

Platinum Resistance Temperature Detector

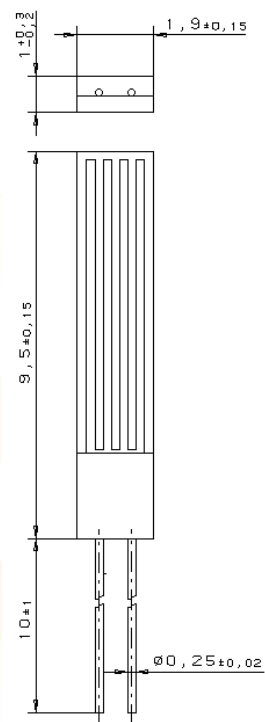
L 1020

L series PRTDs are designed for large volume applications where long term stability, interchangeability and accuracy over a large temperature range are vital. Typical applications are Automotive, White Goods, HVAC, Energy Management, Medical and Industrial equipment.

| Nominal Resistance R_0 | Tolerance | Order No. Plastic bag |
|-----------------------------|-----------------------------|--------------------------|
| 100 Ohm at 0°C | DIN EN 60751, class B | 32 207 708 |
| | DIN EN 60751, class A | 32 207 579 |
| | DIN EN 60751, class 1/3 DIN | 32 207 585 |
| 500 Ohm at 0°C | DIN EN 60751, class B | 32 207 709 |
| 1000 Ohm at 0°C | DIN EN 60751, class B | 32 207 710 |
| | DIN EN 60751, class A | 32 207 581 |
| | DIN EN 60751, class 1/3 DIN | 32 207 586 |

The measuring point for the nominal resistance is defined at 8 mm from the end of the sensor body.

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| Specification | DIN EN 60751 (according to IEC 751) |
| Temperature range | -50°C to + 400°C (continuous operation) Tolerance class B: - 50 °C to + 400 °C Tolerance class A: - 50 °C to + 300 °C Tolerance class 1/3 DIN: 0 °C to + 150 °C |
| Temperature coefficient | TCR = 3850 ppm/K |
| Leads | AgPd |
| Long-term stability | max. R_0 -drift 0.04% after 1000 h at 400 °C |
| Vibration resistance | at least 40 g acceleration at 10 to 2000 Hz, depends on installation |
| Shock resistance | at least 100 g acceleration with 8ms half sine wave, depends on installation |
| Environmental conditions | unhoused for dry environments only |
| Insulation resistance | > 100 M Ω at 20 °C; > 2 M Ω at 500 °C |
| Self heating | 0.2 K/mW at 0 °C |
| Response time | water current ($v = 0.4$ m/s): $t_{0.5} = 0.12$ s; $t_{0.9} = 0.30$ s air stream ($v = 2$ m/s): $t_{0.5} = 6.0$ s; $t_{0.9} = 20.0$ s |
| Measuring current | 100 Ω : 0.3 to 1.0 mA 500 Ω : 0.1 to 0.7 mA 1000 Ω : 0.1 to 0.3 mA (self heating has to be considered) |
| Note | Other tolerances, values of resistance and wire lengths are available on request. |



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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