

Cable Assemblies

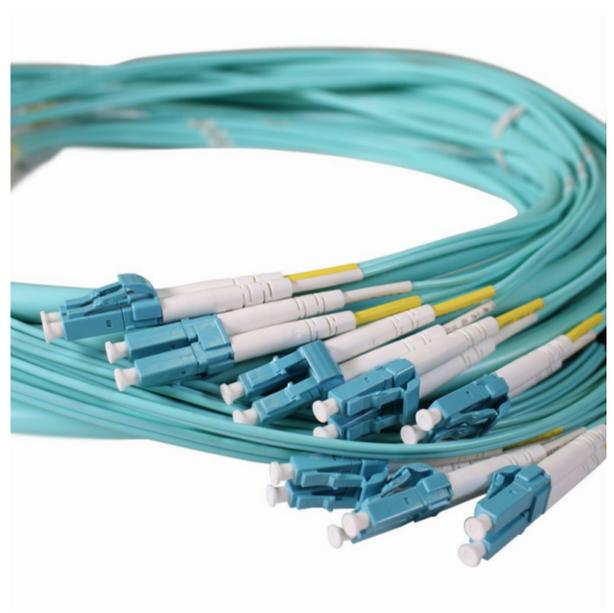
Be it from Data Centers to Enterprise Networks, connectorized cables are a necessary and critical component of a robust, physically interconnected fiber optic system, and Sumitomo Electric Lightwave (SEL) has years of experience in supplying these important, highly varied components to facilities worldwide.

Enhancing SEL's optical fiber development and manufacturing with a wide range of fiber, cables, connectors and sizes to choose from, SEL can provide most any type of connectorized cable assembly needed at competitive prices and lead times. SEL's Cable Assemblies are designed for use in any application requiring optical connections. Available in simplex, duplex, interconnect, and trunk configurations, these assemblies can contain up to 864 optical fibers.

Additional fiber count assemblies are available upon request.

FEATURES & BENEFITS

- **Industry Standard Connector Configurations:** Compatible with all industry-standard connector configurations for maximum flexibility.
- **Custom Termination & Cable Options:** Tailor configurations to meet specific networking needs.
- **Multiple Connector End Configurations:** Various end configurations available. See ordering information on pages 4-5.
- **Compatible Fiber Types:** Can be designed with the following fiber types for versatility: OM1 (62.5µm); OM2, OM3, OM4, OM5 (50µm); SM (G.657.A2, G.657.A1)
- **Environmental Suitability:** Riser, plenum, and LSZH jackets provide options for different environmental and safety requirements.
- **12f/8f MPO Ribbon Assemblies:** Quick and easy termination for 1G, 10G, 40G, and 100G applications.
- **Flexible MPO Connector:** Allows for gender and polarity changes in the field and push-pull operations.
- **Superior Insertion Loss & Back Reflection Performance:** Ensures minimal signal loss and high-quality data transmission.
- **100% Visual/Performance Verification:** Rigorous visual and optical testing ensures optimal performance.
- **Standards Compliance:** Exceeds TIA and Telcordia requirements for quality and reliability.



QUICK SPECS

SINGLE-FIBER
CONNECTORS

LC, SC,
STC, etc.

MULTI-FIBER
CONNECTORS

MPO, MTP,
etc.

FIBER COUNT

1-864*

FIBER SIZE

Various

** Additional fiber count assemblies available upon request*

APPLICATIONS

- Data Centers
- MPO Cassettes
- High Density Distribution Panels
- Direct Connection to Equipment
- Connection Between Patch Panels
- Restricted Space Installations
- Central Office Cross Connects

To learn more information visit www.SumitomoElectricLightwave.com



Simplex Patchcords



Duplex Patchcords



Distribution Trunk Cables

SPECIFICATIONS

CONNECTOR TYPES

CONNECTOR TYPES	
Lucent Connector (LC)	
Subscriber Connector (SC)	
Straight Tip Connector (ST)	

POLISH TYPES

POLISH TYPES	
Ultra Physical Contact (UPC)	
Angled Physical Contact (APC)	

INSERTION LOSS

CONNECTOR TYPE	FIBER TYPE	POLISH TYPE	INSERTION LOSS
LC	SM	UPC	≤ 0.25 dB
	SM	APC	≤ 0.30 dB
	MM	PC	≤ 0.30 dB
SC / ST	SM	UPC	≤ 0.30 dB
	SM	APC (SC Only)	≤ 0.50 dB
MPO (Standard)	MM	PC	≤ 0.50 dB
	SM	APC	≤ 0.75 dB
MPO (Low Loss)	MM	PC	≤ 0.60 dB
	SM	APC	≤ 0.35 dB
	MM	PC	≤ 0.35 dB

RETURN LOSS

CONNECTOR TYPE	FIBER TYPE	POLISH TYPE	RETURN LOSS
LC	SM	UPC	≥ 55 dB
	SM	APC	≥ 60 dB
	MM	PC	≥ 25 dB
SC / ST	SM	UPC	≥ 55 dB
	SM	APC (SC Only)	≥ 60 dB
MPO (Standard)	MM	PC	≥ 25 dB
	SM	APC	≥ 55 dB
MPO (Low Loss)	MM	PC	≥ 20 dB
	SM	APC	≥ 60 dB
	MM	PC	≥ 20 dB

PROPERTY	SMF		MMF OM1	MMF OM4	MMF OM5
Polish Type	UPC	APC	UPC	UPC	UPC
Housing Color	Blue	Green	Beige	Aqua	Lime
Operating Temperature	+14 to +140°F (-10 to +60°C)				

CABLE ASSEMBLIES RESOURCES	POLARITY GUIDE <p>This guide helps you understand polarity configurations, enabling you to make informed decisions for your networking projects.</p>	PART NUMBER CONFIGURATOR <p>This user-friendly tool accommodates our most common cable assemblies, making it easy to configure and order the exact product you need.</p>
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ORDERING INFORMATION

Instructions: Create a part number by using this character set and codes.

D Z - 1 222 3 4 5 6 7 8 999 U - X Y P E
(21 characters minimum. More if exact length or other custom configuration.)

Z - POLARITY/FIBER ORIENTATION		1 - FIBER TYPE		2 - FIBER COUNT (3-DIGITS)			
Single Fiber Cable		1	OM1 Fiber (62.5 μm)	001	1f	050	50f
A	Single Fiber Cable	2	OM2 Fiber (50 μm)	002	2f	060	60f
Multi-Fiber Cable with Single Fiber Connectors (LC, SC, ST, etc.)		3	OM3 Fiber (50 μm)	004	4f	072	72f
A	A Connector to A Connector (Crossover Type)	4	OM4 Fiber (50 μm)	006	6f	096	96f
B	A Connector to B Connector (Straight Through Type)	5	OM5 Fiber (50 μm)	008	8f	144	144f
Multi-Fiber Cable with Multi-Fiber Connectors (MPO, MTP, etc.)		8	SM (G.657.A2)	012	12f	192	192f
A	MPO/MTP Type A	9	SM (G.657.A1)	016	16f	288	288f
B	MPO/MTP Type B			024	24f	432	432f
C	MPO/MTP Type C			036	36f	576	576f
D	MPO/MTP SM Type B (with window up key down)			048	48f	864	864f
G	40G/400G Type B (Outer 8F out of 12F)						
H	40G/400G Type A (Outer 8F out of 12F)						
1	MPO24/MTP24 Config 1						
2	MPO24/MTP24 Config 2						
3	MPO24/MTP24 Config 3						
4	MPO24/MTP24 Config 4						

Additional Fiber Count Assemblies Available Upon Request

3 - CABLE DESIGN		4 - ARMOR TYPE		5 - CABLE JACKET/FLAME RETARDANCY RATING		6 - SUBUNITS (FURCATION CORD)	
P	Pliable Ribbon (250 μm)	N	No Armor	A	OSP	C	1.6 mm
Q	Pliable Ribbon (200 μm)	L	Interlocking Armor	B	Riser	T	2.0 mm
A	Flat Ribbon (250 μm)	M	Micro Armor	C	Indoor/Outdoor Riser	X	3.0 mm
B	Flat Ribbon (200 μm)			D	LSZH (Low Smoke Zero Halogen)	9	900 μm
X	Loose Buffer (200 μm)			E	Riser LSZH	V	SEL Option
Y	Loose Buffer (250 μm)			F	Indoor/Outdoor Riser LSZH	D	Not Applicable
Z	Tight Buffer (900 μm)			G	Plenum		
				H	Indoor/Outdoor Plenum		
				2	B1ca		
				3	B2ca		
				4	Cca		
				5	Dca		

For ordering assistance, please contact our Inside Sales team at **800-358-7378**.

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7 & 8 - CONNECTOR END A & B						9 - LENGTH (3-DIGITS)	
Two Choices Needed						001	001-999+
0	LC, Simplex	9	LC-UNIBOOT / APC (Reversible with Pull Tab/Boot)	I	Do Not Use	R	MPO/MTP (Female/Unpinned), 24 Fiber, Standard Loss <i>Longer lengths may be available upon request.</i>
1	LC, Duplex (Zip Cord)	A	MPO/MTP (Male/Pinned), 8 Fiber, Low Loss	J	MPO/MTP (Male/Pinned), 16 Fiber, Low Loss	S	SC, Duplex (Zip Cord)
2	LC/APC, Simplex	B	MPO/MTP (Male/Pinned), 8 Fiber, Standard Loss	K	MPO/MTP (Male/Pinned), 16 Fiber, Standard Loss	T	SC, Simplex
3	LC/APC, Duplex	C	MPO/MTP (Female/Unpinned), 8 Fiber, Low Loss	L	MPO/MTP (Female/Unpinned), 16 Fiber, Low Loss	U	SC/APC, Duplex (Zip Cord)
4	LC-UNIBOOT (Non-Reversible, No Pull Tab/Boot)	D	MPO/MTP (Female/Unpinned), 8 Fiber, Standard Loss	M	MPO/MTP (Female/Unpinned), 16 Fiber, Standard Loss	V	SC/APC, Simplex
5	LC-UNIBOOT (Reversible, No Pull Tab/Boot)	E	MPO/MTP (Male/Pinned), 12 Fiber, Low Loss	N	MPO/MTP (Male/Pinned), 24 Fiber, Low Loss	W	ST
6	LC-UNIBOOT (Reversible, Pull Tab/Boot)	F	MPO/MTP (Male/Pinned), 12 Fiber, Standard Loss	O	Do Not Use	X	BARE END (Open/Blunt)
7	LC-UNIBOOT / APC (Non-Reversible, No Pull Tab/Boot)	G	MPO/MTP (Female/Unpinned), 12 Fiber, Low Loss	P	MPO/MTP (Male/Pinned), 24 Fiber, Standard Loss	Y	FC
8	LC-UNIBOOT / APC (Non-Reversible, No Pull Tab/Boot)	H	MPO/MTP (Female/Unpinned), 12 Fiber, Standard Loss	Q	MPO/MTP (Female/Unpinned), 24 Fiber, Low Loss	Z	FC/APC

U - LENGTH UNIT		X & Y - END A & B BREAKOUT LENGTH		P - PULLING EYE		E - FOR EXACT LENGTH ONLY	
F	Feet	Two Choices Needed		A	Pulling Eye on A End Only	E	Exact Length, +/- 0.5 inches
M	Meters	1	18 in (457 mm) - No Stagger	H	18 in (457 mm) - Fiber Pair Stagger	B	Pulling Eye on B End Only
I	Inch	2	24 in (609 mm) - No Stagger	J	24 in (609 mm) - Fiber Pair Stagger	D	Pulling Eyes on Both Ends
		3	36 in (914 mm) - No Stagger	K	36 in (914 mm) - Fiber Pair Stagger	X	No Pulling Eye
		4	48 in (1,219 mm) - No Stagger	L	48 in (1,219 mm) - Fiber Pair Stagger		Exact Length Cables: Assemblies that feature highly precise fiber lengths that provide more equal latency across the fibers housed within the assembly.
		5	60 in (1,524 mm) - No Stagger	M	60 in (1,524 mm) - Fiber Pair Stagger		
		6	72 in (1,828 mm) - No Stagger	N	72 in (1,828 mm) - Fiber Pair Stagger		
		7	16 in (406 mm) - No Stagger	Q	18 in (457 mm) - Subunit and Fiber Pair Stagger		
		8	12 in (305 mm) - No Stagger	R	24 in (609 mm) - Subunit and Fiber Pair Stagger		
		A	18 in (457 mm) - Subunit Stagger	S	36 in (914 mm) - Subunit and Fiber Pair Stagger		
		B	24 in (609 mm) - Subunit Stagger	T	48 in (1,219 mm) - Subunit and Fiber Pair Stagger		
		C	36 in (914 mm) - Subunit Stagger	U	60 in (1,524 mm) - Subunit and Fiber Pair Stagger		
		D	48 in (1,219 mm) - Subunit Stagger	V	72 in (1,828 mm) - Subunit and Fiber Pair Stagger		
		E	60 in (1,524 mm) - Subunit Stagger	W	Special		
		F	72 in (1,828 mm) - Subunit Stagger	X	No Breakout		

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EXAMPLE **DA - 9 004 Z N B T 11 003 M - XXXX** | Part No. is: DA-9002ZNBT11003M-XXXX

Cable Assembly, A Connector to B Connector (Crossover Type), SM (G.657.A1), 2-Fibers, Tight Buffer (900 μm), No Armor, Riser, 2.0 mm Subunit, LC-Duplex to LC-Duplex, 3 Meters Long, No Breakout, No Pulling Eye, Not Exact Length

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