

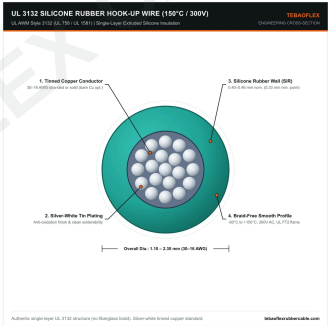
UL 3132 Flexible Silicone Rubber Hook-Up Wire (150°C / 300V)

UL 3132 silicone rubber hook-up wire delivers flexible internal point-to-point wiring for enclosed electrical appliances, precision sensors, Class B/F motor leads, and lighting fixtures operating from -60°C to +150°C at 300 V AC. Its thin 0.40 mm braid-free elastomer wall strips cleanly without glass-fiber fraying on automated harness lines.

1. WIRE CONSTRUCTION

1. Conductor	Annealed tinned copper (silver-white tin plating standard to prevent copper oxidation up to +150°C and ensure rapid solder wetting; bare copper available on request), 30 AWG to 16 AWG in flexible 7/17/19-strand, 133/0.05 mm ultra-flex, or solid constructions.
2. Insulation Material	Extruded high-purity thermoset Silicone Rubber (SiR), odorless, non-toxic, halogen-free, and resistant to thermal hardening, ozone, moisture, and solder-iron melt-back during PCB rework.
3. Wall Thickness	0.40 mm to 0.46 mm nominal wall thickness (15 mil min. average / 0.33 mm minimum at any single point per UL 758 Style 3132). Single-layer homogeneous extrusion (braid-free).
4. Standard Color Code	Black, White, Red, Yellow, Green, Blue, Brown, Grey, Orange, Violet, and Green/Yellow (custom RAL stripes or cut-and-stripped harness leads available).
5. Surface Marking	UL AWM STYLE 3132 150°C 300V VW-1/FT2 TEBAOFLEX CABLE (or unprinted smooth surface for ultra-fine 28–30 AWG gauges per UL tag reel marking rules).

Cross-Section Reference



UL 3132 Cross-Section: Single-layer extruded thermoset silicone rubber insulation (0.40–0.46 mm nom. wall, no fiberglass braid) over silver-white tinned copper strands.

2. ELECTRICAL, THERMAL & ENVIRONMENTAL DATA

Reference Standard	UL 758 Appliance Wiring Material (AWM Style 3132) & UL 1581
Nominal Operating Voltage	300 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 +150°C (UL 150°C thermal class)
Flame Retardancy	UL 1581 Horizontal Flame Test (FT2)
Minimum Bending Radius	4 × Overall Diameter (fixed internal routing) / 6 × OD (flexing assembly)
Chemical & Thermal Stability	Resistant to soldering iron contact heat, ozone, UV, moisture, and mild industrial cleaning agents
Environmental Compliance	EU RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant, low-smoke halogen-free elastomer

3. AWG STRANDING, INSULATION WALL & ELECTRICAL SCHEDULE

UL AWM Style 3132 — 30 AWG to 16 AWG Tinned Copper Schedule (300V / 150°C)						
AWG Size	Nom. Area (mm²)	Stranding (No./mm)	Cond. Dia. (mm)	Wall Nom./Min. (mm)	Nom. OD (mm)	Max. DC Res. @ 20°C (Ω/km)
16 AWG	1.32	7/0.49	1.50	0.40 / 0.33	2.30	14.60
18 AWG	0.84	7/0.39	1.19	0.40 / 0.33	1.97	23.20
20 AWG	0.49	7/0.30	0.92	0.46 / 0.33	1.85	36.70
22 AWG (Flex)	0.34	17/0.16	0.76	0.46 / 0.33	1.70	59.40
22 AWG	0.35	7/0.254	0.76	0.46 / 0.33	1.70	59.40
22 AWG (Solid)	0.33	1/0.65 (Solid)	0.65	0.46 / 0.33	1.57	56.40
24 AWG (Ultra-Flex)	0.26	133/0.05 (Ultra-Flex)	0.67	0.40 / 0.33	1.47	94.20
24 AWG (Flex)	0.21	19/0.12	0.60	0.40 / 0.33	1.40	94.20
24 AWG (Semi-Flex)	0.22	11/0.16	0.61	0.40 / 0.33	1.41	94.20
24 AWG	0.22	7/0.20	0.61	0.40 / 0.33	1.41	94.20
24 AWG (Solid)	0.20	1/0.51 (Solid)	0.51	0.40 / 0.33	1.31	89.30
26 AWG	0.14	7/0.16	0.48	0.40 / 0.33	1.28	150.00
26 AWG (Solid)	0.13	1/0.40 (Solid)	0.40	0.40 / 0.33	1.20	143.00
28 AWG	0.089	7/0.127	0.38	0.40 / 0.33	1.18	239.00
30 AWG	0.055	7/0.10	0.30	0.40 / 0.33	1.10	381.00

Stranding & Metric Family Cross-Reference: Custom fine-stranded tinned copper counts (such as 16 AWG 26/0.254 mm or 18 AWG 16/0.254 mm) are available within UL Style 3132 limits. For metric cross-section multi-style engineering schedules (0.5–150 mm²), compare our UL Style 3099 / 3132 / 3123 / 3133 Metric 150°C Silicone Family.