

Adapter Panel

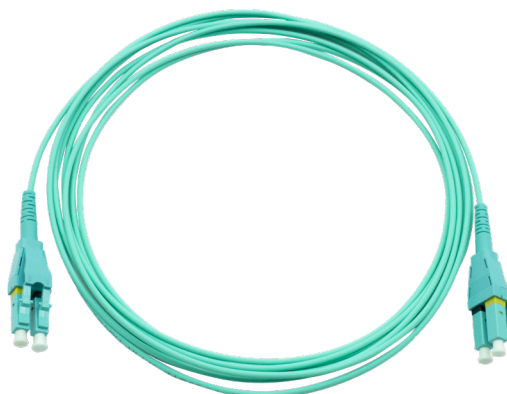


The adapter panel provides fast and efficient port management for MTP/MPO or LC/SC connectors. It is applicable for next-generation high-density data center solutions. The panel reaches the connection and deployment of the patch cords and pigtails between the devices and patch panels. The panel is used with the field mounting connectors, or with the pre-terminated cables device to the interconnect hardware.

FEATURES

- High-density ports, single adapter panel Configurable with 24 IP adapter ports or 6 SC adapter ports or 6 MPO / MTP adapter ports;
- High-quality cold-rolled steel, compliant with European ROHS standards;
- Clear connector coding mark;
- Flexible structure, adapter port configuration can be flexibly selected;
- Applicable to all types of industrial standard adapters;
- Cartridge installation for easy installation;
- Easy to upgrade to 40G / 100G network without changing the fiber management structures;
- Compliant with TIA / EIA604-D-2007, IEC61754-7-2008 series;

Switchable Duplex LC Uniboot Fiber Optic Patch Cord



Duplex Uniboot connector patch cord is designed by **Adtechfiber**. This highly flexible duplex cable reduces cabling congestion and improves patch cord management and installation,. This it improves cabling space

FEATURES

- Fiber polarity A -> A or A -> B can be switched by installer
- Thin round cable;
- Duplex connectors with single boot which is highly integrated and easy for installation;
- Standard compatible, simplex / duplex LC connectors. Other options: SC / FC;
- High performance, 100% tested;
- Fiber type: OFNR, OFNP
- Customized patch cord length
- Two notches on the connectors for easy for installation and uninstallation;
- Mini and flexible boot is available. Boot can be turned to any angle;
- Quick deployment reduces installation time;
- Fast upgrading supports parallel transmission system;
- Outer jacket material, PVC, LSZH and other materials selection

	Single mode	Multimode
Insertion Loss	$\leq 0.30\text{dB}$	$\leq 0.30\text{dB}$
Return Loss	$\geq 50\text{ dB (PC)}$ $\geq 60\text{ dB (APC)}$	/
Durability	$< 0.20\text{ dB}$ typical change, 1000 matings	/
Operating Temperature	$-40\text{ to }+85^{\circ}\text{C}$	

High Density LC Duplex Uni-boot Patch-Cord



This High Density LC Duplex Uni-boot Patch-Cord is available for high-density fiber patch panels. The highly flexible duplex cable reduces cable congestion and can be plug in and out of the panel easily and quickly so that it improves management and installation convenience.

FEATURES

- Thin round cable;
- Duplex LC with latched uniboot, easy for plug in and out among panels;
- Standard compatible, duplex LC connectors;
- High transmission, 100% tested under IEC standards
- Quick deployment reduces installation time;
- Fast upgrading supports parallel transmission system;
- Outer jacket material, PVC, LSZH and other materials selection
- Fiber type: ODNr, OFNP
- Customized patch cord length

	Single mode	Multimode
Insertion Loss	$\leq 0.30\text{dB}$	$\leq 0.30\text{dB}$
Return Loss	$\geq 50\text{ dB (PC)}$ $\geq 60\text{ dB (APC)}$	/
Durability	$< 0.20\text{ dB}$ typical change, 1000 matings	/
Operating Temperature	$-40\text{ to }+85^{\circ}\text{C}$	

LC Uniboot Connector with Up-down Tool

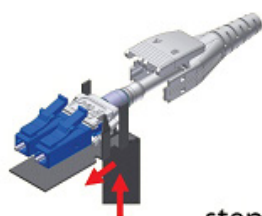


The LC Uniboot Connector with Up-Down tool combines a simple installation and removal process with space utilization efficiency. The compact design and easy, A/B polarity reversible function of the LC Connector makes managing cable systems simpler, while the seamless latching mechanism ensures a stable connection. Used for single, multi-mode and APC applications, the practical design of the LC Uniboot Connector makes it easy to engage and disengage from even the most compact panels.

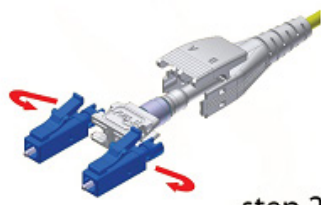
FEATURES

- Array connectors with high precision low loss MTP / MPO connectors;
- Smooth upgrading to next generation data center of 40GbE and 100GbE;
- Outer jacket material option: PVC, LSZH and other selected materials;
- Cable flammability rating: OFNR, OFNP, LSZH.

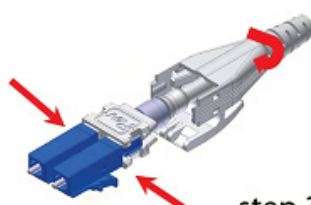
Item	Specification	
	Single mode	Multimode
Insertion Loss	$\leq 0.30\text{dB}$	$\leq 0.30\text{dB}$
Return Loss	$\geq 50\text{ dB (PC)}$, $\geq 60\text{ dB (APC)}$	/
Durability	$< 0.20\text{ dB}$, 500 matings	/
Operating Temperature	$-40\text{ to }+85^{\circ}\text{C}$	$-40\text{ to }+85^{\circ}\text{C}$



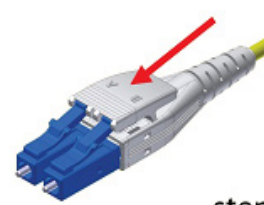
step 1



step 2



step 3



step 4

MTP / MPO-LC 40G to 4x10G Patch Cord



The fan-out is applied to connect 12-core MTP / MPO connector to the LC connectors on the trunk cable.

Adtechfiber provides both standard and customized branch lengths. When the network equipment is close to MTP patch panel frames, the length of fan-out patch cords are minimized. For the hardware and equipment in the same cabinet, the longer patch cords can provide flexibility at any location, and the branch cables can be wound into the vertical cable organizer.

FEATURES

- Array connectors with high precision low loss MTP / MPO connectors;
- Smooth upgrading to next generation data center of 40GbE and 100GbE;
- Outer jacket material option: PVC, LSZH and other selected materials;
- Cable flammability rating: OFNR, OFNP, LSZH.

	Single mode		Multimode	
	MTP/MPO	LC	MTP/MPO	LC
Insertion Loss	Low loss $\leq 0.35\text{dB}$	$\leq 0.3\text{dB}$	Low loss $\leq 0.35\text{dB}$	$\leq 0.3\text{dB}$
	Standard Loss $\leq 0.7\text{dB}$		Standard Loss $\leq 0.5\text{dB}$	
Return Loss	$\geq 60\text{dB}$	$\geq 50\text{dB}$	$\geq 30\text{dB}$	$\geq 30\text{dB}$
Durability	<0.2typical change, 500 matings			
Operating Temperature	-40 to + 85°C			

40G / 100G MTP / MPO Trunk Fiber Optic Cable Patch Cord



Pre-terminated trunk cable can be from 4 to 144 cores with 8/12-pin MTP connector at both ends. High-quality cable and MPO kits guarantee low insertion loss and high return loss for high-speed network. Its efficient plug-and-play structure greatly reduces the initial installation and routine maintenance costs.

Pre-terminated trunk cables can also be used with plug-and-play modules or MTP / MPO connector panels to achieve multi-level connection of the extension of the pre-terminated trunk cable can also be extended by MTP/MPO panel with plug-and play module. The extended trunk cable is to be connected with another panel or fan-out patch cords.

FEATURES

- Array of connectors with high precision low loss MTP / MPO connectors;
- MTP/MPO connectors has been assembled at both ends of the cable. The optical performance is 100% tested.
- A B C three polarity wiring options can be chosen from;
- sufficient capacity can provide 4-144 cores fiber connections;
- Cable flammability rating: OFNR, OFNP, LSZH.

- The length of customized cable, trunk cable, extension cable, branch cable can be accurate;
- Traction tube is the optional for easy on-site installation;
- Minimize failures and reduces cabling space and installation time;
- Smooth upgrading to next generation data center of 40GbE and 100GbE;
- Outer jacket material option: PVC, LSZH and other selected materials;

	Single mode	Multimode
Insertion Loss	Low loss $\leq 0.35\text{dB}$	Low loss $\leq 0.35\text{dB}$
	Standard Loss $\leq 0.7\text{dB}$	Standard Loss $\leq 0.5\text{dB}$
Return Loss	$\geq 60\text{dB}$	$\geq 30\text{dB}$
Durability	<0.2typical change, 500 matings	
Operating Temperature	-40 to + 85°C	
40G	8 Fiber	
100G	20 Fiber	

OM5 Product Series



The OM5 fiber has been approved as a new multimode optical fiber for high-speed data center applications. and is designed to support at least four low-cost wavelengths in the 850-950 nm range, enabling optimal support of emerging Shortwave Wavelength Division Multiplexing (SWDM) applications that reduce parallel fiber count by at least a factor of four to allow continued use of just two fibers (rather than eight) for transmitting 40 Gb/s and 100 Gb/s and reduced fiber counts for higher speeds. SWDM has many applications in Data Centers and other applications. OM5 cabling fully compatible and intermateable with OM3 and OM4 cabling. The related OM5 patchcord, Cassette and Panels has attracted wide attention in the industry, and the patchcord cover also all type of fiber connectors

FEATURES

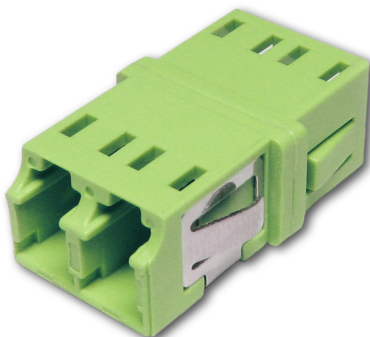
- Wavelength range 850-953 nm
- Low insertion loss and back reflection loss
- High precision alignment
- Good exchangeability
- High temperature stability
- Compatible with OM3 and OM4 patchcord

Application

- Telecommunication networks
- Data Center
- CATV , and Multimedia
- Optical switch interframe connection
- Asynchronous Transmission Mode (ATM)

Item	Specification
Fiber Type	OM5(50 μ m multimode fiber)
Wavelength range	850-953 nm
Jacket Color	Lime Green
Furcation Color	Lime Green
Connector Type	MPO/MTP/LC/SC/FC/customized
Connector Color	customized
Regulatory Compliance	IEC 60793-2-10 /TIA-492AAAE/RoHS/ISO9001
Operating Temperature	-40 to + 85°C

Cassette and Adapter



DX LC Adapter for OM5



DX LC Adapter for OM5



MPO Polarity Changeable Patch-Cord



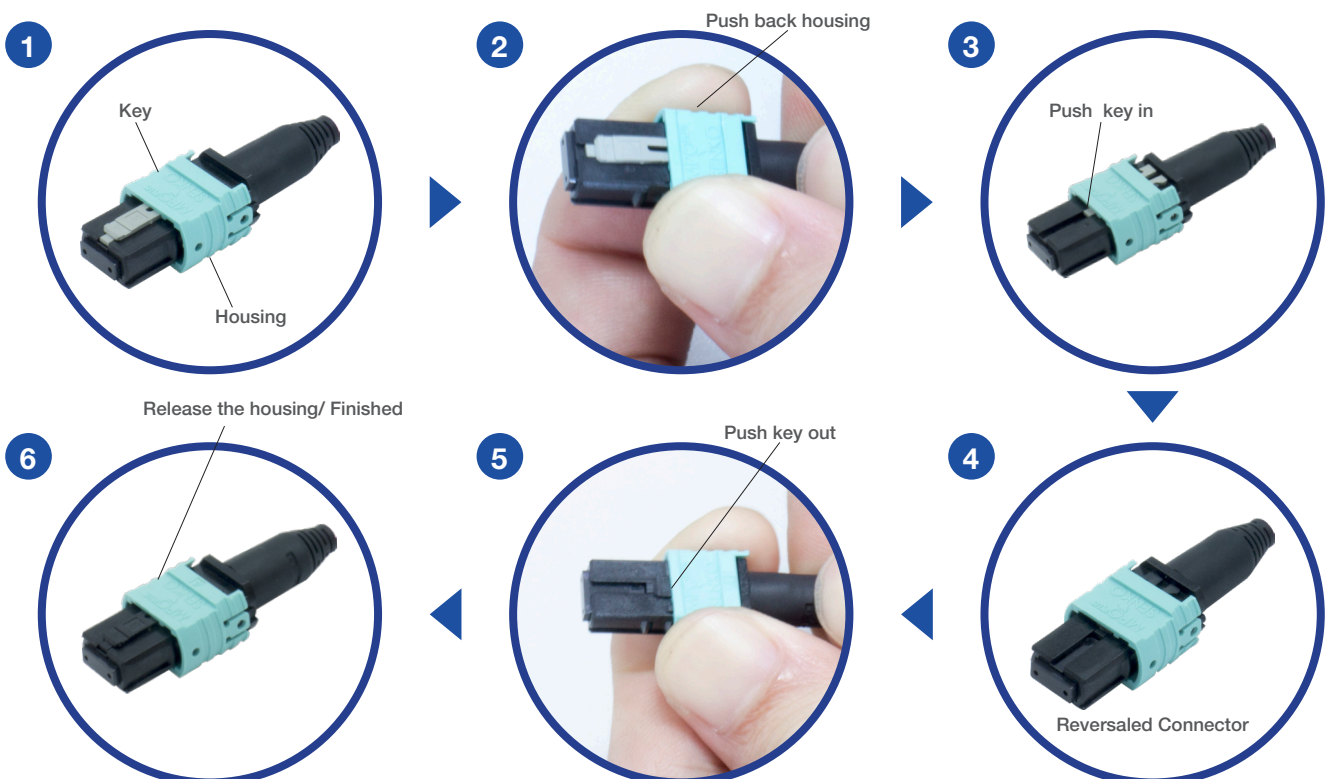
The MPO Switchable Connector is a unique design that allows the use of round style. The housing of the MPO Switchable Connector can be Polarity change in the field without the use of any tool, and simple gender change without taking off the housing. This connector allows the fiber polarity to be switched at the time of cable assembly installation without having to re-terminate the connectors. This design is commonly used in data centers.

FEATURES

- Low insertion loss and back reflection loss
- Polarity change in the field without any tool
- Simple gender change without taking off the housing
- Good exchangeability
- Good Durability
- High temperature stability
- Various boots types available
- Standard: Telcordia GR-1435-CORE compliant

Item	Single mode		Multimode	
	Standard	Low loss	Standard	Low loss
Insertion Loss	≤0.75dB typical≤0.5dB	≤0.35dB typical≤0.2dB	≤0.5dB typical≤0.35dB	≤0.35dB typical≤0.2dB
Return Loss	≥60 dB (APC)		≥30 dB (PC)	
Repeatability	≤0.1 dB			
Durability	≤0.2 dB typical change, 500 matings			
Interchangeability	≤0.2dB			
Tensile strength	>70N			
Operating Temperature	-40 to + 85°C			

Switch Polarity (Sample: Aqua housing/3.0mm short mini boot)



MTP/MPO Polarity Instruction



End A

End B

12Core Patchcord

End A		End B	End A		End B
① blue	→	① blue	① blue	→	⑫ blue
② orange	→	② orange	② orange	→	⑪ orange
③ green	→	③ green	③ green	→	⑩ green
④ brown	→	④ brown	④ brown	→	⑨ brown
⑤ grey	→	⑤ grey	⑤ grey	→	⑧ grey
⑥ white	→	⑥ white	⑥ white	→	⑦ white
⑦ red	→	⑦ red	⑦ red	→	⑥ red
⑧ black	→	⑧ black	⑧ black	→	⑤ black
⑨ yellow	→	⑨ yellow	⑨ yellow	→	④ yellow
⑩ purple	→	⑩ purple	⑩ purple	→	③ purple
⑪ pink	→	⑪ pink	⑪ pink	→	② pink
⑫ aqua	→	⑫ aqua	⑫ aqua	→	① aqua

Polarity A

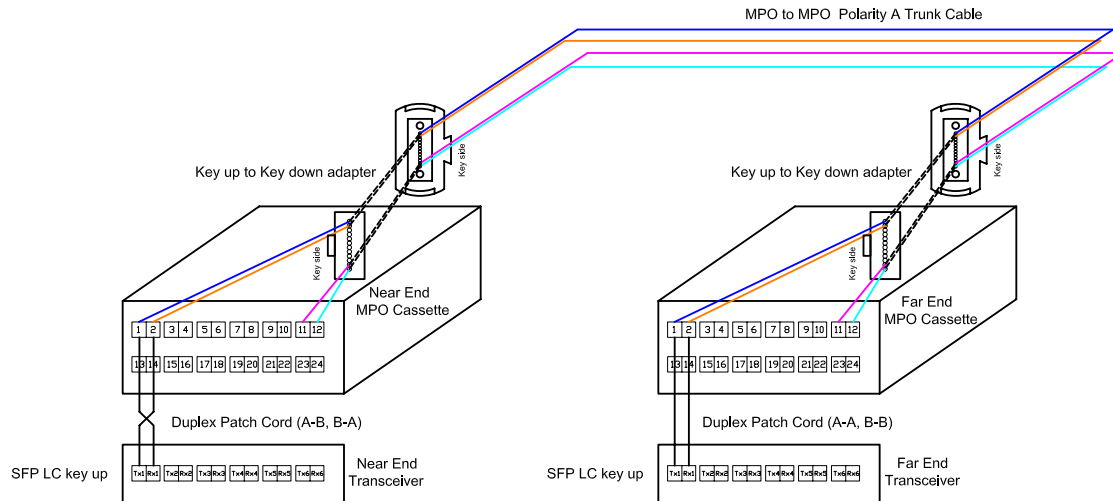
Polarity B

End A		End B
① blue	→	① orange
② orange	→	② blue
③ green	→	③ brown
④ brown	→	④ green
⑤ grey	→	⑤ white
⑥ white	→	⑥ grey
⑦ red	→	⑦ black
⑧ black	→	⑧ red
⑨ yellow	→	⑨ purple
⑩ purple	→	⑩ yellow
⑪ pink	→	⑪ aqua
⑫ aqua	→	⑫ pink

Polarity C

12Core Patchcord

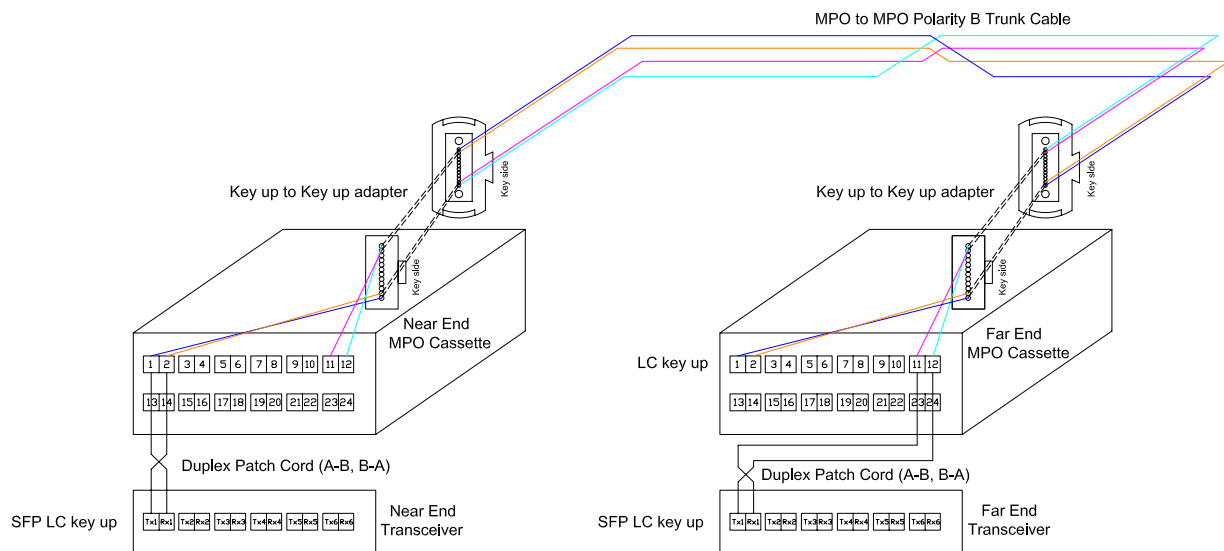
TIA 568-C.3 Method A (Type A)Fiber Polarity



Note:

1. MPO-MPO trunk cable, Polarity A, key up to key down.
2. MPO-LC Cassette, Polarity A, key up to key down MPO adapter.
3. Cassette to cassette fiber sequence 1-1, 2-2, 3-3, 4-9...11-11, 12-12.
3. To ensure TX1 to RX1, near end LC-LC DX patch cord is Polarity A-B, B-A(crossed), far end is polarity A-A, B-B (straight).

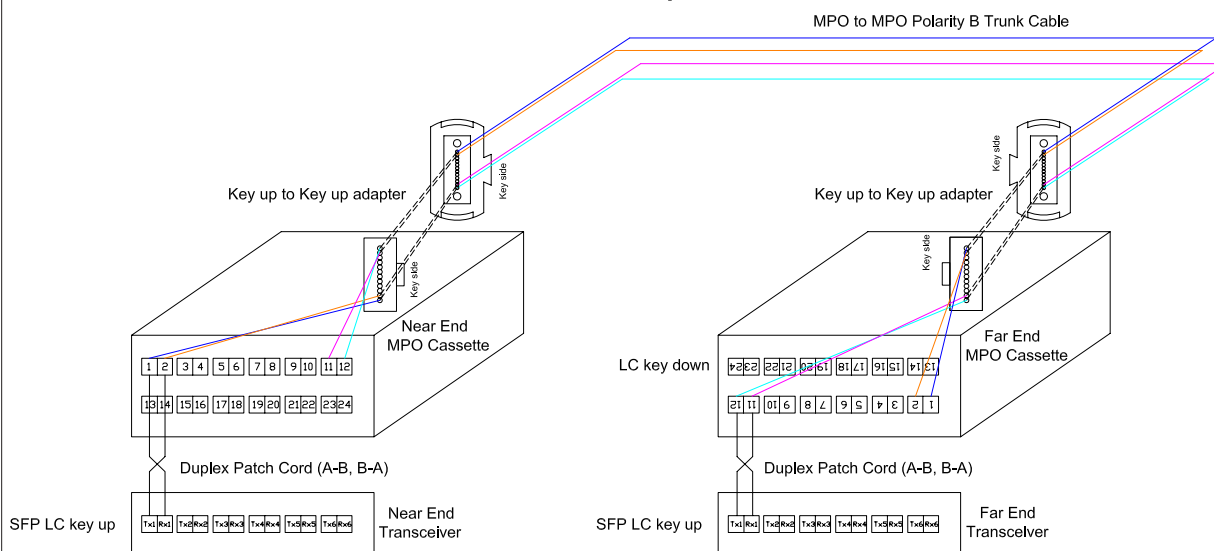
TIA 568-C.3 Method B (Type B)Fiber Polarity Installation Option 1



Note:

1. Installation option 1: Far end MPO cassette LC key up when installing.
2. MPO-MPO trunk cable, Polarity B, key up to key up.
3. MPO-LC Cassette, Polarity B, key up to key up MPO adapter.
4. Cassette to cassette fiber sequence 1-12, 2-11, 3-10, 4-9...11-2, 12-1.
5. To ensure TX1 to RX1, both of near end and far end LC-LC DX patch cords are polarity A-B, B-A(crossed).

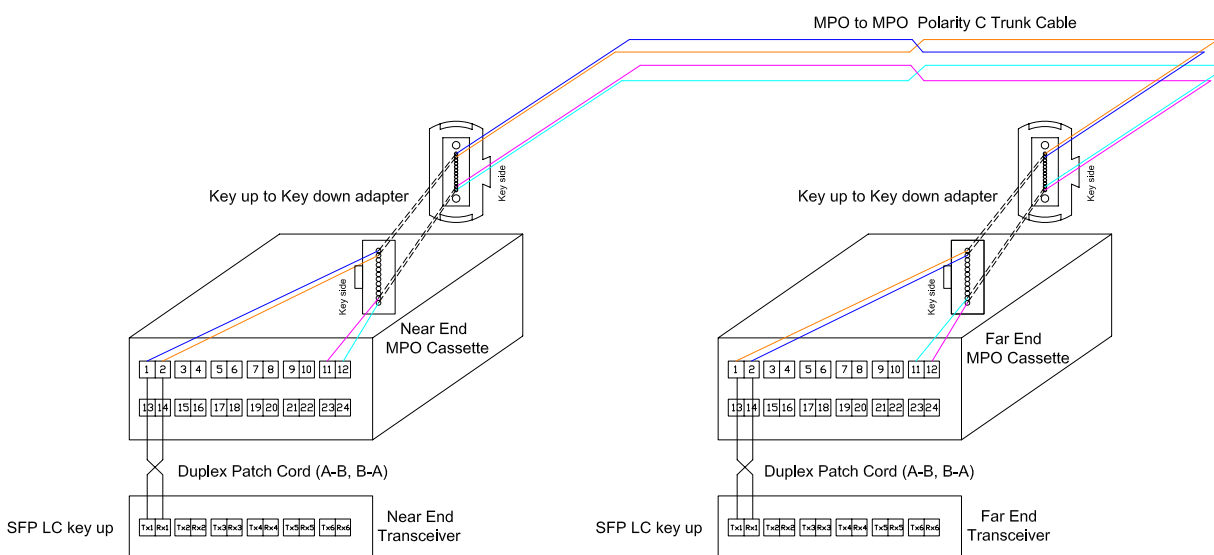
TIA 568-C.3 Method B (Type B) Fiber Polarity Installation Option 2



Note:

1. Installation option 2: Far end MPO cassette LC key down when installing.
2. MPO-MPO trunk cable, Polarity B
3. MPO-LC Cassette, Polarity B. (1-12, 2-11, 3-10, 4-9...11-2, 12-1)
4. To ensure TX1 to RX1, near end and far end LC-LC DX patch cords are polarity A-B, B-A(crossed).

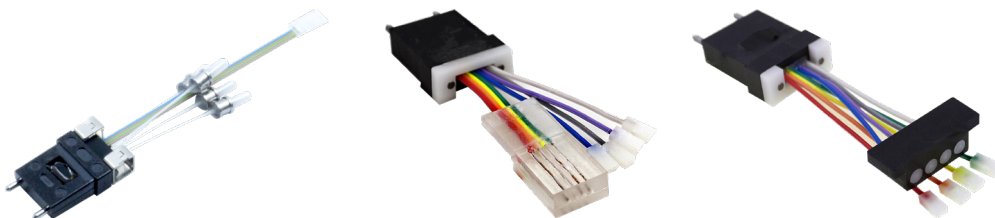
TIA 568-C.3 Method C (Type C)Fiber Polarity



Note:

1. MPO-MPO trunk cable, Polarity C (pair flipped)
2. MPO-LC Cassette, Polarity C(same as polarity A).
3. Cassette to cassette fiber sequence 1-2, 2-1, 3-4, 4-3...11-12, 12-11.
3. To ensure TX1 to RX1, both of near end and far end LC-LC DX patch cords are polarity A-B, B-A(crossed).

MT-SUS



MT-SUS used in the parallel fiber optic module the connection to the optical lens and External Port. We use low loss MT Ferrule, Corning G657A2 or Ultra fiber to achieve low attenuation. Total length's tolerance $\pm 0.15\text{mm}$, MT Ferrule's tolerance $\pm 0.05\text{mm}$, are available to satisfy coupling in small space of the module

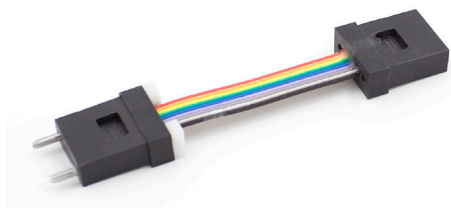
FEATURES

- Transmission rate: 40Gbps/100Gbps
- GR-1435 compliant
- Simple structure easy to locate
- Low cost
- Customized products available

Applications

- QSFP
- SFP+Active Optical cables
- Parallel light optical transceiver module
- Super computers
- Communication
- Military Application
- Data Centers

MT-MT



12-fiber MT-MT patch cords used in the parallel fiber optic module(QSFP+SR4) the connection to the optical lens and External Port. We use low loss MT Ferrule, Corning Clean Curve OM2 or OM3 fiber to achieve low attenuation. Total length's tolerance $\pm 0.15\text{mm}$, MT Ferrule's tolerance $\pm 0.05\text{mm}$, are available to satisfy coupling in small space of the module.

FEATURES

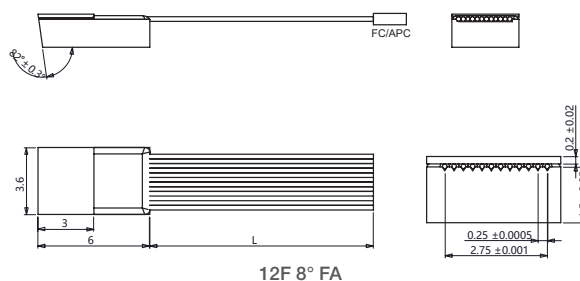
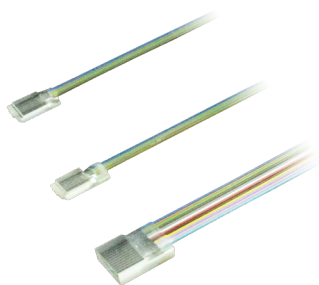
- Transmission rate: 40Gbps/100Gbps
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Applications

- QSFP
- SFP+Active Optical cables
- Parallel light optical transceiver module
- Super computers
- Communication
- Military Application
- Data Centers

Item	SM	MM	Unit
Insertion Loss	0.5	0.35	dB
Return Loss	60	20	dB
Core Diameter	/	/	um
Durability	200		Time
Fiber Type	Corning ZBL	OM3	
Operating Temperature	-20 to +70		°C

FA



FEATURES

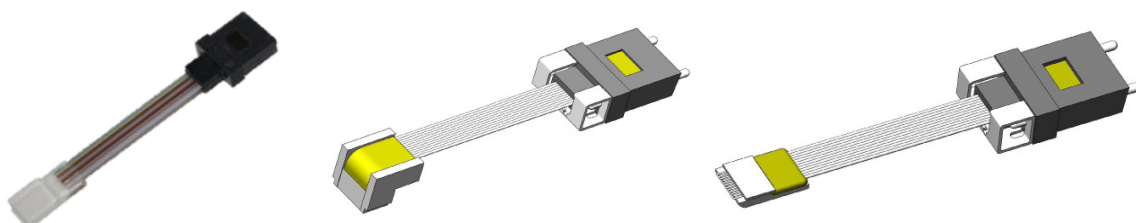
- High-speed, high capacity transmission
- Weight reduction
- Low power consumption
- High quality transmission
- Low loss long-distance transmission

Applications

- MEMS devices
- PLC (Planar Lightwave Chips)
- AWG devices
- Miniaturized or integrated fiber optic components

Material	High Borosilicate/Silica	
Channel	1~128	
Dimension(Min)	V-Groove	LxWxH=4.5mmx2.0mmx0.5mm
	Lid	LxWxH=2.0mmx2.0mmx0.15mm
Surface	Flat/Spherical/Fiber Protrusion 0.2±0.1mm	
Channel Spacing	0.25±0.0005 /0.127±0.0005/Customized	
Fiber Type	Customized	
Angle	0°/8°/16°/42.5°/Customized	
Work Temperature	-40°C~85°C	

MT-FA



MT-FA used in the parallel fiber optic module the connection to the optical lens and External Port. We use low loss MT Ferrule, Corning G657A2 or Ultra fiber to achieve low attenuation. Total length's tolerance $\pm 0.15\text{mm}$, MT Ferrule's tolerance $\pm 0.05\text{mm}$, are available to satisfy coupling in small space of the module

FEATURES

- Transmission rate: 40Gbps/100Gbps
- GR-1435 compliant
- Simple structure easy to locate
- Low cost
- Customized products available

Applications

- QSFP
- SFP+Active Optical cables
- Parallel light optical transceiver module
- Super computers
- Communication
- Military Application
- Data Centers

Parameter	MT-FA Patchcord	MT-45°FA Patchcord
Insertion Loss	Typical:<0.5dB Maximum:<0.7dB	Typical:<0.5dB Maximum:<0.7dB
Fiber type	Typical: 0.20dB	
Return Loss	>20dB	
Durability	500 Matings	
Operating Temperature	-40c to +85c	
Length	20~100mm, and customized length	