



MPO/MTP® TRUNK CABLE



FEATURES

- MTP® (US Conec) brand or MPO standard compliant multifiber connector
- Connector's design complies with IEC 61754-7 standards
- 4, 8, 12 and 24-fiber with single mode and multimode options
- Polarity method A, B or C
- LSZH, OFNP, OFNR cable jacket types selection
- Rapid deployment, high density and high reliability
- Extremely low insertion loss and high return loss
- Telcordia GR-1435-CORE issue 2 compliant
- RoHS and REACH materials compliant

OPTICAL CHARACTERISTICS (applied to 12c MPO/MTP®)

Item	Parameter		Reference
	Standard SM	Standard MM	
Insertion loss typ.	≤ 0.1dB	≤ 0.05dB	IEC 61300-3-4
Insertion loss max.	≤ 0.25dB	≤ 0.15dB	
Return loss	≥ 65dB (APC); ≥ 50dB (UPC)	≥ 35dB	IEC 61300-3-6

END-FACE GEOMETRY (applied to 12c MPO/MTP®)

Item	Parameter	Reference
Minus Coplanarity	≤ 200nm	IEC 61755-3-31:2015
Ferrule Surface X-Angle	-0.075° to +0.075°	
Ferrule Surface Y-Angle	7.8° to 8.2°	
Fiber Height	1300nm to 1800nm	
Fiber Differential Height-All	≤ 200nm	
Fiber Differential Height-Adj.	≤ 150nm	
Fiber Tip Spherical Radius	≥ 1mm	
Ferrule Surface X-Radius	≥ 2000mm	
Ferrule Surface Y-Radius	≥ 50mm	
Core Dip (for MM)	0 to 100nm	
Geometry Limit	≤ 10	

END-FACE QUALITY (SM)

Zone	Range (µm)	Scratches	Defects	Reference
A: Core	0 to 25	None	None	IEC 61300-3-35:2015
B: Cladding	25 to 115	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	

CONNECTOR TYPES

Type	Reference	Note
MPO/MTP®	IEC 61754-7	Boot Color: Black Body Sleeve: MM (Beige, Aqua, Magenta), SM (Green, Yellow)

MECHANICAL CHARACTERISTICS

Item	Parameter
Mating cycles	△IL ≤ 0.2dB (for 500 mates)

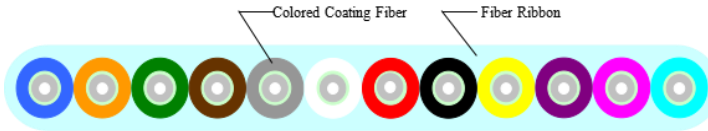


ENVIRONMENTAL CHARACTERISTICS

Item	Parameter
Operating temperature	-10°C to +60°C
Storage temperature	-20°C to +70°C

CABLE SPECIFICATIONS (2c to 12c RIBBON CABLE)

Cable Structure

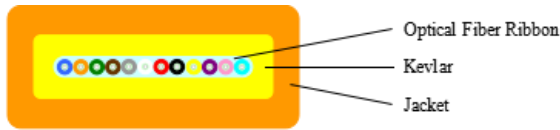


Cable Parameters

Fiber Count	Width (mm)	Thickness (mm)	Horizontal Space Between Adjacent Fibers (mm)	Horizontal Space Between End Fibers (mm)	Planarity (mm)
2	≤ 0.700	≤ 0.400	≤ 0.280	≤ 0.280	—
4	≤ 1.220	≤ 0.400	≤ 0.280	≤ 0.835	≤ 35
6	≤ 1.770	≤ 0.400	≤ 0.280	≤ 1.385	≤ 35
8	≤ 2.300	≤ 0.400	≤ 0.300	≤ 1.920	≤ 35
10	≤ 2.850	≤ 0.400	≤ 0.300	≤ 2.450	≤ 35
12	≤ 3.400	≤ 0.400	≤ 0.300	≤ 2.950	≤ 35

CABLE SPECIFICATIONS (2c to 12c FLAT CABLE)

Cable Structure



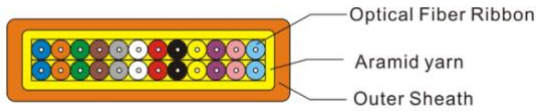
Cable Parameters

Fiber count	Cable dimension (mm)	Cable weight (kg/km)	Tensile strength (N)		Crush resistance (N/100mm)		Min. bend radius (mm)		Range of temperature (°C)
			Long Term	Short Term	Long Term	Short Term	Dynamic	Static	
2	2.5×3.5	7.3	80	200	200	500	50	30	-20 to 60
4	2.5×3.5	7.4	80	200	200	500			
6	2.5×4.0	8.2	80	200	200	500			
8	2.5×4.5	9.3	80	200	200	500			
12	2.5×5.0	10.0	80	200	200	500			

Fiber count	4	6	8	12
Outer dimension D*H (mm) ± 0.3mm	3.5*2.5	3.8*2.5	4.5*2.5	5.0*2.5
Nominal weight (kg/km)	12	13	15	17
Max. tensile strength (N)	Short-term	200		
	Long-term	80		
Min. bending radius (mm)	Dynamic	35H		
	Static	25H		
Crush resistance (N/100mm ²)	500			



CABLE SPECIFICATIONS (24c FLAT CABLE)

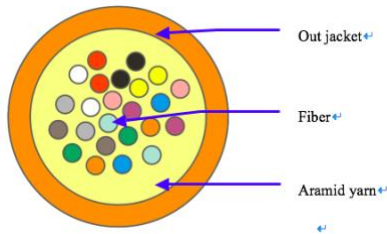


Cable Parameters

Fiber Count	24	
Outer dimension D*H (mm)	(5.0±0.5)*(2.9±0.3)	
Nominal weight (kg/km)	16	
Max. Tensile Strength(N)	Short-term	150
	Long-term	80
Min. bending radius (mm)	Dynamic	50
	Static	35

CABLE SPECIFICATIONS (2c to 24c ROUND CABLE)

Cable Structure

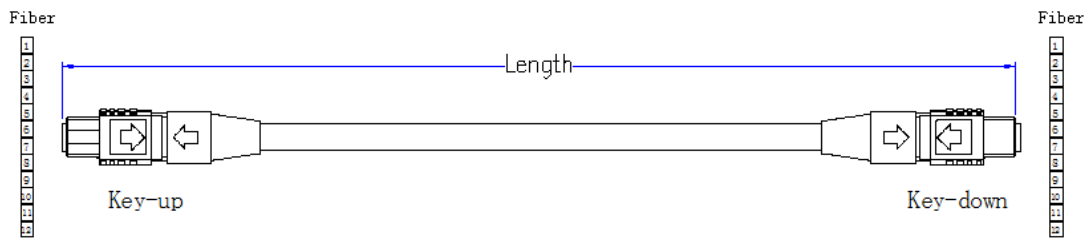


Cable Parameters

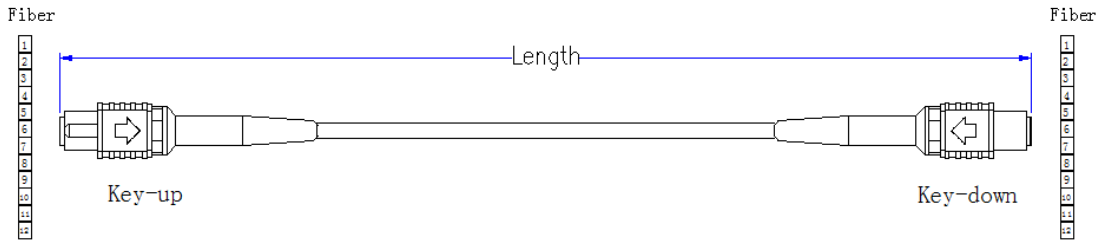
Fiber count	2 to 24		
Outer diameter (mm)	2.95±0.1		
Thickness (mm)	0.50±0.05		
Max. tensile strength (N)	Short-term	200	
	Long-term	100	
Max. crush resistance (N/100mm ²)	Short-term	500	
	Long-term	150	
Min. bending radius (mm)	Short-term	20D	
	Long-term	10D	
Material	PVC	LSZH	OFNP
Nominal weight (kg/km)	7.2	7.6	8.1
Color	Customized		
Strength members	Aramid yarn		
Temperature (°C)	Storage or transportation		
	-20 to 70		

CONFIGURATION DIAGRAMS

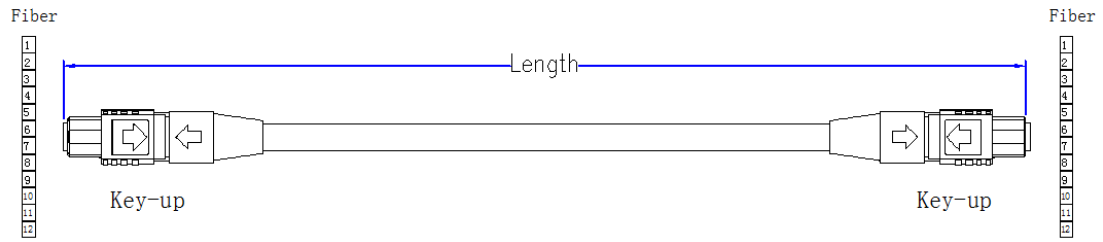
12c Type A (for flat cable and ribbon cable): Key up/Key down



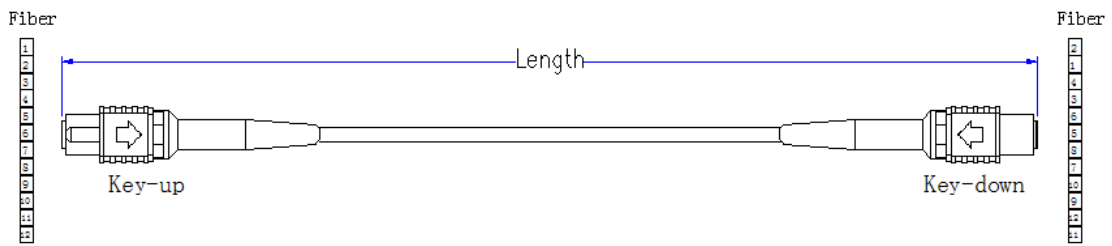
12c Type A (for round cable): Key up/Key down



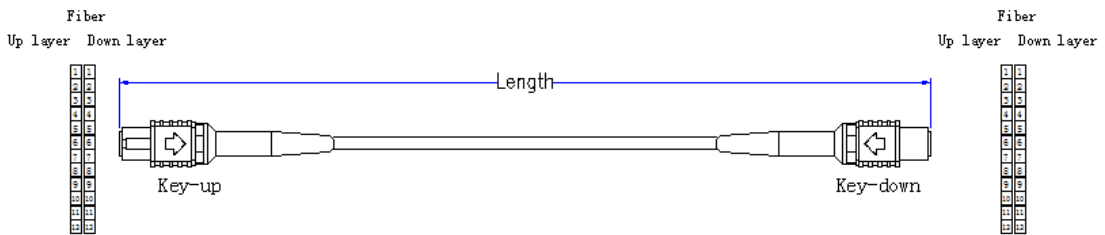
12c Type B (for flat cable, ribbon cable and round cable): Key up/Key up



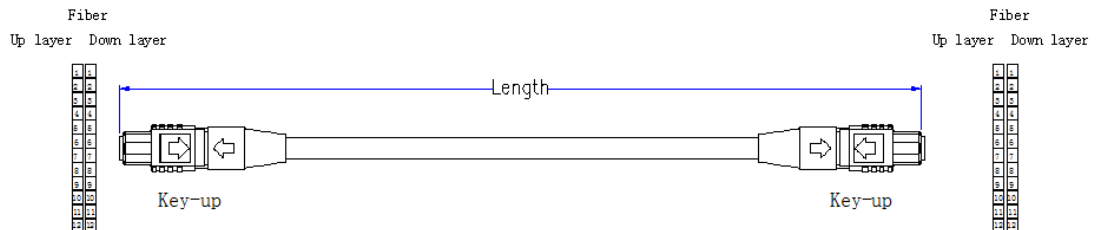
12c Type C (for round cable): Key up/Key down



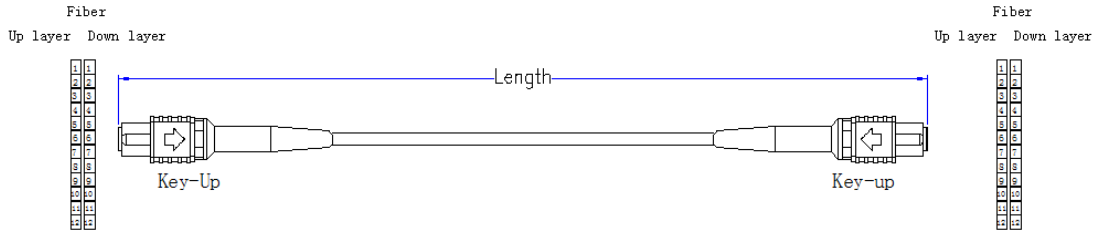
24c Type A (for round cable): Key up/Key down



24c Type B (for flat cable and ribbon cable): Key up/Key up



24c Type B (for round cable): Key up/Key up



ORDER INFORMATION

MPOTC	①	②	③	④	⑤	⑥	⑦	⑧	⑨
① [Connector A]	1: MTP/UPC (Female)	2: MPO/UPC (Female)	3: MTP/APC (Female)	4: MPO/APC (Female)	5: MTP/UPC (Male)	6: MPO/UPC (Male)	7: MTP/APC (Male)	8: MPO/APC (Male)	
② [Connector B]	1: MTP/UPC (Female)	2: MPO/UPC (Female)	3: MTP/APC (Female)	4: MPO/APC (Female)	5: MTP/UPC (Male)	6: MPO/UPC (Male)	7: MTP/APC (Male)	8: MPO/APC (Male)	
③ [Polarity]	1: Type A	2: Type B	3: Type C						
④ [Fiber type]	1: G652D	2: G657A1	3: G657A2	4: G657B3	5: OM1	6: OM2	7: OM3	8: OM4	
⑤ [Fiber count]	1: 4	2: 8	3: 12	4: 24					
⑥ [Cable type]	1: Bare ribbon fiber	2: Ribbon cable	3: Round cable						
⑦ [Jacket type]	1: No jacket	2: PVC	3: LSZH	4: OFNR	5: OFNP				
⑧ [Jacket color]	1: Yellow	2: Orange	3: Aqua	4: Magenta	5: Customized	6: Bare			
⑨ [Cable length]	00D5: 0.5m	01D5: 1.5m	0001: 1m	0010: 10m	0100: 100m				