

PT100 Measuring element

Table of temperature / resistance
of the PT100 platin measuring
element according to DIN / IEC751
(100 Ω at 0 °C)

t = Temperature [°C]
R_F = Resistance of T1 measuring
element (only for use when
setting up a temperature
simulator)

t [°C]	R _F [Ω]	t [°C]	R _F [Ω]	t [°C]	R _F [Ω]	t [°C]	R _F [Ω]
-60	76.28	30	111.67	125	147.94	220	183.17
-55	78.27	35	113.61	130	149.82	225	185.00
-50	80.25	40	115.54	135	151.70	230	186.82
		45	117.47	140	153.57	235	188.64
-45	82.23	50	119.40	145	155.45	240	190.46
-40	84.21			150	157.32	245	192.27
-35	86.19	55	121.32			250	194.08
-30	88.17	60	123.24	155	159.18		
-25	90.15	65	125.16	160	161.04	255	195.89
-20	92.13	70	127.07	165	162.90	260	197.70
-15	94.10	75	128.98	170	164.76	265	199.50
-10	96.07	80	130.89	175	166.62	270	201.30
-5	98.01	85	132.80	180	168.47	275	203.09
		90	134.70	185	170.32	280	204.88
0	100.00	95	136.60	190	172.16	285	206.68
		100	138.50	195	174.00	290	208.46
5	101.95			200	175.84	295	210.25
10	103.90	105	140.39			300	212.03
15	105.85	110	142.28	205	177.68		
20	107.79	115	144.18	210	179.51		
25	109.73	120	146.06	215	181.34		

PT1000

Measuring element

Table of temperature / resistance of the PT1000 platin measuring element according to DIN / IEC751 (1000 Ω at 0 °C)

t = Temperature [°C]
R_F = Resistance of T1 measuring element (only for use when setting up a temperature simulator)

t [°C]	R _F [Ω]	t [°C]	R _F [Ω]	t [°C]	R _F [Ω]
-100	602.0				
-95	622.3	105	1403.9	305	2138.1
-90	642.5	110	1422.8	310	2155.8
-85	662.7	115	1441.8	315	2173.6
-80	682.8	120	1460.6	320	2191.3
-75	702.9	125	1479.4	325	2209.0
-70	722.9	130	1498.2	330	2226.6
-65	742.9	135	1517.0	335	2244.2
-60	762.8	140	1535.7	340	2261.8
-55	782.7	145	1554.5	345	2279.4
-50	802.5	150	1573.2	350	2296.9
-45	822.3	155	1591.8	355	2314.4
-40	842.1	160	1610.4	360	2331.9
-35	861.9	165	1629.0	365	2349.3
-30	881.7	170	1647.6	370	2366.7
-25	901.5	175	1666.2	375	2384.1
-20	921.3	180	1684.7	380	2401.5
-15	941.0	185	1703.2	385	2418.8
-10	960.7	190	1721.6	390	2436.1
-5	980.1	195	1740.0	395	2453.4
0	1000.0	200	1758.4	400	2470.6
5	1019.5	205	1776.8	405	2487.8
10	1039.0	210	1795.1	410	2505.0
15	1058.5	215	1813.4	415	2522.1
20	1077.9	220	1831.7	420	2539.3
25	1097.3	225	1850.0	425	2556.4
30	1116.7	230	1868.2	430	2573.4
35	1136.1	235	1886.4	435	2590.5
40	1155.4	240	1904.6	440	2607.5
45	1174.7	245	1922.7	445	2624.5
50	1194.0	250	1940.8	450	2641.4
55	1213.2	255	1958.9		
60	1232.4	260	1977.0		
65	1251.6	265	1995.0		
70	1270.7	270	2013.0		
75	1289.8				
80	1308.9	275	2030.9		
85	1328.0	280	2048.8		
		285	2066.8		
90	1347.0	290	2084.6		
95	1366.0	295	2102.5		
100	1385.0	300	2120.3		