

## MPO/MTP Trunk Cable Specification



### Application

- 1.Data communication network.
- 2.Optical System Access network.
- 3.Storage area networking fiber channel.
- 4.High density architectures.

### Features

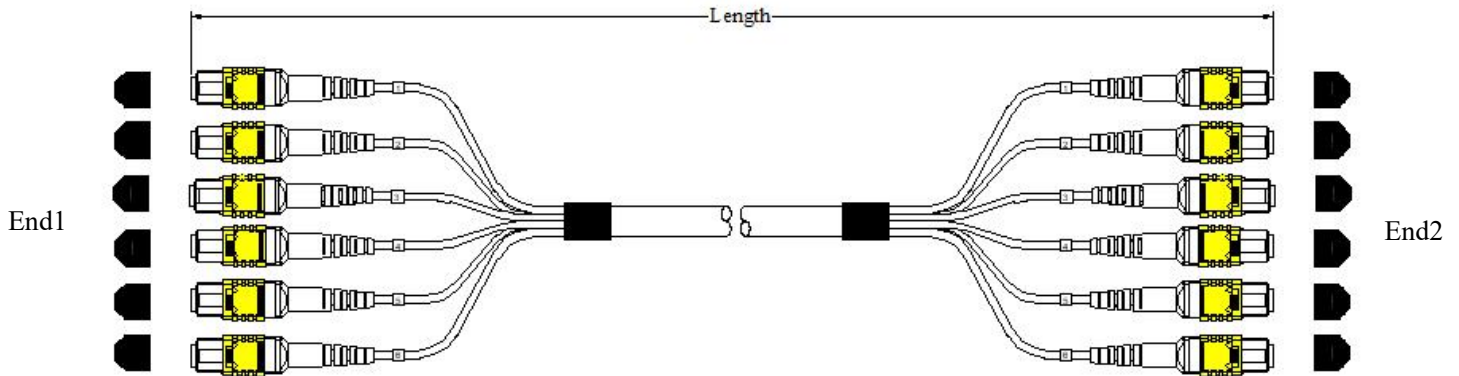
- 1.100% pre-terminated and tested in factory to ensure transfer performance.
- 2.Rapid configuration and networking, reduce installation time.
- 3.Supports 40G and 100G network applications.
- 4.Cable Jacket material: LSZH, OFNR, OFNP available.
- 5.Supports up to 12F, 24F, 48F, 72F, 96F, 144F, customized products are available.

### Connector Types

Type	Reference	Note	
MPO	IEC 61754-7	Single mode	APC: Green connectors (Standard ) APC: Yellow connectors (Elite)
		Multimode	PC: Aqua Connectors
MTP	IEC 61754-7	Single mode	APC: Green connectors (Standard ) APC: Yellow connectors (Elite)
		Multimode	PC: Aqua Connectors

## Dimensional Diagrams

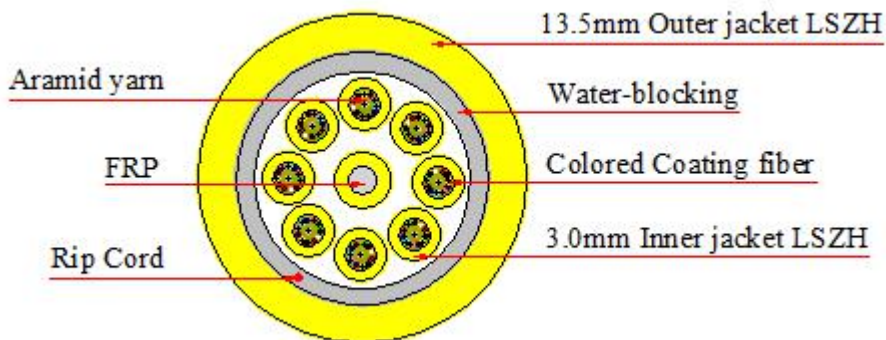
1. MPO/MTP Trunk Cable (Method A, Method B, Method C).



## Patch cord versions

Jumper tolerance requirement	
Overall length (L) (M)	length of tolerance (CM)
$0 < L \leq 20$	+10/-0
$20 < L \leq 40$	+15/-0
$L > 40$	+0.5%L/-0

## Cable Structure



## Cable Parameters

Fiber account	OD(mm)	Nominal Weight (kg/km)	Max.tensile Strength(N)		Max.Crush Resistance (N/100mm)		Min.Bending Radius(mm)	
			Short-term	Long-term	Short-term	Long-term	Dynamic	Static
72	11.5±0.3	126	1000	300	1000	300	20D	10D
96	13.5±0.5	178	1000	300	1000	300	20D	10D
144	17.5±0.5	285	1000	300	1000	300	20D	10D

## Optical Characteristics

Item	Parameter				Reference
	Single mode		Multimode		
	Standard	Elite	Standard	Elite	
Insertion loss	Typical $\leq$ 0.30dB Max $\leq$ 0.75dB	Typical $\leq$ 0.15dB Max $\leq$ 0.35dB	Typical $\leq$ 0.50dB Max $\leq$ 0.25dB	Typical $\leq$ 0.10dB Max $\leq$ 0.35dB	IEC 61300-3-34
Return loss	$\geq$ 50dB (PC) $\geq$ 60dB (APC)	$\geq$ 55dB (PC) $\geq$ 65dB (APC)	$\geq$ 30dB(PC)	$\geq$ 30dB(PC)	IEC 61300-3-6

## End-Face Geometry

Ferrule parameter		IEC-61300--3-30	
		Minimum	Maximum
ROC	ROC-X:	2000mm	$\infty$
	ROC-Y:	50mm	$\infty$
Angle	Angle-X:	-0.2°	0.2°
	Angle-Y:	PC	0.2°
		APC	7.85°
Fiber Hight:		1000nm	3500nm
Max.DH.All:		-300nm	300nm
DH.Adj:		-300nm	300nm
DH.Ave Fiber:		-300nm	300nm
Core Dip:	MM	-200nm	300nm
	SM	N/A	N/A
Ferrule height		7.9mm	8.05mm

## End-Face Quality (SM)

Zone	Range ( $\mu$ m)	Scratches	Defects	Reference
A: Core	0 to 25	None	None	IEC 61300-3-35:2015
B: Cladding	25 to 115	None	None	
C: Adhesive	115 to 135	None	None	
D: Contact	135 to 250	None	None	
E: Rest of ferrule		None	None	

## End-Face Quality (MM)

Zone	Range (μm)	Scratches	Defects	Reference
A: Core	0 to 65	None	None	IEC 61300-3-35:2015
B: Cladding	65 to 115	None	None	
C: Adhesive	115 to 135	None	None	
D: Contact	135 to 250	None	None	
E: Rest of ferrule		None	None	

## Mechanical Characteristics

Test	Conditions	Reference
Endurance	500 matings	IEC 61300-2-2
Vibration	Frequency: 10 to 55Hz, Amplitude: 0.75mm	IEC 61300-2-1
Cable retention	400N (main cable); 50N (connector part)	IEC 61300-2-4
Strength of coupling mechanism	80N for 2 to 3mm cable	IEC 61300-2-6
Cable torsion	15N for 2 to 3mm cable	IEC 61300-2-5
Fall	10 drops, 1m drop height	IEC 61300-2-12
Static lateral load	1N for 1h (main cable); 0.2N for 5min (ranch part)	IEC 61300-2-42
Cold	-25°C, 96h duration	IEC 61300-2-17
Dry heat	+70°C, 96h duration	IEC 61300-2-18
Change of temperature	-25°C to +70°C, 12 cycles	IEC 61300-2-22
Humidity	+40°C at 93%, 96h duration	IEC 61300-2-19