

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

# **Adventum Tight Buffer Plenum Rated Drop Cable**

2 x OM2+ Adventum Tight Buffer Plenum Part Number: ATP002LB3010/75

Berk-Tek's Adventum Tight-Buffer cable is designed specifically for FTTH, MDU, MTU deployments. This design incorporates 1 or 2 tight buffered optical fibers within a dry water blocked buffer tube. Suitable for operation across wide temperature variations typically addressed by outside plant cables. No Buffer Tube Fan Out Kits are required. Direct Termination is enabled.

# Description

This plenum flame rated drop cable design accommodates 1 or 2 tight buffered optical fibers. Berk-Tek's loose tube tight buffered drop cables are available in Multimode, Single-mode, and GIGAlite fibers.

#### Construction

Each DryGel water blocked buffer tube contains 1 or 2, 900  $\mu$ m tight-buffered fibers

- 3 mm Buffer Tube Diameter
- Thermoplastic Jacket Material

## **Outdoor Considerations**

Loose Tube cables are recommended if interbuilding conduit systems are likely to fill with water.

Adventum Tight Buffer cables are not suitable for aerial-lashed installations. Plenum flame rating allows for building riser shaft penetration or alongside plenums without having to change cabling.

### **Applications**

Berk-Tek's Adventum Tight Buffer Drop cables are suitable for all passive and active optical network designs requiring high speed voice, video, and data applications, including (but not limited to):

- 10BASE-FL
- 100BASE-SX/100BASE-FX
- ATM 155/ATM 622
- 1000BASE-SX/1000BASE-LX
- Fibre Channel 1.062/2.125
- 10GBASE-SR/SW
- 10GBASE-LX4

### **Features**

- Plenum ratings enable installations to go directly from outside plant through riser shafts and alongside plenums with no transition point requirement.
- High tensile strength, crush resistant and small diameter design enable long pulls in non-dedicated conduits.
- Tight Buffered fibers are ready for direct termination, no fan out kits are needed.
- · All dielectric design with Interlocking Armor available.
- Fully water-blocked core using a dry water blocking system.
- · Available with new bend-insensitive single-mode fibers
- UV resistant outer jacket protects the cable in outside plant installations

# Benefits



## Standards

International EN 50173; ISO/ IEC 11801

**National** ANSI/ICEA S-104-696; ANSI/ICEA S-83-596; ANSI/ ICEA S-87-640; ANSI/TIA-568-C.3; Telcordia GR-409



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- Compact, water blocked, plenum rated, flexible loose tube design with tight buffered fibers
- Can incorporate an optional tracer wire.
- Ruggedly designed for outside plant installation (non-aerial lashed)
- High Tensile Strength provides for greater pulling distances
- Long-term reliability improved over traditional tight buffer premises cables
- Low cable plant maintenance, ease of installation
- Reduced cable diameter, flexible, with easy access to buffer tube and fibers

#### **PATENT ISSUED**

Berk-Tek, a Nexans Company was recently issued a patent on this unique cable design. (U.S. Patent No. 7,664,354)



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## Characteristics

Construction characteristics	
Fiber optic type	OM2 50/125 Extended Distance
Type of cable	Loose tube
Outer sheath	Plenum
Sheath colour	Black
Dimensional characteristics	
Tube diameter	3 mm
Number of optical fibres	2
Nominal outer diameter	0.235 in
Nominal outer diameter	6.0 mm
Approximate weight	26 lb/kft
Approximate weight	38 kg/km
Fransmission characteristics	
Optical performance	LB (50/125 GIGAlite, OM2+ Extended Distance)
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 5.88 N-m
Crush resistance per TIA/EIA FOTP-41	220 N/cm
Cable flexibility per TIA/EIA FOTP-104	100 cycles
Jsage characteristics	
Minimum Bending Radius - Install	3.5 in
Minimum Bend Radius - Install	9 cm
Minimum Bending Radius - LongTerm	2.4 in
Minimum Bending Radius - LongTerm	6 cm
Operating temperature, range	-40 75 °C
Ambient installation temperature, range	-20 60 °C
Storage temperature, range	-40 85 °C
Field of application	Indoor, Outdoor



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# Standard 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	Black	
СВ	62.5	OM1	200 MHz-km	200 MHz-km	3.5 dB/km	1.0 dB/km	NS	Black	
GB	62.5	OM1+	500 MHz-km	350 MHz-km	3.5 dB/km	1.0 dB/km	NS	Black	
ZB	50	OM2	500 MHz-km	500 MHz-km	3.5 dB/km	1.5 dB/km	NS	Black	
LB	50	OM2+	950 MHz-km	700 MHz-km	3.0 dB/km	1.0 dB/km	NS	Black	
EB	50	OM3	2000 MHz-km	1500 MHz-km	3.0 dB/km	1.0 dB/km	NS	Black	
FB	50	OM4	4700 MHz-km	3500 MHz-km	3.0 dB/km	1.0 dB/km	NS	Black	
XB	50	OM4+	4900 MHz-km	3675 MHz-km	3.0 dB/km	1.0 dB/km	NS	Black	
NS = Not Specified									

**Additional Standards Compliance** 

**NFPA 130** 

Image of ATP Cable

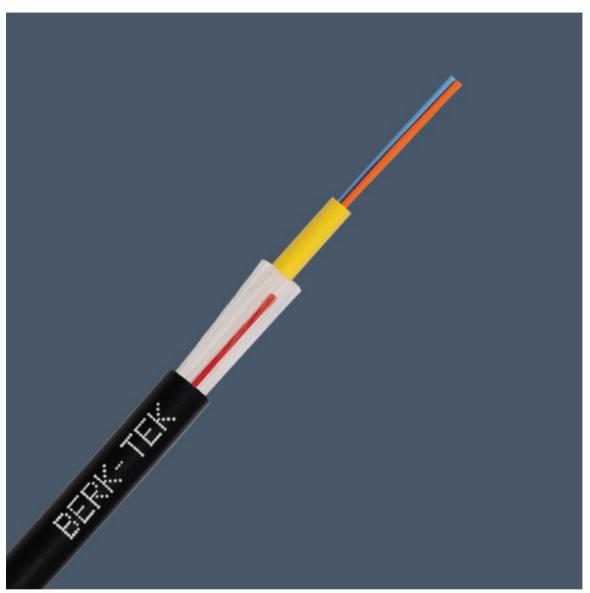
2-Fiber ATP Construction



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# Manufacturing Release

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