

### OPTICAL FIBER CABLE ASSEMBLIES

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### Chapter Summary

- A complete line of cable assemblies for virtually any communications scenario
- Factory-terminated and tested
- Manufactured using quality AMP NETCONNECT cable and connectors
- Available in 50/125 μm, XG and 62.5/125 μm Multimode and Single-mode
- Available connector styles include MT-RJ, SC, ST, LC and MPO
- Feature connectors with ceramic ferrules
- Call for quotes on custom cable assemblies
- Most standard cable assemblies are shipped within one week, special configuration cable assemblies can be shipped within two weeks
- Selected LSZH cable assemblies available upon request - contact your local NETCONNECT representative for more information

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## Optical Fiber Cable Assembly Information

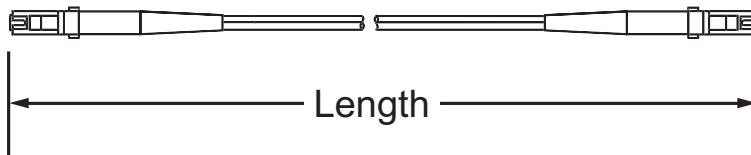
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### Optical Fiber Cable Assembly Performance Details

Test Description	FOTP*	Requirement
Visual and Mechanical Inspection:	MT-RJ - 13	TIA/EIA-604-12 (FOCIS 12)
	SC - 13	TIA/EIA-604-3 (FOCIS 3)
	ST - 13	TIA/EIA-604-2 (FOCIS 2)
	LC - 13	TIA/EIA-604-10 (FOCIS 10)
Attenuation	34	≤ 0.75 dB
Return Loss	107	≤ -20 dB
Low Temperature (0° C for 4 days)	188	≤ 0.3 dB change
Temperature Life (55° C for 14 days)	7	≤ 0.3 dB change
Humidity (90 to 95% @ 40° C for 4 days)	5	≤ 0.3 dB change
Impact (8 drops from 1.8 m)	2	≤ 0.75 dB IL, ≤ -20 dB RL
Durability (500 cycles)	21	≤ 0.75 dB IL, ≤ -20 dB RL
Cable Retention (0° and 90°)	6	≤ 0.75 dB IL, ≤ -20 dB RL
Flex (100 cycles)	1	≤ 0.75 dB IL, ≤ -20 dB RL
Twist (10 cycles)	36	≤ 0.75 dB IL, ≤ -20 dB RL

\*Note: FOTP = Fiber Optic Test Procedure per TIA/EIA - 455-XX series.  
FOCIS = Fiber Optic Connector Interchangeability Standard.

### Optical Fiber Cable Assembly Length Reference



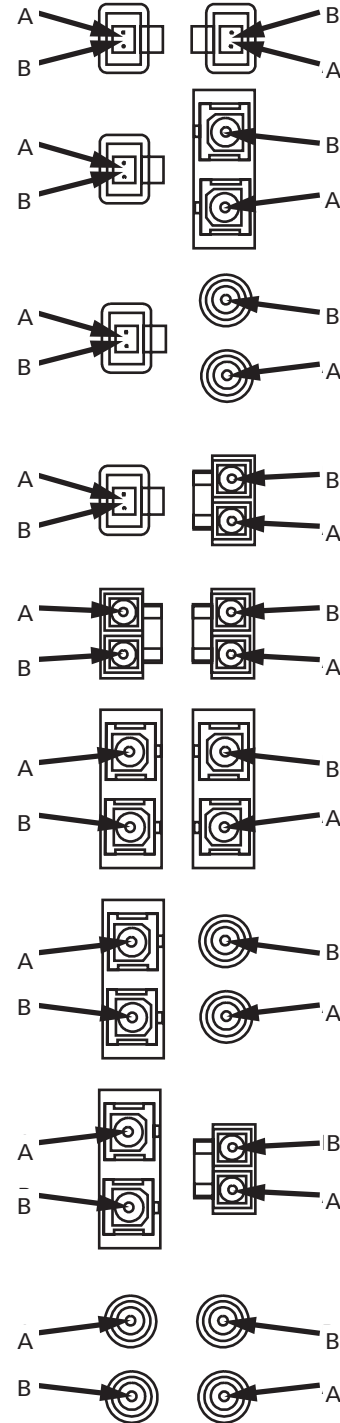
### Meter to Foot and Inch Reference

Length in Meters	Length in Feet	Length in Inches
1	3.28	39.37
2	6.56	78.74
3	9.84	118.11
4	13.12	157.48
5	16.40	196.85
6	19.68	236.21
7	22.96	275.59
8	26.25	314.96
9	29.52	354.33
10	32.80	393.70
20	65.62	787.40
30	98.42	1181.10
40	131.23	1574.80
50	164.04	1968.50
60	196.85	2362.20
70	229.66	2755.90
80	262.47	3149.60
90	295.27	3543.30
100	328.08	3937.00
110	360.89	4330.69
120	393.70	4724.39
130	426.51	5118.09
140	459.32	5511.79
150	492.12	5905.49
160	524.93	6299.19
170	557.74	6692.89
180	590.55	7086.59
190	623.36	7480.29
200	656.17	7873.99

Note: Conversion chart is for reference only and does not imply actual assembly length.

### Fiber Polarity

Fiber Color	Left Connector	Right Connector
White	A	B
Blue	B	A



## MPO Trunk Cable Assemblies



with Pulling Socks

### Product Facts

- Trunk cable fiber polarity is Pair-Flipped AB/BA (see polarity diagram Chapter 2.4)
- Trunk cables with Pair-Straight AB/AB polarity are available
- Pulling socks protect MPO terminations during installation
- Twelve (12) fibers per MPO plug
- Trunk cables come pre-tested and ready for immediate use
- 12 and 24 fiber MPO Trunk cables meet or exceed the requirements of GR-409-CORE and UL/NEC rating for Riser and Plenum applications.
- Plenum Cables can be used in riser spaces
- Additional counts and lengths are available

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Description	Fiber Type	UL/NEC Ratings	Jacket Color	Part Number
12-Fiber, Pair-Flipped (AB/BA)	50/125 μm	Plenum (OFNP) Riser (OFNR)	Orange	6435028-X
	XG (850 nm LO 50/125 μm)	Plenum (OFNP) Riser (OFNR)	Aqua	1907404-X
	62.5/125 μm	Plenum (OFNP) Riser (OFNR)	Orange	6435024-X
	Single-mode	Plenum (OFNP) Riser (OFNR)	Yellow	6435070-X
24-Fiber, Pair-Flipped (AB/BA)	50/125 μm	Plenum (OFNP) Riser (OFNR)	Orange	6435029-X
	XG (850 nm LO 50/125 μm)	Plenum (OFNP) Riser (OFNR)	Aqua	1754687-X
	62.5/125 μm	Plenum (OFNP) Riser (OFNR)	Orange	6435025-X
	Single-mode	Plenum (OFNP) Riser (OFNR)	Yellow	6754882-X
72-Fiber, Pair-Flipped (AB/BA)	50/125 μm	Plenum (OFNP) Riser (OFNR)	Orange	6435031-X
	XG (850 nm LO 50/125 μm)	Plenum (OFNP) Riser (OFNR)	Aqua	1828803-X
	62.5/125 μm	Plenum (OFNP) Riser (OFNR)	Orange	6435027-X
	62.5/125 μm	Plenum (OFNP) Riser (OFNR)	Orange	6435035-X

X denotes length in feet: -1 = 10, -2 = 20, -3 = 30, -4 = 40, -5 = 50, -6 = 60, -7 = 70, -8 = 80, -9 = 90, 1--0 = 100, 1--1 = 110, 1--2 = 120, 1--3 = 130, 1--4 = 140, 1--5 = 150, 1--6 = 160, 1--7 = 170, 1--8 = 180, 1--9 = 190, 2--0 = 200, 2--1 = 210, 2--2 = 220, 2--3 = 230, 2--4 = 240, 2--5 = 250, 2--6 = 260, 2--7 = 270, 2--8 = 280, 2--9 = 290, 3--0 = 300

### MT-RJ Cable Assemblies



#### Product Facts

- Each MT-RJ connector houses two fibers
- Cable assemblies are riser-rated
- For MT-RJ SECURE assemblies, see Chapter 4

Connector End 1	Connector End 2	Fiber Type	Jacket Color	UL/NEC Rating	Part Number
MT-RJ	MT-RJ	50/125 μm	Orange	OFNR	6278128-X
		XG (850 nm 50/125 μm)	Aqua	OFNR	6588572-X
		62.5/125 μm	Orange	OFNR	6278032-X
		Single-mode	Yellow	OFNR	6278033-X

X denotes length in meters: -1 = 1, -2 = 2, -3 = 3, -5 = 5, 1--0 = 10

### MT-RJ to SC Cable Assemblies



#### Product Facts

- Connects between equipment with different interfaces
- SC connectors feature ceramic ferrules
- Each MT-RJ Connector houses two fibers
- For MT-RJ SECURE assemblies, see Chapter 4

Connector End 1	Connector End 2	Fiber Type	Jacket Color	UL/NEC Rating	Part Number
MT-RJ	Duplex SC	50/125 μm	Orange	OFNR	6278126-X
		XG (850 nm 50/125 μm)	Aqua	OFNP	1907429-X
		62.5/125 μm	Orange	OFNR	6278028-X
	Simplex SC	Single-mode	Yellow	OFNR	6278031-X
		50/125 μm	Orange	OFNR	6278127-X
		XG (850 nm 50/125 μm)	Aqua	OFNR	6588573-X
		62.5/125 μm	Orange	OFNR	6278030-X

X denotes length in meters: -1 = 1, -2 = 2, -3 = 3, -5 = 5, 1--0 = 10

### MT-RJ to ST Cable Assemblies



#### Product Facts

- Connects between equipment with different interfaces
- ST Connectors feature ceramic ferrules
- Each MT-RJ Connector houses two fibers
- Cable assemblies are riser-rated
- For MT-RJ SECURE assemblies, see Chapter 4

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Connector End 1	Connector End 2	Fiber Type	Jacket Color	UL/NEC Rating	Part Number
MT-RJ	Dual ST	50/125 μm	Orange	OFNR	6278199-X
		62.5/125 μm	Orange	OFNR	1907441-X
		Single-mode	Yellow	OFNR	6278298-X

X denotes length in meters: -1 = 1, -2 = 2, -3 = 3, -5 = 5, 1--0 = 10

### MT-RJ to LC Cable Assemblies

#### Product Facts

- Connects between equipment with different interfaces
- One Duplex LC Connector and one MT-RJ Plug
- LC Connectors feature ceramic ferrules
- Cable Assemblies are riser-rated
- Each MT-RJ Connector houses two fibers
- For MT-RJ SECURE assemblies, see Chapter 4

Connector End 1	Connector End 2	Fiber Type	Jacket Color	UL/NEC Rating	Part Number
MT-RJ	LC Duplex	50/125 μm	Orange	OFNR	6374647-X
		XG (850 nm LO 50/125 μm)	Aqua	OFNR	1907440-X
		62.5/125 μm	Orange	OFNR	6374646-X
		Single-mode	Yellow	OFNR	6374645-X

X denotes length in meters: -1 = 1, -2 = 2, -3 = 3, -5 = 5, 1--0 = 10

### MT-RJ Plug to MT-RJ Right Angle Jack

#### Product Facts



- Form connections between work area and consolidation point
- Factory-assembled and tested
- Save time and money on moves, adds and changes

Description	Jacket Color	Part Number
50/125 μm OFNR (Riser)	Orange	6457240-X

X denotes length in feet: -1 = 10, -2 = 20, -3 = 30, -4 = 40, -5 = 50

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**SC Cable Assemblies**



**Product Facts**

- Cable assemblies are riser-rated
- Connector features ceramic ferrules

Connector End 1	Connector End 2	Fiber Type	Jacket Color	UL/NEC Rating	Part Number
SC Duplex	SC Duplex	50/125 μm	Orange	OFNR	1907379-X
		XG (850 nm LO 50/125 μm)	Aqua	OFNR	6828151-X
		62.5/125 μm	Orange	OFNR	1907434-X
		Single-mode	Yellow	OFNR	1907435-X

X denotes length in meters: -1 = 1, -2 = 2, -3 = 3, -5 = 5, 1--0 = 10

**SC to ST Cable Assemblies**



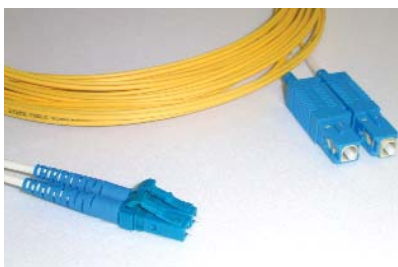
**Product Facts**

- Connects between equipment with different interfaces
- Cable assemblies are riser-rated
- Connectors feature ceramic ferrules

Connector End 1	Connector End 2	Fiber Type	Jacket Color	UL/NEC Rating	Part Number
SC Duplex	Dual ST	50/125 μm	Orange	ONFR	5492591-X
		XG (850 nm LO 50/125 μm)	Aqua	OFNR	1907339-X
		62.5/125 μm	Orange	OFNR	1907385-X
		Single-mode	Yellow	OFNR	1907357-X

X denotes length in meters: -1 = 1, -2 = 2, -3 = 3, -5 = 5, 1--0 = 10

**SC to LC Cable Assemblies**



**Product Facts**

- Connects between equipment with different interfaces
- Connectors feature ceramic ferrules
- Cable Assemblies are riser-rated
- For LC SECURE assemblies, see Chapter 4

Connector End 1	Connector End 2	Fiber Type	Jacket Color	UL/NEC Rating	Part Number
SC Duplex	LC Duplex	50/125 μm	Orange	OFNR	1907380-X
		XG (850 nm LO 50/125 μm)	Aqua	OFNR	1907438-X
		62.5/125 μm	Orange	OFNR	1906777-X
		Single-mode	Yellow	OFNR	1906768-X

X denotes length in meters: -1 = 1, -2 = 2, -3 = 3, -5 = 5, 1--0 = 10

## ST Cable Assemblies



### Product Facts

- Connectors feature ceramic ferrules
- Cable assemblies are riser-rated

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Connector End 1	Connector End 2	Fiber Type	Jacket Color	UL/NEC Rating	Part Number
Dual ST	Dual ST	50/125 $\mu\text{m}$	Orange	OFNR	6278207-X
		XG (850 nm LO 50/125 $\mu\text{m}$ )	Aqua	OFNR	1907557-X
		62.5/125 $\mu\text{m}$	Orange	OFNR	1907436-X
		Single-mode	Yellow	OFNR	1907437-X

X denotes length in meters: -1 = 1, -2 = 2, -3 = 3, -5 = 5, 1--0 = 10

## LC Cable Assemblies

### Product Facts

- Connectors feature ceramic ferrules
- Cable Assemblies are riser-rated
- For LC SECURE assemblies, see Chapter 4

Connector End 1	Connector End 2	Fiber Type	Jacket Color	UL/NEC Rating	Part Number
LC Duplex	LC Duplex	50/125 $\mu\text{m}$	Orange	OFNR	1906866-X
		XG (850 nm LO 50/125 $\mu\text{m}$ )	Aqua	OFNR	6828317-X
		62.5/125 $\mu\text{m}$	Orange	OFNR	1906865-X
		Single-mode	Yellow	OFNR	1906856-X

X denotes length in meters: -1 = 1, -2 = 2, -3 = 3, -5 = 5, 1--0 = 10

### MT-RJ Pigtail Jack (Single-Ended) Cable Assemblies

Description	Color	Fiber Type	Part Number
MT-RJ Jack	Black	50/125 $\mu\text{m}$	6374018-X
	Gray	XG (850 nm LO 50/125 $\mu\text{m}$ )	1938008-X
	Beige	62.5/125 $\mu\text{m}$	6374019-X
	Blue	Single-mode	6374020-X

X denotes length in meters: -1 = 1, -2 = 2, -3 = 3

#### Product Facts

- Compatible with MT-RJ Jack Snap-in Adapter Plates
- Two 250  $\mu\text{m}$  coated fiber in protective 900  $\mu\text{m}$  tubing
- Compatible with fusion or mechanical splices
- Each MT-RJ Connector houses two fibers

### MT-RJ Pigtail Plug (Single-Ended) Cable Assemblies

Description	Fiber Type	Part Number
MT-RJ Plug	50/125 $\mu\text{m}$	6588849-X
	XG (850 nm LO 50/125 $\mu\text{m}$ )	1985275-X
	62.5/125 $\mu\text{m}$	6693532-X
	Single-mode	6693533-X

X denotes length in meters: -1 = 1, -2 = 2, -3 = 3

#### Product Facts

- Compatible with MT-RJ Plug Snap-in Adapter Plates
- Two 250  $\mu\text{m}$  coated fiber in protective 900  $\mu\text{m}$  tubing
- Compatible with fusion or mechanical splices
- MT-RJ Plugs are pinned
- Each MT-RJ Connector houses two fibers
- For MT-RJ SECURE assemblies, see Chapter 4

### SC Pigtail (Single-Ended) Cable Assemblies

Fiber Type	Part Number
Single-mode	Simplex SC - APC 3.0 mm Jacketed 5492193-X
	Simplex SC - UPC 3.0 mm Jacketed 5492081-X
	900 $\mu\text{m}$ Buffered 5492065-X

X denotes length in meters: -1 = 1, -2 = 2, -3 = 3

#### Product Facts

- Compatible with SC Snap-in Adapter Plates
- Spliceable pigtail assembly
- 250  $\mu\text{m}$  coated fiber in protective 900  $\mu\text{m}$  tubing
- Compatible with fusion or mechanical splices

### LC Pigtail (Single-Ended) Cable Assemblies

Connector End 1	Connector End 2	Fiber Type	Part Number
LC Simplex, 1 m	2.0 mm Jacketed	50/125 $\mu\text{m}$	6754404-1
		XG (850 nm LO 50/125 $\mu\text{m}$ )	6754402-1
		62.5/125 $\mu\text{m}$	6754400-1
		Single-mode	6754401-1

#### Product Facts

- Compatible with LC Snap-in Adapter Plates
- Spliceable pigtail assembly
- 250  $\mu\text{m}$  coated fiber in protective 900  $\mu\text{m}$  tubing
- Compatible with fusion or mechanical splices

### MT-RJ OTDR Test Assemblies

Description	Connector End 1	Connector End 2	Fiber Type	Part Number
Launch Lead	MT-RJ	Dual SC Simplex	50/125 μm	6588080-1
			62.5/125 μm	6588079-1
		Dual ST	50/125 μm	6588078-1
			62.5/125 μm	6588077-1

#### Product Facts

- For use in testing with an OTDR test set
- All assemblies are 100m in length
- For XG fiber testing, use standard 50/125 μm Multimode products

### MT-RJ Loopbacks

Description	Fiber Type	Part Number
MT-RJ Loopback	50/125 μm	6278357-1
	62.5/125 μm	6278153-1
	Single-mode	6278358-1

#### Product Facts

- For XG fiber testing, use standard 50/125 μm Multimode products

### MT-RJ Test Kits



Equipment Transmit Port	Fiber Type	Part Number
ST-Style	50/125 μm	1278861-2
	62.5/125 μm	1278862-2
	Single-mode	1278863-2
SC	50/125 μm	1278861-1
	62.5/125 μm	1278862-1
	Single-mode	1278863-1

#### Product Facts

- Each Test Kit includes:
  - 1 - MT-RJ Adapter
  - 2-MT-RJ(no pins)to SC Simplex or ST Cable Assemblies
  - 1-MT-RJ (with pins) to SC Simplex or ST Cable Assembly
  - 1-MT-RJ to MT-RJ Cable Assembly
  - 2 - Mandrels (not included with Single-mode Kit)
  - 1 - Carrying case
- Test Kits for MT-RJ SECURE Connector Systems also available
- See "MT-RJ OPTICAL FIBER SYSTEMS TESTING" White Paper (available on-line at [www.ampnetconnect.com](http://www.ampnetconnect.com)) for details
- For XG fiber testing, use standard 50/125 μm Multimode products

### Replacement Components for MT-RJ Test Kits

Connector End 1	Connector End 2	Fiber Type	Part Number	
Unpinned MT-RJ	Unpinned MT-RJ	50/125 μm	6435096-2	
		62.5/125 μm	6435096-1	
		Single-mode	6435096-3	
	SC	50/125 μm	6435092-2	
			6435092-1	
		62.5/125 μm	6435092-3	
			6435092-2	
		ST-style	62.5/125 μm	6435094-1
			Single-mode	6435094-3
Pinned MT-RJ	SC	50/125 μm	6435092-5	
		62.5/125 μm	6435092-4	
	Single-mode	6435092-6		
		6435094-5		
	ST-style	62.5/125 μm	6435094-4	
		Single-mode	6435094-6	
MT-RJ to MT-RJ Coupler			1278017-1	
Mandrels, set of two, 50/125um type			1435119-2	
Mandrels, set of two, 62.5/125um type			1435118-2	

#### Product Facts

- All assemblies are 4 m in length
- Pinned MT-RJ Cable Assemblies are used for testing only
- Cable Assemblies are riser-rated
- For XG fiber testing, use standard 50/125 μm Multimode products

## LC Test Kits

Description	Fiber Type	Part Number
For use with Dual Fiber Testers with SC Transmit and LC Receive Ports	50/125 $\mu\text{m}$ / XG 50/125 $\mu\text{m}$	1828867-1
	62.5/125 $\mu\text{m}$	1828868-1
	Single-mode	1828869-1
For use with Dual Fiber Testers with ST Transmit and LC Receive Ports	50/125 $\mu\text{m}$ / XG 50/125 $\mu\text{m}$	1828867-2
	62.5/125 $\mu\text{m}$	1828868-2
	Single-mode	1828869-2
For use with Dual Fiber Testers with LC Transmit and LC Receive Ports	50/125 $\mu\text{m}$ / XG 50/125 $\mu\text{m}$	1828867-3
	62.5/125 $\mu\text{m}$	1828868-3
	Single-mode	1828869-3

### Product Facts

- Test Kits includes:
  - Cable Assemblies
  - LC Duplex Clips
  - Mandrels (not included with Single-mode Kit)
  - Carrying case
- Test Kits for LC SECURE Connector Systems also available
- See "FIELD TESTING LC OPTICAL FIBER SYSTEMS" White Paper (available on-line at [www.ampnetconnect.com](http://www.ampnetconnect.com)) for test details

## Replacement Components for LC Test Kits

Description	Fiber Type	Part Number
Mandrels (Transmit side only)	50/125 $\mu\text{m}$ / XG 50/125 $\mu\text{m}$	1435119-1
	62.5/125 $\mu\text{m}$	1435118-1
	Single-mode	-
LC Duplex Clips (pack of 6)	50/125 $\mu\text{m}$ / XG 50/125 $\mu\text{m}$	1754371-2
	62.5/125 $\mu\text{m}$	
	Single-mode	
SC to LC Simplex Assembly, 3m	50/125 $\mu\text{m}$ / XG 50/125 $\mu\text{m}$	1907490-3
	62.5/125 $\mu\text{m}$	1907491-3
	Single-mode	1907489-3
ST to LC Simplex Assembly, 3m	50/125 $\mu\text{m}$ / XG 50/125 $\mu\text{m}$	1907493-3
	62.5/125 $\mu\text{m}$	1907494-3
	Single-mode	1907492-3
LC to LC Simplex Assembly, 3m	50/125 $\mu\text{m}$ / XG 50/125 $\mu\text{m}$	1907496-3
	62.5/125 $\mu\text{m}$	1907497-3
	Single-mode	1907495-3

### Product Facts

- Assemblies are 3m in length
- Assemblies are Simplex style
- Cable Assemblies are riser-rated