3M™ Cold Shrink Joints and Terminations

For Medium & EHV Applications











Cold Shrink Solutions

Your reputation and revenues depend on the quality of your work. When you complete a job you want assurance that every connection you make is correctly sealed and insulated to provide long term protection. 3M makes the products you need for that peace of mind.

Over 40 years ago, 3M pioneered cold shrink technology. Since then, field use and laboratory analysis have repeatedly proven its merits and reliability. Through constant innovation, we have refined cold shrink products making them better than ever. They're easier to apply and built to withstand extreme environmental conditions. Enhanced performance at a lower installed cost continue to make 3M the preferred choice for cold shrink solutions. Cold shrink splicing products are designed using 3M's unique cold shrink delivery system. Products are supplied pre-stretched on a removable core for efficiency and ease of installation. Removal of the core (unwind) after positioning the splice allows the product to shrink into position forming a moisture-tight seal. The live memory action of the specially formulated material ensures a permanent, durable environmental seal and insulation. Discover how quality 3M products can solve your most common sealing and insulating applications.

We're with you in the trenches

Even the most innovative technology will have little benefit, unless it is matched to the application and correctly applied. That's why all 3M cable accessories are backed by a global network of technical support, sales and supply chain specialists. Their expertise is always available to help suggest alternatives for you to evaluate and select a solution optimized for your requirements – with training, installation assistance, custom configurations and more.

EPDM Rubber and Silicone Rubber Cold Shrink Tubes

Features

- · Simple, safe installation, requires no tools or special training
- Accommodates a wide range of cable, wire, conduit and hose diameters
- No torches or heat required
- Good thermal stability
- Seals tight, retains its resiliency and pressure even after prolonged years of aging and exposure
- Excellent wet electrical properties
- Improved, tougher rubber formulation provides a highly flexible "living" seal
- Water-resistant
- · Seals without mastic, tape or adhesives
- · Resistant to fungus, ozone, alkalies and acids
- Easily removed for required disconnects or inspections

Applications

- Primary electrical insulation for all solid dielectric (rubber and plastic) insulated wire and cable splicing rated to 1000 volts
- Physical protection and moisture sealing for couplings, hoses, connectors, and terminal lugs
- Cable jacket and sheath repairs
- Environmental sealing for communication connectors and other non-electrical applications



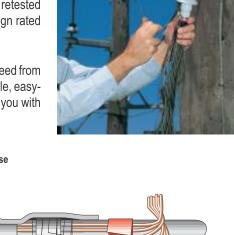
- Repair of non-pressurized hoses and conduit
- Corrosion protection for fittings and couplings
- · Resists ozone and ultraviolet light*
- · Resists fire will not support flame*
- Resists fluid splashes*
- Operating temperature range -66°F/ -55C to 500°F/260°C*

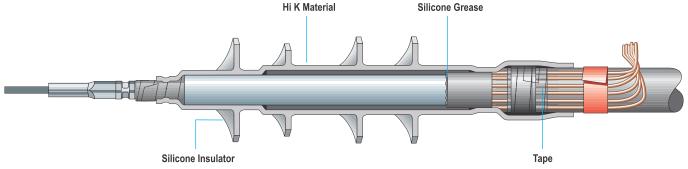
11/22/33 kV Termination / Splice

3M™ Cold Shrink Termination QT II

3M termination kits offer you -

- Fast, easy installation. Advanced 3M solutions provide terminations and splices installed in a fraction of the time. 3M kits also eliminate the need for soldering or special tools.
- **Reliable, long-lasting materials.** All 3M termination and splice materials have been factory tested and retested before being shipped to you. And all 3M products meet tough IEEE standards for performance and design rated class **I**
- Solutions to fit your specs. Kits are available for virtually any application, cable voltage or cable size.
- Everything you need to terminate and splice. With 3M, you can order all the kits and accessories you need from the same source. So you can save time, simplify your ordering and reduce your paperwork. For dependable, easy-to-assemble termination and splice solutions, contact your 3M representative. We'll be happy to provide you with reliable, high-quality 3M materials to meet your specialrequirements.





3M Cold Shrink QS 2000E

3M splice solutions can help you reduce the time, labor and cost involved in both above and below splice applications. What's more, every 3M splice has been 100% factory tested on power cable, so you can be assured of dependable performance, stability and long life with every splice you make.



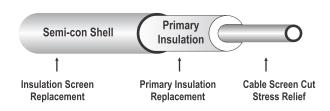


Product Description

The 3M QS2000 E is a cold shrink, one-piece multilayer silicone splice body with integrated stress control device, insulation andouter semi-conductive layer. The 3M QS2000 E silicone splice body is delivered on a removeable plastic supporting core. During the installation the ribbon core in unwound counter clockwise, allowing the splice body to shrink onto the cable joint. The applied permanent radial pressure guarantees a reliable function over the entire lifetime.



- The outer semi-conductive layer re-establishes the cable screen.
- The insulation of the splice body replaces the cable insulation across the entire splice.
- The integrated refractive stress control provides the proper electric field distribution.
- 3M Scotch® Tape 13 is applied over the connector and forms the inner conductive electrode.



A History of Cold Shrink Technology Innovation First medium-voltage termination -3M™ High Voltage Joint QS-III 3M™ Termination QTM - includes slide-on stress cone and cold shrink silicone skirts applications is introduced. Engineered to provide improved resistance to water damage, corrosion and other harsh environmental conditions 3M™ Joint QS-2000 - • 799 3M™ Pre-Stretched Tube - • 7 first medium-voltage initially for insulating buried 3M™ Joint QS-III – cold shrink joint lowvoltage secondary joints and a one-piece joint with wide for protecting mining cable joints range and geometric stress control 3M™ High Voltage Termination QT-III 3M™ Medium Voltage for both pole - and 3M™ Medium Voltage Termination QT-II padmounted applications 3M™ introduces Termination QT-III --an all-cold shrink 110kV / 145kV Joints termination integrated 3M researchers termination with and Terminations with built-in environmental invent cold shrink silicone insulator and seal and mastic high-K stress control technology and perfect the removable 3M™ Joint QS-1000 core. 40 years of joint for 15kV with industry-changing stress relief built into "firsts" follow insulation material

Important Notice

Before using these products, you must evaluate it and determine if it is suitable for your intended application. You assume all risks and liability associated with such use.

Warranty; Limited Remedy; Limited Liability.

This product will be free from defects in material and manufacture at the time of purchase. 3M MAKES NO OTHER WARRANTIES

To explore the many ways we can serve you or to arrange for sales asssistance Contact:



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