35° Field of View and Air Purge Head

**OS36-2 Series** 



- ✓ Infrared Thermocouple Workhorse
- ✓ 35° (2:1) Field of View
- ✓ Built-In Air Purge
- **✓** J, K, E, or T Thermocouple Output Signal
- Self-Powered
- ✓ Temperature Compensated

The small size and built-in features of the OS36-2 make it ideal for infrared monitoring tasks. The narrow 35° field of view and small aperture allow small-target measurements of up to 4 mm (0.16"). The threaded head securely mounts through a bulkhead or threads into a tapped hole. The internal air purge passages provide a convenient and highly efficient method of maintaining optical cleanliness in harsh environments.

## **Specifications**

Range: -45 to 1150°C (-50 to 2000°F)
See range chart for linear ranges. Measurement is practical beyond thermocouple table values by use of radiation laws. Polynomials available upon request.

Field of View: 35° (2:1)

Minimum Spot Size: 4 mm (0.16")

Operating Ambient Temperature Range: -18 to 85°C (0 to 185°F)

Air Purge: Built-in flow for operation at temperatures of

-18 to 116°C (0 to 240°F)

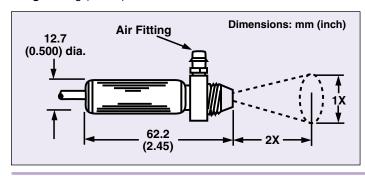
Ambient Temperature Compensation: Internal temperature cold junction compensation up to 538°C (1000°F) water-cooled, 400°C (750°F) air-cooled; cooling jacket optional (model OS36-SPC)

Output Impedance: 4 to 8 k $\Omega$  (varies by model)

**Dimensions:** 6.22 L x 1.27 cm diameter (2.45 x 0.5"); 0.9 m (36")

PFA coated lead wires

Weight: 44 g (1.6 oz) with cable



(200 to 270°F) range, right-angle view, stripped lead termination.



OMEGACARE<sup>SM</sup> extended warranty program is available for models shown on this page. Ask your sales representative for full details when placing an order. OMEGACARES™ covers parts, labor and equivalent loaners.

Air Purge

OS36-2-J-140F

shown actual size.

## Range Chart

Range	Temperature Range
Code	(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)

To Order Visit omega.com/os36-2 for Pricing and Details	
Model No.**	Description
OS36-2-J-(*)	Type J thermocouple
OS36-2-K-(*)	Type K thermocouple
OS36-2-T-(*)	Type T thermocouple
OS36-2-E-(*)	Type E thermocouple
OS36-APC	Cooling jacket

\* Specify temperature range code from range chart. 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 for an additional cost. To order with GST standard-size low-noise thermocouple connector pair, add suffix "-GST" to model number for an additional cost.

Ordering Examples: OS36-2-K-140F-GMP, infrared thermocouple sensor Type K, with 25 to 80°C (80 to 180°F) range, GMP low-noise subminiature connectors.

OS36-2-J-240F, infrared thermocouple sensor Type J, with 95 to 130°C (200 to 270°F) range.

OCW-3, OMEGACARE™ extends standard 2-year warranty to a total of 5 years.

## \*\*Right-Angle Models

To order with right-angle view, for use in difficult-to-view applications, change model number from "OS36-2" to "OS36-2-RA" for an additional cost. Ordering Example: OS36-2-RA-K-240F, infrared thermocouple, Type K, 95 to 130°C

