Sweek.com

Infrared Temperature Sensors

DATASHEET

IRt/c.20A Base Model



• 20:1 Field of View

Product Overview

Technical Data

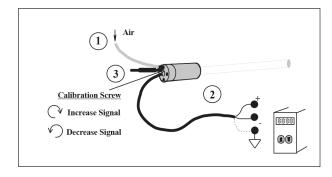
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6.319.302; 5.333,784 CC				Tan and max	T	
			► 1 .40 (35,5)	.80 (20) DIA.		
	.073 (1,85)		▶ 4.15 (105,4)			
	.073 (1,83)		1			
	T/C WIRE					
	= #10-32 MOUN	FING HOLES ON A 1.	.0" (25,4) DIA BOLT CIR., 1	MOUNTING SCREWS PRO	VIDED	

Target SurfaceType	Hi E (non-metal)	Lo E (metal)		
Sensing Range	500 to 3000°F (260 to 1650°C)	1000 to 3500°F (540 to 1930°C)		
Optimum Range Selections	One model each J, K: adjustable over entire sensing range, output tables available			
Minimum Spot Size at dist. (with supplied apertures)	No Aperture: 0.8" (20 mm) at <16" (400 mm) ½" Aperture: 0.5" (13 mm) at <9" (230 mm) ¼" Aperture: 0.25" (6 mm) at<3.5" (90 mm)			
Field-of-View at > min. spot	20:1 (3°) approximately			
Spectral Response	2 to 20 µ	0.1 to 5 μ		
Output Impedance	6 to 13 Kohms approx	9 to 18 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	4.15" x 1.375" Dia. (105 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 fromsignal			
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.

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