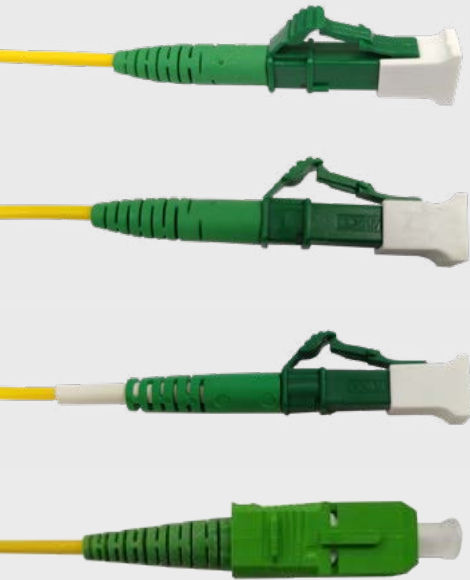


Singlemode and multimode cable assemblies

Pigtails and patch cords



FEATURES

- CommScope offers two ranges of cable assembly specifications according to IEC 61755-1:
- Grade C as a standard quality for use in data centers and telecommunication networks
- Grade B as a superior quality if lower attenuation (Insertion) losses are required, for example to cover extra distance
- All connectors are built with full ceramic ferrules and tuned for best performance and compatibility according to IEC 61755-3-1 and -3-2
- CommScope's standard single mode fiber is according to ITU-T G.657.A1 (MFD $9.2 \mu\text{m} \pm 0.4 \mu\text{m}$) and G.657.A2 (MFD $8.6 \mu\text{m} \pm 0.4 \mu\text{m}$). If other fiber types or MFD (Mode Field Diameter) are required, please contact your CommScope representative.

Singlemode cable assemblies

Singlemode fiber optic cable assemblies are designed for use in telecommunications, CATV, data communications and wide area network applications.

Pigtails are single fiber cables preassembled with a connector at one end. They are typically used to terminate primary coated fiber to optical equipment.

Patch cords are single fiber cables preassembled with a connector at both ends. They are typically used to cross-connect patch panel to patch panel and to interconnect patch panels to optical equipment.

Optical performance

	Standard connectors	Superior connectors
Grade according to IEC 61755-1	C	B
Attenuation (Insertion loss)		
Random mated for 97%	$\leq 0.50 \text{ dB}$	$\leq 0.25 \text{ dB}$
Random mated average	$\leq 0.25 \text{ dB}$	$\leq 0.12 \text{ dB}$
Against reference ¹	$\leq 0.45 \text{ dB}$	$\leq 0.25 \text{ dB}$
Return loss		
Random mated for UPC ²	$> 50 \text{ dB}$	$> 50 \text{ dB}$
Random mated for APC ³	$> 60 \text{ dB}$	$> 60 \text{ dB}$
Operational temperature range	$-40^\circ\text{C} \dots +70^\circ\text{C}$	$-40^\circ\text{C} \dots +70^\circ\text{C}$

¹ The given values are for 1310 nm, 1550 nm and 1625 nm

² UPC = ultra polished physical contact

³ APC = angled polished physical contact

For information on other grade connectors, please contact your local CommScope sales representative.

Ruggedized Pigtails

OC P - - M - X X

Connector/adapter type		
Standard C grade	Superior B grade	Type
S1	SF	SC/UPC
S2	SG	SC/APC 8°
S3	SH	SC/APC 9°
L1	LF	LC/UPC
L2	LG	LC/APC
-	EC	LSH/APC 8°

- Standard Configuration by default for 1.8mm

Jacket color : Yellow
Buffer color : milky white or transparent
250 μm color : natural or milky white

Cable type			Fiber type
ASIA	1.8 mm simplex	LSZH jacket	A1
HSIA	1.8 mm simplex	LSZH jacket	A2

Cable length			
01	1 meter	15	15 meters
02	2 meters	20	20 meters
03	3 meters	25	25 meters
05	5 meters	30	30 meters
10	10 meters		

900 μm pigtails

OC P - - M - X X

Connector/adapter type		
Standard C grade	Superior B grade	Type
S1	SF	SC/UPC
S2	SG	SC/APC 8°
S3	SH	SC/APC 9°
L1	LF	LC/UPC
L2	LG	LC/APC
-	EC	LSH/APC 8°

- Standard Configuration by default 900μm buffer

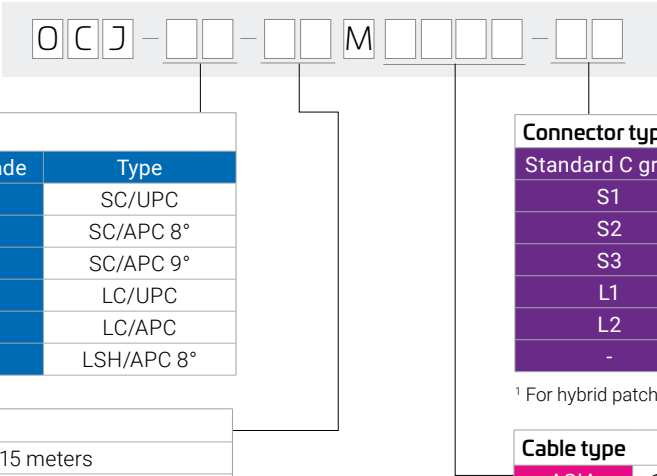
Buffer color: yellow
250 μm color: natural or milky white

JACKET STRIPPING NOTE
Semi-tight buffer: 2 m in steps of minimum 30 cm in one operation
Loose buffer: 2 m in one operation

Cable type			Fiber type
ASEN	900 μm	Semi-tight jacket	A1
HSEN	900 μm	Semi-tight jacket	A2
ALEN	900 μm	Loose buffered tube	A1
HLEN	900 μm	Loose buffered tube	A2

Cable length	
02	2 meters

Patch cords



Connector type at end 1		
Standard C grade	Superior B grade	Type
S1	SF	SC/UPC
S2	SG	SC/APC 8°
S3	SH	SC/APC 9°
L1	LF	LC/UPC
L2	LG	LC/APC
-	EC	LSH/APC 8°

Cable length			
01	1 meter	15	15 meters
02	2 meters	20	20 meters
03	3 meters	25	25 meters
05	5 meters	30	30 meters
10	10 meters		

- Standard Configuration by default for 1.8mm

Jacket color : Yellow

Buffer color : milky white or transparent

250 μm color : natural or milky white

Connector type at end 2 ¹		
Standard C grade	Superior B grade	Type
S1	SF	SC/UPC
S2	SG	SC/APC 8°
S3	-	SC/APC 9°
L1	LF	LC/UPC
L2	LG	LC/APC
-	EC	LSH/APC 8°

Cable type			Fiber type
ASIA	1.8 mm simplex	LSZH jacket	A1
ASHA	1.8 mm duplex	LSZH jacket	A1
HSIA	1.8 mm simplex	LSZH jacket	A2
HSHA	1.8 mm duplex	LSZH jacket	A2

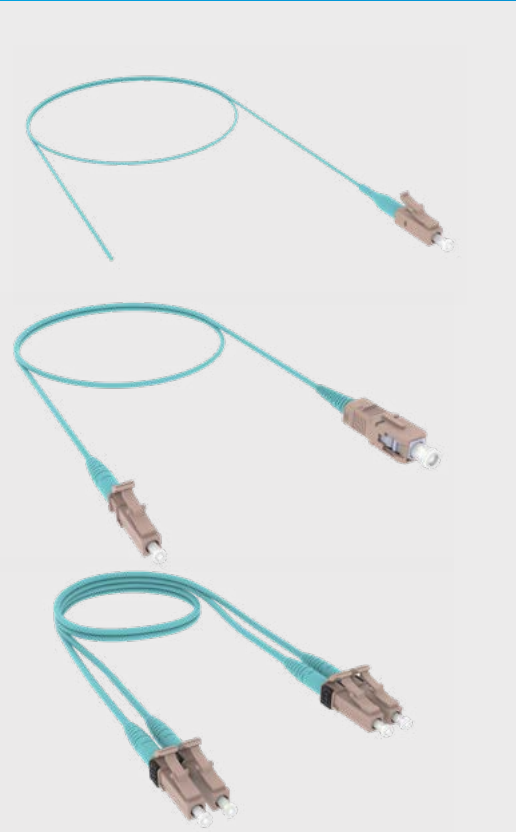
¹ For hybrid patch cords, connectors 1 and 2 must be the same grade.

Notes

In case of a hybrid jumper, sort the connector type codes alphanumerical.

For more technical options and order quantity information, please consult the products ordering guides or your local sales representative.

Multimode cable assemblies



COMMScope OFFERS:

OM4 (both 50/125 μm, laser optimized) for use in short distances applications at 10 Gbit/s as LANs, data centers and central offices

Multimode fiber optic cable assemblies are designed for use in datacommunications and local area network (LAN) applications.

Pigtails are single fiber cables preassembled with a connector at one end.

Patch cords are single or dual fiber cables preassembled with connectors at both ends. They are typically used to cross-connect patch panel to patch panel and to interconnect patch panels to optical equipment.

For all connectors used on the pigtails and patch cords the matching adapters are available and can be ordered separately.

Optical performance

Attenuation grade according to IEC 634267-1 (1)	
Attenuation (Insertion loss)	Grade Bm
Random mated for 97%	<= 0.6 db
Random mated average	<= 0.3 db
Against reference Rm1 (2)	<= 0.41 db
Return loss grade according to IEC 634267-1 (1)	
Return loss	Grade 2m
Random mated for PC	>= 20 dB (mated)
Operational temperature range	-10 °C ... +60 °C

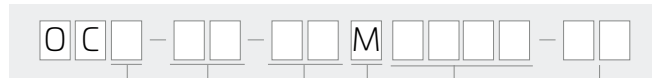
(1) 86B/4657/FDIS is approved for publication

(2) Reference Rm1 according to IEC 63267-3-1 (working number 86B/4705/NP)

The given values are for 850 nm

For information on other grades, please contact your local CommScope sales representative

Pigtails & Patch cords



Cable assembly	
P	Pigtail
J	Jumper (Patch cord)

Connector type at end 1		
Minimum return loss	SC	LC
20 dB	S5	L5

Cable length			
01	1 meter	15	15 meters
02	2 meters	20	20 meters
03	3 meters	25	25 meters
05	5 meters	30	30 meters
10	10 meters		

Connector type at end 2		
Minimum return loss	SC	LC
20 dB	S5	L5

Code	Cable type	Jacket	Fiber type
GSIA	1.8 mm simplex	LSZH	OM4 - 50/125
GSHA	1.8 mm duplex	LSZH	OM4 - 50/125
GSEN	900 μm simplex	Semi-tight	OM4 - 50/125
GLEN	900 μm simplex	Loose buffered tube	OM4 - 50/125

Cable length unit	
M	Meter

JACKET STRIPPING NOTE

Semi-tight buffer: 2 m in steps of minimum 30 cm in one operation

Loose buffer: 2 m in one operation

Notes

In case of a hybrid jumper, sort the connector type codes alphanumerical.
For more technical options and order quantity information, please consult the
products ordering guides or your local sales representative.

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