

**Product Information**

**Temperature**

**Universal Head Transmitter GITT01**



- **Freely programmable for resistance thermometers, thermocouples, resistance sensors, voltage sensors**
- **Electrically isolated**

**Characteristics**

The GITT01 is a universally programmable transmitter for measuring temperature, resistance and voltage. The input signal is linearized and output as 4..20 mA or 20..4 mA signal. This allows to transmit signals over large distances. The GITT01 is well-suited for industrial application.

The transmitter is factory preset, but can also be configured by the customer via programming tool. This makes customers' warehousing easier and has the advantages of a freely programmable measuring range.

The GITT01 provides error signaling in case of sensor break or sensor short-circuit. PC-configuration is possible while the transmitter is in measuring mode.

**Technical data**

Measuring input : resistance thermometer, thermocouple, resistance, voltage

Input signal max. meas. range min. meas. range

**Resistance thermometers**

Pt100	: -200..+850 °C	10 K
Pt500	: -200..+250 °C	10 K
Pt1000	: -200..+250 °C	10 K
Ni100	: -60 ... +250 °C	10 K
Ni500	: -60..+150 °C	10 K
Ni1000	: -60..+150 °C	10 K

**Thermocouples**

Type B (PtRh30-PtRh6)	: 0..+1820 °C	500 K
Type C (W5Re-W26Re)	: 0..+2320 °C	500 K
Type D (W3Re-W25Re)	: 0..+2495 °C	500 K
Type E (NiCr-CuNi)	: -270..+1000 °C	50 K
Type J (Fe-CuNi)	: -210..+1200 °C	50 K
Type K (NiCr-Ni)	: -270..+1372 °C	50 K
Type L (Fe-CuNi)	: -200.. + 900 °C	50 K
Type N (NiCrSi-NiSi)	: -270..+1300 °C	50 K
Type R (Pt13Rh-Pt)	: -50..+1768 °C	500 K
Type S (Pt10Rh-Pt)	: -50..+1768 °C	500 K
Type T (Cu-CuNi)	: -270..+ 400 °C	50 K
Type U (Cu-CuNi)	: -200.. + 600 °C	50 K

**Resistance-type sensor**

Resistance	: 10.. 400 Ohm	10 Ohm
Resistance	: 10..2000 Ohm	10 Ohm

**Voltage sensor**

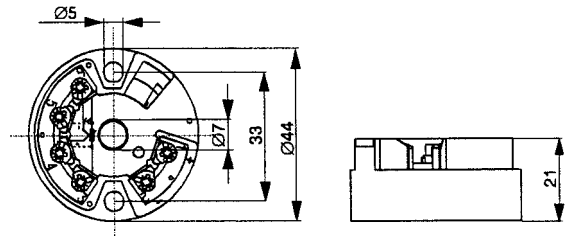
Voltage	: -10..100 mV	5 mV
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**Sensor connection**

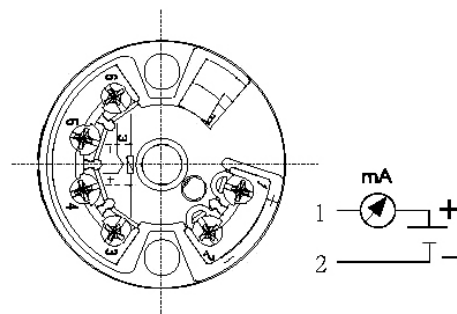
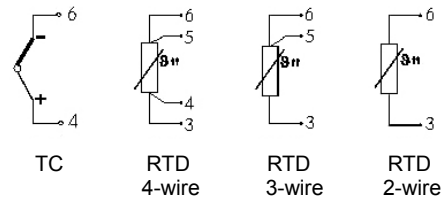
Resist. thermometer	: 2-, 3- or 4-wire connection
Thermocouple	: 2-wire connection

Working temperature	: -40..+85 °C
Output signal	: 4..20 mA, 20..4 mA, 2-wire
Power supply U <sub>B</sub>	: 8..35 V DC
Response time	: 1 s
Electric connection	: via screw terminals, max. cable cross-section 1.75 m <sup>2</sup>
Housing	: round head transmitter, Ø 44 x 21 mm, suitable for installation in connection head acc. to DIN 43729 form B
Protection class	: housing: IP54 terminals: IP00

**Dimensions**



**Connection diagram**



continued on next page

**Product Information**

**Ordering code**

GITT01 -  1. -  2. -  3. -  4. -  5.

<b>1. Input signal</b>	
1	resistance thermometer Pt100
2	resistance thermometer Pt500
3	resistance thermometer Pt1000
4	resistance thermometer Ni100
5	resistance thermometer Ni500
6	resistance thermometer Ni1000
B	type B (PtRh30-PtRh6)
C	type C (W5Re-W26Re)
D	type D (W3Re-W25Re)
E	type E (NiCr-CuNi)
J	type J (Fe-CuNi)
K	type K (NiCr-Ni)
L	type L (Fe-CuNi)
N	type N (NiCrSi-NiSi)
R	type R (Pt13Rh-Pt)
S	type S (Pt10Rh-Pt)
T	type T (Cu-CuNi)
U	type U (Cu-CuNi)
7	resistance 10..400 Ohm
8	resistance 10..2000 Ohm
9	voltage -10..100 mV
<b>2. Measuring range</b>	
MBx	state desired measuring range e.g.: MB -50..+400 °C (must be within max. possible measuring range)
<b>3. Sensor break signal</b>	
FBU	3.6 mA
FBO	≥ 21.0 mA
<b>4. Output signal</b>	
A1	4..20 mA
A2	20..4 mA
<b>5. Options</b>	
00	without option
Ex	with Ex protection (ATEX) for use in potentially explosive areas

**Accessories**

**Rail adapter**

(for snapping the GITT01 onto a top-hat rail)



**Programming tool for GITT01**

The programming tool contains a multilingual configuration software and USB-connection cable