

MTP®/MPO Jumpers

They support parallel fiber applications from 10G to 800G and are an ideal choice for high-density, high-speed network cabling in data centers



MTP®/MPO Jumpers

MTP®/MPO jumpers are pre-terminated fiber optic cables rigorously tested and designed for high-performance fiber optic connections. They use low insertion loss MTP®/MPO connectors which can reduce signal loss during transmission to support the seamless migration to higher data rates in the data center when used with MTP® trunk cables. The jumpers usually connect pre-terminated cassettes or panels in main and horizontal cabling and can also be directly connected to the equipment through the MTP®/MPO connector. They support parallel fiber applications from 10G to 800G and are an ideal choice for high-density, high-speed network cabling in data centers.

Features

- US Conec MTP® Connector with Optimal 0.35/0.20dB Low Insertion Loss
- Bend Insensitive Fiber Allows Tighter Cable Bends for Slack Storage and Routing
- Color-Coded Connector Boots for Easy Identification
- Available in OS2, OM3, OM4, and OM5 Fiber
- MTP®-12 Available in 8, 12, 24, 36, 48, 72, 96, 144, and 288 Fiber Counts
- MTP®-24 Available in 24, 48, 72, 96, 144, and 192 Fiber Counts
- Available in Plenum (OFNP), Riser (OFNR), LSZH and Dual Rated (OFNR/LSZH) Cable Jacket
- Available in Female (Pinless) and Male (Pinned)
- Available in Type A, Type B, and Type C Standard Polarity
- Pulling Eyes are Provided As An Option To Protect the Fiber Ends During Installation

Standards Compliance

Component	Governing Body	Standard Code
Cable	EIA/TIA	568
Single Mode Fiber	ITU-T	G.657-A1
Connectors	IEC	61754-7
Connectors	TIA	604-5
Multi-Fiber Connectors	Telcordia	GR-1435-CORE
Fiber and Connectors	RoHS	2011/65/EU and (EU)2015/863

Transmission Distance

Multimode fiber backbone cabling distances for 10 Gbps, 40 Gbps, and 100 Gbps applications.

Backbone Application	Standard Specified Max. Distance		
	OM3	OM4	OM5
10GBASE-SR (850nm)	300m (984ft)	400m (1312ft)	400m (1312ft)
40GBASE-SR4	100m (328ft)	150m (492ft)	150m (492ft)
40G BiDi	100m (328ft)	150m (492ft)	200m (689ft)
40GBASE-eSR4	300m (984ft)	400m (1312ft)	400m (1312ft)
40G SWDM4	240m (787ft)	350m (1148ft)	440m (1444ft)
100GBASE-SR10	100m (328ft)	150m (492ft)	150m (492ft)
100GBASE-SR4	70m (230ft)	100m (328ft)	100m (328ft)
100GBASE-eSR4	200m (689ft)	300m (984ft)	300m (984ft)
100G SWDM4	75m (246ft)	100m (328ft)	150m (492ft)

Construction

Connector Type		
Connector A		MTP®, MTP® PRO, MPO
Connector B		MTP®, MTP® PRO, MPO
Connector Gender		Female, Male
Connector Brand		US Conec (MTP®/MTP® PRO)
Polish Type		UPC, APC
Cable Jackets		
OS2 9/125 µm		Yellow
OM5 50/125 µm		Lime Green
OM4 50/125 µm		Magenta
OM3 50/125 µm		Aqua
Connectors		
OS2 9/125 µm		Green
OM5 50/125 µm		Lime Green
OM4 50/125 µm		Aqua (UPC), Green (APC)
OM3 50/125 µm		Aqua
Connector Boots		
MTP®-8		Gray
MTP®/MPO-12		Black
MTP®-16		Black
MTP®-24		Red

	OS2 9/125 μm	OM5 50/125 μm	OM4 50/125 μm	OM3 50/125 μm
MTP®-8	-	-		
MTP®-12				
MTP®-16		-		-
MTP®-24				
MTP® PRO-12		-		
MPO-12		-		-

Mechanical Characteristics

Fiber Count	Outside Diameter		Tensile Load	
	Trunk	Breakout	Long-term	Short-term

MTP®/MPO-12 Jumpers

8 Fibers	3.0mm	3.0mm	80N	240N
12 Fibers	3.0mm	3.0mm	80N	240N
24 Fibers	7.2mm	3.0mm	80N	240N
36 Fibers	9.3mm	3.0mm	80N	240N
48 Fibers	9.5mm	3.0mm	80N	240N
72 Fibers	11.7mm	3.0mm	80N	240N
96 Fibers	12.0mm	3.0mm	80N	240N
144 Fibers	17.3mm	3.0mm	80N	240N
288 Fibers	23.0mm	3.0mm	80N	240N

MTP®-16 Jumpers

16 Fibers	3.0mm	3.0mm	80N	240N
32 Fibers	7.2mm	3.0mm	80N	240N

MTP®-24 Jumpers

24 Fibers	3.0mm	3.0mm	80N	240N
48 Fibers	7.2mm	3.0mm	80N	240N
72 Fibers	9.3mm	3.0mm	80N	240N
96 Fibers	9.5mm	3.0mm	80N	240N
144 Fibers	11.7mm	3.0mm	80N	240N
192 Fibers	12.0mm	3.0mm	80N	240N

Fiber Count	Outside Diameter		Tensile Load	
	Trunk	Breakout	Long-term	Short-term
MTP®-12 Armored Jumpers				
8 Fibers	6.0mm	3.0mm	200N	400N
12 Fibers	6.0mm	3.0mm	200N	400N
24 Fibers	13.2mm	3.0mm	200N	400N
36 Fibers	14.0mm	3.0mm	200N	400N
48 Fibers	16.2mm	3.0mm	200N	400N
72 Fibers	21.4mm	3.0mm	200N	400N
96 Fibers	24.6mm	3.0mm	200N	400N
144 Fibers	29.5mm	3.0mm	200N	400N

Note:

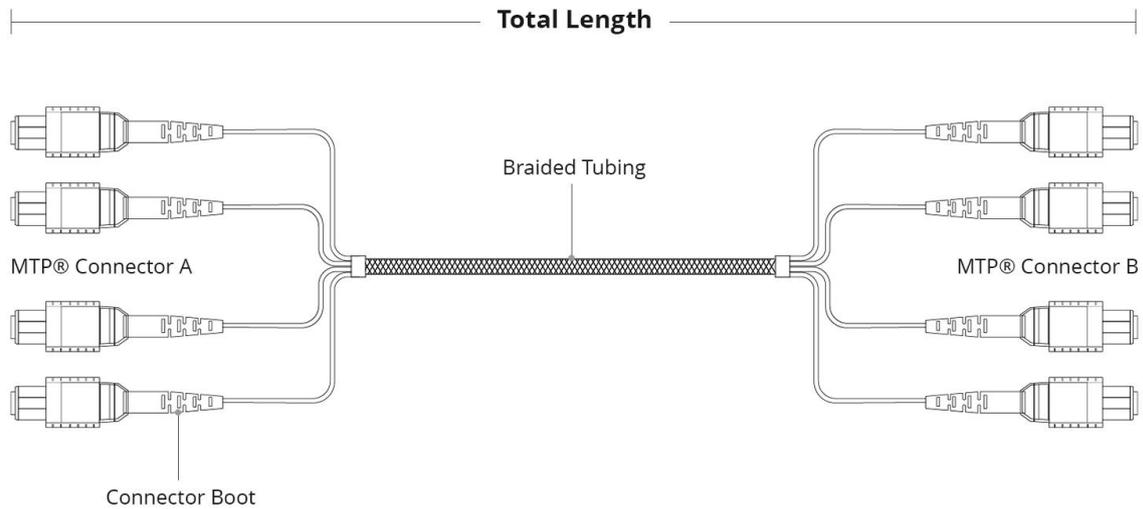
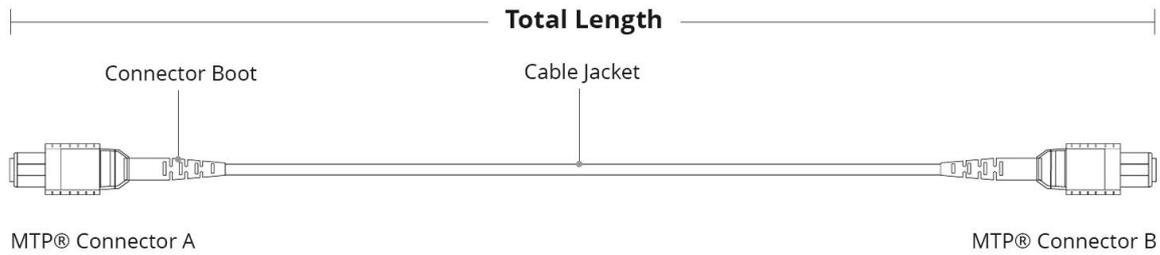
- As for MTP®/MPO-12 cables, the 24 fibers indicate 2 bundles (2x 12F). And as for MTP®/MPO-24 cables, the 48 fibers indicate 2 bundles (2x 24F). The 'bundle' means a combination of several fibers.
- When the cable length exceeds or equals 1 meter, the cables of 2-24 bundles can customize the breakout length to 0.3m equal breakout.
- When the cable length exceeds or equals 1.3 meters, the cables of 2-24 bundles can customize the breakout length as 0.5m equal breakout.

Performance Characteristics

	OS2	OM5	OM4	OM3
Polarity	Type A	Type A	Type A	Type A
	Type B	Type B	Type B	Type B
	Type C	Type B	Type C	Type C
Fiber Core Diameter	9/125µm	50/125µm	50/125µm	50/125µm
Wavelength	1310/1550nm	850/1300nm	850/1300nm	850/1300nm
Operating Temperature	Plenum (OFNP)/Dual Rated (OFNR/LSZH): -10 to 60°C (14 to 140°F) Riser (OFNR)/LSZH: -10 to 70°C (14 to 158°F)			
Storage Temperature	Plenum (OFNP)/Dual Rated (OFNR/LSZH): -10 to 70°C (14 to 158°F) Riser (OFNR)/LSZH: -20 to 70°C (-4 to 158°F)			
MTP® Jumpers				
Glass Fiber	G.657.A1	Bend Insensitive Fiber	Bend Insensitive Fiber	Bend Insensitive Fiber
Minimum Bend Radius	10mm	7.5mm	7.5mm	7.5mm
Cable Jacket	Plenum (OFNP)	Plenum (OFNP)	Plenum (OFNP)	Plenum (OFNP)
	Dual Rated (OFNR/LSZH)		Dual Rated (OFNR/LSZH)	Dual Rated (OFNR/LSZH)
	LSZH		LSZH	LSZH
	Riser (OFNR)		Riser (OFNR)	Riser (OFNR)
Insertion Loss	≤0.35dB	≤0.35dB	≤0.35/0.20dB	≤0.35/0.20dB
Return Loss	≥60/65dB	≥20/27dB	UPC≥20/27dB	UPC≥20/27dB
			APC≥20/45dB	APC≥20/45dB
Attenuation (1310/1550nm)	≤0.35dB/km at 1310nm ≤0.21dB/km at 1550nm	-	-	-
Attenuation (850/1300nm)	-	≤2.3dB/km at 850nm ≤0.6dB/km at 1300nm	≤2.3dB/km at 850nm ≤0.6dB/km at 1300nm	≤2.3dB/km at 850nm ≤0.6dB/km at 1300nm
MTP® Armored Jumpers				
Glass Fiber	G.657.A1	-	Bend Insensitive Fiber	-
Minimum Bend Radius	10mm	-	10mm	-
Cable Jacket	Plenum (OFNP)	-	Plenum (OFNP)	-
	LSZH		LSZH	
Insertion Loss	≤0.35dB	-	≤0.35dB	-
Return Loss	≥60dB	-	≥27dB	-
Attenuation (1310/1550nm)	≤0.35dB/km at 1310nm ≤0.21dB/km at 1550nm	-	-	-
Attenuation (850/1300nm)	-	-	≤2.3dB/km at 850nm ≤0.6dB/km at 1300nm	-

	OS2	OM5	OM4	OM3
MTP® PRO Jumpers				
Glass Fiber	G.657.A1	-	Bend Insensitive Fiber	Bend Insensitive Fiber
Minimum Bend Radius	10mm	-	7.5mm	7.5mm
Cable Jacket	Plenum (OFNP) LSZH	-	Plenum (OFNP) LSZH	Plenum (OFNP) LSZH
Insertion Loss	≤0.35dB	-	≤0.35dB	≤0.35dB
Return Loss	≥60dB	-	≥27dB	≥27dB
Attenuation (1310/1550nm)	≤0.35dB/km at 1310nm ≤0.21dB/km at 1550nm	-	-	-
Attenuation (850/1300nm)	-	-	≤2.3dB/km at 850nm ≤0.6dB/km at 1300nm	≤2.3dB/km at 850nm ≤0.6dB/km at 1300nm
MPO Jumpers				
Glass Fiber	G.657.A1	-	Bend Insensitive Fiber	-
Minimum Bend Radius	10mm	-	7.5mm	-
Cable Jacket	Plenum (OFNP) LSZH	-	Plenum (OFNP) LSZH	-
Insertion Loss	≤0.35dB	-	≤0.35dB	-
Return Loss	≥60dB	-	≥27/45dB (UPC/APC)	-
Attenuation (1310/1550nm)	≤0.35dB/km at 1310nm ≤0.21dB/km at 1550nm	-	-	-
Attenuation (850/1300nm)	-	-	≤2.3dB/km at 850nm ≤0.6dB/km at 1300nm	-

MTP®-MTP® Jumpers Options



MTP®-12 to MTP®-12 Jumpers Options

Fiber Type	Fiber Count	Cable Jacket	Connector A	Connector B	Polarity	Pulling Eye
• OS2	• 8	• Plenum (OFNP)	• MTP® Female UPC	• MTP® Female UPC	• Type A	• None
• OM4	• 12	• LSZH	• MTP® Female APC	• MTP® Female APC	• Type B	• End A
• OM3	• 24	• Riser (OFNR)	• MTP® Male UPC	• MTP® Male UPC	• Type C	• End B
	• 36		• MTP® Male APC	• MTP® Male APC		• Both Ends
	• 48					
	• 72					
	• 96					
	• 144					
	• 288					

MTP®-16 to MTP®-16 Jumpers Options

Fiber Type	Fiber Count	Cable Jacket	Connector A	Connector B	Polarity	Pulling Eye
• OS2	• 16	• Plenum (OFNP)	• MTP® Female UPC	• MTP® Female UPC	• Crossover	• None
• OM4	• 32		• MTP® Female APC	• MTP® Female APC		• End A
			• MTP® Male UPC	• MTP® Male UPC		• End B
			• MTP® Male APC	• MTP® Male APC		• Both Ends

MTP®-24 to MTP®-24 Jumpers Options

Fiber Type	Fiber Count	Cable Jacket	Connector A	Connector B	Polarity	Pulling Eye
• OS2	• 24	• Plenum (OFNP)	• MTP® Female UPC	• MTP® Female UPC	• Type A	• None
• OM4	• 48	• LSZH	• MTP® Female APC	• MTP® Female APC	• Type B	• End A
• OM3	• 72		• MTP® Male UPC	• MTP® Male UPC	• Type C	• End B
	• 96		• MTP® Male APC	• MTP® Male APC		• Both Ends
	• 144					
	• 192					

Products Listing

MTP®-8 to MTP®-8 Jumpers

ID	Description
317743	MTP®-8 Jumper, F to F, APC, 8F, OS2, OFNP, 0.35dB, Type B, 1m (3ft)
317731	MTP®-8 Jumper, F to F, UPC, 8F, OM4, OFNP, 0.35dB, Type B, 1m (3ft)
317755	MTP®-8 Jumper, F to F, UPC, 8F, OM3, OFNP, 0.35dB, Type B, 1m (3ft)

MTP®-12 to MTP®-12 Jumpers

ID	Description
68018	MTP®-12 Jumper, F to F, APC, 12F, OS2, OFNP, 0.35dB, Type B, 1m (3ft)
310195	MTP®-12 Jumper, F to F, UPC, 12F, OM5, OFNP, 0.35dB, Type B, 1m (3ft)
68017	MTP®-12 Jumper, F to F, UPC, 12F, OM4, OFNP, 0.35dB, Type B, 1m (3ft)
317767	MTP®-12 Jumper, F to F, UPC, 12F, OM3, OFNP, 0.35dB, Type B, 1m (3ft)
68102	MTP®-12 Jumper, F to F, APC, 12F, OS2, OFNP, 0.35dB, Type A, 5m (16ft)
183670	MTP®-12 Jumper, F to F, UPC, 12F, OM5, OFNP, 0.35dB, Type A, 1m (3ft)
68106	MTP®-12 Jumper, F to F, UPC, 12F, OM4, OFNP, 0.35dB, Type A, 5m (16ft)
317779	MTP®-12 Jumper, F to F, UPC, 12F, OM3, OFNP, 0.35dB, Type A, 5m (16ft)
318147	MTP®-12 Jumper, F to F, APC, 8F, OS2, OFNP, 0.35dB, Type B, 1m (3ft)
208163	MTP®-12 Jumper, F to F, APC, 8F, OM4, OFNP, 0.35dB, Type B, 1m (3ft)

MTP®-12 to MTP®-12 Jumpers

ID	Description
364563	MTP®-12 Jumper, F to F, APC, 8F, OS2, OFNR/LSZH, 0.35dB, Type B, 3m (10ft)
364539	MTP®-12 Jumper, F to F, APC, 8F, OM4, OFNR/LSZH, 0.35dB, Type B, 3m (10ft)
364515	MTP®-12 Jumper, F to F, APC, 8F, OM3, OFNR/LSZH, 0.35dB, Type B, 3m (10ft)
30976	Customized MTP®-12 Jumper, 8-144F, OS2, 0.35dB
30962	Customized MTP®-12 Jumper, 8-288F, OM4, 0.35dB
30977	Customized MTP®-12 Jumper, 8-144F, OM3, 0.35dB
321569	Customized MTP®-12 Jumper, 8-144 Fibers, OM4, 0.20dB
321571	Customized MTP®-12 Jumper, 8-144 Fibers, OM3, 0.20dB

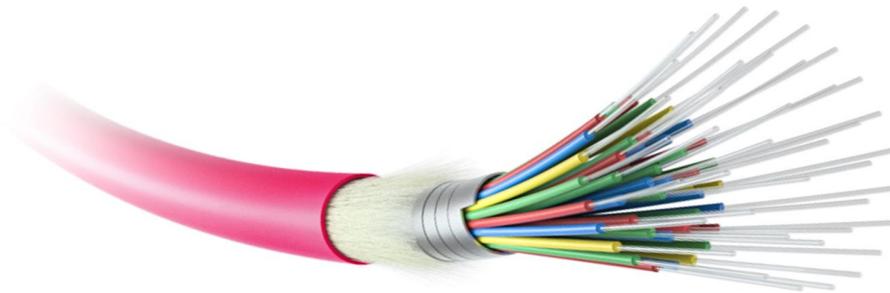
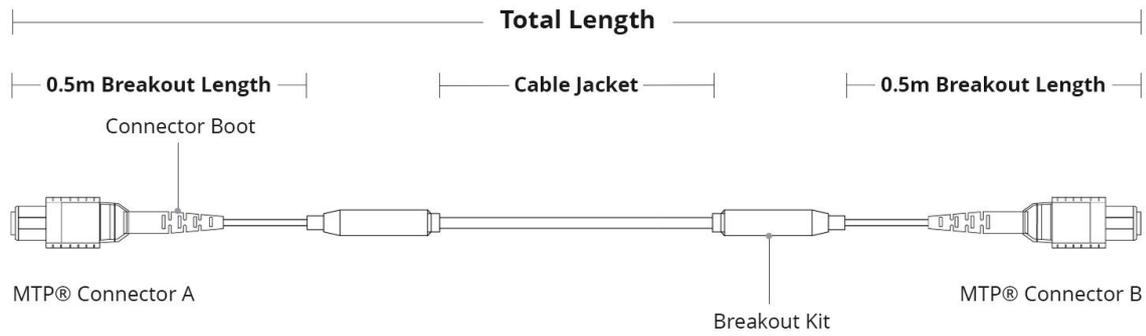
MTP®-16 to MTP®-16 Jumpers

ID	Description
150162	MTP®-16 Jumper, F to F, APC, 16F, OS2, OFNP, 0.35dB, Crossover, 1m (3ft)
93744	MTP®-16 Jumper, F to F, APC, 16F, OM4, OFNP, 0.35dB, Crossover, 1m (3ft)
364467	MTP®-16 Jumper, F to F, APC, 16F, OM3, OFNP, 0.35dB, Crossover, 1m (3ft)
364503	MTP®-16 Jumper, F to F, APC, 16F, OS2, OFNR/LSZH, 0.35dB, Crossover, 1m (3ft)
364491	MTP®-16 Jumper, F to F, APC, 16F, OM4, OFNR/LSZH, 0.35dB, Crossover, 1m (3ft)
364479	MTP®-16 Jumper, F to F, APC, 16F, OM3, OFNR/LSZH, 0.35dB, Crossover, 1m (3ft)
150171	Customized MTP®-16 Jumper, 16F, OS2, OFNP, Crossover
132843	Customized MTP®-16 Jumper, 16/32F, OM4, OFNP, Crossover

MTP®-24 to MTP®-24 Jumpers

ID	Description
72421	MTP®-24 Jumper, F to F, APC, 24F, OS2, OFNP, 0.35dB, Type A, 1m (3ft)
183676	MTP®-24 Jumper, F to F, UPC, 24F, OM5, OFNP, 0.35dB, Type A, 1m (3ft)
68041	MTP®-24 Jumper, F to F, UPC, 24F, OM4, OFNP, 0.35dB, Type A, 1m (3ft)
317789	MTP®-24 Jumper, F to F, UPC, 24F, OM3, OFNP, 0.35dB, Type A, 5m (16ft)
31012	Customized MTP®-24 Jumper, 24-144F, OS2
31014	Customized MTP®-24 Jumper, 24-192F, OM4
31015	Customized MTP®-24 Jumper, 24-144F, OM3

MTP®-MTP® Armored Jumpers Options



MTP®-12 to MTP®-12 Armored Jumpers Options

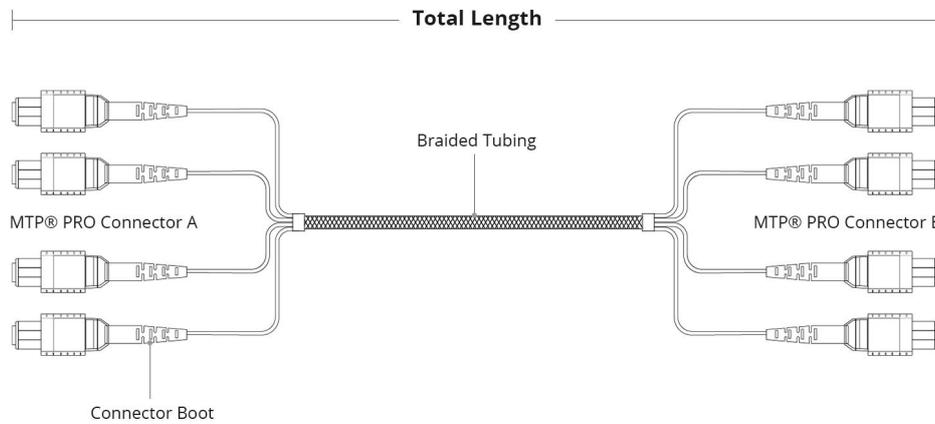
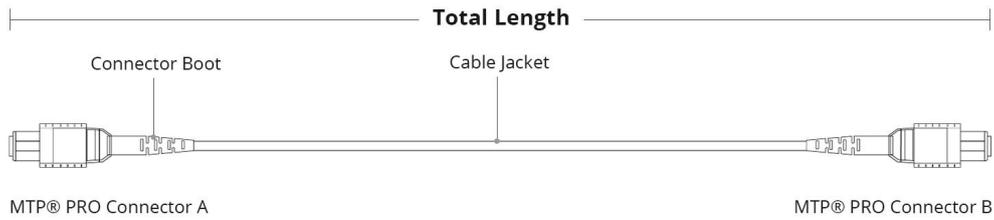
Fiber Type	Fiber Count	Cable Jacket	Connector A	Connector B	Polarity	Pulling Eye
• OS2	• 8	• Plenum (OFNP)	• MTP® Female UPC	• MTP® Female UPC	• Type A	• None
• OM4	• 12	• LSZH	• MTP® Female APC	• MTP® Female APC	• Type B	• End A
	• 24		• MTP® Male UPC	• MTP® Male UPC	• Type C	• End B
	• 36		• MTP® Male APC	• MTP® Male APC		• Both Ends
	• 48					
	• 72					
	• 96					
	• 144					

Products Listing

MTP®-12 to MTP®-12 Armored Jumpers

ID	Description
174099	Customized MTP®-12 Armored Jumper, 8-144F, OS2
174105	Customized MTP®-12 Armored Jumper, 8-144F, OM4

MTP® PRO-MTP® PRO Jumpers Options



MTP® PRO-12 to MTP® PRO-12 Jumpers Options

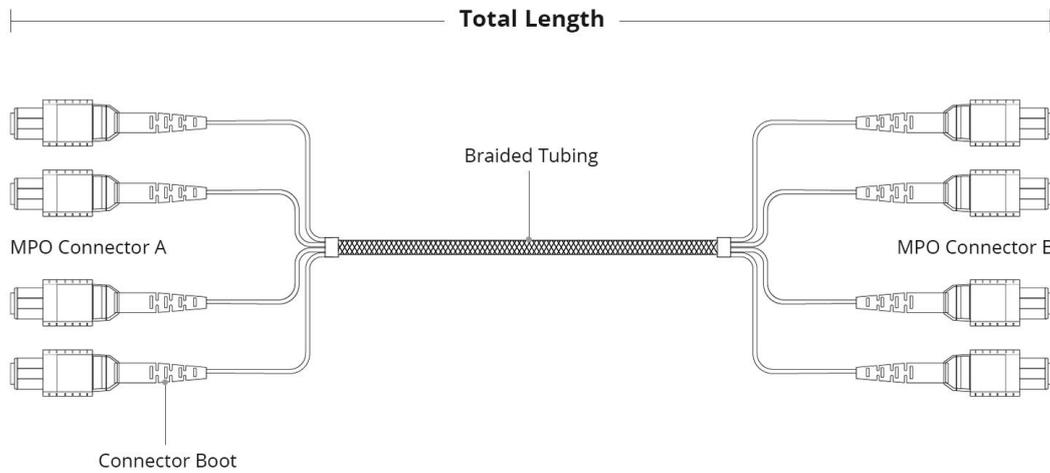
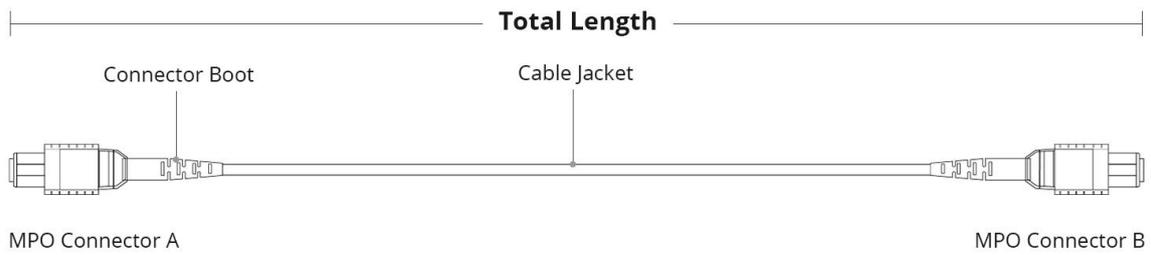
Fiber Type	Fiber Count	Cable Jacket	Connector A	Connector B	Polarity	Pulling Eye
• OS2	• 8	• Plenum (OFNP)	• MTP® PRO Female UPC	• MTP® PRO Female UPC	• Type A	• None
• OM4	• 12	• LSZH	• MTP® PRO Female APC	• MTP® PRO Female APC	• Type B	• End A
• OM3	• 24		• MTP® PRO Male UPC	• MTP® PRO Male UPC		• End B
	• 36		• MTP® PRO Male APC	• MTP® PRO Male APC		• Both Ends
	• 48					
	• 72					
	• 96					
	• 144					

Products Listing

MTP® PRO-12 to MTP® PRO-12 Jumpers

ID	Description
80736	Customized MTP®-12 PRO Jumper, 8-144F, OS2
80734	Customized MTP®-12 PRO Jumper, 8-144F, OM4
80735	Customized MTP®-12 PRO Jumper, 8-144F, OM3

MPO-MPO Jumpers Options



MPO-12 to MPO-12 Jumpers Options

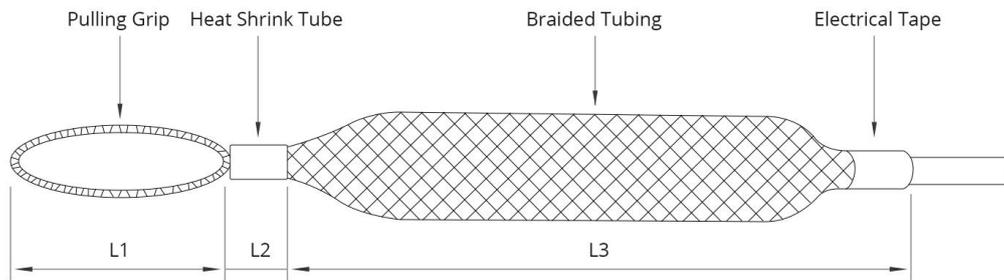
Fiber Type	Fiber Count	Cable Jacket	Connector A	Connector B	Polarity	Pulling Eye
• OS2	• 8	• Plenum (OFNP)	• MPO Female UPC	• MPO Female UPC	• Type A	• None
• OM4	• 12	• LSZH	• MPO Female APC	• MPO Female APC	• Type B	• End A
	• 24		• MPO Male UPC	• MPO Male UPC	• Type C	• End B
	• 36		• MPO Male APC	• MPO Male APC		• Both Ends
	• 48					
	• 72					
	• 96					
	• 144					

Products Listing

MPO-12 to MPO-12 Jumpers

ID	Description
226631	Customized MPO-12 Jumper, 8-144F, OS2
226629	Customized MPO-12 Jumper, 8-144F, OM4

Pulling Eye Information



Bundle Count	Total Length (Cable)	L1 Length (Pulling Eye)	L2 Length (Pulling Eye)	L3 Length (Pulling Eye)
1 Bundle	< 1m	100±20mm	50-60mm	400mm
1 Bundle	≥ 1m	100±20mm	50-60mm	Depending on the total length of the cable.
2-24 Bundles	-	100±20mm	50-60mm	300/500+350mm