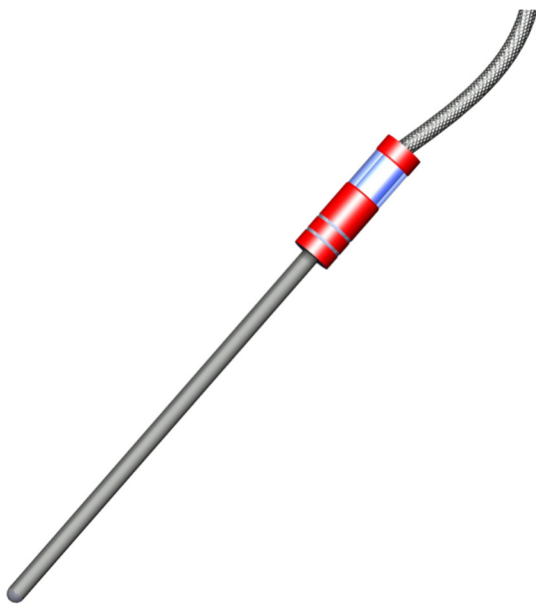# EP-E164
Industrial reference thermometer

Precise reference thermometer for measuring exact temperatures or used as industrial temperature standard e.g. for temperature dry block calibrators.

Pt100: -100 °C to 250 °C

- **slim design**
  The small handle allows the use in cramped conditions such as temperature dry block calibrators

- **1/10 DIN Pt 100**
  Use of highly stable and annealed detectors.

- **configurable**
  individually combinable according to many parameters

Calibration

eXacal thermometers are calibrated in our own DAkkS calibration laboratory. The DAkkS accreditation ensures that all calibrations are traceable to national and international standards. The calibration of eXacal resistance thermometers is carried out at ITS-90 fixed points. It is also possible to carry out calibrations according to the comparison method in liquid baths and calibration furnaces. The measurement uncertainty is calculated from many components. The largest contributions are reproducibility, ITS-90 function, self-heating and hysteresis.

Technical Data

Model	eXacal EP-E164
Temperature range	-100 °C to 250 °C
Nominal resistance	Pt100 (100 Ohm)
typical annual drift	2,5mk
Connection type	Four-wire
Connecting cable	temperature resistance – very low EMF stranded wires from own production
Connection	depending on configuration
Sheath material	Metal
Thermometer wire	silver
Dimensions	
Handle	∅12mm x 40mm
diameter	4mm
Length	depending on configuration
Connection cable	depending on configuration
Detector	
R0	100 Ohm ± 0,05 Ohm
Alpha	0,003850 ± 0,000005
Standard	IEC 60751:2008
tolerance	1/10 DIN
length	6mm
recommended measuring current	1mA
Self-heating	4mK
DAkkS calibration	
Comparison calibration	10 mK to 40 mK