

Temperature transmitter



Technical data

Power supply: 12 V DC~28 V DC (Reverse power protection)
Input signal: K, E, S, B, J, T, R, N, etc
millivolt signal (-10mV~120mV)
Output signal: 4~20mA
Load resistance: $RL \leq [(U-12)/0.022]\Omega$; U is loop powered
voltafe

Range and Conversion accuracy list ($25^{\circ}\text{C} \pm 2^{\circ}\text{C}$, not contain cold junction compensation) :

Type	Range	Min.span/Accuracy
K	-200°C~+1372°C	<300°C, $\pm 0.3^{\circ}\text{C}$
E	-100°C~+1000°C	<300°C, $\pm 0.3^{\circ}\text{C}$
J	-100°C~+1200°C	<300°C, $\pm 0.3^{\circ}\text{C}$
N	-200°C~+1300°C	<300°C, $\pm 0.3^{\circ}\text{C}$
S	-50°C~+1768°C	<500°C, $\pm 0.5^{\circ}\text{C}$
R	-50°C~+1768°C	<500°C, $\pm 0.5^{\circ}\text{C}$
T	-20°C~+400°C	<300°C, $\pm 0.3^{\circ}\text{C}$
B	+400°C~+1820°C	<500°C, $\pm 0.5^{\circ}\text{C}$
mv	-10mV~120mV	<10mV, 0.01mV
		>10mV, $\pm 0.1^{\circ}\text{F.S.}$

Compensation accuracy: 1°C (Temperature compensation range:
 $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$)

Temperature drift: 50ppm/ $^{\circ}\text{C}$

Response time: $\leq 1\text{s}$

Electromagnetic compatibility: IEC 61326-1

Dielectric strength: $\geq 1500\text{V AC}$ (Input/Output)

Insulation resistance: $\geq 100\text{M}\Omega$ (Input/Output)

Operation temperature: $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$

Storage temperature: $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$

Dimension: $\varnothing 44 \times 25.5\text{mm}$

Wire size: 1.5mm^2

Screw terminal torque: 0.5Nm

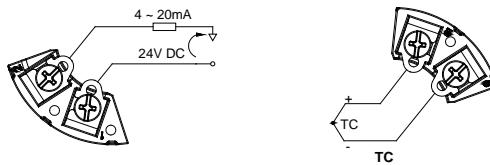
Temperature transmitter

NTM 210.Ex

- TC or mV input
- High accuracy
- Excellent EMC performance
- 1500V AC dielectric strength
- DIN B Head mount and field mount transmitters
- Configurable input types and ranges



Wiring diagram



Explosive-proof parameters

National Supervision and Inspection Center for Explosion Protection and Safety of Instrumentation (NEPSI)

Explosive-proof grade: Ex ia IIIC T4/T6 Ga

T4: $-40^{\circ}\text{C} \sim +60^{\circ}\text{C}$

T6: $-40^{\circ}\text{C} \sim +50^{\circ}\text{C}$

Certified parameters (Terminals 5, 6):

$U_o=5.9\text{V}$ $I_o=24\text{mA}$ $P_o=36\text{mW}$

$C_o=40\mu\text{F}$ $L_o=40\text{mH}$

Certified parameters (Terminals 1, 2):

$U_i=28\text{V}$ $I_i=93\text{mA}$ $P_i=670\text{mW}$

$C_i=0\mu\text{F}$ $L_i=0\text{mH}$