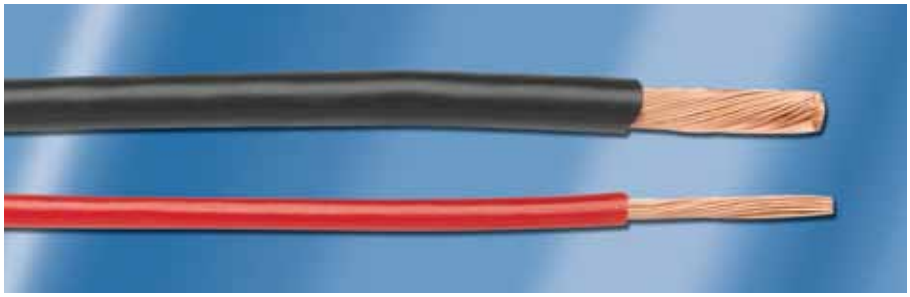
Hook-Up Wire

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**

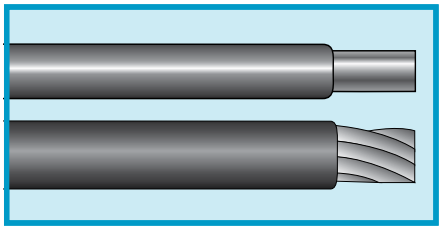
Choice of Insulations to Meet Temperature Range and Mechanical and Environmental Requirements

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 TÜV 2 PFG 1169	—	-40°C to +90°C
Wire Wrap						
	PVDF	—	30 – 24	AWM 1422, 1423		-40°C to +125°C
	ETFE	—	30 – 24	AWM 1516, 1523		-70°C to +150°C
Ribbon Cable: 5 to 30 Conductors						
150/300	PVC	26 – 22	—	AWM 2713, 2555		-55°C to +80°C
600/1000	PVC	26 – 22	—	MIL-DTL-16878/1 and /2 (Types B & C)		-55°C to +105°C

Hook-Up Wire

300 V, PVC



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

Operating Temperature

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

Materials

- Stranded or solid tinned copper conductor
- PVC insulation

Availability

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

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

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

Insulation Colors Z1

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

Insulation Colors Z2

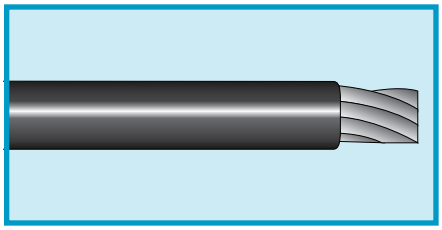
0 Black	4 Yellow	8 Slate
1 Brown	5 Green	9 White
2 Red	6 Blue	
3 Orange	7 Violet	

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

CA PROP 65 RoHS Compliant

Hook-Up Wire

300 V, Semirigid PVC



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

Operating Temperature

- -10°C to +80°C

Materials

- Stranded or solid tinned copper conductor
- Semirigid PVC insulation

Availability

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

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

Insulation Colors Z1

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

Insulation Colors Z2

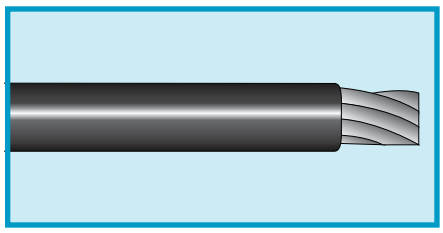
0 Black	4 Yellow	8 Slate
1 Brown	5 Green	9 White
2 Red	6 Blue	
3 Orange	7 Violet	

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

CA PROP 65 RoHS Compliant

Hook-Up Wire

600 V, PVC



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

Operating Temperature

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

Materials

- Stranded bare copper conductor
- PVC insulation

Availability

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

Part No.	Wire Size		Stranding		Insulation Thickness		Nominal Diameter		UL Style
	AWG	mm²	AWG	mm	Inch	mm	Inch	mm	
461816	18	0.81	16/30	16 x 0.25	0.032	0.81	0.111	2.82	1015, 1230
461626	16	1.32	26/30	26 x 0.25	0.032	0.81	0.124	3.15	1015, 1230
461419	14	2.07	19/0.0147	19 x 0.37	0.032	0.81	0.138	3.51	1015, 1230
461219	12	3.29	19/0.0185	19 x 0.47	0.032	0.81	0.157	3.99	1015, 1230
461265	12	3.29	65/0.010	65 x 0.25	0.031	0.79	0.153	3.89	1015, 1230
461019	10	5.26	19/0.0234	19 x 0.59	0.032	0.81	0.181	4.60	1015, 1230
460819	8	8.38	19/0.0295	19 x 0.75	0.047	1.19	0.242	6.15	1028, 1231
460619	6	13.32	19/0.0372	19 x 0.94	0.063	1.59	0.311	7.90	1283, 1232
460419	4	21.09	19/0.0469	19 x 1.19	0.063	1.59	0.360	9.14	1283, 1232
460219	2	33.63	19/0.0591	19 x 1.50	0.063	1.59	0.421	10.69	1283, 1232
460001	1/0	53.39	19/0.0745	19 x 1.89	0.078	1.98	0.529	13.44	1284, 1232

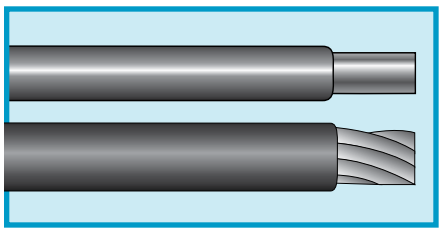
Insulation Colors

White	Yellow	Slate
Black	Blue	Violet
Red	Brown	
Green	Orange	

CA PROP 65 RoHS Compliant

Hook-Up Wire

600 V, PVC



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

Operating Temperature

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

Materials

- Stranded or solid tinned copper conductor
- PVC insulation

Availability

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

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

T indicates top coat conductors.
*Not MTW

Insulation Colors Z1

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

Insulation Colors Z2

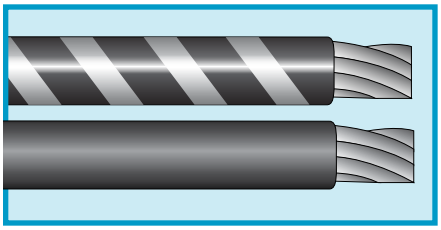
0 Black	4 Yellow	8 Slate
1 Brown	5 Green	9 White
2 Red	6 Blue	
3 Orange	7 Violet	

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

CA PROP 65 RoHS Compliant

Hook-Up Wire

600 V, PVC



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

Operating Temperature

- -55°C to +105°C

Materials

- Stranded or solid tinned copper conductor
- PVC insulation

Availability

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

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

*Also meets MIL-W-76 Type LW.

Insulation Colors Z1

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

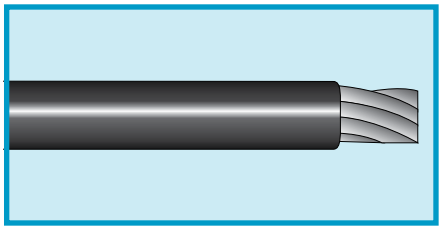
Insulation Colors Z2

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

CA PROP 65 RoHS Compliant

Hook-Up Wire

600 V, PVC



MIL-W-76 Type HW

Operating Temperature

- -20°C to +80°C

Materials

- Stranded tinned copper conductor
- PVC insulation

Availability

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

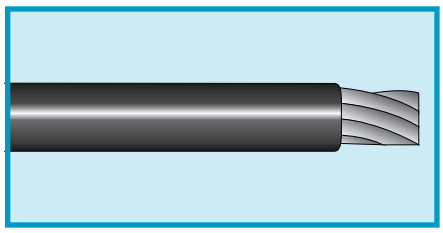
Part No.	Wire Size		Stranding		Insulation Thickness		Nominal Diameter	
	AWG	mm^2	AWG	mm	Inch	mm	Inch	mm
1579	14	2.08	41/30	41 x 0.25	0.045	1.14	0.164	4.17
1651	12	3.29	65/30	65 x 0.25	0.045	1.14	0.183	4.65
1653	10	5.32	105/30	105 x 0.25	0.045	1.14	0.210	5.33
1655	8	8.61	133/29	133 x 0.28	0.045	1.14	0.259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

Insulation Colors
White
Black
Red

CA PROP 65 RoHS Compliant

Hook-Up Wire

600 V, PVC



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

Operating Temperature

- -55°C to +105°C

Materials

- Stranded tinned copper conductor
- PVC insulation

Availability

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

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

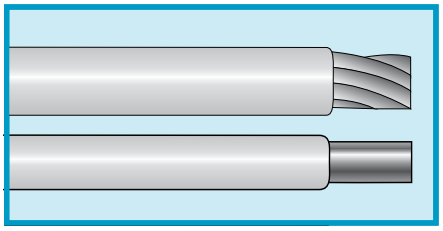
Insulation Colors

White	Yellow	Slate
Black	Blue	Violet
Red	Brown	
Green	Orange	

CA PROP 65 RoHS Compliant

Hook-Up Wire

600 V, PVC/Nylon



UL THHN, THWN, TFN, TFFN

Operating Temperature

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

Materials

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

Availability

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

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

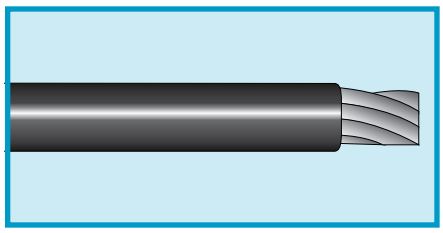
Insulation Colors

White	Yellow	Slate
Black	Blue	Violet
Red	Brown	
Green	Orange	

CA PROP 65 RoHS Compliant

Hook-Up Wire

600 V, PVC/Nylon



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

Operating Temperature

- -55°C to +105°C

Materials

- Stranded tinned copper conductor
- PVC/nylon insulation

Availability

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

Part No.	Wire Size		Stranding		PVC Insulation Thickness		Nominal Diameter	
	AWG	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

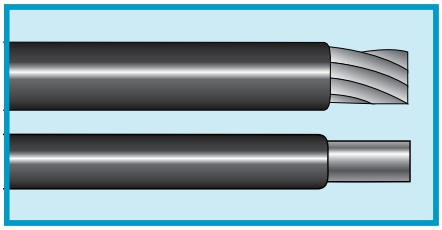
Insulation Colors

White	Yellow	Slate
Black	Blue	Violet
Red	Brown	
Green	Orange	

CA PROP 65 RoHS Compliant

Hook-Up Wire

1000 V, PVC



MIL-W-76 Type MWP

Operating Temperature

- -55°C to +90°C

Materials

- Stranded or solid tinned copper conductor
- PVC insulation

Availability

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

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

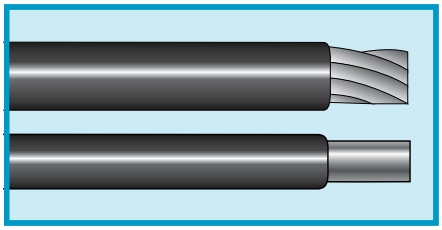
Insulation Colors

White	Yellow	Slate
Black	Blue	Violet
Red	Brown	
Green	Orange	

CA PROP 65 RoHS Compliant

Hook-Up Wire

1000 V, PVC



MIL-W-76 B Type MW

Operating Temperature

- -40°C to +80°C

Materials

- Stranded or solid tinned copper conductor
- PVC insulation

Availability

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

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

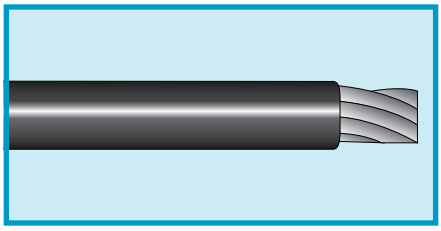
Insulation Colors

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

CA PROP 65 RoHS Compliant

Hook-Up Wire

600/150 V, Irradiated PVC Soldering Iron Resistant



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

Operating Temperature

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

Materials

- Stranded tinned copper conductor
- Irradiated PVC insulation

Availability

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

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

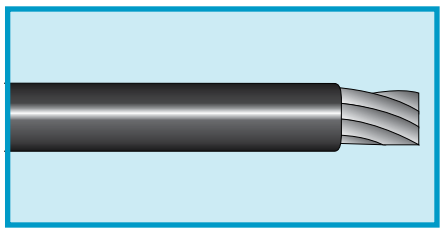
Insulation Colors

White	Yellow	Slate
Black	Blue	Violet
Red	Brown	
Green	Orange	

CA PROP 65 RoHS Compliant

Hook-Up Wire

1000/300 V, Irradiated PVC Soldering Iron Resistant



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

Operating Temperature

- -55°C to +105°C

Materials

- Stranded tinned copper conductor
- Irradiated PVC insulation

Availability

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

Part No.	Wire Size		Stranding		Insulation Thickness		Nominal Diameter		Colors
	AWG	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

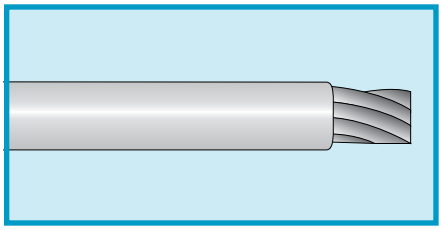
Insulation Colors

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

CA PROP 65 RoHS Compliant

Hook-Up Wire

3000/600 V, XLPE



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

Operating Temperature

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

Materials

- Stranded tinned copper conductor
- Cross-linked polyolefin insulation

Availability

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

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

Insulation Colors
White
Black
Red

1000/300 V, XLPE

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

Operating Temperature

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

Materials

- Stranded tinned copper conductor
- Cross-linked polyolefin insulation

Availability

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

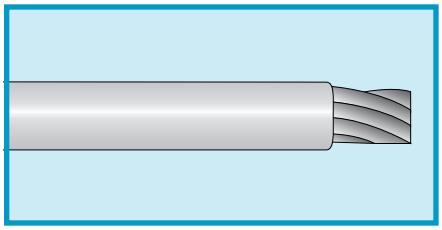
Part No.	Wire Size		Stranding		Insulation Thickness		Nominal Diameter	
	AWG	mm²	AWG	mm	Inch	mm	Inch	mm
7024	22	0.38	19/34	19 x 0.16	0.016	0.41	0.064	1.63
7025	20	0.62	19/32	19 x 0.20	0.016	0.41	0.072	1.83
7026	18	0.96	19/30	19 x 0.25	0.016	0.41	0.080	2.03

Insulation Colors
White
Black
Red

CA PROP 65 RoHS Compliant

Hook-Up Wire

600/150 V, XLPE



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

Operating Temperature

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

Materials

- Stranded tinned copper conductor
- Cross-linked polyolefin insulation

Availability

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

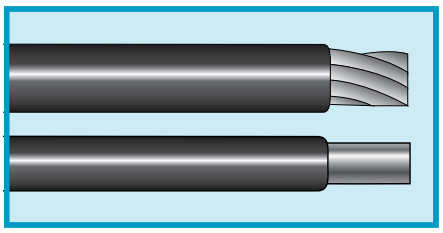
Part No.	Wire Size		Stranding		Insulation Thickness		Nominal Diameter	
	AWG	mm²	AWG	mm	Inch	mm	Inch	mm
7012	22	0.38	19/34	19 x 0.16	0.011	0.28	0.054	1.37
7013	20	0.62	19/32	19 x 0.20	0.011	0.28	0.06	1.52
7014	18	0.96	19/30	19 x 0.25	0.011	0.28	0.070	1.78

Insulation Colors

White
Black

Hook-Up Wire

600 V, XLPE



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

Availability

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

Operating Temperature

- -20°C to +125°C

Materials

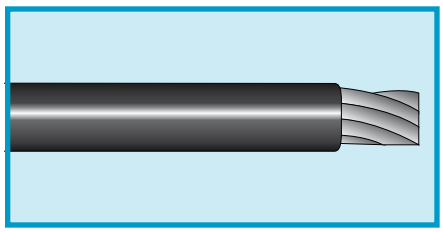
- Stranded or solid tinned copper conductor
- Slate cross-linked polyethylene insulation

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

CA PROP 65 RoHS Compliant

Hook-Up Wire

600 V, XLPE



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

Operating Temperature

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

Materials

- Stranded tinned copper conductor
- Cross-linked polyethylene insulation

Availability

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

Part No.	Wire Size		Stranding		Insulation Thickness		Nominal Diameter	
	AWG	mm²	AWG	mm	Inch	mm	Inch	mm
752010	20	0.51	10/30	10 x 0.25	0.031	0.79	0.099	2.51
751816	18	0.81	16/30	16 x 0.25	0.031	0.79	0.109	2.77
751626	16	1.32	26/30	26 x 0.25	0.031	0.79	0.122	3.10
751441*	14	2.08	41/30	41 x 0.25	0.031	0.79	0.136	3.45
751265*	12	3.29	65/30	65 x 0.25	0.031	0.79	0.155	3.94
751000*	10	5.32	105/30	105 x 0.25	0.031	0.79	0.180	4.57
758133**	8	8.63	133/29	133 x 0.29	0.047	1.19	0.263	6.68

*UL SIS.
**UL AWM 3195 only.

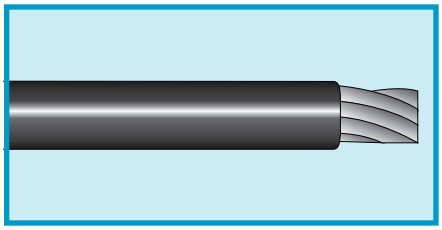
Insulation Colors

White	Yellow	Slate
Black	Blue	Violet
Red	Brown	
Green	Orange	

RoHS Compliant

Hook-Up Wire

50 V, XLPE



SAE J1128 Type GXL

Operating Temperature

- -40°C to +125°C

Materials

- Stranded bare copper conductor
- Cross-linked polyethylene insulation

Availability

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

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

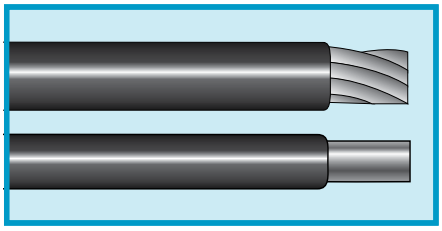
Insulation Colors

White	Yellow	Slate
Black	Blue	Violet
Red	Brown	
Green	Orange	

CA PROP 65 RoHS Compliant

Hook-Up Wire

250 V, PTFE



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

Operating Temperature

- -60°C to +200°C

Materials

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

Availability

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

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

Insulation Colors Z1

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

Insulation Colors Z2

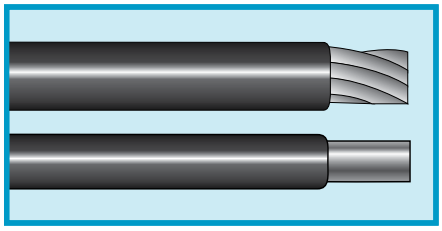
0 Black	4 Yellow	8 Slate
1 Brown	5 Green	9 White
2 Red	6 Blue	
3 Orange	7 Violet	

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

CA PROP 65 RoHS Compliant

Hook-Up Wire

600 V, PTFE



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

Operating Temperature

- -60°C to +200°C

Materials

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

Availability

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

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

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

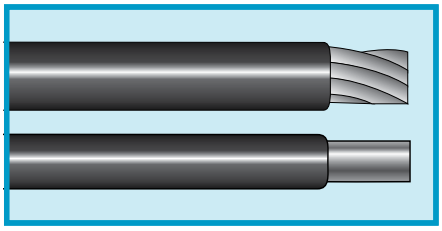
Insulation Colors

White	Yellow	Slate
Black	Blue	Violet
Red	Brown	
Green	Orange	

RoHS Compliant

Hook-Up Wire

600 V, PTFE



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

Operating Temperature

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

Materials

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

Availability

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

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

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

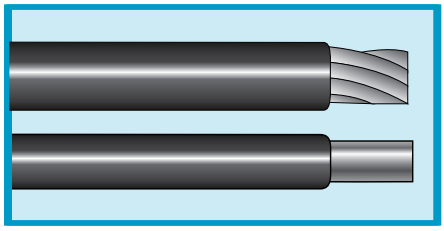
Insulation Colors

White	Yellow	Slate
Black	Blue	Violet
Red	Brown	
Green	Orange	

CA PROP 65 RoHS Compliant

Hook-Up Wire

1000/300 V, PTFE



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

Operating Temperature

- -60°C to +200°C

Materials

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

Availability

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

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

*Not UL AWM 1180.

Insulation Colors

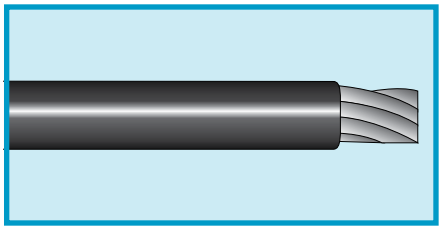
White	Yellow	Slate
Black	Blue	Violet
Red	Brown	
Green	Orange	

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

CA PROP 65 RoHS Compliant

Hook-Up Wire

1000 V, PTFE



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

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

Operating Temperature

- -60°C to +200°C

Materials

- Stranded silver-plated copper conductor
- PTFE insulation

Availability

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

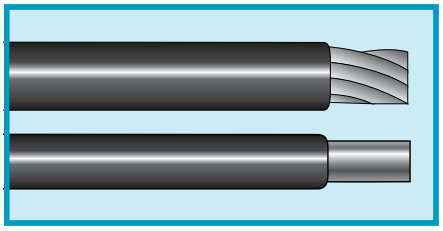
Insulation Colors

White	Yellow	Slate
Black	Blue	Violet
Red	Brown	
Green	Orange	

RoHS Compliant

Hook-Up Wire

600 V, ETFE or PTFE



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

Operating Temperature

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

Materials

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

Availability

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

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

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

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

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

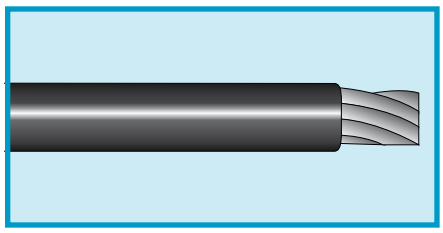
Insulation Colors

White	Yellow	Slate
Black	Blue	Violet
Red	Brown	
Green	Orange	

CA PROP 65 RoHS Compliant

Hook-Up Wire

Wire Wrap, PVDF or ETFE



UL 1422, 1423, 1516, 1523
VW-1

Operating Temperature

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

Materials

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

Availability

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

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

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

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

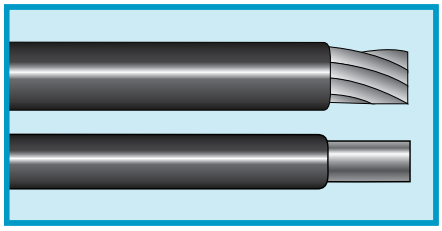
Insulation Colors

White	Yellow	Slate
Black	Blue	Violet
Red	Brown	
Green	Orange	

CA PROP 65 RoHS Compliant

Hook-Up Wire

Test Lead Wire, EPR Rubber



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

Operating Temperature

- -30°C to +90°C

Voltage Rating

- See table

Materials

- Stranded tinned copper conductors
- EPR rubber insulation

Availability

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

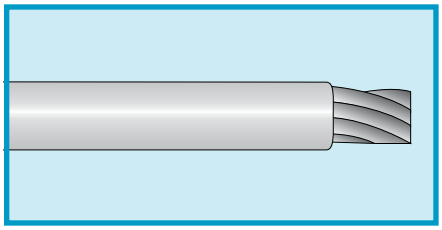
Insulation Colors

Black
Red

RoHS Compliant

Hook-Up Wire

600 V, Silicone Rubber



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

Operating Temperature

- -40°C to +150°C

Materials

- Stranded tinned copper conductor
- White silicone rubber insulation

Availability

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

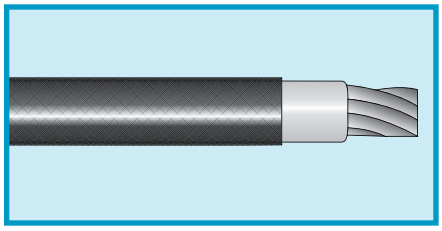
Part No.	Wire Size		Stranding		Insulation Thickness		Nominal Diameter		UL AWM
	AWG	mm²	AWG	mm	Inch	mm	Inch	mm	
392207	22	0.35	7/30	7 x 0.25	0.047	1.19	0.124	3.15	3212
392010	20	0.51	10/30	10 x 0.25	0.047	1.19	0.131	3.33	3212
391816	18	0.81	16/30	16 x 0.25	0.047	1.19	0.141	3.58	3212
391626	16	1.32	26/30	26 x 0.25	0.047	1.19	0.154	3.91	3212
391441	14	2.08	41/30	41 x 0.25	0.047	1.19	0.168	4.27	3212
391265	12	3.29	65/30	65 x 0.25	0.047	1.19	0.187	4.75	3212
391000	10	5.32	105/30	105 x 0.25	0.047	1.19	0.212	5.38	3212
398133	8	8.61	133/29	133 x 0.29	0.063	1.60	0.295	7.49	3213
396133	6	13.57	133/27	133 x 0.36	0.063	1.60	0.339	8.61	3213
394133	4	21.55	133/25	133 x 0.45	0.063	1.60	0.395	10.03	3213
392259	2	33.15	259/26	259 x 0.40	0.063	1.60	0.460	11.68	3213
391259	1	41.96	259/25	259 x 0.45	0.078	1.98	0.532	13.51	3214
390001	1/0	53.10	259/24	259 x 0.51	0.078	1.98	0.578	14.68	3214
390002	2/0	67.43	1330/30	1330 x 0.25	0.078	1.98	0.639	16.23	3214
390004	4/0	106.82	2107/30	2107 x 0.25	0.078	1.98	0.837	21.26	3214

CA PROP 65 RoHS Compliant

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

Hook-Up Wire

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



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

Operating Temperature

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

Materials

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

Availability

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

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

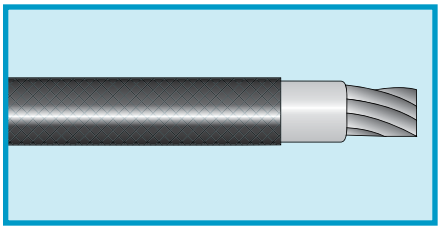
Insulation Colors

White
Black

CA PROP 65 RoHS Compliant

Hook-Up Wire

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



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

Operating Temperature

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

Materials

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

Availability

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

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

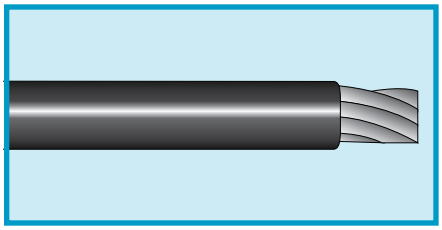
Insulation Colors

White
Black

CA PROP 65 RoHS Compliant

Hook-Up Wire

High Voltage, Silicone Rubber



UL AWM 3239

Operating Temperature

- -40°C to +150°C

Materials

- Stranded tinned copper conductor
- Silicone rubber insulation

Availability

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

UL 3239

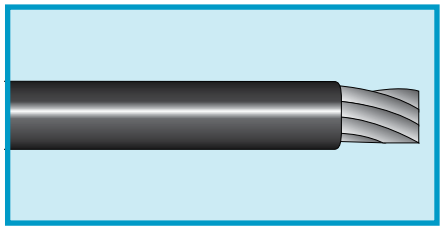
Part No.	Wire Size		Stranding		Insulation Thickness		Nominal Diameter		Voltage
	AWG	mm²	AWG	mm	Inch	mm	Inch	mm	
392297	22	0.35	7/30	7 x 0.25	0.097	2.46	0.224	5.69	40 kV
392275	22	0.35	7/30	7 x 0.25	0.075	1.90	0.180	4.57	30 kV
392262	22	0.35	7/30	7 x 0.25	0.062	1.57	0.154	3.91	25 kV
392250	22	0.35	7/30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

White	Black	Red

UL LISTED CA PROP 65 RoHS Compliant

Hook-Up Wire

High Voltage, Silicone Rubber



UL AWM 3239

Operating Temperature

- -40°C to +150°C

Materials

- Stranded tinned copper conductor
- Silicone rubber insulation

Availability

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

UL 3239

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

*Not UL Recognized.

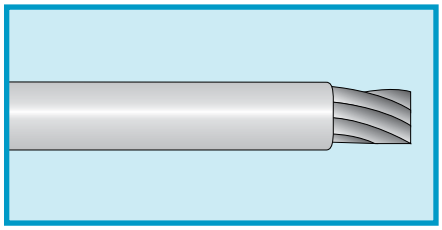
Insulation Colors

White	Black	Red

UL LISTED CA PROP 65 RoHS Compliant

Hook-Up Wire

High Voltage, Silicone Rubber



UL VW-1

Operating Temperature

- -40°C to +200°C

Materials

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

Availability

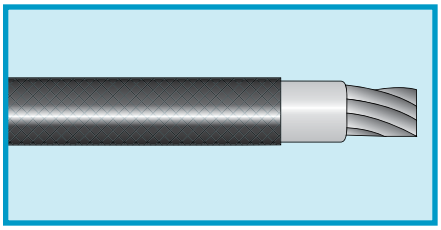
100 ft (30.5 m)
500 ft (152 m)
1000 ft (305 m)
Bulk, cut to length

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

CA PROP 65 RoHS Compliant

Hook-Up Wire

High Temperature
600 V, Mica-Glass, PTFE



UL AWM 5107
CSA AWM I A/B

Operating Temperature

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

Materials

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

Availability

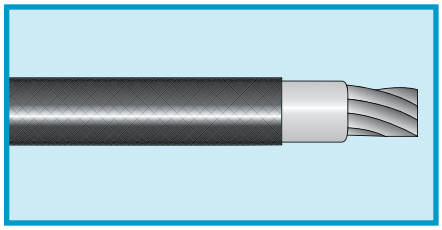
100 ft (30.5 m)
500 ft (152 m)
1000 ft (305 m)
Bulk, cut to length

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

CA PROP 65 RoHS Compliant

Hook-Up Wire

High Temperature
600 V, PTFE/Glass Braid



UL AWM 5196
CSA AWM I A/B

Operating Temperature

- -55°C to +250°C

Materials

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

Availability

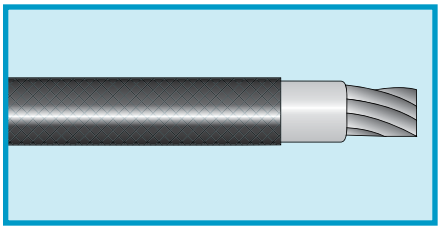
100 ft (30.5 m)
500 ft (152 m)
1000 ft (305 m)
Bulk, cut to length

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

CA PROP 65 RoHS Compliant

Hook-Up Wire

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



UL AWM 5196, 5251
CSA AWM 1 A/B

Operating Temperature

- -55°C to +250°C

Materials

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

Availability

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

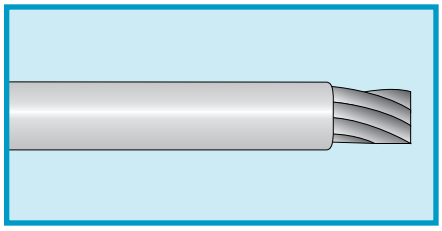
Part No.	Wire Size		Stranding		Insulation Thickness		Nominal Diameter	
	AWG	mm^2	AWG	mm	Inch	mm	Inch	mm
M70562*	2	36.6	133/0.0223	133 x 0.57	0.020	0.51	0.445	11.30
M70563	1	41.1	259/0.0177	259 x 0.45	0.020	0.51	0.485	12.32
M70564	1/0	53.5	259/0.0202	259 x 0.51	0.020	0.51	0.535	13.59
M70565	2/0	68.8	259/0.0227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

*UL AWM 5196.

CA PROP 65 RoHS Compliant

Hook-Up Wire

Welding Cable
600 V, EPDM



Operating Temperature

- -50°C to +105°C

Materials

- Stranded bare copper conductor
- Black EPDM rubber jacket

Availability

Bulk, cut to length

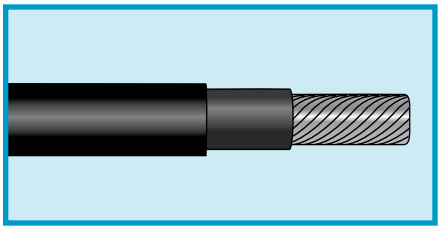
Part No.	Wire Size		Stranding		Insulation Thickness		Nominal Diameter		Current-Carrying Capacity	Voltage Drop*
	AWG	mm²	AWG	mm	Inch	mm	Inch	mm	A	V
6112	6	13.5	266/30	266 x 0.25	0.060	1.52	0.320	8.13	75	3.30
6113	4	19.9	392/30	392 x 0.25	0.060	1.52	0.375	9.53	100	2.80
6115	2	32.6	644/30	644 x 0.25	0.060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

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

RoHS Compliant

Hook-Up Wire

1000/2000 V Photovoltaic Wire, XLPE, PVC



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

Operating Temperature

- -40°C to +90°C

Materials

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

Availability

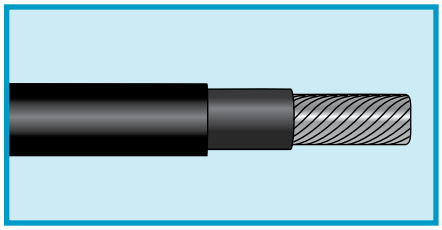
100 ft (30.5 m)
1000 ft (305 m)

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

*UL 4703 PV only.

Hook-Up Wire

600/1000 V Photovoltaic Wire, LSZH, LSZH



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

Operating Temperature

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

Materials

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

Availability

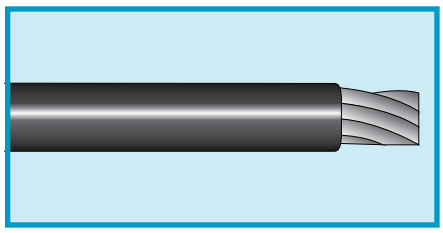
100 ft (30.5 m)
1000 ft (305 m)

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

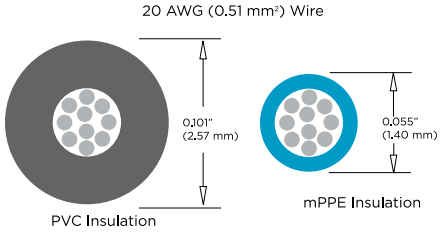
UL LISTED RoHS Compliant

Hook-Up Wire

EcoWire™
600 V, mPPE



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



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

Operating Temperature

- -40°C to +105°C

Materials

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

Availability

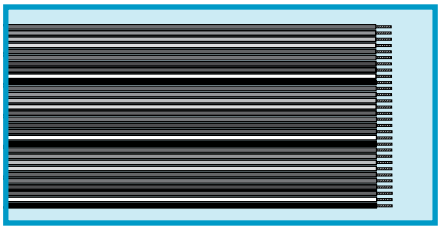
100 ft (30.5 m)
1000 ft (305 m)

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

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

Hook-Up Wire

150/600 V Ribbon Cable, PVC



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

Operating Temperature

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

Conductor Color Coding

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

Materials

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

Availability

100 ft (30.5 m)

26 AWG (0.14 mm²)

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

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

24 AWG (0.23 mm²)

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

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

24 AWG (0.24 mm²)

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

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

22 AWG (0.35 mm²)

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

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

22 AWG (0.38 mm²)

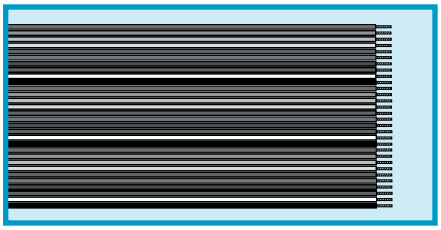
Stranding: 19/34 (19 x 0.16 mm)
Insulation thickness: 0.010 (0.25 mm)
Cable height: 0.051 (1.29 mm)

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

RoHS Compliant

Hook-Up Wire

300/1000 V Ribbon Cable, PVC



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

Operating Temperature

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

Conductor Color Coding

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

Materials

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

Availability

100 ft (30.5 m)

22 AWG (0.35 mm²)

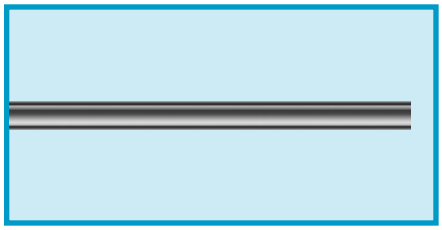
Stranding: 7/30 (7 x 0.25 mm)
Insulation thickness: 0.016 (0.41 mm)
Cable height: 0.065 (1.65 mm)

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

RoHS Compliant

Hook-Up Wire

Bus Bar Wire



CID AA-59551 Type S
ASTM B33

Material

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

Availability

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

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

RoHS Compliant

Hook-Up Wire Kits

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

Operating Temperature

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

Voltage Rating

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

Materials

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

Availability

1 box

Part No.	Wire Type	Wire Size		Colors	Wire Length (each order)		Reorder No.
		AWG	mm²		Feet	Meters	
HU-KIT-40	UL AWM 1007 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.

RoHS Compliant

Dearborn™ Bulk Hook-Up Wire

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

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

Bulk PVC wire options include:

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

Popular Bulk Wire Styles

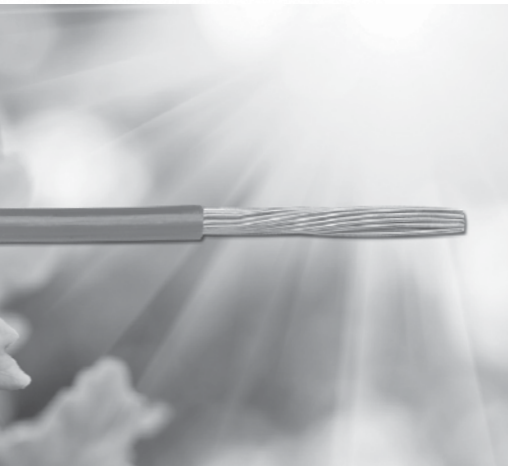
Style	Insulation	AWG Range	Temperature
MIL-DTL-16878/1 (Type B)	PVC	32 – 14	-55°C to +105°C
MIL-DTL-16878/2 (Type C)	PVC	24 – 22	-55°C to +105°C
MIL-DTL-16878/3 (Type D)	PVC	16	-20°C to +105°C
MIL-W-76 Type MWP	PVC	24, 12	-55°C to +90°C
UL AWM 1007	PVC	24 - 10	-20°C to +80°C
UL AWM 1028	PVC	24 - 10	-20°C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

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

{CONFESSION}

We think we're pretty tough

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



Superior Performance for Sustainable Designs

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

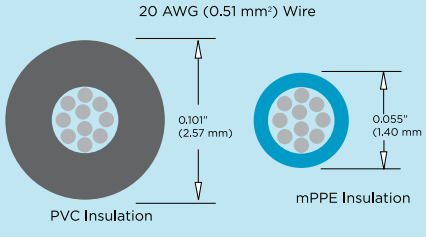
Meet Waste Electrical and Electronic Equipment (WEEE) requirements with EcoWire. Its nonhalogenated insulation contains no heavy metal pigments, so it is easily and 100% recyclable.

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

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

EcoWire Gives You More for Less

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



AlphaWire

Cables you trust. Service you deserve.

Toll Free: 1-800-52 ALPHA | www.alphawire.com

CABLE | WIRE | ACCESSORIES

Общество с ограниченной ответственностью «МосЧип» ИНН 7719860671 / КПП 771901001
Адрес: 105318, г.Москва, ул.Щербаковская д.3, офис 1107

Данный компонент на территории Российской Федерации

Вы можете приобрести в компании MosChip.

Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

http://moschip.ru/get-element

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

Офис по работе с юридическими лицами:

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

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

Факс: +7 495 668-12-70 (доб.304)

E-mail: info@moschip.ru

Skype отдела продаж:
moschip.ru
moschip.ru_4
moschip.ru_6
moschip.ru_9