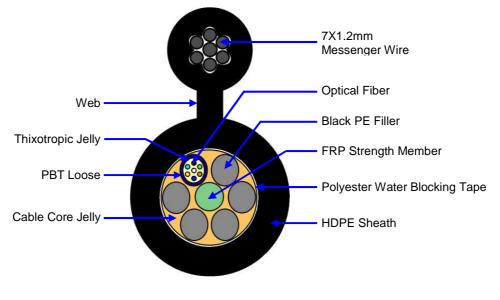
Optical Fiber Aerial Figure 8 Cables, PE (4-144 Fibers)





4-144 Fibers

Description:

AMP Netconnect OSP (outside plant) 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. Cables are tested to the TIA/EIA 568-C 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 and 40/100Gbps Ethernet. The cables are available with Singlemode OS2, 62.5/125µm Extended Grade OM1, 50/125µm OM2, 50/125µm Laser Optimized (XG) OM3 and 50/125µm OM4 Fiber

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.



Part Numbers

Description	Fiber Type	Fiber Count	Element	Fiber / Element	Part Number
FO CABLE, OUTDOOR, FIGURE 8, 4F	OS2	4	5	6	Y-1859400-4
FO CABLE, OUTDOOR, FIGURE 8, 6F	OS2	6	5	6	Y-1859401-4
FO CABLE, OUTDOOR, FIGURE 8, 8F	OS2	8	5	6	Y-1859402-4
FO CABLE, OUTDOOR, FIGURE 8, 12F	OS2	12	5	6	Y-1859403-4
FO CABLE, OUTDOOR, FIGURE 8, 24F	OS2	24	5	6	Y-1859404-4
FO CABLE, OUTDOOR, FIGURE 8, 36F	OS2	36	6	6	Y-1859408-4
FO CABLE, OUTDOOR, FIGURE 8, 48F	OS2	48	5	12	Y-1859409-4
FO CABLE, OUTDOOR, FIGURE 8, 60F	OS2	60	5	12	Y-1859410-4
FO CABLE, OUTDOOR, FIGURE 8, 72F	OS2	72	6	12	Y-1859411-4
FO CABLE, OUTDOOR, FIGURE 8, 96F	OS2	96	8	12	Y-1859412-4
FO CABLE, OUTDOOR, FIGURE 8, 144F	OS2	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-C.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. mm (in)		Min. Bending Radius		Rated Tensile Load		Crush Resistance	Span 108km/hr	Temperature
Count			Installation mm (in)	Long term mm (in)	Installation N	Long Term N	N/10cm	m	- remperature
4-fiber	8.8 (0.346)	142	176 (6.93)	88 (3.46)	4410	11630	2000	80	
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	Operation /Installation -20 °c to +70 °c
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	+70 °C
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	

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 ± 5 μm
Coating Concentricity error –	≤ 12 μm

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Transmission Characteristics

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 –	≤ 18 ps/(nm.km)
@1625nm –	≤ 22 ps/(nm.km)
Cut-Off Wavelength "λcc" –	≤ 1260 nm
Zero dispersion wavelength (λ_{\circ}) –	1302 to 1322 ps/(nm ² .km)
Zero dispersion Slope (So) –	≤ 0.089 ps/(nm².km)
Polarization mode dispersion coefficient	
(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	≤ 0.05 dB
100 turns, 75mm diameter @1550 nm -	- 0.00 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

Performance Characteristics (meet or exceed EIA/TIA 568-C.3 and ISO/IEC 11801 requirements)

	OM4	OM3	OM2	OM1	OS2
Application	50/125µm	50/125µm	50/125µm	62.5/125µm	Singlemode
	(850/1300)	(850/1300)	(850/1300)	(850/1300)	(1310/1383/1550)
Typical Attenuation (dB/Km)	2.4/0.6	2.4/0.6	2.6/1.1	2.9/0.9	0.36/0.36/0.23
Maximum Attenuation (dB/Km)	3.5/1.5	3.5/1.5	3.5/1.5	3.5/1.0	0.4/0.4/0.4
OFL Bandwidth (MHz×km)	3500/500	1500/500	500/500	200/600	N/A
850nm Laser Bandwidth (MHz×km)	4700	2000	N/A	N/A	N/A
1000Base-SX,Gigabit Ethernet,@850nm	900m	900m	550m	220m	-
1000Base-LX,Gigabit Ethernet,@1300nm	550m	550m	550m*	550m*	5000m
10GBase-SR,10Gbps,@850nm	550m	300m	82m	33m	-
10GBASE-LX4,10Gbps,WDM,@1310nm	300m	300m	300m	300m	10000m
10GBASE-LR,10Gbps,@1310nm	-	-	-	-	10000m
10GBASE-ER,10Gbps,@1550nm	-	-	-	-	40000m
40GBASE-SR4,40Gbps,@850nm	150m	100m	-	-	-
40GBASE-LR4,40Gbps,@1310nm	-	-	-	-	10000m
100GBASE-SR10,100Gbps,@850nm	100m	-	-	-	-
100GBASE-LR4,100Gbps,@1310nm	-	-	-	-	10000m
100GBASE-ER4,100Gbps,@1550nm	-	-	-	-	40000m

* To reach 550m on traditional fiber OM2, OM3 Mode Conditioning Lunch Patch Cord is required

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Revised 03/11



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