



TEMPERATURE

ALL-PURPOSE THERMISTOR AND RTD SENSORS KTA* SERIES

DESCRIPTION

The Kele KTA* Series All-Purpose Thermistor and RTD Sensors provide remote temperature sensing for building automation systems and mechanical equipment room instrumentation. The active sensing element is made of a highly stable thermistor material or platinum RTDs.

The KTA* Series sensors are rugged, point-sensitive waterproof sensors featuring a 9" (22.8 cm) 304 stainless steel probe and brass fitting. The brass fitting has a 1/2" NPT male thread. The sensors are supplied with two 1/2" locknuts for easy installation in handy boxes (or other enclosures with 1/2" knockouts).



KTA*



FEATURES

- Three-year warranty
- Wide selection of thermistor and RTD curves
- Tip sensitive for precise temperature response
- All metal construction with 304 stainless steel probes
- Easy to mount to duct, wall, or back box
- Waterproof probe

APPLICATION

The KTA* Series Sensors are waterproof and can be used where it is possible for the sensed temperature to fall below the ambient dew point, causing condensation to occur on the sensor. However, it is important that the field connection be made as far as possible from the sensed media. The sensing element is sealed with a thermally conductive compound in a versatile 9" long stainless steel tube with a brass electrical fitting. The all-purpose probe is suitable for plenum mounting, duct mounting, immersion wells, or outside air.

SPECIFICATIONS

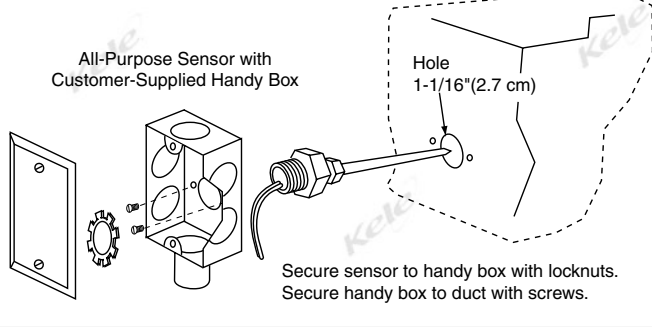
Accuracy		Heat Dissipation	2.7 mW/°C (power needed to raise the temperature 1°C)
Thermistor	±0.50°F (0.28°C)	Enclosure Rating	NEMA 1
RTD	±0.60°F(0.33°C)	Mounting	Ductly to duct, wall or customer supplied back box, no adapters needed for standard box
Sensor Type		Wiring Terminations	8' (2.44m) of 24 AWG gray wire leads, Type 71 & 81 sensors have 18" (0.45m) leads
Thermistor	2.252 kΩ, 3 kΩ, 10 kΩ Type II, III & III w/11K shunt, 20 kΩ, 100 kΩ	Probe	Seamless 304 stainless steel tube, 1/4" OD
RTD		Weight	0.2 lb (0.09 Kg) w/o options
Type 71, 81	100Ω Pt 385 Curve	Approvals	CE
Type 85	1000Ω Pt 385 Curve	Warranty	3 years
Type 91	1000Ω Pt 375 Curve		
Temperature Range			
Thermistor/RTD	-40° to 221°F (-40° to 105°C)		
Temperature Coefficient			
Thermistor	Negative temperature coefficient		
RTD	Positive temperature coefficient		
Temperature Stability			
Thermistor	0.24°F (0.13°C) over five years		
RTD	Max 0.04% after 1k hours @ 500 °C		



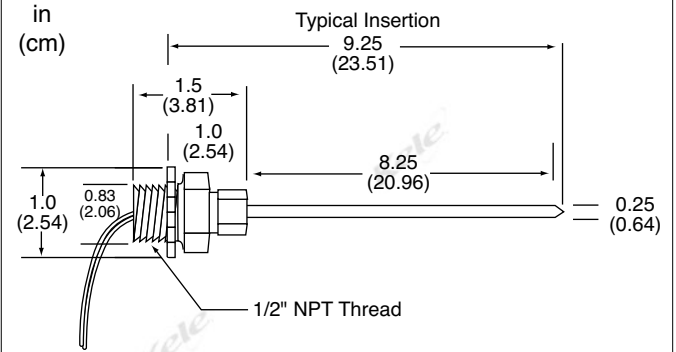
MOUNTING

Locknuts provide direct mounting and can be used where conduit is not required. Mount directly to electrical outlet boxes as shown below.

Basic model comes with 8' (2.4 m) of 24 AWG wire and two locknuts for mounting to a variety of box options.



DIMENSIONS



ORDERING INFORMATION

MODEL	DESCRIPTION
KTA3	10,000Ω all-purpose thermistor @ 77°F (25°C), Type III (gray leads)
KTA11K	10,000Ω all-purpose thermistor @ 77°F (25°C), Type III with 11K shunt (gray leads)
KTA21	2252Ω all-purpose thermistor @ 77°F (25°C), Type II (gray leads)
KTA22	3000Ω all-purpose thermistor @ 77°F (25°C), Type II (gray leads)
KTA24	10,000Ω all-purpose thermistor @ 77°F (25°C), Type II (gray leads)
KTA27	100,000Ω all-purpose thermistor @ 77°F (25°C), Type II (gray leads)
KTA42	20,000Ω all-purpose thermistor @ 77°F (25°C), Type IV (gray leads)
KTA71	100 ultra high accurat RTD @ 32°F (0°C), 385 platinum curve (gray leads)
KTA81	100Ω all-purpose RTD @ 32°F (0°C), 385 platinum curve (gray leads)
KTA85	1000Ω all-purpose RTD @ 32°F (0°C), 385 platinum curve (gray leads)
KTA91	1000Ω all-purpose RTD @ 32°F (0°C), 375 platinum curve (gray leads)
OPTIONS	
QD ¼	Nylon insulated Quick Disconnect ¼"
X25	25' (7.6) lead length 24 AWG
XC25	25' (7.6m) lead length jacketed cable
XCO	½" LB conduit fitting
XCP25	25' Non-shielded plenum cable
XD	Dual sensors in one probe
XH	Handy box housing (factory installed)
XHP	Non-metallic handy box housing (factory installed)
XL	Custom length insertion probes 1" to 108"
XL2	Custom length insertion probe, 4-7/8" (12.38 cm)
XL2 in	Custom length insertion probe, 2" (5.08 cm)
XN	Certificate of conformance
XN1	NIST certificate, one reference point 32°F (0°C)
XN2	NIST certificate, two reference points 32°F/158°F (0°C/70°C)
XN3	NIST certificate, three reference points 32°F/77°F/158°F (0°C/25°C/70°C)
XP	Matched sensor pair, matched to ±0.1°F, 0.05°C (must order two sensors)
XW	Weather resistant housing (factory installed)
XZ	Three wire RTD connections (optional only on Type 81, not available with XC25 and XCP25)

KTA24 - **XP** Example: **KTA24-XP** 10,000Ω Type II all-purpose temperature sensor with matched sensor

RELATED PRODUCTS

T81U-XR
T85U-XR
T91U-XR
UR

100 ohm, Type 81 4-20 mA temperature transmitter, custom rangeable
1000 ohm, Type 85 4-20 mA temperature transmitter, custom rangeable
1000 ohm, Type 91 4-20 mA temperature transmitter, custom rangeable
Moisture-resistant three-wire butt splice