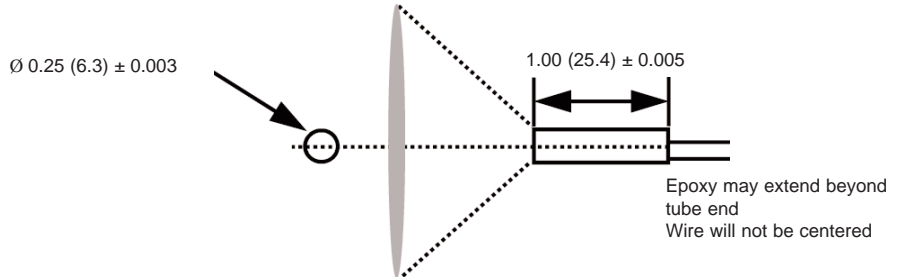




ATTENTION OEM'S
Introducing the NEW:
micro IRt/c

The World's Smallest and Lowest Cost IRt/c™



Features

- Small Size
- Lowest Cost
- Variety of mounting options
- Self powered
- Air purge (optional)

Specifications

	P/N	Model	2% Linear Temperature Range
Recommended Sensing Ranges	150041	μIRt/c-K-80F/27C	40-118° F (4-48° C)
	150042	μIRt/c-K-98.6F/37C	77-104° F (25-40° C)
	150040	μIRt/c-K-140F/70C	90-180° F (32-82° C)
	150043	μIRt/c-K-180F/90C	170-220° F (77-104° C)
	150044	μIRt/c-K-240F/120C	220-245° F (104-118° C)
	150045	μIRt/c-K-280F/140C	270-310° F (132-154° C)
	150046	μIRt/c-K-340F/170C	330-370° F (166-188° C)
	150047	μIRt/c-K-440F/220C	415-465° F (213-241° C)
Ambient Temperature Range	-40 to 212°F (-40 to 100 °C)		
Sensing Range - All Models	0 to 975°F (-18 to 524 °C) with linearization at readout		
Field of View	approximately 1:2 (100°)		
Minimum Spot size	3 mm (.1")		
Spectral Response	5.5 to 20 μm		
Output	K type thermocouple		
Impedance	15 – 40 Kohms, varies depending on temperature range		
Emissivity (e)	.90		
Resolution	Approximately 0.0003°C (Johnson Noise limited)		
Response Time	50 millisecond time constant (typical)		
Accuracy (Interchangeability)	1% to factory calibration conditions		
Dimensions	0.25" (6.3 mm) Dia. x 1.0" (25.4 mm)		
Housing	Stainless Steel		
Cable Assembly	3 feet of unshielded, duplex insulated, type K, 24 AWG, PFA jacket rated to 500 °F (260 °C) (Shielded cable available upon request)		
Humidity	Non-Condensing		
Power Requirements	None, self-powered signal output		
Sealed	Hermetically sealed, exceeds NEMA 4X, IP67		
Weight	Approximately 30 grams (1 oz.)		
Input Device Compatibility	It is recommended to use input devices with less than 1 nA of leakage current to minimize offsets, and sensor break detection should be set to 40 kohm maximum.		



micro IRt/c Accessories

APJ-1 Air Purge Jacket P/N 150066



This convenient and inexpensive kit makes it possible to use the micro IRt/c™ with air for service in harsh environments. Measuring only 3/8" x 3" (9.5 x 76 mm) overall, the APJ-1 is physically small enough to fit into tight areas and closely monitor process temperatures from the optimum position - up close. This air purge kit ensures that the performance of a micro IRt/c does not degrade because of contamination by deposits of airborne chemicals or particles on the sensor. Efficient in design, the APJ-1 requires as little as 3.5 SCFH (1.7 L/min) of air to protect a micro IRt/c. In addition to keeping a micro IRt/c clean, the airflow through the air purge jacket can cool a micro IRt/c, allowing it to operate in environments of up to 347 °F (175 °C) with only 35 SCFH (17 L/min) at 5 psig (0.33 bar).

Features

- Small Size - 3/8" dia. x 3" long (9.5 x 76 mm)
- Aluminum housing
- Attaches to standard 3/8" tube fitting or 3/8" ID tubing
- Air purge and cooling



150062 & 836068
micro Thru-Fitting & MB-2 Mounting Bracket
plastic fitting with lock nut, sealing nut, and hub
1.17" x 0.59" (29.7 x 14.99 mm)
PG-7 thread



150037
MB-5 micro clamp mounting bracket
Stainless Steel, with silicone cushions
0.25" diameter



150038
MB-4 APJ-1 clamp mounting bracket
Stainless Steel, with silicone cushions
0.38" diameter



150065
APJ-1 Omega clamp
metal clamp with rubber cushion for mounting
1.81" x 0.78" (45.97 x 19.81 mm)



108000
IRt/c connector kit
type K thermocouple connectors



150064
micro Omega clamp
metal clamp with rubber cushion for mounting
1.81" x 0.78" (45.97 x 19.81 mm)



150063
APJ-1 Thru-Fitting
plastic fitting with lock nut, sealing nut and hub
1.17" x 0.59" (29.7 x 14.99 mm)
PG-7 thread

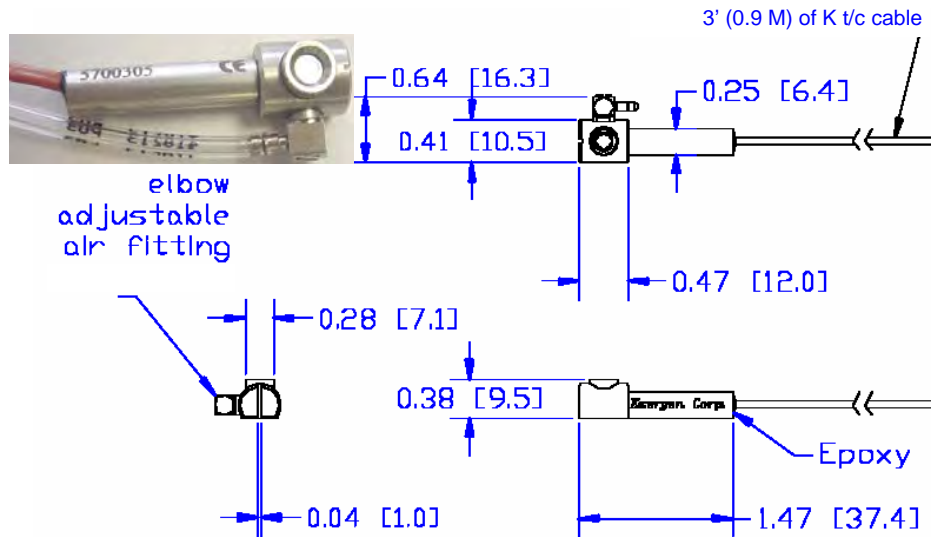
YOUR LOCAL SALES REPRESENTATIVE IS:



Introducing the **NEW:**
 micro IRT/c.4sv-K-440F/220C™
 The World's Smallest 4:1 Field of View, Side View,
 Air Purged, Infrared Temperature Sensor

Features

- Side view mount
- Self powered
- Small size
- Mounting rings
- Built in Air purge
- 4:1 field of view
- High temperature range with signal output tables available



Specifications

Sensing Range	-45 °C to 625 °C (2% linear to match a K t/c from 212 -240 °C)
Ambient Temperature Range	-20 °C to 100 °C (with air off), -20 °C to 120 °C (with air on).
Storage Temperature Range	-20 °C to 100 °C
Field of View of Sensing Element	approximately 4:1 (14°)*
Minimum Spot size	3 mm (.1")
Dominant Spectral Response	3 to 20 μm
Output Sensor	K type thermocouple from 414 - 464 °F (212 - 240 °C), mV output tables available and recommendations for programmable devices.
Impedance	~ 40 kohms
Emissivity (e)	.90
Measurement Type	Thermopile
Resolution	Approximately 0.0003°C, Johnson Noise
Update Time	Instantaneous
Time Constant	60 milliseconds
Accuracy (Interchangeability)	1% to factory calibration conditions
Dimensions	See above
Housing	Stainless Steel 303
Cable Assembly	3 feet (0.9 meters) of unshielded, duplex insulated, type K, 24 AWG, PFA jacket, rated to 500 °F (260 °C) (Shielded cable also available)
Humidity	Non-Condensing
Power Requirements	None
Environmental Ratings	Hermetically sealed, exceeds NEMA 4, 4X, IP67
Weight	~ 60 grams (2 oz.)



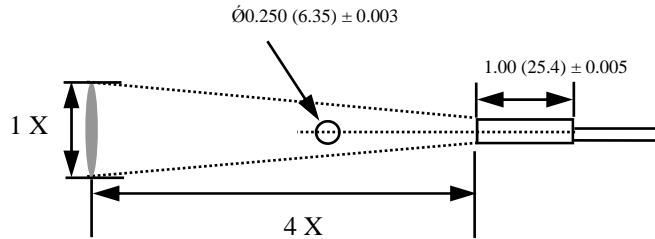
Introducing the **NEW:**
 micro IRt/c.4-K-440F/220C™
 The World's Smallest 4:1 Field of View Infrared
 Temperature Sensor

Features

- Self powered
- Small size
- Low cost
- Mounting rings
- Air purge available
- 4:1 field of view
- Measure higher temperature ranges
- Repeatable signal
- High interchangeability
- Highly Reliable



micro IRt/c.4



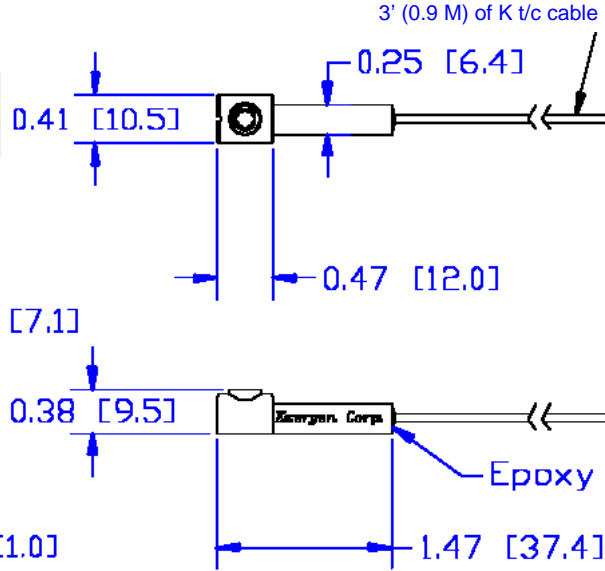
Specifications	
Sensing Range	-45 °C to 625 °C (2% linear to match a K t/c from 212 -240 °C)
Ambient Temperature Range	-20 °C to 100 °C (air purge jacket available for cooling to 175 °C)
Storage Temperature Range	-20 °C to 100 °C
Field of View of Sensing Element	approximately 4:1 (14°)*
Minimum Spot size	3 mm (.1")
Dominant Spectral Response	3 to 20 μm
Output Sensor	K type thermocouple from 414 - 464 °F (212 - 240 °C), mV output tables available and recommendations for programmable devices.
Impedance	~ 40 kohms
Emissivity (e)	.90
Measurement Type	Thermopile
Resolution	Approximately 0.0003°C, Johnson Noise
Update Time	Instantaneous
Time Constant	60 milliseconds
Accuracy (Interchangeability)	1% to factory calibration conditions
Dimensions	See above
Housing	Stainless Steel 303
Cable Assembly	3 feet (0.9 meters) of unshielded, duplex insulated, type K, 24 AWG, PFA jacket, rated to 500 °F (260 °C) (Shielded cable also available)
Humidity	Non-Condensing
Power Requirements	None
Environmental Ratings	Hermetically sealed, exceeds NEMA 4, 4X, IP67
Weight	~ 30 grams (1 oz.)



Introducing the **NEW:**
 micro IRT/c.sv-K-**
 The World's Smallest Side View Mounted Infrared
 Temperature Sensors

Features

- Side view mount
- Self powered
- Small size
- Mounting rings



SELECTION TABLE

MODEL	2% Linear Range
uIRt/c.SV-K-80F/27C	40-118°F (4-48°C)
uIRt/c.SV-K-98.6F/37C	77-104°F (25-40°C)
uIRt/c.SV-K-140F/60C	90-180°F (32-82°C)
uIRt/c.SV-K-180F/90C	170-220°F (77-104°C)
uIRt/c.SV-K-240F/120C	220-245°F (104-118°C)
uIRt/c.SV-K-280F/140C	270-310°F (132-154°C)
uIRt/c.SV-K-340F/170C	330-370°F (166-188°C)
uIRt/c.SV-K-440F/220C	415-465°F (213-241°C)

Specifications

Sensing Range	-45 °C to 524 °C (2% linear to match K t/c, see table)
Ambient Temperature Range	-20 °C to 100 °C
Storage Temperature Range	-20 °C to 100 °C
Field of View of Sensing Element	approximately 1:2 (100°)
Minimum Spot size	3 mm (.1")
Dominant Spectral Response	5.5 to 20 μm
Output Sensor	K type thermocouple at temperatures close to calibration point, see Selection Table, (mV output tables available with recommendations for programmable devices).
Impedance	~ 15-40 kohms, depends on model selected
Emissivity (e)	.90
Measurement Type	Thermopile
Resolution	Approximately 0.0003°C, Johnson Noise
Update Time	Instantaneous
Time Constant	50 milliseconds
Accuracy (Interchangeability)	1% to factory calibration conditions
Dimensions	See above
Housing	Stainless Steel 303
Cable Assembly	3 feet (0.9 meters) of unshielded, duplex insulated, type K, 24 AWG, PFA jacket, rated to 500 °F (260 °C) (Shielded cable also available)
Humidity	Non-Condensing
Power Requirements	None
Environmental Ratings	Hermetically sealed, exceeds NEMA 4, 4X, IP67
Weight	~ 30 grams (1 oz.), SV model ~ 60 grams (2 oz.)