



MPO/MTP® Trunk Cables Datasheet



Standards Compliance

- YD/T1272.5-2019
- IEC 61300-3-35
- RoHS and REACH

Features

- Low loss Connector
- Polish Type: PC, APC
- G657A1, OM3, OM4, OM5 available
- Supports 400G and 800G data rates
- Factory Pre-terminated 100% Tested

Technical Specification

ITEM	Description
Fiber Count	8~144 Fibers
Fiber Mode	Single Mode: G657A1/OS2 Multimode: OM3/OM4/OM5
Connector Type	MPO Female, Male/MTP Female, Male
Connector Ferrule	Plastic
Polish Type	SM: PC/APC MM: PC
Cable Jacket Ratings	PVC/LSZH/OFNP
Connectors Color	SM: Green(Standard loss); Yellow(Low loss) MM: Aqua(OM3); Violet(OM4); Lime Green(OM5)
Cable Jackets Color	SM: Yellow MM: Aqua(OM3); Violet(OM4); Lime Green(OM5)
Cable Diameter ^①	3.0mm
Tensile Strength	40N
Connector Durability	500 Mating Cycles
Cable Type	Bunch/Ribbon
Breakout Length	0.3m ~ 1m
Polarity	Type A, Type B, Type C

Note: SM(Single Mode), MM(Multimode).

①: Cable diameter of standard single MPO/MTP cable is 3.0mm, and as for cables with different bundles, the trunk diameter is different.

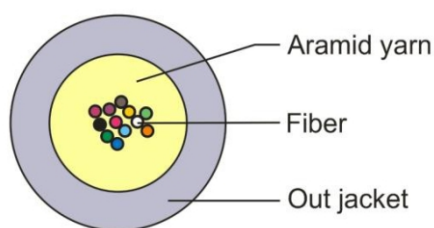
Bundle Count	MPO/MTP-12	MPO/MTP-24	Trunk Diameter
2 Bundles	24 Fibers	48 Fibers	9±0.5mm
3 Bundles	36 Fibers	72 Fibers	9±0.5mm
4 Bundles	48 Fibers	96 Fibers	9±0.5mm
6 Bundles	72 Fibers	144 Fibers	11.2±0.5mm
8 Bundles	96 Fibers	/	13.5±0.5mm
12 Bundles	144 Fibers	/	17.5±0.5mm

Note: MPO/MTP-12 cables, 2 bundles mean 24 Fibers (2x 12F);
MPO/MTP-24 cables, 2 bundles mean 48 Fibers (2x 24F).

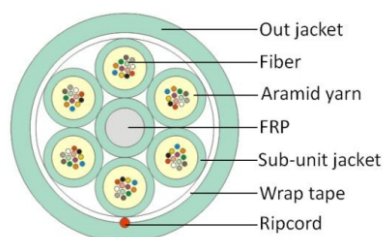
ITEM	Description
Insertion Loss	Standard loss: (SM:APC $\leq$ 0.7dB; MM:PC $\leq$ 0.7dB) Low loss: (SM:APC $\leq$ 0.35dB; MM:PC $\leq$ 0.35dB)
Return Loss	Standard loss: (SM:APC $\geq$ 55dB; SM:PC $\geq$ 40dB, MM:PC $\geq$ 20dB) Low loss: (SM:APC $\geq$ 60dB; SM:PC $\geq$ 50dB, MM:PC $\geq$ 25dB)
Wavelength	SM: 1310/1550nm MM: 850/1300nm
Operating Temperature	-20~70°C
Storage Temperature	-40~70°C

Note: MPO Connectors are available in low loss or standard loss, MTP Connectors are low loss

Cable Technical Specification



8~24 Fibers
Micro Multi-Core Soft Cable



24~144 Fibers
Sub-Unit Micro Cable

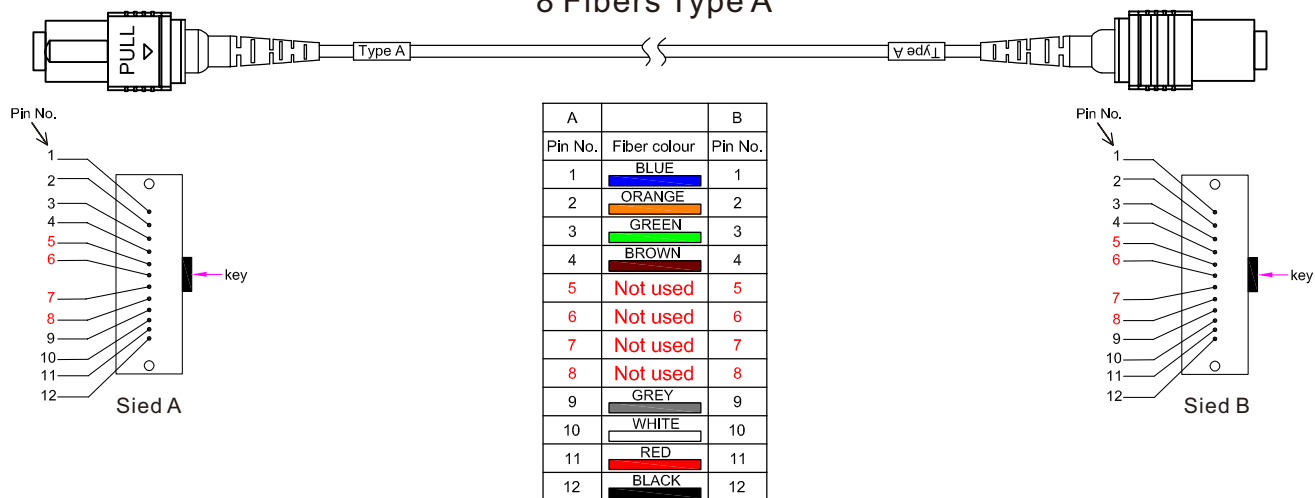
ITEM	Micro Cable	Sub-Unit Cable
Fiber Minimum Bend Radius	SM:10mm(G657A1); 16mm(OS2) MM:7.5mm	
Cable Minimum Bend Radius	Dynamic:20D Static:10D	
Max.Crush Resistance	Short-term:500N/100mm Long-term:100N/100mm	Short-term:1000N/100mm Long-term:300N/100mm

Cables	Nominal Weight	Max.Tensile Strength	
		Short-Term	Long-Term
8~24 Fibers(Micro Soft Cable)	7.5kg/km	160N	80N
24 Fibers	76kg/km	500N	180N
36 Fibers	78kg/km	500N	180N
48 Fibers	79kg/km	600N	200N
72 Fibers	126kg/km	1000N	300N
96 Fibers	178kg/km	1000N	300N
144 Fibers	285kg/km	1000N	300N

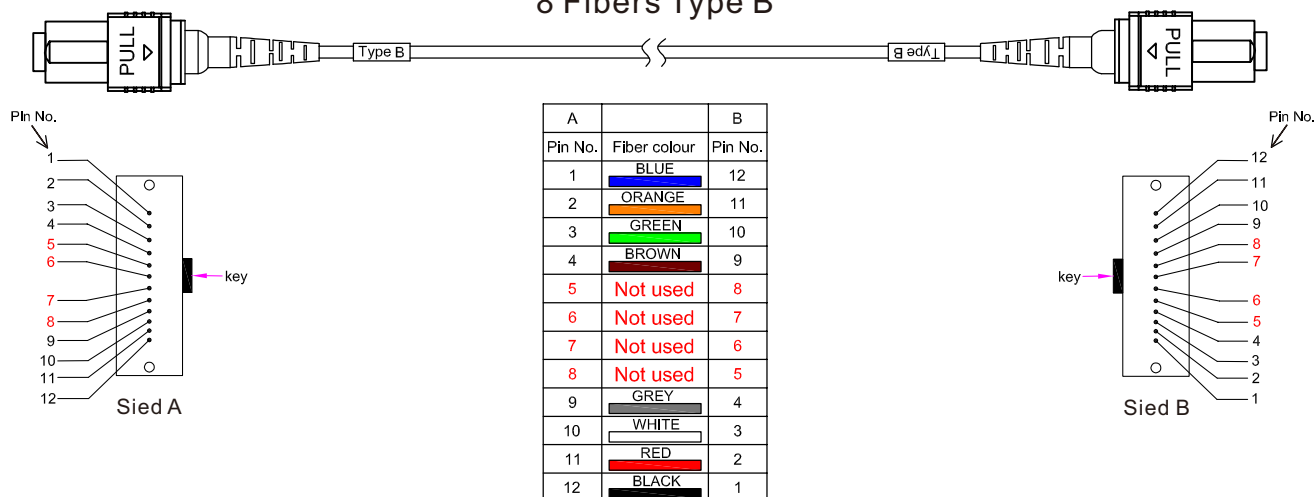
ITEM	Description
Attenuation(dB/km)	SM: ≤ 0.5 at 1310nm, ≤ 0.4 at 1550nm OM3/OM4/OM5: ≤ 3.5 at 850nm, ≤ 1.5 at 1300nm
Bandwidth(MHz*km)	OM3: ≥ 1500 at 850nm, ≥ 500 at 1300nm OM4: ≥ 3500 at 850nm, ≥ 500 at 1300nm OM5: ≥ 3500 at 850nm, ≥ 500 at 1300nm

Cable Polarity

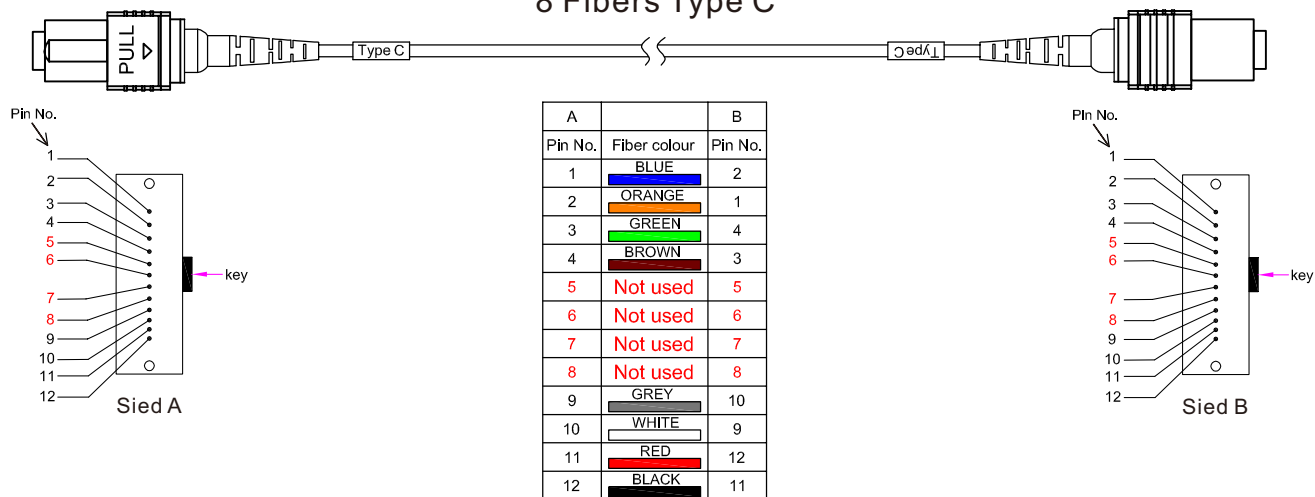
8 Fibers Type A



8 Fibers Type B

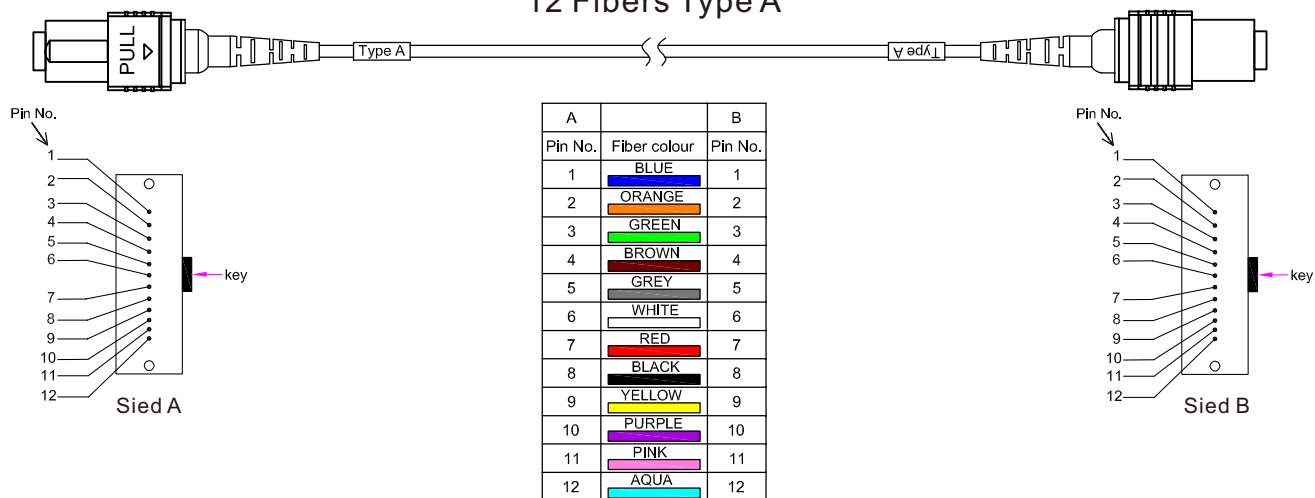


8 Fibers Type C

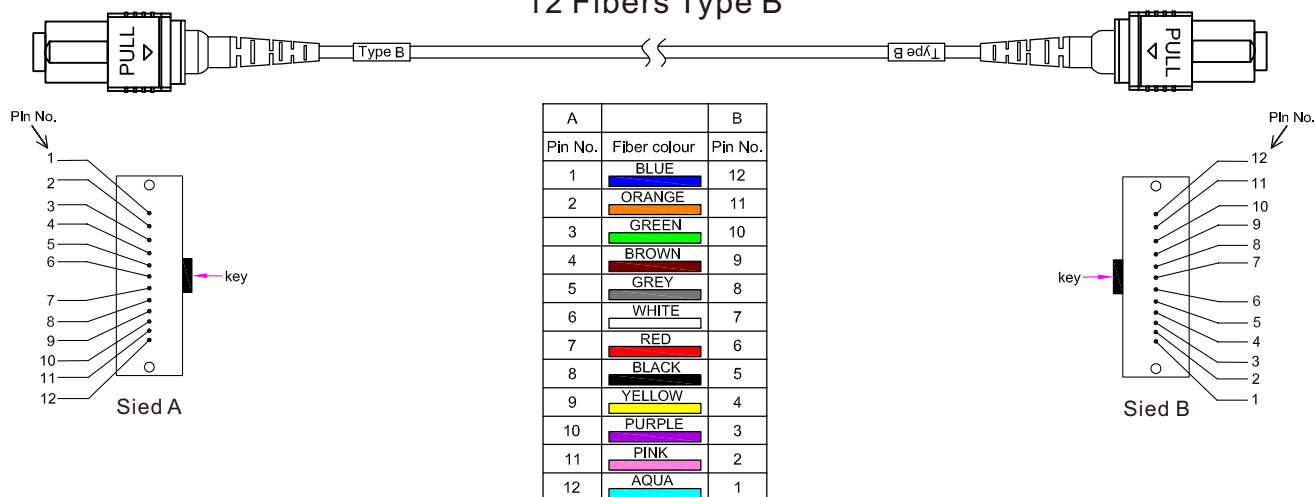


Cable Polarity

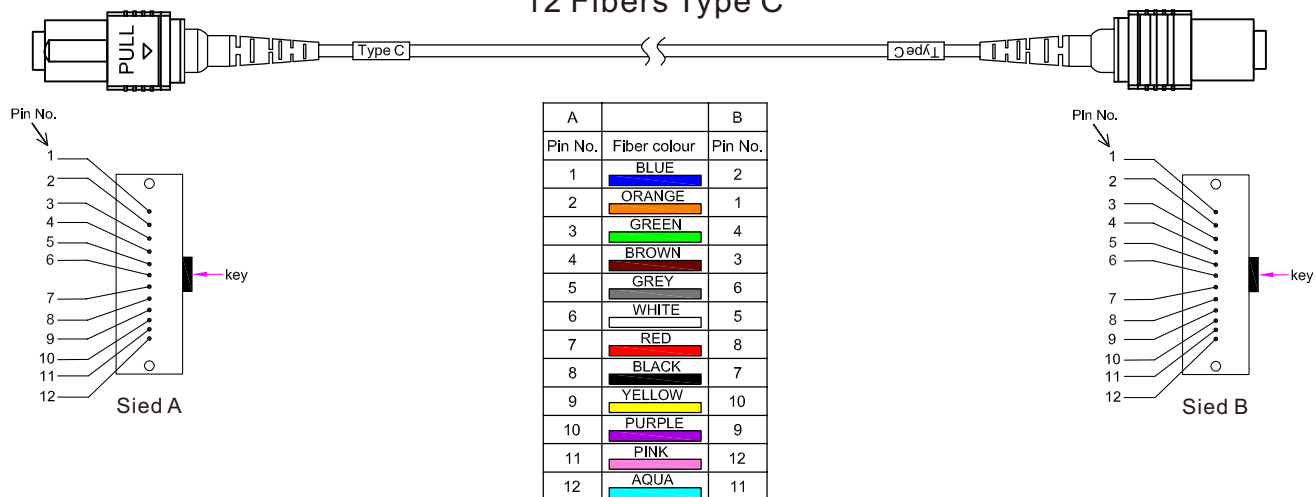
12 Fibers Type A



12 Fibers Type B

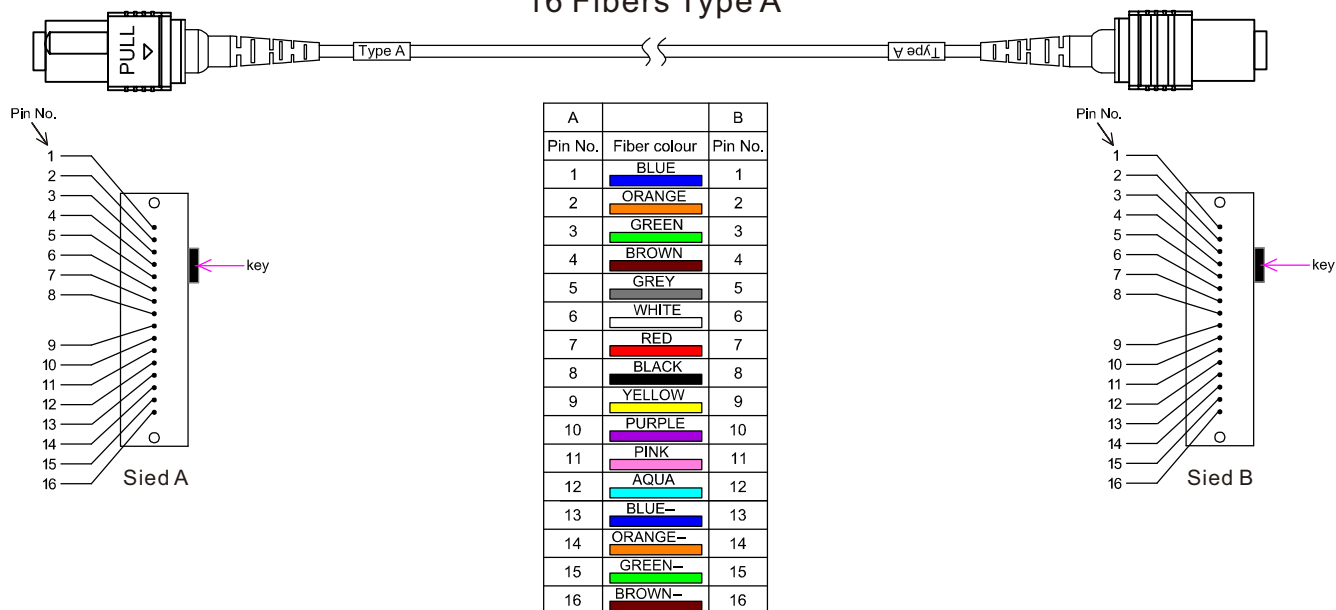


12 Fibers Type C

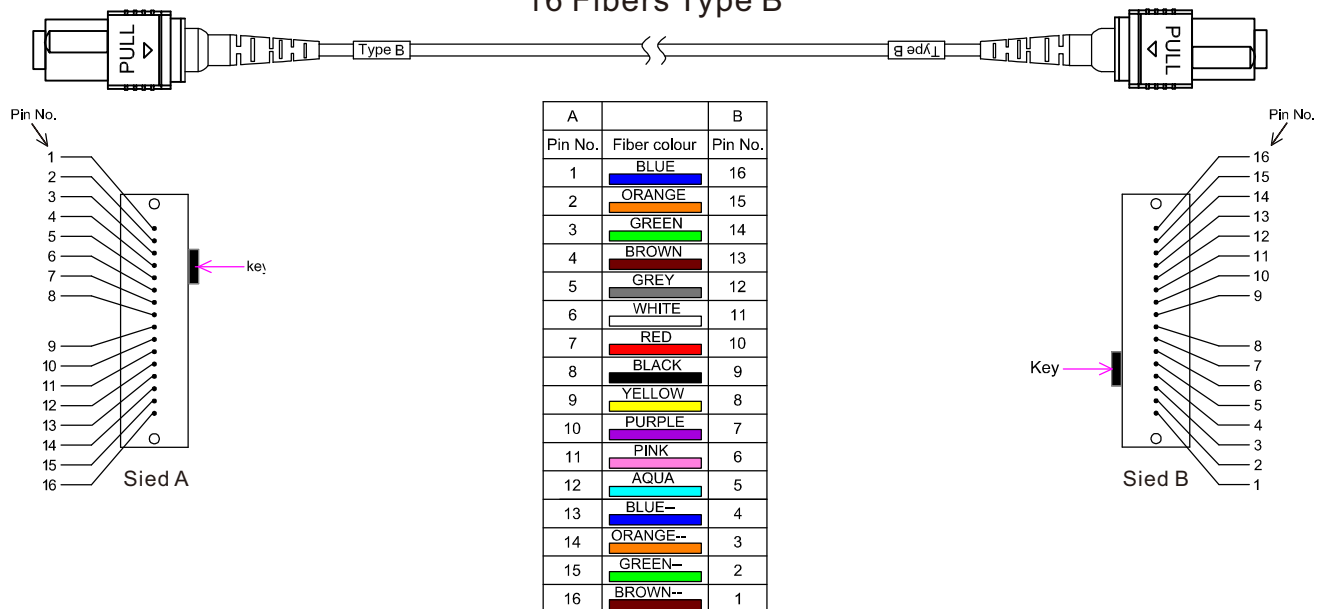


Cable Polarity

16 Fibers Type A

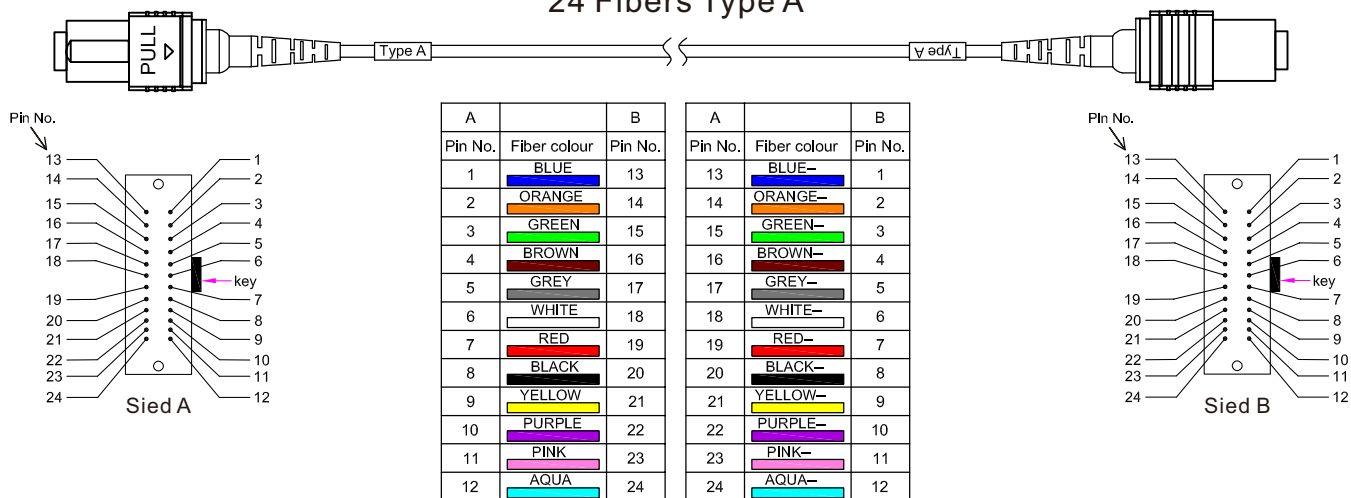


16 Fibers Type B

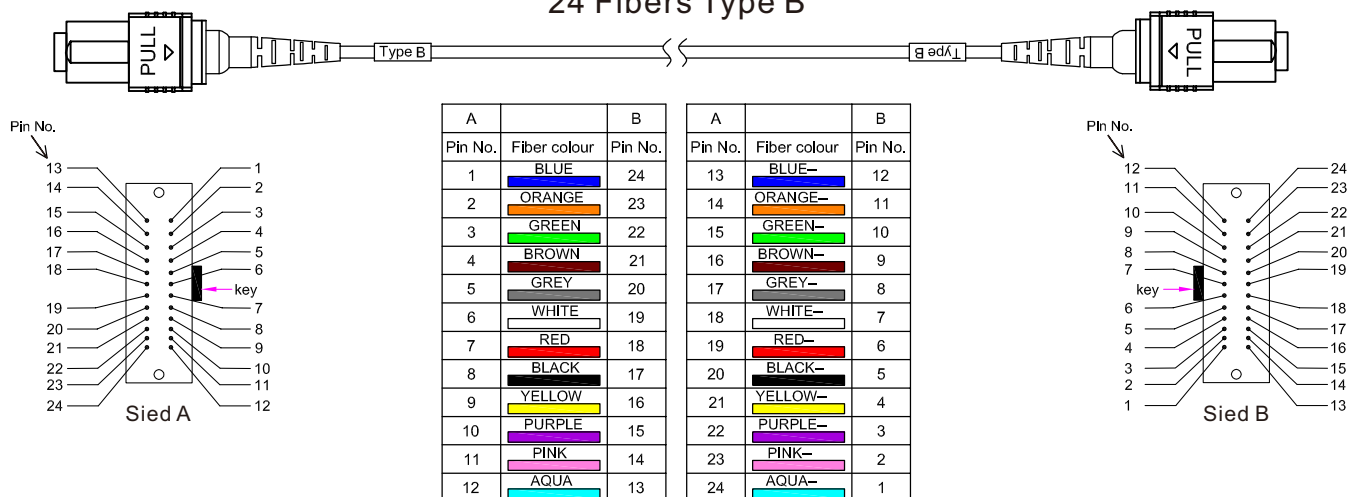


Cable Polarity

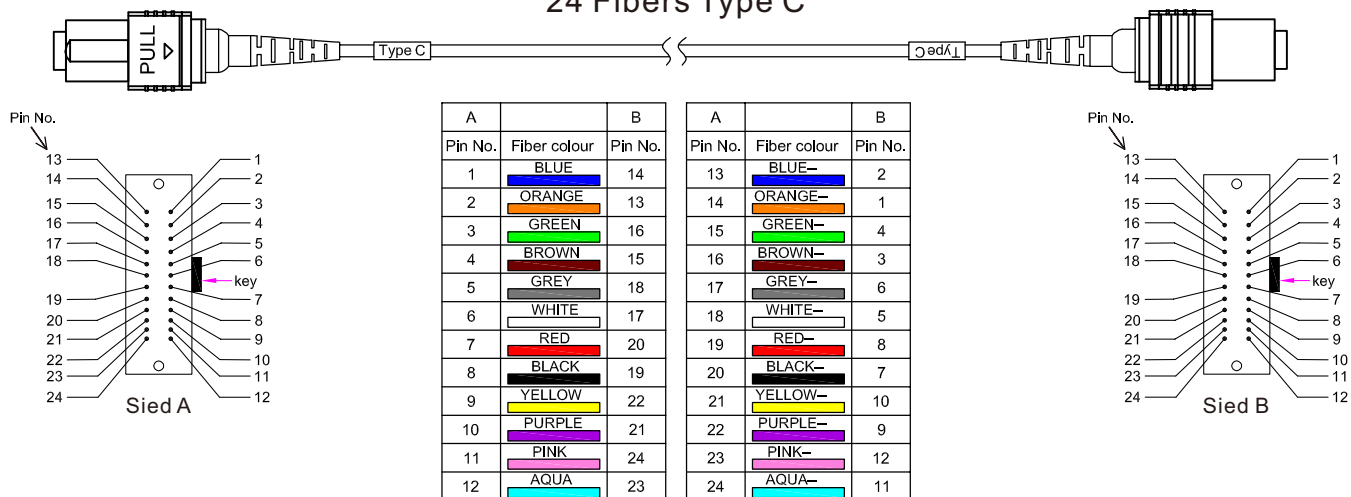
24 Fibers Type A



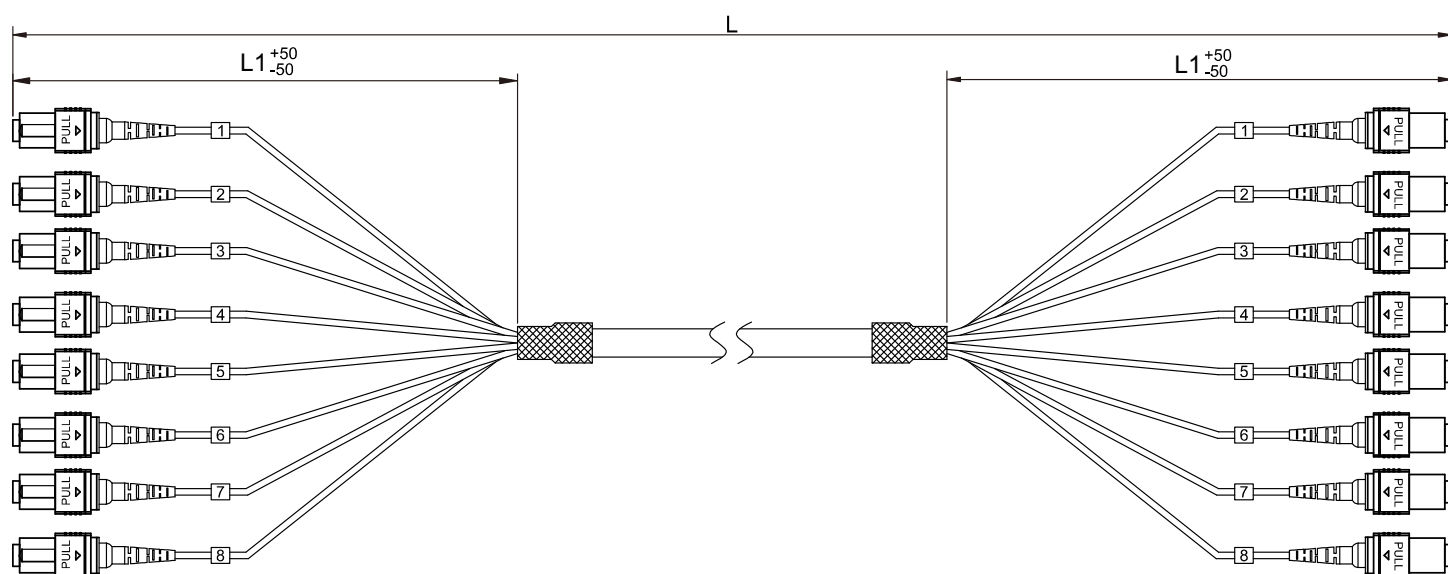
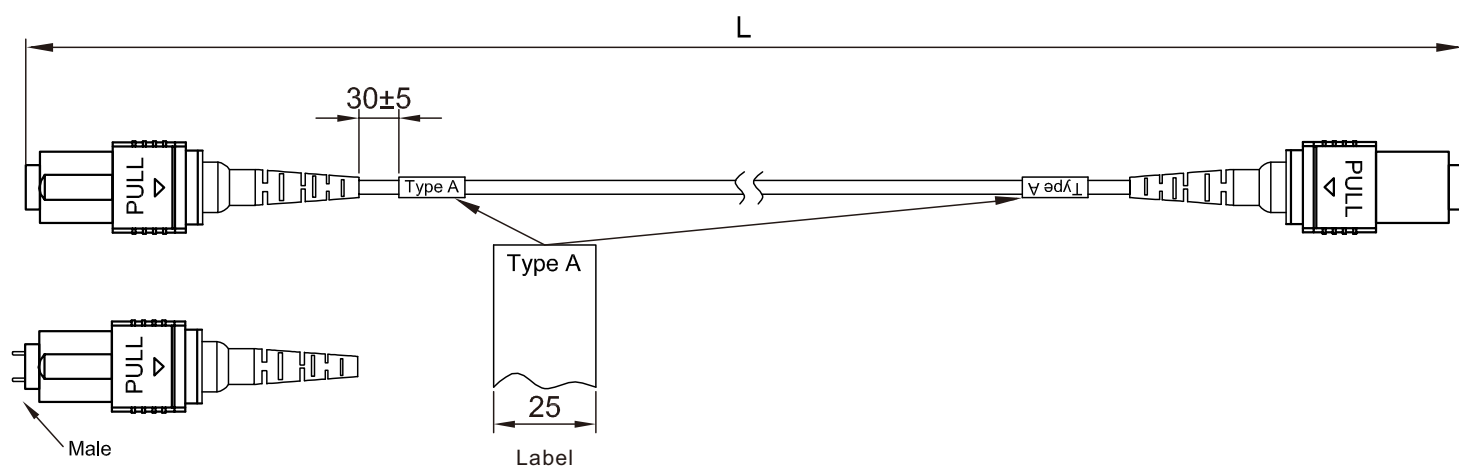
24 Fibers Type B



24 Fibers Type C



Technical Drawing



Cable Length	Tolerances
$L \leq 1m$	$+150mm/-0$
$1m < L \leq 30m$	$+150mm/-50$
$L > 30m$	$+1\%/-0$

Cable Tolerance

Ordering Information

MPO/F/PC - MPO/F/PC - OM3 - 12B - S - 1.5M - LSZH - Aqua - A								
1	2	3	4	5	6	7	8	9

- 1-Connector A:** MPO/F/PC:MPO Female PC; MTP/M/APC:MTP Male APC;
2-Connector B: MPO/F/PC:MPO Female PC; MTP/M/APC:MTP Male APC;
3-Fiber Type: OM3; OM4; OM5; G657A1; etc;
4-Fiber Count: 12B:12F Bundled Cable;12R: 12F Ribbon Cable;
5-Breakout Type: S:No Breakout;
6-Cable Length: 1.5M; etc;
7-Cable Jacket Ratings: LSZH; PVC; OFNP;
8-Cable Color: Yellow(G657A1/OS2);Aqua(OM3);Violet(OM4);Lime Green(OM5);
9-Polarity: A: Type A; B: Type B; C: Type C

8xMPO/F/PC(12X) - 8xMPO/F/PC(12X) - OM3 - 96B - 13.5/B3.0 - 5M/0.5M - LSZH - Aqua - A								
1	2	3	4	5	6	7	8	9

- 1-Connector A:** 8xMPO/F/PC(12X): 8PCS MPO Female PC 12 Fibers Connector;
2-Connector B: 8xMPO/F/PC(12X): 8PCS MPO Female PC 12 Fibers Connector;
3-Fiber Type: OM3; OM4; OM5; G657A1; etc;
4-Fiber Count: 96B:96F Bundled Cable;96R: 96F Ribbon Cable; etc
5-Cable Diameter: 13.5/B3.0:Trunk Cable 13.5mm, Branched Cable 3.0mm; etc;
6-Cable Length: 5M/0.5: Total length 5M, branch 0.5M ; etc;
7-Cable Jacket Ratings: LSZH; PVC; OFNP;
8-Cable Color: Yellow(G657A1/OS2);Aqua(OM3);Violet(OM4);Lime Green(OM5);
9-Polarity: A: Type A; B: Type B; C: Type C



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