DIN IEC 751
Temperature/Resistance Table for Platinum Sensors

°C	Ω	°C	Ω	°C	Ω	°C	Ω
–200	18.52	20	107.79	240	190.47	460	267.56
–195	20.68	25	109.73	245	192.29	465	269.25
–190	22.83	30	111.67	250	194.10	470	270.93
–185	24.97	35	113.61	255	195.91	475	272.61
–180	27.10	40	115.54	260	197.71	480	274.29
–175	29.22	45	117.47	265	199.51	485	275.97
–170	31.33	50	119.40	270	201.31	490	277.64
–165	33.44	55	121.32	275	203.11	495	279.31
–160	35.54	60	123.24	280	204.90	500	280.98
–155	37.64	65	125.16	285	206.70	505	282.64
–150	39.72	70	127.08	290	208.48	510	284.30
–145	41.80	75	128.99	295	210.27	515	285.96
–140	43.88	80	130.90	300	212.05	520	287.62
–135	45.94	85	132.80	305	213.83	525	289.27
–130	48.00	90	134.71	310	215.61	530	290.92
–125	50.06	95	136.61	315	217.38	535	292.56
–120	52.11	100	138.51	320	219.15	540	294.21
–115	54.15	105	140.40	325	220.92	545	295.85
–110	56.19	110	142.29	330	222.69	550	297.49
–105	58.23	115	144.18	335	224.45	555	299.12
–100	60.26	120	146.07	340	226.21	560	300.75
–95	62.28	125	147.95	345	227.96	565	302.38
–90	64.30	130	149.83	350	229.72	570	304.01
–85	66.31	135	151.71	355	231.47	575	305.63
–80	68.33	140	153.58	360	233.21	580	307.25
–75	70.33	145	155.46	365	234.96	585	308.87
–70	72.33	150	157.33	370	236.70	590	310.49
–65	74.33	155	159.19	375	238.44	595	312.10
–60	76.33	160	161.05	380	240.18	600	313.71
–55	78.32	165	162.91	385	241.91	605	315.31
–50	80.31	170	164.77	390	243.64	610	316.92
–45	82.29	175	166.63	395	245.37	615	318.52
–40	84.27	180	168.48	400	247.09	620	320.12
–35	86.25	185	170.33	405	248.81	625	321.71
–30	88.22	190	172.17	410	250.53	630	323.30
–25	90.19	195	174.02	415	252.25	635	324.89
–20	92.16	200	175.86	420	253.96	640	326.48
–15	94.12	205	177.69	425	255.67	645	328.06
–10	96.09	210	179.53	430	257.38	650	329.64
–5	98.04	215	181.36	435	259.08	655	331.22
0	100.00	220	183.19	440	260.78	660	332.79
5	101.95	225	185.01	445	262.48		
10	103.90	230	186.84	450	264.18		
15	105.85	235	188.66	455	265.87		

Lake Shore Cryotronics, 575 McCorkle Blvd. Westerville, OH 43082 www.lakeshore.com
Phone (614) 891-2243 – Fax (614) 891-1362 – sales@lakeshore.com – service@lakeshore.com

Permissible Deviations for Class A and Class B Platinum Sensors

The permissible deviations for platinum resistance elements (uncalibrated) are determined by the following equations (in accordance with DIN IEC 751):

Permissible Deviation – Class A
°C = ±(0.15 + 0.002 [t]

Permissible Deviation – Class B
°C = ±(0.3 + 0.005 [t]

Where [t] is the temperature value in °C.

Measuring temp. °C	Permissible Deviations			
	Class A		Class B	
	Ω	°C	Ω	°C
–200	±0.24	±0.55	±0.56	±1.3
–100	±0.14	±0.35	±0.32	±0.8
0	±0.06	±0.15	±0.12	±0.3
100	±0.13	±0.35	±0.30	±0.8
200	±0.20	±0.55	±0.48	±1.3
300	±0.27	±0.75	±0.64	±1.8
400	±0.33	±0.95	±0.79	±2.3
500	±0.38	±1.15	±0.93	±2.8
600	±0.43	±1.35	±1.06	±3.3
650	±0.46	±1.45	±1.13	±3.6
700	—	—	±1.17	±3.8
800	—	—	±1.28	±4.3
850	—	—	±1.34	±4.6