



## Hook-up &amp; equipment wires

# UL AWM 1007 / 1569

## Hook-Up Wire

Dual-rated UL AWM 1007 (80 °C) / 1569 (105 °C) & CSA TR-64 300 V PVC hook-up wire



UL 1007 / 1569 · CSA TR-64

300 V · 80 / 105 °C · VW-1

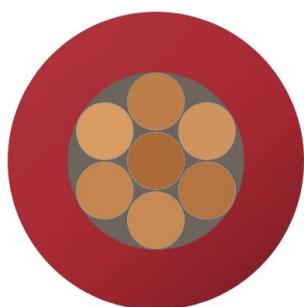
30-16 AWG Tinned Cu

## Application

Industry-standard 300 V appliance and electronic chassis hook-up wire triple-rated to UL AWM Style 1007 (80 °C), UL AWM Style 1569 (105 °C) and CSA TR-64 (90 °C), featuring a 0.41 mm (16 mil) VW-1 / FT1 flame-retardant PVC wall over tinned copper (30-16 AWG).

**Typical uses:** Electronic test & measurement instruments, Switch-mode power supplies & UPS units, Commercial appliances & HVAC control boxes, PCB jumper leads & internal wire harnesses, Vending, gaming & medical diagnostic chassis

## Construction



Cross-section, not to scale

|   |                                        |                          |
|---|----------------------------------------|--------------------------|
| 1 | Stranded or solid tinned copper        | ASTM B33 · UL 758        |
| 2 | 0.41 mm (16 mil) 105 °C PVC dielectric | UL 758 Style 1007 / 1569 |
| 3 | VW-1 / FT1 colour-coded PVC surface    | UL 1581 VW-1 · CSA FT1   |

## Technical data

Typical values

|                                      |                                                                                                                                  |                                |                                                                                     |
|--------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|--------------------------------|-------------------------------------------------------------------------------------|
| Rated voltage                        | 300 V RMS                                                                                                                        | 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 · 24 AWG: ≤ 84.2 Ω/km · 22 AWG: ≤ 53.2 Ω/km · 20 AWG: ≤ 33.2 Ω/km · 18 AWG: ≤ 21.0 Ω/km · 16 AWG: ≤ 13.2 Ω/km | Temperature rating             | −40 °C to +105 °C (UL 1569) / +80 °C (UL 1007) / +90 °C (CSA TR-64 / AWM I A/B)     |
| Short-circuit / solder heat          | +150 °C to +250 °C (5 s)                                                                                                         | Nominal insulation wall        | 0.41 mm (0.016 in / 16 mil) minimum average, 0.33 mm (13 mil) minimum at any point  |
| Min. bending radius                  | 4 × overall diameter (fixed chassis routing)                                                                                     | Automated processing           | Concentric extrusion allows high-speed cut-and-strip without nicking tinned strands |
| Flame retardance                     | UL 1581 VW-1 vertical wire flame test & CSA C22.2 FT1                                                                            | Oil, acid & solvent resistance | Passes UL 60 °C oil immersion, weak acid, alkali and fungus resistance requirements |
| Standards                            | UL 758 Style 1007 (80 °C, 300 V) & Style 1569 (105 °C, 300 V)                                                                    | Standard packing               | Heat-treated ISPM-15 timber drums or spools with sealed ends                        |

## Sizes

8 standard constructions

Tick the sizes you need and send this page to [info@tebaoflex.com](mailto:info@tebaoflex.com) or WhatsApp +86 185 9591 3361.

| Order designation                                                      | Cores × mm <sup>2</sup> / AWG  | AWG ≈ | Outer Ø min<br>mm | Outer Ø max<br>mm | Copper<br>kg/km | Weight ≈<br>kg/km | Min. bend R<br>mm |
|------------------------------------------------------------------------|--------------------------------|-------|-------------------|-------------------|-----------------|-------------------|-------------------|
| 300 V PVC Hook-Up Wire (UL 1007 / 1569 · CSA TR-64, 30–16 AWG) 8 sizes |                                |       |                   |                   |                 |                   |                   |
| <input type="checkbox"/> UL 1007/1569 30 AWG (7/38)                    | 30 AWG (0.05 mm <sup>2</sup> ) | 30    | 1.0               | 1.1               | 0               | 2                 | 4                 |
| <input type="checkbox"/> UL 1007/1569 28 AWG (7/36)                    | 28 AWG (0.08 mm <sup>2</sup> ) | 28    | 1.1               | 1.2               | 0               | 2                 | 5                 |
| <input type="checkbox"/> UL 1007/1569 26 AWG (7/34)                    | 26 AWG (0.13 mm <sup>2</sup> ) | 26    | 1.2               | 1.3               | 1               | 3                 | 5                 |
| <input type="checkbox"/> UL 1007/1569 24 AWG (7/32)                    | 24 AWG (0.20 mm <sup>2</sup> ) | 24    | 1.3               | 1.4               | 2               | 4                 | 6                 |
| <input type="checkbox"/> UL 1007/1569 22 AWG (7/30)                    | 22 AWG (0.33 mm <sup>2</sup> ) | 22    | 1.5               | 1.6               | 3               | 5                 | 6                 |
| <input type="checkbox"/> UL 1007/1569 20 AWG (7/28)                    | 20 AWG (0.52 mm <sup>2</sup> ) | 20    | 1.7               | 1.8               | 5               | 7                 | 7                 |
| <input type="checkbox"/> UL 1007/1569 18 AWG (16/30)                   | 18 AWG (0.82 mm <sup>2</sup> ) | 18    | 1.9               | 2.0               | 7               | 10                | 8                 |
| <input type="checkbox"/> UL 1007/1569 16 AWG (26/30)                   | 16 AWG (1.31 mm <sup>2</sup> ) | 16    | 2.2               | 2.4               | 12              | 15                | 9                 |

– Dimensions and weights are typical values per UL 758 Style 1007 / 1569 · CSA C22.2 No. 210 TR-64. Minimum fixed bending radius shown is 4 × OD.

## Electrical & current ratings

8 sizes

| Cross-section<br>mm <sup>2</sup> | AWG ≈ | Max. DC resistance<br>20 °C, Ω/km | Single wire in air<br>30 °C, A | Multi-core bundle<br>30 °C, A |
|----------------------------------|-------|-----------------------------------|--------------------------------|-------------------------------|
| 0.05                             | 30    | 395                               | 1.0                            | 0.8                           |
| 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                            |
| 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 1007 / 1569 · CSA C22.2 No. 210 TR-64

✓ 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-1007-1569-hook-up-wire



Typical values for this cable type, based on UL 758 Style 1007 / 1569 · CSA C22.2 No. 210 TR-64. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.