

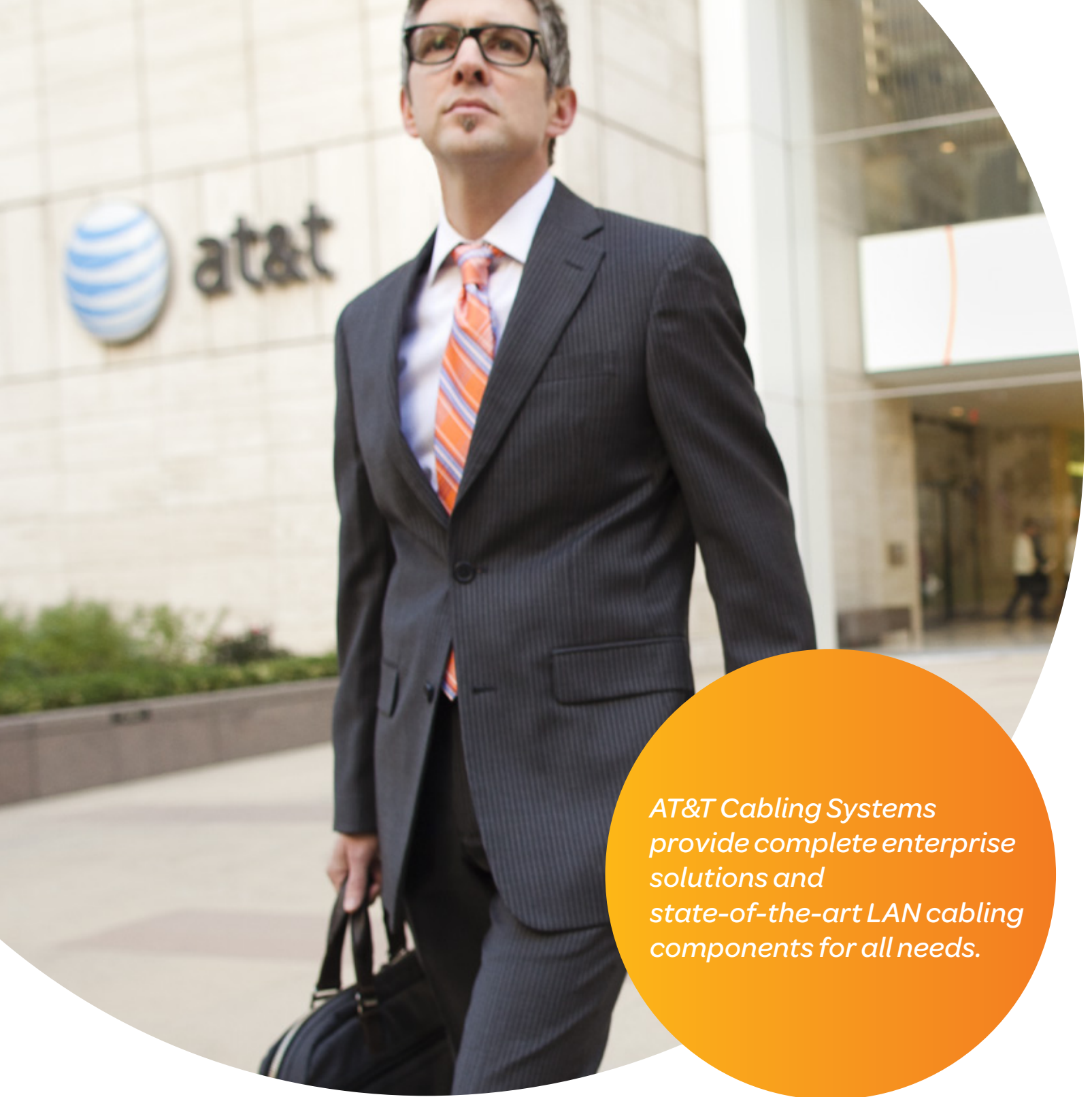
# Product Catalog 2015

## *FiberLine*

AT&T Fiber  
LAN Cabling Products

AT&T Cabling Systems





*AT&T Cabling Systems  
provide complete enterprise  
solutions and  
state-of-the-art LAN cabling  
components for all needs.*

## **AT&T Cabling Systems**

Our high-performance network infrastructure solutions based on innovative designs and highly advanced technology are the first choice for all applications. Faithful to the world-leading AT&T heritage, combining world-class reliability with the unique AT&T Millennium™ Lifetime warranty, AT&T Cabling Systems is your key to years of fail-safe and trouble-free operation, minimizing system downtime and maximizing your profits.

# AT&T Cabling Systems



## AT&T Cabling Systems Goals

AT&T Cabling Systems Continuous goals:

- *Supply high performance network infrastructure solutions, virtually anywhere in the world.*
- *Provide high performance advanced technology and services.*
- *Satisfy the IT infrastructure needs of our global customers.*
- *Provide continuous expert support and be a reliable partner to all our customers.*

*These goals are achieved by a unique combination of deep knowledge of all LAN cabling aspects, integrity, teamwork & creativity, all provided under the trusted AT&T brand.*

## Part B - FiberLine

<b>1</b>	<b>FiberLine Cables</b> .....	<b>6-32</b>
<b>1.1</b>	<b>Indoor LSOH Cables</b> .....	<b>6-8</b>
1.1.1	Simplex & Duplex Cables .....	6
1.1.2	Tight Buffer Cables .....	7
1.1.3	Breakout Cables .....	8
<b>1.2</b>	<b>Indoor/Outdoor LSOH Non-Armored Cables</b> .....	<b>9-11</b>
1.2.1	Tight Buffer Cables .....	9
1.2.2	Single Loose-Tube Cables .....	10
1.2.3	Multi Loose-Tube Dry-Core Cables .....	11
<b>1.3</b>	<b>Indoor/Outdoor LSOH Dielectric Armored Cables</b> .....	<b>12-15</b>
1.3.1	Tight Buffer DJ Cables.....	12-13
1.3.2	Single Loose-Tube SJ Cables.....	14
1.3.3	Multi Loose-Tube Dry-Core SJ Cables .....	15
<b>1.5</b>	<b>Outdoor Non-Armored Cables</b> .....	<b>16</b>
1.5.1	Multi Loose-Tube Jelly Filled SJ Cables.....	16
<b>1.6</b>	<b>Outdoor Dielectric Armored Cables</b> .....	<b>17-22</b>
1.6.1	Single Loose-Tube SJ Cables.....	17
1.6.2	Multi Loose-Tube Jelly Filled SJ Cables .....	18
1.6.3	Single Loose-Tube DJ Cables .....	19
1.6.4	Multi Loose-Tube Jelly Filled DJ Cables.....	20
1.6.5	Multi Loose-Tube Jelly Filled DJ Short-span ADSS Cables.....	21
1.6.6	Multi Loose-Tube Jelly Filled DJ Long-span ADSS Cables.....	22
<b>1.7</b>	<b>Outdoor Steel Armored Cables</b> .....	<b>23-30</b>
1.7.1	Single Loose-Tube SJ Cables.....	23
1.7.2	Multi Loose-Tube Jelly Filled SJ Cables .....	24
1.7.3	Single Loose-Tube DJ Cables .....	25
1.7.4	Multi Loose-Tube Jelly Filled DJ Cables.....	26
1.7.5	Multi Loose-Tube Jelly Filled SJ Aerial (FIG-8) Cables .....	27
1.7.6	Multi Loose-Tube Jelly Filled DJ Aerial (FIG-8) Cables.....	28
1.7.7	Tight-buffer Jelly Filled DJ Cables.....	29-30
<b>1.8</b>	<b>FTTx FO Cables</b> .....	<b>31-32</b>
1.8.1	Microduct Multi Loose-Tube Dry-Core SJ Cables .....	31
1.8.2	FTTx Drop Cables .....	32
<b>2</b>	<b>FiberLine Panels</b> .....	<b>33-51</b>
<b>2.1</b>	<b>Non-Terminated Panels</b> .....	<b>33-39</b>
2.1.1	Standard 19" Panels .....	33-34
2.1.2	High-Density 19" Panels.....	35-36
2.1.3	Basic 19" Panels.....	37
2.1.4	Wall-mount Panels .....	38-39
<b>2.2</b>	<b>Pre-terminated MTP Panels</b> .....	<b>40-45</b>
2.2.1	Standard MTP Cassette Panels .....	40-41
2.2.2	High-Density MTP Cassette Panels.....	42-43
2.2.3	High-Density MTP Fixed Panels.....	44-45
<b>2.3</b>	<b>Pre-terminated MPO Panels</b> .....	<b>46-51</b>
2.3.1	Standard MPO Cassette Panels.....	46-47
2.3.2	High-Density MPO Cassette Panels .....	48-49
2.3.3	High-Density MPO Fixed Panels.....	50-51

<b>3</b>	<b>FiberLine Cords &amp; Pigtails</b>	<b>52-77</b>
<b>3.1</b>	<b>Simplex Cords</b>	<b>53-62</b>
<b>3.1.1</b>	<b>SC/UPC Cords</b>	<b>53-54</b>
3.1.1.1	SC/UPC Multimode Cords	53
3.1.1.2	SC/UPC Singlemode Cords	54
<b>3.1.2</b>	<b>LC/UPC Cords</b>	<b>55-56</b>
3.1.2.1	LC/UPC Multimode Cords	55
3.1.2.2	LC/UPC Singlemode Cords	56
<b>3.1.3</b>	<b>FC/UPC Cords</b>	<b>57-58</b>
3.1.3.1	FC/UPC Multimode Cords	57
3.1.3.2	FC/UPC Singlemode Cords	58
<b>3.1.4</b>	<b>ST/UPC Cords</b>	<b>59-60</b>
3.1.4.1	ST/UPC Multimode Cords	59
3.1.4.2	ST/UPC Singlemode Cords	60
<b>3.1.5</b>	<b>LSH (E-2000™) Cords</b>	<b>61-62</b>
3.1.5.1	LSH/UPC (E-2000™) Multimode Cords	61
3.1.5.2	LSH/UPC (E-2000™) Singlemode Cords	62
<b>3.2</b>	<b>Duplex Cords</b>	<b>63-74</b>
<b>3.2.1</b>	<b>SC/UPC Cords</b>	<b>63-64</b>
3.2.1.1	SC/UPC Multimode Cords	63
3.2.1.2	SC/UPC Singlemode Cords	64
<b>3.2.2</b>	<b>LC/UPC Cords</b>	<b>65-70</b>
3.2.2.1	LC/UPC Multimode Cords	65
3.2.2.1a	LC/UPC Multimode Uniboot Cords (OD 2.0mm)	66
3.2.2.1b	LC/UPC Multimode Uniboot Cords (OD 3.0mm)	67
3.2.2.2	LC/UPC Singlemode Cords	68
3.2.2.2a	LC/UPC Singlemode Uniboot Cords (OD 2.0mm)	69
3.2.2.2b	LC/UPC Singlemode Uniboot Cords (OD 3.0mm)	70
<b>3.2.3</b>	<b>FC/UPC Cords</b>	<b>71-72</b>
3.2.3.1	FC/UPC Multimode Cords	71
3.2.3.2	FC/UPC Singlemode Cords	72
<b>3.2.4</b>	<b>ST/UPC Cords</b>	<b>73-74</b>
3.2.4.1	ST/UPC Multimode Cords	73
3.2.4.2	ST/UPC Singlemode Cords	74
<b>3.2.5</b>	<b>LSH (E-2000™) Cords</b>	<b>75-76</b>
3.2.5.1	LSH/UPC (E-2000™) Multimode Cords	75
3.2.5.2	LSH/UPC (E-2000™) Singlemode Cords	76
<b>3.2.6</b>	<b>MTRJ Cords</b>	<b>77-78</b>
3.2.6.1	MTRJ Mutlimode Cords	77
3.2.6.2	MTRJ Singlemode Cords	78
<b>3.3</b>	<b>Pigtails</b>	<b>79</b>
<b>4</b>	<b>FiberLine Connectors &amp; Coupler</b>	<b>80-91</b>
<b>4.1</b>	<b>Connectors &amp; coupler</b>	<b>80-89</b>
4.1.1	ST FO Connectors & Couplers	81
4.1.2	FC FO Connectors & Couplers	82
4.1.3	SC FO Connectors	83
4.1.4	SC FO Couplers	84
4.1.5	LC FO Connectors	85
4.1.6	LC FO Couplers	86
4.1.7	MTRJ FO Connectors & Couplers	87
4.1.8	LSH (E-2000™) FO Connectors	88

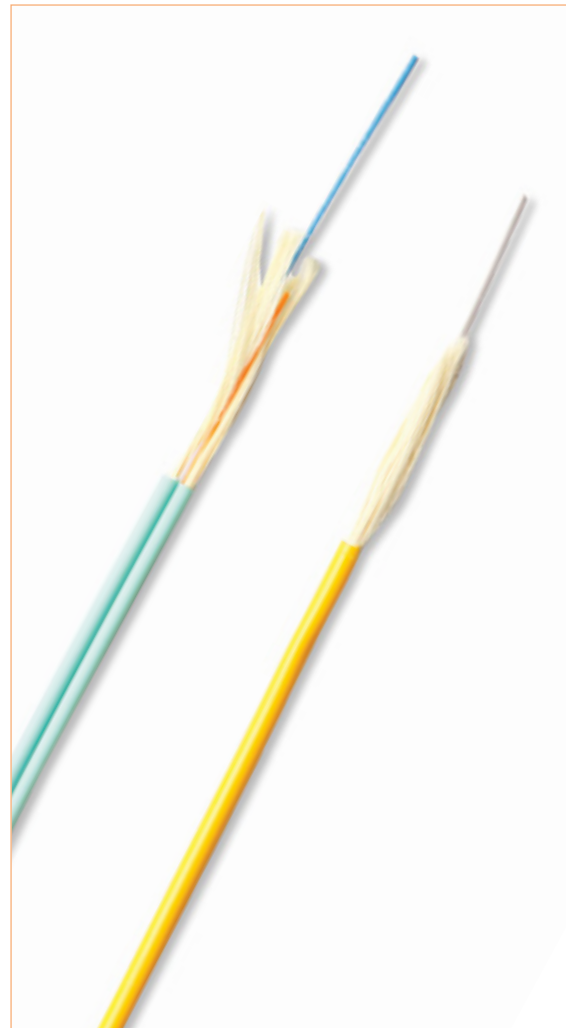
4.1.9	LSH (E-2000™) FO Couplers.....	89
<b>4.2</b>	<b>FiberLine Rapid Connectors.....</b>	<b>90-91</b>
4.2.1	Fiber Rapid Connectors.....	90
4.2.2	Cord Rapid Connectors.....	91
<b>5</b>	<b>FiberLine Outlets.....</b>	<b>92-93</b>
5.1	Surface Mount Boxes.....	92
5.2	Multimedia Boxes with Fiber Management.....	93
<b>6</b>	<b>FiberLine Fiber Types.....</b>	<b>94</b>

## AT&T FiberLine

### Indoor Simplex and Duplex Optical Fiber LS0H Cables

#### Description

1-2 fibers indoor simplex and duplex FO cables	
Fiber type	Select from FiberLine fiber types (Section B.6)
Buffer type	900µ tight flame retardant LS0H coating
Strength elements	Served aramid and glass yarn
Minicable jacket material	Flame retardant LS0H compound
Color code	1. Blue 2. Orange
Jacket color	Per request



#### Standard & EU Directives Conformance

- Relevant sections of ANSI/TIA-568-C.3
- Relevant sections of ISO/IEC 11801
- Relevant sections of EN 50173
- IEC 60332-1 flame test
- IEC 60754 & IEC 61034
- EU Directive 2011/65/EU (RoHS-2)

#### Mechanical Properties

Short term bend radius	20xOD mm
Long term bend radius	10xOD mm
Operating temperature	-20 to +60C
Installation temperature	0 to +50C
Default jacket colors	MM OM1 & OM2: Orange
	MM OM3: Turquoise
	MM OM4: Purple
	SM: Yellow

#### Ordering Information

FF: Fiber Type    CC: Jacket Color

Description	OD mm	Weight Kg/Km	Max. Load N		Packaging	P/N
			Short Term	Long Term		
Simplex LS0H FO Indoor Cable	1.8	3.5	80	40	2000m Drum	21NFFHA001A-CC2N
Simplex LS0H FO Indoor Cable	2.0	3.9	100	50	2000m Drum	21NFFHA001B-CC2N
Simplex LS0H FO Indoor Cable	2.4	4.5	100	50	2000m Drum	21NFFHA001C-CC2N
Simplex LS0H FO Indoor Cable	2.8	5.2	120	60	2000m Drum	21NFFHA001D-CC2N
Simplex LS0H FO Indoor Cable	3.0	6.5	160	80	2000m Drum	21NFFHA001E-CC2N
Duplex LS0H FO Indoor Zip-Cable	1.8x3.6	7.0	160	80	2000m Drum	21NFFHA002A-CC2N
Duplex LS0H FO Indoor Zip-Cable	2.0x4.0	8.0	200	100	2000m Drum	21NFFHA002B-CC2N
Duplex LS0H FO Indoor Zip-Cable	2.4x4.8	9.1	240	120	2000m Drum	21NFFHA002C-CC2N
Duplex LS0H FO Indoor Zip-Cable	2.8x5.6	10.5	300	150	2000m Drum	21NFFHA002D-CC2N
Duplex LS0H FO Indoor Zip-Cable	3.0x6.0	14.0	300	150	2000m Drum	21NFFHA002E-CC2N

## AT&T FiberLine

### Indoor Tight-Buffer Optical Fiber LSOH Cables

#### Description

2-144 fibers indoor tight-buffer FO cables	
Fiber type	Select from FiberLine fiber types (Section B.6)
Buffer type	900μ tight flame retardant LSOH coating
Strength elements	Served aramid and glass yarn
Central strength member	Dielectric, in multi-unit cables only
Sub-units jacket material	Flame retardant LSOH compound
Cable jacket material	Flame retardant LSOH compound
Fibers and sub-units color code	TIA-598-C
Jacket color	Per request

#### Standard & EU Directives Conformance

- Relevant sections of ANSI/TIA-568-C.3
- Relevant sections of ISO/IEC 11801
- Relevant sections of EN 50173
- IEC 60332-1 flame test
- IEC 60754 & IEC 61034
- EU Directive 2011/65/EU (RoHS-2)

#### Mechanical Properties

Short term bend radius	20xOD mm
Long term bend radius	10xOD mm
Operating temperature	-20 to +60C
Installation temperature	0 to +50C
Default jacket colors	MM OM1 & OM2: Orange MM OM3: Turquoise MM OM4: Purple SM: Yellow



#### Ordering Information - Single Unit Cables

FF: Fiber Type CC: Jacket Color

Description	Fiber Count	Cable OD mm	Weight Kg/Km	Max. Load N		Packaging	P/N
				Short Term	Long Term		
2-Fiber LSOH FO Indoor Tight-Buffer Cable	2	3.5	15	600	200	2000m Drum	23NFFHA002S-CC2N
4-Fiber LSOH FO Indoor Tight-Buffer Cable	4	5.0	22	600	200	2000m Drum	23NFFHA004S-CC2N
6-Fiber LSOH FO Indoor Tight-Buffer Cable	6	5.0	23	600	200	2000m Drum	23NFFHA006S-CC2N
8-Fiber LSOH FO Indoor Tight-Buffer Cable	8	5.5	27	600	200	2000m Drum	23NFFHA008S-CC2N
12-Fiber LSOH FO Indoor Tight-Buffer Cable	12	6.3	35	600	200	2000m Drum	23NFFHA012S-CC2N
16-Fiber LSOH FO Indoor Tight-Buffer Cable	16	7.0	45	1500	500	2000m Drum	23NFFHA016S-CC2N
18-Fiber LSOH FO Indoor Tight-Buffer Cable	18	7.5	51	1500	500	2000m Drum	23NFFHA018S-CC2N
24-Fiber LSOH FO Indoor Tight-Buffer Cable	24	8.5	60	1500	500	2000m Drum	23NFFHA024S-CC2N

#### Ordering Information - Multi-Unit Cables

FF: Fiber Type CC: Jacket Color

Description	Fiber per Subunit	Subunit Count	Cable OD mm	Weight Kg/Km	Max. Load N		Packaging	P/N
					Short Term	Long Term		
18-Fiber LSOH FO Indoor Tight-Buffer Cable	6	3	12	125	1500	500	2000m Drum	23NFFHA018M-CC2N
24-Fiber LSOH FO Indoor Tight-Buffer Cable	6	4	13	135	1500	500	2000m Drum	23NFFHA024M-CC2N
36-Fiber LSOH FO Indoor Tight-Buffer Cable	6	6	16	210	1500	500	2000m Drum	23NFFHA036M-CC2N
48-Fiber LSOH FO Indoor Tight-Buffer Cable	12	4	16	210	1500	500	2000m Drum	23NFFHA048M-CC2N
60-Fiber LSOH FO Indoor Tight-Buffer Cable	12	5	17	230	1500	500	2000m Drum	23NFFHA060M-CC2N
72-Fiber LSOH FO Indoor Tight-Buffer Cable	12	6	19	300	1500	500	2000m Drum	23NFFHA072M-CC2N
96-Fiber LSOH FO Indoor Tight-Buffer Cable	12	8	22	390	1500	500	2000m Drum	23NFFHA096M-CC2N
144-Fiber LSOH FO Indoor Tight-Buffer Cable	12	12	28	600	1500	500	2000m Drum	23NFFHA144M-CC2N



## AT&T FiberLine

### Indoor Breakout Optical Fiber LS0H Cables

#### Description

1-12 fibers indoor breakout FO cables	
Fiber type	Select from FiberLine fiber types (Section B.6)
Buffer type	900µ tight flame retardant LS0H coating
Strength elements	Served aramid and glass yarn
Minicable jacket material	Flame retardant LS0H compound
Minicable jacket diameter	2.0 mm nom. (other sizes available)
Color code	TIA-598-C
Jacket color	Per request

#### Standard & EU Directives Conformance

- Relevant sections of ANSI/TIA-568-C.3
- Relevant sections of ISO/IEC 11801
- Relevant sections of EN 50173
- IEC 60332-1 flame test
- IEC 60754 & IEC 61034
- EU Directive 2011/65/EU (RoHS-2)

#### Mechanical Properties

Short term bend radius	20xOD mm
Long term bend radius	10xOD mm
Operating temperature	-20 to +60C
Installation temperature	0 to +50C
Default jacket colors	MM OM1 & OM2: Orange MM OM3: Turquoise MM OM4: Purple SM: Yellow



#### Ordering Information

FF: Fiber Type    CC: Jacket Color

Description	OD mm	Weight Kg/Km	Max. Load N		Packaging	P/N
			Short Term	Long Term		
2-Fiber LS0H FO Indoor Breakout Cable	6.5	45	400	200	2000m Drum	22NFFHA002N-CC2N
4-Fiber LS0H FO Indoor Breakout Cable	7.0	50	1000	500	2000m Drum	22NFFHA004N-CC2N
6-Fiber LS0H FO Indoor Breakout Cable	8.3	65	1200	600	2000m Drum	22NFFHA006N-CC2N
8-Fiber LS0H FO Indoor Breakout Cable	9.5	85	1400	600	2000m Drum	22NFFHA008N-CC2N
12-Fiber LS0H FO Indoor Breakout Cable	12.5	150	1500	600	2000m Drum	22NFFHA012N-CC2N

## AT&T FiberLine

### Indoor/Outdoor Tight-Buffer Non-Armored Optical Fiber LSOH Cables

#### Description

2-12 fibers indoor/outdoor tight-buffer non-armored FO cables	
Fiber type	Select from FiberLine fiber types (Section B.6)
Buffer type	900μ tight flame retardant LSOH coating
Strength elements	Served swellable aramid and glass yarn
Central strength member	Dielectric, in multi-unit cables only
Sub-units jacket material	Flame retardant LSOH compound
Multi-unit water blocking	Swellable tapes
Cable jacket material	Flame retardant LSOH UV-resistant compound
Fibers and sub-units color code	TIA-598-C
Jacket color	Black (other colors available)



#### Standard & EU Directives Conformance

- Relevant sections of ANSI/TIA-568-C.3
- Relevant sections of ISO/IEC 11801
- Relevant sections of EN 50173
- IEC 60332-1 flame tests
- IEC 60754 & IEC 61034
- EU Directive 2011/65/EU (RoHS-2)

#### Mechanical Properties

Short term bend radius	20xOD mm
Long term bend radius	10xOD mm
Operating temperature	-20 to +60C
Installation temperature	0 to +50C
Water blocking test	3m cable, 1m water, 24h - IEC 60794-1-2 F5

#### Ordering Information - Single Unit Cables

FF: Fiber Type

Description	Fiber Count	Cable OD mm	Weight Kg/Km	Max. Load N		Packaging	P/N
				Short Term	Long Term		
2-Fiber LSOH FO Indoor/Outdoor Tight-Buffer Cable	2	3.5	15	600	200	2000m Drum	23RFFHA002S-BK2N
4-Fiber LSOH FO Indoor/Outdoor Tight-Buffer Cable	4	5.0	22	600	200	2000m Drum	23RFFHA004S-BK2N
6-Fiber LSOH FO Indoor/Outdoor Tight-Buffer Cable	6	5.0	23	600	200	2000m Drum	23RFFHA006S-BK2N
8-Fiber LSOH FO Indoor/Outdoor Tight-Buffer Cable	8	5.5	27	600	200	2000m Drum	23RFFHA008S-BK2N
12-Fiber LSOH FO Indoor/Outdoor Tight-Buffer Cable	12	6.3	35	600	200	2000m Drum	23RFFHA012S-BK2N

## AT&T FiberLine

### Indoor/Outdoor Single Loose-Tube Non-Armored Optical Fiber LSOH Cables

#### Description

2-12 fibers indoor/outdoor single loose-tube non-armored FO cables	
Fiber type	Select from FiberLine fiber types (Section B.6)
Buffer type	Single PBT jell-filled loose tube
Strength elements	Served swellable glass yarn
Cable jacket material	Flame retardant LSOH UV-resistant compound
Fibers color code	TIA-598-C
Jacket color	Black (other colors available)

#### Standard & EU Directives Conformance

- Relevant sections of ANSI/TIA-568-C.3
- Relevant sections of ISO/IEC 11801
- Relevant sections of EN 50173
- IEC 60332-1 flame test
- IEC 60754 & IEC 61034
- EU Directive 2011/65/EU (RoHS-2)

#### Mechanical Properties

Short term bend radius	30xOD mm
Long term bend radius	15xOD mm
Operating temperature	-30 to +70C
Installation temperature	0 to +50C
Water blocking test	3m cable, 1m water, 24h - IEC 60794-1-2 F5



#### Ordering Information

FF: Fiber Type

Description	Cable OD mm	Weight Kg/Km	Max. Load N		Packaging	P/N
			Short Term	Long Term		
2-Fiber LSOH FO Indoor/Outdoor Single Loose-Tube Cable	7.2	65.0	1000	500	2000m Drum	24RFFHA002N-BK2N
4-Fiber LSOH FO Indoor/Outdoor Single Loose-Tube Cable	7.2	65.0	1000	500	2000m Drum	24RFFHA004N-BK2N
6-Fiber LSOH FO Indoor/Outdoor Single Loose-Tube Cable	7.2	65.0	1000	500	2000m Drum	24RFFHA006N-BK2N
8-Fiber LSOH FO Indoor/Outdoor Single Loose-Tube Cable	7.2	65.0	1000	500	2000m Drum	24RFFHA008N-BK2N
10-Fiber LSOH FO Indoor/Outdoor Single Loose-Tube Cable	7.2	65.0	1000	500	2000m Drum	24RFFHA010N-BK2N
12-Fiber LSOH FO Indoor/Outdoor Single Loose-Tube Cable	7.2	65.0	1000	500	2000m Drum	24RFFHA012N-BK2N

## AT&T FiberLine

### Indoor/Outdoor Multi Loose-Tube Dry-Core Single Jacket Optical Fiber LSOH Cables

#### Description

2-288 fibers indoor/outdoor all-dielectric multi loose-tube dry-core single-jacket non-armored FO cables

Fiber type	Select from FiberLine fiber types (Section B.6)
Buffer type	PBT jell-filled loose tubes
Central strength member	Rigid all-dielectric FRP
Water blocking elements	Swellable yarn and tapes
Cable jacket material	Flame retardant LSOH UV-resistant compound
Fibers and tubes color code	TIA-598-C
Jacket color	Black (other colors available)

#### Standard & EU Directives Conformance

- Relevant sections of ANSI/TIA-568-C.3
- Relevant sections of ISO/IEC 11801
- Relevant sections of EN 50173
- IEC 60332-1 flame test
- IEC 60754 & IEC 61034
- EU Directive 2011/65/EU (RoHS-2)

#### Mechanical Properties

Short term bend radius	20xOD mm
Long term bend radius	10xOD mm
Operating temperature	-40 to +70C
Installation temperature	0 to +50C
Water blocking test	3m cable, 1m water, 24h - IEC 60794-1-2 F5
Default fiber count per tube	Indicated (other options available)



#### Ordering Information

FF: Fiber Type

Description	Fibers per Tube	Tube Count	Fillers	Cable OD mm	Weight Kg/Km	Max. Load N		Packaging	P/N
						Short Term	Long Term		
2-Fiber Indoor/Outdoor LSOH FO Loose-Tube All-Dielectric Dry-Core SJ Cable	2	1	5	11.0	110	1500	900	2000m Drum	25RFFHA002N-BK2N
4-Fiber Indoor/Outdoor LSOH FO Loose-Tube All-Dielectric Dry-Core SJ Cable	4	1	5	11.0	110	1500	900	2000m Drum	25RFFHA004N-BK2N
6-Fiber Indoor/Outdoor LSOH FO Loose-Tube All-Dielectric Dry-Core SJ Cable	6	1	5	11.0	110	1500	900	2000m Drum	25RFFHA006N-BK2N
8-Fiber Indoor/Outdoor LSOH FO Loose-Tube All-Dielectric Dry-Core SJ Cable	4	2	4	11.0	110	1500	900	2000m Drum	25RFFHA008N-BK2N
12-Fiber Indoor/Outdoor LSOH FO Loose-Tube All-Dielectric Dry-Core SJ Cable	4	3	3	11.0	110	1500	900	2000m Drum	25RFFHA012N-BK2N
24-Fiber Indoor/Outdoor LSOH FO Loose-Tube All-Dielectric Dry-Core SJ Cable	6	4	2	11.0	115	1500	900	2000m Drum	25RFFHA024N-BK2N
36-Fiber Indoor/Outdoor LSOH FO Loose-Tube All-Dielectric Dry-Core SJ Cable	6	6	0	11.0	115	1500	900	2000m Drum	25RFFHA016N-BK2N
48-Fiber Indoor/Outdoor LSOH FO Loose-Tube All-Dielectric Dry-Core SJ Cable	8	6	0	11.5	130	1500	900	2000m Drum	25RFFHA048N-BK2N
72-Fiber Indoor/Outdoor LSOH FO Loose-Tube All-Dielectric Dry-Core SJ Cable	12	6	0	11.5	130	1500	900	2000m Drum	25RFFHA072N-BK2N
96-Fiber Indoor/Outdoor LSOH FO Loose-Tube All-Dielectric Dry-Core SJ Cable	12	8	0	13.5	155	1500	900	2000m Drum	25RFFHA096N-BK2N
144-Fiber Indoor/Outdoor LSOH FO Loose-Tube All-Dielectric Dry-Core SJ Cable	12	12	0	17.0	210	1500	900	2000m Drum	25RFFHA144N-BK2N
288-Fiber Indoor/Outdoor LSOH FO Loose-Tube All-Dielectric Dry-Core SJ Cable	12	24	0	19.5	305	1500	900	2000m Drum	25RFFHA288N-BK2N

## AT&T FiberLine

### Indoor/Outdoor Tight-Buffer Dielectric Armored Double-Jacket Optical Fiber LSOH Cables

#### Description

6-144 fibers indoor/outdoor tight-buffer dielectric armored double-jacket FO cables

Fiber type	Select from FiberLine fiber types (Section B.6)
Buffer type	900µ tight flame retardant LSOH coating
Strength elements	Served swellable aramid and glass yarn
Sub-units jacket material	Flame retardant LSOH compound
Multi-unit water blocking	Swellable tapes
Inner jacket material	Flame retardant LSOH compound
Dielectric armor	Swellable glass yarn
Outer jacket material	Flame retardant LSOH UV-resistant compound
Fibers and sub-units color code	TIA-598-C
Jacket color	Black (other color available)

#### Standard & EU Directives Conformance

- Relevant sections of ANSI/TIA-568-C.3
- Relevant sections of ISO/IEC 11801
- Relevant sections of EN 50173
- IEC 60332-1 flame test
- IEC 60754 & IEC 61034
- EU Directive 2011/65/EU (RoHS-2)

#### Mechanical Properties

Short term bend radius	20xOD mm
Long term bend radius	10xOD mm
Operating temperature	-20 to +60C
Installation temperature	0 to +50C
Water blocking test	3m cable, 1m water, 24h - IEC 60794-1-2 F5



#### Ordering Information - Single Unit Cables

FF: Fiber Type

Description	Fiber Count	Cable OD mm	Weight Kg/Km	Max. Load N		Packaging	P/N
				Short Term	Long Term		
2-Fiber LSOH FO Indoor/Outdoor Dielectric Armored Dry-Core Tight-Buffer DJ Cable	2	9.5	100	2000	1000	2000m Drum	23RFFAA002S-BK2N
4-Fiber LSOH FO Indoor/Outdoor Dielectric Armored Dry-Core Tight-Buffer DJ Cable	4	11.0	120	2000	1000	2000m Drum	23RFFAA004S-BK2N
6-Fiber LSOH FO Indoor/Outdoor Dielectric Armored Dry-Core Tight-Buffer DJ Cable	6	11.0	120	2000	1000	2000m Drum	23RFFAA006S-BK2N
8-Fiber LSOH FO Indoor/Outdoor Dielectric Armored Dry-Core Tight-Buffer DJ Cable	8	11.5	130	2000	1000	2000m Drum	23RFFAA008S-BK2N
12-Fiber LSOH FO Indoor/Outdoor Dielectric Armored Dry-Core Tight-Buffer DJ Cable	12	12.5	145	2000	1000	2000m Drum	23RFFAA012S-BK2N
16-Fiber LSOH FO Indoor/Outdoor Dielectric Armored Dry-Core Tight-Buffer DJ Cable	16	13.0	160	2500	1200	2000m Drum	23RFFAA016S-BK2N
18-Fiber LSOH FO Indoor/Outdoor Dielectric Armored Dry-Core Tight-Buffer DJ Cable	18	13.5	170	2500	1200	2000m Drum	23RFFAA018S-BK2N
24-Fiber LSOH FO Indoor/Outdoor Dielectric Armored Dry-Core Tight-Buffer DJ Cable	24	14.5	185	2500	1200	2000m Drum	23RFFAA024S-BK2N

Continued on page B.1.3.1a

## AT&T FiberLine

Indoor/Outdoor Tight-Buffer Dielectric Armored Double-Jacket Optical Fiber LS0H Cables (contd.)

### Ordering Information - Multi-Unit Cables

FF: Fiber Type

Description	Fiber per Subunit	Subunit Count	Cable OD mm	Weight Kg/Km	Max. Load N		Packaging	P/N
					Short Term	Long Term		
18-Fiber LS0H FO Indoor/Outdoor Dielectric Armored Dry-Core Tight-Buffer DJ Cable	6	3	17.5	275	2500	1500	2000m Drum	23RFFAA018M-BK2N
24-Fiber LS0H FO Indoor/Outdoor Dielectric Armored Dry-Core Tight-Buffer DJ Cable	6	4	18.5	295	2500	1500	2000m Drum	23RFFAA024M-BK2N
36-Fiber LS0H FO Indoor/Outdoor Dielectric Armored Dry-Core Tight-Buffer DJ Cable	6	6	21.5	395	2500	1500	2000m Drum	23RFFAA036M-BK2N
48-Fiber LS0H FO Indoor/Outdoor Dielectric Armored Dry-Core Tight-Buffer DJ Cable	12	4	21.5	395	2500	1500	2000m Drum	23RFFAA048M-BK2N
60-Fiber LS0H FO Indoor/Outdoor Dielectric Armored Dry-Core Tight-Buffer DJ Cable	12	5	22.5	425	2500	1500	2000m Drum	23RFFAA060M-BK2N
72-Fiber LS0H FO Indoor/Outdoor Dielectric Armored Dry-Core Tight-Buffer DJ Cable	12	6	24.5	510	2500	1500	2000m Drum	23RFFAA072M-BK2N
96-Fiber LS0H FO Indoor/Outdoor Dielectric Armored Dry-Core Tight-Buffer DJ Cable	12	8	27.5	625	2500	1500	2000m Drum	23RFFAA096M-BK2N
144-Fiber LS0H FO Indoor/Outdoor Dielectric Armored Dry-Core Tight-Buffer DJ Cable	12	12	33.5	885	2500	1500	2000m Drum	23RFFAA144M-BK2N

## AT&T FiberLine

### Indoor/Outdoor Single Loose-Tube Dielectric Armored Optical Fiber LSOH Cables

#### Description

2-12 fibers indoor/outdoor single loose-tube dielectric armored dry-core single-jacket FO cables

Fiber type	Select from FiberLine fiber types (Section B.6)
Buffer type	Single PBT jell-filled loose tube
Strength elements & armor	Served swellable glass yarn
Cable jacket material	Flame retardant LSOH UV-resistant compound
Fibers color code	TIA-598-C
Jacket color	Black (other colors available)

#### Standard & EU Directives Conformance

- Relevant sections of ANSI/TIA-568-C.3
- Relevant sections of ISO/IEC 11801
- Relevant sections of EN 50173
- IEC 60332-1 flame test
- IEC 60754 & IEC 61034
- EU Directive 2011/65/EU (RoHS-2)

#### Mechanical Properties

Short term bend radius	30xOD mm
Long term bend radius	15xOD mm
Operating temperature	-30 to +70C
Installation temperature	0 to +50C
Water blocking test	3m cable, 1m water, 24h - IEC 60794-1-2 F5



#### Ordering Information

FF: Fiber Type

Description	Cable OD mm	Weight Kg/Km	Max. Load N		Packaging	P/N
			Short Term	Long Term		
2-Fiber LSOH FO Indoor/Outdoor Dielectric Armored Single Loose-Tube SJ Cable	8.4	80	2000	1000	2000m Drum	24RFFAA002N-BK2N
4-Fiber LSOH FO Indoor/Outdoor Dielectric Armored Single Loose-Tube SJ Cable	8.4	80	2000	1000	2000m Drum	24RFFAA004N-BK2N
6-Fiber LSOH FO Indoor/Outdoor Dielectric Armored Single Loose-Tube SJ Cable	8.4	80	2000	1000	2000m Drum	24RFFAA006N-BK2N
8-Fiber LSOH FO Indoor/Outdoor Dielectric Armored Single Loose-Tube SJ Cable	8.4	80	2000	1000	2000m Drum	24RFFAA008N-BK2N
10-Fiber LSOH FO Indoor/Outdoor Dielectric Armored Single Loose-Tube SJ Cable	8.4	80	2000	1000	2000m Drum	24RFFAA010N-BK2N
12-Fiber LSOH FO Indoor/Outdoor Dielectric Armored Single Loose-Tube SJ Cable	8.4	80	2000	1000	2000m Drum	24RFFAA012N-BK2N

## AT&T FiberLine

### Indoor/Outdoor Multi Loose-Tube Dielectric Armored Dry-Core Single Jacket Optical Fiber LSOH Cables

#### Description

2-288 fibers indoor/outdoor all-dielectric multi loose-tube dry-core single-jacket armored FO cables

Fiber type	Select from FiberLine fiber types (Section B.6)
Buffer type	PBT jell-filled loose tubes
Central strength member	Rigid all-dielectric FRP
Water blocking elements	Swellable yarn and tapes
Dielectric armor	Swellable glass yarn
Cable jacket material	Flame retardant LSOH UV-resistant compound
Fibers and tubes color code	TIA-598-C
Jacket color	Black (other colors available)

#### Standard & EU Directives Conformance

- Relevant sections of ANSI/TIA-568-C.3
- Relevant sections of ISO/IEC 11801
- Relevant sections of EN 50173
- IEC 60332-1 flame test
- IEC 60754 & IEC 61034
- EU Directive 2011/65/EU (RoHS-2)

#### Mechanical Properties

Short term bend radius	20xOD mm
Long term bend radius	10xOD mm
Operating temperature	-40 to +70C
Installation temperature	0 to +50C
Water blocking test	3m cable, 1m water, 24h - IEC 60794-1-2 F5
Default fiber count per tube	Indicated (other options available)



#### Ordering Information

FF: Fiber Type

Description	Fibers per Tube	Tube Count	Fillers	Cable OD mm	Weight Kg/Km	Max. Load N		Packaging	P/N
						Short Term	Long Term		
2-Fiber Indoor/Outdoor LSOH FO Loose-Tube Dielectric Armored Dry-Core SJ Cable	2	1	5	13.0	145	2500	1500	2000m Drum	25RFFAA002N-BK2N
4-Fiber Indoor/Outdoor LSOH FO Loose-Tube Dielectric Armored Dry-Core SJ Cable	4	1	5	13.0	145	2500	1500	2000m Drum	25RFFAA004N-BK2N
6-Fiber Indoor/Outdoor LSOH FO Loose-Tube Dielectric Armored Dry-Core SJ Cable	6	1	5	13.0	145	2500	1500	2000m Drum	25RFFAA006N-BK2N
8-Fiber Indoor/Outdoor LSOH FO Loose-Tube Dielectric Armored Dry-Core SJ Cable	4	2	4	13.0	145	2500	1500	2000m Drum	25RFFAA008N-BK2N
12-Fiber Indoor/Outdoor LSOH FO Loose-Tube Dielectric Armored Dry-Core SJ Cable	4	3	3	13.0	145	2500	1500	2000m Drum	25RFFAA012N-BK2N
24-Fiber Indoor/Outdoor LSOH FO Loose-Tube Dielectric Armored Dry-Core SJ Cable	6	4	0	13.0	150	2500	1500	2000m Drum	25RFFAA024N-BK2N
36-Fiber Indoor/Outdoor LSOH FO Loose-Tube Dielectric Armored Dry-Core SJ Cable	6	6	0	13.0	150	2500	1500	2000m Drum	25RFFAA036N-BK2N
48-Fiber Indoor/Outdoor LSOH FO Loose-Tube Dielectric Armored Dry-Core SJ Cable	8	6	0	13.5	160	2500	1500	2000m Drum	25RFFAA048N-BK2N
72-Fiber Indoor/Outdoor LSOH FO Loose-Tube Dielectric Armored Dry-Core SJ Cable	12	6	0	13.5	160	2500	1500	2000m Drum	25RFFAA072N-BK2N
96-Fiber Indoor/Outdoor LSOH FO Loose-Tube Dielectric Armored Dry-Core SJ Cable	12	8	0	15.3	200	2500	1500	2000m Drum	25RFFAA096N-BK2N
144-Fiber Indoor/Outdoor LSOH FO Loose-Tube Dielectric Armored Dry-Core SJ Cable	12	12	0	18.8	280	2500	1500	2000m Drum	25RFFAA144N-BK2N
288-Fiber Indoor/Outdoor LSOH FO Loose-Tube Dielectric Armored Dry-Core SJ Cable	12	24	0	21.5	350	2500	1500	2000m Drum	25RFFAA288N-BK2N



## AT&T FiberLine

### Outdoor Multi Loose-Tube Jelly-Filled Single-Jacket Optical Fiber Cables

#### Description

2-288 fibers outdoor all-dielectric multi loose-tube jelly-filled single-jacket non-armored FO cables

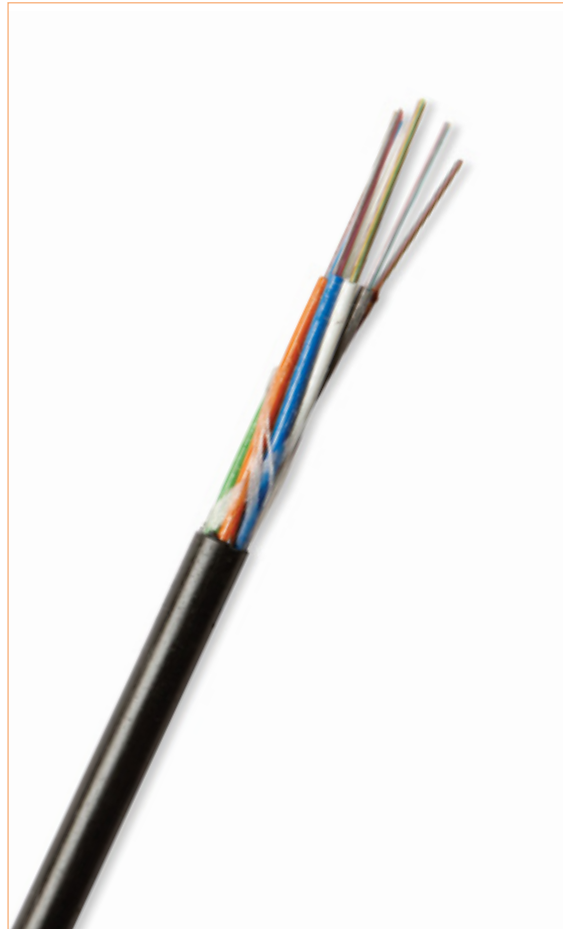
Fiber type	Select from FiberLine fiber types (Section B.6)
Buffer type	PBT jell-filled loose tubes
Central strength member	Rigid all-dielectric FRP
Water blocking	Petroleum jelly
Aarmor	None
Cable jacket material	UV-resistant PE
Fibers and loose-tubes color code	TIA-598-C
Jacket color	Black (other colors available)

#### Standard & EU Directives Conformance

- Relevant sections of ANSI/TIA-568-C.3
- Relevant sections of ISO/IEC 11801
- Relevant sections of EN 50173
- EU Directive 2011/65/EU (RoHS-2)

#### Mechanical Properties

Short term bend radius	20xOD mm
Long term bend radius	10xOD mm
Operating temperature	-40 to +70C
Installation temperature	0 to +50C
Water blocking test	3m cable, 1m water, 24h - IEC 60794-1-2 F5
Default fiber count per tube	Indicated (other options available)



#### Ordering Information

FF: Fiber Type

Description	Fibers per Tube	Tube Count	Fillers	Cable OD mm	Weight Kg/Km	Max. Load N		Packaging	P/N
						Short Term	Long Term		
2-Fiber FO Outdoor Loose-Tube All-Dielectric Jelly-Filled SJ Cable	2	1	5	11.0	100	2500	1500	2000m Drum	25SFFEN002N-BK2N
4-Fiber FO Outdoor Loose-Tube All-Dielectric Jelly-Filled SJ Cable	4	1	5	11.0	100	2500	1500	2000m Drum	25SFFEN004N-BK2N
6-Fiber FO Outdoor Loose-Tube All-Dielectric Jelly-Filled SJ Cable	6	1	5	11.0	100	2500	1500	2000m Drum	25SFFEN006N-BK2N
8-Fiber FO Outdoor Loose-Tube All-Dielectric Jelly-Filled SJ Cable	4	2	4	11.0	100	2500	1500	2000m Drum	25SFFEN008N-BK2N
12-Fiber FO Outdoor Loose-Tube All-Dielectric Jelly-Filled SJ Cable	4	3	3	11.0	100	2500	1500	2000m Drum	25SFFEN012N-BK2N
24-Fiber FO Outdoor Loose-Tube All-Dielectric Jelly-Filled SJ Cable	4	6	0	11.0	100	2500	1500	2000m Drum	25SFFEN024N-BK2N
36-Fiber FO Outdoor Loose-Tube All-Dielectric Jelly-Filled SJ Cable	6	6	0	11.0	100	2500	1500	2000m Drum	25SFFEN036N-BK2N
48-Fiber FO Outdoor Loose-Tube All-Dielectric Jelly-Filled SJ Cable	8	6	0	11.5	115	2500	1500	2000m Drum	25SFFEN048N-BK2N
72-Fiber FO Outdoor Loose-Tube All-Dielectric Jelly-Filled SJ Cable	12	6	0	11.5	115	2500	1500	2000m Drum	25SFFEN072N-BK2N
96-Fiber FO Outdoor Loose-Tube All-Dielectric Jelly-Filled SJ Cable	12	8	0	13.5	140	2500	1500	2000m Drum	25SFFEN096N-BK2N
144-Fiber FO Outdoor Loose-Tube All-Dielectric Jelly-Filled SJ Cable	12	12	0	17.0	195	2500	1500	2000m Drum	25SFFEN144N-BK2N
288-Fiber FO Outdoor Loose-Tube All-Dielectric Jelly-Filled SJ Cable	12	24	0	19.5	305	2500	1500	2000m Drum	25SFFEN288N-BK2N

## AT&T FiberLine

### Outdoor Single Loose-Tube Dielectric Armored Single-Jacket Optical Fiber Cables

#### Description

2-12 fibers outdoor single loose-tube dielectric armored single-jacket FO cables	
Fiber type	Select from FiberLine fiber types (Section B.6)
Buffer type	Single PBT jell-filled loose tube
Strength elements & armor	Served swellable glass yarn
Cable jacket material	UV-resistant PE
Fibers color code	TIA-598-C
Jacket color	Black (other colors available)

#### Standard & EU Directives Conformance

- Relevant sections of ANSI/TIA-568-C.3
- Relevant sections of ISO/IEC 11801
- Relevant sections of EN 50173
- EU Directive 2011/65/EU (RoHS-2)

#### Mechanical Properties

Short term bend radius	30xOD mm
Long term bend radius	15xOD mm
Operating temperature	-30 to +70C
Installation temperature	-20 to +70C
Water blocking test	3m cable, 1m water, 24h - IEC 60794-1-2 F5



#### Ordering Information

FF: Fiber Type

Description	Cable OD mm	Weight Kg/Km	Max. Load N		Packaging	P/N
			Short Term	Long Term		
2-Fiber FO Outdoor Dielectric Armored Single Loose-Tube SJ Cable	8.4	60	2000	1000	2000m Drum	24SFFAN002N-BK2N
4-Fiber FO Outdoor Dielectric Armored Single Loose-Tube SJ Cable	8.4	60	2000	1000	2000m Drum	24SFFAN004N-BK2N
6-Fiber FO Outdoor Dielectric Armored Single Loose-Tube SJ Cable	8.4	60	2000	1000	2000m Drum	24SFFAN006N-BK2N
8-Fiber FO Outdoor Dielectric Armored Single Loose-Tube SJ Cable	8.4	60	2000	1000	2000m Drum	24SFFAN008N-BK2N
10-Fiber FO Outdoor Dielectric Armored Single Loose-Tube SJ Cable	8.4	60	2000	1000	2000m Drum	24SFFAN010N-BK2N
12-Fiber FO Outdoor Dielectric Armored Single Loose-Tube SJ Cable	8.4	60	2000	1000	2000m Drum	24SFFAN012N-BK2N

## AT&T FiberLine

### Outdoor Multi Loose-Tube Dielectric Armored Jelly-Filled Single-Jacket Optical Fiber Cables

#### Description

2-288 fibers outdoor all-dielectric multi loose-tube jelly-filled single-jacket armored FO cables

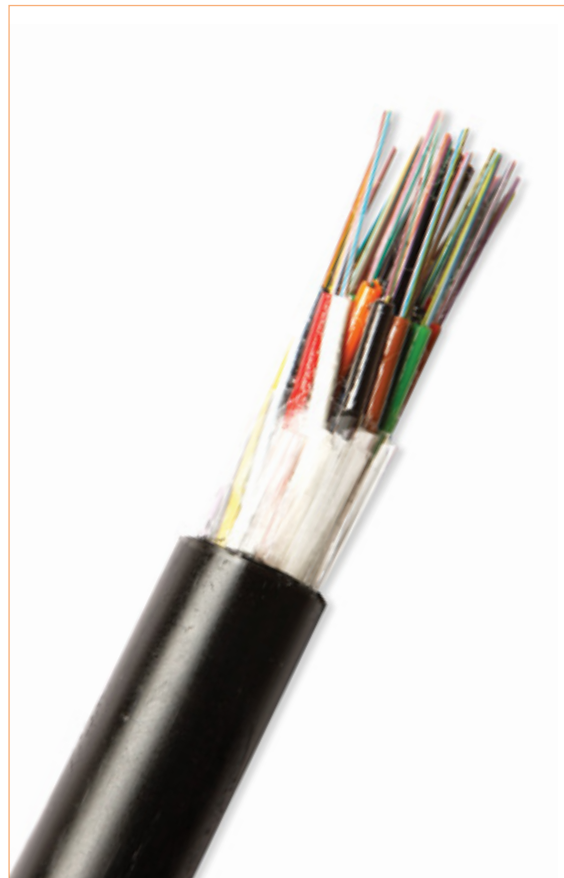
Fiber type	Select from FiberLine fiber types (Section B.6)
Buffer type	PBT jell-filled loose tubes
Central strength member	Rigid all-dielectric FRP
Water blocking	Petroleum jelly
Dielectric armor	Jelly-filled glass yarn
Cable jacket material	UV-resistant PE
Fibers and tubes color code	TIA-598-C
Jacket color	Black (other colors available)

#### Standard & EU Directives Conformance

- Relevant sections of ANSI/TIA-568-C.3
- Relevant sections of ISO/IEC 11801
- Relevant sections of EN 50173
- EU Directive 2011/65/EU (RoHS-2)

#### Mechanical Properties

Short term bend radius	20xOD mm
Long term bend radius	10xOD mm
Operating temperature	-40 to +70C
Installation temperature	-20 to +70C
Water blocking test	3m cable, 1m water, 24h - IEC 60794-1-2 F5
Default fiber count per tube	Indicated (other options available)



#### Ordering Information

FF: Fiber Type

Description	Fibers per Tube	Tube Count	Fillers	Cable OD mm	Weight Kg/Km	Max. Load N		Packaging	P/N
						Short Term	Long Term		
2-Fiber FO Outdoor Loose-Tube Dielectric Armored Jelly-Filled SJ Cable	2	1	5	13.0	125	3000	1500	2000m Drum	25SFFAN002N-BK2N
4-Fiber FO Outdoor Loose-Tube Dielectric Armored Jelly-Filled SJ Cable	4	1	5	13.0	125	3000	1500	2000m Drum	25SFFAN004N-BK2N
6-Fiber FO Outdoor Loose-Tube Dielectric Armored Jelly-Filled SJ Cable	6	1	5	13.0	125	3000	1500	2000m Drum	25SFFAN006N-BK2N
8-Fiber FO Outdoor Loose-Tube Dielectric Armored Jelly-Filled SJ Cable	4	2	4	13.0	125	3000	1500	2000m Drum	25SFFAN008N-BK2N
12-Fiber FO Outdoor Loose-Tube Dielectric Armored Jelly-Filled SJ Cable	4	3	3	13.0	125	3000	1500	2000m Drum	25SFFAN012N-BK2N
24-Fiber FO Outdoor Loose-Tube Dielectric Armored Jelly-Filled SJ Cable	4	6	0	13.0	125	3000	1500	2000m Drum	25SFFAN024N-BK2N
36-Fiber FO Outdoor Loose-Tube Dielectric Armored Jelly-Filled SJ Cable	6	6	0	13.0	130	3000	1500	2000m Drum	25SFFAN036N-BK2N
48-Fiber FO Outdoor Loose-Tube Dielectric Armored Jelly-Filled SJ Cable	8	6	0	13.5	145	3000	1500	2000m Drum	25SFFAN048N-BK2N
72-Fiber FO Outdoor Loose-Tube Dielectric Armored Jelly-Filled SJ Cable	12	6	0	13.5	145	3000	1500	2000m Drum	25SFFAN072N-BK2N
96-Fiber FO Outdoor Loose-Tube Dielectric Armored Jelly-Filled SJ Cable	12	8	0	15.3	180	3000	1500	2000m Drum	25SFFAN096N-BK2N
144-Fiber FO Outdoor Loose-Tube Dielectric Armored Jelly-Filled SJ Cable	12	12	0	18.8	265	3000	1500	2000m Drum	25SFFAN144N-BK2N
288-Fiber FO Outdoor Loose-Tube Dielectric Armored Jelly-Filled SJ Cable	12	24	0	21.5	350	3000	1500	2000m Drum	25SFFAN288N-BK2N

## AT&T FiberLine

### Outdoor Single Loose-Tube Dielectric Armored Double-Jacket Optical Fiber Cables

#### Description

2-12 fibers outdoor single loose-tube dielectric armored double-jacket FO cables

Fiber type	Select from FiberLine fiber types (Section B.6)
Buffer type	Single PBT jell-filled loose tube
Strength elements	Served swellable glass yarn
Inner jacket material	PE
Dielectric armor	Swellable glass yarn
Outer jacket material	UV-resistant PE
Fibers color code	TIA-598-C
Jacket color	Black (other colors available)

#### Standard & EU Directives Conformance

- Relevant sections of ANSI/TIA-568-C.3
- Relevant sections of ISO/IEC 11801
- Relevant sections of EN 50173
- EU Directive 2011/65/EU (RoHS-2)

#### Mechanical Properties

Short term bend radius	30xOD mm
Long term bend radius	15xOD mm
Operating temperature	-30 to +70C
Installation temperature	-20 to +70C
Water blocking test	3m cable, 1m water, 24h - IEC 60794-1-2 F5



#### Ordering Information

FF: Fiber Type

Description	Cable OD mm	Weight Kg/Km	Max. Load N		Packaging	P/N
			Short Term	Long Term		
2-Fiber FO Outdoor Dielectric Armored Single Loose-Tube DJ Cable	11.2	135	2000	1000	2000m Drum	24DFFAN002N-BK2N
4-Fiber FO Outdoor Dielectric Armored Single Loose-Tube DJ Cable	11.2	135	2000	1000	2000m Drum	24DFFAN004N-BK2N
6-Fiber FO Outdoor Dielectric Armored Single Loose-Tube DJ Cable	11.2	135	2000	1000	2000m Drum	24DFFAN006N-BK2N
8-Fiber FO Outdoor Dielectric Armored Single Loose-Tube DJ Cable	11.2	135	2000	1000	2000m Drum	24DFFAN008N-BK2N
10-Fiber FO Outdoor Dielectric Armored Single Loose-Tube DJ Cable	11.2	135	2000	1000	2000m Drum	24DFFAN010N-BK2N
12-Fiber FO Outdoor Dielectric Armored Single Loose-Tube DJ Cable	11.2	135	2000	1000	2000m Drum	24DFFAN012N-BK2N

## AT&T FiberLine

### Outdoor Multi Loose-Tube Dielectric Armored Jelly-Filled Double-Jacket Optical Fiber Cables

#### Description

2-288 fibers outdoor all-dielectric multi loose-tube jelly-filled double-jacket armored FO cables

Fiber type	Select from FiberLine fiber types (Section B.6)
Buffer type	PBT jell-filled loose tubes
Central strength member	Rigid all-dielectric FRP
Water blocking	Petroleum jelly
Inner jacket material	PE
Dielectric armor	Jelly-filled glass yarn
Outer jacket material	UV-resistant PE
Fibers and tubes color code	TIA-598-C
Jacket color	Black (other colors available)

#### Standard & EU Directives Conformance

- Relevant sections of ANSI/TIA-568-C.3
- Relevant sections of ISO/IEC 11801
- Relevant sections of EN 50173
- EU Directive 2011/65/EU (RoHS-2)

#### Mechanical Properties

Short term bend radius	20xOD mm
Long term bend radius	10xOD mm
Operating temperature	-40 to +70C
Installation temperature	-20 to +70C
Water blocking test	3m cable, 1m water, 24h - IEC 60794-1-2 F5
Default fiber count per tube	Indicated (other options available)



#### Ordering Information

FF: Fiber Type

Description	Fibers per Tube	Tube Count	Fillers	Cable OD mm	Weight Kg/Km	Max. Load N		Packaging	P/N
						Short Term	Long Term		
2-Fiber FO Outdoor Loose-Tube Dielectric Armored Jelly-Filled DJ Cable	2	1	5	15.0	160	3000	1500	2000m Drum	25DFFAN002N-BK2N
4-Fiber FO Outdoor Loose-Tube Dielectric Armored Jelly-Filled DJ Cable	4	1	5	15.0	160	3000	1500	2000m Drum	25DFFAN004N-BK2N
6-Fiber FO Outdoor Loose-Tube Dielectric Armored Jelly-Filled DJ Cable	6	1	5	15.0	160	3000	1500	2000m Drum	25DFFAN006N-BK2N
8-Fiber FO Outdoor Loose-Tube Dielectric Armored Jelly-Filled DJ Cable	4	2	4	15.0	165	3000	1500	2000m Drum	25DFFAN008N-BK2N
12-Fiber FO Outdoor Loose-Tube Dielectric Armored Jelly-Filled DJ Cable	4	3	3	15.0	165	3000	1500	2000m Drum	25DFFAN012N-BK2N
24-Fiber FO Outdoor Loose-Tube Dielectric Armored Jelly-Filled DJ Cable	4	6	0	15.0	165	3000	1500	2000m Drum	25DFFAN024N-BK2N
36-Fiber FO Outdoor Loose-Tube Dielectric Armored Jelly-Filled DJ Cable	6	6	0	15.0	165	3000	1500	2000m Drum	25DFFAN036N-BK2N
48-Fiber FO Outdoor Loose-Tube Dielectric Armored Jelly-Filled DJ Cable	8	6	0	15.5	180	3000	1500	2000m Drum	25DFFAN048N-BK2N
72-Fiber FO Outdoor Loose-Tube Dielectric Armored Jelly-Filled DJ Cable	12	6	0	15.5	180	3000	1500	2000m Drum	25DFFAN072N-BK2N
96-Fiber FO Outdoor Loose-Tube Dielectric Armored Jelly-Filled DJ Cable	12	8	0	17.5	215	3000	1500	2000m Drum	25DFFAN096N-BK2N
144-Fiber FO Outdoor Loose-Tube Dielectric Armored Jelly-Filled DJ Cable	12	12	0	21.0	275	3000	1500	2000m Drum	25DFFAN144N-BK2N
288-Fiber FO Outdoor Loose-Tube Dielectric Armored Jelly-Filled DJ Cable	12	24	0	23.5	400	3000	1500	2000m Drum	25DFFAN288N-BK2N

## AT&T FiberLine

### Outdoor Multi Loose-Tube Short-Span ADSS Optical Fiber Cables

#### Description

2-288 fibers outdoor all-dielectric self-supporting (ADSS) short-span multi loose-tube jelly-filled double-jacket FO cables

Fiber type	Select from FiberLine fiber types (Section B.6)
Buffer type	PBT jell-filled loose tubes
Central strength member	Rigid all-dielectric FRP
Water blocking	Petroleum jelly
Inner jacket material	PE
Peripheral strength elements	Jelly filled aramid yarn
Outer jacket material	UV-resistant PE
Fibers and tubes color code	TIA-598-C
Jacket color	Black (other colors available)

#### Standard & EU Directives Conformance

- Relevant sections of ANSI/TIA-568-C.3
- Relevant sections of ISO/IEC 11801
- Relevant sections of EN 50173
- EU Directive 2011/65/EU (RoHS-2)

#### Mechanical Properties

Short term bend radius	23xOD mm
Long term bend radius	12xOD mm
Operating temperature	-40 to +70C
Installation temperature	-20 to +70C
Water blocking test	3m cable, 1m water, 24h - IEC 60794-1-2 F5
Default fiber count per tube	Indicated (other options available)
Load conditions	NESC Medium
Span	122m max.
Installation sag	1%



#### Ordering Information

FF: Fiber Type

Description	Fibers per Tube	Tube Count	Fillers	Cable OD mm	Weight Kg/Km	Max. Load N		Packaging	P/N
						Short Term	Long Term		
2-Fiber FO Outdoor Loose-Tube ADSS Short-Span Jelly-Filled Cable	2	1	5	14.0	155	9500	5300	2000m Drum	25AFFEN002S-BK2N
4-Fiber FO Outdoor Loose-Tube ADSS Short-Span Jelly-Filled Cable	4	1	5	14.0	155	9500	5300	2000m Drum	25AFFEN004S-BK2N
6-Fiber FO Outdoor Loose-Tube ADSS Short-Span Jelly-Filled Cable	6	1	5	14.0	155	9500	5300	2000m Drum	25AFFEN006S-BK2N
8-Fiber FO Outdoor Loose-Tube ADSS Short-Span Jelly-Filled Cable	4	2	4	14.0	155	9500	5300	2000m Drum	25AFFEN008S-BK2N
12-Fiber FO Outdoor Loose-Tube ADSS Short-Span Jelly-Filled Cable	4	3	3	14.0	155	9500	5300	2000m Drum	25AFFEN012S-BK2N
24-Fiber FO Outdoor Loose-Tube ADSS Short-Span Jelly-Filled Cable	4	6	0	14.0	160	9500	5300	2000m Drum	25AFFEN024S-BK2N
36-Fiber FO Outdoor Loose-Tube ADSS Short-Span Jelly-Filled Cable	6	6	0	14.0	165	9500	5300	2000m Drum	25AFFEN024S-BK2N
48-Fiber FO Outdoor Loose-Tube ADSS Short-Span Jelly-Filled Cable	8	6	0	14.5	175	10000	5900	2000m Drum	25AFFEN048S-BK2N
72-Fiber FO Outdoor Loose-Tube ADSS Short-Span Jelly-Filled Cable	12	6	0	14.5	175	10000	5900	2000m Drum	25AFFEN072S-BK2N
96-Fiber FO Outdoor Loose-Tube ADSS Short-Span Jelly-Filled Cable	12	8	0	16.5	230	13000	7000	2000m Drum	25AFFEN096S-BK2N
144-Fiber FO Outdoor Loose-Tube ADSS Short-Span Jelly-Filled Cable	12	12	0	20.0	355	16000	9400	2000m Drum	25AFFEN144S-BK2N
288-Fiber FO Outdoor Loose-Tube ADSS Short-Span Jelly-Filled Cable	12	24	0	22.5	510	16000	9400	2000m Drum	25AFFEN288S-BK2N

## AT&T FiberLine

### Outdoor Multi Loose-Tube Long-Span ADSS Optical Fiber Cables

#### Description

2-288 fibers outdoor all-dielectric self-supporting (ADSS) long-span multi loose-tube jelly-filled double-jacket FO cables

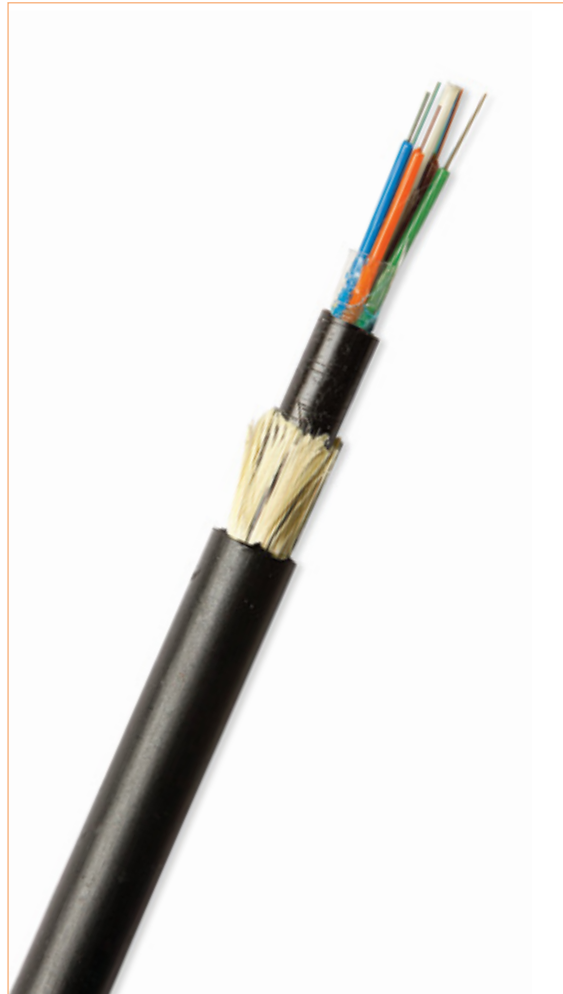
Fiber type	Select from FiberLine fiber types (Section B.6)
Buffer type	PBT jell-filled loose tubes
Central strength member	Rigid all-dielectric FRP
Water blocking	Petroleum jelly
Inner jacket material	PE
Peripheral strength elements	Jelly-filled aramid yarn
Outer jacket material	UV-resistant PE
Fibers and tubes color code	TIA-598-C
Jacket color	Black (other colors available)

#### Standard & EU Directives Conformance

- Relevant sections of ANSI/TIA-568-C.3
- Relevant sections of ISO/IEC 11801
- Relevant sections of EN 50173
- EU Directive 2011/65/EU (RoHS-2)

#### Mechanical Properties

Short term bend radius	23xOD mm
Long term bend radius	12xOD mm
Operating temperature	-40 to +70C
Installation temperature	-20 to +70C
Water blocking test	3m cable, 1m water, 24h - IEC 60794-1-2 F5
Default fiber count per tube	Indicated (other options available)
Load conditions	NESC Medium
Span	250m max.
Installation sag	1%



#### Ordering Information

FF: Fiber Type

Description	Fibers per Tube	Tube Count	Fillers	Cable OD mm	Weight Kg/Km	Max. Load N		Packaging	P/N
						Short Term	Long Term		
2-Fiber FO Outdoor Loose-Tube ADSS Long-Span Jelly-Filled Cable	2	1	5	14.5	160	16000	5300	2000m Drum	25AFFEN002L-BK2N
4-Fiber FO Outdoor Loose-Tube ADSS Long-Span Jelly-Filled Cable	4	1	5	14.5	160	16000	5300	2000m Drum	25AFFEN004L-BK2N
6-Fiber FO Outdoor Loose-Tube ADSS Long-Span Jelly-Filled Cable	6	1	5	14.5	160	16000	5300	2000m Drum	25AFFEN006L-BK2N
8-Fiber FO Outdoor Loose-Tube ADSS Long-Span Jelly-Filled Cable	4	2	4	14.5	160	16000	5300	2000m Drum	25AFFEN008L-BK2N
12-Fiber FO Outdoor Loose-Tube ADSS Long-Span Jelly-Filled Cable	4	3	3	14.5	160	16000	5300	2000m Drum	25AFFEN012L-BK2N
24-Fiber FO Outdoor Loose-Tube ADSS Long-Span Jelly-Filled Cable	4	6	0	14.5	165	16000	5300	2000m Drum	25AFFEN024L-BK2N
36-Fiber FO Outdoor Loose-Tube ADSS Long-Span Jelly-Filled Cable	6	6	0	14.5	175	16000	5300	2000m Drum	25AFFEN036L-BK2N
48-Fiber FO Outdoor Loose-Tube ADSS Long-Span Jelly-Filled Cable	8	6	0	15.0	200	18000	5900	2000m Drum	25AFFEN048L-BK2N
72-Fiber FO Outdoor Loose-Tube ADSS Long-Span Jelly-Filled Cable	12	6	0	15.0	200	18000	5900	2000m Drum	25AFFEN072L-BK2N
96-Fiber FO Outdoor Loose-Tube ADSS Long-Span Jelly-Filled Cable	12	8	0	17.0	260	21000	7000	2000m Drum	25AFFEN096L-BK2N
144-Fiber FO Outdoor Loose-Tube ADSS Long-Span Jelly-Filled Cable	12	12	0	20.5	380	29000	9400	2000m Drum	25AFFEN144L-BK2N
288-Fiber FO Outdoor Loose-Tube ADSS Long-Span Jelly-Filled Cable	12	24	0	23.0	540	29000	9400	2000m Drum	25AFFEN288L-BK2N

## AT&T FiberLine

### Outdoor Single Loose-Tube Steel Armored Single-Jacket Optical Fiber Cables

#### Description

2-12 fibers outdoor single loose-tube steel armored single-jacket FO cables

Fiber type	Select from FiberLine fiber types (Section B.6)
Buffer type	Single PBT jell-filled loose tube
Strength elements	Served swellable glass yarn
Aarmor	Corrugated steel tape
Cable jacket material	UV-resistant PE
Fibers color code	TIA-598-C
Jacket color	Black (other colors available)

#### Standard & EU Directives Conformance

- Relevant sections of ANSI/TIA-568-C.3
- Relevant sections of ISO/IEC 11801
- Relevant sections of EN 50173
- EU Directive 2011/65/EU (RoHS-2)

#### Mechanical Properties

Short term bend radius	30xOD mm
Long term bend radius	15xOD mm
Operating temperature	-30 to +70C
Installation temperature	-20 to +70C
Water blocking test	3m cable, 1m water, 24h - IEC 60794-1-2 F5



#### Ordering Information

FF: Fiber Type

Description	Cable OD mm	Weight Kg/Km	Max. Load N		Packaging	P/N
			Short Term	Long Term		
2-Fiber FO Outdoor Steel Armored Single Loose-Tube SJ Cable	8.4	70	1200	600	2000m Drum	24SFFCN002N-BK2N
4-Fiber FO Outdoor Steel Armored Single Loose-Tube SJ Cable	8.4	70	1200	600	2000m Drum	24SFFCN004N-BK2N
6-Fiber FO Outdoor Steel Armored Single Loose-Tube SJ Cable	8.4	70	1200	600	2000m Drum	24SFFCN006N-BK2N
8-Fiber FO Outdoor Steel Armored Single Loose-Tube SJ Cable	8.4	70	1200	600	2000m Drum	24SFFCN008N-BK2N
10-Fiber FO Outdoor Steel Armored Single Loose-Tube SJ Cable	8.4	70	1200	600	2000m Drum	24SFFCN010N-BK2N
12-Fiber FO Outdoor Steel Armored Single Loose-Tube SJ Cable	8.4	70	1200	600	2000m Drum	24SFFCN012N-BK2N



## AT&T FiberLine

### Outdoor Multi Loose-Tube Steel Armored Jelly-Filled Single-Jacket Optical Fiber Cables

#### Description

2-288 fibers outdoor multi loose-tube jelly-filled single-jacket steel-armored FO cables

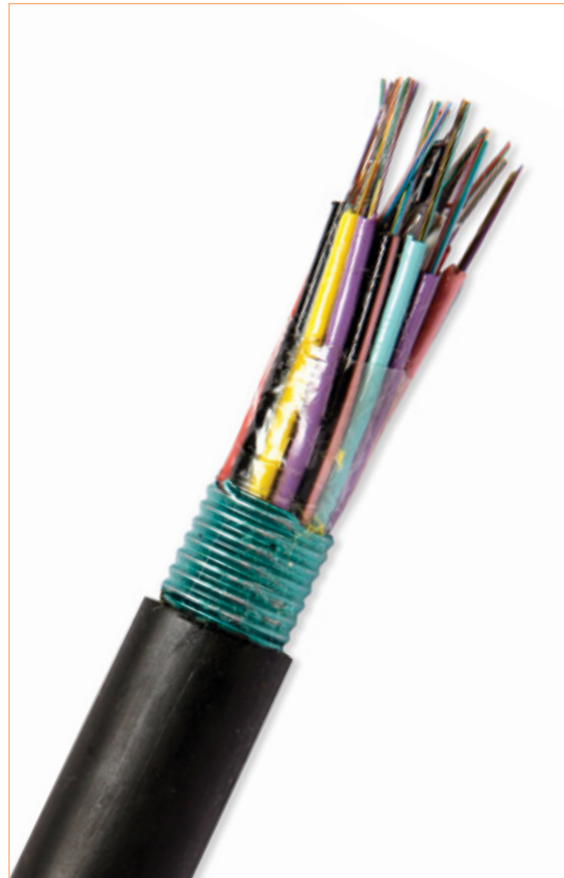
Fiber type	Select from FiberLine fiber types (Section B.6)
Buffer type	PBT jell-filled loose tubes
Central strength member	Rigid all-dielectric FRP
Water blocking	Petroleum jelly
A armor	Corrugated steel tape
Cable jacket material	UV-resistant PE
Fibers and tubes color code	TIA-598-C
Jacket color	Black (other colors available)

#### Standard & EU Directives Conformance

- Relevant sections of ANSI/TIA-568-C.3
- Relevant sections of ISO/IEC 11801
- Relevant sections of EN 50173
- EU Directive 2011/65/EU (RoHS-2)

#### Mechanical Properties

Short term bend radius	20xOD mm
Long term bend radius	10xOD mm
Operating temperature	-40 to +70C
Installation temperature	-20 to +70C
Water blocking test	3m cable, 1m water, 24h - IEC 60794-1-2 F5
Default fiber count per tube	Indicated (other options available)



#### Ordering Information

FF: Fiber Type

Description	Fibers per Tube	Tube Count	Fillers	Cable OD mm	Weight Kg/Km	Max. Load N		Packaging	P/N
						Short Term	Long Term		
2-Fiber FO Outdoor Loose-Tube Steel Armored Jelly-Filled SJ Cable	2	1	5	11.5	135	2500	1500	2000m Drum	25SFFCN002N-BK2N
4-Fiber FO Outdoor Loose-Tube Steel Armored Jelly-Filled SJ Cable	4	1	5	11.5	135	2500	1500	2000m Drum	25SFFCN004N-BK2N
6-Fiber FO Outdoor Loose-Tube Steel Armored Jelly-Filled SJ Cable	6	1	5	11.5	135	2500	1500	2000m Drum	25SFFCN006N-BK2N
8-Fiber FO Outdoor Loose-Tube Steel Armored Jelly-Filled SJ Cable	4	2	4	11.5	135	2500	1500	2000m Drum	25SFFCN008N-BK2N
12-Fiber FO Outdoor Loose-Tube Steel Armored Jelly-Filled SJ Cable	4	3	3	11.5	135	2500	1500	2000m Drum	25SFFCN012N-BK2N
24-Fiber FO Outdoor Loose-Tube Steel Armored Jelly-Filled SJ Cable	4	6	0	11.5	135	2500	1500	2000m Drum	25SFFCN024N-BK2N
36-Fiber FO Outdoor Loose-Tube Steel Armored Jelly-Filled SJ Cable	6	6	0	12.5	165	2500	1500	2000m Drum	25SFFCN036N-BK2N
48-Fiber FO Outdoor Loose-Tube Steel Armored Jelly-Filled SJ Cable	8	6	0	12.5	165	2500	1500	2000m Drum	25SFFCN048N-BK2N
72-Fiber FO Outdoor Loose-Tube Steel Armored Jelly-Filled SJ Cable	12	6	0	13.0	180	2500	1500	2000m Drum	25SFFCN072N-BK2N
96-Fiber FO Outdoor Loose-Tube Steel Armored Jelly-Filled SJ Cable	12	8	0	15.0	225	2500	1500	2000m Drum	25SFFCN096N-BK2N
144-Fiber FO Outdoor Loose-Tube Steel Armored Jelly-Filled SJ Cable	12	12	0	18.5	325	2500	1500	2000m Drum	25SFFCN144N-BK2N
288-Fiber FO Outdoor Loose-Tube Steel Armored Jelly-Filled SJ Cable	12	24	0	21.0	425	2500	1500	2000m Drum	25SFFCN288N-BK2N

## AT&T FiberLine

### Outdoor Single Loose-Tube Steel Armored Double-Jacket Optical Fiber Cables

#### Description

2-12 fibers outdoor single loose-tube steel armored double-jacket dry-core FO cables

Fiber type	Select from FiberLine fiber types (Section B.6)
Buffer type	Single PBT jell-filled loose tube
Strength elements	Served swellable glass yarn
Inner jacket material	PE
Aarmor	Corrugated steel tape
Outer jacket material	UV-resistant PE
Fibers color code	TIA-598-C
Jacket color	Black (other colors available)

#### Standard & EU Directives Conformance

- Relevant sections of ANSI/TIA-568-C.3
- Relevant sections of ISO/IEC 11801
- Relevant sections of EN 50173
- EU Directive 2011/65/EU (RoHS-2)

#### Mechanical Properties

Short term bend radius	30xOD mm
Long term bend radius	15xOD mm
Operating temperature	-30 to +70C
Installation temperature	-20 to +70C
Water blocking test	3m cable, 1m water, 24h - IEC 60794-1-2 F5



#### Ordering Information

FF: Fiber Type

Description	Cable OD mm	Weight Kg/Km	Max. Load N		Packaging	P/N
			Short Term	Long Term		
2-Fiber FO Outdoor Steel Armored Single Loose-Tube DJ Cable	11.2	115	1500	700	2000m Drum	24DFFCN002N-BK2N
4-Fiber FO Outdoor Steel Armored Single Loose-Tube DJ Cable	11.2	115	1500	700	2000m Drum	24DFFCN004N-BK2N
6-Fiber FO Outdoor Steel Armored Single Loose-Tube DJ Cable	11.2	115	1500	700	2000m Drum	24DFFCN006N-BK2N
8-Fiber FO Outdoor Steel Armored Single Loose-Tube DJ Cable	11.2	115	1500	700	2000m Drum	24DFFCN008N-BK2N
10-Fiber FO Outdoor Steel Armored Single Loose-Tube DJ Cable	11.2	115	1500	700	2000m Drum	24DFFCN010N-BK2N
12-Fiber FO Outdoor Steel Armored Single Loose-Tube DJ Cable	11.2	115	1500	700	2000m Drum	24DFFCN012N-BK2N

## AT&T FiberLine Outdoor Multi Loose-Tube Steel Armored Jelly-Filled Double-Jacket Optical Fiber Cables

### Description

2-288 fibers outdoor multi loose-tube jelly-filled double-jacket steel-armored FO cables

Fiber type	Select from FiberLine fiber types (Section B.6)
Buffer type	PBT jell-filled loose tubes
Central strength member	Rigid all-dielectric FRP
Water blocking	Petroleum jelly
Inner jacket material	UV-resistant PE
Armor	Corrugated steel tape
Outer jacket material	UV-resistant PE
Fibers and tubes color code	TIA-598-C
Jacket color	Black (other colors available)

### Standard & EU Directives Conformance

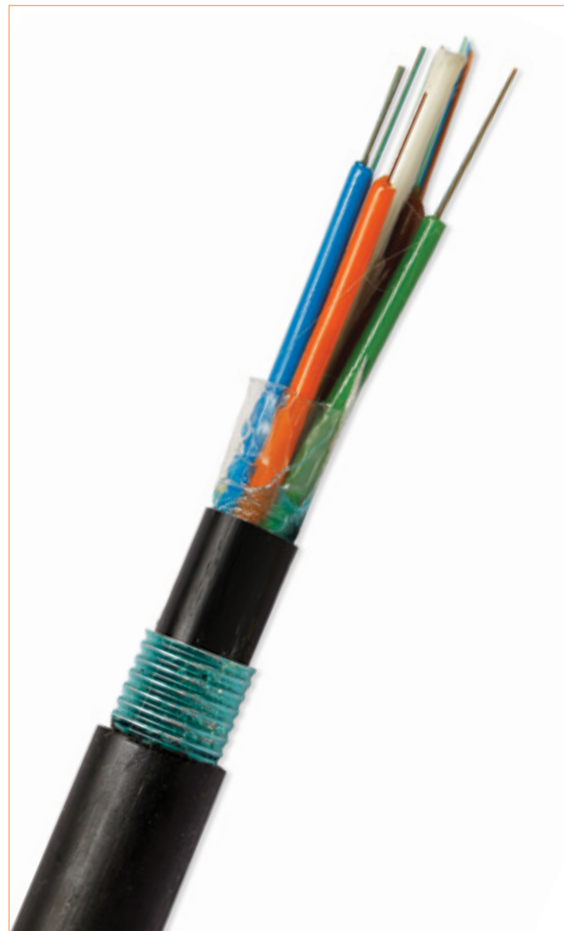
- Relevant sections of ANSI/TIA-568-C.3
- Relevant sections of ISO/IEC 11801
- Relevant sections of EN 50173
- EU Directive 2011/65/EU (RoHS-2)

### Mechanical Properties

Short term bend radius	20xOD mm
Long term bend radius	10xOD mm
Operating temperature	-40 to +70C
Installation temperature	-20 to +70C
Water blocking test	3m cable, 1m water, 24h - IEC 60794-1-2 F5
Default fiber count per tube	Indicated (other options available)

### Ordering Information

FF: Fiber Type



Description	Fibers per Tube	Tube Count	Fillers	Cable OD mm	Weight Kg/Km	Max. Load N		Packaging	P/N
						Short Term	Long Term		
2-Fiber FO Outdoor Loose-Tube Steel Armored Jelly-Filled DJ Cable	2	1	5	14.8	200	2700	1700	2000m Drum	25DFFCN002N-BK2N
4-Fiber FO Outdoor Loose-Tube Steel Armored Jelly-Filled DJ Cable	4	1	5	14.8	200	2700	1700	2000m Drum	25DFFCN004N-BK2N
6-Fiber FO Outdoor Loose-Tube Steel Armored Jelly-Filled DJ Cable	6	1	5	14.8	200	2700	1700	2000m Drum	25DFFCN006N-BK2N
8-Fiber FO Outdoor Loose-Tube Steel Armored Jelly-Filled DJ Cable	4	2	4	14.8	200	2700	1700	2000m Drum	25DFFCN008N-BK2N
12-Fiber FO Outdoor Loose-Tube Steel Armored Jelly-Filled DJ Cable	4	3	3	14.8	200	2700	1700	2000m Drum	25DFFCN012N-BK2N
24-Fiber FO Outdoor Loose-Tube Steel Armored Jelly-Filled DJ Cable	4	6	0	14.8	200	2700	1700	2000m Drum	25DFFCN024N-BK2N
36-Fiber FO Outdoor Loose-Tube Steel Armored Jelly-Filled DJ Cable	6	6	0	14.8	200	2700	1700	2000m Drum	25DFFCN036N-BK2N
48-Fiber FO Outdoor Loose-Tube Steel Armored Jelly-Filled DJ Cable	8	6	0	15.5	220	2700	1700	2000m Drum	25DFFCN048N-BK2N
72-Fiber FO Outdoor Loose-Tube Steel Armored Jelly-Filled DJ Cable	12	6	0	15.5	220	2700	1700	2000m Drum	25DFFCN072N-BK2N
96-Fiber FO Outdoor Loose-Tube Steel Armored Jelly-Filled DJ Cable	12	8	0	17.2	260	2700	1700	2000m Drum	25DFFCN096N-BK2N
144-Fiber FO Outdoor Loose-Tube Steel Armored Jelly-Filled DJ Cable	12	12	0	21.0	340	2700	1700	2000m Drum	25DFFCN144N-BK2N
288-Fiber FO Outdoor Loose-Tube Steel Armored Jelly-Filled DJ Cable	12	24	0	23.5	470	2700	1700	2000m Drum	25DFFCN288N-BK2N

## AT&T FiberLine

### Outdoor Aerial Multi Loose-Tube Steel Armored Jelly-Filled Single-Jacket Optical Fiber Cables with Messenger

#### Description

2-288 fibers outdoor multi loose-tube jelly-filled single-jacket steel-armored FO cables with steel messenger in FIG-8 formation

Fiber type	Select from FiberLine fiber types (Section B.6)
Buffer type	PBT jell-filled loose tubes
Central strength member	Rigid all-dielectric FRP
Water blocking	Petroleum jelly
Armor	Corrugated steel tape
Outer jacket material	UV-resistant PE
Messenger	Galvanized steel wire
Fibers and tubes color code	TIA-598-C
Jacket color	Black (other colors available)

#### Standard & EU Directives Conformance

- Relevant sections of ANSI/TIA-568-C.3
- Relevant sections of ISO/IEC 11801
- Relevant sections of EN 50173
- EU Directive 2011/65/EU (RoHS-2)

#### Mechanical Properties

Short term bend radius	20xOD mm
Long term bend radius	10xOD mm
Operating temperature	-40 to +70C
Installation temperature	-20 to +70C
Water blocking test	3m cable, 1m water, 24h - IEC 60794-1-2 F5
Messenger tensile strength	7500N min. - IEC-60794-1-2 E1
Default fiber count per tube	Indicated (other options available)
Load conditions	NESC Medium
Span	122m max.
Installation sag	1%



#### Ordering Information

FF: Fiber Type

Description	Fibers per Tube	Tube Count	Fillers	Cable OD mm (*)	Weight Kg/Km	Max. Load N		Packaging	P/N
						Short Term	Long Term		
2-Fiber FO Aerial Loose-Tube Steel Armored Jelly-Filled SJ FIG-8 Cable	2	1	5	11.5	285	2700	1700	2000m Drum	25MFFCN002A-BK2N
4-Fiber FO Aerial Loose-Tube Steel Armored Jelly-Filled SJ FIG-8 Cable	4	1	5	11.5	285	2700	1700	2000m Drum	25MFFCN004A-BK2N
6-Fiber FO Aerial Loose-Tube Steel Armored Jelly-Filled SJ FIG-8 Cable	6	1	5	11.5	285	2700	1700	2000m Drum	25MFFCN006A-BK2N
8-Fiber FO Aerial Loose-Tube Steel Armored Jelly-Filled SJ FIG-8 Cable	4	2	4	11.5	285	2700	1700	2000m Drum	25MFFCN008A-BK2N
12-Fiber FO Aerial Loose-Tube Steel Armored Jelly-Filled SJ FIG-8 Cable	4	3	3	11.5	285	2700	1700	2000m Drum	25MFFCN012A-BK2N
24-Fiber FO Aerial Loose-Tube Steel Armored Jelly-Filled SJ FIG-8 Cable	4	6	0	11.5	285	2700	1700	2000m Drum	25MFFCN024A-BK2N
36-Fiber FO Aerial Loose-Tube Steel Armored Jelly-Filled SJ FIG-8 Cable	6	6	0	12.5	315	2700	1700	2000m Drum	25MFFCN036A-BK2N
48-Fiber FO Aerial Loose-Tube Steel Armored Jelly-Filled SJ FIG-8 Cable	8	6	0	12.5	315	2700	1700	2000m Drum	25MFFCN048A-BK2N
72-Fiber FO Aerial Loose-Tube Steel Armored Jelly-Filled SJ FIG-8 Cable	12	6	0	13.0	335	2700	1700	2000m Drum	25MFFCN072A-BK2N
96-Fiber FO Aerial Loose-Tube Steel Armored Jelly-Filled SJ FIG-8 Cable	12	8	0	15.0	445	2700	1700	2000m Drum	25MFFCN096A-BK2N
144-Fiber FO Aerial Loose-Tube Steel Armored Jelly-Filled SJ FIG-8 Cable	12	12	0	18.5	555	2700	1700	2000m Drum	25MFFCN144A-BK2N
288-Fiber FO Aerial Loose-Tube Steel Armored Jelly-Filled SJ FIG-8 Cable	12	24	0	21.0	665	2700	1700	2000m Drum	25MFFCN288A-BK2N

(\*) Cable OD without the messenger

## AT&T FiberLine

### Outdoor Aerial Multi Loose-Tube Steel Armored Jelly-Filled Double-Jacket Optical Fiber Cables with Messenger

2-288 fibers outdoor multi loose-tube jelly-filled double-jacket steel-armored FO cables with steel messenger in FIG-8 formation

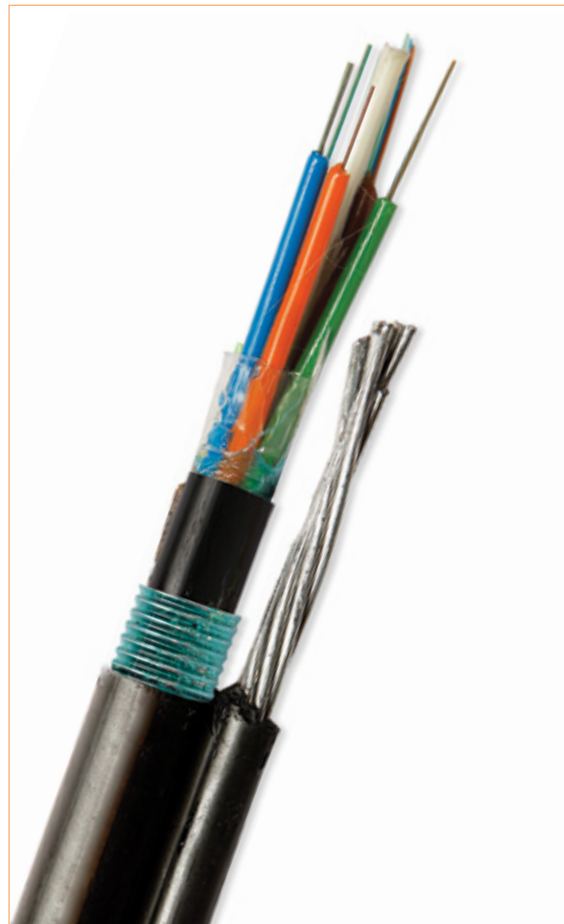
Fiber type	Select from FiberLine fiber types (Section B.6)
Buffer type	PBT jell-filled loose tubes
Central strength member	Rigid all-dielectric FRP
Water blocking	Petroleum jelly
Inner jacket material	UV-resistant PE
Armor	Corrugated steel tape
Outer jacket material	UV-resistant PE
Messenger	Galvanized steel wire
Fibers and tubes color code	TIA-598-C
Jacket color	Black (other colors available)

#### Standard & EU Directives Conformance

- Relevant sections of ANSI/TIA-568-C.3
- Relevant sections of ISO/IEC 11801
- Relevant sections of EN 50173
- EU Directive 2011/65/EU (RoHS-2)

#### Mechanical Properties

Short term bend radius	20xOD mm
Long term bend radius	10xOD mm
Operating temperature	-40 to +70C
Installation temperature	-20 to +70C
Water blocking test	3m cable, 1m water, 24h - IEC 60794-1-2 F5
Messenger tensile strength	7500N min. - IEC-60794-1-2 E1
Default fiber count per tube	Indicated (other options available)
Load conditions	NESC Medium
Span	122m max.
Installation sag	1%



#### Ordering Information

FF: Fiber Type

Description	Fibers per Tube	Tube Count	Fillers	Cable OD mm (*)	Weight Kg/Km	Max. Load N		Packaging	P/N
						Short Term	Long Term		
2-Fiber FO Aerial Loose-Tube Steel Armored Jelly-Filled DJ FIG-8 Cable	2	1	5	14.8	430	3500	2500	2000m Drum	25MFFCN002B-BK2N
4-Fiber FO Aerial Loose-Tube Steel Armored Jelly-Filled DJ FIG-8 Cable	4	1	5	14.8	430	3500	2500	2000m Drum	25MFFCN004B-BK2N
6-Fiber FO Aerial Loose-Tube Steel Armored Jelly-Filled DJ FIG-8 Cable	6	1	5	14.8	430	3500	2500	2000m Drum	25MFFCN006B-BK2N
8-Fiber FO Aerial Loose-Tube Steel Armored Jelly-Filled DJ FIG-8 Cable	4	2	4	14.8	430	3500	2500	2000m Drum	25MFFCN008B-BK2N
12-Fiber FO Aerial Loose-Tube Steel Armored Jelly-Filled DJ FIG-8 Cable	4	3	3	14.8	430	3500	2500	2000m Drum	25MFFCN012B-BK2N
24-Fiber FO Aerial Loose-Tube Steel Armored Jelly-Filled DJ FIG-8 Cable	4	6	0	14.8	430	3500	2500	2000m Drum	25MFFCN024B-BK2N
36-Fiber FO Aerial Loose-Tube Steel Armored Jelly-Filled DJ FIG-8 Cable	6	6	0	14.8	430	3500	2500	2000m Drum	25MFFCN036B-BK2N
48-Fiber FO Aerial Loose-Tube Steel Armored Jelly-Filled DJ FIG-8 Cable	8	6	0	15.5	450	3500	2500	2000m Drum	25MFFCN048B-BK2N
72-Fiber FO Aerial Loose-Tube Steel Armored Jelly-Filled DJ FIG-8 Cable	12	6	0	15.5	450	3500	2500	2000m Drum	25MFFCN072B-BK2N
96-Fiber FO Aerial Loose-Tube Steel Armored Jelly-Filled DJ FIG-8 Cable	12	8	0	17.2	580	3500	2500	2000m Drum	25MFFCN096B-BK2N
144-Fiber FO Aerial Loose-Tube Steel Armored Jelly-Filled DJ FIG-8 Cable	12	12	0	21.0	700	3500	2500	2000m Drum	25MFFCN144B-BK2N
288-Fiber FO Aerial Loose-Tube Steel Armored Jelly-Filled DJ FIG-8 Cable	12	24	0	23.5	820	3500	2500	2000m Drum	25MFFCN288B-BK2N

(\*) Cable OD without the messenger

## AT&T FiberLine Outdoor Tight-Buffer Steel Armored Double-Jacket Optical Fiber Cables

### Description

2-144 fibers indoor/outdoor tight-buffer steel armored double-jacket FO cables	
Fiber type	Select from FiberLine fiber types (Section B.6)
Buffer type	900μ tight flame retardant LSOH coating
Strength elements	Served swellable aramid and glass yarn
Sub-units jacket material	Flame retardant LSOH compound
Multi-unit water blocking	Swellable tapes
Inner jacket material	Flame retardant LSOH compound
Armor	Corrugated steel tape
Water blocking	Petroleum jelly
Outer jacket material	UV-resistant PE
Fibers and sub-units color code	TIA-598-C
Jacket color	Black (other colors available)



### Standard & EU Directives Conformance

- Relevant sections of ANSI/TIA-568-C.3
- Relevant sections of ISO/IEC 11801
- Relevant sections of EN 50173
- EU Directive 2011/65/EU (RoHS-2)

### Mechanical Properties

Short term bend radius	20xOD mm
Long term bend radius	10xOD mm
Operating temperature	-30 to +70C
Installation temperature	-20 to +70C
Water blocking test	3m cable, 1m water, 24h - IEC 60794-1-2 F5

### Ordering Information - Single Unit Cables

FF: Fiber Type

Description	Fiber Count	Cable OD mm	Weight Kg/Km	Max. Load N		Packaging	P/N
				Short Term	Long Term		
2-Fiber FO Outdoor Steel Armored Tight-Buffer DJ Cable	2	8.5	90	1000	400	2000m Drum	23DFFCN002S-BK2N
4-Fiber FO Outdoor Steel Armored Tight-Buffer DJ Cable	4	10.0	110	1000	400	2000m Drum	23DFFCN004S-BK2N
6-Fiber FO Outdoor Steel Armored Tight-Buffer DJ Cable	6	10.0	110	1000	400	2000m Drum	23DFFCN006S-BK2N
8-Fiber FO Outdoor Steel Armored Tight-Buffer DJ Cable	8	10.5	125	1000	400	2000m Drum	23DFFCN008S-BK2N
12-Fiber FO Outdoor Steel Armored Tight-Buffer DJ Cable	12	11.5	140	1000	400	2000m Drum	23DFFCN012S-BK2N
16-Fiber FO Outdoor Steel Armored Tight-Buffer DJ Cable	16	12.0	155	1700	800	2000m Drum	23DFFCN016S-BK2N
18-Fiber FO Outdoor Steel Armored Tight-Buffer DJ Cable	18	12.5	165	1700	800	2000m Drum	23DFFCN018S-BK2N
24-Fiber FO Outdoor Steel Armored Tight-Buffer DJ Cable	24	13.5	185	1700	800	2000m Drum	23DFFCN024S-BK2N

Continued on page B.1.7.7a

## AT&T FiberLine

### Outdoor Tight-Buffer Steel Armored Double-Jacket Optical Fiber Cables (contd.)

#### Ordering Information - Multi-Unit Cables

FF: Fiber Type

Description	Fiber per Subunit	Subunit Count	Cable OD mm	Weight Kg/Km	Max. Load N		Packaging	P/N
					Short Term	Long Term		
18-Fiber FO Outdoor Steel Armored Tight-Buffer DJ Cable	6	3	17	290	1700	800	2000m Drum	23DFFCN018M-BK2N
24-Fiber FO Outdoor Steel Armored Tight-Buffer DJ Cable	6	4	18	315	1700	800	2000m Drum	23DFFCN024M-BK2N
36-Fiber FO Outdoor Steel Armored Tight-Buffer DJ Cable	6	6	21	420	1700	800	2000m Drum	23DFFCN036M-BK2N
48-Fiber FO Outdoor Steel Armored Tight-Buffer DJ Cable	12	4	21	420	1700	800	2000m Drum	23DFFCN048M-BK2N
60-Fiber FO Outdoor Steel Armored Tight-Buffer DJ Cable	12	5	22	450	1700	800	2000m Drum	23DFFCN060M-BK2N
72-Fiber FO Outdoor Steel Armored Tight-Buffer DJ Cable	12	6	24	540	1700	800	2000m Drum	23DFFCN072M-BK2N
96-Fiber FO Outdoor Steel Armored Tight-Buffer DJ Cable	12	8	27	665	1700	800	2000m Drum	23DFFCN096M-BK2N
144-Fiber FO Outdoor Steel Armored Tight-Buffer DJ Cable	12	12	33	940	1700	800	2000m Drum	23DFFCN144M-BK2N

## AT&T FiberLine

### Microduct Dry-Core FTTx Optical Fiber Cables

#### Description

2-72 fibers outdoor all-dielectric microduct dry-core single-jacket non-armored FTTx FO cables

Fiber type	Select from FiberLine fiber types (Section B.6)
Buffer type	PBT jell-filled loose tubes
Central strength member	Rigid all-dielectric FRP
Water blocking elements	Swellable yarn and tapes
Cable jacket material	UV-resistant PE
Fibers and tubes color code	TIA-598-C
Jacket color	Black (other colors available)

#### Standard & EU Directives Conformance

- Relevant sections of ANSI/TIA-568-C.3
- Relevant sections of ISO/IEC 11801
- Relevant sections of EN 50173
- EU Directive 2011/65/EU (RoHS-2)

#### Mechanical Properties

Short term bend radius	25xOD mm
Long term bend radius	15xOD mm
Operating temperature	-30 to +70C
Installation temperature	-20 to +70C
Water blocking test	3m cable, 1m water, 24h - IEC 60794-1-2 F5
Default fiber count per tube	Indicated (other options available)



#### Ordering Information

FF: Fiber Type

Description	Fibers per Tube	Tube Count	Fillers	Cable OD mm	Weight Kg/Km	Max. Load N		Packaging	P/N
						Short Term	Long Term		
2-Fiber FO Microduct FTTx All-Dielectric Dry-Core Cable	2	1	5	8.0	40.0	700	420	2000m Drum	25FFFEN002N-BK2N
4-Fiber FO Microduct FTTx All-Dielectric Dry-Core Cable	4	1	5	8.0	40.0	700	420	2000m Drum	25FFFEN004N-BK2N
6-Fiber FO Microduct FTTx All-Dielectric Dry-Core Cable	6	1	5	8.0	40.0	700	420	2000m Drum	25FFFEN006N-BK2N
8-Fiber FO Microduct FTTx All-Dielectric Dry-Core Cable	8	1	5	8.0	40.0	700	420	2000m Drum	25FFFEN008N-BK2N
12-Fiber FO Microduct FTTx All-Dielectric Dry-Core Cable	12	1	5	8.0	40.0	700	420	2000m Drum	25FFFEN012N-BK2N
24-Fiber FO Microduct FTTx All-Dielectric Dry-Core Cable	12	2	4	8.0	40.0	700	420	2000m Drum	25FFFEN024N-BK2N
36-Fiber FO Microduct FTTx All-Dielectric Dry-Core Cable	12	3	3	8.0	45.0	700	420	2000m Drum	25FFFEN036N-BK2N
48-Fiber FO Microduct FTTx All-Dielectric Dry-Core Cable	12	4	2	8.0	45.0	700	420	2000m Drum	25FFFEN048N-BK2N
72-Fiber FO Microduct FTTx All-Dielectric Dry-Core Cable	12	6	0	8.0	45.0	700	420	2000m Drum	25FFFEN072N-BK2N



## AT&T FiberLine

### Single Loose-Tube Dielectric FTTx Drop Optical Fiber Cables

#### Description

2-12 fibers single loose-tube dielectric FTTx drop FO cables	
Fiber type	Select from FiberLine fiber types (Section B.6)
Buffer type	Single PBT jell-filled loose tube
Strength elements	Two rigid FRP rods
Water blocking	Swellable fillers
Cable jacket material	UV-resistant PE
Cable formation	Flat-oval
Fibers color code	TIA-598-C
Jacket color	Black (other colors available)

#### Standard & EU Directives Conformance

- Relevant sections of ANSI/TIA-568-C.3
- Relevant sections of ISO/IEC 11801
- Relevant sections of EN 50173
- EU Directive 2011/65/EU (RoHS-2)

#### Mechanical Properties

Short term bend radius	30xOD mm
Long term bend radius	15xOD mm
Operating temperature	-30 to +70C
Installation temperature	-20 to +70C
Water blocking test	3m cable, 1m water, 24h - IEC 60794-1-2 F5



#### Ordering Information

FF: Fiber Type

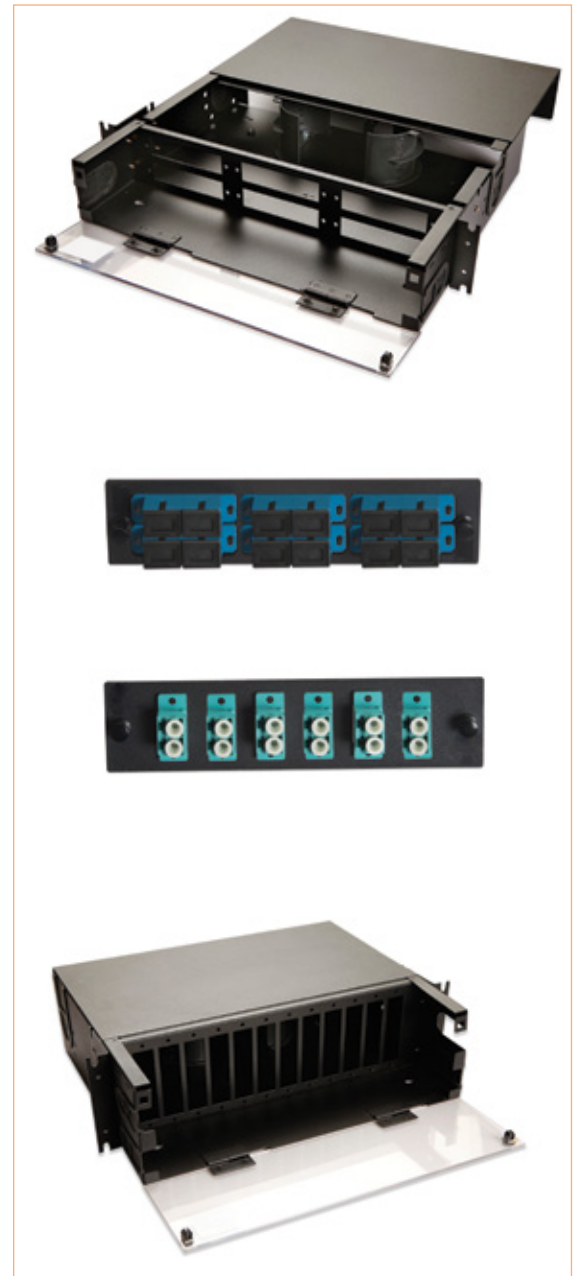
Description	Cable OD mm	Weight Kg/Km	Max. Load N		Packaging	P/N
			Short Term	Long Term		
2-Fiber FO Dielectric Single Loose-Tube FTTx Drop Cable	5.5x8.8	40.0	1350	400	2000m Drum	24PFFEN002N-BK2N
4-Fiber FO Dielectric Single Loose-Tube FTTx Drop Cable	5.5x8.8	40.0	1350	400	2000m Drum	24PFFEN004N-BK2N
6-Fiber FO Dielectric Single Loose-Tube FTTx Drop Cable	5.5x8.8	40.0	1350	400	2000m Drum	24PFFEN006N-BK2N
8-Fiber FO Dielectric Single Loose-Tube FTTx Drop Cable	5.5x8.8	40.0	1350	400	2000m Drum	24PFFEN008N-BK2N
10-Fiber FO Dielectric Single Loose-Tube FTTx Drop Cable	5.5x8.8	40.0	1350	400	2000m Drum	24PFFEN010N-BK2N
12-Fiber FO Dielectric Single Loose-Tube FTTx Drop Cable	5.5x8.8	40.0	1350	400	2000m Drum	24PFFEN012N-BK2N

## AT&T FiberLine Panels

### Standard 19" Fiber Optic Panels

#### Description

1-288 fiber, 2-7U standard 19" fiber optic splicing/distribution panels	
Connector type compatibility - Group A	ST, SC, FC
Connector type compatibility - Group B	LC, MTRJ, LSH (E-2000™)
Splicing with Group A & B connectors	Up to two 36 fiber splicing in each cassette
Distribution with Group A connectors	Up to 36 fiber direct cable termination in each U
Distribution with Group B connectors	Up to 72 fiber direct cable termination in each U
Panel front	Up to 24 removable modules
Panel access	Top and side
Front Cable Management	Tray for patch cord routing and protection



#### Standard & EU Directives Conformance

- Relevant sections of ANSI/TIA/EIA-604 (FOCIS)
- Relevant sections of IEC 60874
- Relevant sections of IEC 61753
- Relevant sections of IEC 61754
- Plastic parts: UL94 V-0 flame test
- EU Directive 2011/65/EU (RoHS-2)

#### Mechanical Properties and Features

Frame	Steel, colored black
Front cover	Hinged transparent cover
Operating temperature	-10 to +60C at 5-85% RH (non condensing)
Storage temperature	-40 to +70C
Plastic parts	High-impact flame retardant materials
Port identification	Numbers and designated space printed on the cover
Panel identification	Designated space at the panel front

#### Ordering Information - Panels

Description	Units	Fiber Capacity		Cassette Capacity	Module Capacity	Size mm	Packaging	P/N
		A	B					
Standard 2U Blank 19" Fiber Optic Panel	2U	72	144	2	6	83x483x356	1/Box	27S00NV072A-MT2U
Standard 3U Blank 19" Fiber Optic Panel	3U	144	288	4	12	132x483x356	1/Box	27S00NV144A-MT3U
Standard 7U Blank 19" Fiber Optic Panel	7U	288	576	8	24	293x483x356	1/Box	27S00NV288A-MT7U

Fiber Capacity refers to distribution option only  
Splice Capacity is limited by cassette capacity

Continued on page B.2.1.1a

## AT&T FiberLine Panels

### Standard 19" Fiber Optic Panels (contd.)

#### Ordering Information - Modules

Description	Coupler Type	Coupler Capacity	Fiber Capacity	Packaging	P/N
Pre-loaded Module	Simplex ST/UPC MM	6	6	1/Bag	53200NV006A-MT61
Pre-loaded Module	Simplex ST/UPC MM	12	12	1/Bag	53200NV012A-MT61
Pre-loaded Module	Simplex ST/UPC SM	6	6	1/Bag	53200NV006C-MT61
Pre-loaded Module	Simplex ST/UPC SM	12	12	1/Bag	53200NV012C-MT61
Pre-loaded Module	Simplex FC/UPC MM	6	6	1/Bag	53200NV006E-MT61
Pre-loaded Module	Simplex FC/UPC MM	12	12	1/Bag	53200NV012E-MT61
Pre-loaded Module	Simplex FC/UPC SM	6	6	1/Bag	53200NV006F-MT61
Pre-loaded Module	Simplex FC/UPC SM	12	12	1/Bag	53200NV012F-MT61
Pre-loaded Module	Simplex FC/APC SM	6	6	1/Bag	53200NV006G-MT61
Pre-loaded Module	Simplex FC/APC SM	12	12	1/Bag	53200NV012G-MT61
Pre-loaded Module	Duplex SC/UPC MM	6	12	1/Bag	53200NV012H-MT61
Pre-loaded Module	Duplex SC/UPC SM	6	12	1/Bag	53200NV012J-MT61
Pre-loaded Module	Duplex SC/APC SM	6	12	1/Bag	53200NV012K-MT61
Pre-loaded Module	Duplex LC/UPC MM	6	12	1/Bag	532M2NV012P-MT61
Pre-loaded Module	Duplex LC/UPC MM OM3	6	12	1/Bag	532M3NV012P-MT61
Pre-loaded Module	Duplex LC/UPC MM OM4	6	12	1/Bag	532M4NV012P-MT61
Pre-loaded Module	Duplex LC/UPC SM	6	12	1/Bag	53200NV012Q-MT61
Pre-loaded Module	Duplex LC/APC SM	6	12	1/Bag	53200NV012R-MT61
Pre-loaded Module	Quad LC/UPC MM	6	24	1/Bag	532M2NV024P-MT61
Pre-loaded Module	Quad LC/UPC MM OM3	6	24	1/Bag	532M3NV024P-MT61
Pre-loaded Module	Quad LC/UPC MM OM4	6	24	1/Bag	532M4NV024P-MT61
Pre-loaded Module	Quad LC/UPC SM	6	24	1/Bag	53200NV024Q-MT61
Pre-loaded Module	Quad LC/APC SM	6	24	1/Bag	53200NV024R-MT61
Pre-loaded Module	MTRJ	6	12	1/Bag	53200NV012S-MT61
Pre-loaded Module	Duplex LSH/UPC MM	6	12	1/Bag	53200NV012D-MT61
Pre-loaded Module	Duplex LSH/UPC SM	6	12	1/Bag	53200NV012L-MT61
Pre-loaded Module	Duplex LSH/APC SM	6	12	1/Bag	53200NV012R-MT61
Blank Module	None	-	-	1/Bag	53200NV000N-MT61

#### Ordering Information - Splicing Kits

Description	Fiber Capacity	Packaging	P/N
Splicing Kit for 36 Fibers	36	1/Bag	53500NV036N-NS61
Splicing Kit for 48 Fibers	48	1/Bag	53500NV048N-NS61
Splicing Kit for 72 Fibers	72	1/Bag	53500NV072N-NS61
Splicing Kit for 96 Fibers	96	1/Bag	53500NV096N-NS61
Splicing Kit for 144 Fibers	144	1/Bag	53500NV144N-NS61
Splicing Kit for 192 Fibers	192	1/Bag	53500NV192N-NS61
Splicing Kit for 216 Fibers	216	1/Bag	53500NV216N-NS61
Splicing Kit for 288 Fibers	288	1/Bag	53500NV288N-NS61

## AT&T FiberLine Panels

### High-Density 19" Fiber Optic Panel

#### Description

1-72 fiber 1U high-density 19" fiber optic splicing/distribution panel  
 Connector type compatibility - Group A ST, SC, FC

Connector type compatibility - Group B LC, MTRJ, LSH (E-2000™)

Splicing with Group A connectors

Up to three 12 fiber splicing cassettes

Splicing with Group B connectors

Up to three 24 fiber splicing cassettes

Distribution with Group A connectors

Up to 36 fiber direct cable termination

Distribution with Group B connectors

Up to 72 fiber direct cable termination

Panel front

Up to three removable pre-loaded modules

Panel access

Top and front slide rail

Back Cable Management

Tray Side & back cable entry with strain relief

Front Cable Management

Tray with rings for patch cord routing and protection

#### Standard & EU Directives Conformance

- Relevant sections of ANSI/TIA/EIA-604 (FOCIS)
- Relevant sections of IEC 60874
- Relevant sections of IEC 61753
- Relevant sections of IEC 61754
- Plastic parts: UL94 V-0 flame test
- EU Directive 2011/65/EU (RoHS-2)

#### Mechanical Properties and Features

Frame	SPCC Steel, colored black
Front cover	None
Operating temperature	-10 to +60C at 5-85% RH (non condensing)
Storage temperature	-40 to +70C
Plastic parts	High-impact flame retardant materials
Port identification	Numbers and designated space printed on the cover



#### Ordering Information - Panel

Description	Units	Fiber Capacity		Cassette Capacity	Module Capacity	Size mm	Packaging	P/N
		A	B					
High-Density Blank 19" Fiber Optic Panel	1U	36	72	3	3	44.5x483x501	1/Box	27H00NV072A-BK1U

Continued on page B.2.1.2a

## AT&T FiberLine Panels

### High-Density 19" Fiber Optic Panels (contd.)

#### Ordering Information - Modules

Description	Coupler Type	Coupler Capacity	Fiber Capacity	Packaging	P/N
Pre-loaded Module	Simplex ST/UPC MM	12	12	1/Bag	53300NV012A-MT61
Pre-loaded Module	Simplex ST/UPC SM	12	12	1/Bag	53300NV012C-MT61
Pre-loaded Module	Simplex FC/UPC MM	12	12	1/Bag	53300NV012E-MT61
Pre-loaded Module	Simplex FC/UPC SM	12	12	1/Bag	53300NV012F-MT61
Pre-loaded Module	Simplex FC/APC SM	12	12	1/Bag	53300NV012G-MT61
Pre-loaded Module	Duplex SC/UPC MM	6	12	1/Bag	53300NV012H-MT61
Pre-loaded Module	Duplex SC/UPC SM	6	12	1/Bag	53300NV012J-MT61
Pre-loaded Module	Duplex SC/APC SM	6	12	1/Bag	53300NV012K-MT61
Pre-loaded Module	Duplex LC/UPC MM	6	12	1/Bag	533M2NV012P-MT61
Pre-loaded Module	Duplex LC/UPC MM OM3	6	12	1/Bag	533M3NV012P-MT61
Pre-loaded Module	Duplex LC/UPC MM OM4	6	12	1/Bag	533M4NV012P-MT61
Pre-loaded Module	Duplex LC/UPC SM	6	12	1/Bag	53300NV012Q-MT61
Pre-loaded Module	Duplex LC/APC SM	6	12	1/Bag	53300NV012R-MT61
Pre-loaded Module	Quad LC/UPC MM	6	24	1/Bag	533M2NV024P-MT61
Pre-loaded Module	Quad LC/UPC MM OM3	6	24	1/Bag	533M3NV024P-MT61
Pre-loaded Module	Quad LC/UPC MM OM4	6	24	1/Bag	533M4NV024P-MT61
Pre-loaded Module	Quad LC/UPC SM	6	24	1/Bag	53300NV024Q-MT61
Pre-loaded Module	Quad LC/APC SM	6	24	1/Bag	53300NV024R-MT61
Pre-loaded Module	MTRJ	12	24	1/Bag	53300NV024S-MT61
Pre-loaded Module	Duplex LSH/UPC MM	12	24	1/Bag	53300NV024D-MT61
Pre-loaded Module	Duplex LSH/UPC SM	12	24	1/Bag	53300NV024L-MT61
Pre-loaded Module	Duplex LSH/APC SM	12	24	1/Bag	53300NV024R-MT61
Blank Module	None	-	-	1/Bag	53300NV000N-MT61

## AT&T FiberLine Panels

### Basic 19" Fiber Optic Panels

#### Description

1-48 fiber 1U low-cost fixed 19" fiber optic splicing/distribution panels

Connector type compatibility - Group A ST, SC, FC, LC, MTRJ, LSH (E-2000™)

Splicing Up to two 24 fiber splicing cassettes

Distribution Up to 48 fiber direct cable termination

Panel access Top and front sliding tray

Back Cable Management None

Front Cable Management None

#### Standard & EU Directives Conformance

- Relevant sections of ANSI/TIA/EIA-604 (FOCIS)
- Relevant sections of IEC 60874
- Relevant sections of IEC 61753
- Relevant sections of IEC 61754
- Plastic parts: UL94 V-0 flame test
- EU Directive 2011/65/EU (RoHS-2)

#### Mechanical Properties and Features

Frame	SPCC Steel, colored black
Front cover	None
Operating temperature	-10 to +60C at 5-85% RH (non condensing)
Storage temperature	-40 to +70C
Plastic parts	High-impact flame retardant materials
Port identification	Numbers and designated space printed on the cover



#### Ordering Information

Description	Compatible Couplers	Coupler Capacity	Fiber Capacity	Cassette Capacity	Size mm	Packaging	P/N
Basic 1U Blank 19" Fiber Optic Panel	ST Simplex	24	24	1	44.5x483x230	1/Box	27B00NV024A-BK1U
Basic 1U Blank 19" Fiber Optic Panel	SC Simplex	24	24	1	44.5x483x230	1/Box	27B00NV024H-BK1U
Basic 1U Blank 19" Fiber Optic Panel	SC Duplex	12	24	1	44.5x483x230	1/Box	27B00NV024J-BK1U
Basic 1U Blank 19" Fiber Optic Panel	SC Duplex	24	48	2	44.5x483x230	1/Box	27B00NV048J-BK1U
Basic 1U Blank 19" Fiber Optic Panel	FC Simplex	24	24	1	44.5x483x230	1/Box	27B00NV024E-BK1U
Basic 1U Blank 19" Fiber Optic Panel	LC Duplex	12	24	1	44.5x483x230	1/Box	27B00NV024Q-BK1U
Basic 1U Blank 19" Fiber Optic Panel	LC Duplex	24	48	2	44.5x483x230	1/Box	27B00NV048Q-BK1U
Basic 1U Blank 19" Fiber Optic Panel	MTRJ	12	24	1	44.5x483x230	1/Box	27B00NV024S-BK1U
Basic 1U Blank 19" Fiber Optic Panel	MTRJ	24	48	1	44.5x483x230	1/Box	27B00NV048S-BK1U

## AT&T FiberLine Panels

### Wall-Mount Indoor Fiber Optic Panels

#### Description

12 or 24 fiber indoor wall-mount panels	
Connector type compatibility	ST, SC, FC, LC, MTRJ, LSH (E-2000™)
Splicing	One or two 12 fiber splicing cassettes
Distribution	12 or 24 fiber direct cable termination
Panel front	Two or four removable pre-loaded modules
Panel access	Front
Doors	Two individually locked doors
Locking method	Mechanical key
Mounting orientation	Horizontal or vertical
Mounting method	Screws (not included)

#### Standard & EU Directives Conformance

- Relevant sections of ANSI/TIA/EIA-604 (FOCIS)
- Relevant sections of IEC 60874
- Relevant sections of IEC 61753
- Relevant sections of IEC 61754
- Plastic parts: UL94 V-0 flame test
- EU Directive 2011/65/EU (RoHS-2)

#### Mechanical Properties and Features

Frame	Galvanized steel colored gray
Front cover	None
Operating temperature	-10 to +60C at 5-85% RH (non condensing)
Storage temperature	-40 to +70C
Plastic parts	High-impact flame retardant materials
Port identification	Numbers
Panel identification	Designated space inside the panel



#### Ordering Information - Panels

Description	Fiber Capacity	Cassette Capacity	Module Capacity	Size mm	Packaging	P/N
12 Fiber Blank Wall-Mount Fiber Optic Panel	12	1	2	91x285x330	1/Box	27W00NV012N-GY51
24 Fiber Blank Wall-Mount Fiber Optic Panel	24	2	4	91x383x355	1/Box	27W00NV024N-GY51

Continued on page B.2.1.4a

## AT&T FiberLine Panels

### Wall-Mount Indoor Fiber Optic Panels (contd.)

#### Ordering Information - Modules

Description	Coupler Type	Coupler Capacity	Fiber Capacity	Packaging	P/N
Pre-loaded Module	Simplex ST/UPC MM	6	6	1/Bag	53400NV006A-GY61
Pre-loaded Module	Simplex ST/UPC SM	6	6	1/Bag	53400NV006C-GY61
Pre-loaded Module	Simplex FC/UPC MM	6	6	1/Bag	53400NV006E-GY61
Pre-loaded Module	Simplex FC/UPC SM	6	6	1/Bag	53400NV006F-GY61
Pre-loaded Module	Simplex FC/APC SM	6	6	1/Bag	53400NV006G-GY61
Pre-loaded Module	Simplex SC/UPC MM	6	6	1/Bag	53400NV006H-GY61
Pre-loaded Module	Simplex SC/UPC SM	6	6	1/Bag	53400NV006J-GY61
Pre-loaded Module	Simplex SC/APC SM	6	6	1/Bag	53400NV006K-GY61
Pre-loaded Module	Duplex SC/UPC MM	3	6	1/Bag	53400NV003H-GY61
Pre-loaded Module	Duplex SC/UPC SM	3	6	1/Bag	53400NV003J-GY61
Pre-loaded Module	Duplex SC/APC SM	3	6	1/Bag	53400NV003K-GY61
Pre-loaded Module	Duplex LC/UPC MM	3	6	1/Bag	534M1NV003P-GY61
Pre-loaded Module	Duplex LC/UPC MM	3	6	1/Bag	534M3NV003P-GY61
Pre-loaded Module	Duplex LC/UPC MM	3	6	1/Bag	534M4NV003P-GY61
Pre-loaded Module	Duplex LC/UPC SM	3	6	1/Bag	53400NV003Q-GY61
Pre-loaded Module	Duplex LC/APC SM	3	6	1/Bag	53400NV003R-GY61
Pre-loaded Module	MTRJ	3	6	1/Bag	53400NV003S-GY61
Pre-loaded Module	Duplex LSH/UPC MM	3	6	1/Bag	53400NV003D-GY61
Pre-loaded Module	Duplex LSH/UPC SM	3	6	1/Bag	53400NV003L-GY61
Pre-loaded Module	Duplex LSH/APC SM	3	6	1/Bag	53400NV003M-GY61



## AT&T FiberLine Panels

### Standard MTP Cassette Fiber Optic Panel

#### Description

1-72 fiber 1U 19" standard MTP cassette fiber optic panel	
Cassette front options	12 or 24 LC/UPC or SC/UPC ports
Cassette back options	One or two 12-fiber MTP couplers
Fiber type compatibility	OM1, OM2, OM3, OM4 & OS2
Panel front	Up to three removable pre-loaded cassettes
Panel access	Top and front slide rail
Back Cable Management	Removable tray with strain relief
Front Cable Management	Tray with rings for patch cord routing and protection



#### Standard & EU Directives Conformance

- Relevant sections of ANSI/TIA/EIA-604 (FOCIS)
- Relevant sections of IEC 60874
- Relevant sections of IEC 61753
- Relevant sections of IEC 61754
- Plastic parts: UL94 V-0 flame test
- EU Directive 2011/65/EU (RoHS-2)

#### Mechanical Properties and Features

Frame	Steel, colored black
Front cover	None
Operating temperature	-10 to +60C at 5-85% RH (non condensing)
Storage temperature	-40 to +70C
Plastic parts	High-impact flame retardant materials
Port identification	Numbers

#### Ordering Information - Panel

Description	Units	Fiber Capacity	Cassette Capacity	Size mm	Packaging	P/N
Standard Blank MTP Cassette Fiber Optic Panel	1U	72	3	44.5x483x501	1/Box	27T00NV072A-BK1U

Continued on page B.2.2.1a

## AT&T FiberLine Panels

### Standard MTP Cassette Fiber Optic Panel (contd.)

#### Ordering Information - Cassettes

Description	Front Couplers	Coupler Capacity	MTP Ports	TIA-568-C.3 Polarity	Size mm	Packaging	P/N
Pre-loaded Standard MTP Cassette	LC/UPC OM1	12	1	Type-C	30x130x91	1/Box	82SM1HV012P-BK51
Pre-loaded Standard MTP Cassette	LC/UPC OM1	12	1	Type-A	30x130x91	1/Box	82FM1HV012P-BK51
Pre-loaded Standard MTP Cassette	LC/UPC OM1	24	2	Type-C	30x130x91	1/Box	82SM1HV024P-BK51
Pre-loaded Standard MTP Cassette	LC/UPC OM1	24	2	Type-A	30x130x91	1/Box	82FM1HV024P-BK51
Pre-loaded Standard MTP Cassette	LC/UPC OM2	12	1	Type-C	30x130x91	1/Box	82SM2HV012P-BK51
Pre-loaded Standard MTP Cassette	LC/UPC OM2	12	1	Type-A	30x130x91	1/Box	82FM2HV012P-BK51
Pre-loaded Standard MTP Cassette	LC/UPC OM2	24	2	Type-C	30x130x91	1/Box	82SM2HV024P-BK51
Pre-loaded Standard MTP Cassette	LC/UPC OM2	24	2	Type-A	30x130x91	1/Box	82FM2HV024P-BK51
Pre-loaded Standard MTP Cassette	LC/UPC OM3	12	1	Type-C	30x130x91	1/Box	82SM3HV012P-BK51
Pre-loaded Standard MTP Cassette	LC/UPC OM3	12	1	Type-A	30x130x91	1/Box	82FM3HV012P-BK51
Pre-loaded Standard MTP Cassette	LC/UPC OM3	24	2	Type-C	30x130x91	1/Box	82SM3HV024P-BK51
Pre-loaded Standard MTP Cassette	LC/UPC OM3	24	2	Type-A	30x130x91	1/Box	82FM3HV024P-BK51
Pre-loaded Standard MTP Cassette	LC/UPC OM3 BI	12	1	Type-C	30x130x91	1/Box	82SC3HV012P-BK51
Pre-loaded Standard MTP Cassette	LC/UPC OM3 BI	12	1	Type-A	30x130x91	1/Box	82FC3HV012P-BK51
Pre-loaded Standard MTP Cassette	LC/UPC OM3 BI	24	2	Type-C	30x130x91	1/Box	82SC3HV024P-BK51
Pre-loaded Standard MTP Cassette	LC/UPC OM3 BI	24	2	Type-A	30x130x91	1/Box	82FC3HV024P-BK51
Pre-loaded Standard MTP Cassette	LC/UPC OM4	12	1	Type-C	30x130x91	1/Box	82SM4HV012P-BK51
Pre-loaded Standard MTP Cassette	LC/UPC OM4	12	1	Type-A	30x130x91	1/Box	82FM4HV012P-BK51
Pre-loaded Standard MTP Cassette	LC/UPC OM4	24	2	Type-C	30x130x91	1/Box	82SM4HV024P-BK51
Pre-loaded Standard MTP Cassette	LC/UPC OM4	24	2	Type-A	30x130x91	1/Box	82FM4HV024P-BK51
Pre-loaded Standard MTP Cassette	LC/UPC OM4 BI	12	1	Type-C	30x130x91	1/Box	82SC4HV012P-BK51
Pre-loaded Standard MTP Cassette	LC/UPC OM4 BI	12	1	Type-A	30x130x91	1/Box	82FC4HV012P-BK51
Pre-loaded Standard MTP Cassette	LC/UPC OM4 BI	24	2	Type-C	30x130x91	1/Box	82SC4HV024P-BK51
Pre-loaded Standard MTP Cassette	LC/UPC OM4 BI	24	2	Type-A	30x130x91	1/Box	82FC4HV024P-BK51
Pre-loaded Standard MTP Cassette	LC/UPC OS2	12	1	Type-C	30x130x91	1/Box	82SS2HV012P-BK51
Pre-loaded Standard MTP Cassette	LC/UPC OS2	12	1	Type-A	30x130x91	1/Box	82FS2HV012P-BK51
Pre-loaded Standard MTP Cassette	LC/UPC OS2	24	2	Type-C	30x130x91	1/Box	82SS2HV024P-BK51
Pre-loaded Standard MTP Cassette	LC/UPC OS2	24	2	Type-A	30x130x91	1/Box	82FS2HV024P-BK51
Pre-loaded Standard MTP Cassette	LC/UPC OS2 BI	12	1	Type-C	30x130x91	1/Box	82SB2HV012P-BK51
Pre-loaded Standard MTP Cassette	LC/UPC OS2 BI	12	1	Type-A	30x130x91	1/Box	82FB2HV012P-BK51
Pre-loaded Standard MTP Cassette	LC/UPC OS2 BI	24	2	Type-C	30x130x91	1/Box	82SB2HV024P-BK51
Pre-loaded Standard MTP Cassette	LC/UPC OS2 BI	24	2	Type-A	30x130x91	1/Box	82FB2HV024P-BK51
Pre-loaded Standard MTP Cassette	SC/UPC OM1	12	1	Type-C	30x130x91	1/Box	82SM1HV012H-BK51
Pre-loaded Standard MTP Cassette	SC/UPC OM1	12	1	Type-A	30x130x91	1/Box	82FM1HV012H-BK51
Pre-loaded Standard MTP Cassette	SC/UPC OM2	12	1	Type-C	30x130x91	1/Box	82SM2HV012H-BK51
Pre-loaded Standard MTP Cassette	SC/UPC OM2	12	1	Type-A	30x130x91	1/Box	82FM2HV012H-BK51
Pre-loaded Standard MTP Cassette	SC/UPC OM3	12	1	Type-C	30x130x91	1/Box	82SM3HV012H-BK51
Pre-loaded Standard MTP Cassette	SC/UPC OM3	12	1	Type-A	30x130x91	1/Box	82FM3HV012H-BK51
Pre-loaded Standard MTP Cassette	SC/UPC OM3 BI	12	1	Type-C	30x130x91	1/Box	82SC3HV012H-BK51
Pre-loaded Standard MTP Cassette	SC/UPC OM3 BI	12	1	Type-A	30x130x91	1/Box	82FC3HV012H-BK51
Pre-loaded Standard MTP Cassette	SC/UPC OM4	12	1	Type-C	30x130x91	1/Box	82SM4HV012H-BK51
Pre-loaded Standard MTP Cassette	SC/UPC OM4	12	1	Type-A	30x130x91	1/Box	82FM4HV012H-BK51
Pre-loaded Standard MTP Cassette	SC/UPC OM4 BI	12	1	Type-C	30x130x91	1/Box	82SC4HV012H-BK51
Pre-loaded Standard MTP Cassette	SC/UPC OM4 BI	12	1	Type-A	30x130x91	1/Box	82FC4HV012H-BK51
Pre-loaded Standard MTP Cassette	SC/UPC OS2	12	1	Type-C	30x130x91	1/Box	82SS2HV012H-BK51
Pre-loaded Standard MTP Cassette	SC/UPC OS2	12	1	Type-A	30x130x91	1/Box	82FS2HV012H-BK51
Pre-loaded Standard MTP Cassette	SC/UPC OS2 BI	12	1	Type-C	30x130x91	1/Box	82SB2HV012H-BK51
Pre-loaded Standard MTP Cassette	SC/UPC OS2 BI	12	1	Type-A	30x130x91	1/Box	82FB2HV012H-BK51
Blank Standard Cassette	None	N/A	N/A	N/A	30x130x91	1/Box	82B00NV000N-BK51

All MTP connectors are low-loss type, having 0.35dB max. connection loss. Assemblies with 0.5dB max. connection loss are available upon request. BI = Bend-Insensitive

## AT&T FiberLine Panels

### High-Density MTP Cassette Fiber Optic Panel

#### Description

1-120 fiber 1U 19" high-density MTP cassette fiber optic panel	
Cassette front	12 or 24 LC/UPC ports
Cassette back options	One or two 12-fiber MTP couplers
Fiber type compatibility	OM1, OM2, OM3, OM4 & OS2
Panel front	Up to five removable pre-loaded cassettes
Panel access	Top and front slide rail
Back Cable Management	Removable tray with strain relief
Front Cable Management	Tray with rings for patch cord routing and protection

#### Standard & EU Directives Conformance

- Relevant sections of ANSI/TIA/EIA-604 (FOCIS)
- Relevant sections of IEC 60874
- Relevant sections of IEC 61753
- Relevant sections of IEC 61754
- Plastic parts: UL94 V-0 flame test
- EU Directive 2011/65/EU (RoHS-2)

#### Mechanical Properties and Features

Frame	Steel, colored black
Front cover	None
Operating temperature	-10 to +60C at 5-85% RH (non condensing)
Storage temperature	-40 to +70C
Plastic parts	High-impact flame retardant materials
Port identification	Numbers



#### Ordering Information - Panel

Description	Units	Fiber Capacity	Cassette Capacity	Size mm	Packaging	P/N
High-Density Blank MTP Cassette Fiber Optic Panel	1U	120	5	44.5x483x501	1/Box	27D00NV120A-BK1U

#### Ordering Information - Coupler Modules

Description	Units	Fiber Capacity	Coupler Capacity	Size mm	Packaging	P/N
Two-Port High-Density MTP & MPO Coupler	1U	12-24	2	34x88	1/Bag	27A00NV002P-BK1U
Three-Port High-Density MTP & MPO Coupler	1U	12-36	3	34x88	1/Bag	27A00NV003P-BK1U
Four-Port High-Density MTP & MPO Coupler	1U	12-48	4	34x88	1/Bag	27A00NV004P-BK1U
Five-Port High-Density MTP & MPO Coupler	1U	12-60	5	34x88	1/Bag	27A00NV005P-BK1U

Continued on page B.2.2.2a

## AT&T FiberLine Panels

### High-Density MTP Cassette Fiber Optic Panel (contd.)

#### Ordering Information - Cassettes

Description	Front Couplers	Coupler Capacity	MTP Ports	TIA-568-C.3 Polarity	Size mm	Packaging	P/N
Pre-loaded High-Density MTP Cassette	LC/UPC OM1	12	1	Type-C	34x111x88	1/Box	82GM1HV012P-BK51
Pre-loaded High-Density MTP Cassette	LC/UPC OM1	12	1	Type-A	34x111x88	1/Box	82PM1HV012P-BK51
Pre-loaded High-Density MTP Cassette	LC/UPC OM1	24	2	Type-C	34x111x88	1/Box	82GM1HV024P-BK51
Pre-loaded High-Density MTP Cassette	LC/UPC OM1	24	2	Type-A	34x111x88	1/Box	82PM1HV024P-BK51
Pre-loaded High-Density MTP Cassette	LC/UPC OM2	12	1	Type-C	34x111x88	1/Box	82GM2HV012P-BK51
Pre-loaded High-Density MTP Cassette	LC/UPC OM2	12	1	Type-A	34x111x88	1/Box	82PM2HV012P-BK51
Pre-loaded High-Density MTP Cassette	LC/UPC OM2	24	2	Type-C	34x111x88	1/Box	82GM2HV024P-BK51
Pre-loaded High-Density MTP Cassette	LC/UPC OM2	24	2	Type-A	34x111x88	1/Box	82PM2HV024P-BK51
Pre-loaded High-Density MTP Cassette	LC/UPC OM3	12	1	Type-C	34x111x88	1/Box	82GM3HV012P-BK51
Pre-loaded High-Density MTP Cassette	LC/UPC OM3	12	1	Type-A	34x111x88	1/Box	82PM3HV012P-BK51
Pre-loaded High-Density MTP Cassette	LC/UPC OM3	24	2	Type-C	34x111x88	1/Box	82GM3HV024P-BK51
Pre-loaded High-Density MTP Cassette	LC/UPC OM3	24	2	Type-A	34x111x88	1/Box	82PM3HV024P-BK51
Pre-loaded High-Density MTP Cassette	LC/UPC OM3 BI	12	1	Type-C	34x111x88	1/Box	82GC3HV012P-BK51
Pre-loaded High-Density MTP Cassette	LC/UPC OM3 BI	12	1	Type-A	34x111x88	1/Box	82PC3HV012P-BK51
Pre-loaded High-Density MTP Cassette	LC/UPC OM3 BI	24	2	Type-C	34x111x88	1/Box	82GC3HV024P-BK51
Pre-loaded High-Density MTP Cassette	LC/UPC OM3 BI	24	2	Type-A	34x111x88	1/Box	82PC3HV024P-BK51
Pre-loaded High-Density MTP Cassette	LC/UPC OM4	12	1	Type-C	34x111x88	1/Box	82GM4HV012P-BK51
Pre-loaded High-Density MTP Cassette	LC/UPC OM4	12	1	Type-A	34x111x88	1/Box	82PM4HV012P-BK51
Pre-loaded High-Density MTP Cassette	LC/UPC OM4	24	2	Type-C	34x111x88	1/Box	82GM4HV024P-BK51
Pre-loaded High-Density MTP Cassette	LC/UPC OM4	24	2	Type-A	34x111x88	1/Box	82PM4HV024P-BK51
Pre-loaded High-Density MTP Cassette	LC/UPC OM4 BI	12	1	Type-C	34x111x88	1/Box	82GC4HV012P-BK51
Pre-loaded High-Density MTP Cassette	LC/UPC OM4 BI	12	1	Type-A	34x111x88	1/Box	82PC4HV012P-BK51
Pre-loaded High-Density MTP Cassette	LC/UPC OM4 BI	24	2	Type-C	34x111x88	1/Box	82GC4HV024P-BK51
Pre-loaded High-Density MTP Cassette	LC/UPC OM4 BI	24	2	Type-A	34x111x88	1/Box	82PC4HV024P-BK51
Pre-loaded High-Density MTP Cassette	LC/UPC OS2	12	1	Type-C	34x111x88	1/Box	82GS2HV012P-BK51
Pre-loaded High-Density MTP Cassette	LC/UPC OS2	12	1	Type-A	34x111x88	1/Box	82PS2HV012P-BK51
Pre-loaded High-Density MTP Cassette	LC/UPC OS2	24	2	Type-C	34x111x88	1/Box	82GS2HV024P-BK51
Pre-loaded High-Density MTP Cassette	LC/UPC OS2	24	2	Type-A	34x111x88	1/Box	82PS2HV024P-BK51
Pre-loaded High-Density MTP Cassette	LC/UPC OS2 BI	12	1	Type-C	34x111x88	1/Box	82GB2HV012P-BK51
Pre-loaded High-Density MTP Cassette	LC/UPC OS2 BI	12	1	Type-A	34x111x88	1/Box	82PB2HV012P-BK51
Pre-loaded High-Density MTP Cassette	LC/UPC OS2 BI	24	2	Type-C	34x111x88	1/Box	82GB2HV024P-BK51
Pre-loaded High-Density MTP Cassette	LC/UPC OS2 BI	24	2	Type-A	34x111x88	1/Box	82PB2HV024P-BK51
Blank High-Density Cassette	None	N/A	N/A	N/A	34x111x88	1/Box	82K00NV000N-BK51

All MTP connectors are low-loss type, having 0.35dB max. connection loss.  
Assemblies with 0.5dB max. connection loss are available upon request.  
BI = Bend-Insensitive

## AT&T FiberLine Panels

### High-Density MTP Fixed Fiber Optic Panel

#### Description

72-144 fiber 1U 19" high-density MTP fixed fiber optic panel	
Panel front	72, 96 or 144 LC/UPC ports
Panel back	Six, eight or twelve 12-fiber MTP couplers
Fiber type compatibility	OM1, OM2, OM3, OM4 & OS2
Back Cable Management	Removable tray with strain relief
Front Cable Management	Removable tray for patch cord routing and protection

#### Standard & EU Directives Conformance

- Relevant sections of ANSI/TIA/EIA-604 (FOCIS)
- Relevant sections of IEC 60874
- Relevant sections of IEC 61753
- Relevant sections of IEC 61754
- Plastic parts: UL94 V-0 flame test
- EU Directive 2011/65/EU (RoHS-2)

#### Mechanical Properties and Features

Frame	Steel, colored black
Front cover	None
Operating temperature	-10 to +60C at 5-85% RH (non condensing)
Storage temperature	-40 to +70C
Plastic parts	High-impact flame retardant materials
Port identification	Numbers



#### Ordering Information

Description	Fiber Type	Fiber Capacity	MTP Couplers	TIA-568-C.3 Polarity	Size mm	Packaging	P/N
High-Density MTP to LC/UPC Fixed Fiber Optic Panel	OM1	72	6	Type-C	44.5x483x336	1/Box	27FM1HV072P-BK1U
High-Density MTP to LC/UPC Fixed Fiber Optic Panel	OM1	72	6	Type-A	44.5x483x336	1/Box	27LM1HV072P-BK1U
High-Density MTP to LC/UPC Fixed Fiber Optic Panel	OM2	72	6	Type-C	44.5x483x336	1/Box	27FM2HV072P-BK1U
High-Density MTP to LC/UPC Fixed Fiber Optic Panel	OM2	72	6	Type-A	44.5x483x336	1/Box	27LM2HV072P-BK1U
High-Density MTP to LC/UPC Fixed Fiber Optic Panel	OM3	72	6	Type-C	44.5x483x336	1/Box	27FM3HV072P-BK1U
High-Density MTP to LC/UPC Fixed Fiber Optic Panel	OM3	72	6	Type-A	44.5x483x336	1/Box	27LM3HV072P-BK1U
High-Density MTP to LC/UPC Fixed Fiber Optic Panel	OM3 BI	72	6	Type-C	44.5x483x336	1/Box	27FC3HV072P-BK1U
High-Density MTP to LC/UPC Fixed Fiber Optic Panel	OM3 BI	72	6	Type-A	44.5x483x336	1/Box	27LC3HV072P-BK1U
High-Density MTP to LC/UPC Fixed Fiber Optic Panel	OM4	72	6	Type-C	44.5x483x336	1/Box	27FM4HV072P-BK1U
High-Density MTP to LC/UPC Fixed Fiber Optic Panel	OM4	72	6	Type-A	44.5x483x336	1/Box	27LM4HV072P-BK1U
High-Density MTP to LC/UPC Fixed Fiber Optic Panel	OM4 BI	72	6	Type-C	44.5x483x336	1/Box	27FC4HV072P-BK1U
High-Density MTP to LC/UPC Fixed Fiber Optic Panel	OM4 BI	72	6	Type-A	44.5x483x336	1/Box	27LC4HV072P-BK1U

All MTP connectors are low-loss type, having 0.35dB max. connection loss. Assemblies with 0.5dB max. connection loss are available upon request. Continued on page B.2.2.3a BI = Bend-Insensitive

## AT&T FiberLine Panels

### High-Density MTP Fixed Fiber Optic Panel (contd.)

#### Ordering Information

Description	Fiber Type	Fiber Capacity	MTP Couplers	TIA-568-C.3 Polarity	Size mm	Packaging	P/N
High-Density MTP to LC/UPC Fixed Fiber Optic Panel	OS2	72	6	Type-C	44.5x483x336	1/Box	27FS2HV072P-BK1U
High-Density MTP to LC/UPC Fixed Fiber Optic Panel	OS2	72	6	Type-A	44.5x483x336	1/Box	27LS2HV072P-BK1U
High-Density MTP to LC/UPC Fixed Fiber Optic Panel	OS2 BI	72	6	Type-C	44.5x483x336	1/Box	27FB2HV072P-BK1U
High-Density MTP to LC/UPC Fixed Fiber Optic Panel	OS2 BI	72	6	Type-A	44.5x483x336	1/Box	27LB2HV072P-BK1U
High-Density MTP to LC/UPC Fixed Fiber Optic Panel	OM1	96	8	Type-C	44.5x483x336	1/Box	27FM1HV096P-BK1U
High-Density MTP to LC/UPC Fixed Fiber Optic Panel	OM1	96	8	Type-A	44.5x483x336	1/Box	27LM1HV096P-BK1U
High-Density MTP to LC/UPC Fixed Fiber Optic Panel	OM2	96	8	Type-C	44.5x483x336	1/Box	27FM2HV096P-BK1U
High-Density MTP to LC/UPC Fixed Fiber Optic Panel	OM2	96	8	Type-A	44.5x483x336	1/Box	27LM2HV096P-BK1U
High-Density MTP to LC/UPC Fixed Fiber Optic Panel	OM3	96	8	Type-C	44.5x483x336	1/Box	27FM3HV096P-BK1U
High-Density MTP to LC/UPC Fixed Fiber Optic Panel	OM3	96	8	Type-A	44.5x483x336	1/Box	27LM3HV096P-BK1U
High-Density MTP to LC/UPC Fixed Fiber Optic Panel	OM3 BI	96	8	Type-C	44.5x483x336	1/Box	27FC3HV096P-BK1U
High-Density MTP to LC/UPC Fixed Fiber Optic Panel	OM3 BI	96	8	Type-A	44.5x483x336	1/Box	27LC3HV096P-BK1U
High-Density MTP to LC/UPC Fixed Fiber Optic Panel	OM4	96	8	Type-C	44.5x483x336	1/Box	27FM4HV096P-BK1U
High-Density MTP to LC/UPC Fixed Fiber Optic Panel	OM4	96	8	Type-A	44.5x483x336	1/Box	27LM4HV096P-BK1U
High-Density MTP to LC/UPC Fixed Fiber Optic Panel	OM4 BI	96	8	Type-C	44.5x483x336	1/Box	27FC4HV096P-BK1U
High-Density MTP to LC/UPC Fixed Fiber Optic Panel	OM4 BI	96	8	Type-A	44.5x483x336	1/Box	27LC4HV096P-BK1U
High-Density MTP to LC/UPC Fixed Fiber Optic Panel	OS2	96	8	Type-C	44.5x483x336	1/Box	27FS2HV096P-BK1U
High-Density MTP to LC/UPC Fixed Fiber Optic Panel	OS2	96	8	Type-A	44.5x483x336	1/Box	27LS2HV096P-BK1U
High-Density MTP to LC/UPC Fixed Fiber Optic Panel	OS2 BI	96	8	Type-C	44.5x483x336	1/Box	27FB2HV096P-BK1U
High-Density MTP to LC/UPC Fixed Fiber Optic Panel	OS2 BI	96	8	Type-A	44.5x483x336	1/Box	27LB2HV096P-BK1U
High-Density MTP to LC/UPC Fixed Fiber Optic Panel	OM1	144	12	Type-C	44.5x483x336	1/Box	27FM1HV144P-BK1U
High-Density MTP to LC/UPC Fixed Fiber Optic Panel	OM1	144	12	Type-A	44.5x483x336	1/Box	27LM1HV144P-BK1U
High-Density MTP to LC/UPC Fixed Fiber Optic Panel	OM2	144	12	Type-C	44.5x483x336	1/Box	27FM2HV144P-BK1U
High-Density MTP to LC/UPC Fixed Fiber Optic Panel	OM2	144	12	Type-A	44.5x483x336	1/Box	27LM2HV144P-BK1U
High-Density MTP to LC/UPC Fixed Fiber Optic Panel	OM3	144	12	Type-C	44.5x483x336	1/Box	27FM3HV144P-BK1U
High-Density MTP to LC/UPC Fixed Fiber Optic Panel	OM3	144	12	Type-A	44.5x483x336	1/Box	27LM3HV144P-BK1U
High-Density MTP to LC/UPC Fixed Fiber Optic Panel	OM3 BI	144	12	Type-C	44.5x483x336	1/Box	27FC3HV144P-BK1U
High-Density MTP to LC/UPC Fixed Fiber Optic Panel	OM3 BI	144	12	Type-A	44.5x483x336	1/Box	27LC3HV144P-BK1U
High-Density MTP to LC/UPC Fixed Fiber Optic Panel	OM4	144	12	Type-C	44.5x483x336	1/Box	27FM4HV144P-BK1U
High-Density MTP to LC/UPC Fixed Fiber Optic Panel	OM4	144	12	Type-A	44.5x483x336	1/Box	27LM4HV144P-BK1U
High-Density MTP to LC/UPC Fixed Fiber Optic Panel	OM4 BI	144	12	Type-C	44.5x483x336	1/Box	27FC4HV144P-BK1U
High-Density MTP to LC/UPC Fixed Fiber Optic Panel	OM4 BI	144	12	Type-A	44.5x483x336	1/Box	27LC4HV144P-BK1U
High-Density MTP to LC/UPC Fixed Fiber Optic Panel	OS2	144	12	Type-C	44.5x483x336	1/Box	27FS2HV144P-BK1U
High-Density MTP to LC/UPC Fixed Fiber Optic Panel	OS2	144	12	Type-A	44.5x483x336	1/Box	27LS2HV144P-BK1U
High-Density MTP to LC/UPC Fixed Fiber Optic Panel	OS2 BI	144	12	Type-C	44.5x483x336	1/Box	27FB2HV144P-BK1U
High-Density MTP to LC/UPC Fixed Fiber Optic Panel	OS2 BI	144	12	Type-A	44.5x483x336	1/Box	27LB2HV144P-BK1U

All MTP connectors are low-loss type, having 0.35dB max. connection loss.  
 Assemblies with 0.5dB max. connection loss are available upon request.  
 BI = Bend-Insensitive

## AT&T FiberLine Panels

### Standard MPO Cassette Fiber Optic Panel

#### Description

1-72 fiber 1U 19" standard MPO cassette fiber optic panel	
Cassette front options	12 or 24 LC/UPC or SC/UPC ports
Cassette back options	One or two 12-fiber MPO couplers
Fiber type compatibility	OM1, OM2, OM3, OM4 & OS2
Panel front	Up to three removable pre-loaded cassettes
Panel access	Top and front slide rail
Back Cable Management	Removable tray with strain relief
Front Cable Management	Tray with rings for patch cord routing and protection

#### Standard & EU Directives Conformance

- Relevant sections of ANSI/TIA/EIA-604 (FOCIS)
- Relevant sections of IEC 60874
- Relevant sections of IEC 61753
- Relevant sections of IEC 61754
- Plastic parts: UL94 V-0 flame test
- EU Directive 2011/65/EU (RoHS-2)

#### Mechanical Properties and Features

Frame	Steel, colored black
Front cover	None
Operating temperature	-10 to +60C at 5-85% RH (non condensing)
Storage temperature	-40 to +70C
Plastic parts	High-impact flame retardant materials
Port identification	Numbers



#### Ordering Information - Panel

Description	Units	Fiber Capacity	Cassette Capacity	Size mm	Packaging	P/N
Standard Blank MPO Cassette Fiber Optic Panel	1U	72	3	44.5x483x501	1/Box	27M00NV072A-BK1U

Continued on page B.2.3.1a

## AT&T FiberLine Panels

### Standard MPO Cassette Fiber Optic Panel (contd.)

#### Ordering Information - Cassettes

Description	Front Couplers	Coupler Capacity	MPO Ports	TIA-568-C.3 Polarity	Size mm	Packaging	P/N
Pre-loaded Standard MPO Cassette	LC/UPC OM1	12	1	Type-C	30x130x91	1/Box	82TM1HV012P-BK51
Pre-loaded Standard MPO Cassette	LC/UPC OM1	12	1	Type-A	30x130x91	1/Box	82LM1HV012P-BK51
Pre-loaded Standard MPO Cassette	LC/UPC OM1	24	2	Type-C	30x130x91	1/Box	82TM1HV024P-BK51
Pre-loaded Standard MPO Cassette	LC/UPC OM1	24	2	Type-A	30x130x91	1/Box	82LM1HV024P-BK51
Pre-loaded Standard MPO Cassette	LC/UPC OM2	12	1	Type-C	30x130x91	1/Box	82TM2HV012P-BK51
Pre-loaded Standard MPO Cassette	LC/UPC OM2	12	1	Type-A	30x130x91	1/Box	82LM2HV012P-BK51
Pre-loaded Standard MPO Cassette	LC/UPC OM2	24	2	Type-C	30x130x91	1/Box	82TM2HV024P-BK51
Pre-loaded Standard MPO Cassette	LC/UPC OM2	24	2	Type-A	30x130x91	1/Box	82LM2HV024P-BK51
Pre-loaded Standard MPO Cassette	LC/UPC OM3	12	1	Type-C	30x130x91	1/Box	82TM3HV012P-BK51
Pre-loaded Standard MPO Cassette	LC/UPC OM3	12	1	Type-A	30x130x91	1/Box	82LM3HV012P-BK51
Pre-loaded Standard MPO Cassette	LC/UPC OM3	24	2	Type-C	30x130x91	1/Box	82TM3HV024P-BK51
Pre-loaded Standard MPO Cassette	LC/UPC OM3	24	2	Type-A	30x130x91	1/Box	82LM3HV024P-BK51
Pre-loaded Standard MPO Cassette	LC/UPC OM3 BI	12	1	Type-C	30x130x91	1/Box	82TC3HV012P-BK51
Pre-loaded Standard MPO Cassette	LC/UPC OM3 BI	12	1	Type-A	30x130x91	1/Box	82LC3HV012P-BK51
Pre-loaded Standard MPO Cassette	LC/UPC OM3 BI	24	2	Type-C	30x130x91	1/Box	82TC3HV024P-BK51
Pre-loaded Standard MPO Cassette	LC/UPC OM3 BI	24	2	Type-A	30x130x91	1/Box	82LC3HV024P-BK51
Pre-loaded Standard MPO Cassette	LC/UPC OM4	12	1	Type-C	30x130x91	1/Box	82TM4HV012P-BK51
Pre-loaded Standard MPO Cassette	LC/UPC OM4	12	1	Type-A	30x130x91	1/Box	82LM4HV012P-BK51
Pre-loaded Standard MPO Cassette	LC/UPC OM4	24	2	Type-C	30x130x91	1/Box	82TM4HV024P-BK51
Pre-loaded Standard MPO Cassette	LC/UPC OM4	24	2	Type-A	30x130x91	1/Box	82LM4HV024P-BK51
Pre-loaded Standard MPO Cassette	LC/UPC OM4 BI	12	1	Type-C	30x130x91	1/Box	82TC4HV012P-BK51
Pre-loaded Standard MPO Cassette	LC/UPC OM4 BI	12	1	Type-A	30x130x91	1/Box	82LC4HV012P-BK51
Pre-loaded Standard MPO Cassette	LC/UPC OM4 BI	24	2	Type-C	30x130x91	1/Box	82TC4HV024P-BK51
Pre-loaded Standard MPO Cassette	LC/UPC OM4 BI	24	2	Type-A	30x130x91	1/Box	82LC4HV024P-BK51
Pre-loaded Standard MPO Cassette	LC/UPC OS2	12	1	Type-C	30x130x91	1/Box	82TS2HV012P-BK51
Pre-loaded Standard MPO Cassette	LC/UPC OS2	12	1	Type-A	30x130x91	1/Box	82LS2HV012P-BK51
Pre-loaded Standard MPO Cassette	LC/UPC OS2	24	2	Type-C	30x130x91	1/Box	82TS2HV024P-BK51
Pre-loaded Standard MPO Cassette	LC/UPC OS2	24	2	Type-A	30x130x91	1/Box	82LS2HV024P-BK51
Pre-loaded Standard MPO Cassette	LC/UPC OS2 BI	12	1	Type-C	30x130x91	1/Box	82TB2HV012P-BK51
Pre-loaded Standard MPO Cassette	LC/UPC OS2 BI	12	1	Type-A	30x130x91	1/Box	82LB2HV012P-BK51
Pre-loaded Standard MPO Cassette	LC/UPC OS2 BI	24	2	Type-C	30x130x91	1/Box	82TB2HV024P-BK51
Pre-loaded Standard MPO Cassette	LC/UPC OS2 BI	24	2	Type-A	30x130x91	1/Box	82LB2HV024P-BK51
Pre-loaded Standard MPO Cassette	SC/UPC OM1	12	1	Type-C	30x130x91	1/Box	82TM1HV012H-BK51
Pre-loaded Standard MPO Cassette	SC/UPC OM1	12	1	Type-A	30x130x91	1/Box	82LM1HV012H-BK51
Pre-loaded Standard MPO Cassette	SC/UPC OM2	12	1	Type-C	30x130x91	1/Box	82TM2HV012H-BK51
Pre-loaded Standard MPO Cassette	SC/UPC OM2	12	1	Type-A	30x130x91	1/Box	82LM2HV012H-BK51
Pre-loaded Standard MPO Cassette	SC/UPC OM3	12	1	Type-C	30x130x91	1/Box	82TM3HV012H-BK51
Pre-loaded Standard MPO Cassette	SC/UPC OM3	12	1	Type-A	30x130x91	1/Box	82LM3HV012H-BK51
Pre-loaded Standard MPO Cassette	SC/UPC OM3 BI	12	1	Type-C	30x130x91	1/Box	82TC3HV012H-BK51
Pre-loaded Standard MPO Cassette	SC/UPC OM3 BI	12	1	Type-A	30x130x91	1/Box	82LC3HV012H-BK51
Pre-loaded Standard MPO Cassette	SC/UPC OM4	12	1	Type-C	30x130x91	1/Box	82TM4HV012H-BK51
Pre-loaded Standard MPO Cassette	SC/UPC OM4	12	1	Type-A	30x130x91	1/Box	82LM4HV012H-BK51
Pre-loaded Standard MPO Cassette	SC/UPC OM4 BI	12	1	Type-C	30x130x91	1/Box	82TC4HV012H-BK51
Pre-loaded Standard MPO Cassette	SC/UPC OM4 BI	12	1	Type-A	30x130x91	1/Box	82LC4HV012H-BK51
Pre-loaded Standard MPO Cassette	SC/UPC OS2	12	1	Type-C	30x130x91	1/Box	82TS2HV012H-BK51
Pre-loaded Standard MPO Cassette	SC/UPC OS2	12	1	Type-A	30x130x91	1/Box	82LS2HV012H-BK51
Pre-loaded Standard MPO Cassette	SC/UPC OS2 BI	12	1	Type-C	30x130x91	1/Box	82TB2HV012H-BK51
Pre-loaded Standard MPO Cassette	SC/UPC OS2 BI	12	1	Type-A	30x130x91	1/Box	82LB2HV012H-BK51
Blank Standard Cassette	None	N/A	N/A	N/A	30x130x91	1/Box	82B00NV000N-BK51

All MPO connectors are low-loss type, having 0.35dB max. connection loss. Assemblies with 0.5dB max. connection loss are available upon request. BI = Bend-Insensitive



## AT&T FiberLine Panels

### High-Density MPO Cassette Fiber Optic Panels

#### Description

1-120 fiber 1U 19" high-density MPO cassette fiber optic panels	
Cassette front	12 or 24 LC/UPC ports
Cassette back options	One or two 12-fiber MPO couplers
Fiber type compatibility	OM1, OM2, OM3, OM4 & OS2
Panel front	Up to five removable pre-loaded cassettes
Panel access	Top and front slide rail
Back Cable Management	Removable tray with strain relief
Front Cable Management	Tray with rings for patch cord routing and protection



#### Standard & EU Directives Conformance

- Relevant sections of ANSI/TIA/EIA-604 (FOCIS)
- Relevant sections of IEC 60874
- Relevant sections of IEC 61753
- Relevant sections of IEC 61754
- Plastic parts: UL94 V-0 flame test
- EU Directive 2011/65/EU (RoHS-2)

#### Mechanical Properties and Features

Frame	Steel, colored black
Front cover	None
Operating temperature	-10 to +60C at 5-85% RH (non condensing)
Storage temperature	-40 to +70C
Plastic parts	High-impact flame retardant materials
Port identification	Numbers

#### Ordering Information - Panel

Description	Units	Fiber Capacity	Cassette Capacity	Size mm	Packaging	P/N
High-Density Blank MPO Cassette Fiber Optic Panel	1U	120	5	44.5x483x501	1/Box	27C00NV120A-BK1U

#### Ordering Information - Coupler Modules

Description	Units	Fiber Capacity	Coupler Capacity	Size mm	Packaging	P/N
Two-Port High-Density MTP & MPO Coupler	1U	12-24	2	34x88	1/Bag	27A00NV002P-BK1U
Three-Port High-Density MTP & MPO Coupler	1U	12-36	3	34x88	1/Bag	27A00NV003P-BK1U
Four-Port High-Density MTP & MPO Coupler	1U	12-48	4	34x88	1/Bag	27A00NV004P-BK1U
Five-Port High-Density MTP & MPO Coupler	1U	12-60	5	34x88	1/Bag	27A00NV005P-BK1U

Continued on page B.2.3.2a

## AT&T FiberLine Panels

### High-Density MPO Cassette Fiber Optic Panel (contd.)

#### Ordering Information - Cassettes

Description	Front Couplers	Coupler Capacity	MPO Ports	TIA-568-C.3 Polarity	Size mm	Packaging	P/N
Pre-loaded High-Density MPO Cassette	LC/UPC OM1	12	1	Type-C	34x111x88	1/Box	82RM1HV012P-BK51
Pre-loaded High-Density MPO Cassette	LC/UPC OM1	12	1	Type-A	34x111x88	1/Box	82DM1HV012P-BK51
Pre-loaded High-Density MPO Cassette	LC/UPC OM1	24	2	Type-C	34x111x88	1/Box	82RM1HV024P-BK51
Pre-loaded High-Density MPO Cassette	LC/UPC OM1	24	2	Type-A	34x111x88	1/Box	82DM1HV024P-BK51
Pre-loaded High-Density MPO Cassette	LC/UPC OM2	12	1	Type-C	34x111x88	1/Box	82RM2HV012P-BK51
Pre-loaded High-Density MPO Cassette	LC/UPC OM2	12	1	Type-A	34x111x88	1/Box	82DM2HV012P-BK51
Pre-loaded High-Density MPO Cassette	LC/UPC OM2	24	2	Type-C	34x111x88	1/Box	82RM2HV024P-BK51
Pre-loaded High-Density MPO Cassette	LC/UPC OM2	24	2	Type-A	34x111x88	1/Box	82DM2HV024P-BK51
Pre-loaded High-Density MPO Cassette	LC/UPC OM3	12	1	Type-C	34x111x88	1/Box	82RM3HV012P-BK51
Pre-loaded High-Density MPO Cassette	LC/UPC OM3	12	1	Type-A	34x111x88	1/Box	82DM3HV012P-BK51
Pre-loaded High-Density MPO Cassette	LC/UPC OM3	24	2	Type-C	34x111x88	1/Box	82RM3HV024P-BK51
Pre-loaded High-Density MPO Cassette	LC/UPC OM3	24	2	Type-A	34x111x88	1/Box	82DM3HV024P-BK51
Pre-loaded High-Density MPO Cassette	LC/UPC OM3 BI	12	1	Type-C	34x111x88	1/Box	82RC3HV012P-BK51
Pre-loaded High-Density MPO Cassette	LC/UPC OM3 BI	12	1	Type-A	34x111x88	1/Box	82DC3HV012P-BK51
Pre-loaded High-Density MPO Cassette	LC/UPC OM3 BI	24	2	Type-C	34x111x88	1/Box	82RC3HV024P-BK51
Pre-loaded High-Density MPO Cassette	LC/UPC OM3 BI	24	2	Type-A	34x111x88	1/Box	82DC3HV024P-BK51
Pre-loaded High-Density MPO Cassette	LC/UPC OM4	12	1	Type-C	34x111x88	1/Box	82RM4HV012P-BK51
Pre-loaded High-Density MPO Cassette	LC/UPC OM4	12	1	Type-A	34x111x88	1/Box	82DM4HV012P-BK51
Pre-loaded High-Density MPO Cassette	LC/UPC OM4	24	2	Type-C	34x111x88	1/Box	82RM4HV024P-BK51
Pre-loaded High-Density MPO Cassette	LC/UPC OM4	24	2	Type-A	34x111x88	1/Box	82DM4HV024P-BK51
Pre-loaded High-Density MPO Cassette	LC/UPC OM4 BI	12	1	Type-C	34x111x88	1/Box	82RC4HV012P-BK51
Pre-loaded High-Density MPO Cassette	LC/UPC OM4 BI	12	1	Type-A	34x111x88	1/Box	82DC4HV012P-BK51
Pre-loaded High-Density MPO Cassette	LC/UPC OM4 BI	24	2	Type-C	34x111x88	1/Box	82RC4HV024P-BK51
Pre-loaded High-Density MPO Cassette	LC/UPC OM4 BI	24	2	Type-A	34x111x88	1/Box	82DC4HV024P-BK51
Pre-loaded High-Density MPO Cassette	LC/UPC OS2	12	1	Type-C	34x111x88	1/Box	82RS2HV012P-BK51
Pre-loaded High-Density MPO Cassette	LC/UPC OS2	12	1	Type-A	34x111x88	1/Box	82DS2HV012P-BK51
Pre-loaded High-Density MPO Cassette	LC/UPC OS2	24	2	Type-C	34x111x88	1/Box	82RS2HV024P-BK51
Pre-loaded High-Density MPO Cassette	LC/UPC OS2	24	2	Type-A	34x111x88	1/Box	82DS2HV024P-BK51
Pre-loaded High-Density MPO Cassette	LC/UPC OS2 BI	12	1	Type-C	34x111x88	1/Box	82RB2HV012P-BK51
Pre-loaded High-Density MPO Cassette	LC/UPC OS2 BI	12	1	Type-A	34x111x88	1/Box	82DB2HV012P-BK51
Pre-loaded High-Density MPO Cassette	LC/UPC OS2 BI	24	2	Type-C	34x111x88	1/Box	82RB2HV024P-BK51
Pre-loaded High-Density MPO Cassette	LC/UPC OS2 BI	24	2	Type-A	34x111x88	1/Box	82DB2HV024P-BK51
Blank High-Density Cassette	None	N/A	N/A	N/A	34x111x88	1/Box	82K00NV000N-BK51

All MPO connectors are low-loss type, having 0.35dB max. connection loss. Assemblies with 0.5dB max. connection loss are available upon request.  
BI = Bend-Insensitive

## AT&T FiberLine Panels

### High-Density MPO Fixed Fiber Optic Panels

#### Description

72-144 fiber 1U 19" high-density MPO fixed fiber optic panels	
Panel front	72, 96 or 144 LC/UPC ports
Panel back	Six, eight or twelve 12-fiber MPO couplers
Fiber type compatibility	OM1, OM2, OM3, OM4 & OS2
Back Cable Management	Removable tray with strain relief
Front Cable Management	Removable tray for patch cord routing and protection

#### Standard & EU Directives Conformance

- Relevant sections of ANSI/TIA/EIA-604 (FOCIS)
- Relevant sections of IEC 60874
- Relevant sections of IEC 61753
- Relevant sections of IEC 61754
- Plastic parts: UL94 V-0 flame test
- EU Directive 2011/65/EU (RoHS-2)

#### Mechanical Properties and Features

Frame	Steel, colored black
Front cover	None
Operating temperature	-10 to +60C at 5-85% RH (non condensing)
Storage temperature	-40 to +70C
Plastic parts	High-impact flame retardant materials
Port identification	Numbers



#### Ordering Information

Description	Fiber Type	Fiber Capacity	MPO Couplers	TIA-568-C.3 Polarity	Size mm	Packaging	P/N
High-Density MPO to LC/UPC Fixed Fiber Optic Panel	OM1	72	6	Type-C	44.5x483x336	1/Box	27PM1HV072P-BK1U
High-Density MPO to LC/UPC Fixed Fiber Optic Panel	OM1	72	6	Type-A	44.5x483x336	1/Box	27EM1HV072P-BK1U
High-Density MPO to LC/UPC Fixed Fiber Optic Panel	OM2	72	6	Type-C	44.5x483x336	1/Box	27PM2HV072P-BK1U
High-Density MPO to LC/UPC Fixed Fiber Optic Panel	OM2	72	6	Type-A	44.5x483x336	1/Box	27EM2HV072P-BK1U
High-Density MPO to LC/UPC Fixed Fiber Optic Panel	OM3	72	6	Type-C	44.5x483x336	1/Box	27PM3HV072P-BK1U
High-Density MPO to LC/UPC Fixed Fiber Optic Panel	OM3	72	6	Type-A	44.5x483x336	1/Box	27EM3HV072P-BK1U
High-Density MPO to LC/UPC Fixed Fiber Optic Panel	OM3 BI	72	6	Type-C	44.5x483x336	1/Box	27PC3HV072P-BK1U
High-Density MPO to LC/UPC Fixed Fiber Optic Panel	OM3 BI	72	6	Type-A	44.5x483x336	1/Box	27EC3HV072P-BK1U
High-Density MPO to LC/UPC Fixed Fiber Optic Panel	OM4	72	6	Type-C	44.5x483x336	1/Box	27PM4HV072P-BK1U
High-Density MPO to LC/UPC Fixed Fiber Optic Panel	OM4	72	6	Type-A	44.5x483x336	1/Box	27EM4HV072P-BK1U
High-Density MPO to LC/UPC Fixed Fiber Optic Panel	OM4 BI	72	6	Type-C	44.5x483x336	1/Box	27PC4HV072P-BK1U
High-Density MPO to LC/UPC Fixed Fiber Optic Panel	OM4 BI	72	6	Type-A	44.5x483x336	1/Box	27EC4HV072P-BK1U

All MPO connectors are low-loss type, having 0.35dB max. connection loss. Assemblies with 0.5dB max. connection loss are available upon request. Continued on page B.2.3.3a BI = Bend-Insensitive

## AT&T FiberLine Panels

### High-Density MPO Fixed Fiber Optic Panels (contd.)

#### Ordering Information

Description	Fiber Type	Fiber Capacity	MPO Couplers	TIA-568-C.3 Polarity	Size mm	Packaging	P/N
High-Density MPO to LC/UPC Fixed Fiber Optic Panel	OS2	72	6	Type-C	44.5x483x336	1/Box	27PS2HV072P-BK1U
High-Density MPO to LC/UPC Fixed Fiber Optic Panel	OS2	72	6	Type-A	44.5x483x336	1/Box	27ES2HV072P-BK1U
High-Density MPO to LC/UPC Fixed Fiber Optic Panel	OS2 BI	72	6	Type-C	44.5x483x336	1/Box	27PB2HV072P-BK1U
High-Density MPO to LC/UPC Fixed Fiber Optic Panel	OS2 BI	72	6	Type-A	44.5x483x336	1/Box	27EB2HV072P-BK1U
High-Density MPO to LC/UPC Fixed Fiber Optic Panel	OM1	96	8	Type-C	44.5x483x336	1/Box	27PM1HV096P-BK1U
High-Density MPO to LC/UPC Fixed Fiber Optic Panel	OM1	96	8	Type-A	44.5x483x336	1/Box	27EM1HV096P-BK1U
High-Density MPO to LC/UPC Fixed Fiber Optic Panel	OM2	96	8	Type-C	44.5x483x336	1/Box	27PM2HV096P-BK1U
High-Density MPO to LC/UPC Fixed Fiber Optic Panel	OM2	96	8	Type-A	44.5x483x336	1/Box	27EM2HV096P-BK1U
High-Density MPO to LC/UPC Fixed Fiber Optic Panel	OM3	96	8	Type-C	44.5x483x336	1/Box	27PM3HV096P-BK1U
High-Density MPO to LC/UPC Fixed Fiber Optic Panel	OM3	96	8	Type-A	44.5x483x336	1/Box	27EM3HV096P-BK1U
High-Density MPO to LC/UPC Fixed Fiber Optic Panel	OM3 BI	96	8	Type-C	44.5x483x336	1/Box	27PC3HV096P-BK1U
High-Density MPO to LC/UPC Fixed Fiber Optic Panel	OM3 BI	96	8	Type-A	44.5x483x336	1/Box	27EC3HV096P-BK1U
High-Density MPO to LC/UPC Fixed Fiber Optic Panel	OM4	96	8	Type-C	44.5x483x336	1/Box	27PM4HV096P-BK1U
High-Density MPO to LC/UPC Fixed Fiber Optic Panel	OM4	96	8	Type-A	44.5x483x336	1/Box	27EM4HV096P-BK1U
High-Density MPO to LC/UPC Fixed Fiber Optic Panel	OM4 BI	96	8	Type-C	44.5x483x336	1/Box	27PC4HV096P-BK1U
High-Density MPO to LC/UPC Fixed Fiber Optic Panel	OM4 BI	96	8	Type-A	44.5x483x336	1/Box	27EC4HV096P-BK1U
High-Density MPO to LC/UPC Fixed Fiber Optic Panel	OS2	96	8	Type-C	44.5x483x336	1/Box	27PS2HV096P-BK1U
High-Density MPO to LC/UPC Fixed Fiber Optic Panel	OS2	96	8	Type-A	44.5x483x336	1/Box	27ES2HV096P-BK1U
High-Density MPO to LC/UPC Fixed Fiber Optic Panel	OS2 BI	96	8	Type-C	44.5x483x336	1/Box	27PB2HV096P-BK1U
High-Density MPO to LC/UPC Fixed Fiber Optic Panel	OS2 BI	96	8	Type-A	44.5x483x336	1/Box	27EB2HV096P-BK1U
High-Density MPO to LC/UPC Fixed Fiber Optic Panel	OM1	144	12	Type-C	44.5x483x336	1/Box	27PM1HV144P-BK1U
High-Density MPO to LC/UPC Fixed Fiber Optic Panel	OM1	144	12	Type-A	44.5x483x336	1/Box	27EM1HV144P-BK1U
High-Density MPO to LC/UPC Fixed Fiber Optic Panel	OM2	144	12	Type-C	44.5x483x336	1/Box	27PM2HV144P-BK1U
High-Density MPO to LC/UPC Fixed Fiber Optic Panel	OM2	144	12	Type-A	44.5x483x336	1/Box	27EM2HV144P-BK1U
High-Density MPO to LC/UPC Fixed Fiber Optic Panel	OM3	144	12	Type-C	44.5x483x336	1/Box	27PM3HV144P-BK1U
High-Density MPO to LC/UPC Fixed Fiber Optic Panel	OM3	144	12	Type-A	44.5x483x336	1/Box	27EM3HV144P-BK1U
High-Density MPO to LC/UPC Fixed Fiber Optic Panel	OM3 BI	144	12	Type-C	44.5x483x336	1/Box	27PC3HV144P-BK1U
High-Density MPO to LC/UPC Fixed Fiber Optic Panel	OM3 BI	144	12	Type-A	44.5x483x336	1/Box	27EC3HV144P-BK1U
High-Density MPO to LC/UPC Fixed Fiber Optic Panel	OM4	144	12	Type-C	44.5x483x336	1/Box	27PM4HV144P-BK1U
High-Density MPO to LC/UPC Fixed Fiber Optic Panel	OM4	144	12	Type-A	44.5x483x336	1/Box	27EM4HV144P-BK1U
High-Density MPO to LC/UPC Fixed Fiber Optic Panel	OM4 BI	144	12	Type-C	44.5x483x336	1/Box	27PC4HV144P-BK1U
High-Density MPO to LC/UPC Fixed Fiber Optic Panel	OM4 BI	144	12	Type-A	44.5x483x336	1/Box	27EC4HV144P-BK1U
High-Density MPO to LC/UPC Fixed Fiber Optic Panel	OS2	144	12	Type-C	44.5x483x336	1/Box	27PS2HV144P-BK1U
High-Density MPO to LC/UPC Fixed Fiber Optic Panel	OS2	144	12	Type-A	44.5x483x336	1/Box	27ES2HV144P-BK1U
High-Density MPO to LC/UPC Fixed Fiber Optic Panel	OS2 BI	144	12	Type-C	44.5x483x336	1/Box	27PB2HV144P-BK1U
High-Density MPO to LC/UPC Fixed Fiber Optic Panel	OS2 BI	144	12	Type-A	44.5x483x336	1/Box	27EB2HV144P-BK1U

All MPO connectors are low-loss type, having 0.35dB max. connection loss.  
 Assemblies with 0.5dB max. connection loss are available upon request.  
 BI = Bend-Insensitive

## AT&T FiberLine

### Fiber Optic Cords and Pigtails

#### Fiber Optic Cords and Pigtails P/N System

This page shows all the available combinations of AT&T fiber-optic cords and pigtails. The following steps should be followed to define the exact product needed.

**Notes:**

- All AT&T fiber-optic cords and pigtails are halogen-free, low smoke and flame retardant (LSOH).
- The default cable diameters are indicated in the following sample catalog pages. Other options available.
- The default formation of all duplex cords is ZIP (FIG-8). Other options available.
- All cords shown in the catalog are standard-loss type. Low-loss cords are available upon request.

The generic P/N of AT&T fiber-optic cords and pigtails has the following format:



- Replace the **R** with the product type needed.
- Replace the **FF** with the relevant **Fiber Code** selected from page **B.6**.
- Replace the **A** with the relevant **Connector Code** selected from page **B.4.1** for one end of the cord.
- Replace the **B** with the relevant **Connector Code** selected from page **B.4.1** for the other end of the cord.

**Note:** In pigtails **B=0**.

- Replace the **LLL** with the required length in dm.

**Examples:**

053 = 5.3 m cord length.  
185 = 18.5 m cord length.

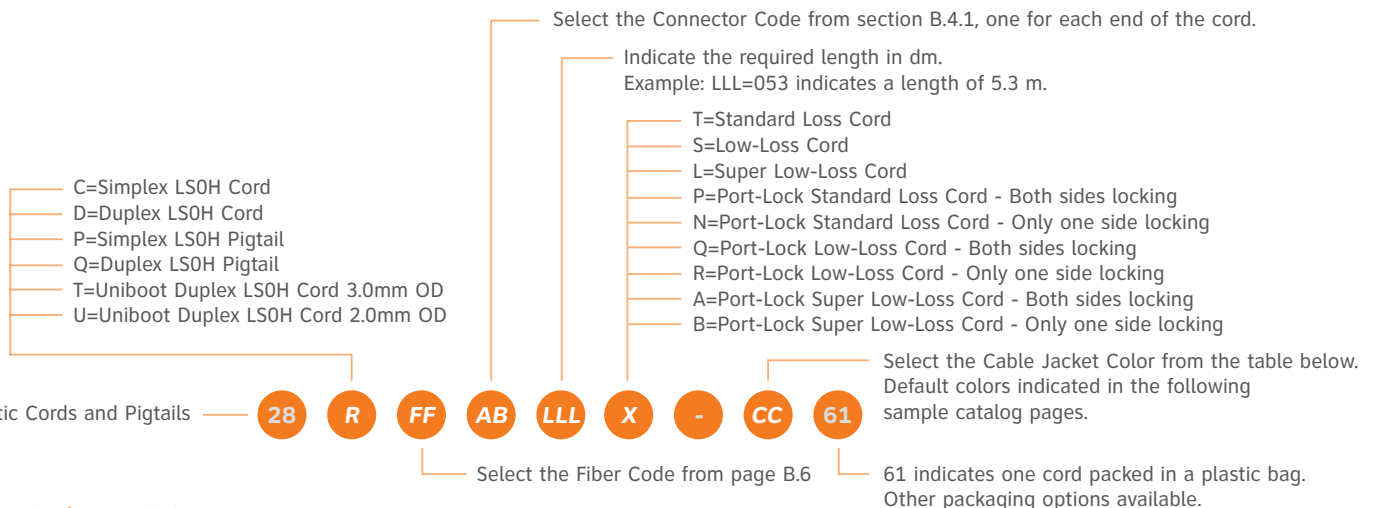
**Note:** Default lengths are indicated in the following sample catalog pages.

- Replace the **X** with the required type

- T=Standard Loss Cord
- S=Low-Loss Cord
- L=Super Low-Loss Cord
- P=Port-Lock Standard Loss Cord - Both sides locking
- N=Port-Lock Standard Loss Cord - Only one side locking
- Q=Port-Lock Low-Loss Cord - Both sides locking
- R=Port-Lock Low-Loss Cord - Only one side locking
- A=Port-Lock Super Low-Loss Cord - Both sides locking
- B=Port-Lock Super Low-Loss Cord - Only one side locking

- Replace the **CC** with the required **Cable Jacket Color** from the table below.

**Note:** Default colors are indicated in the following sample catalog pages.



#### Jacket Colors (CC)

Code	Color	RAL	Code	Color	RAL	Code	Color	RAL
BL	Blue	5015	GY	ATT Gray	9002	BK	Black	9004
OR	Orange	2000	GL	Office Gray	7035	YL	Yellow	1021
GN	Green	6024	WT	White	9003	PU	Purple	4005
BN	Brown	8011	RD	Red	3000	TQ	Turquoise	5018

## AT&T FiberLine

### Fiber Optic SC/UPC Simplex Multimode Cords

#### Description

This page shows some of the available combinations of AT&T fiber-optic Simplex Multimode Cords made with multimode fibers and terminated with SC/UPC connectors.

Additional combinations can be selected using the information on page B.3.

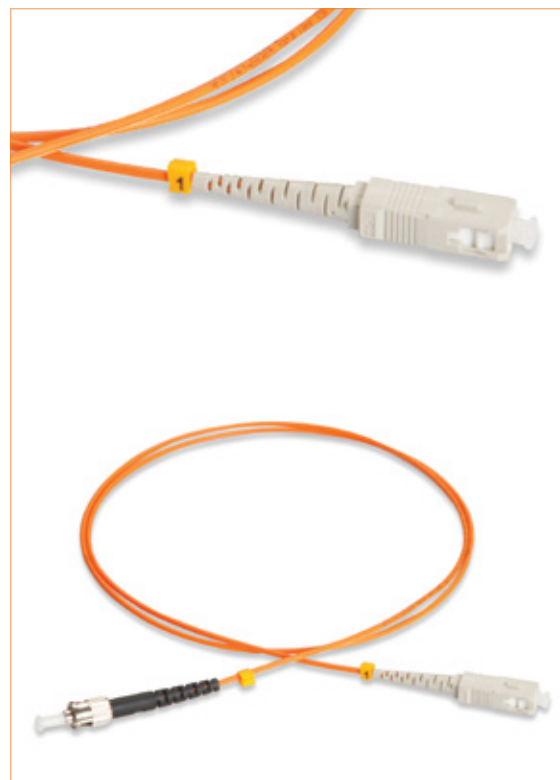
Fiber type	Select a multimode fiber from page B.6.
Buffer type	900µ tight flame retardant LSOH coating
Strength elements	Served aramid and glass yarn
Minicable jacket material	Flame retardant LSOH compound

#### Standard & EU Directives Conformance

- Relevant sections of ANSI/TIA-568-C.3
- Relevant sections of ISO/IEC 11801
- Relevant sections of EN 50173
- Relevant sections of ANSI/TIA/EIA-604 (FOCIS)
- Relevant sections of IEC 60874
- Relevant sections of IEC 61753
- Relevant sections of IEC 61754
- IEC 60332-1 flame test
- IEC 60754 & IEC 61034
- EU Directive 2011/65/EU (RoHS-2)

#### Mechanical Properties

Short term bend radius	20xOD mm
Long term bend radius	10xOD mm
Operating temperature	-20 to +60C
Default jacket colors	MM OM1 & OM2: Orange MM OM3: Turquoise MM OM4: Purple



#### Ordering Information

FF: Fiber Type CC: Jacket Color

Description	Length m	Cable OD mm	Packaging	P/N
SC/UPC-SC/UPC Simplex Multimode Cord LSOH	1	3.0	1/Bag - 12/Box	28CFFHH010T-CC61
SC/UPC-SC/UPC Simplex Multimode Cord LSOH	2	3.0	1/Bag - 12/Box	28CFFHH020T-CC61
SC/UPC-SC/UPC Simplex Multimode Cord LSOH	3	3.0	1/Bag - 12/Box	28CFFHH030T-CC61
SC/UPC-SC/UPC Simplex Multimode Cord LSOH	5	3.0	1/Bag - 12/Box	28CFFHH050T-CC61
SC/UPC-SC/UPC Simplex Multimode Cord LSOH	10	3.0	1/Bag - 12/Box	28CFFHH100T-CC61
SC/UPC-ST/UPC Simplex Multimode Cord LSOH	1	3.0	1/Bag - 12/Box	28CFFHA010T-CC61
SC/UPC-ST/UPC Simplex Multimode Cord LSOH	2	3.0	1/Bag - 12/Box	28CFFHA020T-CC61
SC/UPC-ST/UPC Simplex Multimode Cord LSOH	3	3.0	1/Bag - 12/Box	28CFFHA030T-CC61
SC/UPC-ST/UPC Simplex Multimode Cord LSOH	5	3.0	1/Bag - 12/Box	28CFFHA050T-CC61
SC/UPC-ST/UPC Simplex Multimode Cord LSOH	10	3.0	1/Bag - 12/Box	28CFFHA100T-CC61
SC/UPC-FC/UPC Simplex Multimode Cord LSOH	1	3.0	1/Bag - 12/Box	28CFFHE010T-CC61
SC/UPC-FC/UPC Simplex Multimode Cord LSOH	2	3.0	1/Bag - 12/Box	28CFFHE020T-CC61
SC/UPC-FC/UPC Simplex Multimode Cord LSOH	3	3.0	1/Bag - 12/Box	28CFFHE030T-CC61
SC/UPC-FC/UPC Simplex Multimode Cord LSOH	5	3.0	1/Bag - 12/Box	28CFFHE050T-CC61
SC/UPC-FC/UPC Simplex Multimode Cord LSOH	10	3.0	1/Bag - 12/Box	28CFFHE100T-CC61
SC/UPC-LC/UPC Simplex Multimode Cord LSOH	1	2.0	1/Bag - 12/Box	28CFFHP010T-CC61
SC/UPC-LC/UPC Simplex Multimode Cord LSOH	2	2.0	1/Bag - 12/Box	28CFFHP020T-CC61
SC/UPC-LC/UPC Simplex Multimode Cord LSOH	3	2.0	1/Bag - 12/Box	28CFFHP030T-CC61
SC/UPC-LC/UPC Simplex Multimode Cord LSOH	5	2.0	1/Bag - 12/Box	28CFFHP050T-CC61
SC/UPC-LC/UPC Simplex Multimode Cord LSOH	10	2.0	1/Bag - 12/Box	28CFFHP100T-CC61
SC/UPC-LSH/UPC Simplex Multimode Cord LSOH	1	2.0	1/Bag - 12/Box	28CFFHD010T-CC61
SC/UPC-LSH/UPC Simplex Multimode Cord LSOH	2	2.0	1/Bag - 12/Box	28CFFHD020T-CC61
SC/UPC-LSH/UPC Simplex Multimode Cord LSOH	3	2.0	1/Bag - 12/Box	28CFFHD030T-CC61
SC/UPC-LSH/UPC Simplex Multimode Cord LSOH	5	2.0	1/Bag - 12/Box	28CFFHD050T-CC61
SC/UPC-LSH/UPC Simplex Multimode Cord LSOH	10	2.0	1/Bag - 12/Box	28CFFHD100T-CC61

#### Optional Transmission Properties

Suffix	Connector IL (dB)	Connector RL (dB)
T = Standard Loss connector	0.30 max. 0.20 Typical	20 min.
S = Low-Loss connector	0.15 max. 0.10 Typical	20 min.

## AT&T FiberLine

### Fiber Optic SC/UPC Simplex Singlemode Cords

#### Description

This page shows some of the available combinations of AT&T fiber-optic Simplex Singlemode Cords made with singlemode fibers and terminated with SC/UPC connectors.

Additional combinations can be selected using the information on page B.3.

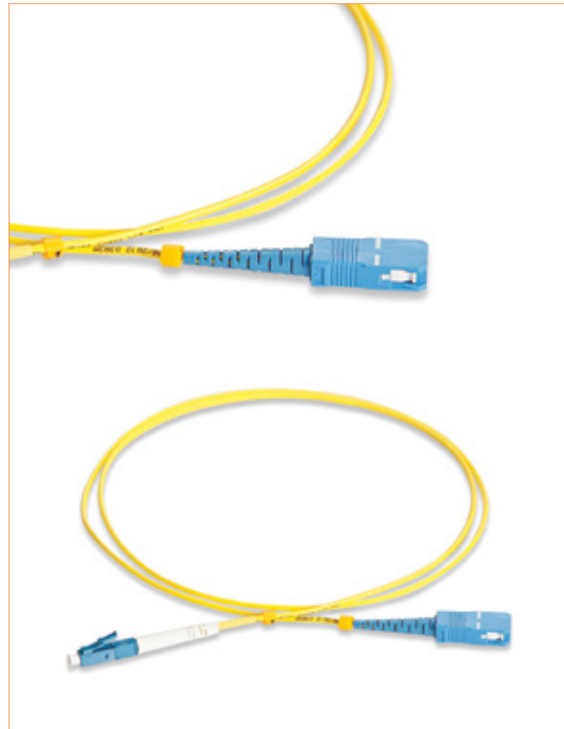
Fiber type	Select a singlemode fiber from page B.6.
Buffer type	900µ tight flame retardant LSOH coating
Strength elements	Served aramid and glass yarn
Minicable jacket material	Flame retardant LSOH compound

#### Standard & EU Directives Conformance

- Relevant sections of ANSI/TIA-568-C.3
- Relevant sections of ISO/IEC 11801
- Relevant sections of EN 50173
- Relevant sections of ANSI/TIA/EIA-604 (FOCIS)
- Relevant sections of IEC 60874
- Relevant sections of IEC 61753
- Relevant sections of IEC 61754
- IEC 60332-1 flame test
- IEC 60754 & IEC 61034
- EU Directive 2011/65/EU (RoHS-2)

#### Mechanical Properties

Short term bend radius	20xOD mm
Long term bend radius	10xOD mm
Operating temperature	-20 to +60C
Default jacket color	Yellow



#### Ordering Information

FF: Fiber Type

Description	Length m	Cable OD mm	Packaging	P/N
SC/UPC-SC/UPC Simplex Singlemode Cord LSOH	1	3.0	1/Bag - 12/Box	28CFFJJ010T-YL61
SC/UPC-SC/UPC Simplex Singlemode Cord LSOH	2	3.0	1/Bag - 12/Box	28CFFJJ020T-YL61
SC/UPC-SC/UPC Simplex Singlemode Cord LSOH	3	3.0	1/Bag - 12/Box	28CFFJJ030T-YL61
SC/UPC-SC/UPC Simplex Singlemode Cord LSOH	5	3.0	1/Bag - 12/Box	28CFFJJ050T-YL61
SC/UPC-SC/UPC Simplex Singlemode Cord LSOH	10	3.0	1/Bag - 12/Box	28CFFJJ100T-YL61
SC/UPC-ST/UPC Simplex Singlemode Cord LSOH	1	3.0	1/Bag - 12/Box	28CFFJC010T-YL61
SC/UPC-ST/UPC Simplex Singlemode Cord LSOH	2	3.0	1/Bag - 12/Box	28CFFJC020T-YL61
SC/UPC-ST/UPC Simplex Singlemode Cord LSOH	3	3.0	1/Bag - 12/Box	28CFFJC030T-YL61
SC/UPC-ST/UPC Simplex Singlemode Cord LSOH	5	3.0	1/Bag - 12/Box	28CFFJC050T-YL61
SC/UPC-ST/UPC Simplex Singlemode Cord LSOH	10	3.0	1/Bag - 12/Box	28CFFJC100T-YL61
SC/UPC-FC/UPC Simplex Singlemode Cord LSOH	1	3.0	1/Bag - 12/Box	28CFFJF010T-YL61
SC/UPC-FC/UPC Simplex Singlemode Cord LSOH	2	3.0	1/Bag - 12/Box	28CFFJF020T-YL61
SC/UPC-FC/UPC Simplex Singlemode Cord LSOH	3	3.0	1/Bag - 12/Box	28CFFJF030T-YL61
SC/UPC-FC/UPC Simplex Singlemode Cord LSOH	5	3.0	1/Bag - 12/Box	28CFFJF050T-YL61
SC/UPC-FC/UPC Simplex Singlemode Cord LSOH	10	3.0	1/Bag - 12/Box	28CFFJF100T-YL61
SC/UPC-LC/UPC Simplex Singlemode Cord LSOH	1	2.0	1/Bag - 12/Box	28CFFJQ010T-YL61
SC/UPC-LC/UPC Simplex Singlemode Cord LSOH	2	2.0	1/Bag - 12/Box	28CFFJQ020T-YL61
SC/UPC-LC/UPC Simplex Singlemode Cord LSOH	3	2.0	1/Bag - 12/Box	28CFFJQ030T-YL61
SC/UPC-LC/UPC Simplex Singlemode Cord LSOH	5	2.0	1/Bag - 12/Box	28CFFJQ050T-YL61
SC/UPC-LC/UPC Simplex Singlemode Cord LSOH	10	2.0	1/Bag - 12/Box	28CFFJQ100T-YL61
SC/UPC-LSH/UPC Simplex Singlemode Cord LSOH	1	2.0	1/Bag - 12/Box	28CFFJL010T-YL61
SC/UPC-LSH/UPC Simplex Singlemode Cord LSOH	2	2.0	1/Bag - 12/Box	28CFFJL020T-YL61
SC/UPC-LSH/UPC Simplex Singlemode Cord LSOH	3	2.0	1/Bag - 12/Box	28CFFJL030T-YL61
SC/UPC-LSH/UPC Simplex Singlemode Cord LSOH	5	2.0	1/Bag - 12/Box	28CFFJL050T-YL61
SC/UPC-LSH/UPC Simplex Singlemode Cord LSOH	10	2.0	1/Bag - 12/Box	28CFFJL100T-YL61

#### Optional Transmission Properties - UPC Connectors

Suffix	Connector IL (dB)	Connector RL (dB)
T = Standard Loss connector	0.30 max. 0.20 Typical	26 min. 60 Typical
S = Low-Loss connector	0.15 max. 0.10 Typical	26 min. 60 Typical

## AT&T FiberLine

### Fiber Optic LC/UPC Simplex Multimode Cords

#### Description

This page shows some of the available combinations of AT&T fiber-optic Simplex Multimode Cords made with multimode fibers and terminated with LC/UPC connectors.

Additional combinations can be selected using the information on page B.3.

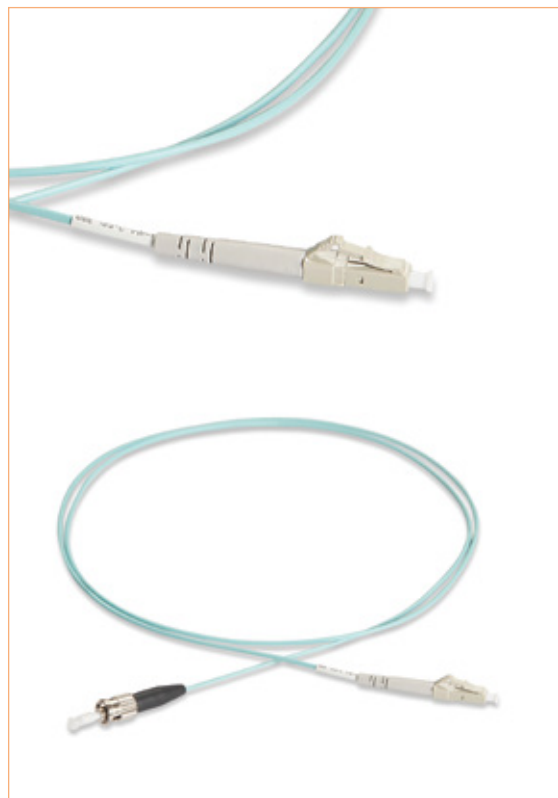
Fiber type	Select a multimode fiber from page B.6.
Buffer type	900µ tight flame retardant LSOH coating
Strength elements	Served aramid and glass yarn
Minicable jacket material	Flame retardant LSOH compound

#### Standard & EU Directives Conformance

- Relevant sections of ANSI/TIA-568-C.3
- Relevant sections of ISO/IEC 11801
- Relevant sections of EN 50173
- Relevant sections of ANSI/TIA/EIA-604 (FOCIS)
- Relevant sections of IEC 60874
- Relevant sections of IEC 61753
- Relevant sections of IEC 61754
- IEC 60332-1 flame test
- IEC 60754 & IEC 61034
- EU Directive 2011/65/EU (RoHS-2)

#### Mechanical Properties

Short term bend radius	20xOD mm
Long term bend radius	10xOD mm
Operating temperature	-20 to +60C
Default jacket colors	MM OM1 & OM2: Orange MM OM3: Turquoise MM OM4: Purple



#### Ordering Information

FF: Fiber Type CC: Jacket Color

Description	Length m	Cable OD mm	Packaging	P/N
LC/UPC-LC/UPC Simplex Multimode Cord LSOH	1	2.0	1/Bag - 12/Box	28CFFPP010T-CC61
LC/UPC-LC/UPC Simplex Multimode Cord LSOH	2	2.0	1/Bag - 12/Box	28CFFPP020T-CC61
LC/UPC-LC/UPC Simplex Multimode Cord LSOH	3	2.0	1/Bag - 12/Box	28CFFPP030T-CC61
LC/UPC-LC/UPC Simplex Multimode Cord LSOH	5	2.0	1/Bag - 12/Box	28CFFPP050T-CC61
LC/UPC-LC/UPC Simplex Multimode Cord LSOH	10	2.0	1/Bag - 12/Box	28CFFPP100T-CC61
LC/UPC-ST/UPC Simplex Multimode Cord LSOH	1	2.0	1/Bag - 12/Box	28CFFPA010T-CC61
LC/UPC-ST/UPC Simplex Multimode Cord LSOH	2	2.0	1/Bag - 12/Box	28CFFPA020T-CC61
LC/UPC-ST/UPC Simplex Multimode Cord LSOH	3	2.0	1/Bag - 12/Box	28CFFPA030T-CC61
LC/UPC-ST/UPC Simplex Multimode Cord LSOH	5	2.0	1/Bag - 12/Box	28CFFPA050T-CC61
LC/UPC-ST/UPC Simplex Multimode Cord LSOH	10	2.0	1/Bag - 12/Box	28CFFPA100T-CC61
LC/UPC-FC/UPC Simplex Multimode Cord LSOH	1	2.0	1/Bag - 12/Box	28CFFPE010T-CC61
LC/UPC-FC/UPC Simplex Multimode Cord LSOH	2	2.0	1/Bag - 12/Box	28CFFPE020T-CC61
LC/UPC-FC/UPC Simplex Multimode Cord LSOH	3	2.0	1/Bag - 12/Box	28CFFPE030T-CC61
LC/UPC-FC/UPC Simplex Multimode Cord LSOH	5	2.0	1/Bag - 12/Box	28CFFPE050T-CC61
LC/UPC-FC/UPC Simplex Multimode Cord LSOH	10	2.0	1/Bag - 12/Box	28CFFPE100T-CC61
LC/UPC-LSH/UPC Simplex Multimode Cord LSOH	1	2.0	1/Bag - 12/Box	28CFFPD010T-CC61
LC/UPC-LSH/UPC Simplex Multimode Cord LSOH	2	2.0	1/Bag - 12/Box	28CFFPD020T-CC61
LC/UPC-LSH/UPC Simplex Multimode Cord LSOH	3	2.0	1/Bag - 12/Box	28CFFPD030T-CC61
LC/UPC-LSH/UPC Simplex Multimode Cord LSOH	5	2.0	1/Bag - 12/Box	28CFFPD050T-CC61
LC/UPC-LSH/UPC Simplex Multimode Cord LSOH	10	2.0	1/Bag - 12/Box	28CFFPD100T-CC61

#### Optional Transmission Properties

Suffix	Connector IL (dB)	Connector RL (dB)
T = Standard Loss connector	0.30 max. 0.20 Typical	20 min.
S = Low-Loss connector	0.15 max. 0.10 Typical	20 min.
L = Super Low-Loss connector (LC Only)	0.10 max. 0.07 Typical	20 min.



## AT&T FiberLine

### Fiber Optic LC/UPC Simplex Singlemode Cords

#### Description

This page shows some of the available combinations of AT&T fiber-optic Simplex Singlemode Cords made with singlemode fibers and terminated with LC/UPC connectors.

Additional combinations can be selected using the information on page B.3.

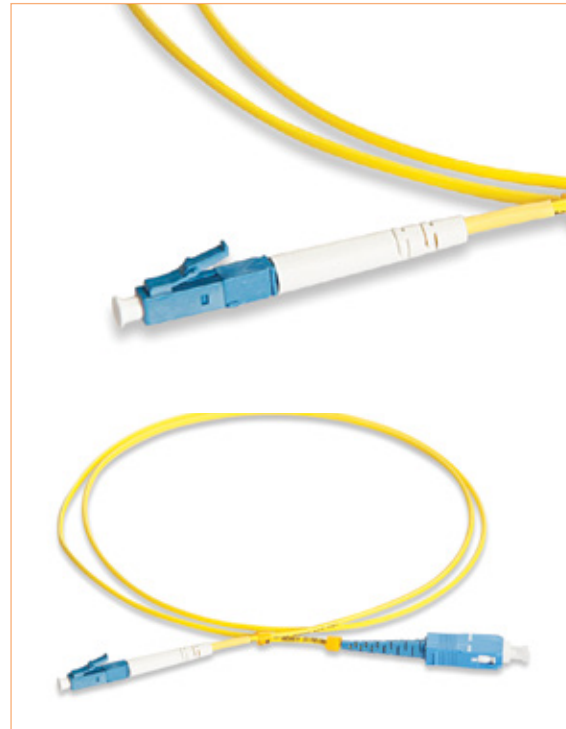
Fiber type	Select a singlemode fiber from page B.6.
Buffer type	900µ tight flame retardant LSOH coating
Strength elements	Served aramid and glass yarn
Minicable jacket material	Flame retardant LSOH compound

#### Standard & EU Directives Conformance

- Relevant sections of ANSI/TIA-568-C.3
- Relevant sections of ISO/IEC 11801
- Relevant sections of EN 50173
- Relevant sections of ANSI/TIA/EIA-604 (FOCIS)
- Relevant sections of IEC 60874
- Relevant sections of IEC 61753
- Relevant sections of IEC 61754
- IEC 60332-1 flame test
- IEC 60754 & IEC 61034
- EU Directive 2011/65/EU (RoHS-2)

#### Mechanical Properties

Short term bend radius	20xOD mm
Long term bend radius	10xOD mm
Operating temperature	-20 to +60C
Default jacket color	Yellow



#### Ordering Information

FF: Fiber Type

Description	Length m	Cable OD mm	Packaging	P/N
LC/UPC-LC/UPC Simplex Singlemode Cord LSOH	1	2.0	1/Bag - 12/Box	28CFFQQ010T-YL61
LC/UPC-LC/UPC Simplex Singlemode Cord LSOH	2	2.0	1/Bag - 12/Box	28CFFQQ020T-YL61
LC/UPC-LC/UPC Simplex Singlemode Cord LSOH	3	2.0	1/Bag - 12/Box	28CFFQQ030T-YL61
LC/UPC-LC/UPC Simplex Singlemode Cord LSOH	5	2.0	1/Bag - 12/Box	28CFFQQ050T-YL61
LC/UPC-LC/UPC Simplex Singlemode Cord LSOH	10	2.0	1/Bag - 12/Box	28CFFQQ100T-YL61
LC/UPC-ST/UPC Simplex Singlemode Cord LSOH	1	2.0	1/Bag - 12/Box	28CFFQC010T-YL61
LC/UPC-ST/UPC Simplex Singlemode Cord LSOH	2	2.0	1/Bag - 12/Box	28CFFQC020T-YL61
LC/UPC-ST/UPC Simplex Singlemode Cord LSOH	3	2.0	1/Bag - 12/Box	28CFFQC030T-YL61
LC/UPC-ST/UPC Simplex Singlemode Cord LSOH	5	2.0	1/Bag - 12/Box	28CFFQC050T-YL61
LC/UPC-ST/UPC Simplex Singlemode Cord LSOH	10	2.0	1/Bag - 12/Box	28CFFQC100T-YL61
LC/UPC-FC/UPC Simplex Singlemode Cord LSOH	1	2.0	1/Bag - 12/Box	28CFFQF010T-YL61
LC/UPC-FC/UPC Simplex Singlemode Cord LSOH	2	2.0	1/Bag - 12/Box	28CFFQF020T-YL61
LC/UPC-FC/UPC Simplex Singlemode Cord LSOH	3	2.0	1/Bag - 12/Box	28CFFQF030T-YL61
LC/UPC-FC/UPC Simplex Singlemode Cord LSOH	5	2.0	1/Bag - 12/Box	28CFFQF050T-YL61
LC/UPC-FC/UPC Simplex Singlemode Cord LSOH	10	2.0	1/Bag - 12/Box	28CFFQF100T-YL61
LC/UPC-LSH/UPC Simplex Singlemode Cord LSOH	1	2.0	1/Bag - 12/Box	28CFFQL010T-YL61
LC/UPC-LSH/UPC Simplex Singlemode Cord LSOH	2	2.0	1/Bag - 12/Box	28CFFQL020T-YL61
LC/UPC-LSH/UPC Simplex Singlemode Cord LSOH	3	2.0	1/Bag - 12/Box	28CFFQL030T-YL61
LC/UPC-LSH/UPC Simplex Singlemode Cord LSOH	5	2.0	1/Bag - 12/Box	28CFFQL050T-YL61
LC/UPC-LSH/UPC Simplex Singlemode Cord LSOH	10	2.0	1/Bag - 12/Box	28CFFQL100T-YL61
LC/UPC-LC/APC Simplex Singlemode Cord LSOH	1	2.0	1/Bag - 12/Box	28CFFQR010T-YL61
LC/UPC-LC/APC Simplex Singlemode Cord LSOH	2	2.0	1/Bag - 12/Box	28CFFQR020T-YL61
LC/UPC-LC/APC Simplex Singlemode Cord LSOH	3	2.0	1/Bag - 12/Box	28CFFQR030T-YL61
LC/UPC-LC/APC Simplex Singlemode Cord LSOH	5	2.0	1/Bag - 12/Box	28CFFQR050T-YL61
LC/UPC-LC/APC Simplex Singlemode Cord LSOH	10	2.0	1/Bag - 12/Box	28CFFQR100T-YL61

#### Optional Transmission Properties - UPC Connectors

Suffix	Connector IL (dB)	Connector RL (dB)
T = Standard Loss connector	0.30 max. 0.20 Typical	50 min. 60 Typical
S = Low-Loss connector	0.15 max. 0.10 Typical	50 min. 60 Typical
L = Super Low-Loss connector (LC Only)	0.10 max. 0.07 Typical	50 min. 60 Typical

## AT&T FiberLine

### Fiber Optic FC/UPC Simplex Multimode Cords

#### Description

This page shows some of the available combinations of AT&T fiber-optic Simplex Multimode Cords made with multimode fibers and terminated with FC/UPC connectors.

Additional combinations can be selected using the information on page B.3.

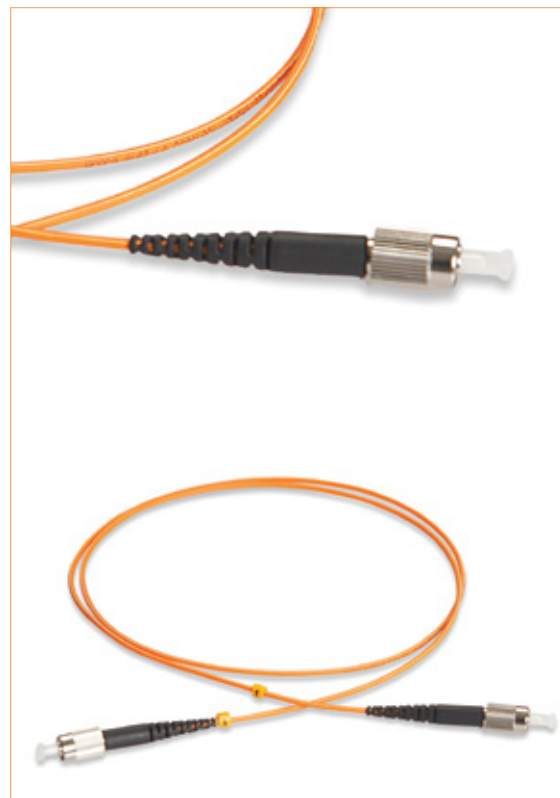
Fiber type	Select a multimode fiber from page B.6.
Buffer type	900µ tight flame retardant LSOH coating
Strength elements	Served aramid and glass yarn
Minicable jacket material	Flame retardant LSOH compound

#### Standard & EU Directives Conformance

- Relevant sections of ANSI/TIA-568-C.3
- Relevant sections of ISO/IEC 11801
- Relevant sections of EN 50173
- Relevant sections of ANSI/TIA/EIA-604 (FOCIS)
- Relevant sections of IEC 60874
- Relevant sections of IEC 61753
- Relevant sections of IEC 61754
- IEC 60332-1 flame test
- IEC 60754 & IEC 61034
- EU Directive 2011/65/EU (RoHS-2)

#### Mechanical Properties

Short term bend radius	20xOD mm
Long term bend radius	10xOD mm
Operating temperature	-20 to +60C
Default jacket colors	MM OM1 & OM2: Orange MM OM3: Turquoise MM OM4: Purple



#### Ordering Information

FF: Fiber Type CC: Jacket Color

Description	Length m	Cable OD mm	Packaging	P/N
FC/UPC-FC/UPC Simplex Multimode Cord LSOH	1	3.0	1/Bag - 12/Box	28CFFEE010T-CC61
FC/UPC-FC/UPC Simplex Multimode Cord LSOH	2	3.0	1/Bag - 12/Box	28CFFEE020T-CC61
FC/UPC-FC/UPC Simplex Multimode Cord LSOH	3	3.0	1/Bag - 12/Box	28CFFEE030T-CC61
FC/UPC-FC/UPC Simplex Multimode Cord LSOH	5	3.0	1/Bag - 12/Box	28CFFEE050T-CC61
FC/UPC-FC/UPC Simplex Multimode Cord LSOH	10	3.0	1/Bag - 12/Box	28CFFEE100T-CC61
FC/UPC-ST/UPC Simplex Multimode Cord LSOH	1	3.0	1/Bag - 12/Box	28CFFEA010T-CC61
FC/UPC-ST/UPC Simplex Multimode Cord LSOH	2	3.0	1/Bag - 12/Box	28CFFEA020T-CC61
FC/UPC-ST/UPC Simplex Multimode Cord LSOH	3	3.0	1/Bag - 12/Box	28CFFEA030T-CC61
FC/UPC-ST/UPC Simplex Multimode Cord LSOH	5	3.0	1/Bag - 12/Box	28CFFEA050T-CC61
FC/UPC-ST/UPC Simplex Multimode Cord LSOH	10	3.0	1/Bag - 12/Box	28CFFEA100T-CC61
FC/UPC-LC/UPC Simplex Multimode Cord LSOH	1	2.0	1/Bag - 12/Box	28CFFEP010T-CC61
FC/UPC-LC/UPC Simplex Multimode Cord LSOH	2	2.0	1/Bag - 12/Box	28CFFEP020T-CC61
FC/UPC-LC/UPC Simplex Multimode Cord LSOH	3	2.0	1/Bag - 12/Box	28CFFEP030T-CC61
FC/UPC-LC/UPC Simplex Multimode Cord LSOH	5	2.0	1/Bag - 12/Box	28CFFEP050T-CC61
FC/UPC-LC/UPC Simplex Multimode Cord LSOH	10	2.0	1/Bag - 12/Box	28CFFEP100T-CC61
FC/UPC-LSH/UPC Simplex Multimode Cord LSOH	1	2.0	1/Bag - 12/Box	28CFFED010T-CC61
FC/UPC-LSH/UPC Simplex Multimode Cord LSOH	2	2.0	1/Bag - 12/Box	28CFFED020T-CC61
FC/UPC-LSH/UPC Simplex Multimode Cord LSOH	3	2.0	1/Bag - 12/Box	28CFFED030T-CC61
FC/UPC-LSH/UPC Simplex Multimode Cord LSOH	5	2.0	1/Bag - 12/Box	28CFFED050T-CC61
FC/UPC-LSH/UPC Simplex Multimode Cord LSOH	10	2.0	1/Bag - 12/Box	28CFFED100T-CC61

#### Optional Transmission Properties

Suffix	Connector IL (dB)	Connector RL (dB)
T = Standard Loss connector	0.30 max. 0.20 Typical	20 min.
S = Low-Loss connector	0.15 max. 0.10 Typical	20 min.

## AT&T FiberLine

### Fiber Optic FC/UPC Simplex Singlemode Cords

#### Description

This page shows some of the available combinations of AT&T fiber-optic Simplex Singlemode Cords made with singlemode fibers and terminated with FC/UPC connectors.

Additional combinations can be selected using the information on page B.3.

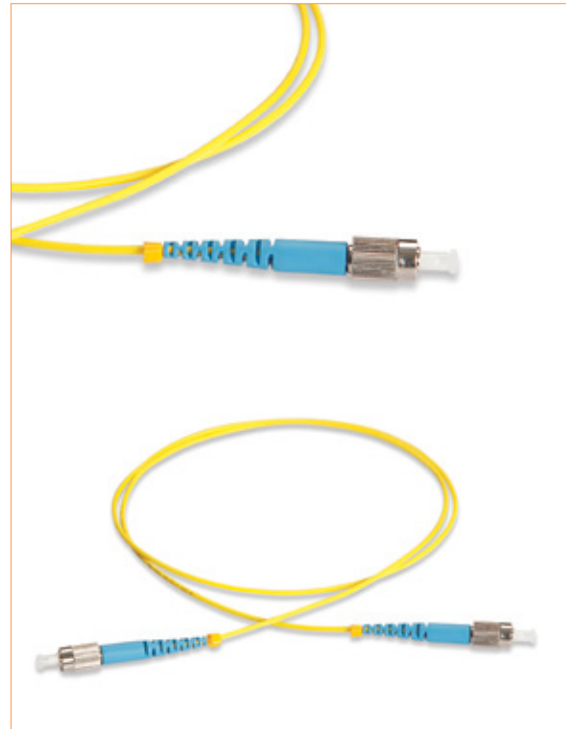
Fiber type	Select a singlemode fiber from page B.6.
Buffer type	900µ tight flame retardant LSOH coating
Strength elements	Served aramid and glass yarn
Minicable jacket material	Flame retardant LSOH compound

#### Standard & EU Directives Conformance

- Relevant sections of ANSI/TIA-568-C.3
- Relevant sections of ISO/IEC 11801
- Relevant sections of EN 50173
- Relevant sections of ANSI/TIA/EIA-604 (FOCIS)
- Relevant sections of IEC 60874
- Relevant sections of IEC 61753
- Relevant sections of IEC 61754
- IEC 60332-1 flame test
- IEC 60754 & IEC 61034
- EU Directive 2011/65/EU (RoHS-2)

#### Mechanical Properties

Short term bend radius	20xOD mm
Long term bend radius	10xOD mm
Operating temperature	-20 to +60C
Default jacket color	Yellow



#### Ordering Information

FF: Fiber Type

Description	Length m	Cable OD mm	Packaging	P/N
FC/UPC-FC/UPC Simplex Singlemode Cord LSOH	1	3.0	1/Bag - 12/Box	28CFFFF010T-YL61
FC/UPC-FC/UPC Simplex Singlemode Cord LSOH	2	3.0	1/Bag - 12/Box	28CFFFF020T-YL61
FC/UPC-FC/UPC Simplex Singlemode Cord LSOH	3	3.0	1/Bag - 12/Box	28CFFFF030T-YL61
FC/UPC-FC/UPC Simplex Singlemode Cord LSOH	5	3.0	1/Bag - 12/Box	28CFFFF050T-YL61
FC/UPC-FC/UPC Simplex Singlemode Cord LSOH	10	3.0	1/Bag - 12/Box	28CFFFF100T-YL61
FC/UPC-ST/UPC Simplex Singlemode Cord LSOH	1	3.0	1/Bag - 12/Box	28CFFFC010T-YL61
FC/UPC-ST/UPC Simplex Singlemode Cord LSOH	2	3.0	1/Bag - 12/Box	28CFFFC020T-YL61
FC/UPC-ST/UPC Simplex Singlemode Cord LSOH	3	3.0	1/Bag - 12/Box	28CFFFC030T-YL61
FC/UPC-ST/UPC Simplex Singlemode Cord LSOH	5	3.0	1/Bag - 12/Box	28CFFFC050T-YL61
FC/UPC-ST/UPC Simplex Singlemode Cord LSOH	10	3.0	1/Bag - 12/Box	28CFFFC100T-YL61
FC/UPC-FC/APC Simplex Singlemode Cord LSOH	1	3.0	1/Bag - 12/Box	28CFFFG010T-YL61
FC/UPC-FC/APC Simplex Singlemode Cord LSOH	2	3.0	1/Bag - 12/Box	28CFFFG020T-YL61
FC/UPC-FC/APC Simplex Singlemode Cord LSOH	3	3.0	1/Bag - 12/Box	28CFFFG030T-YL61
FC/UPC-FC/APC Simplex Singlemode Cord LSOH	5	3.0	1/Bag - 12/Box	28CFFFG050T-YL61
FC/UPC-FC/APC Simplex Singlemode Cord LSOH	10	3.0	1/Bag - 12/Box	28CFFFG100T-YL61
FC/UPC-LC/APC Simplex Singlemode Cord LSOH	1	2.0	1/Bag - 12/Box	28CFFFR010T-YL61
FC/UPC-LC/APC Simplex Singlemode Cord LSOH	2	2.0	1/Bag - 12/Box	28CFFFR020T-YL61
FC/UPC-LC/APC Simplex Singlemode Cord LSOH	3	2.0	1/Bag - 12/Box	28CFFFR030T-YL61
FC/UPC-LC/APC Simplex Singlemode Cord LSOH	5	2.0	1/Bag - 12/Box	28CFFFR050T-YL61
FC/UPC-LC/APC Simplex Singlemode Cord LSOH	10	2.0	1/Bag - 12/Box	28CFFFR100T-YL61
FC/UPC-LSH/UPC Simplex Singlemode Cord LSOH	1	2.0	1/Bag - 12/Box	28CFFFL010T-YL61
FC/UPC-LSH/UPC Simplex Singlemode Cord LSOH	2	2.0	1/Bag - 12/Box	28CFFFL020T-YL61
FC/UPC-LSH/UPC Simplex Singlemode Cord LSOH	3	2.0	1/Bag - 12/Box	28CFFFL030T-YL61
FC/UPC-LSH/UPC Simplex Singlemode Cord LSOH	5	2.0	1/Bag - 12/Box	28CFFFL050T-YL61
FC/UPC-LSH/UPC Simplex Singlemode Cord LSOH	10	2.0	1/Bag - 12/Box	28CFFFL100T-YL61

#### Optional Transmission Properties - UPC Connectors

Suffix	Connector IL (dB)	Connector RL (dB)
T = Standard Loss connector	0.30 max. 0.20 Typical	26 min. 60 Typical
S = Low-Loss connector	0.15 max. 0.10 Typical	26 min. 60 Typical

## AT&T FiberLine

### Fiber Optic ST/UPC Simplex Multimode Cords

#### Description

This page shows some of the available combinations of AT&T fiber-optic Simplex Multimode Cords made with multimode fibers and terminated with ST/UPC connectors.

Additional combinations can be selected using the information on page B.3.

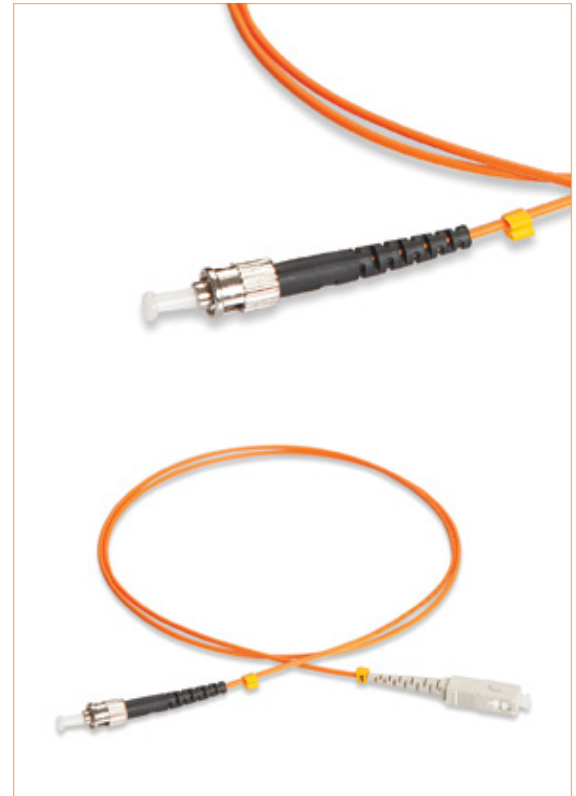
Fiber type	Select a multimode fiber from page B.6.
Buffer type	900µ tight flame retardant LSOH coating
Strength elements	Served aramid and glass yarn
Minicable jacket material	Flame retardant LSOH compound

#### Standard & EU Directives Conformance

- Relevant sections of ANSI/TIA-568-C.3
- Relevant sections of ISO/IEC 11801
- Relevant sections of EN 50173
- Relevant sections of ANSI/TIA/EIA-604 (FOCIS)
- Relevant sections of IEC 60874
- Relevant sections of IEC 61753
- Relevant sections of IEC 61754
- IEC 60332-1 flame test
- IEC 60754 & IEC 61034
- EU Directive 2011/65/EU (RoHS-2)

#### Mechanical Properties

Short term bend radius	20xOD mm
Long term bend radius	10xOD mm
Operating temperature	-20 to +60C
Default jacket colors	MM OM1 & OM2: Orange MM OM3: Turquoise MM OM4: Purple



#### Ordering Information

FF: Fiber Type CC: Jacket Color

Description	Length m	Cable OD mm	Packaging	P/N
ST/UPC-ST/UPC Simplex Multimode Cord LSOH	1	3.0	1/Bag - 12/Box	28CFFAA010T-CC61
ST/UPC-ST/UPC Simplex Multimode Cord LSOH	2	3.0	1/Bag - 12/Box	28CFFAA020T-CC61
ST/UPC-ST/UPC Simplex Multimode Cord LSOH	3	3.0	1/Bag - 12/Box	28CFFAA030T-CC61
ST/UPC-ST/UPC Simplex Multimode Cord LSOH	5	3.0	1/Bag - 12/Box	28CFFAA050T-CC61
ST/UPC-ST/UPC Simplex Multimode Cord LSOH	10	3.0	1/Bag - 12/Box	28CFFAA100T-CC61
ST/UPC-FC/UPC Simplex Multimode Cord LSOH	1	3.0	1/Bag - 12/Box	28CFFAE010T-CC61
ST/UPC-FC/UPC Simplex Multimode Cord LSOH	2	3.0	1/Bag - 12/Box	28CFFAE020T-CC61
ST/UPC-FC/UPC Simplex Multimode Cord LSOH	3	3.0	1/Bag - 12/Box	28CFFAE030T-CC61
ST/UPC-FC/UPC Simplex Multimode Cord LSOH	5	3.0	1/Bag - 12/Box	28CFFAE050T-CC61
ST/UPC-FC/UPC Simplex Multimode Cord LSOH	10	3.0	1/Bag - 12/Box	28CFFAE100T-CC61
ST/UPC-LC/UPC Simplex Multimode Cord LSOH	1	2.0	1/Bag - 12/Box	28CFFAP010T-CC61
ST/UPC-LC/UPC Simplex Multimode Cord LSOH	2	2.0	1/Bag - 12/Box	28CFFAP020T-CC61
ST/UPC-LC/UPC Simplex Multimode Cord LSOH	3	2.0	1/Bag - 12/Box	28CFFAP030T-CC61
ST/UPC-LC/UPC Simplex Multimode Cord LSOH	5	2.0	1/Bag - 12/Box	28CFFAP050T-CC61
ST/UPC-LC/UPC Simplex Multimode Cord LSOH	10	2.0	1/Bag - 12/Box	28CFFAP100T-CC61
ST/UPC-LSH/UPC Simplex Multimode Cord LSOH	1	2.0	1/Bag - 12/Box	28CFFAD010T-CC61
ST/UPC-LSH/UPC Simplex Multimode Cord LSOH	2	2.0	1/Bag - 12/Box	28CFFAD020T-CC61
ST/UPC-LSH/UPC Simplex Multimode Cord LSOH	3	2.0	1/Bag - 12/Box	28CFFAD030T-CC61
ST/UPC-LSH/UPC Simplex Multimode Cord LSOH	5	2.0	1/Bag - 12/Box	28CFFAD050T-CC61
ST/UPC-LSH/UPC Simplex Multimode Cord LSOH	10	2.0	1/Bag - 12/Box	28CFFAD100T-CC61

#### Optional Transmission Properties

Suffix	Connector IL (dB)	Connector RL (dB)
T = Standard Loss connector	0.30 max. 0.20 Typical	20 min.
S = Low-Loss connector	0.15 max. 0.10 Typical	20 min.

## AT&T FiberLine

### Fiber Optic ST/UPC Simplex Singlemode Cords

#### Description

This page shows some of the available combinations of AT&T fiber-optic Simplex Singlemode Cords made with singlemode fibers and terminated with ST/UPC connectors.

Additional combinations can be selected using the information on page B.3.

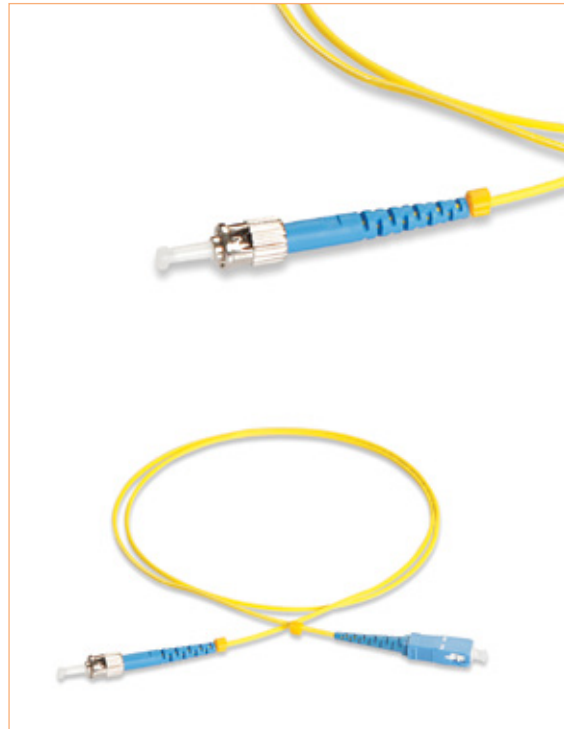
Fiber type	Select a singlemode fiber from page B.6.
Buffer type	900µ tight flame retardant LSOH coating
Strength elements	Served aramid and glass yarn
Minicable jacket material	Flame retardant LSOH compound

#### Standard & EU Directives Conformance

- Relevant sections of ANSI/TIA-568-C.3
- Relevant sections of ISO/IEC 11801
- Relevant sections of EN 50173
- Relevant sections of ANSI/TIA/EIA-604 (FOCIS)
- Relevant sections of IEC 60874
- Relevant sections of IEC 61753
- Relevant sections of IEC 61754
- IEC 60332-1 flame test
- IEC 60754 & IEC 61034
- EU Directive 2011/65/EU (RoHS-2)

#### Mechanical Properties

Short term bend radius	20xOD mm
Long term bend radius	10xOD mm
Operating temperature	-20 to +60C
Default jacket color	Yellow



#### Ordering Information

FF: Fiber Type

Description	Length m	Cable OD mm	Packaging	P/N
ST/UPC-ST/UPC Simplex Singlemode Cord LSOH	1	3.0	1/Bag - 12/Box	28CFFCC010T-YL61
ST/UPC-ST/UPC Simplex Singlemode Cord LSOH	2	3.0	1/Bag - 12/Box	28CFFCC020T-YL61
ST/UPC-ST/UPC Simplex Singlemode Cord LSOH	3	3.0	1/Bag - 12/Box	28CFFCC030T-YL61
ST/UPC-ST/UPC Simplex Singlemode Cord LSOH	5	3.0	1/Bag - 12/Box	28CFFCC050T-YL61
ST/UPC-ST/UPC Simplex Singlemode Cord LSOH	10	3.0	1/Bag - 12/Box	28CFFCC100T-YL61
ST/UPC-FC/APC Simplex Singlemode Cord LSOH	1	3.0	1/Bag - 12/Box	28CFFCG010T-YL61
ST/UPC-FC/APC Simplex Singlemode Cord LSOH	2	3.0	1/Bag - 12/Box	28CFFCG020T-YL61
ST/UPC-FC/APC Simplex Singlemode Cord LSOH	3	3.0	1/Bag - 12/Box	28CFFCG030T-YL61
ST/UPC-FC/APC Simplex Singlemode Cord LSOH	5	3.0	1/Bag - 12/Box	28CFFCG050T-YL61
ST/UPC-FC/APC Simplex Singlemode Cord LSOH	10	3.0	1/Bag - 12/Box	28CFFCG100T-YL61
ST/UPC-LC/APC Simplex Singlemode Cord LSOH	1	2.0	1/Bag - 12/Box	28CFFCR010T-YL61
ST/UPC-LC/APC Simplex Singlemode Cord LSOH	2	2.0	1/Bag - 12/Box	28CFFCR020T-YL61
ST/UPC-LC/APC Simplex Singlemode Cord LSOH	3	2.0	1/Bag - 12/Box	28CFFCR030T-YL61
ST/UPC-LC/APC Simplex Singlemode Cord LSOH	5	2.0	1/Bag - 12/Box	28CFFCR050T-YL61
ST/UPC-LC/APC Simplex Singlemode Cord LSOH	10	2.0	1/Bag - 12/Box	28CFFCR100T-YL61
ST/UPC-LSH/APC Simplex Singlemode Cord LSOH	1	2.0	1/Bag - 12/Box	28CFFCM010T-YL61
ST/UPC-LSH/APC Simplex Singlemode Cord LSOH	2	2.0	1/Bag - 12/Box	28CFFCM020T-YL61
ST/UPC-LSH/APC Simplex Singlemode Cord LSOH	3	2.0	1/Bag - 12/Box	28CFFCM030T-YL61
ST/UPC-LSH/APC Simplex Singlemode Cord LSOH	5	2.0	1/Bag - 12/Box	28CFFCM050T-YL61
ST/UPC-LSH/APC Simplex Singlemode Cord LSOH	10	2.0	1/Bag - 12/Box	28CFFCM100T-YL61
ST/UPC-SC/APC Simplex Singlemode Cord LSOH	1	3.0	1/Bag - 12/Box	28CFFCK010T-YL61
ST/UPC-SC/APC Simplex Singlemode Cord LSOH	2	3.0	1/Bag - 12/Box	28CFFCK020T-YL61
ST/UPC-SC/APC Simplex Singlemode Cord LSOH	3	3.0	1/Bag - 12/Box	28CFFCK030T-YL61
ST/UPC-SC/APC Simplex Singlemode Cord LSOH	5	3.0	1/Bag - 12/Box	28CFFCK050T-YL61
ST/UPC-SC/APC Simplex Singlemode Cord LSOH	10	3.0	1/Bag - 12/Box	28CFFCK100T-YL61

#### Optional Transmission Properties - UPC Connectors

Suffix	Connector IL (dB)	Connector RL (dB)
T = Standard Loss connector	0.30 max. 0.20 Typical	26 min. 60 Typical
S = Low-Loss connector	0.15 max. 0.10 Typical	26 min. 60 Typical

## AT&T FiberLine

### Fiber Optic LSH/UPC (E-2000™) Simplex Multimode Cords

#### Description

This page shows some of the available combinations of AT&T fiber-optic Simplex Multimode Cords made with multimode fibers and terminated with LSH/UPC connectors.

Additional combinations can be selected using the information on page B.3.

Fiber type	Select a multimode fiber from page B.6.
Buffer type	900µ tight flame retardant LSOH coating
Strength elements	Served aramid and glass yarn
Minicable jacket material	Flame retardant LSOH compound

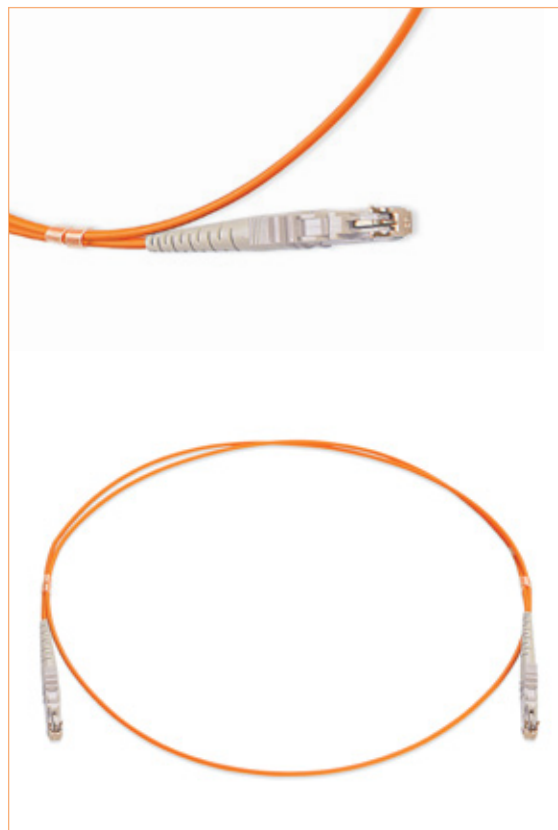
#### Standard & EU Directives Conformance

- Relevant sections of ANSI/TIA-568-C.3
- Relevant sections of ISO/IEC 11801
- Relevant sections of EN 50173
- Relevant sections of ANSI/TIA/EIA-604 (FOCIS)
- Relevant sections of IEC 60874
- Relevant sections of IEC 61753
- Relevant sections of IEC 61754
- IEC 60332-1 flame test
- IEC 60754 & IEC 61034
- EU Directive 2011/65/EU (RoHS-2)

#### Mechanical Properties

Short term bend radius	20xOD mm
Long term bend radius	10xOD mm
Operating temperature	-20 to +60C
Default jacket colors	MM OM1 & OM2: Orange
	MM OM3: Turquoise
	MM OM4: Purple

E-2000™ is a trademark of Diamond SA



#### Ordering Information

FF: Fiber Type CC: Jacket Color

Description	Length m	Cable OD mm	Packaging	P/N
LSH/UPC-LSH/UPC Simplex Multimode Cord LSOH	1	2.0	1/Bag - 12/Box	28CFFDD010T-CC61
LSH/UPC-LSH/UPC Simplex Multimode Cord LSOH	2	2.0	1/Bag - 12/Box	28CFFDD020T-CC61
LSH/UPC-LSH/UPC Simplex Multimode Cord LSOH	3	2.0	1/Bag - 12/Box	28CFFDD030T-CC61
LSH/UPC-LSH/UPC Simplex Multimode Cord LSOH	5	2.0	1/Bag - 12/Box	28CFFDD050T-CC61
LSH/UPC-LSH/UPC Simplex Multimode Cord LSOH	10	2.0	1/Bag - 12/Box	28CFFDD100T-CC61
LSH/UPC-ST/UPC Simplex Multimode Cord LSOH	1	2.0	1/Bag - 12/Box	28CFFDA010T-CC61
LSH/UPC-ST/UPC Simplex Multimode Cord LSOH	2	2.0	1/Bag - 12/Box	28CFFDA020T-CC61
LSH/UPC-ST/UPC Simplex Multimode Cord LSOH	3	2.0	1/Bag - 12/Box	28CFFDA030T-CC61
LSH/UPC-ST/UPC Simplex Multimode Cord LSOH	5	2.0	1/Bag - 12/Box	28CFFDA050T-CC61
LSH/UPC-ST/UPC Simplex Multimode Cord LSOH	10	2.0	1/Bag - 12/Box	28CFFDA100T-CC61
LSH/UPC-FC/UPC Simplex Multimode Cord LSOH	1	2.0	1/Bag - 12/Box	28CFFDE010T-CC61
LSH/UPC-FC/UPC Simplex Multimode Cord LSOH	2	2.0	1/Bag - 12/Box	28CFFDE020T-CC61
LSH/UPC-FC/UPC Simplex Multimode Cord LSOH	3	2.0	1/Bag - 12/Box	28CFFDE030T-CC61
LSH/UPC-FC/UPC Simplex Multimode Cord LSOH	5	2.0	1/Bag - 12/Box	28CFFDE050T-CC61
LSH/UPC-FC/UPC Simplex Multimode Cord LSOH	10	2.0	1/Bag - 12/Box	28CFFDE100T-CC61
LSH/UPC-LC/UPC Simplex Multimode Cord LSOH	1	2.0	1/Bag - 12/Box	28CFFDP010T-CC61
LSH/UPC-LC/UPC Simplex Multimode Cord LSOH	2	2.0	1/Bag - 12/Box	28CFFDP020T-CC61
LSH/UPC-LC/UPC Simplex Multimode Cord LSOH	3	2.0	1/Bag - 12/Box	28CFFDP030T-CC61
LSH/UPC-LC/UPC Simplex Multimode Cord LSOH	5	2.0	1/Bag - 12/Box	28CFFDP050T-CC61
LSH/UPC-LC/UPC Simplex Multimode Cord LSOH	10	2.0	1/Bag - 12/Box	28CFFDP100T-CC61

#### Optional Transmission Properties

Suffix	Connector IL (dB)	Connector RL (dB)
T = Standard Loss connector	0.30 max. 0.20 Typical	20 min.
S = Low-Loss connector	0.15 max. 0.10 Typical	20 min.

## AT&T FiberLine

### Fiber Optic LSH/UPC (E-2000™) Simplex Singlemode Cords

#### Description

This page shows some of the available combinations of AT&T fiber-optic Simplex Singlemode Cords made with singlemode fibers and terminated with LSH/UPC connectors.

Additional combinations can be selected using the information on page B.3.

Fiber type	Select a singlemode fiber from page B.6.
Buffer type	900µ tight flame retardant LSH coating
Strength elements	Served aramid and glass yarn
Minicable jacket material	Flame retardant LSH compound

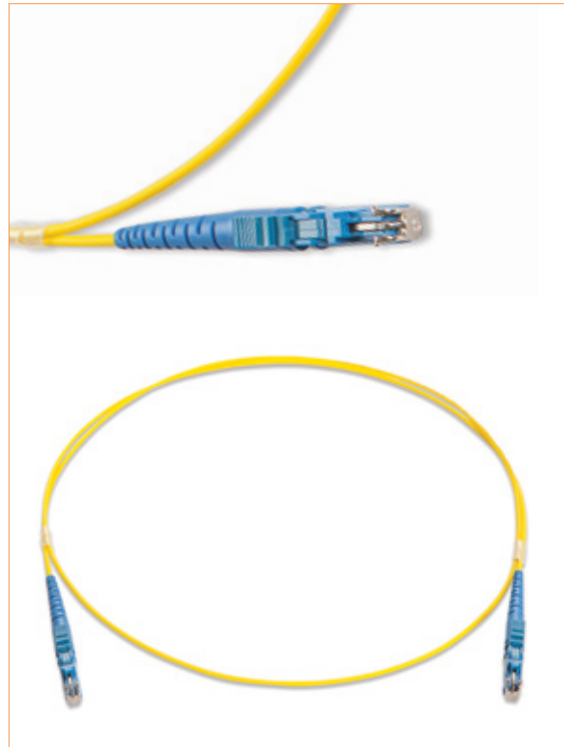
#### Standard & EU Directives Conformance

- Relevant sections of ANSI/TIA-568-C.3
- Relevant sections of ISO/IEC 11801
- Relevant sections of EN 50173
- Relevant sections of ANSI/TIA/EIA-604 (FOCIS)
- Relevant sections of IEC 60874
- Relevant sections of IEC 61753
- Relevant sections of IEC 61754
- IEC 60332-1 flame test
- IEC 60754 & IEC 61034
- EU Directive 2011/65/EU (RoHS-2)

#### Mechanical Properties

Short term bend radius	20xOD mm
Long term bend radius	10xOD mm
Operating temperature	-20 to +60C
Default jacket color	Yellow

E-2000™ is a trademark of Diamond SA



#### Ordering Information

FF: Fiber Type

Description	Length m	Cable OD mm	Packaging	P/N
LSH/UPC-LSH/UPC Simplex Singlemode Cord LS0H	1	2.0	1/Bag - 12/Box	28CFLL010T-YL61
LSH/UPC-LSH/UPC Simplex Singlemode Cord LS0H	2	2.0	1/Bag - 12/Box	28CFLL020T-YL61
LSH/UPC-LSH/UPC Simplex Singlemode Cord LS0H	3	2.0	1/Bag - 12/Box	28CFLL030T-YL61
LSH/UPC-LSH/UPC Simplex Singlemode Cord LS0H	5	2.0	1/Bag - 12/Box	28CFLL050T-YL61
LSH/UPC-LSH/UPC Simplex Singlemode Cord LS0H	10	2.0	1/Bag - 12/Box	28CFLL100T-YL61
LSH/UPC-ST/UPC Simplex Singlemode Cord LS0H	1	2.0	1/Bag - 12/Box	28CFFLC010T-YL61
LSH/UPC-ST/UPC Simplex Singlemode Cord LS0H	2	2.0	1/Bag - 12/Box	28CFFLC020T-YL61
LSH/UPC-ST/UPC Simplex Singlemode Cord LS0H	3	2.0	1/Bag - 12/Box	28CFFLC030T-YL61
LSH/UPC-ST/UPC Simplex Singlemode Cord LS0H	5	2.0	1/Bag - 12/Box	28CFFLC050T-YL61
LSH/UPC-ST/UPC Simplex Singlemode Cord LS0H	10	2.0	1/Bag - 12/Box	28CFFLC100T-YL61
LSH/UPC-FC/APC Simplex Singlemode Cord LS0H	1	2.0	1/Bag - 12/Box	28CFFLG010T-YL61
LSH/UPC-FC/APC Simplex Singlemode Cord LS0H	2	2.0	1/Bag - 12/Box	28CFFLG020T-YL61
LSH/UPC-FC/APC Simplex Singlemode Cord LS0H	3	2.0	1/Bag - 12/Box	28CFFLG030T-YL61
LSH/UPC-FC/APC Simplex Singlemode Cord LS0H	5	2.0	1/Bag - 12/Box	28CFFLG050T-YL61
LSH/UPC-FC/APC Simplex Singlemode Cord LS0H	10	2.0	1/Bag - 12/Box	28CFFLG100T-YL61
LSH/UPC-LC/APC Simplex Singlemode Cord LS0H	1	2.0	1/Bag - 12/Box	28CFFLR010T-YL61
LSH/UPC-LC/APC Simplex Singlemode Cord LS0H	2	2.0	1/Bag - 12/Box	28CFFLR020T-YL61
LSH/UPC-LC/APC Simplex Singlemode Cord LS0H	3	2.0	1/Bag - 12/Box	28CFFLR030T-YL61
LSH/UPC-LC/APC Simplex Singlemode Cord LS0H	5	2.0	1/Bag - 12/Box	28CFFLR050T-YL61
LSH/UPC-LC/APC Simplex Singlemode Cord LS0H	10	2.0	1/Bag - 12/Box	28CFFLR100T-YL61
LSH/UPC-LSH/APC Simplex Singlemode Cord LS0H	1	2.0	1/Bag - 12/Box	28CFFLM010T-YL61
LSH/UPC-LSH/APC Simplex Singlemode Cord LS0H	2	2.0	1/Bag - 12/Box	28CFFLM020T-YL61
LSH/UPC-LSH/APC Simplex Singlemode Cord LS0H	3	2.0	1/Bag - 12/Box	28CFFLM030T-YL61
LSH/UPC-LSH/APC Simplex Singlemode Cord LS0H	5	2.0	1/Bag - 12/Box	28CFFLM050T-YL61
LSH/UPC-LSH/APC Simplex Singlemode Cord LS0H	10	2.0	1/Bag - 12/Box	28CFFLM100T-YL61

#### Optional Transmission Properties - UPC Connectors

Suffix	Connector IL (dB)	Connector RL (dB)
T = Standard Loss connector	0.30 max. 0.20 Typical	26 min. 60 Typical
S = Low-Loss connector	0.15 max. 0.10 Typical	26 min. 60 Typical

## AT&T FiberLine

### Fiber Optic SC/UPC Duplex Multimode Zip-Cords

#### Description

This page shows some of the available combinations of AT&T fiber-optic Duplex Multimode Zip-Cords made with multimode fibers and terminated with SC/UPC connectors.

Additional combinations can be selected using the information on page B.3.

Fiber type	Select a multimode fiber from page B.6.
Buffer type	900µ tight flame retardant LSOH coating
Strength elements	Served aramid and glass yarn
Minicable jacket material	Flame retardant LSOH compound

#### Standard & EU Directives Conformance

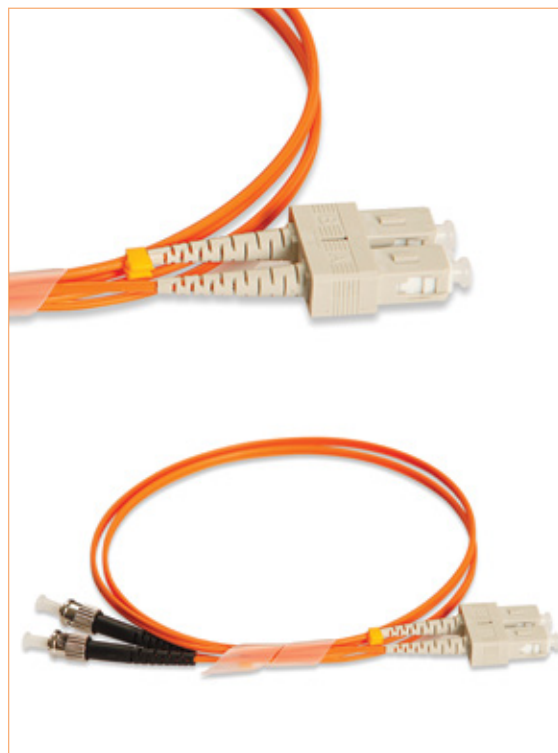
- Relevant sections of ANSI/TIA-568-C.3
- Relevant sections of ISO/IEC 11801
- Relevant sections of EN 50173
- Relevant sections of ANSI/TIA/EIA-604 (FOCIS)
- Relevant sections of IEC 60874
- Relevant sections of IEC 61753
- Relevant sections of IEC 61754
- IEC 60332-1 flame test
- IEC 60754 & IEC 61034
- EU Directive 2011/65/EU (RoHS-2)

#### Mechanical Properties

Short term bend radius	20xOD mm
Long term bend radius	10xOD mm
Operating temperature	-20 to +60C
	MM OM1 & OM2: Orange
Default jacket colors	MM OM3: Turquoise
	MM OM4: Purple

#### Ordering Information

FF: Fiber Type CC: Jacket Color



Description	Length m	Cable OD mm	Packaging	P/N
SC/UPC-SC/UPC Duplex Multimode Zip-Cord LSOH	1	3.0x6.0	1/Bag - 12/Box	28DFFHH010T-CC61
SC/UPC-SC/UPC Duplex Multimode Zip-Cord LSOH	2	3.0x6.0	1/Bag - 12/Box	28DFFHH020T-CC61
SC/UPC-SC/UPC Duplex Multimode Zip-Cord LSOH	3	3.0x6.0	1/Bag - 12/Box	28DFFHH030T-CC61
SC/UPC-SC/UPC Duplex Multimode Zip-Cord LSOH	5	3.0x6.0	1/Bag - 12/Box	28DFFHH050T-CC61
SC/UPC-SC/UPC Duplex Multimode Zip-Cord LSOH	10	3.0x6.0	1/Bag - 12/Box	28DFFHH100T-CC61
SC/UPC-ST/UPC Duplex Multimode Zip-Cord LSOH	1	3.0x6.0	1/Bag - 12/Box	28DFFHA010T-CC61
SC/UPC-ST/UPC Duplex Multimode Zip-Cord LSOH	2	3.0x6.0	1/Bag - 12/Box	28DFFHA020T-CC61
SC/UPC-ST/UPC Duplex Multimode Zip-Cord LSOH	3	3.0x6.0	1/Bag - 12/Box	28DFFHA030T-CC61
SC/UPC-ST/UPC Duplex Multimode Zip-Cord LSOH	5	3.0x6.0	1/Bag - 12/Box	28DFFHA050T-CC61
SC/UPC-ST/UPC Duplex Multimode Zip-Cord LSOH	10	3.0x6.0	1/Bag - 12/Box	28DFFHA100T-CC61
SC/UPC-FC/UPC Duplex Multimode Zip-Cord LSOH	1	3.0x6.0	1/Bag - 12/Box	28DFFHE010T-CC61
SC/UPC-FC/UPC Duplex Multimode Zip-Cord LSOH	2	3.0x6.0	1/Bag - 12/Box	28DFFHE020T-CC61
SC/UPC-FC/UPC Duplex Multimode Zip-Cord LSOH	3	3.0x6.0	1/Bag - 12/Box	28DFFHE030T-CC61
SC/UPC-FC/UPC Duplex Multimode Zip-Cord LSOH	5	3.0x6.0	1/Bag - 12/Box	28DFFHE050T-CC61
SC/UPC-FC/UPC Duplex Multimode Zip-Cord LSOH	10	3.0x6.0	1/Bag - 12/Box	28DFFHE100T-CC61
SC/UPC-LC/UPC Duplex Multimode Zip-Cord LSOH	1	2.0x4.0	1/Bag - 12/Box	28DFFHP010T-CC61
SC/UPC-LC/UPC Duplex Multimode Zip-Cord LSOH	2	2.0x4.0	1/Bag - 12/Box	28DFFHP020T-CC61
SC/UPC-LC/UPC Duplex Multimode Zip-Cord LSOH	3	2.0x4.0	1/Bag - 12/Box	28DFFHP030T-CC61
SC/UPC-LC/UPC Duplex Multimode Zip-Cord LSOH	5	2.0x4.0	1/Bag - 12/Box	28DFFHP050T-CC61
SC/UPC-LC/UPC Duplex Multimode Zip-Cord LSOH	10	2.0x4.0	1/Bag - 12/Box	28DFFHP100T-CC61
SC/UPC-LSH/UPC Duplex Multimode Zip-Cord LSOH	1	2.0x4.0	1/Bag - 12/Box	28DFFHD010T-CC61
SC/UPC-LSH/UPC Duplex Multimode Zip-Cord LSOH	2	2.0x4.0	1/Bag - 12/Box	28DFFHD020T-CC61
SC/UPC-LSH/UPC Duplex Multimode Zip-Cord LSOH	3	2.0x4.0	1/Bag - 12/Box	28DFFHD030T-CC61
SC/UPC-LSH/UPC Duplex Multimode Zip-Cord LSOH	5	2.0x4.0	1/Bag - 12/Box	28DFFHD050T-CC61
SC/UPC-LSH/UPC Duplex Multimode Zip-Cord LSOH	10	2.0x4.0	1/Bag - 12/Box	28DFFHD100T-CC61
SC/UPC-MTRJ Female Duplex Multimode Zip-Cord LSOH	1	1.6x3.2	1/Bag - 12/Box	28DFFHT010T-CC61
SC/UPC-MTRJ Female Duplex Multimode Zip-Cord LSOH	2	1.6x3.2	1/Bag - 12/Box	28DFFHT020T-CC61
SC/UPC-MTRJ Female Duplex Multimode Zip-Cord LSOH	3	1.6x3.2	1/Bag - 12/Box	28DFFHT030T-CC61
SC/UPC-MTRJ Female Duplex Multimode Zip-Cord LSOH	5	1.6x3.2	1/Bag - 12/Box	28DFFHT050T-CC61
SC/UPC-MTRJ Female Duplex Multimode Zip-Cord LSOH	10	1.6x3.2	1/Bag - 12/Box	28DFFHT100T-CC61

#### Optional Transmission Properties

Suffix	Connector IL (dB)	Connector RL (dB)
T = Standard Loss connector	0.30 max. 0.20 Typical	20 min.
S = Low-Loss connector	0.15 max. 0.10 Typical	20 min.



## AT&T FiberLine

### Fiber Optic SC/UPC Duplex Singlemode Zip-Cords

#### Description

This page shows some of the available combinations of AT&T fiber-optic Duplex Singlemode Zip-Cords made with singlemode fibers and terminated with SC/UPC connectors.

Additional combinations can be selected using the information on page B.3.

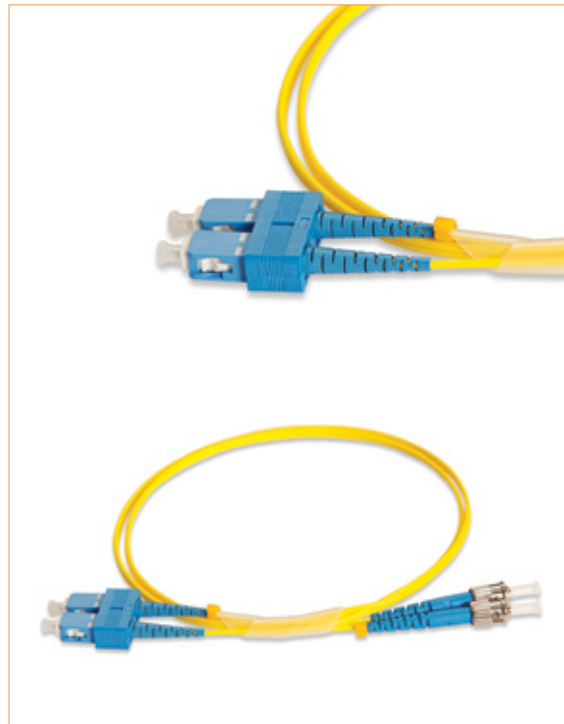
Fiber type	Select a singlemode fiber from page B.6.
Buffer type	900 $\mu$ tight flame retardant LSOH coating
Strength elements	Served aramid and glass yarn
Minicable jacket material	Flame retardant LSOH compound

#### Standard & EU Directives Conformance

- Relevant sections of ANSI/TIA-568-C.3
- Relevant sections of ISO/IEC 11801
- Relevant sections of EN 50173
- Relevant sections of ANSI/TIA/EIA-604 (FOCIS)
- Relevant sections of IEC 60874
- Relevant sections of IEC 61753
- Relevant sections of IEC 61754
- IEC 60332-1 flame test
- IEC 60754 & IEC 61034
- EU Directive 2011/65/EU (RoHS-2)

#### Mechanical Properties

Short term bend radius	20xOD mm
Long term bend radius	10xOD mm
Operating temperature	-20 to +60C
Default jacket color	Yellow



#### Ordering Information

FF: Fiber Type

Description	Length m	Cable OD mm	Packaging	P/N
SC/UPC-SC/UPC Duplex Singlemode Zip-Cord LSOH	1	3.0x6.0	1/Bag - 12/Box	28DFFJ010T-YL61
SC/UPC-SC/UPC Duplex Singlemode Zip-Cord LSOH	2	3.0x6.0	1/Bag - 12/Box	28DFFJ020T-YL61
SC/UPC-SC/UPC Duplex Singlemode Zip-Cord LSOH	3	3.0x6.0	1/Bag - 12/Box	28DFFJ030T-YL61
SC/UPC-SC/UPC Duplex Singlemode Zip-Cord LSOH	5	3.0x6.0	1/Bag - 12/Box	28DFFJ050T-YL61
SC/UPC-SC/UPC Duplex Singlemode Zip-Cord LSOH	10	3.0x6.0	1/Bag - 12/Box	28DFFJ100T-YL61
SC/UPC-ST/UPC Duplex Singlemode Zip-Cord LSOH	1	3.0x6.0	1/Bag - 12/Box	28DFFJC010T-YL61
SC/UPC-ST/UPC Duplex Singlemode Zip-Cord LSOH	2	3.0x6.0	1/Bag - 12/Box	28DFFJC020T-YL61
SC/UPC-ST/UPC Duplex Singlemode Zip-Cord LSOH	3	3.0x6.0	1/Bag - 12/Box	28DFFJC030T-YL61
SC/UPC-ST/UPC Duplex Singlemode Zip-Cord LSOH	5	3.0x6.0	1/Bag - 12/Box	28DFFJC050T-YL61
SC/UPC-ST/UPC Duplex Singlemode Zip-Cord LSOH	10	3.0x6.0	1/Bag - 12/Box	28DFFJC100T-YL61
SC/UPC-FC/UPC Duplex Singlemode Zip-Cord LSOH	1	3.0x6.0	1/Bag - 12/Box	28DFFJF010T-YL61
SC/UPC-FC/UPC Duplex Singlemode Zip-Cord LSOH	2	3.0x6.0	1/Bag - 12/Box	28DFFJF020T-YL61
SC/UPC-FC/UPC Duplex Singlemode Zip-Cord LSOH	3	3.0x6.0	1/Bag - 12/Box	28DFFJF030T-YL61
SC/UPC-FC/UPC Duplex Singlemode Zip-Cord LSOH	5	3.0x6.0	1/Bag - 12/Box	28DFFJF050T-YL61
SC/UPC-FC/UPC Duplex Singlemode Zip-Cord LSOH	10	3.0x6.0	1/Bag - 12/Box	28DFFJF100T-YL61
SC/UPC-LC/UPC Duplex Singlemode Zip-Cord LSOH	1	2.0x4.0	1/Bag - 12/Box	28DFFJQ010T-YL61
SC/UPC-LC/UPC Duplex Singlemode Zip-Cord LSOH	2	2.0x4.0	1/Bag - 12/Box	28DFFJQ020T-YL61
SC/UPC-LC/UPC Duplex Singlemode Zip-Cord LSOH	3	2.0x4.0	1/Bag - 12/Box	28DFFJQ030T-YL61
SC/UPC-LC/UPC Duplex Singlemode Zip-Cord LSOH	5	2.0x4.0	1/Bag - 12/Box	28DFFJQ050T-YL61
SC/UPC-LC/UPC Duplex Singlemode Zip-Cord LSOH	10	2.0x4.0	1/Bag - 12/Box	28DFFJQ100T-YL61
SC/UPC-LSH/UPC Duplex Singlemode Zip-Cord LSOH	1	2.0x4.0	1/Bag - 12/Box	28DFFJL010T-YL61
SC/UPC-LSH/UPC Duplex Singlemode Zip-Cord LSOH	2	2.0x4.0	1/Bag - 12/Box	28DFFJL020T-YL61
SC/UPC-LSH/UPC Duplex Singlemode Zip-Cord LSOH	3	2.0x4.0	1/Bag - 12/Box	28DFFJL030T-YL61
SC/UPC-LSH/UPC Duplex Singlemode Zip-Cord LSOH	5	2.0x4.0	1/Bag - 12/Box	28DFFJL050T-YL61
SC/UPC-LSH/UPC Duplex Singlemode Zip-Cord LSOH	10	2.0x4.0	1/Bag - 12/Box	28DFFJL100T-YL61
SC/UPC-MTRJ Female Duplex Singlemode Zip-Cord LSOH	1	1.6x3.2	1/Bag - 12/Box	28DFFJT010T-YL61
SC/UPC-MTRJ Female Duplex Singlemode Zip-Cord LSOH	2	1.6x3.2	1/Bag - 12/Box	28DFFJT020T-YL61
SC/UPC-MTRJ Female Duplex Singlemode Zip-Cord LSOH	3	1.6x3.2	1/Bag - 12/Box	28DFFJT030T-YL61
SC/UPC-MTRJ Female Duplex Singlemode Zip-Cord LSOH	5	1.6x3.2	1/Bag - 12/Box	28DFFJT050T-YL61
SC/UPC-MTRJ Female Duplex Singlemode Zip-Cord LSOH	10	1.6x3.2	1/Bag - 12/Box	28DFFJT100T-YL61

#### Optional Transmission Properties - UPC Connectors

Suffix	Connector IL (dB)	Connector RL (dB)
T = Standard Loss connector	0.30 max. 0.20 Typical	26 min. 60 Typical
S = Low-Loss connector	0.15 max. 0.10 Typical	26 min. 60 Typical

## AT&T FiberLine

### Fiber Optic LC/UPC Duplex Multimode Zip-Cords

#### Description

This page shows some of the available combinations of AT&T fiber-optic Duplex Multimode Zip-Cords made with multimode fibers and terminated with LC/UPC connectors.

Additional combinations can be selected using the information on page B.3.

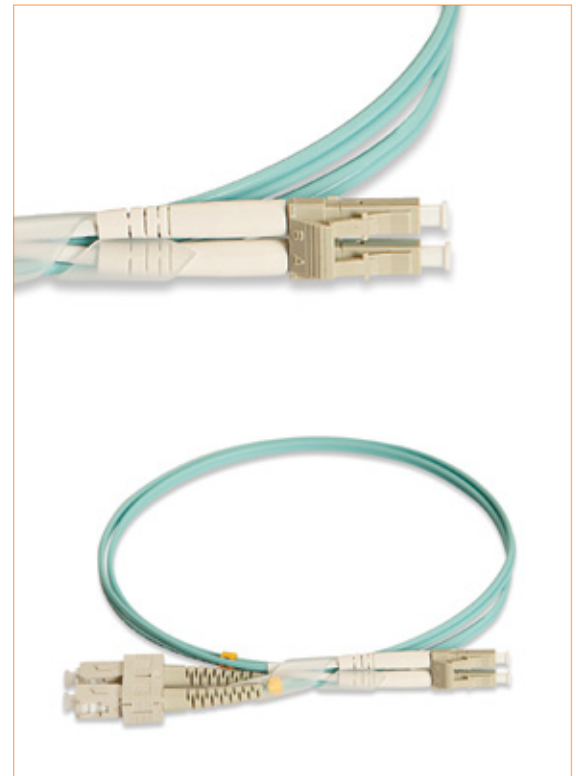
Fiber type	Select a multimode fiber from page B.6.
Buffer type	900µ tight flame retardant LSOH coating
Strength elements	Served aramid and glass yarn
Minicable jacket material	Flame retardant LSOH compound

#### Standard & EU Directives Conformance

- Relevant sections of ANSI/TIA-568-C.3
- Relevant sections of ISO/IEC 11801
- Relevant sections of EN 50173
- Relevant sections of ANSI/TIA/EIA-604 (FOCIS)
- Relevant sections of IEC 60874
- Relevant sections of IEC 61753
- Relevant sections of IEC 61754
- IEC 60332-1 flame test
- IEC 60754 & IEC 61034
- EU Directive 2011/65/EU (RoHS-2)

#### Mechanical Properties

Short term bend radius	20xOD mm
Long term bend radius	10xOD mm
Operating temperature	-20 to +60C
Default jacket colors	MM OM1 & OM2: Orange
	MM OM3: Turquoise
	MM OM4: Purple



#### Ordering Information

FF: Fiber Type    CC: Jacket Color

Description	Length m	Cable OD mm	Packaging	P/N
LC/UPC-LC/UPC Duplex Multimode Zip-Cord LSOH	1	2.0x4.0	1/Bag - 12/Box	28DFFPP010T-CC61
LC/UPC-LC/UPC Duplex Multimode Zip-Cord LSOH	2	2.0x4.0	1/Bag - 12/Box	28DFFPP020T-CC61
LC/UPC-LC/UPC Duplex Multimode Zip-Cord LSOH	3	2.0x4.0	1/Bag - 12/Box	28DFFPP030T-CC61
LC/UPC-LC/UPC Duplex Multimode Zip-Cord LSOH	5	2.0x4.0	1/Bag - 12/Box	28DFFPP050T-CC61
LC/UPC-LC/UPC Duplex Multimode Zip-Cord LSOH	10	2.0x4.0	1/Bag - 12/Box	28DFFPP100T-CC61
LC/UPC-ST/UPC Duplex Multimode Zip-Cord LSOH	1	2.0x4.0	1/Bag - 12/Box	28DFFPA010T-CC61
LC/UPC-ST/UPC Duplex Multimode Zip-Cord LSOH	2	2.0x4.0	1/Bag - 12/Box	28DFFPA020T-CC61
LC/UPC-ST/UPC Duplex Multimode Zip-Cord LSOH	3	2.0x4.0	1/Bag - 12/Box	28DFFPA030T-CC61
LC/UPC-ST/UPC Duplex Multimode Zip-Cord LSOH	5	2.0x4.0	1/Bag - 12/Box	28DFFPA050T-CC61
LC/UPC-ST/UPC Duplex Multimode Zip-Cord LSOH	10	2.0x4.0	1/Bag - 12/Box	28DFFPA100T-CC61
LC/UPC-FC/UPC Duplex Multimode Zip-Cord LSOH	1	2.0x4.0	1/Bag - 12/Box	28DFFPE010T-CC61
LC/UPC-FC/UPC Duplex Multimode Zip-Cord LSOH	2	2.0x4.0	1/Bag - 12/Box	28DFFPE020T-CC61
LC/UPC-FC/UPC Duplex Multimode Zip-Cord LSOH	3	2.0x4.0	1/Bag - 12/Box	28DFFPE030T-CC61
LC/UPC-FC/UPC Duplex Multimode Zip-Cord LSOH	5	2.0x4.0	1/Bag - 12/Box	28DFFPE050T-CC61
LC/UPC-FC/UPC Duplex Multimode Zip-Cord LSOH	10	2.0x4.0	1/Bag - 12/Box	28DFFPE100T-CC61
LC/UPC-LSH/UPC Duplex Multimode Zip-Cord LSOH	1	2.0x4.0	1/Bag - 12/Box	28DFFPD010T-CC61
LC/UPC-LSH/UPC Duplex Multimode Zip-Cord LSOH	2	2.0x4.0	1/Bag - 12/Box	28DFFPD020T-CC61
LC/UPC-LSH/UPC Duplex Multimode Zip-Cord LSOH	3	2.0x4.0	1/Bag - 12/Box	28DFFPD030T-CC61
LC/UPC-LSH/UPC Duplex Multimode Zip-Cord LSOH	5	2.0x4.0	1/Bag - 12/Box	28DFFPD050T-CC61
LC/UPC-LSH/UPC Duplex Multimode Zip-Cord LSOH	10	2.0x4.0	1/Bag - 12/Box	28DFFPD100T-CC61
LC/UPC-MTRJ Female Duplex Multimode Zip-Cord LSOH	1	1.6x3.2	1/Bag - 12/Box	28DFFPT010T-CC61
LC/UPC-MTRJ Female Duplex Multimode Zip-Cord LSOH	2	1.6x3.2	1/Bag - 12/Box	28DFFPT020T-CC61
LC/UPC-MTRJ Female Duplex Multimode Zip-Cord LSOH	3	1.6x3.2	1/Bag - 12/Box	28DFFPT030T-CC61
LC/UPC-MTRJ Female Duplex Multimode Zip-Cord LSOH	5	1.6x3.2	1/Bag - 12/Box	28DFFPT050T-CC61
LC/UPC-MTRJ Female Duplex Multimode Zip-Cord LSOH	10	1.6x3.2	1/Bag - 12/Box	28DFFPT100T-CC61

#### Optional Transmission Properties

Suffix	Connector IL (dB)	Connector RL (dB)
T = Standard Loss connector	0.30 max. 0.20 Typical	20 min.
S = Low-Loss connector	0.15 max. 0.10 Typical	20 min.
L = Super Low-Loss connector (LC Only)	0.10 max. 0.07 Typical	20 min.

## AT&T FiberLine

### Fiber Optic LC/UPC Duplex Multimode Uniboot Cords (OD 2.0mm)

#### Description

This page shows some of the available combinations of AT&T fiber-optic Duplex Multimode Uniboot made with multimode fibers and terminated with LC/UPC connectors. Polarity switch is enabled.

Additional combinations can be selected using the information on page B.3.

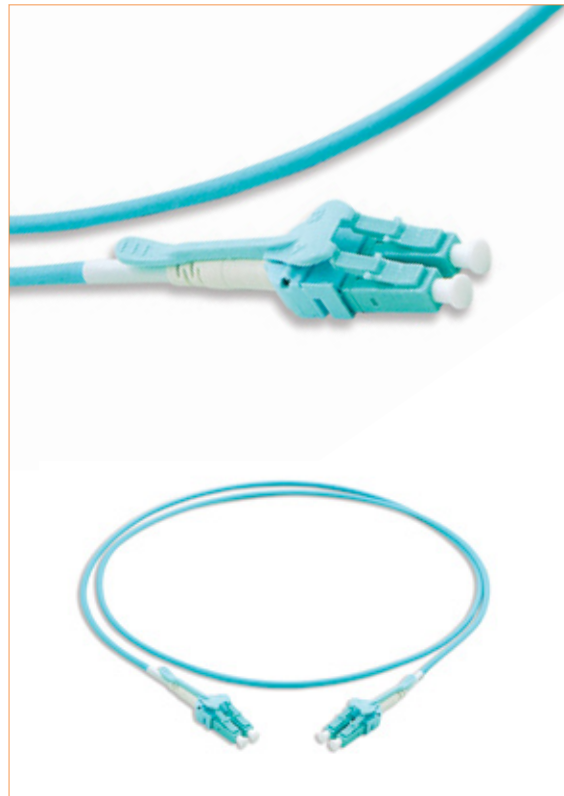
Fiber type	Select a multimode fiber from page B.6.
Buffer type	None
Strength elements	Served aramid and glass yarn
Minicable jacket material	Flame retardant LSOH compound

#### Standard & EU Directives Conformance

- Relevant sections of ANSI/TIA-568-C.3
- Relevant sections of ISO/IEC 11801
- Relevant sections of EN 50173
- Relevant sections of ANSI/TIA/EIA-604 (FOCIS)
- Relevant sections of IEC 60874
- Relevant sections of IEC 61753
- Relevant sections of IEC 61754
- IEC 60332-1 flame test
- IEC 60754 & IEC 61034
- EU Directive 2011/65/EU (RoHS-2)

#### Mechanical Properties

Short term bend radius	20xOD mm
Long term bend radius	10xOD mm
Operating temperature	-20 to +70C
	MM OM1 & OM2: Orange
Default jacket color	MM OM3: Turquoise
	MM OM4: Purple



#### Optional Transmission Properties

Suffix	Connector IL (dB)	Connector RL (dB)
T = Standard Loss connector	0.30 max. 0.20 Typical	20 min.
S = Low-Loss connector	0.15 max. 0.10 Typical	20 min.
L = Super Low-Loss connector	0.10 max. 0.07 Typical	20 min.

#### Ordering Information

FF: Fiber Type CC: Jacket Color

Description	Length m	Cable OD mm	Packaging	P/N
LC/UPC-LC/UPC Duplex Multimode Uniboot Cord LSOH	1	2.0	1/Bag - 12/Box	28UFFPP010T-CC61
LC/UPC-LC/UPC Duplex Multimode Uniboot Cord LSOH	2	2.0	1/Bag - 12/Box	28UFFPP020T-CC61
LC/UPC-LC/UPC Duplex Multimode Uniboot Cord LSOH	3	2.0	1/Bag - 12/Box	28UFFPP030T-CC61
LC/UPC-LC/UPC Duplex Multimode Uniboot Cord LSOH	5	2.0	1/Bag - 12/Box	28UFFPP050T-CC61
LC/UPC-LC/UPC Duplex Multimode Uniboot Cord LSOH	10	2.0	1/Bag - 12/Box	28UFFPP100T-CC61

## AT&T FiberLine

### Fiber Optic LC/UPC Duplex Multimode Uniboot Cords (OD 3.0mm)

#### Description

This page shows some of the available combinations of AT&T fiber-optic Duplex Multimode Uniboot made with multimode fibers and terminated with LC/UPC connectors. Polarity switch is enabled.

Additional combinations can be selected using the information on page B.3.

Fiber type	Select a multimode fiber from page B.6.
Buffer type	900 $\mu$ tight flame retardant LSOH coating
Strength elements	Served aramid and glass yarn
Minicable jacket material	Flame retardant LSOH compound

#### Standard & EU Directives Conformance

- Relevant sections of ANSI/TIA-568-C.3
- Relevant sections of ISO/IEC 11801
- Relevant sections of EN 50173
- Relevant sections of ANSI/TIA/EIA-604 (FOCIS)
- Relevant sections of IEC 60874
- Relevant sections of IEC 61753
- Relevant sections of IEC 61754
- IEC 60332-1 flame test
- IEC 60754 & IEC 61034
- EU Directive 2011/65/EU (RoHS-2)

#### Mechanical Properties

Short term bend radius	20xOD mm
Long term bend radius	10xOD mm
Operating temperature	-20 to +70C
Default jacket color	MM OM1 & OM2: Orange MM OM3: Turquoise MM OM4: Purple



#### Optional Transmission Properties

Suffix	Connector IL (dB)	Connector RL (dB)
T = Standard Loss connector	0.30 max. 0.20 Typical	20 min.
S = Low-Loss connector	0.15 max. 0.10 Typical	20 min.
L = Super Low-Loss connector	0.10 max. 0.07 Typical	20 min.

#### Ordering Information

FF: Fiber Type CC: Jacket Color

Description	Length m	Cable OD mm	Packaging	P/N
LC/UPC-LC/UPC Duplex Multimode Uniboot Cord LSOH	1	3.0	1/Bag - 12/Box	28TFFPP010T-CC61
LC/UPC-LC/UPC Duplex Multimode Uniboot Cord LSOH	2	3.0	1/Bag - 12/Box	28TFFPP020T-CC61
LC/UPC-LC/UPC Duplex Multimode Uniboot Cord LSOH	3	3.0	1/Bag - 12/Box	28TFFPP030T-CC61
LC/UPC-LC/UPC Duplex Multimode Uniboot Cord LSOH	5	3.0	1/Bag - 12/Box	28TFFPP050T-CC61
LC/UPC-LC/UPC Duplex Multimode Uniboot Cord LSOH	10	3.0	1/Bag - 12/Box	28TFFPP100T-CC61

## AT&T FiberLine

### Fiber Optic LC/UPC Duplex Singlemode Zip-Cords

#### Description

This page shows some of the available combinations of AT&T fiber-optic Duplex Singlemode Zip-Cords made with singlemode fibers and terminated with LC/UPC connectors.

Additional combinations can be selected using the information on page B.3.

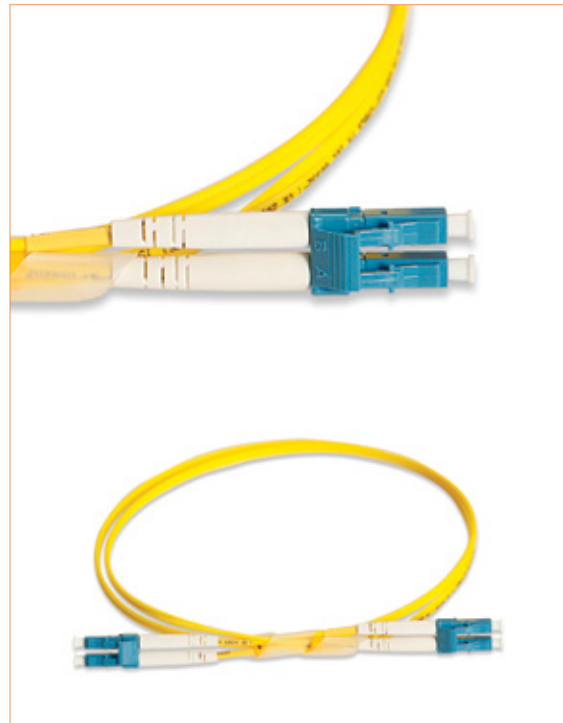
Fiber type	Select a singlemode fiber from page B.6.
Buffer type	900µ tight flame retardant LSOH coating
Strength elements	Served aramid and glass yarn
Minicable jacket material	Flame retardant LSOH compound

#### Standard & EU Directives Conformance

- Relevant sections of ANSI/TIA-568-C.3
- Relevant sections of ISO/IEC 11801
- Relevant sections of EN 50173
- Relevant sections of ANSI/TIA/EIA-604 (FOCIS)
- Relevant sections of IEC 60874
- Relevant sections of IEC 61753
- Relevant sections of IEC 61754
- IEC 60332-1 flame test
- IEC 60754 & IEC 61034
- EU Directive 2011/65/EU (RoHS-2)

#### Mechanical Properties

Short term bend radius	20xOD mm
Long term bend radius	10xOD mm
Operating temperature	-20 to +60C
Default jacket color	Yellow



#### Ordering Information

FF: Fiber Type

Description	Length m	Cable OD mm	Packaging	P/N
LC/UPC-LC/UPC Duplex Singlemode Zip-Cord LSOH	1	2.0x4.0	1/Bag - 12/Box	28DFFQQ010T-YL61
LC/UPC-LC/UPC Duplex Singlemode Zip-Cord LSOH	2	2.0x4.0	1/Bag - 12/Box	28DFFQQ020T-YL61
LC/UPC-LC/UPC Duplex Singlemode Zip-Cord LSOH	3	2.0x4.0	1/Bag - 12/Box	28DFFQQ030T-YL61
LC/UPC-LC/UPC Duplex Singlemode Zip-Cord LSOH	5	2.0x4.0	1/Bag - 12/Box	28DFFQQ050T-YL61
LC/UPC-LC/UPC Duplex Singlemode Zip-Cord LSOH	10	2.0x4.0	1/Bag - 12/Box	28DFFQQ100T-YL61
LC/UPC-ST/UPC Duplex Singlemode Zip-Cord LSOH	1	2.0x4.0	1/Bag - 12/Box	28DFFQC010T-YL61
LC/UPC-ST/UPC Duplex Singlemode Zip-Cord LSOH	2	2.0x4.0	1/Bag - 12/Box	28DFFQC020T-YL61
LC/UPC-ST/UPC Duplex Singlemode Zip-Cord LSOH	3	2.0x4.0	1/Bag - 12/Box	28DFFQC030T-YL61
LC/UPC-ST/UPC Duplex Singlemode Zip-Cord LSOH	5	2.0x4.0	1/Bag - 12/Box	28DFFQC050T-YL61
LC/UPC-ST/UPC Duplex Singlemode Zip-Cord LSOH	10	2.0x4.0	1/Bag - 12/Box	28DFFQC100T-YL61
LC/UPC-FC/UPC Duplex Singlemode Zip-Cord LSOH	1	2.0x4.0	1/Bag - 12/Box	28DFFQF010T-YL61
LC/UPC-FC/UPC Duplex Singlemode Zip-Cord LSOH	2	2.0x4.0	1/Bag - 12/Box	28DFFQF020T-YL61
LC/UPC-FC/UPC Duplex Singlemode Zip-Cord LSOH	3	2.0x4.0	1/Bag - 12/Box	28DFFQF030T-YL61
LC/UPC-FC/UPC Duplex Singlemode Zip-Cord LSOH	5	2.0x4.0	1/Bag - 12/Box	28DFFQF050T-YL61
LC/UPC-FC/UPC Duplex Singlemode Zip-Cord LSOH	10	2.0x4.0	1/Bag - 12/Box	28DFFQF100T-YL61
LC/UPC-LSH/UPC Duplex Singlemode Zip-Cord LSOH	1	2.0x4.0	1/Bag - 12/Box	28DFFQL010T-YL61
LC/UPC-LSH/UPC Duplex Singlemode Zip-Cord LSOH	2	2.0x4.0	1/Bag - 12/Box	28DFFQL020T-YL61
LC/UPC-LSH/UPC Duplex Singlemode Zip-Cord LSOH	3	2.0x4.0	1/Bag - 12/Box	28DFFQL030T-YL61
LC/UPC-LSH/UPC Duplex Singlemode Zip-Cord LSOH	5	2.0x4.0	1/Bag - 12/Box	28DFFQL050T-YL61
LC/UPC-LSH/UPC Duplex Singlemode Zip-Cord LSOH	10	2.0x4.0	1/Bag - 12/Box	28DFFQL100T-YL61
LC/UPC-LC/APC Duplex Singlemode Zip-Cord LSOH	1	2.0x4.0	1/Bag - 12/Box	28DFFQR010T-YL61
LC/UPC-LC/APC Duplex Singlemode Zip-Cord LSOH	2	2.0x4.0	1/Bag - 12/Box	28DFFQR020T-YL61
LC/UPC-LC/APC Duplex Singlemode Zip-Cord LSOH	3	2.0x4.0	1/Bag - 12/Box	28DFFQR030T-YL61
LC/UPC-LC/APC Duplex Singlemode Zip-Cord LSOH	5	2.0x4.0	1/Bag - 12/Box	28DFFQR050T-YL61
LC/UPC-LC/APC Duplex Singlemode Zip-Cord LSOH	10	2.0x4.0	1/Bag - 12/Box	28DFFQR100T-YL61
LC/UPC-MTRJ Female Duplex Singlemode Zip-Cord LSOH	1	1.6x3.2	1/Bag - 12/Box	28DFFQT010T-YL61
LC/UPC-MTRJ Female Duplex Singlemode Zip-Cord LSOH	2	1.6x3.2	1/Bag - 12/Box	28DFFQT020T-YL61
LC/UPC-MTRJ Female Duplex Singlemode Zip-Cord LSOH	3	1.6x3.2	1/Bag - 12/Box	28DFFQT030T-YL61
LC/UPC-MTRJ Female Duplex Singlemode Zip-Cord LSOH	5	1.6x3.2	1/Bag - 12/Box	28DFFQT050T-YL61
LC/UPC-MTRJ Female Duplex Singlemode Zip-Cord LSOH	10	1.6x3.2	1/Bag - 12/Box	28DFFQT100T-YL61

#### Optional Transmission Properties - UPC Connectors

Suffix	Connector IL (dB)	Connector RL (dB)
T = Standard Loss connector	0.30 max. 0.20 Typical	50 min. 60 Typical
S = Low-Loss connector	0.15 max. 0.10 Typical	50 min. 60 Typical
L = Super Low-Loss connector (LC Only)	0.10 max. 0.07 Typical	50 min. 60 Typical

## AT&T FiberLine

### Fiber Optic LC/UPC Duplex Singlemode Uniboot Cords (OD 2.0mm)

#### Description

This page shows some of the available combinations of AT&T fiber-optic Duplex Singlemode Uniboot made with singlemode fibers and terminated with LC/UPC connectors. Polarity switch is enabled.

Additional combinations can be selected using the information on page B.3.

Fiber type	Select a singlemode fiber from page B.6.
Buffer type	None
Strength elements	Served aramid and glass yarn
Minicable jacket material	Flame retardant LSOH compound

#### Standard & EU Directives Conformance

- Relevant sections of ANSI/TIA-568-C.3
- Relevant sections of ISO/IEC 11801
- Relevant sections of EN 50173
- Relevant sections of ANSI/TIA/EIA-604 (FOCIS)
- Relevant sections of IEC 60874
- Relevant sections of IEC 61753
- Relevant sections of IEC 61754
- IEC 60332-1 flame test
- IEC 60754 & IEC 61034
- EU Directive 2011/65/EU (RoHS-2)

#### Mechanical Properties

Short term bend radius	20xOD mm
Long term bend radius	10xOD mm
Operating temperature	-20 to +70C
Default jacket colors	Yellow



#### Optional Transmission Properties - UPC Connectors

Suffix	Connector IL (dB)	Connector RL (dB)
T = Standard Loss connector	0.30 max. 0.20 Typical	50 min. 60 Typical
S = Low-Loss connector	0.15 max. 0.10 Typical	50 min. 60 Typical
L = Super Low-Loss connector	0.10 max. 0.07 Typical	50 min. 60 Typical

#### Ordering Information

FF: Fiber Type

Description	Length m	Cable OD mm	Packaging	P/N
LC/UPC-LC/UPC Duplex Singlemode Uniboot Cord LSOH	1	2.0	1/Bag - 12/Box	28UFFQQ010T-YL61
LC/UPC-LC/UPC Duplex Singlemode Uniboot Cord LSOH	2	2.0	1/Bag - 12/Box	28UFFQQ020T-YL61
LC/UPC-LC/UPC Duplex Singlemode Uniboot Cord LSOH	3	2.0	1/Bag - 12/Box	28UFFQQ030T-YL61
LC/UPC-LC/UPC Duplex Singlemode Uniboot Cord LSOH	5	2.0	1/Bag - 12/Box	28UFFQQ050T-YL61
LC/UPC-LC/UPC Duplex Singlemode Uniboot Cord LSOH	10	2.0	1/Bag - 12/Box	28UFFQQ100T-YL61

## AT&T FiberLine

### Fiber Optic LC/UPC Duplex Singlemode Uniboot Cords (OD 3.0mm)

#### Description

This page shows some of the available combinations of AT&T fiber-optic Duplex Singlemode Uniboot made with singlemode fibers and terminated with LC/UPC connectors. Polarity switch is enabled.

Additional combinations can be selected using the information on page B.3.

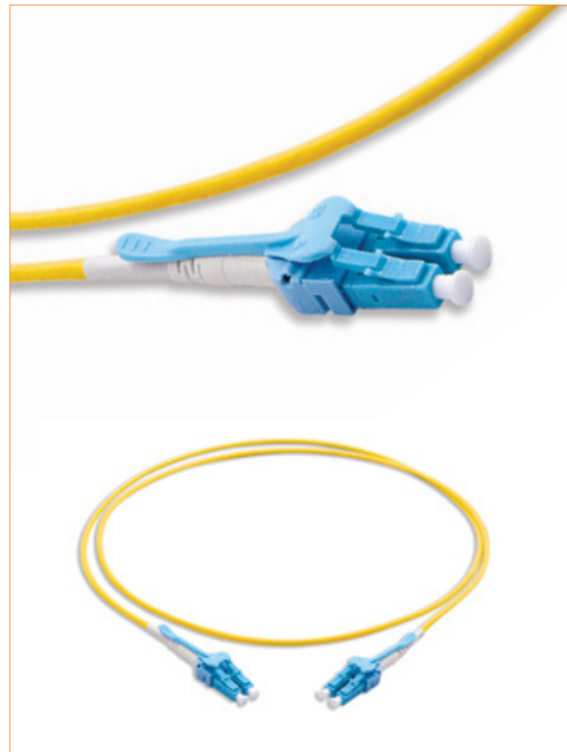
Fiber type	Select a singlemode fiber from page B.6.
Buffer type	900µ tight flame retardant LS0H coating
Strength elements	Served aramid and glass yarn
Minicable jacket material	Flame retardant LS0H compound

#### Standard & EU Directives Conformance

- Relevant sections of ANSI/TIA-568-C.3
- Relevant sections of ISO/IEC 11801
- Relevant sections of EN 50173
- Relevant sections of ANSI/TIA/EIA-604 (FOCIS)
- Relevant sections of IEC 60874
- Relevant sections of IEC 61753
- Relevant sections of IEC 61754
- IEC 60332-1 flame test
- IEC 60754 & IEC 61034
- EU Directive 2011/65/EU (RoHS-2)

#### Mechanical Properties

Short term bend radius	20xOD mm
Long term bend radius	10xOD mm
Operating temperature	-20 to +70C
Default jacket colors	Yellow



#### Optional Transmission Properties - UPC Connectors

Suffix	Connector IL (dB)	Connector RL (dB)
T = Standard Loss connector	0.30 max. 0.20 Typical	50 min. 60 Typical
S = Low-Loss connector	0.15 max. 0.10 Typical	50 min. 60 Typical
L = Super Low-Loss connector	0.10 max. 0.07 Typical	50 min. 60 Typical

#### Ordering Information

FF: Fiber Type

Description	Length m	Cable OD mm	Packaging	P/N
LC/UPC-LC/UPC Duplex Singlemode Uniboot Cord LS0H	1	3.0	1/Bag - 12/Box	28TFFQQ010T-YL61
LC/UPC-LC/UPC Duplex Singlemode Uniboot Cord LS0H	2	3.0	1/Bag - 12/Box	28TFFQQ020T-YL61
LC/UPC-LC/UPC Duplex Singlemode Uniboot Cord LS0H	3	3.0	1/Bag - 12/Box	28TFFQQ030T-YL61
LC/UPC-LC/UPC Duplex Singlemode Uniboot Cord LS0H	5	3.0	1/Bag - 12/Box	28TFFQQ050T-YL61
LC/UPC-LC/UPC Duplex Singlemode Uniboot Cord LS0H	10	3.0	1/Bag - 12/Box	28TFFQQ100T-YL61

## AT&T FiberLine

### Fiber Optic FC/UPC Duplex Multimode Zip-Cords

#### Description

This page shows some of the available combinations of AT&T fiber-optic Duplex Multimode Zip-Cords made with multimode fibers and terminated with FC/UPC connectors.

Additional combinations can be selected using the information on page B.3.

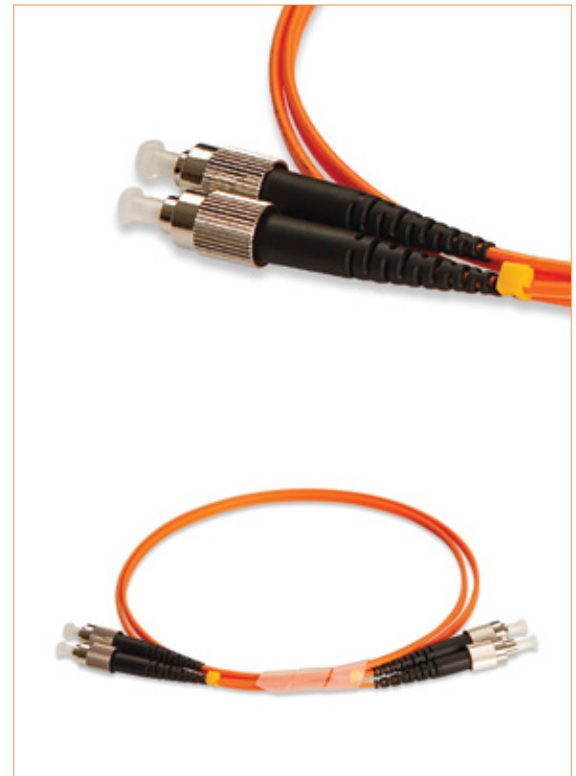
Fiber type	Select a multimode fiber from page B.6.
Buffer type	900µ tight flame retardant LSOH coating
Strength elements	Served aramid and glass yarn
Minicable jacket material	Flame retardant LSOH compound

#### Standard & EU Directives Conformance

- Relevant sections of ANSI/TIA-568-C.3
- Relevant sections of ISO/IEC 11801
- Relevant sections of EN 50173
- Relevant sections of ANSI/TIA/EIA-604 (FOCIS)
- Relevant sections of IEC 60874
- Relevant sections of IEC 61753
- Relevant sections of IEC 61754
- IEC 60332-1 flame test
- IEC 60754 & IEC 61034
- EU Directive 2011/65/EU (RoHS-2)

#### Mechanical Properties

Short term bend radius	20xOD mm
Long term bend radius	10xOD mm
Operating temperature	-20 to +60C
Default jacket colors	MM OM1 & OM2: Orange MM OM3: Turquoise MM OM4: Purple



#### Ordering Information

FF: Fiber Type CC: Jacket Color

Description	Length m	Cable OD mm	Packaging	P/N
FC/UPC-FC/UPC Duplex Multimode Zip-Cord LSOH	1	3.0x6.0	1/Bag - 12/Box	28DFFEE010T-CC61
FC/UPC-FC/UPC Duplex Multimode Zip-Cord LSOH	2	3.0x6.0	1/Bag - 12/Box	28DFFEE020T-CC61
FC/UPC-FC/UPC Duplex Multimode Zip-Cord LSOH	3	3.0x6.0	1/Bag - 12/Box	28DFFEE030T-CC61
FC/UPC-FC/UPC Duplex Multimode Zip-Cord LSOH	5	3.0x6.0	1/Bag - 12/Box	28DFFEE050T-CC61
FC/UPC-FC/UPC Duplex Multimode Zip-Cord LSOH	10	3.0x6.0	1/Bag - 12/Box	28DFFEE100T-CC61
FC/UPC-ST/UPC Duplex Multimode Zip-Cord LSOH	1	3.0x6.0	1/Bag - 12/Box	28DFFEA010T-CC61
FC/UPC-ST/UPC Duplex Multimode Zip-Cord LSOH	2	3.0x6.0	1/Bag - 12/Box	28DFFEA020T-CC61
FC/UPC-ST/UPC Duplex Multimode Zip-Cord LSOH	3	3.0x6.0	1/Bag - 12/Box	28DFFEA030T-CC61
FC/UPC-ST/UPC Duplex Multimode Zip-Cord LSOH	5	3.0x6.0	1/Bag - 12/Box	28DFFEA050T-CC61
FC/UPC-ST/UPC Duplex Multimode Zip-Cord LSOH	10	3.0x6.0	1/Bag - 12/Box	28DFFEA100T-CC61
FC/UPC-LC/UPC Duplex Multimode Zip-Cord LSOH	1	2.0x4.0	1/Bag - 12/Box	28DFFEP010T-CC61
FC/UPC-LC/UPC Duplex Multimode Zip-Cord LSOH	2	2.0x4.0	1/Bag - 12/Box	28DFFEP020T-CC61
FC/UPC-LC/UPC Duplex Multimode Zip-Cord LSOH	3	2.0x4.0	1/Bag - 12/Box	28DFFEP030T-CC61
FC/UPC-LC/UPC Duplex Multimode Zip-Cord LSOH	5	2.0x4.0	1/Bag - 12/Box	28DFFEP050T-CC61
FC/UPC-LC/UPC Duplex Multimode Zip-Cord LSOH	10	2.0x4.0	1/Bag - 12/Box	28DFFEP100T-CC61
FC/UPC-LSH/UPC Duplex Multimode Zip-Cord LSOH	1	2.0x4.0	1/Bag - 12/Box	28DFFED010T-CC61
FC/UPC-LSH/UPC Duplex Multimode Zip-Cord LSOH	2	2.0x4.0	1/Bag - 12/Box	28DFFED020T-CC61
FC/UPC-LSH/UPC Duplex Multimode Zip-Cord LSOH	3	2.0x4.0	1/Bag - 12/Box	28DFFED030T-CC61
FC/UPC-LSH/UPC Duplex Multimode Zip-Cord LSOH	5	2.0x4.0	1/Bag - 12/Box	28DFFED050T-CC61
FC/UPC-LSH/UPC Duplex Multimode Zip-Cord LSOH	10	2.0x4.0	1/Bag - 12/Box	28DFFED100T-CC61
FC/UPC-MTRJ Female Duplex Multimode Zip-Cord LSOH	1	1.6x3.2	1/Bag - 12/Box	28DFFET010T-CC61
FC/UPC-MTRJ Female Duplex Multimode Zip-Cord LSOH	2	1.6x3.2	1/Bag - 12/Box	28DFFET020T-CC61
FC/UPC-MTRJ Female Duplex Multimode Zip-Cord LSOH	3	1.6x3.2	1/Bag - 12/Box	28DFFET030T-CC61
FC/UPC-MTRJ Female Duplex Multimode Zip-Cord LSOH	5	1.6x3.2	1/Bag - 12/Box	28DFFET050T-CC61
FC/UPC-MTRJ Female Duplex Multimode Zip-Cord LSOH	10	1.6x3.2	1/Bag - 12/Box	28DFFET100T-CC61

#### Optional Transmission Properties

Suffix	Connector IL (dB)	Connector RL (dB)
T = Standard Loss connector	0.30 max. 0.20 Typical	20 min.
S = Low-Loss connector	0.15 max. 0.10 Typical	20 min.



## AT&T FiberLine

### Fiber Optic FC/UPC Duplex Singlemode Zip-Cords

#### Description

This page shows some of the available combinations of AT&T fiber-optic Duplex Singlemode Zip-Cords made with singlemode fibers and terminated with FC/UPC connectors.

Additional combinations can be selected using the information on page B.3.

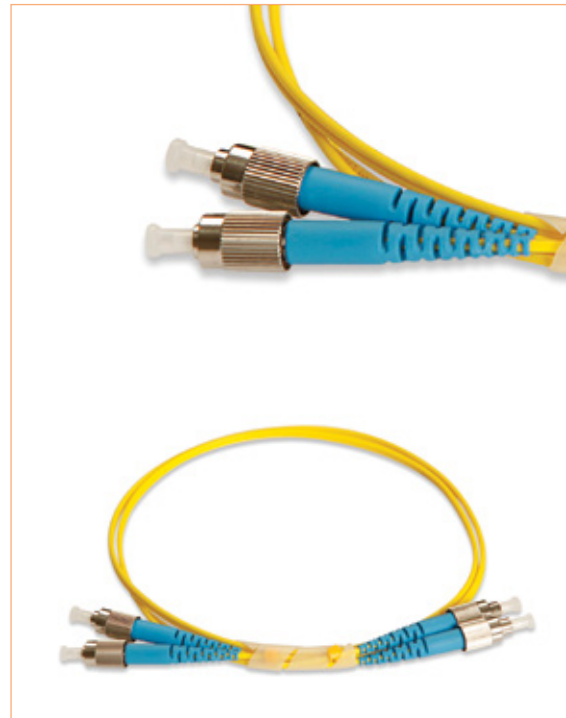
Fiber type	Select a singlemode fiber from page B.6.
Buffer type	900µ tight flame retardant LSOH coating
Strength elements	Served aramid and glass yarn
Minicable jacket material	Flame retardant LSOH compound

#### Standard & EU Directives Conformance

- Relevant sections of ANSI/TIA-568-C.3
- Relevant sections of ISO/IEC 11801
- Relevant sections of EN 50173
- Relevant sections of ANSI/TIA/EIA-604 (FOCIS)
- Relevant sections of IEC 60874
- Relevant sections of IEC 61753
- Relevant sections of IEC 61754
- IEC 60332-1 flame test
- IEC 60754 & IEC 61034
- EU Directive 2011/65/EU (RoHS-2)

#### Mechanical Properties

Short term bend radius	20xOD mm
Long term bend radius	10xOD mm
Operating temperature	-20 to +60C
Default jacket color	Yellow



#### Ordering Information

FF: Fiber Type

Description	Length m	Cable OD mm	Packaging	P/N
FC/UPC-FC/UPC Duplex Singlemode Zip-Cord LSOH	1	3.0x6.0	1/Bag - 12/Box	28DFFFF010T-YL61
FC/UPC-FC/UPC Duplex Singlemode Zip-Cord LSOH	2	3.0x6.0	1/Bag - 12/Box	28DFFFF020T-YL61
FC/UPC-FC/UPC Duplex Singlemode Zip-Cord LSOH	3	3.0x6.0	1/Bag - 12/Box	28DFFFF030T-YL61
FC/UPC-FC/UPC Duplex Singlemode Zip-Cord LSOH	5	3.0x6.0	1/Bag - 12/Box	28DFFFF050T-YL61
FC/UPC-FC/UPC Duplex Singlemode Zip-Cord LSOH	10	3.0x6.0	1/Bag - 12/Box	28DFFFF100T-YL61
FC/UPC-ST/UPC Duplex Singlemode Zip-Cord LSOH	1	3.0x6.0	1/Bag - 12/Box	28DFFFC010T-YL61
FC/UPC-ST/UPC Duplex Singlemode Zip-Cord LSOH	2	3.0x6.0	1/Bag - 12/Box	28DFFFC020T-YL61
FC/UPC-ST/UPC Duplex Singlemode Zip-Cord LSOH	3	3.0x6.0	1/Bag - 12/Box	28DFFFC030T-YL61
FC/UPC-ST/UPC Duplex Singlemode Zip-Cord LSOH	5	3.0x6.0	1/Bag - 12/Box	28DFFFC050T-YL61
FC/UPC-ST/UPC Duplex Singlemode Zip-Cord LSOH	10	3.0x6.0	1/Bag - 12/Box	28DFFFC100T-YL61
FC/UPC-FC/APC Duplex Singlemode Zip-Cord LSOH	1	3.0x6.0	1/Bag - 12/Box	28DFFFG010T-YL61
FC/UPC-FC/APC Duplex Singlemode Zip-Cord LSOH	2	3.0x6.0	1/Bag - 12/Box	28DFFFG020T-YL61
FC/UPC-FC/APC Duplex Singlemode Zip-Cord LSOH	3	3.0x6.0	1/Bag - 12/Box	28DFFFG030T-YL61
FC/UPC-FC/APC Duplex Singlemode Zip-Cord LSOH	5	3.0x6.0	1/Bag - 12/Box	28DFFFG050T-YL61
FC/UPC-FC/APC Duplex Singlemode Zip-Cord LSOH	10	3.0x6.0	1/Bag - 12/Box	28DFFFG100T-YL61
FC/UPC-LC/APC Duplex Singlemode Zip-Cord LSOH	1	2.0x4.0	1/Bag - 12/Box	28DFFFR010T-YL61
FC/UPC-LC/APC Duplex Singlemode Zip-Cord LSOH	2	2.0x4.0	1/Bag - 12/Box	28DFFFR020T-YL61
FC/UPC-LC/APC Duplex Singlemode Zip-Cord LSOH	3	2.0x4.0	1/Bag - 12/Box	28DFFFR030T-YL61
FC/UPC-LC/APC Duplex Singlemode Zip-Cord LSOH	5	2.0x4.0	1/Bag - 12/Box	28DFFFR050T-YL61
FC/UPC-LC/APC Duplex Singlemode Zip-Cord LSOH	10	2.0x4.0	1/Bag - 12/Box	28DFFFR100T-YL61
FC/UPC-LSH/UPC Duplex Singlemode Zip-Cord LSOH	1	2.0x4.0	1/Bag - 12/Box	28DFFFL010T-YL61
FC/UPC-LSH/UPC Duplex Singlemode Zip-Cord LSOH	2	2.0x4.0	1/Bag - 12/Box	28DFFFL020T-YL61
FC/UPC-LSH/UPC Duplex Singlemode Zip-Cord LSOH	3	2.0x4.0	1/Bag - 12/Box	28DFFFL030T-YL61
FC/UPC-LSH/UPC Duplex Singlemode Zip-Cord LSOH	5	2.0x4.0	1/Bag - 12/Box	28DFFFL050T-YL61
FC/UPC-LSH/UPC Duplex Singlemode Zip-Cord LSOH	10	2.0x4.0	1/Bag - 12/Box	28DFFFL100T-YL61
FC/UPC-MTRJ Female Duplex Singlemode Zip-Cord LSOH	1	1.6x3.2	1/Bag - 12/Box	28DFFFT010T-YL61
FC/UPC-MTRJ Female Duplex Singlemode Zip-Cord LSOH	2	1.6x3.2	1/Bag - 12/Box	28DFFFT020T-YL61
FC/UPC-MTRJ Female Duplex Singlemode Zip-Cord LSOH	3	1.6x3.2	1/Bag - 12/Box	28DFFFT030T-YL61
FC/UPC-MTRJ Female Duplex Singlemode Zip-Cord LSOH	5	1.6x3.2	1/Bag - 12/Box	28DFFFT050T-YL61
FC/UPC-MTRJ Female Duplex Singlemode Zip-Cord LSOH	10	1.6x3.2	1/Bag - 12/Box	28DFFFT100T-YL61

#### Optional Transmission Properties - UPC Connectors

Suffix	Connector IL (dB)	Connector RL (dB)
T = Standard Loss connector	0.30 max. 0.20 Typical	26 min. 60 Typical
S = Low-Loss connector	0.15 max. 0.10 Typical	26 min. 60 Typical

## AT&T FiberLine

### Fiber Optic ST/UPC Duplex Multimode Zip-Cords

#### Description

This page shows some of the available combinations of AT&T fiber-optic Duplex Multimode Zip-Cords made with multimode fibers and terminated with ST/UPC connectors.

Additional combinations can be selected using the information on page B.3.

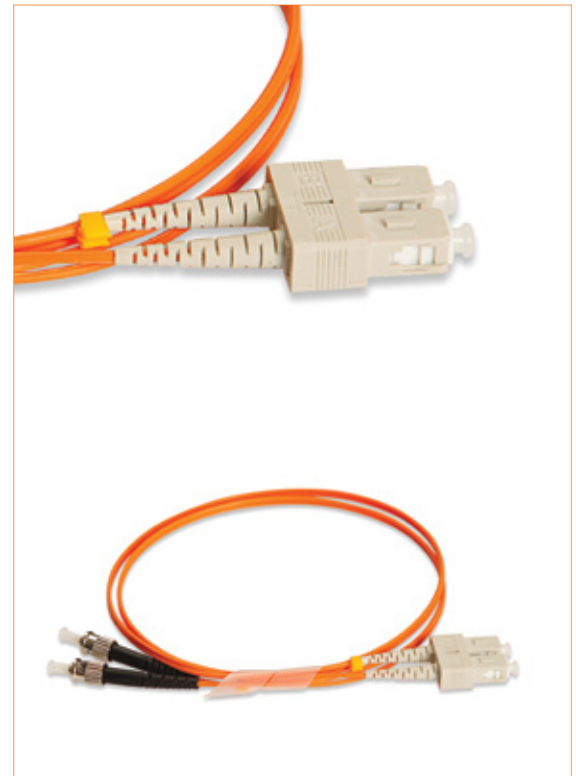
Fiber type	Select a multimode fiber from page B.6.
Buffer type	900µ tight flame retardant LSOH coating
Strength elements	Served aramid and glass yarn
Minicable jacket material	Flame retardant LSOH compound

#### Standard & EU Directives Conformance

- Relevant sections of ANSI/TIA-568-C.3
- Relevant sections of ISO/IEC 11801
- Relevant sections of EN 50173
- Relevant sections of ANSI/TIA/EIA-604 (FOCIS)
- Relevant sections of IEC 60874
- Relevant sections of IEC 61753
- Relevant sections of IEC 61754
- IEC 60332-1 flame test
- IEC 60754 & IEC 61034
- EU Directive 2011/65/EU (RoHS-2)

#### Mechanical Properties

Short term bend radius	20xOD mm
Long term bend radius	10xOD mm
Operating temperature	-20 to +60C
Default jacket colors	MM OM1 & OM2: Orange MM OM3: Turquoise MM OM4: Purple



#### Ordering Information

FF: Fiber Type CC: Jacket Color

Description	Length m	Cable OD mm	Packaging	P/N
ST/UPC-ST/UPC Duplex Multimode Zip-Cord LSOH	1	3.0x6.0	1/Bag - 12/Box	28DFFAA010T-CC61
ST/UPC-ST/UPC Duplex Multimode Zip-Cord LSOH	2	3.0x6.0	1/Bag - 12/Box	28DFFAA020T-CC61
ST/UPC-ST/UPC Duplex Multimode Zip-Cord LSOH	3	3.0x6.0	1/Bag - 12/Box	28DFFAA030T-CC61
ST/UPC-ST/UPC Duplex Multimode Zip-Cord LSOH	5	3.0x6.0	1/Bag - 12/Box	28DFFAA050T-CC61
ST/UPC-ST/UPC Duplex Multimode Zip-Cord LSOH	10	3.0x6.0	1/Bag - 12/Box	28DFFAA100T-CC61
ST/UPC-FC/UPC Duplex Multimode Zip-Cord LSOH	1	3.0x6.0	1/Bag - 12/Box	28DFFAE010T-CC61
ST/UPC-FC/UPC Duplex Multimode Zip-Cord LSOH	2	3.0x6.0	1/Bag - 12/Box	28DFFAE020T-CC61
ST/UPC-FC/UPC Duplex Multimode Zip-Cord LSOH	3	3.0x6.0	1/Bag - 12/Box	28DFFAE030T-CC61
ST/UPC-FC/UPC Duplex Multimode Zip-Cord LSOH	5	3.0x6.0	1/Bag - 12/Box	28DFFAE050T-CC61
ST/UPC-FC/UPC Duplex Multimode Zip-Cord LSOH	10	3.0x6.0	1/Bag - 12/Box	28DFFAE100T-CC61
ST/UPC-LC/UPC Duplex Multimode Zip-Cord LSOH	1	2.0x4.0	1/Bag - 12/Box	28DFFAP010T-CC61
ST/UPC-LC/UPC Duplex Multimode Zip-Cord LSOH	2	2.0x4.0	1/Bag - 12/Box	28DFFAP020T-CC61
ST/UPC-LC/UPC Duplex Multimode Zip-Cord LSOH	3	2.0x4.0	1/Bag - 12/Box	28DFFAP030T-CC61
ST/UPC-LC/UPC Duplex Multimode Zip-Cord LSOH	5	2.0x4.0	1/Bag - 12/Box	28DFFAP050T-CC61
ST/UPC-LC/UPC Duplex Multimode Zip-Cord LSOH	10	2.0x4.0	1/Bag - 12/Box	28DFFAP100T-CC61
ST/UPC-LSH/UPC Duplex Multimode Zip-Cord LSOH	1	2.0x4.0	1/Bag - 12/Box	28DFFAD010T-CC61
ST/UPC-LSH/UPC Duplex Multimode Zip-Cord LSOH	2	2.0x4.0	1/Bag - 12/Box	28DFFAD020T-CC61
ST/UPC-LSH/UPC Duplex Multimode Zip-Cord LSOH	3	2.0x4.0	1/Bag - 12/Box	28DFFAD030T-CC61
ST/UPC-LSH/UPC Duplex Multimode Zip-Cord LSOH	5	2.0x4.0	1/Bag - 12/Box	28DFFAD050T-CC61
ST/UPC-LSH/UPC Duplex Multimode Zip-Cord LSOH	10	2.0x4.0	1/Bag - 12/Box	28DFFAD100T-CC61
ST/UPC-MTRJ Female Duplex Multimode Zip-Cord LSOH	1	1.6x3.2	1/Bag - 12/Box	28DFFAT010T-CC61
ST/UPC-MTRJ Female Duplex Multimode Zip-Cord LSOH	2	1.6x3.2	1/Bag - 12/Box	28DFFAT020T-CC61
ST/UPC-MTRJ Female Duplex Multimode Zip-Cord LSOH	3	1.6x3.2	1/Bag - 12/Box	28DFFAT030T-CC61
ST/UPC-MTRJ Female Duplex Multimode Zip-Cord LSOH	5	1.6x3.2	1/Bag - 12/Box	28DFFAT050T-CC61
ST/UPC-MTRJ Female Duplex Multimode Zip-Cord LSOH	10	1.6x3.2	1/Bag - 12/Box	28DFFAT100T-CC61

#### Optional Transmission Properties

Suffix	Connector IL (dB)	Connector RL (dB)
T = Standard Loss connector	0.30 max. 0.20 Typical	20 min.
S = Low-Loss connector	0.15 max. 0.10 Typical	20 min.

## AT&T FiberLine

### Fiber Optic ST/UPC Duplex Singlemode Zip-Cords

#### Description

This page shows some of the available combinations of AT&T fiber-optic Duplex Singlemode Zip-Cords made with singlemode fibers and terminated with ST/UPC connectors.

Additional combinations can be selected using the information on page B.3.

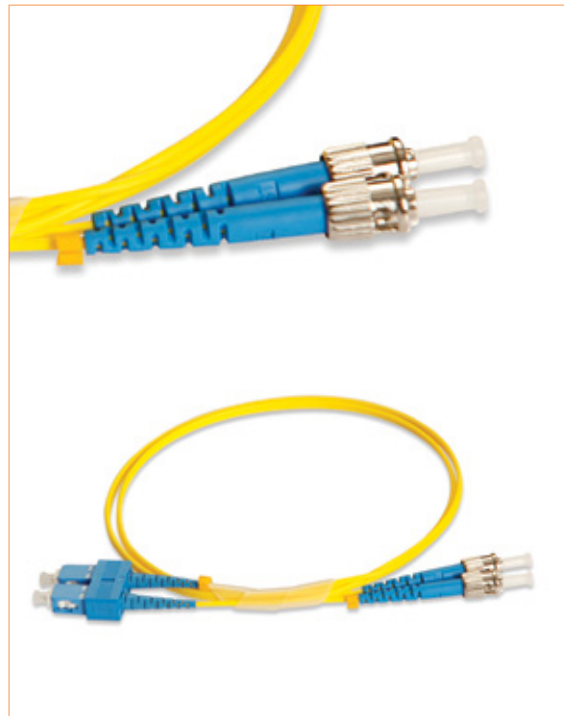
Fiber type	Select a singlemode fiber from page B.6.
Buffer type	900 $\mu$ tight flame retardant LSOH coating
Strength elements	Served aramid and glass yarn
Minicable jacket material	Flame retardant LSOH compound

#### Standard & EU Directives Conformance

- Relevant sections of ANSI/TIA-568-C.3
- Relevant sections of ISO/IEC 11801
- Relevant sections of EN 50173
- Relevant sections of ANSI/TIA/EIA-604 (FOCIS)
- Relevant sections of IEC 60874
- Relevant sections of IEC 61753
- Relevant sections of IEC 61754
- IEC 60332-1 flame test
- IEC 60754 & IEC 61034
- EU Directive 2011/65/EU (RoHS-2)

#### Mechanical Properties

Short term bend radius	20xOD mm
Long term bend radius	10xOD mm
Operating temperature	-20 to +60C
Default jacket color	Yellow



#### Ordering Information

FF: Fiber Type

Description	Length m	Cable OD mm	Packaging	P/N
ST/UPC-ST/UPC Duplex Singlemode Zip-Cord LSOH	1	3.0x6.0	1/Bag - 12/Box	28DFFCC010T-YL61
ST/UPC-ST/UPC Duplex Singlemode Zip-Cord LSOH	2	3.0x6.0	1/Bag - 12/Box	28DFFCC020T-YL61
ST/UPC-ST/UPC Duplex Singlemode Zip-Cord LSOH	3	3.0x6.0	1/Bag - 12/Box	28DFFCC030T-YL61
ST/UPC-ST/UPC Duplex Singlemode Zip-Cord LSOH	5	3.0x6.0	1/Bag - 12/Box	28DFFCC050T-YL61
ST/UPC-ST/UPC Duplex Singlemode Zip-Cord LSOH	10	3.0x6.0	1/Bag - 12/Box	28DFFCC100T-YL61
ST/UPC-FC/APC Duplex Singlemode Zip-Cord LSOH	1	3.0x6.0	1/Bag - 12/Box	28DFFCG010T-YL61
ST/UPC-FC/APC Duplex Singlemode Zip-Cord LSOH	2	3.0x6.0	1/Bag - 12/Box	28DFFCG020T-YL61
ST/UPC-FC/APC Duplex Singlemode Zip-Cord LSOH	3	3.0x6.0	1/Bag - 12/Box	28DFFCG030T-YL61
ST/UPC-FC/APC Duplex Singlemode Zip-Cord LSOH	5	3.0x6.0	1/Bag - 12/Box	28DFFCG050T-YL61
ST/UPC-FC/APC Duplex Singlemode Zip-Cord LSOH	10	3.0x6.0	1/Bag - 12/Box	28DFFCG100T-YL61
ST/UPC-LC/APC Duplex Singlemode Zip-Cord LSOH	1	2.0x4.0	1/Bag - 12/Box	28DFFCR010T-YL61
ST/UPC-LC/APC Duplex Singlemode Zip-Cord LSOH	2	2.0x4.0	1/Bag - 12/Box	28DFFCR020T-YL61
ST/UPC-LC/APC Duplex Singlemode Zip-Cord LSOH	3	2.0x4.0	1/Bag - 12/Box	28DFFCR030T-YL61
ST/UPC-LC/APC Duplex Singlemode Zip-Cord LSOH	5	2.0x4.0	1/Bag - 12/Box	28DFFCR050T-YL61
ST/UPC-LC/APC Duplex Singlemode Zip-Cord LSOH	10	2.0x4.0	1/Bag - 12/Box	28DFFCR100T-YL61
ST/UPC-LSH/APC Duplex Singlemode Zip-Cord LSOH	1	2.0x4.0	1/Bag - 12/Box	28DFFCM010T-YL61
ST/UPC-LSH/APC Duplex Singlemode Zip-Cord LSOH	2	2.0x4.0	1/Bag - 12/Box	28DFFCM020T-YL61
ST/UPC-LSH/APC Duplex Singlemode Zip-Cord LSOH	3	2.0x4.0	1/Bag - 12/Box	28DFFCM030T-YL61
ST/UPC-LSH/APC Duplex Singlemode Zip-Cord LSOH	5	2.0x4.0	1/Bag - 12/Box	28DFFCM050T-YL61
ST/UPC-LSH/APC Duplex Singlemode Zip-Cord LSOH	10	2.0x4.0	1/Bag - 12/Box	28DFFCM100T-YL61
ST/UPC-SC/APC Duplex Singlemode Zip-Cord LSOH	1	3.0x6.0	1/Bag - 12/Box	28DFFCK010T-YL61
ST/UPC-SC/APC Duplex Singlemode Zip-Cord LSOH	2	3.0x6.0	1/Bag - 12/Box	28DFFCK020T-YL61
ST/UPC-SC/APC Duplex Singlemode Zip-Cord LSOH	3	3.0x6.0	1/Bag - 12/Box	28DFFCK030T-YL61
ST/UPC-SC/APC Duplex Singlemode Zip-Cord LSOH	5	3.0x6.0	1/Bag - 12/Box	28DFFCK050T-YL61
ST/UPC-SC/APC Duplex Singlemode Zip-Cord LSOH	10	3.0x6.0	1/Bag - 12/Box	28DFFCK100T-YL61
ST/UPC-MTRJ Female Duplex Singlemode Zip-Cord LSOH	1	1.6x3.2	1/Bag - 12/Box	28DFFCT010T-YL61
ST/UPC-MTRJ Female Duplex Singlemode Zip-Cord LSOH	2	1.6x3.2	1/Bag - 12/Box	28DFFCT020T-YL61
ST/UPC-MTRJ Female Duplex Singlemode Zip-Cord LSOH	3	1.6x3.2	1/Bag - 12/Box	28DFFCT030T-YL61
ST/UPC-MTRJ Female Duplex Singlemode Zip-Cord LSOH	5	1.6x3.2	1/Bag - 12/Box	28DFFCT050T-YL61
ST/UPC-MTRJ Female Duplex Singlemode Zip-Cord LSOH	10	1.6x3.2	1/Bag - 12/Box	28DFFCT100T-YL61

#### Optional Transmission Properties - UPC Connectors

Suffix	Connector IL (dB)	Connector RL (dB)
T = Standard Loss connector	0.30 max. 0.20 Typical	26 min. 60 Typical
S = Low-Loss connector	0.15 max. 0.10 Typical	26 min. 60 Typical

## AT&T FiberLine

### Fiber Optic LSH/UPC (E-2000™) Duplex Multimode Zip-Cords

#### Description

This page shows some of the available combinations of AT&T fiber-optic Duplex Multimode Zip-Cords made with multimode fibers and terminated with LSH/UPC connectors.

Additional combinations can be selected using the information on page B.3.

Fiber type	Select a multimode fiber from page B.6.
Buffer type	900μ tight flame retardant LSOH coating
Strength elements	Served aramid and glass yarn
Minicable jacket material	Flame retardant LSOH compound

#### Standard & EU Directives Conformance

- Relevant sections of ANSI/TIA-568-C.3
- Relevant sections of ISO/IEC 11801
- Relevant sections of EN 50173
- Relevant sections of ANSI/TIA/EIA-604 (FOCIS)
- Relevant sections of IEC 60874
- Relevant sections of IEC 61753
- Relevant sections of IEC 61754
- IEC 60332-1 flame test
- IEC 60754 & IEC 61034
- EU Directive 2011/65/EU (RoHS-2)

#### Mechanical Properties

Short term bend radius	20xOD mm
Long term bend radius	10xOD mm
Operating temperature	-20 to +60C
Default jacket colors	MM OM1 & OM2: Orange MM OM3: Turquoise MM OM4: Purple

E-2000™ is a trademark of Diamond SA

#### Ordering Information

FF: Fiber Type    CC: Jacket Color



Description	Length m	Cable OD mm	Packaging	P/N
LSH/UPC-LSH/UPC Duplex Multimode Zip-Cord LSOH	1	2.0x4.0	1/Bag - 12/Box	28DFFDD010T-CC61
LSH/UPC-LSH/UPC Duplex Multimode Zip-Cord LSOH	2	2.0x4.0	1/Bag - 12/Box	28DFFDD020T-CC61
LSH/UPC-LSH/UPC Duplex Multimode Zip-Cord LSOH	3	2.0x4.0	1/Bag - 12/Box	28DFFDD030T-CC61
LSH/UPC-LSH/UPC Duplex Multimode Zip-Cord LSOH	5	2.0x4.0	1/Bag - 12/Box	28DFFDD050T-CC61
LSH/UPC-LSH/UPC Duplex Multimode Zip-Cord LSOH	10	2.0x4.0	1/Bag - 12/Box	28DFFDD100T-CC61
LSH/UPC-ST/UPC Duplex Multimode Zip-Cord LSOH	1	2.0x4.0	1/Bag - 12/Box	28DFFDA010T-CC61
LSH/UPC-ST/UPC Duplex Multimode Zip-Cord LSOH	2	2.0x4.0	1/Bag - 12/Box	28DFFDA020T-CC61
LSH/UPC-ST/UPC Duplex Multimode Zip-Cord LSOH	3	2.0x4.0	1/Bag - 12/Box	28DFFDA030T-CC61
LSH/UPC-ST/UPC Duplex Multimode Zip-Cord LSOH	5	2.0x4.0	1/Bag - 12/Box	28DFFDA050T-CC61
LSH/UPC-ST/UPC Duplex Multimode Zip-Cord LSOH	10	2.0x4.0	1/Bag - 12/Box	28DFFDA100T-CC61
LSH/UPC-FC/UPC Duplex Multimode Zip-Cord LSOH	1	2.0x4.0	1/Bag - 12/Box	28DFFDE010T-CC61
LSH/UPC-FC/UPC Duplex Multimode Zip-Cord LSOH	2	2.0x4.0	1/Bag - 12/Box	28DFFDE020T-CC61
LSH/UPC-FC/UPC Duplex Multimode Zip-Cord LSOH	3	2.0x4.0	1/Bag - 12/Box	28DFFDE030T-CC61
LSH/UPC-FC/UPC Duplex Multimode Zip-Cord LSOH	5	2.0x4.0	1/Bag - 12/Box	28DFFDE050T-CC61
LSH/UPC-FC/UPC Duplex Multimode Zip-Cord LSOH	10	2.0x4.0	1/Bag - 12/Box	28DFFDE100T-CC61
LSH/UPC-LC/UPC Duplex Multimode Zip-Cord LSOH	1	2.0x4.0	1/Bag - 12/Box	28DFFDP010T-CC61
LSH/UPC-LC/UPC Duplex Multimode Zip-Cord LSOH	2	2.0x4.0	1/Bag - 12/Box	28DFFDP020T-CC61
LSH/UPC-LC/UPC Duplex Multimode Zip-Cord LSOH	3	2.0x4.0	1/Bag - 12/Box	28DFFDP030T-CC61
LSH/UPC-LC/UPC Duplex Multimode Zip-Cord LSOH	5	2.0x4.0	1/Bag - 12/Box	28DFFDP050T-CC61
LSH/UPC-LC/UPC Duplex Multimode Zip-Cord LSOH	10	2.0x4.0	1/Bag - 12/Box	28DFFDP100T-CC61
LSH/UPC-MTRJ Female Duplex Multimode Zip-Cord LSOH	1	1.6x3.2	1/Bag - 12/Box	28DFFDT010T-CC61
LSH/UPC-MTRJ Female Duplex Multimode Zip-Cord LSOH	2	1.6x3.2	1/Bag - 12/Box	28DFFDT020T-CC61
LSH/UPC-MTRJ Female Duplex Multimode Zip-Cord LSOH	3	1.6x3.2	1/Bag - 12/Box	28DFFDT030T-CC61
LSH/UPC-MTRJ Female Duplex Multimode Zip-Cord LSOH	5	1.6x3.2	1/Bag - 12/Box	28DFFDT050T-CC61
LSH/UPC-MTRJ Female Duplex Multimode Zip-Cord LSOH	10	1.6x3.2	1/Bag - 12/Box	28DFFDT100T-CC61

#### Optional Transmission Properties

Suffix	Connector IL (dB)	Connector RL (dB)
T = Standard Loss connector	0.30 max. 0.20 Typical	20 min.
S = Low-Loss connector	0.15 max. 0.10 Typical	20 min.

## AT&T FiberLine

### Fiber Optic LSH/UPC (E-2000™) Duplex Singlemode Zip-Cords

#### Description

This page shows some of the available combinations of AT&T fiber-optic Duplex Singlemode Zip-Cords made with singlemode fibers and terminated with LSH/UPC connectors.

Additional combinations can be selected using the information on page B.3.

Fiber type	Select a singlemode fiber from page B.6.
Buffer type	900µ tight flame retardant LSOH coating
Strength elements	Served aramid and glass yarn
Minicable jacket material	Flame retardant LSOH compound

#### Standard & EU Directives Conformance

- Relevant sections of ANSI/TIA-568-C.3
- Relevant sections of ISO/IEC 11801
- Relevant sections of EN 50173
- Relevant sections of ANSI/TIA/EIA-604 (FOCIS)
- Relevant sections of IEC 60874
- Relevant sections of IEC 61753
- Relevant sections of IEC 61754
- IEC 60332-1 flame test
- IEC 60754 & IEC 61034
- EU Directive 2011/65/EU (RoHS-2)

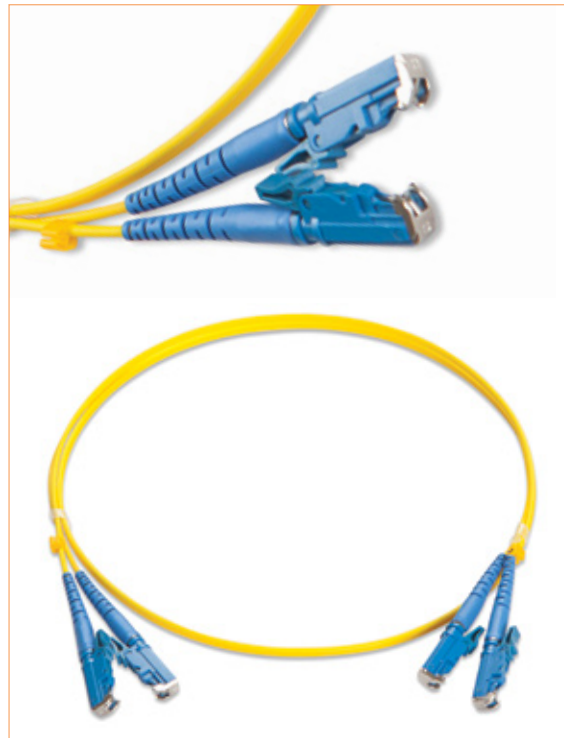
#### Mechanical Properties

Short term bend radius	20xOD mm
Long term bend radius	10xOD mm
Operating temperature	-20 to +60C
Default jacket color	Yellow

E-2000™ is a trademark of Diamond SA

#### Ordering Information

FF: Fiber Type



Description	Length m	Cable OD mm	Packaging	P/N
LSH/UPC-LSH/UPC Duplex Singlemode Zip-Cord LSOH	1	2.0x4.0	1/Bag - 12/Box	28DFFLL010T-YL61
LSH/UPC-LSH/UPC Duplex Singlemode Zip-Cord LSOH	2	2.0x4.0	1/Bag - 12/Box	28DFFLL020T-YL61
LSH/UPC-LSH/UPC Duplex Singlemode Zip-Cord LSOH	3	2.0x4.0	1/Bag - 12/Box	28DFFLL030T-YL61
LSH/UPC-LSH/UPC Duplex Singlemode Zip-Cord LSOH	5	2.0x4.0	1/Bag - 12/Box	28DFFLL050T-YL61
LSH/UPC-LSH/UPC Duplex Singlemode Zip-Cord LSOH	10	2.0x4.0	1/Bag - 12/Box	28DFFLL100T-YL61
LSH/UPC-ST/UPC Duplex Singlemode Zip-Cord LSOH	1	2.0x4.0	1/Bag - 12/Box	28DFFLC010T-YL61
LSH/UPC-ST/UPC Duplex Singlemode Zip-Cord LSOH	2	2.0x4.0	1/Bag - 12/Box	28DFFLC020T-YL61
LSH/UPC-ST/UPC Duplex Singlemode Zip-Cord LSOH	3	2.0x4.0	1/Bag - 12/Box	28DFFLC030T-YL61
LSH/UPC-ST/UPC Duplex Singlemode Zip-Cord LSOH	5	2.0x4.0	1/Bag - 12/Box	28DFFLC050T-YL61
LSH/UPC-ST/UPC Duplex Singlemode Zip-Cord LSOH	10	2.0x4.0	1/Bag - 12/Box	28DFFLC100T-YL61
LSH/UPC-FC/APC Duplex Singlemode Zip-Cord LSOH	1	2.0x4.0	1/Bag - 12/Box	28DFFLG010T-YL61
LSH/UPC-FC/APC Duplex Singlemode Zip-Cord LSOH	2	2.0x4.0	1/Bag - 12/Box	28DFFLG020T-YL61
LSH/UPC-FC/APC Duplex Singlemode Zip-Cord LSOH	3	2.0x4.0	1/Bag - 12/Box	28DFFLG030T-YL61
LSH/UPC-FC/APC Duplex Singlemode Zip-Cord LSOH	5	2.0x4.0	1/Bag - 12/Box	28DFFLG050T-YL61
LSH/UPC-FC/APC Duplex Singlemode Zip-Cord LSOH	10	2.0x4.0	1/Bag - 12/Box	28DFFLG100T-YL61
LSH/UPC-LC/APC Duplex Singlemode Zip-Cord LSOH	1	2.0x4.0	1/Bag - 12/Box	28DFFLR010T-YL61
LSH/UPC-LC/APC Duplex Singlemode Zip-Cord LSOH	2	2.0x4.0	1/Bag - 12/Box	28DFFLR020T-YL61
LSH/UPC-LC/APC Duplex Singlemode Zip-Cord LSOH	3	2.0x4.0	1/Bag - 12/Box	28DFFLR030T-YL61
LSH/UPC-LC/APC Duplex Singlemode Zip-Cord LSOH	5	2.0x4.0	1/Bag - 12/Box	28DFFLR050T-YL61
LSH/UPC-LC/APC Duplex Singlemode Zip-Cord LSOH	10	2.0x4.0	1/Bag - 12/Box	28DFFLR100T-YL61
LSH/UPC-LSH/APC Duplex Singlemode Zip-Cord LSOH	1	2.0x4.0	1/Bag - 12/Box	28DFFLM010T-YL61
LSH/UPC-LSH/APC Duplex Singlemode Zip-Cord LSOH	2	2.0x4.0	1/Bag - 12/Box	28DFFLM020T-YL61
LSH/UPC-LSH/APC Duplex Singlemode Zip-Cord LSOH	3	2.0x4.0	1/Bag - 12/Box	28DFFLM030T-YL61
LSH/UPC-LSH/APC Duplex Singlemode Zip-Cord LSOH	5	2.0x4.0	1/Bag - 12/Box	28DFFLM050T-YL61
LSH/UPC-LSH/APC Duplex Singlemode Zip-Cord LSOH	10	2.0x4.0	1/Bag - 12/Box	28DFFLM100T-YL61
LSH/UPC-MTRJ Female Duplex Singlemode Zip-Cord LSOH	1	1.6x3.2	1/Bag - 12/Box	28DFFLT010T-YL61
LSH/UPC-MTRJ Female Duplex Singlemode Zip-Cord LSOH	2	1.6x3.2	1/Bag - 12/Box	28DFFLT020T-YL61
LSH/UPC-MTRJ Female Duplex Singlemode Zip-Cord LSOH	3	1.6x3.2	1/Bag - 12/Box	28DFFLT030T-YL61
LSH/UPC-MTRJ Female Duplex Singlemode Zip-Cord LSOH	5	1.6x3.2	1/Bag - 12/Box	28DFFLT050T-YL61
LSH/UPC-MTRJ Female Duplex Singlemode Zip-Cord LSOH	10	1.6x3.2	1/Bag - 12/Box	28DFFLT100T-YL61

#### Optional Transmission Properties - UPC Connectors

Suffix	Connector IL (dB)	Connector RL (dB)
T = Standard Loss connector	0.30 max. 0.20 Typical	26 min. 60 Typical
S = Low-Loss connector	0.15 max. 0.10 Typical	26 min. 60 Typical

## AT&T FiberLine

### Fiber Optic MTRJ Duplex Multimode Zip-Cords

#### Description

This page shows some of the available combinations of AT&T fiber-optic Duplex Multimode Zip-Cords made with multimode fibers and terminated with MTRJ connectors.

Additional combinations can be selected using the information on page B.3.

Fiber type                      Select a multimode fiber from page B.6.  
 Buffer type                     900µ tight flame retardant LSOH coating  
 Strength elements            Served aramid and glass yarn  
 Minicable jacket material    Flame retardant LSOH compound

#### Standard & EU Directives Conformance

- Relevant sections of ANSI/TIA-568-C.3
- Relevant sections of ISO/IEC 11801
- Relevant sections of EN 50173
- Relevant sections of ANSI/TIA/EIA-604 (FOCIS)
- Relevant sections of IEC 60874
- Relevant sections of IEC 61753
- Relevant sections of IEC 61754
- IEC 60332-1 flame test
- IEC 60754 & IEC 61034
- EU Directive 2011/65/EU (RoHS-2)

#### Mechanical Properties

Short term bend radius        20xOD mm  
 Long term bend radius        10xOD mm  
 Operating temperature        -20 to +60C  
   MM OM1 & OM2: Orange  
 Default jacket color           MM OM3: Turquoise  
   MM OM4: Purple



#### Ordering Information

FF: Fiber Type    CC: Jacket Color

Description	Length m	Cable OD mm	Packaging	P/N
MTRJ-MTRJ Female Duplex Multimode Zip-Cord LSOH	1	1.6x3.2	1/Bag - 12/Box	28DFFTT010T-CC61
MTRJ-MTRJ Female Duplex Multimode Zip-Cord LSOH	2	1.6x3.2	1/Bag - 12/Box	28DFFTT020T-CC61
MTRJ-MTRJ Female Duplex Multimode Zip-Cord LSOH	3	1.6x3.2	1/Bag - 12/Box	28DFFTT030T-CC61
MTRJ-MTRJ Female Duplex Multimode Zip-Cord LSOH	5	1.6x3.2	1/Bag - 12/Box	28DFFTT050T-CC61
MTRJ-MTRJ Female Duplex Multimode Zip-Cord LSOH	10	1.6x3.2	1/Bag - 12/Box	28DFFTT100T-CC61
MTRJ Female-FC/UPC Duplex Multimode Zip-Cord LSOH	1	1.6x3.2	1/Bag - 12/Box	28DFFTE010T-CC61
MTRJ Female-FC/UPC Duplex Multimode Zip-Cord LSOH	2	1.6x3.2	1/Bag - 12/Box	28DFFTE020T-CC61
MTRJ Female-FC/UPC Duplex Multimode Zip-Cord LSOH	3	1.6x3.2	1/Bag - 12/Box	28DFFTE030T-CC61
MTRJ Female-FC/UPC Duplex Multimode Zip-Cord LSOH	5	1.6x3.2	1/Bag - 12/Box	28DFFTE050T-CC61
MTRJ Female-FC/UPC Duplex Multimode Zip-Cord LSOH	10	1.6x3.2	1/Bag - 12/Box	28DFFTE100T-CC61
MTRJ Female-LC/UPC Duplex Multimode Zip-Cord LSOH	1	1.6x3.2	1/Bag - 12/Box	28DFFTP010T-CC61
MTRJ Female-LC/UPC Duplex Multimode Zip-Cord LSOH	2	1.6x3.2	1/Bag - 12/Box	28DFFTP020T-CC61
MTRJ Female-LC/UPC Duplex Multimode Zip-Cord LSOH	3	1.6x3.2	1/Bag - 12/Box	28DFFTP030T-CC61
MTRJ Female-LC/UPC Duplex Multimode Zip-Cord LSOH	5	1.6x3.2	1/Bag - 12/Box	28DFFTP050T-CC61
MTRJ Female-LC/UPC Duplex Multimode Zip-Cord LSOH	10	1.6x3.2	1/Bag - 12/Box	28DFFTP100T-CC61
MTRJ Female-LSH/UPC Duplex Multimode Zip-Cord LSOH	1	1.6x3.2	1/Bag - 12/Box	28DFFTD010T-CC61
MTRJ Female-LSH/UPC Duplex Multimode Zip-Cord LSOH	2	1.6x3.2	1/Bag - 12/Box	28DFFTD020T-CC61
MTRJ Female-LSH/UPC Duplex Multimode Zip-Cord LSOH	3	1.6x3.2	1/Bag - 12/Box	28DFFTD030T-CC61
MTRJ Female-LSH/UPC Duplex Multimode Zip-Cord LSOH	5	1.6x3.2	1/Bag - 12/Box	28DFFTD050T-CC61
MTRJ Female-LSH/UPC Duplex Multimode Zip-Cord LSOH	10	1.6x3.2	1/Bag - 12/Box	28DFFTD100T-CC61
MTRJ Female-SC/UPC Duplex Multimode Zip-Cord LSOH	1	1.6x3.2	1/Bag - 12/Box	28DFFTH010T-CC61
MTRJ Female-SC/UPC Duplex Multimode Zip-Cord LSOH	2	1.6x3.2	1/Bag - 12/Box	28DFFTH020T-CC61
MTRJ Female-SC/UPC Duplex Multimode Zip-Cord LSOH	3	1.6x3.2	1/Bag - 12/Box	28DFFTH030T-CC61
MTRJ Female-SC/UPC Duplex Multimode Zip-Cord LSOH	5	1.6x3.2	1/Bag - 12/Box	28DFFTH050T-CC61
MTRJ Female-SC/UPC Duplex Multimode Zip-Cord LSOH	10	1.6x3.2	1/Bag - 12/Box	28DFFTH100T-CC61

#### Optional Transmission Properties

Suffix	Connector IL (dB)	Connector RL (dB)
T = Standard Loss connector	0.30 max. 0.20 Typical	20 min.
S = Low-Loss connector	0.15 max. 0.10 Typical	20 min.

## AT&T FiberLine

### Fiber Optic MTRJ Duplex Singlemode Zip-Cords

#### Description

This page shows some of the available combinations of AT&T fiber-optic Duplex Singlemode Zip-Cords made with singlemode fibers and terminated with MTRJ connectors.

Additional combinations can be selected using the information on page B.3.

Fiber type	Select a singlemode fiber from page B.6.
Buffer type	900 $\mu$ tight flame retardant LSOH coating
Strength elements	Served aramid and glass yarn
Minicable jacket material	Flame retardant LSOH compound

#### Standard & EU Directives Conformance

- Relevant sections of ANSI/TIA-568-C.3
- Relevant sections of ISO/IEC 11801
- Relevant sections of EN 50173
- Relevant sections of ANSI/TIA/EIA-604 (FOCIS)
- Relevant sections of IEC 60874
- Relevant sections of IEC 61753
- Relevant sections of IEC 61754
- IEC 60332-1 flame test
- IEC 60754 & IEC 61034
- EU Directive 2011/65/EU (RoHS-2)

#### Mechanical Properties

Short term bend radius	20xOD mm
Long term bend radius	10xOD mm
Operating temperature	-20 to +60C
Default jacket color	Yellow



#### Ordering Information

FF: Fiber Type

Description	Length m	Cable OD mm	Packaging	P/N
MTRJ-MTRJ Female Duplex Singlemode Zip-Cord LSOH	1	1.6x3.2	1/Bag - 12/Box	28DFFTT010T-YL61
MTRJ-MTRJ Female Duplex Singlemode Zip-Cord LSOH	2	1.6x3.2	1/Bag - 12/Box	28DFFTT020T-YL61
MTRJ-MTRJ Female Duplex Singlemode Zip-Cord LSOH	3	1.6x3.2	1/Bag - 12/Box	28DFFTT030T-YL61
MTRJ-MTRJ Female Duplex Singlemode Zip-Cord LSOH	5	1.6x3.2	1/Bag - 12/Box	28DFFTT050T-YL61
MTRJ-MTRJ Female Duplex Singlemode Zip-Cord LSOH	10	1.6x3.2	1/Bag - 12/Box	28DFFTT100T-YL61
MTRJ Female-FC/APC Duplex Singlemode Zip-Cord LSOH	1	1.6x3.2	1/Bag - 12/Box	28DFFTG010T-YL61
MTRJ Female-FC/APC Duplex Singlemode Zip-Cord LSOH	2	1.6x3.2	1/Bag - 12/Box	28DFFTG020T-YL61
MTRJ Female-FC/APC Duplex Singlemode Zip-Cord LSOH	3	1.6x3.2	1/Bag - 12/Box	28DFFTG030T-YL61
MTRJ Female-FC/APC Duplex Singlemode Zip-Cord LSOH	5	1.6x3.2	1/Bag - 12/Box	28DFFTG050T-YL61
MTRJ Female-FC/APC Duplex Singlemode Zip-Cord LSOH	10	1.6x3.2	1/Bag - 12/Box	28DFFTG100T-YL61
MTRJ Female-LC/APC Duplex Singlemode Zip-Cord LSOH	1	1.6x3.2	1/Bag - 12/Box	28DFFTR010T-YL61
MTRJ Female-LC/APC Duplex Singlemode Zip-Cord LSOH	2	1.6x3.2	1/Bag - 12/Box	28DFFTR020T-YL61
MTRJ Female-LC/APC Duplex Singlemode Zip-Cord LSOH	3	1.6x3.2	1/Bag - 12/Box	28DFFTR030T-YL61
MTRJ Female-LC/APC Duplex Singlemode Zip-Cord LSOH	5	1.6x3.2	1/Bag - 12/Box	28DFFTR050T-YL61
MTRJ Female-LC/APC Duplex Singlemode Zip-Cord LSOH	10	1.6x3.2	1/Bag - 12/Box	28DFFTR100T-YL61
MTRJ Female-LSH/APC Duplex Singlemode Zip-Cord LSOH	1	1.6x3.2	1/Bag - 12/Box	28DFFTM010T-YL61
MTRJ Female-LSH/APC Duplex Singlemode Zip-Cord LSOH	2	1.6x3.2	1/Bag - 12/Box	28DFFTM020T-YL61
MTRJ Female-LSH/APC Duplex Singlemode Zip-Cord LSOH	3	1.6x3.2	1/Bag - 12/Box	28DFFTM030T-YL61
MTRJ Female-LSH/APC Duplex Singlemode Zip-Cord LSOH	5	1.6x3.2	1/Bag - 12/Box	28DFFTM050T-YL61
MTRJ Female-LSH/APC Duplex Singlemode Zip-Cord LSOH	10	1.6x3.2	1/Bag - 12/Box	28DFFTM100T-YL61
MTRJ Female-SC/APC Duplex Singlemode Zip-Cord LSOH	1	1.6x3.2	1/Bag - 12/Box	28DFFTK010T-YL61
MTRJ Female-SC/APC Duplex Singlemode Zip-Cord LSOH	2	1.6x3.2	1/Bag - 12/Box	28DFFTK020T-YL61
MTRJ Female-SC/APC Duplex Singlemode Zip-Cord LSOH	3	1.6x3.2	1/Bag - 12/Box	28DFFTK030T-YL61
MTRJ Female-SC/APC Duplex Singlemode Zip-Cord LSOH	5	1.6x3.2	1/Bag - 12/Box	28DFFTK050T-YL61
MTRJ Female-SC/APC Duplex Singlemode Zip-Cord LSOH	10	1.6x3.2	1/Bag - 12/Box	28DFFTK100T-YL61

#### Optional Transmission Properties - UPC Connectors

Suffix	Connector IL (dB)	Connector RL (dB)
T = Standard Loss connector	0.30 max. 0.20 Typical	26 min. 60 Typical
S = Low-Loss connector	0.15 max. 0.10 Typical	26 min. 60 Typical

## AT&T FiberLine

### Fiber Optic Multimode and Singlemode Pigtails

#### Description

This page shows the standard AT&T fiber-optic pigtails made with multimode or singlemode fibers, terminated with different connectors.

Additional combinations can be selected using the information on page B.3.

Buffer type 900µ tight flame retardant LSOH coating

Strength elements (MTRJ only) Served aramid and glass yarn

Minicable jacket material (MTRJ only) Flame retardant LSOH compound

#### Standard & EU Directives Conformance

- Relevant sections of ANSI/TIA-568-C.3
- Relevant sections of ISO/IEC 11801
- Relevant sections of EN 50173
- Relevant sections of ANSI/TIA/EIA-604 (FOCIS)
- Relevant sections of IEC 60874
- Relevant sections of IEC 61753
- Relevant sections of IEC 61754
- IEC 60332-1 flame test
- IEC 60754 & IEC 61034
- EU Directive 2011/65/EU (RoHS-2)

#### Mechanical Properties

Short term bend radius 20xOD mm  
 Long term bend radius 10xOD mm  
 Operating temperature -20 to +60C  
 Default length 1.5m (other lengths available)  
 Default jacket colors Indicated (other colors available)



#### Ordering Information

Description	Color	Length m	Cable OD mm	Packaging	P/N
ST/UPC Multimode OM1 Simplex Pigtail	Blue	1.5	0.9	12/Bag - 60/Box	28PM1A0015T-BL6Q
ST/UPC Multimode OM2 Simplex Pigtail	Orange	1.5	0.9	12/Bag - 60/Box	28PM2A0015T-OR6Q
ST/UPC Multimode OM3 Simplex Pigtail	Turquoise	1.5	0.9	12/Bag - 60/Box	28PM3A0015T-TQ6Q
ST/UPC Multimode OM4 Simplex Pigtail	Purple	1.5	0.9	12/Bag - 60/Box	28PM4A0015T-PU6Q
ST/UPC Singlemode OS2 Simplex Pigtail	Yellow	1.5	0.9	12/Bag - 60/Box	28PS2C0015T-YL6Q
FC/UPC Multimode OM1 Simplex Pigtail	Blue	1.5	0.9	12/Bag - 60/Box	28PM1E0015T-BL6Q
FC/UPC Multimode OM2 Simplex Pigtail	Orange	1.5	0.9	12/Bag - 60/Box	28PM2E0015T-OR6Q
FC/UPC Multimode OM3 Simplex Pigtail	Turquoise	1.5	0.9	12/Bag - 60/Box	28PM3E0015T-TQ6Q
FC/UPC Multimode OM4 Simplex Pigtail	Purple	1.5	0.9	12/Bag - 60/Box	28PM4E0015T-PU6Q
FC/UPC Singlemode OS2 Simplex Pigtail	Yellow	1.5	0.9	12/Bag - 60/Box	28PS2F0015T-YL6Q
FC/APC Singlemode OS2 Simplex Pigtail	Yellow	1.5	0.9	12/Bag - 60/Box	28PS2G0015T-YL6Q
SC/UPC Multimode OM1 Simplex Pigtail	Blue	1.5	0.9	12/Bag - 60/Box	28PM1H0015T-BL6Q
SC/UPC Multimode OM2 Simplex Pigtail	Orange	1.5	0.9	12/Bag - 60/Box	28PM2H0015T-OR6Q
SC/UPC Multimode OM3 Simplex Pigtail	Turquoise	1.5	0.9	12/Bag - 60/Box	28PM3H0015T-TQ6Q
SC/UPC Multimode OM4 Simplex Pigtail	Purple	1.5	0.9	12/Bag - 60/Box	28PM4H0015T-PU6Q
SC/UPC Singlemode OS2 Simplex Pigtail	Yellow	1.5	0.9	12/Bag - 60/Box	28PS2J0015T-YL6Q
SC/APC Singlemode OS2 Simplex Pigtail	Yellow	1.5	0.9	12/Bag - 60/Box	28PS2K0015T-YL6Q
LSH/UPC Multimode OM1 Simplex Pigtail	Blue	1.5	0.9	12/Bag - 60/Box	28PM1D0015T-BL6Q
LSH/UPC Multimode OM2 Simplex Pigtail	Orange	1.5	0.9	12/Bag - 60/Box	28PM2D0015T-OR6Q
LSH/UPC Multimode OM3 Simplex Pigtail	Turquoise	1.5	0.9	12/Bag - 60/Box	28PM3D0015T-TQ6Q
LSH/UPC Multimode OM4 Simplex Pigtail	Purple	1.5	0.9	12/Bag - 60/Box	28PM4D0015T-PU6Q
LSH/UPC Singlemode OS2 Simplex Pigtail	Yellow	1.5	0.9	12/Bag - 60/Box	28PS2L0015T-YL6Q
LSH/APC Singlemode OS2 Simplex Pigtail	Yellow	1.5	0.9	12/Bag - 60/Box	28PS2M0015T-YL6Q
LC/UPC Multimode OM1 Simplex Pigtail	Blue	1.5	0.9	12/Bag - 60/Box	28PM1P0015T-BL6Q
LC/UPC Multimode OM2 Simplex Pigtail	Orange	1.5	0.9	12/Bag - 60/Box	28PM2P0015T-OR6Q
LC/UPC Multimode OM3 Simplex Pigtail	Turquoise	1.5	0.9	12/Bag - 60/Box	28PM3P0015T-TQ6Q
LC/UPC Multimode OM4 Simplex Pigtail	Purple	1.5	0.9	12/Bag - 60/Box	28PM4P0015T-PU6Q
LC/UPC Singlemode OS2 Simplex Pigtail	Yellow	1.5	0.9	12/Bag - 60/Box	28PS2Q0015T-YL6Q
LC/APC Singlemode OS2 Simplex Pigtail	Yellow	1.5	0.9	12/Bag - 60/Box	28PS2R0015T-YL6Q
MTRJ Male Multimode OM1 Duplex Pigtail	Blue	1.5	1.6x3.2	12/Bag - 60/Box	28PM1S0015T-BL6Q
MTRJ Male Multimode OM2 Duplex Pigtail	Orange	1.5	1.6x3.2	12/Bag - 60/Box	28PM2S0015T-OR6Q
MTRJ Male Multimode OM3 Duplex Pigtail	Turquoise	1.5	1.6x3.2	12/Bag - 60/Box	28PM3S0015T-TQ6Q
MTRJ Male Multimode OM4 Duplex Pigtail	Purple	1.5	1.6x3.2	12/Bag - 60/Box	28PM4S0015T-PU6Q
MTRJ Male Singlemode OS2 Duplex Pigtail	Yellow	1.5	1.6x3.2	12/Bag - 60/Box	28PS2S0015T-YL6Q



## AT&T FiberLine

### Fiber Optic Connectors and Couplers

#### Description

This section shows all the available AT&T fiber-optic connectors and couplers.

#### Notes:

- Each connector has a full-length P/N that can be used as ordering information for the connector alone.
- Each connector has a single letter code that can be used to build fiber-optic cords and pigtails part-numbers.
- The default boot colors are indicated in the following pages. Other options available.

Connector Type	Compatible Fiber	Code
ST/UPC	Multimode	A
ST/APC	Singlemode	C
FC/UPC	Multimode	E
FC/APC	Singlemode	F
SC/UPC	Multimode	H
SC/APC	Singlemode	J
LC/UPC	Multimode	P
LC/APC	Singlemode	Q
Mini LC/UPC	Multimode	B
Mini LC/APC	Singlemode	N
MTRJ Male	All fibers	S
MTRJ Female	All fibers	T

## AT&T FiberLine

### Fiber Optic ST Connectors and Couplers

#### Description

Fiber Optic Connectors and Couplers Type ST

Durability 0.2dB max. change after 1000 mating cycles

Temperature range -20 to +60C

Typical Insertion loss <0.2dB

Connector Ferrule type Ceramic



#### Standard & EU Directives Conformance

- Relevant sections of ANSI/TIA/EIA-604 (FOCIS)
- Relevant sections of IEC 60874
- Relevant sections of IEC 61753
- Relevant sections of IEC 61754
- EU Directive 2011/65/EU (RoHS-2)

#### Notes:

- Each product has a full-length P/N that can be used as ordering information.
- Each connector has a single letter code that can be used to build fiber-optic cords and pigtails part-numbers.
- The default colors are indicated in this page. Other options available.
- Each bag contains one connector and two colored boots: 0.9mm & 3.0mm.

#### Ordering Information - Connectors

Type	Compatible Fiber	Formation	Body Color	Boot Color	Code	Packaging	P/N
ST/UPC Connector	Multimode	Single	Metal	Black	A	1/Bag 120/Box	29CM1NV001A-BK61
ST/UPC Connector	Multimode	Single	Metal	Red	A	1/Bag 120/Box	29CM1NV001A-RD61
ST/UPC Connector	Singlemode	Single	Metal	Yellow	C	1/Bag 120/Box	29CS1NV001C-YL61

#### Ordering Information - Couplers

Type	Compatible Fiber	Formation	Body Color	Cover Color	Sleeve	Packaging	P/N
ST/UPC Coupler	Multimode	Single	Metal	Black	PB	1/Bag 120/Box	29LM1NV001A-BK61
ST/UPC Coupler	Singlemode	Single	Metal	Yellow	Zirconia	1/Bag 120/Box	29LS1NV001C-YL61

## AT&T FiberLine

### Fiber Optic FC Connectors and Couplers

#### Description

Fiber Optic Connectors and Couplers Type FC  
 Durability 0.2dB max. change after 1000 mating cycles  
 Temperature range -20 to +60C  
 Typical Insertion loss <0.3dB  
 Ferrule type Ceramic



#### Standard & EU Directives Conformance

- Relevant sections of ANSI/TIA/EIA-604 (FOCIS)
- Relevant sections of IEC 60874
- Relevant sections of IEC 61753
- Relevant sections of IEC 61754
- EU Directive 2011/65/EU (RoHS-2)

#### Notes:

- Each product has a full-length P/N that can be used as ordering information.
- Each connector has a single letter code that can be used to build fiber-optic cords and pigtails part-numbers.
- The default colors are indicated in this page. Other options available.
- Each bag contains one connector and two colored boots: 0.9mm & 3.0mm.

#### Ordering Information - Connectors

Type	Compatible Fiber	Formation	Body Color	Boot Color	Code	Packaging	P/N
FC/UPC Connector	Multimode	Single	Metal	Black	E	1/Bag 120/Box	29CM1NV001E-BK61
FC/UPC Connector	Singlemode	Single	Metal	Blue	F	1/Bag 120/Box	29CS1NV001F-BL61
FC/APC Connector	Singlemode	Single	Metal	Green	G	1/Bag 120/Box	29CS1NV001G-GN61

#### Ordering Information - Couplers

Type	Compatible Fiber	Formation	Body Color	Cover Color	Sleeve	Packaging	P/N
FC/UPC Coupler	Multimode	Single	Metal	Black	PB	1/Bag 120/Box	29LM1NV001E-BK61
FC/UPC Coupler	Singlemode	Single	Metal	White	Zirconia	1/Bag 120/Box	29LS1NV001F-WT61
FC/APC Coupler	Singlemode	Single	Metal	Green	Zirconia	1/Bag 120/Box	29LS1NV001G-GN61

## AT&T FiberLine

### Fiber Optic SC Connectors

#### Description

Fiber Optic Connectors Type SC

Durability	0.2dB max. change after 1000 mating cycles
Temperature range	-20 to +60C
Typical Insertion loss	<0.2dB
Connector Ferrule type	Ceramic

#### Standard & EU Directives Conformance

- Relevant sections of ANSI/TIA/EIA-604 (FOCIS)
- Relevant sections of IEC 60874
- Relevant sections of IEC 61753
- Relevant sections of IEC 61754
- EU Directive 2011/65/EU (RoHS-2)



#### Notes:

- Each product has a full-length P/N that can be used as ordering information.
- Each connector has a single letter code that can be used to build fiber-optic cords and pigtails part-numbers.
- The default colors are indicated in this page. Other options available.
- Each bag contains one connector and two colored boots: 0.9mm & 3.0mm.

#### Ordering Information - Connectors

Type	Compatible Fiber	Formation	Body Color	Boot Color	Code	Packaging	P/N
SC/UPC Connector	Multimode	Single	Beige	Beige	H	1/Bag 120/Box	29CM1NV001H-BG61
SC/UPC Connector	Singlemode	Single	Blue	Blue	J	1/Bag 120/Box	29CS1NV001J-PB61
SC/APC Connector	Singlemode	Single	Green	Green	K	1/Bag 120/Box	29CS1NV001K-GN61
SC/UPC Connector	Multimode	Double	Beige	Red & Black	H	1/Bag 120/Box	29CM1NV002H-BG61
SC/UPC Connector	Singlemode	Double	Beige	Blue	J	1/Bag 120/Box	29CS1NV002J-PB61
SC/APC Connector	Singlemode	Double	Green	Green	K	1/Bag 120/Box	29CS1NV002K-GN61

#### Ordering Information - Clips

Type	Color	Packaging	P/N
Duplex Clip for SC/UPC Multimode Connector	Beige	120/Bag	531M1NV002H-BG6Y
Duplex Clip for SC/UPC Singlemode Connector	Blue	120/Bag	531S1NV002J-PB6Y
Duplex Clip for SC/APC Singlemode Connector	Green	120/Bag	531S1NV002K-GN6Y

## AT&T FiberLine

### Fiber Optic SC Couplers

#### Description

Fiber Optic Couplers Type SC

#### Standard & EU Directives Conformance

- Relevant sections of ANSI/TIA/EIA-604 (FOCIS)
- Relevant sections of IEC 60874
- Relevant sections of IEC 61753
- Relevant sections of IEC 61754
- EU Directive 2011/65/EU (RoHS-2)



#### Notes:

- Each product has a full-length P/N that can be used as ordering information.
- The default colors are indicated in this page. Other options available.

#### Ordering Information

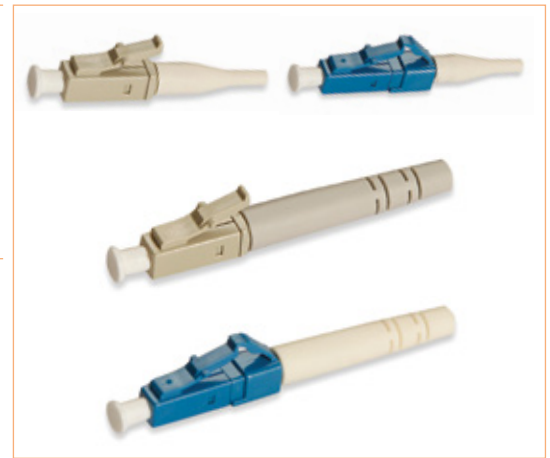
Type	Compatible Fiber	Formation	Body Color	Boot/ Cover Color	Sleeve	Packaging	P/N
SC/UPC Coupler	Multimode	Single	Beige	Beige	PB	1/Bag 120/Box	29LM1NV001H-GL61
SC/UPC Coupler	Singlemode	Single	Blue	Blue	Zirconia	1/Bag 120/Box	29LS1NV001J-PB61
SC/APC Coupler	Singlemode	Single	Green	Green	Zirconia	1/Bag 120/Box	29LS1NV001K-GN61
SC/UPC Coupler	Multimode OM3	Single	Turquoise	Turquoise	Zirconia	1/Bag 120/Box	29LM3NV001H-TQ61
SC/UPC Coupler	Multimode OM4	Single	Turquoise	Turquoise	Zirconia	1/Bag 120/Box	29LM4NV001H-TQ61
SC/UPC Coupler	Multimode	Double	Beige	Beige	PB	1/Bag 120/Box	29LM1NV002H-GL61
SC/UPC Coupler	Singlemode	Double	Blue	Blue	Zirconia	1/Bag 120/Box	29LS1NV002J-PB61
SC/APC Coupler	Singlemode	Double	Green	Green	Zirconia	1/Bag 120/Box	29LS1NV002K-GN61
SC/UPC Coupler	Multimode OM3	Double	Turquoise	Turquoise	Zirconia	1/Bag 120/Box	29LM3NV002H-TQ61
SC/UPC Coupler	Multimode OM4	Double	Turquoise	Turquoise	Zirconia	1/Bag 120/Box	29LM4NV002H-TQ61

## AT&T FiberLine

### Fiber Optic LC Connectors

#### Description

Fiber Optic Connectors Type LC	
Durability	0.2dB max. change after 1000 mating cycles
Temperature range	-20 to +60C
Typical Insertion loss	<0.3dB
Ferrule type	Ceramic



#### Standard & EU Directives Conformance

- Relevant sections of ANSI/TIA/EIA-604 (FOCIS)
- Relevant sections of IEC 60874
- Relevant sections of IEC 61753
- Relevant sections of IEC 61754
- EU Directive 2011/65/EU (RoHS-2)

#### Notes:

- Each product has a full-length P/N that can be used as ordering information.
- Each connector has a single letter code that can be used to build fiber-optic cords and pigtails part-numbers.
- The default colors are indicated in this page. Other options available.
- Each bag contains one connector and three colored boots: 0.9mm, 2.0mm & 3.0mm.

#### Ordering Information - Connectors

Type	Compatible Fiber	Formation	Body Color	Boot Color	Code	Packaging	P/N
LC/UPC Connector	Multimode	Single	Beige	White	P	1/Bag 120/Box	29CM1NV001P-BG61
LC/UPC Connector	Singlemode	Single	Blue	White	Q	1/Bag 120/Box	29CS1NV001Q-BL61
LC/APC Connector	Singlemode	Single	Green	White	R	1/Bag 120/Box	29CS1NV001R-GN61
LC/UPC Connector	Multimode	Double	Beige	White	P	1/Bag 120/Box	29CM1NV002P-BG61
LC/UPC Connector	Singlemode	Double	Blue	White	Q	1/Bag 120/Box	29CS1NV002Q-BL61
LC/APC Connector	Singlemode	Double	Green	White	R	1/Bag 120/Box	29CS1NV002R-GN61

#### Ordering Information - Clips

Type	Color	Packaging	P/N
Duplex Clip for LC/UPC Multimode Connector	Beige	120/Bag	531M1NV002H-BG6Y
Duplex Clip for LC/UPC Singlemode Connector	Blue	120/Bag	531S1NV001Q-BL6Y
Duplex Clip for LC/APC Singlemode Connector	Green	120/Bag	531S1NV001R-GN6Y

## AT&T FiberLine

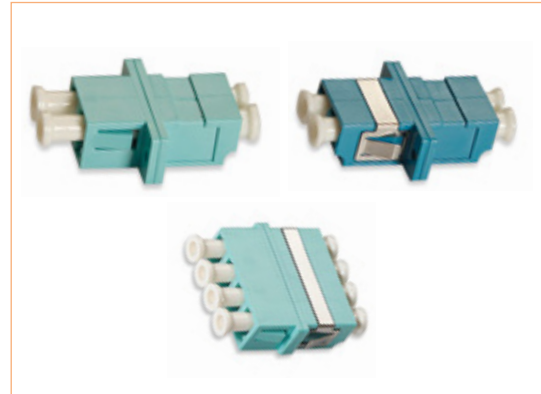
### Fiber Optic LC Couplers

#### Description

Fiber Optic Couplers Type LC

#### Standard & EU Directives Conformance

- Relevant sections of ANSI/TIA/EIA-604 (FOCIS)
- Relevant sections of IEC 60874
- Relevant sections of IEC 61753
- Relevant sections of IEC 61754
- EU Directive 2011/65/EU (RoHS-2)



#### Notes:

- Each product has a full-length P/N that can be used as ordering information.
- The default colors are indicated in this page. Other options available.
- LC duplex couplers have SC simplex footprint.
- LC quad couplers have SC duplex footprint.

#### Ordering Information

Type	Compatible Fiber	Formation	Body Color	Cover Color	Sleeve	Packaging	P/N
LC/UPC Coupler	Multimode	Double	Beige	White	PB	1/Bag 120/Box	29LM1NV002P-GL61
LC/UPC Coupler	Singlemode	Double	Blue	White	Zirconia	1/Bag 120/Box	29LS1NV002Q-BL61
LC/APC Coupler	Singlemode	Double	Green	White	Zirconia	1/Bag 120/Box	29LS1NV002R-GN61
LC/UPC Coupler	Multimode OM3	Double	Turquoise	White	Zirconia	1/Bag 120/Box	29LM3NV002P-TQ61
LC/UPC Coupler	Multimode OM4	Double	Turquoise	White	Zirconia	1/Bag 120/Box	29LM4NV002P-TQ61
LC/UPC Coupler	Multimode	Quad	Beige	Beige	PB	1/Bag 120/Box	29LM1NV004P-GL61
LC/UPC Coupler	Singlemode	Quad	Blue	White	Zirconia	1/Bag 120/Box	29LS1NV004Q-BL61
LC/APC Coupler	Singlemode	Quad	Green	White	Zirconia	1/Bag 120/Box	29LS1NV004R-GN61
LC/UPC Coupler	Multimode OM3	Quad	Turquoise	White	Zirconia	1/Bag 120/Box	29LM3NV004P-TQ61
LC/UPC Coupler	Multimode OM4	Quad	Turquoise	White	Zirconia	1/Bag 120/Box	29LM4NV004P-TQ61

## AT&T FiberLine

### Fiber Optic MTRJ Connectors and Couplers

#### Description

Fiber Optic Connectors and Couplers Type MTRJ	
Durability	0.1dB max. change after 500 mating cycles
Temperature range	-20 to +60C
Typical multimode insertion loss	<0.25dB
Typical singlemode insertion loss	<0.20dB
Connector ferrule type	Ceramic

#### Standard & EU Directives Conformance

- Relevant sections of ANSI/TIA/EIA-604 (FOCIS)
- Relevant sections of IEC 60874
- Relevant sections of IEC 61753
- Relevant sections of IEC 61754
- EU Directive 2011/65/EU (RoHS-2)



#### Notes:

- a. MTRJ coupler has a full-length P/N that can be used as ordering information.
- b. MTRJ connectors have a single letter code that can be used to build fiber-optic cords and pigtailed part-numbers.
- c. The default colors are indicated in this page. Other options available.
- d. MTRJ connectors are not sold separately.

#### Ordering Information

Type	Compatible Fiber	Formation	Body Color	Boot/Cover Color	Code	P/N
MTRJ Male Connector	All fibers	Double	Black	Black	S	N/A
MTRJ Female Connector	All fibers	Double	Black	Black	T	N/A
MTRJ Coupler	All fibers	Double	Black	Black	-	29LxxNV002S-BK61



## AT&T FiberLine

### Fiber Optic LSH Connectors

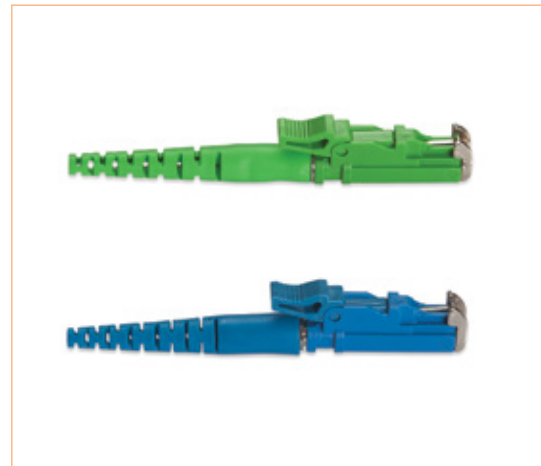
#### Description

Fiber Optic Connectors Type LSH (E-2000™)

Durability	0.2dB max. change after 1000 mating cycles
Temperature range	-20 to +60C
Typical Insertion loss	<0.2dB
Ferrule type	Ceramic

#### Standard & EU Directives Conformance

- Relevant sections of ANSI/TIA/EIA-604 (FOCIS)
- Relevant sections of IEC 60874
- Relevant sections of IEC 61753
- Relevant sections of IEC 61754
- EU Directive 2011/65/EU (RoHS-2)



#### Notes:

- Each product has a full-length P/N that can be used as ordering information.
- Each connector has a single letter code that can be used to build fiber-optic cords and pigtails part-numbers.
- The default colors are indicated in this page. Other options available.
- Each bag contains one connector and two colored boots: 0.9mm & 3.0mm.
- E-2000 is a trademark of Diamond SA, Switzerland.

#### Ordering Information - Connectors

Description	Compatible Fiber	Formation	Body Color	Boot/Cover Color	Code	Packaging	P/N
LSH/UPC Connector	Multimode	Single	Beige	Beige	D	1/Bag 120/Box	29CM1NV001D-BG61
LSH/UPC Connector	Singlemode	Single	Blue	Blue	L	1/Bag 120/Box	29CS1NV001L-BL61
LSH/APC Connector	Singlemode	Single	Green	Green	M	1/Bag 120/Box	29CS1NV001M-GN61
LSH/UPC Connector	Multimode	Double	Beige	Beige	D	1/Bag 120/Box	29CM1NV002D-BG61
LSH/UPC Connector	Singlemode	Double	Blue	Blue	L	1/Bag 120/Box	29CS1NV002L-BL61
LSH/APC Connector	Singlemode	Double	Green	Green	M	1/Bag 120/Box	29CS1NV002M-GN61

#### Ordering Information - Clips

Description	Color	Packaging	P/N
Duplex Clip for LSH/UPC Multimode Connector	Beige	120/Bag	531M1NV002D-BG6Y
Duplex Clip for LSH/UPC Singlemode Connector	Blue	120/Bag	531S1NV002L-BL6Y
Duplex Clip for LSH/APC Singlemode Connector	Green	120/Bag	531S1NV002M-GN6Y

## AT&T FiberLine

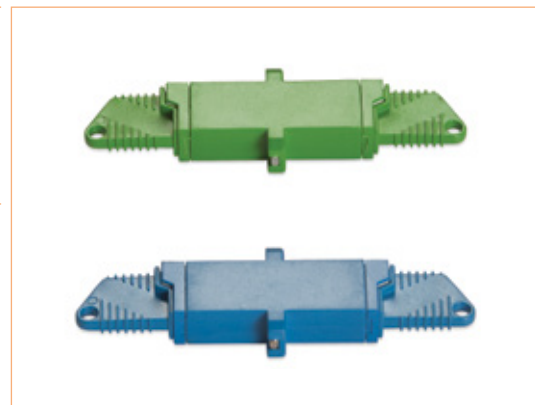
### Fiber Optic LSH Couplers

#### Description

Fiber Optic Couplers Type LSH (E-2000™)

#### Standard & EU Directives Conformance

- Relevant sections of ANSI/TIA/EIA-604 (FOCIS)
- Relevant sections of IEC 60874
- Relevant sections of IEC 61753
- Relevant sections of IEC 61754
- EU Directive 2011/65/EU (RoHS-2)



#### Notes:

- Each product has a full-length P/N that can be used as ordering information.
- The default colors are indicated in this pages. Other options available.
- E-2000 is a trademark of Diamond SA, Switzerland.

#### Ordering Information

Type	Compatible Fiber	Formation	Body Color	Cover Color	Sleeve	Packaging	P/N
LSH/UPC Coupler	Multimode	Single	Beige	Beige	PB	1/Bag 120/Box	29LM1NV001D-BG61
LSH/UPC Coupler	Singlemode	Single	Blue	Blue	Zirconia	1/Bag 120/Box	29LS1NV001L-BL61
LSH/APC Coupler	Singlemode	Single	Green	Green	Zirconia	1/Bag 120/Box	29LS1NV001M-GN61
LSH/UPC Coupler	Multimode	Double	Beige	Beige	PB	1/Bag 120/Box	29LM1NV002D-BG61
LSH/UPC Coupler	Singlemode	Double	Blue	Blue	Zirconia	1/Bag 120/Box	29LS1NV002L-BL61
LSH/APC Coupler	Singlemode	Double	Green	Green	Zirconia	1/Bag 120/Box	29LS1NV002M-GN61

## AT&T FiberLine

### Fiber Optic Rapid Connectors for 250 $\mu$ or 900 $\mu$ Fibers

#### Description

Pre-terminated & pre-polished connectors for field termination of fibers

Compatible fiber coating diameters 250 $\mu$ m and 900 $\mu$ m

Available fiber polishing methods UPC or APC

Insertion loss	SM UPC	SM APC	MM
Max./Typical dB	0.5/0.2	0.6/0.3	0.4/0.1
Return loss	SM UPC	SM APC	SM APC
Min./Typical dB	40/55	50/60	22/35

Durability 0.2dB max. change after 1000 mating cycles

Temperature range -40 to +75C

Connector Ferrule type Ceramic



#### Standard & EU Directives Conformance

- Relevant sections of ANSI/TIA/EIA-604 (FOCIS)
- Relevant sections of IEC 60874
- Relevant sections of IEC 61753
- Relevant sections of IEC 61754
- EU Directive 2011/65/EU (RoHS-2)

#### Notes:

- Each product has a full-length P/N that can be used as ordering information.
- The default colors are indicated in this page. Other options available.
- Standard packaging contains 0.9mm boots and breakout tubes (for 250 $\mu$  fibers).

#### Ordering Information

Description	Compatible Fiber	Body Color	Boot Color	Packaging	P/N
Rapid Plus SC/UPC Connector	Singlemode	Blue	White	1/Bag 120/Box	29SS2NV001J-PB61
Rapid Plus SC/APC Connector	Singlemode	Green	White	1/Bag 120/Box	29SS2NV001K-GN61
Rapid Plus SC/UPC Connector	Multimode 50/125 $\mu$	Black	White	1/Bag 120/Box	29SM2NV001H-BK61
Rapid Plus SC/UPC Connector	Multimode 62.5/125 $\mu$	Beige	White	1/Bag 120/Box	29SM1NV001H-BG61
Rapid Plus SC/UPC Connector	Multimode OM4/OM3	Turquoise	White	1/Bag 120/Box	29SM4NV001H-TQ61
Rapid Plus LC/UPC Connector	Singlemode	Blue	White	1/Bag 120/Box	29SS2NV001Q-PB61
Rapid Plus LC/UPC Connector	Singlemode	Green	White	1/Bag 120/Box	29SS2NV001Q-GN61
Rapid Plus LC/UPC Connector	Multimode 50/125 $\mu$	Black	White	1/Bag 120/Box	29SM2NV001P-BK61
Rapid Plus LC/UPC Connector	Multimode 62.5/125 $\mu$	Beige	White	1/Bag 120/Box	29SM1NV001P-BG61
Rapid Plus LC/UPC Connector	Multimode OM4/OM3	Turquoise	White	1/Bag 120/Box	29SM4NV001P-TQ61
Rapid SC/UPC Fiber Connector	Singlemode	Blue	Black	1/Bag 120/Box	29RS2NV001J-PB61
Rapid SC/APC Fiber Connector	Singlemode	Green	Black	1/Bag 120/Box	29RS2NV001K-GN61
Rapid SC/UPC Fiber Connector	Multimode 50/125 $\mu$	Beige	Black	1/Bag 120/Box	29RM2NV001H-BG61
Rapid SC/UPC Fiber Connector	Multimode 62.5/125 $\mu$	Beige	Black	1/Bag 120/Box	29RM1NV001H-BG61
Rapid SC/UPC Fiber Connector	Multimode OM4/OM3	Turquoise	Black	1/Bag 120/Box	29RM3NV001H-TQ61
Rapid LC/UPC Fiber Connector	Singlemode	Blue	Black	1/Bag 120/Box	29RS2NV001Q-PB61
Rapid LC/UPC Fiber Connector	Multimode 50/125 $\mu$	Beige	Black	1/Bag 120/Box	29RM2NV001P-BG61
Rapid LC/UPC Fiber Connector	Multimode 62.5/125 $\mu$	Beige	Black	1/Bag 120/Box	29RM1NV001P-BG61
Rapid LC/UPC Fiber Connector	Multimode OM4/OM3	Turquoise	Black	1/Bag 120/Box	29RM3NV001P-TQ61
Rapid ST/UPC Fiber Connector	Singlemode	Blue	Black	1/Bag 120/Box	29RS2NV001C-PB61
Rapid ST/UPC Fiber Connector	Multimode 50/125 $\mu$	Beige	Black	1/Bag 120/Box	29RM2NV001A-BG61
Rapid ST/UPC Fiber Connector	Multimode 62.5/125 $\mu$	Beige	Black	1/Bag 120/Box	29RM1NV001A-BG61
Rapid ST/UPC Fiber Connector	Multimode OM4/OM3	Turquoise	Black	1/Bag 120/Box	29RM3NV001A-TQ61

## AT&T FiberLine

### Fiber Optic Rapid Connectors for 2mm or 3mm Minicables

#### Description

Pre-terminated & pre-polished connectors for field termination of minicables

Compatible minicables diameters 2.0mm and 3.0mm.  
Available fiber polishing methods UPC or APC

Typical insertion loss	SM UPC	SM APC	MM
dB	<0.5	<0.6	<0.4
Typical return loss	SM UPC	SM APC	SM APC
dB	<45	<65	<50
Durability	0.2dB max. change after 1000 mating cycles		
Temperature range	-20 to +60C		
Connector Ferrule type	Ceramic		



#### Standard & EU Directives Conformance

- Relevant sections of ANSI/TIA/EIA-604 (FOCIS)
- Relevant sections of IEC 60874
- Relevant sections of IEC 61753
- Relevant sections of IEC 61754
- EU Directive 2011/65/EU (RoHS-2)

#### Notes:

- Each product has a full-length P/N that can be used as ordering information.
- The default colors are indicated in this page. Other options available.
- Each bag contains one connector, one 2.0mm boot and one 3.0mm boot.

#### Ordering Information

Description	Compatible Fiber	Body Color	Boot Color	Packaging	P/N
Rapid SC/UPC Minicable Connector	Singlemode	Blue	Black	1/Bag 120/Box	29BS2NV001J-PB61
Rapid SC/APC Minicable Connector	Singlemode	Green	Black	1/Bag 120/Box	29BS2NV001K-GN6
Rapid SC/UPC Minicable Connector	Multimode 50/125μ	Beige	Black	1/Bag 120/Box	29BM2NV001H-BG61
Rapid SC/UPC Minicable Connector	Multimode 62.5/125μ	Beige	Black	1/Bag 120/Box	29BM1NV001H-BG61
Rapid SC/UPC Minicable Connector	Multimode OM3	Turquoise	Black	1/Bag 120/Box	29BM3NV001H-TQ61
Rapid SC/UPC Minicable Connector	Multimode OM4	Turquoise	Black	1/Bag 120/Box	29BM4NV001H-TQ61
Rapid LC/UPC Minicable Connector	Singlemode	Blue	Black	1/Bag 120/Box	29BS2NV001Q-PB61
Rapid LC/UPC Minicable Connector	Multimode 50/125μ	Beige	Black	1/Bag 120/Box	29BM2NV001P-BG61
Rapid LC/UPC Minicable Connector	Multimode 62.5/125μ	Beige	Black	1/Bag 120/Box	29BM1NV001P-BG61
Rapid LC/UPC Minicable Connector	Multimode OM3	Turquoise	Black	1/Bag 120/Box	29BM3NV001P-TQ61
Rapid LC/UPC Minicable Connector	Multimode OM4	Turquoise	Black	1/Bag 120/Box	29BM4NV001P-TQ61
Rapid ST/UPC Minicable Connector	Singlemode	Blue	Black	1/Bag 120/Box	29BS2NV001C-PB61
Rapid ST/UPC Minicable Connector	Multimode 50/125μ	Beige	Black	1/Bag 120/Box	29BM2NV001A-BG61
Rapid ST/UPC Minicable Connector	Multimode 62.5/125μ	Beige	Black	1/Bag 120/Box	29BM1NV001A-BG61
Rapid ST/UPC Minicable Connector	Multimode OM3	Turquoise	Black	1/Bag 120/Box	29BM3NV001A-TQ61
Rapid ST/UPC Minicable Connector	Multimode OM4	Turquoise	Black	1/Bag 120/Box	29BM4NV001A-TQ61

## AT&T FiberLine Outlets

### Fiber Optic Surface Mount Boxes

#### Description

1-4 fiber 86x86mm fiber optic surface mount boxes	
Connector type compatibility	SC and LC
Type	Wall mount
Splicing and distribution options	1-4 fiber splicing or cable distribution
Connectors assembly	One or two SC simplex or LC duplex couplers
Access method	Top and back



#### Standard & EU Directives Conformance

- Plastic parts: UL94 V-0 flame test
- EU Directive 2011/65/EU (RoHS-2)

#### Mechanical Properties and Features

Material of construction	High-impact flame retardant materials
Operating temperature	0 to +60C at 5-85% RH (non condensing)
Storage temperature	-20 to +60C
Color	White (other colors available)

#### Ordering Information

Description	Ports	Fiber Capacity	Size mm	Color	Packaging	P/N
Fiber Optic Surface Mount Box	2	1-4	86x86x15	White	1/Bag	53F8686002N-WT61

## AT&T FiberLine Outlets

### Fiber Optic & Copper Multimedia Box

#### Description

Fiber and copper multimedia box with 12 fiber management  
 Up to 24 fibers or 12 RJ45 adapters  
 Connector type compatibility ST, SC, LC, MTRJ or RJ45  
 Type Wall mount  
 Splicing and distribution options 1-12 fiber splicing or cable distribution  
 Access method Top and back



#### Standard & EU Directives Conformance

- Plastic parts: UL94 V-0 flame test
- EU Directive 2011/65/EU (RoHS-2)

#### Mechanical Properties and Features

Material of construction High-impact flame retardant materials  
 Operating temperature 0 to +60C at 5-85% RH (non condensing)  
 Storage temperature -20 to +60C  
 Box identification Label with transparent cover  
 Color White RAL 1013  
 (other colors available)

#### Ordering Information - Multimedia Box

Description	Ports	Fiber Capacity	Size mm	Color	Packaging	P/N
12-Port Multimedia Box with Cable Management	12	1-24	205x171x57	White	1/Bag	53M2016012N-WT51

#### Ordering Information - Multimedia Box Inserts

Type	Adapter	Type	Capacity	Size mm	Color	Packaging	P/N
Insert Assembly for Multimedia Box	ST	Simplex	2 fibers	50x25x12	White	1/Bag	53MASNA002N-WT61
Insert Assembly for Multimedia Box	SC	Duplex	2 fibers	50x25x12	White	1/Bag	53MHDNA002N-WT61
Insert Assembly for Multimedia Box	LC	Quad	4 fibers	50x25x12	White	1/Bag	53MPQNA004N-WT61
Insert Assembly for Multimedia Box	LC	Duplex	2 fibers	50x25x12	White	1/Bag	53MPDNA002N-WT61
Insert Assembly for Multimedia Box	MTRJ	One Duplex	2 fibers	50x25x12	White	1/Bag	53MSSNA002N-WT61
Insert Assembly for Multimedia Box	MTRJ	Two Duplex	4 fibers	50x25x12	White	1/Bag	53MSDNA004N-WT61
Insert Assembly for Multimedia Box	RJ45	Single	1x4 Pairs	50x25x12	White	1/Bag	53MRJ45001N-WT61
Insert Assembly for Multimedia Box	RJ45	Double	2x4 Pairs	50x25x12	White	1/Bag	53MRJ45002N-WT61
Blank Insert for Multimedia Box	-	-	-	50x25x12	White	1/Bag	53M00NA000N-WT61

## AT&T FiberLine

### Optical Fibers

#### Instructions

1. Select the fiber type needed.
2. Replace the *FF* in the product P/N with the relevant **Fiber Code** to complete the P/N.

Fiber Type	Grade & Standard	Fiber Code	Fiber Type	Grade & Standard	Fiber Code
62.5/125µm Multimode	OM1 - ISO/IEC 11801 EIA/TIA-492 AAAA TIA-568-C.3	M1	9/125µm Singlemode	OS2 - ISO/IEC 11801 TIA-568-C.3 Outside Plant	S2
50/125µm Multimode	OM2 - ISO/IEC 11801 EIA/TIA-492 AAAB A1a.1 - IEC 60793-2-10 TIA-568-C.3	M2	9/125µm Singlemode	ITU-T G.652.D No water peak OS2 - ISO/IEC 11801 TIA-568-C.3 Outside Plant	SD
50/125µm Multimode	OM3 - ISO/IEC 11801 EIA/TIA-492 AAAC-A A1a.2 - IEC 60793-2-10 TIA-568-C.3	M3	9/125µm Singlemode	ITU-T G.655.D Non-zero dispersion-shifted OS2 - ISO/IEC 11801 TIA-568-C.3 Outside Plant	S5
50/125µm Multimode	Bend-Insensitive OM3 - ISO/IEC 11801 EIA/TIA-492 AAAC-A A1a.2 - IEC 60793-2-10 TIA-568-C.3	MB or C3	9/125µm Singlemode	ITU-T G.656 Non-zero dispersion for wideband optical transport OS2 - ISO/IEC 11801 TIA-568-C.3 Outside Plant	S6
50/125µm Multimode	OM4 - EIA/TIA-492 AAAD OM4 - ISO/IEC 11801 A1a.3 - IEC 60793-2-10	M4	9/125µm Singlemode	ITU-T G.657.A1 Bend-insensitive Category A1 MBR: 10mm	A1
50/125µm Multimode	Bend-Insensitive OM4 - EIA/TIA-492 AAAD OM4 - ISO/IEC 11801 A1a.3 - IEC 60793-2-10	MS or C4	9/125µm Singlemode	ITU-T G.657.A2 Bend-Insensitive Category A2 MBR: 7.5mm	A2
			9/125µm Singlemode	ITU-T G.657.B2 Bend-insensitive Category B2 MBR: 7.5mm	B2
			9/125µm Singlemode	ITU-T G.657.B3 Bend-Insensitive Category B3 MBR:5.0mm	B3



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