310	400	3,000	3,000
TC12TRC	UL/CUL OFNR Rated Tube Cable/Single Jacket; 12 tubes	1.49	480	400	3,000	3,000
TC19TRC	UL/CUL OFNR Rated Tube Cable/Single Jacket; 19 tubes	1.70	574	500	3,000	3,000
TC24TRC	UL/CUL OFNR Rated Tube Cable/Single Jacket; 24 tubes	2.0	650	500	2,000	2,000

Armored Physical Characteristics

Part Number	Description	Outside Diameter (in.)	Max Weight (lbs./kft.)	Max Tensile Load (lbs.)	Std Length	Max Length
TC02TRC-1	TC02TRC with Interlocked Glavanized Steel Armored (no armor overjacket)	1.08	543	120	3,000	3,000
TC04TRC-1	TC04TRC with Interlocked Glavanized Steel Armored (no armor overjacket)	1.19	748	200	3,000	3,000
TC07TRC-1	TC07TRC with Interlocked Glavanized Steel Armored (no armor overjacket)	1.39	982	400	3,000	3,000
TC12TRC-1	TC12TRC with Interlocked Glavanized Steel Armored (no armor overjacket)	1.83	1506	400	3,000	3,000
TC19TRC-1	TC019TRC with Interlocked Glavanized Steel Armored (no armor overjacket)	2.03	1783	500	2,500	2,500

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Indoor/Plenum Rated

TC02TP2-1

TC02TP2

TC04TP2-1

TC04TP2

TC07TP2-1

TC07TP2

TC12TP2-1

TC12TP2

TC19TP2-1

TC19TP2

Description:

These single and multi-tube cables are used for creating indoor tube cable infrastructures. They are listed for plenum spaces. They are ideal for intrabuilding transitions which require plenum listed products.

Features

- Low-smoke, flame-resistant jacket materials
- Cable length markings at 2 foot intervals
- Tube ID numbers marked at 2 inch intervals
- NFPA 262 / CUL FT6 / CSA listed
- Meets ICEA, TIA and UL standards

Specifications

Property	Specification
OFNP Plenum-Rated	NFPA 262 / CUL FT6 / CSA OFN (FT6) Listed
Operation Temperature Range – Plenum rated	+32°F to +158°F (0°C to +70°C) ICEA 596
Minimum Bend Radius for Multi-Tube Cables (During/After Installation)	20/10 x cable diameter
Minimum Bend Radius for 8mm OD Single Tubes (During and After Installation)TC01TPX	9" Radius
Standard Reel Length	1,000 ft. (+10ft./-0 ft.)
Inner Tube ID / OD	6mm / 8mm

Physical Characteristics

Part Number	Description	Outside Diameter (in.)	Max Weight (lbs./kft.)	Max Tensile Load (lbs.)	Std Length	Max Length
TC01TPX	UL/CUL/CSA NFPA 262 Plenum Rated Single Tube	0.32	27	60	1,000	1,000
TC02TP2	UL/CUL/CSA NFPA 262 Plenum OFNP Rated Tube Cable/Single Jacket; 2 tubes (CSM)	0.90	89	120	1,000	1,000
TC04TP2	UL/CUL/CSA NFPA 262 Tube Cable/Single Jacket; 4 tubes	0.90	210	200	1,000	1,000
TC07TP2	UL/CUL/CSA NFPA 262 Plenum OFNP Rated Tube Cable/Single Jacket; 7 tubes	1.00	320	400	1,000	1,000
TC12TP2	UL/CUL/CSA NFPA 262 Plenum OFNP Rated Tube Cable/Single Jacket; 12 tubes	1.48	574	450	1,000	1,000
TC19TP2	UL/CUL/CSA NFPA 262 Plenum OFNP Rated Tube Cable/Single Jacket; 19 tubes	1.70	750	500	1,000	1,000

Armored Physical Characteristics

Part Number	Description	Outside Diameter (in.)	Max Weight (lbs./kft.)	Max Tensile Load (lbs.)	Std Length	Max Length
TC02TP2-1	TC02TP2 with Interlocked Glavanized Steel Armored (no armor overjacket)	1.31	559	120	1,000	1,000
TC04TP2-1	TC04TP2 with Interlocked Glavanized Steel Armored (no armor overjacket)	1.31	608	200	1,000	1,000
TC07TP2-1	TC07TP2 with Interlocked Glavanized Steel Armored (no armor overjacket)	1.51	887	400	1,000	1,000
TC12TP2-1	TC12TP2 with Interlocked Glavanized Steel Armored (no armor overjacket)	1.95	1521	450	1,000	1,000
TC19TP2-1	TC019TP2 with Interlocked Glavanized Steel Armored (no armor overjacket)	2.15	1696	500	1,000	1,000

Indoor/Outdoor Special Applications

TC02MTIO

TC04MTIO

TC07MTIO

TC12MTIO

TC19MTIO

Description:
Designed for use in Mass Transit, Nuclear Power Plants and Class I, Division 1 and 2 installations, these multi-tube cables are used for creating tube cable infrastructures in indoor or outdoor environments. They are ideal for duct installations or any normal OSP environment and are also UL OFN-LS/OFNR listed for applications requiring riser classification.

Features
- Low Smoke
- Halogen Free Outer Jacket
- NFPA 130 / cUL FT4 / IEEE 1202 Listed / OFNR
- Water-blocking tape
- Cable length markings at 2 foot intervals
- Tube ID numbers marked at 2 inch intervals
- Meets TIA and UL Standards
- UL 1651 Listed

Specifications

Property	Specification
Transit and Passenger Rail Systems	NFPA 130 / IEEE 1202 Listed / OFNR
Operation Temperature Range	-40° F to + 158°F (-40° C to +70° C) ICEA 696
Minimum Bend Radius (During/After Installation)	20/10 x cable diameter
Standard Reel Length	3,000 ft. (+30 ft./-0 ft.)
Maximum Reel Length	3,000 ft. (+30 ft./-0 ft.)
Inner Tube ID / OD	6mm / 8mm

Physical Characteristics

Part Number	Description	Outside Diameter (in.)	Max Weight (lbs./kft.)	Max Tensile Load (lbs.)	Std Length	Max Length
TC02MTIO	UL/CUL FT4 NFPA 130 Indoor/Outdoor Tube Cable; 2 tubes	0.90	140	200	3,000	3,000
TC04MTIO	UL/CUL FT4 NFPA 130 Indoor/Outdoor Tube Cable; 4 tubes (CSM)	0.90	244	300	3,000	3,000
TC07MTIO	UL/CUL FT4 NFPA 130 Indoor/Outdoor Tube Cable; 7 tubes	1.10	338	400	3,000	3,000
TC12MTIO	UL/CUL FT4 NFPA 130 Indoor/Outdoor Tube Cable; 12 tubes	1.45	564	450	3,000	3,000
TC19MTIO	UL/CUL FT4 NFPA 130 Indoor/Outdoor Tube Cable; 19 tubes	1.80	671	500	3,000	3,000

The New TCMTIO products replaces the former TCMTX. The New TCMTIO is an enhanced version of the MTX - Mass Transit product and in addition to still satisfying Mass Transit requirements now also meets Riser and Low Smoke application classification/requirements.

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Outdoor/All-Dielectric

TC02MSOS

TC02TOX

TC04MSOS

TC04TOD

TC07MSOS

TC07TOX

TC12MSOS

TC12TOX

TC19MSOS

TC19TOX

TC24TOX

Description:

These single and multi-tube cables are designed for use in creating tube cable infrastructures in outdoor environments where non-conductive elements are desired or required. The TOX and TOD cables and are ideal for duct installations or any normal outside plant environments.

MSOS cables incorporate SEL's ultra high-performance tubing technology and are ideal for aerial installations.

Features

• All normal outdoor environments
• Cable length markings at 2 foot intervals
• Tube ID numbers marked at 2 inch intervals
• Meets TIA standards

Specifications	
Property	Specification
Operation Temperature Range	-40°F to +158°F (-40°C to +70°C) ICEA 640
Minimum Bend Radius (During/After Installation)	20/10 x cable diameter
Standard Reel Length	3,000 ft. (+30 ft./-0 ft.), except 24TOX 2,000 ft.
Maximum Reel Length	3,000 ft. (+30 ft./-0 ft.), except 24TOX 2,000 ft.
Inner Tube ID / OD	6mm / 8mm

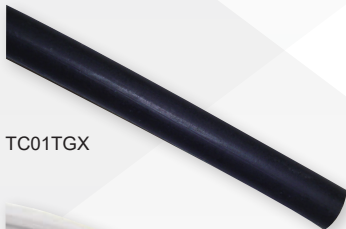| Physical Characteristics						
Part Number	Description	Outside Diameter (in.)	Max Weight (lbs./kft.)	Max Tensile Load (lbs.)	Std Length	Max Length
TC02TOX	Water-Blocked, Dielectric Tube Cable; 2 tubes	0.9	87	200	3,000	3,000
TC04TOD	Water-Blocked, Dielectric Tube Cable with CSM; 4 tubes	0.9	137	500	3,000	3,000
TC07TOX	Water-Blocked, Dielectric Tube Cable; 7 tubes	1.1	205	500	3,000	3,000
TC12TOX	Water-Blocked, Dielectric Tube Cable; 12 tubes	1.46	300	500	3,000	3,000
TC19TOX	Water-Blocked, Dielectric Tube Cable; 19 tubes	1.7	443	500	3,000	3,000
TC24TOX	Water-Blocked, Dielectric Tube Cable; 24 tubes	1.98	498	500	2,000	2,000
TC02MSOS	Water-Blocked, Dielectric Tube Cable - Low shrink, with 4 yellow stripes; 2 tubes	0.9	89	200	3,000	3,000
TC04MSOS	Water-Blocked, Dielectric Tube Cable with CSM- Low shrink, with 4 yellow stripes; 4 tubes	0.9	141	500	3,000	3,000
TC07MSOS	Water-Blocked, Dielectric Tube Cable - Low shrink, with 4 yellow stripes; 7 tubes	1.1	196	500	3,000	3,000
TC12MSOS	Water-Blocked, Dielectric Tube Cable - Low shrink, with 4 yellow stripes; 12 tubes	1.5	324	500	3,000	3,000
TC19MSOS	Water-Blocked, Dielectric Tube Cable - Low shrink, with 4 yellow stripes; 19 tubes	1.7	399	500	3,000	3,000

Outdoor/Metallic

TC02MSOS-2

TC02TOX-2

TC04MSOS-2

TC04TOD-2

TC07MSOS-2

TC07TOX-2

TC19MSOS-2

TC19TOX-2

Description:
With its metallic protection, these multi-tube cables are primarily used for creating tube cable infrastructures in rugged installations. These cables are ideal for duct or direct burial applications.

Features
- Dry tape waterblocked cable core
- Interlocked steel armor
- Cable length markings at 2 foot intervals
- Tube ID numbers marked at 2 inch intervals
- Meets TIA standards

Specifications

Property	Specification
Operation Temperature Range	-65°F to +158°F (-55°C to +70°C)
Minimum Bend Radius (During/After Installation)	20/10 x cable diameter
Standard Reel Length	3,000 ft. (+30 ft./-0 ft.)
Maximum Reel Length	3,000 ft. (+30 ft./-0 ft.)
Metallic Elements	Bonding/Grounding Required
Inner Tube ID / OD	6mm / 8mm

Physical Characteristics

Part Number	Description	Outside Diameter (in.)	Max Weight (lbs./kft.)	Max Tensile Load (lbs.)	Std Length	Max Length
TC02TOX-2	Same as TC02TOX with jacketed interlocked steel armor.	1.2	589	500	3,000	3,000
TC02MSOS-2	Same as TC02MSOS with jacketed interlocked steel armor.	1.2	586	500	3,000	3,000
TC04TOD-2	Same as TC04TOD with jacketed interlocked steel armor.	1.3	734	500	3,000	3,000
TC04MSOS-2	Same as TC04MSOS with jacketed interlocked steel armor.	1.3	707	500	3,000	3,000
TC07MSOS-2	Same as TC07MSOS with jacketed interlocked steel armor.	1.5	825	600	3,000	3,000
TC07TOX-2	Same as TC07TOX with jacketed interlocked steel armor.	1.5	825	600	3,000	3,000
TC12MSOS-2	Same as TC12MSOS with jacketed interlocked steel armor.	1.9	1,061	600	3,000	3,000
TC12TOX-2	Same as TC12TOX with jacketed interlocked steel armor.	1.9	1,080	600	3,000	3,000
TC19MSOS-2	Same as TC19MSOS with jacketed interlocked steel armor.	2.1	1,152	600	3,000	3,000
TC19TOX-2	Same as TC19TOX with jacketed interlocked steel armor	2.1	1,152	600	3,000	3,000

Unjacketed Single Tubes

TC01TBX

TC01TGX

TC01TXX

Description:
These unjacketed single tubes are available in fire-retardant and non-flame-retardant versions. Fire-retardant tubes are UL listed for indoor general applications. The non-flame retardant tubes are designed for indoor single tube drops where fire rating is unnecessary. Semi-transparent tubes are also offered for tube connection in Tube Distribution Units.

Features
- Unjacketed single tubes
- Non-flame-retardant, fire-retardant and semi-transparent tubes available
- TGX is UL 1581 OFN / CUL FT 1 / CSA listed

Specifications	
Property	Specification
OFN General Purpose Fire Rated	UL 1581 / CUL FT1 / CSA OFN (FT1) Listed
Operation Temperature Range –General Purpose Rated	-4°F to +158°F (-20°C to +70°C) ICEA 596
Minimum Bend Radius for 8mm OD Single Tubes (During and After Installation)	9" Radius
Minimum Bend Radius for 6mm OD Single Tubes Single Tubes	6" Radius
Inner / Outer Tube Diameter	6mm / 8 mm (except TC01T6M: 4.25mm / 6mm)

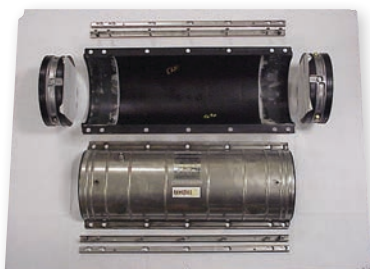| Physical Characteristics						
Part Number	Description	Outside Diameter (in.)	Max Weight (lbs./kft.)	Max Tensile Load (lbs.)	Std Length	Max Length
TC01TBX	Black Tube-Non-flame Retardant	0.315	15	60	3,300	3,300
TC01TCX	Clear Tube -Non-flame Retardant	0.315	32	60	500	3,000
TC01TGX	UL/CUL/CSA OFN Rated	0.315	17	60	1,000	3,000
TC01TXX	Translucent Tube -Non-flame Retardant	0.315	15	60	3,300	3,300
TC01T6M	Clear Tube - Non-flame Retardant 6mm OD x 4.25mm ID	0.236	17	60	500	3,000

Tube Distribution Units

DE06MDU

DE20IDUP

DE04EPA, DE02EPA

DE09SPC

Description:

Featuring a scalable and flexible design, Tube Distribution Units are wall-mounted enclosures used at tube cable transitions or branching locations. Tubes are joined together using push-fit connectors. This results in a pathway between the network hub and workstations or other sites and functions supported by the tube cable infrastructure.

Features

- Top, bottom or side entry for cables up to 2 inches in diameter
- The 16 x 16 inch modular unit (DE06MDU) minimizes wall space usage by allowing attachment of a Fiber Termination Unit to its door hinge

Indoor Distribution Ordering Information

Part Number	Description	Dimensions	Material	Color	Weight
DE06MDU	Indoor Tube Distribution Unit (16")	16" x 16" x 4"	Aluminum	Black	5 lbs
DE20IDU	Indoor Tube Distribution Unit (20")	20" x 20" x 7"	Steel	Gray	27 lbs
DE36IDU	Indoor Tube Distribution Unit (36")	36" x 30" x 7"	Steel	Gray	70 lbs
DE20IDUP	Perf Panel Kit for DE20IDU	17" x 18.5"	Steel	Gray	20 lbs
DE36IDUP	Perf Panel Kit for DE36IDU	32" x 28.5"	Steel	Gray	60 lbs
DEIDUKEY	Keyed cylinder lock kit with 2 keys for DE20/36IDU				

Outdoor Distribution Ordering Information

Part Number	Description	Dimensions	Material	Color	Weight
DE24XPPU	Outdoor Tube Distribution Unit (24") NEMA 4X	24"x 24"x 8"	Aluminum	Silver	21 lbs
DE36XPPU	Outdoor Tube Distribution Unit (36") NEMA 4X	36"x 30"x 8"	Aluminum	Silver	35 lbs
DE36XPPUST	Outdoor Stainless Steel Tube Distribution Unit (36") NEMA 4X	36"x 30"x 8"	Stainless Steel	Gray	60 lbs

Splice Case and End Plate Adapter Ordering Information

Part Number	Description	Material
DE02EPA	Splice Case end plate adapter for 2 tube cables	Rubber
DE04EPA	Splice Case end plate adapter for 4 tube cables	Rubber
DE12EPA	Splice Case end plate adapter for 12 tube cables	Rubber
DE24EPA	Splice Case end plate adapter for 24 tube cables	Rubber
DE09SPC	Splice Case w/ 3 pc end plate, 9.5"x 28"	Stainless Steel
DE12SPC	Splice Case w/ 3pc end plate, 12.5" x38"	Stainless Steel

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Tools and Accessories

BETC001

BETL03

BETL64

DE02SPL

Description:
Accessory items are used for cutting, splicing or sealing tube cables. Available items include tubing cutters and replacement blades, tube cable cutters and replacement blades, splice kits and tube cable end seals.

Features
• Tube cutter smoothly cuts all FutureFLEX™ tube types
• Tube cable cutter cuts tube cables up to 2 inches in diameter.
• Splice kits provide all materials necessary to complete a permanent tube cable splice with a water-resistant protective barrier around the splice
• Tube cable end seals available for 2 and 4 tubes, 7 tubes and 19 tubes

Ordering Information

Part Number	Description
BETC001	Tube Cutter
BETC00B	Replacement Blade for Tube Cutter
BETL03	Tube Cable Cutter (up to 32mm) Green
BETL64	Tube Cable Cutter (up to 64mm) Blue
BE08CTB	BB Catcher with 8mm fitting
BEPT0S	Pressure Test Switch
DE00SPL	Tube Cable Splice Kit (for 2 or 4-Tube Cables)
DE01SPL	Tube Cable Splice Kit (for 7 or 12-Tube Cables)
DE02SPL	Tube Cable Splice Kit (for 19-Tube Cables)
DE03SPL	Tube Cable Splice Kit (for 24-Tube Cables)
DE04HS1	Cable End Seal (Heat Shrink, TC02-TC04 Tube Cables)
DE07HS1	Cable End Seal (Heat Shrink, TC07 Tube Cables)
DE19HS1	Cable End Seal (Heat Shrink, TC19 and 24- Tube Cables)
DE19HS2	Cable End Seal (Heat Shrink, TC19TRC Tube Cables)

DE08MC2   DE08MCS   DE06MP

DE55MP   DE08MA   DE06RC

DE08MT   DE08MB   DE08GBC

Coupling Ordering Information

Part Number	Description	Color	UOM
DE08MC2	Straight Tube Coupling (8mm) for Non-Hazardous Areas	Clear	1 ea.*
DE08MCS	Nickleplated Brass Coupling for Hazardous Areas	N/A	1 ea.
DE06MP	Tube Plug (6mm) for use in all tubes except Plenum	Orange	1 ea.*
DE55MP	5.5mm OD tube plug for use in Plenum tubes	Gray	1 ea*
DE08MA	Tube End Cap (8mm)	Gray	1 ea.*
DE06RC	8mm x 6mm Reducing Coupling	Gray	1 ea.*
DE08MT	Tee Coupling (8mm)	Gray	1 ea.*
DE08MB	Bulkhead Tube Coupling (8mm)	N/A	1 ea*
DE08GBC	8mm Gas Blocking Coupling for use in Class 1 - Div. 1 & 2 areas	Black and Yellow	1 ea.*

*MOQ Applies

Tube Distribution Accessories

DE02TOX & DE04TOD

DECES3, DECES4

DELTKG1, DELTKG7

DEDTSR1, DEDTSR3

Strain Relief Kellems Grips Ordering Information

Part Number	Description	Used for
DEDTSR1	Liquid-Tight Kellems Grips #1 for armored and non-armored tube cables	TC02TP2, TC02TRC, TC04TP2, TC04TRC, TC07TP2, , TC07TRC, TC02TP2-1, TC02TRC-1, TC04TP2-1, TC04TRC-1, TC02TOX, TC02MSOS, TC04TOD, TC04MSOS, TC07TOX, TC07MSOS, TC02TOX-2, TC02MSOS-2, TC02MTIO, TC02CTR, TC04MTIO, TC04CTR, TC07MTIO, TC07CTR
DEDTSR2	Liquid-Tight Kellems Grips #2 for armored and non-armored tube cables	TC12TP2, TC12TRC, TC12TOX, TC12TP2, TC12MTIO, TC12MSOS, TC07TP2-1, TC07TRC-1, TC04TOD-2 and TC04MSOS-2
DEDTSR3	Liquid-Tight Kellems Grips #3 for armored tube cables	TC07TOX-2 TC07MSOS-2
DEDTSR4	Liquid-Tight Kellems Grips #4 for non-armored tube cables	TC19TOX, TC19MSOS, TC19CTR, TC12TOX-2, TC12MSOS-2
DEDTSR5	Liquid-Tight Kellems Grips #5 for armored tube cables	TC19TP2-1, TC19TRC-1, TC19TOX-2, TC19MSOS-2
DEDTSR6	Liquid-Tight Kellems Grips #6 for armored tube cables	TC24TOX

Liquid-Tight Kellems Grips Ordering Information

Part Number	Description	Used for
DELTKG1	Liquid-Tight Kellems Grips #1 for non-armored tube cables	- TC02TOX, TC02MSOS, TC02MTIO, TC02CTR— **PLUS DE02TOX** - TC04TOD, TC04MSOS, TC04MTIO, TC04CTR— **PLUS DE04TOD** - TC07TOX, TC07MSOS, TC07MTIO, TC07CTR
DELTKG2	Liquid-Tight Kellems Grips #2 for armored tube cables	- TC02TOX-2, TC02MSOS-2 - TC12TOX, TC12MSOS, TC12MTIO—**PLUS DE12TOX**
DELTKG3	Liquid-Tight Kellems Grips #3 for armored tube cables	TC04TOD-2, TC04MSOS-2
DELTKG4	Liquid-Tight Kellems Grips #4	N/A
DELTKG5	Liquid-Tight Kellems Grips #5 for armored tube cables	TC07TOX-2, TC07MSOS-2
DELTKG6	Liquid-Tight Kellems Grips #6 for armored tube cables	TC19TOX, TC19MSOS, TC19MTIO, TC19CTR
DELTKG7	Liquid-Tight Kellems Grips #7 for armored and non-armored tube cables	- TC19TOX-2, TC19MSOS-2 - TC24TOX — **PLUS DE24TOX**

Bushing and End Caps Ordering Information

Part Number	Description	Used for
DE02TOX	Adapter Bushing for 2 tube cables	Tapered rubber insert for 2 TC Liquid-Tight Kellems Grips
DE04TOD	Adapter Bushing for 4 tube cables	Tapered rubber insert for 4 TC Liquid-Tight Kellems Grips
DE12TOX	Adapter Bushing for 12 tube cables	Tapered rubber insert for 12 TC Liquid-Tight Kellems Grips
DE24TOX	Adapter Bushing for 24 tube cables	Tapered rubber insert for 24 TC Liquid-Tight Kellems Grips
DE5KCAP	End Caps for DELTKG1	Sealing unoccupied Liquid-Tight Kellems Grips
DE6KCAP	End Caps for DELTKG2, 3, 5 and 6	Sealing unoccupied Liquid-Tight Kellems Grips
DE7KCAP	End Caps for DELTKG7	Sealing unoccupied Liquid-Tight Kellems Grips

Heat Shrinkable Cable Entry Seal (No Strain) Ordering Information

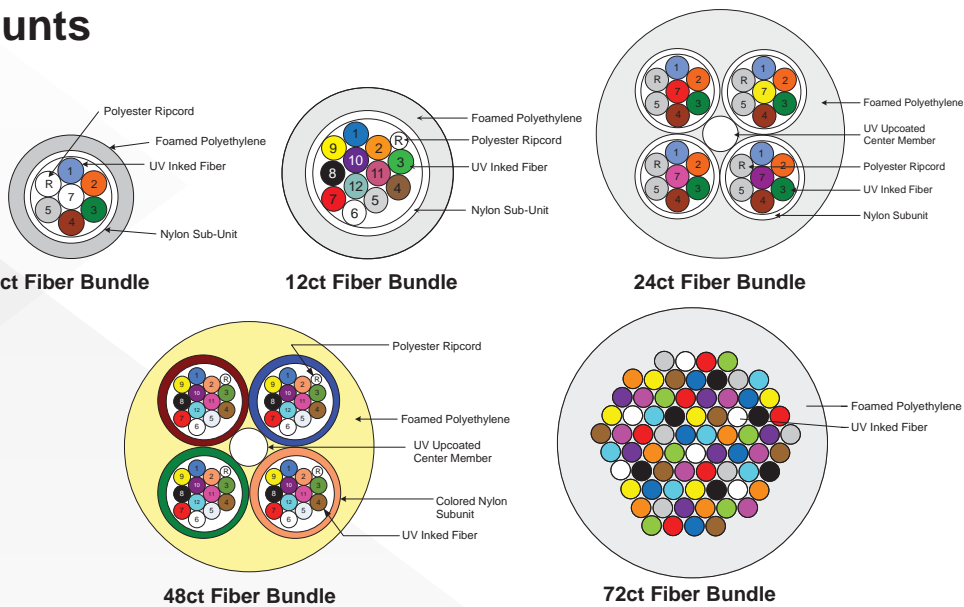| Part Number	Description
DECES3	Heat Shrinkable Seal for 02/04/07 Tube Cables
DECES4	Heat Shrinkable Seal for 12 and 19 Tube Cables
DECES5	Heat Shrinkable Seal for 24 Tube Cables

![Sumitomo Electric Lightwave logo]

NEXT GENERATION THINKING™

Step 2 – Install the Fiber Bundle

Fiber Types

Single-mode Fiber Bundle – OS2-ITU-T G.652.D and G.657.A1	Page 15
Multimode OM1 Fiber Bundle	Page 16
Multimode OM2 Fiber Bundle	Page 17
Laser Optimized OM3 & OM4 Fiber Bundle	Page 18
Laser Optimized OM5 Fiber Bundle	Page 19

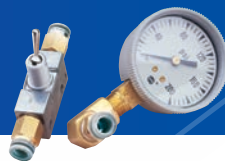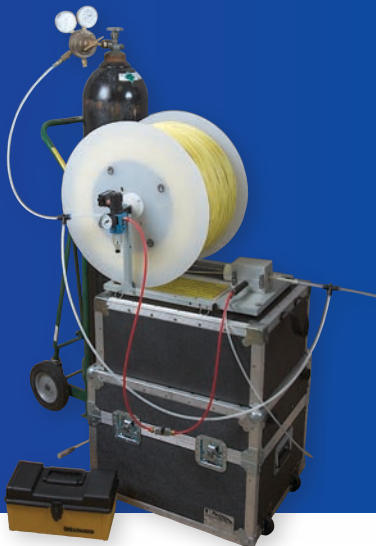Radiation Hardened Multimode and Hybrid Fiber Bundles are also available on certain fiber configurations.

Fiber Counts

6ct Fiber Bundle **12ct Fiber Bundle** **24ct Fiber Bundle**

48ct Fiber Bundle **72ct Fiber Bundle**

HOW IS FIBER BUNDLE INSTALLED?

Blowing Equipment & Accessories are required to properly install the fiber bundle through the tube cable pathway.

Blowing equipment is rented by a Licensed Installer or Licensed End User for installing the fiber bundle.

Single-mode

Description:

These fiber bundles are designed for installation into the FutureFLEX™ Air-Blown Fiber tube cable infrastructure. They can be used in indoor and outdoor applications.

The 72-Fiber Bundle utilizes a 12-ct Freeform Ribbon™ design for rapid terminations to either single connectors, ribbon fanouts or MPO connectors. It also requires using the Long Reel (LR) version blowing head rental unit.

Features

- Up to 72 fibers per bundle
- Industry standard low water peak single-mode optical fiber
- Fibers individually color coded per TIA standards
- Yellow aerodynamic jacket allows long distance blows
- Ripcords for easy bundle entry
- UL listed for use with fire-rated tube cables
- Meets ICEA, TIA and UL standards

Specifications

Property	Specification	
Fiber Bundle Jacket material	Polyethylene Extruded Foam (PEF)	
Fiber Bundle Jacket color	Yellow	
Core diameter	8.3 micron	
Core / Cladding Offset	≤ 0.4 µm	
Cladding diameter	125 micron	
Maximum Dispersion at 1310 / 1550 nm	≤ 3.2 / 1.80 ps/nm-km	
Index of Refraction	1310 nm	1.466
	1550 nm	1.467
	1625 nm	1.47
Fiber Bundle Minimum Bend Radius	1.5"	

Physical Characteristics

Part Number	Fiber Type	Description	Outside Diameter (in./mm.)	Max Weight (lbs./kft.)	Std Length (490 Bobbin)	Max Length (600 Bobbin)
FB02SX	SM OS2	Single-mode 2-fiber	0.08 / 2.0	0.4	14,000	~39,000
FB04SX	SM OS2	Single-mode 4-fiber	0.08 / 2.1	1.9	14,000	~39,000
FB06SX	SM OS2	Single-mode 6-fiber	0.08 / 2.0	1.3	14,000	~39,000
FB12SXS	SM OS2	Single-mode 12-fiber	0.08 / 2.1	1.9	7,000	~39,000
FB24SX	SM OS2	Single-mode 24-fiber	0.12 / 3.0	3.4	7,000	~14,500
FB48SX	SM OS2	Single-mode 48-fiber	0.15 / 3.7	5.6	7,000	~10,500
FB72SP	SM OS2	Single-mode 72-fiber	0.16 / 4.0	6.2	6,000	~9,800

Blowing Head Part Numbers and Compatibility

Item	Standard Blowing Head	Long Reel Blowing Head
Part Number	BE200R	BE200LR
490 Bobbins	•	•
600 Bobbins	N/A	•

490mm Bobbins

600mm Bobbins

SUMITOMO ELECTRIC LIGHTWAVE

NEXT GENERATION THINKING™
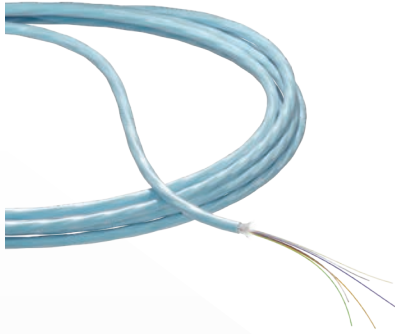
Multimode 62.5 µm

Description:
These small fiber bundles are designed for installation into the FutureFLEX™ Air-Blown Fiber tube cable infrastructure. Operating wavelengths are 850 and 1300 nm. They can be used in indoor and outdoor installations.
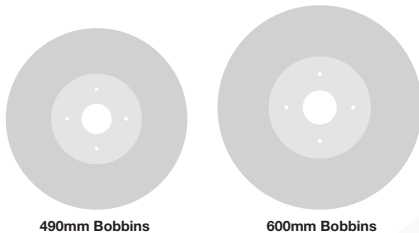
Features
- Up to 24 fibers per bundle
- Industry standard 62.5 µm graded-index multimode optical fiber
- Fibers individually color coded per TIA standards
- Blue aerodynamic jacket allows long distance blows
- Ripcords for easy bundle entry
- UL listed for use with fire-rated tube cables
- Meets ICEA, TIA and UL standards
- Meets IEEE 802.3z Gigabit Ethernet standard.

Specifications	
Property	**Specification**
Fiber Bundle Jacket material	Polyethylene Extruded Foam (PEF)
Fiber Bundle Jacket color	Blue
Core diameter	62.5 micron
Cladding diameter	125 micron
Buffer / acrylate diameter	250 micron
Maximum Attenuation at 850 / 1300 nm	< 2.9 / 0.6 dB/km
Fiber Bandwidth at 850 / 1300 nm	≥ 220 / 600 MHz-km
Group Index of Refraction	850 nm / 1.496
	1300 nm / 1.491
Fiber Bundle Minimum Bend Radius	1.5"

Physical Characteristics						
Part Number	Fiber Type	Description	Outside Diameter (in./mm.)	Max Weight (lbs./kft.)	Std Length (490 Bobbin)	Max Length (600 Bobbin)
FB02M6	62.5/125 OM1	Multimode 2-fiber	0.08 / 2.0	0.4	14,000	~39,000
FB04M6	62.5/125 OM1	Multimode 4-fiber	0.08 / 2.0	1.3	14,000	~39,000
FB06M6	62.5/125 OM1	Multimode 6-fiber	0.08 / 2.0	1.3	14,000	~39,000
FB12M6S	62.5/125 OM1	Multimode 12-fiber	0.08 / 2.0	3.4	7,000	~39,000
FB24M6	62.5/125 OM1	Multimode 24-fiber	0.12 / 3.0	3.4	7,000	~14,500
FB48M6	62.5/125 OM1	Multimode 48-fiber	0.15 / 3.7	5.6	7,000	~10,500

Blowing Head Part Numbers and Compatibility		
Item	**Standard Blowing Head**	**Long Reel Blowing Head**
Part Number	BE200R	BE200LR
490 Bobbins	•	•
600 Bobbins	N/A	•

490mm Bobbins

600mm Bobbins

Multimode 50 µm

Description:

These small fiber bundles are designed for installation into the FutureFLEX™ Air-Blown Fiber tube cable infrastructure. Operating wavelengths are 850 and 1300 nm. They can be used in indoor and outdoor applications.

Features

- Up to 48 fibers per bundle
- Industry standard 50 µm graded-index multimode optical fiber
- Fibers individually color coded per TIA standards
- White aerodynamic jacket allows long distance blows
- Ripcords for easy bundle entry
- UL listed for use with fire-rated tube cables
- Meets ICEA, TIA and UL standards
- Meets IEEE 802.3z Gigabit Ethernet standard.

Specifications	
Property	**Specification**
Fiber Bundle Jacket material	Polyethylene Extruded Foam (PEF)
Fiber Bundle Jacket color	White for 1 Gigabit fiber
Core diameter	50 micron
Cladding diameter	125 micron
Buffer / acrylate diameter	250 micron
Maximum Attenuation at 850 / 1300 nm	< 2.2 / 0.6 dB/km
Fiber Bandwidth at 850 / 1300 nm	≥ 500 / 500 MHz-km
Group Index of Refraction	850 nm — 1.483
	1300 nm — 1.479
Fiber Bundle Minimum Bend Radius	1.5"

Physical Characteristics						
Part Number	**Fiber Type**	**Description**	**Outside Diameter (in./mm.)**	**Max Weight (lbs./kft.)**	**Std Length (490 Bobbin)**	**Max Length (600 Bobbin)**
FB02M5	50/125 OM2	Multimode 2-fiber	0.08 / 2.0	0.4	14,000	~39,000
FB04M5	50/125 OM2	Multimode 4-fiber	0.08 / 2.0	1.3	14,000	~39,000
FB06M5	50/125 OM2	Multimode 6-fiber	0.08 / 2.0	1.3	14,000	~39,000
FB12M5S	50/125 OM2	Multimode 12-fiber	0.08 / 2.0	3.4	7,000	~39,000
FB24M5	50/125 OM2	Multimode 24-fiber	0.12 / 3.0	3.4	7,000	~14,500
FB48M5	50/125 OM2	Multimode 48-fiber	0.15 / 3.7	5.6	7,000	~10,500

Blowing Head Part Numbers and Compatibility		
Item	**Standard Blowing Head**	**Long Reel Blowing Head**
Part Number	**BE200R**	**BE200LR**
490 Bobbins	•	•
600 Bobbins	N/A	•

490mm Bobbins

600mm Bobbins

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Laser Optimized Multi-Mode 50 μm

Description:
These small fiber bundles are designed for installation into the FutureFLEX™ Air-Blown Fiber tube cable infrastructure. Operating wavelengths are 850 and 1300 nm. They can be used in indoor and outdoor installations.

Features
- Up to 48 fibers per bundle
- Industry standard OM3 and OM4
- Fibers individually color coded per TIA standards
- Aqua aerodynamic jacket allows long distance blows
- Ripcords for easy bundle entry
- UL listed for use with fire-rated tube cables
- Meets ICEA, TIA and UL standards
- Meets IEEE 802.3z Gigabit Ethernet standard.
- Gigabit laser optimized 50/125 multimode

Specifications

Property	Specification	
Fiber Bundle Jacket material	Polyethylene Extruded Foam (PEF)	
Fiber Bundle Jacket color	Aqua	
Core diameter	50 micron	
Cladding diameter	125 micron	
Buffer / acrylate diameter	250 micron	
Maximum Attenuation at 850 / 1300 nm	< 2.2 / 0.6 dB/km	
Minimum Bandwidth	Laser EMB @850nm (OM3/OM4)	2000/4700
	Laser EMB @1310nm	500/500
	Overfilled @ 850nm	1500/3500
	Overfilled @ 1300nm	500/500
Group Index of Refraction	850nm	1.483
	1300nm	1.479
Fiber Bundle Minimum Bend Radius	1.5"	

Physical Characteristics

Part Number	Fiber Type	Description	Outside Diameter (in./mm.)	Max Weight (lbs./kft.)	Std Length (490 Bobbin)	Max Length (600 Bobbin)
FB06G53	50/125 OM3	10 Gb 300 Meter Multimode 6-fiber	0.08 / 2.0	0.4	14,000	~39,000
FB12G53S	50/125 OM3	10 Gb 300 Meter Multimode 12-fiber	0.08 / 2.0	3.4	7,000	~39,000
FB24G53	50/125 OM3	10 Gb 300 Meter Multimode 24-fiber	0.12 / 3.0	3.4	7,000	~14,500
FB48G53	50/125 OM3	10 Gb 300 Meter Multimode 48-fiber	0.15 / 3.7	5.6	7,000	~10,500
FB06G55	50/125 OM4	10 Gb 550 Meter Multimode 6-fiber	0.08 / 2.0	0.4	14,000	~39,000
FB12G55S	50/125 OM4	10 Gb 550 Meter Multimode 12-fiber	0.08 / 2.0	3.4	7,000	~39,000
FB24G55	50/125 OM4	10 Gb 550 Meter Multimode 24-fiber	0.12 / 3.0	3.4	7,000	~14,500
FB48G55	50/125 OM4	10 Gb 550 Meter Multimode 48-fiber	0.15 / 3.7	5.6	7,000	~10,500

Blowing Head Part Numbers and Compatibility

Item	Standard Blowing Head	Long Reel Blowing Head
Part Number	BE200R	BE200LR
490 Bobbins	•	•
600 Bobbins	N/A	•

490mm Bobbins   600mm Bobbins

Laser Optimized Multi-Mode 50 µm

Description:

These small fiber bundles are designed for installation into the FutureFLEX™ Air-Blown Fiber tube cable infrastructure. Operating wavelengths are 850 and 1300 nm. They can be used in indoor and outdoor installations.
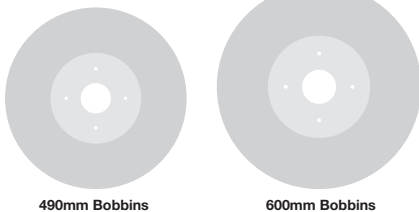
Features

- Up to 48 fibers per bundle
- Industry standard OM5
- Fibers individually color coded per TIA standards
- Aqua aerodynamic jacket allows long distance blows
- Ripcords for easy bundle entry
- UL listed for use with fire-rated tube cables
- Meets ICEA, TIA and UL standards
- Meets IEEE 802.3z Gigabit Ethernet standard
- Gigabit laser optimized 50/125 multimode

Specifications

Property	Specification	
Fiber Bundle Jacket material	Polyethylene Extruded Foam (PEF)	
Fiber Bundle Jacket color	Lime	
Core diameter	50 micron	
Cladding diameter	125 micron	
Buffer / acrylate diameter	250 micron	
Maximum Attenuation at 850 / 1300 nm	< 2.2 / 0.6 dB/km	
Fiber Capacity	100Gbps WDM	150M
	40Gbps WDM	440M
	40 GBASE-SR4/100GBASE-SR4	200M
Overfilled Modal Bandwidth (OFL)	850nm	≥3500 MHz.km
	953nm	≥1850 MHz.km
	1300nm	≥500 MHz.km
Effective Modal Bandwidth (EMB)	850nm	≥4700 MHz.km
	1300nm	≥2470 MHz.km
Fiber Bundle Minimum Bend Radius	1.5"	

Physical Characteristics

Part Number	Fiber Type	Description	Outside Diameter (in./mm.)	Max Weight (lbs./kft.)	Std Length (490 Bobbin)	Max Length (600 Bobbin)
FB06G5W	50/125 OM5	Multimode 6-fiber	0.08 / 2.0	0.4	14,000	~39,000
FB12G5W	50/125 OM5	Multimode 12-fiber	0.08 / 2.0	3.4	7,000	~39,000
FB24G5W	50/125 OM5	Multimode 24-fiber	0.12 / 3.0	3.4	7,000	~14,500
FB48G5W	50/125 OM5	Multimode 48-fiber	0.15 / 3.7	5.6	7,000	~10,500

Blowing Head Part Numbers and Compatibility

Item	Standard Blowing Head	Long Reel Blowing Head
Part Number	BE200R	BE200LR
490 Bobbins	•	•
600 Bobbins	N/A	•

490mm Bobbins

600mm Bobbins

Blowing Equipment and Accessories

BE200

BEPT001

BE2MFT (red), BE3MFT (black), BE4MFT (blue)

BEREG02

Description:
Sumitomo Electric Lightwave's cable blowing head is used to blow the compact fiber optic bundles through the tube cable on a stream of air or nitrogen gas. Installation is completely stress-free, eliminating the damage that can occur when traditional fiber is pulled through the network.

Features
- System consists of a payoff stand on which reels of fiber bundles are placed; a blowing head used to direct the fiber bundles; a pressure regulator and air source
- Air source is either compressed air or bottles of compressed nitrogen
- Pressure regulator with 0-200 psi output pressure
- Fiber bundles are blown at rates up to 150 feet per minute. Speed is controlled by air flow rate through motor

Ordering Information	
Part Number	**Description**
BE200RM	Blowing Head Kit, Monthly Rental
BE200RS	Blowing Head Kit, Semi-annual Rental
BE200RY	Blowing Head Kit, Yearly Rental
BE200LRM	Blowing Head Kit, Monthly Rental (Long Reel for 72-Fiber Bundle and/or Fiber Bundle Extended Length)
BE200LRS	Blowing Head Kit, Semi-annual Rental (Long Reel for 72-Fiber Bundle and/or Fiber Bundle Extended Length)
BE200LRY	Blowing Head Kit, Yearly Rental (Long Reel for 72-Fiber Bundle and/or Fiber Bundle Extended Length)
BE02DW	Blowing Head Drive Wheels 2, 4 or 6 and 12-Fiber Single Sub-unit Bundle / Red
BE02SL	Blowing Head Seal 2, 4 or 6 and 12-Fiber Single Sub-unit Bundle / Black
BE03DW	Blowing Head Drive Wheels (12 Legacy, 18, 24, 48 or 72-Fiber Bundle) / Black
BE03SL	Blowing Head Seal (12 Legacy, 18 or 24-Fiber Bundle) Black
BE04SL	Blowing Head Seal (48 and 72-Fiber Bundle) Black
BE08CTB	BB Catcher with 8mm Fittings
BE2MFT	Reusable, threaded, aluminum tip for installing 2, 4 or 6 and 12-Fiber Single Sub-unit Bundle/Red
BE3MFT	Reusable, threaded, aluminum tip for installing 12 Legacy to 48-fiber bundles/Black
BE4MFT	Reusable, threaded, aluminum tip for installing 72-fiber bundles/Blue
BEPT001	Tube Testing Kit, for Pressure & Obstruction Tests
BEPT0S	Pressure Test Switch
BEBB01P	5 mm Plastic Beads (for Obstruction Testing) pack of 100
BEPTGA	Test Gauge - Handheld Pressure Gauge with 8mm Fitting for Tube Pressure Testing
BEBB40P	4 mm Plastic Beads (for Obstruction Testing of TCxxTP2 series)
BEREG02	Single Stage Nitrogen Tank Regulator, 0-200 psi
BEISOV1	Dual-Tank Isolation Valve Kit - for using 2 nitrogen bottles
BEREGCA	Regulator adapter for compressed air cylinders
BETC001	Tube Cutter
BETC00B	Replacement Blade for Tube Cutter
BETLL03	Tube Cable Cutter (Replaced BETL01 and BETL02)

* Blowing head kits are leased only to Sumitomo Electric Lightwave licensed installers.
Minimum Order Quantities may apply. Plesae contact Inside Sales for further information.

Step 3 – Terminate the Fiber Bundles at Fiber Termination Units

Fiber Termination units are available in a variety of both application use (ie wall mount or rack mount) as well as size depending on the fiber count or density at the termination point.

There are also options for how to terminate the fiber bundles. Including…

Fusion Splice-On Connectors
- (Lynx2 CustomFit® Fusion Splice-On Connector)
- Available in both single connectors (LC, SC, ST, etc) and MPO
- Fibers are typically furcated prior to terminating to the connector of choice to ensure adequate protection (FTFLD & FTFBK products)

Fusion Splice to Pre-Terminated Fan-Out or Pigtails
- Fan-out is a 12ct ribbon to individual connectors (LC, SC, ST, etc)

Fusion splice directly in back of cassette (ie Sumitomo's FOX Cassettes)

QUANTUM FUSION SPLICERS

Sumitomo is an industry leader in fusion splicing and connectivity. For any fusion splicing needs, rely on the durability and dependibility of a Quantum Fusion Splicers. Purchase or Rent a Fusion Splicer in 2 or 4 week increments.

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Fiber Termination Units

Description:
Fiber Termination Units are wall-mounted or rack-mounted enclosures used to terminate ABF tubes and fiber bundles. They can be used in a variety of locations, including telecommunications closets and hubs, to organize fibers for termination.

For more information about SEL's 2RU Stationary Patch Panel or other related products, visit SEL's at www.sumitomoelectric.com.

Wall-Mount Features
- Keylocked door for installation and maintenance
- Supports cables up to 2 inches in diameter; top, bottom or side entry
- Accepts single-mode, multimode pigtail splicing, and field termination

Rack-Mount Features
- Fits both 19 inch and 23 inch racks
- Accepts single-mode, multimode pigtail splicing, and field termination
- Accepts all common connector types

Fiber Termination Unit Ordering Information

Part Number	Mount Type	Description	Capacity: LGX Cassette or Adapter Panel	Capacity: Splice Tray	Dimensions (in.)	Material
FSPWM-12T	Wall Mount	Wall mount Splice Tray Enclosure	N/A	12	17.25 x 21.25 x 4.68	Aluminum
FTWM-08L		Wall Mount FTU	8	3	14.5 x 13.2 x 5.6	Aluminum
FT01RU3P	Rack Mount	1RU Standard	3	1	17 x 14.75 x 1.75	Aluminum
FT02RU6P		2RU Standard	6	2	17 x 14.75 x 3.5	Aluminum
FT02RU6PX		Extended 2RU Standard, 14" slide tray	6	2	17 x 17 x 3.5	Aluminum
FT03RU9P		3RU Standard	9	4	17 x 14.75 x 5	Aluminum
FT04RU12P		4RU Standard	12	6	17 x 14.75 x 7	Aluminum
FT04RU12PX		Extended 4RU Standard, 14" slide tray	12	6	17 x 17 x 7	Aluminum

Splice Tray Ordering Information

Part Number	Description	Dimension (in)
FSPST-24S	24 single fiber splice holder (fits all single sleeve)	11.75 x 4 x 0.25
FSPST-16M	16 mass splice holder (FPS 6 only)	11.75 x 4 x 0.25
FT24ST2	8.75", up to 24 single splices (fits all single sleeve)	8.75 x 5.25 x 0.25
FT-HS-07	Mass Splice Tray, 9" Metal Tray, 9" Metal Cover, up to 12 mass splices	5.25 x 9 x 0.25
ST-01	Mass Splice Tray, 7.5" Metal Tray, 7.5" Clear Plastic Cover, up to 12 mass splices	5.25 x 7.5 x 0.25

PrecisionFlex®
Sliding Patch Panels

Description:

Sumitomo Electric Lightwave's 4th Level® sliding patch panels are specifically designed for the flexibility to house high density cassettes or LGX cassettes/interconnect panels by choosing either high density or LGX faceplates. A wide range of cable management options provide a variety of solutions and versatility for your particular application. The ideal choice for data center, storage area network (SAN), local area network (LAN), and central office / headend applications, 4th Level™ panels facilitate easy installation, fiber access and maintenance for years of worry free service. Mounting brackets allow for forward and backward adjustment within a standard 19" relay rack or cabinet. These panels also feature a rugged construction with a user friendly design for no hassle installations.

Features

- Interchangeable Face Plates Can Be Used to Support Different Cassette Formats
- Black Powder Coated Aluminum for Durability
- Removable Front and Rear Doors
- Versatile Rack Mounting Brackets
- Accepts industry standard interconnect panels

Benefits

- Large Variety of Connector Options
- Easy Access to Rear of Cassettes or Splice Trays
- Scalable as Density Needs Change
- Stacked Panels Can Be Accessed Due To New Removable Door Designs

Ordering Information

Part Number	Rack Units	Modules/Interconnect Positions	Maximum LC Fiber Ports	Maximum SC Fiber Ports
FT01H08	1	HD-8	96	48
FT01L03	1	LGX-3	72	36
FT02H24	2	HD-24	288	144
FT02L06	2	LGX-6	144	72
FT02P144-01	2	144 SC/ LC DX Adapters	288	144
FT03H36	3	HD-36	432	216
FT03L09	3	LGX-9	216	108
FT04H48	4	HD-48	576	288
FT04L12	4	LGX-12	288	144

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PrecisionFlex™
Fiber Optic eXchange Cassette

Description

Sumitomo Electric Lightwave's Fiber Optic eXchange Cassette accepts all types of cordage to eliminate splice trays and terminate cables into cassettes quickly, safely and elegantly.

The white ABS body gives excellent visibility for fiber colors and the removable splice shuttle makes installation much more convenient. The eXchange Cassette features wall mounting holes in the body allowing the user to mount anywhere. In addition to accepting all cable types (including Air Blown Fiber tubes), the entry points double as MPO adapter ports

giving the flexibility to convert the cassette into an MPO cassette.

The LC adapters are shuttered and the faceplate can be removed even after installation into a patch panel allowing for easy cleaning or repair of the internal connectors.

A unique feature of the eXchange Cassette is that the dust plug illuminates when a VFL is used, quickly showing continuity of the system.

Ordering Information

FT11-FSP22333444-5555

1- Front Connector Type	2- Fiber Count	3- Fiber Construction	4- Fiber Type	5- Special
LC - LC Conector **SC** - SC Connector **ST** - ST Connector	**06** - 6 Fiber **12** - 12 Fiber **24** - 24 Fiber	**RBN** - Ribbon **TBF** - Tight Buffer	**OS2**- Singlemode **OM4** - Laser Optimized 50um Multimode **OM1** - 62.5um Multimode	**APFC**- Angle Polish Front Connector **MP12** - 12 Fiber MPO **MP24** - 24 Fiber MPO

Features
- Loadable from Rear of Panel with Proprietary Removable Mounting Ears
- DIN Rail Mountable
- Shuttered LC Adapters
- White ABS Body
- LGX Footprint
- Translucent Lid With Tool-Free Removal
- Available In Ribbon and Tight Buffer
- Removable Faceplate
- Cable Entry Points Double As MPO Adapter Ports
- Wall Mountable
- Air Blown Fiber Compatible
- Removable Splice Sleeve Holder
- <0.30 dB IL, LC-UPC

Benefits
- Extremely Flexible Design
- Accepts All Types Of Cable
- Eliminates The Need For Bulky Splice Trays
- Terminate Cables Into Cassettes Quickly, Safely And Elegantly

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PrecisionFlex™ LGX Cassette

Description:
Sumitomo LGX Cassettes are designed to be compatible with the industry standard LGX format. Available in many formats, LGX cassette modules are used to break out MPO trunk cables or ribbon to LC or SC connectors as part of a fiber optic connectivity system.

Features
- Built-In Latching System
- No field Termination or Testing Required
- Modular Design Can Be Expanded as Needed
- No special tools or expertise required
- Insertion Loss Throughput: <0.75dB
- RoHS Compliant

Ordering Information

Part Number	Description
FTLC-MP12COM4-L-V	Cassette, 12F MPO-LC, OM4, LGX
FTLC-MP12COS1-L-V	Cassette, 12F MPO-LC, SM, LGX
FTLC-MP24COM4-L2-V	Cassette, 2x12F MPO-24 LC, OM4, LGX
FTLC-MP24COS1-L2-V	Cassette, 2x12F MPO-24 LC, SM, LGX

PrecisionFlex™ HD Cassette

Description:
The new high density (HD) MPO cassette from Sumitomo brings innovative features to the highest capacity format cassette available. Made from anodized aluminum, the cassette is very light and durable with a shortened depth to fit into the tightest of spaces. The front of the cassette features dual-door shuttered adapters which protect the installed connectors for even the most severe dusty conditions. The MPO adapter in the rear of the cassette features a polarity changing design allowing the cassette to reverse the fiber routing from MPO to LC with a simple key-flip of the adapter (MM-only due to flat polish angle). The HD cassette can be installed and removed from the front of the panel with a squeeze to the release tabs. For retrofit applications to LGX formats, the HD cassette is available with conversion brackets to achieve 24 LC connectors in a single LGX opening.
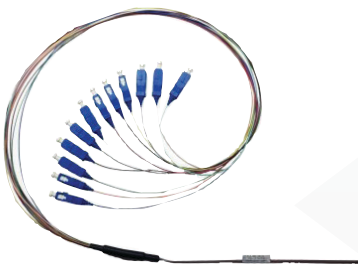
Features
- Shuttered LC adapters standard reversible polarity MPO adapter standard on MM cassettes
- Requires only 50% of the Rack Space of an LGX system- 288 LC in a 2RU patch Panel
- Compact Size and Built-In Latching System for front-side installation and removal
- Modular Design Can Be Expanded as Needed
- Insertion Loss Throughput: <0.75dB
- RoHS Compliant

Ordering Information

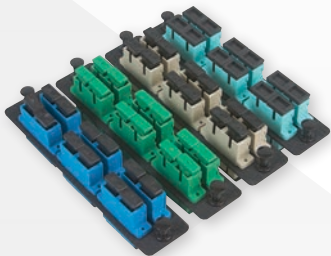| Part Number	Description
FTLC-MP12COS2-HD	HD Cassette, 12F MPO-LC, SM, Blue-Shuttered
FTLC-MP12COS2-A-HD	HD Cassette, 12F MPO-LC/APC, SM, Green-Shuttered
FTLC-MP12COM4-HD	HD Cassette, 12F MPO-LC, OM4, Aqua-Shuttered

Ribbon Breakout Kit

Ordering Information

Part Number	Description
BOR-BR012LC37-V	Breakout kit, 12F Ribbon, OM3, LC, 3M
BOR-BR012LC38-V	Breakout kit, 12F Ribbon, OM4, LC, 3M
BOR-BR012LC3D-V	Breakout kit, 12F Ribbon, SM, LC, 3M
BOR-BR012LCA3D-V	Breakout kit, 12F Ribbon, SM, LC/APC, 3M
BOR-BR012SC37-V	Breakout kit, 12F Ribbon, OM3, SC, 3M
BOR-BR012SC38-V	Breakout kit, 12F Ribbon, OM4, SC, 3M
BOR-BR012SC3D-V	Breakout kit, 12F Ribbon, SM, SC, 3M
BOR-BR012SCA3D-V	Breakout kit, 12F Ribbon, SM, SC/APC, 3M

Fiber Termination Accessories

Tapered Bushings:
FT2MFB (Red), FT3MFB (Black), FT4MFB (Gray)

Interconnect Panel: SC

Interconnect Panels: LC

FT48FBK

FT72FBK

Description:
Fiber termination accessories are used to terminate the fiber ends in wall-mount or rack-mount cabinets.
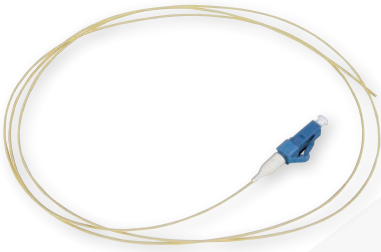
Features
- Accessory items include splice trays, tapered bushings, interconnect panels, pigtails, and breakout kits
- Pigtails are available in various lengths with LC, SC, MTRJ, ST, FC and other connectors

Ordering Information

Part Number	Description
FT24ST2	Splice tray with 24 single fiber fusion splices / Aluminum
FT204BP	Blank Adapter Panel / Black
FTFC06S5	FC Panel with 6 Adapters and 6 Ports / SM or MM
FTFC12S5	FC Panel with 12 Adapters and 12 Ports / SM or MM
FTFA06S2	FC Panel with 6 Adapters and 6 Ports / SM APC
FTFA12S2	FC Panel with 12 Adapters and 12 Ports / SM APC
FTLC06D1	LC Duplex Panel with 6 Adapters and 12 Ports / SM / Blue
FTLA06D2	LC Duplex Panel with 6 Adapters and 12 Ports / SM APC / Green
FTLC06D3	LC Duplex Panel with 6 Adapters and 12 Ports / MM62.5 OM1 and MM50 OM2 / Beige
FTLC06D4	LC Duplex Panel with 6 Adapters and 12 Ports / 10 Gb MM50 OM3 and OM4 / Aqua
FTLC06Q1LC	LC Quad Panel with 6 Adapters and 24 Ports / SM / Blue
FTLC06Q2LC	LC Quad Panel with 6 Adapters and 24 Ports / SM APC / Green
FTLC06Q3LC	LC Quad Panel with 6 Adapters and 24 Ports / MM62.5 OM1 and MM50 OM2 / Beige
FTLC06Q4LC	LC Quad Panel with 6 Adapters and 24 Ports / 10 Gb MM50 OM3 and OM4 / Aqua
FTMT06D5	MTRJ Duplex Panel with 6 Adapters and 12 Ports / SM or MM / Black
FTSC06S1	SC Panel with 6 Adapters and 6 Ports / SM / Blue
FTSA06S2	SC Panel with 6 Adapters and 6 Ports / SM APC / Green
FTSC06S3	SC Panel with 6 Adapters and 6 Ports / MM62.5 OM1 and MM50 OM2 / Beige
FTSC06S4	SC Panel with 6 Adapters and 6 Ports / 10 Gb MM50 OM3 and OM4 / Aqua
FTSC06D1	SC Duplex Panel with 6 Adapters and 12 Ports / SM / Blue
FTSA06D2	SC Duplex Panel with 6 Adapters and 12 Ports / SM APC / Green
FTSC06D3	SC Duplex Panel with 6 Adapters and 12 Ports / MM62.5 OM1 and MM50 OM2 / Beige
FTSC06D4	SC Duplex Panel with 6 Adapters and 12 Ports / 10 Gb MM50 OM3 and OM4 / Aqua
FTST06S5	ST Panel with 6 Adapters and 6 Ports / SM or MM
FTST12S5	ST Panel with 12 Adapters and 12 Ports / SM or MM
FT2MFB	Tapered Bushing (for 2-, 4-, or 6-fiber bundle) / Red
FT3MFB	Tapered Bushing (for 12-, 18-, or 24 fiber bundle) / Black
FT4MFB	Tapered Bushing (for 48, 72- fiber bundle) / Gray
FTFLD02	2-fiber Bundle Breakout Kit (w/ 900 micron Tubing)
FTFLD04	4-fiber Bundle Breakout Kit (w/ 900 micron Tubing)
FTFLD06	6-fiber Bundle Breakout Kit (w/ 900 micron Tubing)
FT12FBK	12-fiber Bundle Breakout Kit (w/ 900 micron Tubing)
FT24FBK	24-fiber Bundle Breakout Kit (w/ 900 micron Tubing)
FT48FBK	48-fiber Bundle Breakout Kit (w/ 900 micron Tubing)
FT72FBK	72-fiber Bundle Breakout Kit (w/ 900 micron Tubing)
FT72FBK-SU	72-fiber Bundle Breakout Kit SM (w/ 3mm Tubing for 6 x 12F MPO)
FPS-6	Splice Protection Sleeves for use with mass/ribbon (2-12 fiber) splicing; 40mm length with glass ceremic strength member. GR Compliant.
MA-2-KIT	Mid Span Ribbon Access Kit - For De-Riboonizing FB with Freeform Ribbon

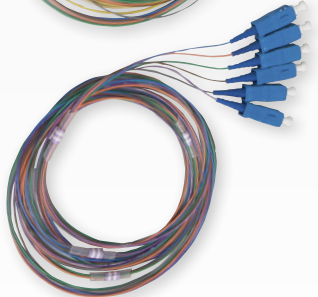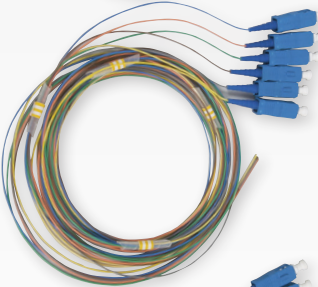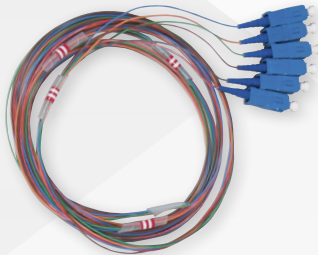# Fiber Termination Accessories (continued)

FT01SLC1M

Ordering Information

Part Number	Description
Simplex Pigtails	
FT01SFC1M	FC Simplex 900um Pigtail / Singlemode / 1 meter
FT01SFA1M	FC-APC Simplex 900um Pigtail / Singlemode / 1 meter
FT01SLC1M	LC Simplex 900um Pigtail / Singlemode / 1 meter
FT01SSC1M	SC Simplex 900um Pigtail / Singlemode / 1 meter
FT01SSA1M	SC-APC Simplex 900um Pigtail / Singlemode / 1 meter
FT01SST1M	ST Simplex 900um Pigtail / Singlemode / 1 meter
FT016LC1M	LC Simplex 900um Pigtail / Multimode 62.5 OM1 / 1 meter
FT016SC1M	SC Simplex 900um Pigtail / Multimode 62.5 OM1 / 1 meter
FT016ST1M	ST Simplex 900um Pigtail / Multimode 62.5 OM1 / 1 meter
FT01MLC1M	LC Simplex 900um Pigtail / Multimode 50 OM2 / 1 meter
FT01MSC1M	SC Simplex 900um Pigtail / Multimode 50 OM2 / 1 meter
FT01MST1M	ST Simplex 900um Pigtail / Multimode 50 OM2 / 1 meter
FT013LC1M	LC Simplex 900um Pigtail / Multimode 50 OM3 (300M) / 1 meter
FT013SC1M	SC Simplex 900um Pigtail / Multimode 50 OM3 (300M) / 1 meter
FT015LC1M	LC Simplex 900um Pigtail / Multimode 50 OM4 (550M) / 1 meter
FT015SC1M	SC Simplex 900um Pigtail / Multimode 50 OM4 (550M) / 1 meter
6 Fiber Pigtails	
FT06SFA2M	FC-APC / 6 Fiber 900um Pigtail / Singlemode / 2 meter
FT06SFC2M	FC / 6 Fiber 900um Pigtail / Singlemode / 2 meter
FT06SLC2M	LC / 6 Fiber 900um Pigtail / Singlemode / 2 meter
FT06SSC2M	SC / 6 Fiber 900um Pigtail / Singlemode / 2 meter
FT06SSA2M	SC-APC / 6 Fiber 900um Pigtail / Singlemode / 2 meter
FT06SST2M	ST / 6 Fiber 900um Pigtail / Singlemode / 2 meter
FT066LC2M	LC / 6 Fiber 900um Pigtail / Multimode 62.5 OM1 / 2 meter
FT066SC2M	SC / 6 Fiber 900um Pigtail / Multimode 62.5 OM1 / 2 meter
FT066ST2M	ST / 6 Fiber 900um Pigtail / Multimode 62.5 OM1 / 2 meter
FT06MLC2M	LC / 6 Fiber 900um Pigtail / Multimode 50 OM2 / 2 meter
FT06MSC2M	SC / 6 Fiber 900um Pigtail / Multimode 50 OM2 / 2 meter
FT06MST2M	ST / 6 Fiber 900um Pigtail / Multimode 50 OM2 / 2 meter
FT063LC2M	LC / 6 Fiber 900um Pigtail / Multimode 50 OM3 (300M) / 2 meter
FT063SC2M	SC / 6 Fiber 900um Pigtail / Multimode 50 OM3 (300M) / 2 meter
FT065LC2M	LC / 6 Fiber 900um Pigtail / Multimode 50 OM4 (550M) / 2 meter
FT065SC2M	SC / 6 Fiber 900um Pigtail / Multimode 50 OM4 (550M) / 2 meter

Fiber Termination Accessories (continued)

FT126SC2M

FT18SSC2M

Ordering Information	
Part Number	**Description**
12 Fiber Pigtails	
FT12SFA2M	FC-APC / 12 Fiber 900um Pigtail / Singlemode / 2 meter
FT12SLC2M	LC / 12 Fiber 900um Pigtail / Singlemode / 2 meter
FT12SSC2M	SC / 12 Fiber 900um Pigtail / Singlemode / 2 meter
FT12SSA2M	SC-APC / 12 Fiber 900um Pigtail / Singlemode / 2 meter
FT12SST2M	ST / 12 Fiber 900um Pigtail / Singlemode / 2 meter
FT126LC2M	LC / 12 Fiber 900um Pigtail / Multimode 62.5 OM1 / 2 meter
FT126SC2M	SC / 12 Fiber 900um Pigtail / Multimode 62.5 OM1 / 2 meter
FT126ST2M	ST / 12 Fiber 900um Pigtail / Multimode 62.5 OM1 / 2 meter
FT12MLC2M	LC / 12 Fiber 900um Pigtail / Multimode 50 OM2 / 2 meter
FT12MSC2M	SC / 12 Fiber 900um Pigtail / Multimode 50 OM2 / 2 meter
FT12MST2M	ST / 12 Fiber 900um Pigtail / Multimode 50 OM2 / 2 meter
FT123LC2M	LC / 12 Fiber 900um Pigtail / Multimode 50 OM3 (300M) / 2 meter
FT123SC2M	SC / 12 Fiber 900um Pigtail / Multimode 50 OM3 (300M) / 2 meter
FT125LC2M	LC / 12 Fiber 900um Pigtail / Multimode 50 OM4 (550M) / 2 meter
FT125SC2M	SC / 12 Fiber 900um Pigtail / Multimode 50 OM4 (550M) / 2 meter
FT245SC2M	SC / 24 Fiber 900um Pigtail / Multimode 50 OM4 (550M) / 2 meter
18 Fiber Pigtails	
FT18SFC2M	FC / 18 Fiber 900um Pigtail / Singlemode / 2 meter
FT18SFA2M	FC-APC / 18 Fiber 900um Pigtail / Singlemode / 2 meter
FT18SLC2M	LC / 18 Fiber 900um Pigtail / Singlemode / 2 meter
FT18SSC2M	SC / 18 Fiber 900um Pigtail / Singlemode / 2 meter
FT18SSA2M	SC-APC / 18 Fiber 900um Pigtail / Singlemode / 2 meter
FT18SST2M	ST / 18 Fiber 900um Pigtail / Singlemode / 2 meter
FT186LC2M	LC / 18 Fiber 900um Pigtail / Multimode 62.5 OM1 / 2 meter
FT186SC2M	SC / 18 Fiber 900um Pigtail / Multimode 62.5 OM1 / 2 meter
FT186ST2M	ST / 18 Fiber 900um Pigtail / Multimode 62.5 OM1 / 2 meter
FT18MLC2M	LC / 18 Fiber 900um Pigtail / Multimode 50 OM2 / 2 meter
FT18MSC2M	SC / 18 Fiber 900um Pigtail / Multimode 50 OM2 / 2 meter
FT18MST2M	ST / 18 Fiber 900um Pigtail / Multimode 50 OM2 / 2 meter
FT183LC2M	LC / 18 Fiber 900um Pigtail / Multimode 50 OM3 (300M) / 2 meter
FT183SC2M	SC / 18 Fiber 900um Pigtail / Multimode 50 OM3 (300M) / 2 meter
FT185LC2M	LC / 18 Fiber 900um Pigtail / Multimode 50 OM4 (550M) / 2 meter
FT185SC2M	SC / 18 Fiber 900um Pigtail / Multimode 50 OM4 (550M) / 2 meter

Fiber Termination Accessories (continued)

FT24SFC2M

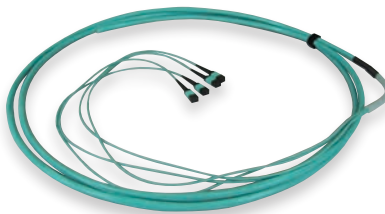| Ordering Information	
Part Number	**Description**
24 Fiber Pigtails	
FT24SFC2M	FC / 24 Fiber 900um Pigtail / Singlemode / 2 meter
FT24SFA2M	FC-APC / 24 Fiber 900um Pigtail / Singlemode / 2 meter
FT24SLC2M	LC / 24 Fiber 900um Pigtail / Singlemode / 2 meter
FT24SSC2M	SC / 24 Fiber 900um Pigtail / Singlemode / 2 meter
FT24SSA2M	SC-APC / 24 Fiber 900um Pigtail / Singlemode / 2 meter
FT24SST2M	ST / 24 Fiber 900um Pigtail / Singlemode / 2 meter
FT246LC2M	LC / 24 Fiber 900um Pigtail / Multimode 62.5 OM1 / 2 meter
FT246SC2M	SC / 24 Fiber 900um Pigtail / Multimode 62.5 OM1 / 2 meter
FT246ST2M	ST / 24 Fiber 900um Pigtail / Multimode 62.5 OM1 / 2 meter
FT24MLC2M	LC / 24 Fiber 900um Pigtail / Multimode 50 OM2 / 2 meter
FT24MSC2M	SC / 24 Fiber 900um Pigtail / Multimode 50 OM2 / 2 meter
FT24MST2M	ST / 24 Fiber 900um Pigtail / Multimode 50 OM2 / 2 meter
FT243LC2M	LC / 24 Fiber 900um Pigtail / Multimode 50 OM3 (300M) / 2 meter
FT243SC2M	SC / 24 Fiber 900um Pigtail / Multimode 50 OM3 (300M) / 2 meter
FT245LC2M	LC / 24 Fiber 900um Pigtail / Multimode 50 OM4 (550M) / 2 meter
FT245SC2M	SC / 24 Fiber 900um Pigtail / Multimode 50 OM4 (550M) / 2 meter

Data Center Enterprise Network Cable Assemblies 1-432 Fibers

Duplex Patch Cords

Description:
Sumitomo Electric Lightwave's 4th Level® cable assemblies are designed for use in any application requiring optical connections. Available in simplex, duplex, interconnect and trunk configurations, these assemblies can contain up to 432 optical fibers.
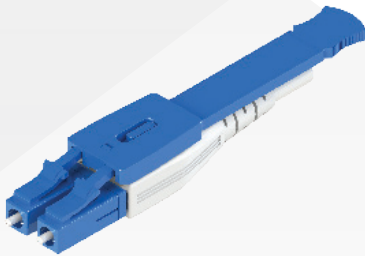
Distribution Trunk Cables

Features:
- Customizable Termination and Cable Options Available
- Can be Designed with the Following Fiber Types: SM; 62.5μmMM; 50μm (OM2) and 50μm Laser Optimized (OM3/OM4)
- Various Connector End Configurations (See Ordering Information Table Below)

Specifications:
- Riser (OFNR/FT-4) and Plenum (OFNP/FT.6)
- 100% Visual/Optical Performance Verification
- Exceeds TIA and Telcordia Requirements
- Insertion Loss and Back Reflection Performance that Meets or Exceeds Industry Standards

Reversible Uniboot Duplex LC Connector

LC-LC Reversible Uniboot Duplex Fiber Assembly

Description:
Sumitomo Electric Lightwave's Duplex LC Reversible Uniboot Fiber Assemblies are specifically designed for high density applications. Unlike standard duplex connectors, these connectors contain two ferrules in one housing. The housing can be easily rotated by flipping the connector clip, changing the polarity of the assembly. The reversible uniboot assembly is ideal for data centers where initial polarity requirements are unknown, since the assembly can be quickly changed to match the required polarity in the field.

The new push/pull tab makes installing and maintaining high density patch panels even easier than with standard densities. The tab brings the latching function to the back of the connector eliminating the need for tools to access the patch cords.

Additionally, the cable employed in these assemblies are smaller in diameter than an equivalent duplex zipcord assembly, thereby saving valuable space and improving airflow on the front side of a patch panel.

Features
- Reverse Polarity without Tools
- New Push/Pull tab
- Ideal for High Density Applications
- Cable is Half the Size of Standard Zipcord, Saving Valuable Space
- Available in SMF and MMF
- Riser and Plenum Both Available
- 100% Visual/Optical Performance Verification
- TIA/EIA-568B-B.3 Compliant
- RoHS Compliant

Specifications				
	SMF		**MMF**	
Insertion Loss	0.20dB (Typical)	0.50dB (Max)	0.10dB (Typical)	0.30dB (Max)
Return Loss	55dB (Typical)	40dB (Min)	35dB (Typical)	22dB (Min)

Ordering Information	
Property	**Connector Code**
Reversible Uniboot Connector	Code R

Connectors are only available on Sumitomo Cable Assemblies

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Cable Assembly Ordering Guide

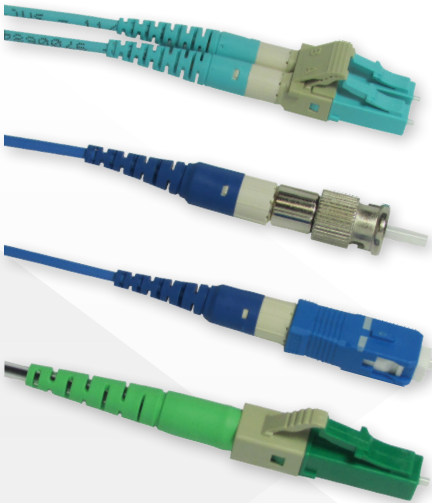| Cz - 1 222 3 4 5 6 7 8 999 10 - x y p (17-21 characters)													
z Polarity / Pin-Out	**1** Fiber Type	**222** Fiber Count	**3** Cable Design	**4** Sheath	**5** Sub-units	**6** Boot Diameter	**7** Conn - End A/P1	**8** Conn - End B/P2	**999** Length	**10** Length Unit	**x** End A BO Length	**y** End B BO Length	**p** Pulling Eye
A = MPO Method A; 1-1B; 1A-1B	1 = OM1 (62.5uM)	001	I = Tight Buffer (900um)	1 = Interlocking Armor I/O Riser	U = 250um	V = Typical Configu-ration	N = MTP(F), 24F, STD LOSS	N = MTP(F), 24F, STD LOSS	001 - 999+	F = Feet	1 = 18 Inches - No Stagger	1 = 18 Inches - No Stagger	A = Pulling Eye on P1 End Only
B = MPO Method B; 1-1A; 1A-1A	2 = OM2 (50uM)	002	W = Loose Buffer (250um)	2 = Interlocking Armor I/O Plenum	S = 900um		3 = MTP(F), 24F, LOW LOSS	3 = MTP(F), 24F, LOW LOSS		M = Meters	2 = 24 Inches - No Stagger	2 = 24 Inches - No Stagger	B = Pulling Eye on P2 End Only
1 = MPO24 Method 1	3 = OM3 (50uM)	004	R = (Ribbon)	G = Indoor/Outdoor Riser	R = Ribbon		W = MPO(F), 24F, STD LOSS	W = MPO(F), 24F, STD LOSS			3 = 36 Inches - No Stagger	3 = 36 Inches - No Stagger	D = Pulling Eye on Both Ends
2 = MPO24 Method 2	4 = OM4 (50uM)	006		H = Interlocking Armor Plenum			0 = MPO(F), 24F, LOW LOSS	0 = MPO(F), 24F, LOW LOSS			4 = 48 Inches - No Stagger	4 = 48 Inches - No Stagger	X = No Pulling Eye
3 = MPO24 Method 3	5 = SM (Low Water Peak)	008		L = Interlocking Armor Riser			P = MT-P(M),24F, STD LOSS	P = MTP(M),24F, STD LOSS			5 = 60 Inches - No Stagger	5 = 60 Inches - No Stagger	
4 = MPO24 Method 4	8 = SM (Bend Insensitive)	012		P = Riser			4 = MTP(M), 24F, LOW LOSS	4 = MTP(M), 24F, LOW LOSS			6 = 72 Inches - No Stagger	6 = 72 Inches - No Stagger	
G = 40G Method B; 1-1A (outer 8F)	9 = SM (Stan-dard)	016		U = Plenum			Y = MTP(F), 12F, STD LOSS	Y = MTP(F), 12F, STD LOSS			7 = 16 Inches - No Stagger	7 = 16 Inches - No Stagger	
H = 40G Method A; 1-1B (outer 8F)		024		X = No Jacket			2 = MTP(F), 12F, LOW LOSS	2 = MTP(F), 12F, LOW LOSS			8 = 12 Inches - No Stagger	8 = 12 Inches - No Stagger	
C = MPO Method C		036		Y = Indoor/Outdoor Plenum			8 = MPO(F), 12F, STD LOSS	8 = MPO(F), 12F, STD LOSS					
D = MPO SM Method B (with window up key down)		048		Z = Low Smoke Zero Halogen			7 = MPO(F), 12F, LOW LOSS	7 = MPO(F), 12F, LOW LOSS					
		050					M = MTP(M), 12F, STD LOSS	M = MTP(M), 12F, STD LOSS					
		060					1 = MTP(M), 12F, LOW LOSS	1 = MTP(M), 12F, LOW LOSS					
		072					6 = MPO(M), 12F, STD LOSS	6 = MPO(M), 12F, STD LOSS					
		096					5 = MPO(M), 12F, LOW LOSS	5 = MPO(M), 12F, LOW LOSS					
		144					J = MTRJ(F)	J = MTRJ(F)					
		288					K = MTRJ(M)	K = MTRJ(M)					
		432					L = LC, MM/ SM, DX	L = LC, MM/ SM, DX					
							Q = LC, MM/ SM, SX	Q = LC, MM/ SM, SX					
							A = LC/APC, DX	A = LC/APC, DX					
							E = LC/APC, SX	E = LC/APC, SX					
							U = LC-UNI-BOOT	U = LC-UNI-BOOT					
							R = LC-UNI-BOOT (Reversible)	R = LC-UNI-BOOT (Reversible)					
							S = SC, MM/ SM, DX	S = SC, MM/ SM, DX					
							V = SC, MM/ SM, SX	V = SC, MM/ SM, SX					
							B = SC/APC, DX	B = SC/APC, DX					
							H = SC/APC, SX	H = SC/APC, SX					
							F = FC, MM/SM	F = FC, MM/SM					
							C = FC/APC	C = FC/APC					
							T = ST, MM/SM	T = ST, MM/SM					
							X = BARE END (Open/Blunt)	X = BARE END (Open/Blunt)					

Flexible MPO Connector

Description:
Sumitomo Electric Lightwave introduces a new MPO connector, available in preterminated assemblies, with innovative features to better accommodate changing network designs. With the ability to change gender from Male to Female and Female to Male in the field, the Flexible MPO connector is ideal for any installation. Additional features include the ability to change polarity in the field and is the first MPO to offer single-handed push/pull operation for installation and removal. With a boot up to 36% shorter than other connectors in the industry, the new connector from Sumitomo Electric Lightwave is a game changer for the fiber optic industry. Also available is an optional installation/removal tool which greatly simplifies connector use in a high density environment.

Features:
- Gender Change in the Field
- Polarity Change in the Field
- Single-Handed Push/Pull Operation
- Shortest Boot in the Industry
- Meets Telecordia Standards

Lynx2-PLUS CustomFit™ Splice-On Connectors Single Package (patented)

Features
- Improved Design for High Density Applications
- New 2 Minute Approximate Connectorization for 2 and 3mm Cord; (250 & 900µm in 96 seconds or less) and removes the need for splice trays
- Achieve EXACT Lengths On-Site, without the Risk of Shorts & Slack of Preterminated Cables
- Eliminates Logistic Delays of Pre-Engineered Cables/Jumpers
- Less Time, Material, and Labor Costs than Other Connectivity Methods
- Cross Compatible with all SC, LC, FC and ST Connectors
- Consistent & Reliable Results with Single-Mode and Multimode Fiber
- Low Insertion & Return Losses for Superior Signal Integrity
- Compatible with Sumitomo Splicers and Other Brands
- Instant Splice Loss Feedback
- Meets Telcordia GR-326-CORE and GR-1081-CORE Compliance

Description:
Sumitomo Electric Lightwave continues its tradition of innovation and customer focused, market driven product advancements with the release of the Lynx2-PLUS. Maintaining all of the quality standards of the Lynx2, the Lynx2-PLUS incorporates an enhanced installation procedure and smaller overall completed connector design.

With the Lynx2-PLUS, termination time for 2 and 3 mm cord applications has been reduced by half for complete connectorization in approximately 2 minutes. The new connectors no longer require furcation tubing for 2 and 3mm applications, resulting in shorter, more aesthetic connectors. The finished product mirrors factory pre-terminated jumpers, trunks, harnesses and/or arrays.

Like the Lynx2-MPO, customized, On-Site, Real-Time field terminations and cable builds at exact lengths are now made possible, enabling quick, easy, and reliable customized permanent field terminations without the shorts, excess slack, and logistic delays of pre-terminated cables.

Compatible with all SC, LC, FC and ST style fiber optic connectors, Lynx2-PLUS offers revolutionary Real-Time, On-Site flexibility for quick MACs, repairs, and restorations for minimal downtime, while eliminating crimping tools, gels, splice trays, and the inventory of varying length of pre-terminated jumpers— providing the industry's most cost effective, reliable, and advanced choice in fiber termination.

Specifications				
Connector Type	SC	LC	FC	ST
Fiber	SM, MM (62.5µm, 50µm, 50µm 10GIG)			
Media Type	250µm, 900µm, 2mm, 3mm			
Polish	APC, UPC, PC			
Insertion Loss	SMF: 0.15dB (average), 0.3dB (maximum) MMF: 0.10dB (average), 0.25dB (maximum)			
Return Loss	SMF: >65dB(APC), >55dB(UPC) MMF: >30dB (PC)			
Operating Temp	-40ºCfg 75ºC			
Housing color	SMF		MMF	
	UPC	APC	PC 62.5µm	PC 50µm	PC 50µm 10GIG
	Blue	Green	Beige	Black	Aqua

LYNX2-PLUS Part Numbering Guide (Single Package)

LYNX2 - A A (AA = Connector Style)	B B B (BBB = Endface Polish)	C C C C C (CCCCC = Fiber Type)	D D D D D D (DDDDDD = Media Diameter)

LYNX2 - A A (AA = Connector Style)

L C

S C

F C

S T

(Not Available in APC)

B B B (BBB = Endface Polish)

A P C
Angled Polished
<-65dB - Single-mode
(Green Housing)

U P C
Ultra Polished
<-55dB - Single-mode
(Blue Housing)

P C
Physical Contact
<-30dB - Multi-mode

C C C C C (CCCCC = Fiber Type)

S M
Single-mode

M 6
Multimode
62.5µm
(Beige Housing)

M 5
Multimode 50µm
(Black Housing)

M 5 1 0 G
Multimode 50µm
Laser Optimized
(Aqua Housing)
OM3 & OM4
Compatible

D D D D D D (DDDDDD = Media Diameter)

2 5 0 9 0 0
0.5"
For 250µm or
900µm Tight Buffer

2 5 0 F T 8
8"
For 250µm with
8" Furcation Tube
This option is only for Singlemode SC-UPC and SC-APC

9 0 0 L T
For 900µm Loose Buffer
ABF Breakout Kit
Compatible

FOR ABF

2 . 0
2.0mm
For 2.0mm Cord

3 . 0
8.0mm
3.0mm
For 3.0mm Cord

3 . 0 D C L
6.25mm
3.0mm
Only for LC Duplex
Application with
3.0mm Cord

EXAMPLES

LYNX2 - L C P C _ M 5 1 0 G - 2 . 0 _ _ _
Part Number is: LYNX2–LCPCM510G-2.0

LYNX2 - S C U P C S M _ _ _ - 2 5 0 9 0 0
Part Number is: LYNX2–SCUPCSM-250900

Tool Kits and Accessory Ordering Guide

Part Number	Description	Media Type	
		250µm	2mm
		900µm	3mm
LYNX2-TKU-2.0-3.0	Lynx2 Tool Kit for 2.0/3.0mm	✔	✔
LYNX2-ATK-SFC	Assembly Platform for Lynx2 Cord Solution		✔
LYNX2-CORDTOOL-2.0-3.0	Cord Prep Tool for 2.0/3.0mm		✔
LYNX2-HOLDER-C	Plastic Ferrule Holder (Sumitomo & New Competitor Splicers)	✔	✔
LYNX2-UML-C	Lynx2, Ferrule Side Holder, Metal/Universal	✔	✔
LYNX2-UML-S	Lynx2, Splice Sleeve Side Holder, Metal/Universal	✔	✔
FHS-025-LB5	Fiber Holder, Loose Buffer 250/900µm, 900LT	✔	✔
LYNX-SHEARS	Kevlar Cutters		✔
JR-M03	Jacket Remover	✔	✔
LYNX2-ST-AT-01	ST Assembly Tool	✔	✔
LYNX2-DUPLEX CLIP-LC	Duplex Clip for LC	✔	✔
LYNX2-DUPLEX CLIP-SC	Duplex Clip for SC	✔	✔

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Lynx2-MPO CustomFit™ Splice-On Connectors
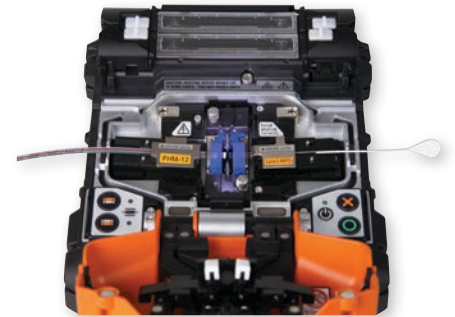

Features

- Industry's First MPO Field Installable, Fusion Splice-On Connector
- Cuts Time, Material, and Labor Costs
- Eliminates Logistical Delays of Pre-Engineered Cables
- Guide Pins for Precision Alignment (Male Only)
- Color Coded Housing
- Compatible with Optical Ribbon Fiber and Round Cord 12ct. Loose Tube
- Customizable Field Polarity Management
- EIA/TIA-604-5, FOCIS 5, IEC-61754-7 Compliant

Description:

Sumitomo's Lynx2-MPO is the industry's first MPO fusion splice-on field installable connector for customized, on-site, terminations. The breakthrough technology of the Lynx2-MPO meets the needs of the network for greater optical fiber density and addresses the connectivity demands for faster and easier terminations, upgrades, repairs and restorations, and significant cost savings required for today's data center, enterprise network, outside plant, OEM, central office, and virtually any FTTx network application.

MTP® compatible, the Lynx2-MPO is the perfect solution for optical fiber ribbon and loose tube round cord and patch cord terminations. Like all Lynx2 fusion splice-on connectors (SC, LC, FC, and ST), the Lynx2-MPO allows the technician to make permanent terminations with the exact cable length for fast and easy installations and upgrades at the work site. The on-site customization facilitated by the Lynx2 connectivity method eliminates the risk of shorts and slack, repair lag, and logistic delays associated with preterminated cables and pigtails — making the Lynx2-MPO your best choice in customized fiber termination.

Specifications					
Connector Type	SMF: Low Loss	SMF: Standard	MMF: 0M1	MMF: 0M2	MMF: 0M3
Polish	Angled	Angled	Flat	Flat	Flat
Housing Color	Yellow	Green	Beige	Black	Aqua
Typical Insertion Loss	.10dB)	.25dB	.10dB	.10dB	.10dB
Maximum Insertion Loss	≤.35dB	≤.75dB	≤.35dB	≤.35dB	≤.35dB
Return Loss	≥ 60dB	≥ 60dB	≥ 20dB	≥ 20dB	≥ 20dB

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LYNX2-MPO- Part Numbering Guide

LYNX2-MPO12 A
(A = Connector Gender)

B B
(BB = Fiber)

C C
(CC = Fiber Type)

D D D D D
(DDDDD = Fiber Media)

E E E
(EEE = Bulk Package Only)

M
(Male)

F
(Female)

S M
(Single-Mode)

M M
(Multimode)

L L
Low Loss
(IL ≤ 35dB RL ≥ 60dB
YELLOW HOUSING

S L
Standard Loss
(IL ≤ 75dB RL ≥ 60dB)
GREEN HOUSING

0 1
Multimode 62.5µm
(IL ≤ 35dB RL ≥ 20dB)
BEIGE HOUSING

0 2
Multimode 50µm
(IL ≤ 35dB RL ≥ 20dB)
BLACK HOUSING

0 3
Multimode 50µm
Laser Optimized
(IL ≤ 35dB RL ≥ 20dB)
AQUA HOUSING
OM3 & OM4 Compatible

R B N _ _
For 12f Ribbon
(No Jacket)

R B C _ _
For 12f Ribbon
(With Jacket)

R C 3 . 0
For 3.0mm Cord
FOR ABF

S T U B _
Ferrule Stub Only

x 100EA

B L K
(100 Pieces)

POLARITY

Specifying Polarity is not required.
See installation instructions.

EXAMPLES
(LYNX2-MPO12-ABBCC-DDD**DD**-EEE)

LYNX2−MPO12 F - S M L L - R B N _ _ - _ _ _
Part Number is: LYNX2–MPO12F-SMLL-RBN

LYNX2−MPO12 M - M M 0 3 - R C 3 . 0 - _ _ _
Part Number is: LYNX2–MPO12M-MM03-RC3.0

(Bulk Example)

LYNX2−MPO12 F - M M 0 2 - S T U B _ - B L K
Part Number is: LYNX2–MPO12F-MM02-STUB-BLK

Tool Kits and Accessory Ordering Guide

Part Number	Description
LYNX2-CORDTOOL-2.0-3.0	Lynx2 SOC, Cord Prep Tool, 2/3mm
FA-03	Fiber Arrangement Tool for Lynx2-MPO
FAC-24	Consumables for Fiber Arrangement Tool (Makes ~30 Ribbons)
FAC-24-003-A	Adhesive for Fiber Arrangement Tool (Included in FAC-24)
FHM-12-MPO-MTL	Lynx2-MPO Ferrule Holder, Metal/Universal
FHM-12-MPO-PLS	Lynx2-MPO Ferrule Holder, Plastic/Universal
LYNX2-TKU-MPO-RCATK	Tool Kit for Terminating Connectors onto Round Cord and Jacketed Ribbon Includes; Assembly Platform with Integrated Fiber Arrangement Tool, Adhesive, Cord Prep Tool, Metal MPO Ferrule Holder, Kevlar® Shears, Backpack
LYNX2-ATK2-MPO	Assembly Platform with Integrated Fiber Arrangement Tool
LYNX2-HRT-1	MPO Outer Housing Disassembly Tool
TYPE-Q101-M12-KIT-MPO1	Quantum Mass Fusion Splicer, Cleaver, Heated Jacket Remover, Spare Electrodes, V-Groove Brush, Power Cord, Manual, Hard Case, MPO Assembly Tool Kit, Consumable Kit
TYPE-Q101-M12-KIT-MPO2	Includes KIT-MPO1 Contents; Plus Battery

MTP is a registered trademark of US Conec. Kevlar is a registered trademark of DuPont.

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Quantum Type-Q102-CA
Core Alignment Fusion Splicer

Description

The Quantum Type-Q102-CA™ is Sumitomo Electric Lightwave's next generation of the industry leading Quantum core alignment fusion splicers, redesigned from the ground up to redefine the industry standard in optical fiber core alignment fusion technology. Maintaining all of the qualities and industry first features of the Quantum Type-Q101-CA, the TYPE-Q102-CA continues to raise the bar in performance by still being the fastest splicer with blazing fast 5 second splice and 9 second sleeve heating times. These new speeds, coupled with the splicer's patent protected dual independent ovens, makes it the fastest in the industry by far. The built-in dual heater system, with its unprecedented speed, improves splicing efficiency by over 80% for perfectly streamlined, consecutive, and cost effective splices. The TYPE-Q102-CA's completely redesigned software user interface is the first splicer in the world to now be built on the Linux operating system bringing a familiar smartphone style intuitive experience to the user making even inexperienced users effective in a fraction of the time. The new 5 inch WVGA 800X480 high resolution screen with active pan and zoom, allow a user to carefully inspect minute areas of a fiber with a simple drag, pinch or expand with fingers directly on the screen making the identification of problem areas simple and quick. Along with being the most advanced core alignment fusion splicer in the industry; it's also been refitted with the most rugged mechanisms able to withstand almost twice the shock of the previous generation with superior dust, shock and water-proof resistance, making it the ideal choice for even the harshest environments

Physical Characteristics

Size(mm)	128W x 154D x 130H
Weight	2.1kg with Battery
Display Type	5 inch Color, Low Glare, High Resolution Touch Screen Monitor
Shock – Free Fall	76cm from 5 sides
Waterproof	IPx2
Dustproof	IP5x
Battery Docking Bay	Internal

Features

- Dual Independent Heat Shrink Ovens
- Fastest Splicer with 5 sec. Splice time and Dual 9 sec. Heaters
- WVGA High Resolution, Fully Navigational Touch Screen Monitor
- SD Port for Virtually Unlimited Data Storage
- Internet Interface for Remote Maintenance & Software Upgrades
- Smartphone-Like User Interface
- Wide Angle LED Work Area Illumination
- Ruggedized Design for Shock, Water, and Dust Resistance
- Automatic Splice Start, Arc Calibration, Heater Start and Fiber Identification
- Long Life Battery for 300 Splice and Heater Cycles per Charge
- Battery Recharges While Splicing
- Long Life Electrodes up to 6,000 arcs
- Lynx2 CustomFit® Splice-On Connector Compatibility
- Three Year Warranty Included
- 24-Hour Technical Support via 1-888-SPLICER

Kit Ordering Information

Type-Q102-CA-KIT-1 Components:

• Type-Q102-CA Splicer	• Standard Battery	• Manual
• Hard Transit Case	• Cleaning Tools	• Fiber Optic Stripper
• Work Platform	• Fiber protection Sleeve Cooling Tray	• AC Adapter

Type-Q102-CA-KIT-2:
Includes All of KIT-1 Components; Plus FC-6S-C Fiber Optic Cleaver

Type-Q102-CA-KIT-6RSC:
Includes All of KIT-1 Components; Plus FC-6RS Precision Bench Top Automatic Blade Rotation Cleaver

Type-Q102-CA-KIT-8R:
Includes All of KIT-1 Components; Plus FC-8R Hand-Held Automatic Blade Rotation Cleaver

Quantum Type-Q102-M12 Ribbon Fusion Splicer

Features

- Automatic Clamp Force Adjustment & Real-Time Clamp Force Calibration, Minimizing Fiber to Fiber Offset for Splicing and MPO Terminations
- Dual Independent Heat Shrink Ovens with Auto Pretension Clamps, Increasing Splicing Efficiency by 70%
- High Resolution, Fully Navigational, Touch Screen Monitor
- Internet Interface for Remote Maintenance & Software Upgrades

- Typical 14 Second Splice & 55 Second Heater Cycle Time Makes the Quantum the Fastest Mass Splicer with a 12 Fiber Splice Under 70 Seconds
- SD Port for Virtually Unlimited Data Storage; Plus Video, Audio, and Software Uploads/ Downloads
- Lightest Weight & Smallest Footprint Mass Fusion Splicer
- Largest 640 x 320 Fiber View and Longest Electrode Life

Other Features Include:

- Ruggedized Design for Superior Shock, Water, and Dust Resistance
- Auto Splice Start, Arc Calibration, Heater Start and Fiber Identification
- Typical Splice Loss: SMF: 0.05dB; MMF: 0.02dB; NZ-DSF: 0.08dB
- Hard Carrying Case with Integrated Work Platform

- Multiple Positional Monitor with Automatic Display Inversion
- Long Life Battery Recharges While Splicing with AC Power
- Lynx2 CustomFit® Splice-On Connector Compatibility
- RoHS Compliant

Physical Characteristics	
Size(mm)	120W x 154D x 130H
Weight	2.0kg with Battery
Display Type	4.1 Color, Low Glare, High Resolution Touch Screen Monitor
Shock−Free Fall	76cm from 5 sides
Waterproof	IPx2
Dustproof	IP5x
Wind Protection	30mph (15m/s)
Battery Docking Bay	Internal

Product Number: KIT Components		

Type-Q102-M12-KIT-6RM1 Components:

• Quantum Mass Fusion Splicer	• Power Cord	• 250µm Holders
• Precision Automatic Blade Rotation	• V-Groove Brush	• 12ct. Ribbon Fiber Holders
• Fiber Cleaver	• Spare Electrodes	• Hard Case
• Heated Jacket Remover	• Manual	

Type-Q102-M12-KIT-6RM2 Components:
Includes All Type-Q101-M12-6RM1Contents; Plus Ribbonizing Tool and Consumable Kit

Type-Q102-M12-KIT-MPO1 Components:

• Quantum Mass Fusion Splicer	• Power Cord	• Hard Case
• Cleaver	• V-Groove Brush	• MPO Assembly Tool Kit
• Heated Jacket Remover	• Spare Electrodes	• Consumable Kit
	• Manual	

Type-Q102-M12-KIT-MPO2 Components: Includes KIT-MPO1 Contents; Plus Battery

Type-Q102-M12-KIT-8R Components: Includes KIT-MPO2 Contents with FC-8R

Quantum Type-QH201e-VS™ Handheld Fusion Splicer

Features
- Industry's Only High Resolution, Fully Navigational, Touch Screen Monitor
- Industry's Smallest Handheld Footprint and Fastest 12 Second Typical Splice Time
- Internal Battery Charging while Splicing
- Dual Bay External Battery Charger Available
- Internet Interface for Remote Maintenance & Software Upgrades
- Micro-SD Ports for Virtually Unlimited Data Storage
- Built-In Help and Maintenance Videos
- Automatic Splice Start, Arc Calibration and Heater Start
- Extended Life Electrodes Standard
- Hard or Soft Transit Case
- Easy to Use Fiber Holder Based System
- Lynx2 CustomFit® Splice-On Connector Compatible
- Typical Splice Loss: SMF: 0.05dB, MMF: 0.03dB
- 24-Hour Technical Support
- RoHS Compliant

Physical Characteristics

Size(mm)	110W x 140D x 76H
Weight	860 g (Including Battery)
Display Type	3.5 Color Touch Screen Monitor
Shock Resistance – Free Fall	76cm from 5 sides
Waterproof	IPx2
Dustproof	IP5x
Wind Protection	30mph (15m/s)

Ordering Information

Type-QH201e-VS-KIT-1 Components: B or H

• Type-QH201e-VS Splicer	• Transit Case* with Hard Case or Backpack Options (part number extension)	• Standard Battery
• Spare Electrodes	• AC Adapter and Power Cord	• Cleaning Tools
	• 250µm Fiber Holders	• Manual
		• Fiber Optic Stripper

Type-QH201e-VS-KIT-2:
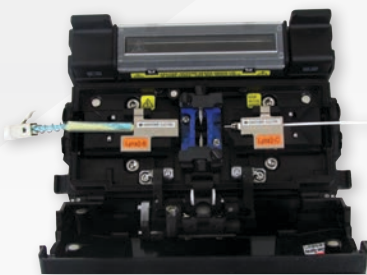Includes All of Kit-1 Components; Plus FC-6S Precision Optical Cleaver

Type-QH201e-VS-KIT-2R, Type- QH201e-VS-KIT-6RSC:
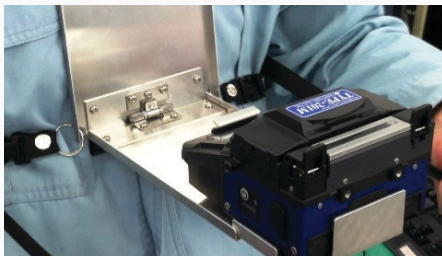Includes All of Kit-1 Components; plus a Precision Optical Cleaver with Automatic Rotating Blade & Scrap Catcher

Type- QH201e-VS-KIT-8R:
Includes All of Kit-1 Components; plus a FC-8R Precision Optical Cleaver with Automatic Rotating Blade

* Part Number Will Add a B or H at the End to Designate Hard Case or Backpack
Example: TYPE-QH201e-VS-KIT-1H

Shown with Optional Lynx2 CustomFit® Splice-On Connector

Quantum Type-QH201e-VS Shown with Optional WT-201 Work Platform

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T-400S Active Clad Alignment Handheld Fusion Splicer

Description

SEL's new T-400S Active Clad Handheld Fusion Splicer features a high resolution display, fiber end face evaluation and post joining loss estimation providing assurance of a successful fiber termination. The handheld fusion splicer removes the technician judgement call required on all other forms of termination by using advanced optical technology, high precision motors and the latest embedded software to completely automate the installation of an optical connector and all at a cost similar to low tech, tool centric connector systems.

For more information about this product or other related products visit **www.SumitomoElectric.com.**

Physical Characteristics	
Size(mm)	129W x 195D x 99H
Weight	1.3kg with Battery
Display Type	4.3" Color LCD Display
Shock−Free Fall	76cm on bottom face
Waterproof	IPx1
Dustproof	IP5x
Joining Time	7 sec. (typical)
Heating Time	24 sec. (typical)
Electrode Life	6,000 arc discharges

Ordering Information	
Part Number	**Description**
LYNX2-SOCTK-400	Splicer KIT,T-400S Active Clad-Align w/ FC-5S Cleaver, Jacket Remover, Lynx2 Ferrule & Cord Holders, Battery, Power Cord & AC Adapter, Shipping Case & Fiber Protection Sleeves
LYNX2-SOCTK-400-PLUS	Splicer KIT,T-400S Active Clad-Align w/ FC-5S Cleaver, Jacket Remover, Lynx2 Ferrule & Cord Holders, Loose Buffer Holder, Cord Prep Tool, Kevlar Sheers, Battery, Power Cord & AC Adapter, Shipping Case & Fiber Protection Sleeves
TYPE-400S-ACA-KIT-1	Splicer KIT,T-400S Active Clad-Align w/ Jacket Remover, Battery, Power Cord & AC Adapter, Shipping Case & Fiber Protection Sleeves
TYPE-400S-ACA-KIT-5S	Splicer KIT,T-400S Active Clad-Align w/ FC-5S Cleaver, Jacket Remover, Battery, Power Cord & AC Adapter, Shipping Case & Fiber Protection Sleeves
TYPE-400S-ACA-KIT-5SFH	Splicer KIT,T-400S Active Clad-Align w/ FC-5S Cleaver, Jacket Remover, Battery, Power Cord & AC Adapter, Shipping Case & Fiber Protection Sleeves, PLUS 250um, 900um and Loose Buffer Fiber Holders
TYPE-400S-ACA-KIT-6RS	Splicer KIT,T-400S Active Clad-Align w/ FC-6RSC Cleaver, Jacket Remover, Battery, Power Cord & AC Adapter, Shipping Case & Fiber Protection Sleeves
TYPE-400S-ACA-KIT-6RSFH	Splicer KIT,T-400S Active Clad-Align w/ FC-6RSC Cleaver, Jacket Remover, Battery, Power Cord & AC Adapter, Shipping Case & Fiber Protection Sleeves, PLUS 250um, 900um and Loose Buffer Fiber Holders
TYPE-400S-ACA-KIT-8R	Splicer KIT,T-400S Active Clad-Align w/ FC-8R Cleaver, Jacket Remover, Battery, Power Cord & AC Adapter, Shipping Case & Fiber Protection Sleeves
TYPE-400S-ACA-KIT-8RFH	Splicer KIT,T-400S Active Clad-Align w/ FC-8R Cleaver, Jacket Remover, Battery, Power Cord & AC Adapter, Shipping Case & Fiber Protection Sleeves, PLUS 250um, 900um and Loose Buffer Fiber Holders

Features

- Capable of Fusion Splicing an Array of Fiber Types and Deployment Time Periods
- Competitive 7 Second Fusion Splicing and 24 Second Heat Shrinking Times
- Ruggedized Design
- Consistent Quality Low Loss Splicing
- Simple Operation by Brand-New User Interface for Quick and Easy Program Navigation and Analysis
- Handheld Operation for Fast Set-Up in Minimal Work Space Environments
- Lynx2 CustomFit Splice-On Connector Compatible
- FTTx Initiatives in One Machine
- 24/7 Technical Support
- 1 Year Warranty Included

Connect to Breakout Kit Ordering Information

Product Type	Part Number	Description
Fiber Bundle	FB72SP	Singlemode 72-fiber (Freeform Ribbon)
Ribbon Furcation	FT72FBK-12SU	72-fiber Bundle Breakout Kit SM (w/ 3mm Tubing for 6 x 12F MPO)
FOX Cassette (Ribbon)	FTLC-FSP12RBNOS2	FOX Splice Cassette, 12 fibers, LC, OS2, Ribbon
	FTLC-FSP12RBNOS2-A	FOX Splice Cassette, 12 fibers, LC-APC, OS2, Ribbon
	FTLC-FSP12RBNOS2-MP12	FOX Splice Cassette, 12 fibers, LC, OS2, Ribbon to 12ctMPO Connector
	FTLC-FSP24RBNOS2	FOX Splice Cassette, 24 fibers, LC, OS2, Ribbon
	FTLC-FSP24RBNOS2-A	FOX Splice Cassette, 24 fibers, LC-APC, OS2, Ribbon
	FTSC-FSP12RBNOS2	FOX Splice Cassette, 12 fibers, SC, OS2, Ribbon
	FTSC-FSP12RBNOS2-A	FOX Splice Cassette, 12 fibers, SC-APC, OS2, Ribbon
	FTST-FSP12RBNOS2	FOX Splice Cassette, 12 fibers, ST, OS2, Ribbon

Connect to FOX Cassette Ordering Information

Product Type	Part Number	Description
Fiber Bundle	FB72SP	Singlemode 72-fiber (Freeform Ribbon)
Ribbon Splice Tray	FT12FHL	Splice Tray/FTU/12F/HS-MECH
	FT-HS-07	Splice Tray,Up to 12ct Mass Splices
	FSPST-16M	Splice Tray for FSPWM-12T, 16 Mass Splice Holder
	ST-01	MASS Fusion Splice Tray,7"Metal Tray
Ribbon Splice Sleeve	FPS-6	Splice Protection Sleeves for use with mass/ribbon (2-12 fiber) splicing; 40mm length with glass ceremic strength member
Ribbon to Connector Pigtail	BOR-BR012LC1D	Breakout 12F Rbn, SM LC, 1 M, 900um Furcation
	BOR-BR012LC2DL	Breakout kit, 12F Ribbon, SM, LC, 2M
	BOR-BR012LC3D	Breakout kit, 12F Ribbon, SM, LC, 3M
	BOR-BR012LC3D-V	Breakout kit, 12F Ribbon, SM, LC, 3M
	BOR-BR012LCA3D	Breakout, LC APC 12F RIBBON SM 25" fan-out 3m
	BOR-BR012LCA3D-V	Breakout, LC APC 12F RIBBON SM 25" fan-out 3m
	BOR-BR012SC3D	Breakout kit, 12F Ribbon, SM, SC, 3M
	BOR-BR012SC3D-V	Breakout kit, 12F Ribbon, SM, SC, 3M
	BOR-BR012SCA3D	Breakout kit, 12F Ribbon, SM, SC-APC, 3M
	BOR-BR012SCA3D-V	Breakout kit, 12F Ribbon, SM, SC-APC, 3M
Connector Adapters	FT204BP	Blank Adapter Panel
	FTFC06S5	FC Panel with 6 Adapters and 6 Ports / SM or MM
	FTFC12S5	FC Simplex Panel with 12 Adapters and 12 Ports / SM or MM
	FTFA06S2	FC Panel with 6 Adapters and 6 Ports / SM APC
	FTFA12S2	FC Panel with 12 Adapters and 12 Ports / SM APC
	FTLC06D1	LC Duplex Panel with 6 Adapters and 12 Ports / SM / Blue
	FTLA06D2	LC Duplex Panel with 6 Adapters and 12 Ports / SM APC / Green
	FTLC06Q1LC	LC Quad Panel with 6 Adapters and 24 Ports / SM / Blue
	FTLC06Q2LC	LC Quad Panel with 6 Adapters and 24 Ports / SM APC/ Green
	FTLCP6DB	LC Duplex Panel w/6 adapters = 12 ports, SM, Blue,FTLC06D1
	FTSC06S1	SC Panel with 6 Adapters and 6 Ports / SM / Blue
	FTSA06S2	SC Panel with 6 Adapters and 6 Ports / SM APC / Green
	FTSC06D1	SC Duplex Panel with 6 Adapters and 12 Ports / SM / Blue
	FTSA06D2	SC Duplex Panel with 6 Adapters and 12 Ports / SM APC / Green
	FTSC06D3	SC Duplex Panel with 6 Adapters and 12 Ports / MM / Beige
	FTSC06D4	SC Duplex Panel with 6 Adapters and 12 Ports / MM / Aqua
	FTSC06D5	SC Duplex Panel with 6 Adapters and 12 Ports / MM / Black
	FTST06S5	ST Panel with 6 Adapters and 6 Ports / SM or MM
	FTST12S5	ST Panel with 12 Adapters and 12 Ports / SM or MM

Training & Warranty Programs

SUMITOMO ELECTRIC
LIGHTWAVE

FutureFLEX™
Installation Course
FF101 Student Guide

FF101 — FutureFLEX Installation Standards Course

FF101 is the certification course covering the engineering, installation, and administration of the FutureFLEX Air-Blown Fiber System. FF101 is required for all Licensed FutureFLEX Installers (LFIs) of FutureFLEX products.

Upon the successful completion of FF101, the student will be able to design, install and test a complete FutureFLEX System. This includes but is not limited to the following:

- Plan the fiber bundle network based on initial fiber type and count requirements

- Design the tube cable infrastructure based on installation environment and expected growth

- Determine the appropriate tube distribution hardware and interconnection requirements

- Determine appropriate field termination units and associated parts

- Set up and utilize the FutureFLEX System installation equipment to blow in optical fiber bundles

FF201 — FutureFLEX System Update

FF201 is only available to previous FF101 graduates. FF201 is recommended every two years for Licensed FutureFLEX Installers (LFIs) in order to maintain licensing and certification.

FF302 — FutureFLEX System Update

Course Topics Include:

• FutureFLEX® capabilities, components, design guidelines, estimating, documentation and installation techniques.

• Design and use in outside plant installations including aerial, direct-buried, conduit and cable tray practices.

• Inside plant design and installation, including general purpose, riser-rated and plenum applications.

• Overview of splicing, coupling of tubes and termination methods.

• Learn about special applications including mass transit, Class 1 Div. 1 & 2, power generation facilities, healthcare and many more.

• Included is the Estimator III Program and a number of calculators useful for calculating fill ratio, vertical suspension, expansion & contraction.

The FutureFLEX Air-Blown Fiber System standard 2-year warranty can be extended to 15 or even 25 years under certain conditions.

Warranty Programs

Sumitomo Electric Lightwave Corporation backs its products with superior material and performance warranties. We warrant the FutureFLEX Air-Blown Fiber System, at the time of shipment, to be free of defects in material and workmanship. Our liability under this standard warranty shall terminate twenty-four (24) months after the date of shipment unless the installer or customer is approved for an extended warranty under our fifteen (15) year "Extended" warranty or the twenty-five (25) year "Premium" warranty.

Please contact a FutureFLEX Licensed Installer (LFI) for complete details about our extended warranty program. To find the name of your closest LFI, please visit www.SumitomoElectric.com. And since we train, certify, and provide continuous support to our national network of LFIs, you can be assured that the tube cable infrastructure you install will be supported by some of the most knowledgeable professionals in the industry.

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SUMITOMO ELECTRIC LIGHTWAVE

ARROW

Arrow Wire & Cable
Headquarters
13911 Yorba Ave.,
Chino, CA 91710

www.arrowwire.com
Southern CA/Arizona: (800) 659-3655
Northern CA: (866) 227-7699