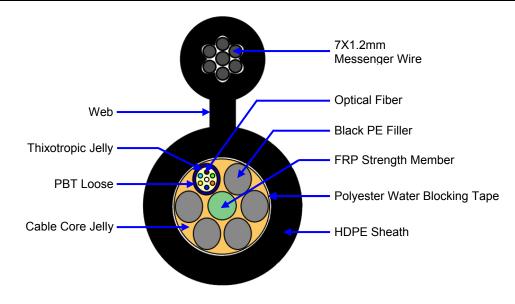
Optical Fiber Aerial Figure 8 Cables, PE (4-144 Fibers)





4-144 Fibers

Description:

AMP NETCONNECT Figure 8 Aerial Self Support cables are designed suitably for Outdoor campus-type UV/harsh outdoor environment protection, Ducted or Underground Conduit service for long runs between buildings short, medium span aerial installations

Standards Compliance:

AMP OSP (outside plant) Figure 8 Aerial Self Support cables are designed for campus-type environments, Aerial links Self Support or Ducted underground service for long runs between buildings. AMP cables are tested to the TIA/EIA 568B.3 and ISO/IEC 11801:2002, IEC 60794-3-12 ,IEC 60794-3-21, IEC 60794-3-21, EN 60794-3-21:2006 requirements for optical fiber cable performance, and are designed to exceed all of the performance requirements for current and proposed applications such as 100BASE-F, 155/622 Mbps ATM Gigabit Ethernet 10Gigabit Ethernet. The cables are available with either singlemode, 62.5/125um Extended Grade, 50/125um and 50/125um Laser Optimized (XG)

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

The optical fiber cable comprise of [6,12,24,36,48 up to 144] fibers. The cables are of [5,6,8,12] elements construction and are detailed in performance table, Loose tubes are manufactured from high strength, low shrinkage PBT compound, and each tube will contain [6 or 12] optical fibers and a thixotropic jelly, to prevent water penetration and protect the fibers against shock. Fiber color sequence is complied with TIA-598. The filler elements are manufactured with PE to the same outside diameter as the loose tubes. The elements are SZ stranded around a non-metallic central strength member (FRP with coating if required) and the formation retained with polyester water blocking tapes binders. To prevent the ingress of water, the cable core is jelly filled. Over this core is applied a polyester tape. Finally a black HDPE is sheathed. This sheath is in a figure 8 formation with the upper part carrying a 7X1.2mm (for 4-72Fiber), 7X1.3mm (for 96Fiber), 7X1.6mm (for 144Fiber) stranded zinc-coated steel strand bearer. The nominal radial thickness of the sheath around the cable core is 1.5mm, and around the bearer the nominal radial thickness is 1.0mm. The web dimensions are 2.0mm wide X 2.0mm high.

Shipping and Packaging:

The cable will be shipped on a wooden reel.

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Part Numbers

Description	Fiber Type	Fiber Count	Element	Fiber / Element	Part Number
FO CABLE,OUTDOOR,FIGURE 8, 4F	SM	4	5	6	Y-1859400-4
FO CABLE,OUTDOOR,FIGURE 8, 6F	SM	6	5	6	Y-1859401-4
FO CABLE,OUTDOOR,FIGURE 8, 8F	SM	8	5	6	Y-1859402-4
FO CABLE,OUTDOOR,FIGURE 8, 12F	SM	12	5	6	Y-1859403-4
FO CABLE,OUTDOOR,FIGURE 8, 24F	SM	24	5	6	Y-1859404-4
FO CABLE,OUTDOOR,FIGURE 8, 36F	SM	36	6	6	Y-1859408-4
FO CABLE,OUTDOOR,FIGURE 8, 48F	SM	48	5	12	Y-1859409-4
FO CABLE,OUTDOOR,FIGURE 8, 60F	SM	60	5	12	Y-1859410-4
FO CABLE,OUTDOOR,FIGURE 8, 72F	SM	72	6	12	Y-1859411-4
FO CABLE,OUTDOOR,FIGURE 8, 96F	SM	96	8	12	Y-1859412-4
FO CABLE,OUTDOOR,FIGURE 8, 144F	SM	144	12	12	Y-1859413-4

Y denotes Length: 1 = 1Km, 2 = 2Km, 3 = 3Km, 4 = 4Km.

Performance Specifications:

AMP NETCONNECT Optical Fiber Aerial Figure 8 Cable are designed and tested in accordance with TIA-568-B.3 and ISO 11801, ITU G.652D, Performance specifications are measured in accordance with the Fiber Optic Test Procedures (EIA/TIA-455 documents) and the test procedures of IEC 60793-2-50,B1.3, IEC 60794.

Mechanical Specification:

Fiber	Nominal O.D.	lominal O.D. Nominal mm (in) Weight Kg/Km	Min. Bending Radius		Rated Tensile Load		Crush Resistance	Span 108km/hr	Tomporatura
	111111 (111)		Installation mm (in)	Long term mm (in)	Installation N	Long Term N	N/10cm	m	Temperature
4-fiber	8.8 (0.346)	142	176 (6.93)	88 (3.46)	4410	11630	2000	80	Operation /Installation -20 °c to +70 °c
6-fiber	8.8 (0.346)	142	176 (6.93)	88 (3.46)	4410	11630	2000	80	
8-fiber	8.8 (0.346)	142	176 (6.93)	88 (3.46)	4410	11630	2000	80	
12-fiber	8.8 (0.346)	142	176 (6.93)	88 (3.46)	4410	11630	2000	80	
24-fiber	8.8 (0.346)	142	176 (6.93)	88 (3.46)	4410	11630	2000	80	
36-fiber	9.4 (0.370)	153	188 (7.40)	94 (3.70)	4900	11630	2000	80	
48-fiber	10 (0.394)	160	200 (7.87)	100 (3.93)	4900	11630	2000	80	Storage
60-fiber	10 (0.394)	160	200 (7.87)	100 (3.93)	4900	11630	2000	80	-40 °c to +70 °c
72-fiber	10.7 (0.421)	174	214 (8.42)	107 (4.21)	5690	11630	2000	80	
96-fiber	12.4 (0.488)	223	248 (9.76)	124 (4.88)	6470	13660	2000	80	
144-fiber	15.6 (0.614)	355	312 (12.28)	156 (6.14)	9520	15230	2000	80	

Optical Fiber Aerial Figure 8 Cables, PE (4-144 Fibers)



Performance Characteristics (meet or exceed EIA/TIA and ISO requirements)

	XG Fiber (850/1300)	50/125 µm MM (850/1300)	62.5/125 μm MM (850/1300)	Singlemode (1310/1383/1550)
Typical Attenuation	2.4/0.6 dB/km	2.6/1.1 dB/km	2.9/0.9 dB/km	0.36/0.36/0.23 dB/km
Maximum Attenuation	3.5/1.5 dB/km	3.5/1.5 dB/km	3.5/1.0 dB/km	0.4/0.4/0.4 dB/km
OFL Bandwidth	1500/500 MHz·km	500/500 MHz·km	200/600 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	-
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

Technical Details

General Characteristics	
Material –	Silica/Germanium doped silica
Index Profile –	Step Index, Matched Cladding
Cladding Diameter –	125 ± 0.7 μm
Cladding Non-Circularity error –	≤ 1.0 %
Core/Cladding concentricity error –	≤ 0.5 µm
Primary Coating	
Material –	UV Cured acrylic resin
External Diameter –	$245 \pm 5 \mu m$
Coating Concentricity error –	≤ 12 µm
Transmission Characteristics	
Mode Field Diameter @1310 nm -	9.2 ± 0.4 μm
Chromatic Dispersion	
in the range 1285 to 1330nm –	≤ 3.5 ps/(nm.km)
@1550nm – @1625nm –	≤ 18 ps/(nm.km) ≤ 22 ps/(nm.km)
Cut-Off Wavelength "λcc" –	≤ 1260 nm
Zero dispersion wavelength (λ_0) –	1302 to 1322 ps/(nm ² .km)
Zero dispersion Slope (So) –	≤ 0.089 ps/(nm².km)
Polarization mode dispersion coefficient	2 0.000 ps/(iiii .kiii)
(PMD Single drum) –	≤ 0.1 ps/√ km
(PMD Link) –	≤ 0.07 ps/√ km
Effective Group Index	
@1310 nm –	1.4675
@1550 nm –	1.4681
Proof test for 1 sec –	1%
Macro bending attenuation 100 turns, 75mm diameter @1550 nm –	≤ 0.05 dB
Approvals	
Tensile Load –	IEC 60794-1-2-E1
Crush Resistance –	IEC 60794-1-2-E3
Repeat Bending –	IEC 60794-1-2-E6
Cable Bend –	IEC 60794-1-2-E11B
Water Penetration –	IEC 60794-1-2-F5
Temperature Cycling –	IEC 60794-1-2-F1
RoHS Compliant –	RoHS

Specifications subject to change without notice.

Revised 07/09

