

**Wire Length in Inches**

<b>6</b>	<b>18</b>
<b>12</b>	<b>24</b>

**Gauge Wire Ohms/foot**

10	0.06488
11	0.08151
12	0.1029
13	0.1302
14	0.1648
15	0.2078
16	0.2595
17	0.3333
18	0.4219
19	0.5208
20	0.6592
21	0.831
22	1.055
23	1.322
24	1.671
25	2.107
26	2.670
27	3.348
28	4.252
29	5.286
30	6.750
31	8.522
32	10.55
33	13.39
34	17.01
35	21.52
36	27.00
37	33.33
38	42.19
39	55.10
40	70.24

**Amperage for Desired Temp**

<i>400°F</i>	<i>600°F</i>
16.2	23.3
13.8	19.2
11.6	16.1
9.8	13.6
8.4	11.6
7.2	10.0
6.4	8.7
5.5	7.5
4.8	6.5
4.3	5.8
3.8	5.1
3.3	4.3
2.9	3.7
2.58	3.3
2.21	2.9
1.92	2.52
1.67	2.14
1.44	1.84
1.24	1.61
1.08	1.41
0.92	1.19
0.77	1.03
0.68	0.90
0.59	0.79
0.50	0.68
0.43	0.57
0.38	0.52
0.35	0.46
0.30	0.41
0.27	0.36
0.24	0.31

**6 Inches**

**Minimum Voltage Rating**

<i>400°F</i>	<i>600°F</i>
0.5	0.8
0.6	0.8
0.6	0.8
0.6	0.9
0.7	1.0
0.7	1.0
0.8	1.1
0.9	1.2
1.0	1.4
1.1	1.5
1.3	1.7
1.4	1.8
1.5	2.0
1.7	2.2
1.8	2.4
2.0	2.7
2.2	2.9
2.4	3.1
2.6	3.4
2.9	3.7
3.1	4.0
3.3	4.4
3.6	4.7
4.0	5.3
4.3	5.8
4.6	6.1
5.1	7.0
5.8	7.7
6.3	8.6
7.4	9.9
8.4	10.9

**12 Inches**

**Minimum Voltage Rating**

<i>400°F</i>	<i>600°F</i>
1.1	1.5
1.1	1.6
1.2	1.7
1.3	1.8
1.4	1.9
1.5	2.1
1.7	2.3
1.8	2.5
2.0	2.7
2.2	3.0
2.5	3.4
2.7	3.6
3.1	3.9
3.4	4.4
3.7	4.8
4.0	5.3
4.5	5.7
4.8	6.2
5.3	6.8
5.7	7.5
6.2	8.0
6.6	8.8
7.2	9.5
7.9	10.6
8.5	11.6
9.3	12.3
10.3	14.0
11.7	15.3
12.7	17.3
14.9	19.8
16.9	21.8

**18 Inches**

**Minimum Voltage Rating**

<i>400°F</i>	<i>600°F</i>
1.6	2.3
1.7	2.3
1.8	2.5
1.9	2.7
2.1	2.9
2.2	3.1
2.5	3.4
2.7	3.7
3.0	4.1
3.4	4.5
3.8	5.0
4.1	5.4
4.6	5.9
5.1	6.5
5.5	7.3
6.1	8.0
6.7	8.6
7.2	9.2
7.9	10.3
8.6	11.2
9.3	12.0
9.8	13.2
10.8	14.2
11.9	15.9
12.8	17.4
13.9	18.4
15.4	21.1
17.5	23.0
19.0	25.9
22.3	29.8
25.3	32.7

**24 Inches**

**Minimum Voltage Rating**

<i>400°F</i>	<i>600°F</i>
2.1	3.0
2.2	3.1
2.4	3.3
2.6	3.5
2.8	3.8
3.0	4.2
3.3	4.5
3.7	5.0
4.1	5.5
4.5	6.0
5.0	6.7
5.5	7.1
6.1	7.8
6.8	8.7
7.4	9.7
8.1	10.6
8.9	11.4
9.6	12.3
10.5	13.7
11.4	14.9
12.4	16.1
13.1	17.6
14.3	19.0
15.8	21.2
17.0	23.1
18.5	24.5
20.5	28.1
23.3	30.7
25.3	34.6
29.8	39.7
33.7	43.5