Berk-Tek Indoor Plenum Flex Ribbon Cable (RDPF)



Berk-Tek's plenum-rated central tube optical fiber flexible ribbon cable uses single-mode 12 fiber ribbons, in a dry central tube, surrounded by dielectric strength members and a plenum 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 space-saving flexible 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 in a dry central tube, surrounded by two layers of flexible strength members, and an extruded cable jacket, providing tensile strength and crush resistance. The outer jacket material is plenum-grade thermoplastic.

Applications

Berk-Tek's fiber optic cable is intended for all 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 (SMF only): RFoG, APON, BPON, EPON, GPON, WDM-PON, NG-PON

Features

- Step-index G.657.A1 single-mode optical fiber
- Protective UV cured acrylate ribbon coating in a flexible structure
- Every fiber is subjected to a 0.7 Gpa (100 kpsi) minimum proof stress per TIA/EIA FOTP-31
- Peelable UV curable matrix material
- Ribbons are easily separated for single fiber splicing if needed.
- Two layers of flexible strength members
- Qualified to ICEA S-83-596 and Telcordia GR-409

Benefits

- 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.
- Cable design offers excellent mechanical performance with superior crush and flex ratings.

Country of Origin: U.S.A.

STANDARDS

International EN 50173; ISO/IEC 11801

National ANSI/ICEA S-83-596; ANSI/TIA-568.3-D; Telcordia GR-409

Copyright © 2020 Leviton Manufacturing Co., Inc. All rights reserved.
Leviton reserves the right to modify product specifications without notice.

SS4000-BTv1 - Released December 2020 Page 1 / 2

Berk-Tek Indoor Plenum Flex Ribbon Cable (RDPF)



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
72	RDPF12B072-M4	0.430	11.0	91	135	4.3	11	8.6	22	300	1340	100	450
144	RDPF12B144-M4	0.470	12.0	103	153	9.4	24	4.7	12	300	1340	100	450
216	RDPF12B216-M4	0.570	14.4	130	193	11.4	28.8	5.7	14.4	300	1340	100	450
288	RDPF12B288-M4	0.57	14.4	134	200	11.4	28.8	5.7	14.4	300	1340	100	450

TECHNICAL DATA												
Fiber Type	Part Number Suffix	S170 (nm)		Modal Bandwidth @ 850 nm	Distance (meters)							
Single-Mode - Bend Insensitive - ITU-T G.652.D and G.657.A1 Compliant								10 GbE	40 GbE	100 GbE		
OS2	AB0403	Standard for Central Tube Ribbon	SMF	1310/1550	0.4/0.3	N/A	≥ 5000	≥ 10000	≥ 10000	≥ 10000		

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.