

# RUBADUEWIRE

## Reinforced (3 layers) Insulation ETFE .001" / Layer

### Product Information

**Temperature Rating:** 155°C

**Insulation:** DuPont™ Tefzel® ETFE

**Compliances:** UL OBJT2 File No. E206198  
 UL 60950-1 (Ed. 2), Annex U  
 System approvals: UL 1446  
 RXT-2 Class F  
 RoHS Compliant

**Conductor:** Tin Plated Copper, Solid or Stranded (ASTM B-33/ASTM B-286)  
 Bare Copper and other conductors available

**Size Range:** 20 AWG – 40 AWG

**Voltage:** 1000 V

**Breakdown:** Approx. 4500 V

**OD Tolerances:** 20- 24 AWG + 0.0015"/-0.0005"  
 25- 40 AWG +0.001"/-0.0005"

### Insulation Information:

**Insulation Type:** Fluoropolymer

**Dielectric Constant:** 2.6

**Abrasion Resistance:** Excellent

**Chemical Resistance:** Excellent

**Underground Resistance:** Excellent

**Thermal:** Continuous Operating Temperature, 150°C

**Tensile Strength (psi):** 6500

**Bondability:** Poor

**Water Resistance:** Excellent

**Long Term Stability:** Excellent

**UL Flammability Rating:** V-0

**Elongation (%):** 150-300

**UV Resistance:** 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

### Insulated Wire Information:

Part Number	AWG	Conductor OD		Insulated Wire OD		Weight LB/KFT
		Inches	MM	Inches	MM	
T20A01TXXX-1	20	0.0320	0.813	0.0380	0.97	3.333
T21A01TXXX-1	21	0.0285	0.724	0.0345	0.88	2.679
T22A01TXXX-1	22	0.0253	0.643	0.0313	0.80	2.137
T23A01TXXX-1	23	0.0226	0.574	0.0286	0.73	1.730
T24A01TXXX-1	24	0.0201	0.511	0.0261	0.66	1.380
T25A01TXXX-1	25	0.0179	0.455	0.0239	0.61	1.120
T26A01TXXX-1	26	0.0159	0.404	0.0219	0.56	0.896
T27A01TXXX-1	27	0.0142	0.361	0.0202	0.51	0.730
T28A01TXXX-1	28	0.0126	0.320	0.0186	0.47	0.589
T29A01TXXX-1	29	0.0113	0.287	0.0173	0.44	0.486
T30A01TXXX-1	30	0.0100	0.254	0.0160	0.41	0.393
T31A01TXXX-1	31	0.0089	0.226	0.0149	0.38	0.323
T32A01TXXX-1	32	0.0080	0.203	0.0140	0.36	0.270
T33A01TXXX-1	33	0.0071	0.180	0.0131	0.33	0.223
T34A01TXXX-1	34	0.0063	0.160	0.0123	0.31	0.185
T35A01TXXX-1	35	0.0056	0.142	0.0116	0.30	0.154
T36A01TXXX-1	36	0.0050	0.127	0.0110	0.28	0.131
T37A01TXXX-1	37	0.0045	0.114	0.0105	0.27	0.113
T38A01TXXX-1	38	0.0040	0.102	0.0100	0.25	0.097
T39A01TXXX-1	39	0.0035	0.089	0.0095	0.24	0.080
T40A01TXXX-1	40	0.0031	0.079	0.0091	0.23	0.071

## 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.
20	0.0317	0.0320	0.0330	0.0975	0.1053	0.1108
21	0.0282	0.0285	0.0294	0.1229	0.1328	0.1400
22	0.0250	0.0253	0.0261	0.1559	0.1685	0.1781
23	0.0224	0.0226	0.0233	0.1956	0.2112	0.2219
24	0.0199	0.0201	0.0207	0.2478	0.2669	0.2811
25	0.0177	0.0179	0.0184	0.3137	0.3366	0.3554
26	0.0157	0.0159	0.0164	0.3948	0.4266	0.4517
27	0.0141	0.0142	0.0146	0.4982	0.5349	0.5600
28	0.0125	0.0126	0.0130	0.6283	0.6793	0.7125
29	0.0112	0.0113	0.0116	0.7892	0.8446	0.8875
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
41	0.0027	0.0028	0.0031	11.0499	13.7564	15.2716
42	0.0024	0.0025	0.0028	13.5446	17.2560	19.3281
43	0.0021	0.0022	0.0025	16.9904	22.2831	25.2449
44	0.0019	0.0020	0.0023	20.0737	26.9625	30.8393

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