

Berk-Tek Outside Plant Single Armor Double Jacket (OPAD)

Berk-Tek's Outside Plant Single Armor Double Jacket Loose Tube fiber optic cables are designed for installation in harsh environments such as direct burial, aerial lashing, conduit and pathways that are subjected to wide temperature variations. The Armored Outside Plant product incorporates a corrugated steel armor tape between two jackets surrounding the core and is offered with 2 - 288 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 Single Armor Double Jacket Loose Tube cables are available in multimode, single-mode and GIGAlite™ fibers.

Buffer Tube Construction

Gel-filled tubes containing up to 12, 250 µm, individually colored 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

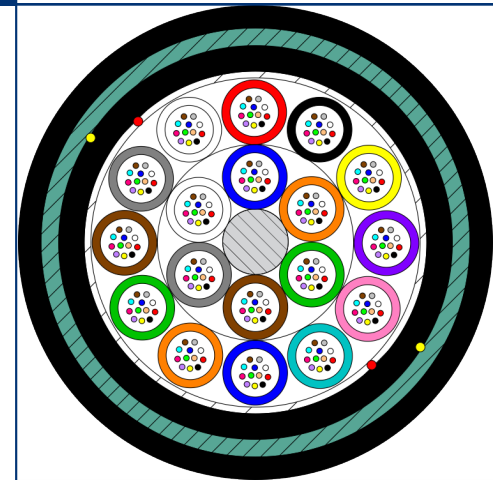
Berk-Tek's Outdoor Loose Tube fiber optic cable is intended for all high speed data applications, including:

- ETHERNET: 10BASE – 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)
- PON (SMF ONLY): RfOG, APON, BPON, EPON, GPON, WDM-PON, NG-PON

Features

- High tensile strength, crush resistant and small diameter design.
- Single-mode, multimode and hybrid design options available.
- Corrugated steel armor provides crush and rodent resistance.
- Recommended for direct burial installations.
- Fully water-blocked core using dry water blocking system.

Benefits



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

Country of Origin: U.S.A.

CHARACTERISTICS

Construction characteristics

Jacket Material

Polyethylene

Usage characteristics

RoHS compliant

Yes

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

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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.	lbf.	N	lbf.	N
24	OPAD12B024	0.621	15.8	145	216	12.4	31.5	9.3	23.7	600	2670	180	800
48	OPAD12B048	0.621	15.8	152	227	12.4	31.5	9.3	23.7	600	2670	180	800
72	OPAD12B072	0.659	16.7	181	270	13.2	33.5	9.9	25.1	600	2670	180	800
96	OPAD12B096	0.745	18.9	211	314	14.9	37.8	11.2	28.4	600	2670	180	800
144	OPAD12B144	0.896	22.8	298	443	17.9	45.5	13.4	34.1	600	2670	180	800
216	OPAD12B216	0.920	23.4	314	467	18.4	46.7	13.8	35.1	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)			
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				

MANUFACTURING RELEASE

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