

MTP®/MPO Double Jacket MicroCable Trunk Assemblies

MTP®/MPO double jacket micro cable trunks are designed and manufactured for high demand network applications. They feature standard or Elite MTP®/MPO connectors and a micro cable double jacket structure. Due to their compact size and up to 24-fibre count they are an ideal solution for high density data centre infrastructure.

Features

- High Precision MTP®/MPO connector
- Double jacket structure (cable outer diameter 4.5mm)
- Low loss performance
- Up to 24 fibres
- Available in OS1/2 G652D, G.657A1, G.657A2, OM3, OM4, OM5 Fibre Grades - OM1 and OM2 available upon request
- Option for LSZH, OFNP or OFNR cable Jacket
- Option for A, B or C polarity
- 100% factory terminated and tested
- Optional Pulling Element
- Saves installation and reconfiguration time

Applications

- Data Centers
- 40/100G applications
- Storage Area Network- Fibre Channel
- Parallel Optics
- InfiniBand
- The internal connector application in fibre equipment

General Specifications

ELEMENT	CHARACTERISTIC
Fibre	OS1/OS2, G.657A1, G.657A2, OM1, OM2, OM3, OM4, OM5
Cable Type	Double jacket (cable outer diameter 4.5mm)
Fibre Count	8/12/16/24
Connector Type	Male, Female
MTP® Terminations	MTP® 12 Fibre Ferrules, Boot Colour: Black, Body Sleeve Colour: MM (Beige), MM Elite (Aqua), OM5 (Lime Green), SM (Green), SM Elite (Yellow)
Cable Diameter	8 Core Cable Jacket OD Max 4.5 ± 0.2 mm, 12 Core Cable Jacket OD Max 4.5 ± 0.2 mm, 16 Core Cable Jacket OD Max 4.5 ± 0.2 mm, 24 Core Cable Jacket 4.5 ± 0.2 mm
Crush Resistance	Short term: 500N/100mm Long term: 150N/100mm
Cable Tensile Strength	Short term: 450N Long term: 220N
Cable Strength Member	Aramid Yarn
Temperature Range	-20 °C to +60°C
Tail Protection	No- Standard, High Crush Resistant Tubing when pulling element
Pulling Eye	Customised

Technical Specifications

Optical Properties	Singlemode	Multimode
Insertion Loss (dB)	Low loss ≤ 0.35 (Typical: ≤ 0.25)	Low loss ≤ 0.35 (Typical: ≤ 0.2)
	Standard Loss ≤ 0.75 (Typical: ≤ 0.4)	Standard Loss ≤ 0.6 (Typical: ≤ 0.35)
Return Loss (dB)	PC ≥ 50; APC ≥ 60	PC ≥ 20; APC ≥ 40
Durability	≤ 0.2 dB typical change, 50 matings	
Wavelength (nm)	Singlemode: 1310/1550, Multimode: 850/1300	

Note: IL&RL Test method: IEC 61300-3-4 insertion B.

Cable Performance

Fibre Type (ISO/IEC 11801)	OS1/OS2	OM1	OM2	OM3	OM4	OM5
Attenuation Coefficient (dB/km)	≤ 0.50 Max (1310nm)	≤ 3.5 Max (850nm)	≤ 3.5 Max (850nm)	≤ 3.5 Max (850nm)	≤ 3.5 Max (850nm)	≤ 3.5 Max (850nm)
	≤ 0.40 Max (1550nm)	≤ 1.5 Max (1300nm)	≤ 1.5 Max (1300nm)	≤ 1.5 Max (1300nm)	≤ 1.5 Max (1300nm)	≤ 1.5 Max (1300nm)
	≤ 0.36 Typ (1310nm)	≤ 3.0 Typ (850nm)	≤ 3.0 Typ (850nm)	≤ 3.0 Typ (850nm)	≤ 3.0 Typ (850nm)	≤ 3.0 Typ (850nm)
	≤ 0.22 Typ (1550nm)	≤ 1.0 Typ (1300nm)	≤ 1.0 Typ (1300nm)	≤ 1.0 Typ (1300nm)	≤ 1.0 Typ (1300nm)	≤ 1.0 Typ (1300nm)
Minimum Bandwidth: Overfilled Launch (Mhz-km)	N/A	≥ 200 (850nm)	≥ 500 (850nm)	≥ 1500 (850nm)	≥ 3500 (850nm)	≥ 3500 (850nm)
		≥ 500 (1300nm)	≥ 500 (1300nm)	≥ 500 (1300nm)	≥ 500 (1300nm)	≥ 1850 (953nm) ≥ 500 (1300nm)
Minimum Bandwidth: Laser Effective Modal Bandwidth (Mhz-km)	N/A	N/A	N/A	≥ 2000 (850nm)	≥ 4700 (850nm)	≥ 4700 (850nm) ≥ 2470 (953nm)

Standards Compliance

- TIA/EIA-568-D.3 and ISO/IEC 11801
- EIA/TIA 604-5
- IEC 61754-7
- IEC 61753-1
- GR 1435-CORE
- RoHS Compliant

Ordering Information

	Connector A		Connector B		Fibre Type		Fibre Count		Length		Polarity and Extra Options	
	Code	Description	Code	Description	Code	Description	Code	Description	Code	Description	Code	Description
OTM	20	MTP® Male	20	MTP® Male	9	G.652.D	08	8	01	1m	A	Polarity A
	22	MTP® Female	22	MTP® Female	A1	G.657A1	12	12	05	5m	B	Polarity B
	24	MTP® Male Elite	24	MTP® Male Elite	A2	G.657A2	16	16	10	10m	C	Polarity C
	26	MTP® Female Elite	26	MTP® Female Elite	1	OM1	24	24	-	LSZH
	28	MTP® Male 24F Elite	28	MTP® Male 24F Elite	2	OM2			xx	Specify	R	OFNR
	30	MTP® Female 24F Elite	30	MTP® Female 24F Elite	3	OM3					P	OFNP
	32	MTP® Male 24F	32	MTP® Male 24F	4	OM4						
	34	MTP® Female 24F	34	MTP® Female 24F	5	OM5						
	21	MPO Male	21	MPO Male								
	23	MPO Female	23	MPO Female								
	25	MPO Male Elite	25	MPO Male Elite								
	27	MPO Female Elite	27	MPO Female Elite								
	33	MPO Male 24F	33	MPO Male 24F								
	35	MPO Female 24F	35	MPO Female 24F								
	29	MPO Male 24F Elite	29	MPO Male 24F Elite								
	31	MPO Female 24F Elite	31	MPO Female 24F Elite								

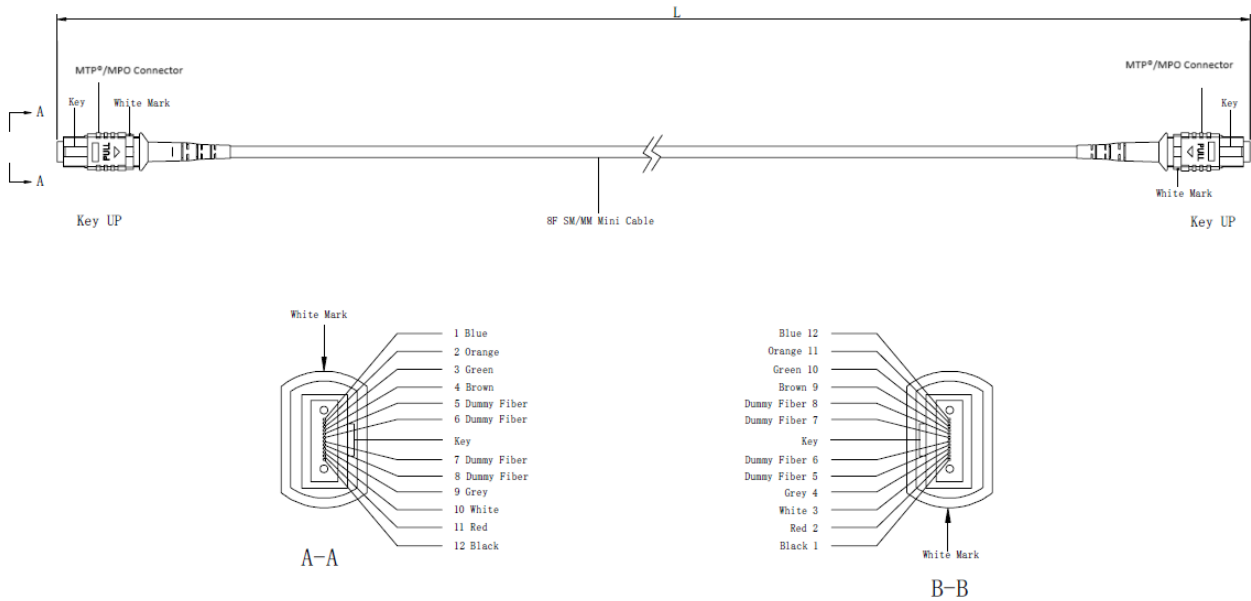
Example Part Number

OTM	-	22	22	3	12	-	30	-	A
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MTP® Female – MTP® Female 12-Fibre OM4 Double Jacket Trunk 30m - Method A Polarity

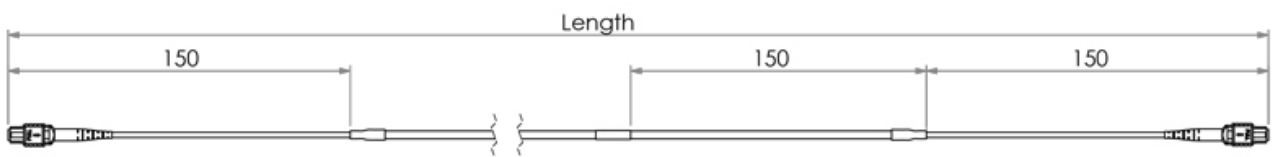
Technical Drawing

8 Fibre Trunk Double Jacket

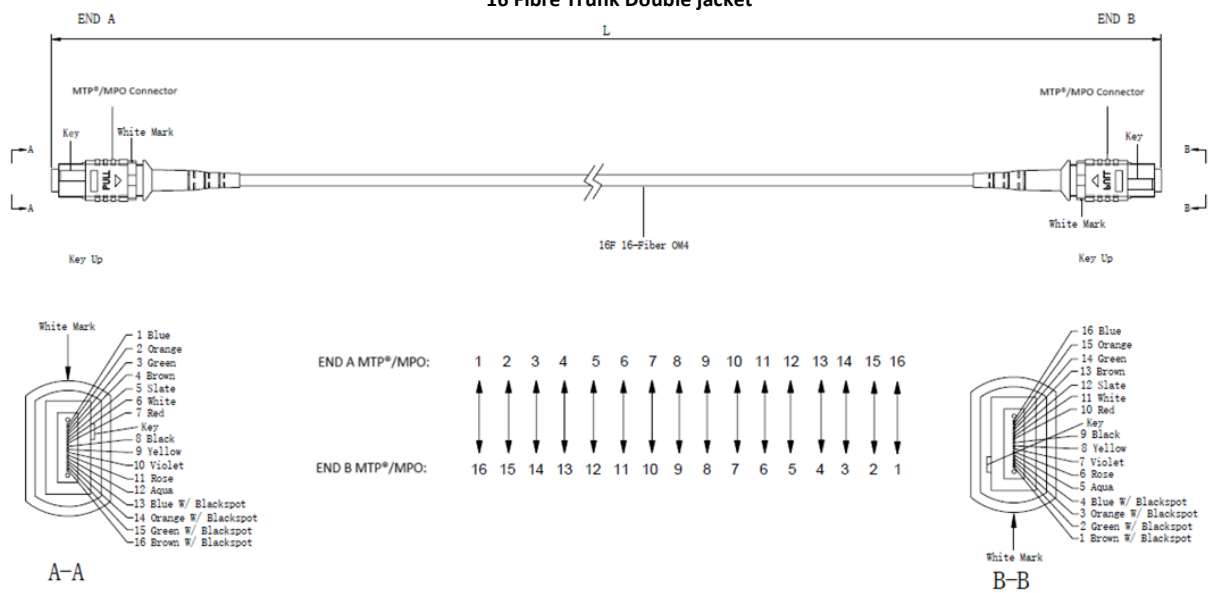


Length (L)	Tolerance (MM)
L ≤ 0.5M	+80/-0
0.5M < L ≤ 5M	+120/-0
5M < L ≤ 10M	+150/-0
10M < L ≤ 30M	+250/-0
30M < L ≤ 100M	+1NL/-0
L > 100M	+1.5NL/-0

12 Fibre Trunk Double jacket 4.5mm OD

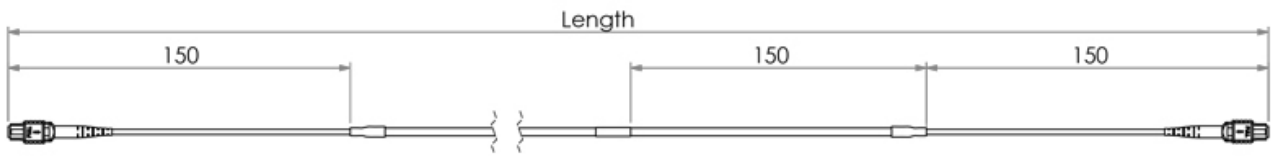


16 Fibre Trunk Double jacket

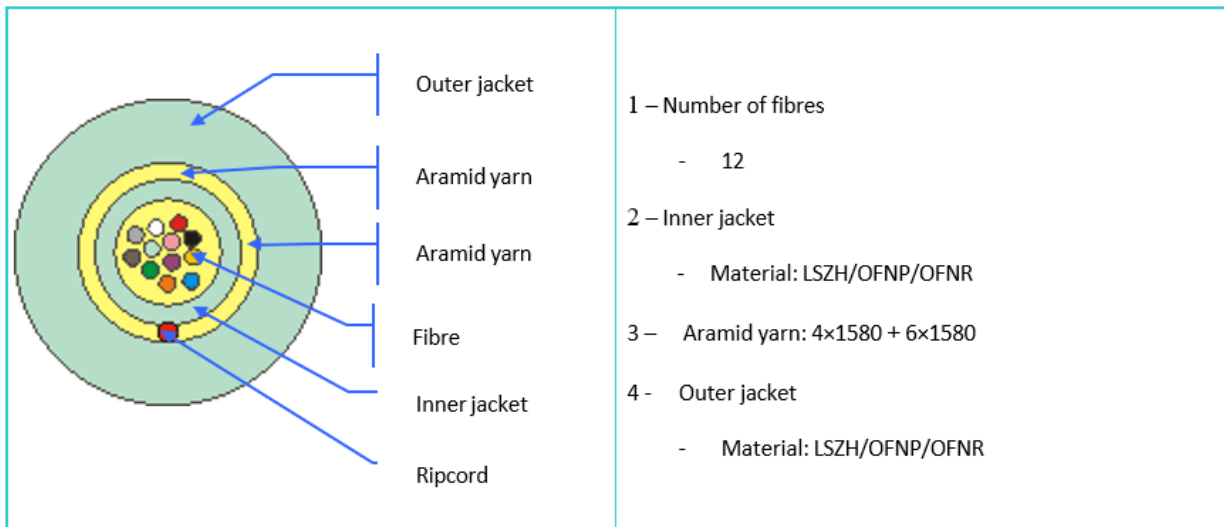


Length (L)	Tolerance (MM)
L ≤ 0.5M	+80/-0
0.5M < L ≤ 5M	+120/-0
5M < L ≤ 10M	+150/-0
10M < L ≤ 30M	+250/-0
30M < L ≤ 100M	+1NL/-0
L > 100M	+1.5NL/-0

24- Fibre Trunk Double jacket 4.5mm OD



Typical Cable Structure



Additional Images



Pulling Elements



Net-tube pulling eye



Corrugated pipe pulling element

Spool Packaging



Paper Spool