

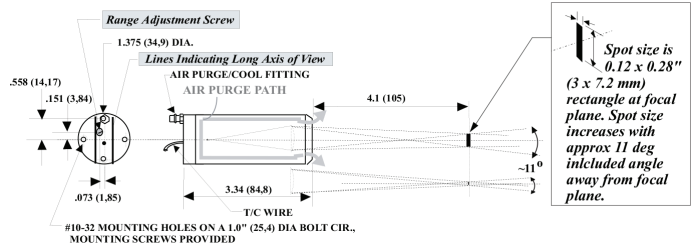
# EXERGEN *Global*

## Industrial OEM Sales

**Infrared Temperature Sensors**
**DATASHEET**
**IRt/c.2/15ALF Base Model**
**Product Overview**

The IRt/c.2/15AMF features:

- Infrared Thermocouple IRt/c
- Non-contact
- Self Powered
- Intrinsically Safe
- Repeatability 0.02°F (0.01°C)
- Interchangeability ±1%
- Resolution approx. 0.0001°C
- Long focus

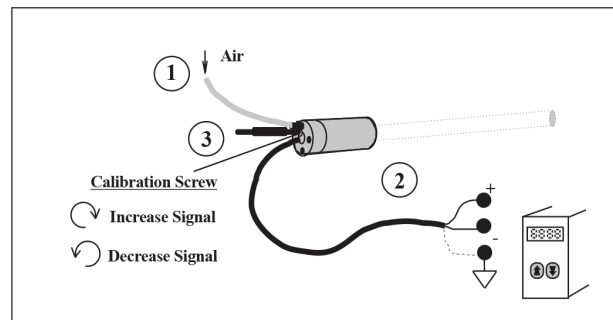

**Technical Data**

Target Surface Type	Hi E (non-metal)	Lo E (metal)
Sensing Range	700 to 3000°F (370 to 1650°C)	1200 to 3500°F (650 to 1930°C)
Optimum Range Selections	One model each J, K: adjustable over entire sensing range, output tables available	
Minimum Spot Size	0.12 x 0.28" (3 x 7.2 mm) at 4.1" (105 mm) from sensor	
Field-of-View at > min. spot	11° approximately	
Spectral Response	2 to 20 μ	0.1 to 5 μ
Output Impedance	10 Kohms approx	
Cable	Twisted shielded pair of base thermocouple material (J,K,etc.), 3 ft (.9 m) std length, Teflon sheathed, rated to 392°F (200°C) continuous service	
Dimensions	3.34" x 1.375" Dia. (84.8 x 35 mm)	
Weight	8.7 oz (248 g) with cable	
Housing	Stainless steel, hermetically sealed, exceeds NEMA 4,4x; IP65,67, intrinsically safe, cable shield grounded to housing and electrically isolated from signal	
Air Purge	Built-in; cooling capacity to 400°F (200°C) ambient; 3' (0.9 m) polyurethane tubing provided	

**Set-up and calibration instructions**

For all IRt/c Models with "A" in model designation (IRt/c.xxxA)

1. Connect air purge first if installing in process already at operating temperature. Provide minimum 5 psig (30 kPa) air pressure.
2. Install IRt/c and align to view the desired target. Bring target to operating temperature if not already there. Connect leads to readout device to be used (controller, PLC, etc.).
3. If the target temperature is not known, measure the target temperature with an accurate reference. Remove the setscrew to expose the calibration screw. Adjust the calibration screw to obtain reading desired. Replace the setscrew cover when complete. For final process adjustments, the ZERO or OFFSET adjustments available on readout devices can be conveniently used.



- Installation and calibration complete.
- To maximize the linear range, see Tech Note #70.
- Calibration screw operates like a radio volume control: clockwise increases signal.