

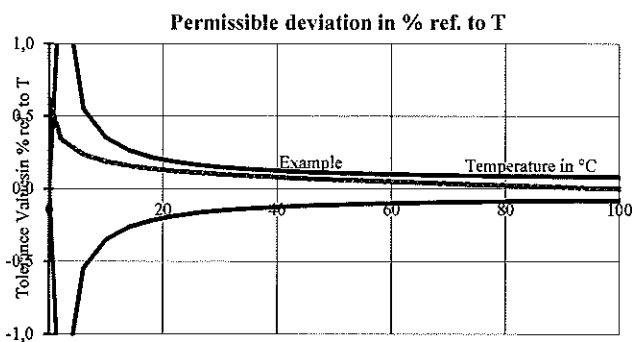
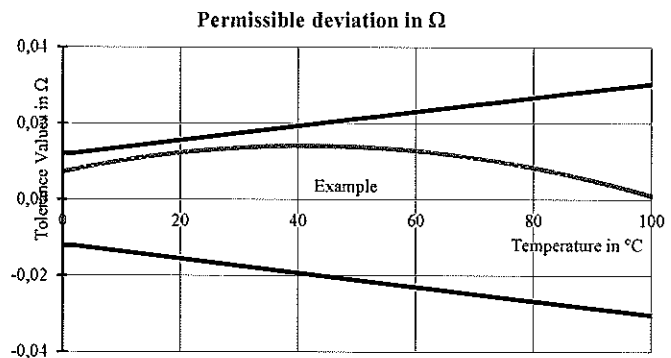
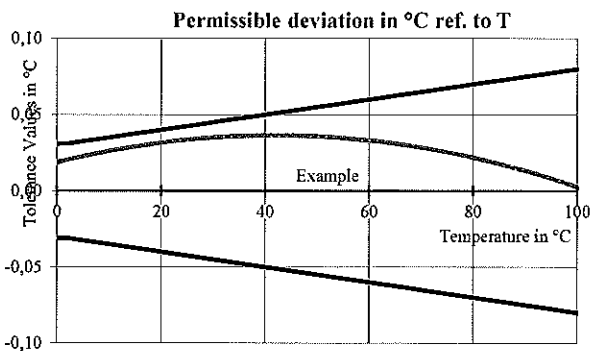
Platinum resistance Elements Tolerance class: Klasse 1/10 B 0°C bis +100°C

$$R_0 = 100\text{Ohm} \pm 0,012 \text{ Ohm} \quad (99,988\text{Ohm} < R_0 < 100,012 \text{ Ohm})$$

$$\text{Permissible deviation in } ^\circ\text{C: } Dt = \pm (0,03^\circ\text{C} + 0,0005 \cdot |t|) = \pm (0,03^\circ\text{C} + 0,0005 \cdot |t|)$$

Tolerance class	Temperature Range	Tolerance in °C	Permissible deviation at 0°C		
			Temperature Value	Resistance-Value $R_0 = 100\text{Ohm}$	Percent Value
Klasse 1/10 B	0°C bis +100°C	$\pm(0,03^\circ\text{C} + 0,0005 \cdot t)$	$\pm 0,03^\circ\text{C}$	$\pm 0,012 \Omega$	0,01%

Temperature °C	Resistance R_t Ω	Sensibility $\frac{\Omega}{^\circ\text{C}}$	Permissible deviation			Limiting Value in Ω		Example	
			°C	Ω	% ref. to T	min	max	R_{tSMW} Ω	E_{SMW} $\frac{\Omega}{^\circ\text{C}}$
0	100,000	0,3908	$\pm 0,030$	$\pm 0,012$		99,988	100,012	100,006	0,39120
5	101,953	0,3903	$\pm 0,033$	$\pm 0,013$	$\pm 0,65$	101,940	101,965	101,960	0,39058
10	103,903	0,3897	$\pm 0,035$	$\pm 0,014$	$\pm 0,35$	103,889	103,916	103,912	0,38996
15	105,849	0,3891	$\pm 0,038$	$\pm 0,015$	$\pm 0,25$	105,835	105,864	105,860	0,38934
20	107,794	0,3885	$\pm 0,040$	$\pm 0,016$	$\pm 0,20$	107,778	107,809	107,805	0,38872
28,35	111,034	0,3876	$\pm 0,044$	$\pm 0,017$	$\pm 0,16$	111,016	111,051	111,047	0,38769
30	111,673	0,3874	$\pm 0,045$	$\pm 0,017$	$\pm 0,15$	111,655	111,690	111,686	0,38749
35	113,608	0,3868	$\pm 0,048$	$\pm 0,018$	$\pm 0,14$	113,590	113,627	113,622	0,38687
40	115,541	0,3862	$\pm 0,050$	$\pm 0,019$	$\pm 0,13$	115,521	115,560	115,555	0,38625
45	117,470	0,3856	$\pm 0,053$	$\pm 0,020$	$\pm 0,12$	117,450	117,491	117,485	0,38563
100	138,506	0,3793	$\pm 0,080$	$\pm 0,030$	$\pm 0,08$	138,475	138,536	138,508	0,37887



$$R_0 = 100,006\Omega$$

$$R_{100} = 138,508\Omega$$

$$TC = 3,850 \cdot 10^{-3} \text{ } ^\circ\text{C}^{-1}$$

Datum: 23.08.2012

Prüfer: Müller