

# HOOK-UP WIRE FINDER GUIDE

Insulation Type	Temp. (°C)	Voltage (Volts)	Specification			Size Range		Alpha No. Series	Page No.
			MIL	UL	CSA	AWG	(MM <sup>2</sup> )		
PVC	80, 90, 105	300		1007/1569	TR-64	30 - 16	(0,06 - 1,3)	<b>3047-3057</b> <b>HU-KIT-20,</b> <b>HU-KIT-40</b>	166
						24 - 22	(0,23 - 0,38)		178
SR PVC	80	300		1061	AWM I A/B FTI	24 - 16	(0,23 - 1,3)	<b>3250-3254</b>	166
PVC	80	600	76B HW			14 - 8	(2,1 - 8,6)	<b>1579,</b> <b>1651-1655</b>	168
PVC	80	1000	76B MW 76B MW			24 - 12	(0,23 - 3,3)	<b>1550-1560</b> <b>1561/24-</b> <b>1565</b> <b>HU-KIT-10,</b> <b>HU-KIT-30</b>	167
						24 - 18	(0,23 - 0,96)		167
						24 - 22	(0,23 - 0,38)		178
PVC	105	600	16878E B			32 - 14	(0,05 - 2,1)	<b>1850-</b> <b>1859/19</b> <b>3070-3081</b>	169
	105					1015	TEW 105		24 - 10
IRRADIATED PVC	80, 105	600	16878E B	1429	AWM I A/B FTI	26 - 16	(0,14 - 1,3)	<b>7053-</b> <b>7058/19</b> <b>7130-7134,</b> <b>7035, 7036</b>	171
	105	1000	16878E C	1430	REW (XLPVC)	24 - 12	(0,23 - 3,3)		171
IRRADIATED POLYOLEFIN	105, 125	600	16878E B	3265	AWM I A/B FTI	22 - 18	(0,38 - 0,96)	<b>7012-7014</b> <b>7024-7026</b> <b>7044-7048</b>	172
	105, 125	1000	16878E C	3266	CL 1252 (XLPE)	22 - 18	(0,38 - 0,96)		172
	105, 125	3000	16878E D	3271	CL 1251 (XLPE)	18 - 10	(0,96 - 5,3)		172
KYNAR*	125	Not Rated		1422, 1423		30 - 24	(0,06 - 0,23)	<b>5951-5954</b>	174
TEFZEL**	150	Not Rated		1516, 1523		30 - 24	(0,06 - 0,23)	<b>1805-1808</b>	174
TFE TEFLON**	200	250	16878E ET			32 - 22	(0,05 - 0,38)	<b>2840/7-</b> <b>2845/19</b> <b>2841/1-</b> <b>2843/11</b> <b>5851-</b> <b>5859/12</b> <b>2853/1-</b> <b>2857/1</b> <b>5874-</b> <b>5879/12</b>	175
						30 - 26	(0,06 - 0,14)		175
	200	600	16878E E	1213	1213		30 - 10	(0,06 - 5,3)	176
							26 - 18	(0,14 - 0,96)	176
			16878E EE	1180		24 - 8	(0,23 - 8,6)	177	

\*Kynar is a trademark of T.M. Pennwalt

\*\*Teflon & Tefzel are registered trademarks of E.I. DuPont

# HOOK-UP WIRE

## TFE TEFLON® INSULATION

MIL-W-16878E (TYPE E)††  
UL 1213  
200°C, 600 VOLT

### CERTIFIED PERFORMANCE - HIGH-RELIABILITY TFE TEFLON® INSULATION

Alpha's TFE Teflon wire family includes a full range of sizes, colors, conductor types and voltage ratings for both commercial (UL styles) and high reliability military OEM products.

Alpha's TFE Teflon is rated for continuous operation in temperatures from -60°C to 200°C and retains its exceptional toughness and flexibility within this range. TFE Teflon is not degraded by chemicals which makes it ideal for use in harsh environments. Teflon is widely regarded as the ultimate high performance wire insulation material for environments characterized by extreme thermal or chemical conditions.

### CHOOSE TFE TEFLON® FOR:

- Resistance To All Chemicals
- High Temperature Use Up To 200°C
- Low Coefficient of Friction
- Outstanding Electrical Properties

### TFE TEFLON® APPLICATIONS:

- Military Harnessing
- Medical Electronics
- Power Supply Lead Wire
- Appliance Wiring

### CHARACTERISTICS

#### OPERATING TEMPERATURE:

- -60°C to 200°C (UL 105°C)

#### VOLTAGE RATING:

- 600 Volt (UL: Voltage Not Specified)

#### PRODUCT DESCRIPTION:

- Conductor: Stranded or Solid Silver-Plated Copper
- Insulation: Color-Coded, Extruded TFE Teflon

### SPECIFICATIONS

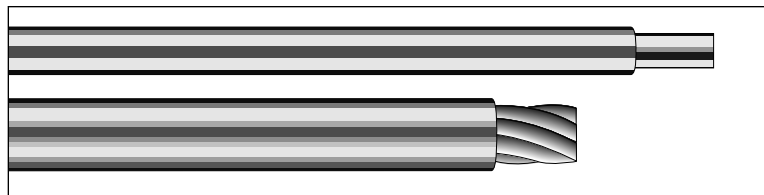
- UL AWM Style 1213
- MIL-W-16878E Type E

 **Recognized Component**  
Underwriters Laboratories Inc.

 **Passes UL VW-1 Flame Test**  
Underwriters Laboratories Inc.

### AVAILABILITY

- 100 ft (30,5m), 1000 ft (305m) put-ups  
1000 ft put-ups may contain multiple lengths



#### STRANDED CONDUCTOR

Alpha Part No.	Type Designation	Conductor AWG	Strand	Insul. Thickness Inches	mm	Diameter Inches	mm	Stock Color*
5851	E-30	30	7/38	0.010	0,25	0.032	0,81	1-10
5852	E-28	28	7/36	0.010	0,25	0.036	0,91	1-10
5853	E-26	26	7/34	0.010	0,25	0.040	1,02	1-10
5853/19	E-26	26	19/38	0.010	0,25	0.041	1,04	1-10
5854	E-24	24	19/36	0.010	0,25	0.045	1,14	1-10
5854/7	E-24	24	7/32	0.010	0,25	0.044	1,12	1-10
5855	E-22	22	19/34	0.010	0,25	0.051	1,30	1-10
5855/7	E-22	22	7/30	0.010	0,25	0.055	1,27	1-10
5856	E-20	20	19/32	0.010	0,25	0.059	1,50	1-10
5856/7	E-20	20	7/28	0.010	0,25	0.058	1,47	1-10
5857	E-18	18	19/30	0.010	0,25	0.070	1,78	1-10
5858	E-16	16	19/29	0.010	0,25	0.077	1,96	1-10
5859†	E-14	14	19/27	0.012	0,30	0.094	2,39	1
5859/12†	E-12	12	19/25	0.012	0,30	0.113	2,87	1
5859/10†	E-10	10	37/26	0.012	0,30	0.134	3,40	1

\*See color chart below

#### SOLID CONDUCTOR

Alpha Part No.	Conductor AWG	Insul. Thickness Inches	mm	Diameter Inches	mm	Stock Color*
2853/1	26	0.010	0,25	0.036	0,91	1-10
2854/1	24	0.010	0,25	0.040	1,02	1-10
2855/1	22	0.010	0,25	0.045	1,14	1-10
2856/1	20	0.010	0,25	0.052	1,32	1-3
2857/1	18	0.010	0,25	0.060	1,52	1-3

\*See color chart below

†Not UL AWM Style 1213

††All product supplied is to the MIL-W-16878 E revision. Revision F product can be supplied upon request, subject to minimum order quantity and lead time requirements.

Teflon® is a registered trademark of E.I. DuPont

#### \*STOCK COLOR CHART

1-White	3-Red	5-Yellow	7-Brown	9-Gray
2-Black	4-Green	6-Blue	8-Orange	10-Violet (purple)



Toll Free: 1-800-52 ALPHA • Telephone: 908-925-8000 • Fax: 908-925-6923  
Europe/UK Telephone: +44 (0) 1932 772422 • Europe/UK Fax: +44 (0) 1932 772433

Web Site: [www.alphawire.com](http://www.alphawire.com)  
Email: [info@alphawire.com](mailto:info@alphawire.com)

MIL-W-16878E (TYPE EE)<sup>††</sup>  
 UL 1180  
 200°C, 1000 VOLT

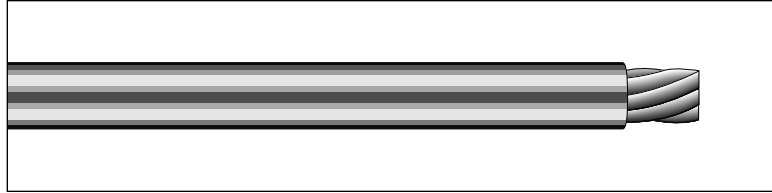
# HOOK-UP WIRE

## TFE TEFLON® INSULATION

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Alpha Part No.	Type Designation	Conductor AWG	Strand	Insul. Thickness		Diameter		Stock Color*
				Inches	mm	Inches	mm	
5874	EE-24	24	19/36	0.014	0,35	0.052	1,32	1-10
5875	EE-22	22	19/34	0.014	0,35	0.059	1,49	1-10
5876	EE-20	20	19/32	0.014	0,35	0.067	1,70	1-10
5877	EE-18	18	19/30	0.014	0,35	0.078	1,98	1-10
5878	EE-16	16	19/29	0.014	0,35	0.086	2,18	1
5879	EE-14	14	19/27	0.017	0,43	0.105	2,67	1
5879/12	EE-12	12	19/25	0.017	0,43	0.124	3,15	1
5879/10	EE-10	10	37/26	0.017	0,43	0.146	3,70	1
5879/8†	EE-8	8	133/29	0.020	0,50	0.206	5,23	1

### CHOOSE TFE TEFLON® FOR:

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- Low Coefficient of Friction
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### TFE TEFLON® APPLICATIONS:

- Military Harnessing
- Medical Electronics
- Power Supply Lead Wire
- Appliance Wiring

### CHARACTERISTICS

#### OPERATING TEMPERATURE:

- -60°C to 200°C

#### VOLTAGE RATING:

- 1000 Volt (MIL), 300 Volt (UL)

#### PRODUCT DESCRIPTION:

- Conductor: Stranded Silver-Plated Copper
- Insulation: Color-Coded, Extruded TFE Teflon

### SPECIFICATIONS

- UL AWM Style 1180
- MIL-W-16878E Type EE

 **Recognized Component**  
 Underwriters Laboratories Inc.

 **Passes UL VW-1 Flame Test**  
 Underwriters Laboratories Inc.

### AVAILABILITY

- 100 ft (30,5m), 1000 ft (305m) put-ups  
 1000 ft put-ups may contain multiple lengths

\*See color chart below

†Not UL AWM 1180 – AWM 1180 requires that 18AWG thru 10AWG have a temperature marker.

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#### \*STOCK COLOR CHART

1-White	3-Red	5-Yellow	7-Brown	9-Gray
2-Black	4-Green	6-Blue	8-Orange	10-Violet (purple)

Web Site: [www.alphawire.com](http://www.alphawire.com)  
 Email: [info@alphawire.com](mailto:info@alphawire.com)

Toll Free: 1-800-52 ALPHA • Telephone: 908-925-8000 • Fax: 908-925-6923  
 Europe/UK Telephone: +44 (0) 1932 772422 • Europe/UK Fax: +44 (0) 1932 772433

