

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.

Applications

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

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

Specifications

ELEMENT	CHARACTERISTIC
Fibre	OS1/OS2, OM3, OM4
Cable Type	Microcable Max OD Trunks 8 cores 4.5 ± 0.3mm Max OD Patchlead 8 cores 2.9 ± 0.1mm Jacket material: LSZH, OFNP, OFNR Jacket colour: Aqua (OM3, OM4), Erica Violet (OM4)
Connectors	MTP® 12xFibre Ferrules US Connec, Boot Colour: Black, Body Sleeve Colour: 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

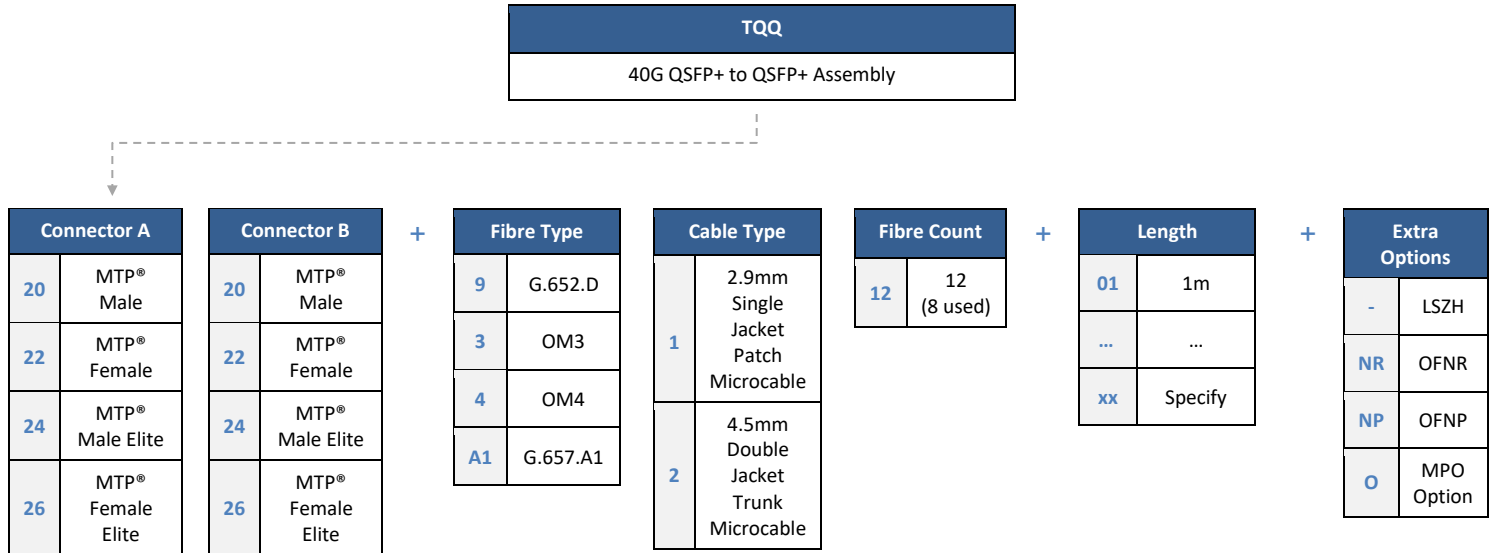
Cable Performance

FIBRETYPE (ISO/IEC 11801)	OS1/OS2	OM3	OM4
Attenuation Coefficient [dB/km]	≤ 0.38 Max (1310nm)	≤ 3.5 Max (850nm)	≤ 3.5 Max (850nm)
	≤ 0.25 Max (1550nm)	≤ 1.5 Max (1300nm)	≤ 1.5 Max (1300nm)
	≤ 0.34 Typ (1310nm)	≤ 2.7 Typ (850nm)	≤ 2.7 Typ (850nm)
	≤ 0.19 Typ (1550nm)	≤ 0.9 Typ (1300nm)	≤ 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

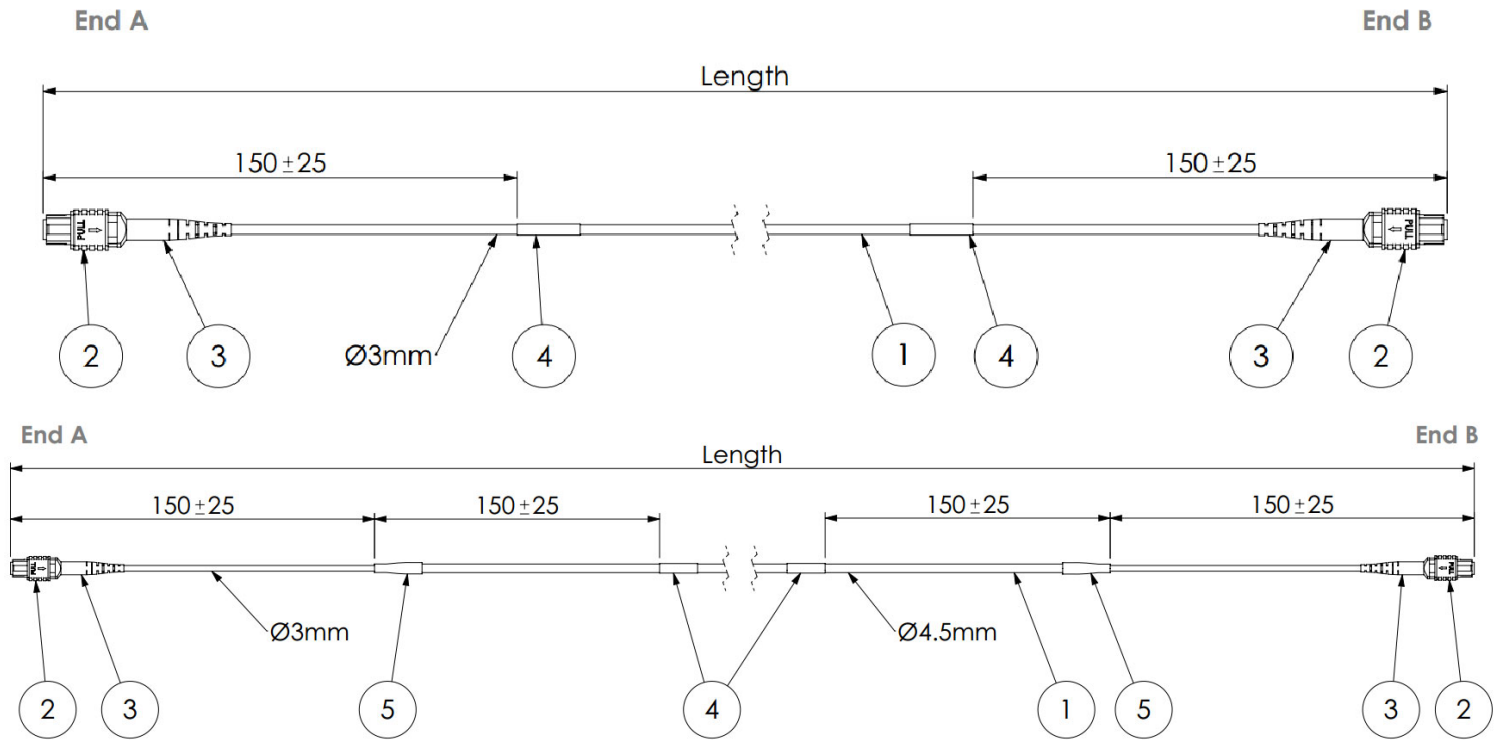
Ordering Information



Example:

TQQ-2220-4112-10 - QSFP+ to QSFP+ 8 Fibres MTP® male to MTP® female OM4 2.9mm Patch Micro Cable LSZH 10m

Technical Drawing



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