

LOW COST, PROGRAMMABLE, LOCAL INDICATING TEMPERATURE TRANSMITTER

FEATURES

- RTD input
- Programmable temperature transmitter
- Compact field case
- Fully range adjustable
- Excellent accuracy & long term stability

APPLICATIONS

A wide range of application in ;

The transmitter converts RTD & T/C inputs to an analog signal for direct interface with indicators, recorders, controllers, PLC & DCS systems can be used for a wide range of applications in process control, automatic machinery and hydraulic or pneumatic system design.



GENERAL DESCRIPTION

KT-10 series Microprocessor based digital temperature transmitter is designed to fit into standard weather proofed field case used on Resistance temperature detector or Thermocouple assembly to provide a 4~20mA DC transmission output signal. A compact field case and 4 digit LED local display make it easy to control process and set the value for measuring range, damping, zero & span.

It is a cost effective solution for all temperature measurement. Numerous configurations for measurement in many different mediums are offered. Generally the transmitter produces a linear 4~20mA output carried on a 2-wire system and optional voltage output can also be available. The transmitter is supplied factory calibrated, but also can be settable a range & zero, span calibration by users.

TECHINCAL DATA

Input

Element Type	Pt 100 ohm Thermocouple K, J, E, T type
Out-diameter	1.0, 1.6, 2.3, 3.2, 4.8, 6.4, 8, 10, 12

Output

Output Signal	4~20mA DC, 2-wire 1~5V DC, 3-wire(Optional)
Local Display	4 Digits, 7-segment digital LED

Electrical Specification

Electrical Connection	Field case, weather-proofed
Conduit Connection	1/2"PT,Female
Excitation Voltage	10~36V DC
Load Resistance max.@24V	750 ohm at 24V
Influence Of Excitation	0.01% FSO/V
Reverse Polarity	Protected
Response Time	≤2 miliseconds
Adjustment	10 : 1 Range turn-down

Performance Specification

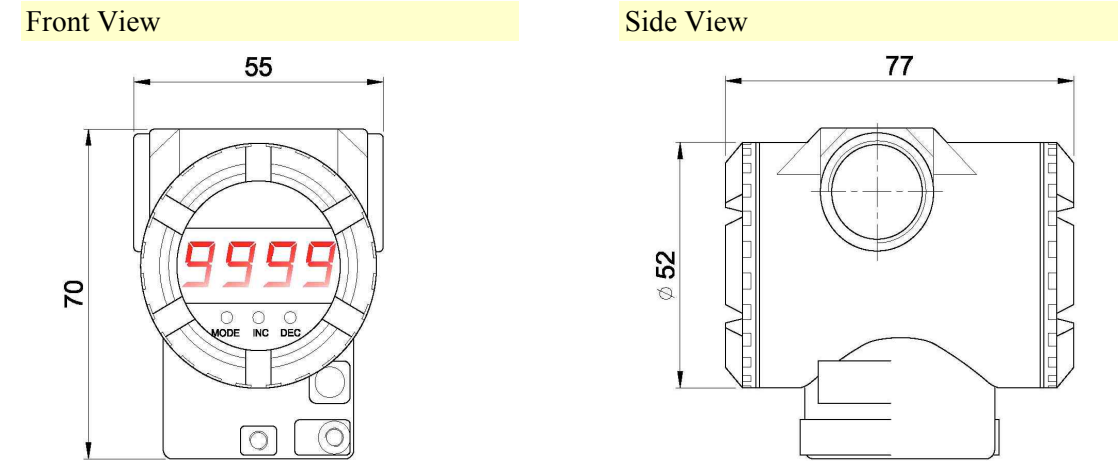
Accuracy	±0.2% FSO
Non-linearity	±0.10% FSO typical
Repeatability	±0.05% FSO typical
Hysteresis	±0.05% FSO typical
Long-term Stability	±0.3% FSO over 6 months
Ambient Temperature Limit	-20~80 °C
Ambient Humidity Limit	5~100% R.H

Physical Specification

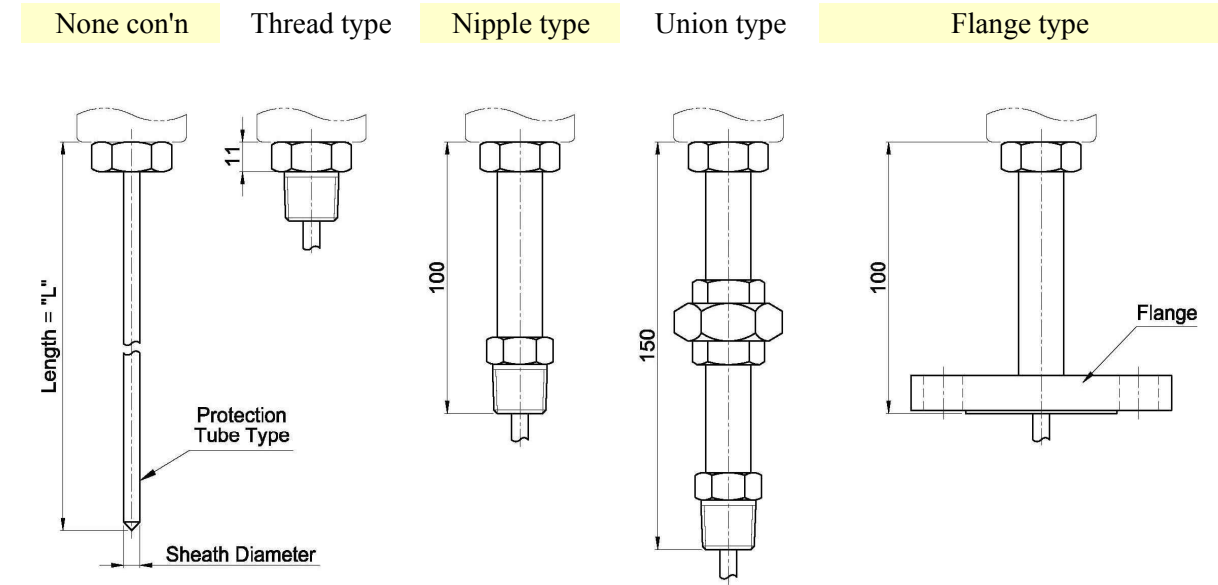
Process Connection	Thread Type : PT, NPT, PF Thread Size : 1/4", 3/8", 1/2" Other connections available such as JIS, ANSI, DIN Flange
Process Media	Gases & liquids compatible with Stainless steel 316
Materials	Field case : ALDC Probe parts : Stainless steel 316
Enclosure Rate	IP65

DIMENSION

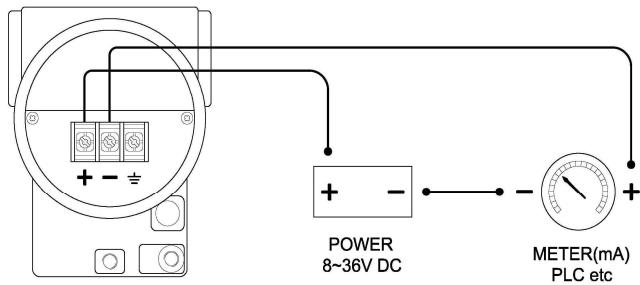
Terminal Head



Wetted Parts Connection



Electrical Connection



ORDERING INFORMATION

		Order Code
Model		KT-10
Input Signal (Sensing Element)	R : Pt 100ohm	R
	K : Thermocouple "K" Type	
	J : Thermocouple "J" Type	
	E : Thermocouple "E" Type	
	T : Thermocouple "T" Type	
Process connection type	X : Refer to Table No.1 on page 28	ACB
Range(℃)	110 : -50~0	115
	111 : -50~50	
	112 : -50~80	
	113 : -50~100	
	114 : 0~50	
	115 : 0~100	
	116 : 0~150	
	117 : 0~200	
	118 : 0~300	
	119 : 0~400	
	120 : 0~500	
	121 : 0~800	
	xxx : Other ranges available on request	
Unit	A : ℃	A
	B : °F	
Output Signal	0 : None-output(Only digital gauge)	1
	1 : 4~20mA DC, 2-wire	
	2 : 1~5V DC, 3-wire(Optional)	
Element specification	x : Refer to Table No.2 on page 28	AABFC
Option	0 None	0
	1 Wetted part teflon coating	
	2 Wetted part teflon lining	
	3 Thermo-well	
	4 Thermo-well with teflon coating	
	5 Thermo-well with teflon lining	
	X Other options on request	

Note 1) Other ranges are available on request.
 2) Please make details, if you need Thermo-well assembly according to Table No.3 on page 29

Specifications subject to change without notice.

Table No.1 For Process Connection

1'st character		2'nd character			3'rd character			
Mounting type		Connection size			Connection type			
Code	Type	Code	Size		Code	Type	Code	Type
A	Fixed thread	A	1/4"	8A	A	PF	F	JIS10K RF
B	Nipple	B	3/8"	10A	B	PT	G	JIS10K FF
C	Union & nipple	C	1/2"	15A	C	NPT	H	JIS20K RF
D	Comp.fitting	D	3/4"	20A	D	UNF	I	JIS20K FF
E	Flange	E	1"	25A	E*	C.F	J	JIS30K RF
F	None	F	1 1/4"	32A			K	JIS30K FF
		G	1 1/2"	40A			L	ANSI 150# RF
		H	2"	50A			M	ANSI 150# FF
		I	2 1/2"	65A			N	ANSI 300# RF
		J	3"	80A			O	ANSI 300# FF
		K	4"	100A			P	ANSI 600# RF
							Q	ANSI 600# FF

Note E* : Compression fitting
Other process connection available on request

Table No.2 For Element specification

1'st character		2'nd character		3'rd character		4'th character		5'th character	
Element		Material		Grade		Out-diameter(mm)		Probe length(mm)	
Code	Element	Code	Material	Code	Class	Code	Diameter	Code	Length
A	Single	A	316 SS	A	0.4 / A	A	1.0	A	50
B	Double	B	Inconel	B	0.75 / B	B	1.6	B	75
						C	2.3	C	100
						D	3.2	D	150
						E	4.8	E	200
						F	6.4	F	250
						G	8.0	G	300
						H	10.0	H	500
						I	12.0	I	750
						J	14.0	J	1000
						K	15.0	K	1500
						L	17.3	L	2000
						M	21.7	M	2500
								N	3000
								O	3500
								P	4000

Note : Special length available on request



성지테크(압력/온도/유량/레벨)

TEL: 02-6335-8006~7