

Contact

Copper LAN Product Inquiry
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Adventum Indoor/Outdoor with Armor-Tek - Plenum Rated

24 x OS2 Adventum Plenum with Interlock Armor

Part Number: LTPK12B024AB0403

Berk-Tek's Adventum Armor-Tek™ products consist of indoor/outdoor rated fiber optic loose tube cables encased with an aluminum or steel spirally wrapped armor in an interlocking configuration. The armored cable is then covered with a plenum rated jacket to prevent snags during installation.

Description

Construction

Loose tube cable constructions (up to 432 optical fibers) with aluminum interlock armor and an overall plenum flame rated jacket. Steel interlock is also available.

Applications

Armor-Tek fiber cables can be used in any of the following installation environments: indoor/outdoor, in backbones, between closets and in fiber to the desk. Armor-Tek is a viable and cost effective solution for applications where a pathway is beyond its full ratio, for areas where extra physical security is a concern, in fast track installations, between buildings, direct buried, or in trays.

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

Berk-Tek's Adventum Loose Tube fiber optic cables (U.S. Patent No. 6,178,278) are suitable for all passive and active optical network designs requiring high speed data applications, including (but not limited to):

- 10BASE-FL
- 100BASE-SX/100BASE-FX
- ATM 155/ATM622
- 1000BASE-SX/1000BASE-LX
- Fibre Channel 1.062/2.125
- 10GBASE-SR/SW
- 10GBASE-LX4
- 40/100 GbE

Features

- Multimode, Single-mode and GIGAlite™ fibers
- Available with new bend-optimized single-mode fibers
- Jacketed armor remains flexible due to the spiral wrap armoring process
- Easy one-pull installation into any environment
- Compact outside diameters when compared to plenum innerduct or conduit
- High tensile strength, crush resistant
- Available Harsh Environment (HE), cables offer superior resistance to chemicals and fuels. Suitable for Petro-Chemical, Industrial, and airport installations.

Benefits



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

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- Eliminates the need for conduit or plenum innerduct
- Significant cost savings in both materials and labor - up to 25%
- Accommodates last minute relocations or pathway changes
- Provides a higher concentration of cables in an area than conduit
- Can be installed in campus environments due to the durability and indoor/outdoor rating of the cable
- Armor provides crush protection and protection from rodent attacks

Characteristics

Construction characteristics	
Fiber optic type	SM (G657.A1)
Type of cable	Loose tube
Outer sheath	Plenum
Sheath colour	Yellow
Armour type	Aluminum Interlock
Dimensional characteristics	
Tube diameter	3 mm
Number of optical fibres	24
Nominal outer diameter	0.73 in
Nominal outer diameter	18.5 mm
Approximate weight	184 lb/kft
Approximate weight	274 kg/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	600 lb
Maximum installation tension	2670 N
Max. Load. Long Term (lbs)	200.0 lb
Max. Load. Long Term	890.0 N
Crush resistance per TIA/EIA FOTP-41	440 N/cm
Cable flexibility per TIA/EIA FOTP-104	100 cycles
Impacts per TIA/EIA FOTP-25	2 at 8.83 N-m
Usage characteristics	
Minimum Bending Radius - Install	11 in
Minimum Bend Radius - Install	27.8 cm
Minimum Bending Radius - LongTerm	7.3 in
Minimum Bending Radius - LongTerm	18.5 cm
Operating temperature, range	-40 .. 75 °C
Ambient installation temperature, range	-20 .. 60 °C
Storage temperature, range	-60 .. 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	0.4 dB/km	0.3 dB/km	Yellow
CB	62.5	OM1	200 MHz-km	200 MHz-km	3.5 dB/km	1.0 dB/km	NS	Orange
GB	62.5	OM1+	500 MHz-km	350 MHz-km	3.5 dB/km	1.0 dB/km	NS	Orange
ZB	50	OM2	500 MHz-km	500 MHz-km	3.5 dB/km	1.5 dB/km	NS	Orange
LB	50	OM2+	950 MHz-km	700 MHz-km	3.0 dB/km	1.0 dB/km	NS	Orange
EB	50	OM3	2000 MHz-km	1500 MHz-km	3.0 dB/km	1.0 dB/km	NS	Aqua
FB	50	OM4	4700 MHz-km	3500 MHz-km	3.0 dB/km	1.0 dB/km	NS	Aqua
XB	50	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.