

# Berk-Tek OneReach Cable Assembly

LC (both ends) Preconnectorized Composite 2 Fiber OM3 with Two 12 AWG Solid Conductors, Plenum



**Part Number:** BHCP02E02D44FFNNPzzzz

The OneReach Cable Assembly (OCA) combines optical fiber and copper conductors in a single assembly that easily attaches with standard LC or MPO and M8 connectors to reach distances up to 3,280 feet for 1000BASE-SX, and up to 6,560 feet for 100BASE-FX.

## DESCRIPTION

Speed, simplicity and performance. You find them all in the OCA of the OneReach System. Power and data transmission are supported within a single jacket through the use of Berk-Tek CL3R-PLTC-OF or CL3P-PLTC-OF rated composite copper/fiber power limited tray cable. These cables combine 12 AWG solid conductors with either tight-buffered or loose tube optical fiber cable designs to support 1, 2, or 4-port remote devices.

Building upon the strength of the innovative cable design, assemblies are built to the specific length requirements of each project, and arrive on-site with pre-tested optical fiber connectors and an M8 connector for power on the remote device end, ready to install. The local end of the assembly attaches effortlessly to the local media module or power injector chassis with standard LC connectors and easy to use screw terminals. Single end termination and field termination options are also available.

Rapid and reliable installation is the norm with OneReach, which lets you take PoE to new distances. The solid conductors provide enough power to support PoE to distances well beyond the 100 meters supported through traditional twisted pair cabling.

### Benefits

- Simple, single pull installation
- Combines control and communication in industrial pathways
- Provides common pathway for fiber backbone and Class 3 power supply
- Can be used in wet or dry locations
- Designs for indoor, outdoor, and indoor/outdoor environments
- Able to support distances beyond 2,500 feet

**Country of Origin:** U.S.A.

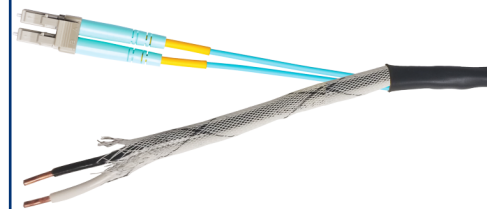
## CHARACTERISTICS

### Construction characteristics

|                      |              |
|----------------------|--------------|
| Fiber optic type     | OM3 50/125   |
| Type of cable        | Tight buffer |
| Jacket Material      | Plenum       |
| Sheath colour        | Black        |
| Conductor material   | Bare copper  |
| Number of conductors | 2            |
| Connector type       | LC Duplex    |

### Dimensional characteristics

|                          |      |
|--------------------------|------|
| Tube diameter            | 2 mm |
| Number of optical fibres | 2    |



### STANDARDS

**International** EN 50173;  
ISO/IEC 11801

**National** UL 13

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### NETWORK SOLUTIONS HEADQUARTERS

Bothell, WA, USA | [leviton.com/ns](http://leviton.com/ns)  
(800) 824 3005 / +1 (425) 486 2222 | [appeng@leviton.com](mailto:appeng@leviton.com)

### BERK-TEK A LEVITON COMPANY

New Holland, PA, USA | [leviton.com/berktek](http://leviton.com/berktek)  
+1 (717) 354 6200 | [berktek.support@leviton.com](mailto:berktek.support@leviton.com)

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Two 12 AWG Solid Conductors, Plenum



## Dimensional characteristics

|                               |           |
|-------------------------------|-----------|
| Cable diameter (Nominal)      | 0.34 in   |
| Nominal outer diameter        | 8.6 mm    |
| Nominal cable weight          | 93 lb/kft |
| Approximate weight            | 138 kg/km |
| Conductor cross-section (AWG) | 12        |

## Electrical characteristics

|   |              |
|---|--------------|
| Max. DC resistance of the conductor at 20°C | 1.62 Ohm/kft |
| DC Resistance (max.)                        | 5.31 Ohm/km  |

## Transmission characteristics

|                                    |                              |
|------------------------------------|------------------------------|
| Optical performance                | EB (50/125 GIGAlite-10, OM3) |
| Attenuation, max. 850 nm (cabled)  | 3.0 dB/km                    |
| Attenuation, max. 1300 nm (cabled) | 1.0 dB/km                    |

## Mechanical characteristics

|  |               |
|--|---------------|
| Maximum installation tension           | 300 lb        |
| Maximum installation tension           | 1335 N        |
| Max. Load. Long Term (lbs)             | 90.0 lb       |
| Max. Load. Long Term                   | 400.0 N       |
| Impacts per TIA/EIA FOTP-25            | 2 at 4.41 N-m |
| Crush resistance per TIA/EIA FOTP-41   | 100 N/cm      |
| Cable flexibility per TIA/EIA FOTP-104 | 100 cycles    |

## Usage characteristics

|   |                 |
|---|-----------------|
| Minimum Bending Radius - Install        | 5.1 in          |
| Minimum Bend Radius - Install           | 13 cm           |
| Minimum Bending Radius - LongTerm       | 3.4 in          |
| Minimum Bending Radius - LongTerm       | 8.6 cm          |
| RoHS compliant                          | Yes             |
| Recommended operating temperature range | -40 .. 75 °C    |
| Ambient installation temperature, range | -10 .. 70 °C    |
| Recommended storage temperature range   | -40 .. 85 °C    |
| Field of application                    | Indoor, Outdoor |

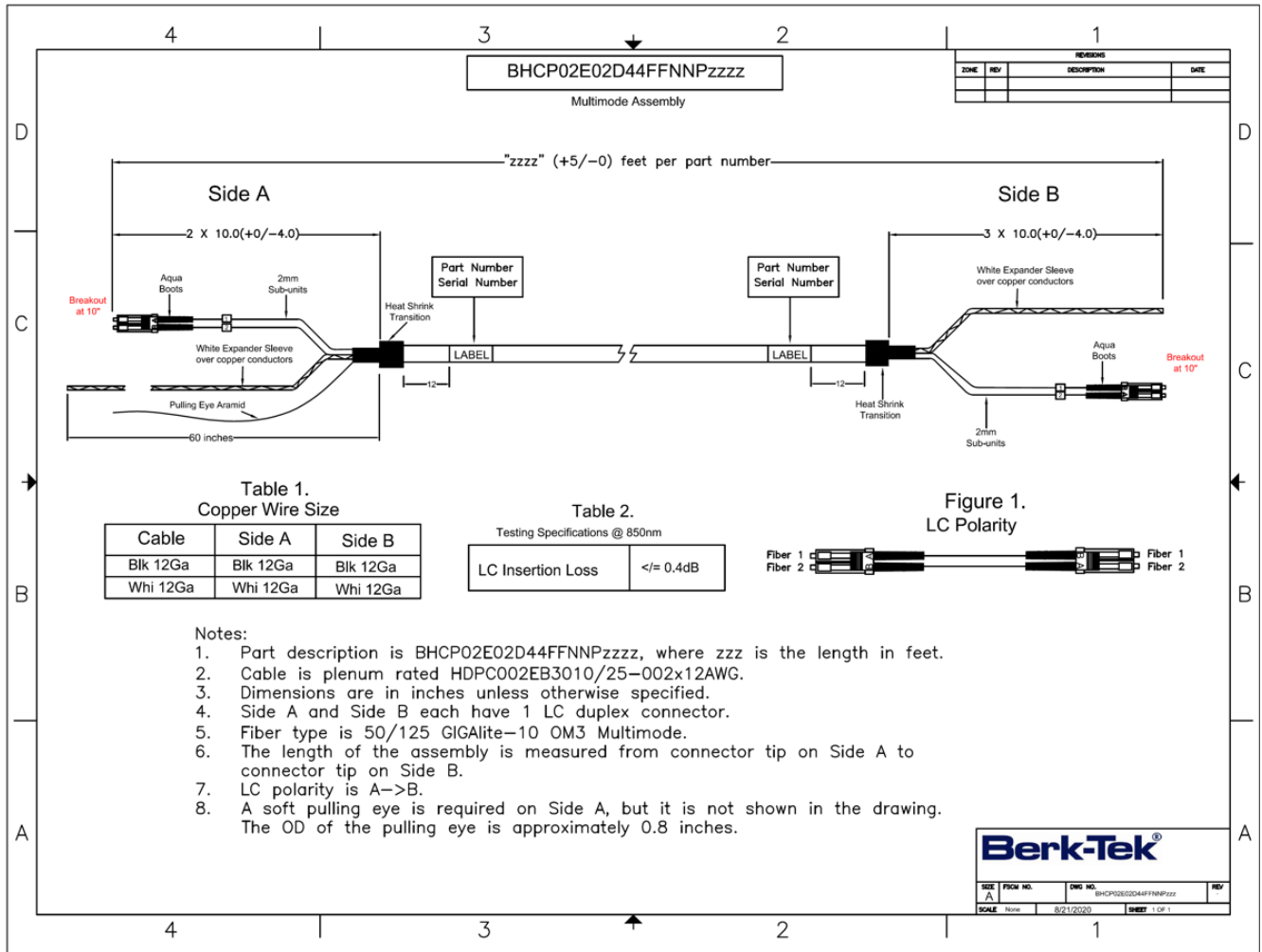
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## DRAWING - BHCP02E02D44FFNNPZZZZ



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