

Product Information

Sensors and Instrumentation

**Temperature Probe
(Surface-Mounted Type)
GTMU-OMU**



A1

- Optimal adaptability due to 4 different design types
- Ready for assembly

Characteristics

The GTMU-OMU is a temperature probe with integrated transmitter. There are 4 basic design types and 3 sensor types. This ensures optimal adaptability to different conditions like higher temperatures, outdoor usage or wall mounting.

The measurement is done by means of a resistive temperature sensor (Pt100 / Pt1000, 2-, 3- or 4- wire) or thermocouple (NiCr-Ni).

The transmitter is completely customized according to customer requirements.

Technical data

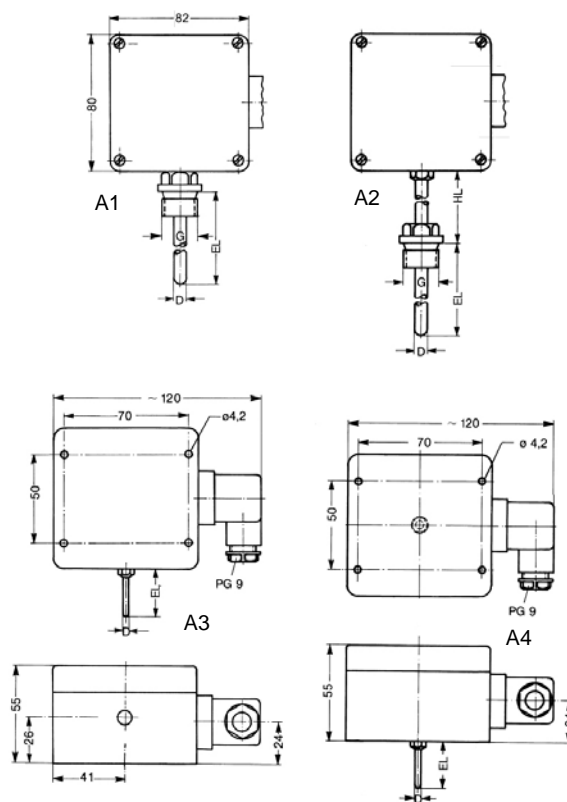
- Sensor element : Pt100 (2-, 3- or 4- wire)
Pt1000 (2-, 3- or 4- wire)
NiCr-Ni
- Standard measuring ranges**
Pt100 / Pt1000 : 0..100 °C, 0..200 °C, -50..+50 °C,
-50..+150 °C
NiCr-Ni : 0..100 °C, -50..+150 °C, -200..+300 °C,
0..600 °C, 0..1150 °C
other measuring ranges upon request
- Max. possible measuring range**
Pt100 / Pt1000 : -200..+800 °C
NiCr-Ni : -40..+1150 °C
- Accuracy**
Pt100 / Pt1000 : DIN class B
NiCr-Ni : class 1
- Working temperature : 0..70 °C (housing and elbow-type plug)
Housing material : ABS
Probe material : stainless steel
Sensor installation : sensors are isolated
Mounting : with fastening holes for wall mounting
Electrical connection : elbow-type plug (EN 175301-803/A)
Protection class : IP65

	A1	A2	A3	A4
Process connection (standard)	G ½		—	—
Fitting length (standard)	EL = 100 mm	EL = 100 mm	EL = 50 mm	EL = 100 mm
Neck tube length (standard)	—	HL = 50 mm	—	—
Diameter (standard)	D = 6 mm	D = 6 mm	D = 3 mm	D = 6 mm

Design types

A1	with process connection G ½ for screw-in
A2	for higher temperatures, process connection G ½ in distance to housing, HL = length of neck tube
A3	indoor / outdoor probe for wall mounting <i>(potting of electronics necessary for outdoor application)</i>
A4	duct probe with centrally mounted sensor tube pointing downwards

Dimensions



continued on next page

Product Information

Ordering code

1. 2. 3. 4. 5. 6. 7.
GTMU-OMU - - - - - - -

1. Design type		
A1	as per description	
A2	as per description	
A3	as per description	
A4	as per description	
2. Sensor element		
P	resistance thermometer Pt100	
T	resistance thermometer Pt1000	
K	thermocouple NiCr-Ni	
3. Measuring range (MB)		
MB1	0..100 °C	P / T / K
MB2	-50..+150 °C	P / T / K
MB3	0..200 °C	only P / T
MB4	-50..+50 °C	only P / T
MB5	-200..+300 °C	only K
MB6	0..600 °C	only K
MB7	0..1150 °C	only K
MBx	desired measuring range (e.g. -50..+400 °C) max. possible measuring range: Pt100: -200..+800 °C / NiCr-Ni: -200..+1150 °C	
4. Fitting length EL		
050	50 mm (standard A3)	
100	100 mm (standard A1, A2, A3)	
xxx	any EL in mm (e.g.: 200 = 200 mm)	
5. Probe diameter D		
3	Ø 3 mm (standard A3)	
4	Ø 4 mm	
5	Ø 5 mm	
6	Ø 6 mm (standard A1, A2, A4)	
8	Ø 8 mm	
6. Process connection G (only at design type A1 and A2)		
G1	G ½, V4A (Standard)	
G2	G ¼, V4A	
G3	G ¾, V4A	
G5	G ⅝, V4A	
M5	M5, V4A	only D = 3 mm possible
M6	M6, V4A	only D = 3 mm possible
M8	M8, V4A	max D = 5 mm possible
M0	M10, V4A	max D = 6 mm possible
M2	M12, V4A	
7. Length of neck tube HL (only at design type A2)		
050	50 mm (standard)	
xxx	any HL in mm (e.g.: 100 = 100 mm)	