

## Contact

Fiber LAN Product Inquiry  
Phone: 717-354-6200  
berktek.support@nexans.com

## Premises Distribution Plenum Indoor/Outdoor w/Armor-Tek

12 x OM3 Premises Distribution Indoor/Outdoor Plenum Cable with Interlocking Armor

Part Number: PDPK012EB3010/25-I/O-C4C5(AQU)

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 or steel interlock armor.

### Outdoor Considerations

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.

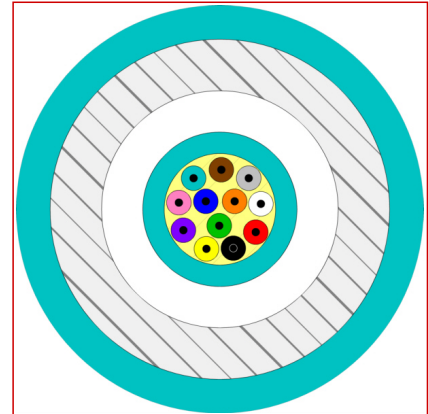
- Tight Buffer fiber cables are not suitable for aerial-lashed installations.

### 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

### Features



### Standards

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

**National** ANSI/ICEA S-104-696; ANSI/TIA-568-C.3; NFPA 130; Telcordia GR-409

## Premises Distribution Plenum Indoor/Outdoor w/Armor-Tek

### 12 x OM3 Premises Distribution Indoor/Outdoor Plenum Cable with Interlocking Armor

- 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 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

#### Characteristics

Construction characteristics	
Fiber optic type	OM3 50/125
Type of cable	Tight Buffered (TB)
Jacket Material	Plenum
Sheath colour	Aqua
Armour type	Aluminum Interlock
Dimensional characteristics	
Number of optical fibres	12
Cable diameter (Nominal)	0.523 in
Nominal outer diameter	13.3 mm
Nominal cable weight	87 lb/kft
Approximate weight	129 kg/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	100 lb
Maximum installation tension	445 N
Max. Load. Long Term (lbs)	30.0 lb
Max. Load. Long Term	133.0 N
Impacts per TIA/EIA FOTP-25	2 at 4.41 N-m
Crush resistance per TIA/EIA FOTP-41	440 N/cm
Cable flexibility per TIA/EIA FOTP-104	25 cycles
Usage characteristics	
Minimum Bending Radius - Install	7.8 in
Minimum Bend Radius - Install	19.9 cm
Minimum Bending Radius - LongTerm	5.2 in
Minimum Bending Radius - LongTerm	13.3 cm

## Premises Distribution Plenum Indoor/Outdoor w/Armor-Tek

12 x OM3 Premises Distribution Indoor/Outdoor Plenum Cable with Interlocking Armor

### Usage characteristics

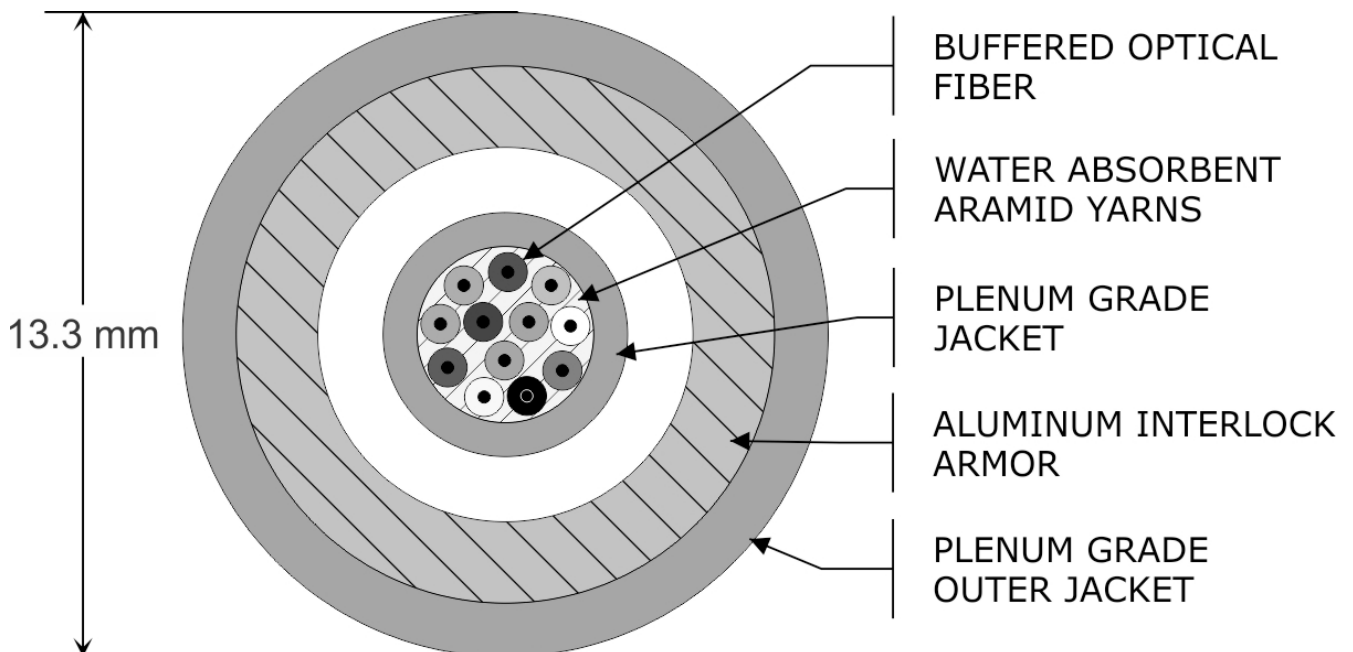
Recommended operating temperature range	-40 .. 75 °C
Ambient installation temperature, range	0 .. 75 °C
Recommended storage temperature range	-40 .. 85 °C
Field of application	Indoor, Outdoor

### ICP-I/O, ICPK-I/O, PDP-I/O & PDPK-I/O Sheath Colors

Fiber Type	Core Size (um)	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	0.7 dB/km	0.7 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
LB	50	OM2+	950 MHz-km	700 MHz-km	3.0 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

NS = Not Specified

### Cross-section Diagram - PDPK012-I/O



### 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

**Contact**

Fiber LAN Product Inquiry  
Phone: 717-354-6200  
berktek.support@nexans.com

**Premises Distribution Plenum Indoor/Outdoor w/Armor-Tek**  
**12 x OM3 Premises Distribution Indoor/Outdoor Plenum Cable with Interlocking Armor**

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.