

Berk-Tek Indoor/Outdoor Plenum Premises Distribution w/ Armor-Tek™ (ICPK-I/O)



Berk-Tek's Plenum rated Indoor/Outdoor Premises Distribution cables are designed specifically for LAN/WAN campus and building backbone cabling infrastructure. Armor-Tek Interlocking Armor is wound around the cable core. Suitable for Indoor/Outdoor installations, below the frost line.

DESCRIPTION

Berk-Tek's tight buffered indoor/outdoor plenum interlock armored cables are designed for installation in plenum and horizontal environments, and interbuilding backbone structures.

This design incorporates tight buffered optical fibers within a dry water blocked core cable. Interlock armor and an outer jacket are added over the 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 core cable. Cable design can accommodate from 6-144 tight buffered (900 µm) fibers. A glass reinforced (GRP) anti-buckling member is centrally located within the 24 fiber cable design, and is used as a central strength member for fiber counts from 36 to 144 that feature 12 fiber subunits.

OFCP Rated. Available with aluminum interlock armor, covered by a plenum rated jacket.

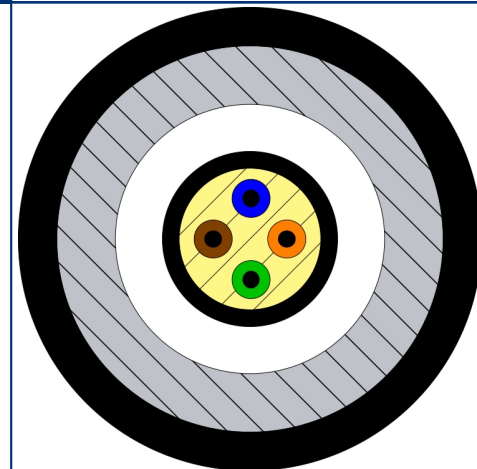
Outdoor Considerations

- 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 Interlocking Armor 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



STANDARDS

International EN 50173;
ISO/IEC 11801

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

Features

- Flexible 900 µm tight buffered construction
- High tensile strength cost-saving design, easy to install and terminate
- Six to 144 count fiber construction plenum rated indoor/outdoor designs ideal for backbone installations
- Single-mode, multimode, and hybrid designs available
- Also available in a riser-rated low smoke zero halogen design

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.

| 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 |
| 2 | ICPK002-I/O(BLA) | 0.495 | 12.6 | 77 | 115 | 7.4 | 18.9 | 5.0 | 12.6 | 100 | 445 | 30 | 133 |
| 4 | ICPK004-I/O(BLA) | 0.495 | 12.6 | 79 | 117 | 7.4 | 18.9 | 5.0 | 12.6 | 100 | 445 | 30 | 133 |

| 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 |

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.