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Adventum Riser Rated Indoor/Outdoor Optical Cable

Hybrid 6 x OM4 & 6 x OS2 Adventum Riser Cable

Part Number: LTR012-006FB3010/F5-006AB0403

Berk-Tek's revolutionary Outdoor/Indoor Adventum™ cables are designed to be used in riser rated environments. Adventum supports the latest Gigabit Communications Protocols, including Gigabit Ethernet and ATM. This cable design utilizes Berk-Tek's unique DryGel™ waterblocking system. DryGel technology utilizes super absorbent polymers to replace the messy gel filler inside the fiber tubes. It is the only fire-rated cable designed to withstand the rigors of the outside plant environment. Adventum is rated for riser installations and has no gel filler.

Description

Berk-Tek's loose tube cable design can be used in all typical campus and outdoor/indoor installations, and is available with standard multimode, single-mode and GIGAlite™ fibers. This design affords the installer the ability to place cable anywhere in a network, bypassing the traditional transition points required in most installations. Adventum Riser cable (U.S. Patent No. 6,178,278) is available in 2 to 432 count fiber constructions. These cables have been thoroughly tested in accordance with Telcordia GR-409, ICEA-640, and ICEA-696 standards where applicable.

Buffer Tube Construction

DryGel blocked color coded loose tubes containing up to 12, 250 μm, individually colored fibers.

Applications

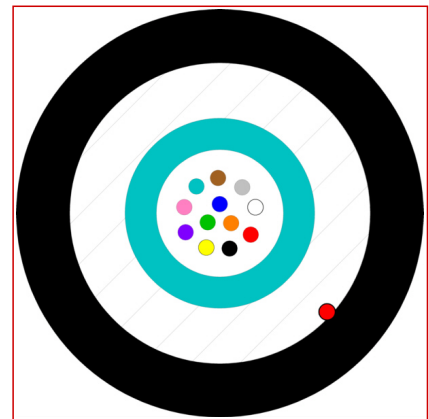
Berk-Tek recommends installation procedures per ANSI/TIA-758, Customer-owned Outside Plant Telecommunications Infrastructure Standard.

Berk-Tek's Adventum Loose Tube, Riser Rated fiber optic cable is intended for all high speed data applications, including:

- 10BASE-FL
- 100BASE-SX/100BASE-FX
- ATM 155/ATM 622
- 1000BASE-SX/1000BASE-LX
- Fibre Channel 1.062/2.125
- 10GBASE-SR/SW
- 10GBASE-LX4
- 40/100 GbE

Features

- Designed to support Gigabit Ethernet, Gigabit ATM, Fibre Channel and other high-speed applications
- Riser rating enables installation to go directly from outside plant to riser shaft
- Cable Core and Buffer Tubes use DryGel water blocking system
- UV resistant outer jacket protects the cable in outside plant installations
- Interlocking Armor Available



Standards

International EN 50173; ISO/IEC 11801

National ANSI/ICEA S-104-696; ANSI/ICEA S-87-640; ANSI/TIA-568-C.3; Telcordia GR-409

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Benefits

- Compact, water blocked, riser rated, flexible loose tube design of all dielectric construction allows for installation in any outside plant or interior space
- No cleaning of gels required for installation, greatly reducing installation time and cost
- Transition points in network are not needed System grounding requirements are eliminated

Characteristics

Construction characteristics	
Fiber optic type	OM4 50/125 / Single-mode 9/125
Type of cable	Loose tube
Outer sheath	Riser
Sheath colour	Black
Dimensional characteristics	
Tube diameter	3 mm
Number of optical fibres	12
Nominal outer diameter	0.255 in
Nominal outer diameter	6.5 mm
Approximate weight	30 lb/kft
Approximate weight	44 kg/km
Transmission characteristics	
Optical performance	Hybrid FB (50/125 GIGAlite 10-FB, OM4) / AB (Single-mode, OS2)
Attenuation, max. 850 nm (cabled)	3.0 dB/km
Attenuation, max. 1300 nm (cabled)	1.0 dB/km
Attenuation, max. 1310 nm (cabled)	0.4 dB/km
Attenuation, max. 1550 nm (cabled)	0.3 dB/km
Mechanical characteristics	
Maximum installation tension	300 lb
Maximum installation tension	1335 N
Max. Load. Long Term (lbs)	90.0 lb
Max. Load. Long Term	400.0 N
Impacts per TIA/EIA FOTP-25	2 at 5.88 N-m
Crush resistance per TIA/EIA FOTP-41	110 N/cm
Cable flexibility per TIA/EIA FOTP-104	100 cycles
Usage characteristics	
Minimum Bending Radius - Install	3.8 in
Minimum Bend Radius - Install	9.7 cm
Minimum Bending Radius - LongTerm	2.6 in
Minimum Bending Radius - LongTerm	6.5 cm
RoHS conform	Yes
Operating temperature, range	-40 .. 75 °C
Ambient installation temperature, range	-20 .. 60 °C

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Usage characteristics

Storage temperature, range	-60 .. 85 °C
Field of application	Indoor, Outdoor

Standard Sheath Colors

Fiber Type	Core Size (um)	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	0.4 dB/km	0.3 dB/km	Black
CB	62.5	OM1	200 MHz-km	200 MHz-km	3.5 dB/km	1.0 dB/km	NS	Black
GB	62.5	OM1+	500 MHz-km	350 MHz-km	3.5 dB/km	1.0 dB/km	NS	Black
ZB	50	OM2	500 MHz-km	500 MHz-km	3.5 dB/km	1.5 dB/km	NS	Black
LB	50	OM2+	950 MHz-km	700 MHz-km	3.0 dB/km	1.0 dB/km	NS	Black
EB	50	OM3	2000 MHz-km	1500 MHz-km	3.0 dB/km	1.0 dB/km	NS	Black
FB	50	OM4	4700 MHz-km	3500 MHz-km	3.0 dB/km	1.0 dB/km	NS	Black
XB	50	OM4+	4900 MHz-km	3675 MHz-km	3.0 dB/km	1.0 dB/km	NS	Black

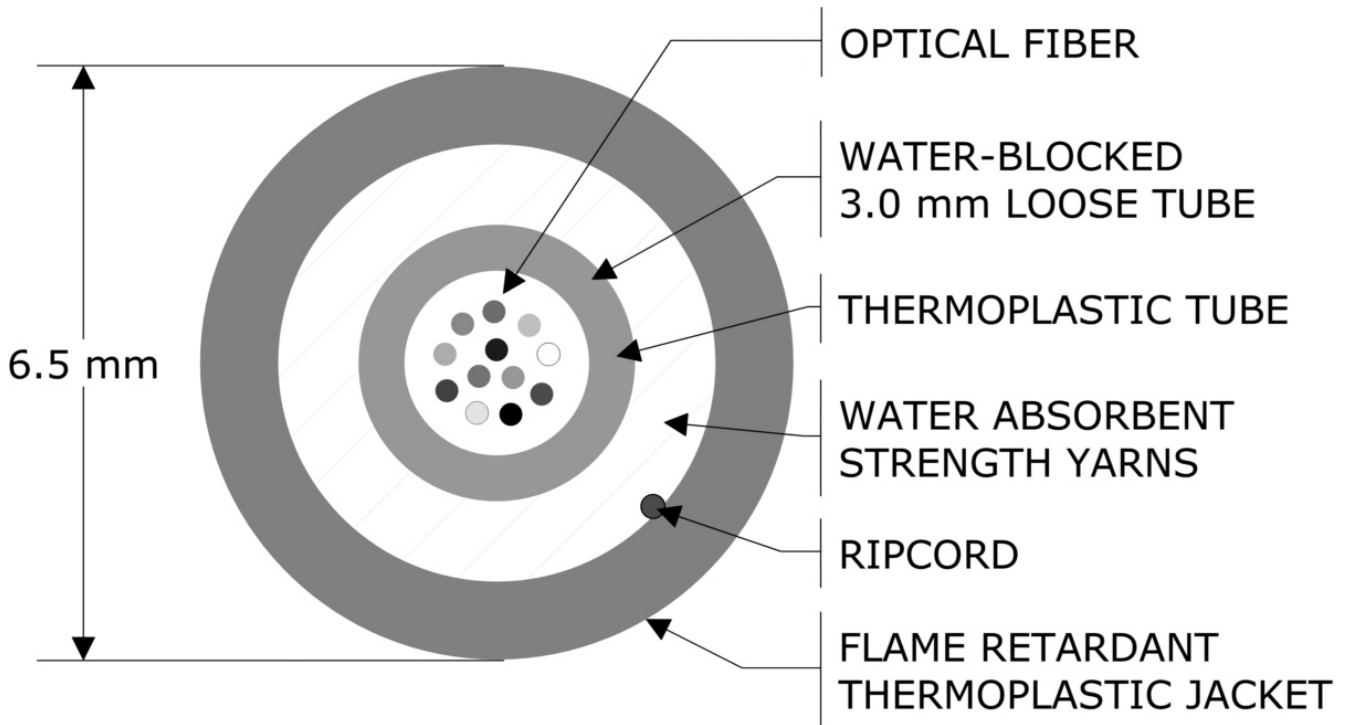
NS = Not Specified

Hybrid Fiber Type by Fiber Color

Fiber Color	Fiber Type
Blue, Orange, Green, Brown, Slate, White	OM4
Red, Black, Yellow, Violet, Rose, Aqua	OS2

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LTR012 Cross-section



Manufacturing Release

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