



### TABELA DE RESISTÊNCIA DO SENSOR Pt-100

Pt-100 –  $R_0 = 100,00 \Omega$  a  $0^\circ\text{C}$  - ASTM-E-1137 - Temperatura em graus Celsius (ITS-90)

Resistência em ohms ( $\Omega$ ) -  $\alpha = 0,003850 \Omega \cdot \Omega^{-1} \cdot ^\circ\text{C}^{-1}$

$^\circ\text{C}$	0	-1	-2	-3	-4	-5	-6	-7	-8	-9	-10
0	100,0000	99,6091	99,2181	98,8270	98,4358	98,0444	97,6529	97,2613	96,8696	96,4778	96,0859
-10	96,0859	95,6938	95,3016	94,9093	94,5169	94,1244	93,7317	93,3390	92,9461	92,5530	92,1599
-20	92,1599	91,7666	91,3732	90,9797	90,5861	90,1923	89,7985	89,4044	89,0103	88,6160	88,2217
-30	88,2217	87,8271	87,4325	87,0377	86,6428	86,2478	85,8526	85,4573	85,0619	84,6663	84,2707
-40	84,2707	83,8748	83,4789	83,0828	82,6865	82,2902	81,8937	81,4970	81,1003	80,7033	80,3063
-50	80,3063	79,9091	79,5117	79,1143	78,7166	78,3189	77,9210	77,5229	77,1247	76,7263	76,3278
-60	76,3278	75,9292	75,5304	75,1315	74,7324	74,3331	73,9337	73,5341	73,1344	72,7346	72,3345
-70	72,3345	71,9344	71,5340	71,1335	70,7328	70,3320	69,9310	69,5299	69,1286	68,7271	68,3254
-80	68,3254	67,9236	67,5217	67,1195	66,7172	66,3147	65,9120	65,5092	65,1062	64,7030	64,2996
-90	64,2996	63,8960	63,4923	63,0884	62,6843	62,2800	61,8756	61,4709	61,0661	60,6611	60,2558
-100	60,2558	59,8504	59,4448	59,0391	58,6331	58,2269	57,8205	57,4139	57,0072	56,6002	56,1930
-110	56,1930	55,7856	55,3780	54,9702	54,5622	54,1540	53,7456	53,3370	52,9281	52,5191	52,1098
-120	52,1098	51,7003	51,2906	50,8806	50,4705	50,0601	49,6495	49,2386	48,8276	48,4163	48,0048
-130	48,0048	47,5930	47,1810	46,7688	46,3563	45,9436	45,5307	45,1175	44,7040	44,2904	43,8764
-140	43,8764	43,4622	43,0478	42,6331	42,2182	41,8030	41,3876	40,9719	40,5559	40,1397	39,7232
-150	39,7232	39,3064	38,8894	38,4721	38,0545	37,6367	37,2186	36,8002	36,3815	35,9626	35,5433
-160	35,5433	35,1238	34,7040	34,2839	33,8635	33,4429	33,0219	32,6006	32,1791	31,7572	31,3350
-170	31,3350	30,9126	30,4898	30,0667	29,6434	29,2197	28,7956	28,3713	27,9467	27,5217	27,0964
-180	27,0964	26,6708	26,2449	25,8186	25,3920	24,9651	24,5379	24,1103	23,6824	23,2541	22,8255
-190	22,8255	22,3965	21,9672	21,5376	21,1076	20,6772	20,2465	19,8154	19,3840	18,9522	18,5201
-200	18,5201										



°C	0	1	2	3	4	5	6	7	8	9	10
0	100,0000	100,3908	100,7814	101,1720	101,5624	101,9527	102,3429	102,7330	103,1229	103,5128	103,9025
10	103,9025	104,2921	104,6816	105,0710	105,4603	105,8495	106,2385	106,6274	107,0162	107,4049	107,7935
20	107,7935	108,1820	108,5703	108,9585	109,3467	109,7347	110,1225	110,5103	110,8980	111,2855	111,6729
30	111,6729	112,0602	112,4474	112,8345	113,2215	113,6083	113,9950	114,3817	114,7681	115,1545	115,5408
40	115,5408	115,9270	116,3130	116,6989	117,0847	117,4704	117,8560	118,2414	118,6268	119,0120	119,3971
50	119,3971	119,7821	120,1670	120,5518	120,9364	121,3210	121,7054	122,0897	122,4739	122,8579	123,2419
60	123,2419	123,6257	124,0095	124,3931	124,7766	125,1600	125,5432	125,9264	126,3094	126,6923	127,0751
70	127,0751	127,4578	127,8404	128,2228	128,6052	128,9874	129,3695	129,7515	130,1334	130,5152	130,8968
80	130,8968	131,2783	131,6597	132,0411	132,4222	132,8033	133,1843	133,5651	133,9458	134,3264	134,7069
90	134,7069	135,0873	135,4676	135,8477	136,2277	136,6077	136,9875	137,3671	137,7467	138,1262	138,5055
100	138,5055	138,8847	139,2638	139,6428	140,0217	140,4005	140,7791	141,1576	141,5360	141,9143	142,2925
110	142,2925	142,6706	143,0485	143,4264	143,8041	144,1817	144,5592	144,9366	145,3138	145,6910	146,0680
120	146,0680	146,4449	146,8217	147,1984	147,5750	147,9514	148,3277	148,7040	149,0801	149,4561	149,8319
130	149,8319	150,2077	150,5833	150,9589	151,3343	151,7096	152,0847	152,4598	152,8347	153,2096	153,5843
140	153,5843	153,9589	154,3334	154,7078	155,0820	155,4562	155,8302	156,2041	156,5779	156,9516	157,3251
150	157,3251	157,6986	158,0719	158,4451	158,8182	159,1912	159,5641	159,9368	160,3095	160,6820	161,0544
160	161,0544	161,4267	161,7989	162,1709	162,5429	162,9147	163,2864	163,6580	164,0295	164,4009	164,7721
170	164,7721	165,1433	165,5143	165,8852	166,2560	166,6267	166,9972	167,3677	167,7380	168,1082	168,4783
180	168,4783	168,8483	169,2181	169,5879	169,9575	170,3271	170,6965	171,0658	171,4349	171,8040	172,1729
190	172,1729	172,5418	172,9105	173,2791	173,6475	174,0159	174,3842	174,7523	175,1203	175,4882	175,8560
200	175,8560	176,2237	176,5912	176,9587	177,3260	177,6932	178,0603	178,4273	178,7941	179,1609	179,5275
210	179,5275	179,8940	180,2604	180,6267	180,9929	181,3590	181,7249	182,0907	182,4564	182,8220	183,1875
220	183,1875	183,5529	183,9181	184,2832	184,6483	185,0132	185,3779	185,7426	186,1072	186,4716	186,8359
230	186,8359	187,2001	187,5642	187,9282	188,2921	188,6558	189,0194	189,3830	189,7463	190,1096	190,4728
240	190,4728	190,8359	191,1988	191,5616	191,9243	192,2869	192,6494	193,0117	193,3740	193,7361	194,0981
250	194,0981	194,4600	194,8218	195,1835	195,5450	195,9065	196,2678	196,6290	196,9901	197,3510	197,7119
260	197,7119	198,0726	198,4333	198,7938	199,1542	199,5145	199,8746	200,2347	200,5946	200,9544	201,3141
270	201,3141	201,6737	202,0332	202,3925	202,7518	203,1109	203,4699	203,8288	204,1876	204,5463	204,9048
280	204,9048	205,2632	205,6215	205,9798	206,3378	206,6958	207,0537	207,4114	207,7690	208,1265	208,4839
290	208,4839	208,8412	209,1984	209,5554	209,9123	210,2692	210,6259	210,9824	211,3389	211,6953	212,0515
300	212,0515	212,4076	212,7636	213,1195	213,4753	213,8310	214,1865	214,5419	214,8972	215,2524	215,6075
310	215,6075	215,9625	216,3173	216,6721	217,0267	217,3812	217,7356	218,0899	218,4440	218,7981	219,1520
320	219,1520	219,5058	219,8595	220,2131	220,5666	220,9199	221,2731	221,6263	221,9793	222,3322	222,6849
330	222,6849	223,0376	223,3901	223,7426	224,0949	224,4471	224,7991	225,1511	225,5029	225,8547	226,2063
340	226,2063	226,5578	226,9092	227,2605	227,6116	227,9627	228,3136	228,6644	229,0151	229,3657	229,7161
350	229,7161	230,0665	230,4167	230,7668	231,1168	231,4667	231,8165	232,1661	232,5157	232,8651	233,2144
°C	0	1	2	3	4	5	6	7	8	9	10



<b>360</b>	233,2144	233,5636	233,9127	234,2616	234,6105	234,9592	235,3078	235,6563	236,0047	236,3530	236,7011
<b>370</b>	236,7011	237,0492	237,3971	237,7449	238,0926	238,4402	238,7876	239,1350	239,4822	239,8293	240,1763
<b>380</b>	240,1763	240,5232	240,8699	241,2166	241,5631	241,9096	242,2559	242,6021	242,9481	243,2941	243,6399
<b>390</b>	243,6399	243,9857	244,3313	244,6768	245,0221	245,3674	245,7126	246,0576	246,4025	246,7473	247,0920
<b>400</b>	247,0920	247,4366	247,7810	248,1254	248,4696	248,8137	249,1577	249,5016	249,8453	250,1890	250,5325
<b>410</b>	250,5325	250,8759	251,2192	251,5624	251,9055	252,2485	252,5913	252,9340	253,2766	253,6191	253,9615
<b>420</b>	253,9615	254,3038	254,6459	254,9879	255,3299	255,6717	256,0133	256,3549	256,6964	257,0377	257,3789
<b>430</b>	257,3789	257,7200	258,0610	258,4019	258,7427	259,0833	259,4238	259,7643	260,1045	260,4447	260,7848
<b>440</b>	260,7848	261,1248	261,4646	261,8043	262,1439	262,4834	262,8228	263,1620	263,5012	263,8402	264,1791
<b>450</b>	264,1791	264,5179	264,8566	265,1952	265,5336	265,8720	266,2102	266,5483	266,8863	267,2241	267,5619
<b>460</b>	267,5619	267,8995	268,2371	268,5745	268,9118	269,2490	269,5860	269,9230	270,2598	270,5965	270,9331
<b>470</b>	270,9331	271,2696	271,6060	271,9422	272,2784	272,6144	272,9503	273,2861	273,6218	273,9574	274,2928
<b>480</b>	274,2928	274,6281	274,9633	275,2985	275,6334	275,9683	276,3031	276,6377	276,9722	277,3066	277,6409
<b>490</b>	277,6409	277,9751	278,3092	278,6431	278,9769	279,3107	279,6443	279,9777	280,3111	280,6444	280,9775
<b>500</b>	280,9775	281,3105	281,6434	281,9762	282,3089	282,6415	282,9739	283,3062	283,6384	283,9705	284,3025
<b>510</b>	284,3025	284,6344	284,9661	285,2978	285,6293	285,9607	286,2920	286,6232	286,9542	287,2852	287,6160
<b>520</b>	287,6160	287,9467	288,2773	288,6078	288,9382	289,2684	289,5985	289,9286	290,2585	290,5883	290,9179
<b>530</b>	290,9179	291,2475	291,5769	291,9063	292,2355	292,5646	292,8935	293,2224	293,5511	293,8798	294,2083
<b>540</b>	294,2083	294,5367	294,8650	295,1932	295,5212	295,8492	296,1770	296,5047	296,8323	297,1598	297,4871
<b>550</b>	297,4871	297,8144	298,1415	298,4685	298,7954	299,1222	299,4489	299,7754	300,1019	300,4282	300,7544
<b>560</b>	300,7544	301,0805	301,4065	301,7323	302,0581	302,3837	302,7092	303,0346	303,3599	303,6851	304,0101
<b>570</b>	304,0101	304,3351	304,6599	304,9846	305,3092	305,6337	305,9580	306,2823	306,6064	306,9304	307,2543
<b>580</b>	307,2543	307,5781	307,9017	308,2253	308,5487	308,8721	309,1953	309,5184	309,8413	310,1642	310,4869
<b>590</b>	310,4869	310,8096	311,1321	311,4545	311,7767	312,0989	312,4210	312,7429	313,0647	313,3864	313,7080
<b>600</b>	313,7080	314,0295	314,3508	314,6721	314,9932	315,3142	315,6351	315,9559	316,2765	316,5971	316,9175
<b>610</b>	316,9175	317,2378	317,5580	317,8781	318,1981	318,5180	318,8377	319,1573	319,4768	319,7962	320,1155
<b>620</b>	320,1155	320,4347	320,7537	321,0726	321,3915	321,7102	322,0287	322,3472	322,6656	322,9838	323,3019
<b>630</b>	323,3019	323,6199	323,9378	324,2556	324,5733	324,8908	325,2082	325,5256	325,8427	326,1598	326,4768
<b>640</b>	326,4768	326,7937	327,1104	327,4270	327,7435	328,0599	328,3762	328,6923	329,0084	329,3243	329,6401
<b>650</b>	329,6401	329,9558	330,2714	330,5869	330,9022	331,2175	331,5326	331,8476	332,1625	332,4772	332,7919
<b>660</b>	332,7919	333,1064	333,4209	333,7352	334,0494	334,3635	334,6774	334,9913	335,3050	335,6186	335,9321
<b>670</b>	335,9321	336,2455	336,5588	336,8719	337,1850	337,4979	337,8107	338,1234	338,4360	338,7485	339,0608
<b>680</b>	339,0608	339,3730	339,6851	339,9972	340,3090	340,6208	340,9325	341,2440	341,5554	341,8667	342,1779
<b>690</b>	342,1779	342,4890	342,8000	343,1108	343,4215	343,7322	344,0427	344,3530	344,6633	344,9735	345,2835
<b>700</b>	345,2835	345,5934	345,9032	346,2129	346,5225	346,8320	347,1413	347,4505	347,7596	348,0686	348,3775
<b>710</b>	348,3775	348,6863	348,9949	349,3035	349,6119	349,9202	350,2284	350,5365	350,8444	351,1523	351,4600
<b>720</b>	351,4600	351,7676	352,0751	352,3825	352,6898	352,9969	353,3039	353,6109	353,9177	354,2244	354,5309
<b>°C</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>



<b>730</b>	354,5309	354,8374	355,1437	355,4500	355,7561	356,0621	356,3679	356,6737	356,9793	357,2849	357,5903
<b>740</b>	357,5903	357,8956	358,2008	358,5059	358,8108	359,1157	359,4204	359,7250	360,0295	360,3339	360,6381
<b>750</b>	360,6381	360,9423	361,2463	361,5502	361,8540	362,1577	362,4613	362,7647	363,0681	363,3713	363,6744
<b>760</b>	363,6744	363,9774	364,2803	364,5830	364,8857	365,1882	365,4906	365,7929	366,0951	366,3972	366,6991
<b>770</b>	366,6991	367,0010	367,3027	367,6043	367,9058	368,2072	368,5084	368,8096	369,1106	369,4115	369,7123
<b>780</b>	369,7123	370,0130	370,3135	370,6140	370,9143	371,2146	371,5147	371,8147	372,1145	372,4143	372,7139
<b>790</b>	372,7139	373,0135	373,3129	373,6122	373,9113	374,2104	374,5094	374,8082	375,1069	375,4055	375,7040
<b>800</b>	375,7040	376,0024	376,3006	376,5988	376,8968	377,1947	377,4925	377,7902	378,0877	378,3852	378,6825
<b>810</b>	378,6825	378,9797	379,2768	379,5738	379,8707	380,1675	380,4641	380,7606	381,0570	381,3533	381,6495
<b>820</b>	381,6495	381,9456	382,2415	382,5373	382,8331	383,1287	383,4241	383,7195	384,0148	384,3099	384,6049
<b>830</b>	384,6049	384,8998	385,1946	385,4893	385,7839	386,0783	386,3726	386,6669	386,9609	387,2549	387,5488
<b>840</b>	387,5488	387,8426	388,1362	388,4297	388,7231	389,0164	389,3096	389,6026	389,8956	390,1884	390,4811
<b>850</b>	390,4811	390,7737	391,0662	391,3586	391,6508	391,9430	392,2350	392,5269	392,8187	393,1103	393,4019

www.temperatura.com.br

www.temperatura.com.br

www.temperatura.com.br

www.temperatura.com.br