Berk-Tek Outside Plant All Dielectric (OPD)



Berk-Tek's Outside Plant Loose Tube fiber optic cables are designed for installation in environments such as aerial lashing, conduit and pathways that are subjected to wide temperature variations. The Outside Plant product line offers 6 and 12 fibers per cable. These cables are thoroughly tested and verified to Telcordia GR-20 and ICEA-640 for outside cabling systems.

DESCRIPTION

Berk-Tek's Outdoor Loose Tube cables are available in multimode, single-mode and GIGAlite™ fibers.

Construction

Gel-filled tubes containing 250 µm fibers

Outdoor Consideration

Berk-Tek recommends that loose tube cables be utilized in an outside plant installation environment. Loose tube cables are especially recommended if the interbuilding conduit system is likely to fill with water.

• Sunlight resistant outer jacket per UL 444 clause 7.22.

Applications

Berk-Tek's Outdoor Loose Tube fiber optic cable is intended for all high speed data applications, including:

- ETHERNET: 10BASE 400GBASE (10BASE, 100BASE, 1000BASE, 10GBASE, 40GBASE, 100GBASE, 400GBASE)
- Fibre Channel: 1G-FC 128GFC (1, 2, 4, 8, 16, 32, 128 GFC)
- SONET: OC-1 OC-768 (OC -1, 3, 12, 24, 48, 192, 768)
- SDH: STM-0 STM-256 (STM-0, 1, 4, 16, 64, 256)
- OTN: OTU-1 OTU4 (OTU1, 2, 2e, 2f, 3, 3e2, 4)
- CPRI: CPRI-1 CPRI-9 (CPRI-1, 2, 3, 4, 5, 6, 7, 7a, 8, 9)

Features

- High tensile strength, crush resistant and small diameter design.
- Single-mode, multimode and hybrid design options available.
- · All dielectric design.
- · Armored designs available.
- · Fully water-blocked core using dry water blocking system.

Benefits

- Provides for greater pulling distances thus reducing installation time.
- Broad design selection allows for mix and match of fiber components to specific networking applications.
- · System grounding problems eliminated.
- · Long-term reliability.
- Low cable plant maintenance, ease of installation.
- · Reduce network costs.

Country of Origin: U.S.A.



International EN 50173:

ISO/IEC 11801

National ANSI/ICEA S-87-640: ANSI/TIA-568.3-D; Telcordia GR-20



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TECHN	ICAL DATA - PHYSIC	Ins	Install L		Long Term		Install		Long Term				
Fibers	Part Number Prefix	Diameter		Weight		Min. Bend Radiu		s		Max. Loadii			
		in.	mm	lb./kft	kg/km	in.	cm	in.	cm	lbf.	N	lbf.	N
6	OPD006	0.400	10.2	55	81	6.0	15.2	4.0	10.2	400	1779	120	534
12	OPD012	0.400	10.2	57	84	6.0	15.2	4.0	10.2	400	1779	120	534
24	OPDD12B024	0.451	11.5	59	88	6.8	17.2	4.5	11.5	600	2670	180	800

TECHNICAL DATA											
Fiber Type	Part Number Suffix	Berk-Tek Fiber	Core Size	Wavelength (nm)	Maximum Attenuation (dB/km)	Effective Modal Bandwidth @ 850 nm (MHz•km)	Distance (meters)				
Multim	ode - Bend Ins	ensitive	1 GbE	10 GbE	40 GbE	100 GbE					
OM1	CB3510/25	GIGAlite	62.5 µm	850/1300	3.5/1.0	200	300	33	N/A	N/A	
OM3	EB3010/25	GIGAlite-10	50 µm	850/1300	3.0/1.0	2000	1000	300	100	70	
OM4	FB3010/F5	GIGAlite-10FB	50 µm	850/1300	3.0/1.0	4700	1040	550	150	100	
OM4+	XB3010/X5	GIGAlite-10XB	50 µm	850/1300	3.0/1.0	4900	1210	600	300	150	
WideBa	and Multimode	- Bend Insensitiv	1 GbE	10 GbE	40 GbE	100 GbE					
OM5	WB3010/W5	GIGAlite-10WB	50 µm	850-953/1300	3.0/1.0	4700	1040	550	190	100	
Single-	Mode - Bend Ir	nsensitive - ITU-T	1 GbE	10 GbE	40 GbE	100 GbE					
OS2	AB0403	Standard for Loose Tube	SMF	1310/1550	0.4/0.3	N/A	≥ 5000	≥ 10000	≥ 10000	≥ 10000	



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CHARACTERISTICS

Construction characteristics

Jacket Material Polyethylene

SHEATH COLORS - LOOSE TUBE - OUTSIDE PLANT - BLACK

Fiber Type	Core Size (µm)	ISO-TIA Standard	Effective Modal BW @ 850 nm	Overfilled Launch BW @ 850 nm	Attenuation @ 850 nm	Attenuation @ 1300 nm	Attenuation @ 1550 nm	Sheath Color
AB	8.3	OS2	NS	NS	NS	0.35 dB/km	0.25 dB/km	Black
AB	8.3	OS2	NS	NS	NS	0.4 dB/km	0.3 dB/km	Black
СВ	62.5	OM1	200 MHz·km	200 MHz·km	3.5 dB/km	1.0 dB/km	NS	Black
EB	50	ОМ3	2000 MHz·km	1500 MHz·km	3.0 dB/km	1.0 dB/km	NS	Black
FB	50	OM4	4700 MHz·km	3500 MHz·km	3.0 dB/km	1.0 dB/km	NS	Black
XB	50	OM4+	4900 MHz·km	3675 MHz·km	3.0 dB/km	1.0 dB/km	NS	Black
WB	50	OM5	4700 MHz·km	3500 MHz·km	3.0 dB/km	1.0 dB/km	NS	Black

NS = Not Specified

MANUFACTURING RELEASE

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