

MTP/MPO Nano Ruggedised Trunk Cable Assemblies

The FirstLight™ Nano MTP/MPO trunk assembly features the small, compact size of Nano Cable providing a flexible though ruggedized product with the improved optical performance of Nano Cable structure. The MTP/MPO Nano trunk multicore cable assemblies facilitate rapid deployment of high density backbone cabling in data centres and other high fibre environments reducing network installation or reconfiguration time and cost. They are used to interconnect cassettes, panels or ruggedized MTP/MPO fanouts, spanning MDA, HDA and EDA zones. Our MTP/MPO trunks are built with highest quality components. Standard MTP/MPO as well low loss Elite versions are offered featuring low insertion loss for demanding high speed networks where power budgets are critical.



Features

- OS1/2, OM3, OM4 fibre grades
- 12 or 24 fibres
- LSZH, OFNP cable jacket
- Female (standard) and Male MTP/MPO connectors
- Polarity A (standard), B or C
- Factory terminated and tested
- **MTP/MPO Interface** MTP/MPO components feature superior optical and mechanical properties.
- **Optimised Performance** Low loss MTP/MPO Elite, discreet Premium connectors and OM4 fibre assures low insertion losses and power penalties in tight power budget high speed network environment.
- **High Density** Multifibre connector and compact dimension of ruggedised Microcable ease space in costly data centre environments.
- **Rapid Deployment** Factory terminated modular system saves installation and reconfiguration time during moves, adds and changes.
- **Reliability - 100% tested** Combination of high quality components and manufacturing quality control guarantees product to the highest standards.
- **Next Generation Network Proof** Emerging high speed protocol are going to use MTP/MPO interface - your cabling infrastructure remains unchanged.

Applications

- Data Centre Infrastructure
- Storage Area Network - Fibre Channel
- Parallel Optics
- Infiniband
- Emerging 40 and 100Gbps Protocols

Specification

ELEMENT	CHARACTERISTIC
Fibre	OS1/OS2, OM3, OM4 (ISO/IEC 60793)
Cable	Nanocable:12, 24 cores MAX OD: 12 cores 3mm / 24 cores 5mm Material: PA12 (LSZH) Colour: Black, Yellow, Aqua
Connectors	MTP® US Conec (IEC-61754-7 & EIA/TIA-604-5) Boot Colour: Black / Body Sleeve Colour: MM (Beige), MM Elite (Aqua), SM (Green), SM Elite (Yellow)
Operating Temperature	-40 ~ +80°C
Installation Temperature	-10 ~ +70°C

Connector Performance

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

Cable Performance

FIBRE TYPE (ISO/IEC 11801)	OS1/OS2	OM1	OM2	OM3	OM4
	≤ 0.38 Max (1310nm) ≤ 0.25	≤ 3.5 Max (850nm)	≤ 3.5 Max (850nm)	≤ 3.5 Max (850nm)	≤ 3.5 Max (850nm)
Attenuation Coefficient [dB/km]	Max (1550nm) ≤ 0.34 Typ (1310nm) ≤ 0.19 Typ (1550nm)	≤ 1.5 Max (1300nm) ≤ 2.9 Typ (850nm) ≤ 1.2 Typ (1300nm)	≤ 1.5 Max (1300nm) ≤ 2.7 Typ (850nm) ≤ 0.9 Typ (1300nm)	≤ 1.5 Max (1300nm) ≤ 2.7 Typ (850nm) ≤ 0.9 Typ (1300nm)	≤ 1.5 Max (1300nm) ≤ 2.7 Typ (850nm) ≤ 0.9 Typ (1300nm)
Minimum Bandwidth: Overfilled Launch [Mhz-km]	N/A	≥ 200 (850nm) ≥ 500 (1300nm)	≥ 500 (850nm) ≥ 500 (1300nm)	≥ 1500 (850nm) ≥ 500 (1300nm)	≥ 3500 (850nm) ≥ 500 (1300nm)

FIBRE TYPE (ISO/IEC 11801)
OS1/OS2
OM1
OM2
OM3
OM4
Minimum Bandwidth:

Laser Effective Modal Bandwidth [Mhz-km]

N/A

N/A

N/A

≥ 2000 (850nm)

≥ 4700 (850nm)

Standards Compliance

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

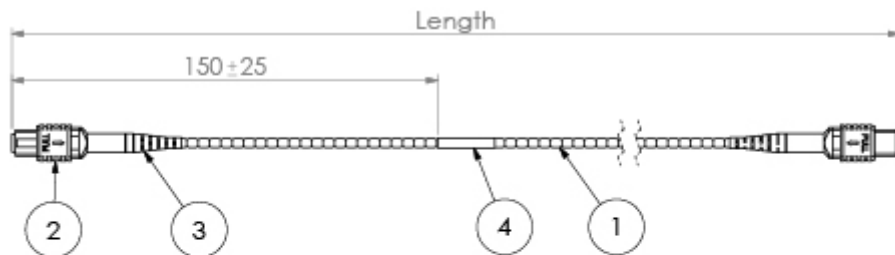
Ordering Information

PRE	Fibre Count		Connector End A			Connector End B			Fibre Type		Cable Construction		Cable Length		Jacket Type		Polarity
	12	24	MTPF	Standard	MTP® Female	MTPF	Standard	MTP® Female	A2	G.657 A2	NCR	Nano Cable Ruggedised	1	1 metre	LSZH Standard	A	
	24	24	MTPEF	Elite®	MTP® Female	MTPEF	Elite®	MTP® Female	OM3	OM3			5	5 meter	PL	OFNP	B
			MTPM	Standard	MTP® Male	MTPM	Standard	MTP® Male	OM4	OM4			10	10 meter			C
			MTPEM	Elite®	MTP® Male	MTPEM	Elite®	MTP® Male					xx	Specify			
			M2F	Standard	MTP® Female 24 fibre ferrule	M2F	Standard	MTP® Female 24 fibre ferrule									
			M2EF	Elite®	MTP® Female 24 fibre ferrule	M2EF	Elite®	MTP® Female 24 fibre ferrule									
			M2M	Standard	MTP® Male 24 fibre ferrule	M2M	Standard	MTP® Male 24 fibre ferrule									
			M2EM	Elite®	MTP® Male 24 fibre ferrule	M2EM	Elite®	MTP® Male 24 fibre ferrule									

Example Part Number

PRE	24	MTPF	OM3	NCR	20		A
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PRE24MTPFOM3NCR20A has created a 20 metre 24 core OM3 multifibre MTP® Nano cable ruggedised assembly, MTP® female to MTP® female with LSZH jacket, colour Aqua, polarity A.

Technical Drawing


No.	Description	Qty.
1	3mm 12 Fibre Nano Cable (See Sheet 2)	1
2	12 Fibre MTP Connector (See Sheet 2)	2
3	MTP 3mm Connector Boot (Black)	2
4	Serial Number Label (Wrap Around)	1