

BIRNS TECHNICAL DATA

AWG/ METRIC CONDUCTOR CHART

NUMBER & DIAMETER									D.C. RESISTANCE	D.C. RESISTANCE
AWG	STRANDING	OF STRANDS MILLIMETERS	APPROX. O.D. INCHES	MM	SQUARE INCHES	MM	WEIGHT LBS./1000 FT.	WEIGHT KG/KM	OHMS/ 1000 FT	OHMS/ K/M
34	Solid	-	0.0063	0,160	-	0,020	0.120	0.179	280.0	918.0
34	7/42	-	0.0075	0,1921	-	0,022	0.132	0.196	237.0	777.0
32	Solid	-	0.008	0,203	0.0001	0,032	0.194	0.289	174.0	571.0
32	7/40	7 x 0.08	0.008	0,203	0.0001	0,034	0.203	0.302	164.0	538.0
32	19/44	-	0.009	0,229	0.0001	0,039	0.230	0.342	136.0	448.0
30	Solid	1 x 0.25	0.010	0,254	0.0001	0,051	0.300	0.450	113.0	365.0
30	7/38	7 x 0.10	0.012	0,305	0.0001	0,057	0.339	0.504	103.0	339.0
30	19/42	-	0.012	0,305	0.0001	0,061	0.359	0.534	87.3	286.7
28	Solid	1 x 0.32	0.013	0,330	0.0001	0,080	0.48	0.72	70.8	232.0
28	7/36	7 x 0.13	0.015	0,381	0.0001	0,072	0.529	0.787	64.9	213.0
28	19/40	19 x 0.08	0.016	0,406	0.0001	0,093	0.553	0.823	56.7	186.0
27	7/35	-	0.018	0,457	0.0002	0,112	0.664	0.988	54.5	179.0
26	Solid	1 x 0.40	0.016	0,409	0.0002	0,128	0.770	1.14	43.6	143.0
26	10/36	7 x 0.15	0.021	0,533	0.0002	0,128	0.757	1.13	41.5	137.0
26	19/38	-	0.020	0,508	0.0002	0,155	0.920	1.37	34.4	113.0
26	7/34	19 x 0.10	0.019	0,483	0.0002	0,142	0.841	1.25	37.3	122.0
24	Solid	1 x 0.50	0.020	0,511	0.0003	0,205	1.22	1.82	27.3	89.4
24	7/32	7 x 0.20	0.024	0,610	0.0004	0,229	1.36	2.02	23.3	76.4
24	10/34	-	0.023	0,582	0.0003	0,202	1.20	1.79	26.1	85.6
24	19/36	7 x 0.13	0.024	0,610	0.0004	0,242	1.43	2.13	21.1	69.2
24	41/40	-	0.023	0,582	0.0003	0,196	1.16	1.73	25.6	84.0
22	Solid	1 x 0.64	0.025	0,643	0.0005	0,324	1.95	2.91	16.8	55.3
22	7/30	7 x 0.25	0.030	0,762	0.0006	0,357	2.12	3.16	14.7	48.4
22	19/34	19 x 0.15	0.031	0,787	0.0006	0,385	2.28	3.39	13.7	45.1
22	26/36	-	0.030	0,462	0.0005	0,332	1.97	2.93	15.9	52.3
20	Solid	1 x 0.81	0.032	0,813	0.0008	0,519	3.10	4.61	10.5	34.6
20	7/28	7 x 0.32	0.038	0,965	0.0009	0,562	3.49	5.19	10.3	33.8
20	10/30	10 x 0.25	0.035	0,889	0.0008	0,510	3.03	4.05	10.3	33.9
20	19/32	19 x 0.20	0.037	0,940	0.0010	0,620	3.70	5.48	8.6	28.3
20	26/34	26 x 0.15	0.036	0,914	0.0008	0,526	3.12	4.64	10.0	33.0
20	41/36	-	0.036	0,914	0.0008	0,523	3.10	4.61	10.0	32.9
18	Solid	1 x 1.02	0.04	1,020	0.0013	0,823	4.92	7.32	6.6	21.8
18	7/26	7 x 0.40	0.048	1,219	0.0014	0,902	5.36	7.98	5.9	19.2
18	16/30	16 x 0.25	0.047	1,194	0.0013	0,816	4.84	7.20	8.5	21.3
18	19/30	19 x 0.25	0.049	1,245	0.0015	0,969	5.75	8.56	5.5	17.9
18	41/34	-	0.047	1,194	0.0013	0,830	4.92	7.32	6.4	20.9
18	65/36	-	0.047	1,194	0.0013	0,829	4.91	7.31	6.4	21.0
16	26/30	26 x 0.25	0.059	1,499	0.0021	1,326	7.87	11.71	4.0	13.1
16	19/29	19 x 0.30	0.058	1,473	0.0019	1,327	7.35	10.94	4.3	14.0
16	105/36	-	0.059	1,499	0.0021	1,339	7.95	11.83	4.0	13.1

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14	Solid	1 x 1.63	0.064	1,630	0.0032	2,080	12.40	18.50	2.6	8.6
14	7/22	-	0.073	1,854	0.0035	2,285	13.56	20.18	2.3	7.6
14	19/27	19 x 0.35	0.073	1,854	0.0030	1,954	11.59	17.25	2.7	8.9
14	41/30	41 x 0.25	0.073	1,854	0.0032	2,091	12.40	18.45	2.5	8.3
14	105/34	-	0.073	1,854	0.0033	2,125	12.61	18.77	2.5	8.2
12	Solid	-	0.081	2,05	0.0052	3,31	19.80	29.50	1.7	5.4
12	7/20	-	0.096	2,438	0.0057	3,66	21.69	32.28	1.5	4.8
12	19/25	19 x 0.45	0.093	2,369	0.0048	3,105	18.43	27.43	1.7	5.6
12	65/30	65 x 0.25	0.095	2,413	0.0051	3,315	19.66	29.26	1.8	5.7
12	165/34	-	0.095	2,413	0.0052	3,340	19.82	29.49	1.6	5.2
10	Solid	-	0.102	2,59	0.0083	5,26	31.40	46.80	1.0	3.4
10	37/26	-	0.115	2,921	0.0074	4,770	28.31	41.13	1.1	3.6
10	49/27	-	0.116	2,946	0.0078	5,038	29.89	44.48	1.1	3.6
10	105/30	-	0.116	2,946	0.0083	5,370	31.76	47.26	0.98	3.2
8	49/25	-	0.147	3,734	0.0124	8,007	47.53	70.73	0.67	2.2
8	133/29	-	0.147	3,734	0.0134	8,662	51.42	76.52	0.61	2.0
8	655/36	-	0.147	3,734	0.0131	8,479	49.58	73.78	0.62	2.0
6	133/27	-	0.184	4,674	0.0212	13,675	81.14	120.74	0.47	1.5
6	259/30	-	0.184	4,674	0.0205	13,209	78.35	116.59	0.40	1.3
6	1050/36	-	0.184	4,674	0.0208	13,388	79.47	118.26	0.39	1.3
4	133/25	-	0.232	5,898	0.0337	21,733	129.01	191.98	0.24	0.80
4	259/27	-	0.232	5,898	0.0413	26,629	158.02	235.15	0.20	0.66
4	1666/36	-	0.232	5,898	0.0329	21,242	126.10	187.65	0.25	0.82
2	133/23	-	0.292	7,417	0.0537	34,648	205.62	305.98	0.15	0.50
2	259/26	-	0.292	7,417	0.0518	33,392	198.14	294.85	0.16	0.52
2	665/30	-	0.292	7,417	0.0526	33,915	201.16	299.35	0.16	0.52
2	2646/36	-	0.292	7,417	0.0523	33,737	200.28	298.04	0.16	0.52
1	163,195.9	-	0.328	8,331	0.0673	43,418	257.60	383.34	0.12	0.40
1	172,508.0	-	0.328	8,331	0.0656	42,322	251.20	373.81	0.13	0.41
1	817/30	-	0.328	8,331	0.0646	41,667	247.10	367.71	0.13	0.42
1	2109/34	-	0.328	8,331	0.0662	42,690	253.29	376.92	0.12	0.41
1/0	133/21	-	0.368	9,347	0.0854	55,098	327.05	486.68	0.096	0.31
1/0	259/24	-	0.368	9,347	0.0827	53,364	316.76	471.37	0.099	0.32
2/0	133/20	-	0.414	10,516	0.1077	69,458	412.17	613.35	0.077	0.25
2/0	259/23	-	0.414	10,516	0.1046	67,472	400.41	595.85	0.077	0.25
3/0	259/22	-	0.464	11,786	0.1290	83,230	501.70	746.58	0.062	0.20
3/0	427/24	-	0.464	11,786	0.1364	87,979	522.20	777.09	0.059	0.19