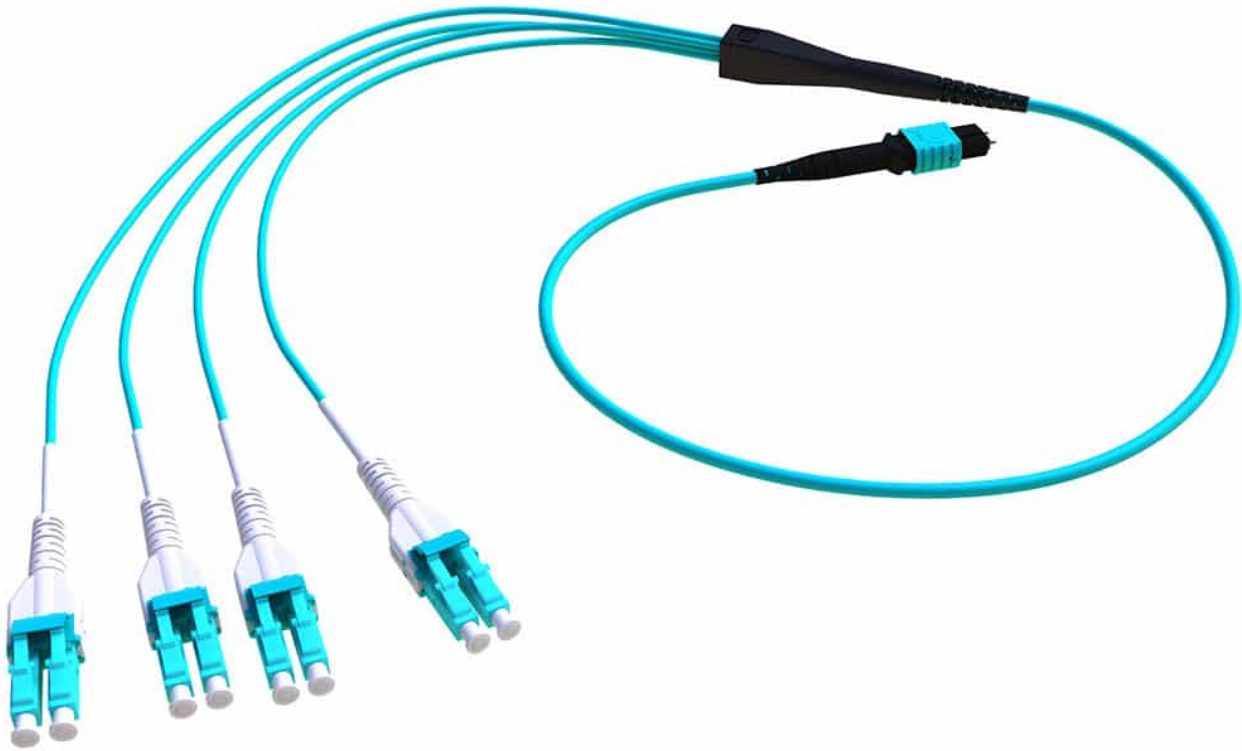


MPO to LC Assembly BASE-8



Description

40G parallel optics transceivers (40GBASE-SR4) supports 4x10G modes, making new parallel optics active equipment compatible with existing 10G transceivers. MPO QSFP+ to SFP+ fanout assemblies provide connections between single QSFP+ (40G transceiver with MPO interface) and 4 x SFP+ (10G transceivers with LC(DX) interface). Parallel optics 40GBASE-SR4 uses 8 out of 12 MPO interface fibers, transmitting 4 x duplex (DX) channels (4 x transmit and 4 x receive). QSFP+ to SFP+ fanout is 8 x fibers MPO to LC (DX) ruggedized fanout assembly. The assembly utilizes a miniature version of a breakout module saving fiber management space and providing a secure transition between cable and tails.

Features and Benefits

- New miniature breakout module saves space within the patching management area whilst providing a robust and safe transition between cable and tails
- 4 x 2 mm tails (Uniboot DX version available) improve rack patching management
- 3 mm OD Patch / 4.5 mm OD Trunk MicroCable versions
- Standard jacket colors: OM3 and OM4 Aqua, G.657A1, or G.657A2 Yellow
- Female MPO connectors for direct connection into QSFP+ transceiver
- OM3, OM4, G.657A1, and G.657A2 fiber versions
- LSZH, OFNP, and OFNR cable jacket types
- Factory terminated and tested

- Optimized performance - premium MPO, discrete LC premium connectors, and OM4 fiber assure low insertion losses and power penalties in tight power budget, high-speed network environments
- 100% tested - a combination of high-quality components and manufacturing quality control guarantees product performs to the highest standards
- Rapid deployment - factory terminated modular system saves installation and reconfiguration time during moves, adds, and changes

Applications

- Data center
- Storage Area Networks (SAN)
- Parallel optics
- 40GBASE-SR4 to 4x10GBASE-SR links

Specifications

ELEMENT	CHARACTERISTICS
Fiber	OM3, OM4, OS1/OS2 G.657A1, G.657A2
Cable	MicroCable- 8 cores MAX OD: Max OD 8 cores Trunk Double Jacket 4.5 ± 0.3 mm / Max OD 8 cores Patch Single Jacket 2.95 ± 0.1 mm Jacket Material: LSZH, OFNP, OFNR Jacket Color: Aqua (OM3, OM4), Erica Violet (OM4), Yellow (OS1/OS2, G.657A1)
Connectors	MPO 12 Fiber Ferrule Body Sleeve Color: MM Premium (Aqua, EricaViolet for EV Cable), SM Premium(Yellow) Boot Color: BlackLC(DX), LC(DX) Uniboot Housing Color: AQUA(MM), Blue (SM), Green (SM/APC)
Storage Temperature	-20 ~ +60°C
Installation Temperature	-5 ~ +50°C
Operation Temperature	-20 ~ +60°C

Connector Performance

CONNECTOR MATING	IL AVERAGE	IL MAX	RETURN LOSS
MPO Premium (MM)	0.10 dB	0.35 dB	N/A
MPO Premium (MM)	0.10 dB	0.35 dB	N/A
LC, SC Premium (MM)	0.08 dB**	0.15 dB**	N/A
MPO Premium (SM)	0.10 dB	0.35 dB	>60 dB
LC, SC Low Loss Premium (SM)	0.12 dB**	0.15 dB**	>55/65 dB*

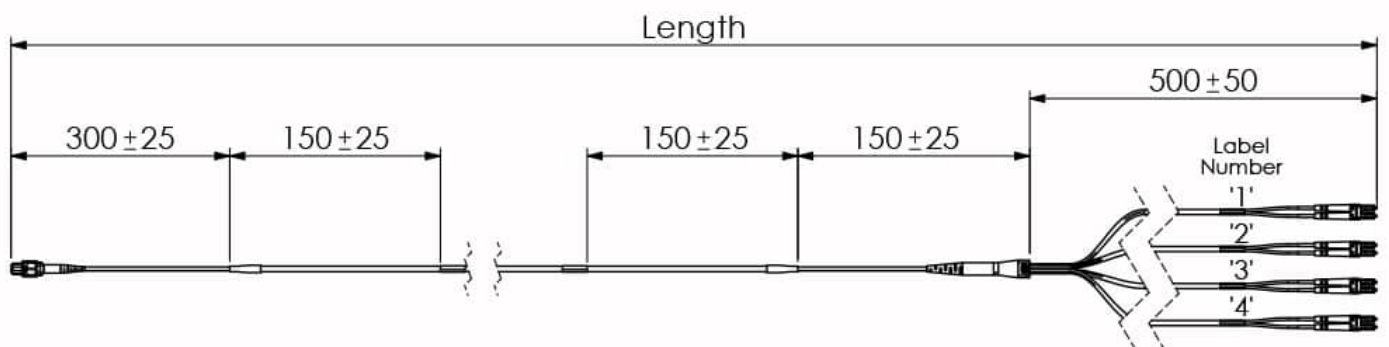
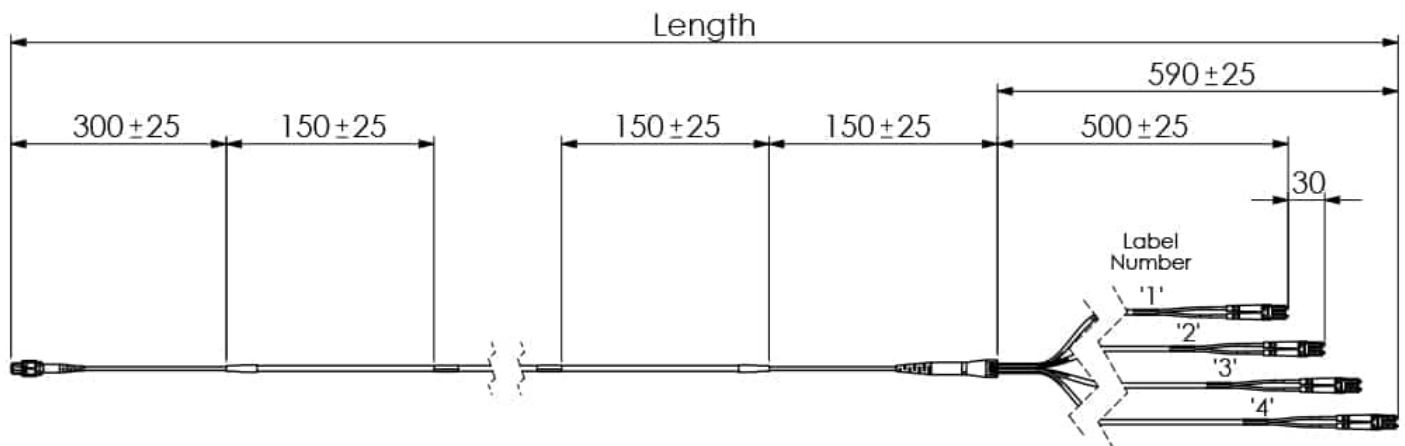
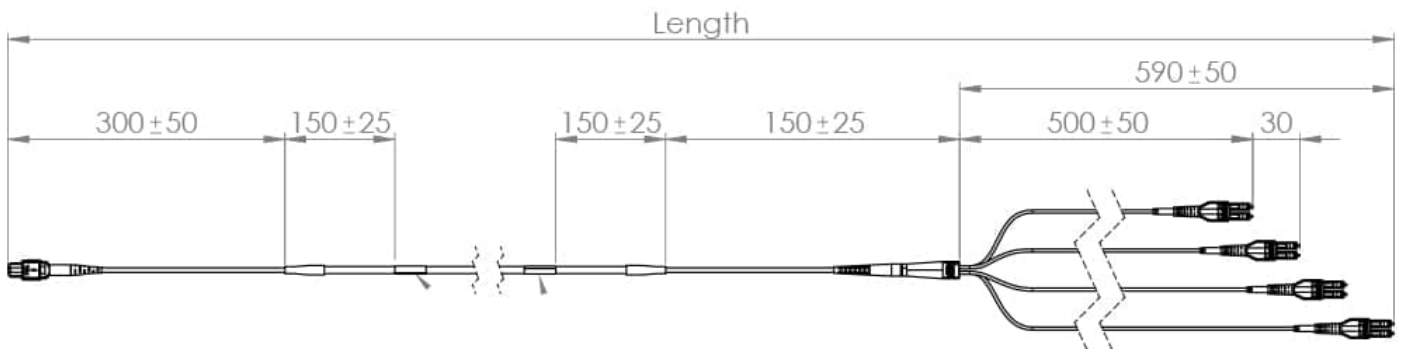
* UPC/APC ** Tested as per IEC 61300-3-4

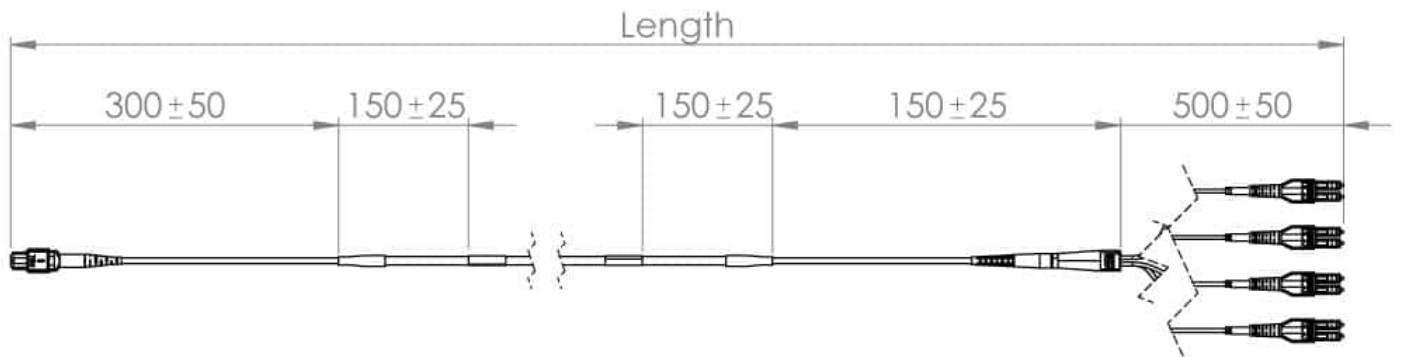
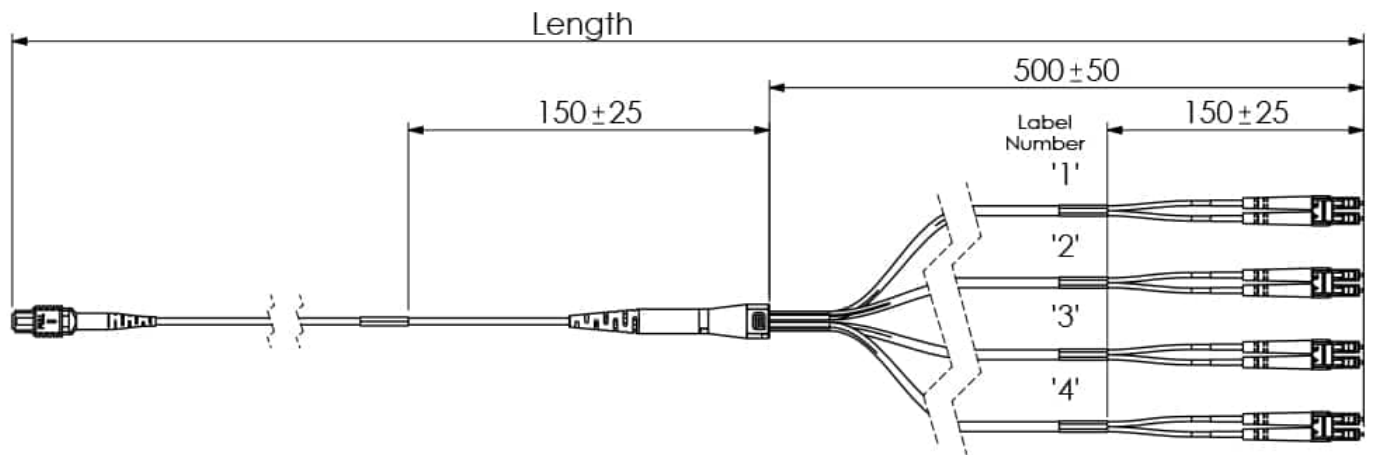
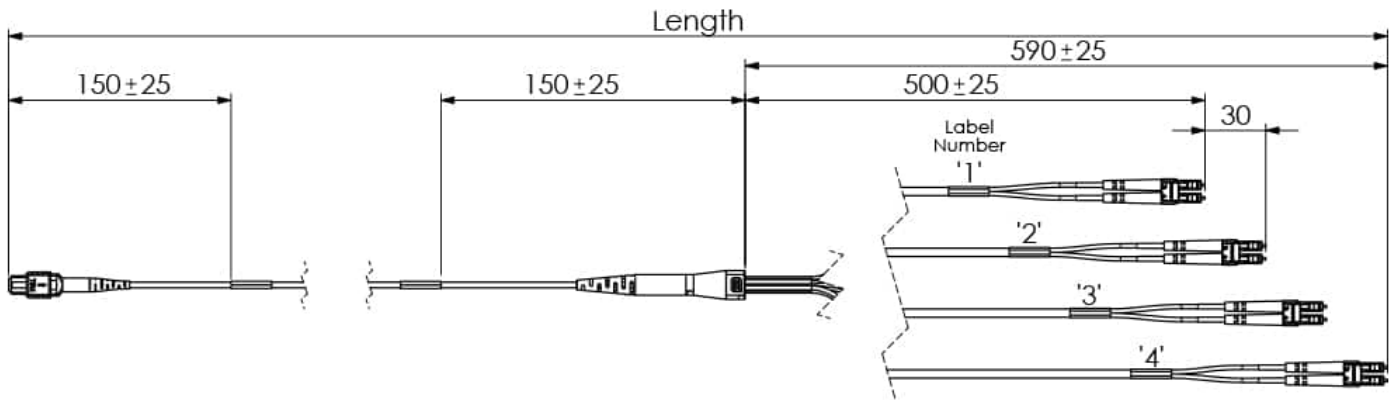
Cable Performance

CABLED FIBRE TYPE (ISO/IEC 11801)	OS1/OS2	OM3	OM4
Attenuation Coefficient [dB/km]	≤ 0.38 Max (1300 nm) ≤ 0.25 Max (1300 nm) ≤ 0.34 Typ (1550 nm) ≤ 0.19 typ (1550 nm)	≤ 3.5 Max (850 nm) ≤ 1.5 Max (1300 nm) ≤ 2.7 Typ (850 nm) ≤ 0.9 typ (1300 nm)	≤ 3.5 Max (850 nm) ≤ 1.5 Max (1300 nm) ≤ 2.7 Typ (850 nm) ≤ 0.9 typ (1300 nm)

CABLED FIBRE TYPE (ISO/IEC 11801)	OS1/OS2	OM3	OM4
Minimum Bandwidth: Overfilled Launch [Mhz-km]	N/A	≥ 1500 (850 nm) ≥ 500 (1300 nm)	≥ 3500 (850 nm) ≥ 500 (1300 nm)
Minimum Bandwidth: Laser Effective Modal Bandwidth [Mhz-km]	N/A	≥ 2000 (850 nm)	≥ 4700 (850 nm)

Technical Drawing

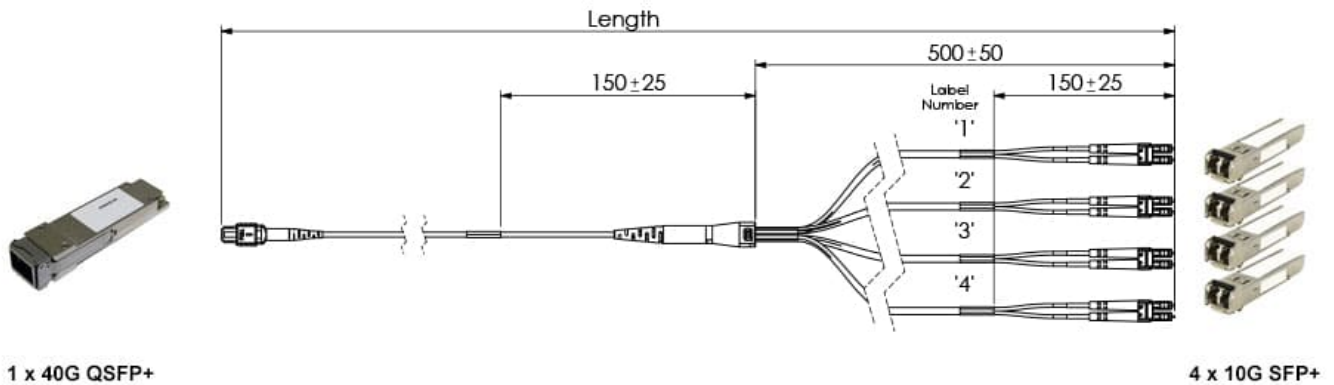




Typical Application

What is a QSFP+ to SFP+ Fanout Assembly?

A QSFP+ to SFP+ cable assembly is an eight fibre **MTP to LC Ruggedised Fanout** connecting a single 40G QSFP+ with four x 100G SFP+ Transceivers



1 x 40G QSFP+

4 x 10G SFP+

Ordering Information

Code	Fiber Type	Cable Type	Jacket Material	Color	Code	End A	End B	Code	Unit	Length
M	3 OM3	DR8 Microcable 8/16F Single Jacket 3mm	L LSZH	9 YELLOW	P	U MPO F	A LC	-K010- QSFP Staggered Simplex	M Meters	1 1
	4 OM4	DT8 Microcable 8/16F Double Jacket 4.5mm	E CPR Eca	C AQUA		V MPO M	C LC Uniboot	-K013- QSFP Staggered Duplex	F Feet	2 2
	7 G.657A1		C CPR Cca*	D ERIKA VIOLET*				-K014- QSFP Fanout Duplex		3 3
	8 G.657A2		B CPR B2ca*					-K017- QSFP Staggered Uniboot		5 5
			R OFNR					-K018- QSFP Fanout Uniboot		10 10
			Q OFNR UL Listed*							XX Specify
			P OFNP							
			A OFNP UL Listed*							

* Check Cable Availability ** USConec MTP connectors available - contact Customer Service for information

Legacy ordering information

Connector End A		Fiber Count	Connector End B		Fiber Type		Cable Construction		Tail Type		Cable Length		Length Unit		Cable Jacket Type		Discrete Termination Grade		
MF	MPO (F)	8	8F core	LC	LC	OM3	OM3 50/125	QSP	3mm MicroCable	A	QSFP Fanout	1	1	leave blank	metre	leave blank	LSZH	leave blank	Standard
MPF	MPO Premium (F)			LCU	LC Uniboot	OM4	OM4 50/125	QST	4.5mm MicroCable	B	QSFP Staggered	2	2	FT	Feet	RI	Riser	/P	Low Loss Premium
MM	MPO (M)					7A1	G.657A1					3	3			PL	Plenum		
MPM	MPO Premium (M)					7A2	G.657A2					5	5			RIUL	Riser UL		
												10	10			PLUL	Plenum UL		
												xx	Specify			E****	LSZH CPR Euroclass Eca		

*LCR Connector, please contact account manager for suitability. **MTP US Conec MPO Connectors Available on Request- Add suffix "-US" to the end of PN **** Standard Stock Profile Double Jacket 4.5mm OD Only

Example Part Number

MF		8		LCU		OM3		QST		A		1						/P	
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MF8LCUOM3QSTA1/P - Assembly 8 Core MPO (F)-LC Uniboot OM3 50/125 4.5mm OD MicroCable QSFP Fanout LSZH Aqua 1mtr -Prem

Additional Information

- TIA/EIA-568-C.3 and ISO/IEC 11801
- IEC 61754-7 & EIA/TIA-604-5
- NFPA 262 or IEC 60332
- IEC 61754-20 & IEC 61754-14
- RoHS, REACH, and SVHC materials compliant
- IEC 60793

