Freely scaleable temperature transducer

GTMU-MP

General

The new generation of our temperature transmitters brings more flexibility thanks to state of the art digital microprocessor technology.
Due to the many different design types and a measuring range of -50 ... 400°C nearly all kinds of applications can be covered.

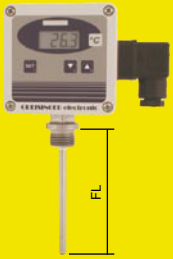
- **on site temperature display**
- **output signal freely scaleable**
- **user-adjustment possible**
- **possible output signals: 4-20mA, 0-1V or 0-10V**

Design types

Design type 1

for direct screw connection

probe with threaded stem "G"



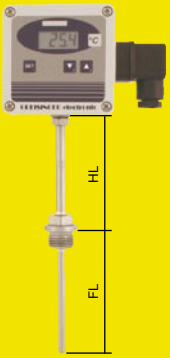
Standard type:

G = ½", FL = 100mm, D = 6mm

Design type 2

for high temperatures

threaded stem at a distance of HL (collar tube) from housing



Standard type:

G = ½", HL = 100mm,
FL = 100mm, D = 6mm

Design type 3

indoor / outdoor probe

for direct wall mounting

Standard type:

FL = 50mm, D = 3mm

Design type 4

duct probe

centrally mounted sensor tube pointig downwards
(for clamping ring screw connection p.r.t. page 92)

Standard type:

FL = 100mm, D = 6mm

Specification

Measuring range:		-50.0 ... +400.0°C, free scaleable *The probe length FL has to be chosen long enough, that the allowable temperature of the case and the electronics of 70°C is not exceeded !*
Accuracy: (at 25°C)		
Display - temperature:		±0,4% of meas. value ±0,2°C
Add. output signal:		±0,2 % FS
Probe:		Pt1000, 2-wire
Output signal:	standard	4-20mA (2-wire), freely scaleable
	option:	0-1V, 0-10V (other output signals upon request)
Connection:		4 - 20 mA (2-wire)
for option AV01, AV10:		0 - 1 (10) Volt (3- or 4-wire)
Auxiliary energy:		12 ... 30 VDC or 18 ... 30VDC (for output: 0-...V)
Reverse voltage protection:		50V, permanently
Perm. impedance (at 4-20mA):		RA [Ω] = (Uv [V] - 12V) / 0.02 A
Permissible load (at 0-1(10)V):		RL [Ω] > 3000Ω
Display:		approx. 10 mm high, 4-digit LCD-display
Working temperature:		-25 to 70°C (electronic)
Storage temperature:		-25 to 70°C
Relative humidity (electronic):		0 to 95 %RH (non-condensing) *If there is a risk of condensation due to temperature changes, please use our encapsulated or lacquered types (option).*
Housing:		ABS (IP65)
Probe tube:		stainless steel
Probe length:		for standard length please refer to design type,
	optional:	any other tube length possible *The probe length FL has to be chosen long enough, that the allowable temperature of the case and the electronics of 70°C is not exceeded !*
thread "G":		G1/2" (standard),
	optional:	G1/4", G3/8", G3/4", M10, M12, M14, M16
Probe diameter "D":		3, 4, 5, 6 or 8 mm
Electric connection:		elbow-type plug acc. to DIN 43650 (IP65)
Mounting:		4 housing holes for wall mounting or by means of plastic tube clamps for duct mounting
Functions:		min-/max-value memory, offset und slope digital adjustable, output signal freely scaleable (without tools)

Prices - temperature transducer

GTMU - MP design type 1

GTMU - MP design type 2

GTMU - MP design type 3

GTMU - MP design type 4

Options / upcharges

- **AV01: output signal 0-1V** upcharge:
- **AV10: output signal 0-10V** upcharge:
- **LACK: encapsulated PC board** upcharge:
  (for outdoor application, i.e. applications where condensation is possible)
- **FL=...: longer tube,** each started further 100mm upcharge:
- **HL=...: longer collar tube,** each started further 100mm upcharge:
- **D=...: other probe diameter**
- **G=...: other thread**

Accessories

Clamping ring screw connection **please refer to page 92**

Ordering information

If no additional data is added to the design type, the probe will be manufactured with standard dimensions.
If different dimensions are needed, they have to be specified.

Ordering examples:

GTMU-MP, type 1

GTMU-MP, type 3, FL = 100 mm, D = 4 mm