

**Applications**

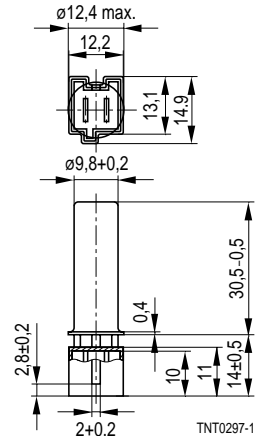
- Washing machines
- Dish washers
- Tumble-dryers
- Water boilers

**Features**

- Suitable for use in corrosive environments
- Compact stainless steel case
- FASTON 5 plug terminals  
(DIN 46 244/4,8 × 0,8)  
 $R_{is} > 1000 \text{ M}\Omega$  ( $V = 100 \text{ V dc}$ )  
 $V_{is} = 3750 \text{ V dc}$  ( $t = 1 \text{ s}$ )
- Cost-effective ready-to-use sensor

**Options**

Alternative resistance ratings, rated temperatures and resistance tolerances available on request



Dimensions in mm  
Approx. weight 10 g

Climatic category (IEC 68-1)		10/100/56	
Max. power at 25 °C	$P_{25}$	500	mW
Resistance tolerance	$\Delta R/R_N$	± 2 %	
Rated temperature	$T_N$	80	°C
B value tolerance	$\Delta B/B$	± 1,5 %	
Dissipation factor (in water)	$\delta_{th}$	approx. 20	mW/K
Thermal time constant	$\tau_a$	approx. 15	s
Heat capacity	$C_{th}$	approx. 100	mJ/K

Type	$R_{80}$ Ω	$R_{25}$ Ω	No. of R/T characteristic	$B_{25/100}$ K	Ordering code
K 276/12 k/A27	1704	11982	2901	3760	B57276-K123-A27

**Reliability data**

Test	Standard	Test conditions	$\Delta R_{25}/R_{25}$ (typical)	Remarks
Storage in dry heat	IEC 60068-2-2	Storage at upper category temperature T: 100 °C t: 1000 h	< 2 %	No visible damage
Storage in damp heat, steady state	IEC 60068-2-3	Temperature of air: 40 °C Relative humidity of air: 93 % Duration: 56 days	< 1 %	No visible damage
Rapid temperature cycling	IEC 60068-2-14	Lower test temperature: – 10 °C Upper test temperature: 100 °C Number of cycles: 10	< 1 %	No visible damage
Endurance		$P_{\max}$ : 500 mW Duration: 1000 h	< 2 %	No visible damage
Long-term stability (empirical value)		Temperature: 100 °C Duration: 10 000 h	< 3 %	No visible damage
Robustness of terminations	DIN 46 249	Pull-out force (both connectors together) $F = 50 \text{ N}$	—	No visible damage