

MTP® Harnesses

PRODUCT INFORMATION



MTP® Harnesses are 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:

To separate the fibers within multifiber connectors like MTP® at one side to singlefiber connectors like LC, SN®, MDC, CS®, SC, E2000® ect.
For stationary and weather protected application acc. to IEC 60721-3-3, like within data centers and buildings.

Portbreakout of the individual duplex ports within MPO transceivers to duplex transceivers:

MPO4+4 OCTO Transceiver



LC-Duplex Transceiver



MPO16 SEDECIM Transceiver



LC-Duplex Transceiver



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SN® and CS® are registered trademarks of SENKO Advance Co. Ltd.
E2000® is a registered trademark of DIAMOND SA

Applications:

Portbreakout of the individual duplex ports within MTP® connectors of trunk cables to duplex transceivers.

Example here is from Product Information PreCONNECT® OCTO MTP®:

MPO4+4 OCTO 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**



LC-Duplex Transceiver



PreCONNECT® OCTO MTP®-LCC harness

Applications:

Examples for Portbreakout of the individual duplex ports within MPO transceivers to duplex transceivers:

Multimode:

- 40GBASE-SR4 MPO4+4 to 4x 10GBASE-SR/SW LC-Duplex/MDC/SN®
- 100GBASE-SR4 MPO4+4 to 4x 25GBASE-SR/SW LC-Duplex/MDC/SN®
- 200GBASE-SR4 MPO4+4 to 4x 50GBASE-SR/SW LC-Duplex/MDC/SN®
- 400GBASE-SR4 MPO4+4 to 4x 100GBASE-SR/SW LC-Duplex/MDC/SN®
- 400GBASE-SR8 MPO16 to 8x 50GBASE-SR/SW LC-Duplex/MDC/SN®
- 4x16GFC MPO4+4 to 4x 16GFC LC-Duplex/MDC/SN®
- 4x32GFC MPO4+4 to 4x 32GFC LC-Duplex/MDC/SN®
- 4x64GFC MPO4+4 to 4x 64GFC LC-Duplex/MDC/SN®

Singlemode:

- 100GBASE DR4/PSM4 MPO4+4 to 4x 25GBASE-LR LC-Duplex/MDC/SN®
- 4x10GBASE-LR MPO4+4 to 4x 10GBASE-LR LC-Duplex/MDC/SN®
- 200GBASE-DR4 MPO4+4 to 4x 50GBASE-LR LC-Duplex/MDC/SN®
- 400GBASE-DR4 MPO4+4 to 4x 100GBASE-LR LC-Duplex/MDC/SN®
- 800GBASE-DR8/PSM8 MPO16 to 8x 100G LC-Duplex/MDC/SN®

Properties:

- Operating temperature range climate class C „indoor, controlled environment“ acc. to IEC 60753-1, -10°C to +60°C
- Connector, fiber and cable data on request

FRNC-LSZH round cable as multifiber connector leg.
Diameter see data sheet of your harness.

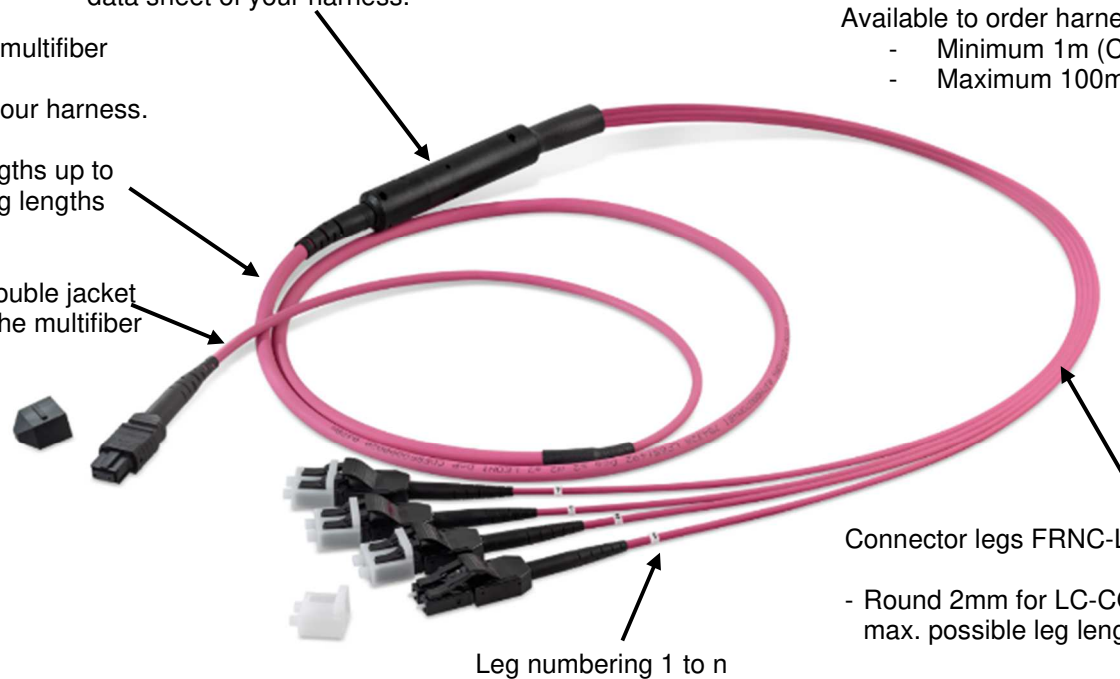
Single jacket cable at leg lengths up to 1m, double jacket cable at leg lengths larger than 1m.

At double jacket cable, the double jacket ends 30cm before the tip of the multifiber connector.

Harness divider made of molded-plastic half-shells with grooves for hooking in. Length and diameter see data sheet of your harness.

Available to order harness lengths:

- Minimum 1m (CPQ 1.5m)
- Maximum 100m



Connector legs FRNC-LSZH:

- Round 2mm for LC-COMPACT, MDC, SN® max. possible leg length 5m (CPQ 2m)
- Zip 2x2.1mm for LC, SC, E2000® Simplex und Duplex max. possible leg length 3m (CPQ 2m)

Leg numbering 1 to n

Length tolerances:

- Up to 1 m = - 50 mm
- 2 m to 3 m = - 100 mm
- 4 m to 25 m = - 200 mm
- Longer than 25 m = - 1 %

Delivery form:

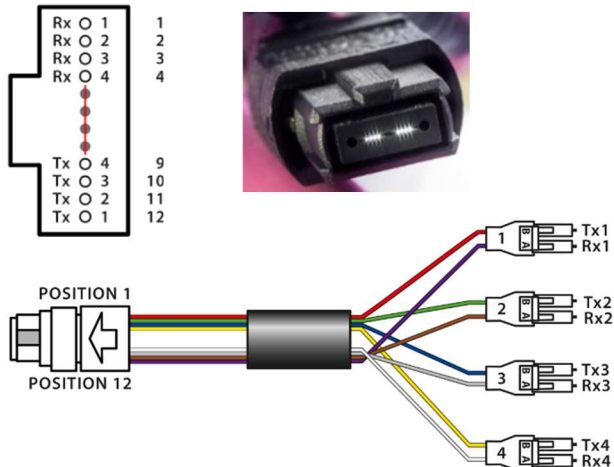
- Attenuation (IL) measured in accordance with IEC 61300-3-4 method „B“, MM 850nm/SM 1310nm, measurement values on request, or can be downloaded from our website by using the serial numbers of the harness <https://www.rosenberger.com/products/download-measurement-data/>
- Serial number label with length information at the harness divider
- Individually packaged in foil bags with product ID label

Polarity:

Rx to Tx:

- Is for direct attach between OCTO 4+4 und SEDECIM 16 MPO transceivers and duplex transceivers, as shown at page 3
- Is for our PreCONNECT® OCTO and SEDECIM MTP® cabling system, with their method B „1 to 12“ resp. „1 to 16“ polarity trunk cables, as shown at page 3. See as well our Product Informations PreCONNECT® OCTO and SEDECIM MTP®.

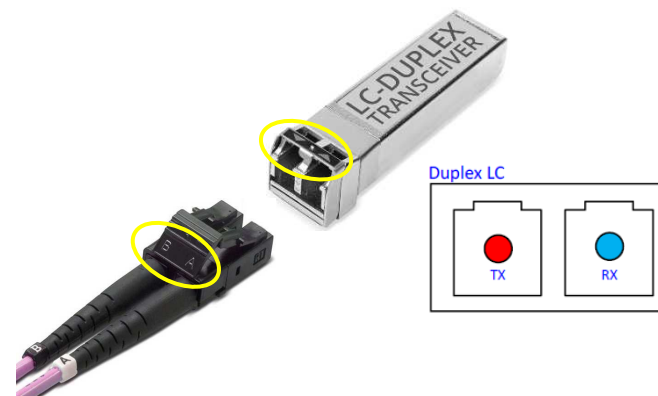
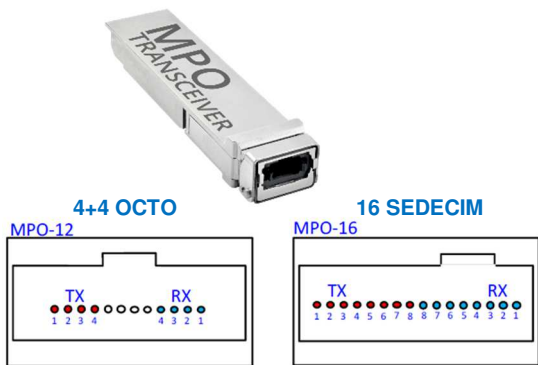
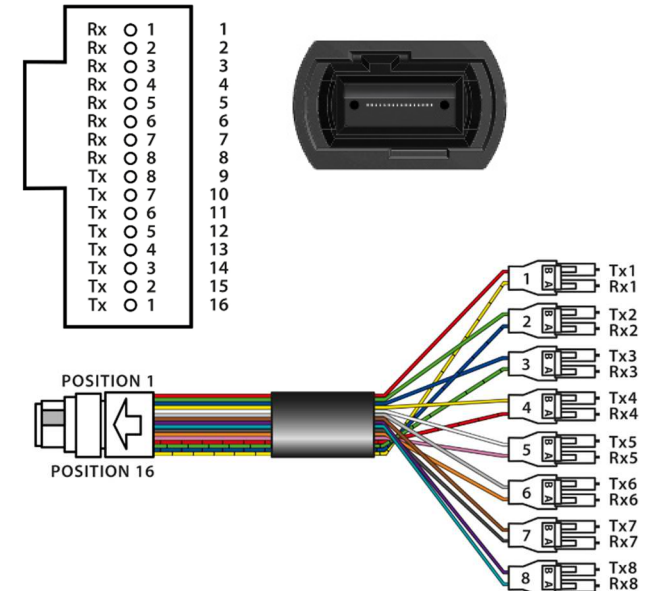
MPO OCTO Transceiver Interface



OCTO 4+4 Rx to Tx	
MTP®	LCD
1	1B
2	2B
3	3B
4	4B
-	-
-	-
-	-
-	-
9	4A
10	3A
11	2A
12	1A

SEDECIM Rx to Tx	
MTP®	LCD
1	1B
2	2B
3	3B
4	4B
5	5B
6	6B
7	7B
8	8B
9	8A
10	7A
11	6A
12	5A
13	4A
14	3A
15	2A
16	1A

MPO SEDECIM Transceiver Interface



MTP® 4+4 OCTO connectors:

- MTP® gender: MPO 4+4 OCTO transceivers and PreCONNECT® OCTO MTP® trunk cables are male/with pins, why the therefore fitting harness MTP® connectors must be female/without pins.
- MTP® 4+4 OCTO connectors belong to the group of „n x 12“ (by12) MTP®, which have centered keys
- Multimode APC 8° for all PAM4 coded transmission applications, like e.g. OCTO 400GBASE-SR4
- The applied MTP® (MT) ferrule quality Standard or Elite, is specified within the part number tables at the following pages



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

male (with pins)



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

male (with pins)



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

male (with pins)



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

male (with pins)

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



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

male (with pins)

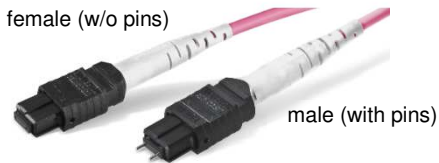
MTP® 16 SEDECIM connectors:

- MTP® gender: MPO 16 SEDECIM transceivers and PreCONNECT® SEDECIM MTP® trunk cables are male/with pins, why the therefore fitting harness MTP® connectors must be female/without pins.
- MTP® 16 SEDECIM connectors belong to the group of „n x 16“ (by16) MTP®, which have off-centered keys
- Multimode APC 8° for all PAM4 coded transmission applications, like e.g. SEDECIM 400GBASE-SR8
- The applied MTP® (MT) ferrule quality Standard or Elite, is specified within the part number tables at the following pages



MTP® 16 MM APC 8° Stecker

female (w/o pins)

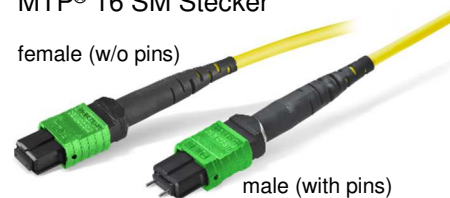


male (with pins)



MTP® 16 SM Stecker

female (w/o pins)

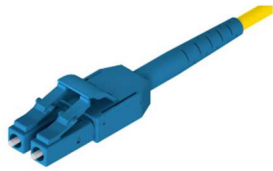


male (with pins)

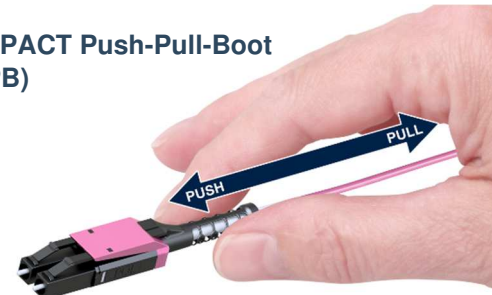
Harness leg connectors:

Other connectors types on request

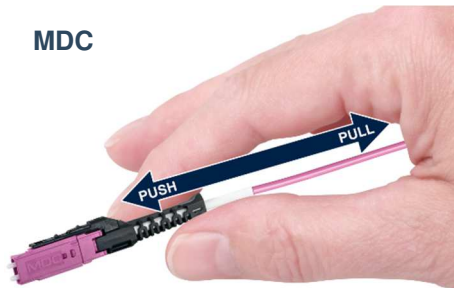
LC-COMPACT (LCC)



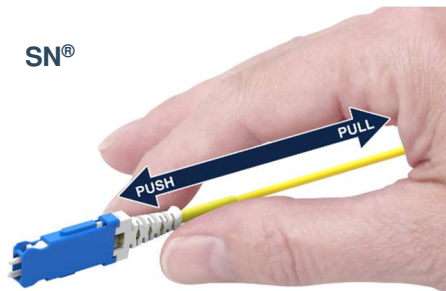
LC-COMPACT Push-Pull-Boot (LCC-PPB)



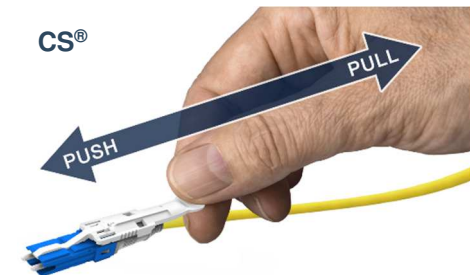
MDC




SN®



CS®



MTP® Harnesses 8 fibers OM4 4+4 OCTO PC 0°
Part numbers for polarity Rx to Tx
 Add your desired length in millimeter to the part number, e.g. 2.0 meter: 03MTPLCcOM4008A007-M2000
 Deliverable lengths: From 1m (CPQ 1.5m) up to 100m, in 50cm increments (CPQ)


MTP®	Length connector legs	4 leg connectors	New (CPQ) part number	Old part number
 <p>4+4 OCTO PC 0° MM Elite quality female (w/o pins)</p>	0.5m	LCC PC 0°	03MTPLCcOM4008A007	076A0112OM4
		LCC-PPB PC 0°	on request	076A1150OM4
		MDC PC 0°	on request	076A0187OM4
		SN PC 0°	on request	---
	1m	LCC PC 0°	03MTPLCcOM4008A021	076A1118OM4
		LCC-PPB PC 0°	on request	---
		MDC PC 0°	on request	---
		SN PC 0°	on request	---
	1.5m	LCC PC 0°	03MTPLCcOM4008A003	076A1126OM4
		LCC-PPB PC 0°	on request	---
		MDC PC 0°	on request	---
		SN PC 0°	on request	---
2m	LCC PC 0°	03MTPLCcOM4008A022	076A0164OM4	
	LCC-PPB PC 0°	on request	---	
	MDC PC 0°	on request	---	
	SN PC 0°	on request	---	
2.5m	LCC PC 0°	on request	076A0178OM4	
	LCC-PPB PC 0°	on request	---	
	MDC PC 0°	on request	---	
	SN PC 0°	on request	---	

With other leg connectors and leg lengths on request.



With MTP® PRO on request



MTP® Harnesses 8 fibers OM4 4+4 OCTO APC 8° Part numbers for polarity Rx to Tx Add your desired length in millimeter to the part number, e.g. 2.0 meter: 076A0112OM4-2000 Deliverable lengths: From 1m (CPQ 1.5m) up to 100m, in 50cm increments (CPQ)			
MTP®	Length connector legs	4 leg connectors	New (CPQ) part number
 <p>4+4 OCTO APC 8° MM Elite quality female (w/o pins)</p>	0,5m	LCC PC 0°	on request
		LCC-PPB PC 0°	on request
		MDC PC 0°	on request
		SN PC 0°	on request
	1m	LCC PC 0°	on request
		LCC-PPB PC 0°	on request
		MDC PC 0°	on request
		SN PC 0°	on request
	1,5m	LCC PC 0°	on request
		LCC-PPB PC 0°	on request
		MDC PC 0°	on request
		SN PC 0°	on request
	2m	LCC PC 0°	on request
		LCC-PPB PC 0°	on request
		MDC PC 0°	on request
		SN PC 0°	on request
With other leg connectors and leg lengths on request.			


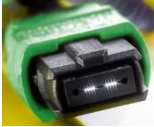


MTP® Harness 8 fibers SM 4+4 OCTO APC 8°

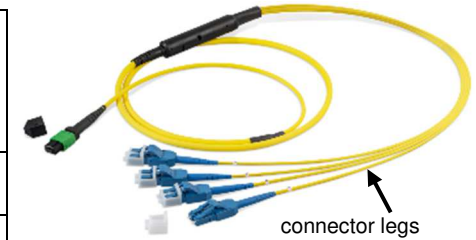
Part numbers for polarity Rx to Tx

Add your desired length in millimeter to the part number, e.g. 2.0 meter: 03MTPLCcG657A1008A008-M2000

Deliverable lengths: From 1m (CPQ 1.5m) up to 100m, in 50cm increments (CPQ)

MTP®	Length connector legs	4 leg connectors	New (CPQ) part number	Old part number
  4+4 OCTO APC 8° SM Standard quality female (w/o pins) Elite quality on request	0.5m	LCC PC 0°	03MTPLCcG657A1008A008	076A0116G657A1
		LCC-PPB PC 0°	on request	076A0149G657A1
		MDC PC 0°	on request	076A0188G657A1
		SN PC 0°	on request	---
	1m	LCC PC 0°	03MTPLCcG657A1008A023	---
		LCC-PPB PC 0°	on request	---
		MDC PC 0°	on request	---
		SN PC 0°	on request	---
	1.5m	LCC PC 0°	03MTPLCcG657A1008A024	---
		LCC-PPB PC 0°	on request	---
		MDC PC 0°	on request	---
		SN PC 0°	on request	---
	2m	LCC PC 0°	03MTPLCcG657A1008A025	---
		LCC-PPB PC 0°	on request	---
		MDC PC 0°	on request	---
		SN PC 0°	on request	---
2.5m	LCC PC 0°	on request	076A0188G657A1	
	LCC-PPB PC 0°	on request	---	
	MDC PC 0°	on request	---	
	SN PC 0°	on request	---	


With other leg connectors and leg lengths on request.



With MTP® PRO on request



MTP® Harness 16 fibers OM4 16 SEDECIM APC 8°
Part numbers for polarity Rx to Tx
 Add your desired length in millimeter to the part number, e.g. 2.0 meter: 076A0177OM4-2000
 Deliverable lengths: From 1m (CPQ 1.5m) up to 100m, in 50cm increments (CPQ)


MTP®	Length connector legs	4 leg connectors	New (CPQ) part number	Old part number
 <p>16 SEDECIM APC 8° MM Elite quality female (w/o pins)</p>	0.5m	LCC PC 0°	on request	076A0177OM4
		LCC-PPB PC 0°	on request	---
		MDC PC 0°	on request	076A0190OM4
		SN PC 0°	on request	---
	1m	LCC PC 0°	on request	---
		LCC-PPB PC 0°	on request	---
		MDC PC 0°	on request	---
		SN PC 0°	on request	---
	1.5m	LCC PC 0°	on request	---
		LCC-PPB PC 0°	on request	---
		MDC PC 0°	on request	---
		SN PC 0°	on request	---
2m	LCC PC 0°	on request	---	
	LCC-PPB PC 0°	on request	---	
	MDC PC 0°	on request	---	
	SN PC 0°	on request	---	

With other leg connectors and leg lengths on request.

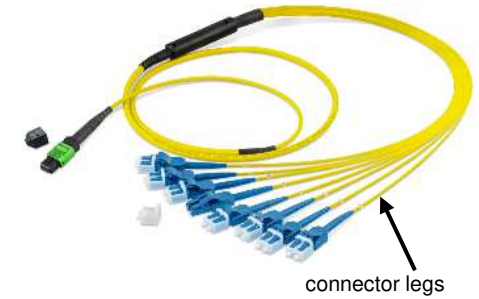


With MTP® 16 SEDECIM PC 0° on request



MTP® Harness 16 fibers OM4 16 SEDECIM APC 8° Part numbers for polarity Rx to Tx Add your desired length in millimeter to the part number, e.g. 2.0 meter: 076A1130G657A1-2000 Deliverable lengths: From 1m (CPQ 1.5m) up to 100m, in 50cm increments (CPQ)				
MTP®	Length connector legs	4 leg connectors	New (CPQ) part number	Old part number
 16 SEDECIM APC 8° SM Standard quality female (w/o pins) Elite quality on request	0,5m	LCC PC 0°	on request	076A1130G657A1
		LCC-PPB PC 0°	on request	---
		MDC PC 0°	on request	076A1131G657A1
		SN PC 0°	on request	---
	1m	LCC PC 0°	on request	---
		LCC-PPB PC 0°	on request	---
		MDC PC 0°	on request	---
		SN PC 0°	on request	---
	1,5m	LCC PC 0°	on request	---
		LCC-PPB PC 0°	on request	---
		MDC PC 0°	on request	---
		SN PC 0°	on request	---
2m	LCC PC 0°	on request	---	
	LCC-PPB PC 0°	on request	---	
	MDC PC 0°	on request	---	
	SN PC 0°	on request	---	

With other leg connectors and leg lengths on request.



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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