

SUMITOMO MPO FIBRE CABLE ASSEMBLIES

DESCRIPTIONS

As datacom technology migrates to higher and higher speeds, it is often necessary for transition from conventional discrete connectors to higher channel count 12-fiber or 24-fiber MPO connectors to connect the increasing higher data rates transceivers with higher port density.

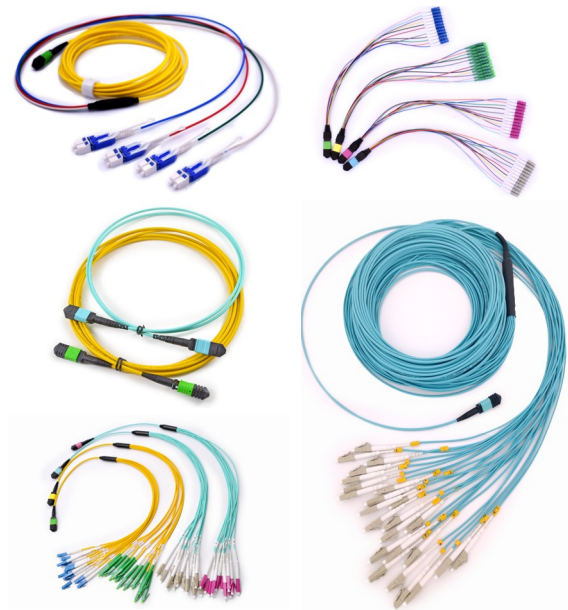
MPO optical fibre cable assembly is an excellent solution for addressing the need in increasing data traffic with increasing port density in data communications industry.

Available options are MPO to MPO, SC, ST, FC, LC, MU and E2000 cable assemblies with PC, UPC and APC single mode or multimode end-face polishes.

The fan-out or breakout cables variations include 2, 4, 8, 12 and 24 MPO fibre connectors which are ideal for connection to patch panels and data distribution routing.

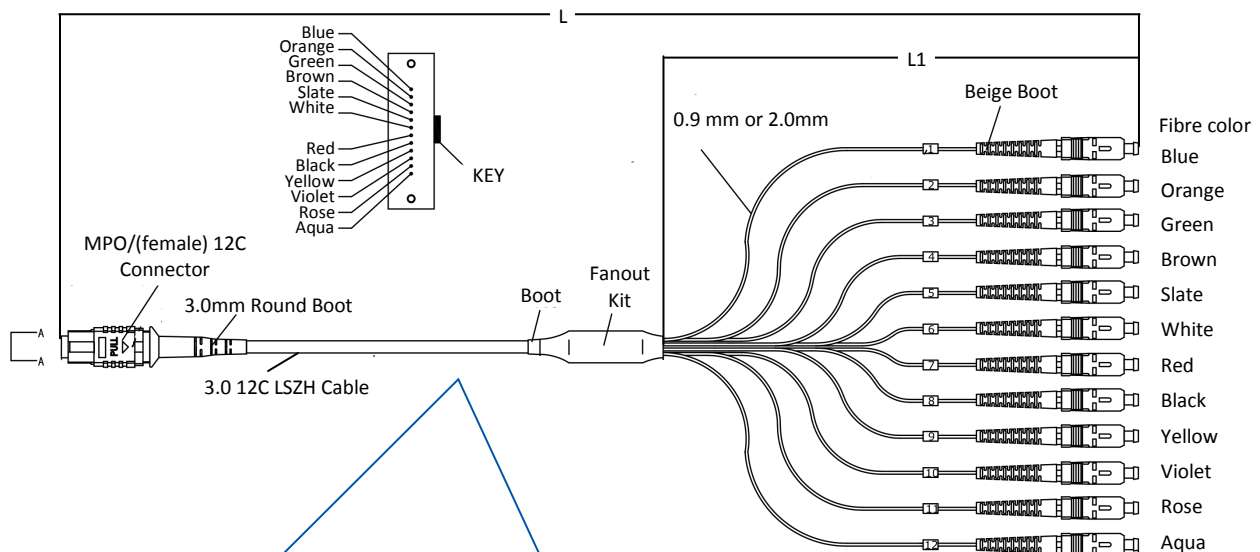
FEATURES

- Compliant with IEC61754 , IEC61755 & GR-1435-CORE
- Multi-fibre termination options of 2, 4, 8, 12 & 24 fibres
- Precision multi-fibre ferrule
- Push-pull latching



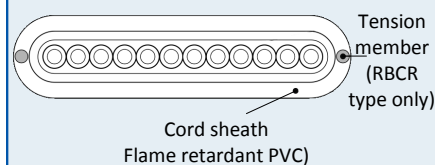
APPLICATIONS

- Trunk backbone to racks
- Data switches and routers
- Data Centres

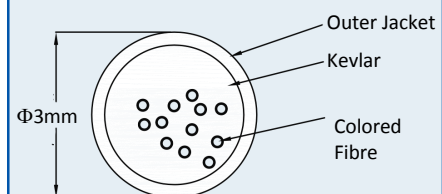


CABLE TYPES

12 Fibre Ribbon Cable



12 Fibre Round Cable



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MPO SPECIFICATIONS

MPO Connector Ferrule		Standard SM	Low Loss SM	Standard MM	Low Loss MM
Insertion Loss (dB)	Typical	0.5	0.20	0.5	0.20
	Maximum	0.7	0.35	0.65	0.35
Return Loss (dB)		≥60 for APC (8° Angle Polish)		≥25 for PC or APC	
Tensile Strength (dB)		≤0.3 (Max 66N)			
Vibration (dB)		≤0.3 (10 ~ 55Hz)			
Thermal Cycle (dB)		≤0.3 (-40 ~ 75 ⁰ C, 21Cycles)			

GEOMETRIC PARAMETERS OF ENDFACE

Fiber Mode	SM	MM
RX (mm)	≥ 2000	
RY (mm)	≥ 5	
Fibre Height (nm)	1000 ~ 3500	
Max. Diff. Height All (nm)	≤ 500	
Max. Diff. Height Adj. (nm)	≤ 300	
X Axis Angle (°)	-0.2 ~ 0.2	
Y Axis Angle (°)	PC: -0.2 ~ 0.2 APC: 7.8 ~ 8.2	-0.2 ~ 0.2
Core Dip (nm)	N/A	-100 ~ 200

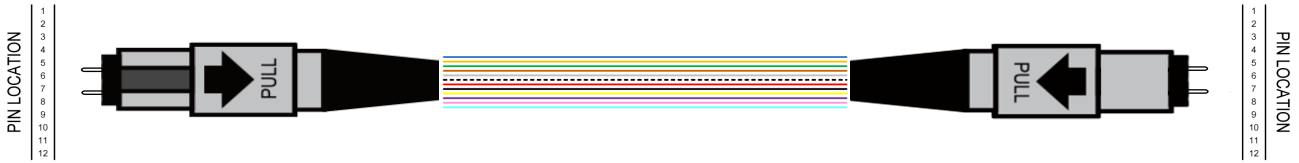
STANDARD CONNECTOR SPECIFICATIONS

Connector Type	FC, SC, ST, LC, MU, E2000		
Fibre Type	SM		MM
Polishing	UPC	APC	PC
Insertion Loss (dB)	≤0.2	≤0.2	≤0.3
Return Loss (dB)	≥55	≥65	-
Cable Diameter (mm)	Φ2 & Φ0.9		
Exchangeability (dB)	≤0.2 (Randomly connected)		
Vibration (dB)	≤0.2 (5~50Hz, 1.5mm amplitude)		
Temp. Range (dB)	≤0.2 (-40°C ~ 80°C, 21 Cycles)		
Lifetimes (times)	>500 mating (in accordance to IEC 61300-2)		

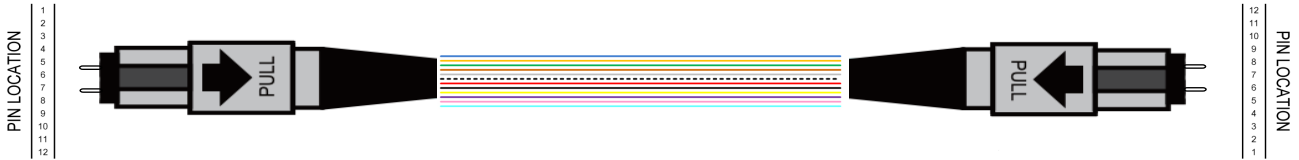


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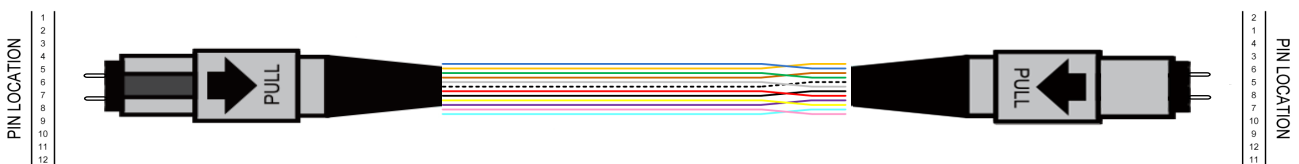
TYPE A - KEY UP/KEY DOWN (Standard Configuration)



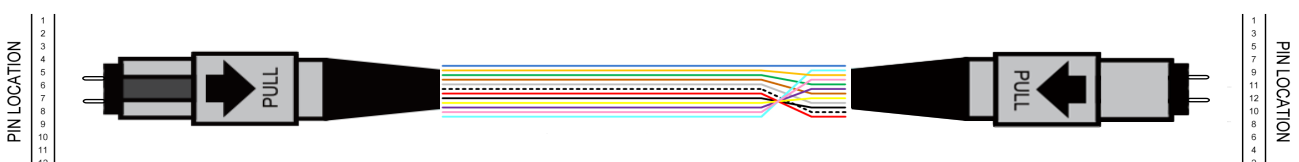
TYPE B - KEY UP/UP or KEY DOWN/DOWN



TYPE C - KEY UP/KEY DOWN (PAIR WISE FLIP)



TYPE D (Universal Configuration)



MPO-MPO/STANDARD CONNECTOR ORDERING INFORMATION

EXAMPLE : SESG-FP-SCU-A8A1-1-1-RJ

SESG-	FP	SCU	A	8	A1	1	1	RJ
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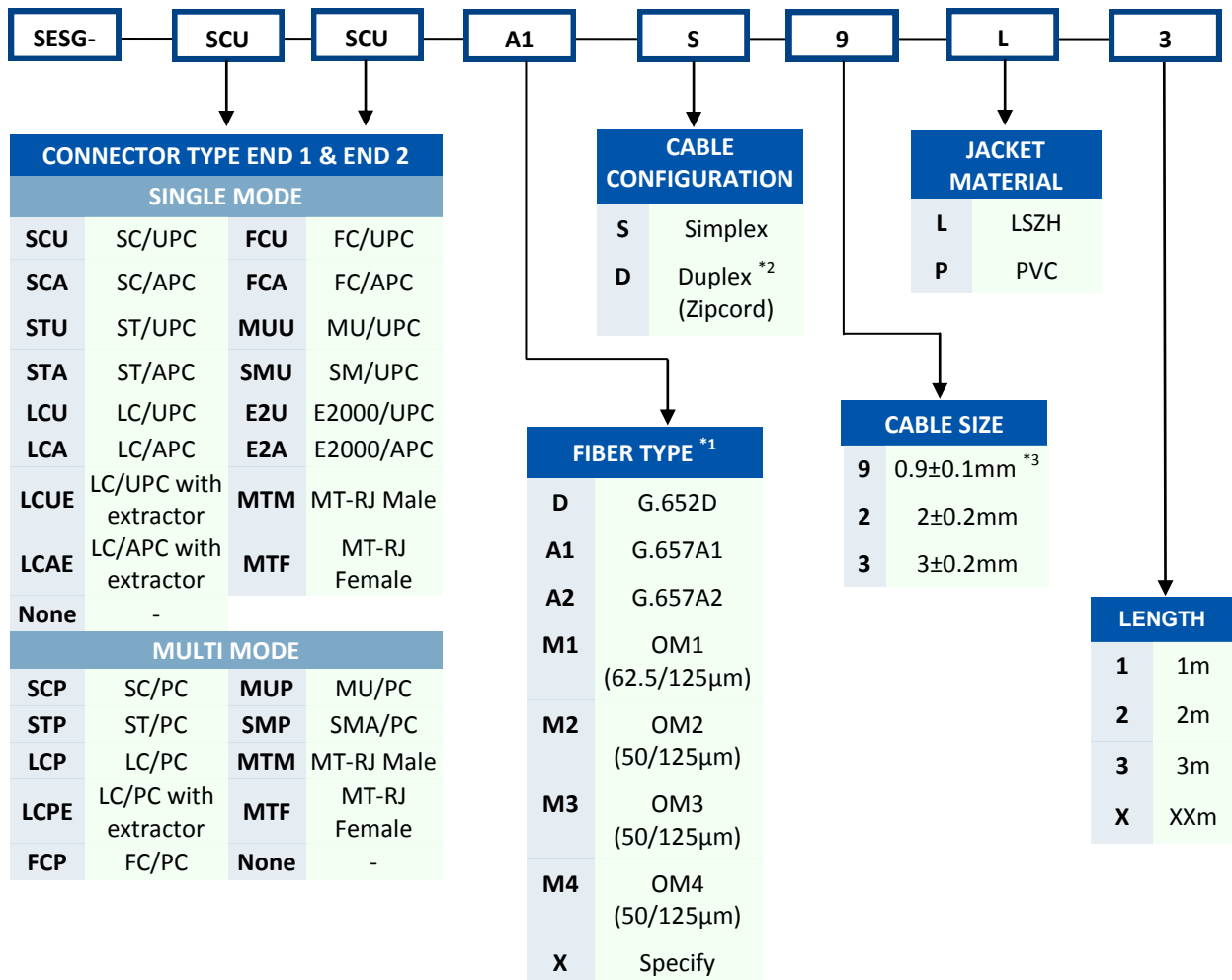
Connector Type 1 & 2				Fiber Count		Cable Length L		Cable Type	
SINGLE MODE									
FP	MPO female/PC	FA	MPO female/APC	4		1	1m	RJ	Jacket Ribbon
MP	MPO male/PC	MA	MPO male/APC	8		2	2m	BR	Bare Ribbon
FCU	FC/UPC	FCA	FC/APC	12		3	3m	RC	Round Cable
SCU	SC/UPC	SCA	SC/APC	24		4	4m		
STU	ST/UPC	STA	ST/APC			X	Specify		
MUU	MU/UPC	MUA	MU/APC		Method	Fibre Mode		Fanout Length	
LCU	LC/UPC	LCA	LC/APC						
LCUE	LC/UPC with extractor	LCAE	LC/APC with extractor						
E2U	E2000/UPC	E2A	E2000/APC						
MULTI MODE						Single mode			
SCP	SC/PC	MUP	MU/PC		A	D	G.652D		
STP	ST/PC	SMP	SMA/PC		B	A1	G.657A1		
LCP	LC/PC	MTM	MT-RJ Male		C	XX	Specify		
LCPE	LC/PC with extractor	MTF	MT-RJ Female		D	Multimode			
FCP	FC/PC	None	-			M1	OM1		
						M2	OM2		
						M3	OM3		
						M4	OM4		

Note : Specifications are subject to change without prior notice

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STANDARD CONNECTOR ORDERING INFORMATION

EXAMPLE : SESG-SCU-SCU-A1S9L3



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