STAINLESS STEEL FLUSH-MOUNT THERMISTOR AND RTD SENSORS
KTP* SERIES

DESCRIPTION

The **Kele KTP* Series Stainless Steel Flush-Mount Thermistor and RTD Sensors** provide room temperature sensing for building automation systems. The active sensing element is made of a highly stable, thermistor material or platinum RTD. This design provides moisture/vapor resistance and is bonded to a 430 stainless steel plate. The back is insulated to reduce interior wall temperature influence. This sensor is intended for interior use only.

FEATURES

- *Three-year warranty*
- *Wide selection of thermistor and RTD curves*
- *Insulated backing for room temperature response*
- *Vandal-resistant flush mounting*
- *Adaptable with many options*
- *430 Stainless steel finish*
- *Easy to mount to wall or back box*
- *Standard size plate to cover mounting holes*

KTP*

APPLICATION

The **KTP* Series sensors** are designed to be mounted on indoor walls. They are ideal for use in schools or cold storage lockers, where vandalism or fork lifts can damage ordinary wall sensors. The sensors have an insulated back that reduces the conductive influences of wall temperatures, yet allows significant convective influences to be sensed. Security screws (XS option) are available where tamper proofing is required.

OPTIONS

- *Setpoint adjustment*
- *Momentary switch override*
- *Security screws*

SPECIFICATIONS

Accuracy	
Thermistor	±0.50°F (0.28°C)
RTD	±0.60°F (0.33°C)
Sensor Type	
Thermistor	2.252 kΩ, 3 kΩ, 10 kΩ Type II, III & III w/11K shunt, 20 kΩ, 100 kΩ
RTD	
Type 71, 81	100Ω Pt 385 Curve
Type 85	1000Ω Pt 385 Curve
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

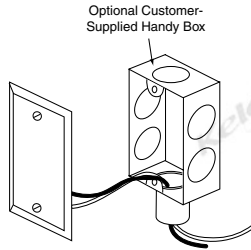|	
Temperature Stability	
Thermistor	0.24°F (0.13°C) over five years
RTD	Max 0.04% after 1k hours @ 500 °C
Heat Dissipation	2.7 mW/°C (power needed to raise the temperature 1°C)
Enclosure rating	NEMA 1, Brushed stainless steel
Mounting	Single gang back box
Wiring Terminations	8' (2.4m) of 24 AWG gray wire leads, Type 71 & 81 sensors have 18" leads
Weight	0.2 lb (0.10 Kg)
Approvals	CE
Warranty	3 years

TEMPERATURE

STAINLESS STEEL FLUSH-MOUNT THERMISTOR AND RTD SENSORS
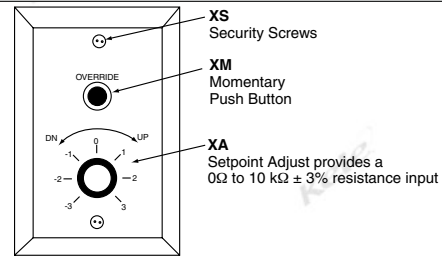### KTP* SERIES

MOUNTING

Toggle bolts or other direct wall-mount screws can be used where conduit is not required. Adapters are not required when mounting directly to electrical outlet boxes. Tighten mounting screws, crushing foam gasketing until plate edges lightly touch the wall. Insulate or seal all interior holes to prevent drafts from affecting the temperature readings. Terminate with butt splices or soldering. Twist on wire connectors are not recommended.

Basic model comes with screws for stainless steel faceplate, two #6-32 screws for handy-box mounting, and 8' (2.4m) of 24 AWG wire. Security screws (**XS** Option) are #6-32 with a spanner head.
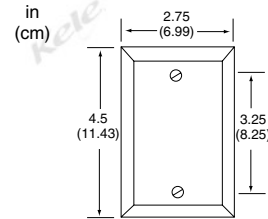
Optional Customer-
Supplied Handy Box

The sensor should be mounted approximately five feet above the floor, on an interior wall, away from any heating or cooling generating devices.

TYPICAL COVER WITH MULTIPLE OPTIONS

OVERRIDE

DN   UP
0
-1   1
-2   2
-3   3

XS
Security Screws

XM
Momentary
Push Button

XA
Setpoint Adjust provides a
0Ω to 10 kΩ ± 3% resistance input

DIMENSIONS

in
(cm)

2.75
(6.99)

4.5
(11.43)

3.25
(8.25)

ORDERING INFORMATION

MODEL	DESCRIPTION
KTP3	10,000Ω flush-mount thermistor @ 77°F (25°C), Type III (gray leads)
KTP11K	10,000Ω flush-mount thermistor @ 77°F (25°C), Type III with 11K shunt (gray leads)
KTP21	2252Ω flush-mount thermistor @ 77°F (25°C), Type II (gray leads)
KTP22	3000Ω flush-mount thermistor @ 77°F (25°C), Type II (gray leads)
KTP24	10,000Ω flush-mount thermistor @ 77°F (25°C), Type II (gray leads)
KTP27	100,000Ω flush-mount thermistor @ 77°F (25°C), Type II (gray leads)
KTP42	20,000Ω flush-mount thermistor @ 77°F (25°C), Type IV (gray leads)
KTP71	100 ultra high accurat RTD @ 32°F (0°C), 385 platinum curve (gray leads)
KTP81	100Ω flush-mount RTD @ 32°F (0°C), 385 platinum curve (gray leads)
KTP85	1000Ω flush-mount RTD @ 32°F (0°C), 385 platinum curve (gray leads)
KTP91	1000Ω flush-mount RTD @ 32°F (0°C), 375 platinum curve (gray leads)

OPTIONS	
X25	25' (7.6m) lead length 24 AWG
XA	Setpoint adjustment (0 to 10,000, resistance input)
XA1500	Setpoint adjustment (0 to 1,500, resistance input)
XA1K	Setpoint adjustment (0 to 1,000, resistance input)
XD	Dual sensors
XK	Custom logo
XM	Momentary switch wired N.O. to terminal block
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)
XS	Security screws (SD-6 spanner screwdriver required)
XZ	Three wire RTD connections (Optional only on Type 81)

KTP3 - XM

Example: **KTP3-XM** 10,000Ω Type III stainless steel flush-mount sensor with momentary switch

RELATED PRODUCTS

KT1	Mounting screwdriver 1/16" allen key
SD-6	Security spanner screwdriver (required for XS option)
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
UR	Moisture-resistant three-wire butt splice