

PRODUCTPROFILE

Catalogue number: 080A20300M4

Partnumber: 754914

PreCONNECT® OCTO MTP Patchcord
Connector side A: MTP OCTO female MM
Connector side B: MTP OCTO female MM
50/125µmOM4, 3.0mm, violet
Polarity: 1 to 12 Method B
Cable I-F(ZN)H8G50/125µm,OM4



Related documents:

DS_FASER OM4BI_OE

Fiber Data Sheet

DS_I-FZNH_L_OE

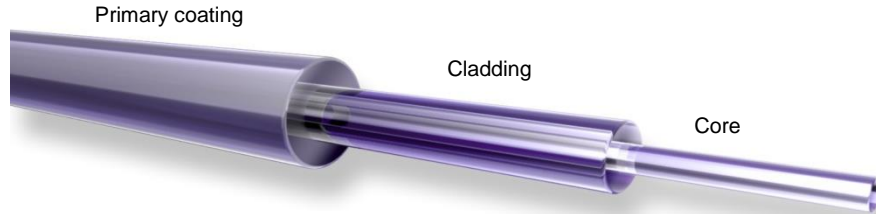
Cable Data Sheet

DS_MTPNX12_STECKER_OE

Steckerdatenblatt

PRECONNECT_OCTO_OE

Product Information



Standards

Graded index fiber 50/125µm according to
 -ISO/IEC 11801 und EN 50173-1 OM4
 -IEC 60793-2-10 type A1a.3
 -ITU G.651.1
 -TIA/EIA 492AAAD

Structure

Silica fiber with two layer acrylate primary coating

Geometrical properties

| | |
|--------------------------------|------------------|
| Core diameter | 50 µm +/- 2.5 µm |
| Cladding diameter | 125 µm +/- 1 µm |
| Core non-concentricity | < 5 % |
| Cladding non-circularity | < 1 % |
| Core-Cladding concentricity | < 1.5 µm |
| Primary coating diameter | 242 µm +/- 5 µm |
| Coating-Cladding concentricity | < 12 µm |

Mechanical properties

Break strength SCREEN-Test 1 % strain for 1 s @100 kpsi

Thermal properties

Operating temperature range -60 to +85°C

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Optical fiber OM4
bend insensitive

059A0381OM4BI

Transmission characteristics

Attenuation:

@ 850 nm max. 2.3 dB/km
@ 1300 nm max. 0.6 dB/km

Macrobending, induced attenuation:

100 turns, 37.5 mm \leq 0.05 dB @ 850 nm
100 turns, 37.5 mm \leq 0.15 dB @ 1300 nm
2 turns, 15 mm \leq 0.1 dB @ 850 nm
2 turns, 15 mm \leq 0.3 dB @ 1300 nm
2 turns, 7.5 mm \leq 0.2 dB @ 850 nm
2 turns, 7.5 mm \leq 0.5 dB @ 1300 nm

Bandwidth (Overfilled launch):

@ 850 nm min. 3500 MHz x km
@ 1300 nm min. 500 MHz x km

Effective modal Bandwidth-length-product (EMB):

@ 850 nm min. 4700 MHz x km

Numerical aperture: 0.200 +/- 0.015

Effective group index of refraction:

@ 850 nm 1.480
@ 1300 nm 1.479

Backscatter attenuation @ 1ns pulse width:

@ 850 nm -68 dB
@ 1300 nm -76 dB

Maximum possible transmission channels lengths:

Ethernet:

1 GBE 100GBASE-SX: min. 1100 m @ max. 3.56 dB channel attenuation ¹⁾
10 GBE 10GBASE-SR: min. 550 m @ max. 2.60 dB channel attenuation ¹⁾
40 GBE 40GBASE-SR4: min. 170 m @ max. 1.50 dB channel attenuation ¹⁾
100 GBE 100GBASE-SR10: min. 170 m @ max. 1.50 dB channel attenuation ¹⁾

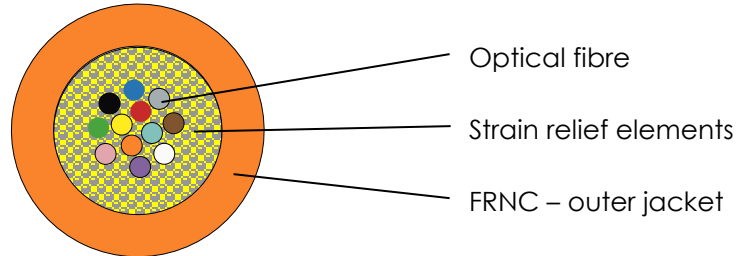
Fibre Channel:

8 GFC (800-SN): min. 245 m @ max. 1.76 dB channel attenuation ¹⁾
16 GFC (1600-SN): min. 165 m @ max. 1.51 dB channel attenuation ¹⁾

¹⁾ Inclusive max. 1.0 dB for connections (connectors and splices)

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|-------------|----------|----------|----------|------|---------------------------|-------------|----------|
| Draft | Date | Approved | Date | Rev. | Engineering change number | Name | Date |
| H. Jungbäck | 26-10-15 | P. Maier | 26-10-15 | 004 | without | H. Jungbäck | 26-10-15 |



Standards

- IEC 60794-2
- EN 50575:2014 +A1:2016 Number of Declaration of Performance:
 - 24 fibers B2ca CDEAL0000098-V1
 - 8, 12, 16 fibers not tested

Structure

- Cable:**
- Up to 24 optical fibers within the cable jacket filled with Aramid strain relief elements
 - Fiber color code 1 to 12: red, green, blue, yellow, white, grey, brown, violet, turquoise, black, orange, pink
 - Fiber color code 13 to 24: red, green, blue, yellow, white, grey, brown, violet, turquoise, transparent, orange, pink, all with black ring-marking

- Outer jacket:**
- FRNC-LSZH flame-retardant and halogen-free material
 - Standard jacket colors:
 - Singlemode: yellow
 - Multimode OM2: orange or green
 - Multimode OM3: aqua (turquoise)
 - Multimode OM4: violet
 - Multimode OM5: fibrous green
 - Wall thickness see geometrical properties
 - Inkjet marking black acc. to separate drawing

Geometrical properties

| Number of fibers | Outer diameter [mm] | Jacket wall thickness [mm] | Weight [kg/km] | Fire load [MJ/m] |
|------------------|---------------------|----------------------------|----------------|------------------|
| 8 | 2,0 | 0,25 | 3,8 | 0,05 |
| 8 | 3.0 | 0.55 | 8 | 0.14 |
| 12 | 3.0 | 0.55 | 8 | 0.14 |
| 16 | 3.0 | 0.55 | 8 | 0.14 |
| 24 | 3.7 | 0.60 | 12 | 0.21 |

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Mechanical properties

- Min. bending radius fixed (static) acc. IEC 60794-1-2 E11A
15 x outside diameter
- Min. bending radius during installation (dynamic) with additional tensile strain acc. IEC 60794-1-2 E6
20 x outside diameter
- Max. tensile force acc. IEC 60794-1-21 E1 long term = 300 N
- Max. crush resistance acc. IEC 60794-1-21 E3 long term = 200 N/dm

Thermal properties

- Transport and storage - 25°C to + 70°C
- Installation - 5°C to + 50°C
- In use acc. IEC 60794-1-2 F1 - 10°C to + 70°C

Chemical properties

No resistance to oil, petrol, acid, leach and water

Fire performance

- Flame-retardant acc. to IEC 60332-1-2 and IEC 60332-3-22 Cat. A
- Smoke density acc. to IEC 61034
- Halogen-free acc. to IEC 60754-1
- Acidity of the combustion gases acc. to IEC 60754-2
- Fire Class according EN 13501-6: 24 fibers B2_{CA}/s1a/d1/a1, 8, 12, 16 fibers not tested

Transmission characteristics

See fiber data sheets

Applications

Indoor cable particularly appropriate for short MTP[®]/MPO Patchcords and Harnesses

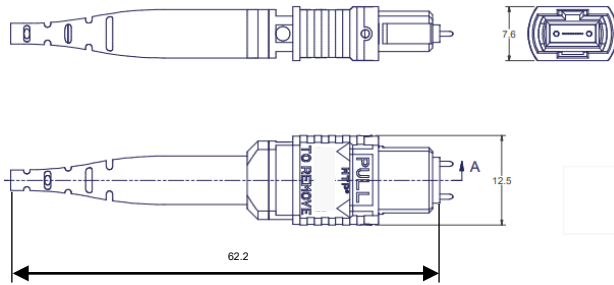
Deliveryform

On one-way drums

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| H. Jungbäck | 2015-11-02 | P. Maier | 2015-11-02 | 004 | without | H. Jungbäck | 2022-06-15 |

MTP® (MPO) connector n x 12 fibers



Properties and applications

- MTP® (MPO) multi-fiber connector up to 72 fibers, based on n x 12 fiber MT ferrules, with strain relief and boot for round cable
- Centric coding-key
- Multimode MTP® (MPO) are acc. to world standard PC 0° polished, Singlemode APC 8°
- Polarity and gender can be changed acc. to USCONEC AEN-1405
- 1) With MTP® PRO protection cap, debris-repellent (better than anti-static), non-outgassing, halogen-free

Standards

IEC 61754-7 and EIA/TIA 604-5

Material

- Ferrule: PPS filled with glass particles
- Body: PBT, flammability UL94-V0
- Boot: TPO, flammability UL94-V0
- Protection cap: TPO, flammability UL94-V0

Optical properties

The quality feature of the connector at your product is identified by the part number:

- BASIC: Part numbers like XXXAXXXX
- PURE: Part numbers with "P" at their end, XXXAXXXXP

Details about PURE see Produktinfo_Qualitätsmerkmal-PURE_od

Applied USCONEC ferrule qualities:

| | Quality features | BASIC | PURE |
|---|------------------|----------|-------|
| - Singlemode SM, 9/125µm all numbers of fibers | | Standard | Elite |
| - Multimode OM2, OM3, OM4, OM5, 50/125µm up to 12 fibers | | Elite | Elite |
| - Multimode OM2, OM3, OM4, OM5, 50/125µm larger 12 fibers | | Standard | Elite |

Insertion Loss IL acc. to IEC61300-3-4, Method B, against reference, maximum [dB]:

| | Quality features | BASIC | PURE |
|--|------------------|-------|------|
| - Singlemode SM, 9/125µm, Standard ferrule | | 0,40 | --- |
| - Singlemode SM, 9/125µm, Elite ferrule | | 0.35 | 0.25 |
| - Multimode OM2, OM3, OM4, OM5, 50/125µm, Elite ferrule | | 0.35 | 0.25 |
| - Multimode OM2, OM3, OM4, OM5, 50/125µm, Standard ferrule | | 0.60 | --- |

Insertion Loss IL „random mated“ in application

Multimode OM2, OM3, OM4, OM5, 50/125µm, Elite ferrule [dB]:

| | |
|--------------------------|----------------|
| - 12 fibers and OCTO 4+4 | 89% lower 0.25 |
| - 24 fibers | 80% lower 0.25 |

GHMT PVP certificates
 No.: c6955X-XX
 No.: c6956X-XX



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MTP® (MPO) connector n x 12 fibers

Optical properties

Insertion Loss IL quality feature PURE "random mated" application limit value, average value [dB]:

- Singlemode SM, 9/125µm 0.15
- Multimode OM2, OM3, OM4, OM5, 50/125µm 0.15

Return Loss RL acc. to IEC61300-3-6, Method 1, against reference, minimum [dB]:

| | Quality feature | BASIC | PURE |
|-----------------------------------|-----------------|-------|------|
| - Singlemode SM, 9/125µm, APC 8° | | 55 | 70 |
| - Multimode all OM classes, PC 0° | | 30 | 30 |

Mechanical properties

- Mating cycles min. 500, IL increase < 0.2 dB
- Strain relief max. 100 N, dependent on cable type

Thermal properties

- Operation temperature range -40°C to +85°C, dependent on cable type
- Storage temperature range -40°C to +85°C

Cable diameters

- Round cable types Ø 2.0 to 4.5 mm

Colors

Connector body / boot:

- Singlemode SM, 9/125µm, APC 8° green / black
- Multimode OM2, OM3, OM4, OM5, 50/125µm black / black

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| Draft | Date | Approved | Date | Rev. | Engineering change number | Name | Date |
|----------|------------|-------------|------------|------|---------------------------|-------------|------------|
| Y. Zhang | 2017-03-31 | H. Jungbäck | 2017-03-31 | 005 | --- | H. Jungbäck | 2022-10-07 |

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PreCONNECT® OCTO MTP®

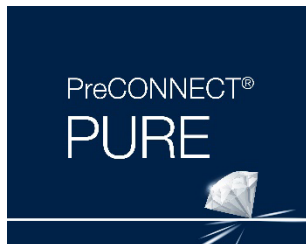
PRODUCT INFORMATION



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 cleanliness, 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: XXXAXXXXP*)

(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:

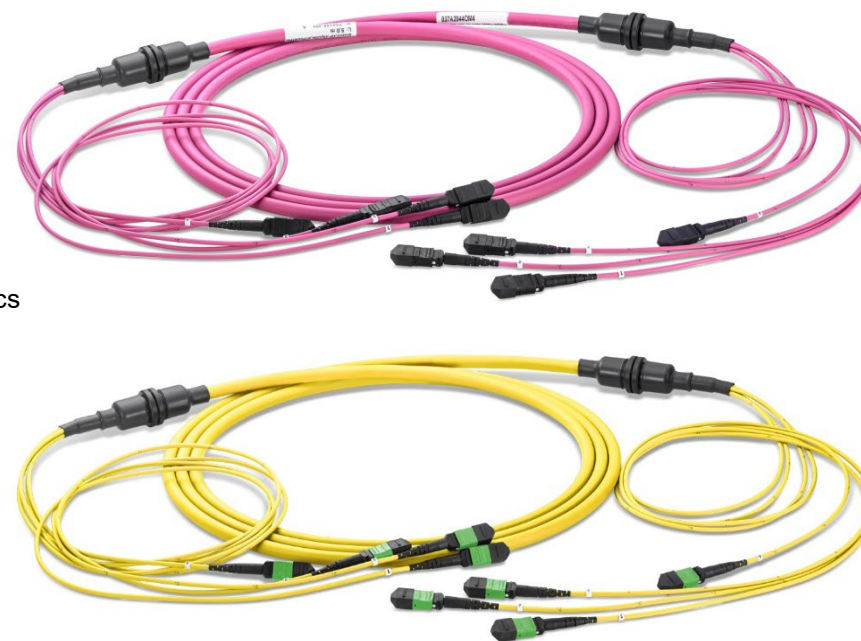
- Factory assembled fiber optic breakout cables, FRNC-LSZH indoor cables, up to 192 fibers with connector systems MTP® 4+4 fiber OCTO per MTP® channel
- MPO/MTP® Port-breakout with MTP® - LC and MTP® - MDC harnesses, MTP® module cassettes with LC and MDC front, and MTP® - LC Port-Breakout-Units

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 through factory assembled plug & play systematic
- Highest quality and cost-efficiency through factory assembling
- PreCONNECT® cabling systems consist of perfectly harmonized modular single components



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



Easy migration to higher speed applications.

System description:

Our PreCONNECT® OCTO cabling system consists of:

- OCTO 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 module cassettes and MTP® - LC Port-Breakout-Units
- OCTO patchcords and harnesses
- Useful accessories
- Patch location racks

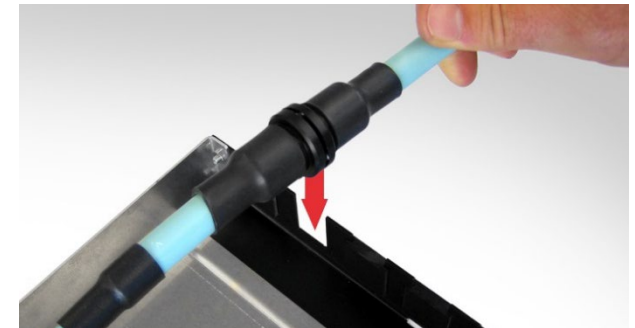
Rosenberger OSI brought already 1991 high fibercount factory assembled FO trunk cables to the market. PreCONNECT® STANDARD was the first in Europe developed and manufactured, high fibercount and modular „plug & play“ FO cabling system and already 1997 we have been the first manufacturer of MTP® cabling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

Properties:

PreCONNECT® square interface and installation protection:

PreCONNECT® OCTO 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:

- OCTO breakout trunks: MTP® and MTP® PRO male 4+4 fiber OCTO
- OCTO patchcords, multijumpers, harnesses and module cassettes: MTP® and MTP® PRO female 4+4 fiber OCTO

Adapter types:

- MTP® multimode: TIA type B “aligned key” „1 to 12“ grey
- MTP® singlemode TIA type A “opposed key” „1 to 1“ green
- Description of the adapter types A and B see last pages of in this document

Polarity:

- OCTO breakout trunks: TIA Method B „1 to 12“
- OCTO patchcords, harnesses and module cassettes: see pages of the products

Cable types:

- PreCONNECT® OCTO 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 patchcords and harnesses I-F(ZN)H and I-F(ZN)H(ZN)H 8 fibers
- Cable data, see separate cable data sheets

Fiber types:

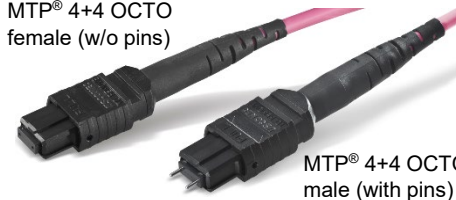
- Multimode OM4 and OM5 bend-insensitive
- Singlemode G.657.A1 bend-insensitive and backwards compatible to G.652.D
- Fiber data, see separate fiber data sheets

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 and return loss measured acc. to IEC 61300-3-4, method B, MM 850/1300nm and SM 1310/1550nm, with measurement protocol
- Product label with serial number at both sides

MTP® 4+4 OCTO female (w/o pins)



MTP® 4+4 OCTO male (with pins)



MTP® 4+4 OCTO female (w/o pins)



MTP® PRO 4+4 OCTO male (with pins)



Info about MTP® PRO
<https://www.usconec.com/featured-products/mtp-pro-connectors>

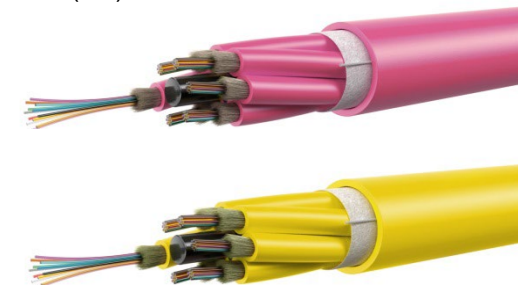
TIA type B “aligned key” „1 to 12“ grey



TIA type A “opposed key” „1 to 1“ green

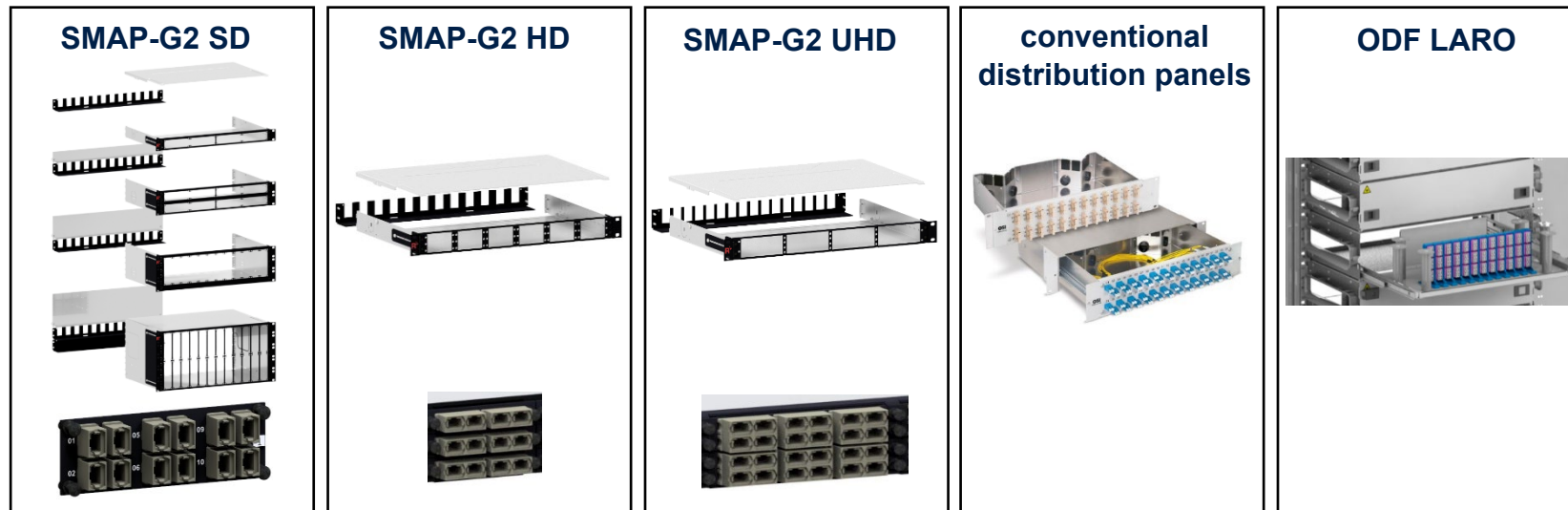


I-F(ZN)HH 6 x 8 fiber breakout cable



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

| 19" panel systems | MTP® port density per HU | Trunks with MTP® | Trunks with MTP® PRO | Patchcords with MTP® | Patchcords with MTP® 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" |
| ODF LARO | 144 in 5 ETSI HU | ✓ | recommended | ✗ | ✓ required | extended stepped "E length legs" |



MTP® female



MTP® PRO female



Info about MTP® PRO
<https://www.usconec.com/featured-products/mtp-pro-connectors>

PreCONNECT® OCTO OM4 and OM5 breakout trunk:

- Breakout cable n x 8 OM4 or OM5 fibers FRNC-LSZH
- **MTP® 4+4 OCTO**, MM, male, Elite quality
- Polarity TIA method B “1 to 12”
- MTP® leg-length = standard stepped

Length definition:

- Order length = length between the connectors of the longest legs at both sides, not between the PreCONNECT® square interfaces.
- Possible order-lengths: From 5 to 2000 meter

Part numbers, length variable:

| Number of OCTO channels | Part numbers OM4 | Part numbers OM5 | Cable structure | Number of fibers | Cable CPR class |
|-------------------------|------------------|------------------|-----------------|------------------|-----------------|
| 1 | 037A0110OM4 | 037A0110OM5 | 1 x 8 | 8 | B2ca |
| 2 | 037A2048OM4 | 037A2048OM5 | 2 x 8 | 16 | Cca |
| 4 | 037A2049OM4 | 037A2049OM5 | 4 x 8 | 32 | Cca |
| 6 | 037A2089OM4 | 037A2089OM5 | 6 x 8 | 48 | Cca |
| 8 | 037A2050OM4 | 037A2050OM5 | 8 x 8 | 64 | Cca |
| 12 | 037A2051OM4 | 037A2051OM5 | 12 x 8 | 96 | Cca |
| 18 | 037A2088OM4 | 037A2088OM5 | 18 x 8 | 144 | tbt. |
| 24 | 037A2067OM4 | 037A2067OM5 | 24 x 8 | 192 | tbt. |

Technical data of connectors, fibers and cables on request via the product profile of your selected trunks.

MULTIMODE



MTP® 4+4 OCTO male (with pins)

Length tolerance:

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

OM5 is only needed for 400GBASE-SR4.2 BiDi channel lengths 101 to 150 meter. OM5 OCTO trunks are fibrous green.



Connector leg lengths see table at page of SM Breakout-Trunk



PreCONNECT® OCTO OM4 and OM5 breakout trunk:

- Breakout cable n x 8 OM4 or OM5 fibers FRNC-LSZH
- **MTP® PRO 4+4 OCTO**, MM, male, Elite quality
- Polarity TIA method B “1 to 12”
- MTP® leg-length = standard stepped

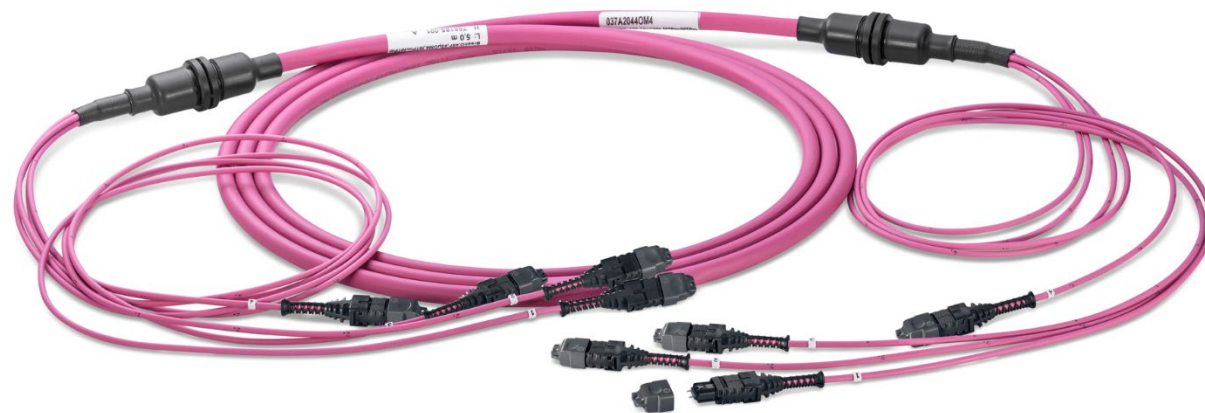
Length definition:

- Order length = length between the connectors of the longest legs at both sides, not between the PreCONNECT® square interfaces.
- Possible order-lengths: From 5 to 2000 meter

Part numbers, length variable:

| Number of OCTO channels | Part numbers OM4 | Part numbers OM5 | Cable structure | Number of fibers | Cable CPR class |
|-------------------------|------------------|------------------|-----------------|------------------|-----------------|
| 1 | on request | on request | 1 x 8 | 8 | B2ca |
| 2 | on request | on request | 2 x 8 | 16 | Cca |
| 4 | on request | on request | 4 x 8 | 32 | Cca |
| 6 | on request | on request | 6 x 8 | 48 | Cca |
| 8 | on request | on request | 8 x 8 | 64 | Cca |
| 12 | on request | on request | 12 x 8 | 96 | Cca |
| 18 | on request | on request | 18 x 8 | 144 | tbt. |
| 24 | on request | on request | 24 x 8 | 192 | tbt. |

Technical data of connectors, fibers and cables on request via the product profile of your selected trunks.



Connector leg lengths see table at page of SM Breakout-Trunk

MULTIMODE



MTP® PRO 4+4 OCTO male (with pins)

Length tolerance:

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

OM5 is only needed for 400GBASE-SR4.2 BiDi channel lengths 101 to 150 meter. OM5 OCTO trunks are fibrous green.



PreCONNECT® OCTO SM breakout trunk:

- Breakout cable n x 8 SM fibers FRNC-LSZH
- **MTP® 4+4 OCTO**, SM, male, Standard quality
- Polarity TIA method B “1 to 12”
- MTP® leg-length = standard stepped

Length definition:

- Order length = length between the connectors of the longest legs at both sides, not between the PreCONNECT® square interfaces.
- Possible order-lengths: From 5 to 2000 meter

Part numbers, length variable:

| Number of OCTO channels | Part numbers | Cable structure | Number of fibers | Cable CPR class |
|-------------------------|----------------|-----------------|------------------|-----------------|
| 1 | 037A2096G657A1 | 1 x 8 | 8 | B2ca |
| 3 | 037A2091G657A1 | 3 x 8 | 24 | Cca |
| 4 | 037A2076G657A1 | 4 x 8 | 32 | Cca |
| 6 | 037A2090G657A1 | 6 x 8 | 48 | Cca |
| 8 | 037A2077G657A1 | 8 x 8 | 64 | Cca |
| 12 | 037A2078G657A1 | 12 x 8 | 96 | Cca |
| 18 | 037A2087G657A1 | 18 x 8 | 144 | Cca |

Technical data of connectors, fibers and cables on request via the product profile of your selected trunks.



SINGLEMODE



MTP® 4+4 OCTO male (with pins)

Length tolerance:

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

Connector leg lengths:

| Number of OCTO channels | Leg lengths [cm] |
|-----------------------------|------------------|
| 1 | 79 |
| 2 | 79 to 87 stepped |
| 4 | 79 to 95 stepped |
| 8 | 79 |
| 12 | 79 |
| 18 | 79 |
| 24 | 79 |
| Production tolerance – 7 cm | |

PreCONNECT® OCTO SM breakout trunk:

- Breakout cable n x 8 SM fibers FRNC-LSZH
- **MTP® PRO 4+4 OCTO**, SM, male, Elite quality
- Polarity TIA method B “1 to 12”
- MTP® leg-length = standard stepped

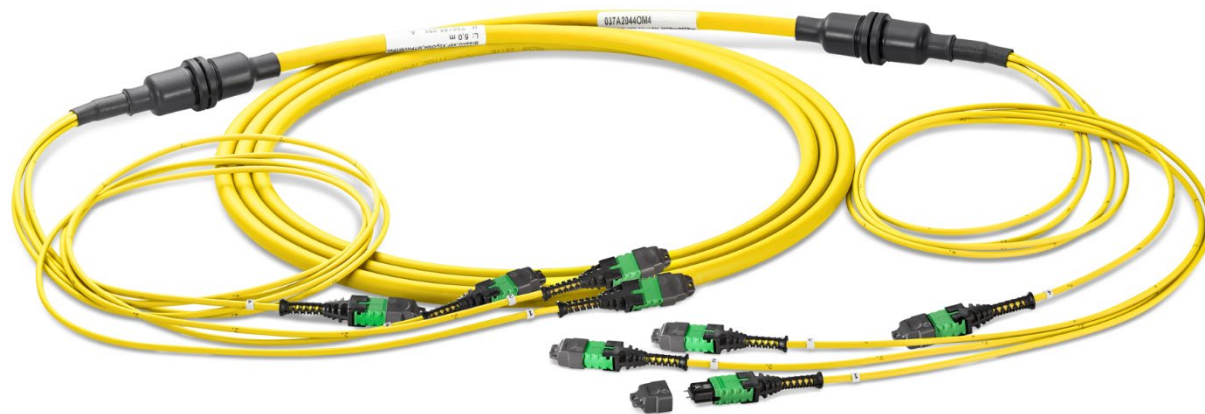
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- Possible order-lengths: From 5 to 2000 meter

Part numbers, length variable:

| Number of OCTO channels | Part numbers | Cable structure | Number of fibers | Cable CPR class |
|-------------------------|--------------|-----------------|------------------|-----------------|
| 1 | on request | 1 x 8 | 8 | B2ca |
| 3 | on request | 3 x 8 | 24 | Cca |
| 4 | on request | 4 x 8 | 32 | Cca |
| 6 | on request | 6 x 8 | 48 | Cca |
| 8 | on request | 8 x 8 | 64 | Cca |
| 12 | on request | 12 x 8 | 96 | Cca |
| 18 | on request | 18 x 8 | 144 | Cca |

Technical data of connectors, fibers and cables on request via the product profile of your selected trunks.



SINGLEMODE



MTP® PRO 4+4 OCTO male (with pins)

Length tolerance:

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

Connector leg lengths:

| Number of OCTO channels | Leg lengths [cm] |
|-----------------------------|------------------|
| 1 | 79 |
| 2 | 79 to 87 stepped |
| 4 | 79 to 95 stepped |
| 8 | 79 |
| 12 | 79 |
| 18 | 79 |
| 24 | 79 |
| Production tolerance – 7 cm | |

PreCONNECT® OCTO OM4 and OM5 patchcords:

Single jacket:

Single jacket cable 8 OM4 or OM5 fibers FRNC-LSZH
 MTP® and MTP® PRO 4+4 OCTO, MM, female, Elite quality
 Polarity TIA method B "1 to 12"

| Part numbers, length variable: | | |
|--------------------------------|-------------------------|------------|
| Cable diameter | MTP® | MTP® PRO |
| 2.0 mm | 080A2063OM4/080A2063OM5 | on request |
| 3.0 mm | 080A2030OM4/080A2030OM5 | on request |

Double jacket:

Double jacket cable 8 OM4 or OM5 fibers FRNC-LSZH
 Diameter 3.0 / 4.5 mm
 MTP® and MTP® PRO 4+4 OCTO, MM, female, Elite quality
 Polarity TIA method B "1 to 12"

Standard lengths of the 3.0 mm single jacket MTP®-legs = 0.5 m,
 others on request

| Part numbers, length variable: | |
|--------------------------------|------------|
| MTP® | MTP® PRO |
| 080A2031OM4 / 080A2031OM5 | on request |



MTP® 4+4 OCTO female (w/o pins)



MTP® PRO 4+4 OCTO female (w/o pins)



MULTIMODE



OM5 is only needed for 400GBASE-SR4.2 BiDi channel lengths 101 to 150 meter.
 OM5 OCTO patchcords are fibrous green.



PreCONNECT® OCTO OM4 patchcords are suitable for SR4 MPO4+4 transceiver-transceiver direct-attach.



PreCONNECT® OCTO SM patchcords:

Single jacket:

Single jacket cable 8 SM fibers FRNC-LSZH
 MTP® and MTP® PRO 4+4 OCTO, SM, female
 MTP® Standard quality, MTP® PRO Elite quality
 Polarity TIA method B “1 to 12”

| Part numbers, length variable: | | |
|--------------------------------|----------------|------------|
| Cable diameter | MTP® | MTP® PRO |
| 2.0 mm | 080A2065G657A1 | on request |
| 3.0 mm | 080A2036G657A1 | on request |



MTP® 4+4 OCTO female (w/o pins)

MTP® PRO 4+4 OCTO female (w/o pins)



SINGLEMODE



Double jacket:

Double jacket cable 8 SM fibers FRNC-LSZH, diameter 3.0 / 4.5 mm
 MTP® and MTP® PRO 4+4 OCTO, SM, female
 MTP® Standard quality, MTP® PRO Elite quality
 Polarity TIA method B “1 to 12”

Standard lengths of the 3.0 mm single jacket MTP®-legs = 0.5 m, others on request

| Part numbers, length variable: | |
|--------------------------------|------------|
| MTP® | MTP® PRO |
| 080A2045G657A1 | on request |



PreCONNECT® OCTO SM patchcords are suitable for DR4/PSM4 MPO4+4 transceiver-transceiver direct-attach.



PreCONNECT® OCTO OM4 MTP®-LCC harness:

For connecting a MPO4+4 transceiver with four LC-Duplex transceivers and for port-breakout of OCTO trunks:

- 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
- 4x16GFC MPO4+4 to 4x 16GFC LC-Duplex
- 4x32GFC MPO4+4 to 4x 32GFC LC-Duplex
- 4x64GFC MPO4+4 to 4x 64GFC LC-Duplex

MULTIMODE



OCTO OM4 harness MTP® 4+4 OCTO, MM, female to 4 LC-COMPACT

Double jacket cable 8 OM4 fibers 3.0 / 4.5 mm FRNC-LSZH
 LC-Compact leg-lengths 0.5 m, legs numbered 1 to 4
 other leg lengths on request
 Order length = total length
 MTP® 4+4 OCTO, MM, female, Elite quality
 Polarity Rx to Tx

| Part numbers, length variable: | |
|--------------------------------|------------|
| MTP® | MTP® PRO |
| 076A0112OM4 | on request |



PreCONNECT® OCTO OM4 MTP®-MDC harness:

For connecting a MPO4+4 transceiver with four MDC transceivers and for port-breakout of OCTO trunks:

- 100GBASE-SR4 MPO4+4 to 4x 25GBASE-SR/SW MDC
- 200GBASE-SR4 MPO4+4 to 4x 50GBASE-SR/SW MDC

OCTO OM4 harness MTP® 4+4 OCTO, MM, female to 4 MDC

Double jacket cable 8 OM4 fibers 3.0 / 4.5 mm FRNC-LSZH
 MDC leg-lengths 0.5 m, legs numbered 1 to 4
 other leg lengths on request
 Order length = total length
 MTP® 4+4 OCTO, MM, female, Elite quality
 Polarity Rx to Tx

MULTIMODE



| Part numbers, length variable: | |
|--------------------------------|------------|
| MTP® | MTP® PRO |
| 076A0187OM4 | on request |

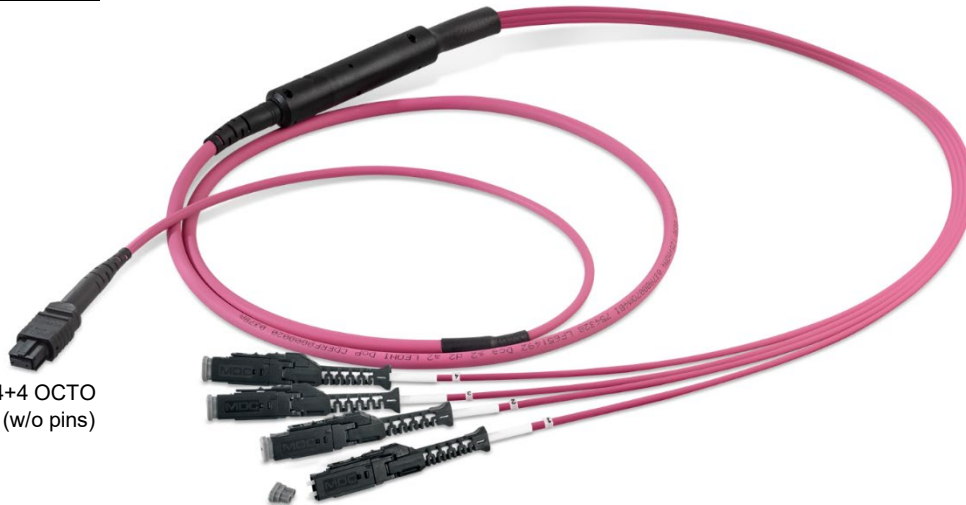
MPO4+4 Transceiver



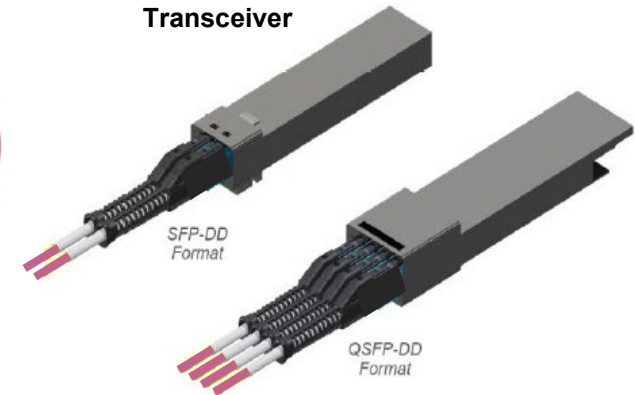
MTP® 4+4 OCTO female (w/o pins)



MTP® PRO 4+4 OCTO female (w/o pins)



MDC Transceiver

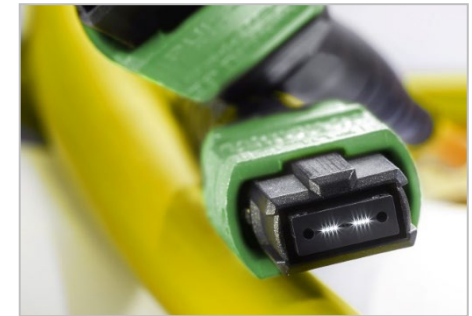


PreCONNECT® OCTO SM MTP®-LCC harness:

For connecting a MPO4+4 transceiver with four LC-Duplex transceivers and for port-breakout of OCTO trunks:

- 100G-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

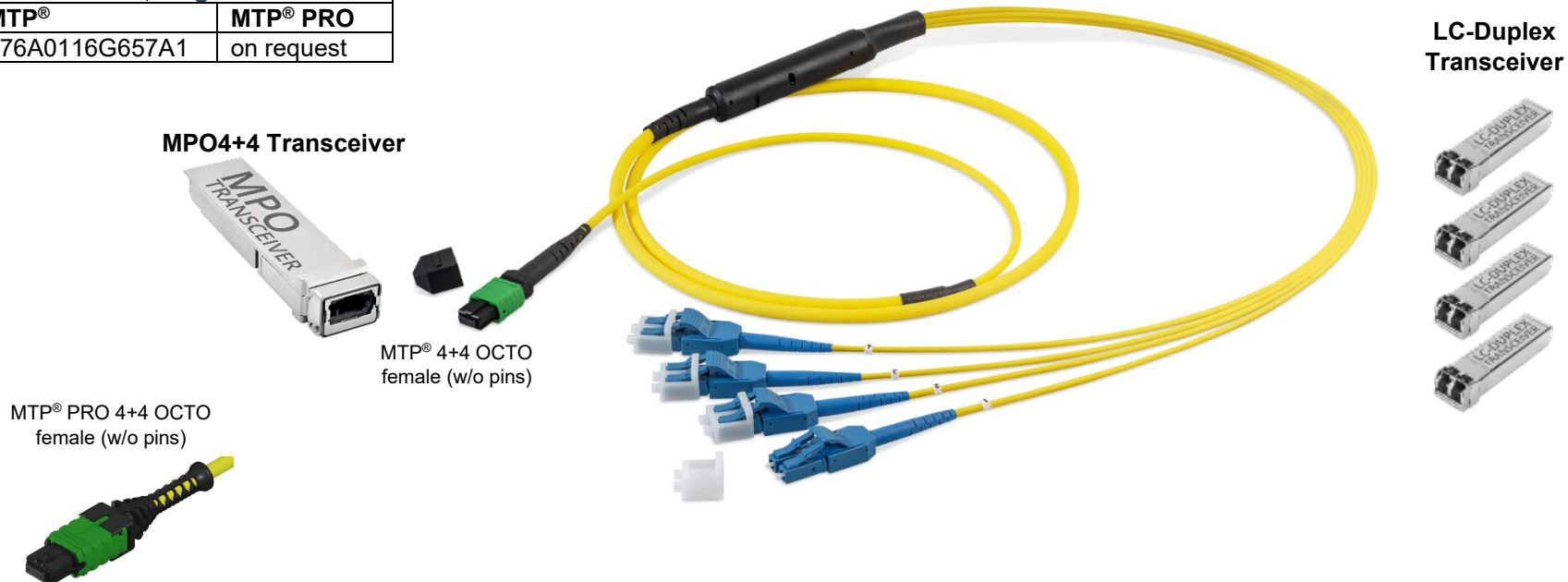
SINGLEMODE



OCTO SM harness MTP® 4+4 OCTO, SM, female to 4 LC-COMPACT

Double jacket cable 8 SM fibers 3.0 / 4.5 mm FRNC-LSZH
 LC-Compact leg-lengths 0.5 m, legs numbered 1 to 4
 other leg lengths on request
 Order length = total length
 MTP® 4+4 OCTO, SM, female, MTP® Standard quality, MTP® PRO Elite quality
 Polarity Rx to Tx

| Part numbers, length variable: | |
|--------------------------------|------------|
| MTP® | MTP® PRO |
| 076A0116G657A1 | on request |



PreCONNECT® OCTO SM MTP®-MDC harness:

For connecting a MPO4+4 transceiver with four MDC transceivers and for port-breakout of OCTO trunks:

- 100G-PSM4 MPO4+4 to 4x 25GBASE-LR MDC
- 200GBASE-DR4 MPO4+4 to 4x 50GBASE-LR MDC
- 400GBASE-DR4 MPO4+4 to 4x 100GBASE-LR MDC

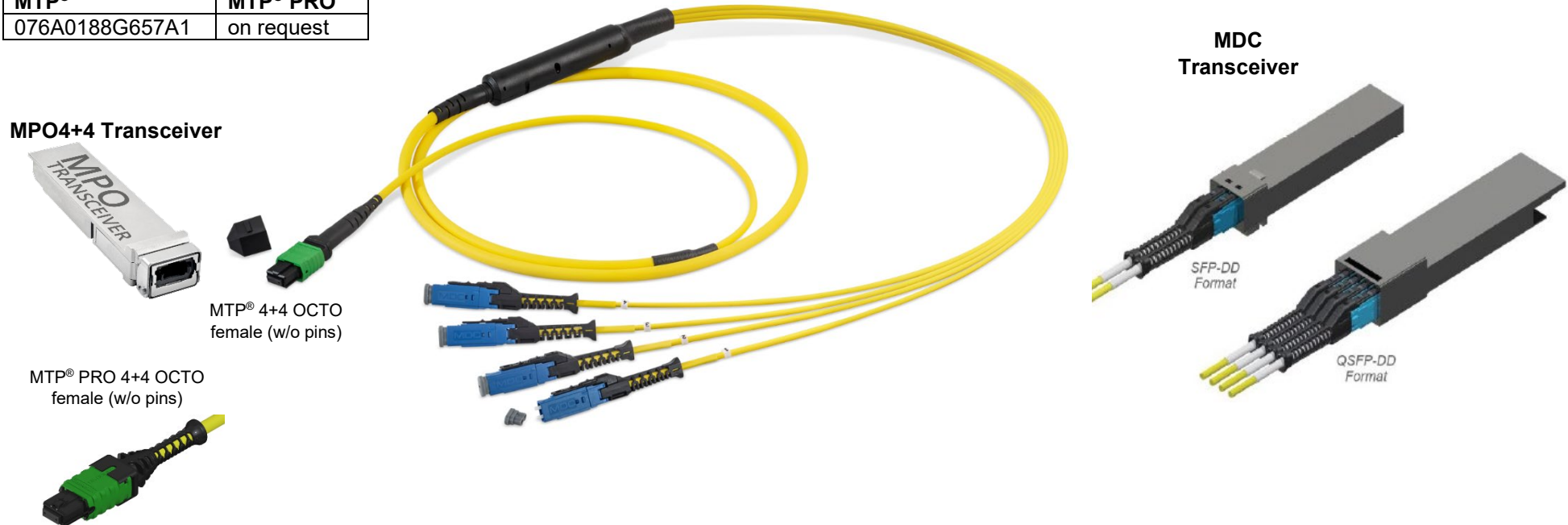
SINGLEMODE



OCTO SM harness MTP® 4+4 OCTO, SM, female to 4 MDC

Double jacket cable 8 SM fibers 3.0 / 4.5 mm FRNC-LSZH
 MDC leg-lengths 0.5 m, legs numbered 1 to 4
 other leg lengths on request
 Order length = total length
 MTP® 4+4 OCTO, SM, female, MTP® Standard quality, MTP® PRO Elite quality
 Polarity Rx to Tx

| Part numbers, length variable: | |
|--------------------------------|------------|
| MTP® | MTP® PRO |
| 076A0188G657A1 | on request |



MPO4+4 Transceiver



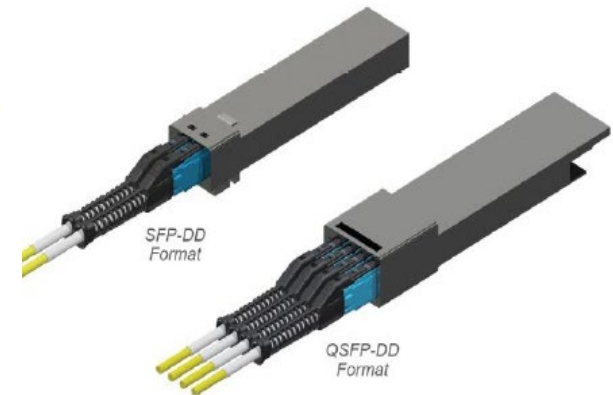
MTP® 4+4 OCTO female (w/o pins)



MTP® PRO 4+4 OCTO female (w/o pins)



MDC Transceiver



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

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Creation date: 2021-08-23

Valid since: 2022-10-06

Revision: 004