C

FEATURES

- **Multi-Range input**(TC, RTD, Volt, mV, mA, Etc)
- **High accuracy 16bit A/D converter**
- **Selectable moving average filter**
- **Built-in multiple function**
- **DC 4.00~20.00mA 2-wrie loop power**
- **4 Digit LCD for parameter alteration and PV output on the spot**

SPECIFICATIONS

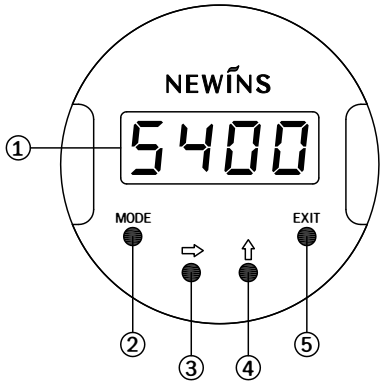
- **Measuring and displaying interval** :
  200ms(mV, Volt, mA type)
  400ms(TC, RTD type)
- **Input resistance** : Volt type 400kΩ, Other type 1MΩ
- **Signal source resistance** :
  PT100Ω..30Ω/Line, Others type 300Ω/Line
- **CMRR(Common Mode Rejection Ratio)** : 140dB or more
- **NMRR(Normal Mode Rejection Ratio)** : 60dB or more
- **Moving average filter** : Selectable(None 4, 8, 16)
- **Accuracy** : ±0.25% FS
- **Power** : DC 9~35V
- **Output** : 2-wire DC 4.00~20.00mA
  load limit(Vsp9V)/0.022=RΩ
- **Operating condition**
  Operating Temp/Humidity : -10~60℃, 10~90%
  Storage Temp/Humidity : -20~70℃, 5~95%
- **Case meterial** : ALL SUS 316L
- **Etc**
  Weight : 1.5kg
  Mounting : Filed Mount

INPUT TYPE

Sensor Type		Range	Scale	Simbol
TC	B(PR 30%)	0~1800℃	-	tC-b
	R(PR 13%)	0~1750℃	-	tC-r
	S(PR 10%)	0~1750℃	-	tC-S
	K(CA)	-200~1350℃	-	tC-K
	E(CRC)	-200.0~700.0℃	-	tC-E
	J(IC)	-199.9~800.0℃	-	tC-J
	T(CC)	-199.9~400.0℃	-	tC-t
Volt	mV	-100.0~100.0mV	-1999~9999	mu
	Volt	-10.0~10.0V	-1999~9999	u
mA	mA	4.00~20.00mA	-1999~9999	mA
PT	Pt100Ω	-199.9~800.0℃	-	d-Pt
	JPt100Ω	-199.9~800.0℃	-	J-Pt

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

PARTS NAME



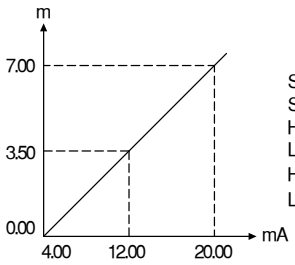
① Measured value display
② MODE Key : Storage the set data and change the operation menu
③ ⇨ Key : Enter into the data setting mode and modify the changed location
④ ⇧ Key : Change the data value
⑤ EXIT Key : Out of mode

MAJOR FUNCTIONS

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 and Level 0.00~7.00m

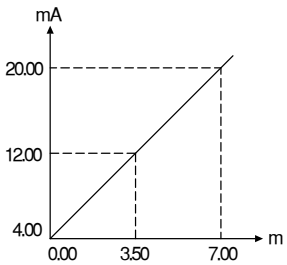


Setting to
Sensor Type : mA
High Range : 20.00mA
Low Range : 4.00mA
High Scale : 7.00m
Low Scale : 0.00m

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

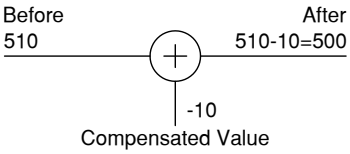


Setting to
High Out Scale : 7.00m
Low Out Scale : 0.00m

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℃
After sensor adjust
= measured value + compensated value
= 510 - 10 = 500℃



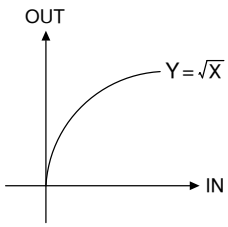
Function(mV, Volt, mA type only)

L in

Pass the input as it is.
Used for general input type and linearity input.

S-rt

Pass the input after $\sqrt{\ }$. Used for flow rate by orifice.



If X > 0
Y = √{(pv−low scale)
x (high scale−low scale)}
+ low scale
If X <= 0 Y = 0

L int

Like level measuring, when it does not display measuring under zero, it always can display zero by using limit function.

Filter function

Filter is moving average filter and it has 4 kinds of function.

nonE

It displays the change of input without filter.

Av 4, 8, 16

It displays in recent input No 4,8,16 sample average.
Setting filter function delays reponse.
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.

C

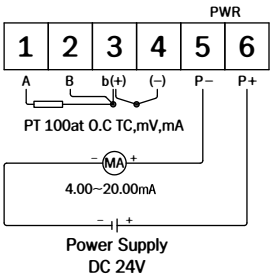
ORDERING CODE

Model	Input	Indicator	Description	Etc
NT 53XX	0		Head Mounted	None LCD
NT 54XX	0		Traditional Mounted	
		0	None	
		1	With LCD	Only 5400

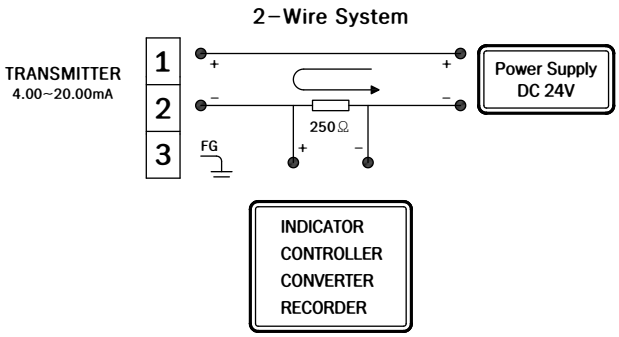
* Temperature sensor is separate way subject of discussion

TERMINAL DIAGRAM

※ NT 5300

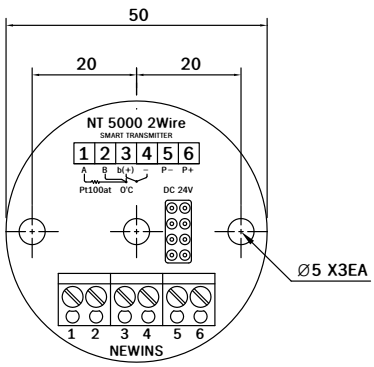


※ NT 5400



DIMENSION & PANEL CUT

※NT 5300



※NT 5400