3M™ Temflex™ 160 Vinyl Electrical Tape

Data Sheet **August 2024**

Product Description

3M™ Temflex™ 160 Vinyl Electrical Tape is a multi-purpose, general use grade, nominal 0.15 mm thick electrical insulating tape composed of an elastic vinyl (PVC) film backing coated on one side with a non-corrosive, pressure-sensitive adhesive. Available in 9 colors.

- Commonly used in these types of applications:
  - UL510: As primary insulation on applications up to 600V at max temperature of 80°C and min temperature of 0°C on joints and splices in wires and cables in accordance with NFPA 70, National Electrical Code.
  - CSA C22.2 No.197: As primary insulation on applications up to 1000V at max temperature of 80°C and min temperature of -10°C on joints and splices in wires and cables in accordance with Canadian Electrical Code, Part 1.
  - Industrial, commercial and residential environments
  - Where Flame Retardant and Cold Resistance rating is required – UL510.
  - Marking of safety areas and equipment and phase coding.
  - Cable jacket repair (up to 600V (UL) / 1000V (CSA) as primary insulation) and as mechanical protection when overwrapping rubber splicing, and mastic tapes used on LV/MV/HV joints and splices.
  - Indoor and weather protected outdoor operations as determined by end-user where use of a professional grade vinyl electrical tape is not required.
  - Where reducing moisture ingress is needed, best results achieved when used as an overwrap in combination with a rubber splicing or mastic tape product.
  - For harnessing and bundling of wires and cable where minimum bulk is required.

Typical Properties

Physical Properties	***Value Imperial (Metric)***	***Mechanical Properties***	***Value Imperial (Metric)***
Color-Visual	Black, Blue, Red, Yellow, White, Green, Yellow-green	**Thickness[3]**	0.15mm±10%
Adhesive	Rubber-based	***Adhesion to steel[3] - Minimum***	13oz/in (0.14N/mm)
Backing	Vinyl (PVC)	***Adhesion to backing[3]- Minimum***	13oz/in (0.14N/mm)
Temperature Rating UL510[1] CSA-C22.2 No.197[2]	0°C to 80°C -10°C to 80°C	***Tensile Strength[3]- Minimum***	2000psi
Flame Retardant – UL510[1]	Pass	***Elongation[3]- Minimum***	150%
Electrical Properties	***Value Imperial (Metric)***		
Voltage Rating UL510[1]/CSA-C22.2 No.197[2]	600V/1000V		
Dielectric Strength[3] - Minimum	1.0kV/mil		

Notes:

1. In accordance with the National Electrical Code, NFPA 70.
2. In accordance with Canadian Electrical Code, Part 1.
3. ASTM D1000 test method-properties measured at room temperature 23°C unless otherwise stated.

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Agency Approval & Self Certifications	• UL listed: UL510 Standard "Insulating Tape", Category OANZ, File No. E129200. • CSA listed: CSA-C22.2 No.197 "PVC Insulating Tape", File No. 605227. • For Regulatory information including RoHS, REACH, please visit www.3M.com/regs
Installation Techniques	3M™ Temflex™ Vinyl Electrical Tape 160 shall be applied in half-lapped layers with sufficient tension to produce a uniform wind. On pigtail splices, the tape shall be wrapped beyond the end of the wires and then folded back, leaving a protective cushion to resist cut-through. Wrap tape up-hill, taping from a smaller diameter surface to a larger diameter surface. Apply the tape with no tension on the last wrap to prevent flagging.
Shelf Life & Storage	This product has a 3-year shelf life (from date of manufacture) when stored in humidity-controlled storage (10°C-27°C and <75% relative humidity).

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Electrical Markets Division
13011 McCallen Pass, Bldg. C
Austin, TX 78753
Phone: 1-800.245.3573
www.3M.com/electrical

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