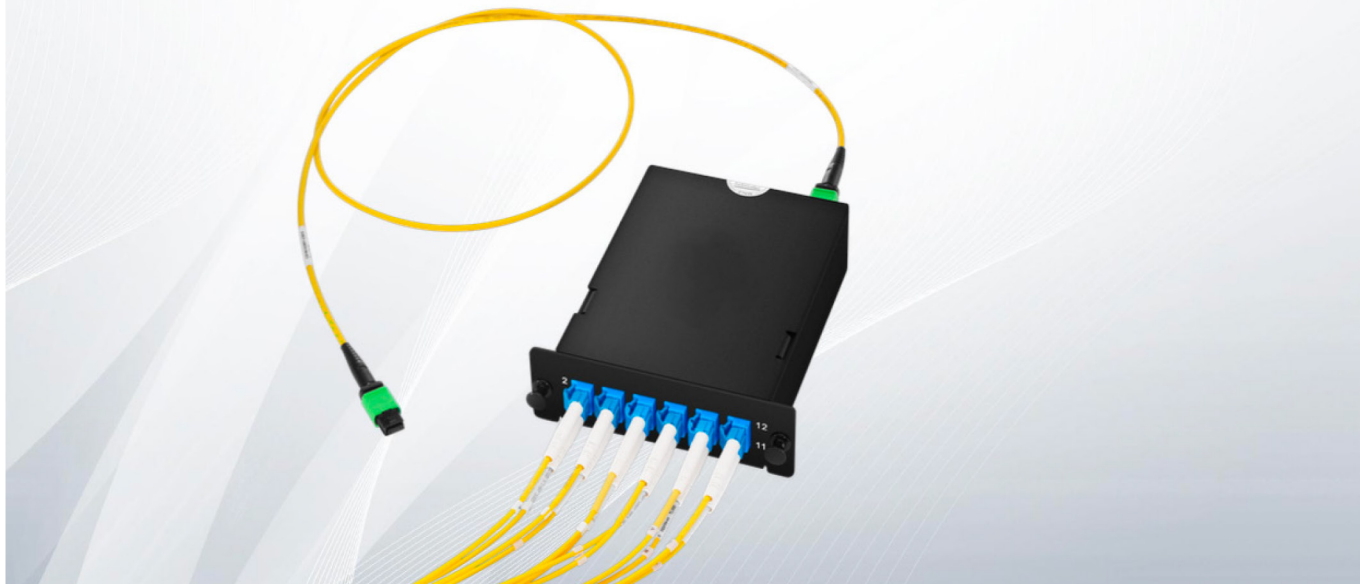


MTP 12/24 CASSETTES DATASHEET

PRE-TERMINATED MODULAR CASSETTE SYSTEM



Products Description

Fiber Optic MTP Cassettes consist of pre-terminated LC, SC, MDC or MTP adapters for quick and easy deployment in high density applications and provide efficient utilization of rack space and design flexibility. The cassettes interconnect with high-density fiber cable assemblies for quick connection of remote or data center applications.

Features

- High-density modular design, up to 96 fibers (LC) in 1U , and up to 192 fibers (LC) in 2U for efficient utilization
- Pre-terminated cassette for improved reliability and quick deployment.
- High performance connectors to achieve a low loss optical budget.
- Plug-N-play modules allow fast installation of multiple fiber links.
- Offered in a wide range of performance and polarity configurations.
- The corning fiber compliant

Applications

- Fiberoptic & copper backbone termination in data closets
- FiberOptic & copper distribution
- FiberOptic & copper horizontal termination
- Fiber to desk applications
- Central Office equipment
- Data-Centers



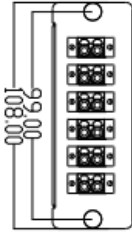
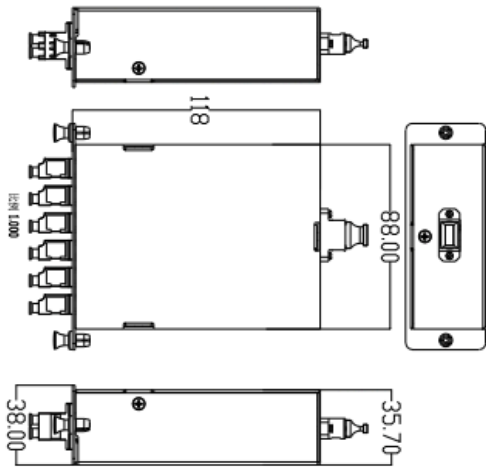
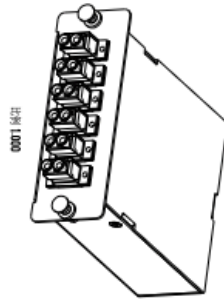
I. Product Constructions

| Parameters | |
|--------------------|--|
| Fiber Count | 12 Fibers/24 Fibers |
| Fiber Mode | Multimode: OM3 50/125μm, OM4 50/125μm, OM5 50/125μm Single Mode: OS2 9/125μm |
| Front Connector | Multimode: LC/SC Duplex (UPC), MTP® Adapter(s) with Male Ferrules (pins) and UPC Polish Single Mode: LC/SC Duplex (UPC/APC), MDC Duplex (UPC), MTP® Adapter(s) with Male Ferrules (pins) and APC Polish |
| Rear Connector | Multimode: MTP® Adapter(s) with Male Ferrules (pins) and UPC Polish Single Mode: MTP® Adapter(s) with Male Ferrules (pins) and APC/UPC Polish |
| Polarity Type | Type A/B/C/Universal |
| Material | Cold Steel |
| Dimensions (HxWxD) | (H) 118 mm X (W) 88 mm, X (D) 35.7 mm. |

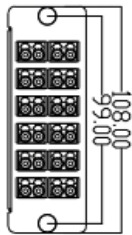
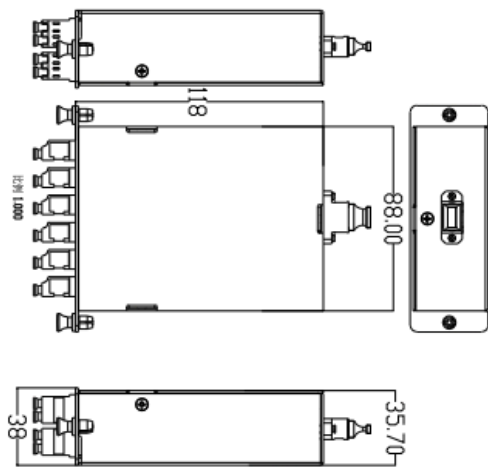
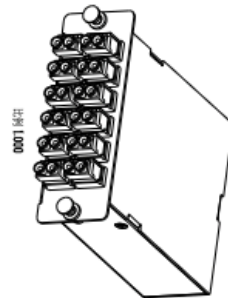
II. Performance Properties

| | |
|----------------------|---|
| Rear Connector | MTP |
| Insertion Loss | Multimode: Stand IL 0.6dB max. Ultra Low IL 0.2dB Max. Single Mode: Stand IL 0.75dB Max. Ultra Low IL 0.2dB Max. |
| Return Loss | Multimode: ≥20dB Single Mode: ≥60dB |
| Connector Durability | MTP Connector Meets TIA/EIA-568.C.3A.4.9 Durability: 500 Mating Cycles |

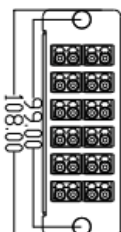
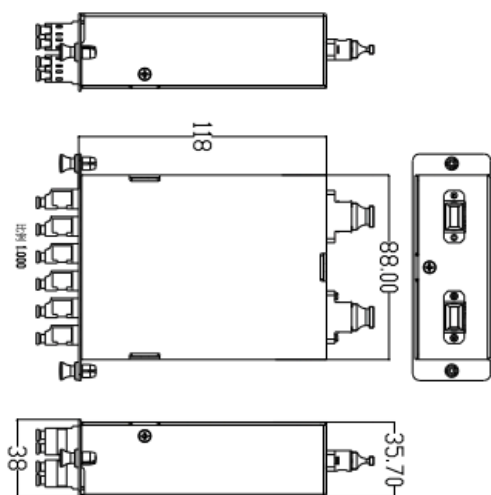
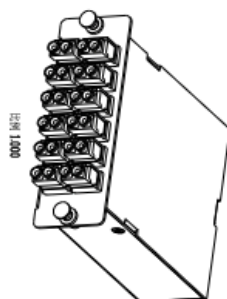
MPO/MTP CASSETTES DATASHEET



6 Port LC DX adapter cassette



12 Port LC DX ADT cassette

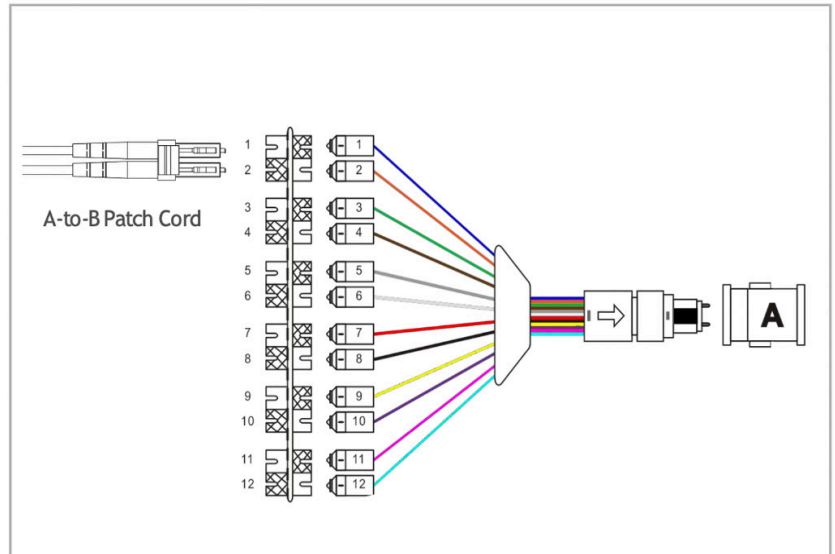


12 Port LC DX ADT cassette

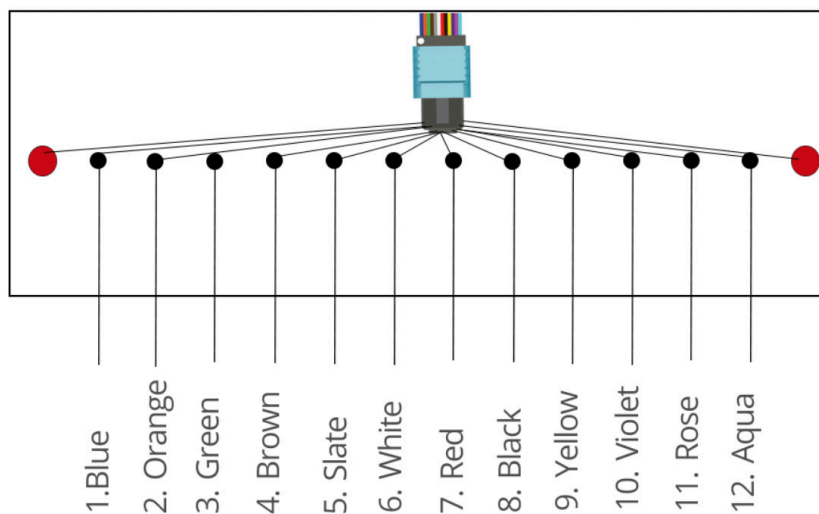
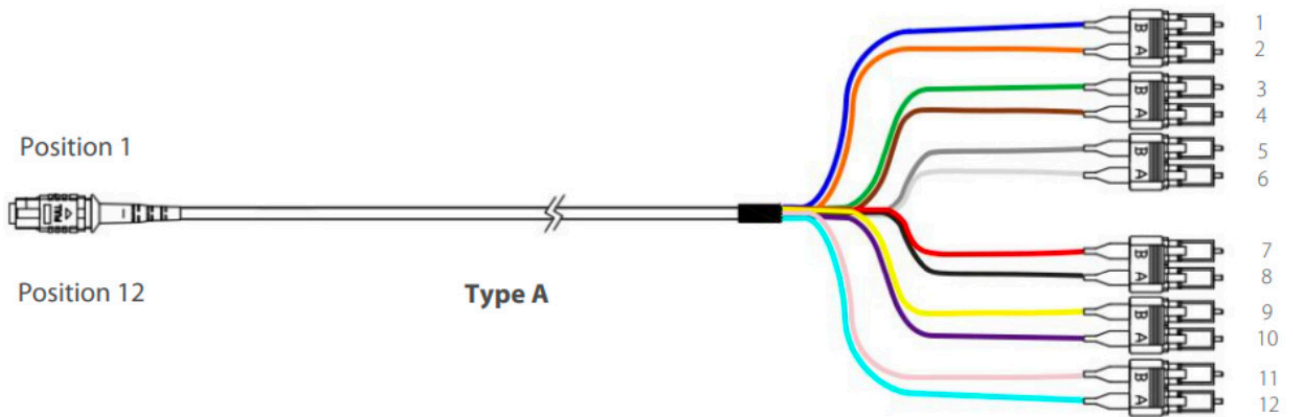


| | | | | | | |
|---------------|---|---|---|---|----|----|
| Port Labeling | 1 | 3 | 5 | 7 | 9 | 11 |
| | 2 | 4 | 6 | 8 | 10 | 12 |

| | | | | | | |
|----------------|---|---|---|---|----|----|
| Inner Sequence | 1 | 3 | 5 | 7 | 9 | 11 |
| | 2 | 4 | 6 | 8 | 10 | 12 |



Pin Assignment

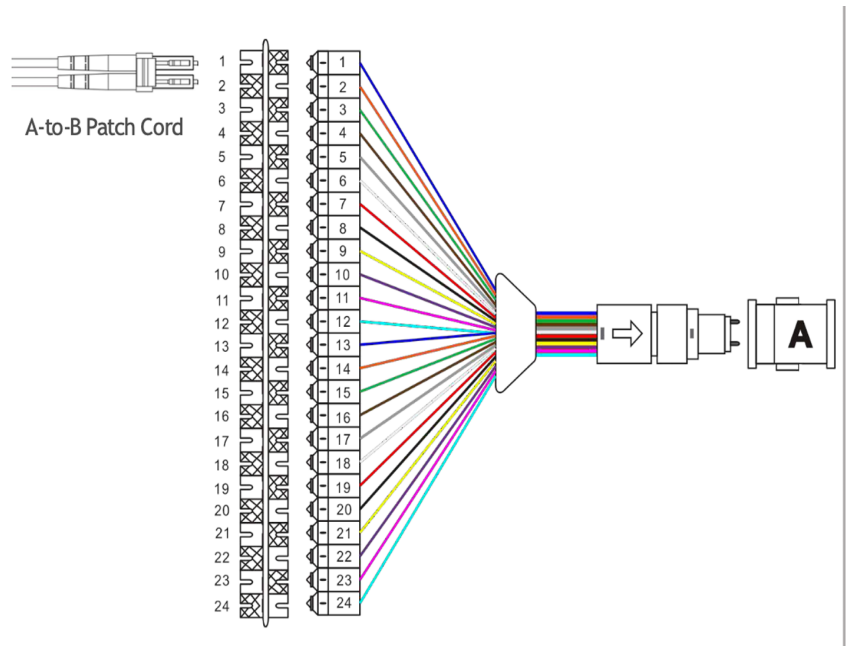


MPO/MTP - 24 Cassette, Type A

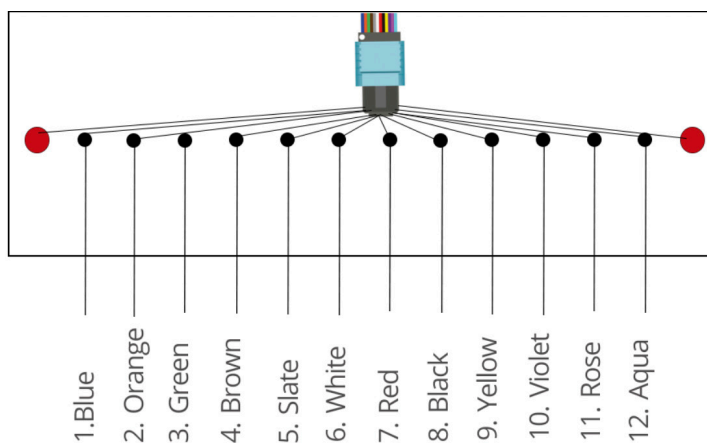
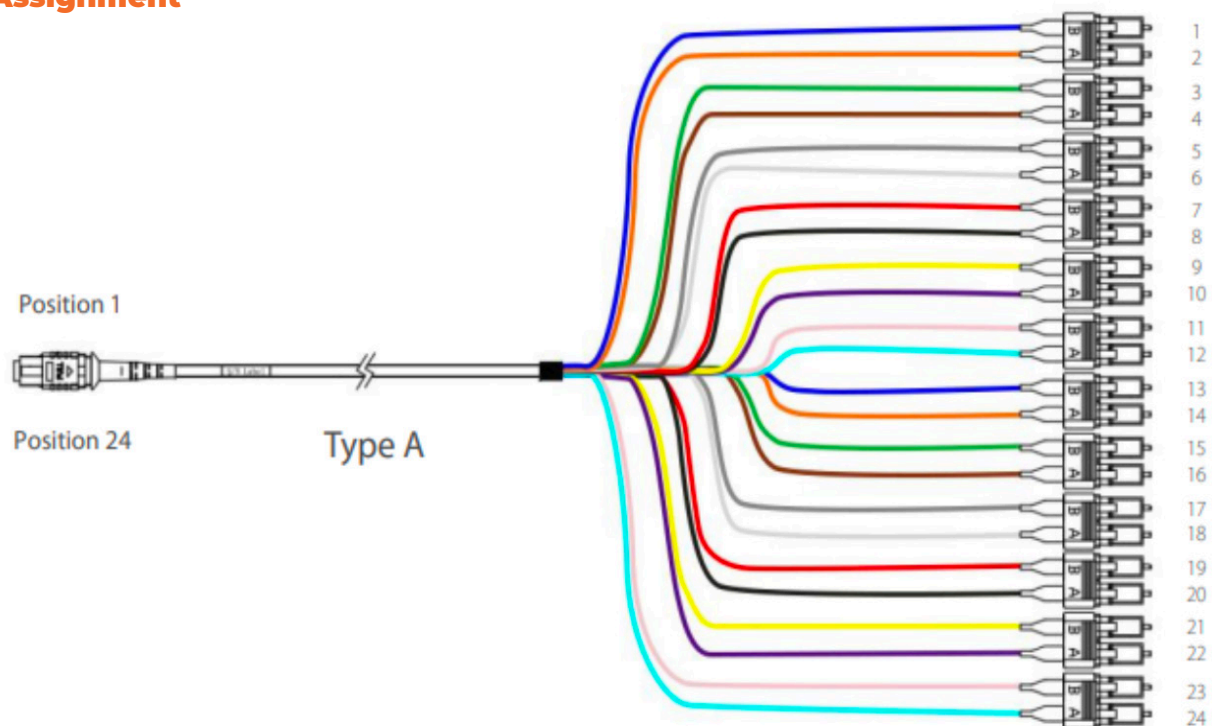


| | | | | | | |
|---------------|----|----|----|----|----|----|
| Port Labeling | 13 | 15 | 17 | 19 | 21 | 23 |
| | 14 | 16 | 18 | 20 | 22 | 24 |
| | 1 | 3 | 5 | 7 | 9 | 11 |
| | 2 | 4 | 6 | 8 | 10 | 12 |

| | | | | | | |
|----------------|----|----|----|----|----|----|
| Inner Sequence | 13 | 15 | 17 | 19 | 21 | 23 |
| | 14 | 16 | 18 | 20 | 22 | 24 |
| | 1 | 3 | 5 | 7 | 9 | 11 |
| | 2 | 4 | 6 | 8 | 10 | 12 |



Pin Assignment



The second sequence is repeated in the same order. (13-24)

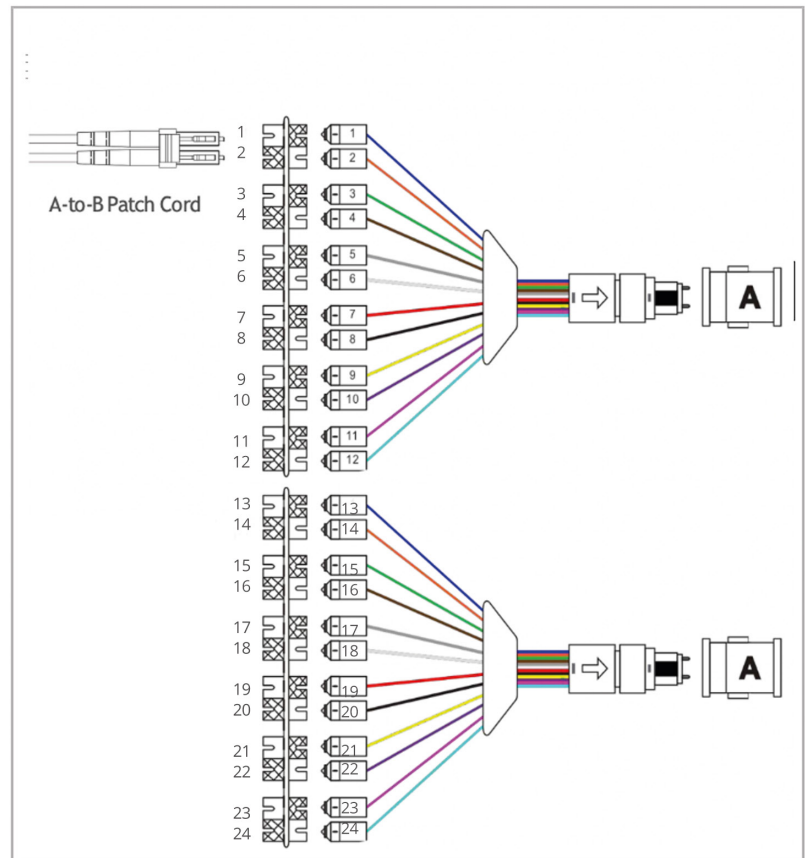
MTP -12 Cassette, Type A

MPO/MTP - 24 Cassette, Type A (2x12)

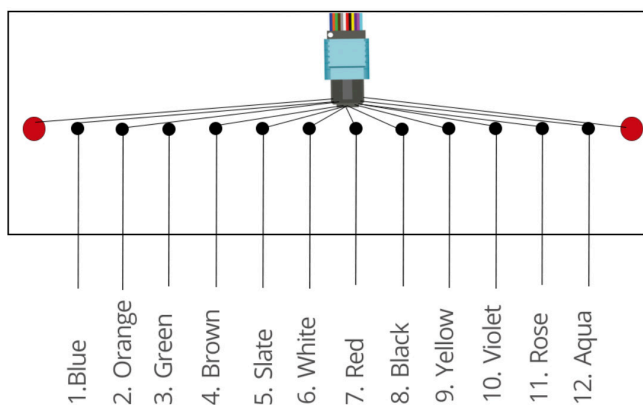
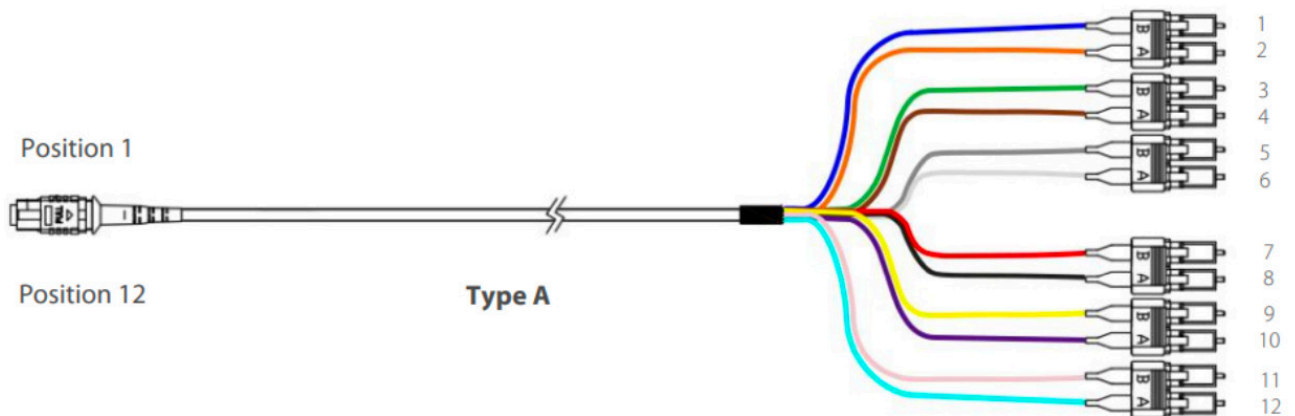


| | | | | | | |
|---------------|----|----|----|----|----|----|
| Port Labeling | 13 | 15 | 17 | 19 | 21 | 23 |
| | 14 | 16 | 18 | 20 | 22 | 24 |
| | 1 | 3 | 5 | 7 | 9 | 11 |
| | 2 | 4 | 6 | 8 | 10 | 12 |

| | | | | | | |
|----------------|----|----|----|----|----|----|
| Inner Sequence | 13 | 15 | 17 | 19 | 21 | 23 |
| | 14 | 16 | 18 | 20 | 22 | 24 |
| | 1 | 3 | 5 | 7 | 9 | 11 |
| | 2 | 4 | 6 | 8 | 10 | 12 |



Pin Assignment



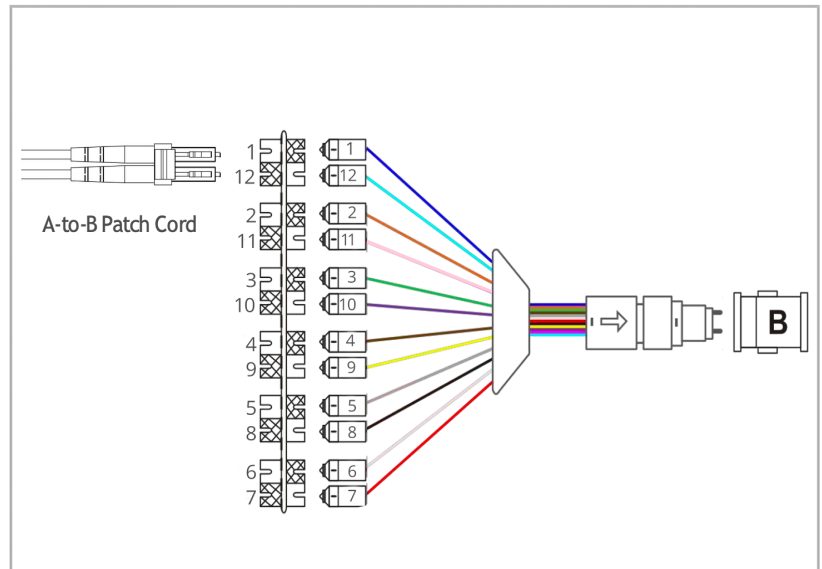
The second MPO has the same layout

MPO/MTP - 12 Cassette, Type B

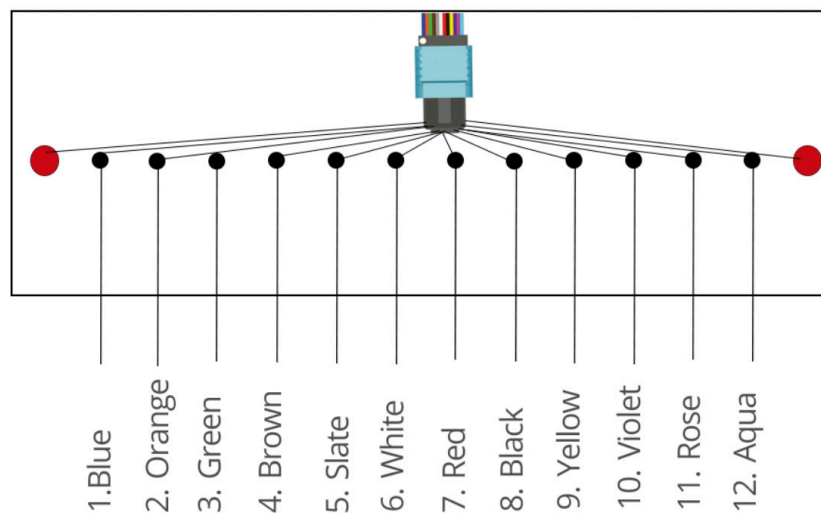
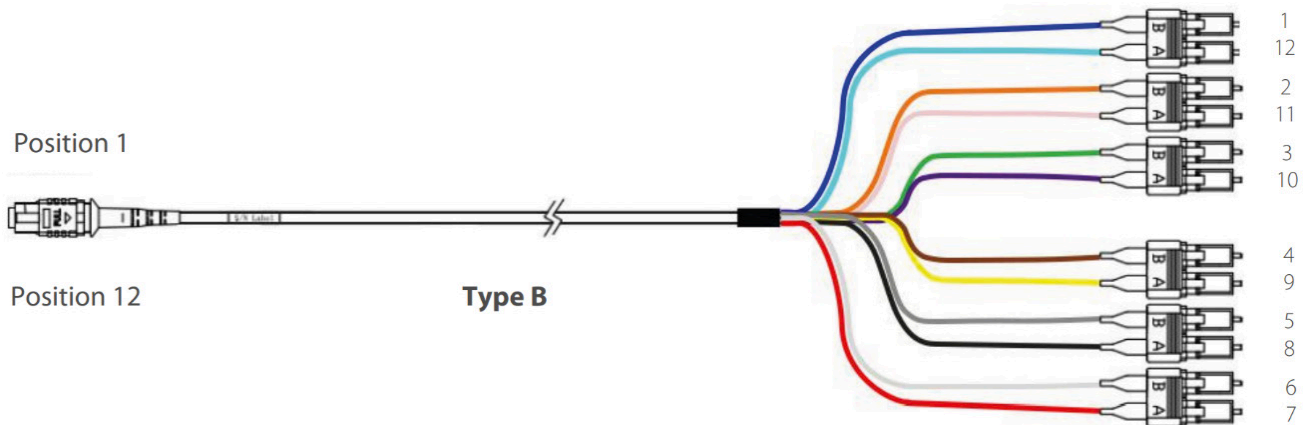


| | | | | | | |
|---------------|----|----|----|---|---|---|
| Port Labeling | 1 | 2 | 3 | 4 | 5 | 6 |
| | 12 | 11 | 10 | 9 | 8 | 7 |

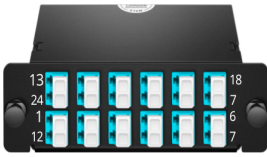
| | | | | | | |
|----------------|----|----|----|---|---|---|
| Inner Sequence | 1 | 2 | 3 | 4 | 5 | 6 |
| | 12 | 11 | 10 | 9 | 8 | 7 |



Pin Assignment

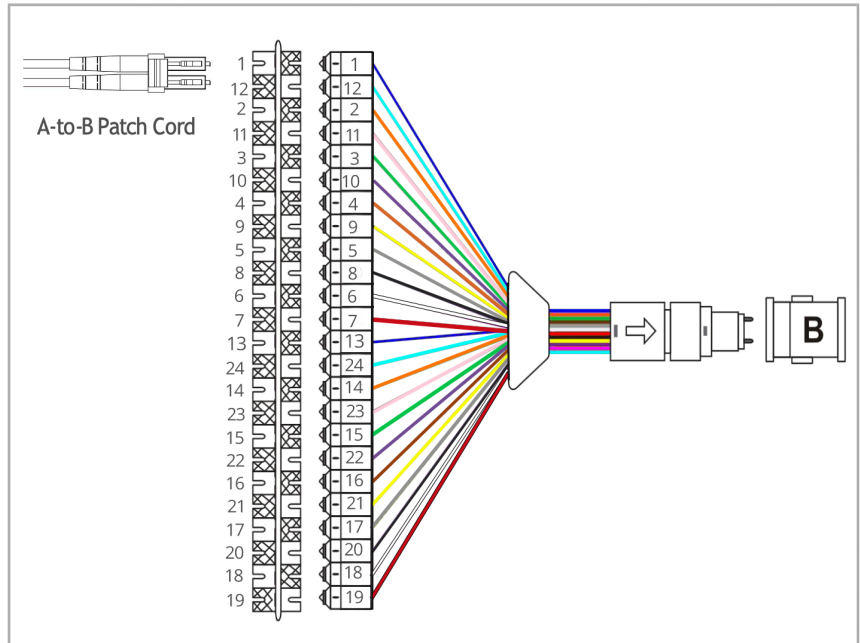


MPO/MTP - 24 Cassette, Type B

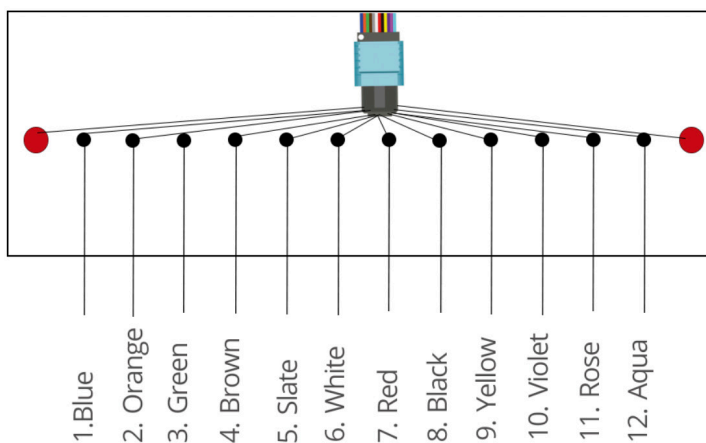
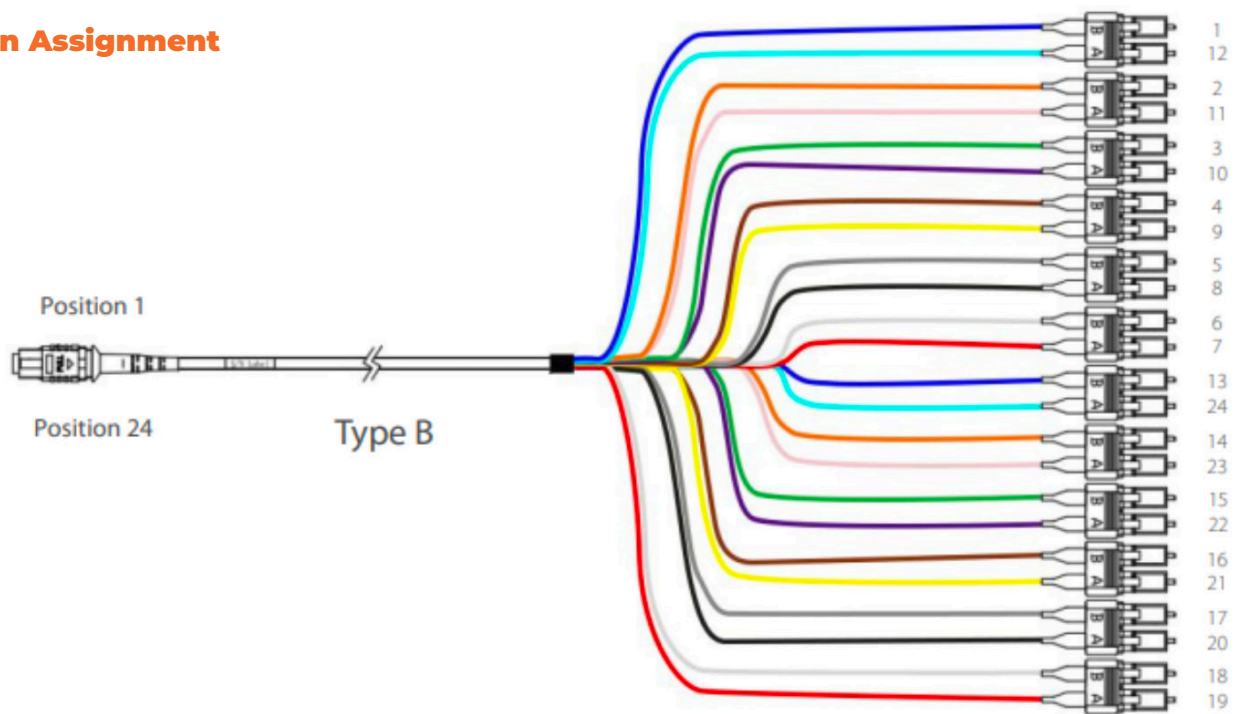


| | | | | | | |
|---------------|----|----|----|----|----|----|
| Port Labeling | 13 | 14 | 15 | 16 | 17 | 18 |
| | 24 | 11 | 10 | 9 | 8 | 7 |
| | 1 | 2 | 3 | 4 | 5 | 6 |
| | 12 | 11 | 10 | 9 | 8 | 7 |

| | | | | | | |
|----------------|----|----|----|----|----|----|
| Inner Sequence | 13 | 14 | 15 | 16 | 17 | 18 |
| | 24 | 11 | 10 | 9 | 8 | 7 |
| | 1 | 2 | 3 | 4 | 5 | 6 |
| | 12 | 11 | 10 | 9 | 8 | 7 |



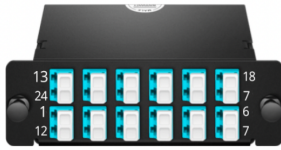
Pin Assignment



The second sequence is repeated in the same order. (13-24)

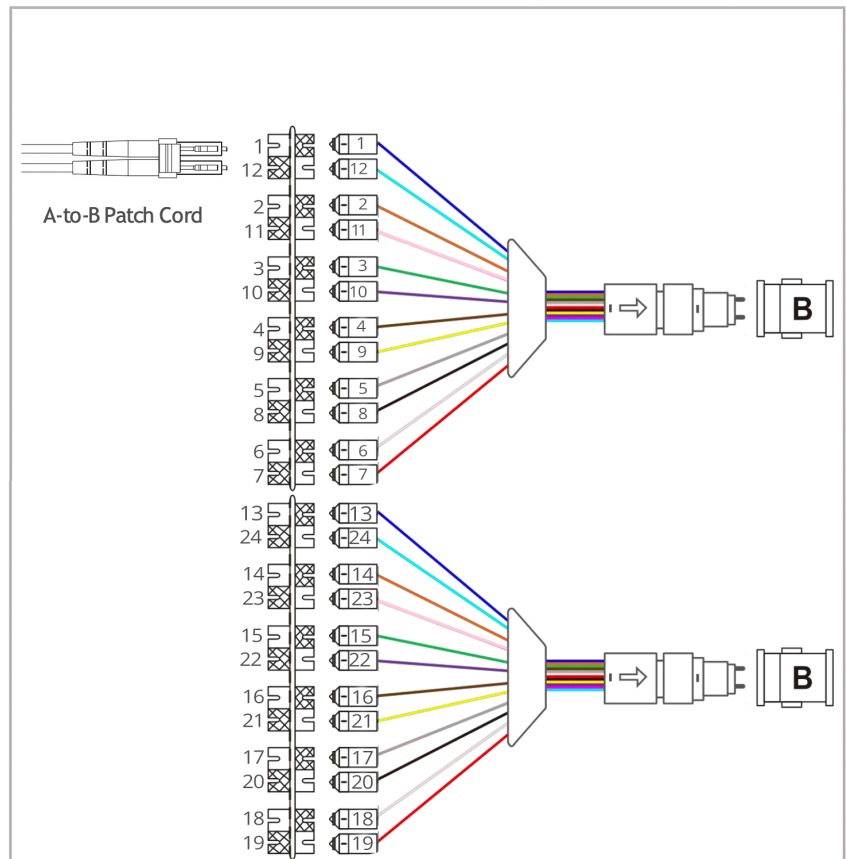
MTP -12 Cassette, Type B

MPO/MTP - 24 Cassette, Type B (2x12)

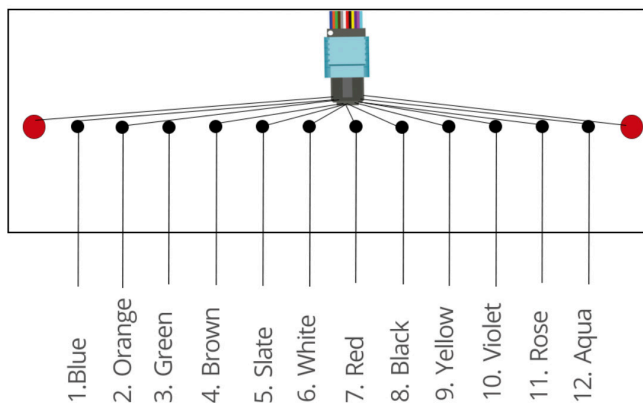
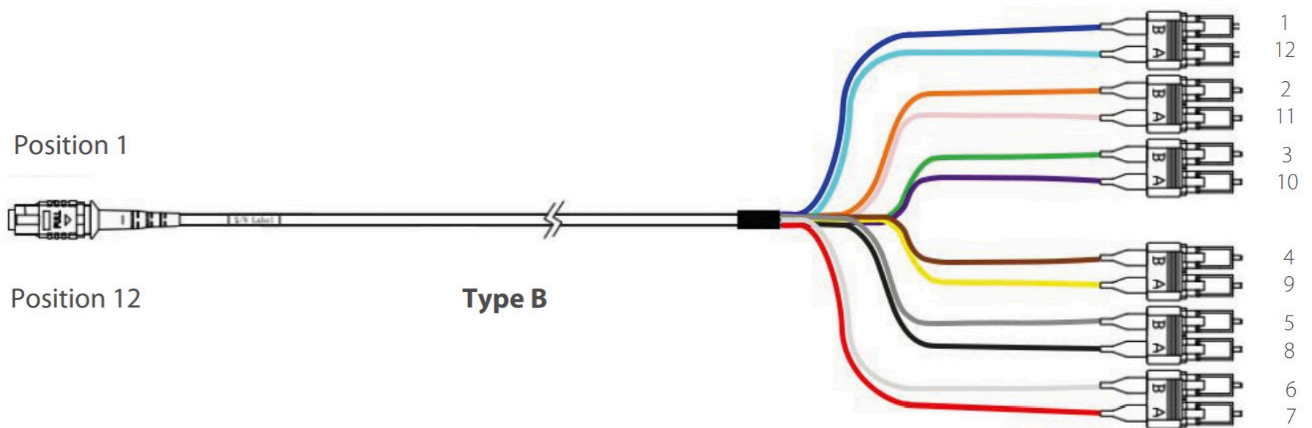


| | | | | | | |
|---------------|----|----|----|----|----|----|
| Port Labeling | 13 | 14 | 15 | 16 | 17 | 18 |
| | 24 | 23 | 22 | 21 | 20 | 19 |
| | 1 | 2 | 3 | 4 | 5 | 6 |
| | 12 | 11 | 10 | 9 | 8 | 7 |

| | | | | | | |
|----------------|----|----|----|----|----|----|
| Inner Sequence | 13 | 14 | 15 | 16 | 17 | 18 |
| | 24 | 23 | 22 | 21 | 20 | 19 |
| | 1 | 2 | 3 | 4 | 5 | 6 |
| | 12 | 11 | 10 | 9 | 8 | 7 |



Pin Assignment



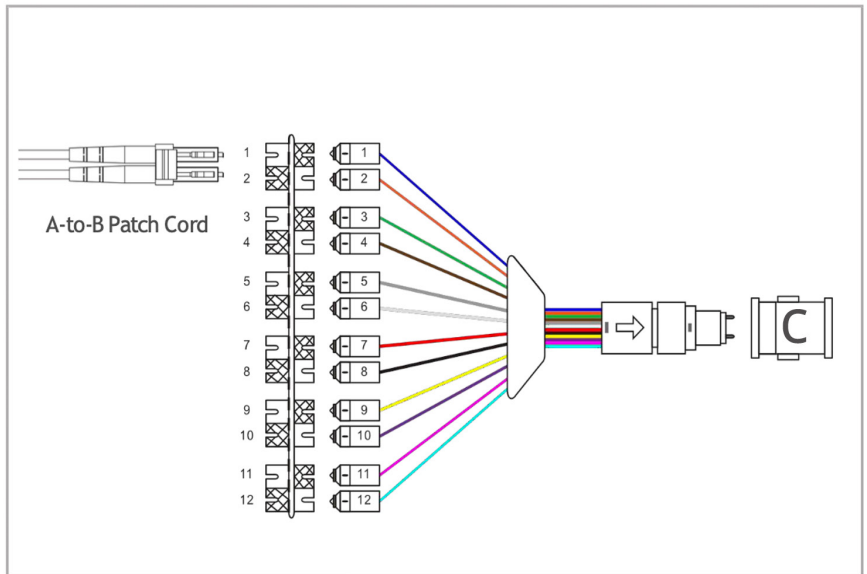
The second MPO has the same layout

MPO/MTP - 12 Cassette, Type C

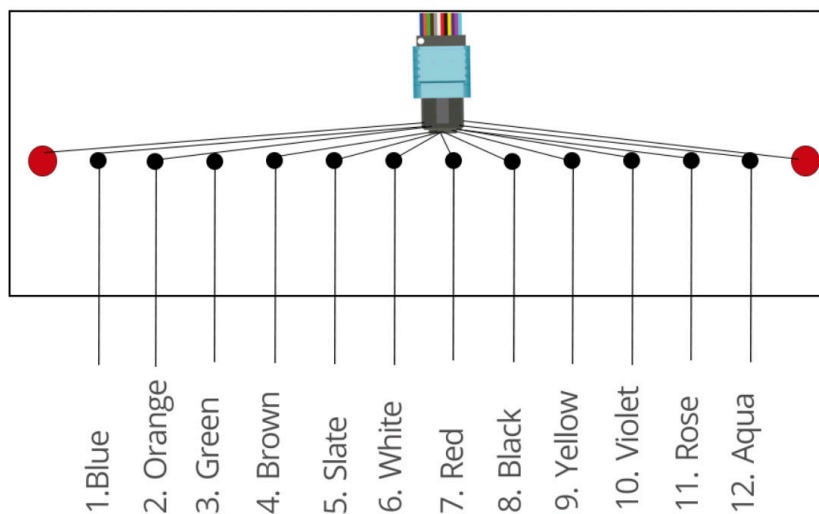
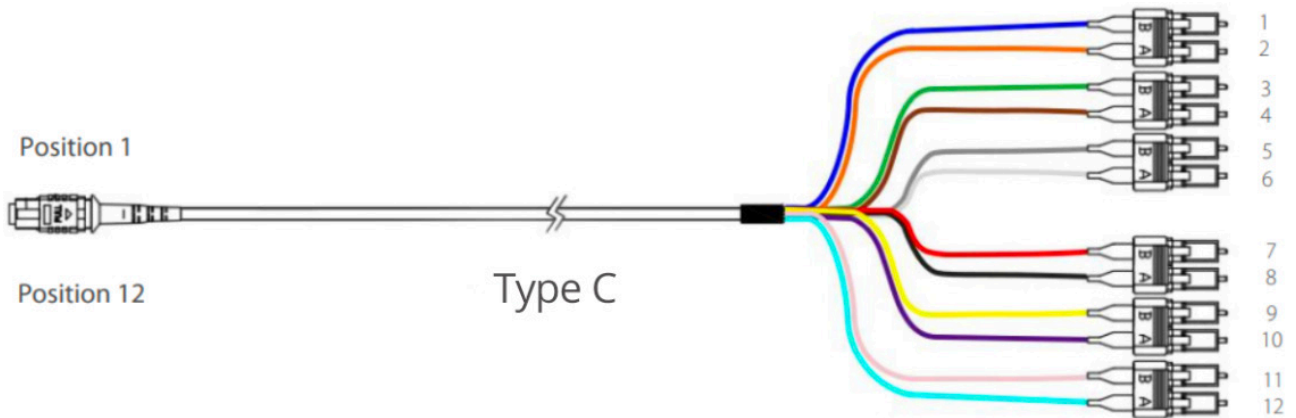


| | | | | | | |
|---------------|---|---|---|---|----|----|
| Port Labeling | 2 | 4 | 6 | 8 | 10 | 12 |
| | 1 | 3 | 5 | 7 | 9 | 11 |

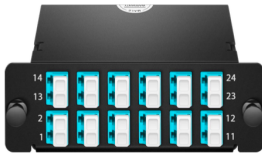
| | | | | | | |
|----------------|---|---|---|---|----|----|
| Inner Sequence | 2 | 4 | 6 | 8 | 10 | 12 |
| | 1 | 3 | 5 | 7 | 9 | 11 |



Pin Assignment

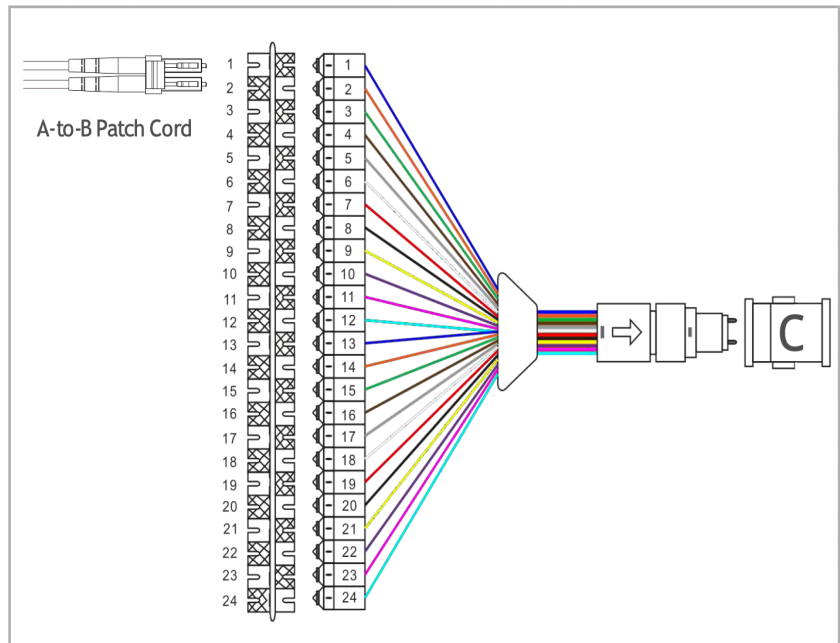


MPO/MTP - 24 Cassette, Type C

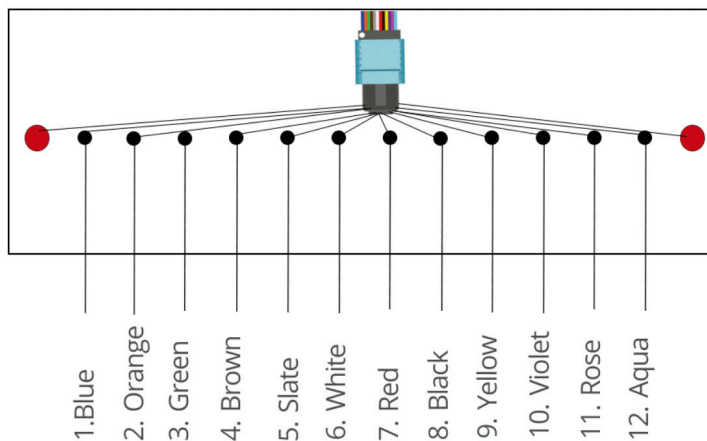
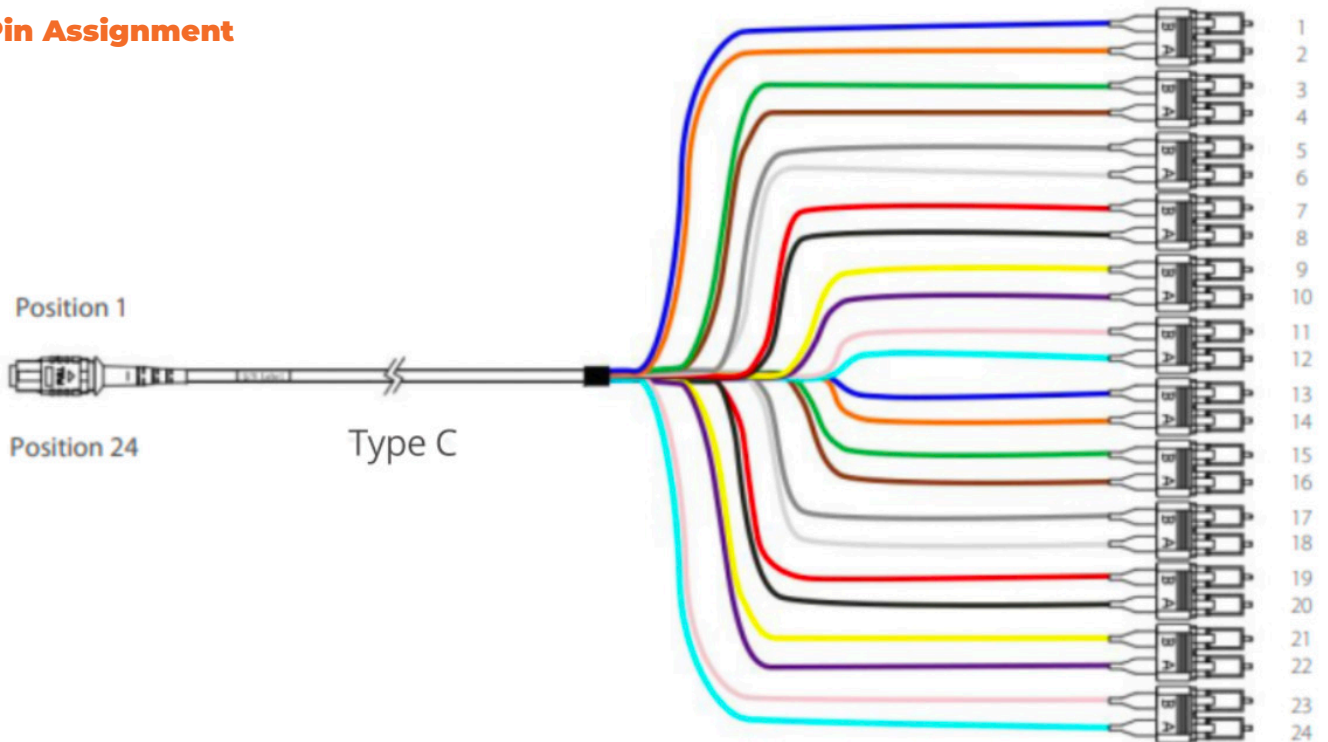


| | | | | | | |
|---------------|----|----|----|----|----|----|
| Port Labeling | 14 | 16 | 18 | 20 | 22 | 24 |
| | 13 | 15 | 17 | 19 | 21 | 23 |
| | 2 | 4 | 6 | 8 | 10 | 12 |
| | 1 | 3 | 5 | 7 | 9 | 11 |

| | | | | | | |
|----------------|----|----|----|----|----|----|
| Inner Sequence | 14 | 16 | 18 | 20 | 22 | 24 |
| | 13 | 15 | 17 | 19 | 21 | 23 |
| | 2 | 4 | 6 | 8 | 10 | 12 |
| | 1 | 3 | 5 | 7 | 9 | 11 |



Pin Assignment



The second sequence is repeated in the same order. (13-24)

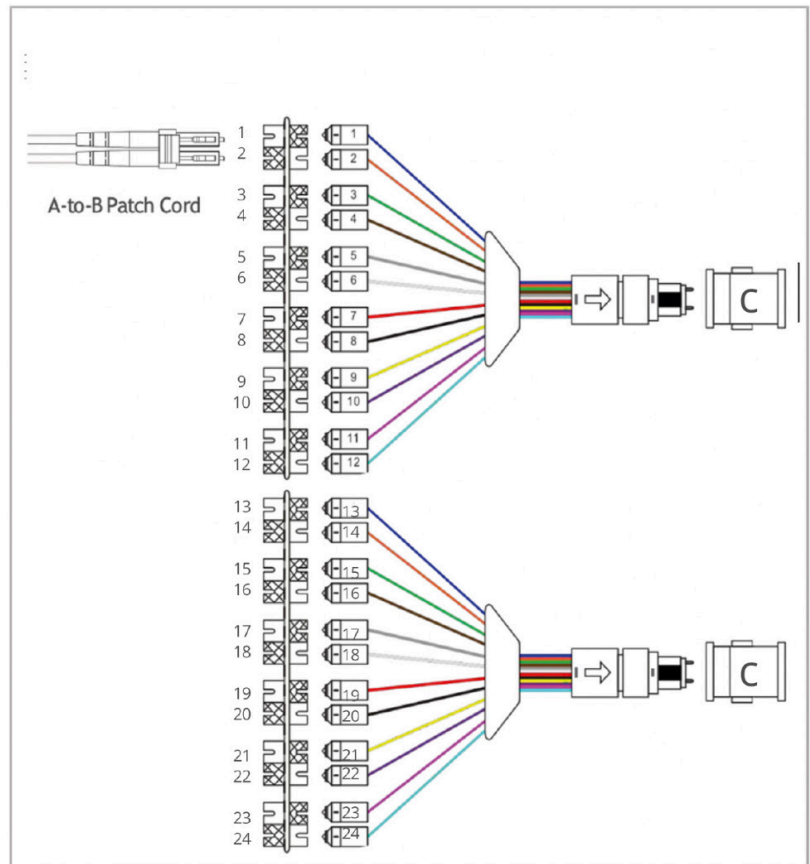
MTP -12 Cassette, Type C

MPO/MTP - 24 Cassette, Type C (2x12)

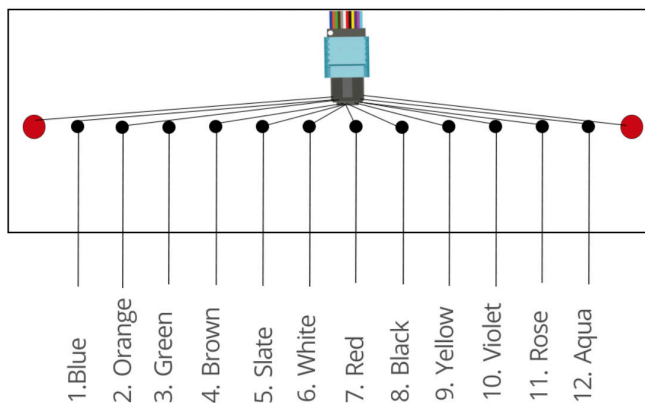
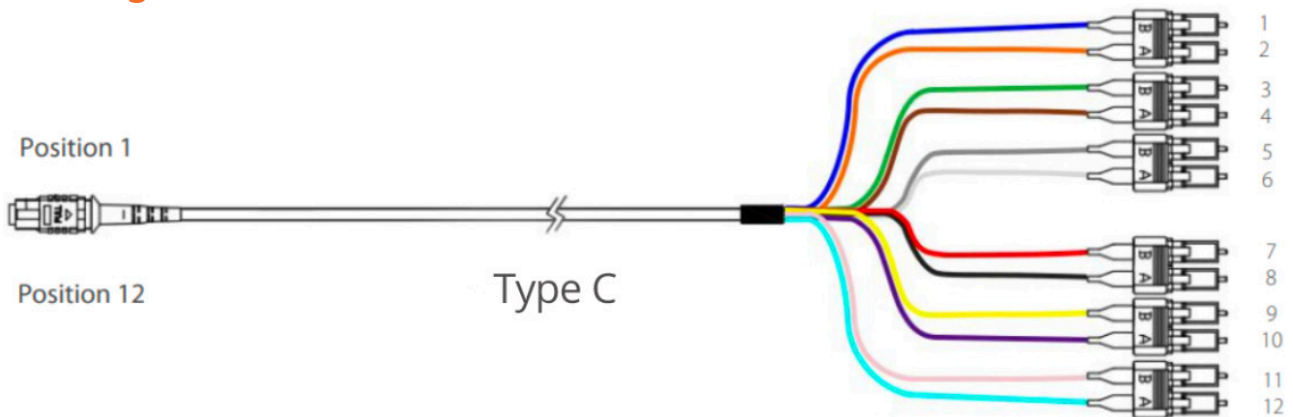


| | | | | | | |
|---------------|----|----|----|----|----|----|
| Port Labeling | 14 | 16 | 18 | 20 | 22 | 24 |
| | 13 | 15 | 17 | 19 | 21 | 23 |
| | 2 | 4 | 6 | 8 | 10 | 12 |
| | 1 | 3 | 5 | 7 | 9 | 11 |

| | | | | | | |
|----------------|----|----|----|----|----|----|
| Inner Sequence | 14 | 16 | 18 | 20 | 22 | 24 |
| | 13 | 15 | 17 | 19 | 21 | 23 |
| | 2 | 4 | 6 | 8 | 10 | 12 |
| | 1 | 3 | 5 | 7 | 9 | 11 |



Pin Assignment



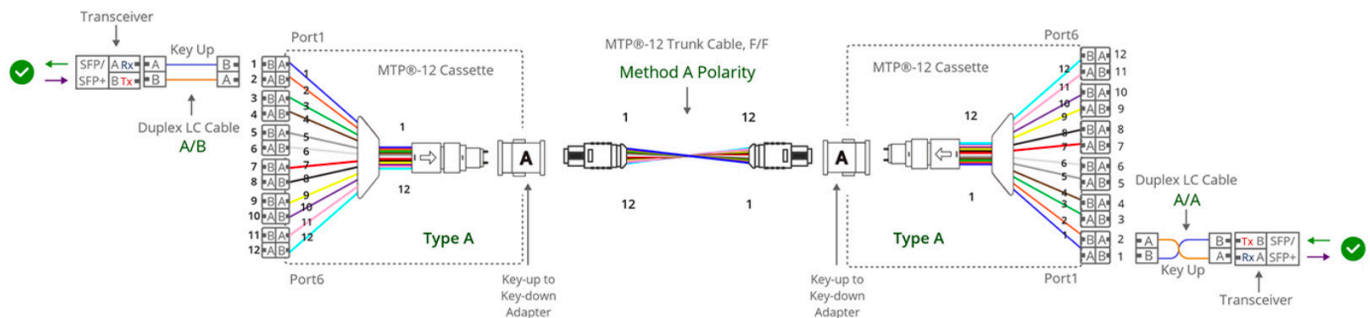
The second MPO has the same layout

Polarity Methods

All array connectivity methods have the same goal: to create an optical path from the transmit port of one device to the receive port of another device. Different methods to accomplish this goal may be implemented; however these different methods may not be interoperable. Any connectivity method requires a specific combination of components to maintain polarity. Some of the components may be common to other connectivity methods.

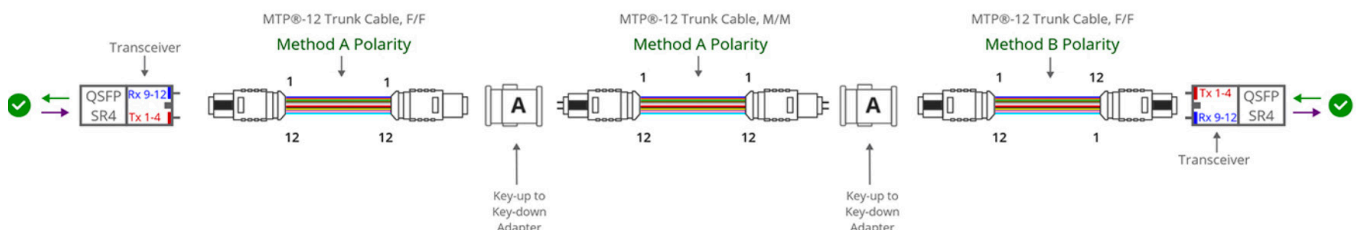
Method A

Connectivity Method A for duplex signals



Note: The transmission of the signal is P2 in and P2 out. This method requires two separate patch cable types (one A-to-B and the other A-to-A).

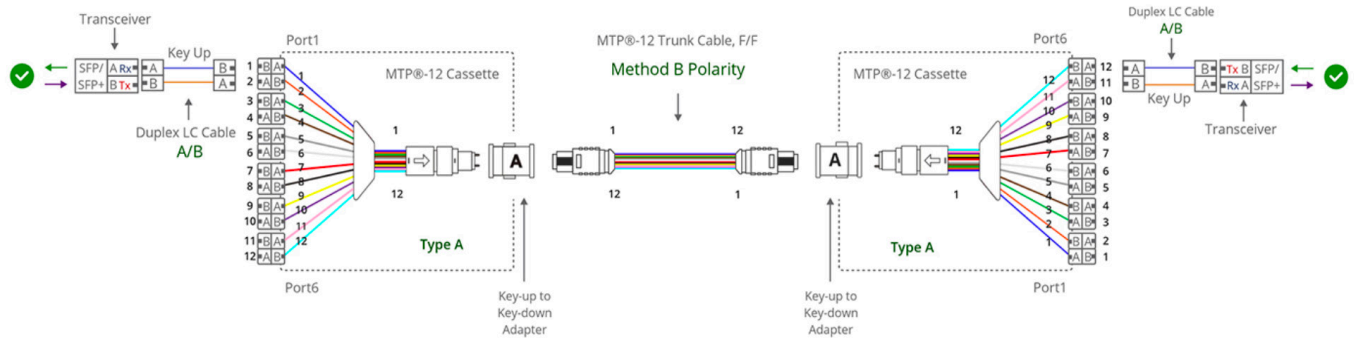
Connectivity Method A for parallel signal



Polarity Methods

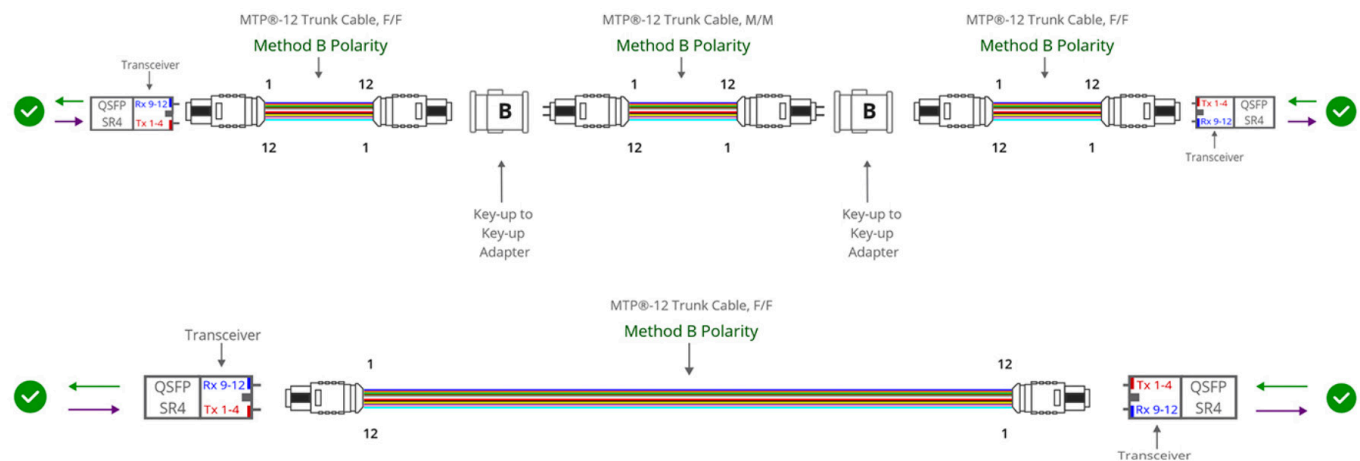
Method B

Connectivity Method B for duplex signals



Note: The transmission of the signal is P2 in and P11 out.

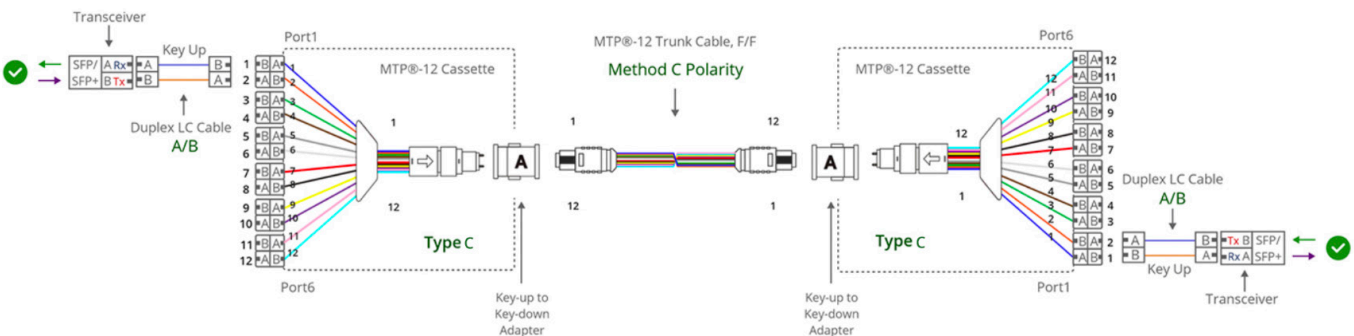
Connectivity Method B for parallel signal



Note: The key-up to key-up adapter (Type B) does not support Single Mode with standards compliant connector endfaces.

Method C

Connectivity Method C for duplex signals



Note: The transmission of the signal is P2 in and P1 out.