

MTP / MPO Cabling System

Optec's MTP / MPO harness assemblies are used to fanout the 8-, 12- or 24-fiber MTP connectors terminated on trunk cables into LC connectors. It is used to transitioning from trunk backbone assemblies to fiber rack system. The ruggedized 2mm or 3mm furcation legs provide a more rugged solution than products with 900um legs, in turns provide excellent installation convenience and longer lifespan.



Features and Applications

Deploy into the transition between trunk backbone assemblies and fiber rack system Wide employment of high density infrastructure

MTP/MPO on one end in 8-, 12- or 24-fiber interface, with LC single-fiber connectors on another end Provides an efficient pathway space in operation

LC Single-fiber connector available in forms of Simplex or Duplex channeling

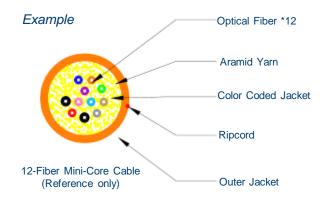
High Flexibility with reducing installation time and cost

Customized furcation length to cater for different installation situations

Enhances installation convenience

Ruggedized furcation legs: Round fanout kit with 2.0 mm or 3.0 mm legs to single-fiber connectors For space saving installation and longer lifespan

Cable Structure Illustration







Cable Mechanical Specifications

	FIBER	ADVENTUM		MINI-CORE		
	TIDEK	OFNP	OFNR	OFNP	OFNR	LSZH
Minimum Bend Radius	8	9.9 cm	9.7 cm	6.0 cm	6.0 cm	6.0 cm
(Installation)	12	9.9 cm	9.7 cm	6.0 cm	6.0 cm	6.0 cm
Minimum Bend Radius	8	6.6 cm	6.5 cm	3.0 cm	3.0 cm	3.0 cm
(Long Term)	12	6.6 cm	6.5 cm	3.0 cm	3.0 cm	3.0 cm
Maximum Tensile	8	1335N	1335N	150N	150N	150N
(Installation)	12	1335N	1335N	150N	150N	150N
Maximum Tensile	8	400N	400N	80N	80N	80N
(Long Term)	12	400N	400N	80N	80N	80N

Cable Physical Specifications

FIBER		ADVE	NTUM	MINI-CORE			
	TIDEK	OFNP	OFNR	OFNP	OFNR	LSZH	
Cable Outer Diameter	8	6.6 mm	6.5 mm	3.0 mm	3.0 mm	3.0 mm	
Cable Outer Diameter	12	6.6 mm	6.5 mm	3.0 mm	3.0 mm	3.0 mm	
Weight	8	48.0 kg / km	45.0 kg / km	14.0 kg / km	14.0 kg / km	14.0 kg / km	
weight	12	48.0 kg / km	45.0 kg / km	14.0 kg / km	14.0 kg / km	14.0 kg / km	
Operating Temperature	12~144	-40°C to +75°C -40°C to +75°C		-20°C to +70°C	-20°C to +70°C	-20°C to +70°C	

Fiber Performance Specifications

	ADVENTUM				MINI-CORE			
	OS1 Singlemode	OM1 Multimode	OM2 Multimode	*OM3 Multimode	OS1 Singlemode	OM1 Multimode	OM2 Multimode	*OM3 Multimode
	(9/125mm)	(62.5/125mm)	(50/125mm)	(50/125mm 10 Gig)	(9/125mm)	(62.5/125mm)	(50/125mm)	(50/125mm 10 Gig)
Wavelength (nm)	1310/1550	850/1300	850/1300	850/1300	1310/1550	850/1300	850/1300	850/1300
Attenuation (db/km)	0.5/0.4	3.5/1.0	3.0/1.0	3.0/1.0	0.4/0.3	3.5/1.5	3.5/1.5	3.5/1.5
Bandwidth (MHz•km)	N/A	200/500	950/500	2000/500	N/A	\geq 300 / \geq 300	≥200 / ≥300	≥1500 / ≥500

* OM3 10 Gig transmission distance at 850/1300 is 300 meters



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Cable Assemblies Technical Information

Polarity

All Optec's MTP / MPO cable assemblies in this document are having **Straight Polarity** (A-to-A, B-to-B). Cross Polarity (A-to-B, B-to-A) or Pair Flip polarity is available, please contact our sales team for details.

Performance of Assemblies

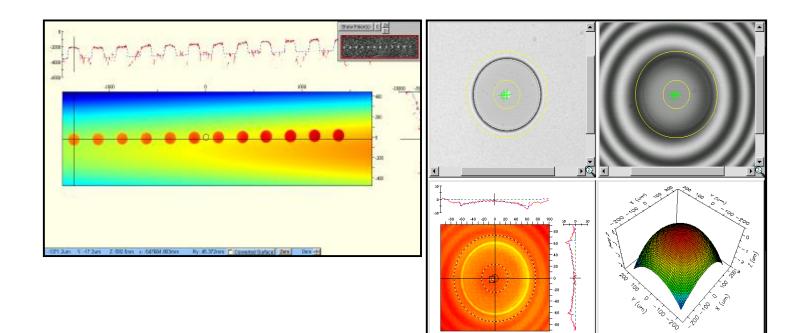
MTP / MPO Termination

Optical Performance **							
Туре	Single (APC	emode polish)	Multimode (PC / Flat Polish)				
Performance	Standard	Elite Low Loss	Standard	Elite Low Loss			
Maximum Insertion Loss	≤ 0.75dB	≤ 0.35dB	≤ 0.60dB	≤ 0.35dB			
Return Loss	≥ 5(DdB	N/A				
Operating Temperature	-40°C 1	o 80°C	-40°C to 80°C				
Test Wavelength	131	0nm	850nm				

Generic Connector Termination

Optical Performance **						
Туре	Single	emode	Multimode			
Performance	UPC	APC	PC			
Maximum Insertion Loss	≤ 0.3 dB	≤ 0.3 dB	≤ 0.3 dB			
Typical Insertion Loss	0.2 dB	0.2 dB	0.2 dB			
Return Loss	≥ 55 dB	≥ 65 dB	≥ 25 dB			
Operating Temperature -40°C to 80°C -40°C to 80°C						
Test Wavelength	1310nm 850nm					
Geometric performance						
Manufactured to Telcordia standard GR-326-CORE						

** Above performance refers to Optec standard grade performance, flexible specification is available to fit for different installation needs, please contact our professional sales team for details

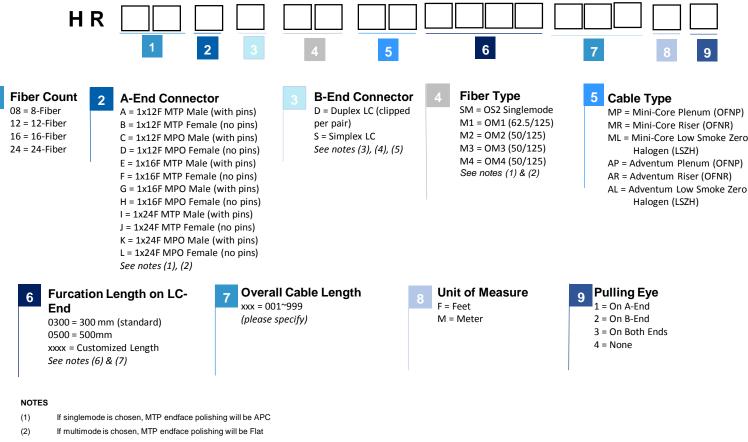




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MTP / MPO to LC Harness

Order Information



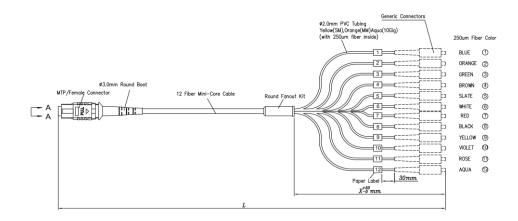
- (3) If singlemode is chosen on MTP/MPO end, LC connector polishing will be UPC. Please specify and contact our sales team if you require specified polishing type
- (4) If multimode is chosen on MTP/MPO end, LC connector polishing will be PC. Please specify and contact our sales team if you require specified polishing type
- (5) Connectors other than the above are available, please specify and contact our sales team
- (6) Maximum furcation length on B-end is 1000mm
- (7) Furcation length tolerance: +50/-0 mm

Assembly Structure Illustration

Example:

Ordering code: HR-12-B-S-SM-MR-0500-002-M-4

Item Description: Harness Assembly, 12-Fiber, MTP Female (no pin) to Simplex LC, Singlemode, Mini-Core Riser (OFNR), Furcation Length 500mm, Overall Length 2 Meters, No Pulling Eye



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