

## Reinforced (3 layers) Insulation ETFE .0015" / Layer with .0015" Self-Bonding Overcoat

### Product Information

<b>Temperature Rating:</b> 155°C	<b>Conductor:</b> Tin Plated Copper, Solid or Stranded (ASTM B-33/ASTM B-286)
<b>Insulation:</b> DuPont™ Tefzel® ETFE w/Proprietary Self-Bonding Overcoat	Bare Copper and other conductors available
<b>Compliances:</b> UL OBJT2 File No. E206198	<b>Size Range:</b> UL: 18 AWG – 40 AWG
UL 60950-1 (Ed. 2), Annex U. UL 60601-1	<b>Voltage:</b> UL: 1500 V for electronic equipment, UL: 707 V for medical equipment
RoHS Compliant	<b>Breakdown:</b> Approx. 7000 V
	<b>OD Tolerances:</b> 14- 24 AWG + 0.0015"/-0.001" 25- 40 AWG + 0.001"/-0.001"

### Reinforced Insulation Information:

<b>Insulation Type:</b> Fluoropolymer	<b>Thermal:</b> Continuous Operating Temperature, 150°C	<b>UL Flammability Rating:</b> V-0
<b>Dielectric Constant:</b> 2.6	<b>Tensile Strength (psi):</b> 6500	<b>Elongation (%):</b> 150-300
<b>Abrasion Resistance:</b> Excellent	<b>UV Resistance:</b> Excellent	<b>Chemical Resistance:</b> Excellent
<b>Water Resistance:</b> Excellent	<b>Underground Resistance:</b> Excellent	<b>Long Term Stability:</b> Excellent

ETFE is a Fluoropolymer compound with excellent electrical properties, heat resistance, chemical resistance, and abrasion resistance. Commonly used in winding wires, UL AWM wires, and medical applications

### Self-Bonding Overcoat Information:

The Self-Bonding Overcoat is a proprietary material intended for bonding the product together and it should not be considered an additional layer of insulation nor should it be used for any additional electrical or mechanical properties.

### Insulated Wire Information with 0.0015" Self-Bonding Overcoat:

Part Number	AWG	Conductor OD		Insulated Wire OD w/Self-Bonding Overcoat	
		Inches	MM	Inches	MM
T18A01TXXX-1.5-SB-1.5	18	0.0403	1.024	0.0523	1.33
T19A01TXXX-1.5-SB-1.5	19	0.0359	0.912	0.0479	1.22
T20A01TXXX-1.5-SB-1.5	20	0.0320	0.813	0.0440	1.12
T21A01TXXX-1.5-SB-1.5	21	0.0285	0.724	0.0405	1.03
T22A01TXXX-1.5-SB-1.5	22	0.0253	0.643	0.0373	0.95
T23A01TXXX-1.5-SB-1.5	23	0.0226	0.574	0.0346	0.88
T24A01TXXX-1.5-SB-1.5	24	0.0201	0.511	0.0321	0.82
T25A01TXXX-1.5-SB-1.5	25	0.0179	0.455	0.0299	0.76
T26A01TXXX-1.5-SB-1.5	26	0.0159	0.404	0.0279	0.71
T27A01TXXX-1.5-SB-1.5	27	0.0142	0.361	0.0262	0.67
T28A01TXXX-1.5-SB-1.5	28	0.0126	0.320	0.0246	0.62
T29A01TXXX-1.5-SB-1.5	29	0.0113	0.287	0.0233	0.59
T30A01TXXX-1.5-SB-1.5	30	0.0100	0.254	0.0220	0.56
T31A01TXXX-1.5-SB-1.5	31	0.0089	0.226	0.0209	0.53
T32A01TXXX-1.5-SB-1.5	32	0.0080	0.203	0.0200	0.51
T33A01TXXX-1.5-SB-1.5	33	0.0071	0.180	0.0191	0.49
T34A01TXXX-1.5-SB-1.5	34	0.0063	0.160	0.0183	0.46
T35A01TXXX-1.5-SB-1.5	35	0.0056	0.142	0.0176	0.45
T36A01TXXX-1.5-SB-1.5	36	0.0050	0.127	0.0170	0.43
T37A01TXXX-1.5-SB-1.5	37	0.0045	0.114	0.0165	0.42
T38A01TXXX-1.5-SB-1.5	38	0.0040	0.102	0.0160	0.41
T39A01TXXX-1.5-SB-1.5	39	0.0035	0.089	0.0155	0.39
T40A01TXXX-1.5-SB-1.5	40	0.0031	0.079	0.0151	0.38

## Bare Core Wire Specifications:

DCR per 10' @ 20°C

AWG	Core Wire Diameter			DC Resistance		
	Min. Dia.	Nom. Dia.	Max. Dia.	Min. Res.*	Nom. Res.	Max. Res.
18	.0399	.0403	.0415	.0617	.0664	.0699
19	.0355	.0359	.0370	.0776	.0837	.0883
20	.0317	.0320	.0330	.0975	.1053	.1108
21	.0282	.0285	.0294	.1229	.1328	.1400
22	.0250	.0253	.0261	.1559	.1685	.1781
23	.0224	.0226	.0233	.1956	.2112	.2219
24	.0199	.0201	.0207	.2478	.2669	.2811
25	.0177	.0179	.0184	.3137	.3366	.3554
26	.0157	.0159	.0164	.3948	.4266	.4517
27	.0141	.0142	.0146	.4982	.5349	.5600
28	.0125	.0126	.0130	.6283	.6793	.7125
29	.0112	.0113	.0116	.7892	.8446	.8875
30	.0099	.0100	.0103	1.0009	1.0785	1.1359
31	.0088	.0089	.0092	1.2546	1.3616	1.4376
32	.0079	.0080	.0083	1.5414	1.6852	1.7838
33	.0070	.0071	.0074	1.9392	2.1395	2.2720
34	.0062	.0063	.0066	2.4378	2.7173	2.8962
35	.0055	.0056	.0059	3.0506	3.4391	3.6803
36	.0049	.0050	.0053	3.7803	4.3140	4.6368
37	.0044	.0045	.0048	4.6089	5.3259	5.7505
38	.0039	.0040	.0043	5.7431	6.7406	7.3195
39	.0034	.0035	.0038	7.3539	8.8041	9.6306
40	.0030	.0031	.0034	9.1860	11.2227	12.3700

\*ASTM B33 sets no standard for minimum resistance. This is only an indicator to investigate other aspects such as tin-thickness and tin coverage.