

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

MTP®/MPO 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, OM4 or OM5 ruggedised double jacket micro cable or patch cords using a compact single jacket micro cable. The use of Standard or Elite MTP®/MPO 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®/MPO 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®/MPO connectors
- Available in OS1/2, OM3, OM4, OM5 Fibre Grades
- Option for Loose Tube, Loose Tube Armoured and Universal Micro Cable Selection
- Polarity B
- Female/Un-Pinned and Male/ Pinned MTP®/MPO connectors
- 8x Fibre Micro cable 4.5mm OD Trunk & 3mm OD Patch Lead Options
- Available with LSZH, OFNP or OFNR Cable Jacket
- MTP®/MPO Interface - QSFP+ 40Gbase-SR transceivers are using MTP® /MPO 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, OM5
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), Lime Green (OM5), Erica Violet (OM4)
Connectors	MTP® 12xFibre Ferrules US Connec, Boot Colour: Black, Body Sleeve Colour: MM (Beige), MM Elite (Aqua), OM5 (Lime Green), Male/ Pinned or Female/ Un-Pinned
Storage Temperature	-20 ~ +70°C
Installation Temperature	0 ~ +50°C
Operating Temperature	-20 ~ +70°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

Fibre Type (ISO/IEC 11801)	OS1/OS2	OM3	OM4	OM5
Attenuation Coefficient (dB/km)	≤ 0.50 Max (1310nm) ≤ 0.40 Max (1550nm) ≤ 0.36 Typ (1310nm) ≤ 0.22 Typ (1550nm)	≤ 3.5 Max (850nm) ≤ 1.5 Max (1300nm) ≤ 3.0 Typ (850nm) ≤ 1.0 Typ (1300nm)	≤ 3.5 Max (850nm) ≤ 1.5 Max (1300nm) ≤ 3.0 Typ (850nm) ≤ 1.0 Typ (1300nm)	≤ 3.5 Max (850nm) ≤ 1.5 Max (1300nm) ≤ 3.0 Typ (850nm) ≤ 1.0 Typ (1300nm)
Minimum Bandwidth: Overfilled Launch (Mhz-km)	N/A	≥ 1500 (850nm) ≥ 500 (1300nm)	≥ 3500 (850nm) ≥ 500 (1300nm)	≥ 3500 (850nm) ≥ 1850 (953nm) ≥ 500 (1300nm)
Minimum Bandwidth: Laser Effective Modal Bandwidth (Mhz-km)	N/A	≥ 2000 (850nm)	≥ 4700 (850nm)	≥ 4700 (850nm) ≥ 2470 (953nm)

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

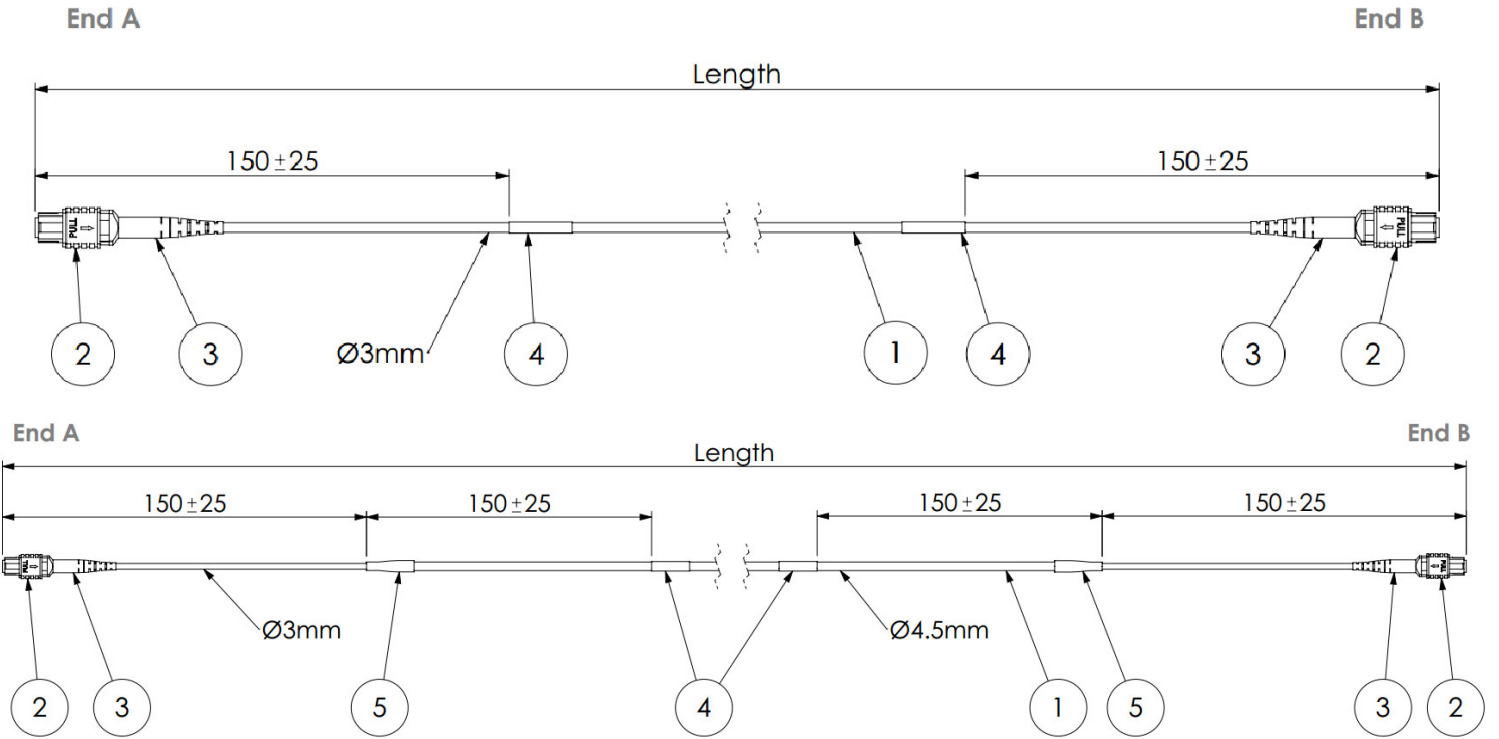
	Connector A		Connector B		Fibre Type		Cable Type		Fibre Count		Length		Extra Options	
OTQQ	20	MTP® Male	20	MTP® Male	9	G.652.D	1	2.9mm Single Jacket Patch Microcable	12	12 (8 used)	01	1m	-	LSZH
	22	MTP® Female	22	MTP® Female	A1	G.657A1	2	4.5mm Double Jacket Trunk Microcable			NR	OFNR
	24	MTP® Male Elite	24	MTP® Male Elite	A2	G.657A2					xx	Specify	NP	OFNP
	26	MTP® Female Elite	26	MTP® Female Elite	3	OM3							O	MPO Option
	21	MPO Male	21	MPO Male	4	OM4								
	23	MPO Female	23	MPO Female	5	OM5								
	25	MPO Male Elite	25	MPO Male Elite										
	27	MPO Female Elite	27	MPO Female Elite										

Example Part Number

OTQQ	-	22	20	-	4	1	12	-	10
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QSFP+ to QSFP+ 8 Fibres MTP® male to MTP® female OM4 2.9mm Patch MicroCable LSZH 10m

Technical Drawing



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

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