TCA3 RUBADUE WIRE

Product Information

Size Range:

UL: 18 AWG - 40 AWG
VDE: 14 AWG - 40 AWG
Not all sizes listed in chart

Conductor:

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

Insulation:

Modified ETFE

Rating:

Temperature:155°C
Voltage:
- UL: 1500V for electronic equipment
- UL: 707V for medical equipment
- VDE: 1000V

Applications:

Various SMPS products
Electronic/Medical/Dental

Compliances:

UL OBJT2 File No. E206198
UL / IEC 60950-1(Ed.2), Annex U
IEC 61558-2-16, 60601-1 (Ed.3) ,61010-1(Ed.3)
VDE License Nr. 136743: Class F
System approvals: UL 1446
- RXT-2 Class F
- TCA Class F
- Other systems available upon request

RoHS Compliant
Tensile Strength: 6500 psi
Breakdown: Approx. 7000V
TCA3 products come standard in Gray

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		NOMINAL O.D.		Weight LB/ KFT
		Inches	MM	Inches	MM	
TCA3 18 AWG	18	0.0403	1.02	0.0493	1.25	5.39
TCA3 19 AWG	19	0.0359	0.912	0.0449	1.14	4.32
TCA3 20 AWG	20	0.032	0.813	0.041	1.04	3.47
TCA3 21 AWG	21	0.0285	0.724	0.0375	0.953	2.8
TCA3 22 AWG	22	0.0253	0.643	0.0343	0.871	2.25
TCA3 23 AWG	23	0.0226	0.574	0.0316	0.803	1.83
TCA3 24 AWG	24	0.0201	0.510	0.0291	0.739	1.73
TCA3 25 AWG	25	0.0179	0.455	0.0269	0.683	1.2
TCA3 26 AWG	26	0.0159	0.404	0.0249	0.632	0.98
TCA3 27 AWG	27	0.0142	0.361	0.0232	0.589	0.8
TCA3 28 AWG	28	0.0126	0.32	0.0216	0.549	0.66
TCA3 29 AWG	29	0.0113	0.287	0.0203	0.516	0.55
TCA3 30 AWG	30	0.01	0.254	0.019	0.483	0.45
TCA3 31 AWG	31	0.0089	0.226	0.0179	0.455	0.38
TCA3 32 AWG	32	0.008	0.203	0.017	0.432	0.32
TCA3 33 AWG	33	0.0071	0.18	0.0161	0.408	0.27
TCA3 34 AWG	34	0.0063	0.16	0.0153	0.388	0.23
TCA3 35 AWG	35	0.0056	0.142	0.0146	0.37	0.2
TCA3 36 AWG	36	0.005	0.127	0.014	0.355	0.17
TCA3 37 AWG	37	0.0045	0.114	0.0135	0.342	0.16
TCA3 38 AWG	38	0.004	0.102	0.013	0.33	0.14
TCA3 39 AWG	39	0.0035	0.089	0.0125	0.317	0.12
TCA3 40 AWG	40	0.0031	0.079	0.0121	0.307	0.11

Bare Copper Wire Specifications:

AWG	Min. Dia.	Nom. Dia.	Max. Dia.	Min. Res.*	Nom. Res.	Max. Res.
18	0.0399	0.0403	0.0415	0.0617	0.0664	0.0699
19	0.0355	0.0359	0.037	0.0776	0.0837	0.0883
20	0.0317	0.032	0.033	0.0975	0.1053	0.1108
21	0.0282	0.0285	0.0294	0.1229	0.1328	0.14
22	0.025	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	0.56

AWG	Min. Dia.	Nom. Dia.	Max. Dia.	Min. Res.*	Nom. Res.	Max. Res.
28	0.0125	0.0126	0.013	0.6283	0.6793	0.7125
29	0.0112	0.0113	0.0116	0.7892	0.8446	0.8875
30	0.0099	0.01	0.0103	1.0009	1.0785	1.1359
31	0.0088	0.0089	0.0092	1.2546	1.3616	1.4376
32	0.0079	0.008	0.0083	1.5414	1.6852	1.7838
33	0.007	0.0071	0.0074	1.9392	2.1395	2.272
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	0.005	0.0053	3.7803	4.314	4.6368
37	0.0044	0.0045	0.0048	4.6089	5.3259	5.7505
38	0.0039	0.004	0.0043	5.7431	6.7406	7.3195
39	0.0034	0.0035	0.0038	7.3539	8.8041	9.6306
40	0.003	0.0031	0.0034	9.186	11.2227	12.37

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