

# Berk-Tek OneReach Cable Assembly

LC (both ends) Preconnectorized Composite 8 Fiber OS2 with Four 12 AWG Solid Conductors, Riser



**Part Number:** BACR08A04D44FFNNPzzzz

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.

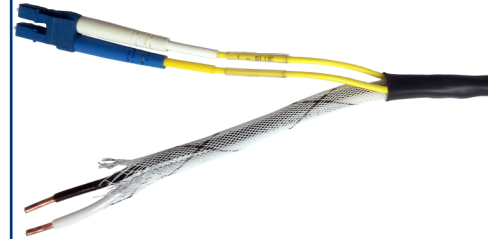
## CHARACTERISTICS

### Construction characteristics

Fiber optic type	SM (G657.A1)
Type of cable	Loose tube
Jacket Material	Riser
Sheath colour	Black
Conductor material	Bare copper
Number of conductors	4
Connector type	LC Duplex

### Dimensional characteristics

Tube diameter	3 mm
Number of optical fibres	8



### STANDARDS

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

**National** UL 13

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Four 12 AWG Solid Conductors, Riser



## Dimensional characteristics

Cable diameter (Nominal)	0.48 in
Nominal outer diameter	12.2 mm
Nominal cable weight	162 lb/kft
Approximate weight	240 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	AB (Single-mode, OS2)
Attenuation, max. 1310 nm (cabled)	0.4 dB/km
Attenuation, max. 1550 nm (cabled)	0.3 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	7.2 in
Minimum Bend Radius - Install	18.3 cm
Minimum Bending Radius - LongTerm	4.8 in
Minimum Bending Radius - LongTerm	12.2 cm
RoHS compliant	Yes
Recommended operating temperature range	-40 .. 75 °C
Ambient installation temperature, range	-20 .. 60 °C
Recommended storage temperature range	-60 .. 85 °C
Field of application	Indoor, Outdoor

## 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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