



Hook-up & equipment wires

UL AWM 3271

Cross-Linked Equipment Wire

UL AWM 3271 & CSA CL1251 600 V 125 °C cross-linked XLPE equipment & motor lead wire



UL 3271 · CSA CL1251

600 V · 125 °C XLPE

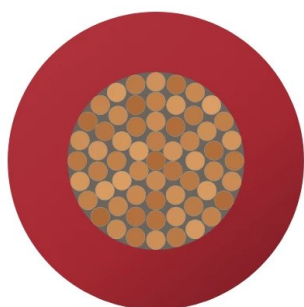
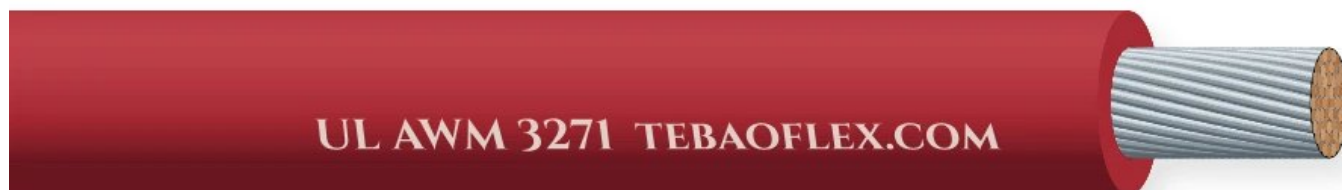
26-2 AWG Motor & Panel Lead

Application

Heavy-duty 600 V 125 °C thermoset equipment and motor lead wire certified to UL AWM Style 3271 and CSA CL1251, constructed with flexible tinned copper conductors (26-2 AWG) and a 0.76 mm (30 mil) electron-beam cross-linked polyolefin (XLPE) insulation wall.

Typical uses: Electric motor & generator stator lead-outs, Dry-type transformers, inductors & reactors, Power inverters, UPS & battery energy storage, Commercial cooking, curing & heating equipment, HID / high-power LED luminaire ballasts

Construction



Cross-section, not to scale

1	Flexible stranded tinned copper	ASTM B33 · UL 758
2	0.76 mm (30 mil) 125 °C XLPE dielectric	UL 758 Style 3271
3	Varnish- & crush-resistant XLPO finish	UL 758 · CSA C22.2 No. 210 CL1251

Technical data

Typical values

Rated voltage	600 V RMS	Dielectric withstand voltage	2000 V AC for 1 min · 6000 V AC spark test
Max. DC conductor resistance (20 °C)	18 AWG: $\leq 21.0 \Omega/\text{km}$ · 16 AWG: $\leq 13.2 \Omega/\text{km}$ · 14 AWG: $\leq 8.28 \Omega/\text{km}$ · 12 AWG: $\leq 5.21 \Omega/\text{km}$ · 10 AWG: $\leq 3.28 \Omega/\text{km}$ · 8 AWG: $\leq 2.06 \Omega/\text{km}$	Continuous temperature rating	-55 °C to +125 °C (compatible with Class B 130 °C insulation systems)
Baking & overload endurance	Withstands 160 °C varnish bake cycles and +250 °C short-circuit temperatures without melting or splitting	Nominal insulation wall	26–10 AWG: 0.76 mm (30 mil) · 8 AWG: 1.14 mm (45 mil) · 6–2 AWG: 1.52 mm (60 mil)
Min. bending radius	4 × overall diameter (fixed routing)	Flame retardance	UL 758 Horizontal / FT2 (VW-1 / CSA FT1 flame-retardant grades available)
Varnish, oil & solvent resistance	Resistant to polyester/epoxy impregnating varnishes, mineral oil, xylene and toluene	Standards	UL 758 Appliance Wiring Material Style 3271 (600 V, 125 °C)
Standard packing	Heat-treated ISPM-15 timber drums or spools with sealed ends		

Sizes

10 standard constructions

Tick the sizes you need and send this page to info@tebaoflex.com or WhatsApp +86 185 9591 3361.

Order designation	Cores × mm ² / AWG	AWG ≈	Outer Ø min mm	Outer Ø max mm	Copper kg/km	Weight ≈ kg/km	Min. bend R mm
600 V 125 °C XLPE Equipment & Coil Leads (UL 3271, 22–10 AWG, 30-mil wall) 7 sizes							
☐ UL 3271 22 AWG (7/30)	22 AWG (0.33 mm ²)	22	2.2	2.4	3	8	9
☐ UL 3271 20 AWG (10/30)	20 AWG (0.52 mm ²)	20	2.3	2.5	5	10	10
☐ UL 3271 18 AWG (16/30)	18 AWG (0.82 mm ²)	18	2.6	2.8	7	13	11
☐ UL 3271 16 AWG (26/30)	16 AWG (1.31 mm ²)	16	2.9	3.1	12	19	12
☐ UL 3271 14 AWG (41/30)	14 AWG (2.08 mm ²)	14	3.2	3.5	20	27	14
☐ UL 3271 12 AWG (65/30)	12 AWG (3.31 mm ²)	12	3.7	4.0	31	40	16
☐ UL 3271 10 AWG (105/30)	10 AWG (5.26 mm ²)	10	4.3	4.7	50	61	19
600 V 125 °C XLPE Heavy Motor & Inverter Leads (UL 3271, 8–4 AWG) 3 sizes							
☐ UL 3271 8 AWG (133/29)	8 AWG (8.37 mm ²)	8	5.9	6.4	80	104	26
☐ UL 3271 6 AWG (133/27)	6 AWG (13.3 mm ²)	6	7.5	8.1	127	165	32
☐ UL 3271 4 AWG (133/25)	4 AWG (21.2 mm ²)	4	8.7	9.5	203	252	38

– Dimensions and weights are typical values per UL 758 Style 3271 · CSA C22.2 No. 210 CL1251. Minimum fixed bending radius shown is 4 × OD.

Electrical & current ratings

10 sizes

Cross-section mm ²	AWG ≈	Max. DC resistance 20 °C, Ω/km	Single wire in air 30 °C, A	Multi-core bundle 30 °C, A
0.33	22	57.8	6.0	4.5
0.52	20	34.6	10	7
0.82	18	24	14	11
1.31	16	15.1	20	15
2.08	14	9.8	27	21
3.31	12	6.2	36	27
5.26	10	3.88	50	36
8.37	8	2.42	68	48
13.3	6	1.48	92	65
21.2	4	0.92	125	88

– Current ratings at 30 °C ambient in free air. Apply temperature and bundle grouping factors per applicable equipment standard.

Standards and approvals

✓ UL 758 Style 3271 · CSA C22.2 No. 210 CL1251

✓ CE · RoHS 2 (2011/65/EU) · REACH

Certifications



Management systems: ISO 9001, ISO 14001, ISO 45001

Request a quotation

Send the size, length and destination. An application engineer replies within 2 business hours.

WhatsApp / phone

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Email

info@tebaoflex.com

Web

tebaoflex.com/cables/ul-awm-3271-cross-linked-equipment-wire



Typical values for this cable type, based on UL 758 Style 3271 · CSA C22.2 No. 210 CL1251. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.