

OSA MTP® cabling system offers a convenient, high density cabling solution for enterprise cabling networks. The multi-fibre connectors and compact cabling structure inherent in the MTP® cabling system facilitate rapid deployment and simplifies ongoing adds, moves and changes in high density installations.

OSA manufactures MTP® connectivity in a range of styles including backbone leads, equipment patch leads, 40 & 100G connectivity and a range of fanout options.

Cable assemblies can be constructed to TIA-568-C compliant methods, or to custom configurations to meet any network requirement.




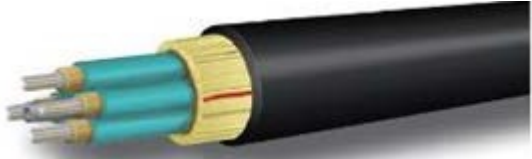
## KEY FEATURES

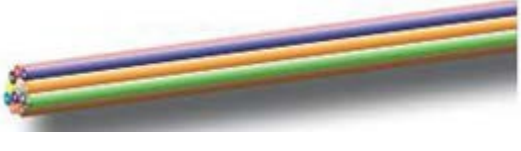

- All OSA supplied MTP® cable assemblies utilise US CONEC MTP® Elite\* connectors for market leading low loss performance
- Method A, B & C configured assemblies, as defined in TIA- 568-C, available to suit any MTP® or MPO network
- Range of cable constructions available including high density 2mm micro cable, 3mm micro cable, double sheath/subgrouped micro cable, ribbon & 900um
- Rapid deployment and flexibility for adds, moves and changes due to true plug and play design
- All cable assemblies are 100% tested and test results supplied with every order
- Tailored to suit your configuration and breakout construction requirements
- Scalable and future proof for 40 & 100G circuits
- Fully compatible with existing MPO networks

## Applications




- Data centre and enterprise networks
- Storage area networks – fibre channel
- Parallel optics including 40G and 100G
- Local area network backbone links
- Optical switching interframe connections

## Manufacturing Options - Cables

Cable Type	Description	Fibre Counts	Oversleeving Jacket		
			Sizes (mm)	Options	
Micro cable (MC)	250um multicore micro cable	12	2.0	Double Jacket, LSZH	
Subgroup micro cable (SMC)	Double sheath/subgrouped 250um multicore micro cable	12 - 144	2.0	LSZH	

900um bare fibre (HY) (RB)	900um bundled fibre cable	12	N/A	PVC	
Ribbon (RB)	250um ribbonised fibre cable	4,8,12	2.0	LSZH	

## Manufacturing Options – Terminations

Connector Type	Description	Fibre Counts	Ferrule Angle (°)	Colour Options	
OM1 MTP®	OM1 multimode array connector	12	0	Beige	
OM3/4MTP®Elite	Low loss OM3/4 multimode array connector	12 or 24	0	Aqua (OM3/4), Violet (OM4)	
SM MTP® Elite	Low loss OS1/2 multimode array connector	12 or 24	8	Mustard, Green	

MTP fanouts available with a range of connectivity options including: ж SC / SCA

- SC / SCA
- LC / LCA
- FC / FCA
- ST
- Wide range of legacy connectors

## Technical Specifications - MTP® Connectors

Applicable connectors	Multimode OM1 US CONEC MTP® 12F Multimode OM3/4 US CONEC MTP®Elite 12F & MTP®Elite 24F Singlemode US CONEC MTP® Elite 12F & MTP® Elite24F <sup>5</sup>			
Fibre mode	OM1	OM3	OM4	OS1/2
Maximum insertion loss (dB) single fibre	0.60	0.35 <sup>2,3</sup>	0.35 <sup>2,3</sup>	0.35 <sup>1,4,5</sup>
Typical insertion loss (dB) all fibres	0.20	0.10	0.10	0.10 <sup>5</sup>

Return Loss (dB)	N/A	>20	>20	>60
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1. As tested per ANSI/EIA-455-171 Method D3
2. As tested per ANSI/EIA-455-171 Method D1
3. As tested with encircled flux launch condition on 50um fiber and 850nm per IEC 61280-4-1
4. Compliant with proposed IEC 61755-3-31/GRADE B
5. Additional losses apply to singlemode US CONEC MTP® Elite 24F, contact OSA for details

## Technical Specifications – General

Applicable Connectors	SC, SCA, LC, LCA, ST, FC <sup>6</sup>			
Fibre Mode	OM1	OM3	OM4	OS1/2
Core/Cladding (um)	62.5/125	50/125	50/125	9/125
Fibre Conformance	TIA/EIA492AAAA	ITU G651.1	ITUG651.1	ITU G652.D <sup>7</sup>
Insertion Loss (max dB)	0.30	0.30	0.30	0.25
Insertion Loss (avg dB)	0.15	0.15	0.15	0.18
Insertion Loss (random)	0.20	0.20	0.20	0.18
Return Loss (dB)	N/A	N/A	N/A	APC:>60 PC:>50

6. Contact OSA for non standard connector specifications
7. G657.A1/2 available by request, conditions may apply

## Applicable Standards

<b>MTP Conformance</b>	<b>All MTP® connectors comply with IEC standard 61754-7 &amp; TIA/EIA 604-5 type MPO</b>
Insertion Loss	All SC, SCA, LC, LCA, ST, FC fanout assemblies comply with the loss requirements of ISO/IEC 61300-3-4, ISO/IEC 61300- 3-34 & AS/NZS ISO/IEC 14763.3
Return Loss	All singlemode assemblies comply with the return loss requirements set out in ISO/ IEC 61300-3-6
Cable Attenuation	Cable attenuation falls below levels specified in AS/NZS 3080
Testing	All testing is completed with reference grade patch leads and precision zirconia sleeve adapters and meet all requirements for testing in AS/NZS ISO/IEC 14763.3
Fibre Standards	Singlemode cabling meet ITU 652.D & TIA/EIA 492 CAAA requirements OM3 & OM4 cabling meet ITU 651.1 & TIA/EIA 492 AAAB requirements OM1 multimode cabling meet requirements set out in TIA/EIA 492 AAAA
Low Smoke Zero Halogen	All LSZH patch leads meet the requirements for flame and fire retardant properties, low smoke opacity and nil halogens as set out in IEC 60332-1, IEC 60332-3, IEC 1034 1/2, & IEC 60754-1/2

## Ordering Information - MTP® Trunk Assemblies

### MC M4 - MTPF - 10M - 12 - A - YL

CableStyle	CableMode	Connectors-End1&2	Length(m)	FibreCount	Method	Jacket Colour
MC: Round Micro Cable	S: OS1/2	MTPF:	12f MTP® Female		A: Method A	OR: Orange1
RMC: Ruggedised Double Jacket Micro Cablea	M1: OM1	MTPM:	12f MTP® Male		B: Method B	YL: Yellow2
SMC: Subgrouped Micro Cable	M3: OM3	MTPFM:	12f MTP® Female to Male		C: Method C	AQ: Aqua3 EV: Erica Violet4
HY: 900um	M4: OM4	M24F:	24f MTP® Female			
RB: Ribbon		M24M:	24f MTP® Male		1: OM1 Cable, 2: SM Cable 3: OM3 and OM4 Cable, 4: OM4 Cable	
		M24FM:	24f MTP® Female to Male			

## Ordering Information - MTP® Fanouts

### MC M4 - MTPM LC 10M - 12 - 5 - B

Cable Style	Cable Mode	Connectors-End1&2	Length (m)	Fibre Count	B/out End 2 (mm)	Length	Oversleeving End 2b
MC: Round Micro Cable	S: OS1/2	Array End 1			A: 150		A: 900um
		MTPF: 12f MTP® Female			2: 200		B: 2mm Standard
RMC: Ruggedised Double Jacket Micro Cable	M1: OM1 M3: OM3	MTPM: 12f MTP® Male			B: 250		K: 2mm Coloured
SMC: Subgrouped Micro Cable	M4: OM4	M24F: 24f MTP® Female			3: 300		
		M24M: 24f MTP® Male			C: 350		
HY: 900um		<b>Fanout End 2</b>			4: 400		
RB: Ribbon		SC: SC/UPC			D: 450		
		SCA: SC/APC			5: 500		
		LC: LC/UPC			E: 550		
		LCA: LC/APC			6: 600		
		ST: ST/UPC			F: 650		
		FC: FC/UPC			7: 700		
		FCA: FC/APC			G: 750		
					8: 800		
					H: 850		
					9: 900		
					I: 950		
					1: 1000		

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