Rosenberger

PreCONNECT® OCTO MTP®

PRODUCT INFORMATION

PreCONNECT® OCTO MTP® solution is available in two end face quality features: BASIC and PURE

Define the end-face quality according to your application requirements:

Quality feature BASIC is our well-proven, high-grade, standards compliant product in terms of end-face geometry, defect, and cleanness, providing excellent IL and RL performance:

- The PreCONNECT® factory-assembled plug & play system enables quick and reliable, cost efficient, installation and performance
- Harmonized modular components of the quality feature BASIC solution ensure end to end performance of the entire channel

Quality feature PURE is the enhanced version of our quality feature BASIC, but with more stringent defect and cleanliness screening and factory sealed, tamper evident adapter-interfaces.

- Guaranteed protection of the polished connector end-face against contamination and damage through sealed adapter-interfaces, enabling time savings during initial installation and commissioning due to the elimination of the need for cleaning and testing*/**.
- Quality feature PURE provides an industry leading low random mate insertion and return loss (mean) which enables up to six (6) mated pairs in a 10G/OM4 application up to 300m.

Part numbers:

Quality feature BASIC: The part numbers XXXAXXXX listed in this document are valid for the BASIC quality feature.

Quality feature PURE: Add a "**P**" to the end of the quality feature BASIC part number (*Example: XXXAXXXX**P***)

(Note: PURE trunk cables have factory attached sealed coupling adapters incorporated and thus utilize empty patch panels and enclosures)

* *While Rosenberger does not require permanent link or channel testing for warranty registration of PURE installations due to guaranteed performance, certain customers will require testing documentation for their records.*

** *Only applicable when all components are of quality feature PURE and installed by trained PURE installers.*

Applications:

Infrastructure and IT room cabling within data centers

System consists of:

- Factory assembled fiber optic breakout cables, FRNC-LSZH indoor cables, up to 192 fibers with connector systems MTP® 4+4 fiber OCTO per MTP® channel
- MPO/MTP® Port-breakout with MTP® - LC and MTP® - MDC harnesses, MTP® module cassettes with LC and MDC front, and MTP® - LC Port-Breakout-Units
- Four 19“ panel systems selectable: SMAP-G2 SD, SMAP-G2 HD, SMAP-G2 UHD and VersaTray®
- Suitable patchcords
- Useful accessories
- Patch location rack

Features:

- For all who already have on minimum one cabling side MPO4+4 based parallel optics SR4 and DR4/PSM4 transceivers
- Cost and attenuation optimized for SR4 and DR4/PSM4 applications

Your benefits at a glance:

- MTP® cabling system perfectly fitting for SR4 and DR4/PSM4 applications
- Cost reduction through the only for SR4 and DR4/PSM4 needed 8 fibers instead of the so far usual 12 are in one MTP® channel
- Fast and safe installation trough factory assembled plug & play systematic
- Highest quality and cost-efficiency through factory assembling
- PreCONNECT® cabling systems consist of perfectly harmonized modular single components

PreCONNECT® OCTO MTP® breakout trunk

OCTO MTP® harnesses

patchcords

patch location rack

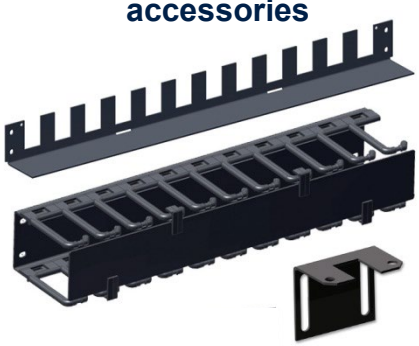
19” panel systems

SMAP-G2 SD

SMAP-G2 HD and UHD

VersaTray®

accessories



Application:

MTP® (MPO) based data center cabling with 8 fibers per MTP® channel:

Optimized for parallel optics MPO 4+4 fiber applications:

- **40/100/200/400 GBASE-SR4**
- **400GBASE-SR4.2 BiDi**
- **4x16, 4x32 and 4x64 GFC**
- **100GBASE DR4/PSM4**
- **200GBASE-DR4**
- **400GBASE-DR4**
- **4x10 GBASE-LR**
- **InfiniBand™ 4X**

Easy migration to higher speed applications.

System description:

Our PreCONNECT® OCTO MTP® cabling system consists of:

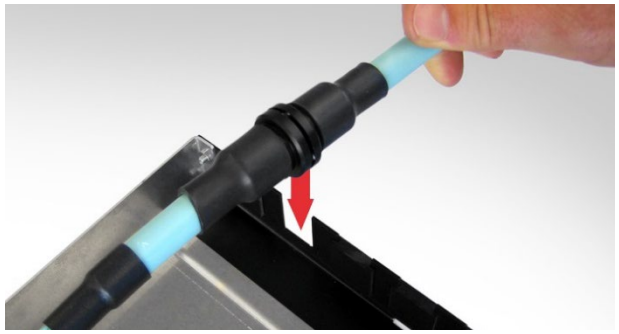
- OCTO MTP® breakout trunk called factory assembled FO cables with up to 24 SR4 or DR4/PSM4 MTP® channels (24x8=192 fibers).
- 19” panel systems with part front plates with MTP®/MPO adapters, OCTO MTP® module cassettes and MTP® - LC Port-Breakout-Units
- OCTO MTP® patchcords and harnesses
- Useful accessories
- Patch location racks

Rosenberger OSI brought already 1991 high fibercount factory assembled FO trunk cables to the market. PreCONNECT® STANDARD was the first in Europe developed and manufactured, high fibercount and modular „plug & play“ FO cabling system and already 1997 we have been the first manufacturer of MTP® cabling systems in Europe.

Properties:

PreCONNECT® square interface and installation protection:

PreCONNECT® OCTO MTP® breakout trunks have PreCONNECT® square interfaces on both sides which can be tool-less hooked into the 19” panel systems for tensile and torsion resistant fixing of the trunks.



The trunk connector legs are fitting for the 19“ panel systems and are packaged in non-pull resistant dust-proof foil tubes. On request with tensile strength, crush resistant, kink and torsion resistant, installation tubes deliverable.

Installation Tube Indoor,
IP50 dustproof

Properties:

Connector types:

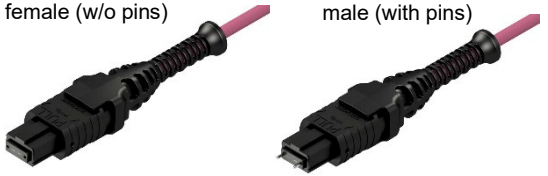
- MTP® 4+4 OCTO multimode PC 0° for all non PAM4 coded transmission applications, e.g. 40/100/200 GBASE-SR4, 400GBASE-SR4.2.
- MTP® 4+4 OCTO multimode APC 8° for all PAM4 coded transmission applications, e.g. 400GBASE-SR4.
  APC 8° to reach reliable high return loss for PAM4. With white boot as color code.
- MTP® 4+4 OCTO singlemode APC 8° for all singlemode transmission applications.
- MTP® 4+4 OCTO connectors have centered keys
- OCTO MTP® breakout trunks: MTP® male 4+4 fiber OCTO
- OCTO MTP® patchcords, harnesses and module cassettes: MTP® female 4+4 fiber OCTO
- As hybrid trunks with LC, SN® or MDC on request

Adapter types:

- For MM PC 0°: TIA type B „centered aligned keys“ „1 to 12“ grey
- For MM APC 8°: TIA type A „centered opposed keys“ „1 to 1“ white
- For SM APC 8°: TIA type A “centered opposed keys” „1 to 1“ green
- Description of the adapter types A and B see last pages of in this document

MTP® 4+4 OCTO MM PC 0°
female (w/o pins)

MTP® PPB 4+4 OCTO MM PC 0°
female (w/o pins) male (with pins)

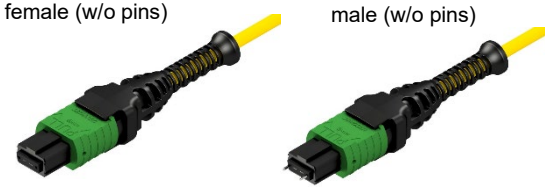


MTP® PRO 4+4 OCTO MM PC 0°
female (w/o pins) male (with pins)

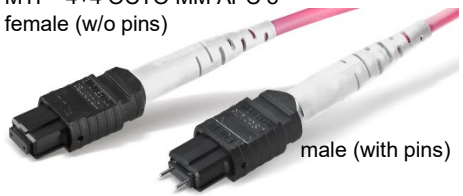
For MM PC 0°
TIA type B „centered aligned keys“ „1 to 12“ grey

MTP® 4+4 OCTO SM APC 8°
female (w/o pins)

MTP® PPB 4+4 OCTO SM APC 8°
female (w/o pins) male (w/o pins)

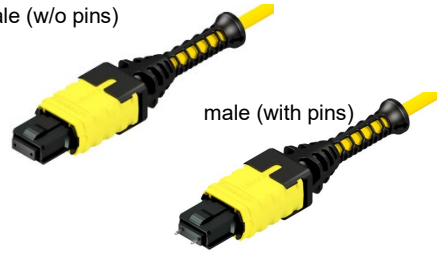


MTP® 4+4 OCTO MM APC 8°
female (w/o pins)



For MM APC 8°
TIA type A „centered opposed keys“ „1 to 1“ white

MTP® PRO 4+4 OCTO SM APC 8°
female (w/o pins)



For SM APC 8°
TIA type A „centered opposed keys“ „1 to 1“ green

Properties:

Polarity:

- OCTO MTP® breakout trunks: TIA Method B „1 to 12“
- OCTO MTP® patchcords, harnesses and module cassettes: see pages of the products
- See as well our White Paper „Light Propagation Polarity Coding“

Cable types:

- PreCONNECT® OCTO MTP® breakout trunks: I-F(ZN)H(ZN)H 8 fibers CPR class B2ca and I-F(ZN)HH n x 8 fibers CPR class Cca
- PreCONNECT® OCTO MTP® patchcords and harnesses I-F(ZN)H and I-F(ZN)H(ZN)H 8 fibers
- Cable data, see separate cable data sheets

I-F(ZN)HH 6 x 8 fiber

Fiber types:

- Multimode OM4 and OM5 bend-insensitive
- Singlemode G.657.A1 bend-insensitive and backwards compatible to G.652.D
- Fiber data, see separate fiber data sheets

Operating temperature range: -10°C to +60°C

Delivery form:

- Dependent on the length as cable ring or on cardboard or wooden drum
- Insertion loss measured acc. to IEC 61300-3-4, method B, MM 850nm / SM 1310nm, with measurement protocol
- Product label with serial number at both sides

Length definition:

- Order-length = length between the connectors of the longest legs at both sides, not between the PreCONNECT® square-interfaces.
- Possible order-lengths: See part number tables

Length tolerances:

Trunk length	Tolerance
<= 10m	+/- 50cm
> 10m <= 30m	+/- 100cm
> 30m <= 100m	+/- 150cm
> 100m	+/- 2%

PreCONNECT® OCTO MTP® application case point-to-point:

MULTIMODE

PC 0°

- **40 / 100 / 200 GBASE-SR4 and 400GBASE-SR4.2 BiDi MPO4+4-MPO4+4**
- **4x16 / 4x32 / 4x64 GFC MPO4+4-MPO4+4**

MPO4+4 Transceiver

PreCONNECT® OCTO MTP® patchcord

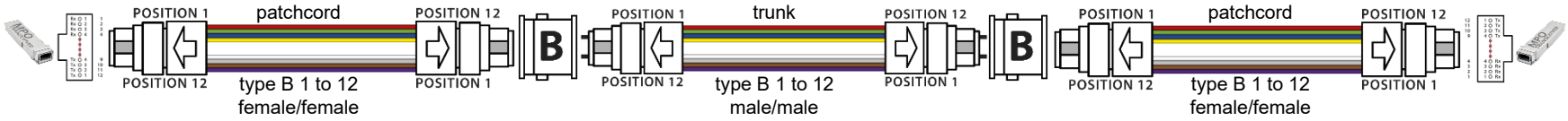
PreCONNECT® OCTO MTP® breakout trunk

PreCONNECT® SMAP-G2 HD
19“ panel system
6/6 width partition
equipped with 1/6
MTP® adapter part front plates

MPO4+4 Transceiver

PreCONNECT® OCTO MTP® patchcord

channel lengths see behind in this product information



patchcord and trunk IEC fiber color code / MTP® adapter B „aligned keys“ „1 to 12“

PreCONNECT® OCTO MTP® application case port breakout with MTP® harness:

MULTIMODE

PC 0°

- **40 / 100 / 200 GBASE-SR4 MPO4+4 to 4x10 / 4x25 / 4x50 GBASE-SR LC-Duplex**
- **4x16 / 4x32 / 4x64 GFC MPO4+4 to 4x16 / 4x 32 / 4x 64 GFC LC-Duplex**

MPO4+4 Transceiver

PreCONNECT® OCTO MTP® breakout trunk

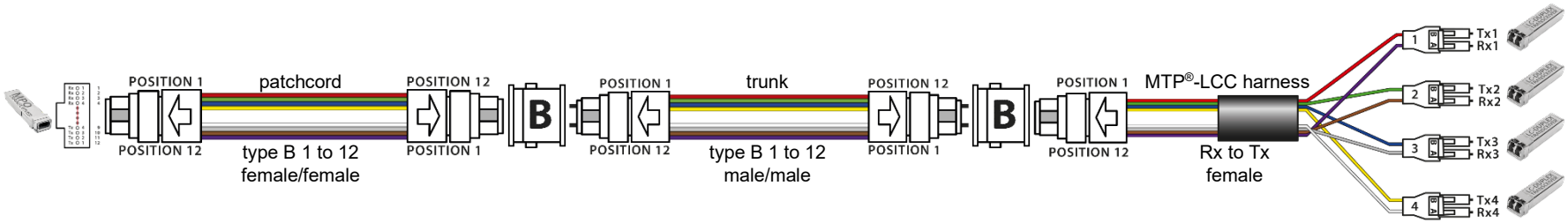
PreCONNECT® SMAP-G2 HD
19“ panel system
6/6 width partition
equipped with 1/6
MTP® adapter part front plates

LC-Duplex Transceiver

PreCONNECT® OCTO MTP® patchcord

PreCONNECT® OCTO MTP®-LCC harness

channel lengths see behind in this product information



patchcord, trunk and harness IEC fiber color code / MTP® adapter B „aligned keys“ „1 to 12“

PreCONNECT® OCTO MTP® application case port breakout with MTP® module cassette:

MULTIMODE

PC 0°

- **40 / 100 / 200 GBASE-SR4 MPO4+4 to 4x10 / 4x25 / 4x50 GBASE-SR LC-Duplex**
- **4x16 / 4x32 / 4x64 GFC MPO4+4 to 4x16 / 4x 32 / 4x 64 GFC LC-Duplex**

MPO4+4 Transceiver

PreCONNECT® OCTO MTP® breakout trunk

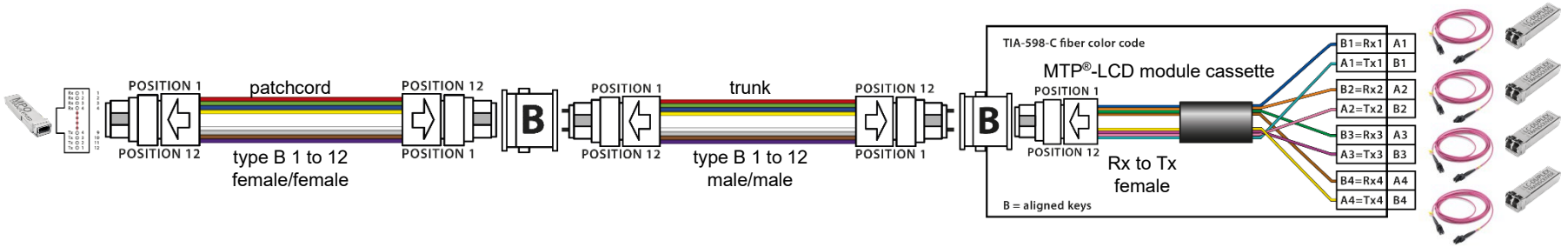
PreCONNECT® SMAP-G2 HD
19“ panel system
6/6 width partition
equipped with 1/6
MTP® adapter part front plates and
module cassettes

LCC-PPB patchcords

LC-Duplex Transceiver

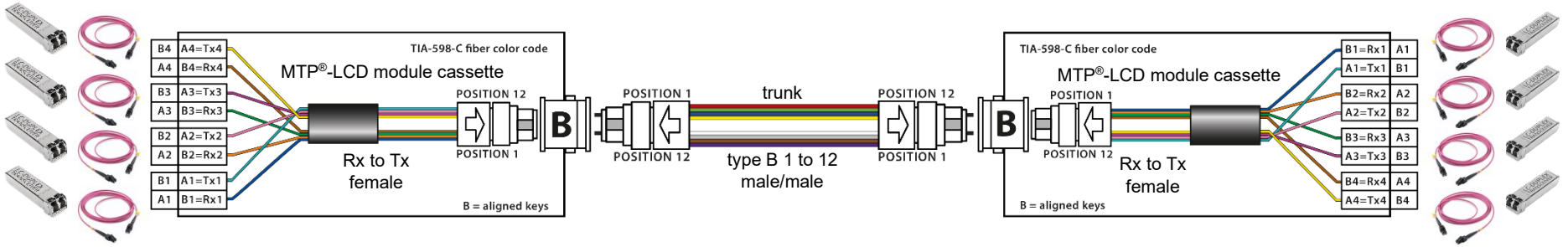
PreCONNECT® OCTO MTP® patchcords

channel lengths see behind in this product information

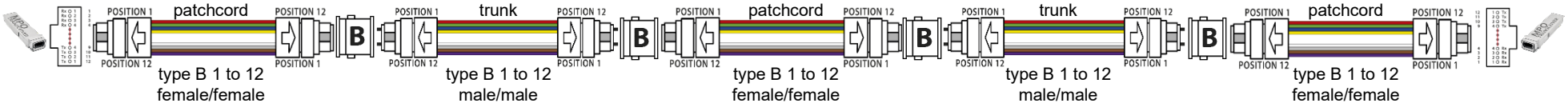


patchcord and trunk IEC fiber color code / modul cassette TIA fiber color code / MTP® adapter B „aligned keys“ „1 to 12“

PreCONNECT® OCTO MTP® application case MTP® module cassettes at both sides:



PreCONNECT® OCTO MTP® application case daisy chain to „4-connector channel“:



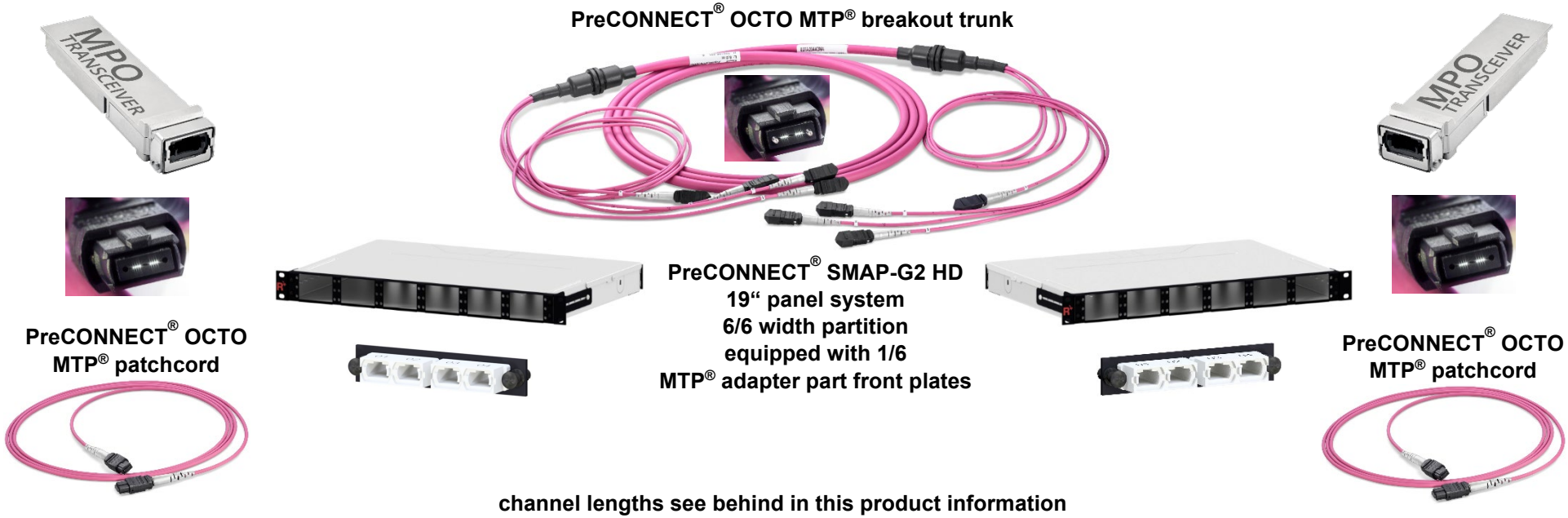
patchcord and trunk IEC fiber color code / modul cassette TIA fiber color code / MTP® adapter B „aligned keys“ „1 to 12“

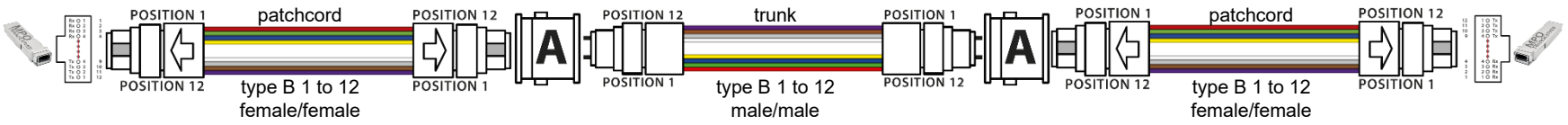
PreCONNECT® OCTO MTP® application case point-to-point:

MULTIMODE

APC 8°

- **400GBASE-SR4 MPO4+4-MPO4+4**





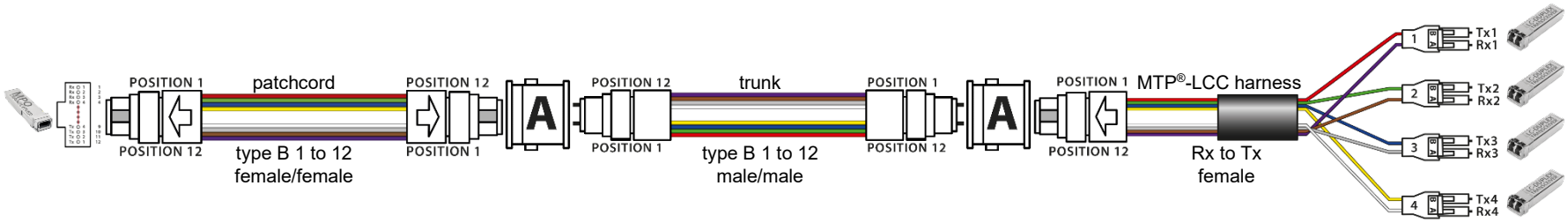
patchcord and trunk IEC fiber color code / MTP® adapter A „opposed keys“ „1 to 1“

PreCONNECT® OCTO MTP® application case port breakout with MTP® harness:

MULTIMODE

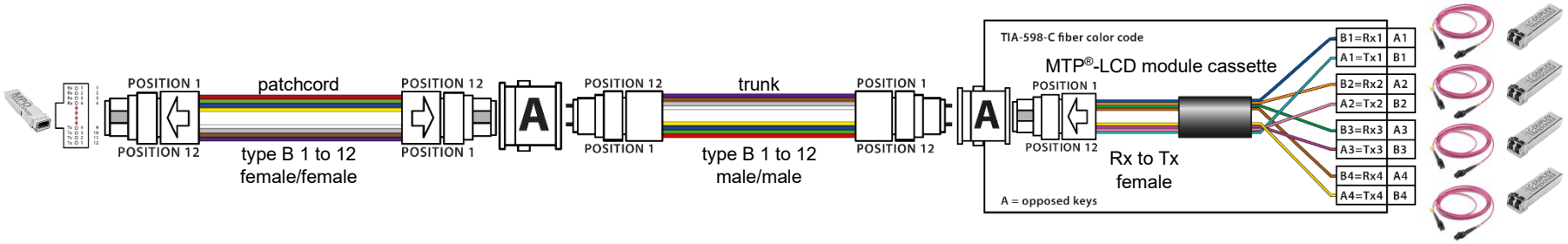
APC 8°

- **400GBASE-SR4 MPO4+4 to 4x100 GBASE-SR LC Duplex**



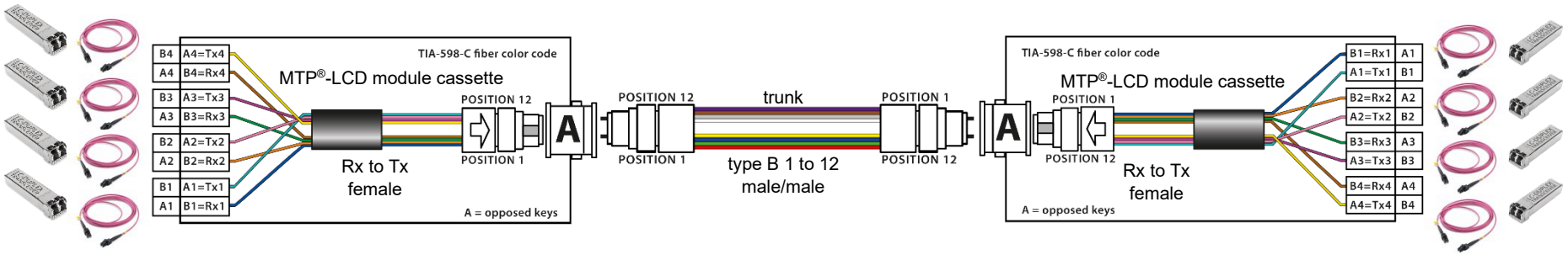
PreCONNECT® OCTO MTP® application case port breakout with MTP® module cassette:

- **400GBASE-SR4 MPO4+4 to 4x100 GBASE-SR LC Duplex**

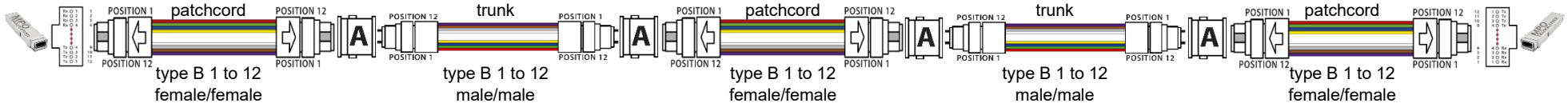


Patchcord, trunk and harness IEC fiber color code / modul cassette TIA fiber color code / MTP® adapter A „opposed keys“ „1 to 1“

PreCONNECT® OCTO MTP® application case MTP® module cassettes at both sides:



PreCONNECT® OCTO MTP® application case daisy chain to „4-connector channel“:



patchcord and trunk IEC fiber color code / modul cassette TIA fiber color code / MTP® adapter A „opposed keys“ „1 to 1“

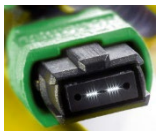
PreCONNECT® OCTO MTP® application case point-to-point:

SINGLEMODE

- **100G-PSM4 MPO4+4-MPO4+4**
- **4x10 GBASE-LR MPO4+4-MPO4+4**
- **200 and 400GBASE-DR4 MPO4+4-MPO4+4**

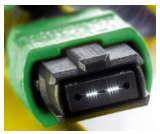
PreCONNECT® OCTO MTP® breakout trunk

MPO4+4 Transceiver



PreCONNECT® SMAP-G2 HD
19“ panel system
6/6 width partition
equipped with 1/6
MTP® adapter part front plates

MPO4+4 Transceiver



PreCONNECT® OCTO MTP® patchcords

PreCONNECT® OCTO MTP® patchcords

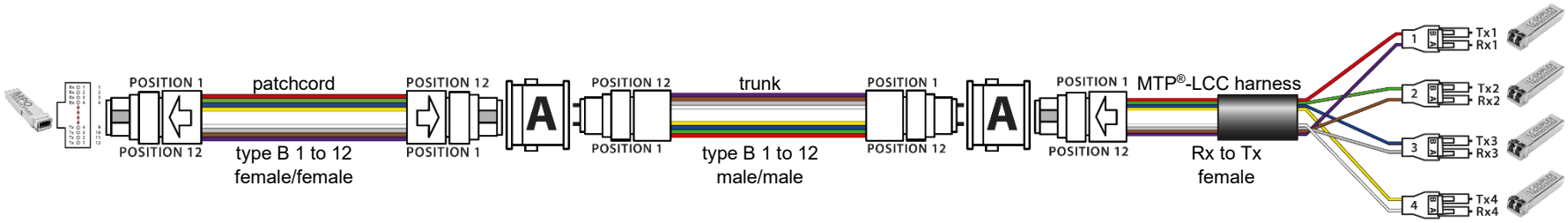
channel lengths see behind in this product information

patchcord and trunk IEC fiber color code / MTP® adapter A „opposed keys“ „1 to 1“

PreCONNECT® OCTO MTP® application case port breakout with MTP® harness:

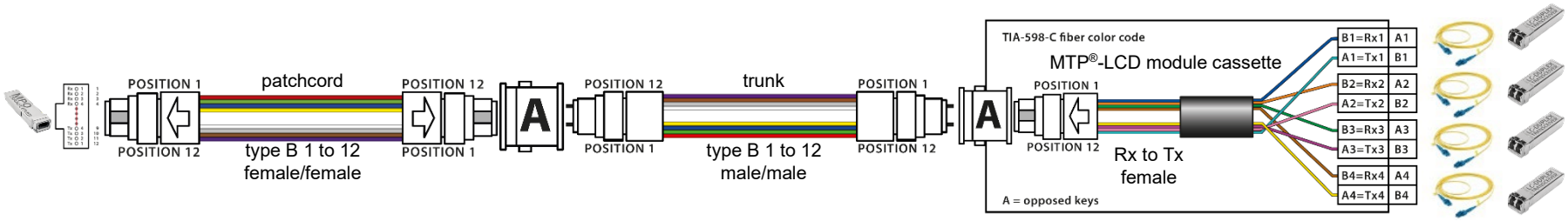
SINGLEMODE

- **100G PSM4 MPO4+4 to 4x25 GBASE-LR LC-Duplex**
- **4x10 GBASE-LR MPO4+4 to 4x10 GBASE-LR LC-Duplex**
- **200GBASE-DR4 MPO4+4 to 4x50 GBASE-LR LC Duplex**
- **400GBASE-DR4 MPO4+4 to 4x100 GBASE-LR LC Duplex**



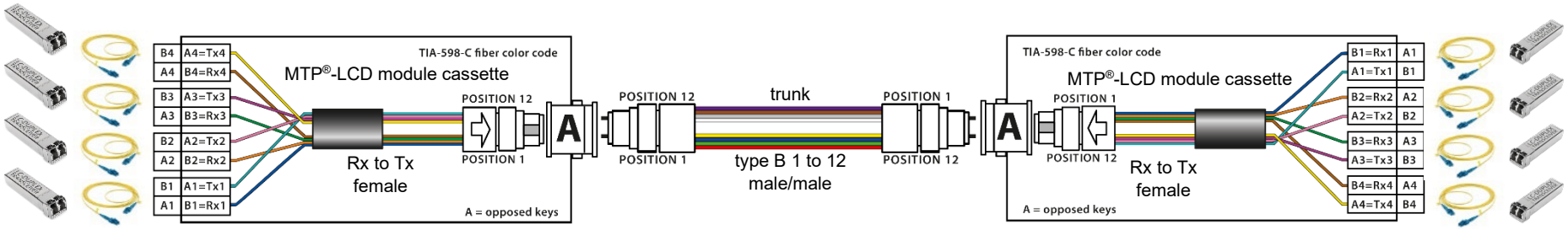
PreCONNECT® OCTO MTP® application case port breakout with MTP® module cassette:

- **100G PSM4 MPO4+4 to 4x25 GBASE-LR LC-Duplex**
- **4x10 GBASE-LR MPO4+4 to 4x10 GBASE-LR LC-Duplex**
- **200GBASE-DR4 MPO4+4 to 4x50 GBASE-LR LC Duplex**
- **400GBASE-DR4 MPO4+4 to 4x100 GBASE-LR LC Duplex**

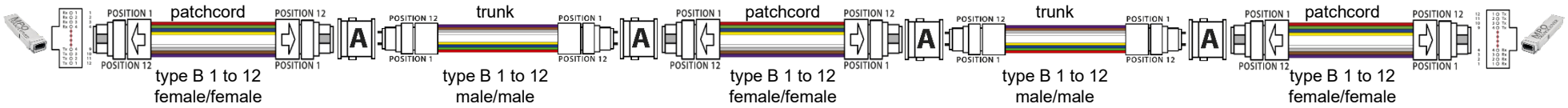


Patchcord, trunk and harness IEC fiber color code / modul cassette TIA fiber color code / MTP® adapter A „opposed keys“ „1 to 1“

PreCONNECT® OCTO MTP® application case MTP® module cassettes at both sides:



PreCONNECT® OCTO MTP® application case daisy chain to „4-connector channel“:



patchcord and trunk IEC fiber color code / modul cassette TIA fiber color code / MTP® adapter A „opposed keys“ „1 to 1“

Application of PreCONNECT® OCTO MTP® Trunks and Patchcords with MTP® in our 19“ panel systems and Trunk leg lengths:

19” panel systems	MTP® port density per HU	Trunks with MTP®	Trunks with MTP® PPB or PRO	Patchcords with MTP®	Patchcords with MTP® PPB or PRO	Trunk leg lengths
SMAP-G2 SD	48	✓	✗	✓	✗	standard stepped “A length legs”
SMAP-G2 HD	72	✓	recommended	✗	✓ required	
SMAP-G2 UHD	96	✗	✓ required	✗	✓ required	
Conventional	24	✓	✗	✓	✗	standard stepped “A length legs
PLRc-Panels	144 in 5 ETSI HU	✓	recommended	✗	✓ required	extended stepped “E length legs”

SMAP-G2 SD

SMAP-G2 HD

SMAP-G2 UHD

conventional distribution panels

PLRc-Panels

MTP®

MTP® PPB

MTP® PRO

PreCONNECT OCTO MTP® breakout trunks n x 8 fibers OM4 FRNC-LSZH:

MULTIMODE

- **MTP® 4+4 OCTO MM PC 0°, male, Elite quality**
- **Polarity: TIA method B „1 to 12“**

MTP® 4+4 OCTO MM PC 0°
male (with pins)

Part numbers

Add your desired length in millimeter to the part number, e.g. 2.0 meter: 037A2050OM4-20000
Deliverable lengths: From 5 to 300 meter, in 1m increments

Connector leg lengths:
All same length 90cm
Production tolerance -5cm

Number of OCTO channels	Number of fibers	Cable structure	Cable CPR class	New (CPQ) part number with 90cm legs	Old part number still with 79cm legs not fitting for VersaTray®
1	8	1 x 8	B2ca	on request	037A0110OM4
2	16	2 x 8	Cca	on request	037A2048OM4
3	24	3 x 8	Cca	on request	037A2136OM4
4	32	4 x 8	Cca	on request	037A2049OM4
6	48	6 x 8	Cca	on request	037A2089OM4
8	64	8 x 8	Cca	on request	037A2050OM4
9	72	9 x 8	Cca	on request	---
12	96	12 x 8	Cca	on request	037A2051OM4
16	128	16 x 8	Cca	on request	---
18	144	18 x 8	tbt	on request	037A2088OM4

On request with:
- MTP® 4+4 OCTO MM APC 8° male Elite quality
- MTP® PPB 4+4 OCTO MM PC 0° male Elite quality
- MTP® PRO 4+4 OCTO MM PC 0° male Elite quality

PreCONNECT OCTO MTP® breakout trunks n x 8 fibers SM FRNC-LSZH:

SINGLEMODE

- **MTP® 4+4 OCTO SM APC 8°, male, Standard quality (Elite quality on request)**
- **Polarity: TIA method B „1 to 12“**

MTP® 4+4 OCTO SM APC 8°
male (with pins)

Part numbers

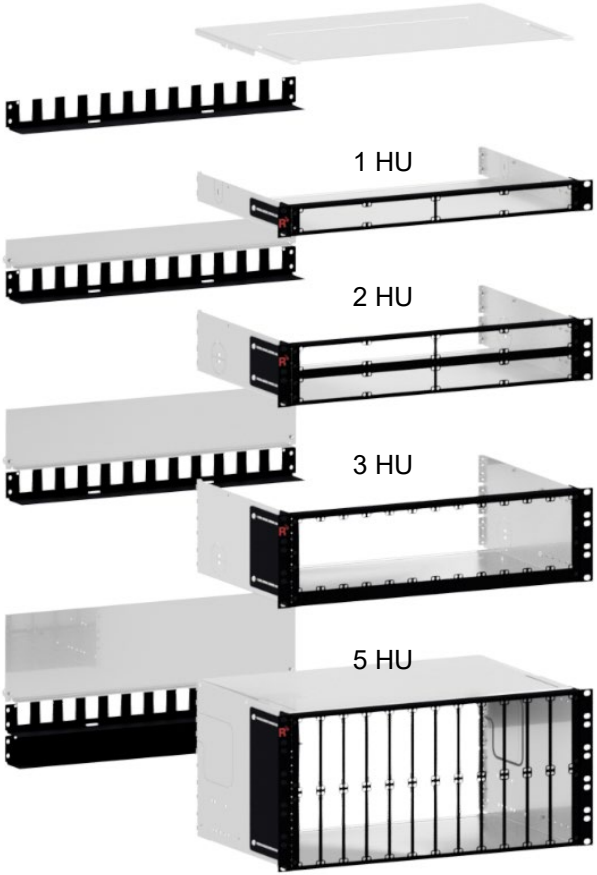
Add your desired length in millimeter to the part number, e.g. 2.0 meter: 037A2090G657A1-20000
Deliverable lengths: From 5 to 1000 meter, in 1m increments

Connector leg lengths:
All same length 90cm
Production tolerance -5cm

Number of OCTO channels	Number of fibers	Cable structure	Cable CPR class	New (CPQ) part number with 90cm legs	Old part number still with 79cm legs not fitting for VersaTray®
1	8	1 x 8	B2ca	on request	037A2096G657A1
2	16	2 x 8	Cca	on request	---
3	24	3 x 8	Cca	on request	037A2091G657A1
4	32	4 x 8	Cca	on request	037A2076G657A1
6	48	6 x 8	Cca	on request	037A2090G657A1
8	64	8 x 8	Cca	on request	037A2077G657A1
9	72	9 x 8	Cca	on request	---
12	96	12 x 8	Cca	on request	037A2078G657A1
16	128	16 x 8	Cca	on request	---
18	144	18 x 8	tbt	on request	037A2087G657A1

On request with:
- MTP® PPB 4+4 OCTO SM APC 8° male Standard an Elite quality
- MTP® PRO 4+4 OCTO SM APC 8° male Standard an Elite quality

PreCONNECT® SMAP-G2 Standard Density (SD) 19” panel system:



Port density:

- 48 LC-Duplex or MTP® ports per HU at the 1, 2 and 3 HU panels and 57.6 per HU (total 288) at the 5 HU panel

Dimensions:

- Width: 19“
- Height: 1, 2, 3 and 5 HU
- Depth: 200 mm and 300 mm, see product information SMAP-G2 SD

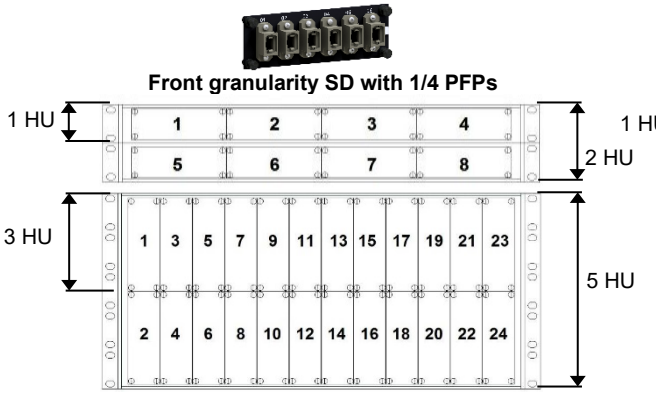
Part numbers:

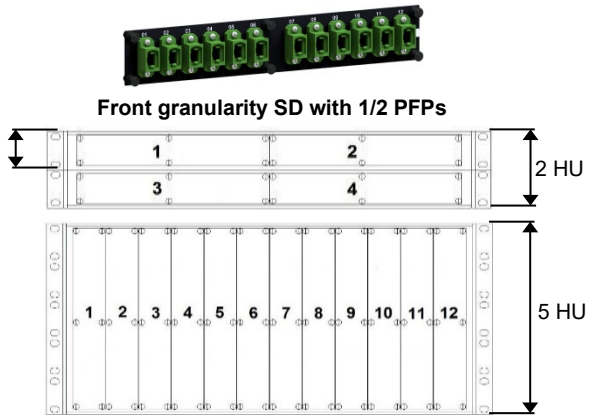
SMAP-G2 SD empty distribution panels, RAL9005 black, back plane with 12 PreCONNECT® square interfaces:

1 HU, depth 300 mm	171A0001
1 HU, depth 200 mm	171A0020
2 HU, depth 300 mm	172A0001
3 HU, depth 300 mm	173A0001
5 HU, depth 300 mm	175A0001

Find panels with other back plane configurations and further information in our product information SMAP-G2 SD.

SMAP-G2 SD panels for PURE trunks are described behind in this document.





SMAP-G2 SD 1HU 1/4 and 1/2 part front plates with matrix numbering:

Part numbers RAL9005 black				
	Blind PFP 1 HU 1/4	170A0001		
	Blind PFP 1 HU 1/2	170A0002		
PFP type	**Number and type of ports**	**for fiber type**		
		MM PC 0° grey type B “centered aligned keys”	**MM APC 8°** white type A “centered opposed keys”	**SM APC 8°** green type A “centered opposed keys”
1 HU 1/4	6 x MTP®	170A0630TB	170A0637	170A0620
1 HU 1/4	8 x MTP®	170A0141TB	170A0143	170A0140
1 HU 1/4	12 x MTP®	170A0636TB	170A0638	170A0623
1 HU 1/4	16 x MTP® 1)	170A0680TB	on request	170A0679
1 HU 1/2	12 x MTP®	170A0670TB	170A0677	170A0660
1 HU 1/2	24 x MTP®	170A0674TB	170A0678	170A0664
Find part numbers for panels factory assembled with part front plates in our product information SMAP-G2 SD. 1) Without numbering because shortage of space				

Blind PFP 1 HU 1/4

1 HU 1/4 PFP 6 MTP®

1 HU 1/4 PFP 8 MTP®

1 HU 1/4 PFP 12 MTP®

1 HU 1/4 PFP 16 MTP®

We recommend to apply trunks and patchcords with MTP® PPB or PRO on PFP 12 MTP®.

Trunks and patchcords with MTP® PPB or PRO musst be applied on PFP 16 MTP®.

MTP® PPB

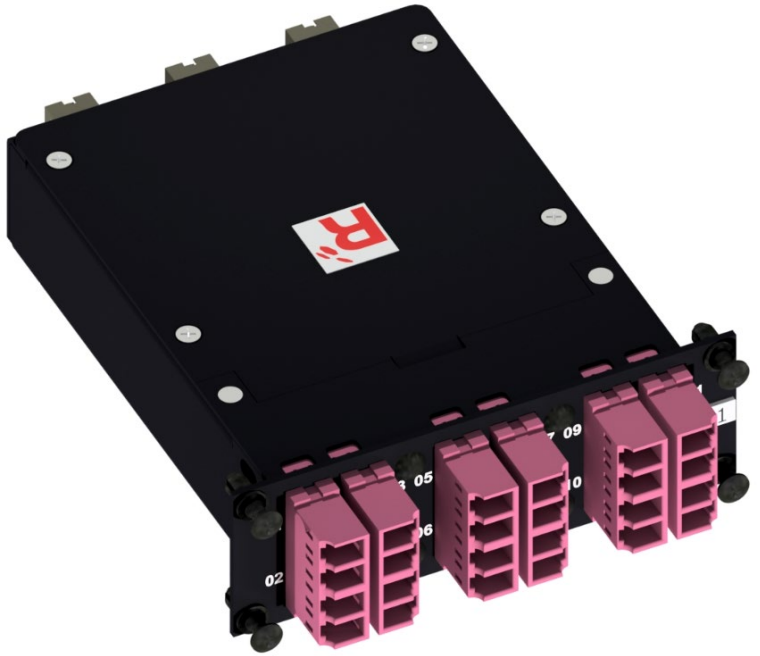
MTP® PRO

Blind PFP 1 HU 1/2

1 HU 1/2 PFP 12 MTP®

1 HU 1/2 PFP 24 MTP®

SMAP-G2 SD 24 fiber MTP®-LC module cassettes fitting for PreCONNECT® OCTO MTP® trunks:



Properties:

- For port breakout of PreCONNECT® OCTO MTP® trunks
- Height: 1 HU
- Width: 1/4
- Depth: 115 mm
- Polarity: Rx to Tx
- 3 MTP® female 4+4F OCTO ports at the rear side:
  - OM4 PC 0°: Elite quality, MTP® adapter type B „centered aligned keys" black
  - OM4 APC 8°: Elite quality, MTP® adapter type A „centered opposed keys" white
  - SM APC 8°: Standard quality, MTP® adapter type A „centered opposed keys" green
- 12 LC-Duplex ports at the front side
- Toolless placement of the module cassettes into the panel from the front side, fixing with quick fasteners
- Material and colour:
  - Cassette body: aluminum powder coated RAL9005 black
  - Front: steel powder coated RAL9005 black

Part numbers RAL9005 black

Fiber type	4+4F OCTO MTP® female at rear side	Number of MTP® at rear side	Number of LC-Duplex ports at front side	LC type at front side	
				LC-PC 0°	LC-APC 8°
OM4	PC 0°	3	3 OCTO groups of 4 = 12	170H2026OM4	---
	APC 8°			on request	---
SM	APC 8°			170H2027	on request

Find part numbers for panels factory assembled with MTP® module cassettes in our product information SMAP-G2 SD.

PreCONNECT® SMAP-G2 High Density (HD) 19” panel system:

Port density:
- 72 LC-Duplex or MTP® ports or 144 MDC ports per HU

Dimensions:
- Width: 19“
- Height: 1 HU and 2 HU
- Depth: 200 mm and 300 mm, see product information SMAP-G2 HD

Part numbers:

SMAP-G2 HD empty distribution panels, RAL9005 black, back plane with 12 PreCONNECT® square interfaces:

- 1 HU, 6/6 width partition, depth 300 mm: 171H0013

Find panels with other back plane configurations and further information in our product information SMAP-G2 HD.

SMAP-G2 HD panels are not appropriate for PURE trunks.

LC-COMPACT Push-Pull-Boot (LCC-PPB) and MDC patchcords with cable diameter 2.0 mm or thinner must be used with this panel system, to be found behind in this product information.

Front granularity HD 6/6 width partition

1	4	7	10	13	16
2	5	8	11	14	17
3	6	9	12	15	18

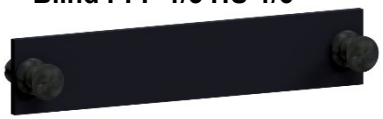
LCC-PPB

MDC

SMAP-G2 HD 1/3 HU 1/6 part front plates with matrix numbering:

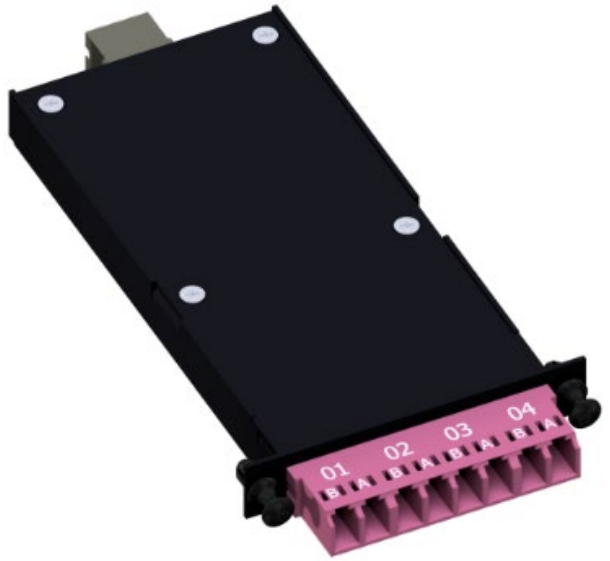
Part numbers RAL9005 black				
Blind PFP 1/3HU 1/6		170H0002		
PFP type	**Number and type of port**	**for fiber type**		
		MM PC 0° grey type B “centered aligned keys	**MM APC 8°** white type A “centered opposed keys”	**SM APC 8°** green type A “centered opposed keys”
1/3 HU 1/6	4 x MTP®	170H2104TB	170H2107	170H2103
Find part numbers for panels factory assembled with part front plates in our product information SMAP-G2 HD.				

Blind PFP 1/3 HU 1/6



1/3 HU 1/6 PFP 4 MTP® (2 MTPD)

SMAP-G2 HD 8 fiber MTP®-LC module cassettes fitting for PreCONNECT® OCTO MTP® trunks:



Properties:

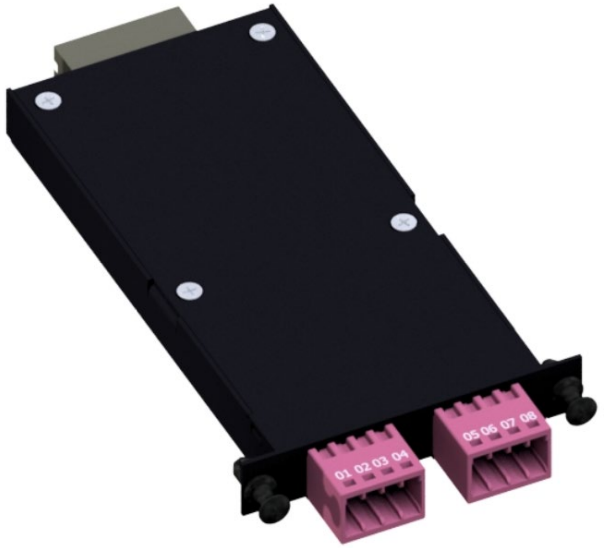
- For Port-Breakout of PreCONNECT® OCTO MTP® trunks
- Fitting in SMAP-G2 HD panel with 6/6 width partition
- Height: 1/3 HU
- Width: 1/6
- Depth: 115 mm
- Polarity: Rx to Tx
- 1 MTP® female 4+4F OCTO port at the rear side:
  - OM4 PC 0°: Elite quality, MTP® adapter type B „centered aligned keys" black
  - OM4 APC 8°: Elite quality, MTP® adapter type A „centered opposed keys" white
  - SM APC 8°: Standard quality, MTP® adapter type A „centered opposed keys" green
- 4 LC-Duplex ports at the front side
- Toolless placement of the module cassettes into the panel from the front side, fixing with quick fasteners
- Material and colour cassette body and front: aluminum powder coated RAL9005 black

Part numbers RAL9005 black

Fiber type	4+4F OCTO MTP® female at rear side	Number of MTP® at rear side	Number of LC-Duplex ports at front side	LC type at front side	
				LC-PC 0°	LC-APC 8°
OM4	PC 0°	1	1 OCTO group = 4	170H1100OM4	---
	APC 8°			on request	---
SM	APC 8°			170H1101	170H1107

Find part numbers for panels factory assembled with MTP® module cassettes in our product information SMAP-G2 HD.

SMAP-G2 HD 16 fiber MTP®-MDC module cassettes fitting for PreCONNECT® OCTO MTP® trunks:



With SN® on demand

Properties:

- For Port-Breakout of PreCONNECT® OCTO MTP® trunks
- Fitting in SMAP-G2 HD panel with 6/6 width partition
- Height: 1/3 HU
- Width: 1/6
- Depth: 115 mm
- Polarity: Rx to Tx
- 2 MTP® female 4+4F OCTO ports at the rear side:
  - OM4 PC 0°: Elite quality, MTP® adapter type B „centered aligned keys" grey
  - OM4 APC 8°: Elite quality, MTP® adapter type A „centered opposed keys" white
  - SM APC 8°: Standard quality, MTP® adapter type A „centered opposed keys" green
- 8 MDC ports at the front side
- Toolless placement of the module cassettes into the panel from the front side, fixing with quick fasteners
- Material and colour cassette body and front: aluminum powder coated RAL9005 black

Part numbers RAL9005 black

Fiber type	4+4F OCTO MTP® female at rear side	Number of MTP® at rear side	Number of MDC ports at front side	MDC type at front side	
				MDC-PC 0°	MDC-APC 8°
OM4	PC 0°	2	2 OCTO groups of 4 = 8	170H1106OM4	---
	APC 8°			on request	---
SM	APC 8°			170H1105	on request

Find part numbers for panels factory assembled with MTP® module cassettes in our product information SMAP-G2 HD.

SMAP-G2 HD 8 fiber MTP®-LC Port-Breakout-Unit

For port-breakout of a MPO4+4 transceiver to 4 LC-Duplex transceivers, without polarity, pin or debris trouble at unit pack plane, lowest attenuation:

Multimode applications:

- 40GBASE-SR4 MPO4+4 to 4x 10GBASE-SR/SW LC-Duplex
- 100GBASE-SR4 MPO4+4 to 4x 25GBASE-SR/SW LC-Duplex
- 200GBASE-SR4 MPO4+4 to 4x 50GBASE-SR/SW LC-Duplex
- 400GBASE-SR4 MPO4+4 to 4x 100GBASE-SR/SW LC-Duplex
- 4x16GFC MPO4+4 to 4x 16GFC LC-Duplex
- 4x32GFC MPO4+4 to 4x 32GFC LC-Duplex
- 4x64GFC MPO4+4 to 4x 64GFC LC-Duplex

Singlemode applications:

- 100GBASE DR4/PSM4 MPO4+4 to 4x 25GBASE-LR LC-Duplex
- 4x10GBASE-LR MPO4+4 to 4x 10GBASE-LR LC-Duplex
- 200GBASE-DR4 MPO4+4 to 4x 50GBASE-LR LC Duplex
- 400GBASE-DR4 MPO4+4 to 4x 100GBASE-LR LC Duplex

Part number:

- Multimode OM4 with MTP®4+4 OCTO female PC 0°: **170H8000OM4**
- Multimode OM4 with MTP®4+4 OCTO female APC 8°: On request
- Singlemode: 170H8100G657A1

Properties:

- Fitting in SMAP-G2 HD panel with 6/6 width partition
- Height: 1/3 HU
- Width: 1/6
- Depth: 115 mm
- Polarity: Rx to Tx
- 1x MTP®4+4 OCTO female connector at cable pigtail
- 4 LC-Duplex ports at the front side
- Toolless placement of the module cassettes into the panel from the front side, fixing with quick fasteners
- Material and colour cassette body and front: aluminum powder coated RAL9005 black

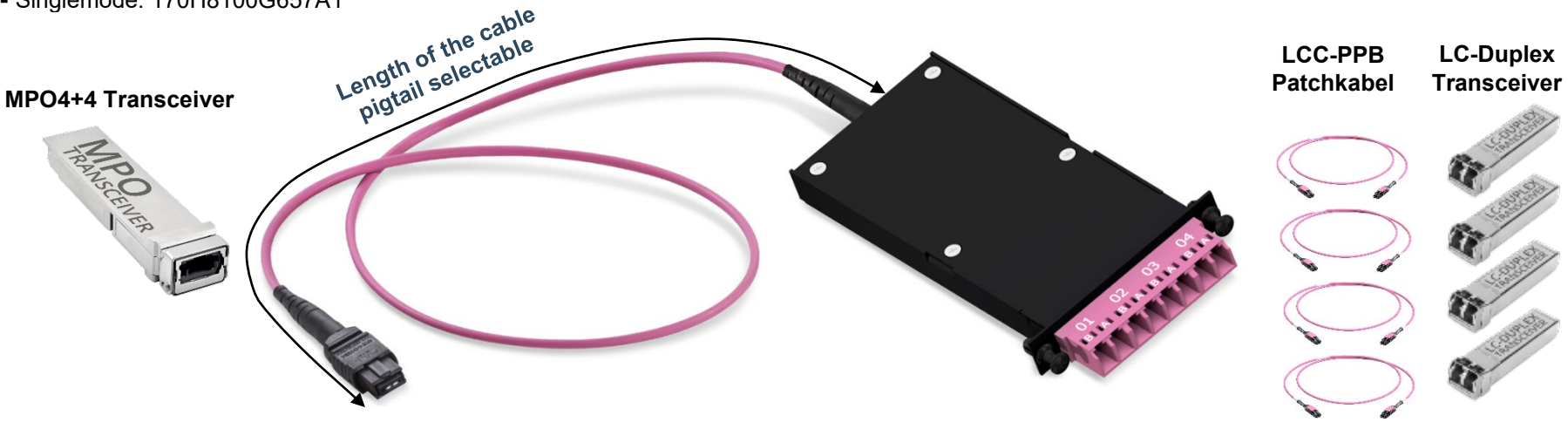
Recommended empty panel:

SMAP-G2 HD 19” 1 HU, open, 6/6 width partition, depth 185mm
RAL9005 black

Part number: 171H0041

Front granularity HD 6/6 width partition

1	4	7	10	13	16
2	5	8	11	14	17
3	6	9	12	15	18



PreCONNECT® SMAP-G2 Ultra High Density (UHD) 19” panel system:

Port density:
- 96 LC-Duplex or MTP® ports per HU

Dimensions:
- Width: 19“
- Height: 1 HU
- Depth: 200 mm and 300 mm, see product information SMAP-G2 UHD

Part numbers:

SMAP-G2 UHD empty distribution panels, RAL9005 black, back plane with 16 PreCONNECT® square interfaces:

- 1 HU, 6/6 width partition, depth 300 mm: 171H0012
- 1 HU, 4/4 width partition, depth 300 mm: 171H0011

Find panels with other back plane configurations and further information in our product information SMAP-G2 UHD.

SMAP-G2 UHD panels are not appropriate for PURE trunks.

Front granularity UHD 6/6 width partition

1	3	5	7	9	11
2	4	6	8	10	12

Front granularity UHD 4/4 width partition

1	3	5	7
2	4	6	8

SMAP-G2 UHD 1/2 HU 1/6 and 1/4 part front plates:

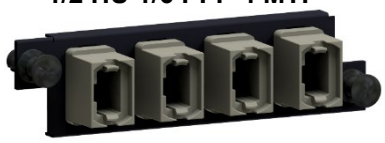
Fitting into SMAP-G2 UHD empty panels with 6/6 and 4/4 width partition. The PFPs are toolless inserted from the front side and fixed with quick fasteners. By this design they can be pulled out to the front for maintenance.

No numbering at part front plates PFP or adapters, because they are not readable at this UHD port density. Port addressing via port address field within optional patchcord manager possible, as shown behind in this document.

Material and colour: steel powder coated RAL9005 black

Part numbers RAL9005 black				
Blind PFP 1/2 HU 1/6		170H3002		
PFP type	**Number and type of port**	**for fiber type**		
		MM PC 0° grey type B “centered aligned keys	**MM APC 8°** white type A “centered opposed keys”	**SM APC 8°** green type A “centered opposed keys”
1/2 HU 1/6	4 x MTP®	170H6104TB	170H6107	170H6103
1/2 HU 1/4	12 x MTP®	170H6005TB	170H6007	170H6006
Find part numbers for panels factory assembled with part front plates in our product information SMAP-G2 UHD.				

1/2 HU 1/6 PFP 4 MTP®



Using this PFP, trunks and patchcords with MTP® can be applied

1/2 HU 1/4 PFP 12 MTP®

Using this PFP, trunks and patchcords with MTP® PPB or PRO and cable diameter 2.0mm must be applied

Blind PFP 1/2 HU 1/6

Blind PFP 1/2 HU 1/4

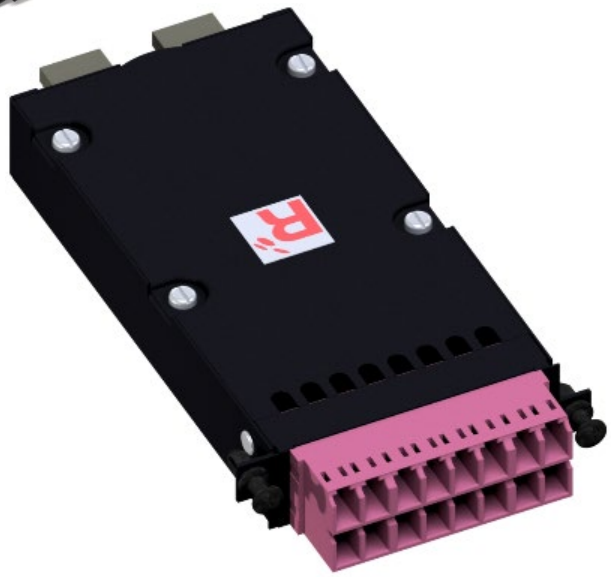
MTP®

MTP® PPB

MTP® PRO

SMAP-G2 UHD 16 fiber MTP®-LC module cassettes fitting for PreCONNECT® OCTO MTP® trunks:

Trunks with MTP® can be applied here



Properties:

- For Port-Breakout of PreCONNECT® OCTO MTP®
- Fitting in SMAP-G2 UHD panel with 6/6 width partition
- Height: 1/2 HU
- Width: 1/6
- Depth: 115 mm
- Polarity: Rx to Tx
- 2 MTP® female 4+4F OCTO ports at the rear side:
  - OM4 PC 0°: Elite quality, MTP® adapter type B „centered aligned keys" black
  - OM4 APC 8°: Elite quality, MTP® adapter type A „centered opposed keys" white
  - SM APC 8°: Standard quality, MTP® adapter type A „centered opposed keys" green
- 8 LC-Duplex ports at the front side
- Toolless placement of the module cassettes into the panel from the front side, fixing with quick fasteners
- Material and colour cassette body and front: aluminum powder coated RAL9005 black

Part numbers RAL9005 black

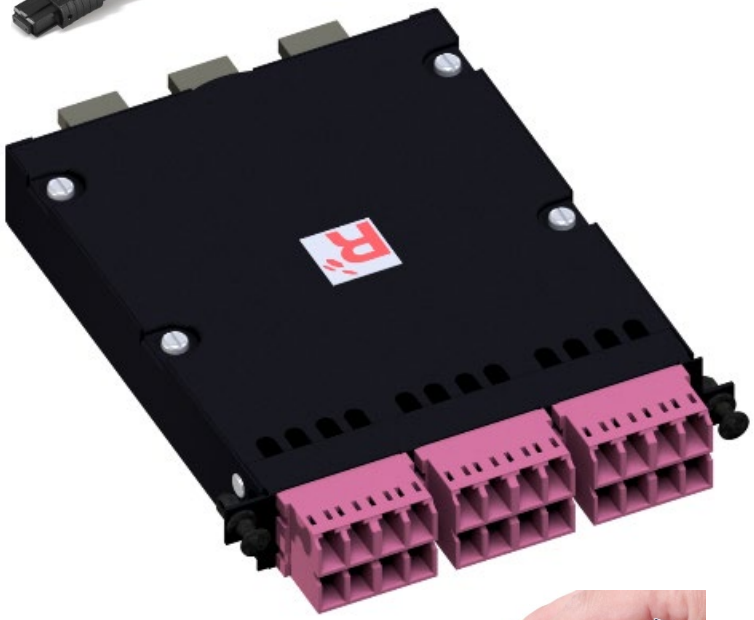
Fiber type	4+4F OCTO MTP® female at rear side	Number of MTP® at rear side	Number of LC-Duplex ports at front side	LC type at front side	
				LC-PC 0°	LC-APC 8°
OM4	PC 0°	2	2 OCTO groups of 4 = 8	170H4100OM4	---
	APC 8°			on request	---
SM	APC 8°			170H4103	on request

Find part numbers for panels factory assembled with MTP® module cassettes in our product information SMAP-G2 UHD.

Patchcords with LC-COMPACT Push-Pull-Boot (LCC-PPB) and cable diameter 2.0mm or thinner must be applied here

SAMP-G2 UHD 24 fiber MTP®-LC module cassettes fitting for PreCONNECT® OCTO MTP® trunks:

Trunks with MTP® can be applied here



Properties:

- For Port-Breakout of PreCONNECT® OCTO MTP® trunks
- Fitting in SMAP-G2 UHD panel with 4/4 width partition
- Height: 1/2 HU
- Width: 1/4
- Depth: 115 mm
- Polarity: Rx to Tx
- 3 MTP® female 4+4F OCTO ports at the rear side:
  - OM4 PC 0°: Elite quality, MTP® adapter type B „centered aligned keys" black
  - OM4 APC 8°: Elite quality, MTP® adapter type A „centered opposed keys" white
  - SM APC 8°: Standard quality, MTP® adapter type A „centered opposed keys" green
- 12 LC-Duplex ports at the front side
- Toolless placement of the module cassettes into the panel from the front side, fixing with quick fasteners
- Material and colour cassette body and front: aluminum powder coated RAL9005 black

Patchcords with LC-COMPACT Push-Pull-Boot (LCC-PPB) and cable diameter 2.0mm or thinner must be applied here

Part numbers RAL9005 black

Fiber type	4+4F OCTO MTP® female at rear side	Number of MTP® at rear side	Number of LC-Duplex ports at front side	LC type at front side	
				LC-PC 0°	LC-APC 8°
OM4	PC 0°	3	3 OCTO groups of 4 = 12	170H4000OM4	---
	APC 8°			on request	---
SM	APC 8°			170H4003	on request

Find part numbers for panels factory assembled with MTP® module cassettes in our product information SMAP-G2 UHD.

SMAP-G2 SD PURE
19“ distribution panels empty:

Part numbers RAL9005 black, 300mm depth	
1 HU	171A0001P
2 HU	172A0001P
3 HU	173A0001P
5 HU	175A0001P

PreCONNECT® PURE MTP®

Adapter interface
at trunk connector legs

Standard back plane configuration for
max. 12 Trunk cable dividers per panel

SMAP-G2 SD PURE part-front-plates PFP

1 HU 1/4 PFP for 6 and 8 MTP® adapter interfaces

Blind-PFP 1 HU 1/4

1 HU 1/2 PFP for 12 MTP® adapter interfaces

Blind-PFP 1 HU 1/2

SMAP-G2 SD PURE 1 HU 1/4 and 1/2 part front plates part numbers RAL9005 black	
PFP type / number of adapter slots	**SMAP-G2 PURE part front plates without adapters**
Blind-PFP 1 HU 1/4	170A0001P
Blind-PFP 1 HU 1/2	170A0002P
1/4 / 6 MTP®	170A0630P
1/4 / 8 MTP®	170A0140P
1/2 / 12 MTP®	170A0670P

19“ VersaTray® Tray System:

This is an outstandingly modular, extremely service-friendly 19” tray system for high-density data cabling in data centers.

Port density:

- 72 MPO ports per height unit (HU), 24 ports per 1/3 HU tray system

VersaTray® consists of:

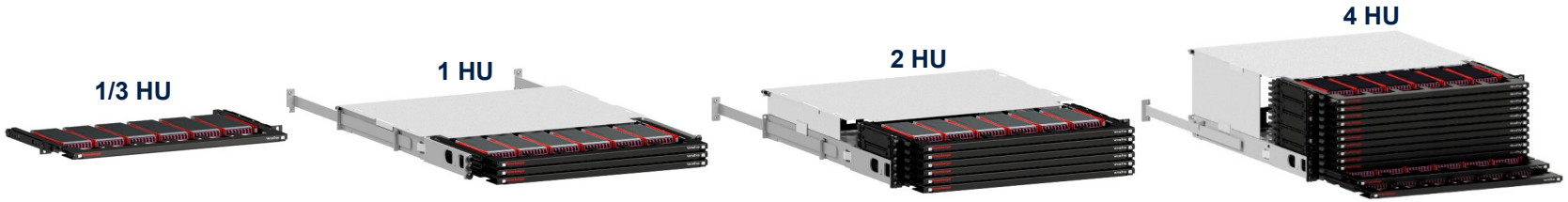
- 19” 1/3 HU tray system in 6/6 width layout
- Right-hand and left-hand tray element
- 1 HU trunk and cable tray
- Individually mountable trunk support can be extended in steps of 1 HU, 2 HU and 4 HU
- MPO coupler modules

1/3 HU tray system:

- with 6/6 width layout: To accommodate 6 coupler modules with 4 MPO

1/3 tray systems can be equipped with modules from the front, top, at an angle without the need for tools. They can be pulled out to two positions without tools and can also be fully removed for maintenance.

Front-mounted, integrated height unit-independent patchcord guide at 1/3 HU drawers. Fold up and open to insert and remove the patchcords. The patchcords are protected by the folding front cover.



19“ VersaTray® Tray System:

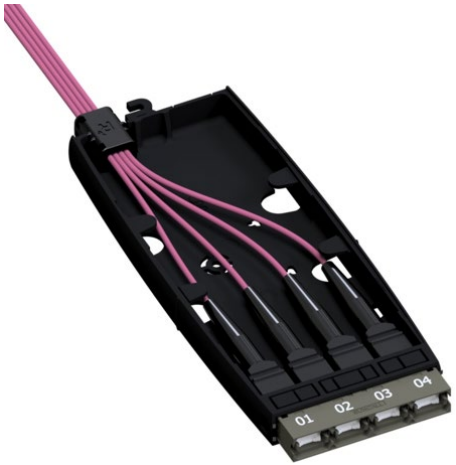
Coupler modules 4 MPO:

Installation on trays:
- Fast, simple installation via spring system without the need for precise alignment and without fixed rail system.
- Modules and coupler modules can be installed from the front, back, top and even the sides.

Dimensions:
- Width: 1/6 width division
- Height: 1/3 HU
- Depth: 140 mm

Coupler characteristics:
- Shuttered MPO connections with integrated dust protection closure for one-handed installation and to ensure the safety of installation personnel when plugging in individual fibers.
- MPO connections have VFL (Visual Fault Locator) transparency level
- Singlemode blue, singlemode APC green and OM4 violet

with installed trunk connector legs



OCTO MTP® Patchcords

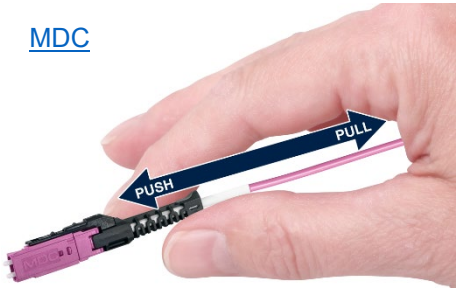
For PreCONNECT® OCTO MTP® trunks fitting, the patchcords MTP® or MTP® PRO 4+4 OCTO connectors must be female and polarity Rx to Tx.

OCTO MTP® Harnesses with leg connectors LC, MDC, SN®

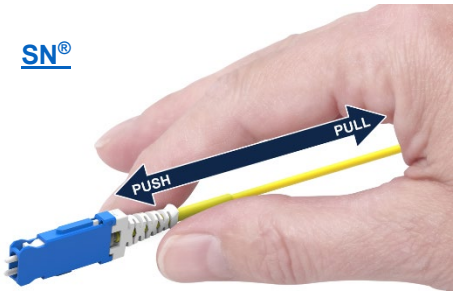
For PreCONNECT® OCTO MTP® trunks fitting, the harness MTP® or MTP® PRO 4+4 OCTO connectors must be female and polarity Rx to Tx.

LC-COMPACT (LCC)

MDC



SN®



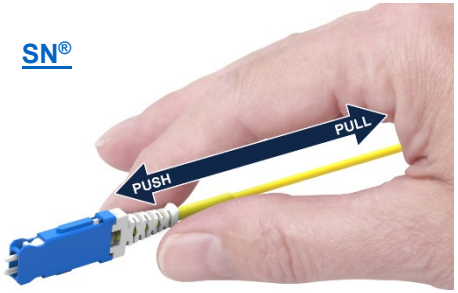
LC-COMPACT Push-Pull-Boot (LCC-PPB)

LC, MDC and SN® patchcords

LC-COMPACT (LCC)

MDC

SN®



LC-COMPACT Push-Pull-Boot (LCC-PPB)

Migration of PreCONNECT® OCTO MTP® to 400GBASE-SR8:

MULTIMODE

PreCONNECT® OCTO MTP® breakout trunk

400GBASE-SR8
MPO16 Transceiver

PreCONNECT® SMAP-G2 HD
19“ panel system
6/6 width partition
equipped with 1/6
MTP® adapter part front plates

400GBASE-SR8
MPO16 Transceiver

PreCONNECT® SEDECIM
SR8 to 2x SR4 OCTO
migration harness
PN: On request

PreCONNECT® SEDECIM
SR8 to 2x SR4 OCTO
migration harness
PN: On request

channel lengths see behind in this product information

PreCONNECT® SEDECIM, SR8 to 2x SR4 OCTO, migration-harness, part numbers:

- **076A0140OM4 with MTP16 MM 0° PC black boot for 400GBASE-SR8 MPO16 Transceivers with 0° PC interface**
- **076A0185OM4 with MTP16 MM 8° APC white boot for 400GBASE-SR8 MPO16 Transceivers with 8° APC interface**

Migration of PreCONNECT® OCTO MTP® 400GBASE-SR8 port-breakout to 2 x 200GBASE-SR4:

MULTIMODE

400GBASE-SR8
MPO16 Transceiver

PreCONNECT® OCTO MTP® breakout trunk

200GBASE-SR4
MPO4+4 Transceiver

PreCONNECT® SMAP-G2 HD
19“ panel system
6/6 width partition
equipped with 1/6
MTP® adapter part front plates

PreCONNECT® SEDECIM
SR8 to 2x SR4 OCTO
migration harness
PN: On request

PreCONNECT® OCTO
MTP® patchcords

channel lengths see behind in this product information

PreCONNECT® SEDECIM, SR8 to 2x SR4 OCTO, migration-harness, part numbers:

1. **076A0140OM4 with MTP16 MM 0° PC black boot for 400GBASE-SR8 MPO16 Transceivers with 0° PC interface**
2. **076A0185OM4 with MTP16 MM 8° APC white boot for 400GBASE-SR8 MPO16 Transceivers with 8° APC interface**

Migration of PreCONNECT® OCTO MTP® to 800GBASE-SR8/PSM8:

SINGLEMODE

PreCONNECT® OCTO MTP® breakout trunk

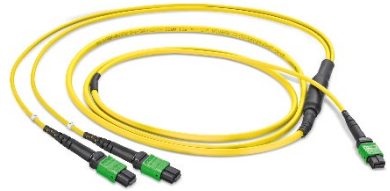
800GBASE-DR8/PSM8
MPO16 Transceiver

800GBASE-DR8/PSM8
MPO16 Transceiver

PreCONNECT® SMAP-G2 HD
19“ panel system
6/6 width partition
equipped with 1/6
MTP® adapter part front plates

PreCONNECT® SEDECIM
DR8/PSM8 to 2x DR4 OCTO
migration harness
PN: On request

PreCONNECT® SEDECIM
DR8/PSM8 to 2x DR4 OCTO
migration harness
PN: On request



channel lengths see behind in this product information

Migration of PreCONNECT® OCTO MTP®
800GBASE-DR8/PSM8 Port-Breakout to 2 x 400GBASE-DR4:

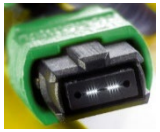
SINGLEMODE

800GBASE-DR8/PSM8
MPO16 Transceiver

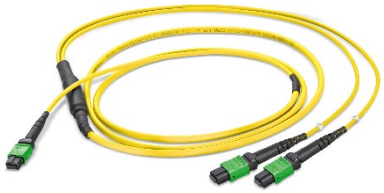
PreCONNECT® OCTO MTP® breakout trunk

PreCONNECT® SMAP-G2 HD
19“ panel system
6/6 width partition
equipped with 1/6
MTP® adapter part front plates

400GBASE-DR4
MPO4+4 Transceiver



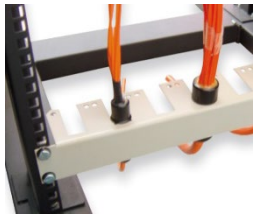
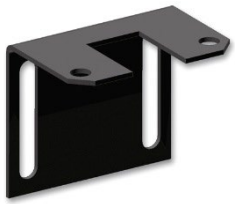
PreCONNECT® SEDECIM
DR8/PSM8 to 2x DR4 OCTO
migration harness
PN: On request



PreCONNECT® OCTO
MTP® patchcords

channel lengths see behind in this product information

Accessories:

Description	Part number	Pictures
19” 1 HU universal trunk cable divider holder For the universal installation of multiple trunk cable dividers within 19" racks.	RAL9005 black 099A0085	 
19” 1 HU single universal trunk cable divider holder For the universal installation of a single trunk cable dividers within 19" racks.	RAL9005 black 099A0065	 
For 19“ panel accessories see our [product information 19“ panel accessories]	    	

Accessories:

Patch location rack:

Applications:
High density data center infrastructures
For the construction of ultra high density data center patch locations

Properties:
Innovative, restriction-free cable management system
Rack pillars with integrated cable managers to prevent interference with cable routing
The covers of the cable managers fold in both directions and are completely removable
Individually selectable feedthroughs in the sides and rear walls of the large volume cable channel for simple vertical and horizontal cable routing
Professional routing of large cable volumes from the patchfields and storage of cable overlengths in the vertical cable managers
Particularly suitable for fiber optic cables thanks to the use of cable clips (L-fingers) and finger slots:

- The rounded L-fingers ensure that the cables are extremely well protected against bending and kinking even when subject to strain.
- The L-fingers do not have any sharp edges and are extremely strong and resistant to breakage.
- Because there is plenty of space for them in the large finger slots, the cables are neither squeezed nor kinked.
- The L-fingers retain the cables in the finger slots whenever you need to work with the covers folded back or removed.

Dimensions (H x L x W): 213 (46 HU) x 90 x 90 cm
Material and color: Powder-coated steel, RAL 9005 (black)

Optional:
19” Intermediate rack for the construction of rack rows with uneven numbers of racks on request.

Delivery form:
Factory mounted on pallet (total height with pallet and packaging: 230 cm)
Including adjustable feet for on-site installation

Accessories:
Wide range of accessories such as side walls, cable guides, excess cable storage for the top of the rack are available on request

More details in our
Product Information “DC-PLR“

PreCONNECT® OCTO MTP® – TECHNOLOGY AND BASICS

The connectivity system of multimode Parallel Optics is MTP®/MPO

MTP® = „Mechanical Transfer Push-On“, is a registered trademark of US Conec Ltd., since 1997 on the market

Standardized since 2000 in IEC 61754-7 as MPO = „Multifiber Push-On“ or „Multipath Push-On“

MTP®/MPO is the fiber optic connectivity system with the highest density, 4 to 72 fibers

Already in 1997 we have been the first manufacturer of MTP® cabling systems in Europe, through initiative of IBM

We are one of only a few worldwide IBM MTP® qualified manufacturers

We have been the first European partner of the MTP® inventor and patent owner US Conec Ltd., and we are the largest MTP® assembler in Europe

„n x 16“ (by16) MTP® like SEDECIM have off-center keys.

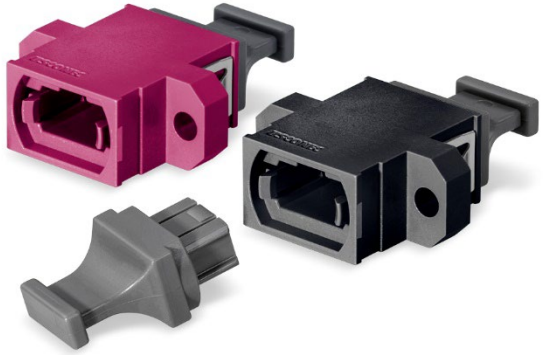
„n x 12“ (by12) MTP® like OCTO and DUODECIM have centered keys, as shown at the following pages.

One connection consists of:

a „female“ connector **without pins but pin holes** …

… a „male“ connector **with pins** …

… and the **adapter**.

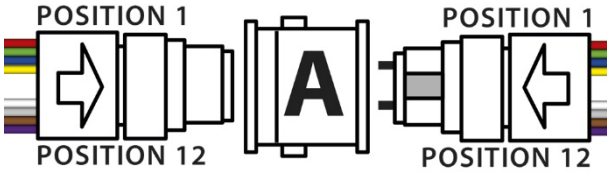


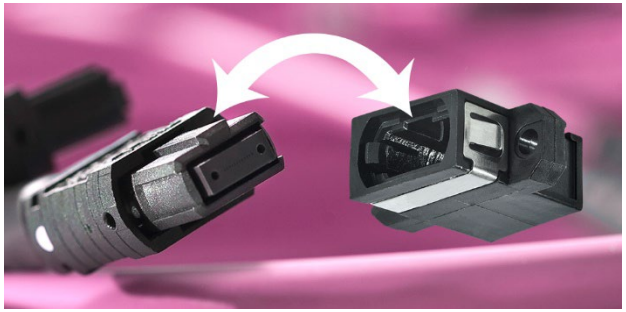
PreCONNECT® OCTO MTP® – TECHNOLOGY AND BASICS

MTP®/MPO adapters

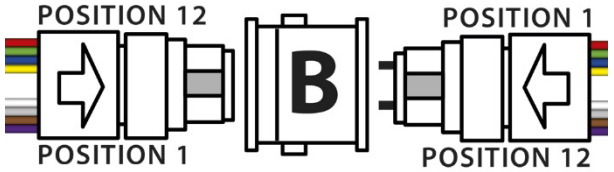
- Are only mechanical fixture, fiber positioning through „male“ pins in „female“ holes of the ferrules.
- According to ANSI/TIA-568-B.1-7, two designs of MTP® adapters are existing, see as well our white paper “Light Propagation Polarity Coding”.

Type A „key-up to key-down“/”opposed key” results in polarity „1 to 1“

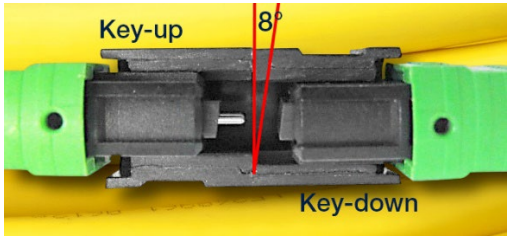




Type B „key-up to key-up“/”aligned key” results in polarity „1 to 12“



Hence singlemode MTP® connectors are usually APC 8°, singlemode MTP® adapters must be Type A „key-up to key-down“/”opposed key”.



MTP® adapter colors:

Type A „key-up to key-down“/”opposed key":
OM2 = black, OM3 = aqua, OM4 = violet, SM = green, OM4 APC 8° = white

Type B „key-up to key-up“/”aligned key”:
grey for all fiber types

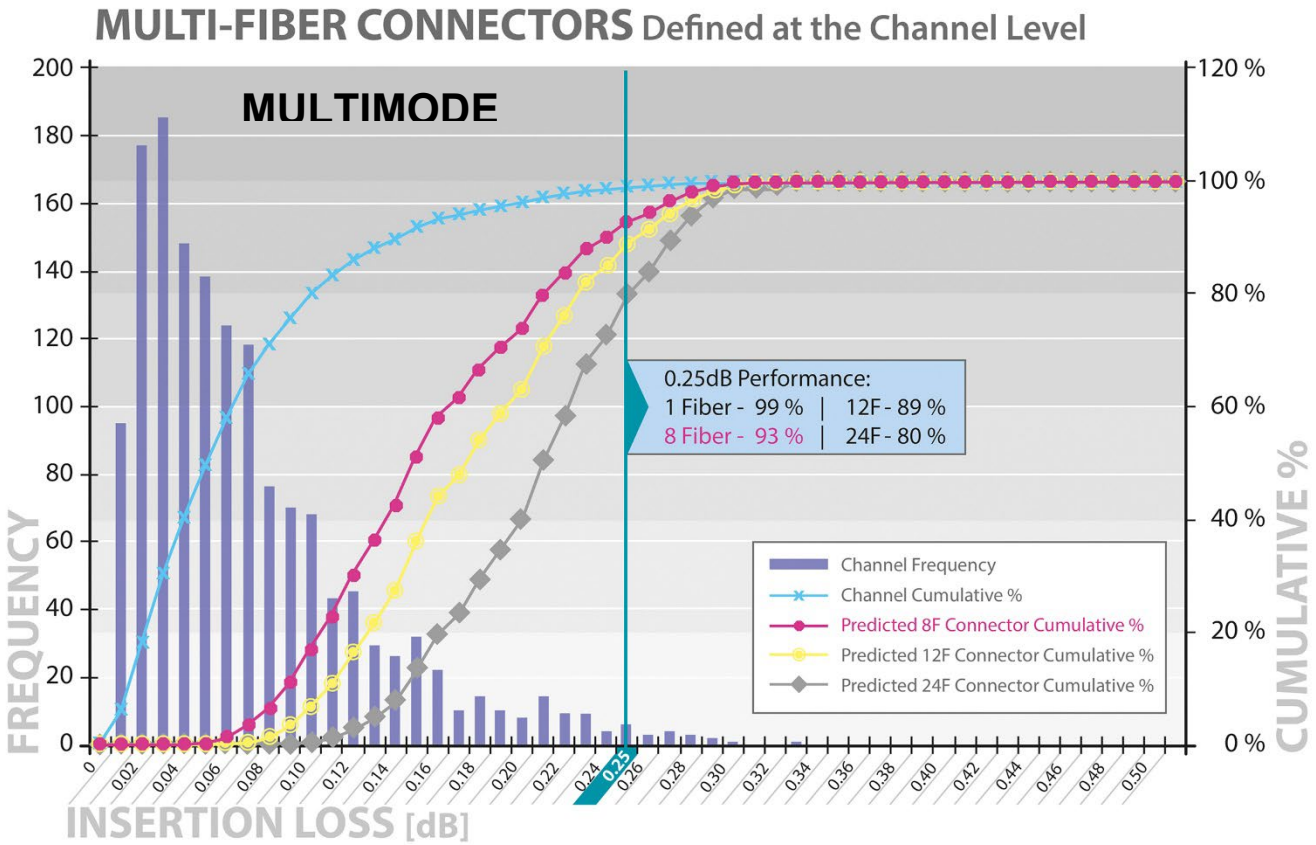
PreCONNECT® OCTO MTP® – TECHNOLOGY AND BASICS

OCTO multimode products
comprise MTP® multimode Elite® ferrules, which is necessary through the low power budget of the SR4 applications.

The Insertion Loss (IL) of connections within channels:

89% of all 12 fiber connections have less than 0.25 dB attenuation

OCTO singlemode
products comprise MTP® singlemode standard ferrules, which is sufficient for the power budget of the PSM4 applications.



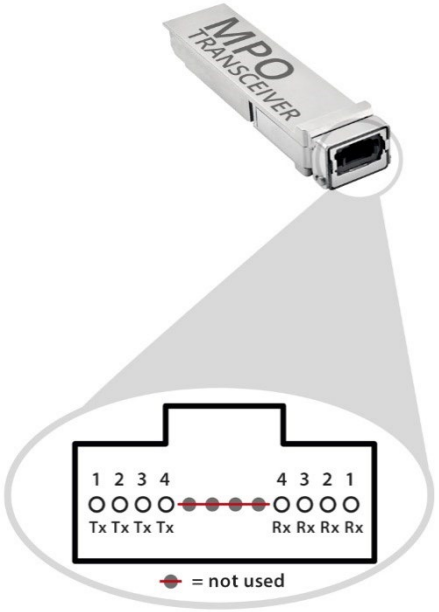
Source: US Conec Ltd.

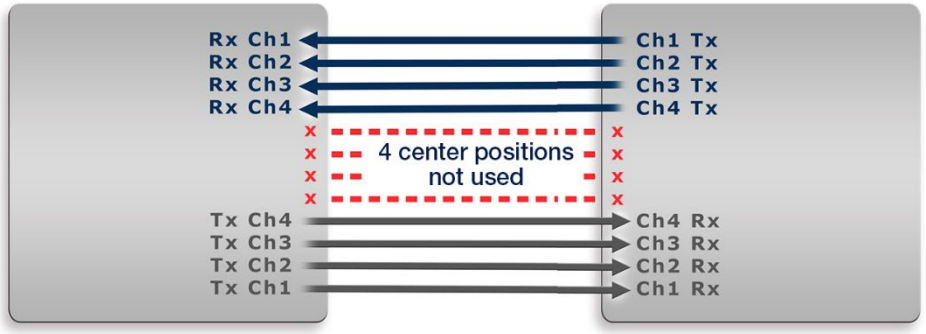
PreCONNECT® OCTO MTP® – TECHNOLOGY AND BASICS

4+4 OCTO fiber assignment

SR4 multimode and PSM4/DR4 singlemode parallel optics applications

40/100/200/400GBASE-SR4, 400GBASE-SR4.2, 4x16 / 4x32 / 4 x 64 GFC, InfiniBand® 4x, 100G-PSM4, 200/400GBASE-DR4





MPO transceivers are male (with pins)

MPO/MTP® connectors must be female (without pins) and must have 4+4 OCTO fiber assignment

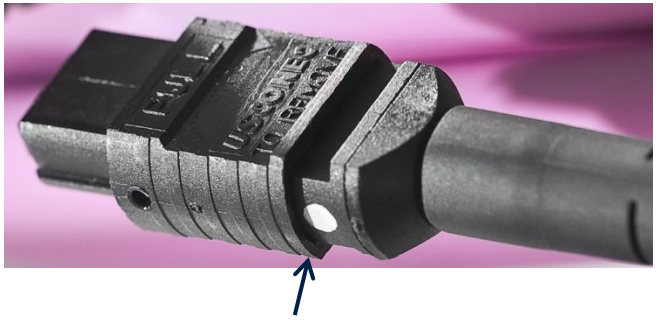
The singlemode MPO/MTP® connectors must be APC 8°, female and must have 4+4 OCTO fiber assignment

PreCONNECT® OCTO MTP® – TECHNOLOGY AND BASICS

Polarity:

The polarity within parallel optics channels must ensure the connection of transmitter Tx1 of the transceiver at one end with the receiver Rx1 of the transceiver at the other end and Tx2 with Rx2, Tx3 with Rx3, etc.

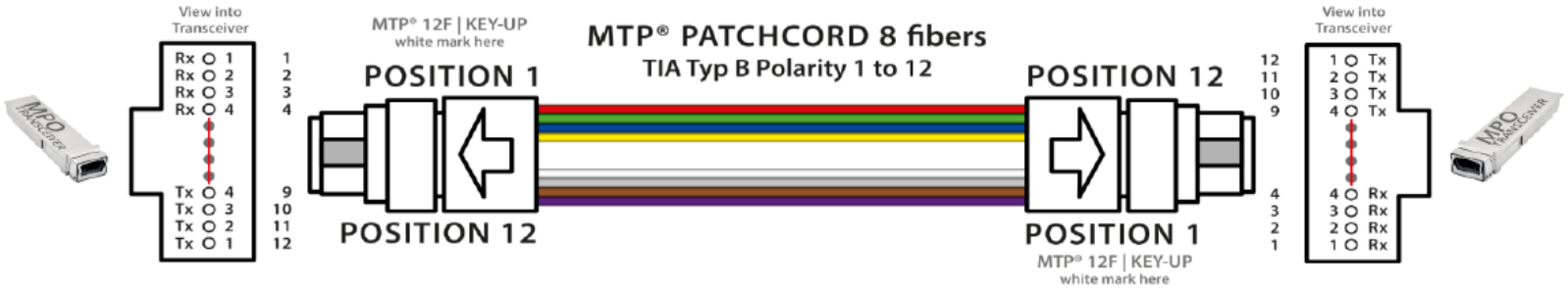
With parallel optics applications having transceiver or transmitter and receiver with 12 fiber MTP® interfaces, polarity must be: fiber position 1 of the MTP® at one end must be linked with fiber position 12 of the MTP® at the other end, the light must propagate from 1 to 12.



The fiber positions within MTP® connectors are counted from the side with the white mark.

1 2 3 4 . . . . 9 10 11 12
fiber positions

TIA method/type B “1 to12” is the SR4, PSM4 and DR4 polarity:



PreCONNECT® OCTO MTP® – TECHNOLOGY AND BASICS

MTP®/MPO Ethernet and Fibre Channel channel specifications

Multimode applications	Channel length max. [m]			Channel attenuation max. [dB]
	OM3	OM4	OM5	
40GBASE-SR4, 850nm, MTP®/MPO4+4 OCTO	IEEE 802.3 = 100	IEEE 802.3 = 150	IEEE 802.3 = 150	OM3 1.9 / OM4 and OM5 1.5
100GBASE-SR10, 850nm, MTP®/MPO24(20)	R-O = 140	R-O = 170	R-O = 170	
100GBASE-eSR4, 850nm, MTP®/MPO4+4 OCTO	200	300	not specified	OM3 2.3 / OM4 2.4
100GBASE-SR4, 850nm, MTP®/MPO4+4 OCTO	70	100	100	OM3 1.8 / OM4 and OM5 1.9
100GBASE-SR2, 850nm, MTP®/MPO2+2				
200GBASE-SR4, 850nm, MTP®/MPO4+4 OCTO				
400GBASE-SR16, 850nm, MTP®/MPO32				
400GBASE-SR8, 850nm, MTP®/MPO16 SEDECIM				
400GBASE-SR4.2, 850/910nm MTP®/MPO4+4 OCTO	70	100	150	OM3 1.8 / OM4 1.9 / OM5 2.0
400GBASE-SR4, 850nm MTP®/MPO4+4 OCTO	60	100	100	OM3 1,7 / OM4 und OM5 1,8
800GBASE-SR8, 850nm, MTP®/MPO16 SEDECIM	in progress	in progress	in progress	in progress
FC 4 x 8 = 128 Gbit/s, 850nm, MTP®/MPO4+4 OCTO	70	100	100	OM3 1.25 / OM4 and OM5 1.36
FC 4 x 16 = 128 Gbit/s, 850nm, MTP®/MPO4+4 OCTO				
FC 4 x 32 = 128 Gbit/s, 850nm, MTP®/MPO4+4 OCTO				
FC 4 x 64 = 256 Gbit/s, 850nm, MTP®/MPO4+4 OCTO	in progress	in progress	in progress	in progress

PreCONNECT® OCTO MTP® – TECHNOLOGY AND BASICS

MTP®/MPO Ethernet and Fibre Channel channel specifications		
Singlemode applications	**Channel length max. [m]**	**Channel attenuation max. [dB]**
100G PSM4, 1310nm, MTP®/MPO4+4 OCTO	500	3.3
200GBASE-DR4, 1310nm, MTP®/MPO4+4 OCTO		3.0
400GBASE-DR4, 1310nm, MTP®/MPO4+4 OCTO		
800GBASE-DR8, 1310nm, MTP®/MPO16 SEDECIM	in progress	in progress
800GBASE-PSM8, 1310nm, MTP®/MPO16 SEDECIM	in progress	in progress

About Rosenberger OSI:

Since 1991, Rosenberger Optical Solutions & Infrastructure (Rosenberger OSI) has been a recognized expert for fiber-based connectivity, cabling solutions and infrastructure services in the areas of data centers, local area networks, mobile networks and industrial applications. As an integrated solution provider, we have high expertise in the development and operational excellence in the production of system solutions for communication networks. Our comprehensive services enable the secure and efficient operation of digital infrastructures. This combination, combined with our strong customer focus, makes us unique and a strong partner in the global market.

Rosenberger OSI has been part of the globally operating Rosenberger Group since 1998. The Rosenberger Group is a leading global provider of high-frequency, high-voltage and fiber optic connectivity solutions with headquarters in Germany. For further information, please visit: www.rosenberger.com/osi

Rosenberger

Rosenberger-OSI GmbH & Co. OHG
Optical Solutions & Infrastructure | Endorferstr. 6 | 86167 Augsburg | GERMANY | Telefon: +49 821 24924-0
info-osi@rosenberger.com | www.rosenberger.com/osi

Date creation: 2015-08-11
Date creation revision: 2024-07-25
Revision: 020