

## Hook-Up Wire



# Hook-Up Wire



**T**he 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<br>MTW, THW, TW | TEW-105           |
| 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<br>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<br>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       | mm <sup>2</sup> | AWG       | mm         | Inch                 | mm   | Inch             | mm   |                    |
| <b>3047</b>                | 30        | 0.06            | 7/38      | 7 x 0.10   | 0.016                | 0.41 | 0.044            | 1.12 | Z1, 1 - 10         |
| <b>3048</b>                | 28        | 0.09            | 7/36      | 7 x 0.13   | 0.016                | 0.41 | 0.047            | 1.19 | Z1, 1 - 10         |
| <b>3049</b>                | 26        | 0.14            | 7/34      | 7 x 0.16   | 0.016                | 0.41 | 0.051            | 1.30 | Z1, 1 - 10         |
| <b>3050/1</b>              | 24        | 0.20            | Solid     | 1 x 0.51   | 0.016                | 0.41 | 0.052            | 1.32 | Z1, 1 - 10         |
| <b>3050</b>                | 24        | 0.23            | 7/32      | 7 x 0.20   | 0.016                | 0.41 | 0.056            | 1.42 | Z1, 1 - 19, 28, 30 |
| <b>892407T<sup>†</sup></b> | 24        | 0.23            | 7/32      | 7 x 0.20   | 0.016                | 0.41 | 0.056            | 1.42 | Z2, 0 - 9          |
| <b>892419<sup>†</sup></b>  | 24        | 0.24            | 19/36     | 19 x 0.13  | 0.016                | 0.41 | 0.057            | 1.45 | Z2, 0 - 9          |
| <b>3051/1</b>              | 22        | 0.32            | Solid     | 1 x 0.64   | 0.016                | 0.41 | 0.057            | 1.45 | Z1, 1 - 10         |
| <b>3051</b>                | 22        | 0.35            | 7/30      | 7 x 0.25   | 0.016                | 0.41 | 0.062            | 1.57 | Z1, 1 - 19, 28, 30 |
| <b>892207T<sup>†</sup></b> | 22        | 0.35            | 7/30      | 7 x 0.25   | 0.016                | 0.41 | 0.062            | 1.57 | Z2, 0 - 9          |
| <b>892219<sup>†</sup></b>  | 22        | 0.38            | 19/34     | 19 x 0.16  | 0.016                | 0.41 | 0.064            | 1.63 | Z2, 0 - 9          |
| <b>3053</b>                | 20        | 0.51            | 10/30     | 10 x 0.25  | 0.016                | 0.41 | 0.069            | 1.75 | Z1, 1 - 19, 28, 30 |
| <b>892010T<sup>†</sup></b> | 20        | 0.51            | 10/30     | 10 x 0.25  | 0.016                | 0.41 | 0.069            | 1.75 | Z2, 0 - 9          |
| <b>3053/1</b>              | 20        | 0.52            | Solid     | 1 x 0.81   | 0.016                | 0.41 | 0.064            | 1.63 | Z1, 1 - 10         |
| <b>892007<sup>†</sup></b>  | 20        | 0.56            | 7/28      | 7 x 0.32   | 0.016                | 0.41 | 0.070            | 1.78 | Z2, 0 - 9          |
| <b>892019<sup>†</sup></b>  | 20        | 0.62            | 19/32     | 19 x 0.20  | 0.016                | 0.41 | 0.072            | 1.83 | Z2, 0 - 9          |
| <b>3055</b>                | 18        | 0.81            | 16/30     | 16 x 0.25  | 0.016                | 0.41 | 0.079            | 2.01 | Z1, 1 - 19, 28, 30 |
| <b>891816T<sup>†</sup></b> | 18        | 0.81            | 16/30     | 16 x 0.25  | 0.016                | 0.41 | 0.079            | 2.01 | Z2, 0 - 9          |
| <b>3055/1</b>              | 18        | 0.82            | Solid     | 1 x 1.02   | 0.016                | 0.41 | 0.072            | 1.83 | Z1, 1 - 10         |
| <b>891819<sup>†</sup></b>  | 18        | 0.96            | 19/30     | 19 x 0.25  | 0.016                | 0.41 | 0.082            | 2.08 | Z2, 0 - 9          |
| <b>3057/1</b>              | 16        | 1.31            | Solid     | 1 x 1.29   | 0.016                | 0.41 | 0.083            | 2.11 | Z1, 1 - 10         |
| <b>3057</b>                | 16        | 1.32            | 26/30     | 26 x 0.25  | 0.016                | 0.41 | 0.092            | 2.34 | Z1, 1 - 19, 28, 30 |
| <b>891441<sup>†</sup></b>  | 14        | 2.08            | 41/30     | 41 x 0.25  | 0.016                | 0.41 | 0.106            | 2.69 | Z2, 0 - 9          |
| <b>891265*<sup>†</sup></b> | 12        | 3.30            | 65/30     | 65 x 0.25  | 0.016                | 0.41 | 0.125            | 3.18 | Z2, 0 - 9          |
| <b>891000*<sup>†</sup></b> | 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.

<sup>†</sup>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.

# 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       | mm <sup>2</sup> | AWG       | mm        | Inch                 | mm   | Inch             | mm   |        |
| <b>422807</b> | 28        | 0.09            | 7/36      | 7 x 0.13  | 0.010                | 0.25 | 0.035            | 0.89 | Z2     |
| <b>422801</b> | 28        | 0.08            | Solid     | 1 x 0.32  | 0.010                | 0.25 | 0.033            | 0.84 | Z2     |
| <b>422607</b> | 26        | 0.14            | 7/34      | 7 x 0.16  | 0.010                | 0.25 | 0.039            | 0.99 | Z2     |
| <b>422601</b> | 26        | 0.13            | Solid     | 1 x 0.40  | 0.010                | 0.25 | 0.036            | 0.91 | Z2     |
| <b>3250</b>   | 24        | 0.23            | 7/32      | 7 x 0.20  | 0.010                | 0.25 | 0.044            | 1.12 | Z1     |
| <b>3251</b>   | 22        | 0.35            | 7/30      | 7 x 0.25  | 0.010                | 0.25 | 0.050            | 1.27 | Z1     |
| <b>422010</b> | 20        | 0.51            | 10/30     | 10 x 0.25 | 0.010                | 0.25 | 0.057            | 1.45 | Z2     |
| <b>3252</b>   | 20        | 0.56            | 7/28      | 7 x 0.32  | 0.010                | 0.25 | 0.058            | 1.47 | Z1     |
| <b>422001</b> | 20        | 0.52            | Solid     | 1 x 0.81  | 0.010                | 0.25 | 0.052            | 1.32 | Z2     |
| <b>421816</b> | 18        | 0.81            | 16/30     | 16 x 0.25 | 0.010                | 0.25 | 0.067            | 1.70 | Z2     |
| <b>3253</b>   | 18        | 0.90            | 7/26      | 7 x 0.40  | 0.010                | 0.25 | 0.068            | 1.73 | Z1     |
| <b>421626</b> | 16        | 1.32            | 26/30     | 26 x 0.25 | 0.010                | 0.25 | 0.080            | 2.03 | Z2     |
| <b>3254</b>   | 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.

# 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 <sup>2</sup> | AWG       | mm        | Inch                 | mm   | Inch             | mm    |            |
| <b>461816</b> | 18        | 0.81            | 16/30     | 16 x 0.25 | 0.032                | 0.81 | 0.111            | 2.82  | 1015, 1230 |
| <b>461626</b> | 16        | 1.32            | 26/30     | 26 x 0.25 | 0.032                | 0.81 | 0.124            | 3.15  | 1015, 1230 |
| <b>461419</b> | 14        | 2.07            | 19/0.0147 | 19 x 0.37 | 0.032                | 0.81 | 0.138            | 3.51  | 1015, 1230 |
| <b>461219</b> | 12        | 3.29            | 19/0.0185 | 19 x 0.47 | 0.032                | 0.81 | 0.157            | 3.99  | 1015, 1230 |
| <b>461265</b> | 12        | 3.29            | 65/0.010  | 65 x 0.25 | 0.031                | 0.79 | 0.153            | 3.89  | 1015, 1230 |
| <b>461019</b> | 10        | 5.26            | 19/0.0234 | 19 x 0.59 | 0.032                | 0.81 | 0.181            | 4.60  | 1015, 1230 |
| <b>460819</b> | 8         | 8.38            | 19/0.0295 | 19 x 0.75 | 0.047                | 1.19 | 0.242            | 6.15  | 1028, 1231 |
| <b>460619</b> | 6         | 13.32           | 19/0.0372 | 19 x 0.94 | 0.063                | 1.59 | 0.311            | 7.90  | 1283, 1232 |
| <b>460419</b> | 4         | 21.09           | 19/0.0469 | 19 x 1.19 | 0.063                | 1.59 | 0.360            | 9.14  | 1283, 1232 |
| <b>460219</b> | 2         | 33.63           | 19/0.0591 | 19 x 1.50 | 0.063                | 1.59 | 0.421            | 10.69 | 1283, 1232 |
| <b>460001</b> | 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 |        |

# 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**

- -20°C to +75°C (THW)
- -20°C to +60°C (TW)

### Materials

- Stranded or solid tinned copper conductor
- PVC insulation

### Operating Temperature

- -20°C to +105°C (AWM, TEW)
- -20°C to +90°C (MTW)

### Availability

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

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



# 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 <sup>2</sup> | AWG       | mm        | Inch                 | mm   | Inch             | mm   |            |
| <b>1850</b>    | 32        | 0.03            | 7/40      | 7 x 0.08  | 0.010                | 0.25 | 0.029            | 0.74 | Z1, 1 - 6  |
| <b>1851*</b>   | 30        | 0.06            | 7/38      | 7 x 0.10  | 0.010                | 0.25 | 0.032            | 0.81 | Z1, 1 - 6  |
| <b>1852*</b>   | 28        | 0.09            | 7/36      | 7 x 0.12  | 0.010                | 0.25 | 0.035            | 0.89 | Z1, 1 - 10 |
| <b>1853*</b>   | 26        | 0.14            | 7/34      | 7 x 0.16  | 0.010                | 0.25 | 0.039            | 0.99 | Z1, 1 - 19 |
| <b>172619</b>  | 26        | 0.15            | 19/38     | 19 x 0.10 | 0.010                | 0.25 | 0.040            | 1.02 | Z2, 0 - 9  |
| <b>1854*</b>   | 24        | 0.23            | 7/32      | 7 x 0.20  | 0.010                | 0.25 | 0.044            | 1.12 | Z1, 1 - 19 |
| <b>1854/19</b> | 24        | 0.24            | 19/36     | 19 x 0.13 | 0.010                | 0.25 | 0.045            | 1.14 | Z1, 1 - 19 |
| <b>1855</b>    | 22        | 0.35            | 7/30      | 7 x 0.25  | 0.010                | 0.25 | 0.050            | 1.27 | Z1, 1 - 19 |
| <b>1855/19</b> | 22        | 0.38            | 19/34     | 19 x 0.16 | 0.010                | 0.25 | 0.052            | 1.32 | Z1, 1 - 19 |
| <b>1856*</b>   | 20        | 0.56            | 7/28      | 7 x 0.32  | 0.010                | 0.25 | 0.058            | 1.47 | Z1, 1 - 19 |
| <b>1856/19</b> | 20        | 0.62            | 19/32     | 19 x 0.20 | 0.010                | 0.25 | 0.060            | 1.52 | Z1, 1 - 19 |
| <b>1857</b>    | 18        | 0.90            | 7/26      | 7 x 0.40  | 0.010                | 0.25 | 0.068            | 1.73 | Z1, 1 - 19 |
| <b>1857/19</b> | 18        | 0.96            | 19/30     | 19 x 0.25 | 0.010                | 0.25 | 0.070            | 1.78 | Z1, 1 - 19 |
| <b>1858/19</b> | 16        | 1.23            | 19/29     | 19 x 0.29 | 0.010                | 0.25 | 0.076            | 1.93 | Z1, 1 - 19 |
| <b>1859/19</b> | 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 |         |

# 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 <sup>2</sup> | AWG       | mm         | Inch                 | mm   | Inch             | mm   |
| <b>1579</b> | 14        | 2.08            | 41/30     | 41 x 0.25  | 0.045                | 1.14 | 0.164            | 4.17 |
| <b>1651</b> | 12        | 3.29            | 65/30     | 65 x 0.25  | 0.045                | 1.14 | 0.183            | 4.65 |
| <b>1653</b> | 10        | 5.32            | 105/30    | 105 x 0.25 | 0.045                | 1.14 | 0.210            | 5.33 |
| <b>1655</b> | 8         | 8.61            | 133/29    | 133 x 0.28 | 0.045                | 1.14 | 0.259            | 6.58 |

### Insulation Colors

White

Black

Red

# 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 <sup>2</sup> | AWG       | mm        | Inch                 | mm   | Inch             | mm   |
| <b>202207</b> | 22        | 0.35            | 7/30      | 7 x 0.25  | 0.017                | 0.43 | 0.064            | 1.63 |
| <b>202007</b> | 20        | 0.56            | 7/28      | 7 x 0.32  | 0.017                | 0.43 | 0.072            | 1.83 |
| <b>201807</b> | 18        | 0.90            | 7/26      | 7 x 0.40  | 0.017                | 0.43 | 0.082            | 2.08 |
| <b>201819</b> | 18        | 0.96            | 19/30     | 19 x 0.25 | 0.017                | 0.43 | 0.084            | 2.13 |
| <b>201619</b> | 16        | 1.23            | 19/29     | 19 x 0.29 | 0.019                | 0.47 | 0.093            | 2.36 |
| <b>201419</b> | 14        | 1.94            | 19/27     | 19 x 0.36 | 0.019                | 0.47 | 0.108            | 2.74 |
| <b>201219</b> | 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 |        |

# 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       | mm <sup>2</sup> | AWG       | mm        | Inch                     | mm   | Inch             | mm    |            |
| <b>541816</b> | 18        | 0.81            | 16/30     | 16 x 0.25 | 0.015                    | 0.38 | 0.086            | 2.18  | TFFN       |
| <b>541801</b> | 18        | 0.82            | Solid     | 1 x 1.02  | 0.015                    | 0.38 | 0.079            | 2.01  | TFN        |
| <b>541626</b> | 16        | 1.32            | 26/30     | 26 x 0.25 | 0.015                    | 0.38 | 0.099            | 2.51  | TFFN       |
| <b>541419</b> | 14        | 2.07            | 19/0.0147 | 19 x 0.37 | 0.015                    | 0.38 | 0.113            | 2.87  | THHN, THWN |
| <b>541401</b> | 14        | 2.08            | Solid     | 1 x 1.63  | 0.015                    | 0.38 | 0.103            | 2.62  | THHN, THWN |
| <b>541219</b> | 12        | 3.29            | 19/0.0185 | 19 x 0.47 | 0.015                    | 0.38 | 0.132            | 3.35  | THHN, THWN |
| <b>541201</b> | 12        | 3.31            | Solid     | 1 x 2.06  | 0.015                    | 0.38 | 0.120            | 3.05  | THHN, THWN |
| <b>541019</b> | 10        | 5.26            | 19/0.0234 | 19 x 0.59 | 0.020                    | 0.51 | 0.166            | 4.22  | THHN, THWN |
| <b>541001</b> | 10        | 5.26            | Solid     | 1 x 2.59  | 0.020                    | 0.51 | 0.141            | 3.58  | THHN, THWN |
| <b>540819</b> | 8         | 8.38            | 19/0.0295 | 19 x 0.75 | 0.030                    | 0.76 | 0.219            | 5.56  | THHN, THWN |
| <b>540619</b> | 6         | 13.32           | 19/0.0372 | 19 x 0.94 | 0.030                    | 0.76 | 0.257            | 6.53  | THHN, THWN |
| <b>540419</b> | 4         | 21.09           | 19/0.0469 | 19 x 1.19 | 0.040                    | 1.02 | 0.329            | 8.36  | THHN, THWN |
| <b>540219</b> | 2         | 33.63           | 19/0.0591 | 19 x 1.50 | 0.040                    | 1.02 | 0.390            | 9.91  | THHN, THWN |
| <b>540001</b> | 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 |        |

# 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       | mm <sup>2</sup> | 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 |        |

# 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 <sup>2</sup> | AWG       | mm        | Inch                 | mm   | Inch             | mm   |
| <b>302407</b> | 24        | 0.23            | 7/32      | 7 x 0.20  | 0.016                | 0.41 | 0.056            | 1.42 |
| <b>302207</b> | 22        | 0.35            | 7/30      | 7 x 0.25  | 0.016                | 0.41 | 0.064            | 1.63 |
| <b>302201</b> | 22        | 0.32            | Solid     | 1 x 0.64  | 0.016                | 0.41 | 0.057            | 1.45 |
| <b>302010</b> | 20        | 0.51            | 10/30     | 10 x 0.25 | 0.016                | 0.41 | 0.069            | 1.75 |
| <b>301816</b> | 18        | 0.81            | 16/30     | 16 x 0.25 | 0.016                | 0.41 | 0.079            | 2.01 |
| <b>301626</b> | 16        | 1.32            | 26/30     | 26 x 0.25 | 0.016                | 0.41 | 0.092            | 2.34 |
| <b>301619</b> | 16        | 1.23            | 19/29     | 19 x 0.29 | 0.016                | 0.41 | 0.088            | 2.24 |
| <b>301441</b> | 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 |        |



# 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       | mm <sup>2</sup> | AWG       | mm        | Inch                 | mm   | Inch             | mm   |         |
| <b>1550</b>    | 24        | 0.23            | 7/32      | 7 x 0.20  | 0.016                | 0.41 | 0.056            | 1.42 | 1 - 19  |
| <b>1561/24</b> | 24        | 0.20            | Solid     | 1 x 0.51  | 0.016                | 0.41 | 0.052            | 1.32 | 1 - 6   |
| <b>1551</b>    | 22        | 0.35            | 7/30      | 7 x 0.25  | 0.016                | 0.41 | 0.062            | 1.57 | 1 - 19  |
| <b>1561</b>    | 22        | 0.32            | Solid     | 1 x 0.64  | 0.016                | 0.41 | 0.057            | 1.45 | 1 - 6   |
| <b>1553</b>    | 20        | 0.51            | 10/30     | 10 x 0.25 | 0.016                | 0.41 | 0.069            | 1.75 | 1 - 19  |
| <b>1563</b>    | 20        | 0.52            | Solid     | 1 x 0.81  | 0.016                | 0.41 | 0.064            | 1.63 | 1 - 6   |
| <b>1555</b>    | 18        | 0.81            | 16/30     | 16 x 0.25 | 0.016                | 0.41 | 0.079            | 2.01 | 1 - 19  |
| <b>1565</b>    | 18        | 0.82            | Solid     | 1 x 1.02  | 0.016                | 0.41 | 0.072            | 1.83 | 1 - 6   |
| <b>1557</b>    | 16        | 1.32            | 26/30     | 26 x 0.25 | 0.016                | 0.41 | 0.092            | 2.34 | 1 - 19  |
| <b>1559</b>    | 14        | 2.08            | 41/30     | 41 x 0.25 | 0.016                | 0.41 | 0.106            | 2.69 | 1 - 10  |
| <b>1560</b>    | 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/<br>Green  | 17 White/<br>Orange |
| 2 Black | 6 Blue   | 10 Violet          | 14 White/<br>Yellow | 18 White/<br>Slate  |
| 3 Red   | 7 Brown  | 11 White/<br>Black | 15 White/Blue       | 19 White/<br>Violet |
| 4 Green | 8 Orange | 12 White/Red       | 16 White/<br>Brown  |                     |

# 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 <sup>2</sup> | AWG       | mm        | Inch                 | mm   | Inch             | mm   |
| <b>7053</b>    | 26        | 0.14            | 7/34      | 7 x 0.16  | 0.010                | 0.25 | 0.039            | 0.99 |
| <b>7054</b>    | 24        | 0.23            | 7/32      | 7 x 0.20  | 0.010                | 0.25 | 0.044            | 1.12 |
| <b>7054/19</b> | 24        | 0.24            | 19/36     | 19 x 0.13 | 0.010                | 0.25 | 0.045            | 1.14 |
| <b>7055</b>    | 22        | 0.35            | 7/30      | 7 x 0.25  | 0.010                | 0.25 | 0.050            | 1.27 |
| <b>7055/19</b> | 22        | 0.38            | 19/34     | 19 x 0.16 | 0.010                | 0.25 | 0.052            | 1.32 |
| <b>7056</b>    | 20        | 0.56            | 7/28      | 7 x 0.32  | 0.010                | 0.25 | 0.058            | 1.47 |
| <b>7056/19</b> | 20        | 0.62            | 19/32     | 19 x 0.20 | 0.010                | 0.25 | 0.060            | 1.52 |
| <b>7057</b>    | 18        | 0.90            | 7/26      | 7 x 0.40  | 0.010                | 0.25 | 0.068            | 1.73 |
| <b>7057/19</b> | 18        | 0.96            | 19/30     | 19 x 0.25 | 0.010                | 0.25 | 0.070            | 1.78 |
| <b>7058/19</b> | 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 |        |

# 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       | mm <sup>2</sup> | AWG       | mm        | Inch                 | mm   | Inch             | mm   |            |
| <b>7130</b>  | 24        | 0.23            | 7/32      | 7 x 0.20  | 0.016                | 0.41 | 0.056            | 1.42 | 1 - 10, 29 |
| <b>7131</b>  | 22        | 0.35            | 7/30      | 7 x 0.25  | 0.016                | 0.41 | 0.062            | 1.57 | 1 - 10     |
| <b>7132</b>  | 20        | 0.56            | 7/ 28     | 7 x 0.32  | 0.016                | 0.41 | 0.070            | 1.78 | 1 - 10     |
| <b>7133</b>  | 18        | 0.89            | 7/26      | 7 x 0.40  | 0.016                | 0.41 | 0.080            | 2.03 | 1 - 10, 29 |
| <b>7134</b>  | 16        | 1.32            | 19/0.0117 | 19 x 0.30 | 0.016                | 0.41 | 0.088            | 2.24 | 1 - 10, 29 |
| <b>7035*</b> | 14        | 2.07            | 19/0.0147 | 19 x 0.37 | 0.016                | 0.41 | 0.103            | 2.62 | 1 - 10, 29 |
| <b>7036*</b> | 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 |                 |

# 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       | mm <sup>2</sup> | AWG       | mm         | Inch                 | mm   | Inch             | mm   |
| <b>7044</b> | 18        | 0.81            | 16/30     | 16 x 0.25  | 0.032                | 0.81 | 0.111            | 2.82 |
| <b>7045</b> | 16        | 1.32            | 26/30     | 26 x 0.25  | 0.032                | 0.81 | 0.119            | 3.02 |
| <b>7046</b> | 14        | 2.08            | 41/30     | 41 x 0.25  | 0.032                | 0.81 | 0.138            | 3.51 |
| <b>7047</b> | 12        | 3.29            | 65/30     | 65 x 0.25  | 0.032                | 0.81 | 0.155            | 3.94 |
| <b>7048</b> | 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       | mm <sup>2</sup> | AWG       | mm        | Inch                 | mm   | Inch             | mm   |
| <b>7024</b> | 22        | 0.38            | 19/34     | 19 x 0.16 | 0.016                | 0.41 | 0.064            | 1.63 |
| <b>7025</b> | 20        | 0.62            | 19/32     | 19 x 0.20 | 0.016                | 0.41 | 0.072            | 1.83 |
| <b>7026</b> | 18        | 0.96            | 19/30     | 19 x 0.25 | 0.016                | 0.41 | 0.080            | 2.03 |

### Insulation Colors

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

# 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       | mm²  | AWG       | mm        | Inch                 | mm   | Inch             | mm   |
| <b>7012</b> | 22        | 0.38 | 19/34     | 19 x 0.16 | 0.011                | 0.28 | 0.054            | 1.37 |
| <b>7013</b> | 20        | 0.62 | 19/32     | 19 x 0.20 | 0.011                | 0.28 | 0.06             | 1.52 |
| <b>7014</b> | 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       | mm <sup>2</sup> | AWG       | mm         | Inch                 | mm   | Inch             | mm    |           |
| <b>M4030</b> | 18        | 0.81            | 16/30     | 16 x 0.25  | 0.031                | 0.79 | 0.110            | 2.79  | 3173      |
| <b>M4010</b> | 18        | 0.90            | 7/26      | 7 x 0.48   | 0.031                | 0.79 | 0.112            | 2.84  | 3173      |
| <b>M4001</b> | 18        | 0.82            | Solid     | 1 x 1.02   | 0.031                | 0.79 | 0.105            | 2.67  | 3173      |
| <b>M4011</b> | 16        | 1.43            | 7/24      | 7 x 0.51   | 0.031                | 0.79 | 0.123            | 3.12  | 3173      |
| <b>M4002</b> | 16        | 1.31            | Solid     | 1 x 1.29   | 0.031                | 0.79 | 0.115            | 2.92  | 3173      |
| <b>M4012</b> | 14        | 2.29            | 7/22      | 7 x 0.64   | 0.031                | 0.79 | 0.140            | 3.56  | SIS, 3173 |
| <b>M4003</b> | 14        | 2.08            | Solid     | 1 x 1.63   | 0.031                | 0.79 | 0.130            | 3.30  | SIS, 3173 |
| <b>M4013</b> | 12        | 3.29            | 19/0.0185 | 19 x 0.47  | 0.031                | 0.79 | 0.160            | 4.06  | SIS, 3173 |
| <b>M4004</b> | 12        | 3.31            | Solid     | 1 x 2.06   | 0.031                | 0.79 | 0.150            | 3.81  | SIS, 3173 |
| <b>M4014</b> | 10        | 5.28            | 19/0.0234 | 19 x 0.59  | 0.031                | 0.79 | 0.180            | 4.57  | SIS, 3173 |
| <b>M4005</b> | 10        | 5.26            | Solid     | 1 x 2.59   | 0.031                | 0.79 | 0.170            | 4.32  | SIS, 3173 |
| <b>M4035</b> | 8         | 8.63            | 133/29    | 133 x 0.29 | 0.047                | 1.19 | 0.270            | 6.86  | SIS, 3195 |
| <b>M4015</b> | 8         | 8.38            | 19/0.0295 | 19 x 0.75  | 0.047                | 1.19 | 0.250            | 6.35  | SIS, 3195 |
| <b>M4036</b> | 6         | 13.6            | 133/27    | 133 x 0.36 | 0.062                | 1.57 | 0.340            | 8.64  | SIS, 3196 |
| <b>M4016</b> | 6         | 13.3            | 19/0.0372 | 19 x 0.94  | 0.062                | 1.57 | 0.320            | 8.13  | SIS, 3196 |
| <b>M4037</b> | 4         | 21.6            | 133/25    | 133 x 0.45 | 0.062                | 1.57 | 0.400            | 10.16 | SIS, 3196 |

# 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 <sup>2</sup> | AWG       | mm         | Inch                 | mm   | Inch             | mm   |
| <b>752010</b>   | 20        | 0.51            | 10/30     | 10 x 0.25  | 0.031                | 0.79 | 0.099            | 2.51 |
| <b>751816</b>   | 18        | 0.81            | 16/30     | 16 x 0.25  | 0.031                | 0.79 | 0.109            | 2.77 |
| <b>751626</b>   | 16        | 1.32            | 26/30     | 26 x 0.25  | 0.031                | 0.79 | 0.122            | 3.10 |
| <b>751441*</b>  | 14        | 2.08            | 41/30     | 41 x 0.25  | 0.031                | 0.79 | 0.136            | 3.45 |
| <b>751265*</b>  | 12        | 3.29            | 65/30     | 65 x 0.25  | 0.031                | 0.79 | 0.155            | 3.94 |
| <b>751000*</b>  | 10        | 5.32            | 105/30    | 105 x 0.25 | 0.031                | 0.79 | 0.180            | 4.57 |
| <b>758133**</b> | 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 |        |



# 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       | mm <sup>2</sup> | AWG       | mm        | Inch                 | mm   | Inch             | mm   |
| <b>631816</b> | 18        | 0.81            | 16/30     | 16 x 0.25 | 0.023                | 0.58 | 0.093            | 2.36 |
| <b>631619</b> | 16        | 1.23            | 19/29     | 19 x 0.29 | 0.023                | 0.58 | 0.102            | 2.59 |
| <b>631419</b> | 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 |        |



# 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       | mm <sup>2</sup> | AWG       | mm        | Inch                 | mm   | Inch             | mm   |               |        |
| <b>33201</b>   | 32        | 0.03            | Solid     | 1 x 0.20  | 0.006                | 0.15 | 0.019            | 0.48 | —             | Z2     |
| <b>33219</b>   | 32        | 0.04            | 19/44     | 19 x 0.05 | 0.006                | 0.15 | 0.022            | 0.56 | —             | Z2     |
| <b>2840/7</b>  | 32        | 0.03            | 7/40      | 7 x 0.08  | 0.006                | 0.15 | 0.022            | 0.56 | ETXBAB        | Z1     |
| <b>2841/7</b>  | 30        | 0.06            | 7/38      | 7 x 0.10  | 0.006                | 0.15 | 0.024            | 0.61 | ETXBBB        | Z1     |
| <b>2841/1</b>  | 30        | 0.05            | Solid     | 1 x 0.25  | 0.006                | 0.15 | 0.022            | 0.56 | ETXBBA        | Z1     |
| <b>2842/7</b>  | 28        | 0.09            | 7/36      | 7 x 0.12  | 0.006                | 0.15 | 0.027            | 0.69 | ETXBCB        | Z1     |
| <b>2842/19</b> | 28        | 0.09            | 19/40     | 19 x 0.08 | 0.006                | 0.15 | 0.027            | 0.69 | ETXBCE        | Z1     |
| <b>2842/1</b>  | 28        | 0.08            | Solid     | 1 x 0.32  | 0.006                | 0.15 | 0.025            | 0.64 | ETXBCA        | Z1     |
| <b>2843/7</b>  | 26        | 0.14            | 7/34      | 7 x 0.16  | 0.006                | 0.15 | 0.031            | 0.79 | ETXBDB        | Z1     |
| <b>2843/19</b> | 26        | 0.15            | 19/38     | 19 x 0.10 | 0.006                | 0.15 | 0.031            | 0.79 | ETXBDE        | Z1     |
| <b>2843/1</b>  | 26        | 0.13            | Solid     | 1 x 0.40  | 0.006                | 0.15 | 0.028            | 0.71 | ETXBDA        | Z1     |
| <b>2844/7</b>  | 24        | 0.23            | 7/32      | 7 x 0.20  | 0.006                | 0.15 | 0.036            | 0.91 | ETXBEB        | Z1     |
| <b>2844/19</b> | 24        | 0.24            | 19/36     | 19 x 0.13 | 0.006                | 0.15 | 0.036            | 0.91 | ETXBEE        | Z1     |
| <b>2845/7</b>  | 22        | 0.35            | 7/30      | 7 x 0.25  | 0.006                | 0.15 | 0.042            | 1.07 | ETXBFB        | Z1     |
| <b>2845/19</b> | 22        | 0.38            | 19/34     | 19 x 0.16 | 0.005                | 0.13 | 0.042            | 1.07 | ETXBFE        | Z1     |
| <b>32007</b>   | 20        | 0.56            | 7/28      | 7 x 0.32  | 0.006                | 0.15 | 0.050            | 1.27 | ETXBGB        | Z2     |
| <b>32019</b>   | 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.

# 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 <sup>2</sup> | AWG       | mm        | Inch                 | mm   | Inch             | mm   |           |
| <b>13207</b>    | 32        | 0.03            | 7/40      | 7 x 0.08  | 0.010                | 0.25 | 0.029            | 0.74 | EXBAB     |
| <b>13001</b>    | 30        | 0.05            | Solid     | 1 x 0.25  | 0.010                | 0.25 | 0.030            | 0.76 | EXBBA     |
| <b>12819</b>    | 28        | 0.09            | 19/40     | 19 x 0.07 | 0.010                | 0.25 | 0.036            | 0.91 | —         |
| <b>12819UL*</b> | 28        | 0.09            | 19/40     | 19 x 0.07 | 0.010                | 0.25 | 0.036            | 0.91 | —         |
| <b>11807</b>    | 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 |        |



# 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)<sup>†</sup>

<sup>†</sup>May contain multiple lengths

| Part No.                   | Wire Size |                 | Stranding |           | Insulation Thickness |      | Nominal Diameter |      | NEMA HP3 Type |
|----------------------------|-----------|-----------------|-----------|-----------|----------------------|------|------------------|------|---------------|
|                            | AWG       | mm <sup>2</sup> | AWG       | mm        | Inch                 | mm   | Inch             | mm   |               |
| <b>5851</b>                | 30        | 0.06            | 7/38      | 7 x 0.10  | 0.010                | 0.25 | 0.032            | 0.81 | EXBBB         |
| <b>5852</b>                | 28        | 0.09            | 7/36      | 7 x 0.13  | 0.010                | 0.25 | 0.035            | 0.89 | EXBCB         |
| <b>5853</b>                | 26        | 0.14            | 7/34      | 7 x 0.16  | 0.010                | 0.25 | 0.039            | 0.99 | EXBDB         |
| <b>5853/19</b>             | 26        | 0.15            | 19/38     | 19 x 0.10 | 0.010                | 0.25 | 0.039            | 0.99 | EXBDE         |
| <b>2853/1</b>              | 26        | 0.13            | Solid     | 1 x 0.40  | 0.010                | 0.25 | 0.036            | 0.91 | EXBDA         |
| <b>5854</b>                | 24        | 0.24            | 19/36     | 19 x 0.13 | 0.010                | 0.25 | 0.044            | 1.12 | EXBEE         |
| <b>5854/7</b>              | 24        | 0.23            | 7/32      | 7 x 0.20  | 0.010                | 0.25 | 0.044            | 1.12 | EXBEB         |
| <b>2854/1</b>              | 24        | 0.20            | Solid     | 1 x 0.51  | 0.010                | 0.25 | 0.040            | 1.02 | EXBEA         |
| <b>5855</b>                | 22        | 0.38            | 19/34     | 19 x 0.16 | 0.010                | 0.25 | 0.050            | 1.27 | EXBFE         |
| <b>5855/7</b>              | 22        | 0.35            | 7/30      | 7 x 0.25  | 0.010                | 0.25 | 0.050            | 1.27 | EXBFB         |
| <b>2855/1</b>              | 22        | 0.32            | Solid     | 1 x 0.64  | 0.010                | 0.25 | 0.045            | 1.14 | EXBFA         |
| <b>5856</b>                | 20        | 0.62            | 19/32     | 19 x 0.20 | 0.010                | 0.25 | 0.058            | 1.47 | EXBGE         |
| <b>5856/7</b>              | 20        | 0.56            | 7/28      | 7 x 0.32  | 0.010                | 0.25 | 0.058            | 1.47 | EXBGB         |
| <b>2856/1***</b>           | 20        | 0.52            | Solid     | 1 x 0.81  | 0.010                | 0.25 | 0.052            | 1.32 | EXBGA         |
| <b>5857</b>                | 18        | 0.96            | 19/30     | 19 x 0.25 | 0.010                | 0.25 | 0.069            | 1.75 | EXBHE         |
| <b>2857/1***</b>           | 18        | 0.82            | Solid     | 1 x 1.02  | 0.011                | 0.27 | 0.061            | 1.55 | EXBHA         |
| <b>5858</b>                | 16        | 1.23            | 19/29     | 19 x 0.29 | 0.012                | 0.30 | 0.080            | 2.03 | EXBJE         |
| <b>5859<sup>†</sup></b>    | 14        | 1.94            | 19/27     | 19 x 0.36 | 0.012                | 0.30 | 0.095            | 2.41 | EXBKE         |
| <b>5859/12<sup>†</sup></b> | 12        | 3.08            | 19/25     | 19 x 0.45 | 0.012                | 0.30 | 0.114            | 2.90 | EXBLE         |
| <b>5859/10<sup>†</sup></b> | 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.

<sup>†</sup>White only, not UL AWM 1213.

### Insulation Colors

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

# 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 <sup>2</sup> | AWG       | mm         | Inch                 | mm   | Inch             | mm   |               |
| <b>5874</b>    | 24        | 0.24            | 19/36     | 19 x 0.13  | 0.015                | 0.37 | 0.054            | 1.37 | EEXBEE        |
| <b>5875</b>    | 22        | 0.38            | 19/34     | 19 x 0.16  | 0.014                | 0.36 | 0.060            | 1.52 | EEXBFE        |
| <b>5876</b>    | 20        | 0.62            | 19/32     | 19 x 0.20  | 0.014                | 0.36 | 0.068            | 1.73 | EEXBGE        |
| <b>5877</b>    | 18        | 0.96            | 19/30     | 19 x 0.25  | 0.015                | 0.37 | 0.079            | 2.01 | EEXBHE        |
| <b>5878</b>    | 16        | 1.23            | 19/29     | 19 x 0.29  | 0.016                | 0.41 | 0.089            | 2.26 | EEXBJE        |
| <b>5879</b>    | 14        | 1.94            | 19/27     | 19 x 0.36  | 0.017                | 0.43 | 0.106            | 2.69 | EEXBKE        |
| <b>5879/10</b> | 10        | 4.74            | 37/26     | 37 x 0.40  | 0.017                | 0.43 | 0.145            | 3.68 | EEXBMG        |
| <b>5879/12</b> | 12        | 3.08            | 19/25     | 19 x 0.45  | 0.017                | 0.43 | 0.125            | 3.18 | EEXBLE        |
| <b>5879/8*</b> | 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.

# Hook-Up Wire

1000 V, PTFE



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

| 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     |

Insulation Colors

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



# 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       | mm <sup>2</sup> | AWG       | mm         | Inch                 | mm   | Inch             | mm   |
| <b>AT261938</b> | 26        | 0.15            | 19/38     | 19 x 0.10  | 0.010                | 0.25 | 0.038            | 0.97 |
| <b>AT241936</b> | 24        | 0.24            | 19/36     | 19 x 0.13  | 0.009                | 0.23 | 0.043            | 1.09 |
| <b>AT221934</b> | 22        | 0.38            | 19/34     | 19 x 0.16  | 0.009                | 0.23 | 0.049            | 1.24 |
| <b>AT201932</b> | 20        | 0.62            | 19/32     | 19 x 0.20  | 0.011                | 0.28 | 0.058            | 1.47 |
| <b>AT181930</b> | 18        | 0.96            | 19/30     | 19 x 0.25  | 0.010                | 0.25 | 0.068            | 1.73 |
| <b>AT161929</b> | 16        | 1.23            | 19/29     | 19 x 0.29  | 0.010                | 0.25 | 0.075            | 1.90 |
| <b>AT141927</b> | 14        | 1.94            | 19/27     | 19 x 0.36  | 0.011                | 0.27 | 0.090            | 2.29 |
| <b>AT121925</b> | 12        | 3.08            | 19/25     | 19 x 0.45  | 0.013                | 0.32 | 0.111            | 2.82 |
| <b>AT103726</b> | 10        | 4.74            | 37/26     | 37 x 0.40  | 0.015                | 0.38 | 0.139            | 3.53 |
| <b>AT813329</b> | 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       | mm <sup>2</sup> | AWG       | mm         | Inch                 | mm   | Inch             | mm   |
| <b>AZ241936</b> | 24        | 0.24            | 19/36     | 19 x 0.13  | 0.011                | 0.27 | 0.045            | 1.14 |
| <b>AZ221934</b> | 22        | 0.38            | 19/34     | 19 x 0.16  | 0.011                | 0.28 | 0.052            | 1.32 |
| <b>AZ201932</b> | 20        | 0.62            | 19/32     | 19 x 0.20  | 0.011                | 0.28 | 0.060            | 1.52 |
| <b>AZ181930</b> | 18        | 0.96            | 19/30     | 19 x 0.25  | 0.012                | 0.29 | 0.071            | 1.80 |
| <b>AZ161929</b> | 16        | 1.23            | 19/29     | 19 x 0.29  | 0.013                | 0.33 | 0.079            | 2.01 |
| <b>AZ141927</b> | 14        | 1.94            | 19/27     | 19 x 0.36  | 0.013                | 0.33 | 0.093            | 2.36 |
| <b>AZ123728</b> | 12        | 2.97            | 37/28     | 37 x 0.32  | 0.014                | 0.34 | 0.114            | 2.90 |
| <b>AZ103726</b> | 10        | 4.74            | 37/26     | 37 x 0.40  | 0.015                | 0.38 | 0.139            | 3.53 |
| <b>AZ813329</b> | 8         | 8.63            | 133/29    | 133 x 0.29 | 0.018                | 0.47 | 0.199            | 5.05 |
| <b>AZ413325</b> | 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 |        |

# 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       | mm <sup>2</sup> | Inch                 | mm   | Inch             | mm   |          |
| <b>5951</b> | 30        | 0.05            | 0.005                | 0.11 | 0.019            | 0.51 | 1423     |
| <b>5952</b> | 28        | 0.08            | 0.006                | 0.14 | 0.024            | 0.61 | 1422     |
| <b>5953</b> | 26        | 0.13            | 0.006                | 0.14 | 0.027            | 0.69 | 1422     |
| <b>5954</b> | 24        | 0.20            | 0.005                | 0.11 | 0.030            | 0.76 | 1423     |

| Part No.      | Wire Size |                 | Insulation Thickness |      | Nominal Diameter |      | UL Style |
|---------------|-----------|-----------------|----------------------|------|------------------|------|----------|
|               | AWG       | mm <sup>2</sup> | Inch                 | mm   | Inch             | mm   |          |
| <b>1805</b>   | 30        | 0.05            | 0.005                | 0.11 | 0.020            | 0.51 | 1516     |
| <b>1806*</b>  | 28        | 0.08            | 0.006                | 0.14 | 0.024            | 0.61 | 1523     |
| <b>1807</b>   | 26        | 0.13            | 0.006                | 0.14 | 0.027            | 0.69 | 1523     |
| <b>1808**</b> | 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 |        |

# Hook-Up Wire

Test Lead Wire, EPR Rubber



## 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)

| Part No.    | Wire Size |                 | Stranding |           | Insulation Thickness |      | Nominal Diameter |      | Breakdown Voltage (RMS) | Working Voltage (RMS) |
|-------------|-----------|-----------------|-----------|-----------|----------------------|------|------------------|------|-------------------------|-----------------------|
|             | AWG       | mm <sup>2</sup> | AWG       | mm        | Inch                 | mm   | Inch             | mm   |                         |                       |
| <b>1632</b> | 20        | 0.52            | 41/36     | 41 x 0.13 | 0.040                | 1.02 | 0.118            | 3.00 | 6000                    | 1500                  |
| <b>1635</b> | 20        | 0.52            | 41/36     | 41 x 0.13 | 0.047                | 1.19 | 0.132            | 3.35 | 12,000                  | 3000                  |
| <b>1636</b> | 18        | 0.83            | 65/36     | 65 x 0.13 | 0.045                | 1.14 | 0.137            | 3.48 | 20,000                  | 5000                  |

## Insulation Colors

Black

Red



# 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 <sup>2</sup> | AWG       | mm          | Inch                 | mm   | Inch             | mm    |        |
| <b>392207</b> | 22        | 0.35            | 7/30      | 7 x 0.25    | 0.047                | 1.19 | 0.124            | 3.15  | 3212   |
| <b>392010</b> | 20        | 0.51            | 10/30     | 10 x 0.25   | 0.047                | 1.19 | 0.131            | 3.33  | 3212   |
| <b>391816</b> | 18        | 0.81            | 16/30     | 16 x 0.25   | 0.047                | 1.19 | 0.141            | 3.58  | 3212   |
| <b>391626</b> | 16        | 1.32            | 26/30     | 26 x 0.25   | 0.047                | 1.19 | 0.154            | 3.91  | 3212   |
| <b>391441</b> | 14        | 2.08            | 41/30     | 41 x 0.25   | 0.047                | 1.19 | 0.168            | 4.27  | 3212   |
| <b>391265</b> | 12        | 3.29            | 65/30     | 65 x 0.25   | 0.047                | 1.19 | 0.187            | 4.75  | 3212   |
| <b>391000</b> | 10        | 5.32            | 105/30    | 105 x 0.25  | 0.047                | 1.19 | 0.212            | 5.38  | 3212   |
| <b>398133</b> | 8         | 8.61            | 133/29    | 133 x 0.29  | 0.063                | 1.60 | 0.295            | 7.49  | 3213   |
| <b>396133</b> | 6         | 13.57           | 133/27    | 133 x 0.36  | 0.063                | 1.60 | 0.339            | 8.61  | 3213   |
| <b>394133</b> | 4         | 21.55           | 133/25    | 133 x 0.45  | 0.063                | 1.60 | 0.395            | 10.03 | 3213   |
| <b>392259</b> | 2         | 33.15           | 259/26    | 259 x 0.40  | 0.063                | 1.60 | 0.460            | 11.68 | 3213   |
| <b>391259</b> | 1         | 41.96           | 259/25    | 259 x 0.45  | 0.078                | 1.98 | 0.532            | 13.51 | 3214   |
| <b>390001</b> | 1/0       | 53.10           | 259/24    | 259 x 0.51  | 0.078                | 1.98 | 0.578            | 14.68 | 3214   |
| <b>390002</b> | 2/0       | 67.43           | 1330/30   | 1330 x 0.25 | 0.078                | 1.98 | 0.639            | 16.23 | 3214   |
| <b>390004</b> | 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       | mm <sup>2</sup> | AWG       | mm        | Inch                 | mm   | Inch             | mm   | UL          | CSA    |
| <b>M4101</b> | 18        | 0.82            | 7/0.0152  | 7 x 0.39  | 0.032                | 0.81 | 0.124            | 3.15 | 3071, SF-2  | SEW-2  |
| <b>M4110</b> | 18        | 0.81            | 16/30     | 16 x 0.25 | 0.032                | 0.81 | 0.130            | 3.30 | 3070, SFF-2 | SEWF-2 |
| <b>M4102</b> | 16        | 1.31            | 7/0.0192  | 7 x 0.49  | 0.032                | 0.81 | 0.136            | 3.45 | 3071, SF-2  | SEW-2  |
| <b>M4111</b> | 16        | 1.32            | 26/30     | 26 x 0.25 | 0.032                | 0.81 | 0.140            | 3.56 | 3070, SFF-2 | SEWF-2 |
| <b>M4103</b> | 14        | 2.08            | 7/0.0242  | 7 x 0.61  | 0.032                | 0.81 | 0.152            | 3.86 | 3071, SF-2  | SEW-2  |
| <b>M4112</b> | 14        | 2.08            | 41/30     | 41 x 0.25 | 0.032                | 0.81 | 0.160            | 4.06 | 3070, SFF-2 | SEWF-2 |
| <b>M4104</b> | 12        | 3.08            | 19/25     | 19 x 0.45 | 0.032                | 0.81 | 0.166            | 4.22 | 3074, SF-2  | SEW-2  |
| <b>M4113</b> | 12        | 3.29            | 65/30     | 65 x 0.25 | 0.032                | 0.81 | 0.180            | 4.57 | 3070, SFF-2 | SEWF-2 |
| <b>M4105</b> | 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

# 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       | mm <sup>2</sup> | AWG       | mm         | Inch                 | mm   | Inch             | mm    |              |          |
| <b>M4114</b> | 10        | 5.32            | 105/30    | 105 x 0.25 | 0.047                | 1.19 | 0.230            | 5.84  | 3101         | SEWF-2   |
| <b>M4115</b> | 8         | 8.29            | 133/.0111 | 133 x 0.28 | 0.062                | 1.57 | 0.305            | 7.75  | 3278         | SEWF-2   |
| <b>M4116</b> | 6         | 13.6            | 133/27    | 133 x 0.36 | 0.062                | 1.57 | 0.345            | 8.76  | 3278         | SEWF-2   |
| <b>M4117</b> | 4         | 21.1            | 133/.0177 | 133 x 0.45 | 0.062                | 1.57 | 0.400            | 10.16 | 3231         | SEW-2    |
| <b>M4118</b> | 2         | 33.5            | 133/.0223 | 133 x 0.57 | 0.062                | 1.57 | 0.470            | 11.94 | 3231         | SEW-2    |
| <b>M4120</b> | 1/0       | 53.5            | 259/.0202 | 259 x 0.51 | 0.085                | 2.16 | 0.605            | 15.37 | 3231         | SEW-2    |
| <b>M4121</b> | 2/0       | 68.8            | 259/.0229 | 259 x 0.58 | 0.085                | 2.16 | 0.660            | 16.76 | 3231         | SEW-2    |
| <b>M4122</b> | 3/0       | 85.3            | 259/.0255 | 259 x 0.65 | 0.085                | 2.16 | 0.715            | 18.16 | 3231         | SEW-2    |
| <b>M4123</b> | 4/0       | 107             | 259/.0286 | 259 x 0.73 | 0.085                | 2.16 | 0.785            | 19.94 | 3231         | SEW-2    |

### Insulation Colors

White

Black

# 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       | mm <sup>2</sup> | 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 |
|-------|-------|-----|

# 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       | mm <sup>2</sup> | AWG       | mm         | Inch                 | mm   | Inch             | mm    |         |
| <b>391297</b>  | 12        | 3.29            | 65/30     | 65 x 0.25  | 0.097                | 2.46 | 0.287            | 7.29  | 40 kV   |
| <b>391275</b>  | 12        | 3.29            | 65/30     | 65 x 0.25  | 0.075                | 1.90 | 0.243            | 6.17  | 30 kV   |
| <b>391262</b>  | 12        | 3.29            | 65/30     | 65 x 0.25  | 0.062                | 1.57 | 0.217            | 5.51  | 25 kV   |
| <b>391250</b>  | 12        | 3.29            | 65/30     | 65 x 0.25  | 0.050                | 1.27 | 0.193            | 4.90  | 20 kV   |
| <b>391245</b>  | 12        | 3.29            | 65/30     | 65 x 0.25  | 0.045                | 1.14 | 0.183            | 4.65  | 15 kV   |
| <b>391099</b>  | 10        | 5.32            | 105/30    | 105 x 0.25 | 0.150                | 3.81 | 0.418            | 10.62 | 50 kV   |
| <b>391097</b>  | 10        | 5.32            | 105/30    | 105 x 0.25 | 0.097                | 2.46 | 0.312            | 7.92  | 40 kV   |
| <b>391045</b>  | 10        | 5.32            | 105/30    | 105 x 0.25 | 0.045                | 1.14 | 0.208            | 5.28  | 15 kV   |
| <b>391040</b>  | 10        | 5.32            | 105/30    | 105 x 0.25 | 0.040                | 1.02 | 0.198            | 5.03  | 10 kV   |
| <b>390897</b>  | 8         | 8.61            | 133/29    | 133 x 0.28 | 0.097                | 2.46 | 0.363            | 9.22  | 40 kV   |
| <b>390862*</b> | 8         | 8.61            | 133/29    | 133 x 0.28 | 0.062                | 1.57 | 0.293            | 7.44  | 25 kV   |
| <b>390845</b>  | 8         | 8.61            | 133/29    | 133 x 0.28 | 0.045                | 1.14 | 0.259            | 6.58  | 15 kV   |
| <b>390662*</b> | 6         | 13.57           | 133/27    | 133 x 0.36 | 0.062                | 1.57 | 0.337            | 8.56  | 25 kV   |
| <b>390645</b>  | 6         | 13.57           | 133/27    | 133 x 0.36 | 0.045                | 1.14 | 0.303            | 7.70  | 15 kV   |
| <b>390462*</b> | 4         | 21.55           | 133/25    | 133 x 0.45 | 0.062                | 1.57 | 0.393            | 9.98  | 25 kV   |
| <b>390262*</b> | 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 |
|-------|-------|-----|

# 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       | mm <sup>2</sup> | AWG       | mm        | Inch                 | mm   | Inch             | mm    |         |
| <b>39X2220</b> | 22        | 0.35            | 7/30      | 7 x 0.25  | 0.050                | 1.27 | 0.130            | 3.30  | 20 kV   |
| <b>39X2215</b> | 22        | 0.35            | 7/30      | 7 x 0.25  | 0.040                | 1.02 | 0.110            | 2.79  | 15 kV   |
| <b>39X2205</b> | 22        | 0.35            | 7/30      | 7 x 0.25  | 0.020                | 0.51 | 0.070            | 1.78  | 5 kV    |
| <b>39X2025</b> | 20        | 0.62            | 19/32     | 19 x 0.20 | 0.063                | 1.60 | 0.166            | 4.22  | 25 kV   |
| <b>39X2020</b> | 20        | 0.62            | 19/32     | 19 x 0.20 | 0.055                | 1.40 | 0.150            | 3.81  | 20 kV   |
| <b>39X2015</b> | 20        | 0.62            | 19/32     | 19 x 0.20 | 0.040                | 1.02 | 0.120            | 3.05  | 15 kV   |
| <b>39X1825</b> | 18        | 0.96            | 19/30     | 19 x 0.25 | 0.055                | 1.40 | 0.160            | 4.06  | 25 kV   |
| <b>39X1660</b> | 16        | 1.32            | 26/30     | 26 x 0.25 | 0.162                | 4.11 | 0.384            | 9.75  | 60 kV   |
| <b>39X1645</b> | 16        | 1.23            | 19/29     | 19 x 0.28 | 0.125                | 3.18 | 0.306            | 7.77  | 45 kV   |
| <b>39X1635</b> | 16        | 1.23            | 41/32     | 41 x 0.20 | 0.105                | 2.67 | 0.269            | 6.83  | 35 kV   |
| <b>39X1620</b> | 16        | 1.33            | 41/32     | 41 x 0.20 | 0.053                | 1.33 | 0.164            | 4.17  | 20 kV   |
| <b>39X1460</b> | 14        | 1.94            | 19/27     | 19 x 0.36 | 0.157                | 3.99 | 0.385            | 9.78  | 60 kV   |
| <b>39X1260</b> | 12        | 3.08            | 19/25     | 19 x 0.45 | 0.178                | 4.51 | 0.445            | 11.30 | 60 kV   |

# 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       | mm <sup>2</sup> | AWG       | mm         | Inch                 | mm   | Inch             | mm    |
| <b>3112010</b> | 20        | 0.51            | 10/30     | 10 x 0.25  | 0.025                | 0.64 | 0.101            | 2.57  |
| <b>3111816</b> | 18        | 0.81            | 16/30     | 16 x 0.25  | 0.025                | 0.64 | 0.111            | 2.82  |
| <b>3111626</b> | 16        | 1.32            | 26/30     | 26 x 0.25  | 0.025                | 0.64 | 0.124            | 3.15  |
| <b>3111441</b> | 14        | 2.08            | 41/30     | 41 x 0.25  | 0.025                | 0.64 | 0.138            | 3.51  |
| <b>3111265</b> | 12        | 3.29            | 65/30     | 65 x 0.25  | 0.025                | 0.64 | 0.157            | 3.99  |
| <b>3111000</b> | 10        | 5.32            | 105/30    | 105 x 0.25 | 0.030                | 0.76 | 0.206            | 5.23  |
| <b>3118133</b> | 8         | 8.63            | 133/29    | 133 x 0.28 | 0.030                | 0.76 | 0.260            | 6.60  |
| <b>3116133</b> | 6         | 13.6            | 133/27    | 133 x 0.36 | 0.030                | 0.76 | 0.304            | 7.72  |
| <b>3114133</b> | 4         | 21.6            | 133/25    | 133 x 0.36 | 0.030                | 0.76 | 0.361            | 9.17  |
| <b>3112133</b> | 2         | 34.4            | 133/23    | 133 x 0.57 | 0.035                | 0.89 | 0.444            | 11.28 |

# 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 <sup>2</sup> | AWG       | mm         | Inch                 | mm   | Inch             | mm   |
| <b>3131816</b> | 18        | 0.81            | 16/30     | 16 x 0.25  | 0.016                | 0.41 | 0.109            | 2.77 |
| <b>3131626</b> | 16        | 1.32            | 26/30     | 26 x 0.25  | 0.016                | 0.41 | 0.122            | 3.10 |
| <b>3131441</b> | 14        | 2.08            | 41/30     | 41 x 0.25  | 0.016                | 0.41 | 0.136            | 3.45 |
| <b>3131265</b> | 12        | 3.29            | 65/30     | 65 x 0.25  | 0.016                | 0.41 | 0.155            | 3.94 |
| <b>3131000</b> | 10        | 5.32            | 105/30    | 105 x 0.25 | 0.016                | 0.41 | 0.180            | 4.57 |
| <b>3138133</b> | 8         | 8.61            | 133/29    | 133 x 0.29 | 0.016                | 0.41 | 0.232            | 5.89 |
| <b>3136133</b> | 6         | 13.6            | 133/27    | 133 x 0.36 | 0.016                | 0.41 | 0.315            | 8.00 |

## 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 <sup>2</sup> | AWG        | mm         | Inch                 | mm   | Inch             | mm    |
| <b>M70562*</b> | 2         | 36.6            | 133/0.0223 | 133 x 0.57 | 0.020                | 0.51 | 0.445            | 11.30 |
| <b>M70563</b>  | 1         | 41.1            | 259/0.0177 | 259 x 0.45 | 0.020                | 0.51 | 0.485            | 12.32 |
| <b>M70564</b>  | 1/0       | 53.5            | 259/0.0202 | 259 x 0.51 | 0.020                | 0.51 | 0.535            | 13.59 |
| <b>M70565</b>  | 2/0       | 68.8            | 259/0.0227 | 259 x 0.58 | 0.020                | 0.51 | 0.685            | 17.40 |
| <b>M70566</b>  | 3/0       | 85.3            | 259/0.0255 | 259 x 0.65 | 0.020                | 0.51 | 0.645            | 16.38 |
| <b>M70567</b>  | 4/0       | 107             | 259/0.0286 | 259 x 0.73 | 0.020                | 0.51 | 0.710            | 18.03 |

\*UL AWM 5196.

# 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       | mm <sup>2</sup> | AWG       | mm          | Inch                 | mm   | Inch             | mm    | A                         | V             |
| <b>6112</b> | 6         | 13.5            | 266/30    | 266 x 0.25  | 0.060                | 1.52 | 0.320            | 8.13  | 75                        | 3.30          |
| <b>6113</b> | 4         | 19.9            | 392/30    | 392 x 0.25  | 0.060                | 1.52 | 0.375            | 9.53  | 100                       | 2.80          |
| <b>6115</b> | 2         | 32.6            | 644/30    | 644 x 0.25  | 0.060                | 1.52 | 0.440            | 11.18 | 200                       | 3.60          |
| <b>6116</b> | 1         | 39.7            | 784/30    | 784 x 0.25  | 0.080                | 2.03 | 0.515            | 13.08 | 250                       | 3.80          |
| <b>6117</b> | 1/0       | 52.0            | 1026/30   | 1026 x 0.25 | 0.080                | 2.03 | 0.550            | 13.97 | 300                       | 3.60          |
| <b>6118</b> | 2/0       | 63.5            | 1254/30   | 1254 x 0.25 | 0.080                | 2.03 | 0.590            | 14.99 | 375                       | 3.37          |
| <b>6119</b> | 3/0       | 81.8            | 1615/30   | 1615 x 0.25 | 0.080                | 2.03 | 0.660            | 16.76 | 450                       | 3.40          |
| <b>6120</b> | 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.



# 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 <sup>2</sup> | AWG       | mm         | Inch                        | mm            | Inch             | mm    |
| <b>PV1430</b>   | 14        | 2.08            | 41/30     | 41 x 0.25  | 0.063/<br>0.032             | 1.60/<br>0.81 | 0.267            | 6.78  |
| <b>PV1230</b>   | 12        | 3.29            | 65/30     | 65 x 0.25  | 0.063/<br>0.032             | 1.60/<br>0.81 | 0.286            | 7.26  |
| <b>PV1030</b>   | 10        | 5.32            | 105/30    | 105 x 0.25 | 0.063/<br>0.032             | 1.60/<br>0.81 | 0.311            | 7.90  |
| <b>PV0830A*</b> | 8         | 8.51            | 168/30    | 168 x 0.25 | 0.078/<br>0.032             | 1.98/<br>0.81 | 0.390            | 9.91  |
| <b>PV0630A*</b> | 6         | 13.5            | 266/30    | 266 x 0.25 | 0.078/<br>0.032             | 1.98/<br>0.81 | 0.433            | 11.00 |
| <b>PV0430A*</b> | 4         | 21.3            | 420/30    | 420 x 0.25 | 0.078/<br>0.032             | 1.98/<br>0.81 | 0.491            | 12.47 |
| <b>PV0230A*</b> | 2         | 33.7            | 665/30    | 665 x 0.25 | 0.078/<br>0.032             | 1.98/<br>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 <sup>2</sup> | AWG       | mm         | Inch                        | mm            | Inch             | mm    |
| <b>PVT1430</b> | 14        | 2.5             | 50/30     | 50 x 0.25  | 0.045/<br>0.032             | 1.14/<br>0.81 | 0.230            | 5.84  |
| <b>PVT1228</b> | 12        | 4.0             | 56/28     | 56 x 0.32  | 0.045/<br>0.032             | 1.14/<br>0.81 | 0.252            | 6.40  |
| <b>PVT1028</b> | 10        | 6.0             | 84/28     | 84 x 0.32  | 0.045/<br>0.032             | 1.14/<br>0.81 | 0.275            | 6.99  |
| <b>PVT0826</b> | 8         | 10              | 78/26     | 78 x 0.40  | 0.060/<br>0.032             | 1.52/<br>0.81 | 0.340            | 8.64  |
| <b>PVT0626</b> | 6         | 16              | 128/26    | 128 x 0.40 | 0.060/<br>0.032             | 1.52/<br>0.81 | 0.386            | 9.80  |
| <b>PVT0426</b> | 4         | 25              | 199/26    | 199 x 0.40 | 0.060/<br>0.032             | 1.52/<br>0.81 | 0.436            | 11.07 |
| <b>PVT0226</b> | 2         | 35              | 279/26    | 279 x 0.40 | 0.060/<br>0.032             | 1.52/<br>0.81 | 0.484            | 12.29 |



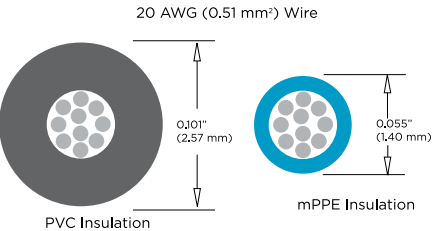
# Hook-Up Wire

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 mm<sup>2</sup>)

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    |
| <b>3550</b>    | 10         | 0.392 | 9.96  |
| <b>3550/14</b> | 14         | 0.546 | 13.87 |
| <b>3551</b>    | 15         | 0.585 | 14.68 |
| <b>3551/16</b> | 16         | 0.624 | 15.85 |
| <b>3553</b>    | 30         | 1.170 | 29.72 |

#### 24 AWG (0.23 mm<sup>2</sup>)

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    |
| <b>3540/7</b> | 10         | 0.440 | 11.18 |
| <b>3541/7</b> | 15         | 0.660 | 16.76 |
| <b>3542/7</b> | 20         | 0.880 | 22.35 |

#### 24 AWG (0.24 mm<sup>2</sup>)

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    |
| <b>3540</b> | 10         | 0.440 | 11.18 |
| <b>3541</b> | 15         | 0.660 | 16.76 |
| <b>3542</b> | 20         | 0.880 | 22.35 |
| <b>3543</b> | 30         | 1.320 | 33.53 |

#### 22 AWG (0.35 mm<sup>2</sup>)

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    |
| <b>3530/7</b> | 10         | 0.500 | 12.70 |
| <b>3531/7</b> | 15         | 0.750 | 19.05 |
| <b>3532/7</b> | 20         | 1.000 | 25.40 |
| <b>3533/7</b> | 30         | 1.500 | 38.10 |

#### 22 AWG (0.38 mm<sup>2</sup>)

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    |
| <b>3530</b> | 10         | 0.510 | 12.95 |
| <b>3531</b> | 15         | 0.765 | 19.43 |
| <b>3532</b> | 20         | 1.020 | 25.91 |
| <b>3533</b> | 30         | 1.530 | 38.86 |



# 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)**

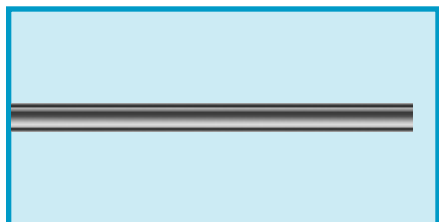
Stranding: 7/30 (7 x 0.25 mm)  
Insulation thickness: 0.016 (0.41 mm)  
Cable height: 0.065 (1.65 mm)

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



# 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 <sup>2</sup> | Inch     | mm   |
| <b>938</b>   | 38        | 16    | .008            | 0.004    | 0.10 |
| <b>936</b>   | 36        | 25    | 0.01            | 0.005    | 0.13 |
| <b>934</b>   | 34        | 40    | 0.02            | 0.006    | 0.15 |
| <b>932</b>   | 32        | 64    | 0.03            | 0.008    | 0.20 |
| <b>299/3</b> | 30        | 100   | 0.05            | 0.010    | 0.25 |
| <b>299/2</b> | 28        | 159   | 0.08            | 0.013    | 0.33 |
| <b>299/1</b> | 26        | 253   | 0.12            | 0.016    | 0.41 |
| <b>299</b>   | 24        | 404   | 0.20            | 0.020    | 0.51 |
| <b>298</b>   | 22        | 640   | 0.32            | 0.025    | 0.64 |
| <b>297</b>   | 20        | 1020  | 0.51            | 0.032    | 0.81 |
| <b>296</b>   | 18        | 1620  | 0.82            | 0.040    | 1.02 |
| <b>295</b>   | 16        | 2580  | 1.31            | 0.051    | 1.30 |
| <b>286</b>   | 14        | 4110  | 2.08            | 0.064    | 1.63 |
| <b>289</b>   | 12        | 6530  | 3.31            | 0.081    | 2.06 |
| <b>910</b>   | 10        | 10380 | 5.26            | 0.102    | 2.59 |
| <b>908</b>   | 8         | 16510 | 8.37            | 0.129    | 3.28 |
| <b>906</b>   | 6         | 26250 | 13.3            | 0.162    | 4.11 |



# 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       | mm <sup>2</sup> |                                        | Feet                     | Meters |             |
| <b>HU-KIT-40</b> | 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        |
| <b>HU-KIT-30</b> | MIL-W-76B Type MW                       | 24        | 0.23            | White<br>Black<br>Red<br>Green<br>Blue | 100                      | 30.5   | 1550        |
| <b>HU-KIT-20</b> | 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        |
| <b>HU-KIT-10</b> | 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.

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

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

{ C O N F E S S I O N }

# We think we're pretty tough

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



## Superior Performance for Sustainable Designs

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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](http://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



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### Офис по работе с юридическими лицами:

105318, г.Москва, ул.Щербаковская д.3, офис 1107, 1118, ДЦ «Щербаковский»

Телефон: +7 495 668-12-70 (многоканальный)

Факс: +7 495 668-12-70 (доб.304)

E-mail: [info@moschip.ru](mailto:info@moschip.ru)

Skype отдела продаж:

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