Fiber optic heat shrink tubing anti-tracking sample

Overview

Tracking, Erosion and Morphological Study of Heat Shrink Anti This paper reports the electrical tracking performance of three commercially available HSATT.

Key Takeaways

Fiber optic heat shrink tubing with anti-tracking properties combines cross-linked polyolefin materials and thermal fusion layers to protect optical fibers while preventing electrical tracking in high-voltage or harsh environments.

Overview

Fiber optic heat shrink tubing, also known as fiber splice tubes or fusion protection tubes, is designed to safeguard optical fibers during splicing and installation. These tubes provide mechanical strength, environmental protection, and maintain optical transmission performance. Anti-tracking variants are specifically engineered to resist electrical tracking and surface degradation, making them suitable for medium-voltage applications or environments prone to moisture and contamination.

Material CompositionCross-linked polyolefin: Provides temperature resistance, mechanical strength, and elongation properties. Hot fusion inner tube: Ensures smooth, bubble-free shrinkage and seals the fiber splice. Stainless steel or ceramic rod: Reinforces the structure, preventing warping or fiber damage during heat application.

Adhesive coating: Applied at the ends to enhance sealing and environmental protection.

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Performance Characteristics

Operating temperature: Typically from -55°C to 100°C, with shrink activation starting around 100°C and completing at 130°C. Moisture and environmental resistance: Sealing structure prevents ingress of water and contaminants, ensuring long-term reliability. Electrical tracking resistance: Anti-tracking formulations prevent surface carbonization and insulation failure under wet or polluted conditions, making them suitable for medium-voltage cable joints up to 36 kV.

Optical performance preservation: Maintains fiber transmission properties while providing mechanical protection at the fusion joint.

Applications

Fiber optic splicing: Protects single or ribbon fibers in telecommunications networks. Medium-voltage cable joints and terminations: Anti-tracking tubes prevent insulation failure in power distribution systems. Harsh environments: Suitable for outdoor, wet, or contaminated conditions where both mechanical and electrical protection are required.

Installation and CustomizationHeat-activated shrinkage: Tubes shrink tightly around the fiber and rod when exposed to heat, excluding air and securing the splice. Clear sleeves: Allow visual inspection of the splice before shrinkage. Customizable colors and sizes: Facilitate identification and installation in complex networks.

Single or ribbon fiber options: Available to match specific splicing requirements.

Sample Availability

Many suppliers, such as Shenzhen Dicore Technology and Bonelinks, offer customized samples for testing and evaluation. Samples typically include different diameters, lengths, and color options to match specific fiber optic or medium-voltage applications. Fiber optic heat shrink tubing with anti-tracking properties is therefore a versatile solution for both telecommunications and electrical applications, combining mechanical protection, environmental sealing, and electrical safety in a single product.

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Article Content

Tracking, Erosion and Morphological Study of Heat Shrink Anti

This paper reports the electrical tracking performance of three commercially available HSATT samples. Crosslinked polyethylene (XLPE) is the key ingredient for heat shrinkable materials.

Tracking, Erosion and Morphological Study of Heat Shrink Anti

gure 1. The sample was mounted with the flat test surface on the underside, at an angle of 45° from the horizontal with the stainless steel el ctrodes 50 mm apart. The sample was wet-contaminated with an

"Anti Tracking Heat Shrink Tube"

Design engineers or buyers might want to check out various Anti Tracking Heat Shrink Tube factory & manufacturers, who offer lots of related choices such as heat shrink tube, heat shrinkable tube and

Heat Shrink Anti tracking Insulation Tube (1~36kV)

Cotranglobal provide cost effective Heat Shrink Anti tracking Insulation Tube (1~36kV) to our clients. Our experienced staff can discuss your requirements at

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We urge everyone wishing to avail our Heat Shrink Tubing to request for a quote directly online on their site. You can fill up and submit online form and inquire about rates and seasonal discounts.

Anti-electrostatic tracking fiber optic heat shrink tubing for island ...

Heat Shrinkable Anti-Tracking Tube (HSATT), an integral part of the Joints and terminations of the MV cable network system is used to cover and safeguard the power cable joints.

Heat Shrink Anti-Tracking Insulation Tube

Heat Shrink Anti-tracking Insulation Tube Manufactured from cross linked polyolefin, inner coated with adhesive at one end. Protecting against accidental flashover. Used in medium voltage cable

Fusion Splice Protection

Corning Cable Systems offers a variety of splice protection choices to meet your needs. All the types of protection pictured and described here allow individual fiber access in the splice tray. Corning Cable

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Anti-Tracking Heat Shrinkable Tube-Heat Shrink

Anti-Tracking Heat Shrinkable Tube (ATHST) is made from radiation cross-linked polyolefin, Designed for applications to seal and protect power cable joints from

SEALED & PROTECTED WITH HEAT SHRINK TUBING

TE''s heat shrink tubing is a high-tech, low-cost solution that can be used in place of taping, molding, potting, gluing and glass. Tubing has a quicker application time and can help improve performance.

How Heat Shrink Cable Joints, Cable Terminations, & Anti Tracking Tubes ...

Having its R & D facilities to provide the most innovative range of heat shrink power cable accessories, Gala Thermo follows quality control system accredited ISO 9001:2015, ISO 14001: 2015

High-Quality TUBES for Reliable Insulation & Protection

Heat shrink dual wall tubing, also known as double-layer heat shrink tubing, is a specialized protective sleeve designed to provide enhanced insulation, sealing, and mechanical protection for electrical and

Tracking, Erosion and Morphological Study of Heat Shrink Anti Tracking ...

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HEAT SHRINK TECHNOLOGY — MAKING ELECTRICAL ...

HEAT SHRINK TECHNOLOGY — MAKING ELECTRICAL CONNECTIONS MORE RELIABLE BASED ON SPECIALLY FORMULATED, CROSS-LINKED THERMOPLASTIC POLYMERS, HEAT SHRINK

Heat Shrinkable Anti Tracking Tubing DSRU

The document describes DSRU Heat Shrinkable Anti Tracking Tubing designed for insulating medium voltage bus bars, offering protection against accidental flashover and reducing clearance

Fiber-Optic Pressure Sensors: Recent Advances in Sensing

In 2016, Y. Tsutsumi et al. proposed and demonstrated a simple optical gas pressure sensor with a long-period fiber grating (LPFG) fabricated from heat-shrink tubing.

RCS-AT/RCS-ATA Heat Shrink Anti-Tracking Insulation Tubing (Up to

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RCS-AT/RCS-ATA Heat Shrink Tubing is a high-performance insulation solution designed for medium and high-voltage applications. Offering superior anti-tracking and flame-retardant properties, this

Heat Shrink Tubing for Fiber Optic Closures

Heat Shrink Tubing for Fiber Optic Closures (terminal box) is with a layer of spiral coated hot melt adhesive in the internal surface. Out layer provide reliable protection.

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This document is for preliminary research. Verify specifications against current standards, product documentation and project requirements.

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