

Hook-Up Wire



Hook-Up Wire



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

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

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

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

| Insulation | Material | Temperature Range | Features |
|------------|------------------------------|-------------------|--|
| PVC | Polyvinyl chloride | -55°C to +105°C | General-purpose insulation Good abrasion resistance Excellent flame resistance |
| XL-PVC | Cross-linked PVC | -55°C to +105°C | Better abrasion and cut-through resistance than standard PVC Improved temperature and solder iron resistance over standard PVC Used in high-density wiring |
| mPPE | Modified polyphenylene ether | -40°C to +105°C | Excellent recyclability Excellent abrasion and cut-through resistance 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 Chemically inert: excellent chemical and solvent resistance 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 Excellent flexibility 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 Chemically inert: excellent chemical and solvent resistance Moisture resistant Withstands mechanical abuse and repeated flexing |
| MG | Mica glass | +450°C | High-temperature applications, such as heat-treating furnaces, kilns, and food service equipment Excellent thermal stability |

| Voltage | Insulation | Wire Range (AWG) | | Approvals | | Temperature Range | |
|---|------------|------------------|---------|---|----------------|-------------------|-----------------|
| | | Stranded | Solid | UL | CSA | | |
| UL/CSA | | | | | | | |
| 150 | XL-PVC | 26 - 16 | — | AWM I A/B FT1 | | -55°C to +105°C | |
| | | | | AWM 1429 | | -55°C to +80°C | |
| | XLPE | 22 - 18 | — | AWM 3265 | I A/B FT1 | -55°C to +125°C | |
| 300 | PVC | 30 - 16 | 24 - 16 | AWM 1569 | | -40°C to +105°C | |
| | | | | AWM 1007 | | -40°C to +80°C | |
| | | | TR-64 | | -40°C to +90°C | | |
| | SR-PVC | 30 - 16 | — | AWM 1061 | I A/B FT1 | -10°C to +80°C | |
| | XL-PVC | 26 - 16 | — | AWM 1430 | REW XL-PVC | -55°C to +105°C | |
| | XLPE | 22 - 18 | — | AWM 3266 | CL 1252 XLPE | -55°C to +125°C | |
| | XLPE | 22 - 16 | — | AWM 3199 | CL1054 | -55°C to +125°C | |
| | PTFE | 24 - 8 | — | AWM 1180 | | -60°C to +200°C | |
| 600 | PVC | 24 - 10 | 26 - 10 | AWM 1015, 1230 MTW, THW, TW | | TEW-105 | -20°C to +105°C |
| | | 8 - 4/0 | — | AWM 1242, 1284 | | | -20°C to +105°C |
| | mPPE | 28 - 10 | 18 - 14 | AWM 11028 | I A/B FT-1 | -40°C to +105°C | |
| | XLPE | 18 - 10 | — | AWM 3271 | CL 1251 XLPE | -55°C to +125°C | |
| | XLPE | 20 - 2/0 | — | AWM 3173, 3195, 3196, 3300 SIS Rated | | | -55°C to +125°C |
| | ETFE | 24 - 4 | — | SAE AS22759/16 | | | -55°C to +150°C |
| | PTFE | 26 - 8 | — | SAE AS22759/11 | | | -55°C to +200°C |
| | Silicone | 22 - 4/0 | — | AWM 3212, 3213, 3214 | AWM I A/B | | -40°C to +150°C |
| 10,000+ | Silicone | 22 - 2 | — | AWM 3239 | | | -40°C to +150°C |
| Military | | | | | | | |
| 250 | PTFE | 32 - 22 | 30 - 26 | MIL-DTL-16878/6 (Type ET) | | -60°C to +200°C | |
| 600 | XL-PVC | 26 - 16 | — | MIL-DTL-16878/1 (Type B) | | -55°C to +105°C | |
| | PVC | 32 - 14 | — | MIL-DTL-16878/1 (Type B) | | -55°C to +105°C | |
| | PVC | 14 - 8 | — | MIL-W-76 Type HW | | -20°C to +80°C | |
| | PTFE | 30 - 10 | 26 - 18 | MIL-DTL-16878/4 (Type E) | | -60°C to +200°C | |
| 1000 | PVC | 24 - 12 | 24 - 18 | MIL-DTL-16878/2 (Type C) | | -40°C to +80°C | |
| | XLPE | 22 - 18 | — | MIL-DTL-16878/2 (Type C) | | -55°C to +105°C | |
| | PTFE | 24 - 8 | — | MIL-DTL-16878/5 (Type EE) | | -60°C to +200°C | |
| 3000 | XLPE | 18 - 10 | — | MIL-DTL-16878/1 (Type D) | | -55°C to +105°C | |
| Solar | | | | | | | |
| 1000/2000 | XLPE/PVC | 14 - 2 | — | UL 4703 PV Wire | RW-90 | -40°C to +90°C | |
| 600/1000 | LSZH/LSZH | 14 - 2 | — | UL 4703 PV Wire TUV 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 ² | AWG | mm | Inch | mm | Inch | mm | |
| 3047 | 30 | 0.06 | 7/38 | 7 x 0.10 | 0.016 | 0.41 | 0.044 | 1.12 | Z1, 1 - 10 |
| 3048 | 28 | 0.09 | 7/36 | 7 x 0.13 | 0.016 | 0.41 | 0.047 | 1.19 | Z1, 1 - 10 |
| 3049 | 26 | 0.14 | 7/34 | 7 x 0.16 | 0.016 | 0.41 | 0.051 | 1.30 | Z1, 1 - 10 |
| 3050/1 | 24 | 0.20 | Solid | 1 x 0.51 | 0.016 | 0.41 | 0.052 | 1.32 | Z1, 1 - 10 |
| 3050 | 24 | 0.23 | 7/32 | 7 x 0.20 | 0.016 | 0.41 | 0.056 | 1.42 | Z1, 1 - 19, 28, 30 |
| 892407T[†] | 24 | 0.23 | 7/32 | 7 x 0.20 | 0.016 | 0.41 | 0.056 | 1.42 | Z2, 0 - 9 |
| 892419[†] | 24 | 0.24 | 19/36 | 19 x 0.13 | 0.016 | 0.41 | 0.057 | 1.45 | Z2, 0 - 9 |
| 3051/1 | 22 | 0.32 | Solid | 1 x 0.64 | 0.016 | 0.41 | 0.057 | 1.45 | Z1, 1 - 10 |
| 3051 | 22 | 0.35 | 7/30 | 7 x 0.25 | 0.016 | 0.41 | 0.062 | 1.57 | Z1, 1 - 19, 28, 30 |
| 892207T[†] | 22 | 0.35 | 7/30 | 7 x 0.25 | 0.016 | 0.41 | 0.062 | 1.57 | Z2, 0 - 9 |
| 892219[†] | 22 | 0.38 | 19/34 | 19 x 0.16 | 0.016 | 0.41 | 0.064 | 1.63 | Z2, 0 - 9 |
| 3053 | 20 | 0.51 | 10/30 | 10 x 0.25 | 0.016 | 0.41 | 0.069 | 1.75 | Z1, 1 - 19, 28, 30 |
| 892010T[†] | 20 | 0.51 | 10/30 | 10 x 0.25 | 0.016 | 0.41 | 0.069 | 1.75 | Z2, 0 - 9 |
| 3053/1 | 20 | 0.52 | Solid | 1 x 0.81 | 0.016 | 0.41 | 0.064 | 1.63 | Z1, 1 - 10 |
| 892007[†] | 20 | 0.56 | 7/28 | 7 x 0.32 | 0.016 | 0.41 | 0.070 | 1.78 | Z2, 0 - 9 |
| 892019[†] | 20 | 0.62 | 19/32 | 19 x 0.20 | 0.016 | 0.41 | 0.072 | 1.83 | Z2, 0 - 9 |
| 3055 | 18 | 0.81 | 16/30 | 16 x 0.25 | 0.016 | 0.41 | 0.079 | 2.01 | Z1, 1 - 19, 28, 30 |
| 891816T[†] | 18 | 0.81 | 16/30 | 16 x 0.25 | 0.016 | 0.41 | 0.079 | 2.01 | Z2, 0 - 9 |
| 3055/1 | 18 | 0.82 | Solid | 1 x 1.02 | 0.016 | 0.41 | 0.072 | 1.83 | Z1, 1 - 10 |
| 891819[†] | 18 | 0.96 | 19/30 | 19 x 0.25 | 0.016 | 0.41 | 0.082 | 2.08 | Z2, 0 - 9 |
| 3057/1 | 16 | 1.31 | Solid | 1 x 1.29 | 0.016 | 0.41 | 0.083 | 2.11 | Z1, 1 - 10 |
| 3057 | 16 | 1.32 | 26/30 | 26 x 0.25 | 0.016 | 0.41 | 0.092 | 2.34 | Z1, 1 - 19, 28, 30 |
| 891441[†] | 14 | 2.08 | 41/30 | 41 x 0.25 | 0.016 | 0.41 | 0.106 | 2.69 | Z2, 0 - 9 |
| 891265*[†] | 12 | 3.30 | 65/30 | 65 x 0.25 | 0.016 | 0.41 | 0.125 | 3.18 | Z2, 0 - 9 |
| 891000*[†] | 10 | 5.32 | 105/30 | 105 x 0.25 | 0.016 | 0.41 | 0.150 | 3.81 | Z2, 0 - 9 |

*UL AWM 1581 and 1569. All others UL AWM 1007 and 1569.

[†]CSA AWM I A/B FT-1.

"T" indicates topcoat conductors.

Insulation Colors Z1

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

Insulation Colors Z2

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

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

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 ² | AWG | mm | Inch | mm | Inch | mm | |
| 422807 | 28 | 0.09 | 7/36 | 7 x 0.13 | 0.010 | 0.25 | 0.035 | 0.89 | Z2 |
| 422801 | 28 | 0.08 | Solid | 1 x 0.32 | 0.010 | 0.25 | 0.033 | 0.84 | Z2 |
| 422607 | 26 | 0.14 | 7/34 | 7 x 0.16 | 0.010 | 0.25 | 0.039 | 0.99 | Z2 |
| 422601 | 26 | 0.13 | Solid | 1 x 0.40 | 0.010 | 0.25 | 0.036 | 0.91 | Z2 |
| 3250 | 24 | 0.23 | 7/32 | 7 x 0.20 | 0.010 | 0.25 | 0.044 | 1.12 | Z1 |
| 3251 | 22 | 0.35 | 7/30 | 7 x 0.25 | 0.010 | 0.25 | 0.050 | 1.27 | Z1 |
| 422010 | 20 | 0.51 | 10/30 | 10 x 0.25 | 0.010 | 0.25 | 0.057 | 1.45 | Z2 |
| 3252 | 20 | 0.56 | 7/28 | 7 x 0.32 | 0.010 | 0.25 | 0.058 | 1.47 | Z1 |
| 422001 | 20 | 0.52 | Solid | 1 x 0.81 | 0.010 | 0.25 | 0.052 | 1.32 | Z2 |
| 421816 | 18 | 0.81 | 16/30 | 16 x 0.25 | 0.010 | 0.25 | 0.067 | 1.70 | Z2 |
| 3253 | 18 | 0.90 | 7/26 | 7 x 0.40 | 0.010 | 0.25 | 0.068 | 1.73 | Z1 |
| 421626 | 16 | 1.32 | 26/30 | 26 x 0.25 | 0.010 | 0.25 | 0.080 | 2.03 | Z2 |
| 3254 | 16 | 1.43 | 7/24 | 7 x 0.51 | 0.010 | 0.25 | 0.080 | 2.03 | Z1 |

Insulation Colors Z1

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

Insulation Colors Z2

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

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

Hook-Up Wire

600 V, PVC



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

Operating Temperature

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

Materials

- Stranded bare copper conductor
- PVC insulation

Availability

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

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

Insulation Colors

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

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 ² | AWG | mm | Inch | mm | Inch | mm | | | |
| 782607* | 26 | 0.14 | 7/34 | 7 x 0.16 | 0.032 | 0.81 | 0.083 | 2.11 | 1015, 1230 | Z2, 0 - 9 | |
| 782401* | 24 | 0.20 | Solid | 1 x 0.51 | 0.032 | 0.81 | 0.084 | 2.13 | 1015, 1230 | Z2, 0 - 9 | |
| 3070* | 24 | 0.23 | 7/32 | 7 x 0.20 | 0.032 | 0.81 | 0.088 | 2.24 | 1015 | Z1, 1 - 10, 28 | |
| 782201 | 22 | 0.32 | Solid | 1 x 0.64 | 0.032 | 0.81 | 0.089 | 2.26 | 1015, 1230 | Z2, 0 - 9 | |
| 782207T | 22 | 0.35 | 7/30 | 7 x 0.25 | 0.032 | 0.81 | 0.094 | 2.39 | 1015, 1230 | Z2, 0 - 9 | |
| 3071 | 22 | 0.35 | 7/30 | 7 x 0.25 | 0.032 | 0.81 | 0.094 | 2.39 | 1015 | Z1, 1 - 10, 28, 29 | |
| 782010T | 20 | 0.51 | 10/30 | 10 x 0.25 | 0.032 | 0.81 | 0.101 | 2.57 | 1015, 1230 | Z2, 0 - 9 | |
| 3073 | 20 | 0.51 | 10/30 | 10 x 0.25 | 0.032 | 0.81 | 0.101 | 2.57 | 1015 | Z1, 1 - 10, 28 | |
| 782001 | 20 | 0.52 | Solid | 1 x 0.81 | 0.032 | 0.81 | 0.096 | 2.44 | 1015, 1230 | Z2, 0 - 9 | |
| 781816T | 18 | 0.81 | 16/30 | 16 x 0.25 | 0.032 | 0.81 | 0.111 | 2.82 | 1015, 1230 | Z2, 0 - 9 | |
| 3075 | 18 | 0.81 | 16/30 | 16 x 0.25 | 0.032 | 0.81 | 0.111 | 2.82 | 1015 | Z1, 1 - 10, 28, 29 | |
| 781801 | 18 | 0.82 | Solid | 1 x 1.02 | 0.032 | 0.81 | 0.104 | 2.64 | 1015, 1230 | Z2, 0 - 9 | |
| 781601 | 16 | 1.31 | Solid | 1 x 1.29 | 0.032 | 0.81 | 0.115 | 2.92 | 1015, 1230 | Z2, 0 - 9 | |
| 3077 | 16 | 1.32 | 26/30 | 26 x 0.25 | 0.032 | 0.81 | 0.124 | 3.15 | 1015 | Z1, 1 - 10, 28, 29 | |
| 781401 | 14 | 2.08 | Solid | 1 x 1.63 | 0.032 | 0.81 | 0.128 | 3.25 | 1015, 1230 | Z2, 0 - 9 | |
| 3079 | 14 | 2.08 | 41/30 | 41 x 0.25 | 0.032 | 0.81 | 0.138 | 3.51 | 1015 | Z1, 1 - 10, 28, 29 | |
| 3080 | 12 | 3.29 | 65/30 | 65 x 0.25 | 0.032 | 0.81 | 0.157 | 3.99 | 1015 | Z1, 1 - 4 | |
| 781201 | 12 | 3.31 | Solid | 1 x 2.06 | 0.032 | 0.81 | 0.145 | 3.68 | 1015, 1230 | Z2, 0 - 9 | |
| 781001 | 10 | 5.26 | Solid | 1 x 2.59 | 0.032 | 0.81 | 0.166 | 4.22 | 1015, 1230 | Z2, 0 - 9 | |
| 3081 | 10 | 5.32 | 105/30 | 105 x 0.25 | 0.032 | 0.81 | 0.184 | 4.67 | 1015 | Z1, 1 - 4 | |
| 788133 | 8 | 8.61 | 133/29 | 133 x 0.29 | 0.047 | 1.19 | 0.263 | 6.68 | 1028, 1231 | Z2, 0 - 9 | |
| 786133 | 6 | 13.57 | 133/27 | 133 x 0.36 | 0.063 | 1.60 | 0.336 | 8.53 | 1283, 1232 | Z2, 0 - 9 | |
| 784133 | 4 | 21.55 | 133/25 | 133 x 0.45 | 0.063 | 1.60 | 0.395 | 10.03 | 1283, 1232 | Z2, 0 - 9 | |
| 782665 | 2 | 33.72 | 665/30 | 665 x 0.25 | 0.063 | 1.60 | 0.461 | 11.71 | 1283, 1232 | Z2, 0 - 9 | |
| 782133 | 2 | 34.45 | 133/23 | 133 x 0.57 | 0.063 | 1.60 | 0.465 | 11.81 | 1283, 1232 | Z2, 0 - 9 | |
| 781259 | 1 | 41.96 | 259/25 | 259 x 0.45 | 0.082 | 2.08 | 0.540 | 13.72 | 1284, 1232 | Z2, 0 - 9 | |
| 781836 | 1 | 42.39 | 836/30 | 836 x 0.25 | 0.082 | 2.08 | 0.547 | 13.89 | 1284, 1232 | Z2, 0 - 9 | |
| 780001 | 1/0 | 52.98 | 1045/30 | 1045 x 0.25 | 0.082 | 2.08 | 0.592 | 15.04 | 1284, 1232 | Z2, 0 - 9 | |
| 780002 | 2/0 | 67.43 | 1330/30 | 1330 x 0.25 | 0.082 | 2.08 | 0.647 | 16.43 | 1284, 1232 | Z2, 0 - 9 | |
| 780003 | 3/0 | 84.47 | 1666/30 | 1666 x 0.25 | 0.082 | 2.08 | 0.768 | 19.51 | 1284, 1232 | Z2, 0 - 9 | |
| 780004 | 4/0 | 106.93 | 2109/30 | 2109 x 0.25 | 0.082 | 2.08 | 0.754 | 19.15 | 1284, 1232 | Z2, 0 - 9 | |

T indicates top coat conductors.

*Not MTW

Insulation Colors Z1

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

Insulation Colors Z2

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

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



Hook-Up Wire

600 V, PVC



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

Operating Temperature

- -55°C to +105°C

Materials

- Stranded or solid tinned copper conductor
- PVC insulation

Availability

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

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

*Also meets MIL-W-76 Type LW.

Insulation Colors Z1

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

Insulation Colors Z2

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

Hook-Up Wire

600 V, PVC



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

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)

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 ² | AWG | mm | Inch | mm | Inch | mm |
| 202207 | 22 | 0.35 | 7/30 | 7 x 0.25 | 0.017 | 0.43 | 0.064 | 1.63 |
| 202007 | 20 | 0.56 | 7/28 | 7 x 0.32 | 0.017 | 0.43 | 0.072 | 1.83 |
| 201807 | 18 | 0.90 | 7/26 | 7 x 0.40 | 0.017 | 0.43 | 0.082 | 2.08 |
| 201819 | 18 | 0.96 | 19/30 | 19 x 0.25 | 0.017 | 0.43 | 0.084 | 2.13 |
| 201619 | 16 | 1.23 | 19/29 | 19 x 0.29 | 0.019 | 0.47 | 0.093 | 2.36 |
| 201419 | 14 | 1.94 | 19/27 | 19 x 0.36 | 0.019 | 0.47 | 0.108 | 2.74 |
| 201219 | 12 | 3.08 | 19/25 | 19 x 0.45 | 0.019 | 0.47 | 0.127 | 3.23 |

Insulation Colors

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

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 ² | AWG | mm | Inch | mm | Inch | mm | |
| 541816 | 18 | 0.81 | 16/30 | 16 x 0.25 | 0.015 | 0.38 | 0.086 | 2.18 | TFFN |
| 541801 | 18 | 0.82 | Solid | 1 x 1.02 | 0.015 | 0.38 | 0.079 | 2.01 | TFN |
| 541626 | 16 | 1.32 | 26/30 | 26 x 0.25 | 0.015 | 0.38 | 0.099 | 2.51 | TFFN |
| 541419 | 14 | 2.07 | 19/0.0147 | 19 x 0.37 | 0.015 | 0.38 | 0.113 | 2.87 | THHN, THWN |
| 541401 | 14 | 2.08 | Solid | 1 x 1.63 | 0.015 | 0.38 | 0.103 | 2.62 | THHN, THWN |
| 541219 | 12 | 3.29 | 19/0.0185 | 19 x 0.47 | 0.015 | 0.38 | 0.132 | 3.35 | THHN, THWN |
| 541201 | 12 | 3.31 | Solid | 1 x 2.06 | 0.015 | 0.38 | 0.120 | 3.05 | THHN, THWN |
| 541019 | 10 | 5.26 | 19/0.0234 | 19 x 0.59 | 0.020 | 0.51 | 0.166 | 4.22 | THHN, THWN |
| 541001 | 10 | 5.26 | Solid | 1 x 2.59 | 0.020 | 0.51 | 0.141 | 3.58 | THHN, THWN |
| 540819 | 8 | 8.38 | 19/0.0295 | 19 x 0.75 | 0.030 | 0.76 | 0.219 | 5.56 | THHN, THWN |
| 540619 | 6 | 13.32 | 19/0.0372 | 19 x 0.94 | 0.030 | 0.76 | 0.257 | 6.53 | THHN, THWN |
| 540419 | 4 | 21.09 | 19/0.0469 | 19 x 1.19 | 0.040 | 1.02 | 0.329 | 8.36 | THHN, THWN |
| 540219 | 2 | 33.63 | 19/0.0591 | 19 x 1.50 | 0.040 | 1.02 | 0.390 | 9.91 | THHN, THWN |
| 540001 | 1/0 | 53.39 | 19/0.0745 | 19 x 1.89 | 0.050 | 1.27 | 0.488 | 12.40 | THHN, THWN |

Insulation Colors

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

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 ² | 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 ² | AWG | mm | Inch | mm | Inch | mm |
| 302407 | 24 | 0.23 | 7/32 | 7 x 0.20 | 0.016 | 0.41 | 0.056 | 1.42 |
| 302207 | 22 | 0.35 | 7/30 | 7 x 0.25 | 0.016 | 0.41 | 0.064 | 1.63 |
| 302201 | 22 | 0.32 | Solid | 1 x 0.64 | 0.016 | 0.41 | 0.057 | 1.45 |
| 302010 | 20 | 0.51 | 10/30 | 10 x 0.25 | 0.016 | 0.41 | 0.069 | 1.75 |
| 301816 | 18 | 0.81 | 16/30 | 16 x 0.25 | 0.016 | 0.41 | 0.079 | 2.01 |
| 301626 | 16 | 1.32 | 26/30 | 26 x 0.25 | 0.016 | 0.41 | 0.092 | 2.34 |
| 301619 | 16 | 1.23 | 19/29 | 19 x 0.29 | 0.016 | 0.41 | 0.088 | 2.24 |
| 301441 | 14 | 2.08 | 41/30 | 41 x 0.25 | 0.016 | 0.41 | 0.106 | 2.69 |

Insulation Colors

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

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 ² | AWG | mm | Inch | mm | Inch | mm | |
| 1550 | 24 | 0.23 | 7/32 | 7 x 0.20 | 0.016 | 0.41 | 0.056 | 1.42 | 1 - 19 |
| 1561/24 | 24 | 0.20 | Solid | 1 x 0.51 | 0.016 | 0.41 | 0.052 | 1.32 | 1 - 6 |
| 1551 | 22 | 0.35 | 7/30 | 7 x 0.25 | 0.016 | 0.41 | 0.062 | 1.57 | 1 - 19 |
| 1561 | 22 | 0.32 | Solid | 1 x 0.64 | 0.016 | 0.41 | 0.057 | 1.45 | 1 - 6 |
| 1553 | 20 | 0.51 | 10/30 | 10 x 0.25 | 0.016 | 0.41 | 0.069 | 1.75 | 1 - 19 |
| 1563 | 20 | 0.52 | Solid | 1 x 0.81 | 0.016 | 0.41 | 0.064 | 1.63 | 1 - 6 |
| 1555 | 18 | 0.81 | 16/30 | 16 x 0.25 | 0.016 | 0.41 | 0.079 | 2.01 | 1 - 19 |
| 1565 | 18 | 0.82 | Solid | 1 x 1.02 | 0.016 | 0.41 | 0.072 | 1.83 | 1 - 6 |
| 1557 | 16 | 1.32 | 26/30 | 26 x 0.25 | 0.016 | 0.41 | 0.092 | 2.34 | 1 - 19 |
| 1559 | 14 | 2.08 | 41/30 | 41 x 0.25 | 0.016 | 0.41 | 0.106 | 2.69 | 1 - 10 |
| 1560 | 12 | 3.29 | 65/30 | 65 x 0.25 | 0.016 | 0.41 | 0.125 | 3.18 | 1 - 10 |

Insulation Colors

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

Hook-Up Wire

600/150 V, Irradiated PVC
Soldering Iron Resistant



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

Operating Temperature

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

Materials

- Stranded tinned copper conductor
- Irradiated PVC insulation

Availability

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

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

Insulation Colors

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

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 ² | AWG | mm | Inch | mm | Inch | mm | |
| 7130 | 24 | 0.23 | 7/32 | 7 x 0.20 | 0.016 | 0.41 | 0.056 | 1.42 | 1 - 10, 29 |
| 7131 | 22 | 0.35 | 7/30 | 7 x 0.25 | 0.016 | 0.41 | 0.062 | 1.57 | 1 - 10 |
| 7132 | 20 | 0.56 | 7/28 | 7 x 0.32 | 0.016 | 0.41 | 0.070 | 1.78 | 1 - 10 |
| 7133 | 18 | 0.89 | 7/26 | 7 x 0.40 | 0.016 | 0.41 | 0.080 | 2.03 | 1 - 10, 29 |
| 7134 | 16 | 1.32 | 19/0.0117 | 19 x 0.30 | 0.016 | 0.41 | 0.088 | 2.24 | 1 - 10, 29 |
| 7035* | 14 | 2.07 | 19/0.0147 | 19 x 0.37 | 0.016 | 0.41 | 0.103 | 2.62 | 1 - 10, 29 |
| 7036* | 12 | 3.29 | 19/0.0185 | 19 x 0.47 | 0.016 | 0.41 | 0.122 | 3.10 | 1 - 10, 29 |

*UL AWM 3317

Insulation Colors

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

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 ² | AWG | mm | Inch | mm | Inch | mm |
| 7044 | 18 | 0.81 | 16/30 | 16 x 0.25 | 0.032 | 0.81 | 0.111 | 2.82 |
| 7045 | 16 | 1.32 | 26/30 | 26 x 0.25 | 0.032 | 0.81 | 0.119 | 3.02 |
| 7046 | 14 | 2.08 | 41/30 | 41 x 0.25 | 0.032 | 0.81 | 0.138 | 3.51 |
| 7047 | 12 | 3.29 | 65/30 | 65 x 0.25 | 0.032 | 0.81 | 0.155 | 3.94 |
| 7048 | 10 | 5.32 | 105/30 | 105 x 0.25 | 0.032 | 0.81 | 0.184 | 4.67 |

Insulation Colors

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

1000/300 V, XLPE

**MIL-DTL-16878/2 (Type C)
(1000 V)**

**UL AWM 3266 (300 V) VW-1
CSA CL 1252 XLPE (300 V)**

Operating Temperature

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

Materials

- Stranded tinned copper conductor
- Cross-linked polyolefin insulation

Availability

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

| Part No. | Wire Size | | Stranding | | Insulation Thickness | | Nominal Diameter | |
|-------------|-----------|-----------------|-----------|-----------|----------------------|------|------------------|------|
| | AWG | mm ² | AWG | mm | Inch | mm | Inch | mm |
| 7024 | 22 | 0.38 | 19/34 | 19 x 0.16 | 0.016 | 0.41 | 0.064 | 1.63 |
| 7025 | 20 | 0.62 | 19/32 | 19 x 0.20 | 0.016 | 0.41 | 0.072 | 1.83 |
| 7026 | 18 | 0.96 | 19/30 | 19 x 0.25 | 0.016 | 0.41 | 0.080 | 2.03 |

Insulation Colors

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



Hook-Up Wire

600/150 V, XLPE



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

Operating Temperature

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

Materials

- Stranded tinned copper conductor
- Cross-linked polyolefin insulation

Availability

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

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

Insulation Colors

White

Black

Hook-Up Wire

600 V, XLPE

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

100 ft (30.5 m)

500 ft (152 m)

1000 ft (305 m)

Operating Temperature

- -20°C to +125°C

Materials

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

| Part No. | Wire Size | | Stranding | | Insulation Thickness | | Nominal Diameter | | UL Style |
|--------------|-----------|-----------------|-----------|------------|----------------------|------|------------------|-------|-----------|
| | AWG | mm ² | AWG | mm | Inch | mm | Inch | mm | |
| M4030 | 18 | 0.81 | 16/30 | 16 x 0.25 | 0.031 | 0.79 | 0.110 | 2.79 | 3173 |
| M4010 | 18 | 0.90 | 7/26 | 7 x 0.48 | 0.031 | 0.79 | 0.112 | 2.84 | 3173 |
| M4001 | 18 | 0.82 | Solid | 1 x 1.02 | 0.031 | 0.79 | 0.105 | 2.67 | 3173 |
| M4011 | 16 | 1.43 | 7/24 | 7 x 0.51 | 0.031 | 0.79 | 0.123 | 3.12 | 3173 |
| M4002 | 16 | 1.31 | Solid | 1 x 1.29 | 0.031 | 0.79 | 0.115 | 2.92 | 3173 |
| M4012 | 14 | 2.29 | 7/22 | 7 x 0.64 | 0.031 | 0.79 | 0.140 | 3.56 | SIS, 3173 |
| M4003 | 14 | 2.08 | Solid | 1 x 1.63 | 0.031 | 0.79 | 0.130 | 3.30 | SIS, 3173 |
| M4013 | 12 | 3.29 | 19/0.0185 | 19 x 0.47 | 0.031 | 0.79 | 0.160 | 4.06 | SIS, 3173 |
| M4004 | 12 | 3.31 | Solid | 1 x 2.06 | 0.031 | 0.79 | 0.150 | 3.81 | SIS, 3173 |
| M4014 | 10 | 5.28 | 19/0.0234 | 19 x 0.59 | 0.031 | 0.79 | 0.180 | 4.57 | SIS, 3173 |
| M4005 | 10 | 5.26 | Solid | 1 x 2.59 | 0.031 | 0.79 | 0.170 | 4.32 | SIS, 3173 |
| M4035 | 8 | 8.63 | 133/29 | 133 x 0.29 | 0.047 | 1.19 | 0.270 | 6.86 | SIS, 3195 |
| M4015 | 8 | 8.38 | 19/0.0295 | 19 x 0.75 | 0.047 | 1.19 | 0.250 | 6.35 | SIS, 3195 |
| M4036 | 6 | 13.6 | 133/27 | 133 x 0.36 | 0.062 | 1.57 | 0.340 | 8.64 | SIS, 3196 |
| M4016 | 6 | 13.3 | 19/0.0372 | 19 x 0.94 | 0.062 | 1.57 | 0.320 | 8.13 | SIS, 3196 |
| M4037 | 4 | 21.6 | 133/25 | 133 x 0.45 | 0.062 | 1.57 | 0.400 | 10.16 | SIS, 3196 |

Hook-Up Wire

600 V, XLPE



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

Operating Temperature

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

Materials

- Stranded tinned copper conductor
- Cross-linked polyethylene insulation

Availability

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

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

*UL SIS.

**UL AWM 3195 only.

Insulation Colors

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

Hook-Up Wire

50 V, XLPE



| Part No. | Wire Size | | Stranding | | Insulation Thickness | | Nominal Diameter | |
|---------------|-----------|-----------------|-----------|-----------|----------------------|------|------------------|------|
| | AWG | mm ² | AWG | mm | Inch | mm | Inch | mm |
| 631816 | 18 | 0.81 | 16/30 | 16 x 0.25 | 0.023 | 0.58 | 0.093 | 2.36 |
| 631619 | 16 | 1.23 | 19/29 | 19 x 0.29 | 0.023 | 0.58 | 0.102 | 2.59 |
| 631419 | 14 | 1.94 | 19/27 | 19 x 0.36 | 0.023 | 0.58 | 0.113 | 2.87 |

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

Insulation Colors

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

Hook-Up Wire

250 V, PTFE



Operating Temperature

- -60°C to +200°C

Materials

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

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

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 ² | AWG | mm | Inch | mm | Inch | mm | | |
| 33201 | 32 | 0.03 | Solid | 1 x 0.20 | 0.006 | 0.15 | 0.019 | 0.48 | — | Z2 |
| 33219 | 32 | 0.04 | 19/44 | 19 x 0.05 | 0.006 | 0.15 | 0.022 | 0.56 | — | Z2 |
| 2840/7 | 32 | 0.03 | 7/40 | 7 x 0.08 | 0.006 | 0.15 | 0.022 | 0.56 | ETXBAB | Z1 |
| 2841/7 | 30 | 0.06 | 7/38 | 7 x 0.10 | 0.006 | 0.15 | 0.024 | 0.61 | ETXBBB | Z1 |
| 2841/1 | 30 | 0.05 | Solid | 1 x 0.25 | 0.006 | 0.15 | 0.022 | 0.56 | ETXBBA | Z1 |
| 2842/7 | 28 | 0.09 | 7/36 | 7 x 0.12 | 0.006 | 0.15 | 0.027 | 0.69 | ETXBCB | Z1 |
| 2842/19 | 28 | 0.09 | 19/40 | 19 x 0.08 | 0.006 | 0.15 | 0.027 | 0.69 | ETXBCE | Z1 |
| 2842/1 | 28 | 0.08 | Solid | 1 x 0.32 | 0.006 | 0.15 | 0.025 | 0.64 | ETXBCA | Z1 |
| 2843/7 | 26 | 0.14 | 7/34 | 7 x 0.16 | 0.006 | 0.15 | 0.031 | 0.79 | ETXBDB | Z1 |
| 2843/19 | 26 | 0.15 | 19/38 | 19 x 0.10 | 0.006 | 0.15 | 0.031 | 0.79 | ETXBDE | Z1 |
| 2843/1 | 26 | 0.13 | Solid | 1 x 0.40 | 0.006 | 0.15 | 0.028 | 0.71 | ETXBDA | Z1 |
| 2844/7 | 24 | 0.23 | 7/32 | 7 x 0.20 | 0.006 | 0.15 | 0.036 | 0.91 | ETXBEB | Z1 |
| 2844/19 | 24 | 0.24 | 19/36 | 19 x 0.13 | 0.006 | 0.15 | 0.036 | 0.91 | ETXBEE | Z1 |
| 2845/7 | 22 | 0.35 | 7/30 | 7 x 0.25 | 0.006 | 0.15 | 0.042 | 1.07 | ETXBFB | Z1 |
| 2845/19 | 22 | 0.38 | 19/34 | 19 x 0.16 | 0.005 | 0.13 | 0.042 | 1.07 | ETXBFE | Z1 |
| 32007 | 20 | 0.56 | 7/28 | 7 x 0.32 | 0.006 | 0.15 | 0.050 | 1.27 | ETXBGB | Z2 |
| 32019 | 20 | 0.62 | 19/32 | 19 x 0.20 | 0.006 | 0.15 | 0.052 | 1.32 | ETXBGE | Z2 |

Insulation Colors Z1

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

Insulation Colors Z2

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

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

Hook-Up Wire

600 V, PTFE



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

Operating Temperature

- -60°C to +200°C

Materials

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

Availability

100 ft (30.5 m)

1000 ft (305 m)*

*May contain multiple lengths

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

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

Insulation Colors

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



Hook-Up Wire

600 V, PTFE



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

Operating Temperature

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

Materials

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

Availability

100 ft (30.5 m)
1000 ft (305 m)[†]

[†]May contain multiple lengths

| Part No. | Wire Size | | Stranding | | Insulation Thickness | | Nominal Diameter | | NEMA HP3 Type |
|----------------------------|-----------|-----------------|-----------|-----------|----------------------|------|------------------|------|---------------|
| | AWG | mm ² | AWG | mm | Inch | mm | Inch | mm | |
| 5851 | 30 | 0.06 | 7/38 | 7 x 0.10 | 0.010 | 0.25 | 0.032 | 0.81 | EXBBB |
| 5852 | 28 | 0.09 | 7/36 | 7 x 0.13 | 0.010 | 0.25 | 0.035 | 0.89 | EXBCB |
| 5853 | 26 | 0.14 | 7/34 | 7 x 0.16 | 0.010 | 0.25 | 0.039 | 0.99 | EXBDB |
| 5853/19 | 26 | 0.15 | 19/38 | 19 x 0.10 | 0.010 | 0.25 | 0.039 | 0.99 | EXBDE |
| 2853/1 | 26 | 0.13 | Solid | 1 x 0.40 | 0.010 | 0.25 | 0.036 | 0.91 | EXBDA |
| 5854 | 24 | 0.24 | 19/36 | 19 x 0.13 | 0.010 | 0.25 | 0.044 | 1.12 | EXBEE |
| 5854/7 | 24 | 0.23 | 7/32 | 7 x 0.20 | 0.010 | 0.25 | 0.044 | 1.12 | EXBEB |
| 2854/1 | 24 | 0.20 | Solid | 1 x 0.51 | 0.010 | 0.25 | 0.040 | 1.02 | EXBEA |
| 5855 | 22 | 0.38 | 19/34 | 19 x 0.16 | 0.010 | 0.25 | 0.050 | 1.27 | EXBFE |
| 5855/7 | 22 | 0.35 | 7/30 | 7 x 0.25 | 0.010 | 0.25 | 0.050 | 1.27 | EXBFB |
| 2855/1 | 22 | 0.32 | Solid | 1 x 0.64 | 0.010 | 0.25 | 0.045 | 1.14 | EXBFA |
| 5856 | 20 | 0.62 | 19/32 | 19 x 0.20 | 0.010 | 0.25 | 0.058 | 1.47 | EXBGE |
| 5856/7 | 20 | 0.56 | 7/28 | 7 x 0.32 | 0.010 | 0.25 | 0.058 | 1.47 | EXBGB |
| 2856/1*** | 20 | 0.52 | Solid | 1 x 0.81 | 0.010 | 0.25 | 0.052 | 1.32 | EXBGA |
| 5857 | 18 | 0.96 | 19/30 | 19 x 0.25 | 0.010 | 0.25 | 0.069 | 1.75 | EXBHE |
| 2857/1*** | 18 | 0.82 | Solid | 1 x 1.02 | 0.011 | 0.27 | 0.061 | 1.55 | EXBHA |
| 5858 | 16 | 1.23 | 19/29 | 19 x 0.29 | 0.012 | 0.30 | 0.080 | 2.03 | EXBJE |
| 5859[†] | 14 | 1.94 | 19/27 | 19 x 0.36 | 0.012 | 0.30 | 0.095 | 2.41 | EXBKE |
| 5859/12[†] | 12 | 3.08 | 19/25 | 19 x 0.45 | 0.012 | 0.30 | 0.114 | 2.90 | EXBLE |
| 5859/10[†] | 10 | 4.74 | 37/26 | 37 x 0.40 | 0.012 | 0.30 | 0.134 | 3.40 | EXBMG |

*Voltage rating not specified.

***White, black, red only.

[†]White only, not UL AWM 1213.

Insulation Colors

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

Hook-Up Wire

1000/300 V, PTFE



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

Operating Temperature

- -60°C to +200°C

Materials

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

Availability

100 ft (30.5 m)

1000 ft (305 m)*

*May contain multiple lengths

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

*Not UL AWM 1180.

Insulation Colors

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

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

Hook-Up Wire

1000 V, PTFE



| Part No. | Wire Size | | Stranding | | Insulation Thickness | | Nominal Diameter | | NEMA HP-3 |
|--------------|-----------|-----------------|-----------|----------|----------------------|------|------------------|------|-----------|
| | AWG | mm ² | AWG | mm | Inch | mm | Inch | mm | |
| 22807 | 28 | 0.09 | 7/36 | 7 x 0.13 | 0.015 | 0.38 | 0.045 | 1.14 | EEXBCB |
| 22407 | 24 | 0.23 | 7/32 | 7 x 0.20 | 0.015 | 0.38 | 0.054 | 1.37 | EEXBEB |
| 22207 | 22 | 0.35 | 7/30 | 7 x 0.25 | 0.014 | 0.36 | 0.058 | 1.47 | EEXBFB |
| 22007 | 20 | 0.56 | 7/28 | 7 x 0.32 | 0.015 | 0.38 | 0.068 | 1.73 | EXBGB |

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

Operating Temperature

- -60°C to +200°C

Materials

- Stranded silver-plated copper conductor
- PTFE insulation

Availability

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

*May contain multiple lengths

Insulation Colors

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



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 ² | AWG | mm | Inch | mm | Inch | mm |
| AT261938 | 26 | 0.15 | 19/38 | 19 x 0.10 | 0.010 | 0.25 | 0.038 | 0.97 |
| AT241936 | 24 | 0.24 | 19/36 | 19 x 0.13 | 0.009 | 0.23 | 0.043 | 1.09 |
| AT221934 | 22 | 0.38 | 19/34 | 19 x 0.16 | 0.009 | 0.23 | 0.049 | 1.24 |
| AT201932 | 20 | 0.62 | 19/32 | 19 x 0.20 | 0.011 | 0.28 | 0.058 | 1.47 |
| AT181930 | 18 | 0.96 | 19/30 | 19 x 0.25 | 0.010 | 0.25 | 0.068 | 1.73 |
| AT161929 | 16 | 1.23 | 19/29 | 19 x 0.29 | 0.010 | 0.25 | 0.075 | 1.90 |
| AT141927 | 14 | 1.94 | 19/27 | 19 x 0.36 | 0.011 | 0.27 | 0.090 | 2.29 |
| AT121925 | 12 | 3.08 | 19/25 | 19 x 0.45 | 0.013 | 0.32 | 0.111 | 2.82 |
| AT103726 | 10 | 4.74 | 37/26 | 37 x 0.40 | 0.015 | 0.38 | 0.139 | 3.53 |
| AT813329 | 8 | 8.61 | 133/29 | 133 x 0.29 | 0.019 | 0.48 | 0.202 | 5.13 |

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

| Part No. | Wire Size | | Stranding | | Insulation Thickness | | Nominal Diameter | |
|-----------------|-----------|-----------------|-----------|------------|----------------------|------|------------------|------|
| | AWG | mm ² | AWG | mm | Inch | mm | Inch | mm |
| AZ241936 | 24 | 0.24 | 19/36 | 19 x 0.13 | 0.011 | 0.27 | 0.045 | 1.14 |
| AZ221934 | 22 | 0.38 | 19/34 | 19 x 0.16 | 0.011 | 0.28 | 0.052 | 1.32 |
| AZ201932 | 20 | 0.62 | 19/32 | 19 x 0.20 | 0.011 | 0.28 | 0.060 | 1.52 |
| AZ181930 | 18 | 0.96 | 19/30 | 19 x 0.25 | 0.012 | 0.29 | 0.071 | 1.80 |
| AZ161929 | 16 | 1.23 | 19/29 | 19 x 0.29 | 0.013 | 0.33 | 0.079 | 2.01 |
| AZ141927 | 14 | 1.94 | 19/27 | 19 x 0.36 | 0.013 | 0.33 | 0.093 | 2.36 |
| AZ123728 | 12 | 2.97 | 37/28 | 37 x 0.32 | 0.014 | 0.34 | 0.114 | 2.90 |
| AZ103726 | 10 | 4.74 | 37/26 | 37 x 0.40 | 0.015 | 0.38 | 0.139 | 3.53 |
| AZ813329 | 8 | 8.63 | 133/29 | 133 x 0.29 | 0.018 | 0.47 | 0.199 | 5.05 |
| AZ413325 | 4 | 21.6 | 133/25 | 133 x 0.45 | 0.026 | 0.66 | 0.312 | 7.92 |

Insulation Colors

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

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

| Part No. | Wire Size | | Insulation Thickness | | Nominal Diameter | | UL Style |
|---------------|-----------|-----------------|----------------------|------|------------------|------|----------|
| | AWG | mm ² | Inch | mm | Inch | mm | |
| 1805 | 30 | 0.05 | 0.005 | 0.11 | 0.020 | 0.51 | 1516 |
| 1806* | 28 | 0.08 | 0.006 | 0.14 | 0.024 | 0.61 | 1523 |
| 1807 | 26 | 0.13 | 0.006 | 0.14 | 0.027 | 0.69 | 1523 |
| 1808** | 24 | 0.20 | 0.005 | 0.11 | 0.030 | 0.76 | 1516 |

*Not available in orange.

**Not available in violet or orange.

Insulation Colors

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

Hook-Up Wire

Test Lead Wire, EPR Rubber



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

Operating Temperature

- -30°C to +90°C

Voltage Rating

- See table

Materials

- Stranded tinned copper conductors
- EPR rubber insulation

Availability

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

Insulation Colors

Black

Red



Hook-Up Wire

600 V, Silicone Rubber



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

Operating Temperature

- -40°C to +150°C

Materials

- Stranded tinned copper conductor
- White silicone rubber insulation

Availability

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

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

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 ² | AWG | mm | Inch | mm | Inch | mm | UL | CSA |
| M4101 | 18 | 0.82 | 7/0.0152 | 7 x 0.39 | 0.032 | 0.81 | 0.124 | 3.15 | 3071, SF-2 | SEW-2 |
| M4110 | 18 | 0.81 | 16/30 | 16 x 0.25 | 0.032 | 0.81 | 0.130 | 3.30 | 3070, SFF-2 | SEWF-2 |
| M4102 | 16 | 1.31 | 7/0.0192 | 7 x 0.49 | 0.032 | 0.81 | 0.136 | 3.45 | 3071, SF-2 | SEW-2 |
| M4111 | 16 | 1.32 | 26/30 | 26 x 0.25 | 0.032 | 0.81 | 0.140 | 3.56 | 3070, SFF-2 | SEWF-2 |
| M4103 | 14 | 2.08 | 7/0.0242 | 7 x 0.61 | 0.032 | 0.81 | 0.152 | 3.86 | 3071, SF-2 | SEW-2 |
| M4112 | 14 | 2.08 | 41/30 | 41 x 0.25 | 0.032 | 0.81 | 0.160 | 4.06 | 3070, SFF-2 | SEWF-2 |
| M4104 | 12 | 3.08 | 19/25 | 19 x 0.45 | 0.032 | 0.81 | 0.166 | 4.22 | 3074, SF-2 | SEW-2 |
| M4113 | 12 | 3.29 | 65/30 | 65 x 0.25 | 0.032 | 0.81 | 0.180 | 4.57 | 3070, SFF-2 | SEWF-2 |
| M4105 | 10 | 4.92 | 19/23 | 19 x 0.57 | 0.048 | 1.22 | 0.221 | 5.61 | 3075, SF-2 | SEW-2 |

Insulation Colors

White

Black

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

Insulation Colors

White

Black

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 ² | 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 ² | AWG | mm | Inch | mm | Inch | mm | |
| 391297 | 12 | 3.29 | 65/30 | 65 x 0.25 | 0.097 | 2.46 | 0.287 | 7.29 | 40 kV |
| 391275 | 12 | 3.29 | 65/30 | 65 x 0.25 | 0.075 | 1.90 | 0.243 | 6.17 | 30 kV |
| 391262 | 12 | 3.29 | 65/30 | 65 x 0.25 | 0.062 | 1.57 | 0.217 | 5.51 | 25 kV |
| 391250 | 12 | 3.29 | 65/30 | 65 x 0.25 | 0.050 | 1.27 | 0.193 | 4.90 | 20 kV |
| 391245 | 12 | 3.29 | 65/30 | 65 x 0.25 | 0.045 | 1.14 | 0.183 | 4.65 | 15 kV |
| 391099 | 10 | 5.32 | 105/30 | 105 x 0.25 | 0.150 | 3.81 | 0.418 | 10.62 | 50 kV |
| 391097 | 10 | 5.32 | 105/30 | 105 x 0.25 | 0.097 | 2.46 | 0.312 | 7.92 | 40 kV |
| 391045 | 10 | 5.32 | 105/30 | 105 x 0.25 | 0.045 | 1.14 | 0.208 | 5.28 | 15 kV |
| 391040 | 10 | 5.32 | 105/30 | 105 x 0.25 | 0.040 | 1.02 | 0.198 | 5.03 | 10 kV |
| 390897 | 8 | 8.61 | 133/29 | 133 x 0.28 | 0.097 | 2.46 | 0.363 | 9.22 | 40 kV |
| 390862* | 8 | 8.61 | 133/29 | 133 x 0.28 | 0.062 | 1.57 | 0.293 | 7.44 | 25 kV |
| 390845 | 8 | 8.61 | 133/29 | 133 x 0.28 | 0.045 | 1.14 | 0.259 | 6.58 | 15 kV |
| 390662* | 6 | 13.57 | 133/27 | 133 x 0.36 | 0.062 | 1.57 | 0.337 | 8.56 | 25 kV |
| 390645 | 6 | 13.57 | 133/27 | 133 x 0.36 | 0.045 | 1.14 | 0.303 | 7.70 | 15 kV |
| 390462* | 4 | 21.55 | 133/25 | 133 x 0.45 | 0.062 | 1.57 | 0.393 | 9.98 | 25 kV |
| 390262* | 2 | 34.45 | 259/26 | 259 x 0.40 | 0.062 | 1.57 | 0.463 | 11.76 | 25 kV |

*Not UL Recognized.

Insulation Colors

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

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

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

Hook-Up Wire

High Temperature
600 V, PTFE/Glass Braid



UL AWM 5196
CSA AWM I A/B

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

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

Hook-Up Wire

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



UL AWM 5196, 5251
CSA AWM 1 A/B

Operating Temperature

- -55°C to +250°C

Materials

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

Availability

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

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

*UL AWM 5196.

Hook-Up Wire

Welding Cable
600 V, EPDM



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

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

Operating Temperature

- -50°C to +105°C

Materials

- Stranded bare copper conductor
- Black EPDM rubber jacket

Availability

Bulk, cut to length



Hook-Up Wire

1000/2000 V Photovoltaic Wire, XLPE, PVC



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

Operating Temperature

- -40°C to +90°C

Materials

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

Availability

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

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

*UL 4703 PV only.

Hook-Up Wire

600/1000 V Photovoltaic Wire, LSZH, LSZH



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

Operating Temperature

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

Materials

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

Availability

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

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



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 | mm ² | AWG | mm | Inch | mm | Inch | mm |
| 6710 | 28 | 0.07 | 7/36 | 7 x 0.12 | 0.010 | 0.25 | 0.034 | 0.86 |
| 6711 | 26 | 0.14 | 7/34 | 7 x 0.16 | 0.010 | 0.25 | 0.038 | 0.97 |
| 6712 | 24 | 0.22 | 7/32 | 7 x 0.20 | 0.010 | 0.25 | 0.043 | 1.09 |
| 6713 | 22 | 0.35 | 7/30 | 7 x 0.25 | 0.010 | 0.25 | 0.049 | 1.24 |
| 6714 | 20 | 0.51 | 10/30 | 10 x 0.25 | 0.010 | 0.25 | 0.055 | 1.40 |
| 6715 | 18 | 0.81 | 16/30 | 16 x 0.25 | 0.010 | 0.25 | 0.067 | 1.70 |
| 6715S | 18 | 0.82 | Solid | Solid | 0.010 | 0.25 | 0.059 | 1.50 |
| 6716 | 16 | 1.32 | 26/30 | 26 x 0.25 | 0.011 | 0.28 | 0.081 | 2.06 |
| 6717 | 14 | 2.09 | 41/30 | 41 x 0.25 | 0.011 | 0.28 | 0.096 | 2.44 |
| 6717S | 14 | 2.08 | Solid | Solid | 0.011 | 0.28 | 0.086 | 2.18 |
| 6718 | 12 | 3.31 | 65/30 | 65 x 0.25 | 0.012 | 0.30 | 0.117 | 2.97 |
| 6719 | 10 | 5.37 | 105/30 | 105 x 0.25 | 0.012 | 0.30 | 0.144 | 3.66 |

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



Hook-Up Wire

150/600 V Ribbon Cable, PVC



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

Operating Temperature

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

Conductor Color Coding

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

Materials

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

Availability

100 ft (30.5 m)

26 AWG (0.14 mm²)

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

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

24 AWG (0.23 mm²)

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

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

24 AWG (0.24 mm²)

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

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

22 AWG (0.35 mm²)

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

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

22 AWG (0.38 mm²)

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

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



Hook-Up Wire

300/1000 V Ribbon Cable, PVC



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

Operating Temperature

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

Conductor Color Coding

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

Materials

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

Availability

100 ft (30.5 m)

22 AWG (0.35 mm²)

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

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

Hook-Up Wire

Bus Bar Wire



CID AA-59551 Type S ASTM B33

Material

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

Availability

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

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



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 ² | | Feet | Meters | |
| HU-KIT-40 | UL AWM 1007 UL AWM 1569 CSA TR 64 | 24 | 0.23 | White Black Red Green Blue | 100 | 30.5 | 3050 |
| HU-KIT-30 | MIL-W-76B Type MW | 24 | 0.23 | White Black Red Green Blue | 100 | 30.5 | 1550 |
| HU-KIT-20 | UL AWM 1007 UL AWM 1569 CSA TR 64 | 22 | 0.36 | White Black Red Green Blue | 100 | 30.5 | 3051 |
| HU-KIT-10 | MIL-W-76B Type MW | 22 | 0.36 | White Black Red Green 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 |
|---------------------------------|------------|-----------|-----------------|
| MIL-DTL-16878/1 (Type B) | PVC | 32 - 14 | -55°C to +105°C |
| MIL-DTL-16878/2 (Type C) | PVC | 24 - 22 | -55°C to +105°C |
| MIL-DTL-16878/3 (Type D) | PVC | 16 | -20°C to +105°C |
| MIL-W-76 Type MWP | PVC | 24, 12 | -55°C to +90°C |
| UL AWM 1007 | PVC | 24 - 10 | -20°C to +80°C |
| UL AWM 1028 | PVC | 24 - 10 | -20°C to +105°C |
| UL AWM 1061 | SR-PVC | 30 - 20 | -10°C to +80°C |
| UL AWM 1231 | PVC | 24 - 10 | -20°C to +105°C |
| UL AWM 1569 | PVC | 28 - 16 | -20°C to +105°C |
| UL AWM 1581 | PVC | 28 - 16 | -20°C to +80°C |
| UL MTW | PVC | 20 - 10 | -20°C to +90°C |
| UL TW | PVC | 24 - 10 | -20°C to +60°C |

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

{ 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

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

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

With sizes ranging from 28 to 10 AWG in a UL AWM 11028 style with a temperature range from -40°C to +105°C, EcoWire is the perfect hook-up wire where space savings, lighter weight, mechanical ruggedness, and

recyclability are required. And it gives you greener performance in eleven insulation colors.

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

EcoWire Gives You More for Less

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



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