

**Contact**

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## Outside Plant All Dielectric

Berk-Tek's Outside Plant 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 Outside Plant product line offers 2 - 216 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 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 above the frost line and likely to fill with water.

### Applications

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

- 10BASE-FL
- 100BASE-SX/100BASE-FX
- ATM 155/ATM 622
- 1000BASE-SX/1000BASE-LX
- Fibre Channel 1.062/2.125
- 10GBASE-SR/SW
- 10GBASE-LX4
- 40/100 GbE

### 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-C.3; Telcordia GR-20

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### Characteristics

Construction characteristics	
Outer sheath	Polyethylene
Usage characteristics	
RoHS conform	Yes
Field of application	Outdoor

### Sheath Color

Fiber Type	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	OS2	NS	NS	NS	0.35 dB/km	0.25 dB/km	Black
AB	OS2	NS	NS	NS	0.4 dB/km	0.3 dB/km	Black
CB	OM1	200 MHz-km	200 MHz-km	3.5 dB/km	1.0 dB/km	NS	Black
GB	OM1	500 MHz-km	350 MHz-km	3.5 dB/km	1.0 dB/km	NS	Black
ZB	OM2	500 MHz-km	500 MHz-km	3.5 dB/km	1.5 dB/km	NS	Black
LB	OM2+	950 MHz-km	700 MHz-km	3.0 dB/km	1.0 dB/km	NS	Black
EB	OM3	2000 MHz-km	1500 MHz-km	3.0 dB/km	1.0 dB/km	NS	Black
FB	OM4	4700 MHz-km	3500 MHz-km	3.0 dB/km	1.0 dB/km	NS	Black
XB	OM4+	4900 MHz-km	3675 MHz-km	3.0 dB/km	1.0 dB/km	NS	Black

NS = Not Specified

### Physical Characteristics - All Fiber Types

Nb optical fibres	Approximate weight [lb/kft]	Minimum Bending Radius - LongTerm [in]	Max. Load. Long Term (lbs) [lb]	Minimum Bending Radius - Install [in]	Maximum installation tension [lb]
2	30	3	100.0	6	300
2	52	4	135.0	6	450
4	30	3	100.0	6	300
4	52	4	135.0	6	450
6	30	3	100.0	6	300
6	52	4	135.0	6	450
12	30	3	100.0	6	300
12	52	4	135.0	6	450
12	52	4	200.0	5.97	600
12	59	4.5	180.0	6.8	600
18	52	4	200.0	5.97	600
18	59	4.5	180.0	6.8	600
24	52	4	200.0	5.97	600

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Nb optical fibres	Approximate weight [lb/kft]	Minimum Bending Radius - LongTerm [in]	Max. Load. Long Term (lbs) [lb]	Minimum Bending Radius - Install [in]	Maximum installation tension [lb]
24	59	4.5	180.0	6.8	600
48	52	4	200.0	5.97	600
48	65	4.5	180.0	6.8	600
72	59	4.2	200.0	6.32	600
72	82	4.9	180.0	7.3	600
144	125	6.2	200.0	9.27	600
144	169	7.2	300.0	10.7	1000
216	116	6.1	200.0	9.09	600
216	177	7.4	300.0	11.1	1000

### Product List

☎=Make to order, 📦=Make to stock

Part Number	Description
📦 OPD012CB3510/25	12 x OM1 Outside Plant All Dielectric Loose Tube Cable
☎ OPDD12B012CB3510/25	12 x OM1 Outside Plant All Dielectric Loose Tube Cable
☎ OPD012GB3510/25	12 x OM1+ Outside Plant All Dielectric Loose Tube Cable
☎ OPDD12B012GB3510/25	12 x OM1+ Outside Plant All Dielectric Loose Tube Cable
☎ OPD012ZB3515/15	12 x OM2 Outside Plant All Dielectric Loose Tube Cable
☎ OPDD12B012ZB3515/15	12 x OM2 Outside Plant All Dielectric Loose Tube Cable
☎ OPD012LB3010/75	12 x OM2+ Outside Plant All Dielectric Loose Tube Cable
☎ OPDD12B012LB3010/75	12 x OM2+ Outside Plant All Dielectric Loose Tube Cable
☎ OPD012EB3010/25	12 x OM3 Outside Plant All Dielectric Loose Tube Cable
☎ OPDD12B012EB3010/25	12 x OM3 Outside Plant All Dielectric Loose Tube Cable
☎ OPD012FB3010/F5	12 x OM4 Outside Plant All Dielectric Loose Tube Cable
☎ OPDD12B012FB3010/F5	12 x OM4 Outside Plant All Dielectric Loose Tube Cable
☎ OPD012XB3010/X5	12 x OM4+ Outside Plant All Dielectric Loose Tube Cable
☎ OPDD12B012XB3010/X5	12 x OM4+ Outside Plant All Dielectric Loose Tube Cable
☎ OPD012AB0403	12 x OS2 Outside Plant All Dielectric Loose Tube Cable
☎ OPDD12B012AB0403	12 x OS2 Outside Plant All Dielectric Loose Tube Cable
☎ OPDB012AB0302-M2	12 x OS2 Outside Plant All Dielectric Loose Tube Cable
☎ OPDD12B012AB0302-M2	12 x OS2 Outside Plant All Dielectric Loose Tube Cable
☎ OPDD12B144CB3510/25	144 x OM1 Outside Plant All Dielectric Loose Tube Cable
☎ OPDD12B144GB3510/25	144 x OM1+ Outside Plant All Dielectric Loose Tube Cable
☎ OPDD12B144ZB3515/15	144 x OM2 Outside Plant All Dielectric Loose Tube Cable
☎ OPDD12B144LB3010/75	144 x OM2+ Outside Plant All Dielectric Loose Tube Cable
☎ OPDD12B144EB3010/25	144 x OM3 Outside Plant All Dielectric Loose Tube Cable
☎ OPDD12B144FB3010/F5	144 x OM4 Outside Plant All Dielectric Loose Tube Cable
☎ OPDD12B144XB3010/X5	144 x OM4+ Outside Plant All Dielectric Loose Tube Cable
☎ OPDD12B144AB0403	144 x OS2 Outside Plant All Dielectric Loose Tube Cable
☎ OPDD12B144AB0302-M2	144 x OS2 Outside Plant All Dielectric Loose Tube Cable
☎ OPDD12B018CB3510/25	18 x OM1 Outside Plant All Dielectric Loose Tube Cable
☎ OPDD12B018GB3510/25	18 x OM1+ Outside Plant All Dielectric Loose Tube Cable

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## Outside Plant All Dielectric

Part Number	Description
☎ OPDD12B018ZB3515/15	18 x OM2 Outside Plant All Dielectric Loose Tube Cable
☎ OPDD12B018LB3010/75	18 x OM2+ Outside Plant All Dielectric Loose Tube Cable
☎ OPDD12B018EB3010/25	18 x OM3 Outside Plant All Dielectric Loose Tube Cable
☎ OPDD12B018FB3010/F5	18 x OM4 Outside Plant All Dielectric Loose Tube Cable
☎ OPDD12B018XB3010/X5	18 x OM4+ Outside Plant All Dielectric Loose Tube Cable
☎ OPDD12B018AB0403	18 x OS2 Outside Plant All Dielectric Loose Tube Cable
☎ OPDD12B018AB0302-M2	18 x OS2 Outside Plant All Dielectric Loose Tube Cable
☎ OPD002CB3510/25	2 x OM1 Outside Plant All Dielectric Loose Tube Cable
☎ OPD002GB3510/25	2 x OM1+ Outside Plant All Dielectric Loose Tube Cable
☎ OPD002ZB3515/15	2 x OM2 Outside Plant All Dielectric Loose Tube Cable
☎ OPD002LB3010/75	2 x OM2+ Outside Plant All Dielectric Loose Tube Cable
☎ OPD002EB3010/25	2 x OM3 Outside Plant All Dielectric Loose Tube Cable
☎ OPD002FB3010/F5	2 x OM4 Outside Plant All Dielectric Loose Tube Cable
☎ OPD002XB3010/X5	2 x OM4+ Outside Plant All Dielectric Loose Tube Cable
☎ OPD002AB0403	2 x OS2 Outside Plant All Dielectric Loose Tube Cable
☎ OPDB002AB0302-M2	2 x OS2 Outside Plant All Dielectric Loose Tube Cable
☎ OPDD12B216CB3510/25	216 x OM1 Outside Plant All Dielectric Loose Tube Cable
☎ OPDD12B216GB3510/25	216 x OM1+ Outside Plant All Dielectric Loose Tube Cable
☎ OPDD12B216ZB3515/15	216 x OM2 Outside Plant All Dielectric Loose Tube Cable
☎ OPDD12B216LB3010/75	216 x OM2+ Outside Plant All Dielectric Loose Tube Cable
☎ OPDD12B216EB3010/25	216 x OM3 Outside Plant All Dielectric Loose Tube Cable
☎ OPDD12B216FB3010/F5	216 x OM4 Outside Plant All Dielectric Loose Tube Cable
☎ OPDD12B216XB3010/X5	216 x OM4+ Outside Plant All Dielectric Loose Tube Cable
☎ OPDD12B216AB0403	216 x OS2 Outside Plant All Dielectric Loose Tube Cable
☎ OPDD12B216AB0302-M2	216 x OS2 Outside Plant All Dielectric Loose Tube Cable
☎ OPDD12B024CB3510/25	24 x OM1 Outside Plant All Dielectric Loose Tube Cable
☎ OPDD12B024GB3510/25	24 x OM1+ Outside Plant All Dielectric Loose Tube Cable
☎ OPDD12B024ZB3515/15	24 x OM2 Outside Plant All Dielectric Loose Tube Cable
☎ OPDD12B024LB3010/75	24 x OM2+ Outside Plant All Dielectric Loose Tube Cable
☎ OPDD12B024EB3010/25	24 x OM3 Outside Plant All Dielectric Loose Tube Cable
☎ OPDD12B024FB3010/F5	24 x OM4 Outside Plant All Dielectric Loose Tube Cable
☎ OPDD12B024XB3010/X5	24 x OM4+ Outside Plant All Dielectric Loose Tube Cable
☎ OPDD12B024AB0403	24 x OS2 Outside Plant All Dielectric Loose Tube Cable
☎ OPDD12B024AB0302-M2	24 x OS2 Outside Plant All Dielectric Loose Tube Cable
☎ OPD004CB3510/25	4 x OM1 Outside Plant All Dielectric Loose Tube Cable
☎ OPD004GB3510/25	4 x OM1+ Outside Plant All Dielectric Loose Tube Cable
☎ OPD004ZB3515/15	4 x OM2 Outside Plant All Dielectric Loose Tube Cable
☎ OPD004LB3010/75	4 x OM2+ Outside Plant All Dielectric Loose Tube Cable
☎ OPD004EB3010/25	4 x OM3 Outside Plant All Dielectric Loose Tube Cable
☎ OPD004FB3010/F5	4 x OM4 Outside Plant All Dielectric Loose Tube Cable
☎ OPD004XB3010/X5	4 x OM4+ Outside Plant All Dielectric Loose Tube Cable
☎ OPD004AB0403	4 x OS2 Outside Plant All Dielectric Loose Tube Cable
☎ OPDB004AB0302-M2	4 x OS2 Outside Plant All Dielectric Loose Tube Cable

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## Outside Plant All Dielectric

Part Number	Description
☎ OPDD12B048CB3510/25	48 x OM1 Outside Plant All Dielectric Loose Tube Cable
☎ OPDD12B048GB3510/25	48 x OM1+ Outside Plant All Dielectric Loose Tube Cable
☎ OPDD12B048ZB3515/15	48 x OM2 Outside Plant All Dielectric Loose Tube Cable
☎ OPDD12B048LB3010/75	48 x OM2+ Outside Plant All Dielectric Loose Tube Cable
☎ OPDD12B048EB3010/25	48 x OM3 Outside Plant All Dielectric Loose Tube Cable
☎ OPDD12B048FB3010/F5	48 x OM4 Outside Plant All Dielectric Loose Tube Cable
☎ OPDD12B048XB3010/X5	48 x OM4+ Outside Plant All Dielectric Loose Tube Cable
☎ OPDD12B048AB0403	48 x OS2 Outside Plant All Dielectric Loose Tube Cable
☎ OPDD12B048AB0302-M2	48 x OS2 Outside Plant All Dielectric Loose Tube Cable
☎ OPD006CB3510/25	6 x OM1 Outside Plant All Dielectric Loose Tube Cable
☎ OPDD12B006CB3510/25	6 x OM1 Outside Plant All Dielectric Loose Tube Cable
☎ OPD006GB3510/25	6 x OM1+ Outside Plant All Dielectric Loose Tube Cable
☎ OPD006ZB3515/15	6 x OM2 Outside Plant All Dielectric Loose Tube Cable
☎ OPD006LB3010/75	6 x OM2+ Outside Plant All Dielectric Loose Tube Cable
☎ OPD006EB3010/25	6 x OM3 Outside Plant All Dielectric Loose Tube Cable
☎ OPD006FB3010/F5	6 x OM4 Outside Plant All Dielectric Loose Tube Cable
☎ OPD006XB3010/X5	6 x OM4+ Outside Plant All Dielectric Loose Tube Cable
☎ OPD006AB0403	6 x OS2 Outside Plant All Dielectric Loose Tube Cable
☎ OPDB006AB0302-M2	6 x OS2 Outside Plant All Dielectric Loose Tube Cable
☎ OPDD12B072CB3510/25	72 x OM1 Outside Plant All Dielectric Loose Tube Cable
☎ OPDD12B072GB3510/25	72 x OM1+ Outside Plant All Dielectric Loose Tube Cable
☎ OPDD12B072ZB3515/15	72 x OM2 Outside Plant All Dielectric Loose Tube Cable
☎ OPDD12B072LB3010/75	72 x OM2+ Outside Plant All Dielectric Loose Tube Cable
☎ OPDD12B072EB3010/25	72 x OM3 Outside Plant All Dielectric Loose Tube Cable
☎ OPDD12B072FB3010/F5	72 x OM4 Outside Plant All Dielectric Loose Tube Cable
☎ OPDD12B072XB3010/X5	72 x OM4+ Outside Plant All Dielectric Loose Tube Cable
☎ OPDD12B072AB0403	72 x OS2 Outside Plant All Dielectric Loose Tube Cable
☎ OPDD12B072AB0302-M2	72 x OS2 Outside Plant All Dielectric Loose Tube Cable
☎ OPDD12B008CB3510/25	8 x OM1 Outside Plant All Dielectric Loose Tube Cable
☎ OPDD12B024-012GB3510/25-012AB0403	Hybrid 12 x OM1+ & 12 x OS2 Outside Plant All Dielectric Loose Tube Cable
☎ OPDD12B048-024EB3010/25-024AB0403	Hybrid 24 x OM3 + 24 OS2 Outside Plant All Dielectric Loose Tube Cable
☎ OPDD12B048-024FB3010/F5-024AB0403	Hybrid 24 x OM4 + 24 OS2 Outside Plant All Dielectric Loose Tube Cable
☎ OPDD12B096-048CB3510/25-048AB0403	Hybrid 48 x OM1 + 48 x OS2 Outside Plant All Dielectric Loose Tube Cable

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### Manufacturing Release

**IMPORTANT NOTICE:** This product specification is provided for informational purposes only in order to illustrate typical product constructions, applications and/or methods of installation. Because conditions of actual installation and use are unique and will vary, Berk-Tek makes no representation or warranty as to the reliability, accuracy or completeness of this data, even if Berk-Tek is aware of the product's intended use or purpose. Furthermore, this data does not constitute, nor should it be regarded or relied upon, as professional engineering advice. Installation of cable should only be done by qualified personnel and in conformance with all safety, electrical and other applicable codes, standards, rules or

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