

Bundled Optical Cable Termination

Overview

The most common method of terminating a fiber bundle employs a ferrule (hollow metal or plastic block or tube to contain fibers) and epoxy. The epoxy keeps the fibers contained in the ferrule and serves as a grinding and polishing fixture. As. The most common method of terminating a fiber bundle employs a ferrule (hollow metal or plastic block or tube to contain fibers) and epoxy. The epoxy keeps the fibers contained in the ferrule and serves as a grinding and polishing fixture. As long as the ID of the “tube” is sized for the required bundle, and the epoxy is mixed, applied, and cured p. Because high temperatures in some applications will melt epoxy, terminations made without epoxy are available. Mechanical swaging or fusing can be used for these applications; but each method has its pros and cons. Both methods allow glass fiber optic components to be used in applications exposed to the softening point of the fiber material (Borosi. Because the ends of the fiber bundle are softened, squeezed together and fused, the interstitial spaces between individual fibers have been eliminated, reducing the active diameter of the bundle. The amount of diameter reduction is 10-14% depending on the pack of the fibers and their starting size. Once fused, fiber ends can withstand temperatures. Swaging does less physical damage than fusing, but this technique limits the ability to affect a good final polish, which reduces transmission when compared to the same bundle with polished end. Swaging requires special finishing techniques which increase the cost of the finished part, but not to the extent of the price increase incurred by fusing. Hot knife termination is a field terminating technique common in commercial lighting applications with plastic fiber only. This simple technique requires plastic fibers to be hand gathered in the ferrule tube, then cut flush with a heated razor knife. Recognized for its convenience and speed, this termination method is popular with installers and c.

Article Content

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The FOA Reference For Fiber Optics

Different connectors and termination procedures are used for singlemode and multimode connectors. Multimode fibers are relatively easy to terminate, so field termination is generally done by installing ...

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Fibre Optic Termination Techniques – Wray Castle

We'll cover everything from connector end-face geometry to step-by-step procedures for both field termination and splice-based approaches. Poor termination remains one of the main ...

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Considerations for Optical Fiber Termination

To terminate an optical fiber cable in the field, the fiber (either tight-buffered or loose fan-out tube) is simply stripped, cleaved, inserted into the connector and mechanically secured.

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The Ultimate Guide to Fiber Optic Termination: A Technical and ...

Learn everything you need about fiber optic termination, including connector and splicing methods, essential tools, and best practices for reliable and high-performance networks.

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Complete Guide: How To Terminate Fiber Optic Cable in 5 Easy Steps

Fiber optic termination is the process of preparing and connecting the end of a fiber optic cable so it can transmit data. Termination involves attaching either a removable connector or a permanent splice to ...

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End Termination

Recognized for its convenience and speed, this termination method is popular with installers and contractors who custom make the fiber harness in the field. However, because the termination ...

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Fiber Optic Termination Kits

Our fiber optic strip tool prepares your fiber optic cable for termination to OmniSplice™ fusion splice connectors. Ergonomically designed, it reduces the need for angling during fiber stripping.

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A Beginner's Guide to Terminating Fiber Optic Cables

When it comes to fiber optic cabling, proper termination is crucial to ensure reliable data transmission and minimal signal loss. Termination involves the process of adding connectors or splicing fibers ...

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TERMINATING FIBER CABLE

Termination methods include pre-connectorized options, epoxy bonding, anaerobic techniques, and mechanical solutions. As previously mentioned, the method selected may rely on work requirements, ...

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Understanding Fiber Termination Techniques: Splicing vs. Connectors

Fiber optic networks are the backbone of modern communication systems, enabling high-speed data transfer and reliable connectivity. When deploying fiber optic cabling, one of the most ...

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