

KTT110

Temperature Transmitter

KeramControls®

Description

KTT110 series duct mounted transmitter is a low-cost temperature transmitter specially designed for temperature measurement in HVAC field. It is suitable for building equipment automatic control system (BA system) of commercial buildings and other conventional buildings. IP65 protection grade is convenient for outdoor measurement at the same time.

The output model of the transmitter is standard 4-20mA, 0-10V, and RS 485 output mode can also be selected.



Features

- Range from -40 to +200°C
- 4-20mA, 0-10V, 0-5V, RS-485 output
- Standard accuracy $\pm 0.3^{\circ}\text{C}$
- Protection class: IP65 / NEMA 4

Applications

KTT110 temperature transmitter used for temperature measurement in heating, ventilation and air conditioning systems enabling weather-dependent temperature regulation.

Technical Data

Model	KTT110
Accuracy	$\pm 0.3^{\circ}\text{C}$ @20°C
Response time	<1min, In 3m/s (590ft/min) air duct / < 30s, measuring the liquid in the pipeline
Repeatability	$\pm 0.01\%$ at FS/year
Media	Air or liquid
Operating temp	-40 ... +110°C (Air duct) / -40 ... +200°C (Liquid pipeline)
Storage temp	-30 ... +70°C
Measuring range	-40 ... +200°C
Operatin & storage humidity range	5% RH ... 95% RH, no condensation
Power consumption	<1.5 W
Power supply	24VAC/DC $\pm 10\%$
Output	4-20mA (2 wire)
	4-20mA (3 wire)
	0-5 / 0-10VDC (3 wire)
	RS-485
Housing material	PC & ABS, UL94-V0
Protection	IP65/NEMA4
Cable gland	M16*1.5

Notes On Disposal



Most Keram Controls products may contain valuable materials that should be recycled rather than treated as domestic waste. Please pay attention to the relevant regulations of local disposal.

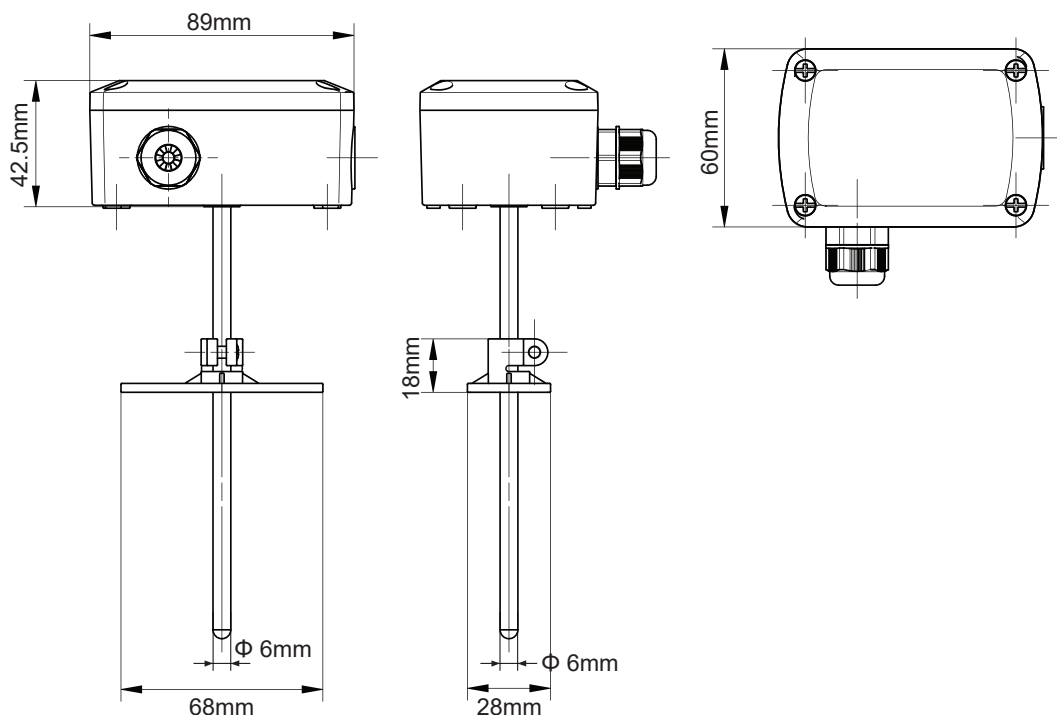
Product Certification



Declaration of conformity

The declaration of conformity of the products can be found on our website [Https://: www.keramcontrols.com](https://www.keramcontrols.com)

Dimensions (mm)



Measuring Range Adjustment

ON 1 2 3	ON 1 2 3	ON 1 2 3	ON 1 2 3	ON 1 2 3
-40 ... +70°C	0 ... +50°C	0 ... +100°C	-30 ... +200°C	-40 ... +140°C

Output Setting (3-wire Model)

ON 4 5	ON 4 5	ON 4 5
0-5V	0-10V	4-20mA



To configure the transmitter, it must not be energized. Then, you can make the settings required, with the DIP switches. When the transmitter is configured, you can power it up.

Ordering Guide

KTT110	Probe length		Output	
Model	Probe length		Output	
KTT110	65mm	(A)	4-20mA (2 wire)	(E)
	120mm	(B)	4-20mA (3 wire)	(F)
	150mm	(C)	0-5 / 0-10VDC (3 wire)	(G)
	300mm	(D)	RS-485	(H)

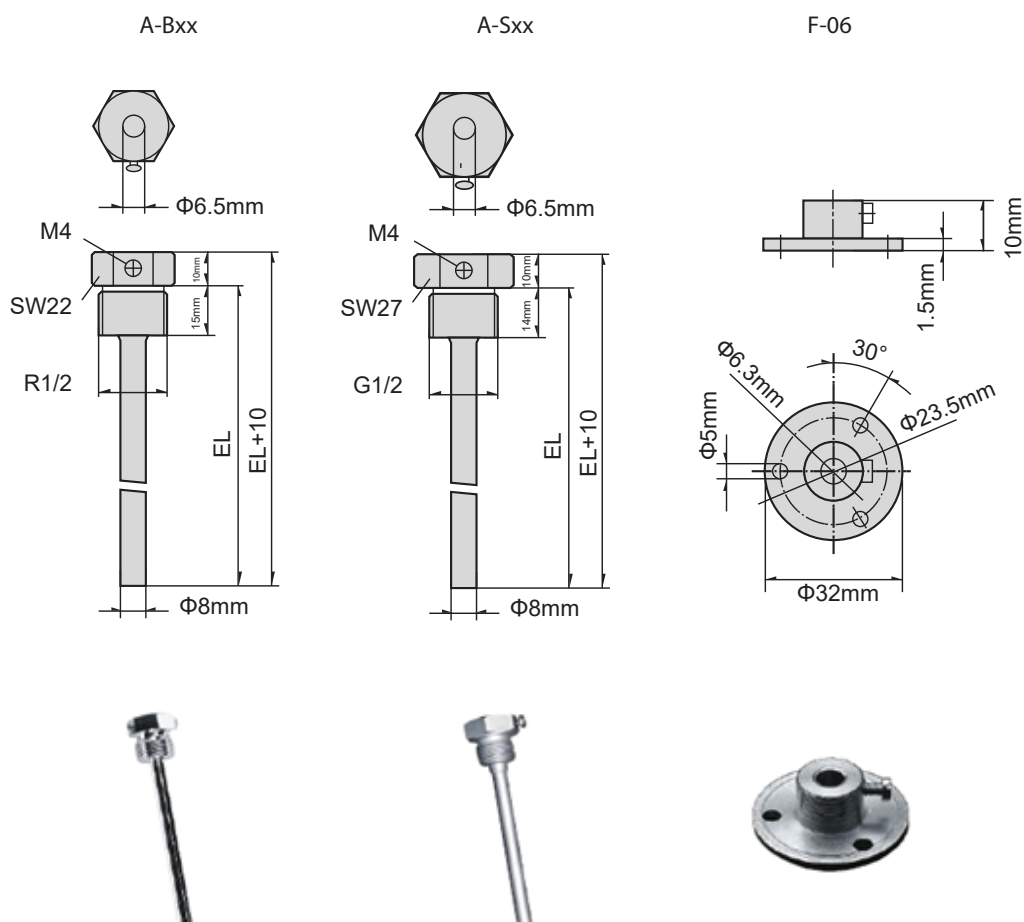
Order Examples

KTT110-2-C-E

Model	KTT110 temperature transmitter
Probe length	150mm
Output	4-20mA (2 wire)

Accessory

Dimensional drawing



Accessory

Model	Immersion sleeve diameter	Material	Pmax	Tmax	Inserted length (EL)
A-B 50MM	8mm	Brass nickel-plated	10bar	150°C	50mm
A-B 100MM					100mm
A-B 150MM					150mm
A-B 200MM					200mm
A-B 250MM					250mm
A-B 300MM					300mm
A-B 350MM					350mm
A-B 400MM					400mm

NOTE: with neck tube

Model	Immersion sleeve diameter	Material	Pmax	Tmax	Inserted length (EL)
A-S 50/90MM	8mm	Stainless steel	40bar	600°C	50mm
A-S 100/90MM					100mm
A-S 150/90MM					150mm
A-S 200/90MM					200mm
A-S 250/90MM					250mm
A-S 300/90MM					300mm

NOTE: with neck tube (90mm)

Model	Diameter	Tube gland	Tmax	Material
F-06	32mm	6.3mm	700°C	Galvansied steel

NOTE: with neck tube (90mm)