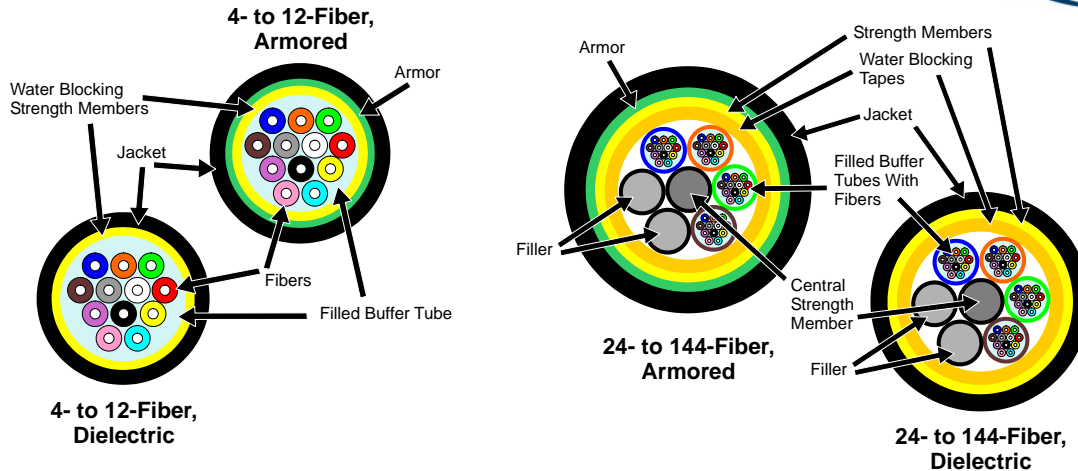


Fiber Optic Outside Plant Cables (4 - 144 Fibers)



Description:

AMP NETCONNECT outdoor cables are designed for campus-type environments or for long runs between buildings in aerial, duct or direct buried installations.

Standards Compliance:

AMP NETCONNECT cables are designed and tested to conform to the fiber and cable performance requirements of the TIA 568, ISO 11801, and ICEA-640 Standards. Accordingly, the cables meet or exceed all of the performance requirements for current and proposed applications such as IEEE 802.3 Ethernet (including 10 Gigabit Ethernet), ATM, Fibre Channel, FDDI and others. The cables are available in armored single tube, dielectric stranded tube and armored stranded tube constructions and with singlemode, 50/125µm, XG (850nm laser-optimized 50/125µm) or 62.5/125µm fiber.

Specification (Text in brackets [...] requires a choice):

The optical fiber cable shall consist of [four, six, eight, twelve, twenty-four, thirty-six, forty-eight, seventy-two, ninety-six or 144] [singlemode, 50/125µm, 850nm laser-optimized 50/125µm, 62.5/125µm] strain-free fibers. [Four, Six, Eight or Twelve] colored fibers shall be encased in a colored buffer tube filled with a water-barrier filling compound. Single tube constructions shall have a single buffer tube, water-blocking strength members, corrugated steel tape armor and a medium-density polyethylene (MDPE) outer jacket. Dielectric stranded tube constructions shall have multiple buffer tubes and fillers (if necessary), water-blocking tapes and/or yarns, strength members and a medium-density polyethylene (MDPE) outer jacket. Armored stranded tube constructions shall have multiple buffer tubes and fillers (if necessary), water-blocking tapes and/or yarns, strength members, corrugated steel tape armor and a medium-density polyethylene (MDPE) outer jacket. The nominal cable dimensions shall be [insert table or values from the Mechanical Specifications table below]. The cable jacket shall be black. The cable shall comply with the performance requirements listed in the Performance Characteristics table [insert table or values from the Performance Characteristics table below]. The cable shall be AMP NETCONNECT part number [insert tables or part numbers from the Part Numbers tables below]. The temperature ratings for storage, shipping, installation and operation shall comply with the Temperature Ratings table [include Temperature Ratings table below]. Hybrid cables shall be constructed in order of core size from smallest to largest. (i.e. single-mode fibers taking the first positions, followed by 50/125µm then 62.5/125µm).

Cable Print:

Cables will be marked with "AMP NETCONNECT F O CABLE [cable description] [fiber count]X[fiber type] [yy/ww] [xxxxx]" or "AMP NETCONNECT XG F O CABLE [cable description] [fiber count]X[fiber type] [yy/ww] [xxxxx]", where cable description defines the cable design [OSP for dielectric, OSPA for armored] fiber count defines total number of fibers in the cable, fiber type defines the fiber type [9/125 for single-mode, 62.5/125, 50/125, 850nm LOF 50/125 for XG], yy is year of manufacture, ww is week of manufacture (calendar week) and xxxxx is length marking in feet.

Shipping and Packaging:

The cable will be shipped on a wooden reel. The cable length billing and shipping tolerances are -0%/+10%.

Materials:

Optical fibers are silica glass surrounded by acrylate coating. The filling compound is a hygroscopic gel. The buffer tubes are thermoplastic and the central members are glass-reinforced plastic (GRP). The strength members are aramid and/or fiberglass yarns. Water blocking materials are impregnated with super absorbent polymers. Cable jacket is black polyethylene. Armor is plastic-coated steel tape.

Fiber Optic Outside Plant Cables (4 - 144 Fibers)



Part Numbers:

OSP Dielectric Single Loose Tube Cable (4 to 12 Fibers, Single Tube)

Description	Part Number			
	4-Fiber	6-Fiber	8-Fiber	12-Fiber
XG Fiber	8-1664212-5	8-1664215-5	8-1664218-5	8-1664221-5
50/125µm Multimode	2-1664212-5	2-1664215-5	2-1664218-5	2-1664221-5
62.5/125µm Multimode	1-1664213-5	1-1664216-5	1-1664219-5	1-1664222-5
Singlemode	0-1664211-5	0-1664214-5	0-1664217-5	0-1664220-5

OSP Dielectric Stranded Loose Tube Cable (48 to 144 Fibers, 12 Fibers Per Tube)

Description	Part Number					
	24-Fiber	36-Fiber	48-Fiber	72-Fiber	96-Fiber	144-Fiber
XG Fiber	8-1664191-5	8-1664194-5	8-1664197-5	8-1664200-5	8-1664203-5	8-1664206-5
50/125µm Multimode	2-1664191-5	2-1664194-5	2-1664197-5	2-1664200-5	2-1664203-5	2-1664206-5
62.5/125µm Multimode	1-1664192-5	1-1664195-5	1-1664198-5	1-1664201-5	1-1664204-5	1-1664207-5
Singlemode	0-1664190-5	0-1664193-5	0-1664196-5	0-1664199-5	0-1664202-5	0-1664205-5

OSP Armored Single Loose Tube Cable (4 to 12 Fibers, Single Tube)

Description	Part Number			
	4-Fiber	6-Fiber	8-Fiber	12-Fiber
XG Fiber	8-1664161-5	8-1664164-5	8-1664167-5	8-1664170-5
50/125µm Multimode	2-1664161-5	2-1664164-5	2-1664167-5	2-1664170-5
62.5/125µm Multimode	1-1664162-5	1-1664165-5	1-1664168-5	1-1664171-5
Singlemode	0-1664160-5	0-1664163-5	0-1664166-5	0-1664169-5

OSP Armored Stranded Loose Tube Cable (24 to 144 Fibers, 12 Fibers per Tube)

Description	Part Number					
	24-fiber	36-Fiber	48-fiber	72-Fiber	96-fiber	144-Fiber
XG Fiber	8-1664173-5	8-1664176-5	8-1664179-5	8-1664182-5	8-1664185-5	8-1664188-5
50/125µm Multimode	2-1664173-5	2-1664176-5	2-1664179-5	2-1664182-5	2-1664185-5	2-1664188-5
62.5/125µm Multimode	1-1664174-5	1-1664177-5	1-1664180-5	1-1664183-5	1-1664186-5	1-1664189-5
Singlemode	0-1664172-5	0-1664175-5	0-1664178-5	0-1664181-5	0-1664184-5	0-1664187-5

Hybrid (Single-mode and 62.5/125µm Multimode Fiber) Dielectric Outdoor Cables

Description	# of Singlemode Fibers	# of 62.5/125µm Fibers	Part Number
24-Fiber Hybrid	12	12	4-1664208-5
36-Fiber Hybrid	12	24	4-1664209-5
72-Fiber Hybrid	24	48	4-1664210-5

Note: Hybrid cables shall be constructed in order of core size from smallest to largest. (i.e. single-mode fibers taking the first positions, followed by 50/125µm then 62.5/125µm).

Fiber Optic Outside Plant Cables (4 - 144 Fibers)



Performance Specifications:

AMP NETCONNECT outside plant cables are designed and tested in accordance with TIA 568, ISO 11801, ICEA 640, Telcordia (Bellcore) and GR-20-CORE. Performance specifications are measured in accordance with the Fiber Optic Test Procedures (EIA/TIA-455 documents) and the test procedures of IEC 60793 and IEC 60794.

Mechanical Specifications

Cable Type	Fiber Count	Nominal O.D. mm (in)	Nominal Weight kg/km (lbs/1000ft)	Rated Tensile Load		Minimum Bend Radius	
				Install N (lbf)	Long Term N (lbf)	Install mm (in)	Long Term mm (in)
Armored	4-Fiber	10.7 (0.42)	120 (78)	2700 (600)	890 (200)	214 (8.4)	107 (4.2)
	6-Fiber	10.7 (0.42)	120 (78)	2700 (600)	890 (200)	214 (8.4)	107 (4.2)
	8-Fiber	10.7 (0.42)	120 (78)	2700 (600)	890 (200)	214 (8.4)	107 (4.2)
	12-Fiber	10.7 (0.42)	120 (78)	2700 (600)	890 (200)	214 (8.4)	107 (4.2)
	24-Fiber	13.4 (0.53)	170 (120)	2700 (600)	890 (200)	268 (10.6)	134 (5.3)
	36-Fiber	13.4 (0.53)	160 (110)	2700 (600)	890 (200)	268 (10.6)	134 (5.3)
	48-Fiber	13.4 (0.53)	160 (110)	2700 (600)	890 (200)	268 (10.6)	134 (5.3)
	72-Fiber	14.2 (0.56)	200 (140)	2700 (600)	890 (200)	284 (11.2)	142 (5.6)
	96-Fiber	16 (0.63)	230 (160)	2700 (600)	890 (200)	320 (12.6)	160 (6.3)
	144-Fiber	20 (0.78)	350 (240)	2700 (600)	890 (200)	392 (15.4)	196 (7.7)
Dielectric	4-Fiber	6.0 (0.24)	32 (22)	1000 (220)	890 (200)	100 (3.9)	60 (2.4)
	6-Fiber	6.0 (0.24)	32 (22)	1000 (220)	890 (200)	100 (3.9)	60 (2.4)
	8-Fiber	6.0 (0.24)	32 (22)	1000 (220)	890 (200)	100 (3.9)	60 (2.4)
	12-Fiber	6.0 (0.24)	32 (22)	1000 (220)	890 (200)	100 (3.9)	60 (2.4)
	24-Fiber	11.6 (0.46)	100 (68)	2700 (600)	890 (200)	232 (9.2)	116 (4.6)
	36-Fiber	11.6 (0.46)	93 (63)	2700 (600)	890 (200)	232 (9.2)	116 (4.6)
	48-Fiber	11.6 (0.46)	93 (63)	2700 (600)	890 (200)	232 (9.2)	116 (4.6)
	72-Fiber	12.6 (0.5)	130 (88)	2700 (600)	890 (200)	252 (10.0)	126 (5.0)
	96-Fiber	14.4 (0.57)	160 (110)	2700 (600)	890 (200)	288 (11.4)	144 (5.7)
	144-Fiber	18 (0.7)	250 (170)	2700 (600)	890 (200)	360 (14.2)	180 (7.1)

Performance Characteristics

	XG Fiber (850nm/1300nm)	Multimode 50/125µm (850nm/1300nm)	Multimode 62.5/125µm (850nm/1300nm)	Single-mode (1310nm/1550nm)
Maximum Attenuation	3.5/1.5 dB/km	3.5/1.5 dB/km	3.5/1.0 dB/km	0.5/0.5dB/km
OFL Bandwidth	1500/500 MHz□km	500/500 MHz□km	200/500 MHz□km	Not Applicable
850nm Laser Bandwidth	2000 MHz□km	Not Applicable	Not Applicable	Not Applicable
1000BASE-SX Distance	2-900m	2-600m	2-300m	2-5000m
1000BASE-LX Distance	2-550m	2-600m	2-550m	2-5000m
10GBASE-SR Distance	2-300m	2-82m	2-33m	NST
10GBASE-LX4 Distance	2-300m	2-300m	2-300m	2-10000m

Temperature Ratings

Operation	Installation	Storage/Shipping
-40°C to +70°C (-40°F to +160°F)	-20°C to +60°C (-22°F to +140°F)	-40°C to +70°C (-40°F to +160°F)

Specifications subject to change without notice. All stated mechanical specifications are considered nominal and are subject to normal manufacturing tolerances.

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