

Supplementary (2 layer) Insulation DuPont ETFE .001" / Layer with .0015" Self-Bonding Overcoat

Product Information

Temperature Rating: 155°C	Conductor: Tin Plated Copper, Solid or Stranded (ASTM B-33/ASTM B-286)
Insulation: DuPont™ Tefzel® ETFE w/Proprietary Self-Bonding Overcoat	Bare Copper and other conductors available
Compliances: UL OBT2 File No. E206198	Size Range: 30 AWG – 40 AWG
UL 60950-1 (Ed. 2), Annex U	Voltage: 600 V
RoHS Compliant	Breakdown: Approx. 3000 V
	OD Tolerances: 30- 40 AWG +0.001"/-0.0005"

Insulation Information:

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

Part Number	AWG	Conductor OD		Insulated Wire OD w/Self-Bonding Overcoat	
		Inches	MM	Inches	MM
D30A01TXX-1-SB-1.5	30	0.0100	0.254	0.0170	0.43
D31A01TXX-1-SB-1.5	31	0.0089	0.226	0.0159	0.40
D32A01TXX-1-SB-1.5	32	0.0080	0.203	0.0150	0.38
D33A01TXX-1-SB-1.5	33	0.0071	0.180	0.0141	0.36
D34A01TXX-1-SB-1.5	34	0.0063	0.160	0.0133	0.34
D35A01TXX-1-SB-1.5	35	0.0056	0.142	0.0126	0.32
D36A01TXX-1-SB-1.5	36	0.0050	0.127	0.0120	0.30
D37A01TXX-1-SB-1.5	37	0.0045	0.114	0.0115	0.29
D38A01TXX-1-SB-1.5	38	0.0040	0.102	0.0110	0.28
D39A01TXX-1-SB-1.5	39	0.0035	0.089	0.0105	0.27
D40A01TXX-1-SB-1.5	40	0.0031	0.079	0.0101	0.26

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.
30	0.0099	0.0100	0.0103	1.0009	1.0785	1.1359
31	0.0088	0.0089	0.0092	1.2546	1.3616	1.4376
32	0.0079	0.0080	0.0083	1.5414	1.6852	1.7838
33	0.0070	0.0071	0.0074	1.9392	2.1395	2.2720
34	0.0062	0.0063	0.0066	2.4378	2.7173	2.8962
35	0.0055	0.0056	0.0059	3.0506	3.4391	3.6803
36	0.0049	0.0050	0.0053	3.7803	4.3140	4.6368
37	0.0044	0.0045	0.0048	4.6089	5.3259	5.7505
38	0.0039	0.0040	0.0043	5.7431	6.7406	7.3195
39	0.0034	0.0035	0.0038	7.3539	8.8041	9.6306
40	0.0030	0.0031	0.0034	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.