

# 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 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		
<b>UL/CSA</b>							
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
<b>Military</b>							
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	
<b>Solar</b>							
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	
<b>Wire Wrap</b>							
	PVDF	—	30 - 24	AWM 1422, 1423		-40°C to +125°C	
	ETFE	—	30 - 24	AWM 1516, 1523		-70°C to +150°C	
<b>Ribbon Cable: 5 to 30 Conductors</b>							
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			
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 <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



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

### 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 <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	
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 <sup>2</sup>	AWG	mm	Inch	mm	Inch	mm
<b>182607</b>	26	0.14	7/34	7 x 0.16	0.010	0.25	0.045	1.14
<b>182407</b>	24	0.23	7/32	7 x 0.20	0.010	0.25	0.050	1.27
<b>182419</b>	24	0.24	19/36	19 x 0.13	0.010	0.25	0.051	1.30
<b>182219</b>	22	0.38	19/34	19 x 0.16	0.010	0.25	0.058	1.47
<b>182019</b>	20	0.62	19/32	19 x 0.20	0.010	0.25	0.066	1.68
<b>181807</b>	18	0.90	7/26	7 x 0.40	0.010	0.25	0.074	1.88
<b>181819</b>	18	0.96	19/30	19 x 0.25	0.010	0.25	0.076	1.93
<b>181619</b>	16	1.23	19/29	19 x 0.29	0.010	0.25	0.082	2.08
<b>181419</b>	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/ 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 <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	mm <sup>2</sup>	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



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

## 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 <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



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



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

### 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 <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

# 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	
<b>392297</b>	22	0.35	7/30	7 x 0.25	0.097	2.46	0.224	5.69	40 kV
<b>392275</b>	22	0.35	7/30	7 x 0.25	0.075	1.90	0.180	4.57	30 kV
<b>392262</b>	22	0.35	7/30	7 x 0.25	0.062	1.57	0.154	3.91	25 kV
<b>392250</b>	22	0.35	7/30	7 x 0.25	0.050	1.27	0.131	3.33	20 kV
<b>392245</b>	22	0.35	7/30	7 x 0.25	0.045	1.14	0.120	3.05	15 kV
<b>392240</b>	22	0.35	7/30	7 x 0.25	0.040	1.02	0.11	2.79	10 kV
<b>392097</b>	20	0.51	10/30	10 x 0.25	0.097	2.46	0.231	5.87	40 kV
<b>392075</b>	20	0.51	10/30	10 x 0.25	0.075	1.90	0.187	4.75	30 kV
<b>392062</b>	20	0.51	10/30	10 x 0.25	0.062	1.57	0.161	4.09	25 kV
<b>392050</b>	20	0.51	10/30	10 x 0.25	0.050	1.27	0.137	3.48	20 kV
<b>392045</b>	20	0.51	10/30	10 x 0.25	0.045	1.14	0.127	3.23	15 kV
<b>392040</b>	20	0.51	10/30	10 x 0.25	0.040	1.02	0.117	2.97	10 kV
<b>391897</b>	18	0.81	16/30	16 x 0.25	0.097	2.46	0.241	6.12	40 kV
<b>391875</b>	18	0.81	16/30	16 x 0.25	0.075	1.90	0.197	5.00	30 kV
<b>391862</b>	18	0.81	16/30	16 x 0.25	0.062	1.57	0.171	4.34	25 kV
<b>391850</b>	18	0.81	16/30	16 x 0.25	0.050	1.27	0.147	3.73	20 kV
<b>391845</b>	18	0.81	16/30	16 x 0.25	0.045	1.14	0.137	3.48	15 kV
<b>391840</b>	18	0.81	16/30	16 x 0.25	0.040	1.02	0.127	3.23	10 kV
<b>391699</b>	16	1.32	26/30	26 x 0.25	0.150	3.81	0.360	9.14	50 kV
<b>391697</b>	16	1.32	26/30	26 x 0.25	0.097	2.46	0.254	6.45	40 kV
<b>391675</b>	16	1.32	26/30	26 x 0.25	0.075	1.90	0.210	5.33	30 kV
<b>391662</b>	16	1.32	26/30	26 x 0.25	0.062	1.57	0.184	4.67	25 kV
<b>391650</b>	16	1.32	26/30	26 x 0.25	0.050	1.27	0.160	4.06	20 kV
<b>391645</b>	16	1.32	26/30	26 x 0.25	0.045	1.14	0.150	3.81	15 kV
<b>391640</b>	16	1.32	26/30	26 x 0.25	0.040	1.02	0.140	3.56	10 kV
<b>391499</b>	14	2.08	41/30	41 x 0.25	0.150	3.81	0.374	9.50	50 kV
<b>391497</b>	14	2.08	41/30	41 x 0.25	0.097	2.46	0.268	6.81	40 kV
<b>391475</b>	14	2.08	41/30	41 x 0.25	0.075	1.90	0.224	5.69	30 kV
<b>391462</b>	14	2.08	41/30	41 x 0.25	0.062	1.57	0.198	5.03	25 kV
<b>391450</b>	14	2.08	41/30	41 x 0.25	0.050	1.27	0.174	4.42	20 kV
<b>391445</b>	14	2.08	41/30	41 x 0.25	0.045	1.14	0.164	4.17	15 kV
<b>391440</b>	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
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# 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**

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

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

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 UL AWM 1569 CSA TR 64	24	0.23	White Black Red Green Blue	100	30.5	3050
<b>HU-KIT-30</b>	MIL-W-76B Type MW	24	0.23	White Black Red Green Blue	100	30.5	1550
<b>HU-KIT-20</b>	UL AWM 1007 UL AWM 1569 CSA TR 64	22	0.36	White Black Red Green Blue	100	30.5	3051
<b>HU-KIT-10</b>	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
<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

**T**ough 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](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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Компания «Океан Электроники» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Поставка оригинальных импортных электронных компонентов напрямую с производств Америки, Европы и Азии, а так же с крупнейших складов мира;
- Широкая линейка поставок активных и пассивных импортных электронных компонентов (более 30 млн. наименований);
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Помощь Конструкторского Отдела и консультации квалифицированных инженеров;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Поставка электронных компонентов под контролем ВП;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- При необходимости вся продукция военного и аэрокосмического назначения проходит испытания и сертификацию в лаборатории (по согласованию с заказчиком);
- Поставка специализированных компонентов военного и аэрокосмического уровня качества (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Actel, Aeroflex, Peregrine, VPT, Syfer, Eurofarad, Texas Instruments, MS Kennedy, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Компания «Океан Электроники» является официальным дистрибьютором и эксклюзивным представителем в России одного из крупнейших производителей разъемов военного и аэрокосмического назначения «JONHON», а так же официальным дистрибьютором и эксклюзивным представителем в России производителя высокотехнологичных и надежных решений для передачи СВЧ сигналов «FORSTAR».



## JONHON

«JONHON» (основан в 1970 г.)

Разъемы специального, военного и аэрокосмического назначения:

(Применяются в военной, авиационной, аэрокосмической, морской, железнодорожной, горно- и нефтедобывающей отраслях промышленности)

«FORSTAR» (основан в 1998 г.)

ВЧ соединители, коаксиальные кабели, кабельные сборки и микроволновые компоненты:

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