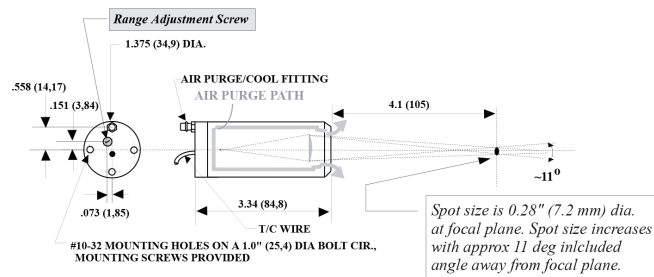


## IRt/c.7ALF Base Model

### Product Overview

The IRt/c.10/38AULF 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



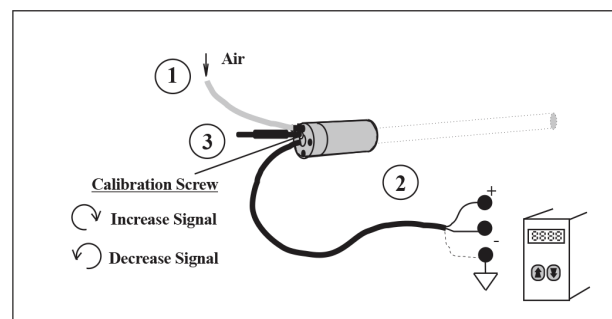
### Technical Data

Target Surface Type	Hi E (non-metal)	Lo E (metal)
Sensing Range	300 to 3000°F (150 to 1650°C)	900 to 3500°F (480 to 1930°C)
Optimum Range Selections	One model each J, K: adjustable over entire sensing range, output tables available	
Minimum Spot Size	0.28" (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.

Exergen Global offices:

The Netherlands  
 Pastoor Clercxstraat 26  
 5465 RH Veghel  
 Tel: +31 (0)413 376 599  
 Fax: +31 (0)413 379 310

USA  
 400 Pleasant Street  
 Watertown, MA 02472  
 Tel: +1 617 649 6322  
 Fax: +1 617 923 9911

office@exergenglobal.com  
 www.exergenglobal.com