

## Adventum Indoor/Outdoor Loose Tube with Interlocking Armor

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	
Type of cable	Loose tube
Outer sheath	Plenum
Usage characteristics	
RoHS conform	Yes
Operating temperature, range	-40 .. 75 °C
Ambient installation temperature, range	-20 .. 60 °C
Storage temperature, range	-60 .. 85 °C

### 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

### Physical Characteristics - All Fiber Types

Nb optical fibres	Approximate weight [lb/kft]	Maximum installation tension [lb]	Minimum Bending Radius - Install [in]	Minimum Bending Radius - LongTerm [in]	Max. Load. Long Term (lbs) [lb]	Nominal outer diameter [in]
6	136	300	9.3	6.2	90.0	0.62
6	185	600	11	7.3	200.0	0.73
12	136	300	9.3	6.2	90.0	0.62
18	208	300	12.8	8.5	90.0	0.851
24	185	600	11	7.3	200.0	0.73

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Nb optical fibres	Approximate weight [lb/kft]	Maximum installation tension [lb]	Minimum Bending Radius - Install [in]	Minimum Bending Radius - LongTerm [in]	Max. Load Long Term (lbs) [lb]	Nominal outer diameter [in]
24	208	300	12.8	8.5	90.0	0.851
48	186	600	11	7.3	200.0	0.73
72	223	600	11.6	7.7	200.0	0.774
144	359	1000	14.6	9.7	300.0	0.974
216	331	1000	14.6	9.7	300.0	0.974

**Product List**

☎ = Make to order, 🏠 = Make to stock

Part Number	Description
☎ LTPK0X018EB3010/25	Adventum Plenum with Interlock Armor 018 Fiber, 50/125 micron, 2000/500 MHz•km, Dual-Unilite
☎ LTPK0X018FB3010/F5	Adventum Plenum with Interlock Armor 018 Fiber, 50/125 micron, 4700/500 MHz•km, Dual-Unilite
☎ LTPK0X018XB3010/X5	Adventum Plenum with Interlock Armor 018 Fiber, 50/125 micron, 4900/500 MHz•km, Dual-Unilite
☎ LTPK0X018ZB3515/55	Adventum Plenum with Interlock Armor 018 Fiber, 50/125 micron, 500/500 MHz•km FDDI, Dual-Unilite
☎ LTPK0X018LB3010/75	Adventum Plenum with Interlock Armor 018 Fiber, 50/125 micron, 950/500 MHz•km, Dual-Unilite
☎ LTPK0X018CB3510/25	Adventum Plenum with Interlock Armor 018 Fiber, 62.5/125 micron, 200/500 MHz•km, Dual-Unilite
☎ LTPK0X018GB3510/25	Adventum Plenum with Interlock Armor 018 Fiber, 62.5/125 micron, GIGAlite 200/500 MHz•km, Dual-Unilite
☎ LTPK0X018AB0403	Adventum Plenum with Interlock Armor 018 Fiber, Enhanced Single-Mode, Dual-Unilite
☎ LTPK0X024EB3010/25	Adventum Plenum with Interlock Armor 024 Fiber, 50/125 micron, 2000/500 MHz•km, Dual-Unilite
☎ LTPK0X024FB3010/F5	Adventum Plenum with Interlock Armor 024 Fiber, 50/125 micron, 4700/500 MHz•km, Dual-Unilite
☎ LTPK0X024XB3010/X5	Adventum Plenum with Interlock Armor 024 Fiber, 50/125 micron, 4900/500 MHz•km, Dual-Unilite
☎ LTPK0X024ZB3515/55	Adventum Plenum with Interlock Armor 024 Fiber, 50/125 micron, 500/500 MHz•km FDDI, Dual-Unilite
☎ LTPK0X024LB3010/75	Adventum Plenum with Interlock Armor 024 Fiber, 50/125 micron, 950/500 MHz•km, Dual-Unilite
☎ LTPK0X024CB3510/25	Adventum Plenum with Interlock Armor 024 Fiber, 62.5/125 micron, 200/500 MHz•km, Dual-Unilite
☎ LTPK0X024GB3510/25	Adventum Plenum with Interlock Armor 024 Fiber, 62.5/125 micron, GIGAlite 200/500 MHz•km, Dual-Unilite
☎ LTPK0X024AB0403	Adventum Plenum with Interlock Armor 024 Fiber, Enhanced Single-Mode, Dual-Unilite
🏠 LTPK006EB3010/25	Adventum Plenum with Interlock Armor 006 Fiber, 50/125 micron, 2000/500 MHz•km
☎ LTPK12B006EB3010/25	Adventum Plenum with Interlock Armor 006 Fiber, 50/125 micron, 2000/500 MHz•km
☎ LTPK006FB3010/F5	Adventum Plenum with Interlock Armor 006 Fiber, 50/125 micron, 4700/500 MHz•km

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## Adventum Indoor/Outdoor Loose Tube with Interlocking Armor

Part Number	Description
☎ LTPK12B006FB3010/F5	Adventum Plenum with Interlock Armor 006 Fiber, 50/125 micron, 4700/500 MHz•km
☎ LTPK006XB3010/X5	Adventum Plenum with Interlock Armor 006 Fiber, 50/125 micron, 4900/500 MHz•km
☎ LTPK12B006XB3010/X5	Adventum Plenum with Interlock Armor 006 Fiber, 50/125 micron, 4900/500 MHz•km
☎ LTPK006ZB3515/55	Adventum Plenum with Interlock Armor 006 Fiber, 50/125 micron, 500/500 MHz•km FDDI
☎ LTPK12B006ZB3515/55	Adventum Plenum with Interlock Armor 006 Fiber, 50/125 micron, 500/500 MHz•km FDDI
☎ LTPK006LB3010/75	Adventum Plenum with Interlock Armor 006 Fiber, 50/125 micron, 950/500 MHz•km
☎ LTPK12B006LB3010/75	Adventum Plenum with Interlock Armor 006 Fiber, 50/125 micron, 950/500 MHz•km
☎ LTPK006CB3510/25	Adventum Plenum with Interlock Armor 006 Fiber, 62.5/125 micron, 200/500 MHz•km
☎ LTPK12B006CB3510/25	Adventum Plenum with Interlock Armor 006 Fiber, 62.5/125 micron, 200/500 MHz•km
☎ LTPK006GB3510/25	Adventum Plenum with Interlock Armor 006 Fiber, 62.5/125 micron, GIGAlite 200/500 MHz•km
☎ LTPK12B006GB3510/25	Adventum Plenum with Interlock Armor 006 Fiber, 62.5/125 micron, GIGAlite 200/500 MHz•km
☎ LTPK006AB0403	Adventum Plenum with Interlock Armor 006 Fiber, Enhanced Single-Mode
☎ LTPK12B006AB0403	Adventum Plenum with Interlock Armor 006 Fiber, Enhanced Single-Mode
🏠 LTPK012EB3010/25	Adventum Plenum with Interlock Armor 012 Fiber, 50/125 micron, 2000/500 MHz•km
☎ LTPK012FB3010/F5	Adventum Plenum with Interlock Armor 012 Fiber, 50/125 micron, 4700/500 MHz•km
☎ LTPK012XB3010/X5	Adventum Plenum with Interlock Armor 012 Fiber, 50/125 micron, 4900/500 MHz•km
☎ LTPK012ZB3515/55	Adventum Plenum with Interlock Armor 012 Fiber, 50/125 micron, 500/500 MHz•km FDDI
☎ LTPK012LB3010/75	Adventum Plenum with Interlock Armor 012 Fiber, 50/125 micron, 950/500 MHz•km
☎ LTPK012CB3510/25	Adventum Plenum with Interlock Armor 012 Fiber, 62.5/125 micron, 200/500 MHz•km
☎ LTPK012GB3510/25	Adventum Plenum with Interlock Armor 012 Fiber, 62.5/125 micron, GIGAlite 200/500 MHz•km
☎ LTPK012AB0403	Adventum Plenum with Interlock Armor 012 Fiber, Enhanced Single-Mode
☎ LTPK12B024EB3010/25	Adventum Plenum with Interlock Armor 024 Fiber, 50/125 micron, 2000/500 MHz•km
☎ LTPK12B024FB3010/F5	Adventum Plenum with Interlock Armor 024 Fiber, 50/125 micron, 4700/500 MHz•km
☎ LTPK12B024XB3010/X5	Adventum Plenum with Interlock Armor 024 Fiber, 50/125 micron, 4900/500 MHz•km
☎ LTPK12B024ZB3515/55	Adventum Plenum with Interlock Armor 024 Fiber, 50/125 micron, 500/500 MHz•km FDDI
☎ LTPK12B024LB3010/75	Adventum Plenum with Interlock Armor 024 Fiber, 50/125 micron, 950/500 MHz•km

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## Adventum Indoor/Outdoor Loose Tube with Interlocking Armor

Part Number	Description
☎ LTPK12B024CB3510/25	Adventum Plenum with Interlock Armor 024 Fiber, 62.5/125 micron, 200/500 MHz•km
☎ LTPK12B024GB3510/25	Adventum Plenum with Interlock Armor 024 Fiber, 62.5/125 micron, GIGALite 200/500 MHz•km
☎ LTPK12B024AB0403	Adventum Plenum with Interlock Armor 024 Fiber, Enhanced Single-Mode
☎ LTPK12B036-024XB3010/X5-012AB0403	Adventum Plenum with Interlock Armor 036 Fiber Hybrid 24 x OM4+ & 12 x OS2
☎ LTPK12B048EB3010/25	Adventum Plenum with Interlock Armor 048 Fiber, 50/125 micron, 2000/500 MHz•km
☎ LTPK12B048FB3010/F5	Adventum Plenum with Interlock Armor 048 Fiber, 50/125 micron, 4700/500 MHz•km
☎ LTPK12B048XB3010/X5	Adventum Plenum with Interlock Armor 048 Fiber, 50/125 micron, 4900/500 MHz•km
☎ LTPK12B048ZB3515/55	Adventum Plenum with Interlock Armor 048 Fiber, 50/125 micron, 500/500 MHz•km FDDI
☎ LTPK12B048LB3010/75	Adventum Plenum with Interlock Armor 048 Fiber, 50/125 micron, 950/500 MHz•km
☎ LTPK12B048CB3510/25	Adventum Plenum with Interlock Armor 048 Fiber, 62.5/125 micron, 200/500 MHz•km
☎ LTPK12B048GB3510/25	Adventum Plenum with Interlock Armor 048 Fiber, 62.5/125 micron, GIGALite 200/500 MHz•km
☎ LTPK12B048AB0403	Adventum Plenum with Interlock Armor 048 Fiber, Enhanced Single-Mode
☎ LTPK12B072EB3010/25	Adventum Plenum with Interlock Armor 072 Fiber, 50/125 micron, 2000/500 MHz•km
☎ LTPK12B072FB3010/F5	Adventum Plenum with Interlock Armor 072 Fiber, 50/125 micron, 4700/500 MHz•km
☎ LTPK12B072XB3010/X5	Adventum Plenum with Interlock Armor 072 Fiber, 50/125 micron, 4900/500 MHz•km
☎ LTPK12B072ZB3515/55	Adventum Plenum with Interlock Armor 072 Fiber, 50/125 micron, 500/500 MHz•km FDDI
☎ LTPK12B072LB3010/75	Adventum Plenum with Interlock Armor 072 Fiber, 50/125 micron, 950/500 MHz•km
☎ LTPK12B072CB3510/25	Adventum Plenum with Interlock Armor 072 Fiber, 62.5/125 micron, 200/500 MHz•km
☎ LTPK12B072GB3510/25	Adventum Plenum with Interlock Armor 072 Fiber, 62.5/125 micron, GIGALite 200/500 MHz•km
☎ LTPK12B072AB0403	Adventum Plenum with Interlock Armor 072 Fiber, Enhanced Single-Mode
☎ LTPK12B144EB3010/25	Adventum Plenum with Interlock Armor 144 Fiber, 50/125 micron, 2000/500 MHz•km
☎ LTPK12B144FB3010/F5	Adventum Plenum with Interlock Armor 144 Fiber, 50/125 micron, 4700/500 MHz•km
☎ LTPK12B144XB3010/X5	Adventum Plenum with Interlock Armor 144 Fiber, 50/125 micron, 4900/500 MHz•km
☎ LTPK12B144ZB3515/55	Adventum Plenum with Interlock Armor 144 Fiber, 50/125 micron, 500/500 MHz•km FDDI
☎ LTPK12B144LB3010/75	Adventum Plenum with Interlock Armor 144 Fiber, 50/125 micron, 950/500 MHz•km
☎ LTPK12B144CB3510/25	Adventum Plenum with Interlock Armor 144 Fiber, 62.5/125 micron, 200/500 MHz•km

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## Adventum Indoor/Outdoor Loose Tube with Interlocking Armor

Part Number	Description
☎ LTPK12B144GB3510/25	Adventum Plenum with Interlock Armor 144 Fiber, 62.5/125 micron, GIGAlite 200/500 MHz•km
☎ LTPK12B144AB0403	Adventum Plenum with Interlock Armor 144 Fiber, Enhanced Single-Mode
☎ LTPK12B216EB3010/25	Adventum Plenum with Interlock Armor 216 Fiber, 50/125 micron, 2000/500 MHz•km
☎ LTPK12B216FB3010/F5	Adventum Plenum with Interlock Armor 216 Fiber, 50/125 micron, 4700/500 MHz•km
☎ LTPK12B216XB3010/X5	Adventum Plenum with Interlock Armor 216 Fiber, 50/125 micron, 4900/500 MHz•km
☎ LTPK12B216ZB3515/55	Adventum Plenum with Interlock Armor 216 Fiber, 50/125 micron, 500/500 MHz•km FDDI
☎ LTPK12B216LB3010/75	Adventum Plenum with Interlock Armor 216 Fiber, 50/125 micron, 950/500 MHz•km
☎ LTPK12B216CB3510/25	Adventum Plenum with Interlock Armor 216 Fiber, 62.5/125 micron, 200/500 MHz•km
☎ LTPK12B216GB3510/25	Adventum Plenum with Interlock Armor 216 Fiber, 62.5/125 micron, GIGAlite 200/500 MHz•km
☎ LTPK12B216AB0403	Adventum Plenum with Interlock Armor 216 Fiber, Enhanced Single-Mode

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### 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.