

Rugged Infrared Thermocouple

11° (5:1) Field of View

Integral Air Cool/ Purge Head



OS36-5-K-140F, \$475, shown smaller than actual size.

OS36-5 Series

\$475

All Models



OMEGACARESM extended warranty program is available for models shown on this page. Ask your sales representative for full details when placing an order. OMEGACARESM covers parts, labor and equivalent loaners.

- ✓ High-Quality Infrared Thermocouple
- ✓ All Stainless Steel Construction
- ✓ 5:1 Field of View
- ✓ Built-In Air Purge
- ✓ J, K, E, or T Thermocouple Output Signal
- ✓ Self-Powered
- ✓ Temperature Compensated

The OS36-5 Series extends the range of applications for infrared thermocouple thermometry to situations in which the sensor is mounted remotely from the target. To the ruggedness and ease of use of the original OS36 Series, the new OS36-5 Series adds hermetic sealing and an internal air cool/purge system. This series exceeds all applicable NEMA standards and is intrinsically safe when used with appropriate barriers.

Specifications

Accuracy: ±2% of nominal range; blackbody source

Repeatability: ±1% rdg

Temperature Coefficient:

±0.02% nominal range per °F

Temperature Compensation Range:

Complies with ASTM standards over 27 to 93°C (80 to 200°F) range

Operating Ambient Temperature Range:

-18 to 85°C (0 to 185°F) with internal cold junction compensation

Air Purge: Built-in

Ambient Temperature Compensation:

With air flow of 1.1 SCFM (20 psig), max is 204°C (400°F)

Storage Temperature Range:

-45 to 121°C (-50 to 250°F)

Response Time: 80 ms

Spectral Response: 6.5 to 14 microns

Range†: -45 to 1100°C (-50 to 2000°F)

Field of View: 11° (5:1)

Minimum Spot Size: 20 mm (0.8")

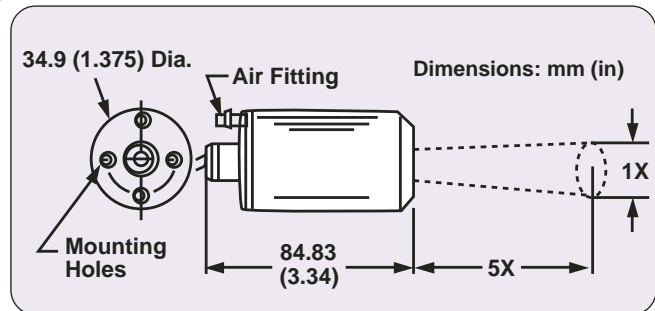
Output Impedance: 4 to 8 kΩ (varies by model)

Dimensions: 8.38 L x 3.49 cm Dia. (3.3 x 1.375");

0.9 m (36") PFA coated lead wires

Weight: 184 g (6.5 oz) with cable

† See Range Chart for linear ranges. Measurement is practical beyond thermocouple table values by use of radiation laws. Polynomials available upon request.



Range Chart

Range Code	Temperature Range (2% Accuracy)
50F	-18 to 27°C (0 to 80°F)
80F	10 to 49°C (50 to 120°F)
98.6F	16 to 39°C (60 to 102°F)
140F	25 to 80°C (80 to 180°F)
180F	70 to 104°C (160 to 220°F)
240F	95 to 130°C (200 to 270°F)
280F	125 to 155°C (260 to 310°F)
340F	145 to 175°C (290 to 350°F)
440F	170 to 250°C (340 to 480°F)

MOST POPULAR MODELS HIGHLIGHTED!

To Order (Specify Model Number)

Model No.	Price	Description
OS36-5-J-*	\$475	J thermocouple
OS36-5-K-*	475	K thermocouple
OS36-5-T-*	475	T thermocouple
OS36-5-E-*	475	E thermocouple
EE-2649	32	Reference Book: Electric Circuit: Fundamentals and Applications

* Specify temperature range code from range chart above. Comes complete with operator's manual.

Note: Stripped leads are standard.

To order with GMP subminiature low-noise thermocouple connector pair, add suffix "-GMP" to model number, and \$12 to price.

To order with GST standard-size low-noise thermocouple connector pair, add suffix "-GST" to model number, and \$12 to price.

Ordering Examples: OS36-5-E-140F-GMP, IR thermocouple sensor Type E, with 25 to 80°C (80 to 180°F) range, GMP low-noise subminiature connectors, \$475 + 12 = \$487. OCW-2, OMEGACARESM extends standard 2-year warranty to a total of 4 years (\$85), \$475 + 85 = \$560.

OS36-5-K-240F, IR thermocouple sensor Type K with 95 to 130°C (200 to 270°F) range, \$475.

omega.co.uk[®]

Your One-Stop Source for Process Measurement and Control!

Freephone 0800 488 488 | International +44(0) 161 777 6622 | Fax +44(0) 161 777 6622 | Sales@omega.co.uk

www.omega.co.uk



UNITED STATES

www.omega.com

1-800-TC-OMEGA
Stamford, CT.

UNITED KINGDOM

www.omega.co.uk

Manchester, England
0800-488-488
+44-(0)161-777-6611

CANADA

www.omega.ca

Laval(Quebec)
1-800-TC-OMEGA

FRANCE

www.omega.fr

0800-466-342

GERMANY

www.omega.de

Deckenfronn, Germany
0800-8266342

BENELUX

www.omega.nl

0800-099-33-44



More than 100,000 Products Available!

• Temperature

Calibrators, Connectors, General Test and Measurement Instruments, Handheld Instruments for Temperature Measurement, Ice Point References, Indicating Labels, Crayons, Cements and Lacquers, Infrared Temperature Measurement Instruments, Recorders, Relative Humidity Measurement Instruments, PT100 Probes, PT100 Elements, Temperature & Process Meters, Timers and Counters, Temperature and Process Controllers and Power Switching Devices, Thermistor Elements, Probes and Assemblies, Thermocouples, Thermowells and Head and Well Assemblies, Transmitters, Thermocouple Wire, RTD Probes

• Flow and Level

Air Velocity Indicators, Doppler Flowmeters, Level Measurement, Magnetic Flowmeters, Mass Flowmeters, Pitot Tubes, Pumps, Rotameters, Turbine and Paddle Wheel Flowmeters, Ultrasonic Flowmeters, Valves, Variable Area Flowmeters, Vortex Shedding Flowmeters

• pH and Conductivity

Conductivity Instrumentation, Dissolved Oxygen Instrumentation, Environmental Instrumentation, pH Electrodes and Instruments, Water and Soil Analysis Instrumentation

• Data Acquisition

Communication Products and Converters, Data Acquisition and Analysis Software, Data Loggers Plug-in Cards, Signal Conditioners, USB, RS232, RS485, Ethernet and Parallel Port Data Acquisition Systems, Wireless Transmitters and Receivers

• Pressure, Strain and Force

Displacement Transducers, Dynamic Measurement Force Sensors, Instrumentation for Pressure and Strain Measurements, Load Cells, Pressure Gauges, Pressure Reference Section, Pressure Switches, Pressure Transducers, Proximity Transducers, Regulators, Pressure Transmitters, Strain Gauges, Torque Transducers, Valves

• Heaters

Band Heaters, Cartridge Heaters, Circulation Heaters, Comfort Heaters, Controllers, Meters and Switching Devices, Flexible Heaters, General Test and Measurement Instruments, Heater Hook-up Wire, Heating Cable Systems, Immersion Heaters, Process Air and Duct, Heaters, Radiant Heaters, Strip Heaters, Tubular Heaters