

# GREISINGER electronic GmbH

## Temperature Transducer (click housing)

Operating Manual

GTP -SG  
GNTP -SG  
RT420 - SG



Made in  
Germany

WEEE-Reg.-Nr. DE93889386



# GREISINGER electronic GmbH

D - 93128 Regenstauf, Hans-Sachs-Straße 26

+49 (0) 9402 / 9383-0 +49 (0) 9402 / 9383-33 [info@greisinger.de](mailto:info@greisinger.de)

## General

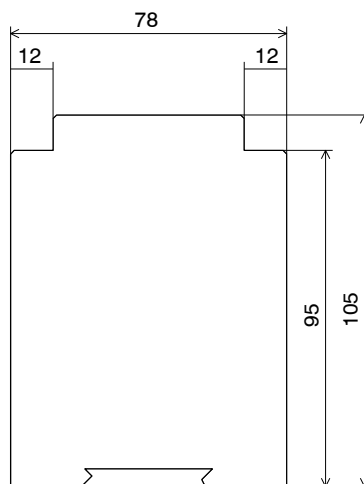
The transducer is ready to use und especially designed for top hat rail mounting.

## 1 Safety instructions

This device has been designed and tested in accordance to the safety regulations for electronic devices. However, its trouble-free operation and reliability cannot be guaranteed unless the standard safety measures and special safety advises given in this manual will be adhered to when using it.

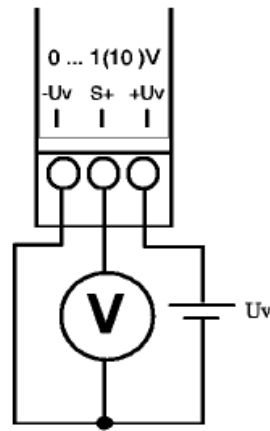
1. Trouble-free operation and reliability of the device can only be guaranteed if it is not subjected to any other climatic conditions than those stated under "Specification".  
Transporting the device from a cold to a warm environment condensation may result in a failure of the function. In such a case make sure the device temperature has adjusted to the ambient temperature before trying a new start-up.
2. General instructions and safety regulations for electric, light and heavy current plants, including domestic safety regulations (e.g. VDE), have to be observed.
3. If device is to be connected to other devices (e.g. via PC) the circuitry has to be designed most carefully. Internal connection in third party devices (e.g. connection GND and earth) may result in not-permissible voltages impairing or destroying the device or another device connected.
4. Whenever there may be a risk whatsoever involved in running it, the device has to be switched off immediately and to be marked accordingly to avoid re-starting. Operator safety may be a risk if:
  - there is visible damage to the device
  - the device is not working as specified
  - the device has been stored under unsuitable conditions for a longer timeIn case of doubt, please return device to manufacturer for repair or maintenance.
5. **Warning:** Do not use this product as safety or emergency stop device or in any other application where failure of the product could result in personal injury or material damage.  
Failure to comply with these instructions could result in death or serious injury and material damage.

## 2 Housing

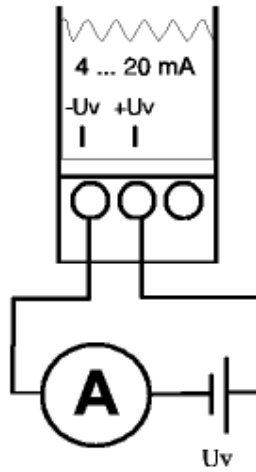


### 3 Assignment

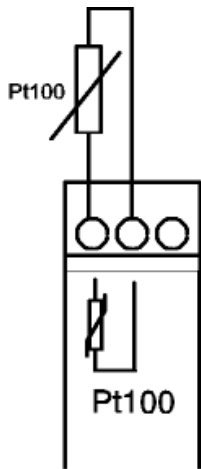
#### Voltage



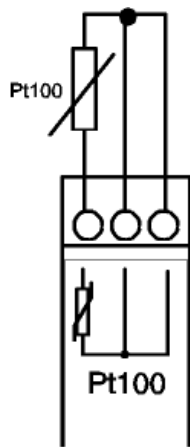
#### Current



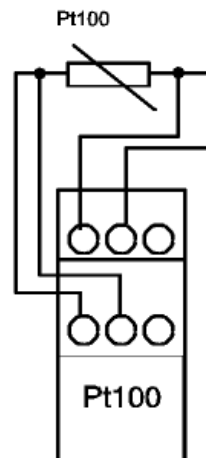
#### 2 wire connection



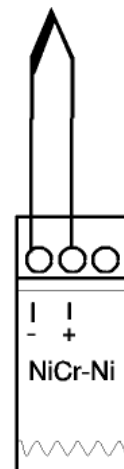
#### 3 wire connection



#### 4 wire connection



#### Thermocouple element



### 4 Disposal instructions



This device must not be disposed as "residual waste".  
To dispose this device, please send it directly to us (adequately stamped).  
We will dispose it appropriately and environmentally friendly.

## 5 Specification

<b>Sensor element:</b>	<b>Pt100, NiCr-Ni</b>	<b>Pt100 (RT 420), RT420</b>
<b>Measuring range:</b>	please refer to type plate	please refer to type plate
<b>Output signal:</b>	please refer to type plate	4-20mA
<b>Accuracy electronic:</b> (at nominal temperature)	< ±0.2% FS (Full Scale) Pt100 < ±0,2% FS (Full Scale) ±0,5°C NiCr-Ni	range < 250°C: < ±0.25°C range > 250°C: < ±0.1% FS (Full Scale)
<b>Temperature coefficient:</b>	0.05 % / °C	0.01 % / °C
<b>Auxiliary energy:</b> (supply voltage)	12 ... 30V DC 18 ... 30V DC (0-10V output)	8 ... 35V DC
<b>Permissible impedance:</b> (current output)	4-20mA: < $(U_v - 12V) / 0.02$ Ohm 0-20mA: < 150 Ohm	< $((U_v - 8V) / 23) * 1000$ Ohm
<b>Permissible load:</b> (voltage output)	>3000 Ohm	
<b>Reverse voltage protection:</b>	max. 50V dauernd	max. 35V
<b>Nominal temperature:</b>	+25 °C	+23 °C ± 2°C
<b>Operating temperature:</b>	0 ... +70 °C	-20 ... +70 °C
<b>Storage temperature:</b>	-20 ... +70 °C	-20 ... +70 °C
<b>Relative humidity:</b>	0 .. 95 % r.H. non condensing	0 .. 95 % r.H. non condensing
<b>Dimensions / housing:</b>	approx. 22.5 x 78 x105 (H x W x D), for top hat rail mounting	
<b>Connecting terminals:</b>	For cable with max. 1.5mm <sup>2</sup> cross section	
<b>EMC:</b>	The device corresponds to the essential protection ratings established in the Regulations of the Council for the Approximation of Legislation for the member countries regarding electromagnetic compatibility (2004/108/EG). In accordance with EN 61326 (appendix B, class B), performance criterion D	