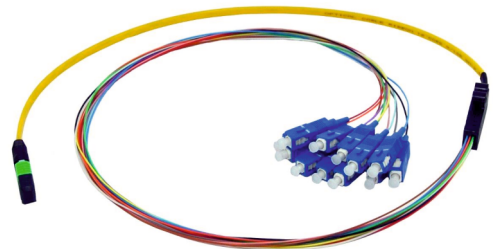


Fan-Out MPO/MTP Q-Fiber

Description

Fan-Out MPO/MTP Q-Fiber is a mechanical system of cable forming for multifiber cable (multifiber connectors). One end of the cable is termination by MPO / MTP connector, the other side is termination by many single fiber connectors (SC, LC, E2000 etc). Using Fan-Out cable, you can enjoy the benefits of multifiber connectors technology without having to change the entire system (without having to replace transmitters). Fan-out can be performed on the ribbon cable, a flat cable as well as a round cable with loose fibers.



Application

Telecommunications, Data Center, LAN, MAN, WAN, FTTX, Measuring Elements.

Properties

- » Any length (length tolerance is up to 10 m: 10 cm, above: 1%),
- » Various lengths of pigtails on side B (0.3 m - 2.0 m),
- » 12 colors for 0.9 mm pigtails, 2.0 mm pigtails in one color (pigtails are numbered),
- » Cable: flat (with jacket), ribbon (without jacket), round,
- » Cable LSOH,
- » Thermoplastic or thermoset connector ferrule (MPO, MTP),
- » Up to 24 fibers in MPO/MTP connector,
- » Ceramic connector ferrule (LC, SC, ST, FC, MU, E2000, DIN),
- » Compliance with the following standards: PN-EN 61754-7, PN-EN 50377-15-1, IEC PAS 61755-3-31, ZN-05/TP SA-044, ZN-96/TPSA-07, PN-EN 50377, IEC 61754, IEC 61755,
- » RoHS compliance.

Polishing standard MPO/MTP

- » PC (for MM connectors),
- » APC 8° (for SM connectors).

Polishing standard (SC, ST, FC, LC, MU, E2000, DIN)

- » Flat,
- » PC,
- » UPC,
- » APC 8°,
- » APC 9°.

Types of connectors

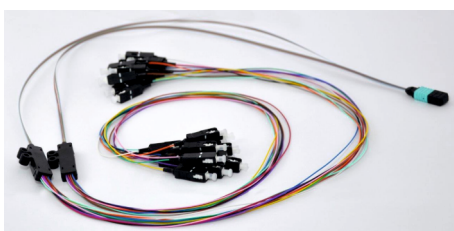


MPO

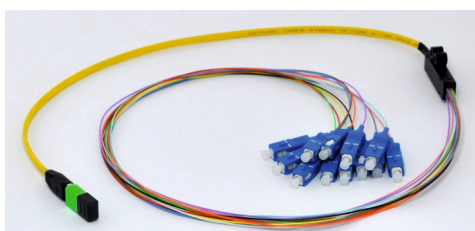


MTP

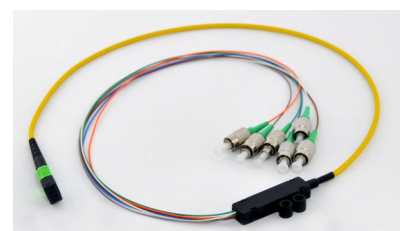
Photos



Ribbon cable



Flat cable



Round cable

Fan-Out MPO/MTP Q-Fiber

»

Parameters

Parameter	Cerramic ferrule (SC, ST, FC, LC, MU, E2000, DIN)					
	MM/PC		SM/PC		SM/APC	
	Standard	Premium	Standard	Premium	Standard	Premium
Max. insertion loss [dB]	≤ 0,60 (grade B _M)	≤ 0,25 (grade B)	≤ 0,5 (grade C)	≤ 0,25 (grade B)	≤ 0,5 (grade C)	≤ 0,25 (grade B)
Typical insertion loss [dB]	≤ 0,35 (grade B _M)	≤ 0,12 (grade B)	≤ 0,25 (grade C)	≤ 0,12 (grade B)	≤ 0,25 (grade C)	≤ 0,12 (grade B)
Reflection [dB]	≥ 20 (grade 2 _M)	≥ 26 (grade 4)	≥ 45 (grade 2)	≥ 45 (grade 2)	≥ 60 (grade 1)	≥ 60 (grade 1)
Radius of curvature [mm]	5 ÷ 30 (grade D)	5 ÷ 30 (grade C)	5 ÷ 30 (grade C)	7 ÷ 25 (grade B)	5 ÷ 12 (grade C)	5 ÷ 12 (grade B)
Apex offset [µm]	0 ÷ 50 (grade D)	0 ÷ 30 (grade C)	0 ÷ 50 (grade C)	0 ÷ 50 (grade B)	0 ÷ 50 (grade C)	0 ÷ 50 (grade B)
Maximum angle error [°]	0,6 (grade D)	0,3 (grade C)	0,3 (grade C)	0,2 (grade B)	0,3 (grade C)	0,2 (grade B)
Fiber height* [nm]	-100 ÷ 100** (grade D)	-100 ÷ A** (grade C)	-100 ÷ A** (grade C)	-60 ÷ A** (grade B)	-100 ÷ A** (grade C)	-60 ÷ A** (grade B)
Parameter	MT Ferrule 12F (MPO/MTP)					
	MM/PC		SM/APC 8		SM/APC 8	
	Standard		Standard	Premium (Low Loss)	Premium (Low Loss)	
Max. insertion loss [dB]	≤ 0,60 (grade B _M)		≤ 0,75 (grade D)		≤ 0,50 (grade C)	
Typical insertion loss [dB]	≤ 0,35 (grade B _M)		≤ 0,5 (grade D)		≤ 0,25 (grade C)	
Reflection [dB]	≥ 20 (grade 2 _M)		≥ 60 (grade 1)		≥ 20 (grade 2 _M)	
Maximum angle error [°]	0,2		0,2		0,2	
Fiber height* [um]	-3,5 ÷ -1,0*		-3,5 ÷ -1,0*		-3,5 ÷ -1,0*	
Parameter	MT Ferrule 24F (MPO/MTP)					
	MM/PC		SM/APC 8		SM/APC 8	
	Standard		Standard	Premium (Low Loss)	Premium (Low Loss)	
Max. insertion loss [dB]	≤ 1,00 (grade C _M)		≤ 1,00 (grade D)		≤ 0,60 (grade B _M)	
Typical insertion loss [dB]	≤ 0,50 (grade C _M)		≤ 0,50 (grade D)		≤ 0,35 (grade B _M)	
Reflection [dB]	≥ 20 (grade 2 _M)		≥ 60 (grade 1)		≥ 20 (grade 2 _M)	
Maximum angle error [°]	0,2		0,2		0,2	
Fiber height* [um]	-3,5 ÷ -1,0*		-3,5 ÷ -1,0*		-3,5 ÷ -1,0*	

* negative value indicates the extension of a fibre

** calculated from the formula based on other geometric parameters, see technical requirements at www.dll.com.pl

*** possibility to order connectors of different parameters, according to the standards of the customer

How to order

F0.MPO*

										
Cable type: P=Flat R=Ribbon O=Round	Number of fibers: 04=4 pcs. 06=6 pcs. 08=8 pcs. 12=12 pcs. 24=24 pcs.	Core type: S2=SM G.652D S7=SM G.657a M1=MM 62 OM1 M2=MM 50 OM2 M3=MM 50 OM3 M4=MM 50 OM4	Connectors standard: S=Standard P=Premium (Low Loss)	Connector type A: M=Male Z=Female	Connector B: O=None S=SC T=ST F=FC L=LC E=E2000 M=MU D=DIN R=MTRJ	Polishing standard B: O=None F=Flat P=PC U=UPC A8=APC 8° A9=APC 9°	Pigtail length (Y): 03=0,3 m : 10=1 m 20=2 m	Pigtail type: P=Staight K=Cascade X=Other	Pigtail diameter: 09=0,9 mm 18=1,8 mm	Length (X): 0020=2 m : 0010=1 m 0020=2 m : 0100=10 m :

* In order to order a Fan-Out MTP one has to use the catalogue code F0.MTP

Fan-Out MPO/MTP Q-Fiber

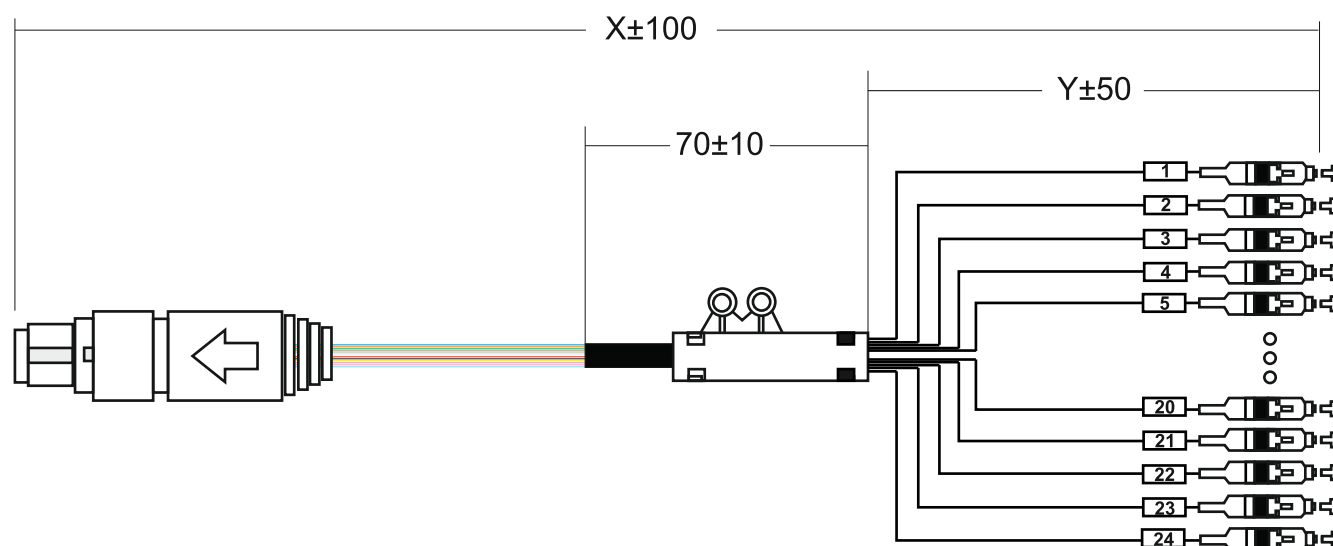
Standard configuration 12F

- » Flat cable,
- » Numer of fibers: 12 pcs.,
- » Core type: SM G.652D or MM OM3,
- » Connector A: MPO with pins (male), type standard,
- » Connector B: SC or LC, type standard,
- » Colored pigtails, pigtails length 60 cm (staight), 0.9 mm pigtails diameter,
- » Fan-Out length 100 cm.

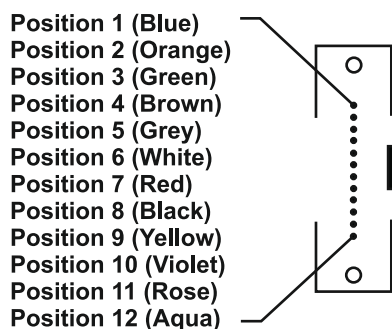
Standard configuration 24F

- » Flat cable,
- » Numer of fibers: 24 pcs.,
- » Core type: SM G.652D or MM OM3,
- » Connector A: MPO with pins (male), type standard,
- » Connector B: SC or LC, type standard,
- » Colored pigtails, pigtails length 60 cm (staight), 0.9 mm pigtails diameter,
- » Fan-Out length 100 cm.

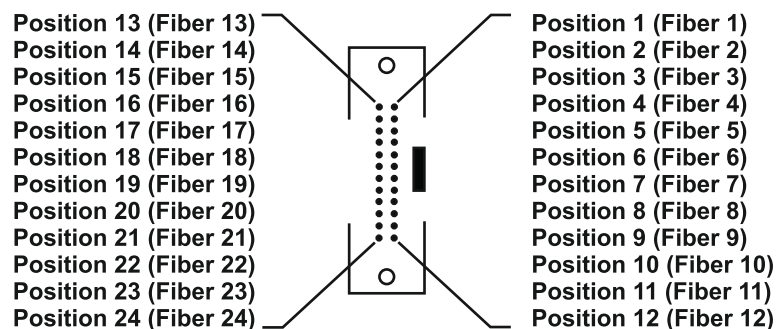
Fan-Out configuration



Ferrule 12F



Ferrule 24F



- » Standard lengths: $X=1000$ mm, $Y=600$ mm,
- » Pigtails 0.9 mm (colored pigtails, pigtails are numbered for 24F)
- » Pigtails 2.0 mm (pigtails in one color (pigtails are numbered for 12F and 24F),