

Housed Platinum Resistance Temperature Detector

TO 92

The PRTD in a plastic housing is characterized by its standardized signal according to DIN EN 60751 (according to IEC 751), interchangeability, excellent long time stability and accuracy. It offers an optimal price-performance ratio in large volume applications including Automotive, Domestic Appliances and Industrial Equipment.

Nominal Resistance R0	Tolerance DIN EN 60751 1996-07	Tolerance DIN EN 60751 2009-05	Order Number Plastic Box
100 Ohm at 0°C	Class B	F 0,3	32 209 210
	Class 2B	F 0,6	32 209 216
1000 Ohm at 0°C	Class B	F 0,3	32 209 220
	Class 2B	F 0,6	32 209 226

Specification DIN EN 60751 (according to IEC 751)

Temperature range -50°C to +150°C

Tolerance Class B or 2B: -50°C up to +150°C

Temperature coefficient TC = 3850 ppm/K

Soldering connection Cu alloy with Sn coating

Long-term stability max. R₀-drift 0.06% after 1000 h at 150°C max. R₀-drift 0.04% after 1000 h at -55°C

Self heating Pt100: 0.4 K/mW

Pt1000: 0.2 K/mW

Response time water current (v = 0.4 m/s): $t_{0.5} = 0.7 \text{s}$

 $\begin{array}{c} t_{0.9} = 2.0s \\ \text{air stream (v = 2 m/s):} \\ \end{array}$

 $t_{0.9} = 26s$

Resistance to soldering heat max. deviation 0.03% after 10s at 260°C

Flammability UL 94-V0

Specific volume 20° C: 5×10^{16} Ωcmresistance 150° C: 5×10^{13} Ωcm

Physical data material: duroplastic

of housing coefficient of thermal expansion: 13 x 10⁻⁶ /°C

thermal conductivity: 0.65 W/mK

moisture absorption: 0.5% (P.C.T.: 121°C, 24h)

Storing information ≤ 1 year (in dry environments) for best solderability

Note Other tolerances and values of resistance are

available on request.

4,2±0,5 4,2±0,2 4,1±0,2 5,0±2,1 4,1±0,2 1,0±2,1 1,0±0,2 1,0



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We reserve the right to make alterations and technical data printed. All technical data serves as a guideline and does not guarantee particular properties to any products.

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