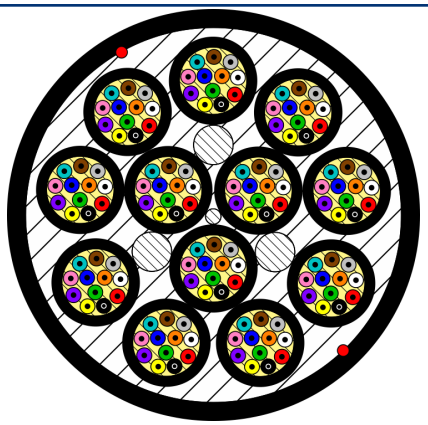
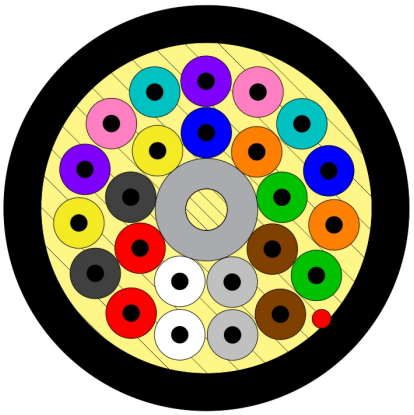
Berk-Tek Indoor/Outdoor Plenum Premises Distribution (PDP-I/O)

Berk-Tek a LEVITON company

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



For fiber counts from 48-144



For fiber counts up to 24

DESCRIPTION

This fiber optic cable is designed for installation in plenum, riser and horizontal environments and interbuilding backbone structures. This design incorporates tight buffered optical fibers within a dry water blocked cable core. 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. All dielectric.
- Aluminum Interlocking Armor (Armor-Tek) versions are available.

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 suitible 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 fiber count plenum designs ideal for horizontal and backbone installation
- Single-mode, multimode, and hybrid designs available
- Also available in low smoke zero halogen design

STANDARDS

International EN 50173; ISO/IEC 11801

National ANSI/ICEA S-104-696; ANSI/ICEA S-83-596; ANSI/TIA-568.3-D; NFPA 130; Telcordia GR-409

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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	Plenum

SHEATH COLORS - ICP(K)-I/O & PDP(K)-I/O

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	Yellow or Black
CB	62.5	OM1	200 MHz·km	200 MHz·km	3.5 dB/km	1.0 dB/km	NS	Orange or Black
EB	50	OM3	2000 MHz·km	1500 MHz·km	3.0 dB/km	1.0 dB/km	NS	Aqua or Black
FB	50	OM4	4700 MHz·km	3500 MHz·km	3.0 dB/km	1.0 dB/km	NS	Aqua or Black
XB	50	OM4+	4900 MHz·km	3675 MHz·km	3.0 dB/km	1.0 dB/km	NS	Violet or Black
WB	50	OM5	4700 MHz·km	3500 MHz·km	3.0 dB/km	1.0 dB/km	NS	Lime Green or 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 inaccuracies, omissions or misuse of the information contained herein. Changes will be periodically made to address any such issues.

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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	PDP006-I/O	0.170	4.3	11	17	2.6	6.5	1.7	4.3	100	445	30	133
12	PDP012-I/O	0.205	5.2	16	24	3.1	7.8	2.1	5.2	100	445	30	133
24	PDP024-I/O	0.275	7.0	33	49	4.1	10.5	2.8	7.0	150	667	45	200
36	PDP12B036-I/O	0.521	13.2	112	166	7.8	19.9	5.2	13.2	300	1335	90	400
48	PDP12B048-I/O	0.558	14.2	136	202	8.4	21.3	5.6	14.2	600	2670	180	800
72	PDP12B072-I/O	0.671	17.0	212	316	10.1	25.6	6.7	17.0	600	2670	180	800
96	PDP12B096-I/O	0.859	21.8	313	466	12.9	32.7	8.6	21.8	600	2670	180	800
144	PDP12B144-I/O	0.896	22.8	318	474	13.4	34.1	9.0	22.8	1000	4445	300	1335

TECHNICAL DATA							Distance (meters)			
Fiber Type	Part Number Suffix	Berk-Tek Fiber	Core Size	Wavelength (nm)	Maximum Attenuation (dB/km)	Effective Modal Bandwidth @ 850 nm (MHz•km)				
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