FS

FHD MPO Cassettes

High Density
Pre-terminated Modular Cassette System

Description

FHD Fiber Optic MPO Cassettes consist of pre-terminated LC or SC 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 fiber in 1U 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 compoliant to Telcordia, EIA/TIA and IEC standards.

Product Specifications

I. Product Constructions

Fiber Count	12 Fibers and 24 Fibers
Fiber Mode	Multimode: OM3 50/125μm OM4 50/125μm Single mode: OS2 9/125μm
Front Connector	Multimode: LC/SC Duplex with UPC polish Single mode: LC/SC Duplex with UPC/APC polish
Rear Connector	Multimode: MPO adapter(s) with male ferrules (pins) and UPC polish Single mode: MPO adapter(s) with male ferrules (pins) and APC polish
Polarity Type	Type A/AF/B1/B2
Material	Aluminium (AL5052)
Dimensions (HxWxD)	1.38"x4.29"x4.64" (35x109x118mm)

II. Performance Properties

Rear Connector	MPO
Insertion Loss	Multimode: Stand IL 0.6dB max. Ultra low IL 0.35dB max. Single mode: Stand IL 0.75dB max. Ultra low IL 0.35dB max.
Return Loss	Multimode: ≥20dB Single mode: ≥60dB

III. Performance Properties

Front Connector	LS/SC Duplex
Fiber Mode	Multimode/Single mode
Material of Sleeve	Zirconia Ceramic
Insertion Loss	Multimode: UPC ≤0.2dB Single mode: APC ≤0.3dB UPC ≤0.2dB
Return Loss	Multimode: UPC ≥30dB Single mode: APC ≥60dB UPC ≥50dB

IV. Environmental Characteristics

| Operating Temperature	0℃-75℃
Storage Temperature	-40℃-75℃

Polarity Illustration

In any installation, it is important to ensure that the transmitter at one end matches the corresponding receiver at the other end. FS provides a number of intelligent solutions that can help you manage and optimize your network and its connectivity.

I. MPO -12 Cassette, Type A

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

A-to-B Patch Cord

A
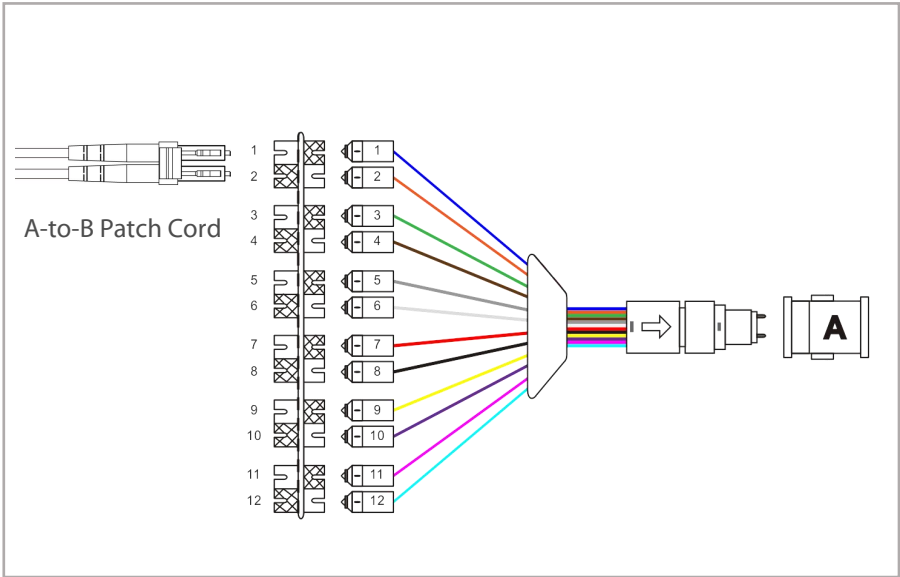
II. MPO -12 Cassette, Type AF

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

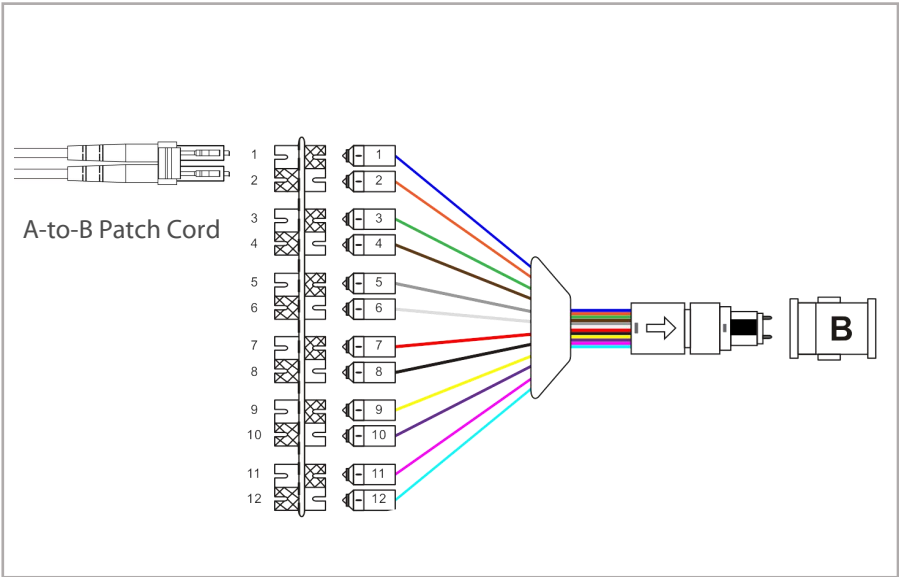| Inner Sequence	1	3	5	7	9	11
	2	4	6	8	10	12

A-to-B Patch Cord

A

Note: Type A and Type AF are used as a pair in a two cassette method A link.

III. MPO -12 Cassette, Type B1

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

A-to-B Patch Cord

B

IV. MPO -12 Cassette, Type B2

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

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

A-to-B Patch Cord

B
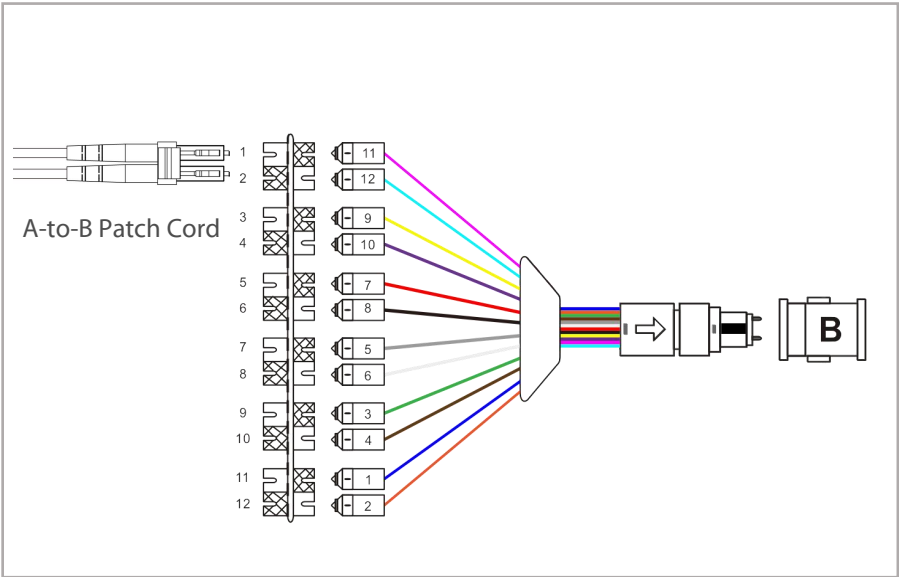
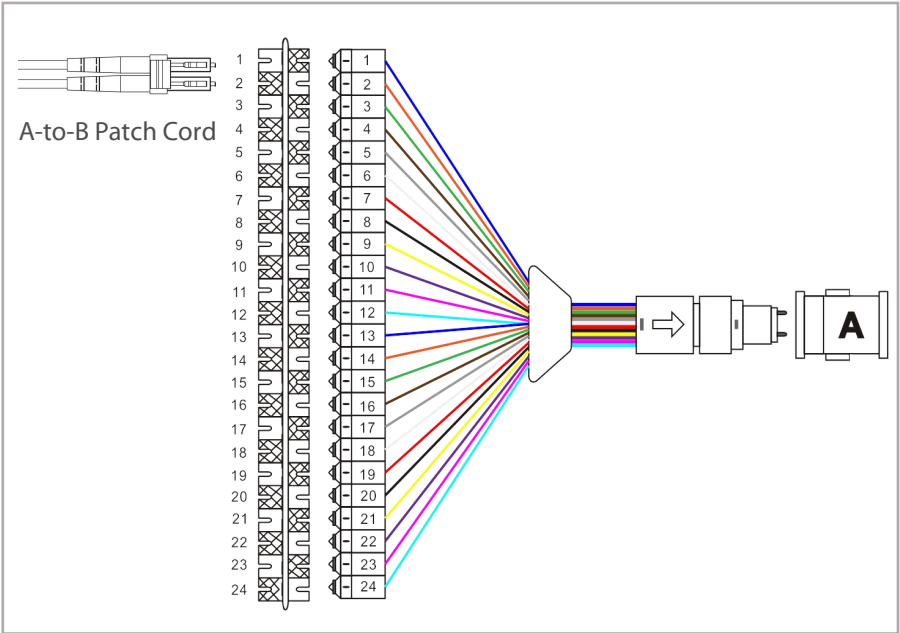**Note:** Type B1 and Type B1 are used as a pair in a two cassette method B link.

V. MPO -24 Cassette, Type A

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

A-to-B Patch Cord

A

VI. MPO -24 Cassette, Type AF

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

A-to-B Patch Cord

A
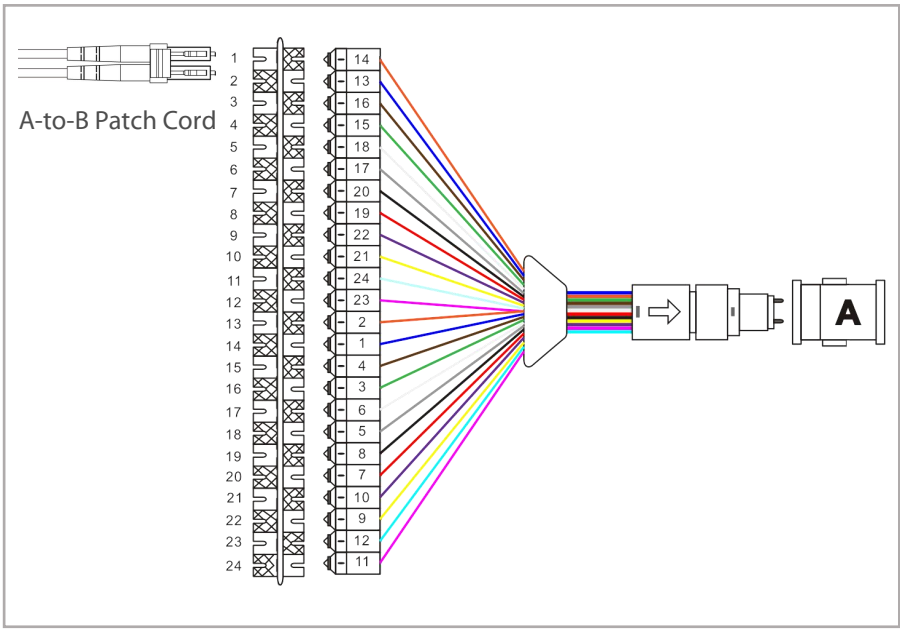
Note: Type A and Type AF are used as a pair in a two cassette method A link.

VII. Method for Achieving Fiber Polarity

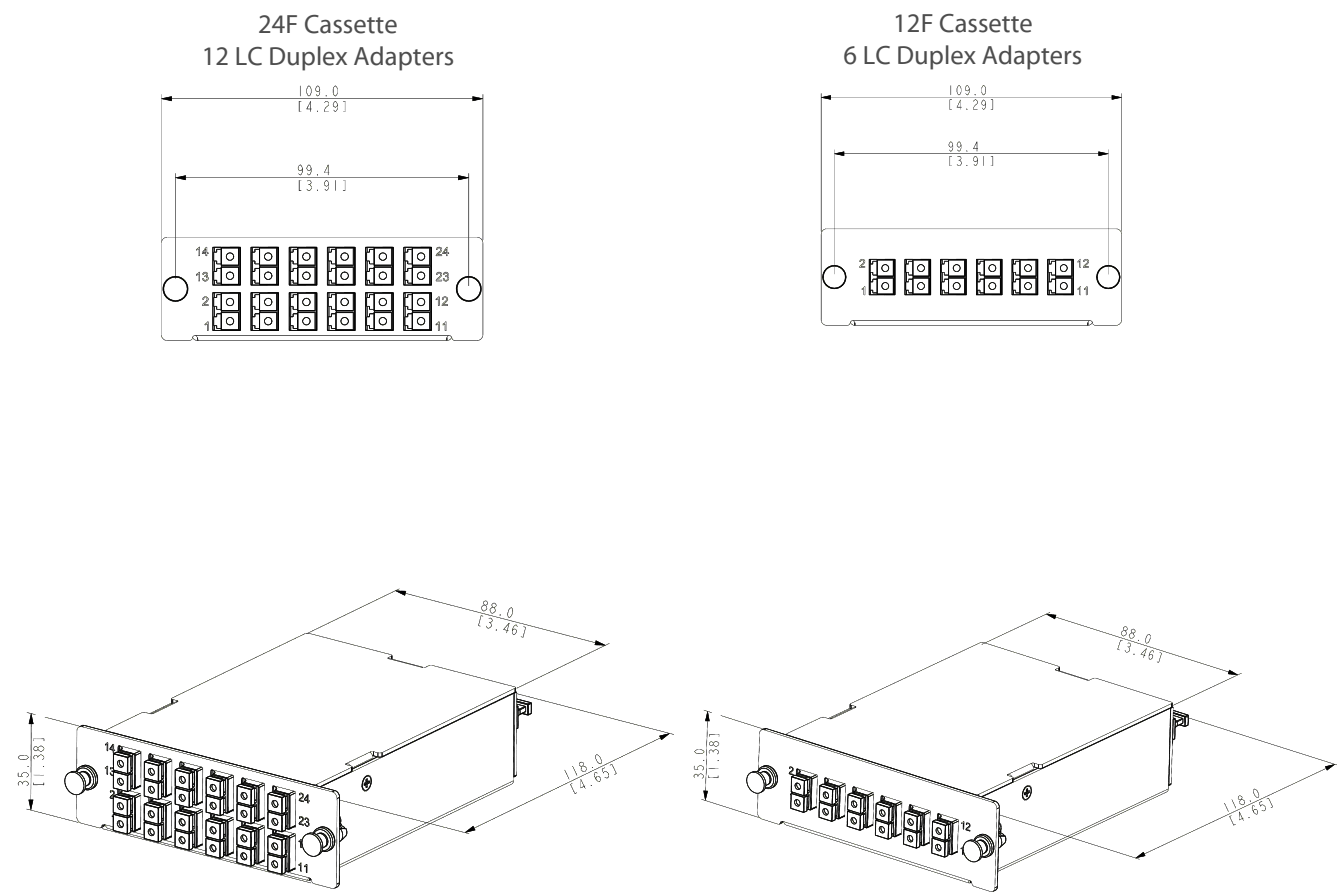## 1. Connectivity Method A for Duplex Signals

Type A

Type A   Type AF

A-to-B Patch Cord   A-to-B Patch Cord

Type A

Type A   Type AF

A-to-B Patch Cord   A-to-B Patch Cord
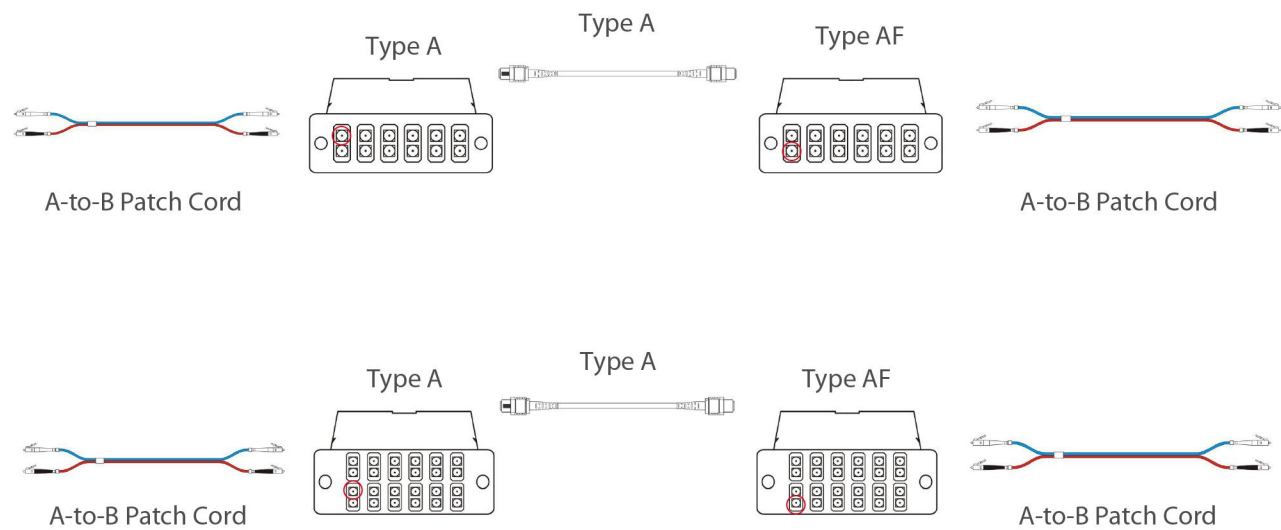
Note:

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

2. Connectivity Method B for Duplex Signals

Type B

Type B1   Type B2

A-to-B Patch Cord   A-to-B Patch Cord
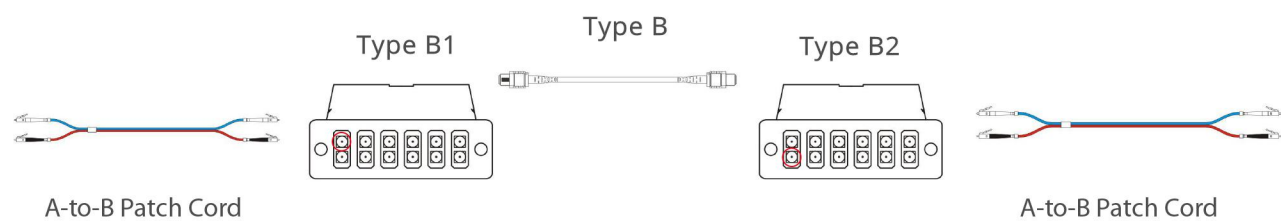
Note:

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

Layout and Dimensions

24F Cassette
12 LC Duplex Adapters

109.0
[4.29]

99.4
[3.91]

12F Cassette
6 LC Duplex Adapters

109.0
[4.29]

99.4
[3.91]

88.0
[3.46]

35.0
[1.38]

118.0
[4.65]

88.0
[3.46]

35.0
[1.38]

118.0
[4.65]

Dimensions are in inches. (Dimensions in parentheses are in millimeters).

Ordering Information

A	B	C	D	E	F	G
Fiber Count	Rear Connector	Fiber Mode	Front Connector	Polish Type	Insertion Loss(dB)	Polarity
12F	MPO-12	OS2	LC Duplex	UPC	Elite 0.35	Type A
24F	MPO-24	OM3	SC Duplex	APC	Standard 0.6/0.75	Type AF
		OM4				Type B1
						Type B2

Note:

Type B: Multimode cassettes only

SC Adapter: 12-Fiber only

MPO Connector (Single mode): APC Polish as default

MPO Connector (Multimode): UPC Polish as default

Hot Products

ID	Description
#79399	MPO-12 to 6x LC Duplex, 12 Fibers OS2 Single Mode FHD MPO Cassette, Type A
#79401	MPO-12 to 6x LC Duplex, 12 Fibers OM3 Multimode FHD MPO Cassette, Type A
#79403	2x MPO-12 to 12x LC Duplex, 24 Fibers OS2 Single Mode FHD MPO Cassette, Type A
#79405	2x MPO-12 to 12x LC Duplex, 24 Fibers OM3 Multimode FHD MPO Cassette, Type A
#79407	MPO-24 to 12x LC Duplex, 24 Fibers OS2 Single Mode FHD MPO Cassette, Type A
#79409	MPO-24 to 12x LC Duplex, 24 Fibers OM3 Multimode FHD MPO Cassette, Type A

* More products information please click >

Matching Products

ID	Description
#34684	1U Rack Mount FHD High Density Fiber Enclosure Unloaded, Holds up to 4x FHD Cassettes or Panels
#70361	Upgrading 1U Rack Mount FHD High Density Slide-out Fiber Enclosure Unloaded
#73205	Upgrading 2U Rack Mount FHD High Density Slide-out Fiber Enclosure Unloaded
#73206	Upgrading 4U Rack Mount FHD High Density Slide-out Fiber Enclosure Unloaded
#50550	2-Door 2-Adapter Panel Wall Mount Fiber Enclosure
#70419	1U Rack Mount FHD Modular Fiber Enclosure Panel, Holds up to 4x FHD Cassette or Panels