

### "C" Wire (Kanthal Nikrothal 60 or Equivalent)

**Composition:** 60% Nickel, 16% Chromium, Fe balance

**Specific Resistance:** 668 Ohms / circ. mil foot @ 68°F / 20°C

**Maximum continuous**

**operating temperature:** 2100°F / 1150°C  
(element temperature in air)

**Melting Point:** 1390°C / 2535°F

**Density:** (lbs / in<sup>3</sup>): 0.296

**Specific Gravity:** 8.25

**Resistance Tolerance:** 16 ga. through 23 ga. ±3%, 24 ga. through 36 ga. ±5%, 37 ga. through 44 ga. ±8%



**Note:** To obtain the working temperature resistance, multiply the factor by the room temperature resistance.

<b>Temp. °F</b>	68	212	392	752	1112	1292	1472	1652	1832	2012	2192
<b>Temp. °C</b>	20	100	200	400	600	700	800	900	1000	1100	1200
<b>Factor</b>	1.00	1.02	1.04	1.06	1.09	1.09	1.10	1.10	1.11	1.12	1.13

(These figures are given as a basis for engineering calculations and represent average material as supplied.)

Part Number	Gauge (AWG)	Diameter	Resistance at 68°F/20°C ohms/ft.	Weight lb./1000 ft.	Length ft./lb.	Nominal Spool Weight	Standard Spool Size Code
RES-103-102	16	0.0508	0.259	7.2	138.9	8	D
RES-103-103	17	0.0453	0.325	5.72	174.8	10	D
RES-103-104	18	0.0403	0.411	4.53	220.8	10	D
RES-103-105	19	0.0359	0.518	3.6	277.8	8	D
RES-103-106	20	0.0320	0.652	2.86	349.7	10	D
RES-103-107	21	0.0285	0.822	2.27	440.5	10	D
RES-103-108	22	0.0253	1.04	1.79	558.7	9	D
RES-103-109	23	0.0226	1.31	1.42	704.2	6	C
RES-103-110	24	0.0201	1.65	1.13	885	5	C
RES-103-111	25	0.0179	2.08	0.894	1119	5	C
RES-103-112	26	0.0159	2.64	0.705	1418	1.5	B
RES-103-113	27	0.0142	3.31	0.563	1776	5	C
RES-103-114	28	0.0126	4.21	0.443	2257	5	C
RES-103-115	29	0.0113	5.23	0.356	2809	5.25	C
RES-103-116	30	0.0100	6.68	0.279	3584	2	B
RES-103-117	31	0.00890	8.43	0.221	4525	3	F
RES-103-118	32	0.00800	10.4	0.179	5587	3	F
RES-103-119	33	0.00710	13.2	0.141	7092	2	B
RES-103-120	34	0.00630	16.8	0.111	9009	2	B
RES-103-121	35	0.00560	21.3	0.0875	11,429	0.75	A
RES-103-122	36	0.00500	26.7	0.0697	14,347	1	A
RES-103-123	37	0.00450	33.0	0.0565	17,699	0.75	A
RES-103-124	38	0.00400	41.7	0.0446	22,422	0.75	A
RES-103-125	39	0.00350	54.5	0.0342	29,240	1	A
RES-103-126	40	0.00310	69.5	0.0268	37,313	1	A
RES-103-127	41	0.00280	85.2	0.0219	45,662	0.25	A
RES-103-128	42	0.00250	107	0.0174	57,471	0.5	A
RES-103-129	43	0.00220	138	0.01422	70,320	0.5	A
RES-103-130	44	0.00200	167	0.0112	89,286	4	C

### Ordering Information

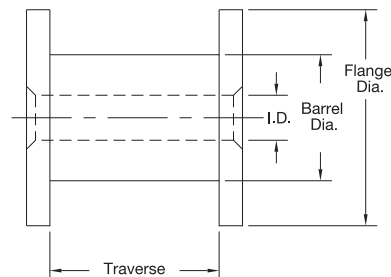
- Specify the part number and quantity in lbs.
- Only full spools are available; re-spooling of smaller quantities is not available.
- Tempco reserves the right to change spool sizes as required.
- Tempco reserves the right to ship ±10% of the stated spool weight.



*All Items Available from Stock*

### Standard Spool Dimensions

Spool Code	Flange		Barrel		Traverse		Bore ID	
	in	mm	in	mm	in	mm	in	mm
A	2.5	63	1.75	44	3	76	.62	16
B	3	76	1.75	44	3	77	.62	16
C	5	127	3	76	3.5	89	.62	16
D	6	152	3.5	89	3.5	89	.62	16
E	3.15	80	2	51	2.5	63	.62	16
F	3.87	98	2.37	59	3.12	79	.62	16
G	4.92	125	3.1	79	3.93	100	.62	16



**WARNING:** Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

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