

CURRENT CARRYING CAPACITY*
Chromel® "A" WIRE
Amps to Heat STRAIGHT Wire in Air to:

B&S Gage	Temperature °C		200	300	400	500	600	700	800	900	1000	1100
	°F		392	572	752	932	1112	1292	1472	1652	1832	2012
	Diameter Inches											
1	0.2890	77	105	132	163	200	240	287	336	386	437	
2	0.2580	64	88	111	137	168	203	242	284	327	309	
3	0.2290	54	74	93	115	141	171	203	238	273	309	
4	0.2040	45	62.5	73	96	118	143	171	199	230	260	
5	0.1820	38.5	53.0	67.0	82.0	100.0	121.0	144.0	168.0	193.0	219.0	
6	0.1620	32.0	44.0	55.5	68.5	83.5	101.0	120.0	141.0	162.0	183.0	
7	0.1440	27.0	37.0	46.5	57.5	70.0	84.5	101.0	119.0	137.0	154.0	
8	0.1280	22.0	31.0	38.5	48.0	59.0	71.0	84.5	99.0	114.0	129.0	
9	0.1140	18.5	26.0	32.5	40.5	49.5	60.0	71.5	83.5	96.5	109.0	
10	0.1020	16.0	22.5	28.5	35.0	42.0	50.5	60.5	71.0	82.0	93.0	
11	0.0910	13.6	18.3	23.3	29.0	35.6	42.7	51.0	60.0	69.0	78.5	
12	0.0810	11.4	15.5	19.5	24.4	30.4	36.8	43.5	50.5	58.0	66.0	
13	0.0720	9.6	13.1	16.6	20.7	25.6	30.8	36.6	42.8	49.2	56.0	
14	0.0640	8.3	11.2	14.1	17.4	21.3	25.8	30.9	36.2	41.5	47.0	
15	0.0570	7.1	9.6	12.1	14.9	18.2	21.9	26.0	30.7	35.0	39.4	
16	0.0510	6.30	8.35	10.30	12.70	15.40	18.70	22.40	26.00	30.10	33.90	
17	0.0450	5.45	7.20	9.00	10.90	13.20	15.80	18.80	22.00	25.20	28.30	
18	0.0400	4.75	6.30	7.80	9.40	11.20	13.30	15.80	18.50	21.20	23.90	
19	0.0360	4.20	5.65	6.25	8.20	9.70	11.50	13.60	15.90	18.30	20.60	
20	0.0320	3.75	4.90	6.00	7.10	8.40	9.90	11.60	13.50	15.60	17.60	
21	0.0285	3.30	4.20	5.05	6.05	7.20	8.50	9.95	11.50	13.20	14.90	
22	0.0253	2.90	3.65	4.30	5.17	6.25	7.40	8.65	9.95	11.30	12.70	
23	0.0226	2.55	3.25	3.85	4.55	5.40	6.40	7.45	8.60	9.80	11.00	
24	0.0201	2.18	2.80	3.30	3.90	4.65	5.50	6.40	7.40	8.40	9.50	
25	0.0179	1.90	2.45	2.90	3.35	3.95	4.70	5.50	6.35	7.25	8.10	
26	0.0159	1.65	2.09	2.49	2.95	3.50	4.09	4.77	5.45	6.20	7.00	
27	0.0142	1.42	1.78	2.14	2.57	3.04	3.56	4.15	4.75	5.40	6.00	
28	0.0126	1.23	1.56	1.86	2.32	2.64	3.08	3.58	4.08	4.60	5.15	
29	0.0113	1.07	1.37	1.65	1.97	2.23	2.70	3.13	3.57	4.02	4.47	
30	0.0100	0.91	1.16	1.40	1.68	1.98	2.31	2.67	3.03	3.40	3.77	
31	0.0089	0.76	1.00	1.20	1.50	1.70	2.00	2.30	2.60	2.91	3.21	
32	0.0080	0.67	0.88	1.10	1.30	1.50	1.70	2.00	2.25	2.52	2.78	
33	0.0071	0.58	0.77	0.95	1.10	1.30	1.50	1.70	1.94	2.16	2.36	
34	0.0063	0.49	0.66	0.79	0.95	1.10	1.30	1.50	1.65	1.83	2.00	
35	0.0056	0.42	0.56	0.69	0.82	0.96	1.10	1.27	1.42	1.57	1.72	
36	0.0050	0.37	0.50	0.60	0.72	0.84	0.97	1.10	1.22	1.30	1.50	
37	0.0045	0.34	0.45	0.54	0.64	0.74	0.84	0.95	1.06	1.20	1.30	
38	0.0040	0.29	0.40	0.48	0.56	0.65	0.73	0.82	0.91	1.00	1.10	
39	0.0035	0.25	0.35	0.41	0.47	0.54	0.62	0.69	0.77	0.85	0.93	
40	0.0031	0.24	0.30	0.35	0.41	0.47	0.53	0.59	0.66	0.73	0.80	

- Current ratings are for thoroughly oxidized wire, but for temperatures below 800°F may also be used for bright wire.
- For Chromel® "C", the current value in this table must be reduced by 2% to 5%, because of the higher specific resistance and higher temperature coefficient of resistance of Chromel® "C"
- Chromel® registered Trademark of Hoskins Mfg.