

Tolerance values of Pt100 sensors *

Allowable deviation $\pm t$ for F0,15 / W0,15 (old class A) acc. to \square DIN EN 60751 (worth in K)

$^{\circ}\text{F}$	$^{\circ}\text{C}$	0	-10	-20	-30	-40	-50	-60	-70	-80	-90
-148	-100	0.35	0.37	0.39	0.41	0.43	0.45	0.47	0.49	0.51	0.53
32	0	0.15	0.17	0.19	0.21	0.23	0.25	0.27	0.29	0.31	0.33
$^{\circ}\text{F}$	$^{\circ}\text{C}$	0	10	20	30	40	50	60	70	80	90
0	0	0.15	0.17	0.19	0.21	0.23	0.25	0.27	0.29	0.31	0.33
212	100	0.35	0.37	0.39	0.41	0.43	0.45	0.47	0.49	0.51	0.53
392	200	0.55	0.57	0.59	0.61	0.63	0.65	0.67	0.69	0.71	0.73
572	300	0.75	0.77	0.79	0.81	0.83	0.85	0.87	0.89	0.91	0.93
752	400	0.95	0.97	0.99	1.01	1.03	1.05	1.07	1.09	1.11	1.13
932	500	1.15	1.17	1.19	1.21	1.23	1.25	1.27	1.29	1.31	1.33
1112	600	1.35	1.37	1.39	1.41	1.43	1.45	1.47	1.49	1.51	1.53

Allowable deviation $\pm t$ for F0,3 / W0,3 (old class B) acc. to DIN EN 60751 (worth in K)

$^{\circ}\text{F}$	$^{\circ}\text{C}$	0	-10	-20	-30	-40	-50	-60	-70	-80	-90
-148	-100	0.80	0.85	0.90	0.95	1.00	1.05	1.10	1.15	1.20	1.25
32	0	0.30	0.35	0.40	0.45	0.50	0.55	0.60	0.65	0.70	0.75
$^{\circ}\text{F}$	$^{\circ}\text{C}$	0	10	20	30	40	50	60	70	80	90
0	0	0.30	0.35	0.40	0.45	0.50	0.55	0.60	0.65	0.70	0.75
212	100	0.80	0.85	0.90	0.95	1.00	1.05	1.10	1.15	1.20	1.25
392	200	1.30	1.35	1.40	1.45	1.50	1.55	1.60	1.65	1.70	1.75
572	300	1.80	1.85	1.90	1.95	2.00	2.05	2.10	2.15	2.20	2.25
752	400	2.30	2.35	2.40	2.45	2.50	2.55	2.60	2.65	2.70	2.75
932	500	2.80	2.85	2.90	2.95	3.00	3.05	3.10	3.15	3.20	3.25
1112	600	3.30	3.35	3.40	3.45	3.50	3.55	3.60	3.65	3.70	3.75

Most applications' operational temperature range of resistance thermometers does not cover the total range given in these tables. Users can seek to specify a thermometer range that is in the middle of the user's application range, minimizing the tolerance value.

For the lower and the upper temperature limits of a specific sensor type, the materials used and the particular conditions of the application are the most essential factors in tolerance values.