INTERLOCK ARMOR | FIBER OPTIC CABLE | **ARMOR-TEK**

- Aluminum or Steel Interlock Armor
- Single-mode, Multimode, or Hybrid
- Laser Optimized Optical Fibers
- Suitable for Hazardous Environments
- Plenum/Riser Rated
- Tight Buffered or Loose Tube Designs

Berk-Tek® A NEXANS COMPANY

www.berktek.com
1-800-237-5835

Berk-Tek's Armor-Tek™ products consist of fiber optic cables (standard tight buffered or loose tube cables) encased with an aluminum or steel spirally wrapped armor in an interlocking configuration. The cable is then covered with a plenum or riser rated jacket to prevent snags during installation.

CONSTRUCTION

Tight buffered or loose tube cable constructions (up to 216 optical fibers) with aluminum interlock armor and an overall flame rated jacket. Steel interlock is available.

STANDARDS

International	ISO/IEC 11801
European	EN 50173
North American	ANSI/TIA/EIA-568-B3 Telcordia GR-20, Telcordia GR-409 ANSI/ICEA S-87-640 ANSI/ICEA S-83-596

FLAME RATING

All of Berk-Tek's Armor-Tek fiber optic cables are rated OFCP for plenum or OFCR for riser environments.

APPLICATIONS

Armor-Tek fiber cables can be used in any of the following installation environments: indoor, 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 fill ratio, for areas where extra physical security is a concern, in fast track installations, between buildings, direct buried, or in trays.

Available Harsh Environment (HE), cables offer superior resistance to chemicals and fuels. Suitable for Petro-Chemical, Industrial, and airport installations.

Berk-Tek's Loose Tube and Tight Buffered fiber optic cables 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

FEATURES:

- Jacketed armor that remains flexible due to the spiral wrap armoring process
- The armored design allows for an easy one-pull installation into any environment
- Aluminum or steel interlock armor is available
- Aluminum interlock offers 10 to 13 times the impact resistance over all-dielectric optical cable
- Compact outside diameters when compared to plenum innerduct or conduit
- Available in tight buffered or loose tube cable designs with 62.5 µm, 62.5 µm GIGAlite™, 50 µm GIGAlite™, and GIGAlite-10 multimode fibers, single-mode fiber, and hybrid constructions
- Interlocking armor available without an overjacket

BENEFITS:

- Eliminate the need for conduit or plenum innerduct by installing interlock armor cable, providing a significant cost savings in both materials and labor
- Extremely durable cables for hazardous environments or difficult cable installations
- Installation time can be reduced by as much as 60% versus installing conduit or innerduct
- Armor-Tek optical fibers cables accommodate last minute relocations or pathway changes whereas innerduct or conduit is not a flexible alternative
- Armor-Tek cables are not governed by fill ratios because they are UL listed as cable assemblies, allowing higher concentrations of cables in an area than allowed with conduit
- Can be installed in campus environments due to the durability and indoor/outdoor rating of the cable
- Provides additional protection and security for your fiber backbone due to the ruggedness of the armoring materials

TEMPERATURE RATING—LOOSE TUBE PRODUCTS

Operation	-40°C to +75°C
Storage	-40°C to +85°C
Installation	-0°C to +60°C

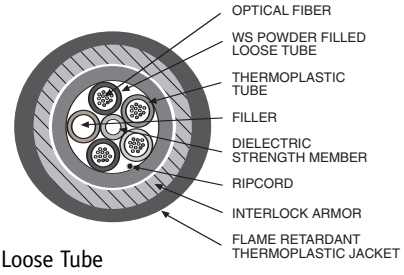
TEMPERATURE RATING—TIGHT BUFFERED PRODUCTS

Operation	-20°C to +75°C
Storage	-40°C to +85°C
Installation	-0°C to +60°C

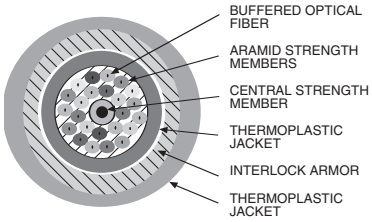
PART NUMBER SELECTION GUIDE

- Select the product prefix corresponding to the cable configuration and quantity of fibers desired, in Table A.
- Then choose the product's suffix corresponding to the type of fiber desired, in Table B or Table C.

Example: PDPK006-AB0504



Loose Tube



Tight Buffered

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TECHNICAL DATA—PHYSICAL (TABLE A)

	FIBERS	PRODUCT PREFIX	DIAMETER		WEIGHT		MIN. BEND RADIUS				MAX. LOADING (CORE CABLE)			
							install		long term		install		long term	
			in.	mm	lb./kft.	kg/km	in.	cm	in.	cm	lb.	N	lb.	N
PREMISE DISTRIBUTION PLENUM *(Available up to 144 Fibers)*	6	PDPK006-	0.505	12.8	79	117	7.6	19.2	5.1	12.8	100	445	30	133
	12	PDPK012-	0.527	13.4	87	129	7.9	20.1	5.3	13.4	100	445	30	133
	18	PDPK018-	0.578	14.7	111	166	8.7	22.0	5.8	14.7	150	667	45	200
	24	PDPK024-	0.578	14.7	119	176	8.7	22.0	5.8	14.7	150	667	45	200
	24	PDPK12B024-	0.749	19.0	161	240	11.2	28.5	7.5	19.0	150	667	45	200
	48	PDPK12B048-	0.921	23.4	274	408	13.8	35.1	9.2	23.4	150	667	45	200
	72	PDPK12B072-	1.000	25.4	392	583	15.0	38.1	10.0	25.4	300	1334	90	400
PREMISE DISTRIBUTION RISER *(Available up to 144 Fibers)*	6	PDRK006-	0.618	15.7	120	179	9.3	23.6	6.2	15.7	150	667	45	200
	12	PDRK012-	0.618	15.7	126	188	9.3	23.6	6.2	15.7	150	667	45	200
	18	PDRK018-	0.618	15.7	134	199	9.3	23.6	6.2	15.7	300	1334	90	400
	24	PDRK024-	0.739	18.8	166	248	11.1	28.2	7.4	18.8	300	1334	90	400
	24	PDRK12B024-	0.789	20.0	195	290	11.8	30.1	7.9	20.0	300	1334	90	400
	48	PDRK12B048-	0.961	24.4	301	448	14.4	36.6	9.6	24.4	300	1334	90	400
	72	PDRK12B072-	10.37	26.3	417	621	15.6	39.5	10.4	26.3	300	1334	90	400
ADVENTUM INDOOR/OUTDOOR PLENUM *(Available up to 216 Fibers)*	6	LTPK006-	0.614	15.6	138	205	9.2	23.4	6.1	15.6	300	1334	90	400
	12	LTPK012-	0.614	15.6	140	208	9.2	23.4	6.1	15.6	300	1334	90	400
	24	LTPK12B024-	0.765	19.4	257	382	11.5	29.1	7.7	19.4	600	2669	180	801
	48	LTPK12B048-	0.765	19.4	257	382	11.5	29.1	7.7	19.4	600	2669	180	801
	72	LTPK12B072-	0.765	19.4	257	382	11.5	29.1	7.7	19.4	600	2669	180	801
ADVENTUM INDOOR/OUTDOOR RISER *(Available up to 216 Fibers)*	6	LTRK006-	0.630	16.0	140	208	9.5	24.0	6.3	16.0	300	1334	90	400
	12	LTRK012-	0.630	16.0	142	211	9.5	24.0	6.3	16.0	300	1334	90	400
	24	LTRK12B024-	0.875	22.2	224	333	13.1	33.3	8.8	22.2	600	2669	180	801
	48	LTRK12B048-	0.875	22.2	239	356	13.1	33.3	8.8	22.2	600	2669	180	801
	72	LTRK12B072-	0.875	22.2	280	417	13.1	33.3	8.8	22.2	600	2669	180	801

FIBER TECHNICAL DATA (MULTIMODE) (TABLE B)

FIBER TYPE	FIBER SUFFIX	WAVELENGTH (nm)	MAXIMUM ATTENUATION (dB/km)	BANDWIDTH (MHz./km)	LENGTH (meters @ 850/1300 nm)
62.5/125 µm Standard	CB3510/25	850/1300	3.5/1.0	200/500*	1 GbE—300/600
62.5/125 µm GIGAlite™	GB3510/25	850/1300	3.5/1.0	200/500**	1 GbE—500/1000
50/125 µm GIGAlite™	LB3010/75	850/1300	3.0/1.0	700/500**	1 GbE—750/600
50/125 µm GIGAlite-10	EB3010/25	850/1300	3.0/1.0	2000***/500*	10 GbE—300/300
50/125 µm-GIGAlite-10XB	XB3010/X5	850/1300	3.0/1.0	4900***/500*	10 GbE—600/300

Contact customer service for more information. *Overfilled Bandwidth Measurement per EIA FOTP 204—Paragraph 3.2.1. **Restricted Mode Launch per EIA FOTP 204—Paragraph 3.2.2. ***Differential Mode Delay per EIA FOTP-220 DMD Test Measurement. For the most current optical fiber specifications, please visit our website at www.berktek.com. Berk-Tek reserves the right to modify optical performance specifications without prior notice.

FIBER TECHNICAL DATA (SINGLE-MODE) (TABLE C)

FIBER TYPE	FIBER SUFFIX	WAVELENGTH (nm)	MAXIMUM ATTENUATION (dB/km)	BANDWIDTH (MHz./km)	LENGTH (meters @ 1300 nm)
Enhanced Single-Mode Fiber[1]	AB0504 or AB1010[2]	1310/1550[1,2]	0.5/0.4 or 0.7/0.7[1,2]	N/A	1 GbE ≥ 5km

[1]Low Water Peak Single-Mode fiber compliant to IEC G.652/D. [2]Attenuation of 0.5/0.4 dB/km for loose tube cable designs. Tight buffered products subject to a maximum attenuation of 0.7 dB/km. Call 1-800-BERK-TEK. For the most current optical fiber specifications, please visit our website at www.berktek.com. Berk-Tek reserves the right to modify optical performance specifications without prior notice.

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