

Berk-Tek Indoor Plenum Heavy Duty Breakout w/Armor-Tek™ (HDPK)

Berk-Tek's Heavy Duty Breakout Armor-Tek cables are designed for installation in horizontal, industrial or other harsh environments where additional strength and fiber protection is required. Heavy Duty Breakout Interlock Armor cables incorporate 900 um tight buffered single-fiber aramid-filled subunits. The standard subunit diameter is 2.0 mm. Additional subunit diameters, including 1.6 mm and 2.5 mm are available. Design utilizes aluminum interlock armoring with an outer jacket. These cables are tested to the mechanical and environmental requirements of Telcordia GR-409 and ANSI/ICEA S-83-596. Berk-Tek's Heavy Duty Breakout cables are available in Multimode, Single-mode, and GIGAlite laser optimized fibers.

DESCRIPTION

Construction

Each cable utilizes individual subunits containing a single 900 um tight buffered fiber, surrounded by aramid yarns. Cable design accommodates from 2 to 36 fibers.

- Each fiber in an individual compact, numbered, aramid-filled subunit
- Tape wrapped dry core
- Colored high-strength ripcord
- Plenum rated polymers used for tight buffer, subunit, core and outer jackets
- Aluminum interlock armor provides extra protection

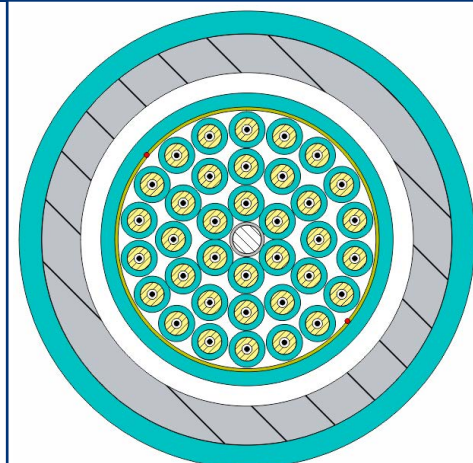
Applications

Berk-Tek's Heavy Duty Breakout cables are suitable for all passive and active optical network designs requiring high speed voice, video, and data applications, including (but not limited to):

- 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

- Multimode, Single-mode, and GIGAlite™ fibers
- Available with new bend-insensitive multimode and single-mode fibers
- High tensile strength, crush resistant
- Aluminum interlock armored
- Plenum rated design.
- Indoor/Outdoor dry water-blocked designs available



STANDARDS

International EN 50173;
ISO/IEC 11801

National ANSI/TIA-568.3-D;
NFPA 130; Telcordia GR-409

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Benefits

- 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
- Armor provides crush protection and protection from rodent attacks

Country of Origin: U.S.A.

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
2	HDPK002	0.596	15.1	144	215	8.9	22.7	6.0	15.1	150	660	45	198
4	HDPK004	0.596	15.1	126	187	8.9	22.7	6.0	15.1	150	660	45	198
6	HDPK006	0.676	17.2	167	249	10.1	25.8	6.8	17.2	150	660	45	198
8	HDPK008	0.726	18.4	200	297	10.9	27.7	7.3	18.4	300	1320	90	396
12	HDPK012	0.847	21.5	272	404	12.7	32.3	8.5	21.5	300	1320	90	396
16	HDPK016	0.847	21.5	265	394	12.7	32.3	8.5	21.5	300	1320	90	396
18	HDPK018	0.847	21.5	267	398	12.7	32.3	8.5	21.5	600	2640	180	792
24	HDPK024	0.947	24.1	331	493	14.2	36.1	9.5	24.1	600	2640	180	792
32	HDPK032	1.000	25.4	378	563	15.0	38.1	10.0	25.4	1000	4448	300	1335
36	HDPK036	1.000	25.4	383	570	15.0	38.1	10.0	25.4	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.652.D and G.657.A1 Compliant							1 GbE	10 GbE	40 GbE	100 GbE
OS2	AB0707	Standard for Tight Buffer	SMF	1310/1550	0.5/0.5	N/A	≥ 5000	≥ 10000	≥ 10000	≥ 10000

STANDARD SHEATH COLORS - TIGHT BUFFER

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	0.5 dB/km	0.5 dB/km	Yellow
CB	62.5	OM1	200 MHz·km	200 MHz·km	3.5 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	Violet
WB	50	OM5	4700 MHz·km	3500 MHz·km	3.0 dB/km	1.0 dB/km	NS	Lime Green

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 product 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.