

# Precision IR Thermocouples

## 6° (10:1) Field of View



OS36-10-K



- ✓ Built-in Air Purge
- ✓ K Thermocouple Output Signal
- ✓ Self-Powered
- ✓ Temperature Compensated

The OS36-10 Series provides precise temperature control for optimum product quality and maximum throughput. Like conventional thermocouples, all IR thermocouples do not require external power and plug into your controller, PLC, data logger, recorder or data acquisition system. They simply measure temperature without contact. The internal air purge passages provide a highly efficient method of maintaining optical cleanliness in harsh environments.



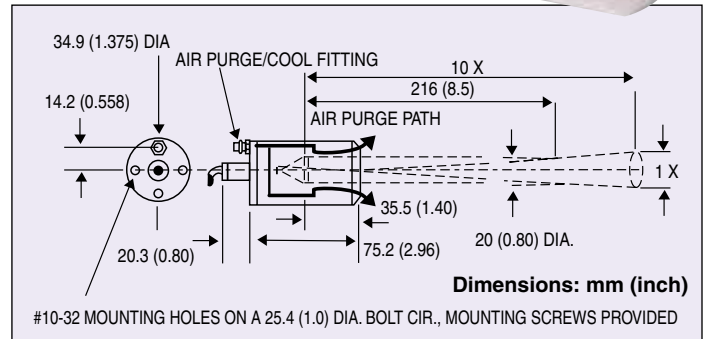
CNi8D shown with iSeries controller.



OS36-10-K shown actual size.

### Specifications

- Range:** -45 to 1370°C (-50 to 2500°F)<sup>†</sup>
  - Field-of-View:** 6° (10:1)
  - Minimum Spot Size:** 20 mm (0.8")
  - Output Impedance:** 4 to 8 kΩ (varies by model)
  - Operating Ambient Temperature Range:** -18 to 85°C (0 to 185°F)
  - Air Purge:** Built-in
  - Ambient Temperature Compensation:** With air flow of 1.1 SCFM (20 psig) maximum ambient is 204°C (400°F)
  - Dimensions:** 9.55 L x 3.49 cm diameter (3.76 x 1.375"); 0.9 m (36") PFA coated lead wires
  - Weight:** 184 g (6.5 oz) with cable
- <sup>†</sup> 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)

To Order	
Model No.	Description
OS36-10-K-(*)	K Thermocouple

\* Specify temperature range code from range chart at left. 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 Example:** OS36-10-K-140F-GST IR thermocouple sensor Type K, with 25 to 80°C (80 to 180°F) range, GST low-noise subminiature connectors.