



Fiber Optic Connectivity Solutions

Introduction

1.1 Overview

This document details the FS fiber optic connectivity system, a comprehensive solution that supports scalable migration to 40G, 100G, 200G, 400G, and beyond through both duplex (2-fiber) and parallel (8/12/16/24-fiber) link designs. The system portfolio features pre-terminated MTP®/MPO cables, patch cables, and MTP® cassettes & panels—each designed to future-proof your network infrastructure.

1.2 Benefits

- The Pre-terminated Design Provides Quick Connection and Deployment for Network Applications
- Available in Base-2/8/12/16/24 Cabling Systems to Maximize Network Design Flexibility
- Available in OS2, OM3, OM4, and OM5 Fiber Optic Connectivities
- Available in FHD, FHX, FHU, and FHZ Series Cassettes, Panels, and Enclosures
- Used to Connect with SFP, QSFP, QSFP 28, QSFP-DD, or OSFP Transceivers
- Offer A Seamless Migration Path from 10/25/100G to 40/100/400G and Higher Data Rates

1.3 Connectivity Speeds

Data Rate	Transceiver	Fiber Type	Fiber Count	Fiber Connector	Polish Type	Max. Distance
10G	SFP-10GSR-85	OM4/OM3	2	LC Duplex	UPC	OM4 400m OM3 300m
10G	SFP-10GLR-31	OS2	2	LC Duplex	UPC	10km
25G	SFP-25GSR-85	OM4/OM3	2	LC Duplex	UPC	OM4 100m OM3 70m
25G	SFP-25GLR-31	OS2	2	LC Duplex	UPC	10km
40G	QSFP-BIDI-40G	OM5/OM4/OM3	2	LC Duplex	UPC	OM5 500m OM4 400m OM3 300m
40G	QSFP-LR4-40G	OS2	2	LC Duplex	UPC	10km
40G	QSFP-SR4-40G	OM4/OM3	12	MTP®/MPO-12	UPC	OM4 150m OM3 100m
40G	QSFP-PLR4-40G	OS2	12	MTP®/MPO-12	APC	10km
50G	SFP-50GSR-85	OM4	2	LC Duplex	UPC	100m
50G	QSFP-LR-50G	OS2	2	LC Duplex	UPC	10km
100G	QSFP-BIDI-100G	OM5/OM4/OM3	2	LC Duplex	UPC	OM5 150m OM4 100m OM3 75m
100G	QSFP-LR4-100G	OS2	2	LC Duplex	UPC	10km
100G	QSFP-SR4-100G	OM4/OM3	12	MTP®/MPO-12	UPC	OM4 100m OM3 70m
100G	QSFP-PSM4-100G	OS2	12	MTP®/MPO-12	APC	500m

100G	CFP-SR10-100G	OM4/OM3	24	MTP®/MPO-24	UPC	OM4 150m OM3 100m
200G	QSFP-FR4-200G	OS2	2	LC Duplex	UPC	2km
200G	QSFP-SR4-200G	OM4/OM3	12	MTP®/MPO-12	UPC	OM4 100m OM3 70m
200G	QDD-SR4-2x100G	OM4	24	MTP®/MPO-24	UPC	100m
400G	OSFP-FR4-400G	OS2	2	LC Duplex	UPC	2km
400G	QSFP112-FR4-400G	OS2	2	LC Duplex	UPC	2km
400G	QDD-FR4-400G	OS2	2	LC Duplex	UPC	2km
400G	QDD-SR4.2-400G	OM4/OM3	12	MTP®/MPO-12	UPC	OM4 150m OM3 70m
400G	OSFP-SR4-400G-FL	OM4/OM3	12	MTP®/MPO-12	APC	OM4 50m OM3 30m
400G	QDD-SR4-400G	OM4/OM3	12	MTP®/MPO-12	APC	OM4 50m OM3 30m
400G	QSFP112-SR4-400G	OM4/OM3	12	MTP®/MPO-12	APC	OM4 50m OM3 30m
400G	OSFP-DR4-400G-FL	OS2	12	MTP®/MPO-12	APC	500m
400G	QSFP112-DR4-400G	OS2	12	MTP®/MPO-12	APC	500m
400G	QDD-DR4-400G	OS2	12	MTP®/MPO-12	APC	500m
400G	OSFP-SR8-400G	OM4	16	MTP®/MPO-16	APC	100m
400G	QDD-SR8-400G	OM4/OM3	16	MTP®/MPO-16	APC	OM4 100m OM3 70m
800G	OSFP-2FR4-800G	OS2	2x2	Dual LC Duplex	UPC	2km
800G	QDD-2FR4-800G	OS2	2x2	Dual LC Duplex	UPC	2km
800G	OSFP-SR8-800G	OM4/OM3	2x12	Dual MTP®/MPO-12	APC	OM4 50m OM3 30m
800G	QDD-SR8-800G	OM4	2x12	Dual MTP®/MPO-12	APC	50m
800G	OSFP-DR8-800G	OS2	2x12	Dual MTP®/MPO-12	APC	500m
800G	OSFP224-DR4-800G-FL	OS2	12	MTP®/MPO-12	APC	500m
1.6T	OSFP-2FR4-1.6T-FL	OS2	2x2	Dual LC Duplex	UPC	2km

1.6T	OSFP-DR8-1.6T-FL	OS2	2x12	Dual MTP®/MPO-12	APC	500m
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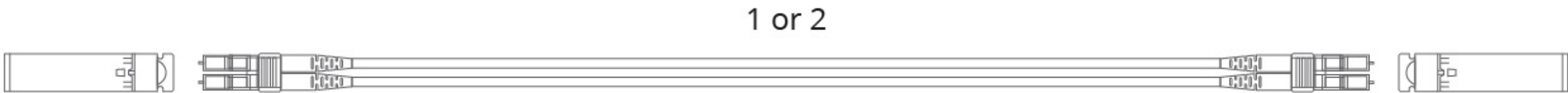
Connectivity Solutions

2.1 Duplex Applications

2.1.1 Duplex Direct

When directly connecting one SFP transceiver to another SFP transceiver, an A (Tx) to B (Rx) LC duplex fiber cable is required. This type of direct connectivity is only suggested within a given row of racks/cabinets.

Base 2

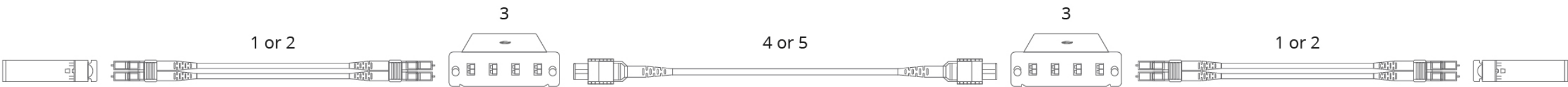


Number	Description	OM4	OS2
1	2F, LC-LC Duplex Fiber Cable, A (Tx) to B (Rx)	OM4LCDX	SMLCDX
2	2F, LC-LC Uniboot Duplex Fiber Cable, A (Tx) to B (Rx)	HD-OM4FULCDX	HD-SMFULCDX

2.1.2 Duplex Interconnect

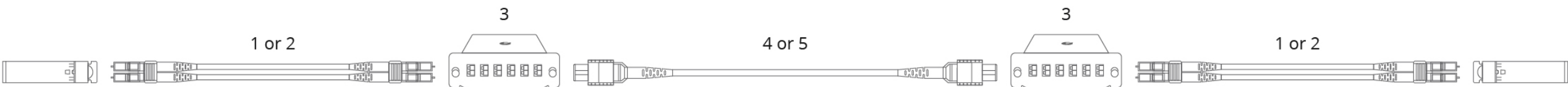
The structured cabling solution allows for patching on both ends of the optical network. An MTP® jumper or trunk is deployed with MTP®-LC cassettes connected to its end. LC duplex fiber cables provide connectivity to the active components. It allows for easier moves, adds, and changes (MACs).

Base 8



Number	Description	OM4	OS2
1	2F, LC-LC Duplex Fiber Cable, A (Tx) to B (Rx)	OM4LCDX	SMLCDX
2	2F, LC-LC UPC Uniboot Duplex Fiber Cable, A (Tx) to B (Rx)	HD-OM4FULCDX	HD-SMFULCDX
3	8F, MTP®-8 (Male) to 4 x LC Duplex Cassette, Universal	FHD-1MTP4LCDOM4U	FHD-1MTP4LCDOS2U
4	8F, MTP®-8 (Female) to MTP®-8 (Female) Jumper, Type B	8FMTPOM4	8FMTPSMF
5	8F, MTP®-8 (Female) to MTP®-8 (Female) Trunk Cable, Type B	8FMTPOM4	8FMTPSMF

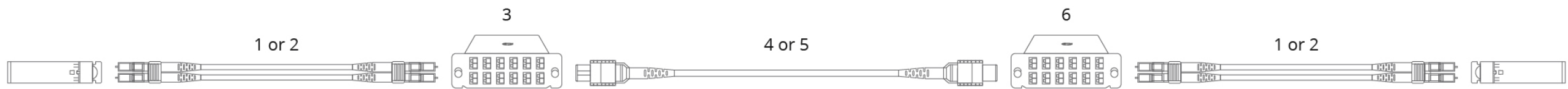
Base 12



Number	Description	OM4	OS2
1	2F, LC-LC Duplex Fiber Cable, A (Tx) to B (Rx)	OM4LCDX	SMLCDX
2	2F, LC-LC UPC Uniboot Duplex Fiber Cable, A (Tx) to B (Rx)	HD-OM4FULCDX	HD-SMFULCDX
3	12F, MTP®-12 (Male) to 6 x LC Duplex Cassette, Universal	FHD-1MTP6LCDOM4U	FHD-1MTP6LCDOS2U

4	12F, MTP®-12 (Female) to MTP®-12 (Female) Jumper, Type B	12FMTPOM4	12FMTPSMF
5	12F, MTP®-12 (Female) to MTP®-12 (Female) Trunk Cable, Type B	12FMTPOM4	12FMTPSMF

Base 24



Number	Description	OM4	OS2
1	2F, LC-LC Duplex Fiber Cable, A (Tx) to B (Rx)	OM4LCDX	SMLCDX
2	2F, LC-LC Uniboot Duplex Fiber Cable, A (Tx) to B (Rx)	HD-OM4FULCDX	HD-SMFULCDX
3	24F, MTP®-24 (Male) to 12 x LC Duplex Cassette, Type A	FHD-1MTP12LCDOM4A	FHD-1MTP12LCDOS2A
4	24F, MTP®-24 (Female) to MTP®-24 (Female) Jumper, Type A	24FMTPOM4	24FMTPSMF
5	24F, MTP®-24 (Female) to MTP®-24 (Female) Trunk Cable, Type A	XXMTPOM4	XXMTPSMF
6	24F, MTP®-24 (Male) to 12 x LC Duplex Cassette, Type AF	FHD-1MTP12LCDOM4AF	FHD-1MTP12LCDOS2AF

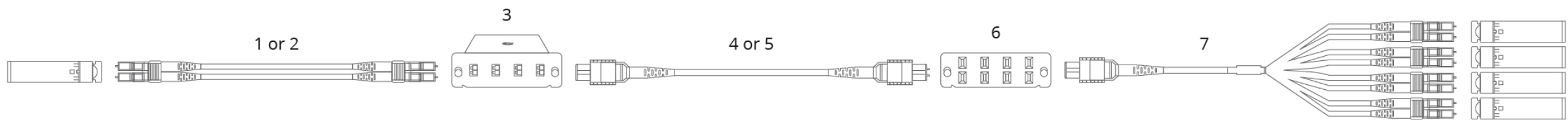
Note:

- Universal cassettes are used as a pair with a type B trunk cable.
- Type A and AF cassettes are used as a pair with a type A trunk cable.
- Learn more about [fiber polarity technical white paper](#).

2.1.3 Duplex Interconnect with Harness

The solution is also a duplex interconnect solution, but it deploys an MTP®-8 harness on one end of the link. An MTP® adapter panel and an MTP®-8 harness replace the MTP®-LC cassette and LC duplex fiber cable used in the previous solution. This cabling solution is ideal for use when high-port-count switches require connectivity.

Base 8



Number	Description	OM4	OS2
1	2F, LC-LC Duplex Fiber Cable, A (Tx) to B (Rx)	OM4LCDX	SMLCDX
2	2F, LC-LC Uniboot Duplex Fiber Cable, A (Tx) to B (Rx)	HD-OM4FULCDX	HD-SMFULCDX
3	8F, MTP®-8 (Male) to 4 x LC Duplex Cassette, Universal	FHD-1MTP4LCDOM4U	FHD-1MTP4LCDOS2U
4	8F, MTP®-8 (Female) to MTP®-8 (Male) Jumper, Type B	XXMTPOM4	XXMTPSMF
5	8F, MTP®-8 (Female) to MTP®-8 (Male) Trunk Cable, Type B	XXMTPOM4	XXMTPSMF
6	MTP®-8/12/24 Adapter Panel, Up to Up/Down	FHD-FAP8MTPHB	FHD-FAP12MTPHA
7	8F, MTP®-8 (Female) to 4 x LC Duplex Harness, Type B	8FMTPLCOM4	8FMTPLCSMF

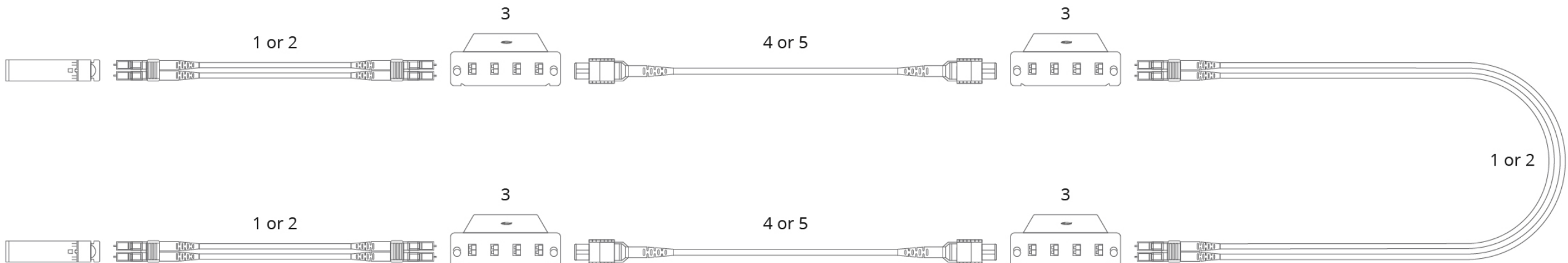
Note:

- The two sides of the MTP® adapter panel should have a male connector and a female connector.

2.1.4 Duplex Cross Connect

The final solution for a duplex link deploys a structured cabling solution with cross-connect connectivity. This solution will allow all patching to be made at the Main Distribution Area (MDA) with maximum flexibility for “any port” to “any port” connection.

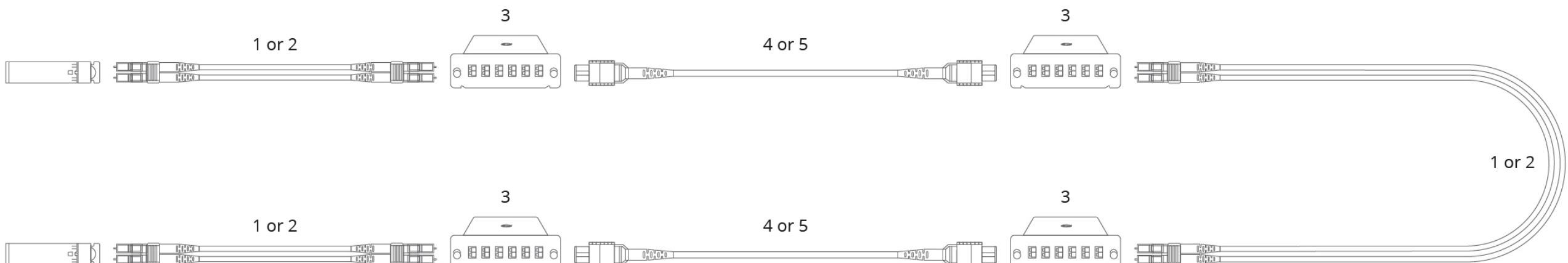
Base 8



The diagram illustrates the Base 8 structured cabling solution. It shows two rows of patch panels, each with 8 ports. The top row is connected to a 2F, LC-LC Duplex Fiber Cable (A (Tx) to B (Rx)) via a 2F, LC-LC Uniboot Duplex Fiber Cable (A (Tx) to B (Rx)). The bottom row is connected to a 2F, LC-LC Duplex Fiber Cable (A (Tx) to B (Rx)) via a 2F, LC-LC Uniboot Duplex Fiber Cable (A (Tx) to B (Rx)). The patch panels are connected to a 4F, MTP®-8 (Male) to 4 x LC Duplex Cassette, Universal via a 4F, MTP®-8 (Female) to MTP®-8 (Female) Jumper, Type B. The patch panels are also connected to a 4F, MTP®-8 (Female) to MTP®-8 (Female) Trunk Cable, Type B. The patch panels are connected to a 4F, MTP®-8 (Female) to MTP®-8 (Female) Trunk Cable, Type B. The patch panels are connected to a 4F, MTP®-8 (Female) to MTP®-8 (Female) Trunk Cable, Type B.

Number	Description	OM4	OS2
1	2F, LC-LC Duplex Fiber Cable, A (Tx) to B (Rx)	OM4LCDX	SMLCDX
2	2F, LC-LC Uniboot Duplex Fiber Cable, A (Tx) to B (Rx)	HD-OM4FULCDX	HD-SMFULCDX
3	8F, MTP®-8 (Male) to 4 x LC Duplex Cassette, Universal	FHD-1MTP4LCDOM4U	FHD-1MTP4LCDOS2U
4	8F, MTP®-8 (Female) to MTP®-8 (Female) Jumper, Type B	8FMTPOM4	8FMTPSMF
5	8F, MTP®-8 (Female) to MTP®-8 (Female) Trunk Cable, Type B	8FMTPOM4	8FMTPSMF

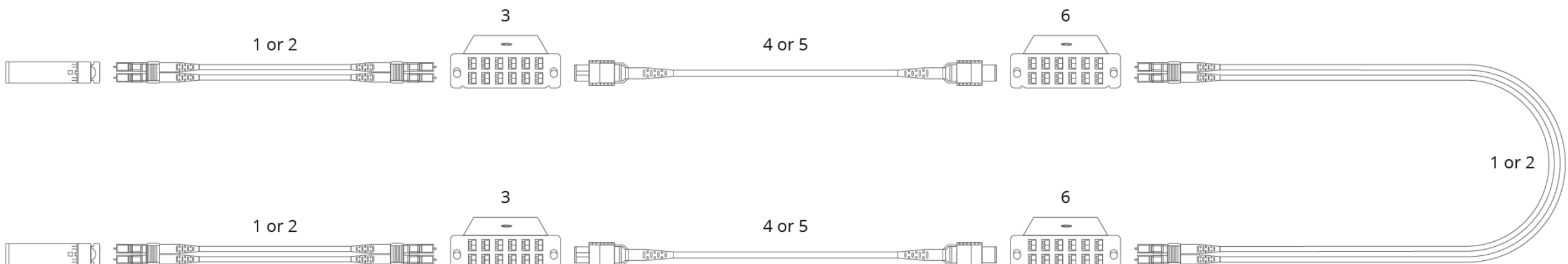
Base 12



The diagram illustrates the Base 12 structured cabling solution. It shows two rows of patch panels, each with 12 ports. The top row is connected to a 2F, LC-LC Duplex Fiber Cable (A (Tx) to B (Rx)) via a 2F, LC-LC Uniboot Duplex Fiber Cable (A (Tx) to B (Rx)). The bottom row is connected to a 2F, LC-LC Duplex Fiber Cable (A (Tx) to B (Rx)) via a 2F, LC-LC Uniboot Duplex Fiber Cable (A (Tx) to B (Rx)). The patch panels are connected to a 12F, MTP®-12 (Male) to 6 x LC Duplex Cassette, Universal via a 12F, MTP®-12 (Female) to MTP®-12 (Female) Jumper, Type B. The patch panels are also connected to a 12F, MTP®-12 (Female) to MTP®-12 (Female) Trunk Cable, Type B. The patch panels are connected to a 12F, MTP®-12 (Female) to MTP®-12 (Female) Trunk Cable, Type B.

Number	Description	OM4	OS2
1	2F, LC-LC Duplex Fiber Cable, A (Tx) to B (Rx)	OM4LCDX	SMLCDX
2	2F, LC-LC Uniboot Duplex Fiber Cable, A (Tx) to B (Rx)	HD-OM4FULCDX	HD-SMFULCDX
3	12F, MTP®-12 (Male) to 6 x LC Duplex Cassette, Universal	FHD-1MTP6LCDOM4U	FHD-1MTP6LCDOS2U
4	12F, MTP®-12 (Female) to MTP®-12 (Female) Jumper, Type B	12FMTPOM4	12FMTPSMF
5	12F, MTP®-12 (Female) to MTP®-12 (Female) Trunk Cable, Type B	12FMTPOM4	12FMTPSMF

Base 24



The diagram illustrates the Base 24 structured cabling solution. It shows two rows of patch panels, each with 24 ports. The top row is connected to a 2F, LC-LC Duplex Fiber Cable (A (Tx) to B (Rx)) via a 2F, LC-LC Uniboot Duplex Fiber Cable (A (Tx) to B (Rx)). The bottom row is connected to a 2F, LC-LC Duplex Fiber Cable (A (Tx) to B (Rx)) via a 2F, LC-LC Uniboot Duplex Fiber Cable (A (Tx) to B (Rx)). The patch panels are connected to a 24F, MTP®-24 (Male) to 12 x LC Duplex Cassette, Universal via a 24F, MTP®-24 (Female) to MTP®-24 (Female) Jumper, Type B. The patch panels are also connected to a 24F, MTP®-24 (Female) to MTP®-24 (Female) Trunk Cable, Type B. The patch panels are connected to a 24F, MTP®-24 (Female) to MTP®-24 (Female) Trunk Cable, Type B.

Number	Description	OM4	OS2
1	2F, LC-LC Duplex Fiber Cable, A (Tx) to B (Rx)	OM4LCDX	SMLCDX
2	2F, LC-LC Uniboot Duplex Fiber Cable, A (Tx) to B (Rx)	HD-OM4FULCDX	HD-SMFULCDX
3	24F, MTP®-24 (Male) to 12 x LC Duplex Cassette, Universal	FHD-1MTP12LCDOM4U	FHD-1MTP12LCDOS2U
4	24F, MTP®-24 (Female) to MTP®-24 (Female) Jumper, Type B	24FMTPOM4	24FMTPSMF
5	24F, MTP®-24 (Female) to MTP®-24 (Female) Trunk Cable, Type B	24FMTPOM4	24FMTPSMF

Number	Description	OM4	OS2
1	2F, LC-LC Duplex Fiber Cable, A (Tx) to B (Rx)	OM4LCDX	SMLCDX
2	2F, LC-LC Uniboot Duplex Fiber Cable, A (Tx) to B (Rx)	HD-OM4FULCDX	HD-SMFULCDX
3	24F, MTP®-24 (Male) to 12 x LC Duplex Cassette, Type A	FHD-1MTP12LCDOM4A	FHD-1MTP12LCDOS2A
4	24F, MTP®-24 (Female) to MTP®-24 (Female) Jumper, Type A	24FMTPOM4	24FMTPSMF
5	24F, MTP®-24 (Female) to MTP®-24 (Female) Trunk Cable, Type A	XXMTPOM4	XXMTPSMF
6	24F, MTP®-24 (Male) to 12 x LC Duplex Cassette, Type AF	FHD-1MTP12LCDOM4AF	FHD-1MTP12LCDOS2AF

Note:

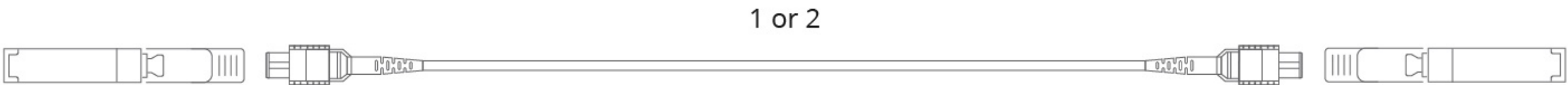
- Universal cassettes are used as a pair with a type B trunk cable.
- Type A and AF cassettes are used as a pair with a type A trunk cable.
- Learn more about [fiber polarity technical white paper](#).

2.2 Parallel Applications

2.2.1 Direct Connect

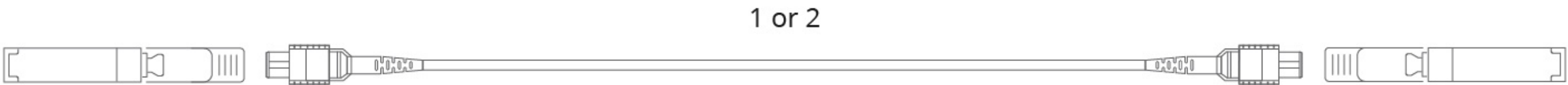
When directly connecting one QFSP+ transceiver to another QFSP+ transceiver, a Type B MTP®-8 Female to MTP®-8 Female fiber cable is required. This type of direct connectivity is only suggested for short distances within a given row of racks/cabinets.

Base 8



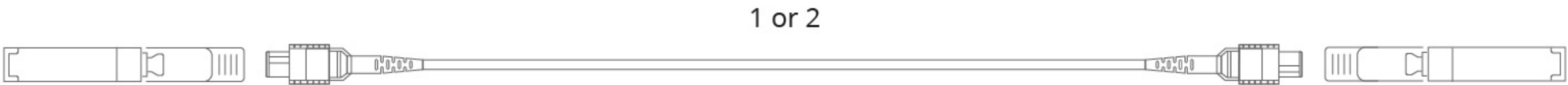
Number	Description	OM4	OS2
1	8F, MTP®-8 (Female) to MTP®-8 (Female) Jumper, Type B	8FMTPOM4	8FMTPSMF
2	8F, MTP®-8 (Female) to MTP®-8 (Female) Trunk Cable, Type B	8FMTPOM4	8FMTPSMF

Base 12



Number	Description	OM4	OS2
1	12F, MTP®-12 (Female) to MTP®-12 (Female) Jumper, Type B	12FMTPOM4	12FMTPSMF
2	12F, MTP®-12 (Female) to MTP®-12 (Female) Trunk Cable, Type B	12FMTPOM4	12FMTPSMF

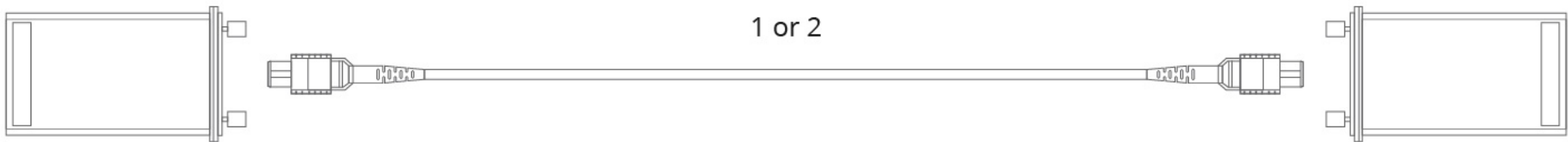
Base 16



Number	Description	OM4	OS2
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1	16F, MTP®-16 (Female) to MTP®-16 (Female) Jumper, Crossover	16FMTPOM4	16FMTPSMF
2	16F, MTP®-16 (Female) to MTP®-16 (Female) Trunk Cable, Crossover	XXMTPOM4	XXMTPSMF

Base 24

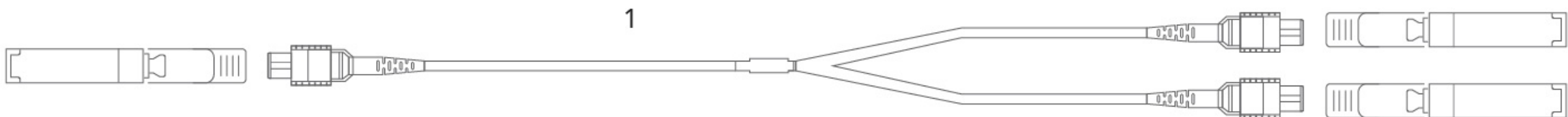


Number	Description	OM4	OS2
1	24F, MTP®-24 (Female) to MTP®-24 (Female) Jumper, Type B	XXMTPOM4	XMTPSMF
2	24F, MTP®-24 (Female) to MTP®-24 (Female) Trunk Cable, Type B	XXMTPOM4	XXMTPSMF

2.2.2 Direct Connect with Breakout

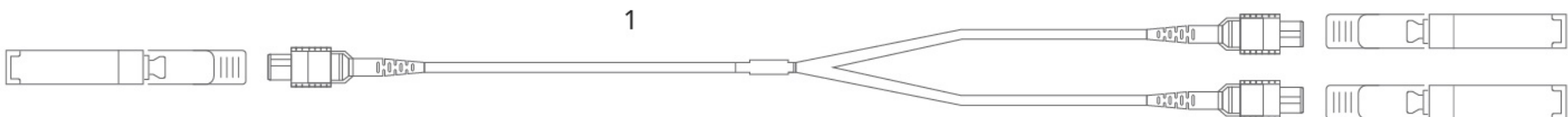
When connecting an MTP® interface to two or three MTP® transceivers, a breakout cable is required. It enables conversion between different fiber counts in MTP® connectors for 100% fiber utilization. This direct breakout solution is recommended only for short-distance connections within the same row or rack/cabinet.

Base 8



Number	Description	OM4	OS2
1	8F, MTP®-12 (Female) to 2 x MTP®-4 (Female) Breakout Cable, Type B	8FMTPOM4	8FMTPSMF

Base 16



Number	Description	OM4	OS2
1	16F, MTP®-16 (Female) to 2 x MTP®-8 (Female) Breakout Cable, Crossover	16FMTPOM4	16FMTPSMF

2.2.3 Direct Connect with Harness

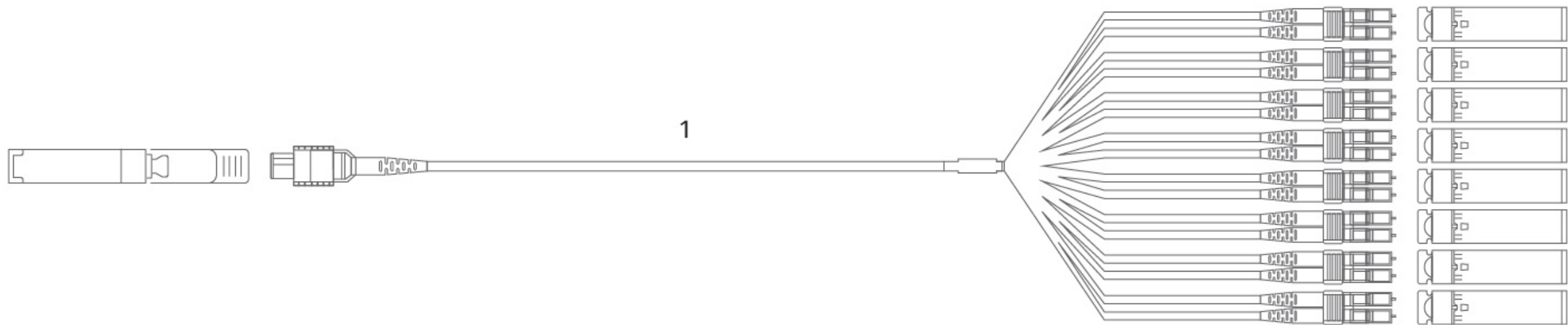
When directly connecting an MTP® transceiver to the corresponding duplex ports, an MTP®-LC harness is required. The harness will have LC duplex connectors and the fibers will be paired in a specific way, assuring the proper polarity is maintained. This type of direct connectivity is only suggested for short distances within a given row or in the same rack/cabinet.

Base 8



Number	Description	OM4	OS2
1	8F, MTP®-8 (Female) to 4 x LC Duplex Harness, Type B	8FMTPLCOM4	8FMTPLCSMF

Base 16

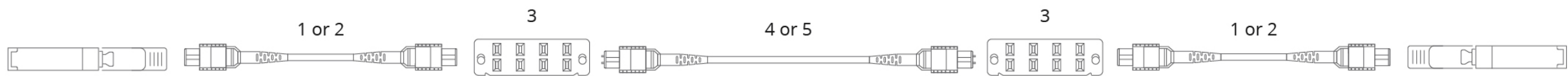


Number	Description	OM4	OS2
1	16F, MTP®-16 (Female) to 8 x LC Duplex Harness, Crossover	16FMTPLCOM4	16FMTPLCSMF

2.2.4 Parallel Interconnect

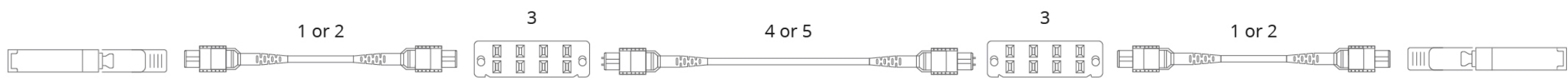
The parallel interconnect solution is similar to the duplex interconnect, but instead of using MTP®-LC cassettes and LC duplex fiber cables, MTP® adapter panels and MTP® jumpers or trunks are deployed. Structured cabling allows for easier moves, adds and changes (MACs).

Base 8



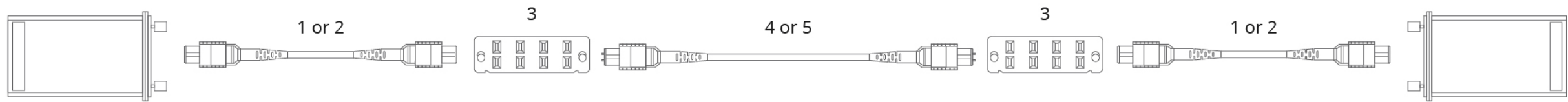
Number	Description	OM4	OS2
1	8F, MTP®-8 (Female) to MTP®-8 (Female) Jumper, Type B	8FMTPOM4	8FMTPSMF
2	8F, MTP®-8 (Female) to MTP®-8 (Female) Trunk Cable, Type B	8FMTPOM4	8FMTPSMF
3	MTP®-8/12/24 Adapter Panel, Up to Up/Down	FHD-FAP8MTPHB	FHD-FAP12MTPHA
4	8F, MTP®-8 (Male) to MTP®-8 (Male) Jumper, Type B	XXMTPOM4	XXMTPSMF
5	8F, MTP®-8 (Male) to MTP®-8 (Male) Trunk Cable, Type B	8FMTPOM4	8FMTPSMF

Base 12



Number	Description	OM4	OS2
1	12F, MTP®-12 (Female) to MTP®-12 (Female) Jumper, Type B	12FMTPOM4	12FMTPSMF
2	12F, MTP®-12 (Female) to MTP®-12 (Female) Trunk Cable, Type B	12FMTPOM4	12FMTPSMF
3	MTP®-8/12/24 Adapter Panel, Up to Up/Down	FHD-FAP8MTPHB	FHD-FAP12MTPHA
4	12F, MTP®-12 (Male) to MTP®-12 (Male) Jumper, Type B	XXMTPOM4	XXMTPSMF
5	12F, MTP®-12 (Male) to MTP®-12 (Male) Trunk Cable, Type B	12FMTPOM4	12FMTPSMF

Base 24



Number	Description	OM4	OS2
1	24F, MTP®-24 (Female) to MTP®-24 (Female) Jumper, Type B	XXMTPOM4	XMTPSMF
2	24F, MTP®-24 (Female) to MTP®-24 (Female) Trunk Cable, Type B	XXMTPOM4	XXMTPSMF
3	MTP®-8/12/24 Adapter Panel, Up to Up/Down	FHD-FAP8MTPHB	FHD-FAP12MTPHA
4	24F, MTP®-24 (Male) to MTP®-24 (Male) Jumper, Type B	XXMTPOM4	XXMTPSMF
5	24F, MTP®-24 (Male) to MTP®-24 (Male) Trunk Cable, Type B	XXMTPOM4	XXMTPSMF

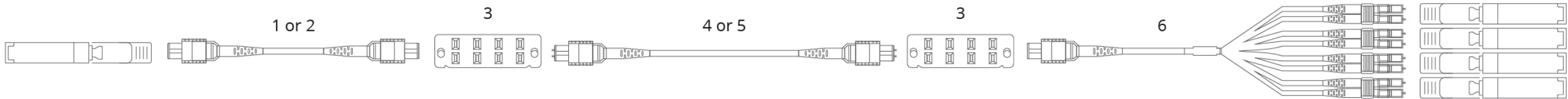
Note:

- The two sides of the MTP® adapter panel should have a male connector and a female connector.

2.2.5 Parallel Interconnect with Harness

A disadvantage of using this solution is that flexibility is lost on the SFP+ end because the transceiver ports need to be located in the same chassis. This is because the leg lengths for the LC Duplexed legs will be the same. However, this approach allows for an easy upgrade path moving from 2-fiber to 8-fiber connectivity. An MTP®-8 jumper would be used from the adapter panel for the QFSP+ connectivity, thus allowing a mix-and-match upgrade path without having to change out the fiber panels.

Base 8

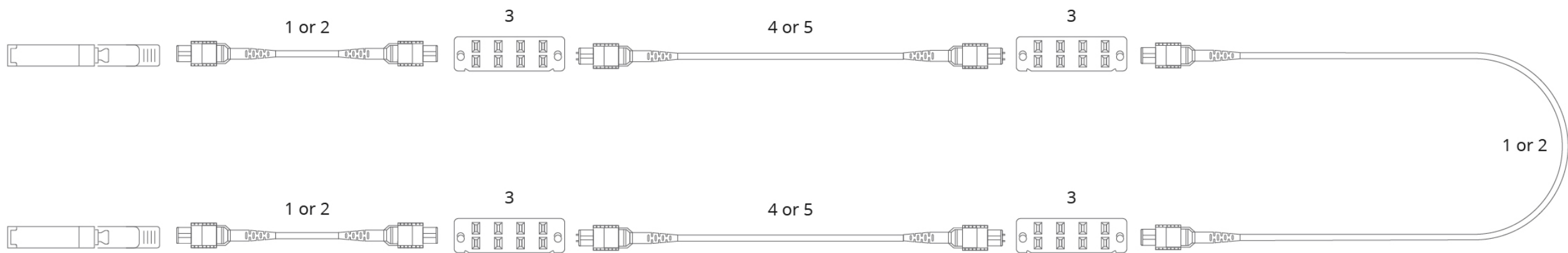


Number	Description	OM4	OS2
1	8F, MTP®-8 (Female) to MTP®-8 (Female) Jumper, Type B	8FMTPOM4	8FMTPSMF
2	8F, MTP®-8 (Female) to MTP®-8 (Female) Trunk Cable, Type B	8FMTPOM4	8FMTPSMF
3	MTP®-8/12/24 Adapter Panel, Up to Up/Down	FHD-FAP8MTPHB	FHD-FAP12MTPHA
4	8F, MTP®-8 (Male) to MTP®-8 (Male) Jumper, Type B	XXMTPOM4	XXMTPSMF
5	8F, MTP®-8 (Male) to MTP®-8 (Male) Trunk Cable, Type B	8FMTPOM4	8FMTPSMF
6	8F, MTP®-8 (Female) to 4 x LC Duplex Harness, Type B	8FMTPLCOM4	8FMTPLCSMF

2.2.6 Parallel Cross Connect

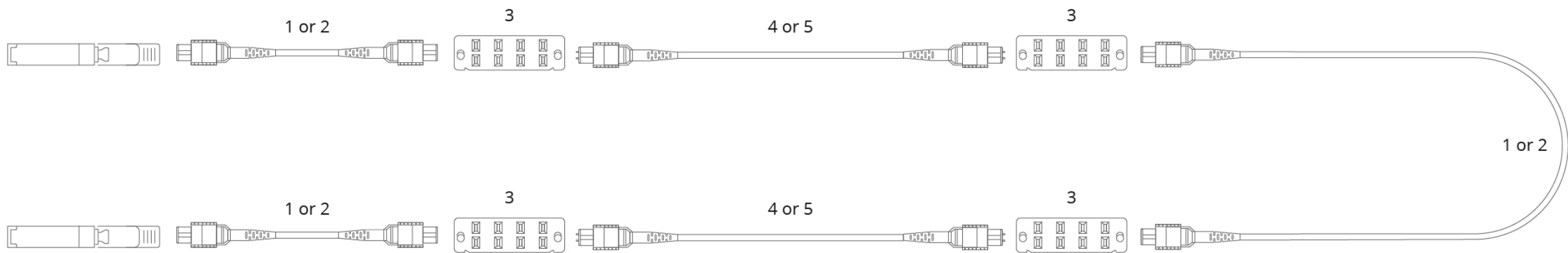
The solution utilizes MTP® trunk cables to provide a structured cable solution with cross-connect connectivity with complete port replication. This solution will allow all MACs to be made at one location (usually the MDA). Utilizing male MTP® trunks allows all MTP® jumpers to be female to female, thus reducing ordering and inventory complexity.

Base 8



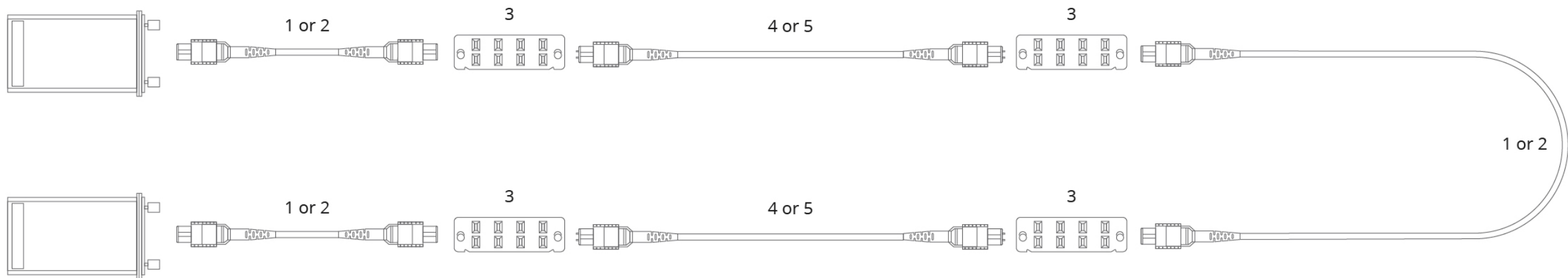
Number	Description	OM4	OS2
1	8F, MTP®-8 (Female) to MTP®-8 (Female) Jumper, Type B	8FMTPOM4	8FMTPSMF
2	8F, MTP®-8 (Female) to MTP®-8 (Female) Trunk Cable, Type B	8FMTPOM4	8FMTPSMF
3	MTP®-8/12/24 Adapter Panel, Up to Up/Down	FHD-FAP8MTPHB	FHD-FAP12MTPHA
4	8F, MTP®-8 (Male) to MTP®-8 (Male) Jumper, Type B	XXMTPOM4	XXMTPSMF
5	8F, MTP®-8 (Male) to MTP®-8 (Male) Trunk Cable, Type B	8FMTPOM4	8FMTPSMF

Base 12



Number	Description	OM4	OS2
1	12F, MTP®-12 (Female) to MTP®-12 (Female) Jumper, Type B	12FMTPOM4	12FMTPSMF
2	12F, MTP®-12 (Female) to MTP®-12 (Female) Trunk Cable, Type B	12FMTPOM4	12FMTPSMF
3	MTP®-8/12/24 Adapter Panel, Up to Up/Down	FHD-FAP8MTPHB	FHD-FAP12MTPHA
4	12F, MTP®-12 (Male) to MTP®-12 (Male) Jumper, Type B	XXMTPOM4	XXMTPSMF
5	12F, MTP®-12 (Male) to MTP®-12 (Male) Trunk Cable, Type B	12FMTPOM4	12FMTPSMF

Base 24



Number	Description	OM4	OS2
1	24F, MTP®-24 (Female) to MTP®-24 (Female) Jumper, Type B	XXMTPOM4	XMTPSMF
2	24F, MTP®-24 (Female) to MTP®-24 (Female) Trunk Cable, Type B	XXMTPOM4	XXMTPSMF
3	MTP®-8/12/24 Adapter Panel, Up to Up/Down	FHD-FAP8MTPHB	FHD-FAP12MTPHA

4	24F, MTP®-24 (Male) to MTP®-24 (Male) Trunk Cable, Type B	XXMTPOM4	XXMTPSMF
5	24F, MTP®-24 (Male) to MTP®-24 (Male) Trunk Cable, Type B	XXMTPOM4	XXMTPSMF

Note:

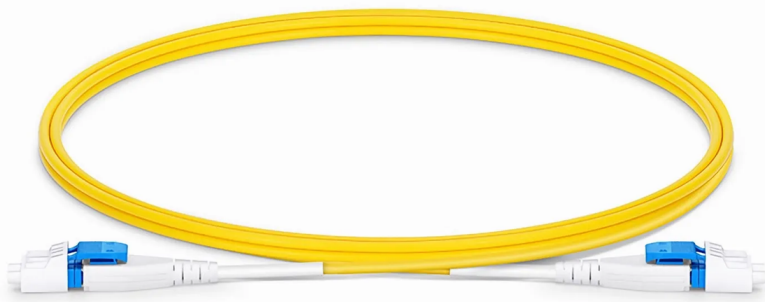
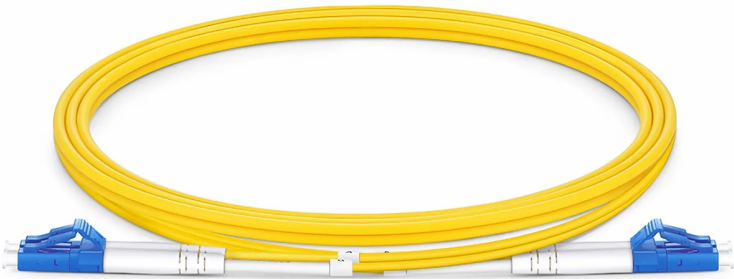
- The two sides of the MTP® adapter panel should have a male connector and a female connector.

Connectivity Components

3.1 Fiber Patch Cables

LC Duplex Fiber Cables

- Available in OS2, OM1, OM2, OM3, OM4, and OM5 Fiber
- Available in Riser (OFNR), Plenum (OFNP), and LSZH Cable Jacket
- Available in 0.9/1.2/1.6/1.8/2.0/3.0mm Cable Outside Diameter
- Available in Yellow, Aqua, Orange, Green, and so on Cable Colors



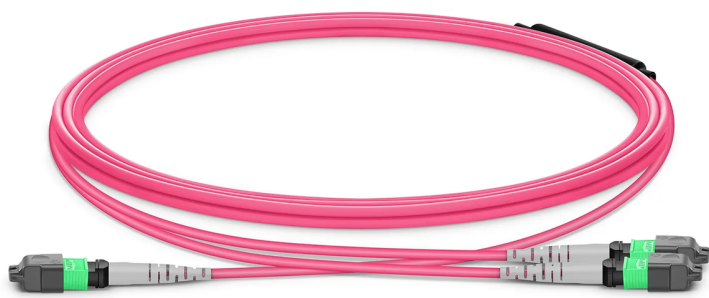
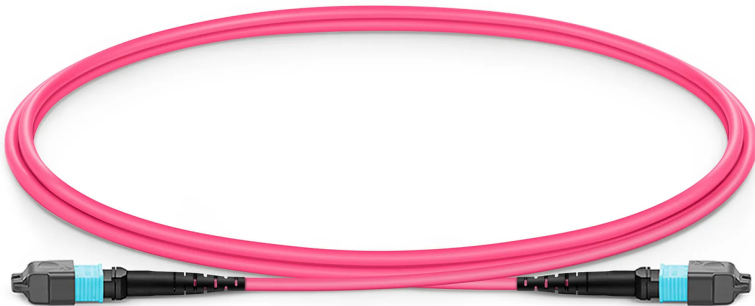
LC Uniboot Duplex Fiber Cables

- Available in Standard/Flat/Switchable Clip and Push Pull Tabs Connector Types
- Available in OS2, OM3, and OM4 Fiber
- Available in Riser (OFNR) and LSZH Cable Jacket
- Available in 1.6 and 2.0mm Cable Outside Diameters

3.2 MTP®/MPO Fiber Cables

MTP®/MPO Jumpers

- Available in OS2, OM3, OM4, and OM5 Fiber
- MTP®-12 Available in 8, 12, 24, 36, 48, 72, 96, 144, and 288 Fiber Counts
- MTP®-24 Available in 24, 48, 72, 96, 144, and 192 Fiber Counts
- Available in Plenum (OFNP), Riser (OFNR), LSZH, and Dual Rated (OFNR/LSZH) Cable Jacket
- Available in Female (Non-Pinned) and Male (Pinned)
- Available in Type A, Type B, and Type C Standard Polarity

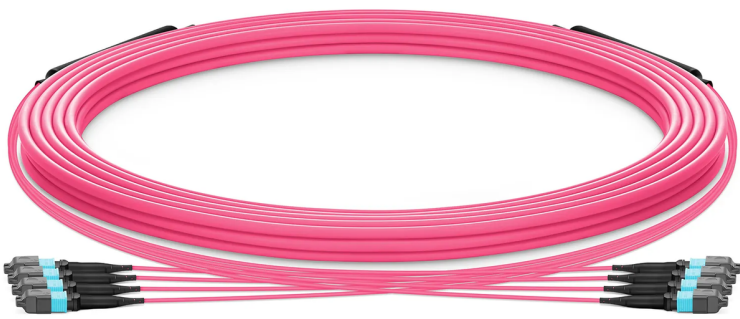


MTP®/MPO Breakouts

- Convert from 8/16/24 to 4/8/12 Fibers for 100% Fiber Utilization
- Available in OS2, OM3, and OM4 Fiber
- Available in Plenum (OFNP), LSZH, and Dual Rated (OFNR/LSZH) Cable Jacket
- Available in Female (Non-Pinned) and Male (Pinned)
- Available in Type A and Type B Standard Polarity

MTP®/MPO Trunks

- Available in OS2, OM3, and OM4 Fiber
- MTP®-8 Available in 8, 16, 24, 32, 48, 72, 96, 144, 192, and 288 Fiber Counts
- MTP®-12 Available in 12, 24, 36, 48, 72, 96, 144, 192, 216, 288, 432, and 576 Fiber Counts
- MTP®-16 Available in 16, 32, 48, 64, 96, 128, 192, and 256 Fiber Counts
- MTP®-24 Available in 24, 48, 72, 96, and 144 Fiber Counts
- Available in Plenum (OFNP) and LSZH Cable Jacket
- Available in Female (Non-Pinned) and Male (Pinned)
- Available in Type A and Type B Standard Polarity



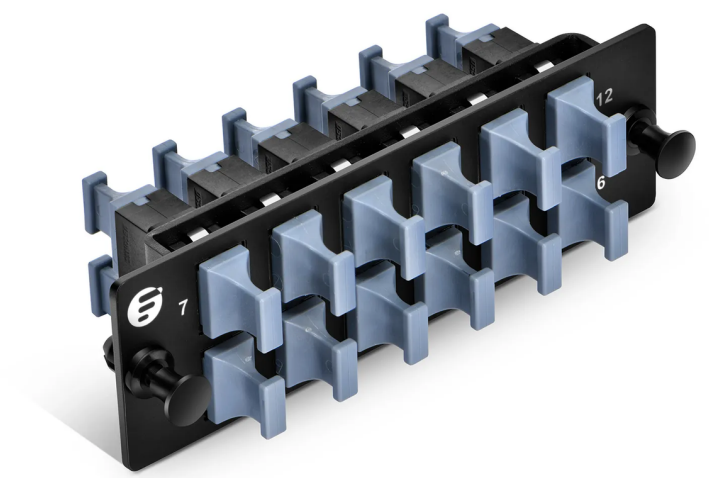
MTP®/MPO Harnesses

- Available in OS2, OM3, and OM4 Fiber
- MTP®/MPO-12 Available in 8, 12, 24, 36, 48, 72, 96, and 144 Fiber Counts
- MTP®-24 Available in 24, 48, 72, 96, and 144 Fiber Counts
- Available in Plenum (OFNP) and LSZH Cable Jacket
- Available in Female (Non-Pinned) and Male (Pinned)
- Available in Type A and Type B Standard Polarity

3.3 FHD MTP® Cassettes & Panels

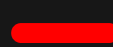
MTP®-LC Cassettes

- 0.35dB Ultra Low-loss MTP® Connectors for Longer Link Distances
- Offered in A Wide Range of Polarity Configurations (A/AF/U)
- Interface Color-coding Makes It Easy to Identify Fiber Type
- Snap-in Front Mount Allows for Easy Installation into Enclosures
- For Main, Horizontal, and Equipment Distribution Areas in Data Center Cabling



MTP® Fiber Adapter Panels

- Fully Compatible with All FHD [Enclosures](#), Assuring Flexibility and Ease of Network Deployment
- Interface Color-coding Makes It Easy to Identify Fiber Type
- Clear Numbering for Quick Fiber Identification
- Push-lock Rivets Tool-less Installation for One-handed Insertion and Removal and Easier MACs



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