



# High performance and reliability



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#### General information MTP portfolio

The HUBER+SUHNER standard portfolio for fiber optic assemblies includes all most common jumpers and trunks. The items published in this catalogue are all made to order, and are coming in the HUBER+SUHNER standard packaging for MTP assemblies. For other lengths, configurations or special packing, please contact your HUBER+SUHNER representative.

#### Partner benefits

The HUBER+SUHNER Group is a leading global supplier of components and systems for electrical and optical connectivity. Our customers in communications, industrial and transportation markets appreciate that we are specialists with detailed knowledge of practical applications. We offer technical expertise in radio frequency technology, fiber optics and low-frequency under one roof, thus providing a unique basis for continual innovation focused on the needs of our customers all over the world.

MTP® is a registered trademark of US Conec.





## Connecting a wide range of market segments

HUBER+SUHNER provides high performance and innovative products and services for the rapidly evolving data center market. We leverage over 25 years of experience in creating tailored connectivity solutions which deliver business-critical services safely and reliably. Our solutions are relevant regardless of the environment or application, and whenever there is a demand for quality, you can rely on us.

Colocation companies around the world rely on our high-density fiber management systems to connect incoming carriers to their valued customers. Our excellent cost per port and leading packing density make us the number one choice for regional and global colocation companies.

Colocation

Our high performance cable systems provide financial companies with the reliability they depend on to maintain their business-critical connections. Our exceptional cable management to high-density SAN switches reduces cable clutter and improves vital air-flow to the equipment.

Finance

Flexibility is key in the broadcast sector. At HUBER+SUHNER we pride ourselves in delivering customisable solutions that fit the specific needs of our customers. We are working with many of the world's largest broadcast companies that require the perfect combination of density, flexibility and speed.

Broadcast

HUBER+SUHNER has been supplying the telecom market since its inception. Our technologies are used in all areas of the network and we are the ideal supplier for companies moving towards a converged all IP infrastructure. We support the requirements from the legacy network and understand the challenging needs of the future.

Telecom

The government sector requires reliability and traceability in every aspect of its business. Our products are designed in such a way as to negate installation errors and avoid costly or embarrassing errors during the lifetime of the network.

Government

Our combination of premium copper, fiber optics and distributed antenna systems matches the demands of hotels and casinos where uninterrupted signal availability is essential. Customers and end-users can enjoy seamless signal quality from the minute they check in till when they check out.

Hospitality



### MTP®

MTP is a connector designed for high-density patching. The colour-coded housings show the differentiated fiber types, polish types and/or connector grades. Our boot colouring offers a fast identification during installation with regards to fiber count. Removable housing allows quick gender change and easy re-polishing.

High fiber count guarantees low space consumption in ducts and racks. The patented floating MT ferrule design ensures fiber contact integrity. The elliptical guide pin tip enhances mating abilities. The high precision guide pins combined with a tightly controlled ferrule design from US Conec provide optimised alignment for superior performance. The MTP brand connector components are fully compliant with IEC Standard 61754-7 and TIA 604-5 – Type MPO.

## MTP gender

MTP connectors are available as a male (with pins) and female (without pins). A male connector must always be mated to a female connector so that light transfers from one fiber to another. Failure to adhere to this rule will result in a dark connection and potential permanent damage to the connector end-faces.

MTP transceivers of any form factor (QSFP, QSFP28, CFP, CFP2, CXP, etc) are typically supplied with a male interface, ensuring the final equipment connection shall be with a female connector. Transceiver damage can occur if this is not adhered to. If in doubt, please consult the relevant manufacturer and/or visually inspect the interface before designing the cabling system.

- We supply 8F modules, fiber trays and short fan-outs (less than 5 m) with female connectors, and backbone cables such as link assemblies, trunk harnesses and MASTERLINES with a male connector.
- We supply 12F modules, fiber trays and short fan-outs (less than 5 m) with male connectors, and backbone cables such as link assemblies and MASTERLINES with a female connector.
- We supply 24F short fan-outs and equipment cords (less than 5 m) with female connectors, and backbone cables such as link assemblies and MASTERLINES with a male connector.

Other options are available upon request - please contact your local HUBER+SUHNER applications engineering team to advise on any changes of this kind.

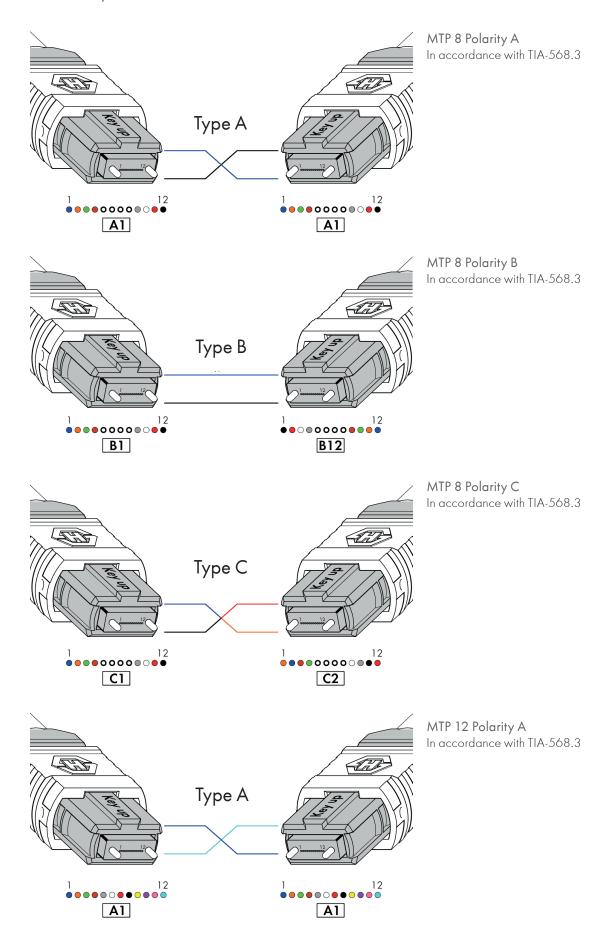
Gender matching requires careful design and planning, particularly when a customised link design is implemented. In some cases (such as links to SAN switches), it may be necessary to eliminate one of the MTP connections and route long fan-outs directly from the switch back to the MDA. In the case of an 8F system, a fan-out with a male connector should be used because it will be connected directly with a female connector at the fiber tray.

It should be noted that with the use of a specialised shroud removal tool it is possible to convert a male connector to a female connector and vice versa. However, this cannot be carried out in a field environment. All gender re-works must be carried out in a HUBER+SUHNER factory to reduce the risk of fiber breakage or connector damage.

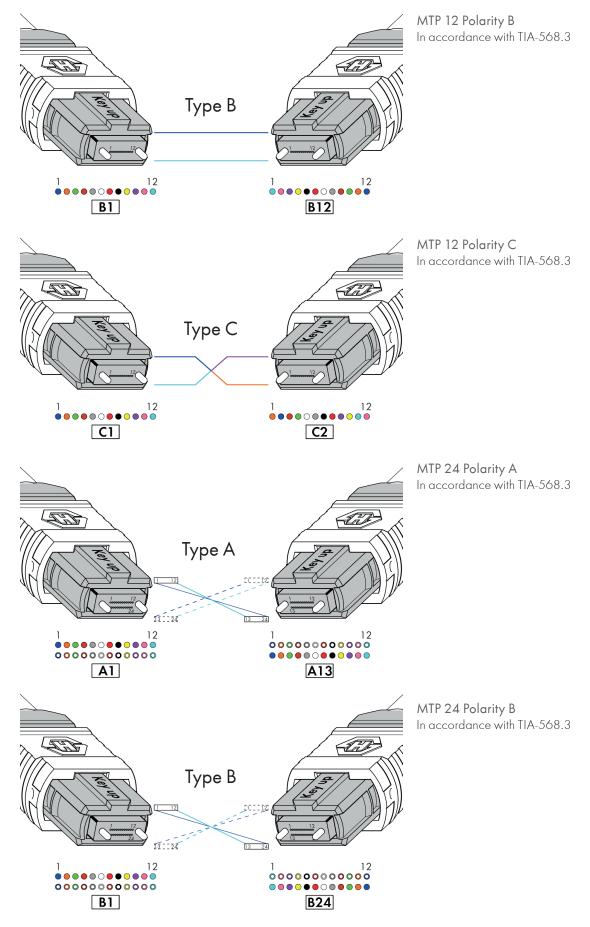
If you have any doubt about gender matching - please contact your local HUBER+SUHNER applications engineering team to advise on any changes of this kind.



## Polarity information



## Polarity information



# MTP connector type identification

Due to the increasing use of MTP connectors with different fiber counts, we use a colour coding system which allows the user to recognise the number of fibers by the boot colour.



# MTP assembly code



1	Assembly type	e					
Мухх	MTP based assembly	A: according to TIA-568.3 (MT 12 / 24) B: according to TIA-568.3 (MT 12 / 24) C: according to TIA-568.3 (MT 12)  xx: fibercount: 8 12 24					
2	Connector, I	Connector, left side					
3	Connector ri	Connector right side					
MTxy	MTP	x: fiber contact					
0000	w/o connector on the right side	A = APC 8°  M = PC Multimode  Y: gender F: female (without pins) M: male (with pins)					
4	Cable type						
A2xxy	SM-Low- Bend r7.5, G.657.A2	xx: cable ø [1/10mm] 20 = 08 or 12 fiber MT					
ОЗхху	MM, G50, OM3	30 = 08, 12, 24 fiber MT y: cable rating					

5	Length
xx.x	length in m
	(ferrule tip to ferrule tip/03.5 = $3.5 \text{ m}$ )
xxxx	length in m if > 99 m
	(ferrule tip to ferrule tip/0100 = 100 m)
6	Assembly class, left side
7	Assembly class, right side
S	SM standard
3	SIVI standara
B	SM elite for MTP

y: not defined R: UL conform

 $<sup>^{\</sup>star}$  Customer specific assemblies are marked with a x at the end.





# MTP® jumpers

Jumper cables are used to make the final connection from patch panels to transceivers, or they are used in the centralised cross connect as a means of connecting two independent backbone links. Jumper cables are available with LC connectors or MTP connectors depending on whether the infrastructure is serial or parallel. Generally, jumper cables are short length assemblies because they only connect two devices within the same rack. However, in some cases jumper cables can be longer, such as middle-of-row or end-of-row distribution architectures.

HUBER+SUHNER manufactures jumper cables which are optimised for the in-rack environment. Jumper cables are smaller and more flexible than conventional assemblies and connectivity is designed to allow highest packing density as well as easy and fast access. All of our jumper cables contain bend-optimised fiber for enhanced performance under tight bending conditions, and our connectors are colour-coded and identified based on base type and fiber type.



#### Characteristics

- Colour-coded connector boots by fiber-count
- Ultra compact cable diameter
- Bend-optimised fiber and flexible construction
- Available as Base-8, -12 or Base-24 types
- Robust construction

### Base-8 MTP jumper cables

Base-8 MTP jumpers are used to connect fiber optic patch panels with servers and switches in 4-lane parallel architectures. They can also be used to connect two independent trays or modules within centralised cross-connects. Base-8 is the most common interface for 40G data rates and new developments in transceiver technology which means that Base-8 could also satisfy 100G, 200G and 400G in the future.

Base-8 jumpers are identified by a grey boot at the rear of the connector so that users do not mistake it for a Base-12 assembly with black boot. Base-8 jumpers are fully compatible with Base-12 patch backbone cables and patch panels. However, users should note that 33 % of backbone fibers will be wasted in such a case.

#### Base-12 MTP jumper cables

Base-12 MTP jumpers are used to connect fiber optic patch panels with servers and switches in 4-lane parallel architectures. They can also be used to connect two independent trays or modules within centralised cross-connects. Base-12 jumpers are compatible with Base-8 transceivers, but usage will result in a 33 % fiber wastage because SR4 deployments of 40G only require 8 fibers (4 × lanes).

Base-12 jumpers are identified by a black boot at the rear of the connector so that users do not mistake it for a Base-8 assembly with grey boot. Base-12 jumpers are fully compatible with Base-8 backbone cables and patch panels. However, users should note that 33 % of jumper fibers will be wasted in such a case.

#### Base-24 MTP jumper cables

Base-24 MTP jumpers are used to connect fiber optic patch panels with servers and switches in 10-lane parallel architectures. They can also be used to connect two independent trays or modules within centralised cross-connects. Base-24 jumpers are typically used for 100G data rates over SR10 transceivers and can be identified by a red boot at the rear of the connector.

### Technical data

Attribute	Value
Cable diameter ( $\varnothing$ )	2.0 mm, LSFH 8 fibers 2.0 mm, LSFH, 12 fibers (legacy version Ø 3.0 mm) 3.0 mm, LSFH, 24 fibers (legacy version Ø 3.6 mm)
Design acc. to IEC 61754-7 and TIA 604-5 Type MPO	compliant
Tensile load	50N
Operating temperature	-10 to +60 °C
Durability	min. 100 matings
Material	flame retardant acc. to UL 94 V-0
RoHS guidelines 2011/65/EU	compliant

### Optical values

Туре	Measurement method (IL/RL)	IL (dB)	RL (dB)
SM MT elite (8, 12 and 24 fiber)	IL tested per IEC 61300-3-4 method B	0.10/0.35	>60
	RL tested per IEC 61300-3-6 method B		
MM MT elite (8, 12 and 24 fiber)	IL tested per IEC 61300-3-4 method B	0.10/0.35	> 30
	RL tested per IEC 61300-3-6 method B		

#### Note

 $Multimode\ MT\ elite\ ferrule\ as\ tested\ with\ proposed\ encircled\ flux\ launch\ condition\ on\ 50\ \mu m\ fiber\ and\ 850\ nm\ per\ IEC\ 61280-4-1$   $Single-mode\ MT\ elite\ ferrule\ compliant\ with\ IEC\ 61755-3-31/grade\ B$ 



### Ordering information

MTP8 female to MTP8 female jumper cable, single-mode APC, polarity B elite  $\varnothing$  2.0 mm







Length	Item no.	Description	Cable	Polarity	Gender	Housing colour	Boot					
1 m	85071917	MB08_MTAF_MTAF_A220y_01.0_BB	OptiPack 8	В	female	green	grey					
2 m	85071918	MB08_MTAF_MTAF_A220y_02.0_BB	2.0 mm yellow									
3 m	85071919	MB08_MTAF_MTAF_A220y_03.0_BB	G.657.A2									
4 m	85071920	MB08_MTAF_MTAF_A220y_04.0_BB	1									
5 m	85071921	MB08_MTAF_MTAF_A220y_05.0_BB	1									
6 m	85071922	MB08_MTAF_MTAF_A220y_06.0_BB										
7 m	85071923	MB08_MTAF_MTAF_A220y_07.0_BB	1									
8 m	85071924	MB08_MTAF_MTAF_A220y_08.0_BB										
9 m	85071925	MB08_MTAF_MTAF_A220y_09.0_BB										
10 m	85071926	MB08_MTAF_MTAF_A220y_10.0_BB										
11 m	85071928	MB08_MTAF_MTAF_A220y_11.0_BB										
12 m	85071929	MBO8_MTAF_MTAF_A220y_12.0_BB										
13 m	85071930	MB08_MTAF_MTAF_A220y_13.0_BB										
14 m	85071932	MB08_MTAF_MTAF_A220y_14.0_BB										
15 m	85071934	MB08_MTAF_MTAF_A220y_15.0_BB	]									

### Ordering information

MTP8 female to MTP8 female jumper cable, multimode OM3, polarity B elite  $\varnothing$  2.0 mm







Length	Item no.	Description	Cable	Polarity	Gender	Connector colour	Boot				
1 m	85072057	MB08_MTMF_MTMF_0320y_01.0_LL	OptiPack 8	В	female	aqua	grey				
2 m	85072058	MB08_MTMF_MTMF_O320y_02.0_LL	2.0 mm aqua								
3 m	85072059	MB08_MTMF_MTMF_O320y_03.0_LL	MM G50								
4 m	85072060	MB08_MTMF_MTMF_O320y_04.0_LL	(OM3)								
5 m	85072061	MB08_MTMF_MTMF_O320y_05.0_LL									
6 m	85072062	MB08_MTMF_MTMF_0320y_06.0_LL									
7 m	85072063	MB08_MTMF_MTMF_0320y_07.0_LL									
8 m	85072064	MB08_MTMF_MTMF_O320y_08.0_LL									
9 m	85072065	MB08_MTMF_MTMF_0320y_09.0_LL									
10 m	85072066	MB08_MTMF_MTMF_0320y_10.0_LL									
11 m	85072067	MB08_MTMF_MTMF_0320y_11.0_LL		-	-						
12 m	85072068	MB08_MTMF_MTMF_0320y_12.0_LL									
13 m	85072069	MB08_MTMF_MTMF_O320y_13.0_LL									
14 m	85072070	MB08_MTMF_MTMF_0320y_14.0_LL									
15 m	85072071	MB08_MTMF_MTMF_O320y_15.0_LL									

### Ordering information

MTP8 female to MTP8 female jumper cable, multimode OM4, polarity B elite  $\varnothing$  2.0 mm





Length	Item no.	Description	Cable	Polarity	Gender	Connector colour	Boot				
1 m	85072139	MB08_MTMF_MTMF_O420y_01.0_LL	OptiPack 8	В	female	black	grey				
2 m	85072140	MB08_MTMF_MTMF_O420y_02.0_ll	2.0 mm heather								
3 m	85072141	MB08_MTMF_MTMF_O420y_03.0_LL	violet								
4 m	85072142	MB08_MTMF_MTMF_O420y_04.0_LL	MM G50 (OM4)								
5 m	85072143	MB08_MTMF_MTMF_O420y_05.0_LL	-	-							
6 m	85072144	MB08_MTMF_MTMF_0420y_06.0_LL									
7 m	85072145	MB08_MTMF_MTMF_O420y_07.0_LL									
8 m	85072146	MB08_MTMF_MTMF_0420y_08.0_LL									
9 m	85072147	MB08_MTMF_MTMF_O420y_09.0_ll									
10 m	85072148	MB08_MTMF_MTMF_O420y_10.0_LL									
11 m	85072149	MB08_MTMF_MTMF_O420y_11.0_LL									
12 m	85072150	MB08_MTMF_MTMF_O420y_12.0_LL									
13 m	85072151	MB08_MTMF_MTMF_O420y_13.0_LL									
14 m	85072152	MB08_MTMF_MTMF_O420y_14.0_LL									
15 m	85072153	MB08_MTMF_MTMF_O420y_15.0_LL									

### Ordering information

MTP12 male to MTP12 female jumper cable, single-mode APC, polarity A elite  $\varnothing$  2.0 mm







Length	Item no.	Description	Cable	Polarity	Gender	Connector colour	Boot						
1 m	85071940	MA12_MTAM_MTAF_A220y_01.0_BB	'	A	male/	green	black						
2 m	85071941	MA12_MTAM_MTAF_A220y_02.0_BB	2.0mm yellow		female								
3 m	85071942	MA12_MTAM_MTAF_A220y_03.0_BB	G.657.A2										
4 m	85071943	MA12_MTAM_MTAF_A220y_04.0_BB											
5 m	85071944	MA12_MTAM_MTAF_A220y_05.0_BB											
6 m	85071945	MA12_MTAM_MTAF_A220y_06.0_BB											
7 m	85071946	MA12_MTAM_MTAF_A220y_07.0_BB											
8 m	85071947	MA12_MTAM_MTAF_A220y_08.0_BB			_	_	-						
9 m	85071948	MA12_MTAM_MTAF_A220y_09.0_BB											
10 m	85071949	MA12_MTAM_MTAF_A220y_10.0_BB											
11 m	85071950	MA12_MTAM_MTAF_A220y_11.0_BB											
12 m	85071951	MA12_MTAM_MTAF_A220y_12.0_BB											
13 m	85071952	MA12_MTAM_MTAF_A220y_13.0_BB											
14 m	85071953	MA12_MTAM_MTAF_A220y_14.0_BB											
15 m	85071954	MA12_MTAM_MTAF_A220y_15.0_BB											

### Ordering information

MTP12 male to MTP12 female jumper cable, multimode OM3, polarity A elite  $\varnothing$  2.0 mm







Length	Item no.	Description	Cable	Polarity	Gender	Connector colour	Boot											
1 m	85072073	MA12_MTMM_MTMF_0320y_01.0_LL	OptiPack 12	A	male/	aqua	black											
2 m	85072074	MA12_MTMM_MTMF_O320y_02.0_LL	2.0 mm aqua		female													
3 m	85072075	MA12_MTMM_MTMF_O320y_03.0_LL	MM G50															
4 m	85072076	MA12_MTMM_MTMF_O320y_04.0_LL	(OM3)	(OM3)														
5 m	85072077	MA12_MTMM_MTMF_O320y_05.0_LL																
6 m	85072081	MA12_MTMM_MTMF_O320y_06.0_LL																
7 m	85072082	MA12_MTMM_MTMF_0320y_07.0_LL																
8 m	85072083	MA12_MTMM_MTMF_O320y_08.0_LL																
9 m	85072084	MA12_MTMM_MTMF_O320y_09.0_LL																
10 m	85072085	MA12_MTMM_MTMF_O320y_10.0_LL																
11 m	85072086	MA12_MTMM_MTMF_O320y_11.0_LL				_												
12 m	85072087	MA12_MTMM_MTMF_O320y_12.0_LL																
13 m	85072088	MA12_MTMM_MTMF_O320y_13.0_LL																
14 m	85072089	MA12_MTMM_MTMF_O320y_14.0_LL																
15 m	85072090	MA12_MTMM_MTMF_O320y_15.0_LL																

MTP12 male to MTP12 female jumper cable, multimode OM4, polarity A elite  $\varnothing$  2.0 mm







Length	Item no.	Description	Cable	Polarity	Gender	Connector colour	Boot										
1 m	85072162	MA12_MTMM_MTMF_0420y_01.0_LL	OptiPack 12	Α	male/	black	black										
2 m	85072163	MA12_MTMM_MTMF_O420y_02.0_LL	2.0 mm heather		temale												
3 m	85072164	MA12_MTMM_MTMF_O420y_03.0_LL	violet														
4 m	85072165	MA12_MTMM_MTMF_O420y_04.0_LL	MM G50 (OM4)														
5 m	85072167	MA12_MTMM_MTMF_O420y_05.0_LL			-		-	-	(3.7)								
6 m	85072168	MA12_MTMM_MTMF_O420y_06.0_LL															
7 m	85072169	MA12_MTMM_MTMF_O420y_07.0_LL															
8 m	85072170	MA12_MTMM_MTMF_O420y_08.0_LL															
9 m	85072171	MA12_MTMM_MTMF_O420y_09.0_LL															
10 m	85072172	MA12_MTMM_MTMF_O420y_10.0_LL															
11 m	85072173	MA12_MTMM_MTMF_O420y_11.0_LL			-	-											
12 m	85072174	MA12_MTMM_MTMF_O420y_12.0_LL							-								
13 m	85072175	MA12_MTMM_MTMF_O420y_13.0_LL															
14 m	85072176	MA12_MTMM_MTMF_O420y_14.0_LL															
15 m	85072177	MA12_MTMM_MTMF_O420y_15.0_LL															

### Ordering information

MTP12 female to MTP12 male jumper cable, single-mode APC, polarity A elite  $\varnothing$  3.0 mm legacy







Length	Item no.	Description	Cable	Polarity	Gender	Connector colour	Boot				
1 m	85018915	MA12_MTAF_MTAM_A230y_01.0_BB	OptiPack 12	А	female/	green	black				
2 m	85018916	MA12_MTAF_MTAM_A230y_02.0_BB	3.0 mm yellow		male						
3 m	85018917	MA12_MTAF_MTAM_A230y_03.0_BB	G.657.A2								
5 m	85018918	MA12_MTAF_MTAM_A230y_05.0_BB	-								
7 m	85018919	MA12_MTAF_MTAM_A230y_07.0_BB									
10 m	85018920	MA12_MTAF_MTAM_A230y_10.0_BB									

MTP12 female to MTP12 male jumper cable, multimode OM3, polarity A elite  $\varnothing$  3.0 mm legacy







Length	Item no.	Description	Cable	Polarity	Gender	Connector colour	Boot
1 m	85018927	ma12_mtmf_mtmm_0330y_01.0_ll	OptiPack 12	A	female/	aqua	black
2 m	85018928	MA12_MTMF_MTMM_O330y_02.0_ll	3.0 mm agua		male		
3 m	85018929	MA12_MTMF_MTMM_O330y_03.0_LL	MM G50				
5 m	85018930	MA12_MTMF_MTMM_O330y_05.0_ll	(OM3)				
7 m	85018931	MA12_MTMF_MTMM_O330y_07.0_LL					
10 m	85018932	ma12_mtmf_mtmm_0330y_10.0_ll					

MTP12 female to MTP12 male jumper cable, multimode OM4, polarity A elite  $\varnothing$  3.0 mm legacy







Length	Item no.	Description	Cable	Polarity	Gender	Connector colour	Boot
1 m	85018246	ma12_mtmf_mtmm_0430y_01.0_ll	OptiPack 12	A	female/	black	black
2 m	85018247	ma12_mtmf_mtmm_0430y_02.0_ll	3.0 mm heather		male		
3 m	85018248	MA12_MTMF_MTMM_O430y_03.0_LL	violet				
5 m	85018249	MA12_MTMF_MTMM_O430y_05.0_LL	MM G50 (OM4)				
7 m	85018250	MA12_MTMF_MTMM_O430y_07.0_LL					
10 m	85018245	MA12_MTMF_MTMM_O430y_10.0_LL					

### Ordering information

MTP24 female to MTP24 female jumper cable, single-mode APC, polarity A elite  $\varnothing$  3.0 mm







Length	Item no.	Description	Cable	Polarity	Gender	Connector colour	Boot
1 m	85072011	MA24_MTAF_MTAF_A230y_01.0_BB	OptiPack 24	А	female	green	red
2 m	85072012	MA24_MTAF_MTAF_A230y_02.0_BB	3.0mm yellow G.657.A2				
3 m	85072014	MA24_MTAF_MTAF_A230y_03.0_BB					
4 m	85072015	MA24_MTAF_MTAF_A230y_04.0_BB					
5 m	85072016	MA24_MTAF_MTAF_A230y_05.0_BB					
6 m	85072017	MA24_MTAF_MTAF_A230y_06.0_BB					
7 m	85072018	MA24_MTAF_MTAF_A230y_07.0_BB					
8 m	85072019	MA24_MTAF_MTAF_A230y_08.0_BB					
9 m	85072020	MA24_MTAF_MTAF_A230y_09.0_BB					
10 m	85072021	MA24_MTAF_MTAF_A230y_10.0_BB					
11 m	85072023	MA24_MTAF_MTAF_A230y_11.0_BB					
12 m	85072024	MA24_MTAF_MTAF_A230y_12.0_BB					
13 m	85072025	MA24_MTAF_MTAF_A230y_13.0_BB					
14 m	85072026	MA24_MTAF_MTAF_A230y_14.0_BB					
15 m	85072028	MA24_MTAF_MTAF_A230y_15.0_BB					

MTP24 female to MTP24 female jumper cable, multimode OM3, polarity A elite  $\varnothing$  3.0 mm











Length	Item no.	Description	Cable	Polarity	Gender	Connector colour	Boot
1 m	85072106	MA24_MTMF_MTMF_O330y_01.0_LL	OptiPack 24	А	female	aqua	red
2 m	85072107	MA24_MTMF_MTMF_O330y_02.0_LL	3.0 mm aqua				
3 m	85072108	MA24_MTMF_MTMF_O330y_03.0_LL	MM G50				
4 m	85072109	MA24_MTMF_MTMF_O330y_04.0_LL	(OM3)				
5 m	85072110	MA24_MTMF_MTMF_O330y_05.0_LL					
6 m	85072111	MA24_MTMF_MTMF_O330y_06.0_LL					
7 m	85072112	MA24_MTMF_MTMF_O330y_07.0_LL					
8 m	85072113	MA24_MTMF_MTMF_O330y_08.0_LL					
9 m	85072114	MA24_MTMF_MTMF_O330y_09.0_LL					
10 m	85072115	MA24_MTMF_MTMF_O330y_10.0_LL					
11 m	85072116	MA24_MTMF_MTMF_O330y_11.0_LL					
12 m	85072117	MA24_MTMF_MTMF_O330y_12.0_LL					
13 m	85072118	MA24_MTMF_MTMF_O330y_13.0_LL					
14 m	85072119	MA24_MTMF_MTMF_O330y_14.0_LL					
15 m	85072120	MA24_MTMF_MTMF_O330y_15.0_LL					

### Ordering information

MTP24 female to MTP24 female jumper cable, multimode OM4, polarity A elite  $\varnothing$  3.0 mm







Length	Item no.	Description	Cable	Polarity	Gender	Connector colour	Boot
1 m	85072192	MA24_MTMF_MTMF_O430y_01.0_LL	OptiPack 24	A	female	black	red
2 m	85072193	MA24_MTMF_MTMF_O430y_02.0_LL	3.0 mm heather violet MM G50				
3 m	85072194	MA24_MTMF_MTMF_O430y_03.0_LL					
4 m	85072195	MA24_MTMF_MTMF_O430y_04.0_ll	(OM4)				
5 m	85072196	MA24_MTMF_MTMF_O430y_05.0_LL					
6 m	85072197	MA24_MTMF_MTMF_O430y_06.0_LL					
7 m	85072198	MA24_MTMF_MTMF_O430y_07.0_LL					
8 m	85072199	MA24_MTMF_MTMF_O430y_08.0_LL					
9 m	85072200	MA24_MTMF_MTMF_O430y_09.0_LL					
10 m	85072201	MA24_MTMF_MTMF_O430y_10.0_LL					
11 m	85072202	MA24_MTMF_MTMF_O430y_11.0_LL					
12 m	85072203	MA24_MTMF_MTMF_O430y_12.0_LL					
13 m	85072204	MA24_MTMF_MTMF_O430y_13.0_LL					
14 m	85072205	MA24_MTMF_MTMF_O430y_14.0_LL					
15 m	85072206	MA24_MTMF_MTMF_O430y_15.0_LL					

For switch to switch application > 15 m, please use the configurator  $\,$ 

MTP24 female to MTP24 female jumper cable, single-mode APC, polarity A elite  $\varnothing$  3.6 mm legacy







Length	Item no.	Description	Cable	Polarity	Gender	Connector colour	Boot
1 m	85018332	MA24_MTAF_MTAF_A236y_01.0_BB	OptiPack 24	A	female	green	red
3 m	85018341	MA24_MTAF_MTAF_A236y_03.0_BB	3.6 mm yellow				
5 m	85018351	MA24_MTAF_MTAF_A236y_05.0_BB	G.657.A2				
7 m	85018361	MA24_MTAF_MTAF_A236y_07.0_BB					
10 m	85017222	MA24_MTAF_MTAF_A236y_10.0_BB					

### Ordering information

MTP24 female to MTP24 female jumper cable, multimode OM3, polarity A elite  $\varnothing$  3.6 mm legacy







Length	Item no.	Description	Cable	Polarity	Gender	Connector colour	Boot
1 m	85018337	ma24_mtmf_mtmf_0336y_01.0_ll	OptiPack 24	A	female	aqua	red
2 m	85018338	MA24_MTMF_MTMF_O336y_02.0_LL	3.6 mm aqua				
3 m	85018340	MA24_MTMF_MTMF_O336y_03.0_LL	MM G50				
5 m	85018342	MA24_MTMF_MTMF_O336y_05.0_LL	(OM3)				
7 m	85018344	MA24_MTMF_MTMF_O336y_07.0_LL					
10 m	85018346	MA24_MTMF_MTMF_O336y_10.0_LL					

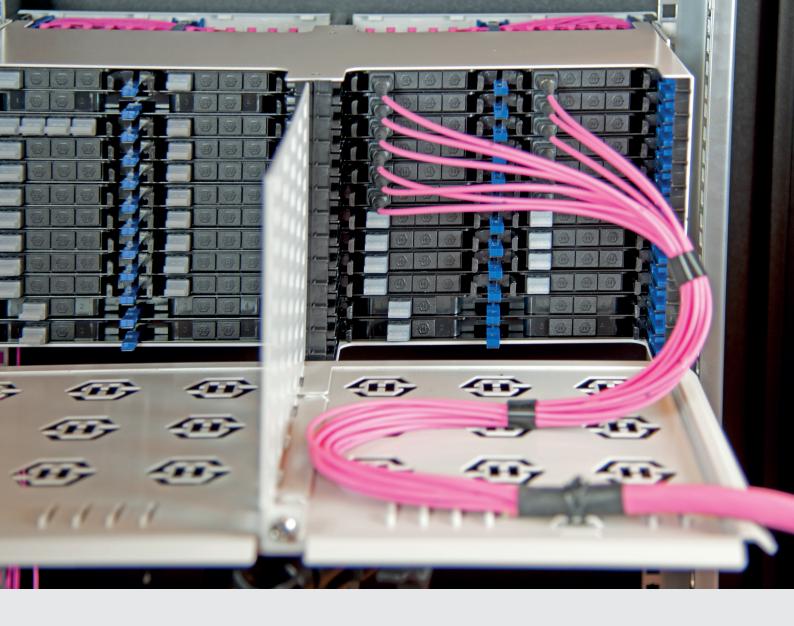
MTP24 female to MTP24 female jumper cable, multimode OM4, polarity A elite  $\varnothing$  3.6 mm legacy







Length	Item no.	Description	Cable	Polarity	Gender	Connector colour	Boot
1 m	85018385	MA24_MTMF_MTMF_O436y_01.0_LL	OptiPack 24	Α	female	black	red
2 m	85018388	MA24_MTMF_MTMF_O436y_02.0_LL	3.6 mm heather violet				
3 m	85018391	MA24_MTMF_MTMF_O436y_03.0_LL	MM G50				
5 m	85018395	MA24_MTMF_MTMF_O436y_05.0_LL	(OM4)				
7 m	85018400	MA24_MTMF_MTMF_O436y_07.0_LL					
10 m	85017119	MA24_MTMF_MTMF_O436y_10.0_LL					



Optipack trunk cables are high-density multi-stranded cables which form the backbone of the data center. Available in different fiber-counts up to 144 fibers, the Optipack trunks reduce the installation time by consolidating multiple sub-units into a single cable. This approach significantly reduces the overall diameter of the cable and provides much better space utilisation of cable routing channels.

Optipack trunk cables are available with 8, 12 and 24 fiber sub-units so that users can deploy Base-8, Base-12 or Base-24 infrastructures to suit their MTP connectivity requirements.

Note: In this catalogue only trunks with one connector per side are listed. For trunks with up to 144 fibers and multiple connectors, please see our catalogue "Data center solutions".

### Ordering information

 $1 \times MTP$  Base-8, male to  $1 \times MTP$  Base-8 male, single-mode APC, trunk cable polarity B elite  $\varnothing$  3.0 mm







Length	Item no.	Description	Cable	Polarity	Gender	Connector colour	Boot
10 m	85071892	MB08_MTAM_MTAM_A230y_10.0_BB	OptiPack 8	В	male	green	grey
15 m	85071894	MB08_MTAM_MTAM_A230y_15.0_BB	3.0 mm yellow				
20 m	85071896	MB08_MTAM_MTAM_A230y_20.0_BB	G.657.A2				
25 m	85071898	MB08_MTAM_MTAM_A230y_25.0_BB					
30 m	85071900	MB08_MTAM_MTAM_A230y_30.0_BB					
35 m	85071901	MB08_MTAM_MTAM_A230y_35.0_BB					
40 m	85071902	MB08_MTAM_MTAM_A230y_40.0_BB					
45 m	85071903	MB08_MTAM_MTAM_A230y_45.0_BB					
50 m	85071904	MB08_MTAM_MTAM_A230y_50.0_BB					

 $1 \times MTP$  Base-8, male to  $1 \times MTP$  Base-8 male, multimode OM3, trunk cable polarity B elite  $\varnothing$  3.0 mm







Length	Item no.	Description	Cable	Polarity	Gender	Connector colour	Boot
10 m	85072029	MB08_MTMM_MTMM_0330y_10.0_LL	OptiPack 8	В	male	aqua	grey
15 m	85072030	MB08_MTMM_MTMM_O330y_15.0_LL	3.0 mm aqua				
20 m	85072031	MB08_MTMM_MTMM_O330y_20.0_LL	MM G50 (OM3)				
25 m	85072032	MB08_MTMM_MTMM_0330y_25.0_LL	(01410)				
30 m	85072033	MB08_MTMM_MTMM_O330y_30.0_LL					
35 m	85072034	MB08_MTMM_MTMM_0330y_35.0_ll					
40 m	85072035	MB08_MTMM_MTMM_0330y_40.0_LL					
45 m	85072036	MB08_MTMM_MTMM_0330y_45.0_LL					
50 m	85072037	MB08_MTMM_MTMM_0330y_50.0_LL					

### Ordering information

 $1 \times MTP$  Base-8, male to  $1 \times MTP$  Base-8 male, multimode OM4, trunk cable polarity B elite  $\varnothing$  3.0 mm





L	ength	Item no.	Description	Cable	Polarity	Gender	Connector colour	Boot
	10 m	85072121	MB08_MTMM_MTMM_O430y_10.0_LL	OptiPack 8	A	male	black	grey
-	15 m	85072122	MB08_MTMM_MTMM_O430y_15.0_LL	3.0 mm heather				
2	20 m	85072123	MB08_MTMM_MTMM_O430y_20.0_LL	violet MM G50				
2	25 m	85072124	MB08_MTMM_MTMM_O430y_25.0_LL	(OM4)				
	30 m	85072125	MB08_MTMM_MTMM_O430y_30.0_LL					
	35 m	85072126	MB08_MTMM_MTMM_O430y_35.0_LL					
_	40 m	85072127	MB08_MTMM_MTMM_O430y_40.0_LL					
_	45 m	85072128	MB08 MTMM MTMM O430v 45.0 LL	1				

 $1\times MTP~Base-12, female~to~1\times MTP~Base-12~female, multimode~OM4, trunk~cable~polarity~A~elite~\varnothing~3.0~mm~A~elite~A~elite~B~elit$ 

MB08\_MTMM\_MTMM\_O430y\_50.0\_LL





85072129

50 m



Length	Item no.	Description	Cable	Polarity	Gender	Connector colour	Boot
10 m	84116115	MA12_MTMF_MTMF_O430y_10.0_LL	OptiPack 12	А	female	black	black
15 m	84116116	MA12_MTMF_MTMF_O430y_15.0_LL	3.0 mm heather				
20 m	84116117	MA12_MTMF_MTMF_O430y_20.0_LL	violet MM G50				
25 m	84116118	MA12_MTMF_MTMF_O430y_25.0_LL	(OM4)				
30 m	84116119	MA12_MTMF_MTMF_O430y_30.0_LL					
35 m	84116120	MA12_MTMF_MTMF_O430y_35.0_LL					
40 m	84116121	MA12_MTMF_MTMF_O430y_40.0_LL					
45 m	84116122	MA12_MTMF_MTMF_O430y_45.0_LL					
50 m	84116123	MA12_MTMF_MTMF_O430y_50.0_LL					

### Ordering information

 $1 \times MTP$  Base-12, female to  $1 \times MTP$  Base-12 female, single-mode APC, trunk cable polarity A elite  $\varnothing$  3.0 mm







Length	Item no.	Description	Cable	Polarity	Gender	Connector colour	Boot
10 m	84110257	MA12_MTAF_MTAF_A230y_10.0_BB	OptiPack 12	А	female	green	black
15 m	84110252	MA12_MTAF_MTAF_A230y_15.0_BB	3.0 mm yellow G.657.A2				
20 m	84112341	MA12_MTAF_MTAF_A230y_20.0_BB					
25 m	84116130	MA12_MTAF_A230y_25.0_BB					
30 m	84112342	MA12_MTAF_MTAF_A230y_30.0_BB					
35 m	84116131	MA12_MTAF_A230y_35.0_BB					
40 m	84112343	MA12_MTAF_MTAF_A230y_40.0_BB					
45 m	84116132	MA12_MTAF_A230y_45.0_BB					
50 m	84112344	MA12_MTAF_MTAF_A230y_50.0_BB					

 $1 \times MTP$  Base-12, female to  $1 \times MTP$  Base-12 female, multimode OM3, trunk cable polarity A elite  $\varnothing$  3.0 mm







Length	Item no.	Description	Cable	Polarity	Gender	Connector colour	Boot
10 m	84112353	MA12_MTMF_MTMF_O330y_10.0_LL	OptiPack 12	А	female	aqua	black
15 m	84110254	MA12_MTMF_MTMF_O330y_15.0_LL	3.0 mm aqua MM G50 (OM3)				
20 m	84112348	MA12_MTMF_MTMF_O330y_20.0_LL					
25 m	84119589	MA12_MTMF_MTMF_O330y_25.0_LL					
30 m	84112349	MA12_MTMF_MTMF_O330y_30.0_LL					
35 m	84119586	MA12_MTMF_MTMF_O330y_35.0_LL					
40 m	84112315	MA12_MTMF_MTMF_O330y_40.0_LL	1				
45 m	84119582	MA12_MTMF_MTMF_O330y_45.0_LL					
50 m	84112316	MA12_MTMF_MTMF_O330y_50.0_LL					

### Ordering information

 $1 \times MTP$  Base-24, male to  $1 \times MTP$  Base-24, male, single-mode APC, trunk cable polarity A elite cable  $\varnothing$  3.0 mm







Length	Item no.	Description	Cable	Polarity	Gender	Connector colour	Boot
10 m	85071906	MA24_MTAM_MTAM_A230y_10.0_BB	OptiPack	А	male	green	red
15 m	85071907	MA24_MTAM_MTAM_A230y_15.0_BB	24 3.0 mm	· I			
20 m	85071908	MA24_MTAM_MTAM_A230y_20.0_BB	yellow G.657.A2				
25 m	85071909	MA24_MTAM_MTAM_A230y_25.0_BB					
30 m	85071911	MA24_MTAM_MTAM_A230y_30.0_BB					
35 m	85071913	MA24_MTAM_MTAM_A230y_35.0_BB					
40 m	85071914	MA24_MTAM_MTAM_A230y_40.0_BB					
45 m	85071915	MA24_MTAM_MTAM_A230y_45.0_BB					
50 m	85071916	MA24_MTAM_MTAM_A230y_50.0_BB					

 $1 \times MTP$  Base-24, male to  $1 \times MTP$  Base-24, male, multimode OM3, trunk cable polarity A elite cable  $\varnothing$  3.0 mm







Length	Item no.	Description	Cable	Polarity	Gender	Connector colour	Boot
10 m	85072038	MA24_MTMM_MTMM_O330y_10.0_LL	OptiPack 24	А	male	aqua	red
15 m	85072039	MA24_MTMM_MTMM_O330y_15.0_LL	3.0 mm aqua				
20 m	85072040	MA24_MTMM_MTMM_O330y_20.0_LL	MM G50 (OM3)				
25 m	85072041	MA24_MTMM_MTMM_O330y_25.0_LL					
30 m	85072042	MA24_MTMM_MTMM_O330y_30.0_LL					
35 m	85072043	MA24_MTMM_MTMM_O330y_35.0_LL					
40 m	85072044	MA24_MTMM_MTMM_O330y_40.0_LL					
45 m	85072045	MA24_MTMM_MTMM_O330y_45.0_LL					
50 m	85072046	MA24_MTMM_MTMM_O330y_50.0_LL					

### Ordering information

 $1 \times MTP$  Base-24, male to  $1 \times MTP$  Base-24, male, multimode OM4, trunk cable polarity A elite cable  $\varnothing$  3.0 mm







Length	Item no.	Description	Cable	Polarity	Gender	Connector colour	Boot
10 m	85072130	MA24_MTMM_MTMM_O430y_10.0_LL	OptiPack 24	А	male	black	red
15 m	85072131	MA24_MTMM_MTMM_O430y_15.0_LL	3.0 mm heather				
20 m	85072132	MA24_MTMM_MTMM_O430y_20.0_LL	violet MM G50 (OM4)				
25 m	85072133	MA24_MTMM_MTMM_O430y_25.0_LL					
30 m	85072134	MA24_MTMM_MTMM_O430y_30.0_LL					
35 m	85072135	MA24_MTMM_MTMM_O430y_35.0_LL					
40 m	85072136	MA24_MTMM_MTMM_O430y_40.0_LL					
45 m	85072137	MA24_MTMM_MTMM_O430y_45.0_LL	1				
50 m	85072138	MA24_MTMM_MTMM_O430y_50.0_LL	1				

## MTP cleaning products

### Optipop R refillable cassette cleaners



#### Characteristics

- Suitable for MTP and LC connectors
- Integrated cartridge for easy handling
- Densely woven, non-static microfibers
- Trigger mechanism for winding-on
- Automatically seals after each clean
- Easy to install replacement reels
- 400+ cleanings per reel
- Robust cloth does not fray or leave fibrous debris

The Optipop R hand-held cleaner utilises an integrated cartridge of woven microfiber that can be wound-on each time a connector is cleaned. The unique, densely woven microfiber cloth provides superior cleaning performance while minimising static charge. This prevents the end-face from immediately being recontaminated with airborne contaminants.

Description	Item no.
MTP cleaning, Optipop R cassette for MTP female connectors	84097538
MTP cleaning, Optipop R cassette for MTP male connectors	84097539
MTP cleaning, Optipop R cassette refill	84097551

### IBC<sup>TM</sup> cleaner



#### Characteristics

- Suitable for male and female MTP connectors
- 600+ cleanings per tool
- Cloth made from densely woven microfibers
- Cleaning cloth is washed and debris-free
- Adapter tip supplied for cleaning unmated connectors
- Allows "through-coupler" cleaning for rear of panel connections

The IBC brand cleaning tools are designed to clean ferrules residing inside an adapter, faceplate or bulkhead. The cleaning tools are simple to use and highly effective at removing oil and dust contaminants. Alternatively, the IBC cleaner can be used to clean unmated connectors by using a different fitting on the front of the nozzle.

Description	Item no.
IBC MTP cleaner male and female	84097537

# MTP cleaning instructions

IEC	62627	7 procedure for exposed connectors	IEC (	62627	7 procedure for in-port connectors
			A		
1.	Alw	ays inspect before cleaning. If the connector is already an, there is no need to clean it.	1.		ays inspect before cleaning. If the connector is already n, there is no need to clean it.
2.	Use	Use a dry cleaning method.			a dry cleaning method.
	a.	Remove connector dust cover.		a.	Insert the IBC cleaner into the adaptor where the connector is mated.
	b.	Select the appropriate cleaner for male/female.		b.	Rotate the tape feeder wheel as indicated on the cleaner.
	C.	For female MTP connectors, use the cleaning brush and fluid to remove any debris from the pin holes.		C.	Inspect the connector with a 200 × microscope.
	d.	Depress the green lever so that a fresh area of cleaning cloth is exposed.		d.	If still contaminated repeat steps once more.
	e.	Position the ferrule against the cloth so that the fibers are in contact with the cleaning material. In the case of angled connectors, the ferrule will need to be adjusted accordingly.	3.	Use	a wet cleaning method.
	f.	Wipe the connector in the direction shown on the cassette.		a.	Insert the cleaning bud through the adaptor and wipe the surface of the connector ferrule.
	g.	Release the grip to seal off the cleaning cloth.		b.	Insert the IBC cleaner into the adaptor where the connector is mated.
	h.	Let the ferrule air-dry before inspecting with a 200 × microscope.		C.	Allow to dry and then inspect the connector with a 200 × microscope.
	i.	If still contaminated repeat all steps once again.		d.	If still contaminated repeat steps once more.
	j.	Ensure that the connector does not touch any hard surfaces.			
3.	If co	onnector is still contaminated, use a wet cleaning method.			
	a.	Apply an approved cleaning fluid to a small area of lint-free cleaning cloth.			
	b.	Wipe the connector over the damp area.			
	C.	Wipe the connector over a dry area of cloth and allow it to dry.			
	1	1			

