

Berk-Tek Indoor/Outdoor Riser Premises Distribution (PDR-I/O)

Berk-Tek's riser rated Indoor/Outdoor Tight-Buffer cables are designed specifically for LAN/WAN campus and building backbone cabling infrastructure. Suitable for Indoor/Outdoor installations, in-conduit, below the frost line.

DESCRIPTION

This fiber optic cable is designed for installation in riser and horizontal environments and interbuilding backbone structures. This design incorporates tight buffered optical fibers within a dry water blocked cable core (6-24 fibers) or 12-fiber subunits (36-144 fibers). Suitable for operation across wide temperature variations typically addressed by outside plant cables. No Buffer Tube Fanout kits are required. Direct termination is enabled.

Construction

Each cable utilizes our DryGel water blocking system in the cable core. Cable design can accommodate from 6-144 tight buffered (900 μm) fibers. A glass reinforced (GRP) anti-buckling member is centrally located within cables having fiber counts from 24-144. All dielectric OFNR.

Interlocking Armor (Armor-Tek) versions are available using aluminum armor.

Outdoor Considerations

- These water-blocked cables feature fungus resistant jacketing, and are sunlight resistant per UL 444 clause 7.22. For use in conduit, below the frost line.
- Loose Tube cables are recommended if interbuilding conduit systems lie above the frost line and are likely to fill with water.
- Tight Buffer fiber cables are not suitable for aerial-lashed installations.

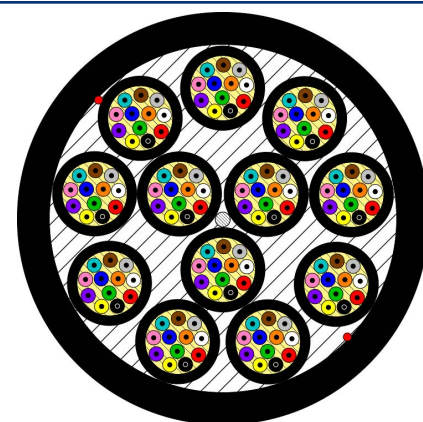
Applications

Berk-Tek's tight buffered cable is intended for all high speed data applications including:

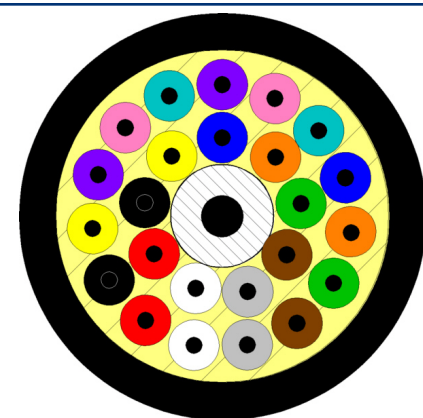
- ETHERNET: 10BASE – 400GBASE (10BASE, 100BASE, 1000BASE, 10GBASE, 40GBASE, 100GBASE, 400GBASE)
- Fibre Channel: 1G-FC – 128GFC (1, 2, 4, 8, 16, 32, 128 GFC)
- SONET: OC-1 – OC-768 (OC -1, 3, 12, 24, 48, 192, 768)
- SDH: STM-0 – STM-256 (STM-0, 1, 4, 16, 64, 256)
- OTN: OTU-1 – OTU4 (OTU1, 2, 2e, 2f,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

Features

- Flexible, small diameter, 900 μm tight buffered construction
- High tensile strength and small diameter design
- 6 to 144 count fiber construction riser indoor/outdoor designs ideal for horizontal and backbone installation
- Single-mode, multimode, and hybrid designs available
- Also available in low smoke zero halogen design



For fiber counts from 48-144



For fiber counts up to 24

STANDARDS

International EN 50173;
ISO/IEC 11801

National ANSI/ICEA S-104-696;
ANSI/ICEA S-83-596;
ANSI/TIA-568.3-D; Telcordia GR-20;
Telcordia GR-409

Benefits

- Cost-saving design, easy to install and terminate
- Provides for greater pulling distances thus reducing installation time
- Assurance that cables will meet required specifications for communication networking applications
- Broad design selection allows for mix and match of fiber components to specific networking applications
- One cable design meeting all structured cabling network communications applications

Country of Origin: U.S.A.

CHARACTERISTICS

Construction characteristics

Type of cable	Tight Buffered (TB)
Jacket Material	Riser

STANDARD SHEATH COLORS - TIGHT BUFFER - 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	0.5 dB/km	0.5 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

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 product should only be done by qualified personnel and in conformance with all safety, electrical and other applicable codes, standards, rules or regulations. Appropriate and correct product selection, installation and use, and compliance with all such codes, standards, rules and regulations, is a customer/end-user responsibility. Product specifications, standards, programs or services are subject to improvement or changes without notice. Berk-Tek accepts no liability for typographical errors, technical

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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
6	PDR006-I/O(BLA)	0.224	5.7	18	27	3.4	8.5	2.2	5.7	150	667	45	200
12	PDR012-I/O(BLA)	0.246	6.2	25	37	3.7	9.4	2.5	6.2	150	667	45	200
24	PDR024-I/O(BLA)	0.335	8.5	47	70	5.0	12.8	3.4	8.5	300	1335	90	400
36	PDR12B036-I/O(BLA)	0.555	14.1	108	161	8.3	21.1	5.6	14.1	300	1335	90	400
48	PDR12B048-I/O(BLA)	0.590	15.0	131	196	8.9	22.5	5.9	15.0	600	2670	180	800
72	PDR12B072-I/O(BLA)	0.732	18.6	203	301	11.0	27.9	7.3	18.6	600	2670	180	800
96	PDR12B096-I/O(BLA)	0.880	22.4	291	433	13.2	33.5	8.8	22.4	600	2670	180	800
144	PDR12B144-I/O(BLA)	0.940	23.9	310	461	14.1	35.8	9.4	23.9	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.652.D and G.657.A1 Compliant							1 GbE	10 GbE	40 GbE	100 GbE
OS2	AB0707	Standard for Tight Buffer	SMF	1310/1550	0.5/0.5	N/A	≥ 5000	≥ 10000	≥ 10000	≥ 10000