

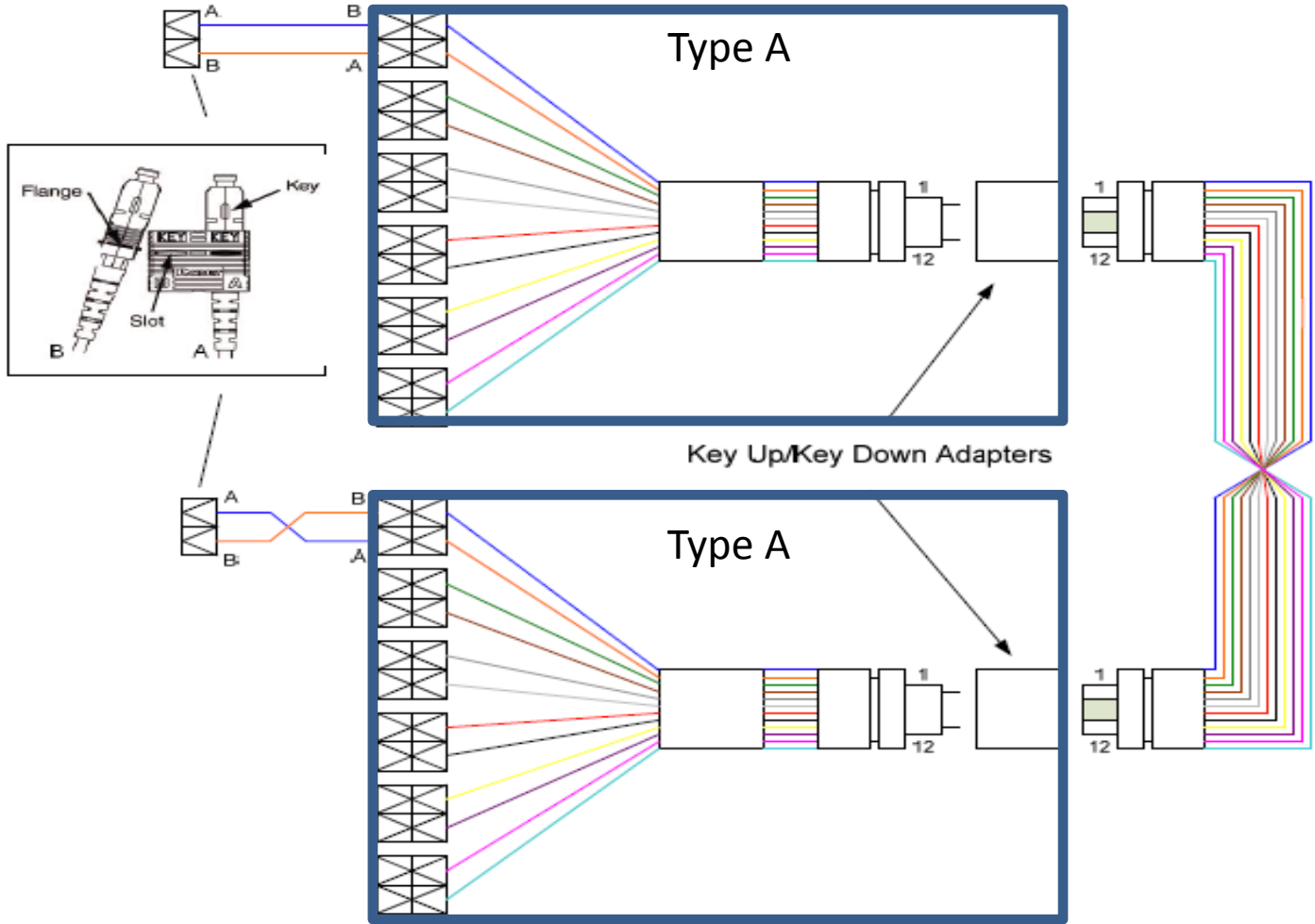
# ACT



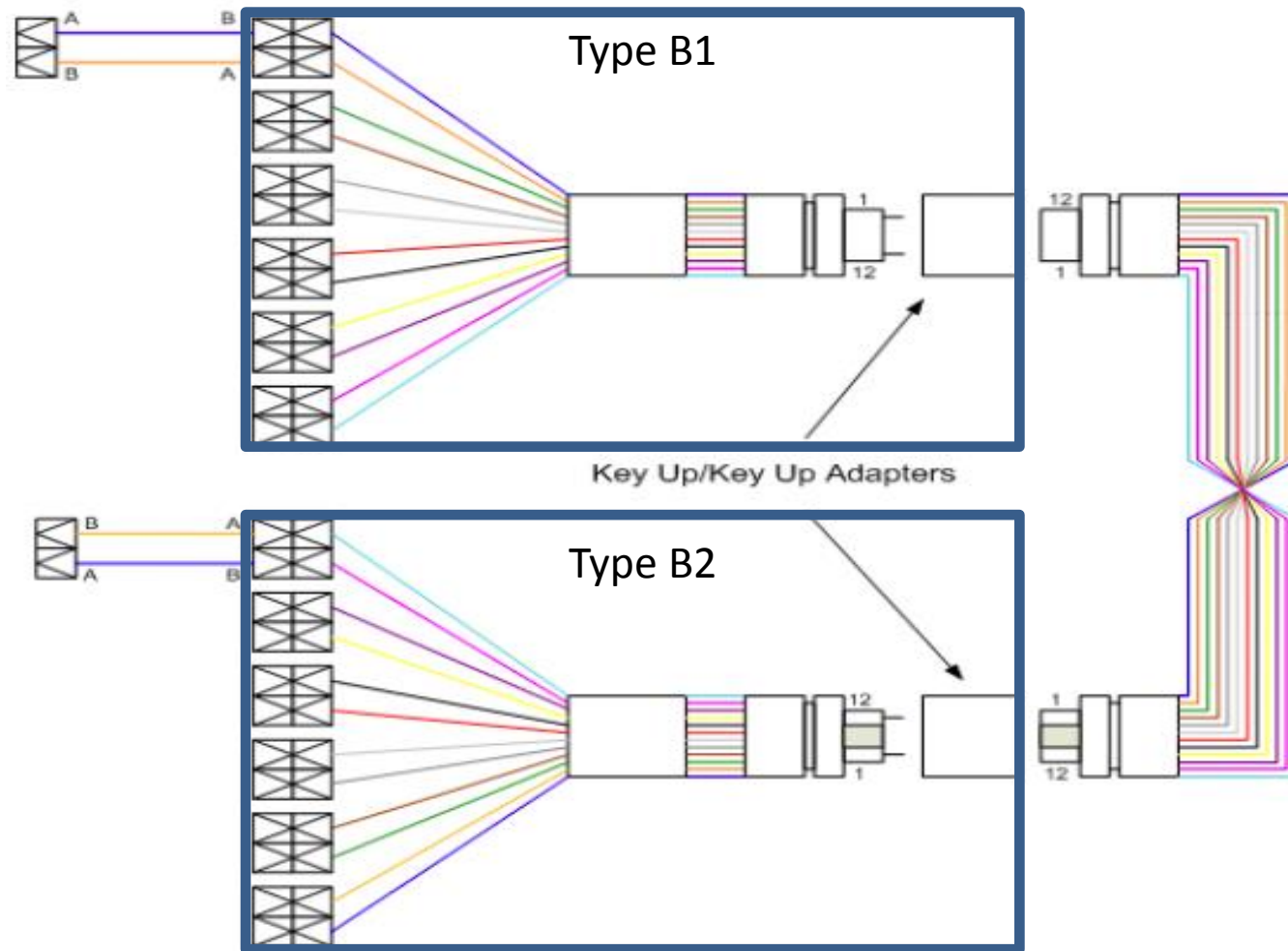
**ACT**  
Fiber optic  
Polarity



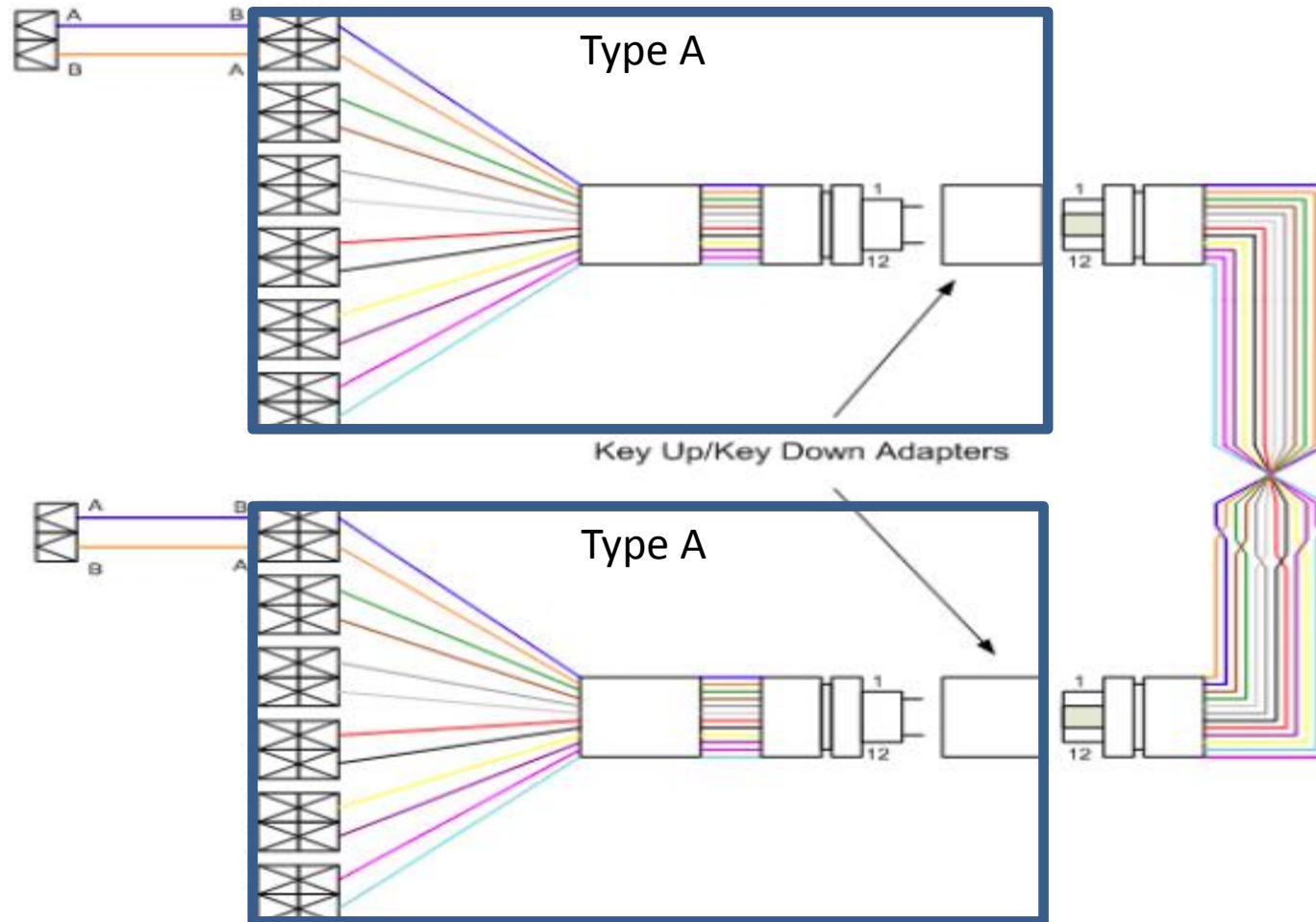
# 10G n 40G Migration – Polarity method A



# 10G n 40G Migration – Polarity method B



# 10G n 40G Migration – Polarity method C



# 10G and 40G Migration Table

TIA-568.C Standard (duplex signals)

Polarity Method	MPO/MTP® cable	MPO/MTP® Cassette	Duplex patch cable type
A	Type A (Key-Up to Key-Down)	Type A (Opposed Key adaptor)	1 x A-to-B 1 x A-to-A
B	Type B (Key-Up to Key-Up)	Type B1, B2 (Aligned Key adaptor)	2 x A-to-B
C	Type C (Key-Up to Key-Down)	Type A (Opposed Key adaptor)	2 x A-to-B

Opposed Key



Aligned Key



A-to-A patch cord

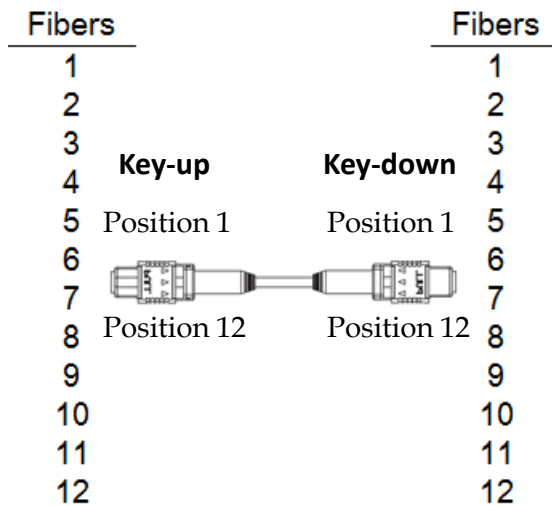


A-to-B patch cord

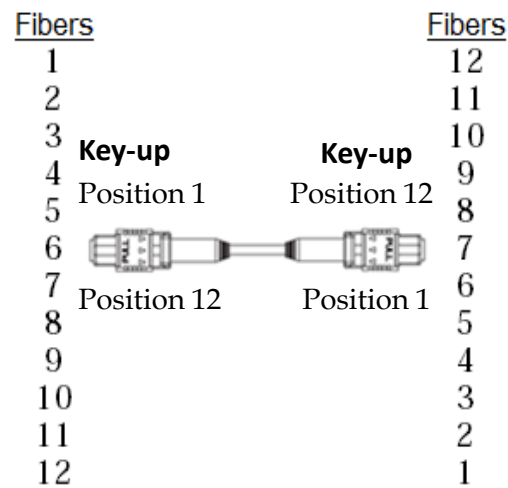


# 40G MPO/MTP® cable

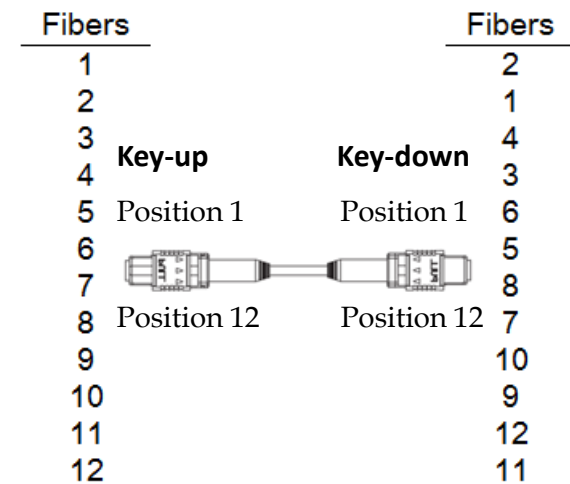
**Type A:**  
Key-up to Key-down



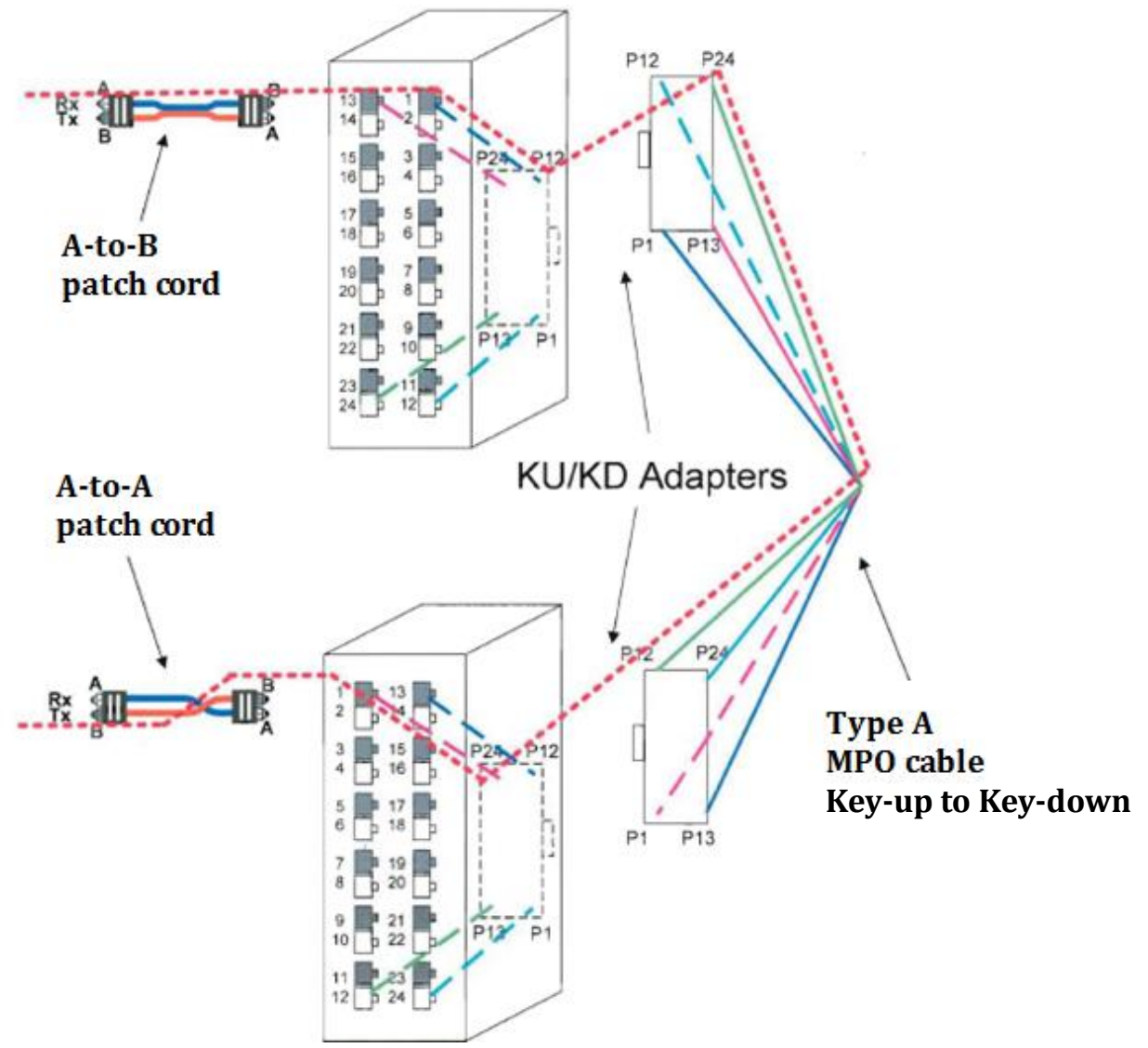
**Type B:**  
Key-up to Key-up



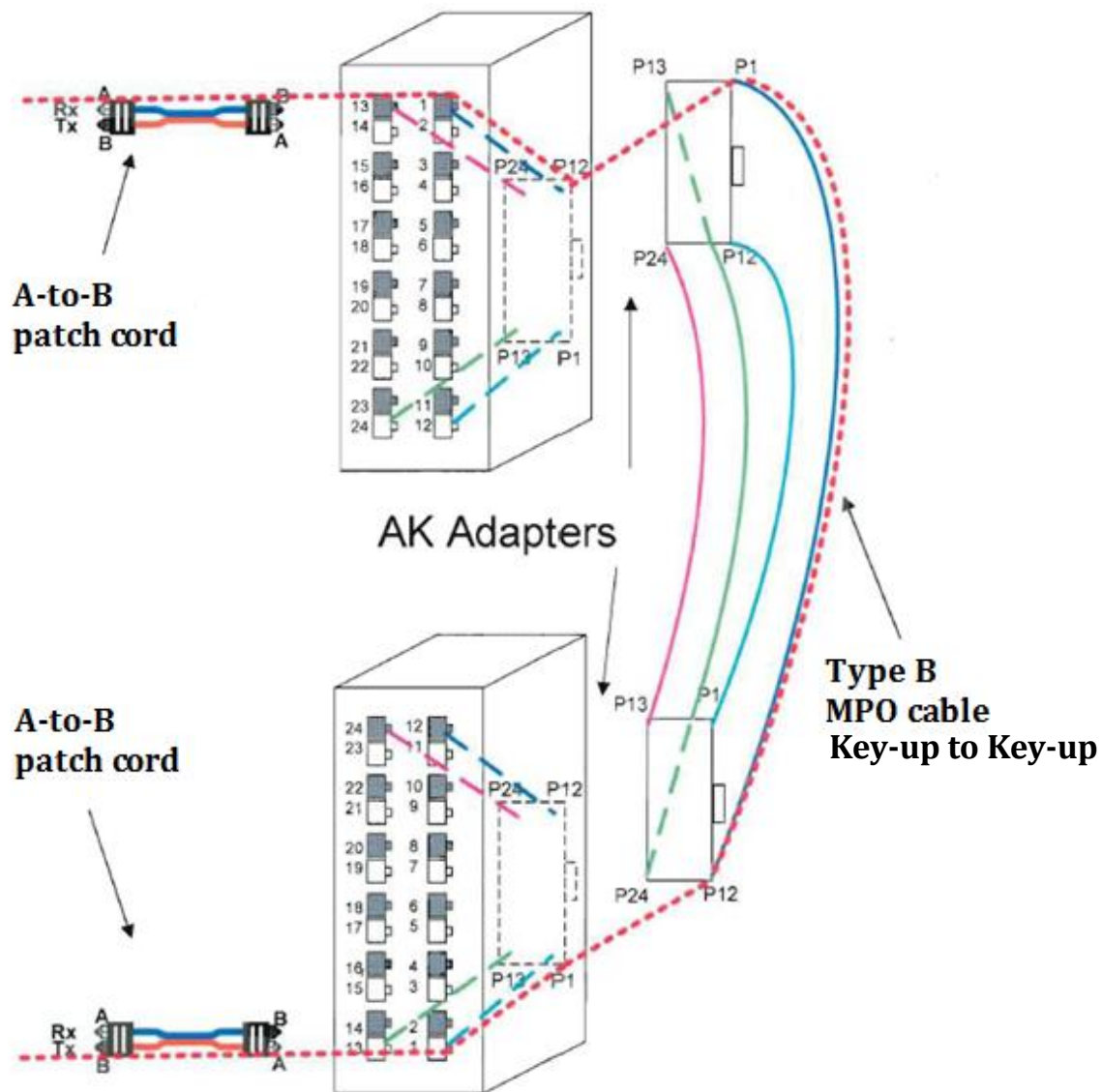
**Type C:**  
Key-up to Key-down  
*Pair-wise Flip*



# 10G n 100G Migration – Polarity method A

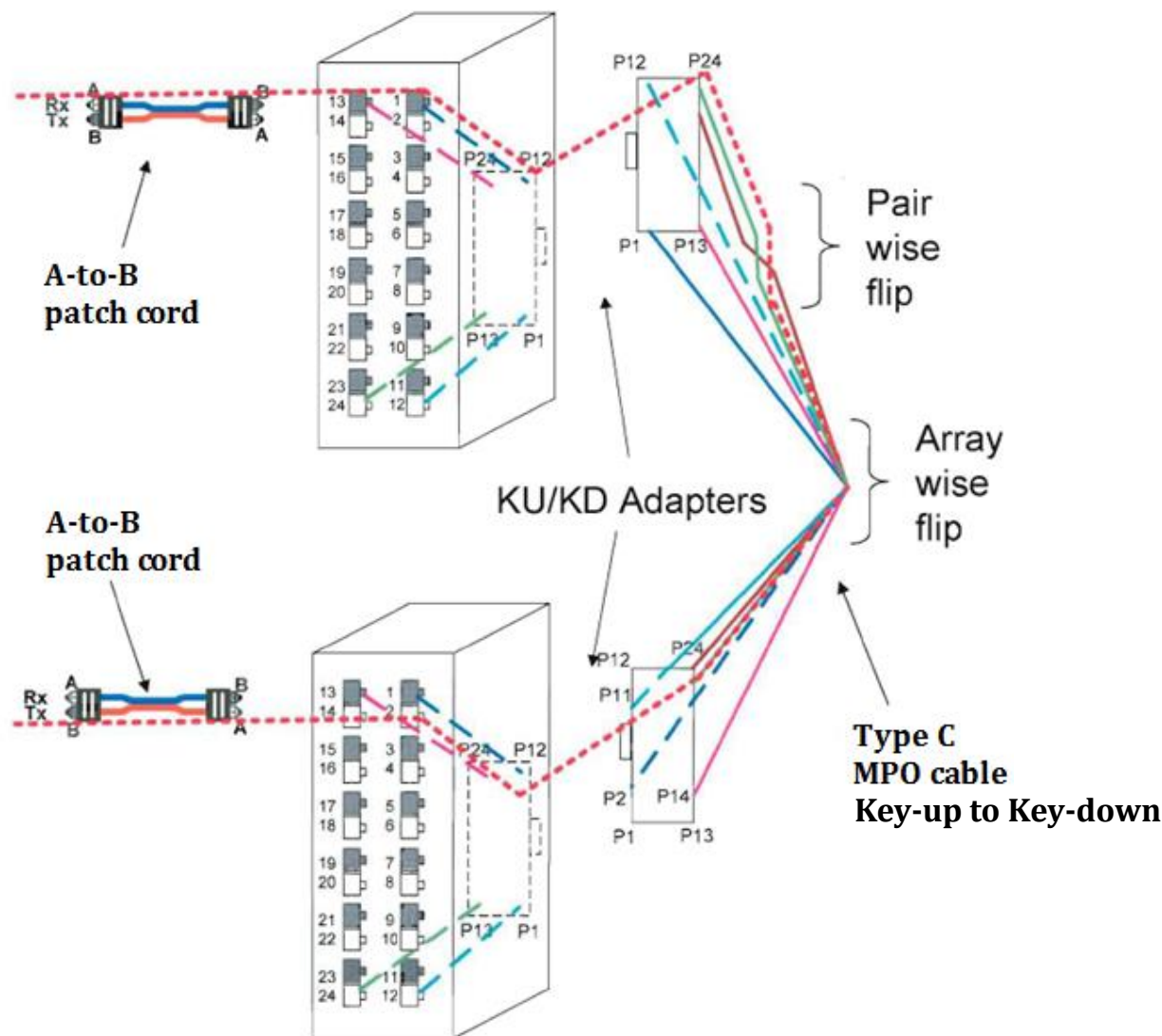


# 10G n 100G Migration – Polarity method B

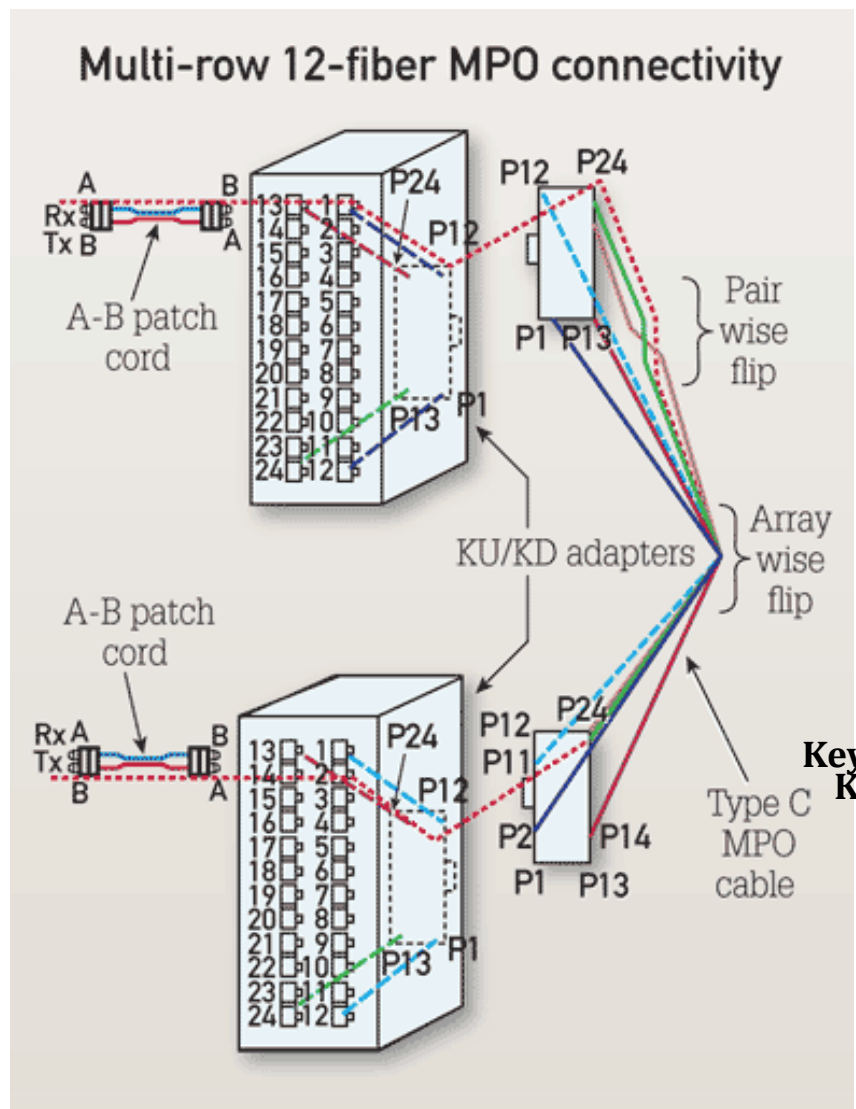




# 10G n 100G Migration – Polarity method C



<http://www.cablinginstall.com/articles/print/volume-19/issue-3/features/maintaining-fiber-optic-polarity-with-array-cabling.html>



**Key-up to Key-up  
Key-up to Key-up**

# 10G and 100G Migration Table



TIA-568.C Standard (duplex signals)

Polarity Method	MPO/MTP® cable	MPO/MTP® Cassette	Duplex patch cable type
A	Type A (Key-Up to Key-Down)	Type A1, A2 (Opposed Key adaptor)	1 x A-to-B 1 x A-to-A
B	Type B (Key-Up to Key-Up)	Type B1, B2 (Aligned Key adaptor)	2 x A-to-B
C	Type C (Key-Up to Key-Down)	Type C (Opposed Key adaptor)	2 x A-to-B

Opposed Key



Aligned Key



A-to-A patch cord





A-to-B patch cord





# 100G MPO/MTP® cable wiring



**Type A:**  
Key-up to Key-down

<u>Fibers</u>			<u>Fibers</u>
1			13
2			14
3			15
4			16
5			17
6			18
7			19
8	<b>Key-up</b>	<b>Key-down</b>	20
9			21
10	Position	Position	22
11	1/13	13/1	23
12			24
13			1
14	Position	Position	2
15	12/24	24/12	3
16			4
17			5
18			6
19			7
20			8
21			9
22			10
23			11
24			12

**Type B:**  
Key-up to Key-up

<u>Fibers</u>			<u>Fibers</u>
1			24
2			23
3			22
4			21
5			20
6			19
7			18
8	<b>Key-up</b>	<b>Key-up</b>	17
9	Position	Position	16
10	1/13	24/12	15
11			14
12			13
13			12
14	Position	Position	11
15	12/24	13/1	10
16			9
17			8
18			7
19			6
20			5
21			4
22			3
23			2
24			1

**Type C:**  
Key-up to Key-down  
*Pair-wise Flip*

<u>Fibers</u>			<u>Fibers</u>
1			14
2			13
3			16
4			15
5			18
6			17
7			20
8	<b>Key-up</b>	<b>Key-down</b>	19
9	Position	Position	22
10	1/13	13/1	21
11			24
12			23
13			2
14	Position	Position	1
15	12/24	24/12	4
16			3
17			6
18			5
19			8
20			7
21			10
22			9
23			12
24			11