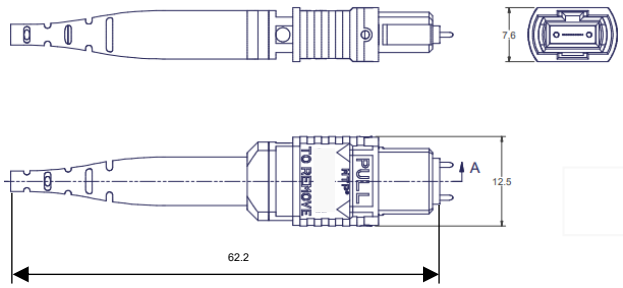
Technical Data Sheet

Rosenberger

MTP® (MPO) connector n x 12 fibers





female without pins

male with pins

MTP® is a registered trademark of USCONEC Ltd.

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) all numbers of fibers are available PC 0° and up to 12 fiber APC 8° polished too, Singlemode APC 8°
- Gender can be changed acc. to USCONEC AEN-1405, polarity can`t be changed at APC 8° only at PC 0°
- [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

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

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	Elite	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, 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	---

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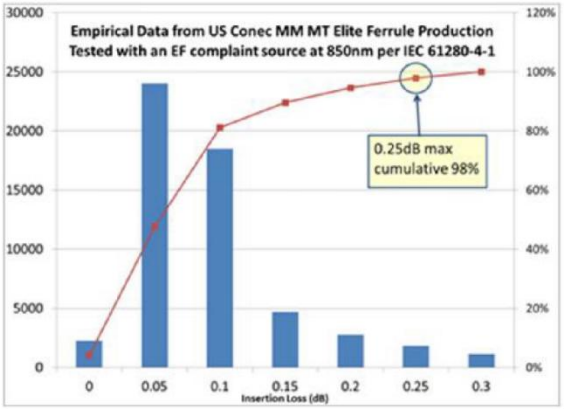
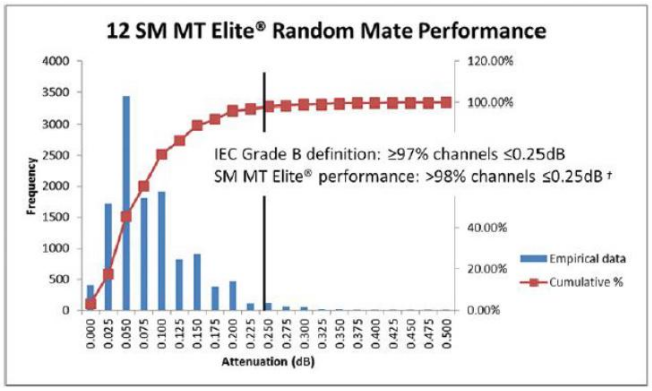
Optical properties

Insertion Loss IL „random mated“ source USCONEC Ltd.:





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
- Multimode all OM classes, APC 8°	50	55

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°	yellow / black
- Multimode OM2, OM3, OM4, OM5, 50/125µm, PC 0°	black / black
- Multimode OM4, OM5, 50/125µm, APC 8°	black / white

While the information has been carefully compiled to the best of our knowledge, nothing is intended as representation or warranty on our part and no statement herein shall be construed as recommendation to infringe existing patents. In the effort to improve our products, we reserve the right to make changes judged to be necessary.

For the installation of the electrotechnical equipment, particular electrotechnical expertise is required.

Draft	Date	Approved	Date	Rev.	Engineering change number	Name	Date
Y. Zhang	2017-03-31	H. Jungbäck	2017-03-31	008	---	H. Jungbäck	2026-03-30

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