

Outside Plant All Dielectric (OPDD)

Outside Plant All Dielectric Loose Tube Cable

Part Number: [OPD006CB3510/25](#)

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 2 - 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. 24 fiber tubes contain two 12-fiber bundles.

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.



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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CHARACTERISTICS

Construction characteristics

Fiber optic type	OM1 62.5/125
Type of cable	Loose tube
Jacket Material	Polyethylene
Sheath colour	Black

Dimensional characteristics

Tube diameter	2.4 mm
Number of optical fibres	6
Cable diameter (Nominal)	0.4 in
Nominal outer diameter	10.2 mm
Nominal cable weight	55 lb/kft
Approximate weight	81 kg/km

Transmission characteristics

Optical performance	CB (62.5/125 Standard, OM1)
Attenuation, max. 850 nm (cabled)	3.5 dB/km
Attenuation, max. 1300 nm (cabled)	1.0 dB/km

Mechanical characteristics

Maximum installation tension	400 lb
Maximum installation tension	1779 N
Max. Load. Long Term (lbs)	120.0 lb
Max. Load. Long Term	534.0 N
Impacts per TIA/EIA FOTP-25	2 at 5.88 N-m
Crush resistance per TIA/EIA FOTP-41	110 N/cm
Cable flexibility per TIA/EIA FOTP-104	100 cycles

Usage characteristics

Minimum Bending Radius - Install	6 in
Minimum Bend Radius - Install	15.2 cm
Minimum Bending Radius - LongTerm	4 in
Minimum Bending Radius - LongTerm	10.2 cm
RoHS compliant	Yes
Recommended operating temperature range	-40 .. 75 °C
Ambient installation temperature, range	-30 .. 60 °C
Recommended storage temperature range	-60 .. 85 °C
Field of application	Outdoor

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SHEATH COLOR

Fiber Type	Core Size (um)	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
LB	50	OM2+	950 MHz-km	700 MHz-km	3.0 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

MANUFACTURING RELEASE

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