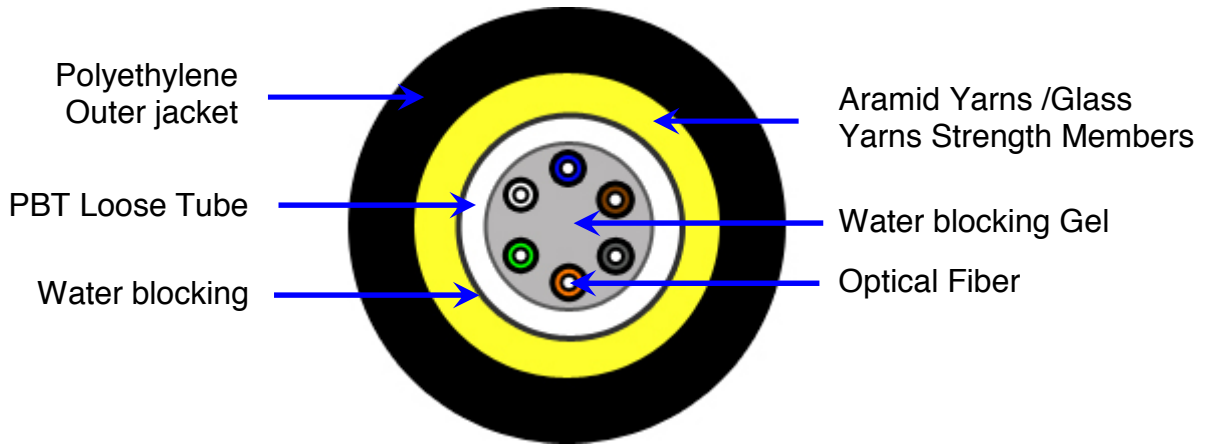


# Outdoor All Dielectric Fiber Optic Cables, PE (4-12 Fibers)



4-12 Fibers

### Description:

AMP Netconnect OSP (outside plant) cables are designed for campus-type environments, Aerial links (when use a messenger strand) or Ducted underground service for long runs between buildings cables are meet TIA/EIA 568-C and ISO/IEC 11801 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, Gigabit Ethernet 1000Base-SX/LX, 155/622 Mbps ATM, 10Gigabit while still supporting legacy LED and VCSEL The system fulfills the specifications of IEEE 802.3z, Gigabit Ethernet, IEEE 802.3ae, 10Gigabit and 40/100Gbps Ethernet. The cables are available with Singlemode OS2, 62.5/125 $\mu$ m Extended Grade OM1 or 50/125 $\mu$ m OM2 and 50/125 $\mu$ m Laser Optimized (XG) OM3 and 50/125 $\mu$ m OM4 Fiber.

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

The optical fiber cable shall contain [4,6,8,12] [OM1, OM2, OM3, OM4 or OS2] Fibers the cable structure central PBT Loose Tube containing the fibers and a thixotropic gel. Water blocking glass yarns are placed around the perimeter of the loose tube, to provide mechanical strength to the cable. Finally an outer sheath of black PE, with thickness of 1.5mm. Loose Tubes are manufactured from high strength, low shrinkage PBT Compound 4.1mm diameter, and each tube will contain up to 12 optical fibers and a thixotropic jelly, to prevent water penetration and protect the fibers against shock. Fiber colors sequence is defined TIA/EIA 598-C color coded fibers for easy identification per EIA 359-A. The cable core is of “dry core” design to prevent ingress of water. a water blocking tape is then longitudinally over the cable core and retained with a helically applied binder. Then non-metallic strength member Glass yarns are applied over the cable core, in order to provide the required tensile strength protection. Finally an outer sheath of black PE (HDPE available to request), with a nominal radial thickness of 1.5mm is applied over the glass yarns.

### Part Numbers

Description	Part Number				
	OS2	OM1	OM2	OM3	OM4
OSP Fiber Optic Cables, 4F	Y-1427449-4	Y-1427449-1	Y-1427449-2	Y-1427449-3	Y-1427449-5
OSP Fiber Optic Cables, 6F	Y-1427450-4	Y-1427450-1	Y-1427450-2	Y-1427450-3	Y-1427450-5
OSP Fiber Optic Cables, 8F	Y-1427451-4	Y-1427451-1	Y-1427451-2	Y-1427451-3	Y-1427451-5
OSP Fiber Optic Cables, 12F	Y-1427452-4	Y-1427452-1	Y-1427452-2	Y-1427452-3	Y-1427452-5

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

# Outdoor All Dielectric Fiber Optic Cables, PE (4-12 Fibers)



## Performance Specifications

AMP Netconnect OSP (outside plant) fiber optic cables are designed and tested in accordance with TIA/EIA 568-C.3, IEEE 802.3 Standard, ISO/IEC 11801, Telcordia (Bellcore) GR-20-CORE, ITU G.652D, ICEA 596, ICEA 696 Performance specifications are measured in accordance with EIA Fiber Optic Test Procedures (EIA/TIA-455 documents) and the test procedures of IEC 60793, IEC 60794.

## Mechanical Specification:

Fiber Count	Nominal O.D. mm (in)	Nominal Weight Kg/Km	Min. Bending Radius		Rated Tensile Load		Crush Resistance	Temperature	
			Installation mm	Long term mm	Installation N	Long Term N		Installation	Operation /Storage
4-12 fiber	7.5	50	150	75	1500	600	1000 N/ 10cm	-20 °c to +60 °c	-40 °c to +70 °c

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

Application	OM4	OM3	OM2	OM1	OS2
	50/125µm (850/1300)	50/125µm (850/1300)	50/125µm (850/1300)	62.5/125µm (850/1300)	Singlemode (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
Macro Bending Attenuation (dB)**	≤ 0.5	≤ 0.5	≤ 0.5	≤ 0.5	≤ 0.05
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

\*\* Macro Bending with 100 turns on a 75mm diameter at 850nm and 1300nm for multimode fiber cable

Macro Bending with 100 turns on a 60mm diameter at 1550nm and 1625nm for singlemode fiber cable

## Technical Details

Approvals	
RoHS Compliant –	RoHS
Tensile Load –	IEC 60794-1-2-E1
Crush –	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

Specifications subject to change without notice.

Revised 07/11

<http://www.ampnetconnect.com/thailand>

