

**Table with deviations for class F 0.6 / F 0.3 / F 0.15 / F 0.1**

according to DIN EN 60751

<b>Calculation basis:</b>		<b>Notes on the table <math>R_0 = 2000 \Omega</math></b>
$t \geq 0$	$R(t) = R_0 \cdot (1 + At + Bt^2)$	(X.XX) Only theoretical values (not covered by DIN EN 60751)
$t < 0$	$R(t) = R_0 \cdot (1 + At + Bt^2 + C(t - 100^\circ\text{C})t^3)$	
with constants:	with constants:	
$A = 3.9083 \cdot 10^{-3} \text{ } ^\circ\text{C}^{-1}$ $B = -5.775 \cdot 10^{-7} \text{ } ^\circ\text{C}^{-2}$	$A = 3.9083 \cdot 10^{-3} \text{ } ^\circ\text{C}^{-1}$ $B = -5.775 \cdot 10^{-7} \text{ } ^\circ\text{C}^{-2}$ $C = -4.183 \cdot 10^{-12} \text{ } ^\circ\text{C}^{-4}$	

Class	Validity range [°C]	Tolerance value [°C]
F 0.1 (1/3B)	0 to +150	$\Delta t = \pm(0.1 + 0.0017 \cdot  t )$
F 0.15 (A)	-50 to +300	$\Delta t = \pm(0.15 + 0.002 \cdot  t )$
F 0.3 (B)	-70 to +550	$\Delta t = \pm(0.3 + 0.005 \cdot  t )$
F 0.6 (2B)	-70 to +600	$\Delta t = \pm(0.6 + 0.01 \cdot  t )$

**Nominal value  $R_0 = 2000 \Omega$**

$R_0 = 2000 \Omega$		F 0.6 (2B)		F 0.3 (B)		F 0.15 (A)		F 0.1 (1/3B)	
Temp.	Nominal Resistance	Resistance deviation	Temperature deviation	Resistance deviation	Temperature deviation	Resistance deviation	Temperature deviation	Resistance deviation	Temperature deviation
T [°C]	R [Ω]	[±Ω]	[±K]	[±Ω]	[±K]	[±Ω]	[±K]	[±Ω]	[±K]
-70	1446.69	10.40	1.30	5.20	0.65	(2.32)	(0.29)	(1.75)	(0.22)
-60	1526.56	9.56	1.20	4.78	0.60	(2.15)	(0.27)	(1.61)	(0.20)
-50	1606.13	8.74	1.10	4.37	0.55	1.99	0.25	(1.47)	(0.19)
-40	1685.41	7.91	1.00	3.96	0.50	1.82	0.23	(1.33)	(0.17)
-30	1764.43	7.10	0.90	3.55	0.45	1.66	0.21	(1.19)	(0.15)
-20	1843.20	6.29	0.80	3.15	0.40	1.49	0.19	(1.05)	(0.13)
-10	1921.72	5.49	0.70	2.74	0.35	1.33	0.17	(0.92)	(0.12)
0	2000.00	4.69	0.60	2.34	0.30	1.17	0.15	0.78	0.10
10	2078.05	5.45	0.70	2.73	0.35	1.32	0.17	0.91	0.12
20	2155.87	6.22	0.80	3.11	0.40	1.48	0.19	1.04	0.13
30	2233.46	6.97	0.90	3.49	0.45	1.63	0.21	1.17	0.15
40	2310.82	7.72	1.00	3.86	0.50	1.78	0.23	1.30	0.17
50	2387.94	8.47	1.10	4.24	0.55	1.93	0.25	1.42	0.19
60	2464.84	9.21	1.20	4.61	0.60	2.07	0.27	1.55	0.20
70	2541.50	9.95	1.30	4.98	0.65	2.22	0.29	1.68	0.22
80	2617.94	10.68	1.40	5.34	0.70	2.37	0.31	1.80	0.24
90	2694.14	11.41	1.50	5.71	0.75	2.51	0.33	1.92	0.25
100	2770.11	12.13	1.60	6.07	0.80	2.65	0.35	2.05	0.27
110	2845.85	12.85	1.70	6.43	0.85	2.80	0.37	2.17	0.29
120	2921.36	13.57	1.80	6.78	0.90	2.94	0.39	2.29	0.30
130	2996.64	14.28	1.90	7.14	0.95	3.08	0.41	2.41	0.32
140	3071.69	14.98	2.00	7.49	1.00	3.22	0.43	2.53	0.34
150	3146.50	15.68	2.10	7.84	1.05	3.36	0.45	2.65	0.36
160	3221.09	16.38	2.20	8.19	1.10	3.50	0.47	(2.77)	(0.37)
170	3295.44	17.07	2.30	8.54	1.15	3.64	0.49	(2.89)	(0.39)
180	3369.57	17.76	2.40	8.88	1.20	3.77	0.51	(3.00)	(0.41)
190	3443.46	18.44	2.50	9.22	1.25	3.91	0.53	(3.12)	(0.42)
200	3517.12	19.11	2.60	9.56	1.30	4.04	0.55	(3.24)	(0.44)
210	3590.55	19.79	2.70	9.90	1.35	4.18	0.57	(3.35)	(0.46)
220	3663.75	20.45	2.80	10.23	1.40	4.31	0.59	(3.46)	(0.47)

The mentioned table values were calculated to the polynomial of DIN EN 60751 with microsoft excel.

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Nominal value $R_0 = 2000 \Omega$									
$R_0 = 2000 \Omega$		F 0.6 (2B)		F 0.3 (B)		F 0.15 (A)		F 0.1 (1/3B)	
Temp.	Nominal Resistance	Resistance deviation	Temperature deviation	Resistance deviation	Temperature deviation	Resistance deviation	Temperature deviation	Resistance deviation	Temperature deviation
T[°C]	R[Ω]	[±Ω]	[±K]	[±Ω]	[±K]	[±Ω]	[±K]	[±Ω]	[±K]
230	3736.72	21.12	2.90	10.56	1.45	4.44	0.61	(3.58)	(0.49)
240	3809.46	21.78	3.00	10.89	1.50	4.57	0.63	(3.69)	(0.51)
250	3881.96	22.43	3.10	11.22	1.55	4.70	0.65	(3.80)	(0.53)
260	3954.24	23.08	3.20	11.54	1.60	4.83	0.67	(3.91)	(0.54)
270	4026.28	23.72	3.30	11.87	1.65	4.96	0.69	(4.02)	(0.56)
280	4098.10	24.36	3.40	12.19	1.70	5.09	0.71	(4.13)	(0.58)
290	4169.68	25.00	3.50	12.50	1.75	5.22	0.73	(4.24)	(0.59)
300	4241.03	25.63	3.60	12.82	1.80	5.34	0.75	(4.34)	(0.61)
310	4312.15	26.26	3.70	13.13	1.85	(5.47)	(0.77)	(4.45)	(0.63)
320	4383.04	26.88	3.80	13.44	1.90	(5.59)	(0.79)	(4.56)	(0.64)
330	4453.70	27.49	3.90	13.75	1.95	(5.71)	(0.81)	(4.66)	(0.66)
340	4524.13	28.11	4.00	14.06	2.00	(5.84)	(0.83)	(4.77)	(0.68)
350	4594.32	28.71	4.10	14.36	2.05	(5.96)	(0.85)	(4.87)	(0.70)
360	4664.29	29.32	4.20	14.66	2.10	(6.08)	(0.87)	(4.97)	(0.71)
370	4734.02	29.91	4.30	14.96	2.15	(6.20)	(0.89)	(5.07)	(0.73)
380	4803.53	30.51	4.40	15.26	2.20	(6.31)	(0.91)	(5.18)	(0.75)
390	4872.80	31.10	4.50	15.55	2.25	(6.43)	(0.93)	(5.28)	(0.76)
400	4941.84	31.68	4.60	15.85	2.30	(6.55)	(0.95)	(5.38)	(0.78)
410	5010.65	32.26	4.70	16.14	2.35	(6.66)	(0.97)	(5.47)	(0.80)
420	5079.23	32.84	4.80	16.42	2.40	(6.78)	(0.99)	(5.57)	(0.81)
430	5147.58	33.41	4.90	16.71	2.45	(6.89)	(1.01)	(5.67)	(0.83)
440	5215.70	33.97	5.00	16.99	2.50	(7.00)	(1.03)	(5.77)	(0.85)
450	5283.58	34.53	5.10	17.27	2.55	(7.11)	(1.05)	(5.86)	(0.87)
460	5351.24	35.09	5.20	17.55	2.60	(7.23)	(1.07)	(5.96)	(0.88)
470	5418.66	35.64	5.30	17.83	2.65	(7.34)	(1.09)	(6.05)	(0.90)
480	5485.86	36.19	5.40	18.10	2.70	(7.44)	(1.11)	(6.14)	(0.92)
490	5552.82	36.73	5.50	18.37	2.75	(7.55)	(1.13)	(6.24)	(0.93)
500	5619.55	37.27	5.60	18.64	2.80	(7.66)	(1.15)	(6.33)	(0.95)
510	5686.05	37.80	5.70	18.91	2.85	(7.77)	(1.17)	(6.42)	(0.97)
520	5752.32	38.33	5.80	19.17	2.90	(7.87)	(1.19)	(6.51)	(0.98)
530	5818.36	38.85	5.90	19.44	2.95	(7.97)	(1.21)	(6.60)	(1.00)
540	5884.17	39.37	6.00	19.70	3.00	(8.08)	(1.23)	(6.69)	(1.02)
550	5949.74	39.89	6.10	19.95	3.05	(8.18)	(1.25)	(6.77)	(1.04)
560	6015.09	40.40	6.20	(20.21)	(3.10)	(8.28)	(1.27)	(6.86)	(1.05)
570	6080.20	40.90	6.30	(20.46)	(3.15)	(8.38)	(1.29)	(6.95)	(1.07)
580	6145.09	41.40	6.40	(20.71)	(3.20)	(8.48)	(1.31)	(7.03)	(1.09)
590	6209.74	41.90	6.50	(20.96)	(3.25)	(8.58)	(1.33)	(7.12)	(1.10)
600	6274.16	42.39	6.60	(21.21)	(3.30)	(8.68)	(1.35)	(7.20)	(1.12)

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