



HSM Wire International, Inc

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Copper Clad Aluminum (CCA) 15%

Product Summary and Specification

Attribute	ASTM B-566 (2004)
Core	Aluminum
Cladding	Copper
Density	0.13118 lbs/in ³ (3.63 gm/cm ³)
DC Conductivity	64.4% min
% Copper by area	13 - 17%
% Copper by weight	34% nom
Tensile Strength Annealed	20 ksi (138 MPa)
Tensile Strength as Draw	40 ksi (276 MPa)

Physical and Mechanical Properties of 15% CCA

Diameter			Area in ² / mm ²	Minimum Copper Thickness in/mm	CCA Weight lb / k-ft & kg / km	CCA ohms / k-ft & ohms / km
AWG	Inches	Mm				
1/0	0.3249	8.25	0.08291 / 53.49	0.0130 / 0.3305	130.51 / 194.14	0.153 / 0.501
1	0.2893	7.35	0.06572 / 42.40	0.0116 / 0.2942	103.46 / 153.91	0.192 / 0.631
2	0.2576	6.54	0.05212 / 33.63	0.0103 / 0.2620	82.05 / 122.06	0.243 / 0.796
3	0.2294	5.83	0.04134 / 26.67	0.0092 / 0.2333	65.07 / 96.80	0.306 / 1.004
4	0.2043	5.19	0.03278 / 21.15	0.0082 / 0.2077	51.60 / 76.76	0.386 / 1.266
5	0.1819	4.62	0.02600 / 16.77	0.0073 / 0.1849	40.92 / 60.88	0.487 / 1.596
6	0.162	4.12	0.02062 / 13.30	0.0065 / 0.1647	32.45 / 48.28	0.613 / 2.013
7	0.1443	3.66	0.01635 / 10.55	0.0058 / 0.1466	25.74 / 38.29	0.774 / 2.538
8	0.1285	3.26	0.01297 / 8.37	0.0051 / 0.1305	20.41 / 30.36	0.975 / 3.200
9	0.1144	2.91	0.01028 / 6.63	0.0046 / 0.1162	16.19 / 24.08	1.230 / 4.035
10	0.1019	2.59	0.00816 / 5.26	0.0041 / 0.1035	12.84 / 19.10	1.551 / 5.088
11	0.0907	2.30	0.00647 / 4.17	0.0036 / 0.0921	10.18 / 15.14	1.956 / 6.416
12	0.0808	2.05	0.00513 / 3.31	0.0032 / 0.0820	8.07 / 12.01	2.466 / 8.091
13	0.0720	1.83	0.00407 / 2.62	0.0029 / 0.0730	6.40 / 9.52	3.110 / 10.202
14	0.0641	1.63	0.00323 / 2.08	0.0026 / 0.0650	5.08 / 7.55	3.921 / 12.864
15	0.0571	1.45	0.00256 / 1.65	0.0023 / 0.0578	4.03 / 5.99	4.944 / 16.221
16	0.0508	1.29	0.00203 / 1.31	0.0020 / 0.0515	3.19 / 4.75	6.234 / 20.454
17	0.0453	1.15	0.00161 / 1.04	0.0018 / 0.0458	2.53 / 3.77	7.861 / 25.792
18	0.0403	1.02	0.00128 / 0.82	0.0016 / 0.0407	2.01 / 2.99	9.913 / 32.522
19	0.0359	0.91	0.00101 / 0.65	0.0014 / 0.0363	1.59 / 2.37	12.500 / 41.009
20	0.0320	0.81	0.00080 / 0.52	0.0013 / 0.0322	1.26 / 1.88	15.761 / 521.711

*To be used as a guideline only.

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