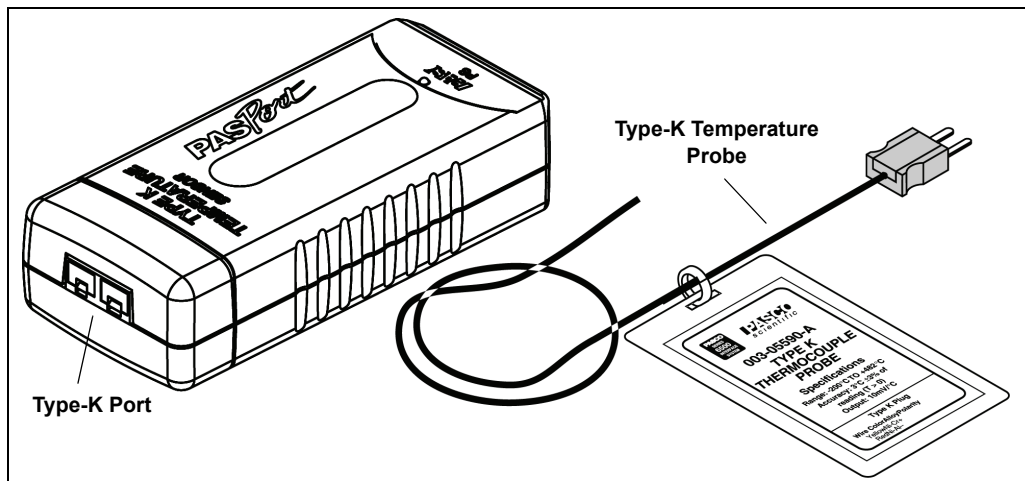


Type-K Temperature Sensor

PS-2134



Included Items
Type-K Temperature Sensor
Type-K Thermocouple Probe (PS-2155)

Required Items*
PASCO Interface
PASCO Data Acquisition Software

*See the PASCO catalog or the PASCO web site at www.pasco.com for more information.

Recommended Items*
Sensor Extension Cable (PS-2500)
Teflon [®] Sensor Covers (CI-6549)

Introduction

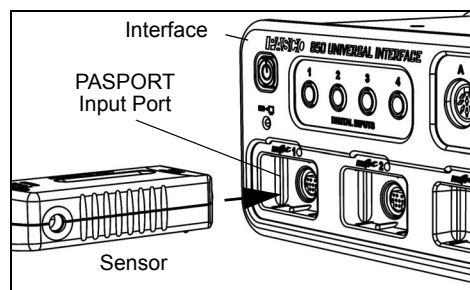
The PS-2134 Type-K Temperature Sensor measures temperature from a “Type-K” thermocouple probe. The tip of the probe has a temperature range of -200°C to 1000°C. The insulation on the probe can withstand temperatures between -73°C and 482°C.

The sensor is designed to work with a PASPORT-compatible interface (such as the PASCO 850 Universal Interface) and

PASCO data acquisition software (such as PASCO Capstone) to measure temperature.

Setup the Sensor

- Plug the sensor into one of the PASPORT input ports of a PASCO PASPORT-compatible interface.



NOTE: If more distance is needed between the sensor and the interface, plug the sensor into a Sensor Extension Cable, and then plug the cable into the interface.

- Plug the “Type-K” thermocouple probe into the sensor.
- Start the PASCO data acquisition software.

Using PASCO Capstone Software

- Click the “Hardware Setup” icon in the Tools palette to open the “Hardware Setup” panel. Confirm that the sensor’s icon appears with the interface’s icon.
- Click one of the display templates in the Capstone workbook page, or double-click an icon in the “Displays” palette to open a data display.

- By default, temperature will be shown in a data display. Click “Data Summary” in the Tools palette to change what is displayed if needed.

Using SPARKvue Software

- Connect the sensor to a SPARKvue-compatible interface and start the software. The sensor parameter screen opens and shows the list of measurements for the sensor.
- In the sensor parameter screen, touch the measurement, and then touch ‘Show’ to open a graph display.

More Information

For more information about collecting, recording, displaying and analyzing data, refer to the User’s Guide or Online Help System for the data acquisition software.

Sensor Usage

Caution: To avoid damaging the sensor box, do not put the Type-K Temperature Sensor box in water, liquids, chemicals, ovens, or fire at any time.

Tip: If the Type-K Temperature Sensor is used to take measurements of a flame, do not let the flame make contact with the thermocouple’s insulation. Put only the tip of the thermocouple probe into the flame.



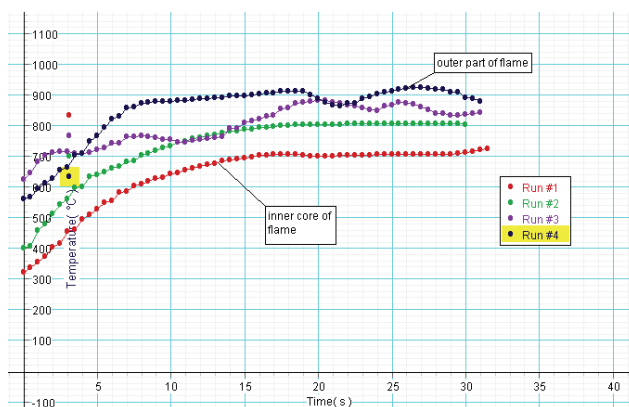
Tip: If the Type-K Temperature Sensor is used to take freezer measurements, put the probe in the freezer but keep the sensor box outside of the freezer.

SAFETY WARNING: When working with candles, flames, or hot objects, always follow standard fire and health safety procedures. Do NOT touch the Type-K probe tip. When the probe is in a candle flame, it will be hot (between 400 and 1400°C).

Suggestion

Use the Type-K Temperature Sensor to map the temperatures of a candle flame. Place the probe tip at different positions in the flame.

Sample Data



Specifications

Type-K Temperature Sensor	Value
Probe Tip Range:	-200°C to 1000°C
Probe Insulation Range:	-73°C to 482°C
Accuracy:	±3°C or 3% of reading
Resolution:	0.1°C
Sensing Element (tip):	Chromel and alumel thermocouple

More Information

For the latest information about the sensor, visit www.pasco.com and enter “PS-2134” or the product name in the Search window.

Technical Support

For assistance with any PASCO product, contact PASCO at:

Address: PASCO scientific
 10101 Foothills Blvd.
 Roseville, CA 95747-7100

Phone: +1 916-786-3800 (worldwide)
 800-772-8700 (U.S.)

E-mail: support@pasco.com

Web www.pasco.com

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This electronic product is subject to disposal and recycling regulations that vary by country and region. It is your responsibility to recycle your electronic equipment per your local environmental laws and regulations to ensure that it will be recycled in a manner that protects human health and the environment. To find out where you can drop off your waste equipment for recycling, please contact your local waste recycle/disposal service, or the place where you purchased the product.

The European Union WEEE (Waste Electronic and Electrical Equipment) symbol (to the right) and on the product or its packaging indicates that this product must not be disposed of in a standard waste container.

