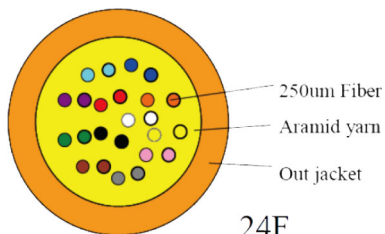


# DATASHEET

## 24F MTP-MTP TRUNK CABLE

Ideal for Data Center High Density Cabling System



RoHS



OMC INDUSTRY CO.LIMITED

## Description

**24F MTP Fiber Patch cable/trunk cable** is terminated with MTP connector on both ends. MTP Patch cable/trunk cables connect MTP modules together as a permanent link. The Patch cable/trunk cables are available with 12, 24, 48,60,72 ,96,144fibers. Support speeds up to 10/40/100Gbps data center solutions. They are typically adopted to inter-connect cassettes, panels or ruggedized MTP fan-outs, and to facilitate rapid deployment of high-density backbone cabling in data centers and other high fiber environments. Besides, MTP also provides much flexibility and convenience once you have to change the connector style in the patch panels. Instead of changing the connector on the cable trunk, just installing a new cassette with the new connector style on the cross-connect side of the patch panel.

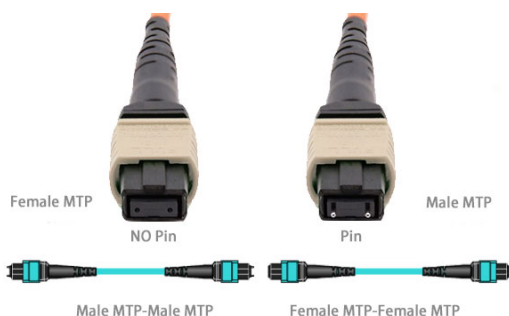

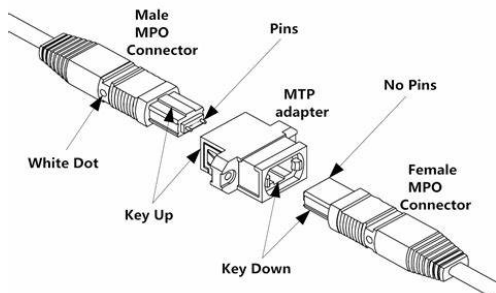
The 24F MPO-MPO Patch cable/trunk cable is designed for 100GBASE-SR10 CXP/CFP Interconnect Solution,100GBASE-LR4 and high-density data center.



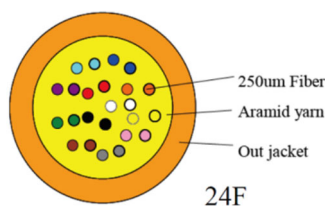
## Products Materials

Connector	Reference	Housing Details
MTP Single mode	IEC 61754-7	SM APC: Green connectors+black boot (Standard Loss MTP) SM APC: Yellow connectors+black boot (Elite MTP)
MTP Multimode	IEC 61754-7	OM3&OM4 PC: Aqua connectors+black boot (Standard Loss&Elite MTP)

IEC Standard IEC-61754-7; IEC61755, Telcordia GR-1435-CORE, JIS C5982; TIA-604-5(FOCIS5) compliant  
Structured cabling per TIA-568-C  
10G Fiber Channel Compliant  
40G and 100G IEEE 802.3

Connector	Fiber Channel
 <p>Female MTP NO Pin</p> <p>Male MTP Pin</p> <p>Male MTP-Male MTP</p> <p>Female MTP-Female MTP</p>	
MTP Connectors	24 Fibers
<p>Note: Female connector need to connect with male connector type.</p> 	

### Cable Parameters-12F Microfiber cable



Fiber Count	OD(mm)	Minimum allowable Tensile Strength (N)	minimum allowable Crush Load(N/100mm)	Minimum Bending Radius(MM)
24	3.0±0.15	Short-term: 180; Long-term: 90	Short-term: 500; Long-term: 150	Static: 10D Dynamic: 20D

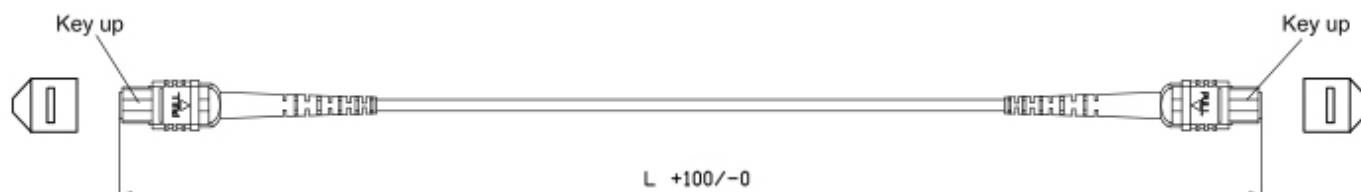
### Optical Specifications

Spec items.	Single mode (APC 8-degree polished)	Multimode (PC Flat polish)
Insertion loss (MTP (IEC 61300-3-34)	Standard loss: ≤0.75dB(max), ≤0.50dB(Typical) Elite loss: ≤0.35dB(max), ≤0.20dB(Typical)	Standard loss: ≤0.6dB(max), ≤0.50(Typical) Elite Low loss: ≤0.35dB(max) , ≤0.20dB(Typical)
Return loss(MTP)	≥60dB (8degree polishing)	≥25dB
Durability	<0.3dBtypical change, 200 matings	
Interchangeability	≤0.2dB	
Tensile strength	>70N	
Operating Temperature	-40 to + 85°C	

### MTP End-Face 3D Interference Index

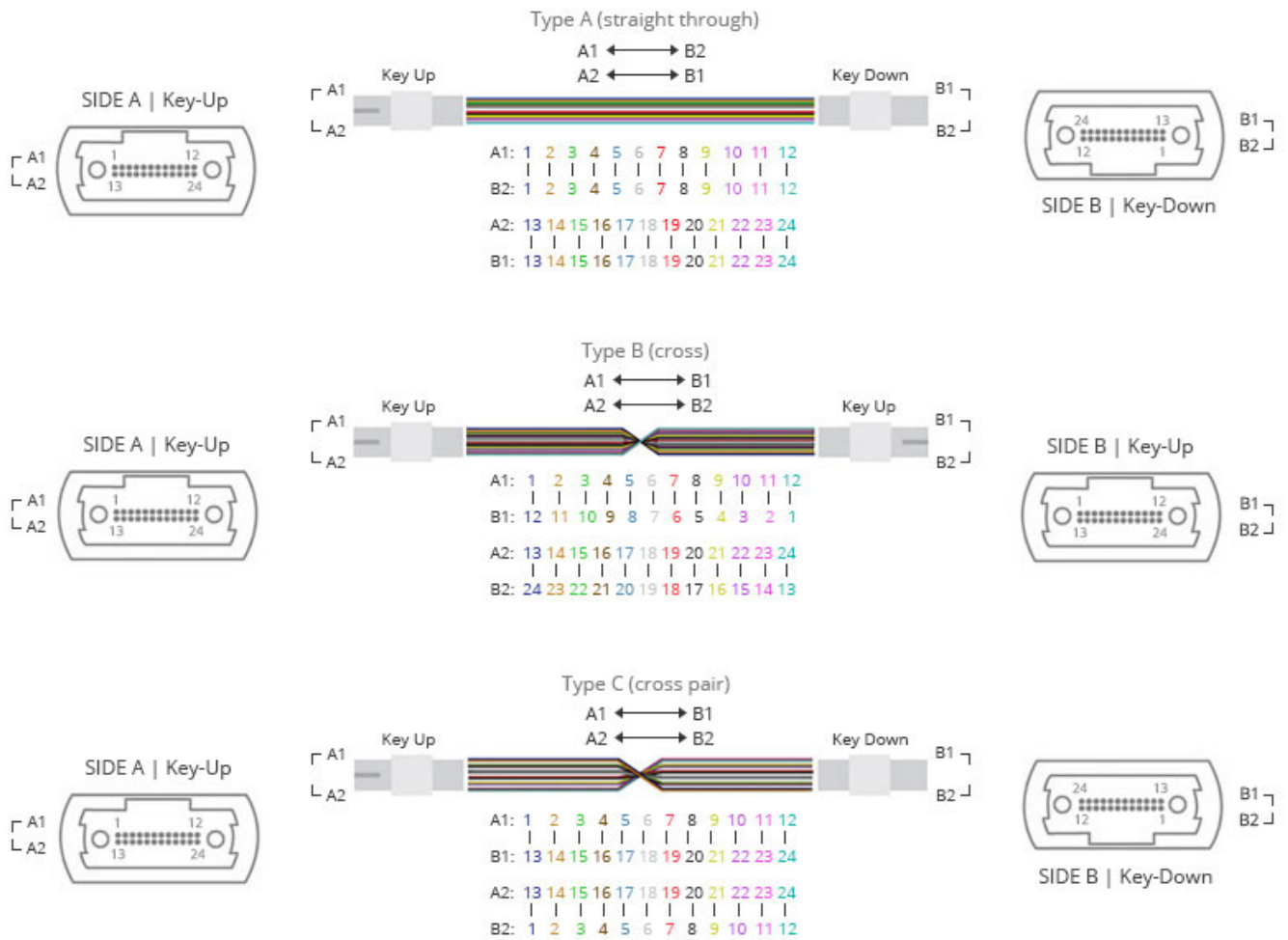
Item (IEC-61300-3-30)			Minimum	Maximum
Radius of curvature (mm)	ROC-X(ABS)		2000	\
	ROC-Y(ABS)		50mm	\
Angle	Angle-X		-0.2°	-0.2°
	Angle-Y	APC	7.85°	8.15°
		PC	-0.2°	-0.2°
Fiber height (nm)			1000nm	3500nm
Max.DH.All Fiber:			-300nm	300nm
DH.Adj:			-300nm	300nm
DH.Ave Fiber:			-300nm	300nm
Core Dip:	SM		N/A	N/A
	MM		-200nm	300nm

### MTP-MTP 12F Trunk cable drawing.



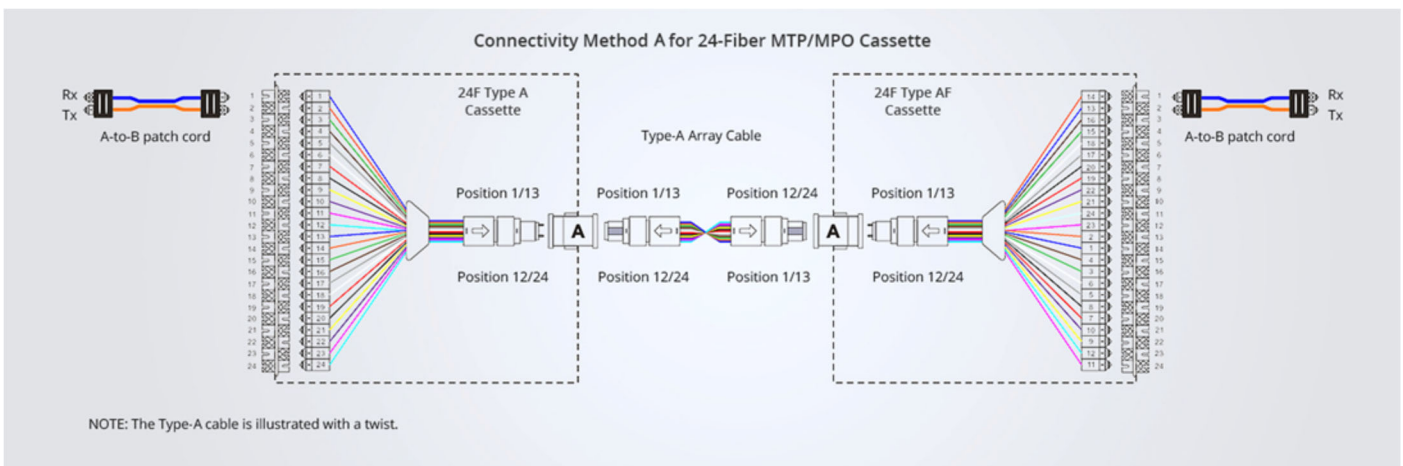
Overall Length(L)(m)	length of tolerance(cm)
0<L<1	+5/-0
1<L<10	+10/-0
10<L<40	+15/-0
40<L	+0.5% x L/-0

## Three Connection Methods Help Keep the Right MTP/MPO Polarity



## Base-24 Polarity Solution

To catch up with the increased demand for higher bandwidth, 24-fiber MTP/MPO cable is introduced to facilitate migration to 100G network. It doubles the density of 12-fiber cabling in the same footprint, which reduces the fiber count, allows for fewer cable pathway, and improving airflow. The polarity maintenance of base-24 MTP/MPO cabling, however, is more complicated. OMC recommends the Type A (key-up to key-down) MTP/MPO trunk cable. With our Type A and Type AF cassette, no need for A-to-A patch cable any more. The connectivity method is illustrated in the following picture





## 24F MTP-MTP TRUNK CABLE

### AVAILABILITY:

Ribbon and bundle cable available;  
Patch cord, pigtail cable assemblies available.  
MT-MT ribbon patch cord is available.  
MTP Loopback Cable available



### Push Pull Tab For USCONEC MTP



### The merits of MTP/MPO Patch cable/trunk cable generally include:

High quality—MTP/MPO Patch cable/trunk cables are factory pre-terminated, tested and packaged along with the test reports. These reports serve as long-term documentation and quality control.  
Decreasing cable volume—MTP/MPO Patch cable/trunk cables have very small diameters, which decrease the cable volume and improve the air-conditioning conditions in data centers.  
Time saving—With the special plug and play design, MTP/MPO Patch cable/trunk cables can be incorporated and immediately plugged in. It greatly helps reduce the installation time.

### Features:

Low insertion loss, high return loss  
MT based Multi-fiber Connector, 4,8,12 and 24 fiber connector terminations and assemblies  
Economical solution for mass-termination of fiber  
Designed for low loss and standard loss SM and MM applications  
Ruggedized round cable, oval cable and bare ribbon options available  
Color coded housings available to differentiate fiber type, polish type and/or connector grade  
Good in repeatability and exchangeability

### OME service

- 1, Cable color, printing word, material of cable jacket, connector's color
- 2, OEM Label, Identify ring, cable's label, box, shipping marks
3. Different quality Level.

### Packaging

This easily taken and well-protected fiber patch cable package has been labelled and marked by OMC as default. Standard carton size : 34\*22\*15 cm; 44\*34\*24 cm ; 54\*39\*34 cm . Which carton to be used depends on goods Qty . Packing can be customized.



1, Self-seal PE Bag



2 Bubble Bag



3, Paper Carton



4, fumig-free Pallet

### Application:

All of OMC's MTP Connectors are from USCONEC. MTP Patch cable/trunk cable is a kind of high density cable assemblies which is generally use in three areas.

- 1, The Data Center application with high dense degree environment
- 2, The optical fiber to the building
- 3, The internal connector application in fiber equipment.

### Order Index

Products	Fiber&cable	Fiber	Quality	Pin	Cable Jacket	Cable Color	Polarity	length
M1 -Senko MPO without	1- 8F round cable	1-G652D	1-Standard loss	1-F to F	H-LSZH	A-Blue	A-Polarity A	1-1m
M2-MTP without tab	2-12F round cable	2-G657A1	2-Super low loss	2-F to M	C-PVC	B-Orange	B-Polarity B	1.5-1.5m
M3-China MPO	3-16F round cable	3-G657A2/B2		3-M to M	F-OFNR	C-Green	C-Polarity C	2-2m
M4-Senko MPO with	4-20F round cable	4-G657B3			P-OFNP	D-Brown		..
M5-MTP with tab	5-24F round cable	5-BIF om1			U-PU	E-Grey		
	6-8F ribbon cable	6-BIF om2			...	F-Whitie		
	7-12F ribbon cable	7-BIF om3			...	G-Red		
	8-8F ribbon bare fiber	8-BIF om4				H-Black		
	9-12F ribbon bare fiber	9-BIF om5				I-Yellow		
						J-Purple		
						K-Pink		
						L-Aqua		
						M-Magenta		