

Faster.
Easier.
Better.



FiberExpress Pre-Terminated Assemblies (continued) FX MPO Trunk Assemblies

Innovative performance with ingrained simplicity. Industry-leading low-loss MPO Trunks are the foundation of Easier, Faster and Better pre-terminated fiber connectivity solutions revolutionizing the data center.

FASTER

- Faster identification of fiber type with Erika Violet for OM4 Cable, Connectors and Adapters
- Faster installation with pre-terminated solutions

EASIER

- Easier installation with 3-flange real and default pulling eye
- Easier ordering with simple intelligent *SmartPart* Numbers
- Easier upgradability to 40G and 100G with MPO pre-term solutions

BETTER

- Better architectural flexibility with high-performance 0.2 dB OM4 MPO connectors
- Better quality through exhaustive design validation against TIA standards
- Better contamination control with Data Center ready packaging



FM4MMB20025M, FX MPO Trunk, OM4, MPO-12 (Male to Male), Type-B, 2 x MPO-12 (24 fibers), 15 m, OFNP, uMini-Distribution, Fanout: 0.5 m x In-Line, Erika Violet Jacket



FM4MMB1010M, FX MPO Trunk, OM4, MPO-12 (Male to Male), Type-B, 1 x MPO-12 (12 fibers), 10 m, OFNP, Mini-Distribution 4.8 mm (Double-Jacket), Erika Violet Jacket

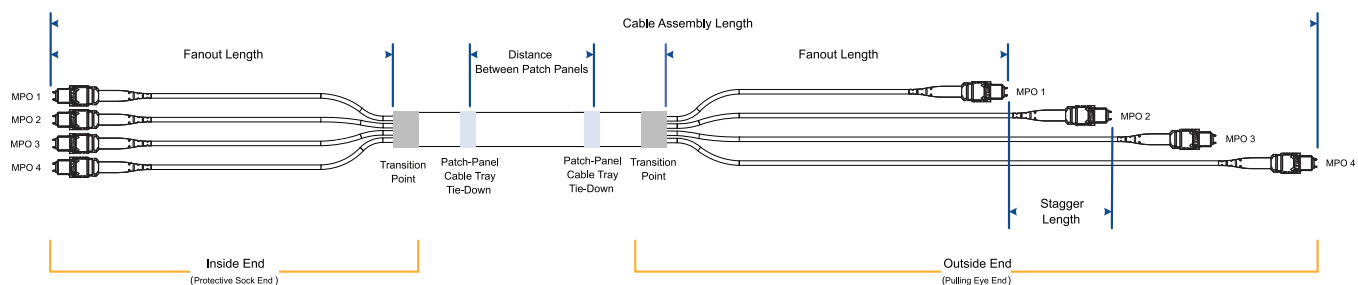
FX MPO Trunk Assemblies - Standard Performance

Description	FX OM1	FX OM3	FX OM4	FX SM
Cable Performance				
IL Max. 850 nm/1300 nm (dB/Km)	3.5/1.2	3.25/1.0	3.0/1.0	-
IL Max. 1310 nm/1550 nm (dB/Km)	-	-	-	0.35/0.25
Fire Rating	Plenum			
Cable Style	uMini-Distributon and Mini-Distribution cables			
Connector Performance - MPO-12				
IL Max. (dB)	0.5	0.35	0.2	0.75
Polish - RL Typ. (dB)	PC - 30	PC - 30	PC - 30	APC - 60
Fanout Length	0.5 m, In-Line			
Connector Performance - MPO-24				
IL Max. (dB)	0.5	0.35	0.35	0.75
Polish - RL Typ. (dB)	PC - 30	PC - 30	PC - 30	APC - 60

Pulling Eye Diameter

Description	12-Fiber	24-Fiber	36-Fiber	48-Fiber	72-Fiber	96-Fiber	144-Fiber
Installation Diameter - MPO-12 (Total Connectors)							
1 Connector per Bundle, 8 cm Bundle Stagger	1	2	3	4	6	8	12
1 Connector per Bundle, 8 cm Bundle Stagger		19.5 mm	19.5 mm	19.5 mm	19.5 mm	19.5 mm	19.5 mm
2 Connectors per Bundle, 8 cm Bundle Stagger				25.4 mm	25.4 mm	25.4 mm	25.4 mm
3 Connectors per Bundle, 8 cm Bundle Stagger					30.0 mm	30.0 mm	30.0 mm
4 Connectors per Bundle, 8 cm Bundle Stagger						31.7 mm	31.7 mm
6 Connectors per Bundle, 8 cm Bundle Stagger							38.1 mm
One Bundle, No Stagger (in-line)	19.5 mm	25.4 mm	30.0 mm	31.7 mm	38.1 mm	41.9 mm	50.8 mm

i Standard FX MPO Trunks 12F (Indoor) have a more robust cable construction using a Mini-Distribution cable (Double jacket 4.8 mm). They are designed for safe pulling, and to withstand the rigors of installation while providing sufficient support (wire basket support).



FiberExpress Pre-Terminated Assemblies (continued) FX MPO Trunk Assemblies

Standard FX MPO Trunks - Base 12



Fiber Type	Connectors	Connector Gender	Polarity (outside)		Connector Count	Length
3 OM3	M MPO-12(12F)	M Male to Male	A	Type-A	1 12 Fibers	005M to 500M M Meters *use M as decimal
4 OM4		F Female to Female	B	Type-B	2 24 Fibers	
S OS2		E Extension (M to F)	C	Type-C	3 36 Fibers	
		P Male to Open			4 48 fibers	
		R Female to Open			6 72 Fibers	
					8 96 Fibers	
					D 144 Fibers	

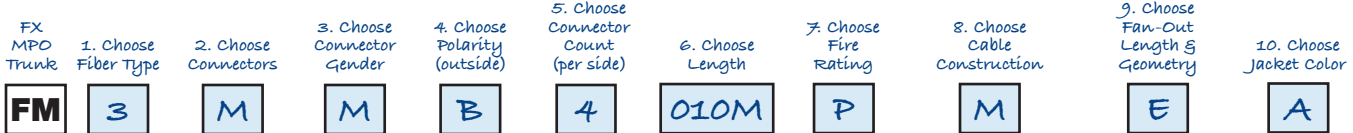
Examples:

FM3MMB1010M - FX MPO Trunk OM3, MPO-12 (Male to Male), Type-B, 1 MPO (12 Fibers), 10 m, OFNP, Mini-Distribution 4.8 mm (Double-Jacket), Aqua Jacket.

FM4MMB4030M - FX MPO Trunk OM4, MPO-12 (Male to Male), Type-B, 4 MPO (48 Fibers), 30 m, OFNP, Mini-Distribution (2.0 mm Sub-Units) Fan-Out: 0.5 m In-Line, Erika Violet Jacket.

FMSMFAD025M - FX MPO Trunk OS2, MPO-12 (Female to Female), Type-A, 12 MPO (144 Fibers), 25 m, OFNP, Mini-Distribution (2.0 mm Sub-Units) Fan-Out: 0.5 m In-Line, Yellow Jacket.

Tailored FX MPO Trunks - Base12



Fiber Type	Connectors	Connector Gender	Polarity (outside)	Connector Count	Length	Fire Rating	Cable Construction	Fan-Out Geometry	Jacket Color
1 OM1	M MPO-12 (12F)	M Male to Male	A Type-A	1 12 Fibers	005M to 500M M Meters *use M as decimal	P Plenum	U uMini-D	D None (1 Conn.)	O Orange
2 OM2		F Female to Female	B Type-B	2 24 Fibers		I I/O Plenum		M Mini-D	D 0.5 m x In-Line (>2 Conn.)
3 OM3		E Extension (M to F)	C Type-C	3 36 Fibers		A Plenum Armored (AIA)		E 1.0 m x In-Line	Y Yellow
4 OM4		P Male to Open		4 48 Fibers		B Plenum I/O Armored (AIA)		F 1.5 m x In-Line	A Aqua
S OS2		R Female to Open		6 72 Fibers		L LSZH		G 2.0 m x In-Line	E Erika Violet
				8 96 Fibers			1 0.5 m x Stag 80 mm/1 conn.		
				D 144 Fibers			2 0.5 m x Stag 80 mm/2 conn.		
							3 0.5 m x Stag 80 mm/3 conn.		
							4 0.5 m x Stag 80 mm/4 conn.		
							N No Pulling Eye		
							B Pulling Eye at both ends		

Use of Tailored part numbers:

- Fiber Type: For any OM1 and OM2 trunk.
- Fire Rating: For any Plenum Armored, I/O Plenum, I/O Plenum Armored, LSZH trunks.
- Cable Construction:
 - "M" Mini-Distribution cable used for indoor Plenum 2F (1 conn.), for I/O Plenum, for Plenum Armored, for I/O Plenum Armored and LSZH.
 - "U" uMini-Distribution cable used for indoor Plenum >=24F (>=2 conn.).

- Fan-Out Length & Geometry: Different fan-out lengths and stagger options, No Pulling Eye, Pulling eye at both ends.

Examples:

FM3MMB1010MPMNA - FX MPO Trunk OM3, MPO-12 (Male to Male), Type-B, 1 MPO (12 Fibers), 10 m, OFNP, Mini-Distribution 4.8 mm (Double-Jacket), No Pulling Eye, Aqua Jacket.

FM4MMB4020MAMDE - FX MPO Trunk OM4, MPO-12 (Male to Male), Type-B, 4 MPO (48 Fibers), 20 m, OFCP, (Plenum Armored), Mini-Distribution (3.0 mm Sub-Units) Fan-Out: 0.5 m In-Line, Erika Violet Jacket.

FMSMFA2030MPM1Y - FX MPO Trunk OS2, MPO-12 (Female to Female), Type-A, 2 MPO (24 Fibers), 30 m, OFNP, Mini-Distribution (3.0 mm Sub-Units) Fan-Out: 0.5 m Staggered 80 mm/1 CONN, Yellow Jacket.

Please contact Belden for any help configuring/validating SmartPart Numbers or for any other custom Engineered solutions

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FiberExpress Pre-Terminated Assemblies (continued) FX MPO Trunk Assemblies

Standard FX MPO Trunks - Base 8

1. Choose Fiber Type: **3**
2. Choose Connectors: **M**
3. Connector Gender: **M**
4. Choose Polarity: **B**
5. Choose Connector Count: **3**
6. Choose Length: **010M**

Fiber Type	Connectors	Connector Gender	Polarity (outside)	Connector Count	Length
3 OM3	4 MPO-12 (8F)	M Male to Male	A Type-A	1 8 Fibers	005M to 500M M Meters <small>*use M as decimal</small>
4 OM4		F Female to Female	B Type-B	2 16 Fibers	
S OS2		E Extension (M to F)	C Type-C	3 24 Fibers	
		P Male to Open		4 32 Fibers	
		R Female to Open		6 48 Fibers	
				8 64 Fibers	
				D 96 Fibers	

Examples:

FM3MMB1010M - FX MPO Trunk OM3, MPO-12 Base 8 (Male to Male), Type-B, 1 MPO (8 Fibers), 10 m, OFNP, Mini-Distribution 4.8 mm (Double-Jacket), Aqua Jacket.

FMS4FAD025M - FX MPO Trunk OS2, MPO-12 Base 8 (Female to Female), Type-A, 12 MPO (96 Fibers), 25 m, OFNP, Mini-Distribution (2.0 mm Sub-Units) Fan-Out: 0.5 m In-Line, Yellow Jacket.

Tailored FX MPO Trunks - Base 8

1. Choose Fiber Type: **3**
2. Choose Connectors: **M**
3. Choose Connector Gender: **M**
4. Choose Polarity (outside): **B**
5. Choose Connector Count (per side): **3**
6. Choose Length: **010M**
7. Choose Fire Rating: **P**
8. Choose Cable Construction: **M**
9. Choose Fan-Out Length & Geometry: **E**
10. Choose Jacket Color: **A**

Fiber Type	Connectors	Connector Gender	Polarity (outside)	Connector Count	Length	Fire Rating	Cable Construction	Fan-Out Geometry	Jacket Color
3 OM3	4 MPO-12 (8F)	M Male to Male	A Type-A	1 8 Fibers	005M to 500M M Meters <small>*use M as decimal</small>	P Plenum	U uMini-D M Mini-D	D None (1 Conn.)	O Orange N Black Y Yellow A Aqua E Erika Violet
4 OM4		F Female to Female	B Type-B	2 16 Fibers		I I/O Plenum		D 0.5 m x In-Line (>2 Conn.)	
S OS2		E Extension (M to F)	C Type-C	3 24 Fibers		A Plenum Armored (AIA)	E 1.0 m x In-Line		
	P Male to Open		4 32 Fibers	B Plenum I/O Armored (AIA)	F 1.5 m x In-Line				
	R Female to Open		6 48 Fibers	L LSZH	G 2.0 m x In-Line				
			8 64 Fibers		1 0.5 m x Stag 80mm/1 conn.				
			D 96 Fibers		2 0.5 m x Stag 80mm/2 conn.				
					3 0.5 m x Stag 80mm/3 conn.				
					4 0.5 m x Stag 80mm/4 conn.				
					N No Pulling Eye				
					B Pulling Eye at both ends				

Examples:

FM34MB1010MPMNA - FX MPO Trunk OM3, MPO-12 Base 8 (Male to Male), Type-B, 1 MPO (8 Fibers), 10 m, OFNP, Mini-Distribution 4.8 mm (Double-Jacket), No Pulling Eye, Aqua Jacket.

FM44MB4020MAMDE - FX MPO Trunk OM4, MPO-12 Base 8 (Male to Male), Type-B, 4 MPO (32 Fibers), 20 m, OFCP, (Plenum Armored), Mini-Distribution (3.0 mm Sub-Units) Fan-Out: 0.5 m In-Line, Erika Violet Jacket.

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