

Berk-Tek Outside Plant All Dielectric (OPDD)

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 24 - 432 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, in up to 12 colors.

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 – 40GBASE (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)

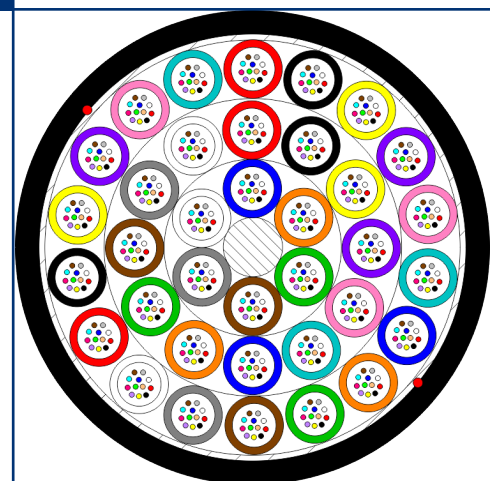
Features

- 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.



STANDARDS

International EN 50173;
ISO/IEC 11801

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

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TECHNICAL DATA - PHYSICAL						Install		Long Term		Install		Long Term	
Fibers	Part Number Prefix	Diameter		Weight		Min. Bend Radius				Max. Loading			
		in.	mm.	lb./kft.	kg./km.	in.	cm.	in.	cm.	lb.	N	lb.	N
24	OPDD12B024	0.451	11.5	59	88	6.8	17.2	4.5	11.5	600	2670	180	800
48	OPDD12B048	0.451	11.5	65	97	6.8	17.2	4.5	11.5	600	2670	180	800
72	OPDD12B072	0.489	12.4	82	122	7.3	18.6	4.9	12.4	600	2670	180	800
96	OPDD12B096	0.565	14.4	106	158	8.5	21.5	5.7	14.4	800	3560	240	1068
144	OPDD12B144	0.716	18.2	169	252	10.7	27.3	7.2	18.2	1000	4445	300	1335
216	OPDD12B216	0.740	18.8	178	265	11.1	28.2	7.4	18.8	1000	4445	300	1335
288	OPDD12B288	0.835	21.2	236	352	12.5	31.8	8.4	21.2	1000	4445	300	1335
432	OPDD12B432	0.991	25.2	316	471	41.9	37.8	9.9	25.2	1000	4445	300	1335

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)			
Multimode - Bend Insensitive							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
WideBand Multimode - Bend Insensitive							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 Insensitive - ITU-T G.657.A1							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

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
CB	62.5	OM1	200 MHz·km	200 MHz·km	3.5 dB/km	1.0 dB/km	NS	Black
EB	50	OM3	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