

Scotch® Vinyl Electrical Tape Super 88

Data Sheet

November 2020

Product Description

Scotch® Vinyl Electrical Tape Super 88 is an 8.5-mil thick, premium grade all-weather vinyl insulating tape. It is designed to perform continuously in ambient temperatures up to 221°F (105°C). The tape is conformable for cold weather application down to 0°F (-18°C). It has excellent resistance to abrasion, moisture, alkalis, acids, corrosion and varying weather conditions (including UV exposure). The combination of an elastic PVC backing and aggressive pressure-sensitive rubber-based adhesive provides moisture-tight electrical and mechanical protection.

- Primary electrical insulation for all wire, cable splices and bus applications up to 600 volts.
- Used for protective jacketing on high voltage cable splices and repairs.
- Compatible with solid dielectric cable insulations.
- Compatible with rubber and synthetic splicing compounds.
- Compatible with epoxy and polyurethane resins.
- Inhibits corrosion of electrical conductors.
- For indoor and outdoor applications.
- Harnessing and bundling of wires and cable applications.

Typical Properties

Physical Properties	Typical Value ^{3,4} Imperial (Metric)	Electrical Property	Typical Value ^{3,4} Imperial (Metric)
Temperature Rating - UL 510 ¹	176°F (80°C)	Voltage Rating UL 510 ¹ CSA ²	600 V 1000 V
CSA - C22.2 No. 197 ²	0°F (-18°C) 221°F (105°C)	Dielectric Strength ⁴ Standard Condition V/mil High Humidity	1250 V/mil (49.2 kV/mm) 90% of std.
Color	Black	Insulation Resistance ⁴ (High Humidity Method)	>1x10 ⁶ megohms
Thickness ⁴	8.5 mils (0.216 mm)		
Adhesion to Steel ⁴ 73°F (23°C) 0°F (-18°C)	28 oz/in (3.0 N/cm) 60 oz/in (6.5 N/cm)		
Adhesion to Backing ⁴ 73°F (23°C) 0°F (-18°C)	28 oz/in (3.0 N/cm) 60 oz/in (6.5 N/cm)		
Breaking Strength ⁴ 73°F (23°C)	20 lb/in (35 N/cm)		
Elongation ⁴ 73°F (23°C) 0°F (-18°C)	250% 100%		
Flame Retardant - UL 510	Pass		

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 73°F (23°C) unless otherwise stated

Agency Approvals & Self Certifications

- UL Listed: UL 510 Standard “Insulating Tape”, Category OANZ, File No. E129200
- CSA Listed: CSA-C22.2 No.197 “PVC Insulating Tape”, File No. 048769, Class 9052-02
- Tested and Self-certified to meet MIL-I-24391C, (Test Report available)
- QPL Listed: QPL-24391, Designation M24391-02 for 0.75” width only
- For Regulatory information including RoHS, REACH, please visit www.3M.com/regs



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Installation Techniques	Scotch®Vinyl Electrical Tape Super 88 shall be applied in half-lapped layers with sufficient tension to produce a uniform bond (for most applications this tension will reduce the tape width to approximately 5/8 of original width). 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 5-year shelf life (from date of manufacture) when stored in humidity-controlled storage (50°F/10°C to 80°F/27°C and <75% relative humidity).
Availability	Scotch®Vinyl Electrical Tape Super 88 is available from 3M authorized distributors Also available from 3M.com/electrical or call 1.800.245.3573.

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78-8124-4857-5 Rev J