

Berk-Tek Indoor/Outdoor LSZH Riser Adventum® - Single Armor Double Jacket (LTRZA)

Berk-Tek

a LEVITON company

Berk-Tek's revolutionary all dry loose tube Indoor/Outdoor LSZH Adventum cables are designed to be used in riser rated environments. This cable design utilizes Berk-Tek's unique DryGel waterblocking system, and incorporates a corrugated steel armor tape between two jackets surrounding the core. DryGel technology utilizes super absorbent polymers to replace the messy gel filler inside the LSZH fiber tubes. Adventum LSZH Single Armor Double Jacket cables are available in fiber counts of 6-288, have no gel filler, and are OFCR rated for riser installations.

DESCRIPTION

Berk-Tek's all dry 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. These cables have been thoroughly tested in accordance with CSA C22.2 No. 232, Telcordia GR-409 Issue 2, ICEA-596 Edition 3, and ICEA-696 Edition 2 standards where applicable. These cables are compliant with the Wire and Cable Requirements of NFPA 130 (2014), section 12.2 Flame Spread and Smoke Release. They are suitable for railway and mass transit infrastructure in tunnels, as well as for Tray installations in industrial environments.

Buffer Tube Construction

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

Outdoor Consideration

Berk-Tek recommends that loose tube cables be utilized in an outside plant installation environment, especially if the interbuilding conduit system is likely to fill with water.

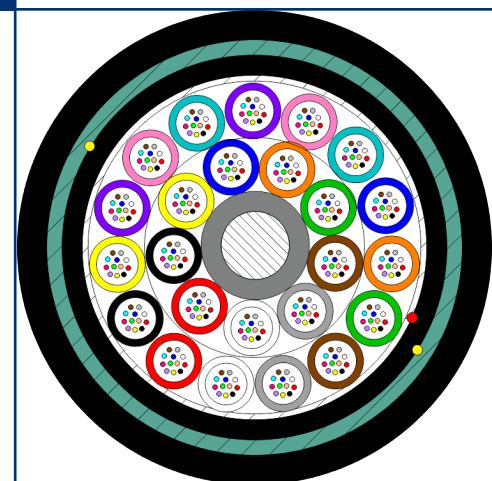
Applications

Berk-Tek recommends installation procedures per ANSI/TIA-758, Customer-owned Outside Plant Telecommunications Infrastructure Standard. Berk-Tek's Adventum Loose Tube, LSZH Riser Rated fiber optic cable is intended for all high speed data applications, including:

- ETHERNET: 10BASE – 40GBASE (10BASE, 100BASE, 1000BASE, 10GBASE, 40GBASE, 100GBASE, 400GBASE)
- Fibre Channel: 1G-FC – 128GFC (1, 2, 4, 8, 16, 32, 128 GFC)
- SONET: OC-1 – OC-768 (OC -1, 3, 12, 24, 48, 192, 768)
- SDH: STM-0 – STM-256 (STM-0, 1, 4, 16, 64, 256)
- OTN: OTU-1 – OTU4 (OTU1, 2, 2e, 2f, 3, 3e2, 4)
- CPRI: CPRI-1 – CPRI-9 (CPRI-1, 2, 3, 4, 5, 6, 7, 7a, 8, 9)
- PON (SMF only): RFoG, APON, BPON, EPON, GPON, WDM-PON, NG-PON

Features

- Supports Gigabit Ethernet, Gigabit ATM, Fibre Channel and other high-speed applications
- High tensile strength, crush resistant and small diameter design, recommended for direct burial installations
- LSZH Riser rating enables installation to go directly from outside plant to riser shaft
- All dry cable core and buffer tubes use DryGel water blocking system
- Sunlight resistant outer jacket per UL 444 clause 7.22 per protects the cable in outside plant installations
- Corrugated steel armor provides crush and rodent resistance.



STANDARDS

International EN 50173;
ISO/IEC 11801

National ANSI/ICEA S-104-696;
ANSI/ICEA S-83-596;
ANSI/TIA-568.3-D; NFPA 130;
Telcordia GR-409

Benefits

- Compact, water blocked, riser rated, flexible loose tube design 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

Country of Origin: U.S.A.

CHARACTERISTICS

Construction characteristics

Type of cable Loose tube

Usage characteristics

RoHS compliant Yes

STANDARD SHEATH COLORS - LOOSE TUBE - BLACK

Fiber Type	Core Size (µm)	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	Black
CB	62.5	OM1	200 MHz·km	200 MHz·km	3.5 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
WB	50	OM5	4700 MHz·km	3500 MHz·km	3.0 dB/km	1.0 dB/km	NS	Black

NS = Not Specified

MANUFACTURING RELEASE

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TECHNICAL DATA - PHYSICAL						Install		Long Term		Install		Long Term	
Fibers	Part Number Prefix	Diameter		Weight		Min. Bend Radius				Max. Loading			
		in.	mm	lb./kft	kg/km	in.	cm	in.	cm	lbf.	N	lbf.	N
6	LTRZA12B006	0.563	14.3	157	233	11.3	28.6	8.4	21.5	300	1335	90	400
12	LTRZA12B012	0.563	14.3	157	233	11.3	28.6	8.4	21.5	300	1335	90	400
24	LTRZA12B024	0.563	14.3	157	233	11.3	28.6	8.4	21.5	300	1335	90	400
48	LTRZA12B048	0.563	14.3	157	233	11.3	28.6	8.4	21.5	300	1335	90	400
72	LTRZA12B072	0.640	16.3	196	292	12.8	32.5	9.6	24.4	600	2670	200	890
96	LTRZA12B096	0.714	18.1	245	364	14.3	36.3	10.7	27.2	600	2670	200	890
144	LTRZA12B144	0.869	22.1	348	517	17.4	44.1	13.0	33.1	1000	4448	300	1335
288	LTRZA12B288	0.999	25.4	419	624	20.0	50.7	15.0	38.1	1000	4448	300	1335

TECHNICAL DATA										
Fiber Type	Part Number Suffix	Berk-Tek Fiber	Core Size	Wavelength (nm)	Maximum Attenuation (dB/km)	Effective Modal Bandwidth @ 850 nm (MHz·km)	Distance (meters)			
Multimode - Bend Insensitive							1 GbE	10 GbE	40 GbE	100 GbE
OM1	CB3510/25	GIGAlite	62.5 μm	850/1300	3.5/1.0	200	300	33	N/A	N/A
OM3	EB3010/25	GIGAlite-10	50 μm	850/1300	3.0/1.0	2000	1000	300	100	70
OM4	FB3010/F5	GIGAlite-10FB	50 μm	850/1300	3.0/1.0	4700	1040	550	150	100
OM4+	XB3010/X5	GIGAlite-10XB	50 μm	850/1300	3.0/1.0	4900	1210	600	300	150
WideBand Multimode - Bend Insensitive							1 GbE	10 GbE	40 GbE	100 GbE
OM5	WB3010/W5	GIGAlite-10WB	50 μm	850-953/1300	3.0/1.0	4700	1040	550	190	100
Single-Mode - Bend Insensitive - ITU-T G.657.A1							1 GbE	10 GbE	40 GbE	100 GbE
OS2	AB0403	Standard for Loose Tube	SMF	1310/1550	0.4/0.3	N/A	≥ 5000	≥ 10000	≥ 10000	≥ 10000