



Hook-up & equipment wires

UL AWM 1429 / 1430

Cross-Linked PVC Wire

Electron-beam cross-linked PVC (XLPVC) solder-resistant wire (UL 1429 150 V & 1430 300 V)



UL 1429 (150 V) & 1430 (300 V)

E-Beam Cross-Linked XLPVC

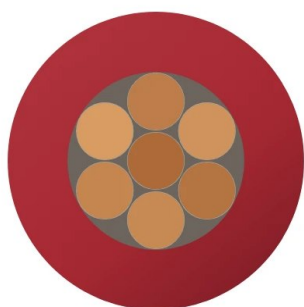
Solder-Iron Resistant · VW-1

Application

Irradiated cross-linked PVC (XLPVC) electronic hook-up wire certified to UL AWM Style 1429 (150 V, 80 °C, 10 mil) and Style 1430 (300 V, 105 °C, 16 mil), engineered so the thermoset insulation will not melt, flow or shrink back on contact with soldering irons.

Typical uses: Hand-soldered & wave-soldered PCB assemblies, Avionics, defence & industrial instrument racks, Potted & conformal-coated electronic modules, Audio consoles, telecom & medical electronics, Precision coil, solenoid & sensor lead-outs

Construction



Cross-section, not to scale

1	Stranded or solid tinned copper	ASTM B33 · UL 758
2	E-beam cross-linked PVC (XLPVC)	UL 758 Style 1429 / 1430
3	Abrasion- & solvent-resistant XLPVC skin	UL 1581 VW-1 · CSA FT1

Technical data

Typical values

Rated voltage	150 V RMS (UL Style 1429) · 300 V RMS (UL Style 1430)	Dielectric withstand voltage	1500 V AC for 1 min · 3000 V AC spark test
Max. DC conductor resistance (20 °C)	28 AWG: ≤ 216 Ω/km · 26 AWG: ≤ 135 Ω/km · 24 AWG: ≤ 84.2 Ω/km · 22 AWG: ≤ 53.2 Ω/km · 20 AWG: ≤ 33.2 Ω/km · 18 AWG: ≤ 21.0 Ω/km	Continuous temperature rating	–55 °C to +80 °C (UL 1429) · –55 °C to +105 °C (UL 1430)
Solder-iron resistance	Withstands 350 °C soldering iron contact without melting through to conductor	Nominal insulation wall	UL 1429: 0.25 mm (10 mil) · UL 1430: 0.41 mm (16 mil)
Min. bending radius	3 × overall diameter (fixed chassis routing)	Crush & scrape abrasion	Cross-linked molecular structure provides 3–5× higher dynamic cut-through resistance than non-irradiated PVC
Flame retardance	UL 1581 VW-1 vertical wire flame test & CSA FT1	Chemicals & potting solvents	Resistant to flux removers, isopropyl alcohol, oils, acids and two-part epoxy/polyurethane potting
Standards	UL 758 Style 1429 (150 V, 80 °C) & Style 1430 (300 V, 105 °C)	Standard packing	Heat-treated ISPM-15 timber drums or spools with sealed ends

Sizes

13 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
UL AWM 1429 — 150 V 80 °C 10-mil Cross-Linked PVC (28–18 AWG) 6 sizes							
☐ UL 1429 150V 28 AWG (7/36)	28 AWG (0.08 mm ²)	28	0.8	0.9	0	2	3
☐ UL 1429 150V 26 AWG (7/34)	26 AWG (0.13 mm ²)	26	0.9	1.0	1	2	3
☐ UL 1429 150V 24 AWG (7/32)	24 AWG (0.20 mm ²)	24	1.0	1.1	2	3	3
☐ UL 1429 150V 22 AWG (7/30)	22 AWG (0.33 mm ²)	22	1.2	1.3	3	4	4
☐ UL 1429 150V 20 AWG (7/28)	20 AWG (0.52 mm ²)	20	1.4	1.5	5	6	4
☐ UL 1429 150V 18 AWG (19/30)	18 AWG (0.82 mm ²)	18	1.6	1.8	7	9	5
UL AWM 1430 — 300 V 105 °C 16-mil Cross-Linked PVC (28–16 AWG) 7 sizes							
☐ UL 1430 300V 28 AWG (7/36)	28 AWG (0.08 mm ²)	28	1.1	1.2	0	2	4
☐ UL 1430 300V 26 AWG (7/34)	26 AWG (0.13 mm ²)	26	1.2	1.3	1	3	4
☐ UL 1430 300V 24 AWG (7/32)	24 AWG (0.20 mm ²)	24	1.3	1.4	2	4	4
☐ UL 1430 300V 22 AWG (7/30)	22 AWG (0.33 mm ²)	22	1.5	1.6	3	5	5
☐ UL 1430 300V 20 AWG (7/28)	20 AWG (0.52 mm ²)	20	1.7	1.8	5	7	5
☐ UL 1430 300V 18 AWG (19/30)	18 AWG (0.82 mm ²)	18	1.9	2.0	7	10	6
☐ UL 1430 300V 16 AWG (26/30)	16 AWG (1.31 mm ²)	16	2.2	2.4	12	15	7

– Dimensions and weights are typical values per UL 758 Style 1429 (150 V) & Style 1430 (300 V) · CSA XL-PVC. Minimum fixed bending radius shown is 3 × OD.

Electrical & current ratings

7 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
0.08	28	248	1.5	1.2
0.13	26	155	2.5	2.0
0.2	24	95.5	3.5	2.8
0.33	22	57.8	6.0	4.5
0.52	20	34.6	10	7
0.82	18	24	14	11

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
1.31	16	15.1	20	15

– 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 1429 (150 V) & Style 1430 (300 V) · CSA XL-PVC

✓ 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

+86 185 9591 3361

Email

info@tebaoflex.com

Web

tebaoflex.com/cables/ul-awm-1429-1430-cross-linked-pvc-wire



Typical values for this cable type, based on UL 758 Style 1429 (150 V) & Style 1430 (300 V) · CSA XL-PVC. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.