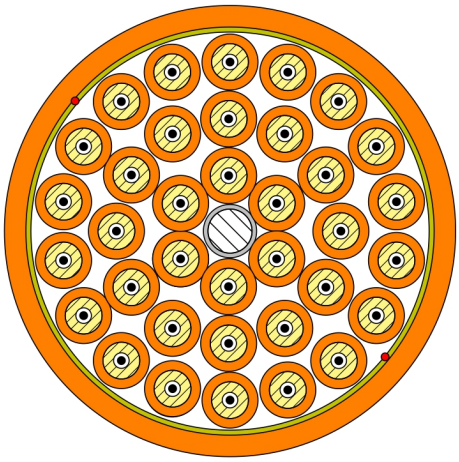
Berk-Tek Indoor Riser Tight Buffer Heavy Duty Breakout (HDR)

Berk-Tek a LEVITON company



Berk-Tek's Heavy Duty Breakout cables are designed for installation in horizontal, industrial or other harsh environments where additional strength and fiber protection is required. Heavy Duty Breakout cables incorporate 900 um tight buffered single-fiber aramid-filled subunits. The standard subunit diameter is 2.0 mm. Design options include interlock armoring and low smoke zero halogen riser jackets. 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 48 fibers.

- Each fiber in an individual compact, numbered, aramid-filled subunit
- Tape wrapped dry core
- Colored high-strength ripcord
- Aluminum interlock armored cables available

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 – 400GBASE (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 single-mode fibers
- High tensile strength, crush resistant
- All-dielectric, aluminum interlock armored designs available
- Riser or low smoke zero halogen riser rated
- Indoor/Outdoor dry water-blocked designs available

STANDARDS

International EN 50173; ISO/IEC 11801

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

NETWORK SOLUTIONS HEADQUARTERS
Bothell, WA, USA | leviton.com/ns
(800) 824 3005 / +1 (425) 486 2222 | appeng@leviton.com

BERK-TEK A LEVITON COMPANY
New Holland, PA, USA | leviton.com/berktek
+1 (717) 354 6200 | berktek.support@leviton.com

Benefits

- One cable design meeting all structured cabling network communications applications
- High tensile strength provides for greater pulling distances
- Ease of installation
- Broad design selection allows for mix and match of fiber components to specific networking applications
- Low cable plant maintenance
- Armor option adds crush resistance and protection from rodent attacks

Country of Origin: U.S.A.

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.

NETWORK SOLUTIONS HEADQUARTERS
Bothell, WA, USA | leviton.com/ns
(800) 824 3005 / +1 (425) 486 2222 | appeng@leviton.com

BERK-TEK A LEVITON COMPANY
New Holland, PA, USA | leviton.com/berktek
+1 (717) 354 6200 | berktek.support@leviton.com

Berk-Tek Indoor Riser Tight Buffer Heavy Duty Breakout (HDR)

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	HDR002	0.268	6.8	32	48	4.0	10.2	2.7	6.8	150	660	45	198
4	HDR004	0.268	6.8	34	50	4.0	10.2	2.7	6.8	150	660	45	198
6	HDR006	0.315	8.0	48	72	4.7	12.0	3.2	8.0	150	660	45	198
12	HDR012	0.470	11.9	102	151	7.1	17.9	4.7	11.9	300	1320	90	396
24	HDR024	0.614	15.6	144	214	9.2	23.4	6.1	15.6	600	2640	180	792
36	HDR036	0.699	17.8	177	264	10.5	26.6	7.0	17.8	1000	4448	300	1335
48	HDR048	0.864	21.9	271	403	13.0	32.9	8.6	21.9	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

NETWORK SOLUTIONS HEADQUARTERS
Bothell, WA, USA | leviton.com/ns
(800) 824 3005 / +1 (425) 486 2222 | appeng@leviton.com

BERK-TEK A LEVITON COMPANY
New Holland, PA, USA | leviton.com/berktek
+1 (717) 354 6200 | berktek.support@leviton.com