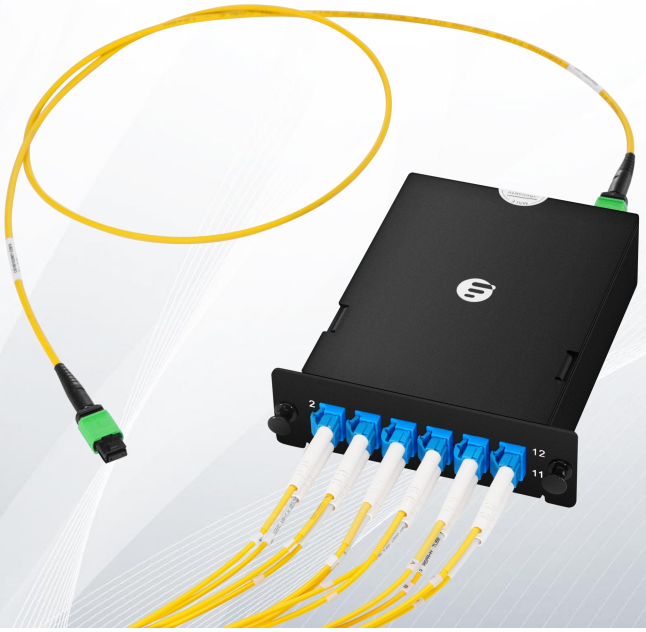
FHD MTP® 12/24 Cassettes Datasheet

HIGH DENSITY

Pre-terminated Modular Cassette System



Description

FHD 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 144 fibers (LC) 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 pola-rity configurations.
- The corning fiber compliant to Telcordia, EIA/TIA and IEC standards.

I. Product Constructions

Fiber Count	12 Fibers/24 Fibers/36 Fibers/48 Fibers
Fiber Mode	Multimode: OM3 50/125μm OM4 50/125μm Single Mode: OS2 9/125μm
Front Connector	Multimode: LC/SC Duplex with UPC Polish MTP® Adapter(s) with Male Ferrules (pins) and UPC Polish Single Mode: LC/SC Duplex with UPC/APC Polish MDC Duplex with UPC Polish 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 Polish
Polarity Type	Type A/AF/B1/B2/Universal
Material	Aluminium (AL5052)
Dimensions (HxWxD)	1.38''x4.29''x4.64'' (35x109x118mm), 1.38''x4.29''x6.22'' (35x109x158mm)

II. Performance Properties

Rear Connector	US Conec MTP®
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
Connector Durability	US Conec MTP® Connector Meets TIA/EIA-568.C.3A.4.9 Durability: 500 Mating Cycles

Note:

The US Conec MTP® connectors are fully compliant with the MPO standards, achieving higher performance levels when compared to generic MPO connectors.

III. Performance Properties

Front Connector	LC/SC/MDC Duplex or MTP® Adapter(s)
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	-10℃-60℃
Storage Temperature	-10℃-60℃

Standards Compliance

- ISO9001 Certificate
- RoHS Compliant
- ISO14001 Compliant

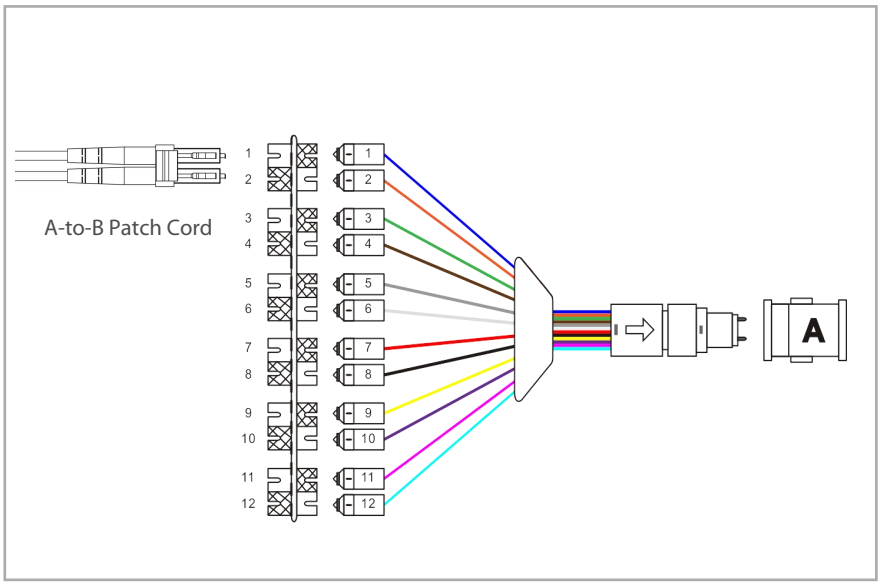
Polarity Illustration

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. MTP® -12 Cassette, Type A

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

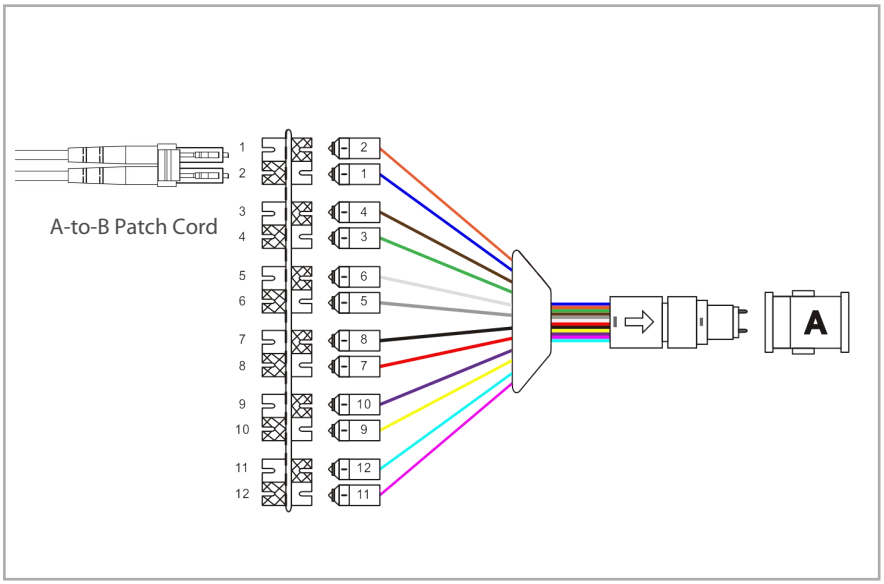
Inner Sequence	2	4	6	8	10	12
	1	3	5	7	9	11



II. MTP® -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

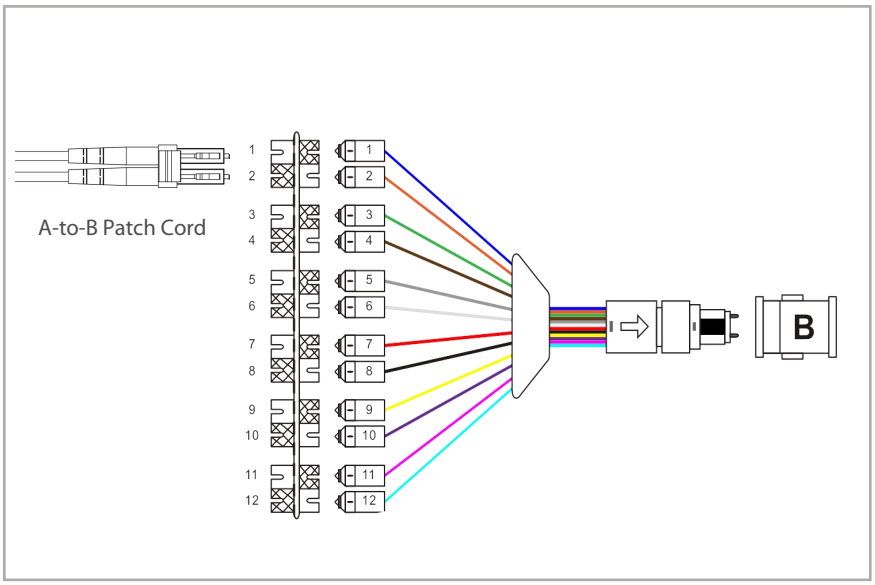


Note: Type A and Type AF are used as a pair in a two cassette method A link.

III. MTP® -12 Cassette, Type B1

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

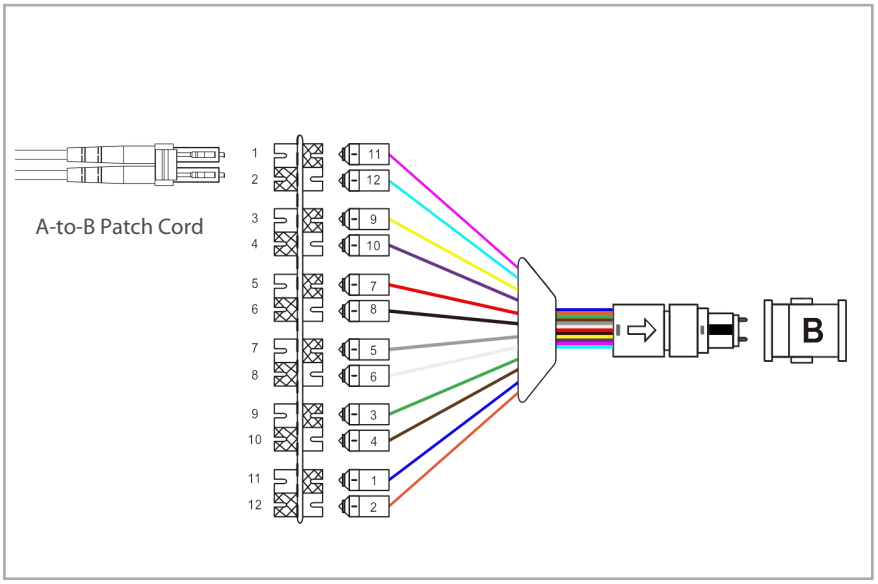
Inner Sequence	2	4	6	8	10	12
	1	3	5	7	9	11



IV. MTP® -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

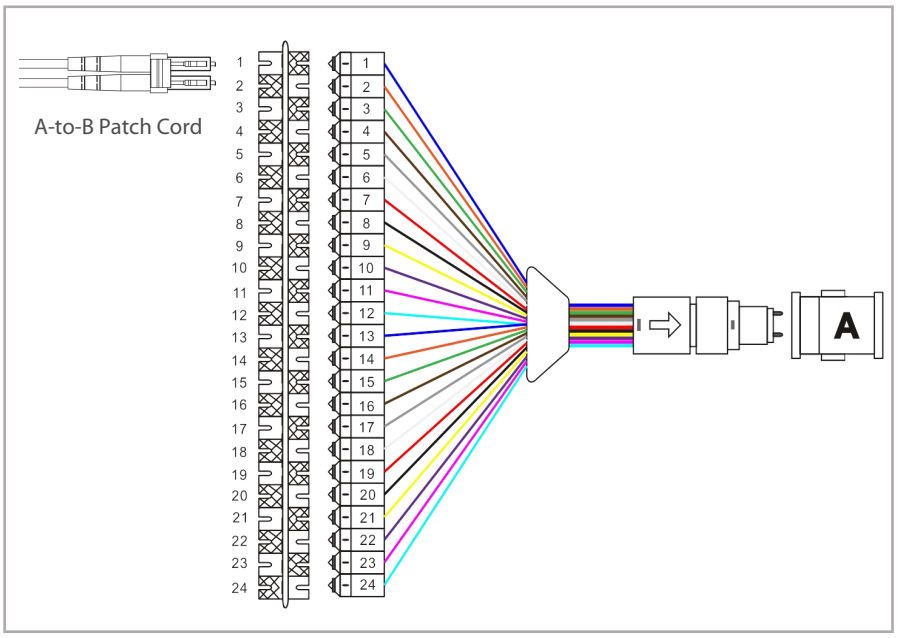


Note: Type B1 and Type B2 are used as a pair in a two cassette method B link.

VI. MTP® -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

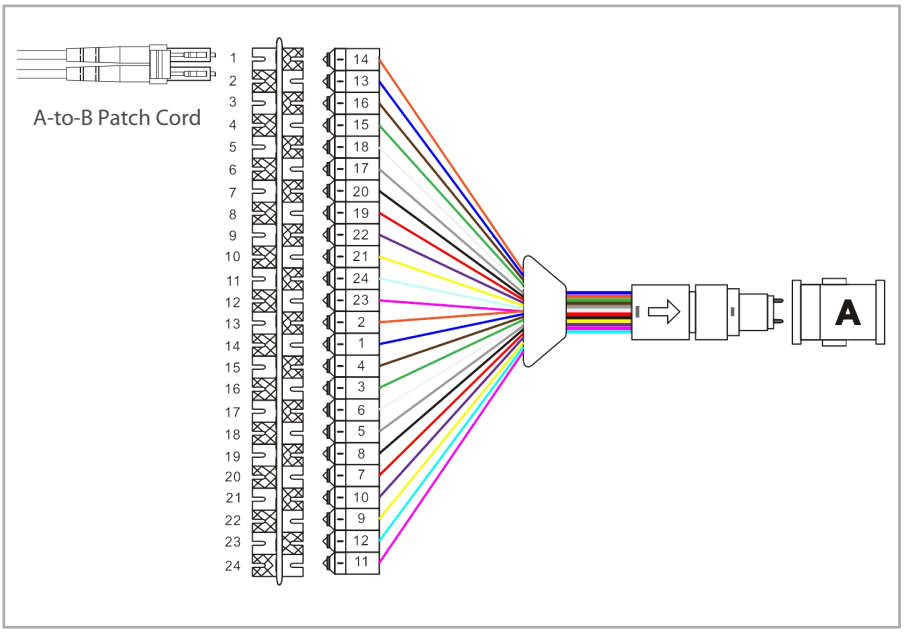
Inner Sequence	14	16	18	20	22	24
	13	15	17	19	21	23
	2	4	6	8	10	12
	1	3	5	7	9	11



VIII. MTP® -24 Cassette, Type AF

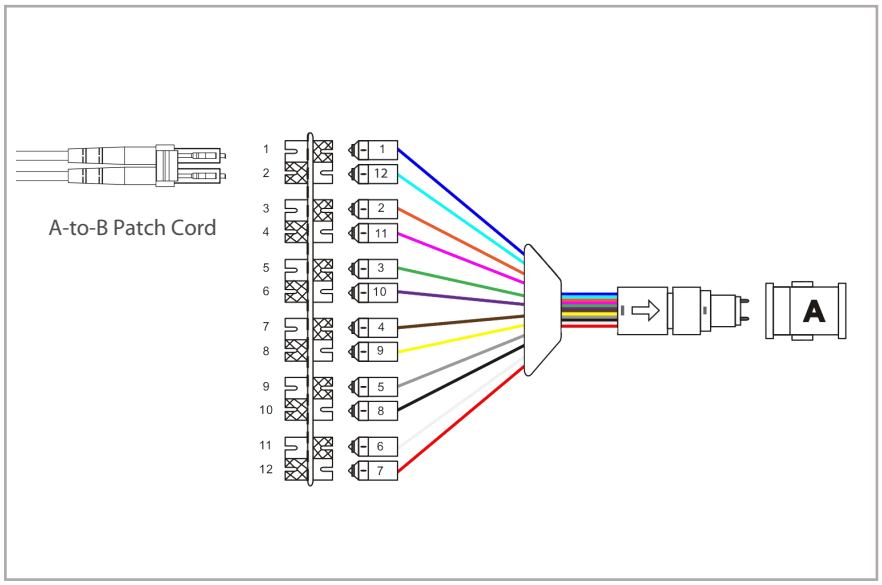
Port Labeling	14	16	18	20	22	24
	13	15	17	19	21	23
	2	4	6	8	10	12
	1	3	5	7	9	11

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



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

V. Universal



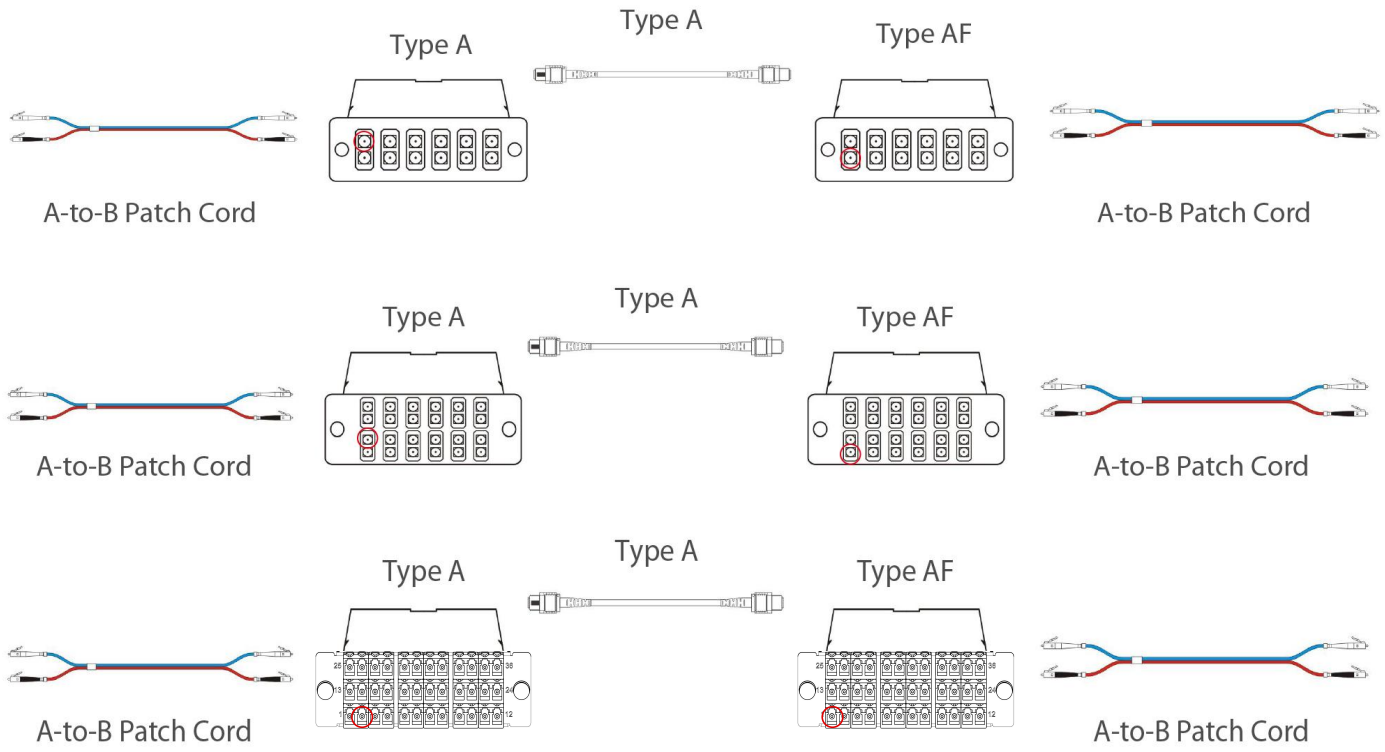
Port Labeling	2	4	6	8	10	12
	1	3	5	7	9	11

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

Note: One universal polarity cassette is used on each end in a method B link, and this link enable moves, adds and changes without polarity concerns.

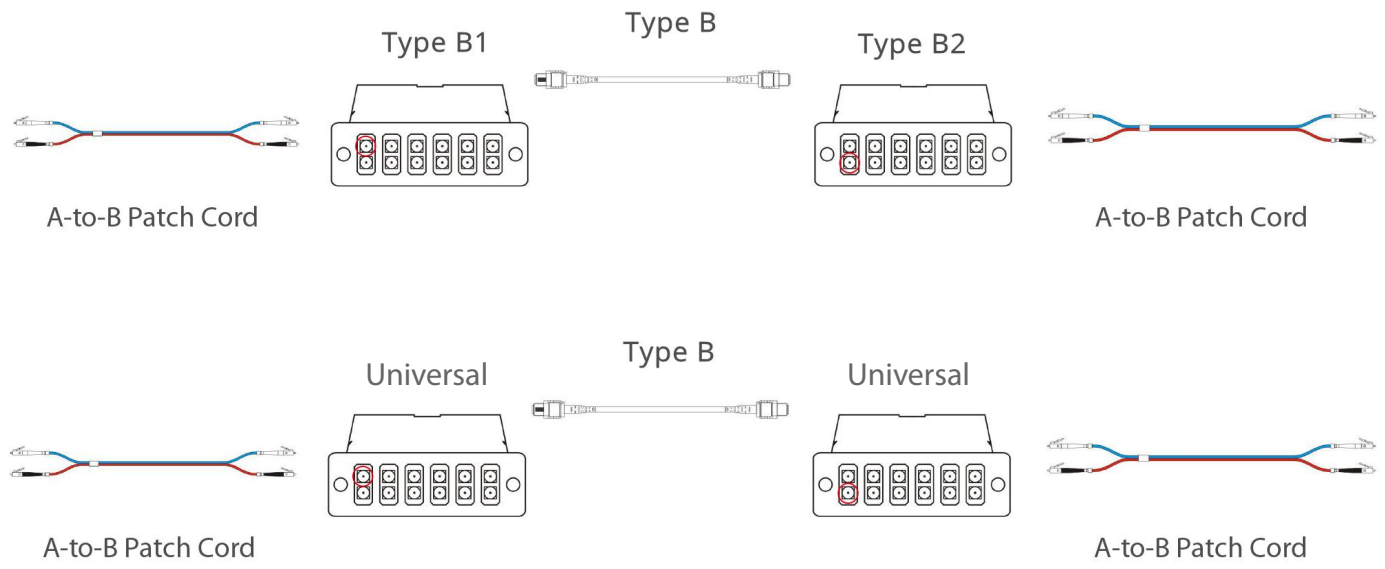
VII. Method for Achieving Fiber Polarity

1. Connectivity Method A for Duplex Signals



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

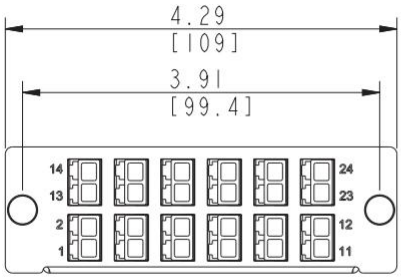
2. Connectivity Method B for Duplex Signals

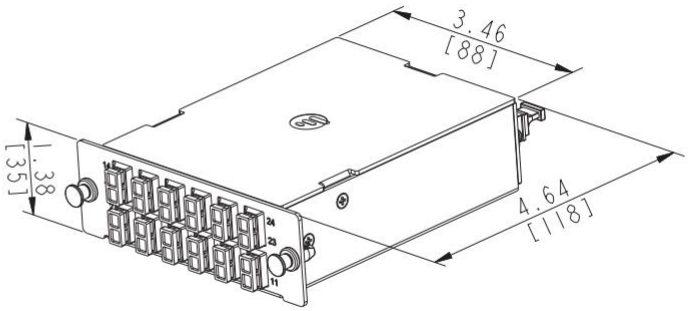


Note: The transmission of the signal is P2 in and P1 out.

Layout and Dimensions

- **12/24F LC & 12F SC Cassette**

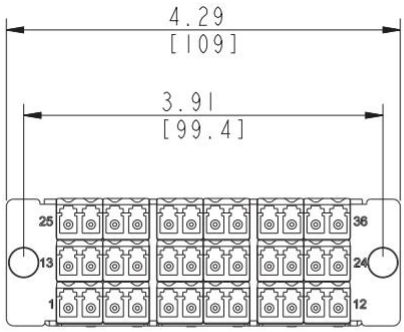


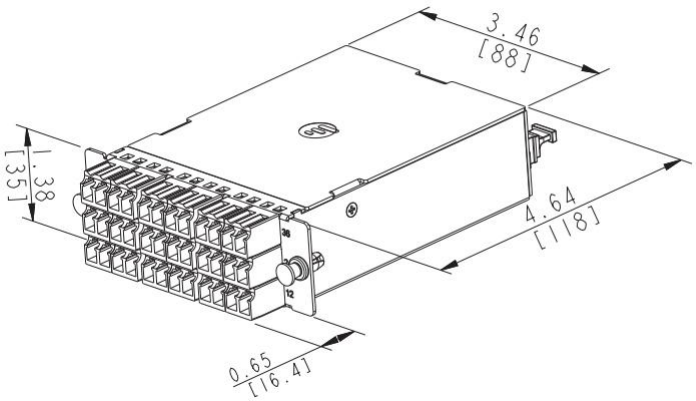


Note:

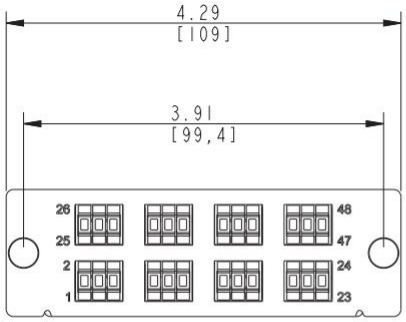
12F/24F LC and 12F SC Cassettes are of the same dimensions.

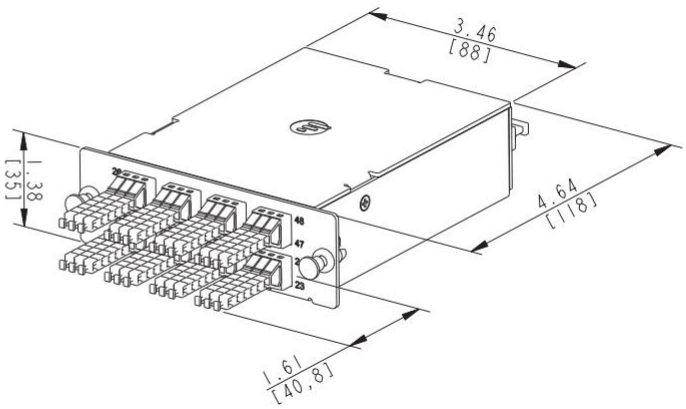
- **36F LC Cassette**





- **48F MDC Cassette**

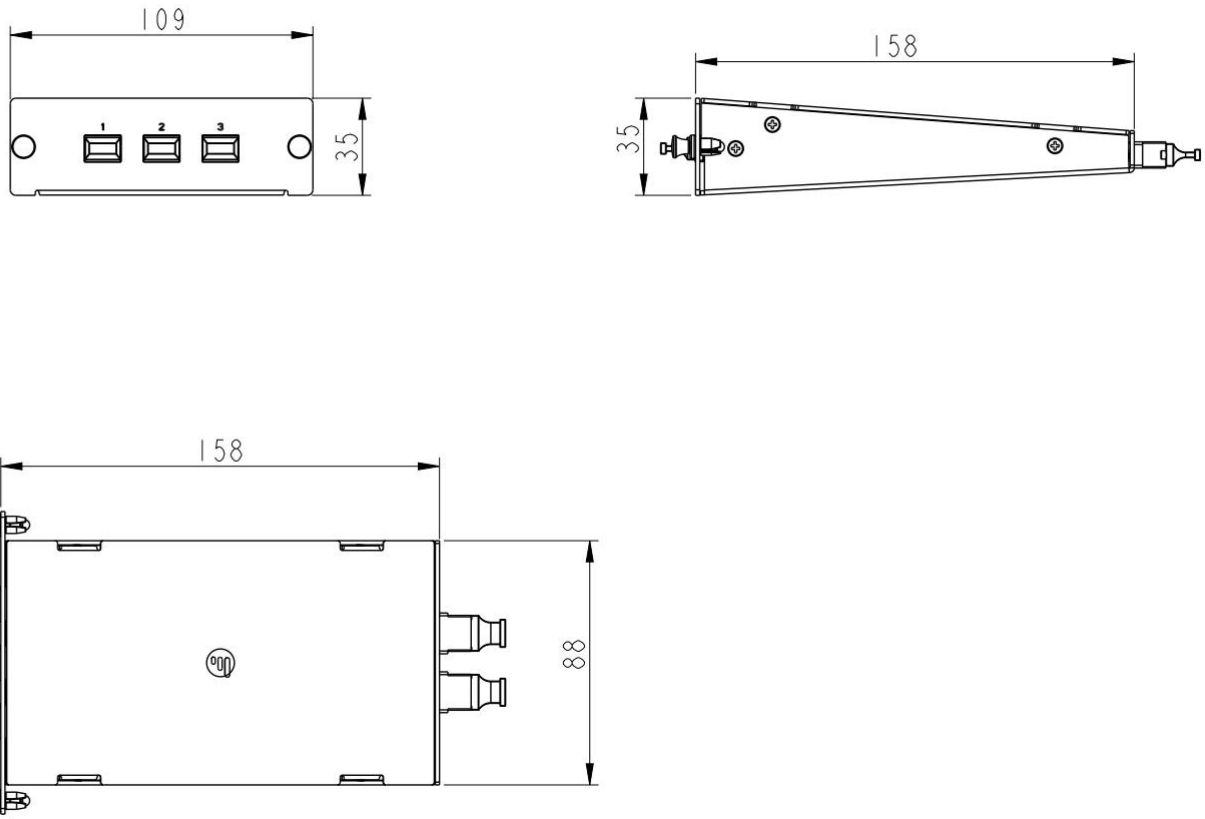




Dimensions are in inches. (Dimensions in parentheses are in millimeters).

Layout and Dimensions

- **12/24F MTP® -MTP® Cassette**



Dimensions in parentheses are in millimeters

Ordering Information

A	B	C	D	E	F	G	H	I
Fiber Count	Rear Connector	Fiber Mode	Front Connector	Polish Type	Insertion Loss(dB)	Polarity	Front Color	Rear Color
12F	MTP®-12	OS2	LC Duplex	UPC	Elite 0.35	Type A	Blue	Black
24F	MTP®-24	OM3	SC Duplex	APC	Standard 0.6/0.75	Type AF	Aqua	
36F		OM4	MDC Duplex			Type B1	Black	
48F						Type B2		
						Universal		

Note:

Type B: Multimode cassettes only

Universal: MTP®-12 cassettes and some MTP®-24 Cassettes

SC Adapter: 12-Fiber only

MTP Connector (Single Mode): APC polish as default

MTP Connector (Multimode): UPC polish as default

Hot Products

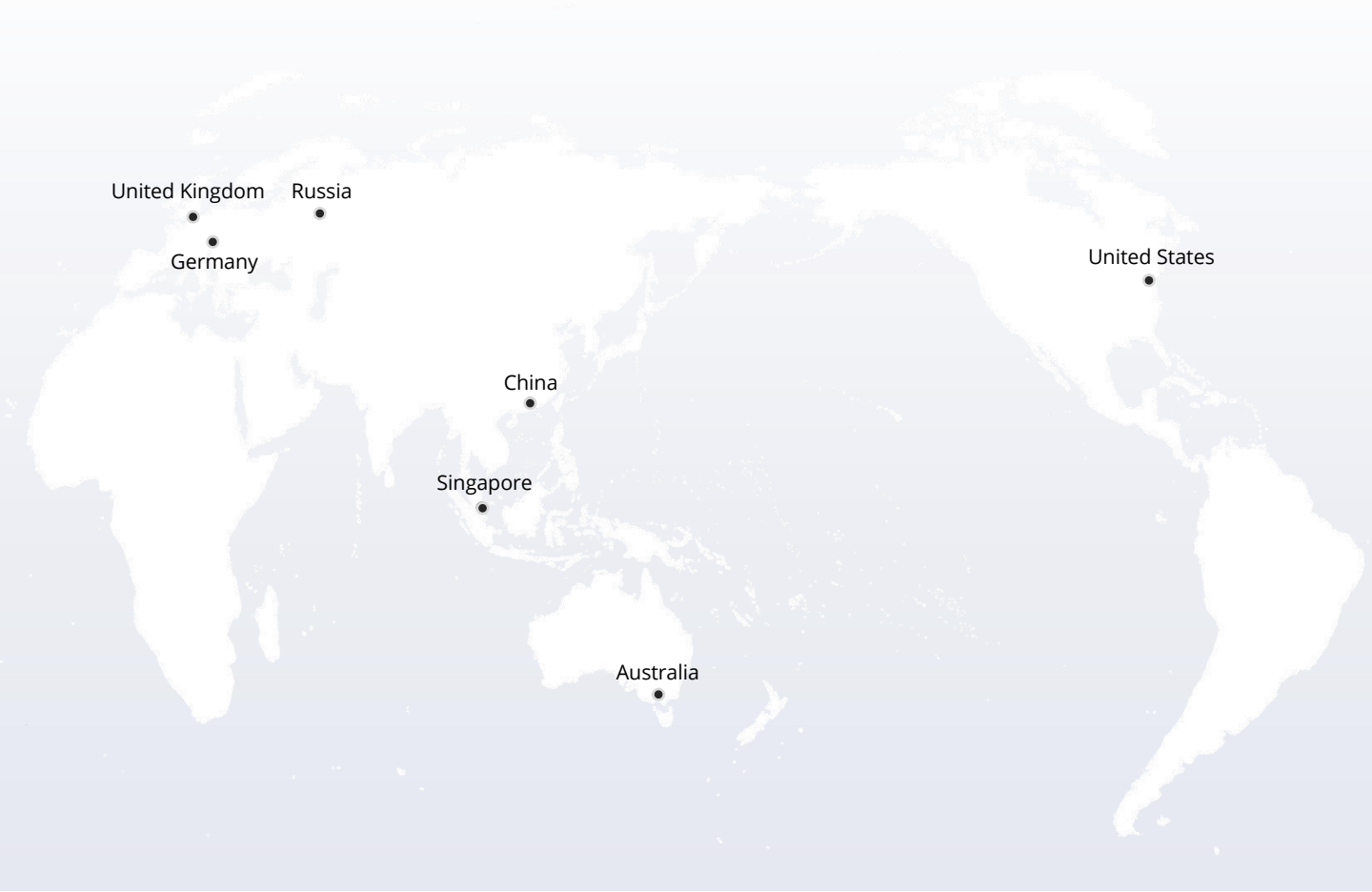
ID	Description
#57016	MTP®-12 to 6x LC Duplex, 12 Fibers OS2 Single Mode FHD MTP® Cassette, Type A
#57017	MTP®-12 to 6x LC Duplex, 12 Fibers OM4 Multimode FHD MTP® Cassette, Type A
#57023	MTP®-24 to 12x LC Duplex, 24 Fibers OS2 Single Mode FHD MTP® Cassette, Type A
#57024	MTP®-24 to 12x LC Duplex, 24 Fibers OM4 Multimode FHD MTP® Cassette, Type A
#57341	2x MTP®-12 to 12x LC Duplex, 24 Fibers OS2 Single Mode FHD MTP® Cassette, Type A
#57342	2x MTP®-12 to 12x LC Duplex, 24 Fibers OM4 Multimode FHD MTP® Cassette, Type A
#105333	3x MTP®-12 to 18x Shuttered LC Duplex, 36 Fibers OS2 Single Mode FHD MTP® Cassette, Type A
#105335	3x MTP®-12 to 18x Shuttered LC Duplex, 36 Fibers OM4 Multimode FHD MTP® Cassette, Type A
#147014	4x MTP®-12 to 8x 3-Port MDC Duplex, 48 Fibers OS2 Single Mode FHD MTP® Cassette, Type A
#167162	MTP®-24 to 3x MTP ® -8, 24 Fibers OS2 Single Mode FHD MTP® Cassette, Universal
#167163	2x MTP®-12 to 3x MTP ® -8 , 24 Fibers OM4 Multimode FHD MTP® Cassette, Universal
#167161	4x MTP®-6x MTP ® -8, 48 Fibers OM4 Multimode FHD MTP® Cassette, Universal

* More products information please click >

Matching Products

ID	Description
#96427	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
#68299	LC UPC to LC UPC Duplex 0.15dB IL OM4 Multimode PVC (OFNR) 2.0mm BIF Fiber Optic Patch Cable
#40191	LC UPC to LC UPC Duplex OS2 Single Mode PVC (OFNR) 2.0mm Fiber Optic Patch Cable
#68018	1m (3ft) MTP® Female, 12F OS2, Type B, Elite, Plenum (OFNP)
#68041	1m (3ft) MTP® Female, 24F OM4, Type A, Elite, Plenum (OFNP)
#72166	LC UPC to LC UPC Flat Clip Uniboot Duplex OS2 PVC (OFNR) 2.0mm BIF Fiber Optic Patch Cable
#72170	LC UPC to LC UPC Flat Clip Uniboot Duplex OM4 PVC (OFNR) 2.0mm BIF Fiber Optic Patch Cable
#105341	Fiber/Copper Connector Insertion & Extraction Tool for LC/SC/MU/MT-RJ/RJ45 Connectors
#130963	1m (3ft) MDC UPC to MDC UPC Uniboot Duplex OS2 Single Mode Fiber Patch Cable 2.0mm
#68107	10m (33ft) MTP®-12 (Female) to MTP®-12 (Female) OM4 Multimode Elite Trunk Cable, 12 Fibers, Type A, Plenum (OFNP)
#31012	Customized 24-144 Fibers MTP®-24 OS2 Single Mode Elite Trunk Cable, Yellow
#68047	1m (3ft) MTP® Female to 4 LC UPC Duplex 8 Fibers Type B Plenum (OFNP) OM4 50/125 Multimode Elite Breakout Cable

Note: 36F fiber casstess are not recommended to fit in FHD series wall mount enclosure (#50550).



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