



*Representative photograph,  
actual product appearance may  
vary.*

*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.*

## **HEL-712-U-0-12-00**

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

### **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.



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| <b>Product Specifications</b>                       |  |
|---|--|
| <b>Termination</b>                                  | Leadwires  |
| <b>Availability</b>                                 | Global   |
| <b>Sensor Type</b>                                  | 1000 Ohm Platinum RTD  |
| <b>Temperature Coefficient</b>                      | 0.00375 Ohm /Ohm/°C  |
| <b>Packaging Type</b>                               | Ceramic case   |
| <b>Temperature Sensing Range</b>                    | -75 °C to 540 °C (-100 °F to 1000 °F)  |
| <b>Base Resistance and Interchangeability</b>       | 1000 ± 2 Ohm at 0 °C   |
| <b>Linearity % of Full Scale</b>                    | ± 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] |
| <b>Time Constant in water at 0.914 m/s [3 ft/s]</b> | < 0.5 s  |
| <b>Stability</b>                                    | > 0,25 °C Per year; 0,05 °C per five years in occupied environment                                     |
| <b>Supply Voltage</b>                               | 4.0 Vdc to 9.0 Vdc   |
| <b>Supply Current (Recommended)</b>                 | 1 mA typ., 2 mA max.   |
| <b>Self Heating</b>                                 | < 15 mW/°C typ.  |
| <b>Insulation Resistance</b>                        | > 50 MOhms at 50 Vdc, 25 °C [77 °F]  |
| <b>Termination Details</b>                          | 28 gauge, Nickel coated stranded copper, Fiberglass insulated  |
| <b>Series Name</b>                                  | HEL-700 Series   |
| <b>Construction</b>                                 | Alumina case; epoxy potting ( Teflon leads); ceramic potting (Fiberglass leads)                        |
| <b>UNSPSC Code</b>                                  | 411121   |
| <b>UNSPSC Commodity</b>                             | 411121 Transducers   |

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** WARNING**

**PERSONAL INJURY**

DO NOT USE these products as safety or emergency stop devices, or in any other application where failure of the product could result in personal injury.

**Failure to comply with these instructions could result in death or serious injury.**

** WARNING**

**MISUSE OF DOCUMENTATION**

- The information presented in this product sheet (or catalog) is for reference only. DO NOT USE this document as product installation information.
- Complete installation, operation and maintenance information is provided in the instructions supplied with each product.

**Failure to comply with these instructions could result in death or serious injury.**