



Resistance vs. Temperature Tables For Resistance Temperature Detectors (RTDs)

As part of performance verification or identifying the type of sensor, the resistance at a known temperature can be valuable.

This document contains Resistance vs. Temperature tables for common alpha values and ice point resistances in degrees C and F.

If your sensor has a different ice point resistance value, the 100 Ω table can be scaled to estimate the resistance at your temperature of interest.

Example: For a sensor with a 500 Ω ice point and an alpha of 0.00385 / $^{\circ}\text{C}$, the measured resistance at 20 $^{\circ}\text{C}$ with can be approximated by taking the value from the 100 Ω table at 20 $^{\circ}\text{C}$ and multiplying by 5.

$$107.79 \times 5 = 538.95$$

Tables in Degrees C: Pages 2-5

Tables in Degrees F: Pages 6-9

If additional questions contact Burns at info@burnsengineering.com

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The Burns Engineering Team

Resistance vs. Temperature

$R_0 = 100 \ \Omega$		$\alpha = 0.003851 \Omega/\Omega/^\circ\text{C}$									
Degrees C		ITS-90									
°C	0	-1	-2	-3	-4	-5	-6	-7	-8	-9	
-200	18.52										
-190	22.83	22.40	21.97	21.54	21.11	20.68	20.25	19.82	19.38	18.95	
-180	27.10	26.67	26.24	25.82	25.39	24.97	24.54	24.11	23.68	23.25	
-170	31.34	30.91	30.49	30.07	29.64	29.22	28.80	28.37	27.95	27.52	
-160	35.54	35.12	34.70	34.28	33.86	33.44	33.02	32.60	32.18	31.76	
-150	39.72	39.31	38.89	38.47	38.05	37.64	37.22	36.80	36.38	35.96	
-140	43.88	43.46	43.05	42.63	42.22	41.80	41.39	40.97	40.56	40.14	
-130	48.00	47.59	47.18	46.77	46.36	45.94	45.53	45.12	44.70	44.29	
-120	52.11	51.70	51.29	50.88	50.47	50.06	49.65	49.24	48.83	48.42	
-110	56.19	55.79	55.38	54.97	54.56	54.15	53.75	53.34	52.93	52.52	
-100	60.26	59.85	59.44	59.04	58.63	58.23	57.82	57.41	57.01	56.60	
-90	64.30	63.90	63.49	63.09	62.68	62.28	61.88	61.47	61.07	60.66	
-80	68.33	67.92	67.52	67.12	66.72	66.31	65.91	65.51	65.11	64.70	
-70	72.33	71.93	71.53	71.13	70.73	70.33	69.93	69.53	69.13	68.73	
-60	76.33	75.93	75.53	75.13	74.73	74.33	73.93	73.53	73.13	72.73	
-50	80.31	79.91	79.51	79.11	78.72	78.32	77.92	77.52	77.12	76.73	
-40	84.27	83.87	83.48	83.08	82.69	82.29	81.89	81.50	81.10	80.70	
-30	88.22	87.83	87.43	87.04	86.64	86.25	85.85	85.46	85.06	84.67	
-20	92.16	91.77	91.37	90.98	90.59	90.19	89.80	89.40	89.01	88.62	
-10	96.09	95.69	95.30	94.91	94.52	94.12	93.73	93.34	92.95	92.55	
0	100.00	99.61	99.22	98.83	98.44	98.04	97.65	97.26	96.87	96.48	
°C	0	1	2	3	4	5	6	7	8	9	
0	100.00	100.39	100.78	101.17	101.56	101.95	102.34	102.73	103.12	103.51	
10	103.90	104.29	104.68	105.07	105.46	105.85	106.24	106.63	107.02	107.40	
20	107.79	108.18	108.57	108.96	109.35	109.73	110.12	110.51	110.90	111.29	
30	111.67	112.06	112.45	112.83	113.22	113.61	114.00	114.38	114.77	115.15	
40	115.54	115.93	116.31	116.70	117.08	117.47	117.86	118.24	118.63	119.01	
50	119.40	119.78	120.17	120.55	120.94	121.32	121.71	122.09	122.47	122.86	
60	123.24	123.63	124.01	124.39	124.78	125.16	125.54	125.93	126.31	126.69	
70	127.08	127.46	127.84	128.22	128.61	128.99	129.37	129.75	130.13	130.52	
80	130.90	131.28	131.66	132.04	132.42	132.80	133.18	133.57	133.95	134.33	
90	134.71	135.09	135.47	135.85	136.23	136.61	136.99	137.37	137.75	138.13	
100	138.51	138.88	139.26	139.64	140.02	140.40	140.78	141.16	141.54	141.91	
110	142.29	142.67	143.05	143.43	143.80	144.18	144.56	144.94	145.31	145.69	
120	146.07	146.44	146.82	147.20	147.57	147.95	148.33	148.70	149.08	149.46	
130	149.83	150.21	150.58	150.96	151.33	151.71	152.08	152.46	152.83	153.21	
140	153.58	153.96	154.33	154.71	155.08	155.46	155.83	156.20	156.58	156.95	
150	157.33	157.70	158.07	158.45	158.82	159.19	159.56	159.94	160.31	160.68	
160	161.05	161.43	161.80	162.17	162.54	162.91	163.29	163.66	164.03	164.40	
170	164.77	165.14	165.51	165.89	166.26	166.63	167.00	167.37	167.74	168.11	
180	168.48	168.85	169.22	169.59	169.96	170.33	170.70	171.07	171.43	171.80	
190	172.17	172.54	172.91	173.28	173.65	174.02	174.38	174.75	175.12	175.49	
200	175.86	176.22	176.59	176.96	177.33	177.69	178.06	178.43	178.79	179.16	
210	179.53	179.89	180.26	180.63	180.99	181.36	181.72	182.09	182.46	182.82	
220	183.19	183.55	183.92	184.28	184.65	185.01	185.38	185.74	186.11	186.47	
230	186.84	187.20	187.56	187.93	188.29	188.66	189.02	189.38	189.75	190.11	
240	190.47	190.84	191.20	191.56	191.92	192.29	192.65	193.01	193.37	193.74	
250	194.10	194.46	194.82	195.18	195.55	195.91	196.27	196.63	196.99	197.35	
260	197.71	198.07	198.43	198.79	199.15	199.51	199.87	200.23	200.59	200.95	
270	201.31	201.67	202.03	202.39	202.75	203.11	203.47	203.83	204.19	204.55	
280	204.90	205.26	205.62	205.98	206.34	206.70	207.05	207.41	207.77	208.13	
290	208.48	208.84	209.20	209.56	209.91	210.27	210.63	210.98	211.34	211.70	
300	212.05	212.41	212.76	213.12	213.48	213.83	214.19	214.54	214.90	215.25	
310	215.61	215.96	216.32	216.67	217.03	217.38	217.74	218.09	218.44	218.80	
320	219.15	219.51	219.86	220.21	220.57	220.92	221.27	221.63	221.98	222.33	
330	222.68	223.04	223.39	223.74	224.09	224.45	224.80	225.15	225.50	225.85	
340	226.21	226.56	226.91	227.26	227.61	227.96	228.31	228.66	229.02	229.37	
350	229.72	230.07	230.42	230.77	231.12	231.47	231.82	232.17	232.52	232.87	
360	233.21	233.56	233.91	234.26	234.61	234.96	235.31	235.66	236.00	236.35	
370	236.70	237.05	237.40	237.74	238.09	238.44	238.79	239.13	239.48	239.83	
380	240.18	240.52	240.87	241.22	241.56	241.91	242.26	242.60	242.95	243.29	
390	243.64	243.99	244.33	244.68	245.02	245.37	245.71	246.06	246.40	246.75	
400	247.09	247.44	247.78	248.13	248.47	248.81	249.16	249.50	249.85	250.19	
410	250.53	250.88	251.22	251.56	251.91	252.25	252.59	252.93	253.28	253.62	
420	253.96	254.30	254.65	254.99	255.33	255.67	256.01	256.35	256.70	257.04	
430	257.38	257.72	258.06	258.40	258.74	259.08	259.42	259.76	260.10	260.44	
440	260.78	261.12	261.46	261.80	262.14	262.48	262.82	263.16	263.50	263.84	
450	264.18	264.52	264.86	265.20	265.53	265.87	266.21	266.55	266.89	267.22	
460	267.56	267.90	268.24	268.57	268.91	269.25	269.59	269.92	270.26	270.60	
470	270.93	271.27	271.61	271.94	272.28	272.61	272.95	273.29	273.62	273.96	
480	274.29	274.63	274.96	275.30	275.63	275.97	276.30	276.64	276.97	277.31	
490	277.64	277.98	278.31	278.64	278.98	279.31	279.64	279.98	280.31	280.64	
500	280.98										

Resistance vs. Temperature

R ₀ = 200 Ω		α= 0.003851Ω/Ω/°C									
Degrees C		ITS-90									
°C	0	-1	-2	-3	-4	-5	-6	-7	-8	-9	
-200	37.04										
-190	45.65	44.79	43.93	43.08	42.22	41.35	40.49	39.63	38.77	37.90	
-180	54.19	53.34	52.49	51.64	50.78	49.93	49.08	48.22	47.36	46.51	
-170	62.67	61.83	60.98	60.13	59.29	58.44	57.59	56.74	55.89	55.04	
-160	71.09	70.25	69.41	68.57	67.73	66.89	66.04	65.20	64.36	63.51	
-150	79.45	78.61	77.78	76.94	76.11	75.27	74.44	73.60	72.76	71.93	
-140	87.75	86.92	86.10	85.27	84.44	83.61	82.78	81.94	81.11	80.28	
-130	96.01	95.19	94.36	93.54	92.71	91.89	91.06	90.23	89.41	88.58	
-120	104.22	103.40	102.58	101.76	100.94	100.12	99.30	98.48	97.66	96.83	
-110	112.39	111.57	110.76	109.94	109.12	108.31	107.49	106.67	105.86	105.04	
-100	120.51	119.70	118.89	118.08	117.27	116.45	115.64	114.83	114.01	113.20	
-90	128.60	127.79	126.98	126.18	125.37	124.56	123.75	122.94	122.13	121.32	
-80	136.65	135.85	135.04	134.24	133.43	132.63	131.82	131.02	130.21	129.41	
-70	144.67	143.87	143.07	142.27	141.47	140.66	139.86	139.06	138.26	137.45	
-60	152.66	151.86	151.06	150.26	149.46	148.67	147.87	147.07	146.27	145.47	
-50	160.61	159.82	159.02	158.23	157.43	156.64	155.84	155.05	154.25	153.45	
-40	168.54	167.75	166.96	166.17	165.37	164.58	163.79	162.99	162.20	161.41	
-30	176.44	175.65	174.86	174.08	173.29	172.50	171.71	170.91	170.12	169.33	
-20	184.32	183.53	182.75	181.96	181.17	180.38	179.60	178.81	178.02	177.23	
-10	192.17	191.39	190.60	189.82	189.03	188.25	187.46	186.68	185.89	185.11	
0	200.00	199.22	198.44	197.65	196.87	196.09	195.31	194.52	193.74	192.96	
°C	0	1	2	3	4	5	6	7	8	9	
0	200.00	200.78	201.56	202.34	203.12	203.91	204.69	205.47	206.25	207.03	
10	207.81	208.58	209.36	210.14	210.92	211.70	212.48	213.25	214.03	214.81	
20	215.59	216.36	217.14	217.92	218.69	219.47	220.25	221.02	221.80	222.57	
30	223.35	224.12	224.89	225.67	226.44	227.22	227.99	228.76	229.54	230.31	
40	231.08	231.85	232.63	233.40	234.17	234.94	235.71	236.48	237.25	238.02	
50	238.79	239.56	240.33	241.10	241.87	242.64	243.41	244.18	244.95	245.72	
60	246.48	247.25	248.02	248.79	249.55	250.32	251.09	251.85	252.62	253.38	
70	254.15	254.92	255.68	256.45	257.21	257.97	258.74	259.50	260.27	261.03	
80	261.79	262.56	263.32	264.08	264.84	265.61	266.37	267.13	267.89	268.65	
90	269.41	270.17	270.94	271.70	272.46	273.22	273.97	274.73	275.49	276.25	
100	277.01	277.77	278.53	279.29	280.04	280.80	281.56	282.32	283.07	283.83	
110	284.59	285.34	286.10	286.85	287.61	288.36	289.12	289.87	290.63	291.38	
120	292.14	292.89	293.64	294.40	295.15	295.90	296.66	297.41	298.16	298.91	
130	299.66	300.42	301.17	301.92	302.67	303.42	304.17	304.92	305.67	306.42	
140	307.17	307.92	308.67	309.42	310.16	310.91	311.66	312.41	313.16	313.90	
150	314.65	315.40	316.14	316.89	317.64	318.38	319.13	319.87	320.62	321.36	
160	322.11	322.85	323.60	324.34	325.09	325.83	326.57	327.32	328.06	328.80	
170	329.54	330.29	331.03	331.77	332.51	333.25	333.99	334.74	335.48	336.22	
180	336.96	337.70	338.44	339.18	339.92	340.65	341.39	342.13	342.87	343.61	
190	344.35	345.08	345.82	346.56	347.30	348.03	348.77	349.50	350.24	350.98	
200	351.71	352.45	353.18	353.92	354.65	355.39	356.12	356.85	357.59	358.32	
210	359.06	359.79	360.52	361.25	361.99	362.72	363.45	364.18	364.91	365.64	
220	366.38	367.11	367.84	368.57	369.30	370.03	370.76	371.49	372.21	372.94	
230	373.67	374.40	375.13	375.86	376.58	377.31	378.04	378.77	379.49	380.22	
240	380.95	381.67	382.40	383.12	383.85	384.57	385.30	386.02	386.75	387.47	
250	388.20	388.92	389.64	390.37	391.09	391.81	392.54	393.26	393.98	394.70	
260	395.42	396.15	396.87	397.59	398.31	399.03	399.75	400.47	401.19	401.91	
270	402.63	403.35	404.07	404.79	405.50	406.22	406.94	407.66	408.38	409.09	
280	409.81	410.53	411.24	411.96	412.68	413.39	414.11	414.82	415.54	416.25	
290	416.97	417.68	418.40	419.11	419.82	420.54	421.25	421.96	422.68	423.39	
300	424.10	424.82	425.53	426.24	426.95	427.66	428.37	429.08	429.79	430.50	
310	431.22	431.92	432.63	433.34	434.05	434.76	435.47	436.18	436.89	437.60	
320	438.30	439.01	439.72	440.43	441.13	441.84	442.55	443.25	443.96	444.66	
330	445.37	446.08	446.78	447.49	448.19	448.89	449.60	450.30	451.01	451.71	
340	452.41	453.12	453.82	454.52	455.22	455.93	456.63	457.33	458.03	458.73	
350	459.43	460.13	460.83	461.53	462.23	462.93	463.63	464.33	465.03	465.73	
360	466.43	467.13	467.83	468.52	469.22	469.92	470.62	471.31	472.01	472.71	
370	473.40	474.10	474.79	475.49	476.19	476.88	477.58	478.27	478.96	479.66	
380	480.35	481.05	481.74	482.43	483.13	483.82	484.51	485.20	485.90	486.59	
390	487.28	487.97	488.66	489.35	490.04	490.73	491.43	492.12	492.81	493.49	
400	494.18	494.87	495.56	496.25	496.94	497.63	498.32	499.00	499.69	500.38	
410	501.07	501.75	502.44	503.12	503.81	504.50	505.18	505.87	506.55	507.24	
420	507.92	508.61	509.29	509.98	510.66	511.34	512.03	512.71	513.39	514.08	
430	514.76	515.44	516.12	516.80	517.49	518.17	518.85	519.53	520.21	520.89	
440	521.57	522.25	522.93	523.61	524.29	524.97	525.65	526.32	527.00	527.68	
450	528.36	529.04	529.71	530.39	531.07	531.74	532.42	533.10	533.77	534.45	
460	535.12	535.80	536.47	537.15	537.82	538.50	539.17	539.85	540.52	541.19	
470	541.87	542.54	543.21	543.88	544.56	545.23	545.90	546.57	547.24	547.91	
480	548.59	549.26	549.93	550.60	551.27	551.94	552.61	553.28	553.94	554.61	
490	555.28	555.95	556.62	557.29	557.95	558.62	559.29	559.96	560.62	561.29	
500	561.96										

Resistance vs. Temperature

$R_0=100\Omega$		$\alpha= 0.003902\Omega/\Omega/^\circ\text{C}$								
Degrees C	ITS-90									
$^\circ\text{C}$	0	-1	-2	-3	-4	-5	-6	-7	-8	-9
-200	17.00									
-190	21.43	20.99	20.55	20.10	19.66	19.22	18.77	18.33	17.89	17.44
-180	25.82	25.38	24.94	24.51	24.07	23.63	23.19	22.75	22.31	21.87
-170	30.17	29.73	29.30	28.87	28.43	28.00	27.56	27.13	26.69	26.25
-160	34.48	34.05	33.62	33.19	32.76	32.33	31.89	31.46	31.03	30.60
-150	38.75	38.32	37.90	37.47	37.04	36.62	36.19	35.76	35.33	34.90
-140	42.99	42.57	42.15	41.72	41.30	40.88	40.45	40.03	39.60	39.18
-130	47.20	46.78	46.36	45.94	45.52	45.10	44.68	44.26	43.84	43.41
-120	51.39	50.97	50.55	50.13	49.72	49.30	48.88	48.46	48.04	47.62
-110	55.54	55.13	54.71	54.30	53.88	53.47	53.05	52.64	52.22	51.80
-100	59.67	59.26	58.85	58.44	58.02	57.61	57.20	56.78	56.37	55.96
-90	63.78	63.37	62.96	62.55	62.14	61.73	61.32	60.91	60.50	60.09
-80	67.87	67.47	67.06	66.65	66.24	65.83	65.42	65.01	64.60	64.19
-70	71.94	71.54	71.13	70.72	70.32	69.91	69.50	69.10	68.69	68.28
-60	76.00	75.59	75.19	74.78	74.38	73.97	73.57	73.16	72.76	72.35
-50	80.03	79.63	79.23	78.82	78.42	78.02	77.61	77.21	76.80	76.40
-40	84.05	83.65	83.25	82.85	82.45	82.04	81.64	81.24	80.84	80.43
-30	88.06	87.66	87.26	86.86	86.46	86.06	85.66	85.26	84.86	84.45
-20	92.05	91.65	91.25	90.85	90.46	90.06	89.66	89.26	88.86	88.46
-10	96.03	95.63	95.24	94.84	94.44	94.04	93.65	93.25	92.85	92.45
0	100.00	99.60	99.21	98.81	98.41	98.02	97.62	97.22	96.83	96.43
10	103.96	104.35	104.75	105.14	105.54	105.93	106.32	106.72	107.11	107.51
20	107.90	108.29	108.69	109.08	109.47	109.87	110.26	110.65	111.05	111.44
30	111.83	112.23	112.62	113.01	113.40	113.79	114.19	114.58	114.97	115.36
40	115.75	116.14	116.54	116.93	117.32	117.71	118.10	118.49	118.88	119.27
50	119.66	120.05	120.44	120.83	121.22	121.61	122.00	122.39	122.78	123.17
60	123.56	123.95	124.34	124.73	125.11	125.50	125.89	126.28	126.67	127.06
70	127.44	127.83	128.22	128.61	129.00	129.39	129.77	130.16	130.54	130.93
80	131.32	131.70	132.09	132.48	132.86	133.25	133.64	134.02	134.41	134.79
90	135.18	135.57	135.95	136.34	136.72	137.11	137.49	137.88	138.26	138.65
100	139.03	139.41	139.80	140.18	140.57	140.95	141.33	141.72	142.10	142.48
110	142.87	143.25	143.63	144.02	144.40	144.78	145.17	145.55	145.93	146.31
120	146.69	147.08	147.46	147.84	148.22	148.60	148.98	149.37	149.75	150.13
130	150.51	150.89	151.27	151.65	152.03	152.41	152.79	153.17	153.55	153.93
140	154.31	154.69	155.07	155.45	155.83	156.21	156.59	156.97	157.35	157.72
150	158.10	158.48	158.86	159.24	159.62	159.99	160.37	160.75	161.13	161.51
160	161.88	162.26	162.64	163.01	163.39	163.77	164.14	164.52	164.90	165.27
170	165.65	166.03	166.40	166.78	167.15	167.53	167.90	168.28	168.66	169.03
180	169.41	169.78	170.16	170.53	170.90	171.28	171.65	172.03	172.40	172.78
190	173.15	173.52	173.90	174.27	174.64	175.02	175.39	175.76	176.14	176.51
200	176.88	177.25	177.63	178.00	178.37	178.74	179.12	179.49	179.86	180.23
210	180.60	180.97	181.34	181.72	182.09	182.46	182.83	183.20	183.57	183.94
220	184.31	184.68	185.05	185.42	185.79	186.16	186.53	186.90	187.27	187.64
230	188.01	188.38	188.75	189.11	189.48	189.85	190.22	190.59	190.96	191.32
240	191.69	192.06	192.43	192.80	193.16	193.53	193.90	194.27	194.63	195.00
250	195.37	195.73	196.10	196.47	196.83	197.20	197.56	197.93	198.30	198.66
260	199.03	199.39	199.76	200.12	200.49	200.85	201.22	201.58	201.95	202.31
270	202.68	203.04	203.41	203.77	204.13	204.50	204.86	205.22	205.59	205.95
280	206.31	206.68	207.04	207.40	207.77	208.13	208.49	208.85	209.22	209.58
290	209.94	210.30	210.66	211.03	211.39	211.75	212.11	212.47	212.83	213.19
300	213.56	213.92	214.28	214.64	215.00	215.36	215.72	216.08	216.44	216.80
310	217.16	217.52	217.88	218.24	218.60	218.95	219.31	219.67	220.03	220.39
320	220.75	221.11	221.47	221.82	222.18	222.54	222.90	223.25	223.61	223.97
330	224.33	224.68	225.04	225.40	225.76	226.11	226.47	226.83	227.18	227.54
340	227.89	228.25	228.61	228.96	229.32	229.67	230.03	230.38	230.74	231.10
350	231.45	231.80	232.16	232.51	232.87	233.22	233.58	233.93	234.29	234.64
360	234.99	235.35	235.70	236.05	236.41	236.76	237.11	237.47	237.82	238.17
370	238.53	238.88	239.23	239.58	239.93	240.29	240.64	240.99	241.34	241.69
380	242.05	242.40	242.75	243.10	243.45	243.80	244.15	244.50	244.85	245.20
390	245.55	245.90	246.25	246.60	246.95	247.30	247.65	248.00	248.35	248.70
400	249.05	249.40	249.75	250.10	250.45	250.79	251.14	251.49	251.84	252.19
410	252.54	252.88	253.23	253.58	253.93	254.27	254.62	254.97	255.31	255.66
420	256.01	256.35	256.70	257.05	257.39	257.74	258.09	258.43	258.78	259.12
430	259.47	259.81	260.16	260.51	260.85	261.20	261.54	261.88	262.23	262.57
440	262.92	263.26	263.61	263.95	264.29	264.64	264.98	265.33	265.67	266.01
450	266.36	266.70	267.04	267.39	267.73	268.07	268.41	268.76	269.10	269.44
460	269.78	270.12	270.47	270.81	271.15	271.49	271.83	272.17	272.51	272.86
470	273.20	273.54	273.88	274.22	274.56	274.90	275.24	275.58	275.92	276.26
480	276.60	276.94	277.28	277.62	277.96	278.29	278.63	278.97	279.31	279.65
490	279.99	280.33	280.67	281.00	281.34	281.68	282.02	282.35	282.69	283.03
500	283.37									

Resistance vs. Temperature

$R_0=200\Omega$		$\alpha= 0.003902 \Omega/\Omega/^\circ\text{C}$								
Degrees C		ITS-90								
$^\circ\text{C}$	0	-1	-2	-3	-4	-5	-6	-7	-8	-9
-200	34.00									
-190	42.86	41.98	41.10	40.20	39.32	38.44	37.54	36.66	35.78	34.88
-180	51.64	50.76	49.88	49.02	48.14	47.26	46.38	45.50	44.62	43.74
-170	60.34	59.46	58.60	57.74	56.86	56.00	55.12	54.26	53.38	52.50
-160	68.96	68.10	67.24	66.38	65.52	64.66	63.78	62.92	62.06	61.20
-150	77.50	76.64	75.80	74.94	74.08	73.24	72.38	71.52	70.66	69.80
-140	85.98	85.14	84.30	83.44	82.60	81.76	80.90	80.06	79.20	78.36
-130	94.40	93.56	92.72	91.88	91.04	90.20	89.36	88.52	87.68	86.82
-120	102.78	101.94	101.10	100.26	99.44	98.60	97.76	96.92	96.08	95.24
-110	111.08	110.26	109.42	108.60	107.76	106.94	106.10	105.28	104.44	103.60
-100	119.34	118.52	117.70	116.88	116.04	115.22	114.40	113.56	112.74	111.92
-90	127.56	126.74	125.92	125.10	124.28	123.46	122.64	121.82	121.00	120.18
-80	135.74	134.94	134.12	133.30	132.48	131.66	130.84	130.02	129.20	128.38
-70	143.88	143.08	142.26	141.44	140.64	139.82	139.00	138.20	137.38	136.56
-60	152.00	151.18	150.38	149.56	148.76	147.94	147.14	146.32	145.52	144.70
-50	160.06	159.26	158.46	157.64	156.84	156.04	155.22	154.42	153.60	152.80
-40	168.10	167.30	166.50	165.70	164.90	164.08	163.28	162.48	161.68	160.86
-30	176.12	175.32	174.52	173.72	172.92	172.12	171.32	170.52	169.72	168.90
-20	184.10	183.30	182.50	181.76	180.92	180.12	179.32	178.52	177.72	176.92
-10	192.06	191.26	190.48	189.68	188.88	188.08	187.30	186.50	185.70	184.90
0	200.00	199.20	198.42	197.62	196.82	196.04	195.24	194.44	193.66	192.86
$^\circ\text{C}$	0	1	2	3	4	5	6	7	8	9
0	200.00	200.80	201.58	202.38	203.16	203.96	204.76	205.54	206.34	207.12
10	207.92	208.70	209.50	210.28	211.08	211.86	212.64	213.44	214.22	215.02
20	215.80	216.58	217.38	218.16	218.94	219.74	220.52	221.30	222.10	222.88
30	223.66	224.46	225.24	226.02	226.80	227.58	228.38	229.16	229.94	230.72
40	231.50	232.28	233.08	233.86	234.64	235.42	236.20	236.98	237.76	238.54
50	239.32	240.10	240.88	241.66	242.44	243.22	244.00	244.78	245.56	246.34
60	247.12	247.90	248.68	249.46	250.22	251.00	251.78	252.56	253.34	254.12
70	254.88	255.66	256.44	257.22	258.00	258.76	259.54	260.32	261.08	261.86
80	262.64	263.40	264.18	264.96	265.72	266.50	267.28	268.04	268.82	269.58
90	270.36	271.14	271.90	272.68	273.44	274.22	274.98	275.76	276.52	277.30
100	278.06	278.82	279.60	280.36	281.14	281.90	282.66	283.44	284.20	284.96
110	285.74	286.50	287.26	288.04	288.80	289.56	290.34	291.10	291.86	292.62
120	293.38	294.16	294.92	295.68	296.44	297.20	297.96	298.74	299.50	300.26
130	301.02	301.78	302.54	303.30	304.06	304.82	305.58	306.34	307.10	307.86
140	308.62	309.38	310.14	310.90	311.66	312.42	313.18	313.94	314.70	315.44
150	316.20	316.96	317.72	318.48	319.24	319.98	320.74	321.50	322.26	323.02
160	323.76	324.52	325.28	326.02	326.78	327.54	328.28	329.04	329.80	330.54
170	331.30	332.06	332.80	333.56	334.30	335.06	335.80	336.56	337.32	338.06
180	338.82	339.56	340.32	341.06	341.80	342.56	343.30	344.06	344.80	345.56
190	346.30	347.04	347.80	348.54	349.28	350.04	350.78	351.52	352.28	353.02
200	353.76	354.50	355.26	356.00	356.74	357.48	358.24	358.98	359.72	360.46
210	361.20	361.94	362.68	363.44	364.18	364.92	365.66	366.40	367.14	367.88
220	368.62	369.36	370.10	370.84	371.58	372.32	373.06	373.80	374.54	375.28
230	376.02	376.76	377.50	378.22	378.96	379.70	380.44	381.18	381.92	382.64
240	383.38	384.12	384.86	385.60	386.32	387.06	387.80	388.54	389.26	390.00
250	390.74	391.46	392.20	392.94	393.66	394.40	395.12	395.86	396.60	397.32
260	398.06	398.78	399.52	400.24	400.98	401.70	402.44	403.16	403.90	404.62
270	405.36	406.08	406.82	407.54	408.26	409.00	409.72	410.44	411.18	411.90
280	412.62	413.36	414.08	414.80	415.54	416.26	416.98	417.70	418.44	419.16
290	419.88	420.60	421.32	422.06	422.78	423.50	424.22	424.94	425.66	426.38
300	427.12	427.84	428.56	429.28	430.00	430.72	431.44	432.16	432.88	433.60
310	434.32	435.04	435.76	436.48	437.20	437.90	438.62	439.34	440.06	440.78
320	441.50	442.22	442.94	443.64	444.36	445.08	445.80	446.50	447.22	447.94
330	448.66	449.36	450.08	450.80	451.52	452.22	452.94	453.66	454.36	455.08
340	455.78	456.50	457.22	457.92	458.64	459.34	460.06	460.76	461.48	462.20
350	462.90	463.60	464.32	465.02	465.74	466.44	467.16	467.86	468.58	469.28
360	469.98	470.70	471.40	472.10	472.82	473.52	474.22	474.94	475.64	476.34
370	477.06	477.76	478.46	479.16	479.86	480.58	481.28	481.98	482.68	483.38
380	484.10	484.80	485.50	486.20	486.90	487.60	488.30	489.00	489.70	490.40
390	491.10	491.80	492.50	493.20	493.90	494.60	495.30	496.00	496.70	497.40
400	498.10	498.80	499.50	500.20	500.90	501.58	502.28	502.98	503.68	504.38
410	505.08	505.76	506.46	507.16	507.86	508.54	509.24	509.94	510.62	511.32
420	512.02	512.70	513.40	514.10	514.78	515.48	516.18	516.86	517.56	518.24
430	518.94	519.62	520.32	521.02	521.70	522.40	523.08	523.76	524.46	525.14
440	525.84	526.52	527.22	527.90	528.58	529.28	529.96	530.66	531.34	532.02
450	532.72	533.40	534.08	534.78	535.46	536.14	536.82	537.52	538.20	538.88
460	539.56	540.24	540.94	541.62	542.30	542.98	543.66	544.34	545.02	545.72
470	546.40	547.08	547.76	548.44	549.12	549.80	550.48	551.16	551.84	552.52
480	553.20	553.88	554.56	555.24	555.92	556.58	557.26	557.94	558.62	559.30
490	559.98	560.66	561.34	562.00	562.68	563.36	564.04	564.70	565.38	566.06
500	566.74									

Resistance vs. Temperature

$R_0 = 100 \ \Omega$ $\alpha = 0.003851 \Omega/\Omega/^\circ C$

Degrees F **ITS-90**

°F	0	-1	-2	-3	-4	-5	-6	-7	-8	-9
-330	18.04									
-320	20.44	20.20	19.96	19.72	19.48	19.24	19.00	18.76	18.52	18.28
-310	22.83	22.59	22.35	22.11	21.87	21.63	21.39	21.16	20.92	20.68
-300	25.20	24.97	24.73	24.49	24.25	24.02	23.78	23.54	23.30	23.06
-290	27.57	27.33	27.10	26.86	26.62	26.39	26.15	25.91	25.68	25.44
-280	29.93	29.69	29.46	29.22	28.98	28.75	28.51	28.28	28.04	27.81
-270	32.27	32.04	31.80	31.57	31.34	31.10	30.87	30.63	30.40	30.16
-260	34.61	34.38	34.14	33.91	33.68	33.44	33.21	32.98	32.74	32.51
-250	36.94	36.71	36.47	36.24	36.01	35.78	35.54	35.31	35.08	34.84
-240	39.26	39.03	38.80	38.56	38.33	38.10	37.87	37.64	37.40	37.17
-230	41.57	41.34	41.11	40.88	40.65	40.42	40.19	39.95	39.72	39.49
-220	43.88	43.65	43.42	43.19	42.96	42.73	42.49	42.26	42.03	41.80
-210	46.17	45.94	45.71	45.48	45.26	45.03	44.80	44.57	44.34	44.11
-200	48.46	48.23	48.00	47.78	47.55	47.32	47.09	46.86	46.63	46.40
-190	50.74	50.52	50.29	50.06	49.83	49.60	49.38	49.15	48.92	48.69
-180	53.02	52.79	52.56	52.34	52.11	51.88	51.65	51.43	51.20	50.97
-170	55.29	55.06	54.83	54.61	54.38	54.15	53.93	53.70	53.47	53.25
-160	57.55	57.32	57.10	56.87	56.65	56.42	56.19	55.97	55.74	55.51
-150	59.81	59.58	59.35	59.13	58.90	58.68	58.45	58.23	58.00	57.78
-140	62.06	61.83	61.61	61.38	61.16	60.93	60.71	60.48	60.26	60.03
-130	64.30	64.08	63.85	63.63	63.40	63.18	62.95	62.73	62.50	62.28
-120	66.54	66.31	66.09	65.87	65.64	65.42	65.20	64.97	64.75	64.52
-110	68.77	68.55	68.33	68.10	67.88	67.66	67.43	67.21	66.99	66.76
-100	71.00	70.78	70.55	70.33	70.11	69.89	69.66	69.44	69.22	68.99
-90	73.22	73.00	72.78	72.56	72.33	72.11	71.89	71.67	71.45	71.22
-80	75.44	75.22	75.00	74.78	74.55	74.33	74.11	73.89	73.67	73.45
-70	77.66	77.43	77.21	76.99	76.77	76.55	76.33	76.11	75.88	75.66
-60	79.86	79.64	79.42	79.20	78.98	78.76	78.54	78.32	78.10	77.88
-50	82.07	81.85	81.63	81.41	81.19	80.97	80.75	80.53	80.31	80.09
-40	84.27	84.05	83.83	83.61	83.39	83.17	82.95	82.73	82.51	82.29
-30	86.47	86.25	86.03	85.81	85.59	85.37	85.15	84.93	84.71	84.49
-20	88.66	88.44	88.22	88.00	87.78	87.56	87.34	87.13	86.91	86.69
-10	90.85	90.63	90.41	90.19	89.97	89.75	89.54	89.32	89.10	88.88
0	93.03	92.82	92.60	92.38	92.16	91.94	91.72	91.50	91.29	91.07

°F	0	1	2	3	4	5	6	7	8	9
0	93.03	93.25	93.47	93.69	93.91	94.12	94.34	94.56	94.78	95.00
10	95.21	95.43	95.65	95.87	96.09	96.30	96.52	96.74	96.96	97.17
20	97.39	97.61	97.83	98.04	98.26	98.48	98.70	98.91	99.13	99.35
30	99.57	99.78	100.00	100.22	100.43	100.65	100.87	101.09	101.30	101.52
40	101.74	101.95	102.17	102.39	102.60	102.82	103.04	103.25	103.47	103.69
50	103.90	104.12	104.34	104.55	104.77	104.98	105.20	105.42	105.63	105.85
60	106.07	106.28	106.50	106.71	106.93	107.15	107.36	107.58	107.79	108.01
70	108.23	108.44	108.66	108.87	109.09	109.30	109.52	109.73	109.95	110.17
80	110.38	110.60	110.81	111.03	111.24	111.46	111.67	111.89	112.10	112.32
90	112.53	112.75	112.96	113.18	113.39	113.61	113.82	114.04	114.25	114.47
100	114.68	114.90	115.11	115.33	115.54	115.76	115.97	116.18	116.40	116.61
110	116.83	117.04	117.26	117.47	117.68	117.90	118.11	118.33	118.54	118.76
120	118.97	119.18	119.40	119.61	119.82	120.04	120.25	120.47	120.68	120.89
130	121.11	121.32	121.53	121.75	121.96	122.18	122.39	122.60	122.82	123.03
140	123.24	123.46	123.67	123.88	124.09	124.31	124.52	124.73	124.95	125.16
150	125.37	125.59	125.80	126.01	126.22	126.44	126.65	126.86	127.08	127.29
160	127.50	127.71	127.93	128.14	128.35	128.56	128.78	128.99	129.20	129.41
170	129.62	129.84	130.05	130.26	130.47	130.68	130.90	131.11	131.32	131.53
180	131.74	131.96	132.17	132.38	132.59	132.80	133.01	133.23	133.44	133.65
190	133.86	134.07	134.28	134.50	134.71	134.92	135.13	135.34	135.55	135.76
200	135.97	136.19	136.40	136.61	136.82	137.03	137.24	137.45	137.66	137.87
210	138.08	138.29	138.51	138.72	138.93	139.14	139.35	139.56	139.77	139.98
220	140.19	140.40	140.61	140.82	141.03	141.24	141.45	141.66	141.87	142.08
230	142.29	142.50	142.71	142.92	143.13	143.34	143.55	143.76	143.97	144.18
240	144.39	144.60	144.81	145.02	145.23	145.44	145.65	145.86	146.07	146.28
250	146.49	146.70	146.91	147.11	147.32	147.53	147.74	147.95	148.16	148.37
260	148.58	148.79	149.00	149.21	149.41	149.62	149.83	150.04	150.25	150.46
270	150.67	150.88	151.08	151.29	151.50	151.71	151.92	152.13	152.33	152.54
280	152.75	152.96	153.17	153.38	153.58	153.79	154.00	154.21	154.42	154.62
290	154.83	155.04	155.25	155.46	155.66	155.87	156.08	156.29	156.49	156.70
300	156.91	157.12	157.33	157.53	157.74	157.95	158.15	158.36	158.57	158.78
310	158.98	159.19	159.40	159.61	159.81	160.02	160.23	160.43	160.64	160.85
320	161.05	161.26	161.47	161.67	161.88	162.09	162.29	162.50	162.71	162.91
330	163.12	163.33	163.53	163.74	163.95	164.15	164.36	164.57	164.77	164.98
340	165.18	165.39	165.60	165.80	166.01	166.21	166.42	166.63	166.83	167.04
350	167.24	167.45	167.66	167.86	168.07	168.27	168.48	168.68	168.89	169.09
360	169.30	169.51	169.71	169.92	170.12	170.33	170.53	170.74	170.94	171.15
370	171.35	171.56	171.76	171.97	172.17	172.38	172.58	172.79	172.99	173.20
380	173.40	173.61	173.81	174.02	174.22	174.43	174.63	174.83	175.04	175.24
390	175.45	175.65	175.86	176.06	176.26	176.47	176.67	176.88	177.08	177.29
400	177.49	177.69	177.90	178.10	178.30	178.51	178.71	178.92	179.12	179.32
410	179.53	179.73	179.93	180.14	180.34	180.55	180.75	180.95	181.16	181.36
420	181.56	181.77	181.97	182.17	182.38	182.58	182.78	182.98	183.19	183.39
430	183.59	183.80	184.00	184.20	184.40	184.61	184.81	185.01	185.22	185.42
440	185.62	185.82	186.03	186.23	186.43	186.63	186.84	187.04	187.24	187.44
450	187.65	187.85	188.05	188.25	188.45	188.66	188.86	189.06	189.26	189.46
460	189.67	189.87	190.07	190.27	190.47	190.67	190.88	191.08	191.28	191.48
470	191.68	191.88	192.09	192.29	192.49	192.69	192.89	193.09	193.29	193.49
480	193.70	193.90	194.10	194.30	194.50	194.70	194.90	195.10	195.30	195.50
490	195.71	195.91	196.11	196.31	196.51	196.71	196.91	197.11	197.31	197.51
500	197.71	197.91	198.11	198.31	198.51	198.71	198.91	199.11	199.31	199.51
510	199.71	199.91	200.11	200.31	200.51	200.71	200.91	201.11	201.31	201.51
520	201.71	201.91	202.11	202.31	202.51	202.71	202.91	203.11	203.31	203.51
530	203.71	203.91	204.11	204.31	204.51	204.71	204.90	205.10	205.30	205.50
540	205.70	205.90	206.10	206.30	206.50	206.70	206.89	207.09	207.29	207.49
550	207.69	207.89	208.09	208.29	208.48	208.68	208.88	209.08	209.28	209.48
560	209.67	209.87	210.07	210.27	210.47	210.67	210.86	211.06	211.26	211.46
570	211.66	211.85	212.05	212.25	212.45	212.64	212.84	213.04	213.24	213.44
580	213.63	213.83	214.03	214.23	214.42	214.62	214.82	215.02	215.21	215.41
590	215.61	215.80	216.00	216.20	216.40	216.59	216.79	216.99	217.18	217.38
600	217.58	217.77	217.97	218.17	218.37	218.56	218.76	218.96	219.15	219.35
610	219.55	219.74	219.94	220.13	220.33	220.53	220.72	220.92	221.12	221.31
620	221.51	221.70	221.90	222.10	222.29	222.49	222.68	222.88	223.08	223.27
630	223.47	223.66	223.86	224.06	224.25	224.45	224.64	224.84	225.03	225.23
640	225.42	225.62	225.82	226.01	226.21	226.40	226.60	226.79	226.99	227.18
650	227.38	227.57	227.77	227.96	228.16	228.35	228.55	228.74	228.94	229.13
660	229.33	229.52	229.72	229.91	230.11	230.30	230.49	230.69	230.88	231.08
670	231.27									

Resistance vs. Temperature

$R_0 = 200 \ \Omega$		$\alpha = 0.003851 \Omega/\Omega/^\circ C$								
Degrees F		ITS-90								
°F	0	-1	-2	-3	-4	-5	-6	-7	-8	-9
-330	36.08									
-320	40.88	40.40	39.92	39.44	38.96	38.48	38.00	37.52	37.04	36.56
-310	45.65	45.17	44.70	44.22	43.74	43.27	42.79	42.31	41.83	41.35
-300	50.40	49.93	49.46	48.98	48.51	48.03	47.55	47.08	46.60	46.13
-290	55.14	54.67	54.19	53.72	53.25	52.77	52.30	51.83	51.35	50.88
-280	59.85	59.38	58.91	58.44	57.97	57.50	57.03	56.55	56.08	55.61
-270	64.55	64.08	63.61	63.14	62.67	62.20	61.73	61.26	60.79	60.32
-260	69.22	68.75	68.29	67.82	67.35	66.89	66.42	65.95	65.48	65.01
-250	73.88	73.41	72.95	72.48	72.02	71.55	71.09	70.62	70.15	69.69
-240	78.52	78.06	77.59	77.13	76.67	76.20	75.74	75.27	74.81	74.34
-230	83.14	82.68	82.22	81.76	81.30	80.83	80.37	79.91	79.45	78.98
-220	87.75	87.29	86.83	86.37	85.91	85.45	84.99	84.53	84.07	83.61
-210	92.35	91.89	91.43	90.97	90.51	90.05	89.59	89.13	88.67	88.21
-200	96.92	96.47	96.01	95.55	95.09	94.64	94.18	93.72	93.26	92.80
-190	101.49	101.03	100.58	100.12	99.66	99.21	98.75	98.29	97.84	97.38
-180	106.04	105.58	105.13	104.67	104.22	103.76	103.31	102.85	102.40	101.94
-170	110.57	110.12	109.67	109.22	108.76	108.31	107.85	107.40	106.95	106.49
-160	115.10	114.65	114.20	113.74	113.29	112.84	112.39	111.93	111.48	111.03
-150	119.61	119.16	118.71	118.26	117.81	117.36	116.91	116.45	116.00	115.55
-140	124.11	123.66	123.21	122.76	122.31	121.86	121.41	120.96	120.51	120.06
-130	128.60	128.15	127.70	127.25	126.80	126.35	125.90	125.45	125.00	124.56
-120	133.08	132.63	132.18	131.73	131.29	130.84	130.39	129.94	129.50	129.05
-110	137.54	137.10	136.65	136.20	135.75	135.31	134.86	134.42	133.97	133.52
-100	142.00	141.55	141.11	140.66	140.22	139.77	139.33	138.88	138.44	137.99
-90	146.45	146.00	145.56	145.11	144.67	144.22	143.78	143.33	142.89	142.45
-80	150.88	150.44	150.00	149.55	149.11	148.67	148.22	147.78	147.33	146.89
-70	155.31	154.87	154.43	153.98	153.54	153.10	152.66	152.21	151.77	151.33
-60	159.73	159.29	158.85	158.41	157.97	157.52	157.08	156.64	156.20	155.75
-50	164.14	163.70	163.26	162.82	162.38	161.94	161.49	161.05	160.61	160.17
-40	168.54	168.10	167.66	167.22	166.78	166.34	165.90	165.46	165.02	164.58
-30	172.93	172.50	172.06	171.62	171.18	170.74	170.30	169.86	169.42	168.98
-20	177.32	176.88	176.44	176.00	175.57	175.13	174.69	174.25	173.81	173.37
-10	181.70	181.26	180.82	180.38	179.95	179.51	179.07	178.63	178.20	177.76
0	186.07	185.63	185.19	184.76	184.32	183.88	183.45	183.01	182.57	182.13
10	186.07	186.50	186.94	187.38	187.81	188.25	188.68	189.12	189.56	189.99
20	190.43	190.86	191.30	191.74	192.17	192.61	193.04	193.48	193.91	194.35
30	194.78	195.22	195.65	196.09	196.52	196.96	197.39	197.83	198.26	198.70
40	199.13	199.57	200.00	200.43	200.87	201.30	201.74	202.17	202.60	203.04
50	203.47	203.91	204.34	204.77	205.21	205.64	206.07	206.51	206.94	207.37
60	207.81	208.24	208.67	209.10	209.54	209.97	210.40	210.83	211.27	211.70
70	212.13	212.56	213.00	213.43	213.86	214.29	214.72	215.16	215.59	216.02
80	216.45	216.88	217.31	217.74	218.18	218.61	219.04	219.47	219.90	220.33
90	220.76	221.19	221.62	222.05	222.48	222.92	223.35	223.78	224.21	224.64
100	225.07	225.50	225.93	226.36	226.79	227.22	227.65	228.08	228.51	228.94
110	229.36	229.79	230.22	230.65	231.08	231.51	231.94	232.37	232.80	233.23
120	233.66	234.09	234.51	234.94	235.37	235.80	236.23	236.66	237.09	237.51
130	237.94	238.37	238.79	239.22	239.65	240.08	240.51	240.93	241.36	241.79
140	242.21	242.64	243.07	243.50	243.92	244.35	244.78	245.20	245.63	246.06
150	246.48	246.91	247.34	247.76	248.19	248.62	249.04	249.47	249.89	250.32
160	250.75	251.17	251.60	252.02	252.45	252.87	253.30	253.72	254.15	254.58
170	255.00	255.43	255.85	256.28	256.70	257.13	257.55	257.97	258.40	258.82
180	259.25	259.67	260.10	260.52	260.95	261.37	261.79	262.22	262.64	263.07
190	263.49	263.91	264.34	264.76	265.18	265.61	266.03	266.45	266.88	267.30
200	267.72	268.15	268.57	268.99	269.41	269.84	270.26	270.68	271.10	271.53
210	271.95	272.37	272.79	273.22	273.64	274.06	274.48	274.90	275.32	275.75
220	276.17	276.59	277.01	277.43	277.85	278.27	278.69	279.11	279.53	279.96
230	280.38	280.80	281.22	281.64	282.06	282.48	282.90	283.32	283.74	284.16
240	284.59	285.01	285.43	285.85	286.27	286.69	287.11	287.53	287.95	288.37
250	288.78	289.20	289.62	290.04	290.46	290.88	291.30	291.72	292.14	292.55
260	292.97	293.39	293.81	294.23	294.65	295.07	295.49	295.91	296.33	296.74
270	297.16	297.58	297.99	298.41	298.83	299.25	299.66	300.08	300.50	300.92
280	301.33	301.75	302.17	302.59	303.00	303.42	303.84	304.25	304.67	305.09
290	305.50	305.92	306.34	306.75	307.17	307.58	308.00	308.42	308.83	309.25
300	309.67	310.08	310.50	310.91	311.33	311.74	312.16	312.57	312.99	313.40
310	313.82	314.24	314.65	315.07	315.48	315.89	316.31	316.72	317.14	317.55
320	317.97	318.38	318.80	319.21	319.63	320.04	320.45	320.87	321.28	321.70
330	322.11	322.52	322.94	323.35	323.76	324.18	324.59	325.00	325.42	325.83
340	326.24	326.66	327.07	327.48	327.89	328.31	328.72	329.13	329.54	329.96
350	330.37	330.78	331.19	331.61	332.02	332.43	332.84	333.25	333.67	334.08
360	334.49	334.90	335.31	335.72	336.13	336.55	336.96	337.37	337.78	338.19
370	338.60	339.01	339.42	339.83	340.24	340.65	341.06	341.47	341.89	342.30
380	342.71	343.12	343.53	343.94	344.35	344.76	345.17	345.58	345.99	346.40
390	346.80	347.21	347.62	348.03	348.44	348.85	349.26	349.67	350.08	350.49
400	350.89	351.30	351.71	352.12	352.53	352.94	353.35	353.75	354.16	354.57
410	354.98	355.39	355.79	356.20	356.61	357.02	357.43	357.84	358.25	358.66
420	359.06	359.46	359.87	360.28	360.68	361.09	361.50	361.90	362.31	362.72
430	363.12	363.53	363.94	364.34	364.75	365.16	365.56	365.97	366.38	366.78
440	367.19	367.59	368.00	368.40	368.81	369.22	369.62	370.03	370.43	370.84
450	371.24	371.65	372.05	372.46	372.86	373.27	373.67	374.08	374.48	374.89
460	375.29	375.69	376.10	376.50	376.91	377.31	377.72	378.12	378.52	378.93
470	379.33	379.73	380.14	380.54	380.95	381.35	381.75	382.16	382.56	382.96
480	383.37	383.77	384.17	384.57	384.98	385.38	385.78	386.18	386.59	386.99
490	387.39	387.79	388.20	388.60	389.00	389.40	389.80	390.21	390.61	391.01
500	391.41	391.81	392.21	392.62	393.02	393.42	393.82	394.22	394.62	395.02
510	395.42	395.82	396.23	396.63	397.03	397.43	397.83	398.23	398.63	399.03
520	399.43	399.83	400.23	400.63	401.03	401.43	401.83	402.23	402.63	403.03
530	403.43	403.83	404.23	404.63	405.02	405.42	405.82	406.22	406.62	407.02
540	407.42	407.82	408.22	408.61	409.01	409.41	409.81	410.21	410.61	411.00
550	411.40	411.80	412.20	412.60	412.99	413.39	413.79	414.19	414.58	414.98
560	415.38	415.78	416.17	416.57	416.97	417.36	417.76	418.16	418.56	418.95
570	419.35	419.75	420.14	420.54	420.93	421.33	421.73	422.12	422.52	422.92
580	423.31	423.71	424.10	424.50	424.89	425.29	425.69	426.08	426.48	426.87
590	427.27	427.66	428.06	428.45	428.85	429.24	429.64	430.03	430.43	430.82
600	431.22	431.61	432.00	432.40	432.79	433.19	433.58	433.97	434.37	434.76
610	435.16	435.55	435.94	436.34	436.73	437.12	437.52	437.91	438.30	438.70
620	439.09	439.48	439.88	440.27	440.66	441.05	441.45	441.84	442.23	442.62
630	443.02	443.41	443.80	444.19	444.59	444.98	445.37	445.76	446.15	446.55
640	446.94	447.33	447.72	448.11	448.50	448.89	449.29	449.68	450.07	450.46
650	450.85	451.24	451.63	452.02	452.41	452.80	453.19	453.58	453.97	454.36
660	454.76	455.15	455.54	455.93	456.32	456.71	457.10	457.49	457.88	458.27

Resistance vs. Temperature

R ₀ = 100 Ω		α = 0.003902Ω/Ω/°C								
Degrees F		ITS-90								
°F	0	-1	-2	-3	-4	-5	-6	-7	-8	-9
-330	16.50									
-320	18.97	18.73	18.48	18.23	17.99	17.74	17.49	17.24	17.00	16.75
-310	21.43	21.18	20.94	20.69	20.45	20.20	19.96	19.71	19.46	19.22
-300	23.87	23.63	23.38	23.14	22.90	22.65	22.41	22.16	21.92	21.67
-290	26.30	26.06	25.82	25.58	25.33	25.09	24.85	24.60	24.36	24.12
-280	28.72	28.48	28.24	28.00	27.76	27.51	27.27	27.03	26.79	26.55
-270	31.13	30.89	30.65	30.41	30.17	29.93	29.68	29.44	29.20	28.96
-260	33.52	33.28	33.04	32.80	32.56	32.33	32.09	31.85	31.61	31.37
-250	35.90	35.67	35.43	35.19	34.95	34.71	34.48	34.24	34.00	33.76
-240	38.28	38.04	37.80	37.57	37.33	37.09	36.85	36.62	36.38	36.14
-230	40.64	40.40	40.17	39.93	39.70	39.46	39.22	38.99	38.75	38.51
-220	42.99	42.76	42.52	42.29	42.05	41.82	41.58	41.35	41.11	40.88
-210	45.33	45.10	44.87	44.63	44.40	44.16	43.93	43.70	43.46	43.23
-200	47.67	47.44	47.20	46.97	46.74	46.50	46.27	46.04	45.80	45.57
-190	49.99	49.76	49.53	49.30	49.07	48.83	48.60	48.37	48.13	47.90
-180	52.31	52.08	51.85	51.62	51.39	51.15	50.92	50.69	50.46	50.23
-170	54.62	54.39	54.16	53.93	53.70	53.47	53.24	53.00	52.77	52.54
-160	56.92	56.69	56.46	56.23	56.00	55.77	55.54	55.31	55.08	54.85
-150	59.22	58.99	58.76	58.53	58.30	58.07	57.84	57.61	57.38	57.15
-140	61.50	61.28	61.05	60.82	60.59	60.36	60.13	59.90	59.67	59.45
-130	63.78	63.56	63.33	63.10	62.87	62.64	62.42	62.19	61.96	61.73
-120	66.06	65.83	65.60	65.38	65.15	64.92	64.69	64.47	64.24	64.01
-110	68.33	68.10	67.87	67.65	67.42	67.19	66.97	66.74	66.51	66.29
-100	70.59	70.36	70.14	69.91	69.68	69.46	69.23	69.01	68.78	68.55
-90	72.85	72.62	72.39	72.17	71.94	71.72	71.49	71.27	71.04	70.81
-80	75.10	74.87	74.65	74.42	74.20	73.97	73.75	73.52	73.30	73.07
-70	77.34	77.12	76.89	76.67	76.45	76.22	76.00	75.77	75.55	75.32
-60	79.58	79.36	79.14	78.91	78.69	78.46	78.24	78.02	77.79	77.57
-50	81.82	81.60	81.37	81.15	80.93	80.70	80.48	80.26	80.03	79.81
-40	84.05	83.83	83.61	83.38	83.16	82.94	82.71	82.49	82.27	82.04
-30	86.28	86.06	85.84	85.61	85.39	85.17	84.94	84.72	84.50	84.28
-20	88.50	88.28	88.06	87.84	87.61	87.39	87.17	86.95	86.73	86.50
-10	90.72	90.50	90.28	90.06	89.84	89.61	89.39	89.17	88.95	88.73
0	92.94	92.72	92.49	92.27	92.05	91.83	91.61	91.39	91.17	90.94

°F	0	1	2	3	4	5	6	7	8	9
0	92.94	93.16	93.38	93.60	93.82	94.04	94.26	94.49	94.71	94.93
10	95.15	95.37	95.59	95.81	96.03	96.25	96.47	96.69	96.91	97.14
20	97.36	97.58	97.80	98.02	98.24	98.46	98.68	98.90	99.12	99.34
30	99.56	99.78	100.00	100.22	100.44	100.66	100.88	101.10	101.32	101.54
40	101.76	101.98	102.20	102.42	102.64	102.86	103.08	103.30	103.52	103.74
50	103.96	104.18	104.39	104.61	104.83	105.05	105.27	105.49	105.71	105.93
60	106.15	106.37	106.59	106.81	107.02	107.24	107.46	107.68	107.90	108.12
70	108.34	108.56	108.78	108.99	109.21	109.43	109.65	109.87	110.09	110.30
80	110.52	110.74	110.96	111.18	111.40	111.61	111.83	112.05	112.27	112.49
90	112.70	112.92	113.14	113.36	113.58	113.79	114.01	114.23	114.45	114.67
100	114.88	115.10	115.32	115.54	115.75	115.97	116.19	116.41	116.62	116.84
110	117.06	117.27	117.49	117.71	117.93	118.14	118.36	118.58	118.79	119.01
120	119.23	119.45	119.66	119.88	120.10	120.31	120.53	120.75	120.96	121.18
130	121.40	121.61	121.83	122.05	122.26	122.48	122.69	122.91	123.13	123.34
140	123.56	123.78	123.99	124.21	124.42	124.64	124.86	125.07	125.29	125.50
150	125.72	125.94	126.15	126.37	126.58	126.80	127.01	127.23	127.44	127.66
160	127.88	128.09	128.31	128.52	128.74	128.95	129.17	129.38	129.60	129.81
170	130.03	130.24	130.46	130.67	130.89	131.10	131.32	131.53	131.75	131.96
180	132.18	132.39	132.61	132.82	133.04	133.25	133.47	133.68	133.89	134.11
190	134.32	134.54	134.75	134.97	135.18	135.39	135.61	135.82	136.04	136.25
200	136.46	136.68	136.89	137.11	137.32	137.53	137.75	137.96	138.18	138.39
210	138.60	138.82	139.03	139.24	139.46	139.67	139.88	140.10	140.31	140.52
220	140.74	140.95	141.16	141.38	141.59	141.80	142.02	142.23	142.44	142.66
230	142.87	143.08	143.29	143.51	143.72	143.93	144.14	144.36	144.57	144.78
240	145.00	145.21	145.42	145.63	145.85	146.06	146.27	146.48	146.69	146.91
250	147.12	147.33	147.54	147.76	147.97	148.18	148.39	148.60	148.82	149.03
260	149.24	149.45	149.66	149.87	150.09	150.30	150.51	150.72	150.93	151.14
270	151.36	151.57	151.78	151.99	152.20	152.41	152.62	152.83	153.05	153.26
280	153.47	153.68	153.89	154.10	154.31	154.52	154.73	154.94	155.16	155.37
290	155.58	155.79	156.00	156.21	156.42	156.63	156.84	157.05	157.26	157.47
300	157.68	157.89	158.10	158.31	158.52	158.73	158.94	159.15	159.36	159.57
310	159.78	159.99	160.20	160.41	160.62	160.83	161.04	161.25	161.46	161.67
320	161.88	162.09	162.30	162.51	162.72	162.93	163.14	163.35	163.56	163.77
330	163.98	164.19	164.40	164.60	164.81	165.02	165.23	165.44	165.65	165.86
340	166.07	166.28	166.49	166.69	166.90	167.11	167.32	167.53	167.74	167.95
350	168.16	168.36	168.57	168.78	168.99	169.20	169.41	169.61	169.82	170.03
360	170.24	170.45	170.65	170.86	171.07	171.28	171.49	171.70	171.90	172.11
370	172.32	172.53	172.73	172.94	173.15	173.36	173.56	173.77	173.98	174.19
380	174.39	174.60	174.81	175.02	175.22	175.43	175.64	175.85	176.05	176.26
390	176.47	176.67	176.88	177.09	177.30	177.50	177.71	177.92	178.12	178.33
400	178.54	178.74	178.95	179.16	179.36	179.57	179.78	179.98	180.19	180.40
410	180.60	180.81	181.01	181.22	181.43	181.63	181.84	182.05	182.25	182.46
420	182.66	182.87	183.08	183.28	183.49	183.69	183.90	184.10	184.31	184.52
430	184.72	184.93	185.13	185.34	185.54	185.75	185.96	186.16	186.37	186.57
440	186.78	186.98	187.19	187.39	187.60	187.80	188.01	188.21	188.42	188.62
450	188.83	189.03	189.24	189.44	189.65	189.85	190.06	190.26	190.47	190.67
460	190.87	191.08	191.28	191.49	191.69	191.90	192.10	192.31	192.51	192.71
470	192.92	193.12	193.33	193.53	193.73	193.94	194.14	194.35	194.55	194.75
480	194.96	195.16	195.37	195.57	195.77	195.98	196.18	196.38	196.59	196.79
490	196.99	197.20	197.40	197.60	197.81	198.01	198.21	198.42	198.62	198.82
500	199.03	199.23	199.43	199.64	199.84	200.04	200.25	200.45	200.65	200.85
510	201.06	201.26	201.46	201.66	201.87	202.07	202.27	202.47	202.68	202.88
520	203.08	203.28	203.49	203.69	203.89	204.09	204.30	204.50	204.70	204.90
530	205.10	205.31	205.51	205.71	205.91	206.11	206.31	206.52	206.72	206.92
540	207.12	207.32	207.52	207.73	207.93	208.13	208.33	208.53	208.73	208.93
550	209.14	209.34	209.54	209.74	209.94	210.14	210.34	210.54	210.75	210.95
560	211.15	211.35	211.55	211.75	211.95	212.15	212.35	212.55	212.75	212.95
570	213.15	213.35	213.56	213.76	213.96	214.16	214.36	214.56	214.76	214.96
580	215.16	215.36	215.56	215.76	215.96	216.16	216.36	216.56	216.76	216.96
590	217.16	217.36	217.56	217.76	217.96	218.16	218.36	218.56	218.76	218.95
600	219.15	219.35	219.55	219.75	219.95	220.15	220.35	220.55	220.75	220.95
610	221.15	221.35	221.54	221.74	221.94	222.14	222.34	222.54	222.74	222.94
620	223.14	223.33	223.53	223.73	223.93	224.13	224.33	224.53	224.72	224.92
630	225.12	225.32	225.52	225.72	225.91	226.11	226.31	226.51	226.71	226.90
640	227.10	227.30	227.50	227.70	227.89	228.09	228.29	228.49	228.69	228.88
650	229.08	229.28	229.48	229.67	229.87	230.07	230.27	230.46	230.66	230.86
660	231.06	231.25	231.45	231.65	231.84	232.04	232.24	232.44	232.63	232.83

Resistance vs. Temperature

$R_0 = 200 \ \Omega$ $\alpha = 0.003902 \Omega/\Omega/^\circ C$
 Degrees F ITS-90

°F	0	-1	-2	-3	-4	-5	-6	-7	-8	-9
-330	33.00									
-320	37.94	37.45	36.96	36.46	35.97	35.48	34.98	34.49	33.99	33.50
-310	42.86	42.37	41.88	41.39	40.90	40.40	39.91	39.42	38.93	38.44
-300	47.75	47.26	46.77	46.28	45.79	45.30	44.82	44.33	43.84	43.35
-290	52.61	52.12	51.64	51.15	50.66	50.18	49.69	49.21	48.72	48.23
-280	57.44	56.96	56.48	55.99	55.51	55.03	54.54	54.06	53.58	53.09
-270	62.25	61.77	61.29	60.81	60.33	59.85	59.37	58.89	58.41	57.92
-260	67.04	66.56	66.09	65.61	65.13	64.65	64.17	63.69	63.21	62.73
-250	71.81	71.33	70.86	70.38	69.91	69.43	68.95	68.47	68.00	67.52
-240	76.55	76.08	75.61	75.13	74.66	74.18	73.71	73.23	72.76	72.28
-230	81.28	80.81	80.34	79.86	79.39	78.92	78.45	77.97	77.50	77.03
-220	85.98	85.51	85.04	84.57	84.10	83.63	83.16	82.69	82.22	81.75
-210	90.67	90.20	89.73	89.27	88.80	88.33	87.86	87.39	86.92	86.45
-200	95.34	94.87	94.41	93.94	93.47	93.01	92.54	92.07	91.60	91.14
-190	99.99	99.52	99.06	98.60	98.13	97.67	97.20	96.73	96.27	95.80
-180	104.62	104.16	103.70	103.23	102.77	102.31	101.84	101.38	100.92	100.45
-170	109.24	108.78	108.32	107.86	107.40	106.93	106.47	106.01	105.55	105.09
-160	113.84	113.38	112.92	112.46	112.00	111.54	111.08	110.62	110.16	109.70
-150	118.43	117.97	117.52	117.06	116.60	116.14	115.68	115.22	114.76	114.30
-140	123.01	122.55	122.09	121.64	121.18	120.72	120.26	119.81	119.35	118.89
-130	127.57	127.11	126.66	126.20	125.75	125.29	124.83	124.38	123.92	123.46
-120	132.12	131.66	131.21	130.75	130.30	129.84	129.39	128.93	128.48	128.02
-110	136.65	136.20	135.75	135.29	134.84	134.39	133.93	133.48	133.03	132.57
-100	141.18	140.73	140.27	139.82	139.37	138.92	138.46	138.01	137.56	137.11
-90	145.69	145.24	144.79	144.34	143.89	143.44	142.98	142.53	142.08	141.63
-80	150.19	149.74	149.29	148.84	148.39	147.94	147.49	147.04	146.59	146.14
-70	154.69	154.24	153.79	153.34	152.89	152.44	151.99	151.54	151.09	150.64
-60	159.17	158.72	158.27	157.82	157.37	156.92	156.47	156.02	155.57	155.12
-50	163.64	163.20	162.75	162.30	161.85	161.41	160.96	160.51	160.06	159.62
-40	168.11	167.66	167.21	166.77	166.32	165.87	165.43	164.98	164.54	164.09
-30	172.56	172.12	171.67	171.23	170.78	170.33	169.89	169.44	169.00	168.55
-20	177.01	176.56	176.12	175.67	175.23	174.78	174.34	173.90	173.45	173.01
-10	181.45	181.00	180.56	180.11	179.67	179.23	178.78	178.34	177.90	177.45
0	185.88	185.43	184.99	184.55	184.10	183.66	183.22	182.77	182.33	181.89

°F	0	1	2	3	4	5	6	7	8	9
0	185.88	186.32	186.76	187.20	187.65	188.09	188.53	188.97	189.41	189.86
10	190.30	190.74	191.18	191.62	192.06	192.51	192.95	193.39	193.83	194.27
20	194.71	195.15	195.59	196.04	196.48	196.92	197.36	197.80	198.24	198.68
30	199.12	199.56	200.00	200.44	200.88	201.32	201.76	202.20	202.64	203.08
40	203.52	203.96	204.40	204.84	205.28	205.72	206.16	206.60	207.04	207.47
50	207.91	208.35	208.79	209.23	209.67	210.11	210.54	210.98	211.42	211.86
60	212.30	212.74	213.17	213.61	214.05	214.49	214.93	215.36	215.80	216.24
70	216.68	217.11	217.55	217.99	218.42	218.86	219.30	219.74	220.17	220.61
80	221.05	221.48	221.92	222.36	222.79	223.23	223.67	224.10	224.54	224.97
90	225.41	225.85	226.28	226.72	227.15	227.59	228.02	228.46	228.90	229.33
100	229.77	230.20	230.64	231.07	231.51	231.94	232.38	232.81	233.25	233.68
110	234.12	234.55	234.98	235.42	235.85	236.29	236.72	237.16	237.59	238.02
120	238.46	238.89	239.32	239.76	240.19	240.63	241.06	241.49	241.93	242.36
130	242.79	243.22	243.66	244.09	244.52	244.96	245.39	245.82	246.25	246.69
140	247.12	247.55	247.98	248.42	248.85	249.28	249.71	250.14	250.58	251.01
150	251.44	251.87	252.30	252.73	253.16	253.60	254.03	254.46	254.89	255.32
160	255.75	256.18	256.61	257.04	257.47	257.90	258.33	258.76	259.19	259.63
170	260.06	260.49	260.92	261.35	261.78	262.21	262.64	263.07	263.50	263.93
180	264.35	264.78	265.21	265.64	266.07	266.50	266.93	267.36	267.79	268.22
190	268.65	269.07	269.50	269.93	270.36	270.79	271.22	271.65	272.07	272.50
200	272.93	273.36	273.79	274.21	274.64	275.07	275.50	275.92	276.35	276.78
210	277.21	277.63	278.06	278.49	278.91	279.34	279.77	280.19	280.62	281.05
220	281.47	281.90	282.33	282.75	283.18	283.61	284.03	284.46	284.88	285.31
230	285.74	286.16	286.59	287.01	287.44	287.86	288.29	288.72	289.14	289.57
240	289.99	290.42	290.84	291.27	291.69	292.12	292.54	292.96	293.39	293.81
250	294.24	294.66	295.09	295.51	295.93	296.36	296.78	297.21	297.63	298.05
260	298.48	298.90	299.33	299.75	300.17	300.60	301.02	301.44	301.86	302.29
270	302.71	303.13	303.56	303.98	304.40	304.82	305.25	305.67	306.09	306.51
280	306.94	307.36	307.78	308.20	308.62	309.05	309.47	309.89	310.31	310.73
290	311.15	311.58	312.00	312.42	312.84	313.26	313.68	314.10	314.52	314.94
300	315.36	315.79	316.21	316.63	317.05	317.47	317.89	318.31	318.73	319.15
310	319.57	319.99	320.41	320.83	321.25	321.67	322.09	322.51	322.93	323.35
320	323.76	324.18	324.60	325.02	325.44	325.86	326.28	326.70	327.12	327.54
330	327.95	328.37	328.79	329.21	329.63	330.05	330.46	330.88	331.30	331.72
340	332.14	332.55	332.97	333.39	333.81	334.22	334.64	335.06	335.48	335.89
350	336.31	336.73	337.14	337.56	337.98	338.39	338.81	339.23	339.64	340.06
360	340.48	340.89	341.31	341.73	342.14	342.56	342.97	343.39	343.81	344.22
370	344.64	345.05	345.47	345.88	346.30	346.71	347.13	347.54	347.96	348.37
380	348.79	349.20	349.62	350.03	350.45	350.86	351.28	351.69	352.11	352.52
390	352.94	353.35	353.76	354.18	354.59	355.01	355.42	355.83	356.25	356.66
400	357.07	357.49	357.90	358.31	358.73	359.14	359.55	359.97	360.38	360.79
410	361.20	361.62	362.03	362.44	362.85	363.27	363.68	364.09	364.50	364.92
420	365.33	365.74	366.15	366.56	366.98	367.39	367.80	368.21	368.62	369.03
430	369.44	369.86	370.27	370.68	371.09	371.50	371.91	372.32	372.73	373.14
440	373.55	373.96	374.37	374.78	375.19	375.60	376.01	376.43	376.84	377.24
450	377.65	378.06	378.47	378.88	379.29	379.70	380.11	380.52	380.93	381.34
460	381.75	382.16	382.57	382.98	383.39	383.79	384.20	384.61	385.02	385.43
470	385.84	386.24	386.65	387.06	387.47	387.88	388.29	388.69	389.10	389.51
480	389.92	390.32	390.73	391.14	391.55	391.95	392.36	392.77	393.18	393.58
490	393.99	394.40	394.80	395.21	395.62	396.02	396.43	396.84	397.24	397.65
500	398.05	398.46	398.87	399.27	399.68	400.08	400.49	400.90	401.30	401.71
510	402.11	402.52	402.92	403.33	403.73	404.14	404.54	404.95	405.35	405.76
520	406.16	406.57	406.97	407.38	407.78	408.19	408.59	408.99	409.40	409.80
530	410.21	410.61	411.01	411.42	411.82	412.23	412.63	413.03	413.44	413.84
540	414.24	414.65	415.05	415.45	415.86	416.26	416.66	417.06	417.47	417.87
550	418.27	418.67	419.08	419.48	419.88	420.28	420.69	421.09	421.49	421.89
560	422.29	422.70	423.10	423.50	423.90	424.30	424.70	425.10	425.51	425.91
570	426.31	426.71	427.11	427.51	427.91	428.31	428.71	429.11	429.51	429.92
580	430.32	430.72	431.12	431.52	431.92	432.32	432.72	433.12	433.52	433.92
590	434.32	434.72	435.11	435.51	435.91	436.31	436.71	437.11	437.51	437.91
600	438.31	438.71	439.11	439.50	439.90	440.30	440.70	441.10	441.50	441.90
610	442.29	442.69	443.09	443.49	443.89	444.28	444.68	445.08	445.48	445.87
620	446.27	446.67	447.07	447.46	447.86	448.26	448.65	449.05	449.45	449.85
630	450.24	450.64	451.04	451.43	451.83	452.23	452.62	453.02	453.41	453.81
640	454.21	454.60	455.00	455.39	455.79	456.18	456.58	456.98	457.37	457.77
650	458.16									