

DATA CENTER > INFRASTRUCTURE AND CONNECTIVITY



molex



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Molex is the worldwide leader on connectivity solution. The high performance products applied to severe operating environments in industrial, telecom, military and medical applications

Enclosure

Molex offers 1RU to 4RU types of MPO cassette storage enclosures for different customer demands. The 1RU type can support 3 MPO cassettes storage with clean and simple design.

The 3RU enclosure and bracket can support up to 288 LC ports with 12 sets MPO cassettes. With excellent cable protection, cable guiding and fixing functions. These enclosures are user friendly and providing highest level protection for your valuable fiber terminations

HD Enclosure

Molex high density enclosure series are specifically designed to meet high density fiber and cable management system. It's an idea choice for data center, storage area network (SAN), local area network (LAN) and central office / headend application.

High density shelf racks are used to breakout MPO cable to LC connectors. It's compact size and support 12/24 ports LC output. HD Enclosure supports 144/192 LC ports with 1RU height.

Distribution Box

Molex fiber distribution box can manage fibers from 24 to 192 ports terminations in 1U to 6U rack space. The termination operations include outdoor main cable cutting, cable position fixing, cable jacket stripping, sub-cable extraction, glass fiber fusion protection, fiber routing management and protection. The extra cable storage can be all treated and well managed in this distribution boxes.

Terminal Box

In order to develop the complete network and faster, efficient optical system. Molex has the diversified box solutions available to meet the fiber connectivity requests. Widely applied in FTTx access network, outdoor application, optical fiber communication system, telecommunication networks and CATV networks. All outdoor boxes follow IP65 rated and good for UV/rainfall resistance. The modular, scalable design provides flexibility for network partitioning and future growth.

Accessories

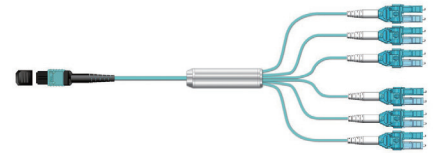
In order to assist fiber network formation on cable management, Molex provides many accessories options for making installation conveniently. For example, bulkhead adapter plate, splice tray(s), bend radius bracket, cable management spool, fusion protection sleeve and so on. Molex also provides various pigtailed and attenuators for fiber network infrastructure.



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Harnesses Cables

Molex MPO multi-fiber cabling system is ideally suited for a high-density environment that demands space saving and innovative cable management solutions. MPO fan-out supports various connections from multi-fiber to single-fiber out. With highly integrated design and manufacturing capability, Molex can also provide customized products to help customers reduce network installation or reconfiguration time and cost.



Trunk Cable

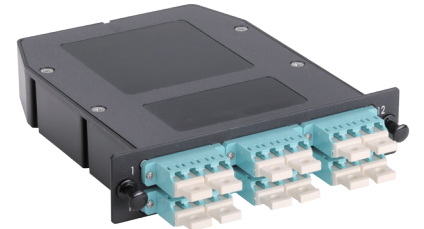
Molex MPO trunk cable assemblies facilitate rapid development of high density backbone cabling data center and other high fiber ports environment. Molex offers 48/72/96/144 fibers MPO trunk cable with different fiber polarity. Spool and pulling sock design are easy to apply on field installation.



LGX Cassette

Molex presents high density MPO cassette system solution dedicated for emerging data center and cloud applications.

Targeting at customer 's storage space saving, and fiber management efficiency demand, we embed modular and scalability characteristics into the core of product design. Molex LGX cassettes are designed to be compatible with the industry standard LGX format. No field termination or testing required. Modular design can be expanded as needed.



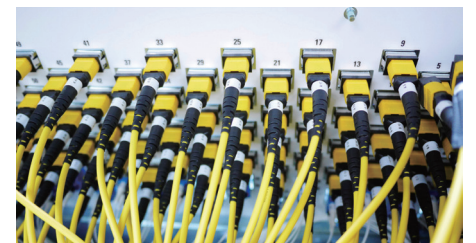
High Density Cassette

Molex high density cassette are specifically designed to meet high density enclosure and cable management system. The maximum connector capacity allows 24 LC fiber port and each series of HD cassette have special pluggable pin for easy installation. The MPO interconnect system platform can also be integrated with others Molex products, such as SFP+, QSFP, CFP modules, CWDM, DWDM Mux/DEMUX, optical switch arrays, EDFA, WSS, Circulator and all other products in Molex group.



Cable Assembly

The Optical Jumper Cable is designed for interconnection in all optical systems or components. Molex offers a wide range of industrial standard jumper cables with various fiber and fiber jacket types, connectors, and lengths. With highly integrated design and manufacturing capability, Molex provides customized products to help customers succeed better opportunities.



Standard Fiber Enclosure

Network growth and management is a key consideration when selecting a physical hardware solution. Molex enclosure approach takes the long view of LAN, SAN and data center design with cable management features that ensure maximum density and growth without disrupting service and saving space. Managed density allows network managers to efficiently pay for their network investment as it grows.

Molex offers various cassette / fiber storage enclosures for different demands. The rack and wall-mount, from 1RU to 4RU are available. The plug-and-play solutions are designed to address the reliability, scalability, and thermal needs of critical networks. It's applied to the main distribution area (MDA), backbone, and horizontal and equipment distribution areas. With excellent cable protection and cable guiding, fixing functions, these enclosures are user friendly and providing highest level protection for your valuable fiber management.

- 1U 19" rack mountable
- Compatible with standard LGX MPO cassette and adapter panels
- 3 MPO cassettes, 72 port of LC connector capacity



PN: 1064800105

- 2U 19" rack mountable
- Compatible with standard LGX MPO cassette and adapter panels
- 6 MPO cassettes, 144 port of LC connector capacity
- Rear cable storage tray



PN: 1064800101

- 3U 19" rack mountable
- Compatible with standard LGX MPO cassette and adapter panels
- 12 MPO cassettes, 288 port of LC connector capacity
- Rear cable storage tray



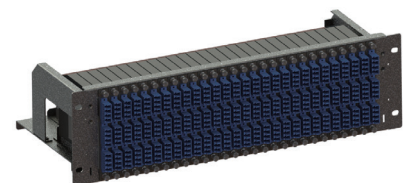
PN: 1064800102

- 4U 19" rack mountable
- Compatible with standard LGX MPO cassette and adapter panels
- 12 MPO cassettes, 288 port of LC connector capacity
- Rear cable storage tray



PN: 1064800103

- 3U 19" rack mountable
- Compatible with Slim MPO cassette and adapter panels
- 28 MPO slim cassettes, 336 port of LC connector capacity
- Rear cable storage tray



PN: 1064800104

Standard Rack Mount Fiber Enclosure

PN	Description	Maximum Capacity				Dimension (mm)
		LC Fiber Ports	Adapter Panel	MPO Module	Adapter	
1064800105	1RU	72	3	3	LC	482 x 275 x 44
1064800101	2RU	144	6	6	LC	482 x 312 x 89
1064800102	3RU	288	12	12	LC	482 x 312 x 133
1064800103	4RU	288	12	12	LC	482 x 305 x 175
1064800104	Slim 3RU	336	28	28	LC	482 x 220 x 133

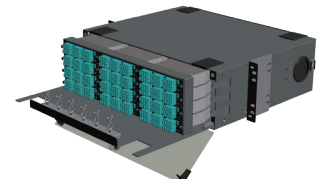
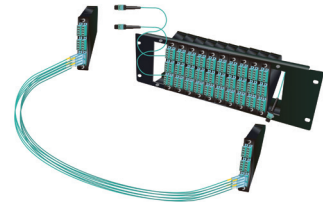
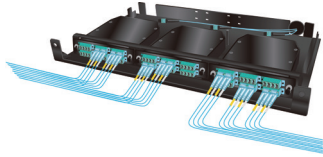
Installation Scenario

The 1RU MPO enclosure can host up to 3 sets MPO module. 72 LC front ports can be interfaced with MPO trunk assemblies. The cassettes can be inserted into the front panel using the quick release mechanism.

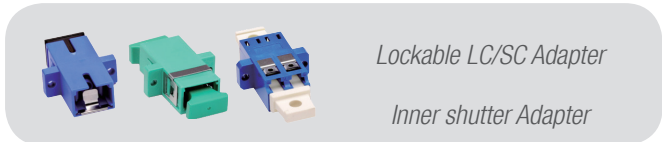
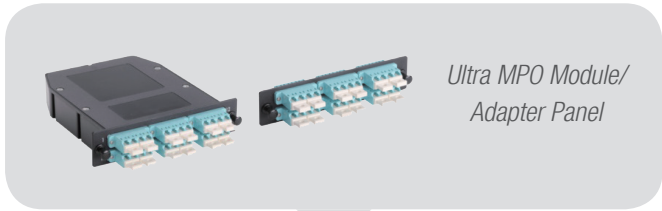
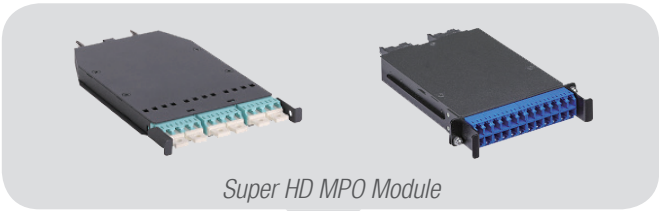
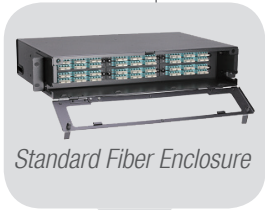
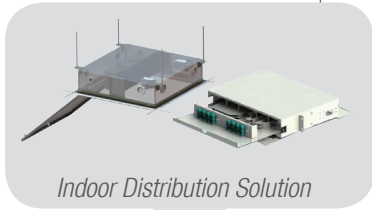
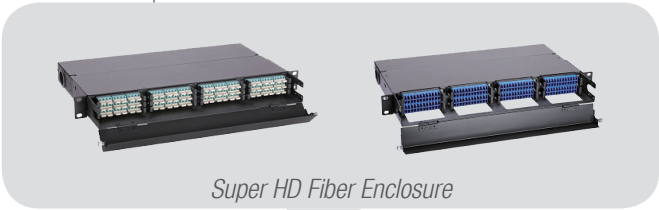
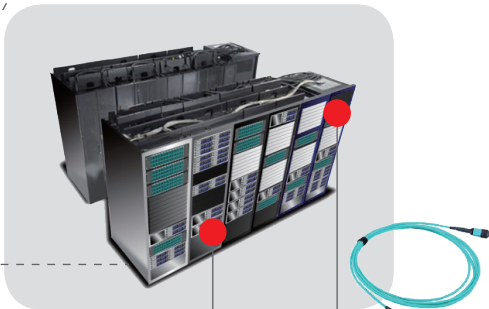
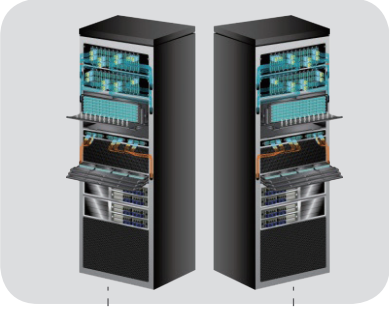
The enclosure fits into standard 19" racks and MPO module can be replaced with 8 / 12 MPO adapter plates for direct trunk cable to fan-out interface.

The 3RU bracket is used to break out up to 12 sets 12/24-fibers MPO to LC module. LGX module are easy to install and no field termination required. The enclosure fits into standard 19" racks and optical fiber patch cord management at the back of strong tray.

For high fiber density 3RU MPO module chassis can host up to 12 MPO module with up to 288 LC connectors. The enclosure fits into standard 19" racks and fiber management will protect well on slidable drawer.



Harnesses MPO Cables
MPO Trunk Cables



High Density Fiber Enclosure

Molex 106480000x enclosure series are specifically designed for high density fiber and cable management system. The ideal choice for data center, storage area network (SAN), local area network (LAN) and central office / headend application. 106480000x shelf rack are used to breakout MPO cable to LC connectors. It's compact size and supported to 12/24 ports LC output. 106480000x supports maximum 192 LC ports with 1RU height.

- 1U 19" rack mountable
- Compatible with Molex high density MPO-LC cassette
- 12 MPO cassettes, 144 port of LC connector capacity



PN: 1064800001

- 1U 19" rack mountable
- Compatible with Molex super high density MPO-LC cassette
- 8 MPO cassettes, 192 port of LC connector capacity
- Rear cable storage tray



PN: 1064800002

- 1U 19" rack mountable
- Compatible with Molex super high density MPO cassette
- 8 MPO cassettes capacity, each cassette support 8 MPO adapter
- Rear cable storage tray



PN: 1064800003

- 4U 19" rack mountable
- Compatible with Molex high density MPO-LC cassette
- 48 MPO cassettes capacity, 576 port of LC connector capacity
- Rear cable storage tray



PN: 1064800004

High Density Rack Mount Fiber Enclosure						
PN	Description	Maximum Capacity				Dimension (mm)
		LC Fiber Ports	Adapter Panel	MPO Module	Adapter	
1064800001	HD 1RU	144	12	12	LC	430 x 282 x 44
1064800002	SHD 1RU	192	8	8	LC	430 x 282 x 44
1064800003	SHD 1RU Tap Tray	---	8	8	MPO	430 x 282 x 44
1064800004	SHD 4RU	576	48	48	LC	430 x 407 x 178

Indoor Distribution Box

Molex provides high bandwidth and physical infrastructures in data center, enterprise, and campus networks with comprehensive fiber optic systems that deliver high performance, reliability and scalability. By leveraging its technology leadership, innovative design and cable management expertise, Molex provides a migration path of future requirement. Fiber distribution box comes in different configurations such as rack mount, wall mount, and indoor or outdoor. The rack mount enclosures come in two styles models. One is the slide-out variety, and the other incorporates a removable lid.

With the precise fiber optic adapters are installed into the cut outs in the adapter panel to accept the various fiber optic connectors. Fiber optic pigtails, mate with the adapters and the fusion-spliced tails are stored in the splice trays.

- 1U 19" rack mountable and 1RU height
- Aluminum housing, powder coating, beige color
- Front and rear access.
- 12 fusions per splice tray and fiber routing spool

- Design for 19" standard rack and 1.5RU height
- Adaptor panel and splice trays are mounted on slidable drawer
- Front and rear access.
- Cable routing spools for storing excess cable

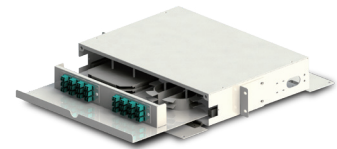
- Design for 4RU 19" standard rack
- Fixed adaptor panel mounted on slidable drawer
- Independent compartment for splice trays
- Cable routing spools for storing excess cable
- Top, bottom, side cable entries

- Elegance for cabling infrastructures
- Integrated power supplies available
- Fan kit available
- Recessed into 2' x 2' drop ceiling acoustical ceiling grids
- Provide wiring blocks function
- Adapter panel and LGX box installation options

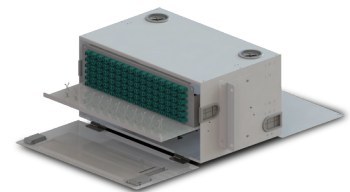
- Six adaptors per panel FC, SC, ST adaptors
- 30/70 split door design. Ease to install for limited environment
- Cable routing spools provided to take up excess cable length
- Modular splice holder of six splice



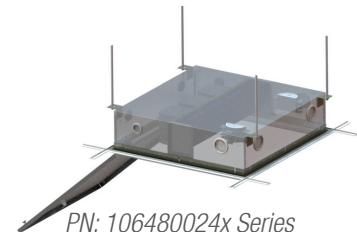
PN: 106480020x Series



PN: 106480021x Series



PN: 106480022x Series



PN: 106480024x Series



PN: 106480030x Series

Patch Panel Distribution Box

PN	Description	Maximum Capacity				Dimension (mm)
		SC Adapter	FC Adapter	LC Duplex	LC Quad	
106480020x	1RU Patch Panel	24	24	24	12	430 x 320 x 78.2
106480021x	Slidable 1RU Rack	24	24	24	12	430 x 320 x 36
106480022x	4RU Patch Panel	96	96	96	48	430 x 320 x 131.8
106480023x	6RU Patch Panel	48	32	48	24	430 x 320 x 131.8
106480024x	Ceiling Box	144	-	144	72	560 x 560 170
106480030x	Wall Mount	24	24	24	12	430 x 75 x 350

Outdoor Plant Distribution Box

Molex optical terminal box allows simple and safe conditions of installation. All outdoor boxes follow IP65 rated and good for UV/rainfall resistant. It's modular, scalable design provides flexibility for network partitioning and future growth. Outdoor plant distribution box is applied for installing pigtail and protects fiber optical splices and used as a termination point for the feeder cable to connect with drop cable in FTTx communication network system.

We also support the box inside pre-assembly technology to offer a full plug-and-play termination solution for in-building fiber applications.

- Plastic box with IP65 rated
- The maximum capacity allows 16-32 fibers (SC simplex/LC duplex)
- Support pigtail, splices, WDM and switch pre-assembly
- Indoor/outdoor terminal application



PN: 106482000x Series

- Plastic box with IP65 rated
- The maximum capacity allows 2-4 fibers (SC simplex/LC duplex)
- Tray to ensure the regularity of the fiber within the connection tray
- Indoor/outdoor terminal application



PN: 106482002x Series

- Plastic box with IP65 rated
- The maximum capacity allows 4-8 fibers (SC simplex/LC duplex)
- Tray to ensure the regularity of the fiber within the connection tray
- Suitable for basement, room and building's outer walls application



PN: 106482004x Series

- Plastic box with IP67 rated
- Support max 72 pairs duplex LC ports
- Support pre-terminated trunk cable in / out
- Hinged box design
- Apply Cable gland for waterproof function



PN: 106482006x Series

- Suitable for all network applications in butt configuration on cut and uncut FO cable
- Supports standard loose tube or ribbon fiber cables in either armored or dielectric configuration
- Versatile mounting brackets support strand, pole, pedestal, wall and hand hole environments
- Fully sealed to protect fiber and splices ensuring longevity
- Fast and easy insertion of branching cables on demand without special tools



PN: 106482008x Series

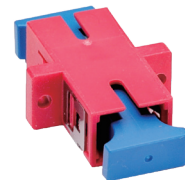
Outdoor Plant Distribution Box

PN	Maximum Capacity		Dimension (mm)
	SC Ports	LC Ports	
106482000x Series	16	32	320 x 260 x 90
106482002x Series	2	4	165 x 100 x 30
106482004x Series	4	8	191 x 120 x 44
106482006x Series	36	72	330 x 320 x 185
106482008x Series	96C		230 x 205 x 455

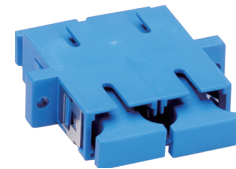
Secure SC / LC Adapter

Molex presents innovative secure lock SC / LC adapters for advanced data center and FTTX applications. The unique adapter lock mechanism is designed for preventing accidental fiber disconnection of important channel links. The renewal SC, LC adapter housing is molded into one piece, with more enhanced precision, structure, and reliable performance. SC lockable adapter also provide inner shutter option, avoided to prevent visual harm. All Molex LC adapters are fully complied with IEC 61754-20 standards. The reliability of adapter completely meets Telcordia GR-326-CORE and TIA/EIA requirements.

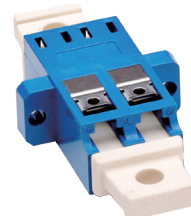
- Patented SC adapter secure lock. (5.0kgf minimum release force)
- Enhanced housing and hook by one-piece molding
- Excellent repeat IL variation built in by mechanical design
- UL 94-V0 compliance



- Patented SC adapter secure lock. (10.0kgf minimum release force)
- Enhanced housing and hook by one-piece molding
- Excellent repeat IL variation built in by mechanical design
- UL 94-V0 compliance



- Lock/Unlock tool available for high density adapter panel
- Enhanced housing and hook by one-piece molding
- Innovative mounting clip design compatible with panel thickness from 1.45mm~1.65mm
- Compliant with RoHS/REACH and UL 94-V0



- Enhanced housing and hook by one-piece molding
- The shutters of internal type adapters automatically open/close
- With a design that is compatible with standard SC connectors
- Avoided visual harm during installation period



Harnesses MPO Cables

Molex’s MTP/MPO product family utilizes push-pull connector housings for quick and reliable connections. Three jacket types are available, round cable, flat cable and bare fiber ribbon. The primary benefit of the round ribbon cable is realized when used with multiple ribbons within a single jacket. Using round ribbon cables allows installers greater flexibility when routing multiple jacketed cables in dense system networks. MTP/MPO cables are offered for various applications for all networking and device needs like 100G modules including CFP, CFP2 and CFP4 series.

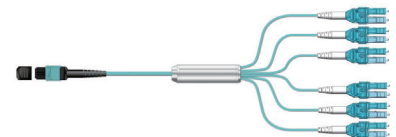
- Reliable high-density, high-performance interconnections
- 8/12/24 fiber counts available
- Data communications networks, high bandwidth equipment
- Telcordia GR-1435-CORE qualification
- IEC 60794, TIA/EIA-568 compliant



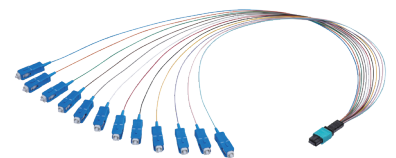
- 8,12 and 24 fiber connector terminations and assemblies
- Assemblies MPO to MPO, MPO to non-terminated stub
- Easy to fiber routing or cassette assembly
- Telcordia GR-1435-CORE qualification
- IEC 60794, TIA/EIA-568 compliant



- TIA-568 Type A, B, or C fiber polarity option
- 40G SR4 / 100G SR10 application
- Uni-boot LC, Flexible boot LC option
- 900um, 2mm fan-out tubing available
- Transition from trunk backbone assemblies to fiber rack system



- 900um Tubing exposed from MPO / MTP connector
- Without fan-out kits easy to installation
- Convenient to MPO cassette fiber routing
- Compact size and save space
- 8 and 12 fiber connector terminations and assemblies
- IEC 60794, TIA/EIA-568 compliant



Harnesses MPO / MTP Assembly				
12 counts fiber MPO-MPO assembly				
Fiber	Jacket	OD	Cable Type	IL
G652D/G657A1 OM3/OM4/Specify	LSZH / OFNR / OFNP	3mm / Specify	Ribbon / Flat / Round	≤ 0.35dB (Low Loss) ≤ 0.75dB (Regular)
24 counts fiber MPO-MPO assembly				
Fiber	Jacket	OD	Cable Type	IL
G652D/G657A1 OM3/OM4/Specify	LSZH / OFNR / OFNP	3.5mm / Specify	Ribbon / Flat / Round	≤ 0.35dB (Low Loss) ≤ 0.75dB (Regular)

Harnesses MPO / MTP to Tubing Fan-out Assembly

12 counts fiber MPO-LC/SC Fan-out assembly

Fiber	Jacket	OD	Cable Type	IL
G652D/G657A1 OM3/OM4/Specify	LSZH / OFNR / OFNP	3mm / Specify (Main) 0.9/1.6/2.0mm (Fan-out)	Ribbon / Flat / Round	≤ 0.35dB (Low Loss) ≤ 0.75dB (Regular) ≤ 0.25dB (SC, LC)

24 counts fiber MPO-MPO assembly

Fiber	Jacket	OD	Cable Type	IL
G652D/G657A1 OM3/OM4/Specify	LSZH / OFNR / OFNP	3.5mm / Specify (Main) 0.9/1.6/2.0mm (Fan-out)	Ribbon / Flat / Round	≤ 0.35dB (Low Loss) ≤ 0.75dB (Regular) ≤ 0.25dB (SC, LC)

- 12 or 24 fiber ferrule MPO/MTP®
- Female and male MPO/MTP option of connectors
- Polarity variants selection
- 40G QSFP+ and 100G CXP/CFP transceivers testing
- Pre-terminated and Tested

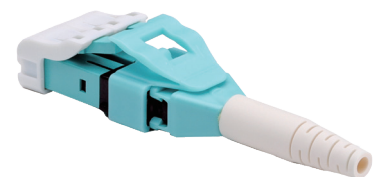
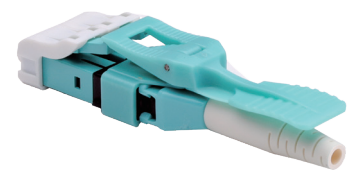
- Pull tabs are ideal for easy mating and de-mating in highly congested applications
- Push/Pull tab connectors offer maximum accessibility in high density installations and install / remove with one hand
- High-density design cuts down on installation costs
- Specify color for quality control and traceability

- Bend any angle and direction free
- Tight bend radius and custom cable exit paths in rack-to-rack applications
- Ideal for QSFP+, CFP, and future 400G networks using MT based interconnects
- Improves the cable routing and avoidance of disturbing adjacent cables

- LC unit boot connector with Push-pull tab
- Easy to release the patch cord
- Diversify options for higher flexibility and adjustability
- Easy to switch the fiber polarity while assembly
- Cable assembly is installed without re-terminating the connectors

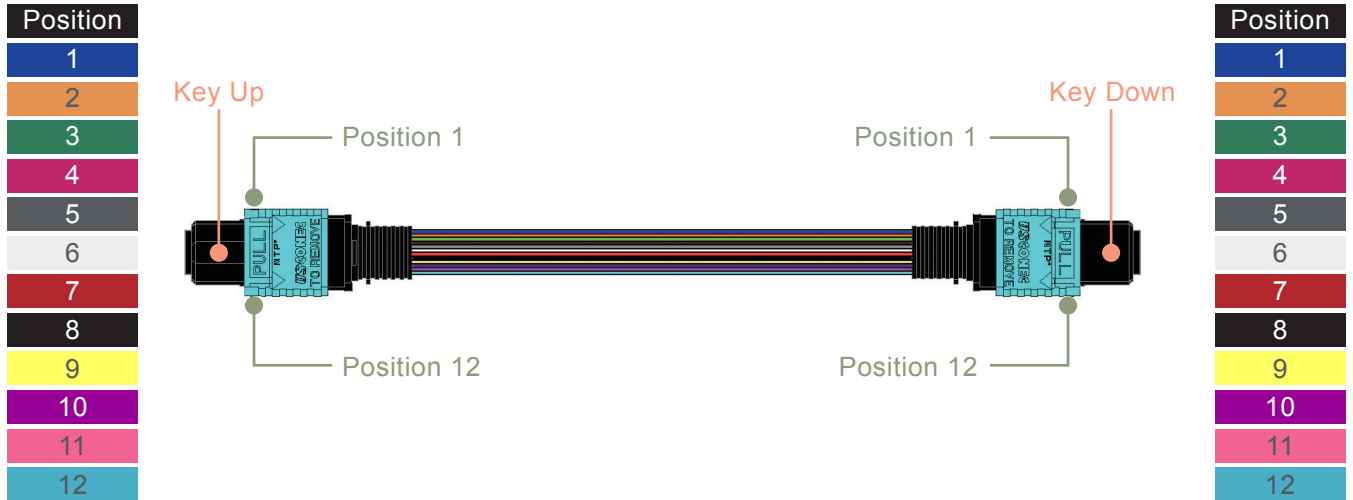
- LC unit boot connector
- Diversify options for higher flexibility and adjustability
- Easy to switch the fiber polarity while assembly
- Cable assembly is installed without re-terminating the connectors

- Duplex LC connector with zip cord
- Removable zip cord design
- Easy to switch the fiber while assembly
- Cable assembly is installed without re-terminating the connectors

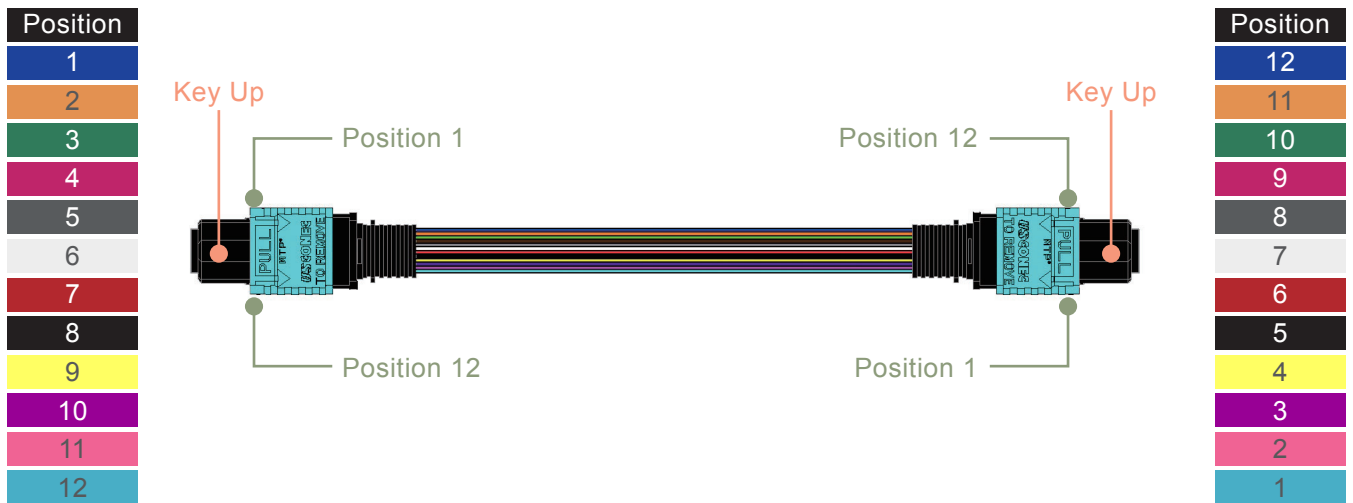


ANSI/TIA-568 is a set of telecommunications standards from the Telecommunications Industry Association (TIA). The standards address commercial building cabling for telecommunications products and services. Molex MPO fiber polarity fully comply ANSI/TIA-568 standards.

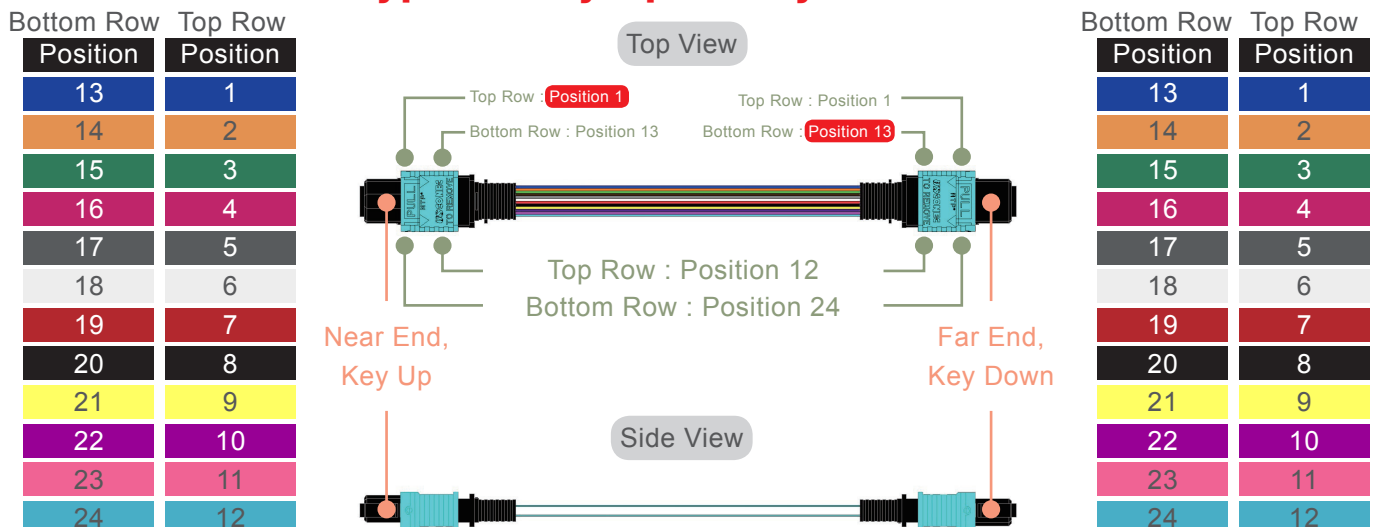
12 Fiber Counts Type A (Key-up to Key Down)



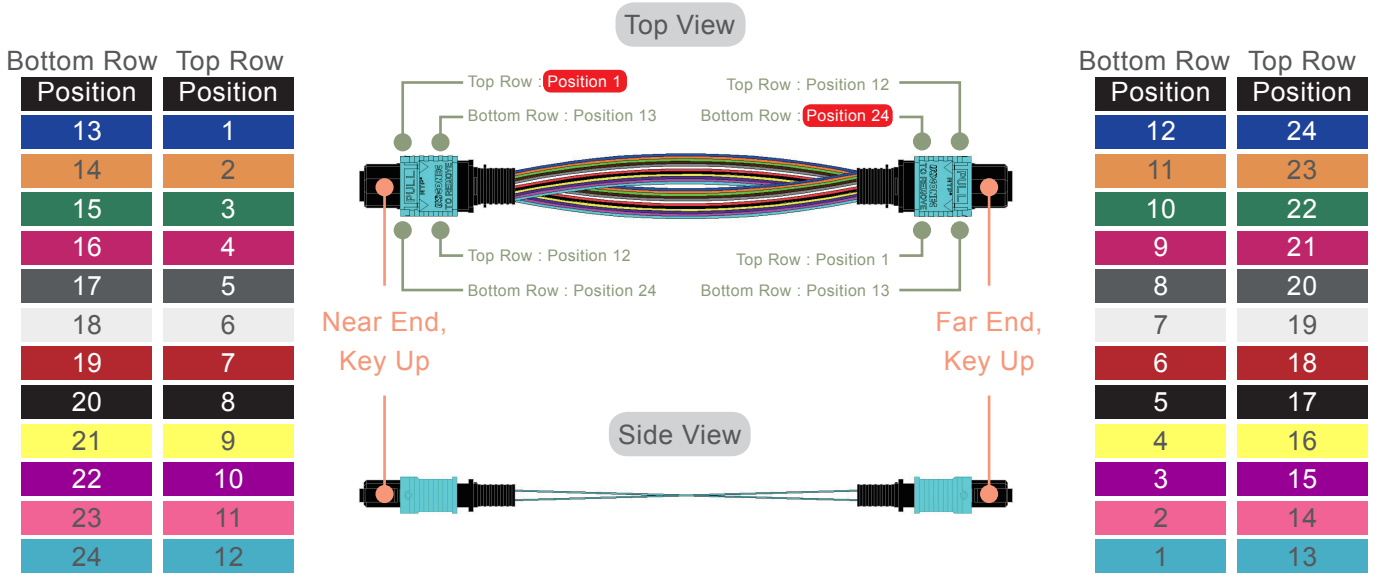
12 Fiber Counts Type B (Key-up to Key up)



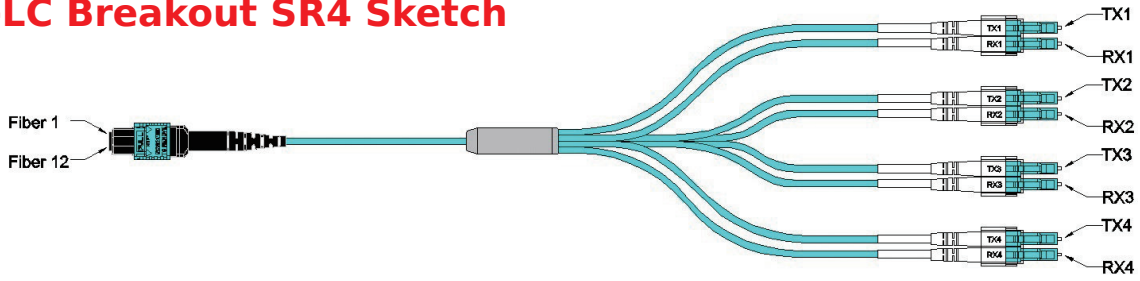
24 Fiber Counts Type A (Key-up to Key Down)



24 Fiber Counts Type B (Key-up to Key up)

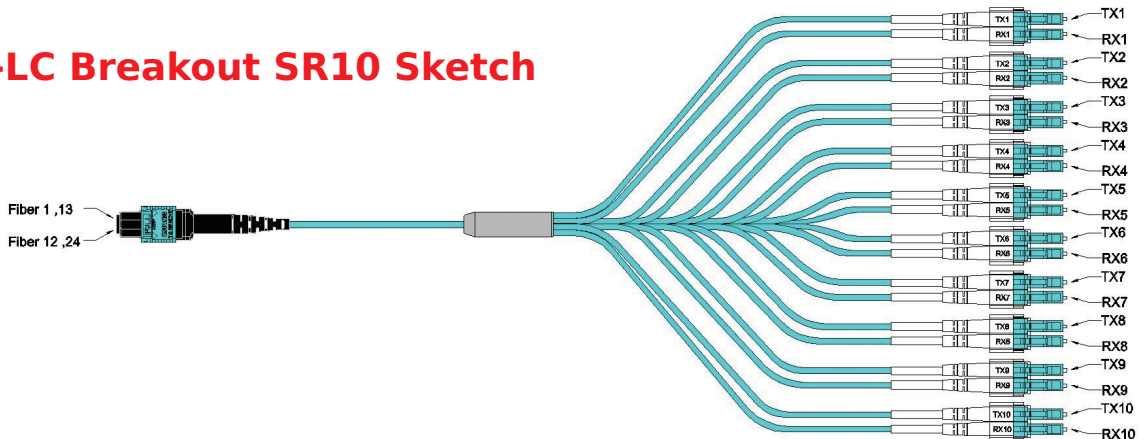


MPO-LC Breakout SR4 Sketch



MPO	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12
Fiber	Blue	Orange	Green	Brown	Slate	White	Red	Black	Yellow	Violet	Rose	Aqua
LC	RX1	RX2	RX3	RX4	---	---	---	---	TX4	TX3	TX2	TX1

MPO-LC Breakout SR10 Sketch



MPO	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12
Fiber	Blue	Orange	Green	Brown	Slate	White	Red	Black	Yellow	Violet	Rose	Aqua
LC	---	TX1	TX2	TX3	TX4	TX5	TX6	TX7	TX8	TX9	TX10	---

MPO	P13	P14	P15	P16	P17	P18	P19	P20	P21	P22	P23	P24
Fiber	Blue	Orange	Green	Brown	Slate	White	Red	Black	Yellow	Violet	Rose	Aqua
LC	---	RX1	RX2	RX3	RX4	RX5	RX6	RX7	RX8	RX9	RX10	---

MPO Trunk Cables

MPO trunk cables are designed for data center solutions supporting the topologies as specified in the data center standards EN50173-5. The MPO multi-fiber trunk cables are terminated with different fiber mode, fiber counts, customized cable configuration. 24 fiber to 144 fiber counts, 10G, 40G and 100G configurations are available. Complied with the standard TIA-568C it is widely used in the pre-terminated system of the IDC and block. It is also available to the updated system for 40G/100G in the future. MPO trunk cable helps to fasten installation for data center and other fiber optic environment. Its efficient plug and play structure which can significantly lower the installation and daily maintenance costs surpasses MDA, HDA and EDA regional module cassette or fan-out fiber connections.



- Easier upgradability to 40G and 100G with MPO pre-term solutions
- Faster installation with pre-terminated solutions
- Reel and default pulling eye for easier installation
- IEC 60794, TIA/EIA-568 compliant
- SM/OM3/OM4 cables are available

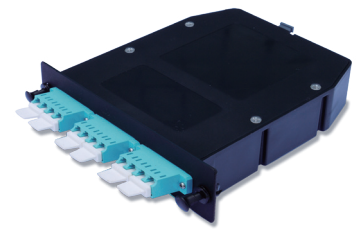
Characteristic		48F (12Fx4)	72F (12Fx6)	96F (12Fx8)	144F (12Fx12)
Fiber Type		Corning G652D / OM3 / OM4 or Equivalent			
Dispersion(ps/(mm.km))		≤ 18@1550nm / ≤ 22@1625nm			
Fiber Attenuation		≤ 0.35dB@1310nm / ≤ 0.25@5505nm			
Max Load (N)		Long term 200 / Short term 660			
Outer Jacket Diameter (mm)	Indoor	10.0±0.2	11.6±0.5	12.0±0.5	18.6±0.5
	Outdoor	11.0±0.2	12.6±0.5	15.0±0.5	18.6±0.5
Outer Jacket Material	Indoor	OFNP			
	Outdoor	PE			
Outer Jacket Color		Yellow / Black / Aqua			
Inner Jacket Diameter (mm)		3.0±0.1			
Inner Jacket Color		Yellow / Aqua			
Cable Attenuation		≤ 0.4@1310nm / ≤ 0.3@1550nm			
Operating Temperature	Indoor	-20°C ~ +75°C			
	Outdoor	-40°C ~ +85°C			
Storage Temperature		-40°C ~ +85°C			

Pre-terminated MPO Cassettes

Molex offers a family of pre-terminated MPO modules for high-density data centers. The MPO/ MTP cassette modules provide secure transition between MPO/MTP and LC or SC discrete connectors. They are used to interconnect MPO/MTP backbones with LC or SC patching Pre-terminated and tested, these MPO modules provide instant field connections with guaranteed quality and performance.

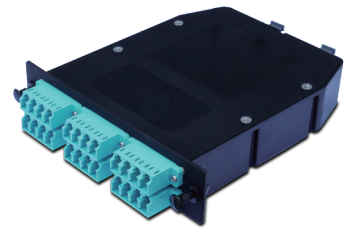
MPO cassette are available for 8/12/24 MPO-LC/SC with SM and OM3 / OM4 options. For standard LGX MPO cassette, Molex offer plastic and metal box. It is compatible with Molex 1864800 enclosure series. Modular system allows for rapid deployment of high density data center infrastructure as well as improved troubleshooting and reconfiguration during moves, adds and changes.

- Pre-terminated and pre-tested module
- Plastic LGX Box with 12F MPO to LC/SC
- Compatible with Molex 1864800 series & LGX bracket
- Designed for 10G/40G/100G system migration
- TIA-568 Polarity A (Default), B or C



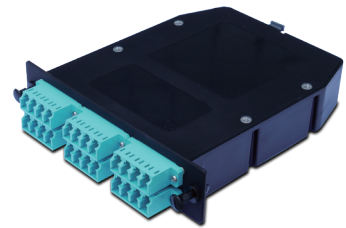
PN: 106481010x Series

- Pre-terminated and pre-tested module
- Plastic LGX Box with 1*24F MPO to LC
- Compatible with Molex 1864800 series & LGX bracket
- Designed for 10G/40G/100G system migration
- TIA-568 Polarity A (Default), B or C



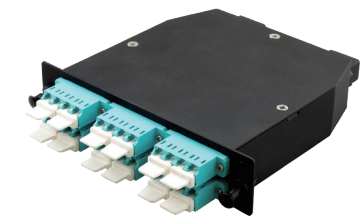
PN: 106481011x Series

- Pre-terminated and pre-tested module
- Plastic LGX Box with 2*12F MPO to LC
- Compatible with Molex 1864800 series & LGX bracket
- Designed for 10G/40G/100G system migration
- TIA-568 Polarity A (Default), B or C



PN: 106481011x Series

- Pre-terminated and pre-tested module
- Metal LGX powder coating box with 1*12F MPO to LC/SC
- Compatible with Molex 1864800 series & LGX bracket
- Designed for 10G/40G/100G system migration
- TIA-568 Polarity A (Default), B or C



PN: 106481012x Series

Capacity of Standard LGX MPO Cassette					
PN	Description	Simplex SC Adapter	Duplex LC Adapter	Quad LC Adapter	Dimension (mm)
106481010x	12 port plastic box	8 Port	12 Port	12 Port	130 x 125 x 28.8
106481011x	24 port plastic box	-	-	24 Port	130 x 125 x 28.8
106481012x	24 port metal box	-	-	24 Port	130 x 105 x 28.8

Pre-terminated High-Density Cassettes

Molex high density cassette are specifically designed to meet high density enclosure and cable management system. The maximum connector capacity allows 24 LC fiber port and each series of HD cassette have special pluggable pin for easy installation. The MPO/ MTP cassette modules provide secure transition between MPO/MTP and LC discrete connectors. They are used to interconnect MPO/ MTP backbones with LC patching Pre-terminated and tested, these MPO modules provide instant field connections with guaranteed quality and performance. MPO cassette are available for 12/24MPO-LC with SM and OM3/OM4 options. Modular system allows for rapid deployment of high density data center infrastructure as well as improved troubleshooting and reconfiguration during moves, adds and changes.

- Pre-terminated and pre-tested module
- Metal box with quad LC adapter support 12 LC output
- Apply to Molex 186480001 High Density enclosure
- Designed for 10G/40G/100G system migration
- TIA-568 Polarity A (Default), B or C



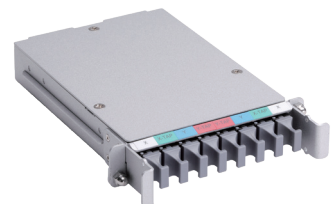
PN: 106481000x Series

- Pre-terminated and pre-tested module
- Metal box with simplify LC adapter support 24 LC output
- Apply to Molex 186480002 Super High Density enclosure
- Designed for 10G/40G/100G system migration
- TIA-568 Polarity A (Default), B or C



PN: 106481001x Series

- Pre-terminated and pre-tested module
- Metal box with MPO adapter support 8 MPO output
- Apply to Molex 186480003 Super High Density enclosure
- Designed for 10G/40G/100G system migration



PN: 106481002x Series

Capacity of High Density Cassette					
PN	Description	Quad LC Adapter	Simplify LC Adapter	MPO Adapter	Dimension (mm)
106481000x	HD 12F LC Cassette	3	-	1	149 x 85 x 11.5
106481001x	SHD 24F LC Cassette	-	12	2	137 x 80.5 x 18
106481002x	MPO Tap Tray	-	-	8	137 x 80.5 x 18
106481003x	LC Tap Tray	-	12	-	137 x 80.5 x 18

Turnkey Box

Molex Turnkey Box aims to provide total solution of optical fiber data center. It offers well designed optical fiber enclosure box with prefabricated cabling system for customers. With variety of enclosure box and interconnectivity, customer is able to purchase customized optical enclosure with pre-assembly cable management all at once. Moreover, Molex professional R&D team will ensure each turnkey box has best quality and meets customers' requirements. Turnkey box saves time and budget of installation of data center as well as ensure the consistency of quality of installation.

Molex provides customized design service for customers. Each enclosure box has great functionality and quality which offers great protection for cables as well as organized cable management. Customer can choose from 12C to 576C, 1RU to 4RU, wall mounted, outdoor enclosure box for different applications.



Molex offers variety of pre-assembly cable. Each optical cable is pre-assembled by professional engineers with high quality and quick lead time. Thus, customer saves time on installation.

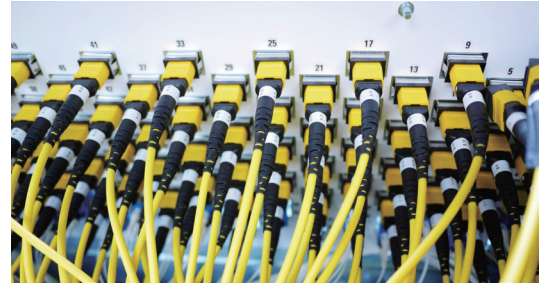
Each turnkey box will be cabling in factory per customer's requirement. This product can be used directly when it reaches the site without tedious assembly work. Thus, it makes installation more efficiently and economically.



Cable Assembly

Molex optical jumper cable is designed for interconnection for all optical systems or components. Molex offer a wide range of industrial standard jumper cables with various fiber and fiber jacket types, connectors, and lengths. With our highly integrated design and manufacturing capability, Molex can also provide customized products to help our customer for better opportunities. Our jumper cable complies with industry green initiative such as RoHs.

- Various option of fiber and connector types and lengths
- Environmental green plan compliance
- High reliability and stability
- 100% geometry inspection
- GR-326 CORE compliant



Parameters	Note	S Grade (Low Loss)	P Grade (Standard)	Unit
Operating Wavelength	Single-Mode	1260~1620		nm
	Multi-Mode	850 & 1310		
Insertion Loss (PC/UPC Type)	Single-Mode	0.15	0.25	dB
	Multi-Mode*		0.30	
Insertion Loss (APC Type)	Single-Mode		0.30	dB
Return Loss	Single-Mode PC Type	45		dB
	Single-Mode UPC Type	50		
	Single-Mode APC Type	60		
	Multi-Mode	35		
Connection Durability		500		Mating
Connector Repeatability		0.2		dB
Operating Temperature		-20 ~ 70		°C
Fiber Type	Single Mode Fiber	SMF-28		
	Multi-Mode Fiber	50/125 μm		
		62.5/125 μm		

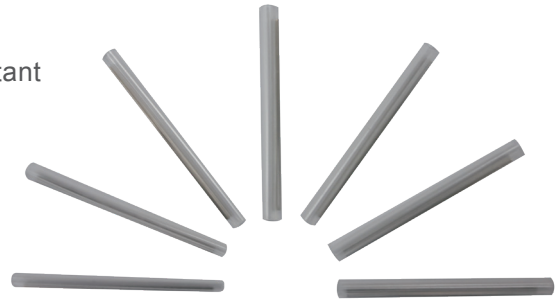
The cable management accessories can help you get your work area organized and increase your productivity. Choose appropriate accessories, your equipment and space will be easier to use and to keep tidy and clean.

Accessories for Cable Management

Molex provides full series of fiber protection sleeves for optical fiber splice protection in field fiber splicing assembly, manufacturing, and optical fiber closure applications. The protection sleeves are categorized as single fiber and ribbon fiber type, and they are using different reinforcement rods.

Protection Sleeve

- Inner sleeve ethylene vinyl acetate provide moisture resistant barrier after shrinkage
- Tension Member Stainless Steel Rod
- Min. shrink temperature 90°C (194° F)
- Working temperature: -55°C ~ +100°C
- Compliance with Telcordia GR-1380-CORE



Item	Outer Tube	Inner Tube	Steel Rod	Unit
Singer Fiber	POLYULEFIN	EAA	SUS 304	---
Ribbon Fiber	POLYULEFIN	EAA	CERAMIC	---
Operation Temp.Range		-55~105		°C

Molex offers 3 sizes of adaptor panel for fiber termination enclosures. They can be provided by various types of adaptor footprints with required quantity. Silk screen number printing service is available for customization products with minimum order quantity

Adapter Panel

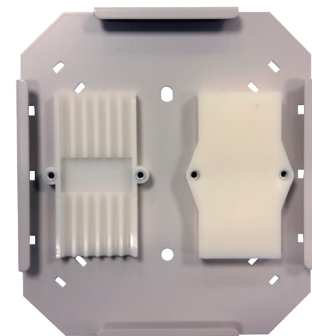
- Modular construction
- Available in SC, LC, FC, ST, and dummy panels
- Nylatch Attachment, easy installation
- Aluminum sheet panel



Molex offers fiber splice tray for standard FTR, FCP, and FTB enclosures. A single splice tray can be installed with 2 tube holders which can hold up to 16pcs of fiber splices in total.

Splice Tray

- Modular fiber splice holder
- Minimum fiber bending radius maintained
- Easy installation
- Aluminum sheet panel or plastic options
- 6/12/24 fiber port capacity are available



Molex offers cable routing spool for fiber enclosure, the spool can be installed into all Molex standard fiber enclosures for extra cable length storage

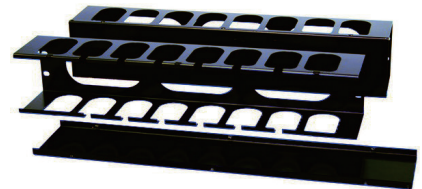
Cable Management Spool

- Flame retardant plastic 94V-0 high impact resistance at low temperature
- Minimum bending radius 40mm
- Two halves spool design, flexible to store required excess cable, by adjusting the location of spools
- Operating temperature: -20°C ~ +80°C



Others

- Universal Rack Mount 1.5" Grommet
- Patch Cord Bend Radius Bracket
- IP 68 Cable Gland
- Sealing hole cable Gland



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