GHM Messtechnik GmbH - Location Greisinger
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Transmitter GTMU-A5

- **Transmitter for already existing Pt100 or NiCr-Ni sensors**
- **Ready for assembly**

Characteristics

The GTMU A5 is a transmitter for external thermocouples (NiCr-Ni) or resistance temperature sensors (Pt100, 2- or 3- wire). The transmitter outputs linear current or voltage signals.

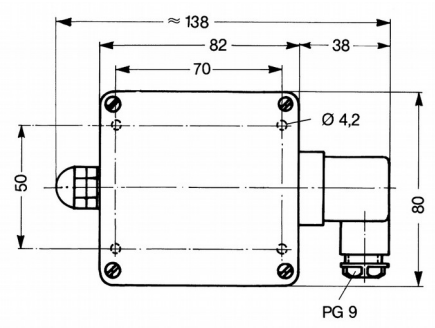
The GTMU A5 is particularly suitable if the temperature probe is already available or if housing and temperature sensor have to be apart form each other (e.g. due to high ambient temperatures).

The transmitter is adjusted according to customer requirements.

Technical data

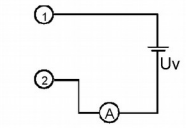
Possible sensor	:	Pt100 (2- or 3- wire) NiCr-Ni
Standard measuring range		
Pt100	:	0..100 °C, 0..200 °C, -50..+50 °C, -50..+150 °C
NiCr-Ni	:	0..100 °C, -50..+150 °C, -200..+300 °C, 0..600 °C, 0..1150 °C other ranges upon request
Max. possible measuring ranges		
Pt100	:	-200..+800 °C
NiCr-Ni	:	-200..+1150 °C
Sensor connection	:	insertion of sensor cable via PG7 connection to board via screw terminals
Output signal	:	standard 4..20 mA (2-wire) optional 0..1 V, 0..2 V, 0..5 V, 0..10 V (3- or 4-wire)
Power supply Uv	:	12..30 V DC (at 0..10 V: 18..30 V DC)
Permissible burden R_A	:	(at 4..20 mA) $R_A = (U_V - 12\ V) / 0{,}02\ A$
Permissible load R_L	:	(at … V) $R_L > 3000\ \Omega$
Working temperature	:	0..70 °C (-40..+85 °C at Option RT420 / GITT)
Housing material	:	ABS
Protection class	:	IP65
Mounting	:	with fastening holes for wall mounting
Electrical connection	:	elbow-type plug (EN 175301-803/A)

Dimensions



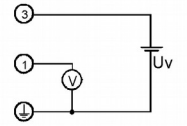
Connection diagram

2-wire (4..20 mA)



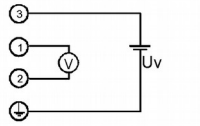
1 = supply voltage +Uv
2 = GND / signal

3-wire (.. V DC)



1 = signal +
3 = supply voltage +Uv
⏚ = supply voltage -Uv
signal -

4-wire (.. V DC)



1 = signal +
2 = signal -
3 = supply voltage +Uv
⏚ = supply voltage -Uv

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Ordering code

GTMU-A5 - 1. ☐ - 2. ☐ - 3. ☐ - 4. ☐

1.	**Sensor element**		
	P2	resistance thermometer Pt100, 2-wire	
	P3	resistance thermometer Pt100, 3-wire	
	K2	thermocouple NiCr-Ni	
2.	**Measuring range (MB)**		
	MB1	0..100 °C	*Pt100 / NiCr-Ni*
	MB2	-50..+150 °C	*Pt100 / NiCr-Ni*
	MB3	0..200 °C	*only Pt100*
	MB4	-50..+50 °C	*only Pt100*
	MB5	-200..+300 °C	*only NiCr-Ni*
	MB6	0..600 °C	*only NiCr-Ni*
	MB7	0..1150 °C	*only NiCr-Ni*
	MBx	desired measuring range (e.g. -50..+400 °C) max. possible measuring range: Pt100: -200..+800 °C / NiCr-Ni: -200..+1150 °C	
3.	**Output signal**		
	A1	4..20 mA (2-wire) (standard)	
	V1	0..1 V (3-wire)	
	V3	0..2 V (3-wire)	
	V4	0..5 V (3-wire)	
	V2	0..10 V (3- wire)	
4.	**Options** (combination of multiple options upon request)		
	00	without Option	
	VO	on-site display (display and control panel)	
	LACK	board varnished on both sides (for outdoor usage)	
	GITT	transmitter with electrical isolation (only output 4..20 mA possible)	
	RT420	transmitter particular for outdoor usage (only with sensor element Pt100 and output 4..20 mA possible)	