

## Adventum Plenum Rated Indoor/Outdoor Optical Cable

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

### 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



### 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

## Adventum Plenum Rated Indoor/Outdoor Optical 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	
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]	Minimum Bending Radius - LongTerm [in]	Max. Load. Long Term (lbs) [lb]	Minimum Bending Radius - Install [in]	Maximum installation tension [lb]
6	30	2.6	90.0	3.9	300
12	31	2.6	90.0	3.9	300
18	58	5.1	90.0	7.7	300
24	56	3.7	90.0	5.6	300
24	58	5.1	90.0	7.7	300
36	56	3.7	90.0	5.6	300

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Nb optical fibres	Approximate weight [lb/kft]	Minimum Bending Radius - LongTerm [in]	Max. Load. Long Term (lbs) [lb]	Minimum Bending Radius - Install [in]	Maximum installation tension [lb]
48	56	3.7	90.0	5.6	300
72	84	4.6	200.0	6.9	600
144	212	6.7	300.0	10.1	1000
216	180	6.7	300.0	10.1	1000
432	362	9.4	300.0	14.1	1000

**Product List**

☎=Make to order, 🏭=Make to stock

Part Number	Description	Optical performance
🏭 LTP012CB3510/25	12 x OM1 Adventum Plenum Cable	CB (62.5/125 Standard, OM1)
☎ LTP012GB3510/25	12 x OM1+ Adventum Plenum Cable	GB (62.5/125 GIGAlite, OM1+ Extended Distance)
☎ LTP012ZB3515/15	12 x OM2 Adventum Plenum Cable	ZB (50/125 FDDI, OM2)
🏭 LTP012LB3010/75	12 x OM2+ Adventum Plenum Cable	LB (50/125 GIGAlite, OM2+ Extended Distance)
🏭 LTP012EB3010/25	12 x OM3 Adventum Plenum Cable	EB (50/125 GIGAlite-10, OM3)
☎ LTP012FB3010/F5	12 x OM4 Adventum Plenum Cable	FB (50/125 GIGAlite 10-FB, OM4)
☎ LTP012XB3010/X5	12 x OM4+ Adventum Plenum Cable	XB (50/125 GIGAlite10-XB, OM4+ Extended Distance)
🏭 LTP012AB0403	12 x SMF Adventum Plenum Cable	AB (Single-mode, OS2)
☎ LTP12B144CB3510/25	144 x OM1 Adventum Plenum Cable	CB (62.5/125 Standard, OM1)
☎ LTP12B144GB3510/25	144 x OM1+ Adventum Plenum Cable	GB (62.5/125 GIGAlite, OM1+ Extended Distance)
☎ LTP12B144ZB3515/15	144 x OM2 Adventum Plenum Cable	ZB (50/125 FDDI, OM2)
☎ LTP12B144LB3010/75	144 x OM2+ Adventum Plenum Cable	LB (50/125 GIGAlite, OM2+ Extended Distance)
☎ LTP12B144EB3010/25	144 x OM3 Adventum Plenum Cable	EB (50/125 GIGAlite-10, OM3)
☎ LTP12B144FB3010/F5	144 x OM4 Adventum Plenum Cable	FB (50/125 GIGAlite 10-FB, OM4)
☎ LTP12B144XB3010/X5	144 x OM4+ Adventum Plenum Cable	XB (50/125 GIGAlite10-XB, OM4+ Extended Distance)
☎ LTP12B144AB0403	144 x SMF Adventum Plenum Cable	AB (Single-mode, OS2)
☎ LTP0X018CB3510/25	18 x OM1 Adventum Plenum Cable	CB (62.5/125 Standard, OM1)
☎ LTP0X018GB3510/25	18 x OM1+ Adventum Plenum Cable	GB (62.5/125 GIGAlite, OM1+ Extended Distance)
☎ LTP0X018ZB3515/15	18 x OM2 Adventum Plenum Cable	ZB (50/125 FDDI, OM2)
☎ LTP0X018LB3010/75	18 x OM2+ Adventum Plenum Cable	LB (50/125 GIGAlite, OM2+ Extended Distance)
☎ LTP0X018EB3010/25	18 x OM3 Adventum Plenum Cable	EB (50/125 GIGAlite-10, OM3)
☎ LTP0X018FB3010/F5	18 x OM4 Adventum Plenum Cable	FB (50/125 GIGAlite 10-FB, OM4)
☎ LTP0X018XB3010/X5	18 x OM4+ Adventum Plenum Cable	XB (50/125 GIGAlite10-XB, OM4+ Extended Distance)
☎ LTP0X018AB0403	18 x SMF Adventum Plenum Cable	AB (Single-mode, OS2)
☎ LTP12B216CB3510/25	216 x OM1 Adventum Plenum Cable	CB (62.5/125 Standard, OM1)
☎ LTP12B216GB3510/25	216 x OM1+ Adventum Plenum Cable	GB (62.5/125 GIGAlite, OM1+ Extended Distance)
☎ LTP12B216ZB3515/15	216 x OM2 Adventum Plenum Cable	ZB (50/125 FDDI, OM2)
☎ LTP12B216LB3010/75	216 x OM2+ Adventum Plenum Cable	LB (50/125 GIGAlite, OM2+ Extended Distance)
☎ LTP12B216EB3010/25	216 x OM3 Adventum Plenum Cable	EB (50/125 GIGAlite-10, OM3)
☎ LTP12B216FB3010/F5	216 x OM4 Adventum Plenum Cable	FB (50/125 GIGAlite 10-FB, OM4)
☎ LTP12B216XB3010/X5	216 x OM4+ Adventum Plenum Cable	XB (50/125 GIGAlite10-XB, OM4+ Extended Distance)
☎ LTP12B216AB0403	216 x SMF Adventum Plenum Cable	AB (Single-mode, OS2)
☎ LTP12B024CB3510/25	24 x OM1 Adventum Plenum Cable	CB (62.5/125 Standard, OM1)

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Part Number	Description	Optical performance
☒ LTP0X024CB3510/25	24 x OM1 Adventum Plenum Cable	CB (62.5/125 Standard, OM1)
☒ LTP12B024GB3510/25	24 x OM1+ Adventum Plenum Cable	GB (62.5/125 GIGALite, OM1+ Extended Distance)
☒ LTP0X024GB3510/25	24 x OM1+ Adventum Plenum Cable	GB (62.5/125 GIGALite, OM1+ Extended Distance)
☒ LTP12B024ZB3515/15	24 x OM2 Adventum Plenum Cable	ZB (50/125 FDDI, OM2)
☒ LTP0X024ZB3515/15	24 x OM2 Adventum Plenum Cable	ZB (50/125 FDDI, OM2)
☒ LTP12B024LB3010/75	24 x OM2+ Adventum Plenum Cable	LB (50/125 GIGALite, OM2+ Extended Distance)
☒ LTP0X024LB3010/75	24 x OM2+ Adventum Plenum Cable	LB (50/125 GIGALite, OM2+ Extended Distance)
☒ LTP12B024EB3010/25	24 x OM3 Adventum Plenum Cable	EB (50/125 GIGALite-10, OM3)
☒ LTP0X024EB3010/25	24 x OM3 Adventum Plenum Cable	EB (50/125 GIGALite-10, OM3)
☒ LTP12B024FB3010/F5	24 x OM4 Adventum Plenum Cable	FB (50/125 GIGALite 10-FB, OM4)
☒ LTP0X024FB3010/F5	24 x OM4 Adventum Plenum Cable	FB (50/125 GIGALite 10-FB, OM4)
☒ LTP12B024XB3010/X5	24 x OM4+ Adventum Plenum Cable	XB (50/125 GIGALite10-XB, OM4+ Extended Distance)
☒ LTP0X024XB3010/X5	24 x OM4+ Adventum Plenum Cable	XB (50/125 GIGALite10-XB, OM4+ Extended Distance)
☒ LTP12B024AB0403	24 x SMF Adventum Plenum Cable	AB (Single-mode, OS2)
☒ LTP0X024AB0403	24 x SMF Adventum Plenum Cable	AB (Single-mode, OS2)
☒ LTP12B036CB3510/25	36 x OM1 Adventum Plenum Cable	CB (62.5/125 Standard, OM1)
☒ LTP12B036GB3510/25	36 x OM1+ Adventum Plenum Cable	GB (62.5/125 GIGALite, OM1+ Extended Distance)
☒ LTP12B036ZB3515/15	36 x OM2 Adventum Plenum Cable	ZB (50/125 FDDI, OM2)
☒ LTP12B036LB3010/75	36 x OM2+ Adventum Plenum Cable	LB (50/125 GIGALite, OM2+ Extended Distance)
☒ LTP12B036EB3010/25	36 x OM3 Adventum Plenum Cable	EB (50/125 GIGALite-10, OM3)
☒ LTP12B036FB3010/F5	36 x OM4 Adventum Plenum Cable	FB (50/125 GIGALite 10-FB, OM4)
☒ LTP12B036XB3010/X5	36 x OM4+ Adventum Plenum Cable	XB (50/125 GIGALite10-XB, OM4+ Extended Distance)
☒ LTP12B036AB0403	36 x SMF Adventum Plenum Cable	AB (Single-mode, OS2)
☒ LTP12B432CB3510/25	432 x OM1 Adventum Plenum Cable	CB (62.5/125 Standard, OM1)
☒ LTP12B432GB3510/25	432 x OM1+ Adventum Plenum Cable	GB (62.5/125 GIGALite, OM1+ Extended Distance)
☒ LTP12B432ZB3515/15	432 x OM2 Adventum Plenum Cable	ZB (50/125 FDDI, OM2)
☒ LTP12B432LB3010/75	432 x OM2+ Adventum Plenum Cable	LB (50/125 GIGALite, OM2+ Extended Distance)
☒ LTP12B432EB3010/25	432 x OM3 Adventum Plenum Cable	EB (50/125 GIGALite-10, OM3)
☒ LTP12B432FB3010/F5	432 x OM4 Adventum Plenum Cable	FB (50/125 GIGALite 10-FB, OM4)
☒ LTP12B432XB3010/X5	432 x OM4+ Adventum Plenum Cable	XB (50/125 GIGALite10-XB, OM4+ Extended Distance)
☒ LTP12B432AB0403	432 x SMF Adventum Plenum Cable	AB (Single-mode, OS2)
☒ LTP12B048CB3510/25	48 x OM1 Adventum Plenum Cable	CB (62.5/125 Standard, OM1)
☒ LTP12B048GB3510/25	48 x OM1+ Adventum Plenum Cable	GB (62.5/125 GIGALite, OM1+ Extended Distance)
☒ LTP12B048ZB3515/15	48 x OM2 Adventum Plenum Cable	ZB (50/125 FDDI, OM2)
☒ LTP12B048LB3010/75	48 x OM2+ Adventum Plenum Cable	LB (50/125 GIGALite, OM2+ Extended Distance)
☒ LTP12B048EB3010/25	48 x OM3 Adventum Plenum Cable	EB (50/125 GIGALite-10, OM3)
☒ LTP12B048FB3010/F5	48 x OM4 Adventum Plenum Cable	FB (50/125 GIGALite 10-FB, OM4)
☒ LTP12B048XB3010/X5	48 x OM4+ Adventum Plenum Cable	XB (50/125 GIGALite10-XB, OM4+ Extended Distance)
☒ LTP12B048AB0403	48 x SMF Adventum Plenum Cable	AB (Single-mode, OS2)
☒ LTP006CB3510/25	6 x OM1 Adventum Plenum Cable	CB (62.5/125 Standard, OM1)
☒ LTP006GB3510/25	6 x OM1+ Adventum Plenum Cable	GB (62.5/125 GIGALite, OM1+ Extended Distance)
☒ LTP006ZB3515/15	6 x OM2 Adventum Plenum Cable	ZB (50/125 FDDI, OM2)
☒ LTP006LB3010/75	6 x OM2+ Adventum Plenum Cable	LB (50/125 GIGALite, OM2+ Extended Distance)

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Part Number	Description	Optical performance
☐ LTP006EB3010/25	6 x OM3 Adventum Plenum Cable	EB (50/125 GIGAlite-10, OM3)
☎ LTP006FB3010/F5	6 x OM4 Adventum Plenum Cable	FB (50/125 GIGAlite 10-FB, OM4)
☎ LTP006XB3010/X5	6 x OM4+ Adventum Plenum Cable	XB (50/125 GIGAlite10-XB, OM4+ Extended Distance)
☐ LTP006AB0403	6 x SMF Adventum Plenum Cable	AB (Single-mode, OS2)
☎ LTP12B072CB3510/25	72 x OM1 Adventum Plenum Cable	CB (62.5/125 Standard, OM1)
☎ LTP12B072GB3510/25	72 x OM1+ Adventum Plenum Cable	GB (62.5/125 GIGAlite, OM1+ Extended Distance)
☎ LTP12B072ZB3515/15	72 x OM2 Adventum Plenum Cable	ZB (50/125 FDDI, OM2)
☎ LTP12B072LB3010/75	72 x OM2+ Adventum Plenum Cable	LB (50/125 GIGAlite, OM2+ Extended Distance)
☐ LTP12B072EB3010/25	72 x OM3 Adventum Plenum Cable	EB (50/125 GIGAlite-10, OM3)
☎ LTP12B072FB3010/F5	72 x OM4 Adventum Plenum Cable	FB (50/125 GIGAlite 10-FB, OM4)
☎ LTP12B072XB3010/X5	72 x OM4+ Adventum Plenum Cable	XB (50/125 GIGAlite10-XB, OM4+ Extended Distance)
☎ LTP12B072AB0403	72 x SMF Adventum Plenum Cable	AB (Single-mode, OS2)
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### Manufacturing Release

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