

MTP®/MPO Loose Tube Trunk Assemblies

Up to 144 fibre loose tube optical cable assemblies designed and manufactured for high density applications that require MTP®/MPO interface. They are available in singlemode (G.652.D, G.657) or multimode (OM1, OM2, OM3, OM4, OM5) fibre grades while there is an option for LSZH, PE, OFNR or OFNP outer jacket.

Features

- Up to 144 fibres – ideal for high density applications
- Low loss performance
- Available in OS1/2, G.657A1, G.657A2, OM1, OM2, OM3, OM4, OM5 fibre grades
- Available with Multifiber MTP/MPO and standard optical connectors
- Suitable for internal/external applications using LSZH or PE cable jacket
- Option for OFNP or OFNR jacket types
- 100% factory terminated and tested
- Option for loose Tube, dry loose tube or Loose Tube Armoured cable
- Available as MTP®/MPO or MTP®/MPO to discrete connector fanout assembly
- Saves installation and reconfiguration time
- Compact Size

Applications

- Data Centers
- Telecommunication applications
- Internal and Backbone Applications

Specifications

ELEMENT	CHARACTERISTIC
Fibre	OS1/OS2, G.657A1, G.657A2, OM1, OM2, OM3, OM4, OM5 (IEC 60793)
Tail Dimensions	3mm Simplex Staggered Configuration (MTP®/MPO)
MTP® Connectors	MTP® 12 Fibre Ferrules US Conec, Boot Colour: Black, Body Sleeve Colour: MM (Beige), MM Elite (Aqua), OM5 (Lime Green), SM (Green), SM Elite (Yellow)
Other Terminations	SC, LC, ST, FC, E2000
Cable Construction	Single Loose Tube (LT) 2-24 Cores (IEC 60794), Multi Loose Tube up to 48 Cores, Single Loose Tube STA Armoured up to 48 Cores, Multi Loose Tube STA Armoured up to 48 Cores, Jacket Material: LSZH, PE, OFNP, OFNR
Cable Diameter	Single LT (Up to 12 Cores) OD MAX: 6.5 ± 0.3mm, Single LT (Up to 24 Cores) OD MAX: 6.7 ± 0.3mm, Multi LT (Up to 48 Cores) OD MAX: 9.7 ± 0.3mm
Crush Resistance	Single LT 1000N/100mm, Multi LT 3000N/100mm
Cable Tensile Strength	Single LT (Short/Long) 1000N/500N, Multi LT (Short/Long) 1500N/500N
Cable Strength Member	Single LT - E-Glass, Multi LT - FRP/E-Glass
Storage Temperature	-20 ~ +60°C
Installation Temperature	-20 ~ +60°C
Operating Temperature	-20 ~ +60°C
Tail Protection	Crush Resistance Tube - OD MAX 25mm (up to 4x3mm Tails)
Pulling Element	RPS Reusable Sock
Gland	PG 13.5 End A/B (up to 4x3mm Tails)
Packaging	Length ≤ 100 - Heavy Duty PE bag / Length > 100m - Drum (up to 24xFibres)

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

OPTICAL PERFORMANCE*	MM PREMIUM	MM STANDARD	SM PREMIUM	SM STANDARD	CONFORMANCE
IL Max/Master (Acceptance)	0.15dB	0.25dB	0.15dB	0.25dB	IEC 61300-3-4
Ave/Master	0.08dB	0.15dB	0.12dB	0.18dB	IEC 61300-3-4
Ave/Random	0.10dB	0.20dB	0.12dB	0.18dB	IEC61300-3-34
RL (Min Acceptance)	NA	NA	55/65**	55/65**	IEC61300-3-6

* Connector Performance table does not refer to E2A terminations ** UPC/APC

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 (1300nm)	≥ 500 (850nm) ≥ 500 (1300nm)	≥ 1500 (850nm) ≥ 500 (1300nm)	≥ 3500 (850nm) ≥ 500 (1300nm)	≥ 3500 (850nm) ≥ 1850 (953nm) ≥ 500 (1300nm)
	N/A	N/A	N/A	≥ 2000 (850nm)	≥ 4700 (850nm)	≥ 4700 (850nm) ≥ 2470 (953nm)

Standards Compliance

- TIA/EIA-568-C.3 and IEC 11801
- ISO/IEC 60793 and ISO/IEC 60794
- ISO/IEC 61753, IEC 61754 and IEC 61755
- ISO/IEC 60332-1, IEC 61034-1/2 and IEC 61754-1/2
- Compliant to Directive 2002/95/EC (RoHS) and REACH SvHC

Ordering Information

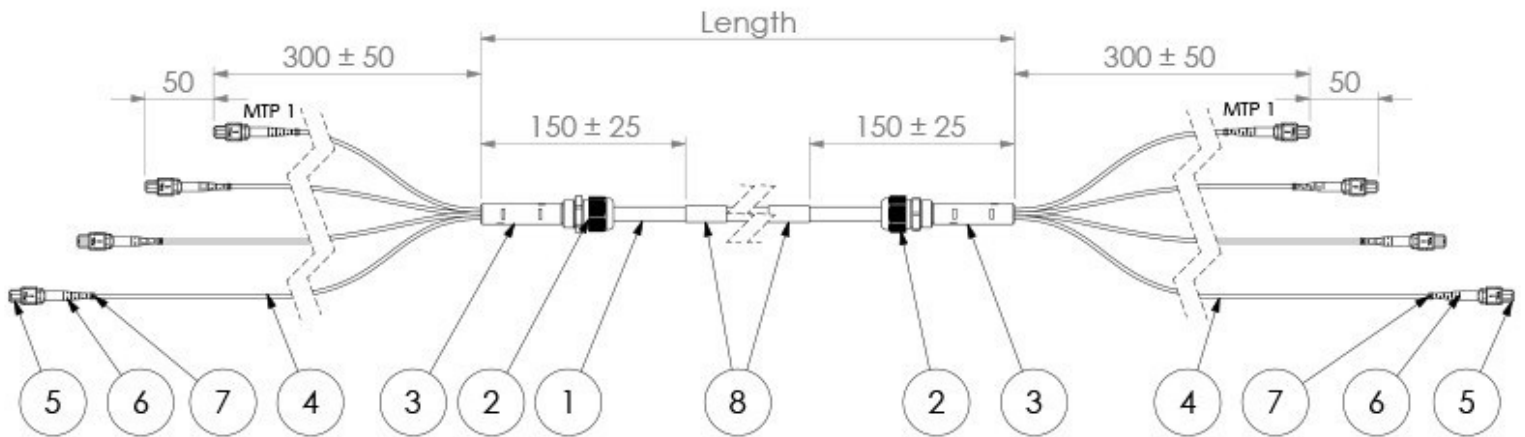
	Connector A		Connector B		Fibre Type		Cable Type		Fibre Count		Length		Extra Options	
	Part No.	Connector	Part No.	Connector	Core	Plastic	Code	Description	Core	Plastic	Code	Length	Option	Description
OP	20	MTP® Male	00	LC	9	G.652.D	LR	Loose Tube Cable	12	12	01	1m	-	LSZH
	22	MTP® Female	01	LCA	A1	G.657A1	SR	Loose Tube STA Cable	24	24	02	2m	R	OFNR
	24	MTP® Male Elite	02	SC	A2	G.657A2			48	48	03	3m	P	OFNP
	26	MTP® Female Elite	03	SCA	1	OM1			72	72	05	5m	E	PE
	28	MTP® Male 24F Elite	04	ST	2	OM2			96	96	10	10m	A	Polarity A (use it only with MTP®)
	30	MTP® Female 24F Elite	05	FC	3	OM3			144	144	B	Polarity B (use it only with MTP®)
	32	MTP® Male 24F	06	FCA	4	OM4					xx	Specify	C	Polarity C (use it only with MTP®)
	34	MTP® Female 24F	07	E2	5	OM5								
	21	MPO Male	08	E2A										
	23	MPO Female	20	MTP® Male										
	25	MPO Male Elite	22	MTP® Female										
	27	MPO Female Elite	24	MTP® Male Elite										
	33	MPO Male 24F	26	MTP® Female Elite										
	35	MPO Female 24F	28	MTP® Male 24F Elite										
	29	MPO Male 24F Elite	30	MTP® Female 24F Elite										
	31	MPO Female 24F Elite	32	MTP® Male 24F										
			34	MTP® Female 24F										
			21	MPO Male										
			23	MPO Female										
			25	MPO Male Elite										
		27	MPO Female Elite											
		33	MPO Male 24F											
		35	MPO Female 24F											
		29	MPO Male 24F Elite											
		31	MPO Female 24F Elite											

Example Part Number

OP	-	20	20	3	LR	12	-	70
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 MTP® Male – MTP® Male 12 Core Pre-terminated Loose Tube Cable LSZH OM₃ 70m

Technical Drawing



No.	Description	Qty.
1	Loose Tube Cable	1
2	Compression Gland without Nut **	2
3	Breakout Module *	2
4	3mm Furcation Tubing (See Options)	-
5	MTP Connector	-
6	MTP Round Connector Boot (Black)	-
7	Tail Identification Marker (C-Clip)	-
8	Serial Number Label (Wrap Around)	2

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