

3M™ Fibre Optic Cable Assemblies



3M provides a variety of single mode and multimode cable assemblies that are compliant with international standards. These can be configured as hybrid assemblies, simplex or duplex jumpers or multi-fibre assemblies. All cables use LSZH rated material and Zirconium ceramic ferrules for the highest transmission quality and reliability.



Features

- LSZH rated cables
- Zirconium ceramic ferrules
- Connectors and cables according to IEC standards
- PC, UPC and APC end finish
- Pigtailed with semi-tight buffer
- SC and LC assemblies optimal with OM 3 fiber

Benefits

- Meets European fire load specifications
- High performance and high reliability
- Planning safety
- Flexibility to customer requests
- Easy strip ability
- Meets latest cabling standards

Specifications:

Fibre:

Single mode: According to IEC 60793-2-50 Optical fibres part 2-50 Product specifications – sectional spec for class B single mode fibres – type B1.3 (ITU G652D)

Multimode: According to IEC 60793-2-10 Optical fibre part 2-10 Product specifications sectional specification for category A1 multimode fibres – type A1a (50/125) or type A1b(62.5/125) as appropriate. Fibre may be specified as OM3 as defined in ISO 11801.

Cable:

Low Smoke Zero Halogen: LSZH

Flame propagation: IEC 60332-3C

Smoke density: IEC 61034

Toxic gas emission: CENELEC HD 605 S1 (test method 1 or test method 2)

Corrosive gas: IEC 60754-1

3M™ Fibre Optic Cable Specifications								
Single Mode								
Code	Number of Fibres	Cable OD Nominal (mm)	Jacket Colour	Loss/Max 1300/1550 nm (dB/km)	Bandwidth 850/1300 nm (MHz-km)	Bend Radius (mm)	Tensile Load (installation N)	Cable Weight (kg/km)
Unjacketed								
AU	1	0,9	White	0,4/0,4	N/A	50	3	0,9
Jacketed								
AT	1	2,9	Yellow	0,4/0,4	N/A	50	500	7,8
BW	2	2,9 x 5,8	Yellow	0,4/0,4	N/A	50	1000	14,7
CU	1	2,0	Yellow	0,4/0,4	N/A	50	220	3,2
CV	1	2,0	Yellow	0,4/0,4	N/A	50	400	6,7
Multimode								
Code	Number of Fibres	Cable OD Nominal (mm)	Jacket Colour	Loss/Max 1300/1550 nm (dB/km)	Bandwidth 850/1300 nm (MHz-km)	Bend Radius (mm)	Tensile Load (installation N)	Cable Weight (kg/km)
50/125								
CB	2	2,0	Orange	3,5/1,0	1500/500 OM3	50	220	6,7
ZJ	1	2,9	Orange	3,5/1,0	500/800	50	500	0,9
ZK	1	0,9	Orange	3,5/1,0	500/800	50	3	0,9
ZO	1	0,9	Orange	3,5/1,0	1500/500 OM3	50	3	0,9
AX	2	2,9 x 5,8	Orange	3,5/1,0	500/800	50	1000	16,0
CT	2	2,0	Orange	3,5/1,0	500/800	50	220	6,7
62,5/125								
AF	1	2,9	Orange	3,5/1,0	200/500	50	500	7,8
AP	1	0,9	Orange	3,5/1,0	200/500	50	3	0,9
AQ	2	2,9 x 5,8	Orange	3,5/1,0	200/500	50	1000	15,6
CP	2	2,0	Orange	3,5/1,0	200/500	50	220	6,7

Specifications:

Connectors: (Multimode and Single Mode)

ST: IEC 61754-02 Fibre Optic Connector Interfaces Part 2 Type BFOC/2,5 connector family

SC: IEC 61754-04 Fibre Optic Connector Interfaces Part 4 Type SC connector family

FC: IEC 61754-13 Fibre Optic Connector Interfaces Part 13 Type FC-PC connector family

LC: IEC 61754-20 Fibre Optic Connector Interfaces Part 20 Type LC connector family

3M™ Fibre Optic Connector Specifications							
Connector	SC	SC Angled	ST	FC	FC Angled 2.0 mm	LC	MT-RJ
Insertion Loss (dB) (one mated pair)							
Single Mode	0,2 average 0,5 maximum	0,2 average 0,5 maximum	0,2 average 0,5 maximum	0,2 average 0,5 maximum	0,2 average 0,5 maximum	0,1 average 0,25 max	0,2 average 0,5 maximum
Multimode	0,2 average 0,3 maximum	- -	0,2 average 0,3 maximum	0,2 average 0,3 maximum	- -	0,1 average 0,3 maximum	0,2 average 0,3 maximum
Reflection (dB)							
Single Mode	≤ -55	≤ -70	≤ -55	≤ -55	≤ -70	≤ -55	≤ -30
Multimode	≤ -25	-	≤ -25	≤ -25	-	≤ -25	≤ -20
Connection durability (dB) change after 500 matings	<0,2	<0,2	<0,1	<0,2	<0,2	<0,2	<0,3
Operational Temperature connector only (cable dependent)	-25° to 70°C	-25° to 70°C	-25° to 70°C	-25° to 70°C	-25° to 70°C	-25° to 70°C	-10° to 60°C
Storage Temperature	-40° to 85°C	-40° to 85°C	-40° to 85°C	-40° to 85°C	-40° to 85°C	-40° to 85°C	-40° to 85°C
Material							
Connector Housing	Engineered Resin	Engineered Resin	Nickel Plated Zinc	Engineered Resin	Engineered Resin	Engineered Resin	Engineered Resin
Connector Ferrule	Zirconia Ceramic	Zirconia Ceramic 8° angle	Zirconia Ceramic	Zirconia Ceramic	Zirconia Ceramic 8° angle	Zirconia Ceramic	Composite
Alignment Sleeve							
Single Mode	Zirconia Ceramic	Zirconia Ceramic	Zirconia Ceramic	Zirconia Ceramic	Zirconia Ceramic	Zirconia Ceramic	No alignment sleeves
Multimode	Metal	-	Metal	Metal	-	Metal	
Boot	Thermoplastic Elastomer	Thermoplastic Elastomer	Thermoplastic Elastomer	Thermoplastic Elastomer	Thermoplastic Elastomer	Thermoplastic Elastomer	Thermoplastic Elastomer
Backbone	Nickel Plated Brass	Nickel Plated Brass	Zinc Alloy	Nickel Plated Brass	Nickel Plated Brass	Nickel Plated Brass	Nickel Plated Brass
Flame Retardant	UL-94 V-O	UL-94 V-O	UL-94 V-O	UL-94 V-O	UL-94 V-O	UL-94 V-O	UL-94 V-O

For more detailed technical data, please refer to the 3M Telecommunications Specifications for Fibre Optic Patch cords and Pigtaills.

Ordering Information:

Catalog #	Product Name	MOQ	Unit
Cable Assemblies - Multimode			
Patch cords duplex ST - ST Multimode 50/125μ			
BANAN-AX000x	ST-ST patchcord duplex multimode 50/125μ, x = 1, 2, 3 or 5m	12	EACH
Patch cords duplex ST - ST Multimode 62.5/x25μ			
BANAN-AQ000x	ST-ST patchcord duplex multimode 62.5/125μ, x = 1, 2, 3 or 5m	12	EACH
Patch cords duplex SC - SC Multimode 50/x25μ			
BDBDB-AX000x	SC-SC Patchcord duplex multimode 50/125μ, x = 1, 2, 3 or 5m	12	EACH
Patch cords duplex SC - SC Multimode 50/x25μ OM3			
BDBDB-CB000x	SC-SC Patchcord duplex multimode 50/125μ, OM3, x = 1, 2, 3 or 5m	12	EACH
Patch cords duplex SC - SC Multimode 62.5/x25μ			
BDBDB-AQ000x	SC-SC Patchcord duplex multimode 62.5/125μ, x = 1, 2, 3 or 5m	12	EACH
Patch cords duplex ST - SC Multimode 50/x25μ			
BANDB-AX000x	ST-SC Patchcord duplex multimode 50/125μ, x = 1, 2, 3 or 5m	12	EACH
Patch cords duplex ST - SC Multimode 62.5/x25μ			
BANDB-AQ000x	ST-SC Patchcord duplex multimode 62.5/125μ, x = 1, 2, 3 or 5m	12	EACH
Patch cords duplex ST - MT - RJ Multimode 50/x25μ			
BANMT-CT000x	ST-MT-RJ Patchcord duplex multimode 50/125μ, x = 1, 2, 3 or 5m	12	EACH
Patch cords duplex SC - MT - RJ Multimode 50/x25μ			
BDBMT-CT000x	SC-MT-RJ Patchcord duplex multimode 50/125μ, x = 1, 2, 3 or 5m	12	EACH
Patch cords duplex ST - MT - RJ Multimode 62.5/x25μ			
BANMT-CP000x	ST-MT-RJ Patchcord duplex multimode 62.5/125μ, x = 1, 2, 3 or 5m	12	EACH
Patch cords duplex SC - MT - RJ Multimode 62.5/x25μ			
BDBMT-CP000x	SC-MT-RJ Patchcord duplex multimode 62.5/125μ, x = 1, 2, 3 or 5m	12	EACH
Patch cords duplex ST - LC Multimode 50/x25μ , OM3			
BANDU-CB0002	ST-LC Patchcord duplex multimode 50/125 OM3, 2m	12	EACH
Patch cords duplex SC - LC Multimode 50/x25μ			
BDBDU-AX000x	SC-LC Patchcord duplex multimode 50/125μ, x = 1, 2, 3 or 5m	12	EACH
Patch cords duplex SC - LC Multimode 50/x25μ OM3			
BDBDU-CB000x	SC-LC Patchcord duplex multimode 50/125μ, OM3, x = 1, 2, 3 or 5m	12	EACH
Patch cords duplex SC - LC Multimode 62.5/x25μ			
BDBDU-AQ000x	SC-LC Patchcord duplex multimode 62.5/125μ, x = 1, 2, 3 or 5m	12	EACH
Patch cords duplex LC - LC Multimode 50/x25μ			
BDUDU-AX000x	LC-LC Patchcord duplex multimode 50/125μ, x = 1, 2, 3 or 5m	12	EACH
Patch cords duplex LC - LC Multimode 50/x25μ, OM3			
BDUDU-CB000x	LC-LC Patchcord duplex multimode 50/125μ, OM3, x = 1, 2, 3 or 5m	12	EACH
Patch cords duplex LC - LC Multimode 62.5/x25μ			
BDUDU-AQ000x	LC-LC Patchcord duplex multimode 62.5/125μ, x = 1, 2, 3 or 5m	12	EACH

Ordering Information:

Catalog #	Product Name	MOQ	Unit
Cable Assemblies – Single Mode			
Patch cords duplex SC - SC Single-mode 9/x25μ			
ADADA-BW000x	SC-SC Patchcord duplex single-mode 9/125μ, x = 1, 2, 3, 5 or 10m	12	EACH
Patch cords duplex SC - LC Single-mode 9/x25μ			
ADADV-BW000x	SC-LC Patchcord duplex single-mode 9/125μ, x = 1, 2, 3, 5 or 10m	12	EACH
Patch cords duplex SC/APC - LC Single-mode 9/x25μ			
AEPDU-BW000x	SC/APC-LC Patchcord duplex single-mode 9/125μ, x = 1, 2, 3, 5 or 10m	12	EACH
Patch cords duplex LC - LC Single-mode 9/x25μ			
ADV DV-BW000x	LC-LC Patchcord duplex single-mode 9/125μ, x = 1, 2, 3 or 5m	12	EACH
Patch cords simplex ST - ST Singlemode 9/x25μ			
AAMAM-AT000x	ST-ST Patchcord simplex singlemode 9/125μm, x = 1, 2, 3 or 5m	12	EACH
Patch cords simplex ST - SC Singlemode 9/x25μ			
AAMDA-AT000x	ST-SC/PC Patchcord simplex singlemode 9/125μm, x = 1, 2, 3 or 5m	12	EACH
Patch cords simplex SC/PC - SC/PC Singlemode 9/x25μ			
ADADA-AT000x	SC-SC Patchcord simplex Single-mode 9/125μ, x = 1, 2, 3 or 5m	12	EACH
Patchcords simplex SC/APC 8° - SC/APC 8° Singlemode 9/x25μ			
AEPEP-AT000x	SC/APC 8°-SC/APC 8°, Patchcord simplex singlemode 9/125μm, x = 1, 2, 3 or 5m	12	EACH
Patchcords simplex SC/UPC - SC/UPC Singlemode 9/x25μ			
AEQEQ-AT000x	SC/UPC-SCUPC Patchcord, simplex, singlemode 9/125 , x = 5 or 10m	12	EACH
Patchcords simplex FC/PC – FC/PC Singlemode 9/x25μ			
AENEN-AT000x	FC/PC-FC/PC Patchcord simplex singlemode 9/125m, x = 1, 2, 3, 5 or 6m	12	EACH
Patchcords simplex SC/APC 8° - SC/PC Singlemode 9/x25μ			
AEPDA-AT000x	SC/APC 8°-SC/PC, Patchcord simplex singlemode 9/125μm, x = 1, 2, or 5m	12	EACH

Pigtails			
Pigtails ST Multimode 900μ semitight			
BANOO-ZK0002	ST Pigtail Multimode 50/125 green, 2m	12	EACH
BANOO-AP0002	ST Pigtail Multimode 62.5/125 blue, 2m	12	EACH
Pigtails SC Multimode 900μ semitight			
BDBOO-ZK0002	SC Pigtail Multimode 50/125 green, 2m	12	EACH
BDBOO-ZO0002	SC Pigtail Multimode 50/125 green, 2m, OM3	12	EACH
BDBOO-AP0002	SC Pigtail Multimode 62.5/125 blue, 2m	12	EACH
Pigtails LC Multimode 900μ semitight			
BDUOO-ZK0002	LC Pigtail Multimode 50/125 green, 2m	12	EACH
BDUOO-ZO0002	LC Pigtail Multimode 50/125 green, 2m, OM3	12	EACH

Ordering Information:

Catalog #	Product Name	MOQ	Unit
Pigtails			
Pigtails ST Single-mode 900µ semitight			
AANOO-AU0002	ST Pigtail Single-mode 9/125 yellow, 2m	12	EACH
Pigtail SC Single-mode 900µ			
ADAOO-AU0002	SC Pigtail Single-mode 9/125 yellow, 2m, semi tight buffer	12	EACH
ADAOO-AU0002-TIGHT	SC Pigtail Single-mode 9/125 yellow, 2m, tight buffer	12	EACH
ADAOO-AU0002-BLUE	SC Pigtail Single-mode 9/125, 2m , blue	12	EACH
ADAOO-AU0002-BULK	SC Pigtail Single-mode 9/125 yellow, 2m, tight buffer,bulk 240 each	240	EACH
Pigtail SC/APC Single-mode 900µ semitight			
AEPOO-AU0002	SC/APC 8° Pigtail Single-mode 9/125 green, 2m	12	EACH
Pigtail SC/UPC Single-mode 900µ semitight			
AEQOO-AU0003	SC/UPC Pigtail Single-mode 9/125, 900 micron, yellow, 3m	12	EACH
AEQOO-CU0005	SC/UPC Pigtail Single-mode 9/125, 2,4mm, yellow, 5m	12	EACH
Pigtails FC Single-mode 900µ semitight			
AENOO-AU0002	FC Pigtail Single-mode 9/125 yellow, 2m	12	EACH
Pigtails LC Single-mode 900µ semitight			
ADVOO-AU0002	LC Pigtail Single-mode 9/125 yellow, 2m	12	EACH
AEYOO-AU0002	E2000/APC 8° Pigtail, Single-mode 9/125 micron, yellow, 2m	12	EACH

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