

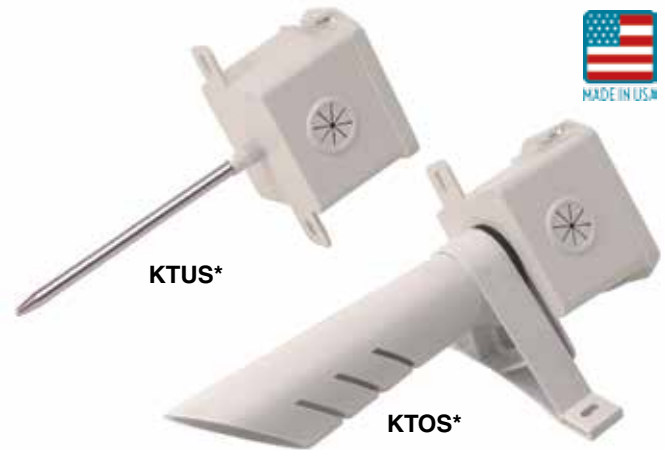
TEMPERATURE

DUCT, IMMERSION, OSA, THERMISTOR AND RTD SENSORS KTUS*, KTOS* SERIES



DESCRIPTION

The Kele KTUS/KTOS Series of Duct, Immersion, OSA Thermistor and RTD Temperature Sensors are very economical and are accurate to within $\pm 0.5^{\circ}\text{F}$ ($\pm 0.28^{\circ}\text{C}$). The Kele KTUS/KTOS Series sensors are ideally suited for HVAC applications. The mounting designs are based on proven techniques for installation efficiency with stainless steel probes for durability. These sensors come with a three-year warranty and are made of a very stable, pre-aged material which offers the reliability needed in HVAC systems.



FEATURES

- Economical
- Three-year warranty
- Flame retardant, plenum rated
- Adaptable with many mounting options
- 304 stainless steel waterproof probes
- Paintable plastic
- NEMA 3R, IP22



SPECIFICATIONS	
Accuracy	
Thermistor	$\pm 0.50^{\circ}\text{F}$ (0.28°C)
RTD	$\pm 0.60^{\circ}\text{F}$ (0.33°C)
Sensor Type	
Thermistor	2.252 k Ω , 3 k Ω , 10 k Ω Type II, III & III w/11K shunt, 20 k Ω , 100 k Ω
RTD	
Type 71,81	100 Ω Pt 385 Curve
Type 85	1000 Ω Pt 385 Curve
Type 91	1000 Ω 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
Heat Dissipation	2.7 mW/°C (power needed to raise the temperature 1°C)
Enclosure Rating	NEMA 1, white plastic
Mounting	Directly to well, duct, or wall
Wiring Terminations	8', 24 AWG gray wire leads, type 71 & 81 sensors have 18" leads
Probe	Seamless 304 stainless steel tube, 1/4" OD, 4.87" long
Weight	0.2 lb (0.1 Kg) w/o options
Approvals	CE
Warranty	3 years

TEMPERATURE

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PROBE TYPES

The **Model KTUS** uses a proven universal style enclosure for use in duct and immersion applications. The direct-mount design incorporates a 2.5" x 2.5" (6.4 x 6.4 cm) termination box with a 4.87" (12.4 cm) stainless steel probe. The probe may be inserted into a duct with 0.4" (1 cm) hole or immersion using a WEL-B or a WEL-S.

The **Model KTOS** is used for outside air temperature sensing. The design allows for two-point mounting and 1.5" (3.8 cm) wall separation for more accurate performance. The weather shield protects the stainless steel probe from the effects of rain, sleet, and snow.

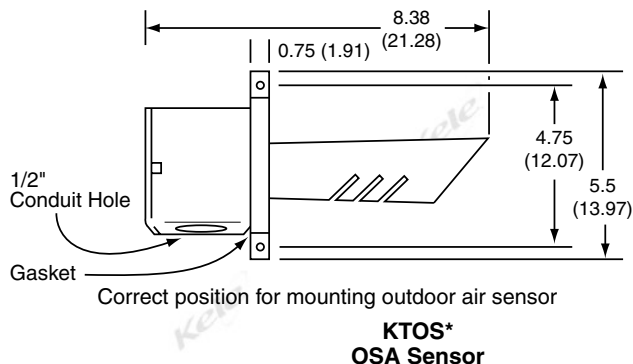
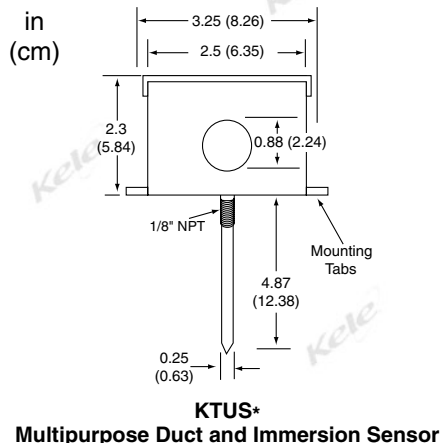


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DUCT, IMMERSION, OSA, THERMISTOR AND RTD SENSORS

KTUS*, KTOS* SERIES

DIMENSIONS



ORDERING INFORMATION

MODEL	DESCRIPTION
KTUS	Universal-mount sensor, duct, and immersion (order wells separately)
KTOS	Universal-mount sensor, OSA
THERMISTOR SENSOR TYPE	
3	10,000Ω thermistor @ 77°F (25°C), Type III, (gray leads)
11K	10,000Ω thermistor @ 77°F (25°C), Type III with 11K shunt, (gray leads)
21	2252Ω thermistor @ 77°F (25°C), Type II, (gray leads)
22	3000Ω thermistor @ 77°F (25°C), Type II, (gray leads)
24	10,000Ω thermistor @ 77°F (25°C), Type II, (gray leads)
27	100,000Ω thermistor @ 77°F (25°C), Type II, (gray leads)
42	20,000Ω thermistor @ 77°F (25°C), Type IV, (gray leads)
71	100 ultra high accurat RTD @ 32°F (0°C), 385 platinum curve (gray leads)
81	100Ω RTD @ 32°F (0°C), 385 platinum curve (gray leads)
85	1000Ω RTD @ 32°F (0°C), 385 platinum curve (gray leads)
91	1000Ω RTD @ 32°F (0°C), 375 platinum curve (gray leads)
OPTIONS	
B	Brass well included (WEL-B for US* only)
QD¼	Nylon insulated quick disconnect ¼"
S	304 stainless steel well included (WEL-S for US* only)
X25	25' (7.6m) lead length 24 AWG
XC25	25' (7.6m) lead length jacketed cable
XCP25	25' non-shielded plenum cable
XD	Dual sensors in one probe
XG	Greenfield fitting (factory installed)
XL	Custom length insertion probes 1" to 60"
XL2 in	Custom length insertion probe, 2" (5.08 cm) (Specify E without well)
XL9	Custom length insertion probe, 9" (22.86 cm) (Specify E without well)
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)

KTUS — 3 — B Example: KTUS-3-B 10,000Ω Type III universal mount thermistor sensor with brass well

RELATED PRODUCTS

T81U-XR	100 ohm, Type 81 4-20 mA temperature transmitter, custom rangeable
T85U-XR	1000 ohm, Type 85 4-20 mA temperature transmitter, custom rangeable
T91U-XR	1000 ohm, Type 91 4-20 mA temperature transmitter, custom rangeable
TCC-111	Thermal conductive compound 111 ml tub
TCC-12	Thermal conductive compound tube, 12 ml
UR	Moisture-resistant three-wire butt splice