# **Berk-Tek Indoor Riser Premises Distribution (PDR)**



Berk-Tek's tight buffered, fiber optic cable is designed for installation in riser and horizontal environments and interbuilding backbone structures.

## **DESCRIPTION**

Berk-Tek's tight buffered cable is available with standard multimode, single-mode and GIGAlite™ fibers.

 $900~\mu m$  buffered fibers surrounded by aramid yarns. Sheathed using a special, state-of-the-art polymer material. All dielectric.

#### **Outdoor Considerations**

Black jacketed and water-blocked versions of riser cables available upon request for outdoor installations. Outdoor versions feature UV and fungus resistant jacketing.

### **Applications**

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

- ETHERNET: 10BASE 400GBASE (10BASE, 100BASE, 100BASE, 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; I/O only): RFoG, APON, BPON, EPON, GPON, WDM-PON, NG-PON

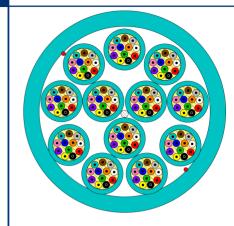
### **Features**

- Flexible, small diameter, 900 µm tight buffered construction
- · High tensile strength and small diameter design
- Six to 144 count fiber construction riser designs ideal for horizontal and backbone installation
- Single-mode, multimode, and hybrid designs available
- Also available in low smoke zero halogen design
- Water blocked indoor/outdoor versions, suitable for installations in-conduit below the frost line, are available

### **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

Country of Origin: U.S.A.



For fiber counts from 48-144



For fiber counts up to 24 Note: Fiber counts 1 and 12 don't have a CSM

### **STANDARDS**

International EN 50173; ISO/IEC 11801

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

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| TECHN  | IICAL DATA - PHYSIC        | Install |       | Long Term |       | Install         |      | Long Term |      |      |              |      |      |
|--------|----------------------------|---------|-------|-----------|-------|-----------------|------|-----------|------|------|--------------|------|------|
| Fibers | Part Number Prefix Diamete |         | neter | er Weight |       | Min. Bend Radiu |      | d Radius  | ıs   |      | Max. Loading |      |      |
|        |                            | in.     | mm    | lb./kft   | kg/km | in.             | cm   | in.       | cm   | lbf. | N            | lbf. | N    |
| 6      | PDR006                     | 0.224   | 5.7   | 19        | 29    | 3.4             | 8.5  | 2.2       | 5.7  | 150  | 667          | 45   | 200  |
| 12     | PDR012                     | 0.246   | 6.2   | 25        | 37    | 3.7             | 9.4  | 2.5       | 6.2  | 150  | 667          | 45   | 200  |
| 24     | PDR024                     | 0.285   | 7.2   | 37        | 56    | 4.3             | 10.9 | 2.9       | 7.2  | 150  | 667          | 45   | 200  |
| 36     | PDR12B036                  | 0.555   | 14.1  | 108       | 161   | 8.3             | 21.1 | 5.6       | 14.1 | 300  | 1335         | 90   | 400  |
| 48     | PDR12B048                  | 0.590   | 15.0  | 131       | 196   | 8.9             | 22.5 | 5.9       | 15.0 | 600  | 2670         | 180  | 800  |
| 72     | PDR12B072                  | 0.732   | 18.6  | 203       | 301   | 11.0            | 27.9 | 7.3       | 18.6 | 600  | 2670         | 180  | 800  |
| 96     | PDR12B096                  | 0.880   | 22.4  | 291       | 433   | 13.2            | 33.5 | 8.8       | 22.4 | 600  | 2670         | 180  | 800  |
| 144    | PDR12B144                  | 0.940   | 23.9  | 310       | 461   | 14.1            | 35.8 | 9.4       | 23.9 | 1000 | 4445         | 300  | 1335 |

| TECHNICAL DATA |                          |                              |              |                    |                                   |   |                      |         |         |         |  |
|----------------|--------------------------|------------------------------|--------------|--------------------|-----------------------------------|---|----------------------|---------|---------|---------|--|
| Fiber<br>Type  | Part<br>Number<br>Suffix | Berk-Tek Fiber               | Core<br>Size | Wavelength<br>(nm) | Maximum<br>Attenuation<br>(dB/km) | Effective<br>Modal<br>Bandwidth<br>@ 850 nm<br>(MHz•km) | Distance<br>(meters) |         |         |         |  |
| Multim         | ode - Bend Ins           | ensitive                     | 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     |  |
| WideBa         | and Multimode            | - Bend Insensitiv            | 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 Ir           | nsensitive - ITU-T           | 1 GbE        | 10 GbE             | 40 GbE                            | 100 GbE   |                      |         |         |         |  |
| OS2            | AB0707                   | Standard for<br>Tight Buffer | SMF          | 1310/1550          | 0.5/0.5                           | N/A   | ≥ 5000               | ≥ 10000 | ≥ 10000 | ≥ 10000 |  |

## **Berk-Tek Indoor Riser Premises Distribution (PDR)**



### **CHARACTERISTICS**

### **Construction characteristics**

Type of cable Tight Buffered (TB)

Jacket Material Riser

### STANDARD SHEATH COLORS - TIGHT BUFFER

| Fiber<br>Type | Core<br>Size<br>(µm) | ISO-TIA<br>Standard | Effective<br>Modal BW<br>@ 850 nm | Overfilled<br>Launch BW<br>@ 850 nm | Attenuation<br>@ 850 nm | Attenuation<br>@ 1300 nm | Attenuation<br>@ 1550 nm | Sheath<br>Color |
|---------------|----------------------|---------------------|-----------------------------------|-------------------------------------|-------------------------|--------------------------|--------------------------|-----------------|
| AB            | 8.3                  | OS2                 | NS                                | NS                                  | NS                      | 0.5 dB/km                | 0.5 dB/km                | Yellow          |
| СВ            | 62.5                 | OM1                 | 200 MHz·km                        | 200 MHz·km                          | 3.5 dB/km               | 1.0 dB/km                | NS                       | Orange          |
| EB            | 50                   | OM3                 | 2000 MHz·km                       | 1500 MHz·km                         | 3.0 dB/km               | 1.0 dB/km                | NS                       | Aqua            |
| FB            | 50                   | OM4                 | 4700 MHz·km                       | 3500 MHz·km                         | 3.0 dB/km               | 1.0 dB/km                | NS                       | Aqua            |
| XB            | 50                   | OM4+                | 4900 MHz·km                       | 3675 MHz·km                         | 3.0 dB/km               | 1.0 dB/km                | NS                       | Violet          |
| WB            | 50                   | OM5                 | 4700 MHz·km                       | 3500 MHz·km                         | 3.0 dB/km               | 1.0 dB/km                | NS                       | Lime Green      |

NS = Not Specified

## **MANUFACTURING RELEASE**

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