

3M™ Temflex™ Vinyl Electrical Tape 170

Technical Data

2023

Product Description

3M™ Temflex™ Vinyl Electrical Tape 170 is a high performance, general use grade, nominal 0.18 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 Listed: 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	Typical Value ³ Imperial (Metric)	Mechanical Properties	Typical Value ³ Imperial (Metric)
Color-Visual	Black, Blue, Red, Yellow, White, Grey, Brown, Green, Yellow/Green, Rainbow pack	Thickness ⁴	0.18mm±10%
Adhesive	Rubber-based	Adhesion to steel ⁴	22oz/in (0.24N/mm)
Backing	Vinyl (PVC)	Adhesion to backing ⁴	22oz/in (0.24N/mm)
Temperature Rating UL510 ¹ CSA-C22.2 No.197 ²	0°C to 80°C -10°C to 80°C	Tensile Strength ⁴	2500psi
Flame Retardant – UL510	Pass	Elongation ⁴	220%
Electrical Properties	Typical Value ³ Imperial (Metric)		
Voltage Rating UL510 ¹ /CSA-C22.2 No.197 ²	600V/1000V		
Dielectric Strength ⁴	1.2kV/mil		

Notes:

1. In accordance with the National Electrical Code, NFPA 70.
2. In accordance with Canadian Electrical Code, Part 1.
3. Not for specification. Values are typical, not to be considered minimum or maximum.
4. ASTM D1000 Test Method-properties measured at room temperature 23°C unless otherwise stated.

3M™ Temflex™ Vinyl Electrical Tape 170

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, Class 9052-02.
 - For Regulatory information including RoHS, REACH, please visit www.3M.com/regs
-

Installation Techniques

3M™ Temflex™ Vinyl Electrical Tape 170 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.

3M and Temflex are trademarks of 3M Company.



Electrical Markets Division

13011 McCallen Pass, Bldg. C

Austin, TX 78753

Phone: 1-800.245.3573

www.3M.com/electrical