# Hook-Up Wire

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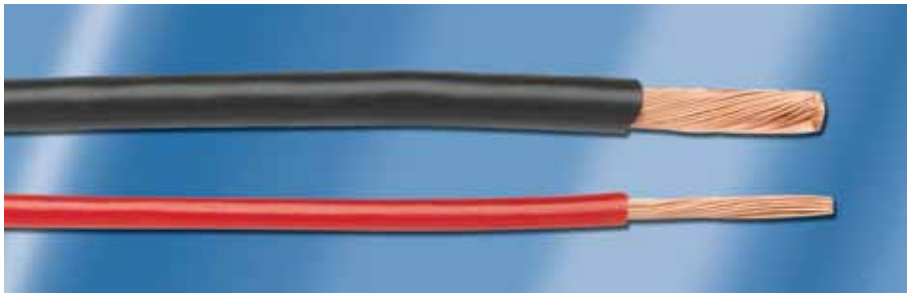


The broad range of hook-up wire from Alpha means you will find the product exactly suited to your application—whether it's as straightforward as a control cabinet in a protected environment or as specialized as a machine tool on the factory floor, a high-temperature oven, or off-road construction equipment.

Our hook-up wire is available in a variety of insulations to meet your needs for temperature, ability to withstand wear and abrasion, electrical performance, or resistance to oil, solvents, and chemicals.

- **Stranded and solid copper conductors, bare or tinned, with other platings available for special application needs**
- **Broad range of insulations**
- **Color-coded insulation for easy circuit identification**
- **UL, CSA, and Mil-spec compliance**
- **Convenient put-ups as short as 100 feet**
- **Excellent uniformity and low-fray design for easy handling, stripping, and termination**

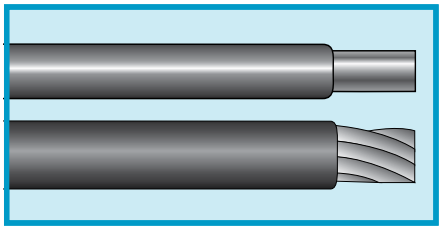
**Choice of Insulations to Meet Temperature Range and Mechanical and Environmental Requirements**

| Insulation | Material | Temperature Range | Features |
|---|---|---|---|
| PVC | Polyvinyl chloride | -55°C to +105°C | General-purpose insulation<br>Good abrasion resistance<br>Excellent flame resistance |
| XL-PVC | Cross-linked PVC | -55°C to +105°C | Better abrasion and cut-through resistance than standard PVC<br>Improved temperature and solder iron resistance over standard PVC<br>Used in high-density wiring |
| mPPE | Modified polyphenylene ether | -40°C to +105°C | Excellent recyclability<br>Excellent abrasion and cut-through resistance<br>Superior dielectric properties for thinner walls than PVC—allows wires 45% smaller in diameter and 40% light in weight |
| PTFE | Polytetrafluoroethylene | -55°C to +200°C | High temperature<br>Chemically inert: excellent chemical and solvent resistance<br>Excellent electrical properties |
| XLPE | Cross-linked polyethylene | -55°C to +125°C | Higher temperature rating than PVC |
| Silicone | Silicone | -40°C to +150°C | High-voltage material<br>Excellent flexibility<br>Excellent dielectric strength and resistance to radiation, corona, and ozone |
| PDVF | Polyvinylidene fluoride | -40°C to +125°C | Widely used in wire wrap applications |
| ETFE | Ethylene tetrafluoroethylene | -70°C to +150°C | |
| TGGT | Teflon glass glass Teflon | +250°C | High-temperature applications<br>Chemically inert: excellent chemical and solvent resistance<br>Moisture resistant<br>Withstands mechanical abuse and repeated flexing |
| MG | Mica glass | +450°C | High-temperature applications, such as heat-treating furnaces, kilns, and food service equipment<br>Excellent thermal stability |

| Voltage | Insulation | Wire Range (AWG) | | Approvals | | Temperature Range |
|---|---|---|---|---|---|---|
| | | Stranded | Solid | UL | CSA | |
| **UL/CSA** | | | | | | |
| 150 | XL-PVC | 26 – 16 | — | | AWM I A/B FT1 | -55°C to +105°C |
| | | | | AWM 1429 | | -55°C to +80°C |
| | XLPE | 22 – 18 | — | AWM 3265 | I A/B FT1 | -55°C to +125°C |
| 300 | PVC | 30 – 16 | 24 – 16 | AWM 1569 | | -40°C to +105°C |
| | | | | AWM 1007 | | -40°C to +80°C |
| | | | | | TR-64 | -40°C to +90°C |
| | SR-PVC | 30 – 16 | — | AWM 1061 | I A/B FT1 | -10°C to +80°C |
| | XL-PVC | 26 – 16 | — | AWM 1430 | REW XL-PVC | -55°C to +105°C |
| | XLPE | 22 – 18 | — | AWM 3266 | CL 1252 XLPE | -55°C to +125°C |
| | XLPE | 22 – 16 | — | AWM 3199 | CL1054 | -55°C to +125°C |
| | PTFE | 24 – 8 | — | AWM 1180 | | -60°C to +200°C |
| 600 | PVC | 24 – 10 | 26 – 10 | AWM 1015, 1230 MTW, THW, TW | TEW-105 | -20°C to +105°C |
| | | 8 – 4/0 | — | AWM 1242, 1284 | | -20°C to +105°C |
| | mPPE | 28 – 10 | 18 – 14 | AWM 11028 | I A/B FT-1 | -40°C to +105°C |
| | XLPE | 18 – 10 | — | AWM 3271 | CL 1251 XLPE | -55°C to +125°C |
| | XLPE | 20 – 2/0 | — | AWM 3173, 3195, 3196, 3300 SIS Rated | | -55°C to +125°C |
| | ETFE | 24 – 4 | — | SAE AS22759/16 | | -55°C to +150°C |
| | PTFE | 26 – 8 | — | SAE AS22759/11 | | -55°C to +200°C |
| | Silicone | 22 – 4/0 | — | AWM 3212, 3213, 3214 | AWM I A/B | -40°C to +150°C |
| 10,000+ | Silicone | 22 – 2 | — | AWM 3239 | | -40°C to +150°C |
| **Military** | | | | | | |
| 250 | PTFE | 32 – 22 | 30 – 26 | MIL-DTL-16878/6 (Type ET) | | -60°C to +200°C |
| 600 | XL-PVC | 26 – 16 | — | MIL-DTL-16878/1 (Type B) | | -55°C to +105°C |
| | PVC | 32 – 14 | — | MIL-DTL-16878/1 (Type B) | | -55°C to +105°C |
| | PVC | 14 – 8 | — | MIL-W-76 Type HW | | -20°C to +80°C |
| | PTFE | 30 – 10 | 26 – 18 | MIL-DTL-16878/4 (Type E) | | -60°C to +200°C |
| 1000 | PVC | 24 – 12 | 24 – 18 | MIL-DTL-16878/2 (Type C) | | -40°C to +80°C |
| | XLPE | 22 – 18 | — | MIL-DTL-16878/2 (Type C) | | -55°C to +105°C |
| | PTFE | 24 – 8 | — | MIL-DTL-16878/5 (Type EE) | | -60°C to +200°C |
| 3000 | XLPE | 18 – 10 | — | MIL-DTL-16878/1 (Type D) | | -55°C to +105°C |
| **Solar** | | | | | | |
| 1000/2000 | XLPE/PVC | 14 – 2 | — | UL 4703 PV Wire | RW-90 | -40°C to +90°C |
| 600/1000 | LSZH/LSZH | 14 – 2 | — | UL 4703 PV Wire TÜV 2 PFG 1169 | — | -40°C to +90°C |
| **Wire Wrap** | | | | | | |
| | PVDF | — | 30 – 24 | AWM 1422, 1423 | | -40°C to +125°C |
| | ETFE | — | 30 – 24 | AWM 1516, 1523 | | -70°C to +150°C |
| **Ribbon Cable: 5 to 30 Conductors** | | | | | | |
| 150/300 | PVC | 26 – 22 | — | AWM 2713, 2555 | | -55°C to +80°C |
| 600/1000 | PVC | 26 – 22 | — | MIL-DTL-16878/1 and /2 (Types B & C) | | -55°C to +105°C |

# Hook-Up Wire

300 V, PVC



**UL AWM 1007, 1581, 1569**
**VW-1**
**CSA AWM I A/B FT1**
**CSA TR-64 FT1**

## Operating Temperature

- -40°C to +105°C (AWM 1569, CSA AWM)
- -40°C to +90°C (CSA TR-64)
- -40°C to +80°C (AWM 1007, 1581)

## Materials

- Stranded or solid tinned copper conductor
- PVC insulation

## Availability

100 ft (30.5 m)
1000 ft (305 m)

| Part No. | Wire Size | | Stranding | | Insulation Thickness | | Nominal Diameter | | Colors |
|---|---|---|---|---|---|---|---|---|---|
| | AWG | mm² | AWG | mm | Inch | mm | Inch | mm | |
| **3047** | 30 | 0.06 | 7/38 | 7 x 0.10 | 0.016 | 0.41 | 0.044 | 1.12 | Z1, 1 - 10 |
| **3048** | 28 | 0.09 | 7/36 | 7 x 0.13 | 0.016 | 0.41 | 0.047 | 1.19 | Z1, 1 - 10 |
| **3049** | 26 | 0.14 | 7/34 | 7 x 0.16 | 0.016 | 0.41 | 0.051 | 1.30 | Z1, 1 - 10 |
| **3050/1** | 24 | 0.20 | Solid | 1 x 0.51 | 0.016 | 0.41 | 0.052 | 1.32 | Z1, 1 - 10 |
| **3050** | 24 | 0.23 | 7/32 | 7 x 0.20 | 0.016 | 0.41 | 0.056 | 1.42 | Z1, 1 – 19, 28, 30 |
| **892407T†** | 24 | 0.23 | 7/32 | 7 x 0.20 | 0.016 | 0.41 | 0.056 | 1.42 | Z2, 0 - 9 |
| **892419†** | 24 | 0.24 | 19/36 | 19 x 0.13 | 0.016 | 0.41 | 0.057 | 1.45 | Z2, 0 - 9 |
| **3051/1** | 22 | 0.32 | Solid | 1 x 0.64 | 0.016 | 0.41 | 0.057 | 1.45 | Z1, 1 - 10 |
| **3051** | 22 | 0.35 | 7/30 | 7 x 0.25 | 0.016 | 0.41 | 0.062 | 1.57 | Z1, 1 – 19, 28, 30 |
| **892207T†** | 22 | 0.35 | 7/30 | 7 x 0.25 | 0.016 | 0.41 | 0.062 | 1.57 | Z2, 0 - 9 |
| **892219†** | 22 | 0.38 | 19/34 | 19 x 0.16 | 0.016 | 0.41 | 0.064 | 1.63 | Z2, 0 - 9 |
| **3053** | 20 | 0.51 | 10/30 | 10 x 0.25 | 0.016 | 0.41 | 0.069 | 1.75 | Z1, 1 – 19, 28, 30 |
| **892010T†** | 20 | 0.51 | 10/30 | 10 x 0.25 | 0.016 | 0.41 | 0.069 | 1.75 | Z2, 0 - 9 |
| **3053/1** | 20 | 0.52 | Solid | 1 x 0.81 | 0.016 | 0.41 | 0.064 | 1.63 | Z1, 1 - 10 |
| **892007†** | 20 | 0.56 | 7/28 | 7 x 0.32 | 0.016 | 0.41 | 0.070 | 1.78 | Z2, 0 - 9 |
| **892019†** | 20 | 0.62 | 19/32 | 19 x 0.20 | 0.016 | 0.41 | 0.072 | 1.83 | Z2, 0 - 9 |
| **3055** | 18 | 0.81 | 16/30 | 16 x 0.25 | 0.016 | 0.41 | 0.079 | 2.01 | Z1, 1 – 19, 28, 30 |
| **891816T†** | 18 | 0.81 | 16/30 | 16 x 0.25 | 0.016 | 0.41 | 0.079 | 2.01 | Z2, 0 - 9 |
| **3055/1** | 18 | 0.82 | Solid | 1 x 1.02 | 0.016 | 0.41 | 0.072 | 1.83 | Z1, 1 - 10 |
| **891819†** | 18 | 0.96 | 19/30 | 19 x 0.25 | 0.016 | 0.41 | 0.082 | 2.08 | Z2, 0 - 9 |
| **3057/1** | 16 | 1.31 | Solid | 1 x 1.29 | 0.016 | 0.41 | 0.083 | 2.11 | Z1, 1 - 10 |
| **3057** | 16 | 1.32 | 26/30 | 26 x 0.25 | 0.016 | 0.41 | 0.092 | 2.34 | Z1, 1 – 19, 28, 30 |
| **891441†** | 14 | 2.08 | 41/30 | 41 x 0.25 | 0.016 | 0.41 | 0.106 | 2.69 | Z2, 0 - 9 |
| **891265*†** | 12 | 3.30 | 65/30 | 65 x 0.25 | 0.016 | 0.41 | 0.125 | 3.18 | Z2, 0 - 9 |
| **891000*†** | 10 | 5.32 | 105/30 | 105 x 0.25 | 0.016 | 0.41 | 0.150 | 3.81 | Z2, 0 - 9 |

*UL AWM 1581 and 1569. All others UL AWM 1007 and 1569.
†CSA AWM I A/B FT-1.
"T" indicates topcoat conductors.

### Insulation Colors Z1

| | | | | | |
|---|---|---|---|---|---|
| 1 White | 5 Yellow | 9 Slate | 13 White/Green | 17 White/ Orange | 29 Yellow/Green |
| 2 Black | 6 Blue | 10 Violet | 14 White/Yellow | 18 White/ Slate | 30 Pink |
| 3 Red | 7 Brown | 11 White/Black | 15 White/Blue | 19 White/ Violet | |
| 4 Green | 8 Orange | 12 White/Red | 16 White/Brown | 28 Green/ Yellow | |

### Insulation Colors Z2

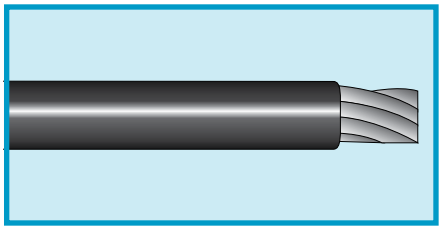
| | | |
|---|---|---|
| 0 Black | 4 Yellow | 8 Slate |
| 1 Brown | 5 Green | 9 White |
| 2 Red | 6 Blue | |
| 3 Orange | 7 Violet | |

These wires also available in 500 ft (152 m) put-ups.

CA PROP 65 RoHS Compliant

# Hook-Up Wire

## 300 V, Semirigid PVC



**UL AWM 1061 VW-1**
**CSA AWM I A/B FT1**

### Operating Temperature

- -10°C to +80°C

### Materials

- Stranded or solid tinned copper conductor
- Semirigid PVC insulation

### Availability

100 ft (30.5 m)
1000 ft (305 m)

| Part No. | Wire Size | | Stranding | | Insulation Thickness | | Nominal Diameter | | Colors |
|---|---|---|---|---|---|---|---|---|---|
| | AWG | mm² | AWG | mm | Inch | mm | Inch | mm | |
| **422807** | 28 | 0.09 | 7/36 | 7 x 0.13 | 0.010 | 0.25 | 0.035 | 0.89 | Z2 |
| **422801** | 28 | 0.08 | Solid | 1 x 0.32 | 0.010 | 0.25 | 0.033 | 0.84 | Z2 |
| **422607** | 26 | 0.14 | 7/34 | 7 x 0.16 | 0.010 | 0.25 | 0.039 | 0.99 | Z2 |
| **422601** | 26 | 0.13 | Solid | 1 x 0.40 | 0.010 | 0.25 | 0.036 | 0.91 | Z2 |
| **3250** | 24 | 0.23 | 7/32 | 7 x 0.20 | 0.010 | 0.25 | 0.044 | 1.12 | Z1 |
| **3251** | 22 | 0.35 | 7/30 | 7 x 0.25 | 0.010 | 0.25 | 0.050 | 1.27 | Z1 |
| **422010** | 20 | 0.51 | 10/30 | 10 x 0.25 | 0.010 | 0.25 | 0.057 | 1.45 | Z2 |
| **3252** | 20 | 0.56 | 7/28 | 7 x 0.32 | 0.010 | 0.25 | 0.058 | 1.47 | Z1 |
| **422001** | 20 | 0.52 | Solid | 1 x 0.81 | 0.010 | 0.25 | 0.052 | 1.32 | Z2 |
| **421816** | 18 | 0.81 | 16/30 | 16 x 0.25 | 0.010 | 0.25 | 0.067 | 1.70 | Z2 |
| **3253** | 18 | 0.90 | 7/26 | 7 x 0.40 | 0.010 | 0.25 | 0.068 | 1.73 | Z1 |
| **421626** | 16 | 1.32 | 26/30 | 26 x 0.25 | 0.010 | 0.25 | 0.080 | 2.03 | Z2 |
| **3254** | 16 | 1.43 | 7/24 | 7 x 0.51 | 0.010 | 0.25 | 0.080 | 2.03 | Z1 |

### Insulation Colors Z1

| | | |
|---|---|---|
| 1 White | 5 Yellow | 9 Slate |
| 2 Black | 6 Blue | 10 Violet |
| 3 Red | 7 Brown | |
| 4 Green | 8 Orange | |

### Insulation Colors Z2

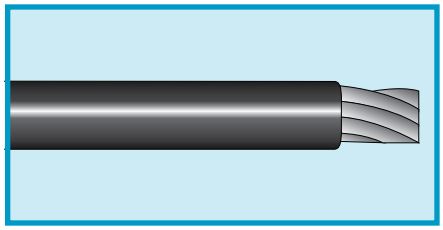
| | | |
|---|---|---|
| 0 Black | 4 Yellow | 8 Slate |
| 1 Brown | 5 Green | 9 White |
| 2 Red | 6 Blue | |
| 3 Orange | 7 Violet | |

These wires also available in 500 ft (152 m) put-ups.

CA PROP 65 RoHS Compliant

# Hook-Up Wire

600 V, PVC



**UL AWM 1015, 1028, 1230, 1231, 1232, 1283, 1284 VW-1**
**UL MTW, TW (14 to 8 AWG), THW (6 to 1/0 AWG)**
**CSA AWM I A/B FT1 and TEW-105**

## Operating Temperature

- -40°C to +105°C (AWM, TEW)
- -40°C to +90°C (MTW)
- -40°C to +75°C (THW)
- -40°C to +60°C (TW)

## Materials

- Stranded bare copper conductor
- PVC insulation

## Availability

100 ft (30.5 m)
1000 ft (305 m)

| Part No. | Wire Size | | Stranding | | Insulation Thickness | | Nominal Diameter | | UL Style |
|---|---|---|---|---|---|---|---|---|---|
| | AWG | $mm^2$ | AWG | mm | Inch | mm | Inch | mm | |
| **461816** | 18 | 0.81 | 16/30 | 16 x 0.25 | 0.032 | 0.81 | 0.111 | 2.82 | 1015, 1230 |
| **461626** | 16 | 1.32 | 26/30 | 26 x 0.25 | 0.032 | 0.81 | 0.124 | 3.15 | 1015, 1230 |
| **461419** | 14 | 2.07 | 19/0.0147 | 19 x 0.37 | 0.032 | 0.81 | 0.138 | 3.51 | 1015, 1230 |
| **461219** | 12 | 3.29 | 19/0.0185 | 19 x 0.47 | 0.032 | 0.81 | 0.157 | 3.99 | 1015, 1230 |
| **461265** | 12 | 3.29 | 65/0.010 | 65 x 0.25 | 0.031 | 0.79 | 0.153 | 3.89 | 1015, 1230 |
| **461019** | 10 | 5.26 | 19/0.0234 | 19 x 0.59 | 0.032 | 0.81 | 0.181 | 4.60 | 1015, 1230 |
| **460819** | 8 | 8.38 | 19/0.0295 | 19 x 0.75 | 0.047 | 1.19 | 0.242 | 6.15 | 1028, 1231 |
| **460619** | 6 | 13.32 | 19/0.0372 | 19 x 0.94 | 0.063 | 1.59 | 0.311 | 7.90 | 1283, 1232 |
| **460419** | 4 | 21.09 | 19/0.0469 | 19 x 1.19 | 0.063 | 1.59 | 0.360 | 9.14 | 1283, 1232 |
| **460219** | 2 | 33.63 | 19/0.0591 | 19 x 1.50 | 0.063 | 1.59 | 0.421 | 10.69 | 1283, 1232 |
| **460001** | 1/0 | 53.39 | 19/0.0745 | 19 x 1.89 | 0.078 | 1.98 | 0.529 | 13.44 | 1284, 1232 |

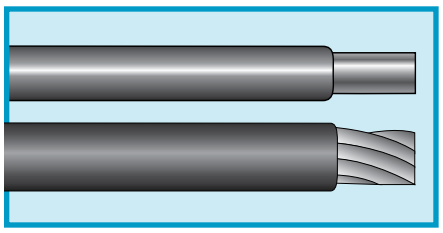
### Insulation Colors

| | | |
|---|---|---|
| White | Yellow | Slate |
| Black | Blue | Violet |
| Red | Brown | |
| Green | Orange | |

CA PROP 65 RoHS Compliant

# Hook-Up Wire

600 V, PVC



**UL AWM 1015, 1028, 1230, 1231, 1232, 1283, 1284 VW-1**
**UL MTW (22 to 4/0 AWG)**
**UL THW (6 to 1/0 AWG)**
**CSA AWM I A/B FT1 and TEW 105**

### Operating Temperature

- -20°C to +105°C (AWM, TEW)
- -20°C to +90°C (MTW)
- -20°C to +75°C (THW)
- -20°C to +60°C (TW)

### Materials

- Stranded or solid tinned copper conductor
- PVC insulation

### Availability

100 ft (30.5 m)
1000 ft (305 m)

| Part No. | Wire Size | | Stranding | | Insulation Thickness | | Nominal Diameter | | UL Style | Colors |
|---|---|---|---|---|---|---|---|---|---|---|
| | AWG | mm² | AWG | mm | Inch | mm | Inch | mm | | |
| **782607*** | 26 | 0.14 | 7/34 | 7 x 0.16 | 0.032 | 0.81 | 0.083 | 2.11 | 1015, 1230 | Z2, 0 - 9 |
| **782401*** | 24 | 0.20 | Solid | 1 x 0.51 | 0.032 | 0.81 | 0.084 | 2.13 | 1015, 1230 | Z2, 0 - 9 |
| **3070*** | 24 | 0.23 | 7/32 | 7 x 0.20 | 0.032 | 0.81 | 0.088 | 2.24 | 1015 | Z1, 1 - 10, 28 |
| **782201** | 22 | 0.32 | Solid | 1 x 0.64 | 0.032 | 0.81 | 0.089 | 2.26 | 1015, 1230 | Z2, 0 - 9 |
| **782207T** | 22 | 0.35 | 7/30 | 7 x 0.25 | 0.032 | 0.81 | 0.094 | 2.39 | 1015, 1230 | Z2, 0 - 9 |
| **3071** | 22 | 0.35 | 7/30 | 7 x 0.25 | 0.032 | 0.81 | 0.094 | 2.39 | 1015 | Z1, 1 - 10, 28, 29 |
| **782010T** | 20 | 0.51 | 10/30 | 10 x 0.25 | 0.032 | 0.81 | 0.101 | 2.57 | 1015, 1230 | Z2, 0 - 9 |
| **3073** | 20 | 0.51 | 10/30 | 10 x 0.25 | 0.032 | 0.81 | 0.101 | 2.57 | 1015 | Z1, 1 - 10, 28 |
| **782001** | 20 | 0.52 | Solid | 1 x 0.81 | 0.032 | 0.81 | 0.096 | 2.44 | 1015, 1230 | Z2, 0 - 9 |
| **781816T** | 18 | 0.81 | 16/30 | 16 x 0.25 | 0.032 | 0.81 | 0.111 | 2.82 | 1015, 1230 | Z2, 0 - 9 |
| **3075** | 18 | 0.81 | 16/30 | 16 x 0.25 | 0.032 | 0.81 | 0.111 | 2.82 | 1015 | Z1, 1 - 10, 28, 29 |
| **781801** | 18 | 0.82 | Solid | 1 x 1.02 | 0.032 | 0.81 | 0.104 | 2.64 | 1015, 1230 | Z2, 0 - 9 |
| **781601** | 16 | 1.31 | Solid | 1 x 1.29 | 0.032 | 0.81 | 0.115 | 2.92 | 1015, 1230 | Z2, 0 - 9 |
| **3077** | 16 | 1.32 | 26/30 | 26 x 0.25 | 0.032 | 0.81 | 0.124 | 3.15 | 1015 | Z1, 1 - 10, 28, 29 |
| **781401** | 14 | 2.08 | Solid | 1 x 1.63 | 0.032 | 0.81 | 0.128 | 3.25 | 1015, 1230 | Z2, 0 - 9 |
| **3079** | 14 | 2.08 | 41/30 | 41 x 0.25 | 0.032 | 0.81 | 0.138 | 3.51 | 1015 | Z1, 1 - 10, 28, 29 |
| **3080** | 12 | 3.29 | 65/30 | 65 x 0.25 | 0.032 | 0.81 | 0.157 | 3.99 | 1015 | Z1, 1 - 4 |
| **781201** | 12 | 3.31 | Solid | 1 x 2.06 | 0.032 | 0.81 | 0.145 | 3.68 | 1015, 1230 | Z2, 0 - 9 |
| **781001** | 10 | 5.26 | Solid | 1 x 2.59 | 0.032 | 0.81 | 0.166 | 4.22 | 1015, 1230 | Z2, 0 - 9 |
| **3081** | 10 | 5.32 | 105/30 | 105 x 0.25 | 0.032 | 0.81 | 0.184 | 4.67 | 1015 | Z1, 1 - 4 |
| **788133** | 8 | 8.61 | 133/29 | 133 x 0.29 | 0.047 | 1.19 | 0.263 | 6.68 | 1028, 1231 | Z2, 0 - 9 |
| **786133** | 6 | 13.57 | 133/27 | 133 x 0.36 | 0.063 | 1.60 | 0.336 | 8.53 | 1283, 1232 | Z2, 0 - 9 |
| **784133** | 4 | 21.55 | 133/25 | 133 x 0.45 | 0.063 | 1.60 | 0.395 | 10.03 | 1283, 1232 | Z2, 0 - 9 |
| **782665** | 2 | 33.72 | 665/30 | 665 x 0.25 | 0.063 | 1.60 | 0.461 | 11.71 | 1283, 1232 | Z2, 0 - 9 |
| **782133** | 2 | 34.45 | 133/23 | 133 x 0.57 | 0.063 | 1.60 | 0.465 | 11.81 | 1283, 1232 | Z2, 0 - 9 |
| **781259** | 1 | 41.96 | 259/25 | 259 x 0.45 | 0.082 | 2.08 | 0.540 | 13.72 | 1284, 1232 | Z2, 0 - 9 |
| **781836** | 1 | 42.39 | 836/30 | 836 x 0.25 | 0.082 | 2.08 | 0.547 | 13.89 | 1284, 1232 | Z2, 0 - 9 |
| **780001** | 1/0 | 52.98 | 1045/30 | 1045 x 0.25 | 0.082 | 2.08 | 0.592 | 15.04 | 1284, 1232 | Z2, 0 - 9 |
| **780002** | 2/0 | 67.43 | 1330/30 | 1330 x 0.25 | 0.082 | 2.08 | 0.647 | 16.43 | 1284, 1232 | Z2, 0 - 9 |
| **780003** | 3/0 | 84.47 | 1666/30 | 1666 x 0.25 | 0.082 | 2.08 | 0.768 | 19.51 | 1284, 1232 | Z2, 0 - 9 |
| **780004** | 4/0 | 106.93 | 2109/30 | 2109 x 0.25 | 0.082 | 2.08 | 0.754 | 19.15 | 1284, 1232 | Z2, 0 - 9 |

T indicates top coat conductors.
*Not MTW

### Insulation Colors Z1

| | | |
|---|---|---|
| 1 White | 5 Yellow | 9 Slate |
| 2 Black | 6 Blue | 10 Violet |
| 3 Red | 7 Brown | 28 Green/Yellow |
| 4 Green | 8 Orange | 29 Yellow/Green |

### Insulation Colors Z2

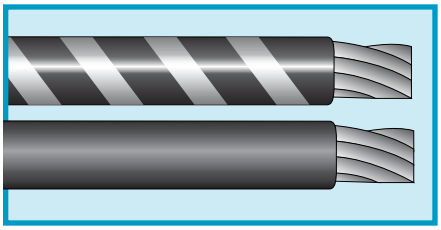
| | | |
|---|---|---|
| 0 Black | 4 Yellow | 8 Slate |
| 1 Brown | 5 Green | 9 White |
| 2 Red | 6 Blue | |
| 3 Orange | 7 Violet | |

These wires also available in 500 ft (152 m) put-ups.

CA PROP 65 RoHS Compliant

# Hook-Up Wire

600 V, PVC



**MIL-DTL-16878/1 (Type B)**
**MIL-W-76 Type LW**

## Operating Temperature

- -55°C to +105°C

## Materials

- Stranded or solid tinned copper conductor
- PVC insulation

## Availability

100 ft (30.5 m)
1000 ft (305 m)

| Part No. | Wire Size | | Stranding | | Insulation Thickness | | Nominal Diameter | | Colors |
|---|---|---|---|---|---|---|---|---|---|
| | AWG | $mm^2$ | AWG | mm | Inch | mm | Inch | mm | |
| **1850** | 32 | 0.03 | 7/40 | 7 x 0.08 | 0.010 | 0.25 | 0.029 | 0.74 | Z1, 1 - 6 |
| **1851*** | 30 | 0.06 | 7/38 | 7 x 0.10 | 0.010 | 0.25 | 0.032 | 0.81 | Z1, 1 - 6 |
| **1852*** | 28 | 0.09 | 7/36 | 7 x 0.12 | 0.010 | 0.25 | 0.035 | 0.89 | Z1, 1 - 10 |
| **1853*** | 26 | 0.14 | 7/34 | 7 x 0.16 | 0.010 | 0.25 | 0.039 | 0.99 | Z1, 1 - 19 |
| **172619** | 26 | 0.15 | 19/38 | 19 x 0.10 | 0.010 | 0.25 | 0.040 | 1.02 | Z2, 0 - 9 |
| **1854*** | 24 | 0.23 | 7/32 | 7 x 0.20 | 0.010 | 0.25 | 0.044 | 1.12 | Z1, 1 - 19 |
| **1854/19** | 24 | 0.24 | 19/36 | 19 x 0.13 | 0.010 | 0.25 | 0.045 | 1.14 | Z1, 1 - 19 |
| **1855** | 22 | 0.35 | 7/30 | 7 x 0.25 | 0.010 | 0.25 | 0.050 | 1.27 | Z1, 1 - 19 |
| **1855/19** | 22 | 0.38 | 19/34 | 19 x 0.16 | 0.010 | 0.25 | 0.052 | 1.32 | Z1, 1 - 19 |
| **1856*** | 20 | 0.56 | 7/28 | 7 x 0.32 | 0.010 | 0.25 | 0.058 | 1.47 | Z1, 1 - 19 |
| **1856/19** | 20 | 0.62 | 19/32 | 19 x 0.20 | 0.010 | 0.25 | 0.060 | 1.52 | Z1, 1 - 19 |
| **1857** | 18 | 0.90 | 7/26 | 7 x 0.40 | 0.010 | 0.25 | 0.068 | 1.73 | Z1, 1 - 19 |
| **1857/19** | 18 | 0.96 | 19/30 | 19 x 0.25 | 0.010 | 0.25 | 0.070 | 1.78 | Z1, 1 - 19 |
| **1858/19** | 16 | 1.23 | 19/29 | 19 x 0.29 | 0.010 | 0.25 | 0.076 | 1.93 | Z1, 1 - 19 |
| **1859/19** | 14 | 1.94 | 19/27 | 19 x 0.36 | 0.010 | 0.25 | 0.091 | 2.31 | Z1, 1 - 10 |

*Also meets MIL-W-76 Type LW.

### Insulation Colors Z1

| | | | | |
|---|---|---|---|---|
| 1 White | 5 Yellow | 9 Slate | 13 White/Green | 17 White/Orange |
| 2 Black | 6 Blue | 10 Violet | 14 White/Yellow | 18 White/Slate |
| 3 Red | 7 Brown | 11 White/Black | 15 White/Blue | 19 White/Violet |
| 4 Green | 8 Orange | 12 White/Red | 16 White/Brown | |

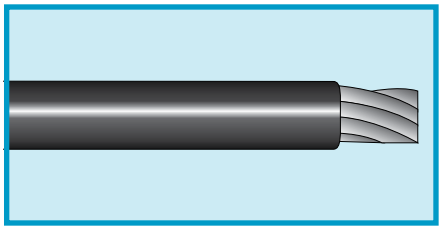
### Insulation Colors Z2

| | | |
|---|---|---|
| 0 Black | 4 Yellow | 8 Slate |
| 1 Brown | 5 Green | 9 White |
| 2 Red | 6 Blue | |
| 3 Orange | 7 Violet | |

CA PROP 65 RoHS Compliant

# Hook-Up Wire

600 V, PVC



## MIL-W-76 Type HW

### Operating Temperature

- -20°C to +80°C

### Materials

- Stranded tinned copper conductor
- PVC insulation

### Availability

100 ft (30.5 m)
1000 ft (305 m)

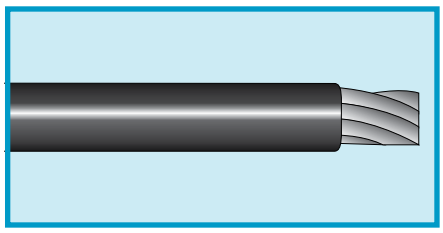
| Part No. | Wire Size | | Stranding | | Insulation Thickness | | Nominal Diameter | |
|---|---|---|---|---|---|---|---|---|
| | AWG | $mm^2$ | AWG | mm | Inch | mm | Inch | mm |
| **1579** | 14 | 2.08 | 41/30 | 41 x 0.25 | 0.045 | 1.14 | 0.164 | 4.17 |
| **1651** | 12 | 3.29 | 65/30 | 65 x 0.25 | 0.045 | 1.14 | 0.183 | 4.65 |
| **1653** | 10 | 5.32 | 105/30 | 105 x 0.25 | 0.045 | 1.14 | 0.210 | 5.33 |
| **1655** | 8 | 8.61 | 133/29 | 133 x 0.28 | 0.045 | 1.14 | 0.259 | 6.58 |

| Insulation Colors |
|---|
| White |
| Black |
| Red |

CA PROP 65 RoHS Compliant

# Hook-Up Wire

600 V, PVC



**MIL-DTL-16878/2 (Type C)**
**UL VW-1**

## Operating Temperature

- -55°C to +105°C

## Materials

- Stranded tinned copper conductor
- PVC insulation

## Availability

100 ft (30.5 m)
1000 ft (305 m)

| Part No. | Wire Size | | Stranding | | Insulation Thickness | | Nominal Diameter | |
|---|---|---|---|---|---|---|---|---|
| | AWG | $mm^2$ | AWG | mm | Inch | mm | Inch | mm |
| **202207** | 22 | 0.35 | 7/30 | 7 x 0.25 | 0.017 | 0.43 | 0.064 | 1.63 |
| **202007** | 20 | 0.56 | 7/28 | 7 x 0.32 | 0.017 | 0.43 | 0.072 | 1.83 |
| **201807** | 18 | 0.90 | 7/26 | 7 x 0.40 | 0.017 | 0.43 | 0.082 | 2.08 |
| **201819** | 18 | 0.96 | 19/30 | 19 x 0.25 | 0.017 | 0.43 | 0.084 | 2.13 |
| **201619** | 16 | 1.23 | 19/29 | 19 x 0.29 | 0.019 | 0.47 | 0.093 | 2.36 |
| **201419** | 14 | 1.94 | 19/27 | 19 x 0.36 | 0.019 | 0.47 | 0.108 | 2.74 |
| **201219** | 12 | 3.08 | 19/25 | 19 x 0.45 | 0.019 | 0.47 | 0.127 | 3.23 |

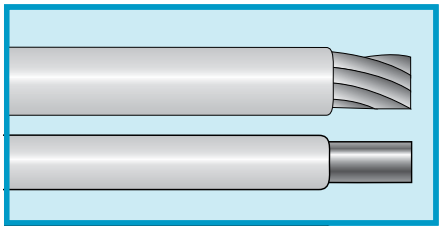
### Insulation Colors

| | | |
|---|---|---|
| White | Yellow | Slate |
| Black | Blue | Violet |
| Red | Brown | |
| Green | Orange | |

CA PROP 65 RoHS Compliant

# Hook-Up Wire

## 600 V, PVC/Nylon



### UL THHN, THWN, TFN, TFFN

#### Operating Temperature

- -40°C to +90°C (THHN, TFN, TFFN)
- -40°C to +75°C (THWN)

#### Materials

- Stranded or solid bare copper conductor
- PVC/nylon insulation

#### Availability

100 ft (30.5 m)
500 ft (152 m)
1000 ft (305 m)
Bulk, cut to length

| Part No. | Wire Size | | Stranding | | PVC Insulation Thickness | | Nominal Diameter | | UL Type |
|---|---|---|---|---|---|---|---|---|---|
| | AWG | mm² | AWG | mm | Inch | mm | Inch | mm | |
| **541816** | 18 | 0.81 | 16/30 | 16 x 0.25 | 0.015 | 0.38 | 0.086 | 2.18 | TFFN |
| **541801** | 18 | 0.82 | Solid | 1 x 1.02 | 0.015 | 0.38 | 0.079 | 2.01 | TFN |
| **541626** | 16 | 1.32 | 26/30 | 26 x 0.25 | 0.015 | 0.38 | 0.099 | 2.51 | TFFN |
| **541419** | 14 | 2.07 | 19/0.0147 | 19 x 0.37 | 0.015 | 0.38 | 0.113 | 2.87 | THHN, THWN |
| **541401** | 14 | 2.08 | Solid | 1 x 1.63 | 0.015 | 0.38 | 0.103 | 2.62 | THHN, THWN |
| **541219** | 12 | 3.29 | 19/0.0185 | 19 x 0.47 | 0.015 | 0.38 | 0.132 | 3.35 | THHN, THWN |
| **541201** | 12 | 3.31 | Solid | 1 x 2.06 | 0.015 | 0.38 | 0.120 | 3.05 | THHN, THWN |
| **541019** | 10 | 5.26 | 19/0.0234 | 19 x 0.59 | 0.020 | 0.51 | 0.166 | 4.22 | THHN, THWN |
| **541001** | 10 | 5.26 | Solid | 1 x 2.59 | 0.020 | 0.51 | 0.141 | 3.58 | THHN, THWN |
| **540819** | 8 | 8.38 | 19/0.0295 | 19 x 0.75 | 0.030 | 0.76 | 0.219 | 5.56 | THHN, THWN |
| **540619** | 6 | 13.32 | 19/0.0372 | 19 x 0.94 | 0.030 | 0.76 | 0.257 | 6.53 | THHN, THWN |
| **540419** | 4 | 21.09 | 19/0.0469 | 19 x 1.19 | 0.040 | 1.02 | 0.329 | 8.36 | THHN, THWN |
| **540219** | 2 | 33.63 | 19/0.0591 | 19 x 1.50 | 0.040 | 1.02 | 0.390 | 9.91 | THHN, THWN |
| **540001** | 1/0 | 53.39 | 19/0.0745 | 19 x 1.89 | 0.050 | 1.27 | 0.488 | 12.40 | THHN, THWN |

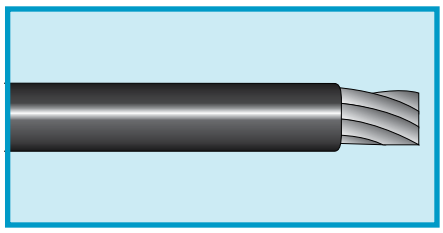
#### Insulation Colors

| | | |
|---|---|---|
| White | Yellow | Slate |
| Black | Blue | Violet |
| Red | Brown | |
| Green | Orange | |

CA PROP 65 RoHS Compliant

# Hook-Up Wire

600 V, PVC/Nylon



**MIL-DTL-16878/17 (Type B/N)**

## Operating Temperature

- -55°C to +105°C

## Materials

- Stranded tinned copper conductor
- PVC/nylon insulation

## Availability

100 ft (30.5 m)
500 ft (152 m)
1000 ft (305 m)
Bulk, cut to length

| Part No. | Wire Size | | Stranding | | PVC Insulation Thickness | | Nominal Diameter | |
|---|---|---|---|---|---|---|---|---|
| | AWG | mm² | AWG | mm | Inch | mm | Inch | mm |
| **182607** | 26 | 0.14 | 7/34 | 7 x 0.16 | 0.010 | 0.25 | 0.045 | 1.14 |
| **182407** | 24 | 0.23 | 7/32 | 7 x 0.20 | 0.010 | 0.25 | 0.050 | 1.27 |
| **182419** | 24 | 0.24 | 19/36 | 19 x 0.13 | 0.010 | 0.25 | 0.051 | 1.30 |
| **182219** | 22 | 0.38 | 19/34 | 19 x 0.16 | 0.010 | 0.25 | 0.058 | 1.47 |
| **182019** | 20 | 0.62 | 19/32 | 19 x 0.20 | 0.010 | 0.25 | 0.066 | 1.68 |
| **181807** | 18 | 0.90 | 7/26 | 7 x 0.40 | 0.010 | 0.25 | 0.074 | 1.88 |
| **181819** | 18 | 0.96 | 19/30 | 19 x 0.25 | 0.010 | 0.25 | 0.076 | 1.93 |
| **181619** | 16 | 1.23 | 19/29 | 19 x 0.29 | 0.010 | 0.25 | 0.082 | 2.08 |
| **181419** | 14 | 1.94 | 19/27 | 19 x 0.36 | 0.010 | 0.25 | 0.097 | 2.46 |

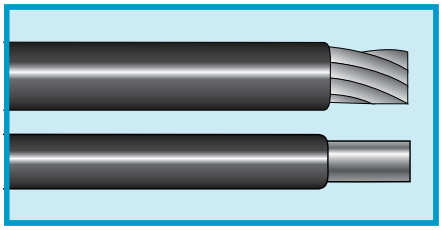
### Insulation Colors

| | | |
|---|---|---|
| White | Yellow | Slate |
| Black | Blue | Violet |
| Red | Brown | |
| Green | Orange | |

CA PROP 65 RoHS Compliant

# Hook-Up Wire

1000 V, PVC



## MIL-W-76 Type MWP

### Operating Temperature

- -55°C to +90°C

### Materials

- Stranded or solid tinned copper conductor
- PVC insulation

### Availability

100 ft (30.5 m)
1000 ft (305 m)
Bulk, cut to length

| Part No. | Wire Size | | Stranding | | Insulation Thickness | | Nominal Diameter | |
|---|---|---|---|---|---|---|---|---|
| | AWG | $mm^2$ | AWG | mm | Inch | mm | Inch | mm |
| **302407** | 24 | 0.23 | 7/32 | 7 x 0.20 | 0.016 | 0.41 | 0.056 | 1.42 |
| **302207** | 22 | 0.35 | 7/30 | 7 x 0.25 | 0.016 | 0.41 | 0.064 | 1.63 |
| **302201** | 22 | 0.32 | Solid | 1 x 0.64 | 0.016 | 0.41 | 0.057 | 1.45 |
| **302010** | 20 | 0.51 | 10/30 | 10 x 0.25 | 0.016 | 0.41 | 0.069 | 1.75 |
| **301816** | 18 | 0.81 | 16/30 | 16 x 0.25 | 0.016 | 0.41 | 0.079 | 2.01 |
| **301626** | 16 | 1.32 | 26/30 | 26 x 0.25 | 0.016 | 0.41 | 0.092 | 2.34 |
| **301619** | 16 | 1.23 | 19/29 | 19 x 0.29 | 0.016 | 0.41 | 0.088 | 2.24 |
| **301441** | 14 | 2.08 | 41/30 | 41 x 0.25 | 0.016 | 0.41 | 0.106 | 2.69 |

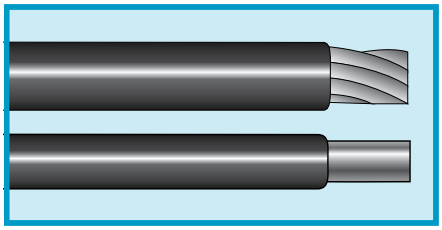
### Insulation Colors

| | | |
|---|---|---|
| White | Yellow | Slate |
| Black | Blue | Violet |
| Red | Brown | |
| Green | Orange | |

CA PROP 65 RoHS Compliant

# Hook-Up Wire

1000 V, PVC



## MIL-W-76 B Type MW

### Operating Temperature

- -40°C to +80°C

### Materials

- Stranded or solid tinned copper conductor
- PVC insulation

### Availability

100 ft (30.5 m)
1000 ft (305 m)

| Part No. | Wire Size | | Stranding | | Insulation Thickness | | Nominal Diameter | | Colors* |
|---|---|---|---|---|---|---|---|---|---|
| | AWG | mm² | AWG | mm | Inch | mm | Inch | mm | |
| **1550** | 24 | 0.23 | 7/32 | 7 x 0.20 | 0.016 | 0.41 | 0.056 | 1.42 | 1 - 19 |
| **1561/24** | 24 | 0.20 | Solid | 1 x 0.51 | 0.016 | 0.41 | 0.052 | 1.32 | 1 - 6 |
| **1551** | 22 | 0.35 | 7/30 | 7 x 0.25 | 0.016 | 0.41 | 0.062 | 1.57 | 1 - 19 |
| **1561** | 22 | 0.32 | Solid | 1 x 0.64 | 0.016 | 0.41 | 0.057 | 1.45 | 1 - 6 |
| **1553** | 20 | 0.51 | 10/30 | 10 x 0.25 | 0.016 | 0.41 | 0.069 | 1.75 | 1 - 19 |
| **1563** | 20 | 0.52 | Solid | 1 x 0.81 | 0.016 | 0.41 | 0.064 | 1.63 | 1 - 6 |
| **1555** | 18 | 0.81 | 16/30 | 16 x 0.25 | 0.016 | 0.41 | 0.079 | 2.01 | 1 - 19 |
| **1565** | 18 | 0.82 | Solid | 1 x 1.02 | 0.016 | 0.41 | 0.072 | 1.83 | 1 - 6 |
| **1557** | 16 | 1.32 | 26/30 | 26 x 0.25 | 0.016 | 0.41 | 0.092 | 2.34 | 1 - 19 |
| **1559** | 14 | 2.08 | 41/30 | 41 x 0.25 | 0.016 | 0.41 | 0.106 | 2.69 | 1 – 10 |
| **1560** | 12 | 3.29 | 65/30 | 65 x 0.25 | 0.016 | 0.41 | 0.125 | 3.18 | 1 - 10 |

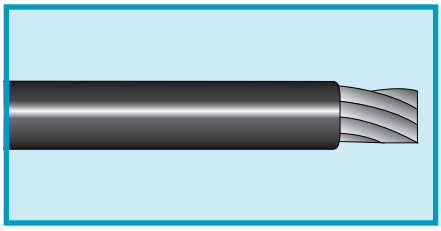
### Insulation Colors

| | | | | |
|---|---|---|---|---|
| 1 White | 5 Yellow | 9 Slate | 13 White/ Green | 17 White/ Orange |
| 2 Black | 6 Blue | 10 Violet | 14 White/ Yellow | 18 White/ Slate |
| 3 Red | 7 Brown | 11 White/ Black | 15 White/Blue | 19 White/ Violet |
| 4 Green | 8 Orange | 12 White/Red | 16 White/ Brown | |

CA PROP 65 RoHS Compliant

# Hook-Up Wire

## 600/150 V, Irradiated PVC Soldering Iron Resistant



**MIL-DTL-16878/1 (Type B) (600 V)**
**UL AWM 1429 (150 V)**
**CSA AWM I A/B FT1 (150 V)**

### Operating Temperature

- -55°C to +105°C (MIL)
- -55°C to +80°C (AWM, CSA)

### Materials

- Stranded tinned copper conductor
- Irradiated PVC insulation

### Availability

100 ft (30.5 m)
1000 ft (305 m)

| Part No. | Wire Size | | Stranding | | Insulation Thickness | | Nominal Diameter | |
|---|---|---|---|---|---|---|---|---|
| | AWG | $mm^2$ | AWG | mm | Inch | mm | Inch | mm |
| **7053** | 26 | 0.14 | 7/34 | 7 x 0.16 | 0.010 | 0.25 | 0.039 | 0.99 |
| **7054** | 24 | 0.23 | 7/32 | 7 x 0.20 | 0.010 | 0.25 | 0.044 | 1.12 |
| **7054/19** | 24 | 0.24 | 19/36 | 19 x 0.13 | 0.010 | 0.25 | 0.045 | 1.14 |
| **7055** | 22 | 0.35 | 7/30 | 7 x 0.25 | 0.010 | 0.25 | 0.050 | 1.27 |
| **7055/19** | 22 | 0.38 | 19/34 | 19 x 0.16 | 0.010 | 0.25 | 0.052 | 1.32 |
| **7056** | 20 | 0.56 | 7/28 | 7 x 0.32 | 0.010 | 0.25 | 0.058 | 1.47 |
| **7056/19** | 20 | 0.62 | 19/32 | 19 x 0.20 | 0.010 | 0.25 | 0.060 | 1.52 |
| **7057** | 18 | 0.90 | 7/26 | 7 x 0.40 | 0.010 | 0.25 | 0.068 | 1.73 |
| **7057/19** | 18 | 0.96 | 19/30 | 19 x 0.25 | 0.010 | 0.25 | 0.070 | 1.78 |
| **7058/19** | 16 | 1.32 | 19/0.0117 | 19 x 0.30 | 0.010 | 0.25 | 0.076 | 1.93 |

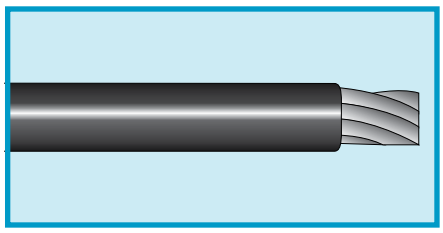
### Insulation Colors

| | | |
|---|---|---|
| White | Yellow | Slate |
| Black | Blue | Violet |
| Red | Brown | |
| Green | Orange | |

CA PROP 65 RoHS Compliant

# Hook-Up Wire

## 1000/300 V, Irradiated PVC Soldering Iron Resistant



**MIL-DTL-16878/2 (Type C) (1000 V)**
**UL AWM 1430 (300 V)**
**CSA REW XLPVC FT1 (300 V)**

### Operating Temperature

- -55°C to +105°C

### Materials

- Stranded tinned copper conductor
- Irradiated PVC insulation

### Availability

100 ft (30.5 m)
1000 ft (305 m)

| Part No. | Wire Size | | Stranding | | Insulation Thickness | | Nominal Diameter | | Colors |
|---|---|---|---|---|---|---|---|---|---|
| | AWG | mm² | AWG | mm | Inch | mm | Inch | mm | |
| **7130** | 24 | 0.23 | 7/32 | 7 x 0.20 | 0.016 | 0.41 | 0.056 | 1.42 | 1 - 10, 29 |
| **7131** | 22 | 0.35 | 7/30 | 7 x 0.25 | 0.016 | 0.41 | 0.062 | 1.57 | 1 - 10 |
| **7132** | 20 | 0.56 | 7/ 28 | 7 x 0.32 | 0.016 | 0.41 | 0.070 | 1.78 | 1 - 10 |
| **7133** | 18 | 0.89 | 7/26 | 7 x 0.40 | 0.016 | 0.41 | 0.080 | 2.03 | 1 - 10, 29 |
| **7134** | 16 | 1.32 | 19/0.0117 | 19 x 0.30 | 0.016 | 0.41 | 0.088 | 2.24 | 1 - 10, 29 |
| **7035*** | 14 | 2.07 | 19/0.0147 | 19 x 0.37 | 0.016 | 0.41 | 0.103 | 2.62 | 1 - 10, 29 |
| **7036*** | 12 | 3.29 | 19/0.0185 | 19 x 0.47 | 0.016 | 0.41 | 0.122 | 3.10 | 1 - 10, 29 |

*UL AWM 3317

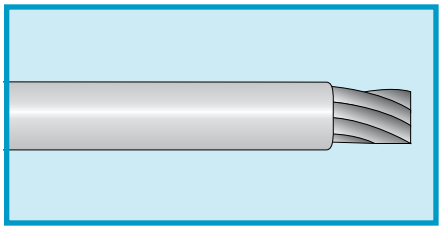
### Insulation Colors

| | | |
|---|---|---|
| 1 White | 5 Yellow | 9 Slate |
| 2 Black | 6 Blue | 10 Violet |
| 3 Red | 7 Brown | 29 Yellow/Green |
| 4 Green | 8 Orange | |

CA PROP 65 RoHS Compliant

# Hook-Up Wire

## 3000/600 V, XLPE



**MIL-DTL-16878/4 (Type D) (3000 V)**
**UL AWM 3271 (600 V) VW-1**
**CSA CL 1251 XLPE (600 V)**

### Operating Temperature

- -55°C to +105°C (MIL)
- -55°C to +125°C (UL, CSA)

### Materials

- Stranded tinned copper conductor
- Cross-linked polyolefin insulation

### Availability

100 ft (30.5 m)
1000 ft (305 m)

| Part No. | Wire Size | | Stranding | | Insulation Thickness | | Nominal Diameter | |
|---|---|---|---|---|---|---|---|---|
| | AWG | mm² | AWG | mm | Inch | mm | Inch | mm |
| **7044** | 18 | 0.81 | 16/30 | 16 x 0.25 | 0.032 | 0.81 | 0.111 | 2.82 |
| **7045** | 16 | 1.32 | 26/30 | 26 x 0.25 | 0.032 | 0.81 | 0.119 | 3.02 |
| **7046** | 14 | 2.08 | 41/30 | 41 x 0.25 | 0.032 | 0.81 | 0.138 | 3.51 |
| **7047** | 12 | 3.29 | 65/30 | 65 x 0.25 | 0.032 | 0.81 | 0.155 | 3.94 |
| **7048** | 10 | 5.32 | 105/30 | 105 x 0.25 | 0.032 | 0.81 | 0.184 | 4.67 |

| Insulation Colors |
|---|
| White |
| Black |
| Red |

## 1000/300 V, XLPE

**MIL-DTL-16878/2 (Type C) (1000 V)**
**UL AWM 3266 (300 V) VW-1**
**CSA CL 1252 XLPE (300 V)**

### Operating Temperature

- -55°C to +105°C (MIL)
- -55°C to +125°C (UL, CSA)

### Materials

- Stranded tinned copper conductor
- Cross-linked polyolefin insulation

### Availability

100 ft (30.5 m)
1000 ft (305 m)

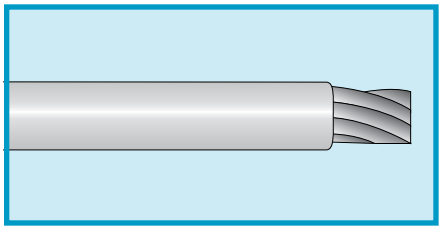
| Part No. | Wire Size | | Stranding | | Insulation Thickness | | Nominal Diameter | |
|---|---|---|---|---|---|---|---|---|
| | AWG | mm² | AWG | mm | Inch | mm | Inch | mm |
| **7024** | 22 | 0.38 | 19/34 | 19 x 0.16 | 0.016 | 0.41 | 0.064 | 1.63 |
| **7025** | 20 | 0.62 | 19/32 | 19 x 0.20 | 0.016 | 0.41 | 0.072 | 1.83 |
| **7026** | 18 | 0.96 | 19/30 | 19 x 0.25 | 0.016 | 0.41 | 0.080 | 2.03 |

| Insulation Colors |
|---|
| White |
| Black |
| Red |

CA PROP 65 RoHS Compliant

# Hook-Up Wire

600/150 V, XLPE



**MIL-DTL-16878/1 (Type B) (600 V)**
**UL AWM 3265 (150 V) VW-1**
**CSA AWM I A/B FT1 (150 V)**

## Operating Temperature

- -55°C to +105°C (MIL)
- -55°C to +125°C (UL, CSA)

## Materials

- Stranded tinned copper conductor
- Cross-linked polyolefin insulation

## Availability

100 ft (30.5 m)
1000 ft (305 m)

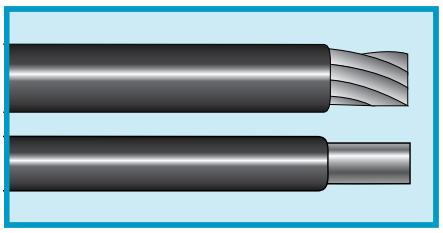
| Part No. | Wire Size | | Stranding | | Insulation Thickness | | Nominal Diameter | |
|---|---|---|---|---|---|---|---|---|
| | AWG | $mm^2$ | AWG | mm | Inch | mm | Inch | mm |
| **7012** | 22 | 0.38 | 19/34 | 19 x 0.16 | 0.011 | 0.28 | 0.054 | 1.37 |
| **7013** | 20 | 0.62 | 19/32 | 19 x 0.20 | 0.011 | 0.28 | 0.06 | 1.52 |
| **7014** | 18 | 0.96 | 19/30 | 19 x 0.25 | 0.011 | 0.28 | 0.070 | 1.78 |

## Insulation Colors

| |
|---|
| White |
| Black |

# Hook-Up Wire

600 V, XLPE



**UL AWM 3173, 3195, 3196**
**UL SIS**
**CSA AWM I A/B**
**CSA CL 1251 XLPE**

## Availability

100 ft (30.5 m)
500 ft (152 m)
1000 ft (305 m)

## Operating Temperature

- -20°C to +125°C

## Materials

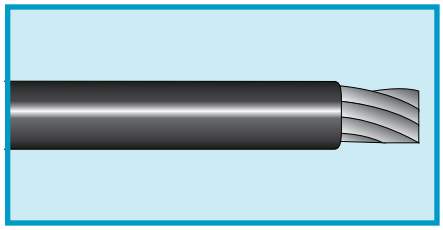
- Stranded or solid tinned copper conductor
- Slate cross-linked polyethylene insulation

| Part No. | Wire Size | | Stranding | | Insulation Thickness | | Nominal Diameter | | UL Style |
|---|---|---|---|---|---|---|---|---|---|
| | AWG | mm² | AWG | mm | Inch | mm | Inch | mm | |
| **M4030** | 18 | 0.81 | 16/30 | 16 x 0.25 | 0.031 | 0.79 | 0.110 | 2.79 | 3173 |
| **M4010** | 18 | 0.90 | 7/26 | 7 x 0.48 | 0.031 | 0.79 | 0.112 | 2.84 | 3173 |
| **M4001** | 18 | 0.82 | Solid | 1 x 1.02 | 0.031 | 0.79 | 0.105 | 2.67 | 3173 |
| **M4011** | 16 | 1.43 | 7/24 | 7 x 0.51 | 0.031 | 0.79 | 0.123 | 3.12 | 3173 |
| **M4002** | 16 | 1.31 | Solid | 1 x 1.29 | 0.031 | 0.79 | 0.115 | 2.92 | 3173 |
| **M4012** | 14 | 2.29 | 7/22 | 7 x 0.64 | 0.031 | 0.79 | 0.140 | 3.56 | SIS, 3173 |
| **M4003** | 14 | 2.08 | Solid | 1 x 1.63 | 0.031 | 0.79 | 0.130 | 3.30 | SIS, 3173 |
| **M4013** | 12 | 3.29 | 19/0.0185 | 19 x 0.47 | 0.031 | 0.79 | 0.160 | 4.06 | SIS, 3173 |
| **M4004** | 12 | 3.31 | Solid | 1 x 2.06 | 0.031 | 0.79 | 0.150 | 3.81 | SIS, 3173 |
| **M4014** | 10 | 5.28 | 19/0.0234 | 19 x 0.59 | 0.031 | 0.79 | 0.180 | 4.57 | SIS, 3173 |
| **M4005** | 10 | 5.26 | Solid | 1 x 2.59 | 0.031 | 0.79 | 0.170 | 4.32 | SIS, 3173 |
| **M4035** | 8 | 8.63 | 133/29 | 133 x 0.29 | 0.047 | 1.19 | 0.270 | 6.86 | SIS, 3195 |
| **M4015** | 8 | 8.38 | 19/0.0295 | 19 x 0.75 | 0.047 | 1.19 | 0.250 | 6.35 | SIS, 3195 |
| **M4036** | 6 | 13.6 | 133/27 | 133 x 0.36 | 0.062 | 1.57 | 0.340 | 8.64 | SIS, 3196 |
| **M4016** | 6 | 13.3 | 19/0.0372 | 19 x 0.94 | 0.062 | 1.57 | 0.320 | 8.13 | SIS, 3196 |
| **M4037** | 4 | 21.6 | 133/25 | 133 x 0.45 | 0.062 | 1.57 | 0.400 | 10.16 | SIS, 3196 |

CA PROP 65 RoHS Compliant

# Hook-Up Wire

600 V, XLPE



**UL AWM 3173**
**UL SIS**
**CSA AWM I A/B FT2**
**CSA CL1251 XLPE**

## Operating Temperature

- -40°C to +125°C (AWM)
- -40°C to +150°C (CSA CL)
- -40°C to +90°C (SIS)

## Materials

- Stranded tinned copper conductor
- Cross-linked polyethylene insulation

## Availability

500 ft (152 m)
1000 ft (305 m)
Bulk, cut to length

| Part No. | Wire Size | | Stranding | | Insulation Thickness | | Nominal Diameter | |
|---|---|---|---|---|---|---|---|---|
| | AWG | $mm^2$ | AWG | mm | Inch | mm | Inch | mm |
| **752010** | 20 | 0.51 | 10/30 | 10 x 0.25 | 0.031 | 0.79 | 0.099 | 2.51 |
| **751816** | 18 | 0.81 | 16/30 | 16 x 0.25 | 0.031 | 0.79 | 0.109 | 2.77 |
| **751626** | 16 | 1.32 | 26/30 | 26 x 0.25 | 0.031 | 0.79 | 0.122 | 3.10 |
| **751441*** | 14 | 2.08 | 41/30 | 41 x 0.25 | 0.031 | 0.79 | 0.136 | 3.45 |
| **751265*** | 12 | 3.29 | 65/30 | 65 x 0.25 | 0.031 | 0.79 | 0.155 | 3.94 |
| **751000*** | 10 | 5.32 | 105/30 | 105 x 0.25 | 0.031 | 0.79 | 0.180 | 4.57 |
| **758133**** | 8 | 8.63 | 133/29 | 133 x 0.29 | 0.047 | 1.19 | 0.263 | 6.68 |

*UL SIS.
**UL AWM 3195 only.

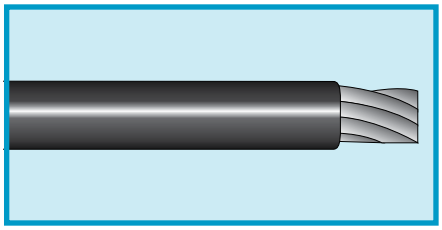
### Insulation Colors

| | | |
|---|---|---|
| White | Yellow | Slate |
| Black | Blue | Violet |
| Red | Brown | |
| Green | Orange | |

RoHS Compliant

# Hook-Up Wire

50 V, XLPE



## SAE J1128 Type GXL

### Operating Temperature

- -40°C to +125°C

### Materials

- Stranded bare copper conductor
- Cross-linked polyethylene insulation

### Availability

500 ft (152 m)
1000 ft (305 m)
Bulk, cut to length

| Part No. | Wire Size | | Stranding | | Insulation Thickness | | Nominal Diameter | |
|---|---|---|---|---|---|---|---|---|
| | AWG | mm² | AWG | mm | Inch | mm | Inch | mm |
| **631816** | 18 | 0.81 | 16/30 | 16 x 0.25 | 0.023 | 0.58 | 0.093 | 2.36 |
| **631619** | 16 | 1.23 | 19/29 | 19 x 0.29 | 0.023 | 0.58 | 0.102 | 2.59 |
| **631419** | 14 | 1.94 | 19/27 | 19 x 0.36 | 0.023 | 0.58 | 0.113 | 2.87 |

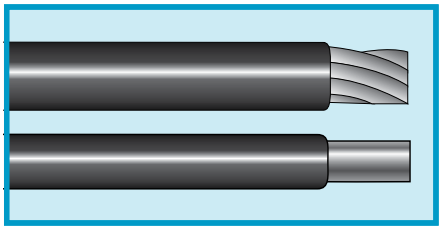
### Insulation Colors

| | | |
|---|---|---|
| White | Yellow | Slate |
| Black | Blue | Violet |
| Red | Brown | |
| Green | Orange | |

CA PROP 65 RoHS Compliant

# Hook-Up Wire

250 V, PTFE



**MIL-DTL-16878/6 (Type ET)**
**UL VW-1**
**NEMA HP3**

## Operating Temperature

- -60°C to +200°C

## Materials

- Stranded or solid silver-plated copper conductor
- PTFE insulation

## Availability

**100 ft (30.5 m)**
**1000 ft (305 m)***
*May contain multiple lengths

| Part No. | Wire Size | | Stranding | | Insulation Thickness | | Nominal Diameter | | NEMA HP3 Type | Colors |
|---|---|---|---|---|---|---|---|---|---|---|
| | AWG | mm² | AWG | mm | Inch | mm | Inch | mm | | |
| **33201** | 32 | 0.03 | Solid | 1 x 0.20 | 0.006 | 0.15 | 0.019 | 0.48 | — | Z2 |
| **33219** | 32 | 0.04 | 19/44 | 19 x 0.05 | 0.006 | 0.15 | 0.022 | 0.56 | — | Z2 |
| **2840/7** | 32 | 0.03 | 7/40 | 7 x 0.08 | 0.006 | 0.15 | 0.022 | 0.56 | ETXBAB | Z1 |
| **2841/7** | 30 | 0.06 | 7/38 | 7 x 0.10 | 0.006 | 0.15 | 0.024 | 0.61 | ETXBBB | Z1 |
| **2841/1** | 30 | 0.05 | Solid | 1 x 0.25 | 0.006 | 0.15 | 0.022 | 0.56 | ETXBBA | Z1 |
| **2842/7** | 28 | 0.09 | 7/36 | 7 x 0.12 | 0.006 | 0.15 | 0.027 | 0.69 | ETXBCB | Z1 |
| **2842/19** | 28 | 0.09 | 19/40 | 19 x 0.08 | 0.006 | 0.15 | 0.027 | 0.69 | ETXBCE | Z1 |
| **2842/1** | 28 | 0.08 | Solid | 1 x 0.32 | 0.006 | 0.15 | 0.025 | 0.64 | ETXBCA | Z1 |
| **2843/7** | 26 | 0.14 | 7/34 | 7 x 0.16 | 0.006 | 0.15 | 0.031 | 0.79 | ETXBDB | Z1 |
| **2843/19** | 26 | 0.15 | 19/38 | 19 x 0.10 | 0.006 | 0.15 | 0.031 | 0.79 | ETXBDE | Z1 |
| **2843/1** | 26 | 0.13 | Solid | 1 x 0.40 | 0.006 | 0.15 | 0.028 | 0.71 | ETXBDA | Z1 |
| **2844/7** | 24 | 0.23 | 7/32 | 7 x 0.20 | 0.006 | 0.15 | 0.036 | 0.91 | ETXBEB | Z1 |
| **2844/19** | 24 | 0.24 | 19/36 | 19 x 0.13 | 0.006 | 0.15 | 0.036 | 0.91 | ETXBEE | Z1 |
| **2845/7** | 22 | 0.35 | 7/30 | 7 x 0.25 | 0.006 | 0.15 | 0.042 | 1.07 | ETXBFB | Z1 |
| **2845/19** | 22 | 0.38 | 19/34 | 19 x 0.16 | 0.005 | 0.13 | 0.042 | 1.07 | ETXBFE | Z1 |
| **32007** | 20 | 0.56 | 7/28 | 7 x 0.32 | 0.006 | 0.15 | 0.050 | 1.27 | ETXBGB | Z2 |
| **32019** | 20 | 0.62 | 19/32 | 19 x 0.20 | 0.006 | 0.15 | 0.052 | 1.32 | ETXBGE | Z2 |

### Insulation Colors Z1

| | | |
|---|---|---|
| 1 White | 5 Yellow | 9 Slate |
| 2 Black | 6 Blue | 10 Violet |
| 3 Red | 7 Brown | |
| 4 Green | 8 Orange | |

### Insulation Colors Z2

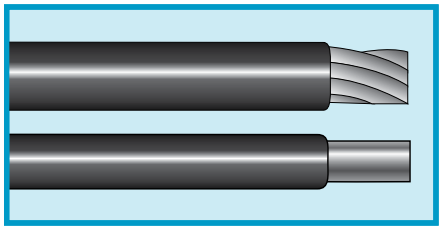
| | | |
|---|---|---|
| 0 Black | 4 Yellow | 8 Slate |
| 1 Brown | 5 Green | 9 White |
| 2 Red | 6 Blue | |
| 3 Orange | 7 Violet | |

These wires also available in 500 ft (152 m) put-ups.

CA PROP 65 RoHS Compliant

# Hook-Up Wire

600 V, PTFE



**MIL-DTL-16878/4 (Type E)**
**UL VW-1**
**NEMA HP3**

## Operating Temperature

- -60°C to +200°C

## Materials

- Stranded or solid silver-plated copper conductor
- PTFE insulation

## Availability

100 ft (30.5 m)
1000 ft (305 m)*
*May contain multiple lengths

| Part No. | Wire Size | | Stranding | | Insulation Thickness | | Nominal Diameter | | NEMA HP-3 |
|---|---|---|---|---|---|---|---|---|---|
| | AWG | $mm^2$ | AWG | mm | Inch | mm | Inch | mm | |
| **13207** | 32 | 0.03 | 7/40 | 7 x 0.08 | 0.010 | 0.25 | 0.029 | 0.74 | EXBAB |
| **13001** | 30 | 0.05 | Solid | 1 x 0.25 | 0.010 | 0.25 | 0.030 | 0.76 | EXBBA |
| **12819** | 28 | 0.09 | 19/40 | 19 x 0.07 | 0.010 | 0.25 | 0.036 | 0.91 | — |
| **12819UL*** | 28 | 0.09 | 19/40 | 19 x 0.07 | 0.010 | 0.25 | 0.036 | 0.91 | — |
| **11807** | 18 | 0.90 | 7/26 | 7 x 0.40 | 0.010 | 0.25 | 0.068 | 1.73 | EXBHB |

*UL AWM 1212 and AWM 1213 and -55°C to +105°C temperature range.

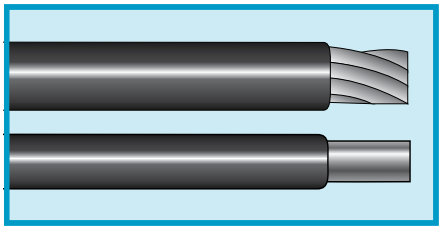
### Insulation Colors

| | | |
|---|---|---|
| White | Yellow | Slate |
| Black | Blue | Violet |
| Red | Brown | |
| Green | Orange | |

RoHS Compliant

# Hook-Up Wire

## 600 V, PTFE



**MIL-DTL-16878/4 (Type E) (600 V)**
**UL AWM 1213***
**NEMA HP3**

### Operating Temperature

- -60°C to +200°C (MIL)
- -60°C to +105°C (UL)

### Materials

- Stranded or solid silver-plated copper conductor
- PTFE insulation

### Availability

100 ft (30.5 m)
1000 ft (305 m)†
†May contain multiple lengths

| Part No. | Wire Size | | Stranding | | Insulation Thickness | | Nominal Diameter | | NEMA HP3 Type |
|---|---|---|---|---|---|---|---|---|---|
| | AWG | mm² | AWG | mm | Inch | mm | Inch | mm | |
| **5851** | 30 | 0.06 | 7/38 | 7 x 0.10 | 0.010 | 0.25 | 0.032 | 0.81 | EXBBB |
| **5852** | 28 | 0.09 | 7/36 | 7 x 0.13 | 0.010 | 0.25 | 0.035 | 0.89 | EXBCB |
| **5853** | 26 | 0.14 | 7/34 | 7 x 0.16 | 0.010 | 0.25 | 0.039 | 0.99 | EXBDB |
| **5853/19** | 26 | 0.15 | 19/38 | 19 x 0.10 | 0.010 | 0.25 | 0.039 | 0.99 | EXBDE |
| **2853/1** | 26 | 0.13 | Solid | 1 x 0.40 | 0.010 | 0.25 | 0.036 | 0.91 | EXBDA |
| **5854** | 24 | 0.24 | 19/36 | 19 x 0.13 | 0.010 | 0.25 | 0.044 | 1.12 | EXBEE |
| **5854/7** | 24 | 0.23 | 7/32 | 7 x 0.20 | 0.010 | 0.25 | 0.044 | 1.12 | EXBEB |
| **2854/1** | 24 | 0.20 | Solid | 1 x 0.51 | 0.010 | 0.25 | 0.040 | 1.02 | EXBEA |
| **5855** | 22 | 0.38 | 19/34 | 19 x 0.16 | 0.010 | 0.25 | 0.050 | 1.27 | EXBFE |
| **5855/7** | 22 | 0.35 | 7/30 | 7 x 0.25 | 0.010 | 0.25 | 0.050 | 1.27 | EXBFB |
| **2855/1** | 22 | 0.32 | Solid | 1 x 0.64 | 0.010 | 0.25 | 0.045 | 1.14 | EXBFA |
| **5856** | 20 | 0.62 | 19/32 | 19 x 0.20 | 0.010 | 0.25 | 0.058 | 1.47 | EXBGE |
| **5856/7** | 20 | 0.56 | 7/28 | 7 x 0.32 | 0.010 | 0.25 | 0.058 | 1.47 | EXBGB |
| **2856/1*** ** | 20 | 0.52 | Solid | 1 x 0.81 | 0.010 | 0.25 | 0.052 | 1.32 | EXBGA |
| **5857** | 18 | 0.96 | 19/30 | 19 x 0.25 | 0.010 | 0.25 | 0.069 | 1.75 | EXBHE |
| **2857/1*** ** | 18 | 0.82 | Solid | 1 x 1.02 | 0.011 | 0.27 | 0.061 | 1.55 | EXBHA |
| **5858** | 16 | 1.23 | 19/29 | 19 x 0.29 | 0.012 | 0.30 | 0.080 | 2.03 | EXBJE |
| **5859†** | 14 | 1.94 | 19/27 | 19 x 0.36 | 0.012 | 0.30 | 0.095 | 2.41 | EXBKE |
| **5859/12†** | 12 | 3.08 | 19/25 | 19 x 0.45 | 0.012 | 0.30 | 0.114 | 2.90 | EXBLE |
| **5859/10†** | 10 | 4.74 | 37/26 | 37 x 0.40 | 0.012 | 0.30 | 0.134 | 3.40 | EXBMG |

*Voltage rating not specified.
***White, black, red only.
†White only, not UL AWM 1213.

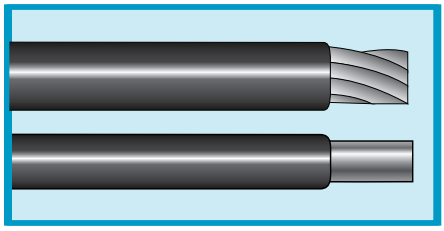
### Insulation Colors

| | | |
|---|---|---|
| White | Yellow | Slate |
| Black | Blue | Violet |
| Red | Brown | |
| Green | Orange | |

CA PROP 65 RoHS Compliant

# Hook-Up Wire

## 1000/300 V, PTFE



**MIL-DTL-16878/5 (TYPE EE) (1000V)**
**UL AWM 1180 (300V)**
**NEMA HP3**

### Operating Temperature

- -60°C to +200°C

### Materials

- Stranded or solid silver-plated copper conductor
- PTFE insulation

### Availability

100 ft (30.5 m)
1000 ft (305 m)*
*May contain multiple lengths

| Part No. | Wire Size | | Stranding | | Insulation Thickness | | Nominal Diameter | | NEMA HP3 Type |
|---|---|---|---|---|---|---|---|---|---|
| | AWG | $mm^2$ | AWG | mm | Inch | mm | Inch | mm | |
| **5874** | 24 | 0.24 | 19/36 | 19 x 0.13 | 0.015 | 0.37 | 0.054 | 1.37 | EEXBEE |
| **5875** | 22 | 0.38 | 19/34 | 19 x 0.16 | 0.014 | 0.36 | 0.060 | 1.52 | EEXBFE |
| **5876** | 20 | 0.62 | 19/32 | 19 x 0.20 | 0.014 | 0.36 | 0.068 | 1.73 | EEXBGE |
| **5877** | 18 | 0.96 | 19/30 | 19 x 0.25 | 0.015 | 0.37 | 0.079 | 2.01 | EEXBHE |
| **5878** | 16 | 1.23 | 19/29 | 19 x 0.29 | 0.016 | 0.41 | 0.089 | 2.26 | EEXBJE |
| **5879** | 14 | 1.94 | 19/27 | 19 x 0.36 | 0.017 | 0.43 | 0.106 | 2.69 | EEXBKE |
| **5879/10** | 10 | 4.74 | 37/26 | 37 x 0.40 | 0.017 | 0.43 | 0.145 | 3.68 | EEXBMG |
| **5879/12** | 12 | 3.08 | 19/25 | 19 x 0.45 | 0.017 | 0.43 | 0.125 | 3.18 | EEXBLE |
| **5879/8*** | 8 | 8.61 | 133/29 | 133 x 0.29 | 0.020 | 0.51 | 0.209 | 5.31 | EEXBNL |

*Not UL AWM 1180.

### Insulation Colors

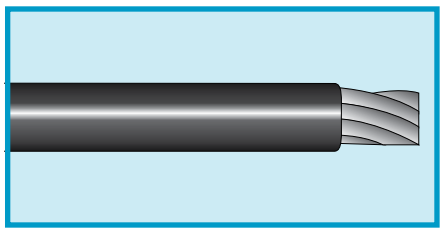
| | | |
|---|---|---|
| White | Yellow | Slate |
| Black | Blue | Violet |
| Red | Brown | |
| Green | Orange | |

Parts 5878, 5879, 5879/8, 5879/10, 5879/12: white only.

CA PROP 65 RoHS Compliant

# Hook-Up Wire

1000 V, PTFE



| Part No. | Wire Size | | Stranding | | Insulation Thickness | | Nominal Diameter | | NEMA HP-3 |
|---|---|---|---|---|---|---|---|---|---|
| | AWG | mm² | AWG | mm | Inch | mm | Inch | mm | |
| **22807** | 28 | 0.09 | 7/36 | 7 x 0.13 | 0.015 | 0.38 | 0.045 | 1.14 | EEXBCB |
| **22407** | 24 | 0.23 | 7/32 | 7 x 0.20 | 0.015 | 0.38 | 0.054 | 1.37 | EEXBEB |
| **22207** | 22 | 0.35 | 7/30 | 7 x 0.25 | 0.014 | 0.36 | 0.058 | 1.47 | EEXBFB |
| **22007** | 20 | 0.56 | 7/28 | 7 x 0.32 | 0.015 | 0.38 | 0.068 | 1.73 | EXBGB |

**MIL-DTL-16878/5 (Type EE)**
**UL VW-1**
**NEMA HP3**

## Operating Temperature

- -60°C to +200°C

## Materials

- Stranded silver-plated copper conductor
- PTFE insulation

## Availability

100 ft (30.5 m)
500 ft (152 m)
1000 ft (305 m)*
*May contain multiple lengths

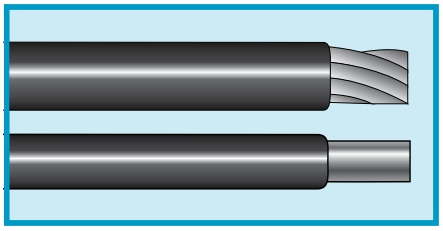
## Insulation Colors

| | | |
|---|---|---|
| White | Yellow | Slate |
| Black | Blue | Violet |
| Red | Brown | |
| Green | Orange | |

RoHS Compliant

# Hook-Up Wire

## 600 V, ETFE or PTFE



**SAE AS22759/11**
**(MIL-DTL-22759/11)**
**SAE AS22759/16**
**(MIL-DTL-22759/16)**

### Operating Temperature

- -55°C to +200°C (PTFE)
- -55°C to +150°C (ETFE)

### Materials

- Stranded silver-plated copper conductors (SAE AS22759/11)
- Stranded tinned copper conductor (SAE AS22759/16)
- ETFE or PTFE insulation

### Availability

100 ft (30.5 m)
500 ft (152 m)
1000 ft (305 m)*
*May contain multiple lengths

**PTFE, SAE AS22759/11, -55°C to +200°C, Silver-Plated Copper Conductors**

| Part No. | Wire Size | | Stranding | | Insulation Thickness | | Nominal Diameter | |
|---|---|---|---|---|---|---|---|---|
| | AWG | mm² | AWG | mm | Inch | mm | Inch | mm |
| **AT261938** | 26 | 0.15 | 19/38 | 19 x 0.10 | 0.010 | 0.25 | 0.038 | 0.97 |
| **AT241936** | 24 | 0.24 | 19/36 | 19 x 0.13 | 0.009 | 0.23 | 0.043 | 1.09 |
| **AT221934** | 22 | 0.38 | 19/34 | 19 x 0.16 | 0.009 | 0.23 | 0.049 | 1.24 |
| **AT201932** | 20 | 0.62 | 19/32 | 19 x 0.20 | 0.011 | 0.28 | 0.058 | 1.47 |
| **AT181930** | 18 | 0.96 | 19/30 | 19 x 0.25 | 0.010 | 0.25 | 0.068 | 1.73 |
| **AT161929** | 16 | 1.23 | 19/29 | 19 x 0.29 | 0.010 | 0.25 | 0.075 | 1.90 |
| **AT141927** | 14 | 1.94 | 19/27 | 19 x 0.36 | 0.011 | 0.27 | 0.090 | 2.29 |
| **AT121925** | 12 | 3.08 | 19/25 | 19 x 0.45 | 0.013 | 0.32 | 0.111 | 2.82 |
| **AT103726** | 10 | 4.74 | 37/26 | 37 x 0.40 | 0.015 | 0.38 | 0.139 | 3.53 |
| **AT813329** | 8 | 8.61 | 133/29 | 133 x 0.29 | 0.019 | 0.48 | 0.202 | 5.13 |

**ETFE, SAE AS22759/16, -55°C to +150°C, Tinned Copper Conductors**

| Part No. | Wire Size | | Stranding | | Insulation Thickness | | Nominal Diameter | |
|---|---|---|---|---|---|---|---|---|
| | AWG | mm² | AWG | mm | Inch | mm | Inch | mm |
| **AZ241936** | 24 | 0.24 | 19/36 | 19 x 0.13 | 0.011 | 0.27 | 0.045 | 1.14 |
| **AZ221934** | 22 | 0.38 | 19/34 | 19 x 0.16 | 0.011 | 0.28 | 0.052 | 1.32 |
| **AZ201932** | 20 | 0.62 | 19/32 | 19 x 0.20 | 0.011 | 0.28 | 0.060 | 1.52 |
| **AZ181930** | 18 | 0.96 | 19/30 | 19 x 0.25 | 0.012 | 0.29 | 0.071 | 1.80 |
| **AZ161929** | 16 | 1.23 | 19/29 | 19 x 0.29 | 0.013 | 0.33 | 0.079 | 2.01 |
| **AZ141927** | 14 | 1.94 | 19/27 | 19 x 0.36 | 0.013 | 0.33 | 0.093 | 2.36 |
| **AZ123728** | 12 | 2.97 | 37/28 | 37 x 0.32 | 0.014 | 0.34 | 0.114 | 2.90 |
| **AZ103726** | 10 | 4.74 | 37/26 | 37 x 0.40 | 0.015 | 0.38 | 0.139 | 3.53 |
| **AZ813329** | 8 | 8.63 | 133/29 | 133 x 0.29 | 0.018 | 0.47 | 0.199 | 5.05 |
| **AZ413325** | 4 | 21.6 | 133/25 | 133 x 0.45 | 0.026 | 0.66 | 0.312 | 7.92 |

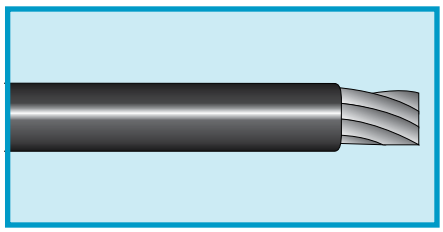
**Insulation Colors**

| | | |
|---|---|---|
| White | Yellow | Slate |
| Black | Blue | Violet |
| Red | Brown | |
| Green | Orange | |

CA PROP 65 RoHS Compliant

# Hook-Up Wire

## Wire Wrap, PVDF or ETFE



**UL 1422, 1423, 1516, 1523**
**VW-1**

### Operating Temperature

- -40°C to +125°C (PVDF)
- -70°C to +150°C (ETFE)
- +105°C (UL)

### Materials

- Silver-plated solid copper conductors
- PVDF or ETFE insulation

### Availability

100 ft (30.5 m) (ETFE)
1000 ft (305 m) (PVDF or ETFE)

| Part No. | Wire Size | | Insulation Thickness | | Nominal Diameter | | UL Style |
|---|---|---|---|---|---|---|---|
| | AWG | mm² | Inch | mm | Inch | mm | |
| **5951** | 30 | 0.05 | 0.005 | 0.11 | 0.019 | 0.51 | 1423 |
| **5952** | 28 | 0.08 | 0.006 | 0.14 | 0.024 | 0.61 | 1422 |
| **5953** | 26 | 0.13 | 0.006 | 0.14 | 0.027 | 0.69 | 1422 |
| **5954** | 24 | 0.20 | 0.005 | 0.11 | 0.030 | 0.76 | 1423 |

| Part No. | Wire Size | | Insulation Thickness | | Nominal Diameter | | UL Style |
|---|---|---|---|---|---|---|---|
| | AWG | mm² | Inch | mm | Inch | mm | |
| **1805** | 30 | 0.05 | 0.005 | 0.11 | 0.020 | 0.51 | 1516 |
| **1806*** | 28 | 0.08 | 0.006 | 0.14 | 0.024 | 0.61 | 1523 |
| **1807** | 26 | 0.13 | 0.006 | 0.14 | 0.027 | 0.69 | 1523 |
| **1808**** | 24 | 0.20 | 0.005 | 0.11 | 0.030 | 0.76 | 1516 |

*Not available in orange.
**Not available in violet or orange.

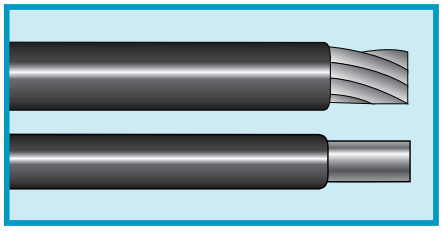
### Insulation Colors

| | | |
|---|---|---|
| White | Yellow | Slate |
| Black | Blue | Violet |
| Red | Brown | |
| Green | Orange | |

CA PROP 65 RoHS Compliant

# Hook-Up Wire

## Test Lead Wire, EPR Rubber



| Part No. | Wire Size | | Stranding | | Insulation Thickness | | Nominal Diameter | | Breakdown Voltage (RMS) | Working Voltage (RMS) |
|---|---|---|---|---|---|---|---|---|---|---|
| | AWG | mm² | AWG | mm | Inch | mm | Inch | mm | | |
| **1632** | 20 | 0.52 | 41/36 | 41 x 0.13 | 0.040 | 1.02 | 0.118 | 3.00 | 6000 | 1500 |
| **1635** | 20 | 0.52 | 41/36 | 41 x 0.13 | 0.047 | 1.19 | 0.132 | 3.35 | 12,000 | 3000 |
| **1636** | 18 | 0.83 | 65/36 | 65 x 0.13 | 0.045 | 1.14 | 0.137 | 3.48 | 20,000 | 5000 |

### Operating Temperature

- -30°C to +90°C

### Voltage Rating

- See table

### Materials

- Stranded tinned copper conductors
- EPR rubber insulation

### Availability

100 ft (30.5 m)
500 ft (152 m)
1000 ft (305 m)

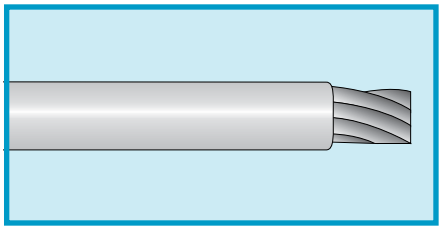
### Insulation Colors

| |
|---|
| Black |
| Red |

RoHS Compliant

# Hook-Up Wire

## 600 V, Silicone Rubber



**UL AWM 3212, 3213, 3214**
**CSA AWM I A/B FT2**

### Operating Temperature

- -40°C to +150°C

### Materials

- Stranded tinned copper conductor
- White silicone rubber insulation

### Availability

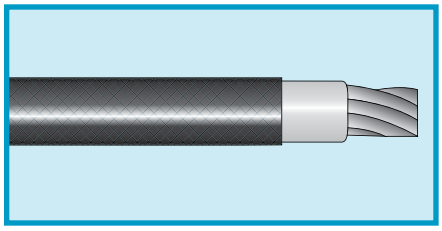
100 ft (30.5 m)
500 ft (152 m)
1000 ft (305 m)
Bulk, cut to length

| Part No. | Wire Size | | Stranding | | Insulation Thickness | | Nominal Diameter | | UL AWM |
|---|---|---|---|---|---|---|---|---|---|
| | AWG | $mm^2$ | AWG | mm | Inch | mm | Inch | mm | |
| **392207** | 22 | 0.35 | 7/30 | 7 x 0.25 | 0.047 | 1.19 | 0.124 | 3.15 | 3212 |
| **392010** | 20 | 0.51 | 10/30 | 10 x 0.25 | 0.047 | 1.19 | 0.131 | 3.33 | 3212 |
| **391816** | 18 | 0.81 | 16/30 | 16 x 0.25 | 0.047 | 1.19 | 0.141 | 3.58 | 3212 |
| **391626** | 16 | 1.32 | 26/30 | 26 x 0.25 | 0.047 | 1.19 | 0.154 | 3.91 | 3212 |
| **391441** | 14 | 2.08 | 41/30 | 41 x 0.25 | 0.047 | 1.19 | 0.168 | 4.27 | 3212 |
| **391265** | 12 | 3.29 | 65/30 | 65 x 0.25 | 0.047 | 1.19 | 0.187 | 4.75 | 3212 |
| **391000** | 10 | 5.32 | 105/30 | 105 x 0.25 | 0.047 | 1.19 | 0.212 | 5.38 | 3212 |
| **398133** | 8 | 8.61 | 133/29 | 133 x 0.29 | 0.063 | 1.60 | 0.295 | 7.49 | 3213 |
| **396133** | 6 | 13.57 | 133/27 | 133 x 0.36 | 0.063 | 1.60 | 0.339 | 8.61 | 3213 |
| **394133** | 4 | 21.55 | 133/25 | 133 x 0.45 | 0.063 | 1.60 | 0.395 | 10.03 | 3213 |
| **392259** | 2 | 33.15 | 259/26 | 259 x 0.40 | 0.063 | 1.60 | 0.460 | 11.68 | 3213 |
| **391259** | 1 | 41.96 | 259/25 | 259 x 0.45 | 0.078 | 1.98 | 0.532 | 13.51 | 3214 |
| **390001** | 1/0 | 53.10 | 259/24 | 259 x 0.51 | 0.078 | 1.98 | 0.578 | 14.68 | 3214 |
| **390002** | 2/0 | 67.43 | 1330/30 | 1330 x 0.25 | 0.078 | 1.98 | 0.639 | 16.23 | 3214 |
| **390004** | 4/0 | 106.82 | 2107/30 | 2107 x 0.25 | 0.078 | 1.98 | 0.837 | 21.26 | 3214 |

CA PROP 65 RoHS Compliant

# Hook-Up Wire

## High-Temperature Appliance Wire
## 600 V, Silicone Rubber, Glass Braid



**UL AWM 3070, 3071, 3074, 3075**
**UL SF-2, SFF-2**
**CSA SEW-2, SEWF-2**

### Operating Temperature

- -40°C to +200°C (UL SF-2, CSA SEW-2)
- -40°C to +150°C (UL SFF-2, CSA SEWF-2)

### Materials

- Stranded tinned copper conductor
- Silicon rubber insulation
- Glass braid jacket

### Availability

100 ft (30.5 m)
500 ft (152 m)
1000 ft (305 m)
Bulk, cut to length

| Part No. | Wire Size | | Stranding | | Insulation Thickness | | Nominal Diameter | | Approval | |
|---|---|---|---|---|---|---|---|---|---|---|
| | AWG | mm² | AWG | mm | Inch | mm | Inch | mm | UL | CSA |
| **M4101** | 18 | 0.82 | 7/0.0152 | 7 x 0.39 | 0.032 | 0.81 | 0.124 | 3.15 | 3071, SF-2 | SEW-2 |
| **M4110** | 18 | 0.81 | 16/30 | 16 x 0.25 | 0.032 | 0.81 | 0.130 | 3.30 | 3070, SFF-2 | SEWF-2 |
| **M4102** | 16 | 1.31 | 7/0.0192 | 7 x 0.49 | 0.032 | 0.81 | 0.136 | 3.45 | 3071, SF-2 | SEW-2 |
| **M4111** | 16 | 1.32 | 26/30 | 26 x 0.25 | 0.032 | 0.81 | 0.140 | 3.56 | 3070, SFF-2 | SEWF-2 |
| **M4103** | 14 | 2.08 | 7/0.0242 | 7 x 0.61 | 0.032 | 0.81 | 0.152 | 3.86 | 3071, SF-2 | SEW-2 |
| **M4112** | 14 | 2.08 | 41/30 | 41 x 0.25 | 0.032 | 0.81 | 0.160 | 4.06 | 3070, SFF-2 | SEWF-2 |
| **M4104** | 12 | 3.08 | 19/25 | 19 x 0.45 | 0.032 | 0.81 | 0.166 | 4.22 | 3074, SF-2 | SEW-2 |
| **M4113** | 12 | 3.29 | 65/30 | 65 x 0.25 | 0.032 | 0.81 | 0.180 | 4.57 | 3070, SFF-2 | SEWF-2 |
| **M4105** | 10 | 4.92 | 19/23 | 19 x 0.57 | 0.048 | 1.22 | 0.221 | 5.61 | 3075, SF-2 | SEW-2 |

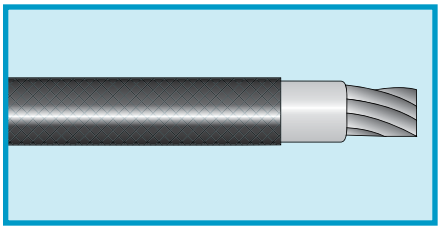
### Insulation Colors

| |
|---|
| White |
| Black |

CA PROP 65 RoHS Compliant

# Hook-Up Wire

## High-Temperature Type SRML Motor Lead
## 600 V, Silicone Rubber



**UL AWM 3101, 3231, 3278**
**CSA SEW-2, SEWF-2**

### Operating Temperature

- -40°C to +200°C (AWM 3231, SEW-2)
- -40°C to +150°C (AWM 3101, 3278, SEWF-2)

### Materials

- Stranded tinned copper conductor
- Silicon rubber insulation
- Black or white glass braid jacket

### Availability

100 ft (30.5 m)
500 ft (152 m)
1000 ft (305 m)
Bulk, cut to length

| Part No. | Wire Size | | Stranding | | Insulation Thickness | | Nominal Diameter | | UL AWM Style | CSA Type |
|---|---|---|---|---|---|---|---|---|---|---|
| | AWG | mm2 | AWG | mm | Inch | mm | Inch | mm | | |
| **M4114** | 10 | 5.32 | 105/30 | 105 x 0.25 | 0.047 | 1.19 | 0.230 | 5.84 | 3101 | SEWF-2 |
| **M4115** | 8 | 8.29 | 133/.0111 | 133 x 0.28 | 0.062 | 1.57 | 0.305 | 7.75 | 3278 | SEWF-2 |
| **M4116** | 6 | 13.6 | 133/27 | 133 x 0.36 | 0.062 | 1.57 | 0.345 | 8.76 | 3278 | SEWF-2 |
| **M4117** | 4 | 21.1 | 133/.0177 | 133 x 0.45 | 0.062 | 1.57 | 0.400 | 10.16 | 3231 | SEW-2 |
| **M4118** | 2 | 33.5 | 133/.0223 | 133 x 0.57 | 0.062 | 1.57 | 0.470 | 11.94 | 3231 | SEW-2 |
| **M4120** | 1/0 | 53.5 | 259/.0202 | 259 x 0.51 | 0.085 | 2.16 | 0.605 | 15.37 | 3231 | SEW-2 |
| **M4121** | 2/0 | 68.8 | 259/.0229 | 259 x 0.58 | 0.085 | 2.16 | 0.660 | 16.76 | 3231 | SEW-2 |
| **M4122** | 3/0 | 85.3 | 259/.0255 | 259 x 0.65 | 0.085 | 2.16 | 0.715 | 18.16 | 3231 | SEW-2 |
| **M4123** | 4/0 | 107 | 259/.0286 | 259 x 0.73 | 0.085 | 2.16 | 0.785 | 19.94 | 3231 | SEW-2 |

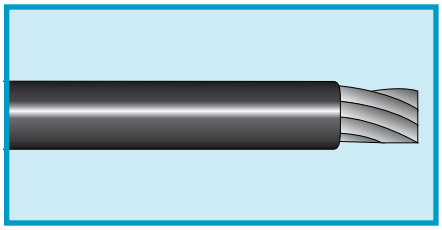
### Insulation Colors

White
Black

CA PROP 65 RoHS Compliant

# Hook-Up Wire

## High Voltage, Silicone Rubber



### UL AWM 3239

#### Operating Temperature

- -40°C to +150°C

#### Materials

- Stranded tinned copper conductor
- Silicone rubber insulation

#### Availability

100 ft (30.5 m)
500 ft (152 m)
1000 ft (305 m)

UL 3239

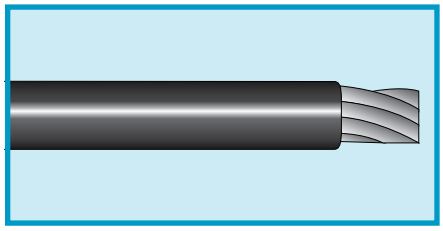
| Part No. | Wire Size | | Stranding | | Insulation Thickness | | Nominal Diameter | | Voltage |
|---|---|---|---|---|---|---|---|---|---|
| | AWG | mm² | AWG | mm | Inch | mm | Inch | mm | |
| **392297** | 22 | 0.35 | 7/30 | 7 x 0.25 | 0.097 | 2.46 | 0.224 | 5.69 | 40 kV |
| **392275** | 22 | 0.35 | 7/30 | 7 x 0.25 | 0.075 | 1.90 | 0.180 | 4.57 | 30 kV |
| **392262** | 22 | 0.35 | 7/30 | 7 x 0.25 | 0.062 | 1.57 | 0.154 | 3.91 | 25 kV |
| **392250** | 22 | 0.35 | 7/30 | 7 x 0.25 | 0.050 | 1.27 | 0.131 | 3.33 | 20 kV |
| **392245** | 22 | 0.35 | 7/30 | 7 x 0.25 | 0.045 | 1.14 | 0.120 | 3.05 | 15 kV |
| **392240** | 22 | 0.35 | 7/30 | 7 x 0.25 | 0.040 | 1.02 | 0.11 | 2.79 | 10 kV |
| **392097** | 20 | 0.51 | 10/30 | 10 x 0.25 | 0.097 | 2.46 | 0.231 | 5.87 | 40 kV |
| **392075** | 20 | 0.51 | 10/30 | 10 x 0.25 | 0.075 | 1.90 | 0.187 | 4.75 | 30 kV |
| **392062** | 20 | 0.51 | 10/30 | 10 x 0.25 | 0.062 | 1.57 | 0.161 | 4.09 | 25 kV |
| **392050** | 20 | 0.51 | 10/30 | 10 x 0.25 | 0.050 | 1.27 | 0.137 | 3.48 | 20 kV |
| **392045** | 20 | 0.51 | 10/30 | 10 x 0.25 | 0.045 | 1.14 | 0.127 | 3.23 | 15 kV |
| **392040** | 20 | 0.51 | 10/30 | 10 x 0.25 | 0.040 | 1.02 | 0.117 | 2.97 | 10 kV |
| **391897** | 18 | 0.81 | 16/30 | 16 x 0.25 | 0.097 | 2.46 | 0.241 | 6.12 | 40 kV |
| **391875** | 18 | 0.81 | 16/30 | 16 x 0.25 | 0.075 | 1.90 | 0.197 | 5.00 | 30 kV |
| **391862** | 18 | 0.81 | 16/30 | 16 x 0.25 | 0.062 | 1.57 | 0.171 | 4.34 | 25 kV |
| **391850** | 18 | 0.81 | 16/30 | 16 x 0.25 | 0.050 | 1.27 | 0.147 | 3.73 | 20 kV |
| **391845** | 18 | 0.81 | 16/30 | 16 x 0.25 | 0.045 | 1.14 | 0.137 | 3.48 | 15 kV |
| **391840** | 18 | 0.81 | 16/30 | 16 x 0.25 | 0.040 | 1.02 | 0.127 | 3.23 | 10 kV |
| **391699** | 16 | 1.32 | 26/30 | 26 x 0.25 | 0.150 | 3.81 | 0.360 | 9.14 | 50 kV |
| **391697** | 16 | 1.32 | 26/30 | 26 x 0.25 | 0.097 | 2.46 | 0.254 | 6.45 | 40 kV |
| **391675** | 16 | 1.32 | 26/30 | 26 x 0.25 | 0.075 | 1.90 | 0.210 | 5.33 | 30 kV |
| **391662** | 16 | 1.32 | 26/30 | 26 x 0.25 | 0.062 | 1.57 | 0.184 | 4.67 | 25 kV |
| **391650** | 16 | 1.32 | 26/30 | 26 x 0.25 | 0.050 | 1.27 | 0.160 | 4.06 | 20 kV |
| **391645** | 16 | 1.32 | 26/30 | 26 x 0.25 | 0.045 | 1.14 | 0.150 | 3.81 | 15 kV |
| **391640** | 16 | 1.32 | 26/30 | 26 x 0.25 | 0.040 | 1.02 | 0.140 | 3.56 | 10 kV |
| **391499** | 14 | 2.08 | 41/30 | 41 x 0.25 | 0.150 | 3.81 | 0.374 | 9.50 | 50 kV |
| **391497** | 14 | 2.08 | 41/30 | 41 x 0.25 | 0.097 | 2.46 | 0.268 | 6.81 | 40 kV |
| **391475** | 14 | 2.08 | 41/30 | 41 x 0.25 | 0.075 | 1.90 | 0.224 | 5.69 | 30 kV |
| **391462** | 14 | 2.08 | 41/30 | 41 x 0.25 | 0.062 | 1.57 | 0.198 | 5.03 | 25 kV |
| **391450** | 14 | 2.08 | 41/30 | 41 x 0.25 | 0.050 | 1.27 | 0.174 | 4.42 | 20 kV |
| **391445** | 14 | 2.08 | 41/30 | 41 x 0.25 | 0.045 | 1.14 | 0.164 | 4.17 | 15 kV |
| **391440** | 14 | 2.08 | 41/30 | 41 x 0.25 | 0.040 | 1.02 | 0.154 | 3.91 | 10 kV |

| White | Black | Red |
|---|---|---|

UL LISTED CA PROP 65 RoHS Compliant

# Hook-Up Wire

## High Voltage, Silicone Rubber



### UL AWM 3239

#### Operating Temperature

- -40°C to +150°C

#### Materials

- Stranded tinned copper conductor
- Silicone rubber insulation

#### Availability

100 ft (30.5 m)
500 ft (152 m)
1000 ft (305 m)

**UL 3239**

| Part No. | Wire Size | | Stranding | | Insulation Thickness | | Nominal Diameter | | Voltage |
|---|---|---|---|---|---|---|---|---|---|
| | AWG | mm² | AWG | mm | Inch | mm | Inch | mm | |
| **391297** | 12 | 3.29 | 65/30 | 65 x 0.25 | 0.097 | 2.46 | 0.287 | 7.29 | 40 kV |
| **391275** | 12 | 3.29 | 65/30 | 65 x 0.25 | 0.075 | 1.90 | 0.243 | 6.17 | 30 kV |
| **391262** | 12 | 3.29 | 65/30 | 65 x 0.25 | 0.062 | 1.57 | 0.217 | 5.51 | 25 kV |
| **391250** | 12 | 3.29 | 65/30 | 65 x 0.25 | 0.050 | 1.27 | 0.193 | 4.90 | 20 kV |
| **391245** | 12 | 3.29 | 65/30 | 65 x 0.25 | 0.045 | 1.14 | 0.183 | 4.65 | 15 kV |
| **391099** | 10 | 5.32 | 105/30 | 105 x 0.25 | 0.150 | 3.81 | 0.418 | 10.62 | 50 kV |
| **391097** | 10 | 5.32 | 105/30 | 105 x 0.25 | 0.097 | 2.46 | 0.312 | 7.92 | 40 kV |
| **391045** | 10 | 5.32 | 105/30 | 105 x 0.25 | 0.045 | 1.14 | 0.208 | 5.28 | 15 kV |
| **391040** | 10 | 5.32 | 105/30 | 105 x 0.25 | 0.040 | 1.02 | 0.198 | 5.03 | 10 kV |
| **390897** | 8 | 8.61 | 133/29 | 133 x 0.28 | 0.097 | 2.46 | 0.363 | 9.22 | 40 kV |
| **390862*** | 8 | 8.61 | 133/29 | 133 x 0.28 | 0.062 | 1.57 | 0.293 | 7.44 | 25 kV |
| **390845** | 8 | 8.61 | 133/29 | 133 x 0.28 | 0.045 | 1.14 | 0.259 | 6.58 | 15 kV |
| **390662*** | 6 | 13.57 | 133/27 | 133 x 0.36 | 0.062 | 1.57 | 0.337 | 8.56 | 25 kV |
| **390645** | 6 | 13.57 | 133/27 | 133 x 0.36 | 0.045 | 1.14 | 0.303 | 7.70 | 15 kV |
| **390462*** | 4 | 21.55 | 133/25 | 133 x 0.45 | 0.062 | 1.57 | 0.393 | 9.98 | 25 kV |
| **390262*** | 2 | 34.45 | 259/26 | 259 x 0.40 | 0.062 | 1.57 | 0.463 | 11.76 | 25 kV |

*Not UL Recognized.

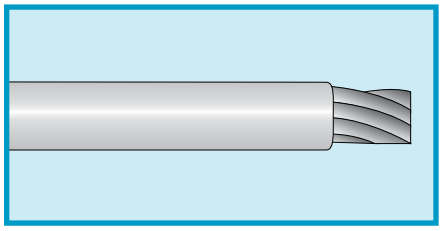
**Insulation Colors**

| White | Black | Red |
|---|---|---|

UL LISTED CA PROP 65 RoHS Compliant

# Hook-Up Wire

## High Voltage, Silicone Rubber



**UL VW-1**

### Operating Temperature

- -40°C to +200°C

### Materials

- Stranded silver-plated copper conductor
- White silicone rubber insulation

### Availability

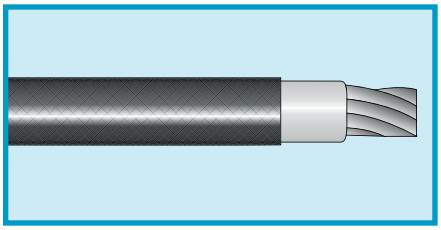
100 ft (30.5 m)
500 ft (152 m)
1000 ft (305 m)
Bulk, cut to length

| Part No. | Wire Size | | Stranding | | Insulation Thickness | | Nominal Diameter | | Voltage |
|---|---|---|---|---|---|---|---|---|---|
| | AWG | mm² | AWG | mm | Inch | mm | Inch | mm | |
| **39X2220** | 22 | 0.35 | 7/30 | 7 x 0.25 | 0.050 | 1.27 | 0.130 | 3.30 | 20 kV |
| **39X2215** | 22 | 0.35 | 7/30 | 7 x 0.25 | 0.040 | 1.02 | 0.110 | 2.79 | 15 kV |
| **39X2205** | 22 | 0.35 | 7/30 | 7 x 0.25 | 0.020 | 0.51 | 0.070 | 1.78 | 5 kV |
| **39X2025** | 20 | 0.62 | 19/32 | 19 x 0.20 | 0.063 | 1.60 | 0.166 | 4.22 | 25 kV |
| **39X2020** | 20 | 0.62 | 19/32 | 19 x 0.20 | 0.055 | 1.40 | 0.150 | 3.81 | 20 kV |
| **39X2015** | 20 | 0.62 | 19/32 | 19 x 0.20 | 0.040 | 1.02 | 0.120 | 3.05 | 15 kV |
| **39X1825** | 18 | 0.96 | 19/30 | 19 x 0.25 | 0.055 | 1.40 | 0.160 | 4.06 | 25 kV |
| **39X1660** | 16 | 1.32 | 26/30 | 26 x 0.25 | 0.162 | 4.11 | 0.384 | 9.75 | 60 kV |
| **39X1645** | 16 | 1.23 | 19/29 | 19 x 0.28 | 0.125 | 3.18 | 0.306 | 7.77 | 45 kV |
| **39X1635** | 16 | 1.23 | 41/32 | 41 x 0.20 | 0.105 | 2.67 | 0.269 | 6.83 | 35 kV |
| **39X1620** | 16 | 1.33 | 41/32 | 41 x 0.20 | 0.053 | 1.33 | 0.164 | 4.17 | 20 kV |
| **39X1460** | 14 | 1.94 | 19/27 | 19 x 0.36 | 0.157 | 3.99 | 0.385 | 9.78 | 60 kV |
| **39X1260** | 12 | 3.08 | 19/25 | 19 x 0.45 | 0.178 | 4.51 | 0.445 | 11.30 | 60 kV |

CA PROP 65 RoHS Compliant

# Hook-Up Wire

## High Temperature
## 600 V, Mica-Glass, PTFE



**UL AWM 5107**
**CSA AWM I A/B**

### Operating Temperature

- -55°C to +538°C
- -55°C to +450°C (UL, CSA)

### Materials

- Stranded nickel-plated copper conductor
- Mica-glass tape insulation
- Tan PTFE-impregnated fiberglass jacket

### Availability

100 ft (30.5 m)
500 ft (152 m)
1000 ft (305 m)
Bulk, cut to length

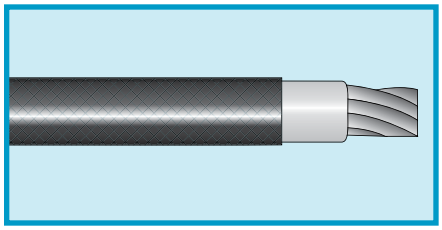
| Part No. | Wire Size | | Stranding | | Insulation Thickness | | Nominal Diameter | |
|---|---|---|---|---|---|---|---|---|
| | AWG | mm² | AWG | mm | Inch | mm | Inch | mm |
| **3112010** | 20 | 0.51 | 10/30 | 10 x 0.25 | 0.025 | 0.64 | 0.101 | 2.57 |
| **3111816** | 18 | 0.81 | 16/30 | 16 x 0.25 | 0.025 | 0.64 | 0.111 | 2.82 |
| **3111626** | 16 | 1.32 | 26/30 | 26 x 0.25 | 0.025 | 0.64 | 0.124 | 3.15 |
| **3111441** | 14 | 2.08 | 41/30 | 41 x 0.25 | 0.025 | 0.64 | 0.138 | 3.51 |
| **3111265** | 12 | 3.29 | 65/30 | 65 x 0.25 | 0.025 | 0.64 | 0.157 | 3.99 |
| **3111000** | 10 | 5.32 | 105/30 | 105 x 0.25 | 0.030 | 0.76 | 0.206 | 5.23 |
| **3118133** | 8 | 8.63 | 133/29 | 133 x 0.28 | 0.030 | 0.76 | 0.260 | 6.60 |
| **3116133** | 6 | 13.6 | 133/27 | 133 x 0.36 | 0.030 | 0.76 | 0.304 | 7.72 |
| **3114133** | 4 | 21.6 | 133/25 | 133 x 0.36 | 0.030 | 0.76 | 0.361 | 9.17 |
| **3112133** | 2 | 34.4 | 133/23 | 133 x 0.57 | 0.035 | 0.89 | 0.444 | 11.28 |

CA PROP 65 RoHS Compliant


Specifications subject to change. For complete specifications and availability, visit www.alphawire.com.

# Hook-Up Wire

## High Temperature
## 600 V, PTFE/Glass Braid



**UL AWM 5196**
**CSA AWM I A/B**

### Operating Temperature

- -55°C to +250°C

### Materials

- Stranded nickel-plated copper conductor
- White PTFE tape insulation
- Double fiberglass serve
- Tan PTFE-impregnated fiberglass jacket

### Availability

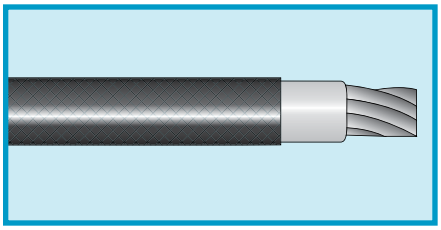
100 ft (30.5 m)
500 ft (152 m)
1000 ft (305 m)
Bulk, cut to length

| Part No. | Wire Size | | Stranding | | Insulation Thickness | | Nominal Diameter | |
|---|---|---|---|---|---|---|---|---|
| | AWG | $mm^2$ | AWG | mm | Inch | mm | Inch | mm |
| **3131816** | 18 | 0.81 | 16/30 | 16 x 0.25 | 0.016 | 0.41 | 0.109 | 2.77 |
| **3131626** | 16 | 1.32 | 26/30 | 26 x 0.25 | 0.016 | 0.41 | 0.122 | 3.10 |
| **3131441** | 14 | 2.08 | 41/30 | 41 x 0.25 | 0.016 | 0.41 | 0.136 | 3.45 |
| **3131265** | 12 | 3.29 | 65/30 | 65 x 0.25 | 0.016 | 0.41 | 0.155 | 3.94 |
| **3131000** | 10 | 5.32 | 105/30 | 105 x 0.25 | 0.016 | 0.41 | 0.180 | 4.57 |
| **3138133** | 8 | 8.61 | 133/29 | 133 x 0.29 | 0.016 | 0.41 | 0.232 | 5.89 |
| **3136133** | 6 | 13.6 | 133/27 | 133 x 0.36 | 0.016 | 0.41 | 0.315 | 8.00 |

CA PROP 65 RoHS Compliant

# Hook-Up Wire

## Type TGGT High-Temperature
## 600 V, PTFE/Glass Braid



**UL AWM 5196, 5251**
**CSA AWM 1 A/B**

### Operating Temperature

- -55°C to +250°C

### Materials

- Flexible nickel-covered stranded copper conductor
- White PTFE tape insulation
- Tan high-temperature-saturant-coated glass braid jacket

### Availability

100 ft (30.5 m)
500 ft (152 m)
1000 ft (305 m)
Bulk, cut to length

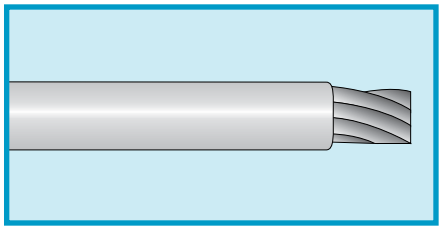
| Part No. | Wire Size | | Stranding | | Insulation Thickness | | Nominal Diameter | |
|---|---|---|---|---|---|---|---|---|
| | AWG | $mm^2$ | AWG | mm | Inch | mm | Inch | mm |
| **M70562*** | 2 | 36.6 | 133/0.0223 | 133 x 0.57 | 0.020 | 0.51 | 0.445 | 11.30 |
| **M70563** | 1 | 41.1 | 259/0.0177 | 259 x 0.45 | 0.020 | 0.51 | 0.485 | 12.32 |
| **M70564** | 1/0 | 53.5 | 259/0.0202 | 259 x 0.51 | 0.020 | 0.51 | 0.535 | 13.59 |
| **M70565** | 2/0 | 68.8 | 259/0.0227 | 259 x 0.58 | 0.020 | 0.51 | 0.685 | 17.40 |
| **M70566** | 3/0 | 85.3 | 259/0.0255 | 259 x 0.65 | 0.020 | 0.51 | 0.645 | 16.38 |
| **M70567** | 4/0 | 107 | 259/0.0286 | 259 x 0.73 | 0.020 | 0.51 | 0.710 | 18.03 |

*UL AWM 5196.

CA PROP 65 RoHS Compliant

# Hook-Up Wire

## Welding Cable
## 600 V, EPDM



### Operating Temperature

- -50°C to +105°C

### Materials

- Stranded bare copper conductor
- Black EPDM rubber jacket

### Availability

Bulk, cut to length

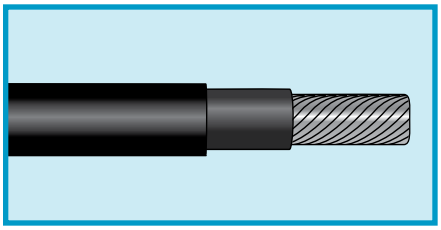
| Part No. | Wire Size | | Stranding | | Insulation Thickness | | Nominal Diameter | | Current-Carrying Capacity | Voltage Drop* |
|---|---|---|---|---|---|---|---|---|---|---|
| | AWG | mm² | AWG | mm | Inch | mm | Inch | mm | A | V |
| **6112** | 6 | 13.5 | 266/30 | 266 x 0.25 | 0.060 | 1.52 | 0.320 | 8.13 | 75 | 3.30 |
| **6113** | 4 | 19.9 | 392/30 | 392 x 0.25 | 0.060 | 1.52 | 0.375 | 9.53 | 100 | 2.80 |
| **6115** | 2 | 32.6 | 644/30 | 644 x 0.25 | 0.060 | 1.52 | 0.440 | 11.18 | 200 | 3.60 |
| **6116** | 1 | 39.7 | 784/30 | 784 x 0.25 | 0.080 | 2.03 | 0.515 | 13.08 | 250 | 3.80 |
| **6117** | 1/0 | 52.0 | 1026/30 | 1026 x 0.25 | 0.080 | 2.03 | 0.550 | 13.97 | 300 | 3.60 |
| **6118** | 2/0 | 63.5 | 1254/30 | 1254 x 0.25 | 0.080 | 2.03 | 0.590 | 14.99 | 375 | 3.37 |
| **6119** | 3/0 | 81.8 | 1615/30 | 1615 x 0.25 | 0.080 | 2.03 | 0.660 | 16.76 | 450 | 3.40 |
| **6120** | 4/0 | 104 | 2056/30 | 2056 x 0.25 | 0.080 | 2.03 | 0.725 | 18.42 | 550 | 3.30 |

*Voltage drop per 100 ft (30.5 m) at 60°C.

RoHS Compliant

# Hook-Up Wire

## 1000/2000 V Photovoltaic Wire, XLPE, PVC



**UL 4703 PV VW-1 (2000 V)**
**UL Sunlight Resistant**

### Operating Temperature

- -40°C to +90°C

### Materials

- Stranded tinned copper conductor
- Black cross-linked polyethylene insulation
- Black PVC jacket

### Availability

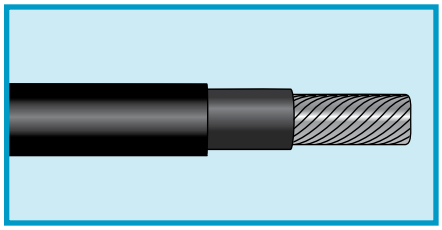
100 ft (30.5 m)
1000 ft (305 m)

| Part No. | Wire Size | | Stranding | | Insulation/Jacket Thickness | | Nominal Diameter | |
|---|---|---|---|---|---|---|---|---|
| | AWG | $mm^2$ | AWG | mm | Inch | mm | Inch | mm |
| **PV1430** | 14 | 2.08 | 41/30 | 41 x 0.25 | 0.063/ 0.032 | 1.60/ 0.81 | 0.267 | 6.78 |
| **PV1230** | 12 | 3.29 | 65/30 | 65 x 0.25 | 0.063/ 0.032 | 1.60/ 0.81 | 0.286 | 7.26 |
| **PV1030** | 10 | 5.32 | 105/30 | 105 x 0.25 | 0.063/ 0.032 | 1.60/ 0.81 | 0.311 | 7.90 |
| **PV0830A*** | 8 | 8.51 | 168/30 | 168 x 0.25 | 0.078/ 0.032 | 1.98/ 0.81 | 0.390 | 9.91 |
| **PV0630A*** | 6 | 13.5 | 266/30 | 266 x 0.25 | 0.078/ 0.032 | 1.98/ 0.81 | 0.433 | 11.00 |
| **PV0430A*** | 4 | 21.3 | 420/30 | 420 x 0.25 | 0.078/ 0.032 | 1.98/ 0.81 | 0.491 | 12.47 |
| **PV0230A*** | 2 | 33.7 | 665/30 | 665 x 0.25 | 0.078/ 0.032 | 1.98/ 0.81 | 0.558 | 14.17 |

*UL 4703 PV only.

# Hook-Up Wire

## 600/1000 V Photovoltaic Wire, LSZH, LSZH



**UL 4703 PV VW-1 (600 V)**
**UL Sunlight Resistant**
**TÜV 2 PFG 1169 (1000 V)**
**IEC 60332-1**
**IEC 60754-1 and 60754-2**

### Operating Temperature

- -40°C to +125°C
- -40°C to +90°C (TÜV and UL)
- +120°C maximum temperature at conductor (TÜV)

### Materials

- Stranded tinned copper conductor
- Black cross-linked LSZH insulation
- Black cross-linked LSZH jacket

### Availability

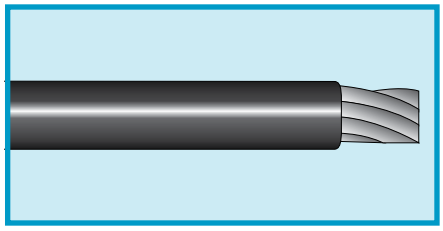
100 ft (30.5 m)
1000 ft (305 m)

| Part No. | Wire Size | | Stranding | | Insulation/Jacket Thickness | | Nominal Diameter | |
|---|---|---|---|---|---|---|---|---|
| | AWG | $mm^2$ | AWG | mm | Inch | mm | Inch | mm |
| **PVT1430** | 14 | 2.5 | 50/30 | 50 x 0.25 | 0.045/ 0.032 | 1.14/ 0.81 | 0.230 | 5.84 |
| **PVT1228** | 12 | 4.0 | 56/28 | 56 x 0.32 | 0.045/ 0.032 | 1.14/ 0.81 | 0.252 | 6.40 |
| **PVT1028** | 10 | 6.0 | 84/28 | 84 x 0.32 | 0.045/ 0.032 | 1.14/ 0.81 | 0.275 | 6.99 |
| **PVT0826** | 8 | 10 | 78/26 | 78 x 0.40 | 0.060/ 0.032 | 1.52/ 0.81 | 0.340 | 8.64 |
| **PVT0626** | 6 | 16 | 128/26 | 128 x 0.40 | 0.060/ 0.032 | 1.52/ 0.81 | 0.386 | 9.80 |
| **PVT0426** | 4 | 25 | 199/26 | 199 x 0.40 | 0.060/ 0.032 | 1.52/ 0.81 | 0.436 | 11.07 |
| **PVT0226** | 2 | 35 | 279/26 | 279 x 0.40 | 0.060/ 0.032 | 1.52/ 0.81 | 0.484 | 12.29 |

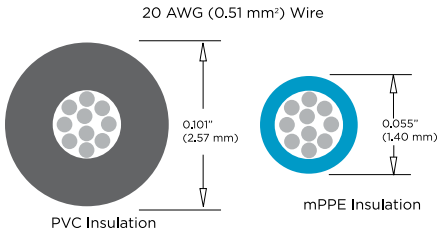
UL LISTED RoHS Compliant

# Hook-Up Wire

## EcoWire™
## 600 V, mPPE



Innovative EcoWire combines increased performance with a minimized environmental impact. EcoWire's modified polyphenylene ether (mPPE) insulation is inherently lighter, tougher, and more durable than PVC. The result is UL AWM wire that is up to 45% smaller in diameter and 40% lighter than PVC-based counterparts, while offering 10x better abrasion resistance. Plus, the non-halogenated insulation contains no heavy metal pigments, allowing it to help manufacturers meet Waste Electrical and Electronic Equipment (WEEE) requirements.




**UL AWM 11028 VW-1**
**CSA AWM I A/B FT1**
**CE compliant**

### Operating Temperature

- -40°C to +105°C

### Materials

- Stranded or solid tinned copper conductors
- Modified polyphenylene ether insulation

### Availability

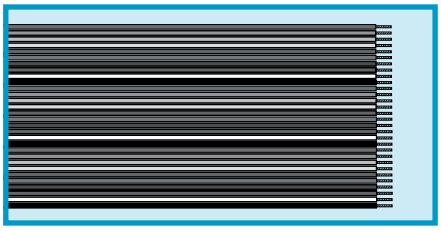
100 ft (30.5 m)
1000 ft (305 m)

| Part No. | Conductor Size | | Stranding | | Insulation Thickness | | Wire Diameter | |
|---|---|---|---|---|---|---|---|---|
| | AWG | mm² | AWG | mm | Inch | mm | Inch | mm |
| **6710** | 28 | 0.07 | 7/36 | 7 x 0.12 | 0.010 | 0.25 | 0.034 | 0.86 |
| **6711** | 26 | 0.14 | 7/34 | 7 x 0.16 | 0.010 | 0.25 | 0.038 | 0.97 |
| **6712** | 24 | 0.22 | 7/32 | 7 x 0.20 | 0.010 | 0.25 | 0.043 | 1.09 |
| **6713** | 22 | 0.35 | 7/30 | 7 x 0.25 | 0.010 | 0.25 | 0.049 | 1.24 |
| **6714** | 20 | 0.51 | 10/30 | 10 x 0.25 | 0.010 | 0.25 | 0.055 | 1.40 |
| **6715** | 18 | 0.81 | 16/30 | 16 x 0.25 | 0.010 | 0.25 | 0.067 | 1.70 |
| **6715S** | 18 | 0.82 | Solid | Solid | 0.010 | 0.25 | 0.059 | 1.50 |
| **6716** | 16 | 1.32 | 26/30 | 26 x 0.25 | 0.011 | 0.28 | 0.081 | 2.06 |
| **6717** | 14 | 2.09 | 41/30 | 41 x 0.25 | 0.011 | 0.28 | 0.096 | 2.44 |
| **6717S** | 14 | 2.08 | Solid | Solid | 0.011 | 0.28 | 0.086 | 2.18 |
| **6718** | 12 | 3.31 | 65/30 | 65 x 0.25 | 0.012 | 0.30 | 0.117 | 2.97 |
| **6719** | 10 | 5.37 | 105/30 | 105 x 0.25 | 0.012 | 0.30 | 0.144 | 3.66 |

| | | |
|---|---|---|
| White | Yellow | Slate |
| Black | Blue | Violet |
| Red | Brown | Green/Yellow |
| Green | Orange | |

# Hook-Up Wire

## 150/600 V Ribbon Cable, PVC



**MIL-DTL-16878/1 (Type B) (600 V)**
**UL AWM 2713 (150 V) VW-1**

### Operating Temperature

- -20°C to +105°C (MIL)
- -20°C to +80°C (AWM)

### Conductor Color Coding

- Brown, red, orange, yellow, green, blue, violet, slate, white, black . . . repeats

### Materials

- Stranded tinned copper conductors
- Color-coded PVC insulation bonded into a flat configuration

### Availability

100 ft (30.5 m)

**26 AWG (0.14 mm²)**

Stranding: 7/34 (7 x 0.16 mm)
Insulation thickness: 0.010 (0.25 mm)
Cable height: 0.039 (0.99 mm)

| Part No. | Conductors | Width | |
|---|---|---|---|
| | | Inch | mm |
| **3550** | 10 | 0.392 | 9.96 |
| **3550/14** | 14 | 0.546 | 13.87 |
| **3551** | 15 | 0.585 | 14.68 |
| **3551/16** | 16 | 0.624 | 15.85 |
| **3553** | 30 | 1.170 | 29.72 |

**24 AWG (0.23 mm²)**

Stranding: 7/32 (7 x 0.20 mm)
Insulation thickness: 0.010 (0.25 mm)
Cable height: 0.044 (1.12 mm)

| Part No. | Conductors | Width | |
|---|---|---|---|
| | | Inch | mm |
| **3540/7** | 10 | 0.440 | 11.18 |
| **3541/7** | 15 | 0.660 | 16.76 |
| **3542/7** | 20 | 0.880 | 22.35 |

**24 AWG (0.24 mm²)**

Stranding: 19/36 (19 x 0.12 mm)
Insulation thickness: 0.010 (0.25 mm)
Cable height: 0.044 (1.12 mm)

| Part No. | Conductors | Width | |
|---|---|---|---|
| | | Inch | mm |
| **3540** | 10 | 0.440 | 11.18 |
| **3541** | 15 | 0.660 | 16.76 |
| **3542** | 20 | 0.880 | 22.35 |
| **3543** | 30 | 1.320 | 33.53 |

**22 AWG (0.35 mm²)**

Stranding: 7/30 (7 x 0.25 mm)
Insulation thickness: 0.010 (0.25 mm)
Cable height: 0.050 (1.27 mm)

| Part No. | Conductors | Width | |
|---|---|---|---|
| | | Inch | mm |
| **3530/7** | 10 | 0.500 | 12.70 |
| **3531/7** | 15 | 0.750 | 19.05 |
| **3532/7** | 20 | 1.000 | 25.40 |
| **3533/7** | 30 | 1.500 | 38.10 |

**22 AWG (0.38 mm²)**

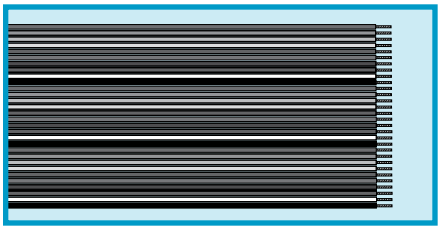
Stranding: 19/34 (19 x 0.16 mm)
Insulation thickness: 0.010 (0.25 mm)
Cable height: 0.051 (1.29 mm)

| Part No. | Conductors | Width | |
|---|---|---|---|
| | | Inch | mm |
| **3530** | 10 | 0.510 | 12.95 |
| **3531** | 15 | 0.765 | 19.43 |
| **3532** | 20 | 1.020 | 25.91 |
| **3533** | 30 | 1.530 | 38.86 |

RoHS Compliant

# Hook-Up Wire

## 300/1000 V Ribbon Cable, PVC



**MIL-DTL-16878/2 (Type C) (1000 V)**
**UL AWM 2555 (300 V)**

### Operating Temperature

- -20°C to +105°C (MIL)
- -20°C to +80°C (AWM)

### Conductor Color Coding

- Brown, red, orange, yellow, green, blue, violet, slate, white, black . . . repeats

### Materials

- Stranded tinned copper conductors
- Color-coded PVC insulation bonded into a flat configuration

### Availability

100 ft (30.5 m)

**22 AWG (0.35 mm²)**

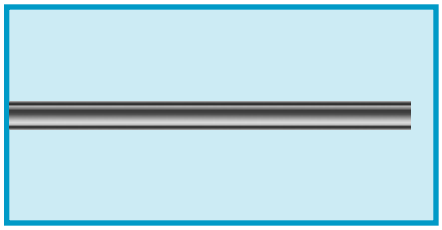
Stranding: 7/30 (7 x 0.25 mm)
Insulation thickness: 0.016 (0.41 mm)
Cable height: 0.065 (1.65 mm)

| Part No. | Conductors | Width | |
|---|---|---|---|
| | | Inch | mm |
| **3505** | 5 | 0.310 | 7.87 |
| **3510** | 10 | 0.620 | 15.75 |
| **3515** | 15 | 0.930 | 23.62 |
| **3520** | 20 | 1.240 | 31.50 |

RoHS Compliant

# Hook-Up Wire

## Bus Bar Wire



**CID AA-59551 Type S**
**ASTM B33**

### Material

- Electrolytic soft-drawn and annealed solid tin-plated copper conductor

### Availability

100 ft (30.5 m)
1000 ft (305 m)

| Part No | Wire Size | | | Diameter | |
|---|---|---|---|---|---|
| | AWG | CMA | $mm^2$ | Inch | mm |
| **938** | 38 | 16 | .008 | 0.004 | 0.10 |
| **936** | 36 | 25 | 0.01 | 0.005 | 0.13 |
| **934** | 34 | 40 | 0.02 | 0.006 | 0.15 |
| **932** | 32 | 64 | 0.03 | 0.008 | 0.20 |
| **299/3** | 30 | 100 | 0.05 | 0.010 | 0.25 |
| **299/2** | 28 | 159 | 0.08 | 0.013 | 0.33 |
| **299/1** | 26 | 253 | 0.12 | 0.016 | 0.41 |
| **299** | 24 | 404 | 0.20 | 0.020 | 0.51 |
| **298** | 22 | 640 | 0.32 | 0.025 | 0.64 |
| **297** | 20 | 1020 | 0.51 | 0.032 | 0.81 |
| **296** | 18 | 1620 | 0.82 | 0.040 | 1.02 |
| **295** | 16 | 2580 | 1.31 | 0.051 | 1.30 |
| **286** | 14 | 4110 | 2.08 | 0.064 | 1.63 |
| **289** | 12 | 6530 | 3.31 | 0.081 | 2.06 |
| **910** | 10 | 10380 | 5.26 | 0.102 | 2.59 |
| **908** | 8 | 16510 | 8.37 | 0.129 | 3.28 |
| **906** | 6 | 26250 | 13.3 | 0.162 | 4.11 |

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# Hook-Up Wire Kits

Alpha's hook-up wire kits contain an assortment of 100 ft (30.5 m) spools of hook-up wire suitable for military or UL/CSA applications. These kits have been designed for use by technicians, engineers, and designers in the R&D lab or maintenance shop. Each kit contains a stripping tool and five spools of hook-up wire in a unique, rack-mounted, transparent dispensing tube. The tube and rack system keeps hook-up wire neat, clean, and conveniently at hand.

### Operating Temperature

- **-40°C to +80°C (HU-KIT-10, 30)**
- **-40°C to +105°C (HU-KIT-20, 40)**

### Voltage Rating

- **1000 V (HU-KIT-10, 30)**
- **300 V (HU-KIT-20, 40)**

### Materials

- **Stranded tinned copper conductor**
- **Color-coded PVC insulation**

### Availability

**1 box**

| Part No. | Wire Type | Wire Size | | Colors | Wire Length (each order) | | Reorder No. |
|---|---|---|---|---|---|---|---|
| | | AWG | mm² | | Feet | Meters | |
| **HU-KIT-40** | UL AWM 1007<br>UL AWM 1569<br>CSA TR 64 | 24 | 0.23 | White<br>Black<br>Red<br>Green<br>Blue | 100 | 30.5 | 3050 |
| **HU-KIT-30** | MIL-W-76B Type MW | 24 | 0.23 | White<br>Black<br>Red<br>Green<br>Blue | 100 | 30.5 | 1550 |
| **HU-KIT-20** | UL AWM 1007<br>UL AWM 1569<br>CSA TR 64 | 22 | 0.36 | White<br>Black<br>Red<br>Green<br>Blue | 100 | 30.5 | 3051 |
| **HU-KIT-10** | MIL-W-76B Type MW | 22 | 0.36 | White<br>Black<br>Red<br>Green<br>Blue | 100 | 30.5 | 1551 |

Note: Each kit includes a cut-and-strip tool.

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# Dearborn™ Bulk Hook-Up Wire

We support your high-volume needs with large put-ups for a wide range of both military and UL style PVC hook-up wire.

Dearborn bulk wire has the same high quality as all Alpha wire and cable, but is available in put-ups of 5000 ft (1524 m) and above. Many styles are available in barrel packs as well.

### Bulk PVC wire options include:

- **Stranded and solid conductors**
- **Bare or tinned copper**
- **Standard and semirigid PVC**
- **Variety of temperature ranges**

**Popular Bulk Wire Styles**

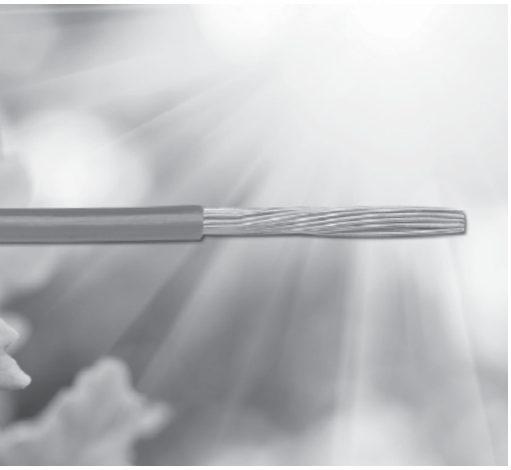
| Style | Insulation | AWG Range | Temperature |
|---|---|---|---|
| **MIL-DTL-16878/1 (Type B)** | PVC | 32 – 14 | -55°C to +105°C |
| **MIL-DTL-16878/2 (Type C)** | PVC | 24 – 22 | -55°C to +105°C |
| **MIL-DTL-16878/3 (Type D)** | PVC | 16 | -20°C to +105°C |
| **MIL-W-76 Type MWP** | PVC | 24, 12 | -55°C to +90°C |
| **UL AWM 1007** | PVC | 24 - 10 | -20°C to +80°C |
| **UL AWM 1028** | PVC | 24 - 10 | -20°C to +105°C |
| **UL AWM 1061** | SR-PVC | 30 - 20 | -10°C to +80°C |
| **UL AWM 1231** | PVC | 24 - 10 | -20°C to +105°C |
| **UL AWM 1569** | PVC | 28 - 16 | -20°C to +105°C |
| **UL AWM 1581** | PVC | 28 - 16 | -20°C to +80°C |
| **UL MTW** | PVC | 20 – 10 | -20°C to +90°C |
| **UL TW** | PVC | 24 - 10 | -20°C to +60°C |

**For more styles and conductor options please contact your Alpha Wire Sales Representative.**

{CONFESSION}

# We think we're pretty tough

## (New EcoWire™ has 10x better abrasion and pinch resistance than PVC)



**Superior Performance for Sustainable Designs**

Tough wire doesn't have to be bulky or hard to recycle. Innovative EcoWire combines increased performance with a minimized environmental impact. EcoWire's modified polyphenylene ether (mPPE) insulation is inherently lighter, tougher, and more durable than PVC.

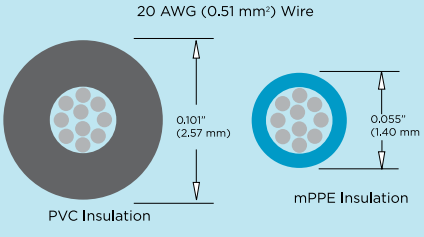
Meet Waste Electrical and Electronic Equipment (WEEE) requirements with EcoWire. Its nonhalogenated insulation contains no heavy metal pigments, so it is easily and 100% recyclable.

With sizes ranging from 28 to 10 AWG in a UL AWM 11028 style with a temperature range from -40°C to +105°C, EcoWire is the perfect hook-up wire where space savings, lighter weight, mechanical ruggedness, and recyclability are required. And it gives you greener performance in eleven insulation colors.

Learn more about EcoWire by visiting www.alphawire.com to download a brochure and white paper, obtain complete specifications, or order a sample.

**EcoWire Gives You More for Less**

- 10x superior abrasion resistance
- Up to 45% smaller diameter
- Up to 40% lighter weight
- UL VW-1 flammability rating
- 100% recyclable




AlphaWire

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