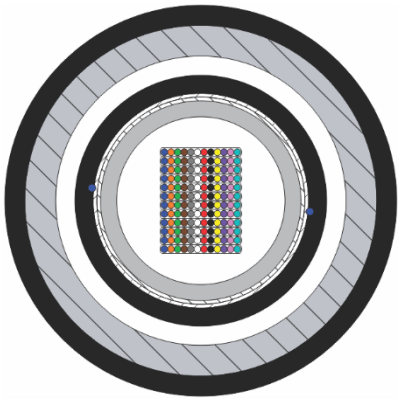
Berk-Tek Indoor/Outdoor Riser Ribbon Cable with Armor-Tek™ (RDRK-I/O)

Berk-Tek a LEVITON company

Berk-Tek Indoor/Outdoor riser-rated central tube optical fiber ribbon cable with Armor-Tek™ uses single-mode or multimode, 12-fiber ribbons, in a dry central tube, surrounded by dielectric strength members and a riser-rated outer jacket.



DESCRIPTION

Construction

A fiber optic flexible ribbon is comprised of 12 fibers coated with a dual acrylate coating system. The fibers are contained in a peelable UV curable matrix material, and the ribbon structure is designed to allow easy separation of the fibers from the matrix in preparation for splicing, or termination to a MPO connector. Ribbons are identified per TIA/EIA-598, and are stacked, and surrounded by water-blocking yarns, in a dry central tube. The tube is surrounded by water-blocking tape, two layers of flexible strength members, and an extruded cable jacket, providing tensile strength and crush resistance. Aluminum interlock armor and a riser-rated UV-resistant armor jacket are added, providing a protective flexible conduit.

Applications

Berk-Tek optical fiber ribbon cables are ideal for use in ducts, trays, and cabinets in Data Centers and SAN applications where high-density connectivity is required. They are intended for a wide variety of high speed data applications, including:

- 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: RFoG, APON, BPON, EPON, GPON, WDM-PON, NG-PON

Features

- The armored design allows for an easy one-pull installation into any environment
- Step-index single-mode, or graded index multimode optical fiber
- Peelable UV curable matrix material
- Ribbons are easily separated for single fiber splicing if needed
- Qualified to ICEA S-104-696

Benefits

- Eliminate the need for conduit or riser innerduct by installing interlock armor cable, providing a significant cost savings in both materials and labor
- Installation time can be reduced by as much as 60% versus installing conduit or innerduct
- Interlock armor is part of the cable and not considered conduit for purposes of the NEC fill ratio, allowing for a higher concentration of cables than when using conduit in a given installation area
- Easily interfaced to MT and MPO based connectors, as well as today's newest ribbon connectors
- Mass fusion splicing ribbon cable enables faster project completion and reduced labor costs
- On 144F cables, mass fusion splicing 12F-to-12F requires 92% fewer splices than single fiber-to-fiber splicing
- A single fiber holder can also be used in the mass splicer; no need to worry about multiple machines if a mass splicer is on hand

Country of Origin: U.S.A.

STANDARDS

International EN 50173;
ISO/IEC 11801

National ICEA S-104-696
ANSI/TIA-568.3-D,
OFCR FT4,
Telcordia GR-409

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TECHNICAL DATA - PHYSICAL						Install		Long Term		Install		Long Term	
Fibers	Product Prefix	Diameter		Weight		Min. Bend Radius				Max. Loading			
		in.	mm	lb/kft.	kg/km	in.	cm	in.	cm	lb	N	lb	N
12	RDRK12B012-I/O(BLA)-M4	0.95	24.1	260	387	9.5	24.1	19.0	48.2	600	2700	200	890
24	RDRK12B024-I/O(BLA)-M4	0.95	24.1	260	387	9.5	24.1	19.0	48.2	600	2700	200	890
48	RDRK12B048-I/O(BLA)-M4	0.95	24.1	260	387	9.5	24.1	19.0	48.2	600	2700	200	890
96	RDRK12B096-I/O(BLA)-M4	0.99	25.1	308	458	9.9	25.1	19.8	50.2	600	2700	200	890
144	RDRK12B144-I/O(BLA)-M4	0.99	25.1	308	458	9.9	25.1	19.8	50.2	600	2700	200	890

TECHNICAL DATA											
Fiber Type	Part Number Suffix	Berk-Tek Fiber	Core Size	Wavelength (nm)	Maximmum Attenuation (dB/km)	Effective Modal Bandwidth @ 850 nm (MHz.km)	Distance (meters)				Sheath Color
Multimode - Bend Insensitive							1 GbE	10 GbE	40 GbE	100 GbE	
OM3	EB3010/25	EB	50 µm	850/1300	3.0/1.0	2000	1000	300	100	70	Black
OM4	FB3010/F5	FB	50 µm	850/1300	3.0/1.0	4700	1040	550	150	100	Black
Single-mode Bend Insensitive - ITU-T G.652.D and G.657.A1 Compliant											
OS2	AB0403	Standard for Central Tube Ribbon	8.3 µm	1310/1550	0.4/0.3	N/A	5000	10000	10000	10000	Black

MANUFACTURING RELEASE

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