



Scotch® 130C™

Linerless Rubber Splicing Tape

1. Product Description

Scotch® Linerless Rubber Splicing Tape 130C is a highly conformable, linerless, ethylene rubber (EPR), high-voltage insulating tape, formulated to provide excellent thermal dissipation of splice heat. The tape is designed for use in splicing and terminating wires and cables. Rated up to 90°C continuous operating temperatures and short-term 130°C overload service. The tape has high physical and electrical properties, which provide immediate moisture seals and void-free build-ups. This product can be used for low and high-voltage (through 69 kV) applications.

- Linerless, self-bonding, primary insulating tape rated through 69 kV
- High thermal conductivity
- Ethylene propylene base
- High physical and electrical properties
- Designed to insulate splices and terminate cables whose overload temperatures can reach 130°C
- Physical and electrical properties unaffected by degree of stretch
- Compatible with common, solid dielectric cable insulation
- Uniform tape unwind from roll
- Small roll size (O.D.)
- Five-year shelf life
- Stable over wide application temperature range
- Weather resistant

2. Applications

- Primary insulation for splicing all types of solid dielectric insulated cables through 69 kV
- Primary insulation for building stress cones on all types of solid dielectric insulated cables up to 35 kV bus bar insulation
- Jacketing (secondary insulation) on high-voltage splices and terminations
- Moisture-sealing electrical connections
- Bus bar insulation
- End-sealing high-voltage cables
- Motor leads
- Jacket repairs

Insert Company
address
before issue

Reference: AABCC28250_02
© 3M 2014 All Rights Reserved.

Issue date 02.11.2016
April 2015

3. Typical Properties

Not for specifications. Values are typical, not to be considered minimum or maximum.
Properties measured at room temperature 23°C unless otherwise stated.

Physical Properties	Typical Value
Color	Black
Thickness ASTM D4325	0,76 mm
Tensile Strength ASTM D4325	1,72 MPa
Ultimate Elongation ASTM D4325	850%
Operating Temperature ASTM D4388	90°C
Emergency Overload ASTM D4388	130°C
Thermal Conductivity (23°C) ASTM C518	0,3 W/m°C
Ozone Resistance ASTM D4388	Passes
Heat Resistance ASTM D4388	Passes
UV Resistance ASTM D4388	Passes

Insert Company
address
before issue

Reference: AABCC28250_02
© 3M 2014 All Rights Reserved.

Issue date 02.11.2016
April 2015

Electrical Property	Typical Value
Dielectric Strength ASTM D4325 Original	29,5 kV/mm
ASTM D4325 24 hrs in H ₂ O	29,5 kV/mm
ASTM D4325 96 hrs @ 23C 96% RH	28,7 kV/mm
Volume Resistivity ASTM D4325 Original Aged 96 hrs @ 23°C 96% RH	>10 ¹⁵ ohm-cm >10 ¹⁴ ohm-cm
Dielectric Constant ASTM D4325 1200 V @ 60 Hz 23°C 90°C	3,5 3,6
Dissipation Factor ASTM D4325 1200 V @ 60 Hz 23°C 90°C	0,70% 3,00%

4. User Information

4.1 Specifications

The high-voltage corona resistant tape must be supplied without a liner, be based on ethylene propylene rubber, and be capable of emergency operating cable temperature of 130°C. The tape must be capable of being applied in either stretched or unstretched conditions without resulting in loss of either physical or electrical properties. The tape must not split, crack, slip, or flag when exposed to various environments (indoor or outdoor). The tape must be compatible with all synthetic cable

insulations and have a shelf life of five years.

4.2 Engineering/Architectural Specification

Splicing and terminating solid dielectric cable shall be done in accordance with drawings engineered by the splice material manufacturer. All splices and terminations shall be insulated using Scotch® Linerless Rubber Splicing Tape 130C.

Insert Company
address
before issue

Reference: AABCC28250_02
© 3M 2014 All Rights Reserved.

Issue date 02.11.2016
April 2015

4.3 Installation Techniques

This tape should be applied in successive half-lapped level wound layers until desired build-up is reached. It should be applied like any rubber tape; that is, the side of the tape wrapped inside the roll should be applied outside on the splice (tacky side up). This will help prevent the roll from getting progressively further away from the work area. This tape should be applied like any rubber tape: that is, the side of the tape wrapped inside the roll should be applied outside on splice, tacky side up. This will help prevent the roll from getting progressively further away from the work area.

To eliminate voids in critical areas, highly elongate 130C tape. Stretch tape in critical areas just short of the breaking point; doing so will not alter its physical or electrical properties. In less critical areas, less elongation may be used. The tape should be stretched to a minimum of 3/4 its original width. Always attempt to half-lap to produce a uniform buildup. When using 130C tape for splicing cable above 15 kV, always highly elongate the tape throughout the entire splice. Techniques for proper usage of 130C tape are contained in standard and special prints available through the "3M System for Splicing and Terminating" program. These are available through the local 3M Electrical Products Division representative.

4.4 Agency Approvals & Self Certifications

- For RoHS information, please visit www.3M.com/RoHS

4.5 Shelf Life & Storage

Scotch® Linerless Rubber Splicing Tape 130C has a 5 year shelf life from the date of manufacture when stored in a temperature and humidity controlled environment: 10°C/50°F to 27°C/80°F and <75% relative humidity.

4.6 Availability

Please contact your local distributor.

5. Additional Information

To request additional product information see address below.

Important Notice

All statements, technical information and recommendations contained in this document are based upon tests or experience that 3M believes are reliable. However, many factors beyond 3M's control can affect the use and performance of a 3M product in a particular application, including the conditions under which the product is used and the time and environmental conditions in which the product is expected to perform. Since these factors are uniquely within the user's knowledge and control, it is essential that the user evaluates the 3M product to determine whether it is fit for a particular purpose and suitable for the user's method or application.

Values presented have been determined by standard test methods and are average values not meant to be used for specification purposes.

All questions of warranty and liability relating to 3M products are governed by the terms of the respective sale subject, where applicable, to the prevailing law.

3M is a trademark of the 3M Company.

Insert Company
address
before issue

Reference: AABCC28250_02
© 3M 2014 All Rights Reserved.

Issue date 02.11.2016
April 2015