

## 40G QSFP+ (MPO/MTP®) to QSFP+ Assemblies

MTP® QSFP+ cable assemblies designed for the interconnection of 40G (40GBASE-SR) QSFP+ transceivers in parallel optics networks using 4x10G channels (4 TX and 4 RX fibres). These assemblies are offered as trunks with 8 Fibre OM3 or OM4 ruggedized double jacket micro cable or patch cords using a compact single jacket micro cable. The use of Standard or Elite MTP® connectors ensures low loss, high speed performance, while the compact sized cable assures optimal airflow in high density data centre applications.

For direct connections between QSFP+ transceivers both MTP® connectors should be un-pinned female type, while for the connection with other MTP/MPO connectors, male pinned or female un-pinned should be chosen accordingly.

---

## Features

- Low loss performance using MTP® connectors
- Available in OS1/2, OM3, OM4 Fibre Grades
- Option for Loose Tube, Loose Tube Armoured and Universal Micro Cable Selection
- Polarity B
- Female/Un-Pinned and Male/ Pinned MTP® connectors
- 8x Fibre Micro cable 4.5mm OD Trunk & 3mm OD Patch Lead Options
- Available with LSZH, OFNP or OFNR Cable Jacket
- MTP® Interface - QSFP+ 40Gbase-SR transceivers are using MTP® interface
- 100% Factory terminated and tested
- Saves installation and re-configuration time

---

## Applications

- Data Centers
- Parallel network applications
- Assemblies for 40GBase-SR QSFP+ transceivers
- InfiniBand

## Specifications

ELEMENT	CHARACTERISTIC
Fibre	OS1/OS2, OM3, OM4
Cable Type	MicrocableMax OD Trunks 8 cores 4.5 ± 0.3mmMax OD Patchlead 8 cores 2.9 ± 0.1mm <b>Jacket material:</b> LSZH, OFNP, OFNR <b>Jacket colour:</b> Aqua (OM3, OM4), Erica Violet (OM4)
Connectors	MTP® 12xFibre Ferrules US Connec, <b>Boot Colour:</b> Black, <b>Body Sleeve Colour:</b> MM (Beige), MM Elite (Aqua) Male/ Pinned or Female/ Un-Pinned
Storage Temperature	-20 ~ +60°C
Installation Temperature	-5 ~ +50°C
Operating Temperature	-20 ~ +60°C

## Connector Performance

CONNECTOR MATING	IL AVERAGE	IL MAX	RETURN LOSS
MTP® Elite (MM)*	0.10dB	0.35dB	N/A
MTP® (MM)*	0.20dB	0.60dB	N/A
MTP® Elite (SM)**	0.10dB	0.35dB	>60dB
MTP® (SM)***	0.25dB	0.75dB	>60dB

\* ANSI/EIA-455-171 Method D1; MM MTP \*\* ANSI/EIA-455-171 Method D3 SM MTP

\*\*\* ANSI/EIA-455-171 Method D3 SM MTP; Compliant with proposed IEC 61755-3-31/GRADE B

## Cable Performance

FIBRETYPE (ISO/IEC 11801)	OS1/OS2	OM3	OM4
Attenuation Coefficient [dB/km]	≤ 0.38 Max (1310nm) ≤ 0.25 Max (1550nm) ≤ 0.34 Typ (1310nm) ≤ 0.19 Typ (1550nm)	≤ 3.5 Max (850nm) ≤ 1.5 Max (1300nm) ≤ 2.7 Typ (850nm) ≤ 0.9 Typ (1300nm)	≤ 3.5 Max (850nm) ≤ 1.5 Max (1300nm) ≤ 2.7 Typ (850nm) ≤ 0.9 Typ (1300nm)
Minimum Bandwidth: Overfilled Launch [Mhz-km]	N/A	≥ 1500 (850nm) ≥ 500 (1300nm)	≥ 3500 (850nm) ≥ 500 (1300nm)
Minimum Bandwidth: Laser Effective Modal Bandwidth [Mhz-km]	N/A	≥ 2000 (850nm)	≥ 4700 (850nm)

## Standards Compliance

- TIA/EIA-568-C.3 and ISO/IEC 11801
- IEC-61754-7 & EIA/TIA-604-5
- NFPA 262 (OFNP) or IEC 60332 (LSZH)
- IEC-61754-20 (LC) & IEC-61754-14 (SC)
- Compliant to Directive 2002/95/EC (RoHS) and REACH SvHC
- IEC-60793

## Ordering Information

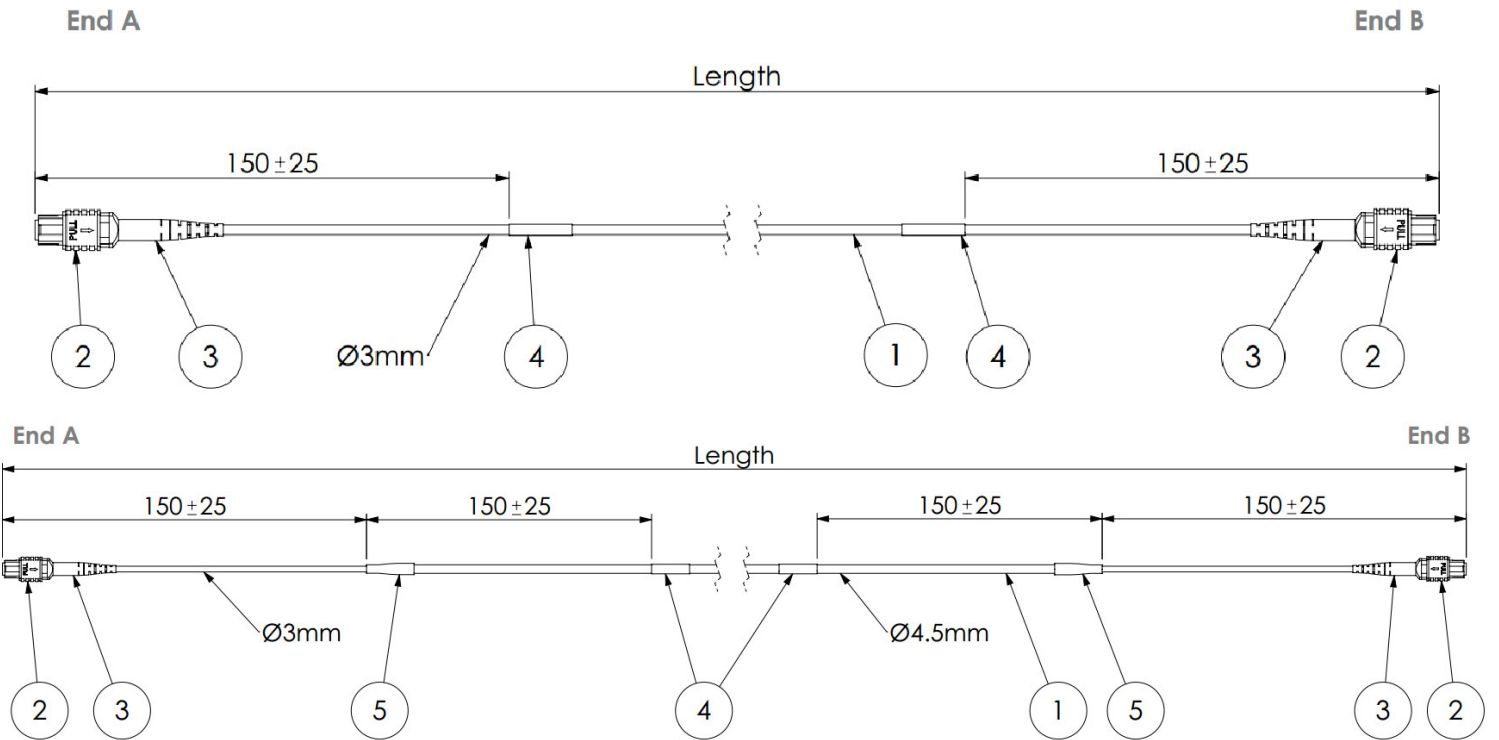
	Connector A		Connector B		Fibre Type		Cable Type		Fibre Count		Length		Extra Options	
	Code	Description	Code	Description	Code	Description	Code	Description	Code	Description	Code	Description	Code	Description
OTQQ	20	MTP® Male	20	MTP® Male	9	G.652.D	1	2.9mm Single Jacket Patch Microcable	12	12 (8 used)	01	1m	-	LSZH
	22	MTP® Female	22	MTP® Female	3	OM3	2	4.5mm Double Jacket Trunk Microcable			...	...	NR	OFNR
	24	MTP® Male Elite	24	MTP® Male Elite	4	OM4					xx	Specify	NP	OFNP
	26	MTP® Female Elite	26	MTP® Female Elite	A1	G.657A1							O	MPO Option

### Example Part Number

OTQQ	-	22	20	-	4	1	12	-	10
------	---	----	----	---	---	---	----	---	----

QSFP+ to QSFP+ 8 Fibres MTP® male to MTP® female OM4 2.9mm Patch MicroCable LSZH 10m

Technical Drawing



1. Assembly MPO/MTP - MPO/MTP 8 Fibre MicroCable 2.9mm OD Patchlead - Single Jacket
2. Assembly MPO/MTP - MPO/MTP 8 Fibre MicroCable 4.5mm OD Trunk - Double Jacket

MTP® is a registered trademark of US Conec Ltd.