

2선식 온도 전송기

2-WIRE TEMPERATURE TRANSMITTER WITH SENSOR(OPTION)/BATTERY DISPLAY

APPLICATION

- Power engineering.
- Plant construction.
- Process engineering.
- General industrial application.
- Oil and gas.

FEATURES

- Multi-Range input.
- Fault signal for sensor burnout.(High /Low select)
- Selectable moving average filter.
- Built-in multiple function.
- IP-67

SPECIFICATIONS

- ▶ Measuring and displaying interval : 400ms
- ▶ Input resistance :
Volt (T/C) 400kΩ, Other type 1MΩ
- ▶ Signal source resistance :
PT100Ω..30Ω/Line,
Volt (T/C) 300Ω/Line
- ▶ CMRR(Common Mode Rejection Ratio) :
140dB or more
- ▶ NMRR(Normal Mode Rejection Ratio) :
60dB or more
- ▶ Moving average filter : Selectable(None 4, 8, 16)
- ▶ Accuracy : ±0.25% FS
- ▶ Output :
2wire DC4.0~20.0mA
Low limit : 3.80mA
upper limit : 20.80mA
- ▶ Power supply :
DC 9~35V
Load limit (vsp9V) / 0.021=RΩ
- ▶ Direction strength :
1000VAC 1minute (input to output)
- ▶ Operating condition
Operating Temp/Humidity : -20~60℃, 0~100% RH
Storage Temp/Humidity : -20~70℃, 5~95% RH
- ▶ material (Body, cover): Aluminum (ALDC, 8S)
- ▶ Electronic mire condition : PF1/2"
- ▶ Weight : 200g (body)
- ▶ Degree of protection : IP-67
- ▶ CE conformity
Pressure equipment directive : 2006 / 95 / EC
EMC Directive : 2004 / 108 / EC EN61326-1
emission (group1, classB) and immunity
(industrial locations)



Battery Type
AAA Size : 2EA
About 3 Years

INPUT TYPE

- ▶ Multi range input
Free input selection by code

Sensor Type	Range	Scale	Symbol	Etc	
TC	B (PR 30%)	0 ~ 1800℃	-	EE-b	STD
	R (PR 13%)	0 ~ 1750℃	-	EE-r	
	S (PR 10%)	0 ~ 1750℃	-	EE-S	
	K(CA)	-200 ~ 1350℃	-	EE-K	
	E(CRC)	-200.0 ~ 700.0℃	-	EE-E	
	J(IC)	-199.9 ~ 800.0℃	-	EE-J	
	T(CC)	-199.9 ~ 400.0℃	-	EE-T	
mV	mV	-100.0 ~ 100.0mV	-1999 ~ 9999	uv	
PT	PT100Ω	-200 ~ 630℃	-	d-PE1	
		-199.9 ~ 630.0℃		d-PE2	
	JPT100Ω	-199.9 ~ 800.0℃	-	J-PE	
Volt	Volt	-10.0 ~ 10.0V	-1999 ~ 9999	v	OPTI ON
mA	mA	4.00 ~ 20.00mA	-1999 ~ 9999	mA	

mA input needs 20Ω 0.05% 25ppm resistance spiral on outside.

- ▶ Minium measuring span
TC : K , E, J, T : 50℃ or 2mV whichever is greater
R, S, B : 200℃
mV : 4mV
RTD : 20℃ or 4.0Ω whichever is greater
sensor current : max 0.3mA

A
B
C
D
E
F
G
H
I
J

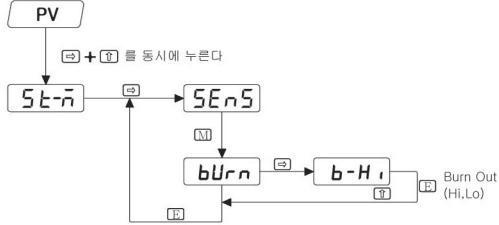
2선식 온도 전송기

2-WIRE TEMPERATURE TRANSMITTER WITH SENSOR(OPTION)/BATTERY DISPLAY

MAJOR FUNCTIONS

▶ Burn-out select function

Sensor burnout when output select function.

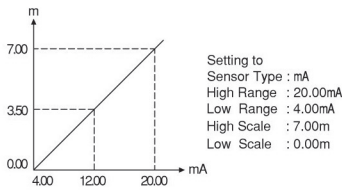


High : 20.80mA keeping
Low : 3.80mA keeping

▶ Display scaling function (mV, Volt, mA only)

This function changes and sets the display value according to scale and input range.

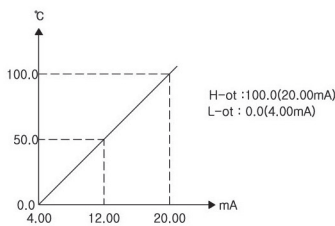
Ex) In case of input range 4.00~20.00mA,
Level 0.00~7.00m



▶ Output scaling function

This function can change the 4.00~20.00mA value as the output scale.

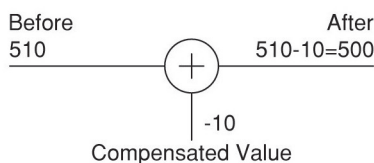
Ex) In case of display value 0.00~7.00m,
Output 4.00~20.00mA



▶ Sensor compensation function

The function is useful for compensating error by long sensor line or changed zero point by aged sensor.

Ex) Before sensor adjust = 510°C
After sensor adjust
= measured value + compensated value
= 510 - 10
= 500°C



▶ Function(mV, Volt, mA type only)

Lin

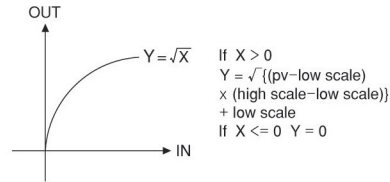
Pass the input as it is.

Used for general input type and linearity input.

rot

Pass the input after $\sqrt{\quad}$.

Used for flow rate by orifice.



▶ Filter function

This function is moving average filter.

0001 ~ 0099

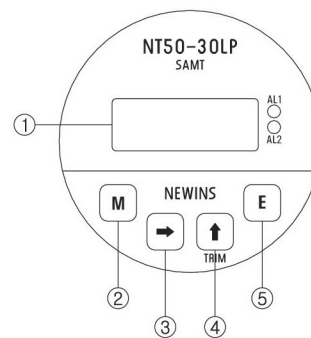
It displays in recent input No 1~99 sample average.

Setting filter function delays response.

Do not use filter when high speed response is needed.

When output and display value are changed by irregular input, it is possible to get regular input and display value by using filter function.

PARTS NAME



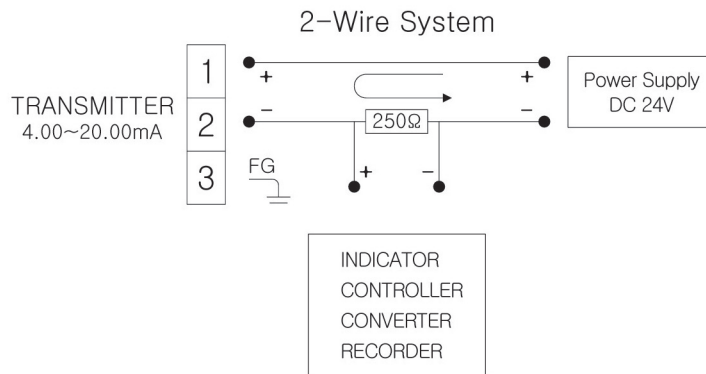
- ① Measured value display
- ② **MODE** : Storage the set data and change the operation menu
- ③ **⇒** : Enter into the data setting mode and modify the changed location
- ④ **↑** : Change the data value
- ⑤ **EXIT** : Out of mode

2선식 온도 전송기

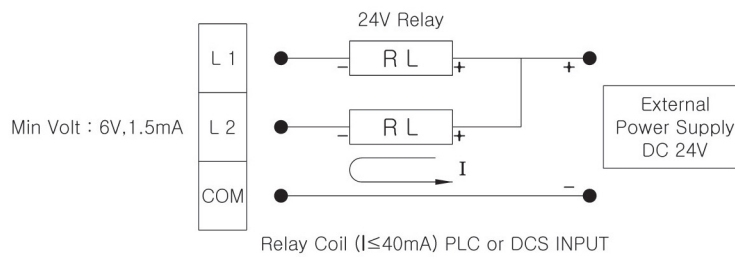
2-WIRE TEMPERATURE TRANSMITTER WITH SENSOR(OPTION)/BATTERY DISPLAY

TERMINAL DIAGRAM

1. 2-Wire



2. Loop-Powered Switch

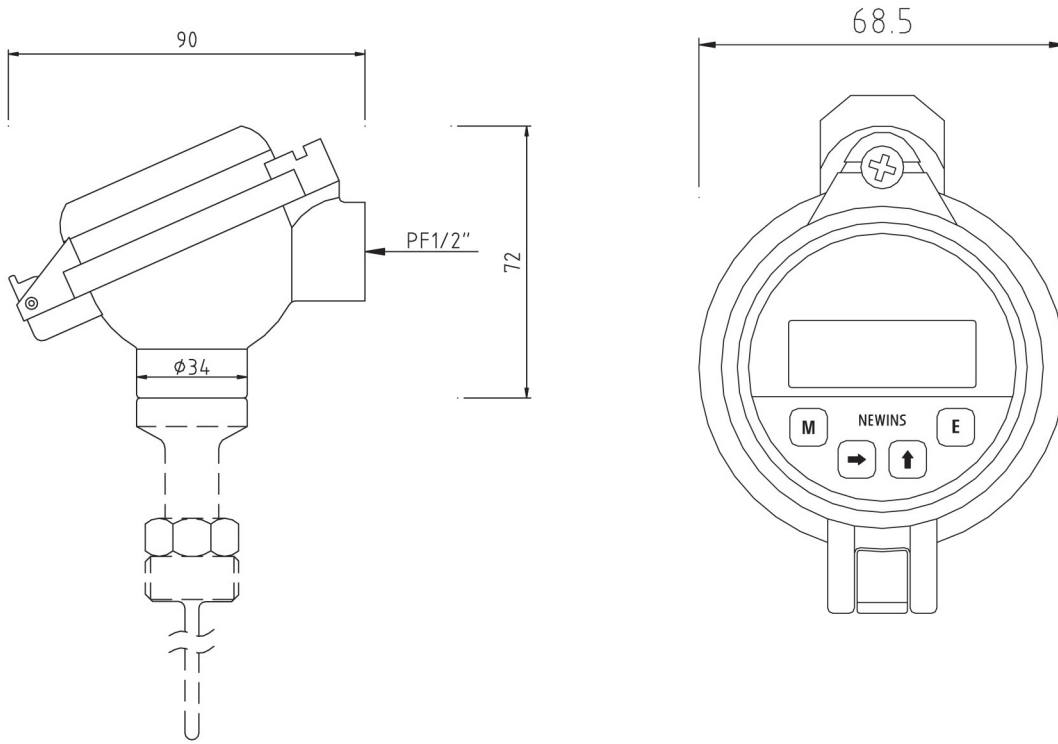


ORDERING CODE

NT54			T	Description(Basic)
Input element	B	0		B
	R	0		R
	S	0		S
	K	0		K
	J	0		J
	E	0		E
	T	0		T
	V	1		mV (-100~100mV)
	V	2		V (-10~10V)
	A	0		mA (4~20mA)
	P	1		Pt100Ω
	P	2		JPt100Ω
Z	0		Others element	
Sensor				Consult
Option Type			B	Battery Type
			LP	Loop Type
			S	2Alarm Contact

DIMENSION

※ Electric connection



Unit:mm