

Applications

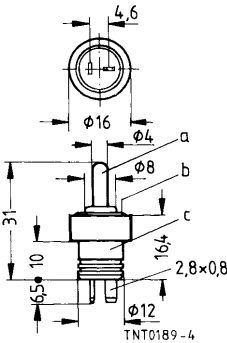
- Heating systems
- Water boilers

Features

- For temperature measurement in liquids
- Stainless steel case (a); the NTC is incorporated in the injection-molded plastic base (c)
- Tab connectors $2,8 \times 0,8$
- With O sealing ring (b)
- Fast response

Options

Cable connectors, customized case styles,
alternative resistance ratings, rated temperatures
and tolerances available on request



Dimensions in mm
Approx. weight 4,5 g

Climatic category (IEC 68-1)		25/100/56	
Max. power at 25 °C	P_{25}	100	mW
Resistance tolerance	$\Delta R/R_N$	$\pm 2 \%$	
Rated temperature	T_N	25	°C
B value tolerance	$\Delta B/B$	$\pm 1,5 \%$	
Dissipation factor (in air)	δ_{th}	approx. 9	mW/K
Thermal time constant (in water)	τ_a	approx. 2,5	s
Heat capacity	C_{th}	approx. 20	mJ/K

Type	R_{25} Ω	No. of R/T characteristic	$B_{25/100}$ K	Ordering code
Z 10/10 k/G	10 k	2001	3920	B57010-Z103-G

Reliability data

Test	Standard	Test conditions	$\Delta R_{25}/R_{25}$ (typical)	Remarks
Storage in dry heat	IEC 68-2-2	Storage at upper category temperature T : 100 °C t : 1000 h	< 1 %	No visible damage
Storage in damp heat, steady state	IEC 68-2-3	Temperature of air: 40 °C Relative humidity of air: 93 % Duration: 56 days	< 0,5 %	No visible damage
Rapid temperature cycling	IEC 68-2-14	Lower test temperature: – 25 °C Upper test temperature: 100 °C Number of cycles: 10	< 1 %	No visible damage
Endurance		$P_{\max}$: 100 mW Duration: 1000 h	< 2 %	No visible damage
Long-term stability (empirical value)		Temperature: 100 °C Duration: 10 000 h	< 2 %	No visible damage
Robustness of terminations	DIN 46 249	Pull-out force (both connectors together) $F = 50 \text{ N}$	—	No visible damage