# Honeywell



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-705-U-1-12-00

**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.

## Honeywell

HEL-705-U-1-12-00

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

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	-200 °C to 260 °C (-320 °F to 500 °F)
Base Resistance and Interchangeability	1000 ± 1 Ohm at 0 °C
Linearity % of Full Scale	± 0.1%, Typ40 °C to +125 °C [-40 °F to 257 °F]; ± 2.0%, max75 °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, Teflon insulated
Series Name	HEL-700 Series
Construction	Alumina case; epoxy potting (Teflon leads); ceramic potting (Fiberglass leads)
UNSPSC Code	411121
UNSPSC Commodity	411121 Transducers

# **Honeywell**

## HEL-705-U-1-12-00

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

## **A** 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.

## **A** 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.

© Copyright Honeywell Inc. 1998-2006 All rights reserved.