Honeywell Sensing and Control

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HEL-707-U-1-12-00

HEL-700 Series Temperature Sensor, Platinum RTD, Ceramic case leadwire

Representative photograph, actual product appearance may vary.

▶ Charts and diagrams
▶ Specifications

Features

- Linear resistance vs temperature
- Accurate and interchangeable
- Excellent stability
- Small for fast response
- Wide temperature range

Typical Applications

- HVAC - room, duct and refrigerant temperature
- Electronic assemblies - thermal management, temperature compensation
- Process control - temperature regulation

Description

HEL-700 Thin Film Platinum RTDs (Resistance Temperature Detectors) provide excellent linearity, accuracy, stability and interchangeability. Resistance changes linearly with temperature.

Product Specifications	
Termination	Leadwires
Availability	Global
Sensor Type	1000 Ohm Platinum RTD
Temperature Coefficient	0.00375 Ohm /Ohm/°C
Packaging Type	Ceramic case
Temperature Sensing Range	-75 °C to 540 °C (-100 °F to 1000 °F)
Base Resistance and Interchangeability	1000 ± 1 Ohm at 0 °C
Linearity % of Full Scale	± 0.1%, Typ. -40 °C to +125 °C [-40 °F to 257 °F]; ± 2.0%, max. -75 °C to +540 °C [-167 °F to 1004 °F]
Time Constant in water at 0.914 m/s [3 ft/s]	< 0.5 s
Stability	> 0,25 °C Per year; 0,05 °C per five years in occupied environment
Supply Voltage	4.0 Vdc to 9.0 Vdc

Supply Current (Recommended)	1 mA typ., 2 mA max.
Self Heating	< 15 mW/°C typ.
Insulation Resistance	> 50 MOhms at 50 Vdc, 25 °C [77 °F]
Termination Details	28 gauge, Nickel coated stranded copper, Fiberglass insulated
Series Name	HEL-700 Series
Construction	Alumina case; epoxy potting (Teflon leads); ceramic potting (Fiberglass leads)
UNSPSC Code	411121
UNSPSC Commodity	411121 Transducers

Due to regional agency approval requirements, some products may not be available in your area.
Please contact your regional Honeywell office regarding your product of choice.