Berk-Tek®
A NEXANS COMPANY

Contact
Fiber LAN Product Inquiry
Phone: 717-354-6200
fiber-pc.us@nexans.com

Adventum Plenum Rated Indoor/Outdoor Optical Cable

12 x OM3 Adventum Plenum Cable

Part Number: LTP012EB3010/25

Berk-Tek's revolutionary Outdoor/Indoor Adventum™ cables are designed to be used in plenum rated environments. Adventum supports the latest Gigabit Communications Protocols, including Gigabit Ethernet and ATM. This cable design utilizes Berk-Tek's unique DryGel™ waterblocking system. DryGel technology utilizes super absorbent polymers to replace the messy gel filler inside the fiber tubes. It is the only fire-rated cable designed to withstand the rigors of the outside plant environment. Adventum is rated for plenum installations and has no gel filler.

Description

Berk-Tek's loose tube cable design can be used in all typical campus and outdoor/indoor installations, and is available with standard multimode, single-mode and GIGAlite™ fibers. This design affords the installer the ability to place cable anywhere in a network, bypassing the traditional transition points required in most installations. Adventum plenum cable (U.S. Patent No. 6,178,278) is available in 2 to 432 count fiber constructions. These cables have been thoroughly tested in accordance with Telcordia GR-409, ICEA-640, and ICEA-696 standards where applicable.

BUFFER TUBE CONSTRUCTION

DryGel blocked color coded loose tubes containing up to 12, 250 µm, individually colored fibers.

APPLICATIONS

Berk-Tek recommends installation procedures per ANSI/TIA-758, Customer-owned Outside Plant Telecommunications Infrastructure Standard.

Berk-Tek's Adventum Loose Tube, plenum rated fiber optic cable is intended for all high speed data applications, including:

- 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
- 40/100 GbE

Standards

International EN 50173; ISO/IEC 11801

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

FEATURES

- Designed to support Gigabit Ethernet, Gigabit ATM, Fibre Channel and other high-speed applications
- Plenum rating enables installation to go directly from outside plant to riser shaft or through plenum spaces
- Cable core and buffer tubes use DryGel water blocking system
- All dielectric design

BENEFITS

All drawings, designs, specifications, plans and particulars of weights, size and dimensions contained in the technical or commercial documentation of Nexans is indicative only and shall not be binding on Nexans or be treated as constituting a representation on the part of Nexans.

Contact
Fiber LAN Product Inquiry
Phone: 717-354-6200
fiber-pc.us@nexans.com

Adventum Plenum Rated Indoor/Outdoor Optical Cable

12 x OM3 Adventum Plenum Cable

- Compact, water blocked, plenum rated, flexible loose tube design of all dielectric construction allows for installation in any outside plant or interior space
- No cleaning of gels required for installation, greatly reducing installation time and cost
- Transition points in network are not needed
- System grounding requirements are eliminated

Characteristics

Construction characteristics	
Fiber optic type	OM3 50/125
Type of cable	Loose tube
Outer sheath	Plenum
Sheath colour	Aqua
Dimensional characteristics	
Tube diameter	3 mm
Number of optical fibres	12
Nominal outer diameter	0.26 in
Nominal outer diameter	6.6 mm
Approximate weight	31 lb/kft
Approximate weight	46 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	300 lb
Maximum installation tension	1335.0 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	110 N/cm
Cable flexibility per TIA/EIA FOTP-104	500 cycles
Usage characteristics	
Minimum Bending Radius - Install	3.9 in
Minimum Bend Radius - Install	9.9 cm
Minimum Bending Radius - LongTerm	2.6 in
Minimum Bending Radius - LongTerm	6.6 cm
RoHS conform	Yes
Operating temperature, range	-40 .. 75 °C
Ambient installation temperature, range	-20 .. 60 °C
Storage temperature, range	-60 .. 85 °C
Field of application	Indoor, Outdoor

All drawings, designs, specifications, plans and particulars of weights, size and dimensions contained in the technical or commercial documentation of Nexans is indicative only and shall not be binding on Nexans or be treated as constituting a representation on the part of Nexans.

Contact
Fiber LAN Product Inquiry
Phone: 717-354-6200
fiber-pc.us@nexans.com

Adventum Plenum Rated Indoor/Outdoor Optical Cable

12 x OM3 Adventum Plenum Cable

Sheath Colors

Fiber Type	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	OS2	NS	NS	NS	0.4 dB/km	0.3 dB/km	Yellow
CB	OM1	200 MHz-km	200 MHz-km	3.5 dB/km	1.0 dB/km	NS	Orange
GB	OM1	500 MHz-km	350 MHz-km	3.5 dB/km	1.0 dB/km	NS	Orange
ZB	OM2	500 MHz-km	500 MHz-km	3.5 dB/km	1.5 dB/km	NS	Orange
LB	OM2+	950 MHz-km	700 MHz-km	3.0 dB/km	1.0 dB/km	NS	Orange
EB	OM3	2000 MHz-km	1500 MHz-km	3.0 dB/km	1.0 dB/km	NS	Aqua
FB	OM4	4700 MHz-km	3500 MHz-km	3.0 dB/km	1.0 dB/km	NS	Aqua
XB	OM4+	4900 MHz-km	3675 MHz-km	3.0 dB/km	1.0 dB/km	NS	Aqua
NS = Not Specified							

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 cable 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.

All drawings, designs, specifications, plans and particulars of weights, size and dimensions contained in the technical or commercial documentation of Nexans is indicative only and shall not be binding on Nexans or be treated as constituting a representation on the part of Nexans.