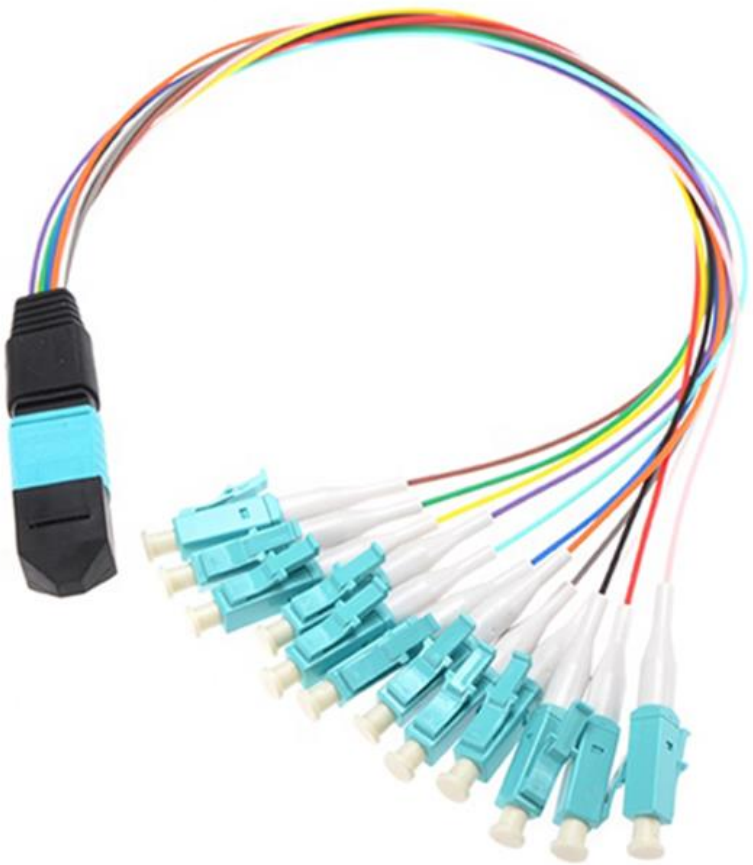
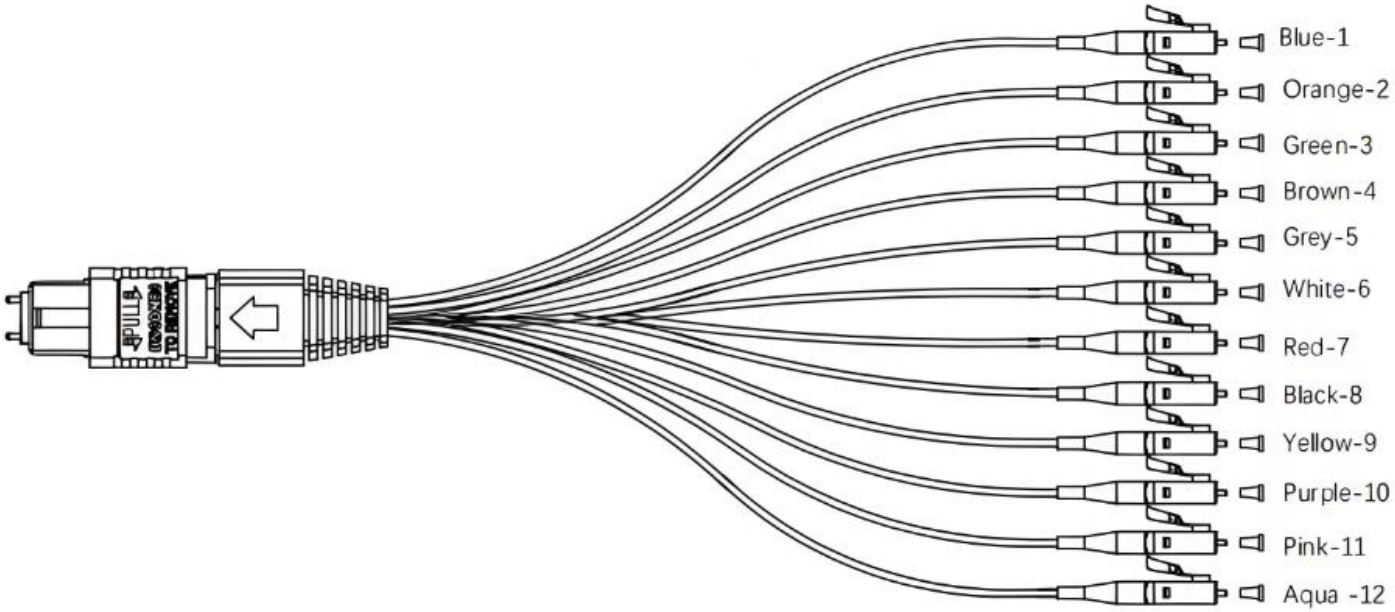
Fiber Optic Patch Cord 12 cores MPO/MTP Male to 0.9mm LC/PC MM OM3 Corning® Fiber LSZH/OFNR/OFNP 0.3m

UnitekFiber specializes in manufacturing high-quality fanout MPO/MTP-LC fiber patch cords, which are widely deployed in structured cabling systems and fiber patch panel connections. We offer a full range of fiber options including single-mode OS2 and multimode OM1/OM2/OM3/OM4/OM5 to satisfy diverse network deployment needs.

Our 0.3-meter fanout MPO/MTP-LC patch cords are available in 8-core, 12-core, and 24-core configurations, and feature premium cable jackets in LSZH, OFNR, and OFNP grades to comply with stringent safety and installation requirements. Specifically engineered for high-density data center applications to ensure efficient, space-saving, and reliable optical connectivity.



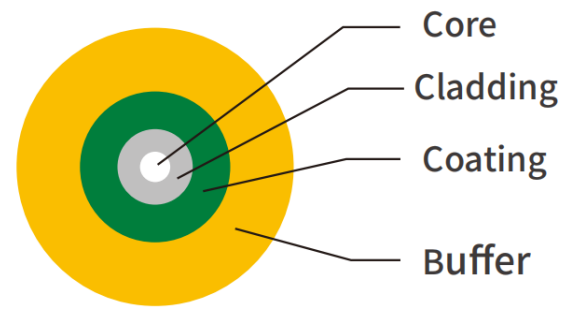
Drawings：

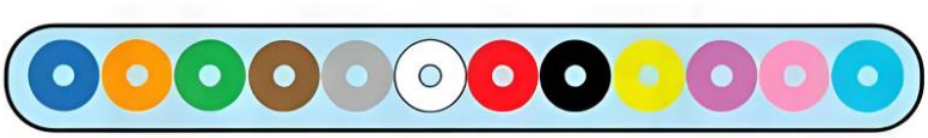


Connector Technical Parameter

Model		MM
Connector A : MPO/MTP		
Insertion Loss	Standard	≤0.70dB
	Elite Low Loss	≤0.35dB
Return Loss		PC≥25dB
Test Wavelength		850nm&1300nm
Connector B: LC		
Insertion Loss	Standard	≤0.30dB
Return Loss		PC≥35dB
Test Wavelength		850nm&1300nm

Cable Structure Diagram





12-fiber ribbon fiber cable

Cable Dimensions and Constructions

Items		Descriptions
Optical Fiber	Fiber count	12
	Color	Optical Fiber Chromatography
Sheath	Material	LSZH/OFNR/OFNP
	Color	Blue、Orange、Green、Brown、Grey、White、Red、Black、Yellow、Purple、Pink、Aqua
	Diameter	0.9±0.05mm

Mechanical and Environmental Characteristics

Items	Descriptions	
Tensile	short-term	6N
	long-term	2N
Min.Bend Radius（Dynamic）	mm	50
Min.Bend Radius（Static）	mm	30
Operating Temperature	- 2 0 ℃-+ 6 0 ℃	
Temperature Range	- 2 0 ℃-+ 6 0 ℃	

Fiber Attenuation

Corning® ClearCurve® OM3 Optical Fibers

Product Information

Standards Compliance

	ClearCurve® OM3 fiber
IEC 60793-2-10 T	Type A1-OM3 fiber
TIA	492AAAC-B

Optical Specifications

Bandwidth

	High Performance EMB* (MHz•km)	Overfilled Modal Bandwidth** (MHz•km)	
Corning optical fiber	850 nm	850 nm	1300 nm
ClearCurve® OM3 fiber	2000	1500	500

*Ensured via minEMBc, per TIA/EIA 455-220A and IEC 60793-1-49, for high performance laser-based systems.

**OFL BW, per TIA/EIA 455-204 and IEC 60793-1-41.

Attenuation

Wavelength (nm)	Maximum Value (db/km)
850	≤ 2.3
1300	≤ 0.6

No point discontinuity greater than 0.2dB. Attenuation at 1380 nm does not exceed the attenuation at 1300 nm by more than 3.0 dB/km.

Macrobend Loss

Mandrel Radius (nm)	Number of Turns	Induced Attenuation (dB) 850nm	1300nm
15	2	≤ 0.1	≤ 0.3
7.5	2	≤ 0.2	≤ 0.3

Numerical Aperture

0.200 ± 0.015

Dimensional Specifications

Glass Geometry*

Core Diameter	50.0 ± 2.5 µm
Cladding Diameter	125.0 ± 1.0 µm
Core-Clad Concentricity	≤ 1.5 µm
Core Non-Circularity	≤ 5%

*Improved geometry available upon request.

Coating Geometry

Coating Diameter	242 ± 5µm
Coating-Cladding Concentricity	< 12µm

Environmental Specifications

Environmental Test	Test Condition	Induced Attenuation 850 nm and 1300 nm (dB/km)
Temperature Dependence	-60°C to +85°C*	≤ 0.10
Temperature Humidity Cycling	-10°C to +85°C and up to 98% RH	≤ 0.10
Water Immersion	23°C ± 2°C	≤ 0.20
Heat Aging	85°C ± 2°C	≤ 0.20
Damp Heat	85°C at 85% RH	≤ 0.20

Operating Temperature Range: -60°C to +85°C

*Reference temperature = +23°C

Mechanical Specifications

Proof Test

The entire fiber length is subjected to a tensile stress ≥ 100 kpsi (0.69 GPa). Higher proof test levels are available.

Length

Fiber lengths available up to 17.6 km/spool.

Performance Characterizations

Characterized parameters are typical values.

Effective Group Index of Refraction (n_{eff})	850 nm: 1.482 1300 nm: 1.477
Fatigue Resistance Parameter (n_d)	20
Coating Strip Force	Dry: 0.6 lbs. (2.7 N) Wet: 14 days in 23°C water soak: 0.6 lbs. (2.7 N)
Chromatic Dispersion	
Zero Dispersion Wavelength (λ_0):	1297 nm ≤ λ_0 ≤ 1315 nm
Zero Dispersion Slope (S_0):	≤ $4(-103)/(840\ (1-(\lambda_0/840)^4))$ ps/(nm²•km)
Spectral Attenuation (Typical Fiber)