

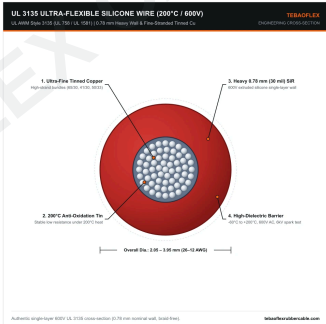
UL 3135 Ultra-Flexible Silicone Rubber Lead Wire (200°C / 600V)

UL 3135 ultra-flexible silicone rubber wire provides 600 V AC internal power and control interconnections across -60°C to +200°C for Class H electric motors, industrial heating equipment, EV/ESS battery modules, and power inverters. High-count tinned copper stranding paired with a 0.78 mm elastomer wall resists vibration fatigue and high-temperature embrittlement.

1. WIRE CONSTRUCTION

1. Conductor	Fine-stranded annealed tinned copper (silver-white tin coating prevents copper oxidation at +200°C continuous operating temperatures and guarantees clean crimp and solder joints), 26 AWG to 12 AWG.
2. Insulation Material	High-tear-strength thermoset Silicone Rubber (SiR), single-layer smooth extrusion (no fiberglass braid), halogen-free, odorless, non-toxic, and immune to solder-iron melt-back.
3. Wall Thickness	0.78 mm (0.031 in / 30 mil minimum average) heavy 600 V insulation wall for high dielectric safety across power electronics and heating circuits.
4. Standard Color Code	10 stocked colors: Black, Red, White, Green, Yellow, Blue, Brown, Grey, Violet, and Orange (plus Green/Yellow ground wire upon request).
5. Surface Marking	UL AWM STYLE 3135 200°C 600V FT2 TEBAOFLEX CABLE printed in high-contrast heat-cured ink along the silicone jacket.

Cross-Section Reference



UL 3135 Cross-Section: Heavy 0.78 mm (30 mil) single-layer 600V silicone rubber wall extruded over high-count fine-stranded silver-white tinned copper.

2. ELECTRICAL, THERMAL & ENVIRONMENTAL DATA

Reference Standard	UL 758 Appliance Wiring Material (AWM Style 3135) & UL 1581
Nominal Operating Voltage	600 V AC RMS
Dielectric Withstand & Spark Test	2,000 V AC (1 min dielectric test) / 6,000 V AC inline spark test
Continuous Temperature Rating	-60°C to +200°C (UL 200°C thermal class; cold bend verified at -40°C / -60°C)
Flame Retardancy	UL 1581 Horizontal Flame Test (FT2)
Minimum Bending Radius	4 × Overall Diameter (fixed installation) / 6 × OD (flexible harness routing)
Thermal & Solder Resistance	Thermoset elastomer will not melt, shrink back, or harden under 200°C continuous heat or brief solder contact
Environmental Compliance	EU RoHS 2 & REACH SVHC compliant, zero halogens, zero heavy-metal plasticizers

3. AWG STRANDING, INSULATION WALL & ELECTRICAL SCHEDULE

UL AWM Style 3135 — 26 AWG to 12 AWG Fine-Stranded Tinned Copper Schedule (600V / 200°C)							
AWG Size	Nom. Area (mm²)	Stranding (No./AWG)	Cond. Dia. (mm)	Nom. Wall (mm / in)	Nom. OD (mm)	Max. DC Res. @ 20°C (Ω/kft Ω/km)	Approx. Weight (lbs/kft kg/km)
12 AWG	3.31	65/30	2.39	0.78 / 0.031	3.95	1.72 / 5.64	27.05 / 40.3
14 AWG	2.08	41/30	1.90	0.78 / 0.031	3.46	2.73 / 8.96	18.58 / 27.6
16 AWG	1.31	50/33	1.50	0.78 / 0.031	3.06	4.45 / 14.60	13.52 / 20.1
18 AWG	0.82	41/34	1.18	0.78 / 0.031	2.74	7.06 / 23.16	9.41 / 14.0
20 AWG	0.52	19/33	0.95	0.78 / 0.031	2.51	11.20 / 36.75	7.16 / 10.7
22 AWG	0.32	17/34	0.76	0.78 / 0.031	2.32	18.10 / 59.38	5.55 / 8.3
24 AWG	0.20	7/32	0.60	0.78 / 0.031	2.15	28.70 / 94.16	4.46 / 6.6
26 AWG	0.13	7/34	0.48	0.78 / 0.031	2.05	45.80 / 150.26	3.73 / 5.6

Super-Fine 0.08 mm Stranding & Metric Family Cross-Reference: In addition to standard UL stranding above, TEBAOFLEX manufactures extra-limp 0.08 mm filament tinned copper stranding (e.g., 12 AWG 680/0.08 mm, 14 AWG 400/0.08 mm, 16 AWG 252/0.08 mm) for robotic and RC/battery power leads. For heavy metric feeders (up to 150 mm²), see our UL Style 3367 / 3135 / 3139 / 3143 Metric 200°C Silicone Family.