

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

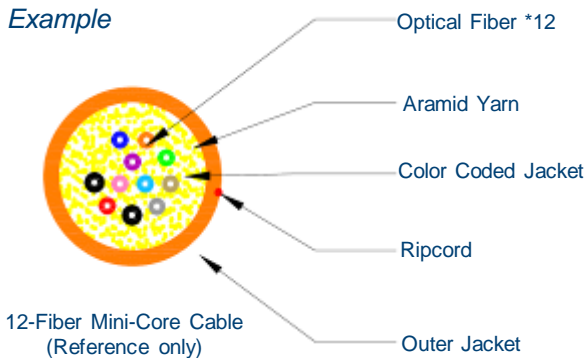
Enhances installation convenience

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

Example



Primary Coded Fiber (250µm)

Blue	White	
Orange	Black	
Green	Yellow	
Brown	Purple	
Grey	Pink	
Red	Aqua	

Fiber Count

8-Fiber
12-Fiber
24-Fiber

Cable Jacket

SM- OS2 -Yellow	
MM- OM1 & OM2 - Orange	
OM3 - Aqua	
OM4 - Violet	

Cable Mechanical Specifications

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

Cable Physical Specifications

	FIBER	ADVENTUM		MINI-CORE		
		OFNP	OFNR	OFNP	OFNR	LSZH
Cable Outer Diameter	8	6.6 mm	6.5 mm	3.0 mm	3.0 mm	3.0 mm
	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
	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 (9/125mm)	OM1 Multimode (62.5/125mm)	OM2 Multimode (50/125mm)	*OM3 Multimode (50/125mm 10 Gig)	OS1 Singlemode (9/125mm)	OM1 Multimode (62.5/125mm)	OM2 Multimode (50/125mm)	*OM3 Multimode (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	≥ 300 / ≥ 300	≥ 200 / ≥ 300	≥ 1500 / ≥ 500

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

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 **				
Type	Singlemode (APC polish)		Multimode (PC / Flat Polish)	
	Standard	Elite Low Loss	Standard	Elite Low Loss
Maximum Insertion Loss	≤ 0.75dB	≤ 0.35dB	≤ 0.60dB	≤ 0.35dB
Return Loss	≥ 50dB		N/A	
Operating Temperature	-40°C to 80°C		-40°C to 80°C	
Test Wavelength	1310nm		850nm	

Generic Connector Termination



Optical Performance **			
Type	Singlemode		Multimode
	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

