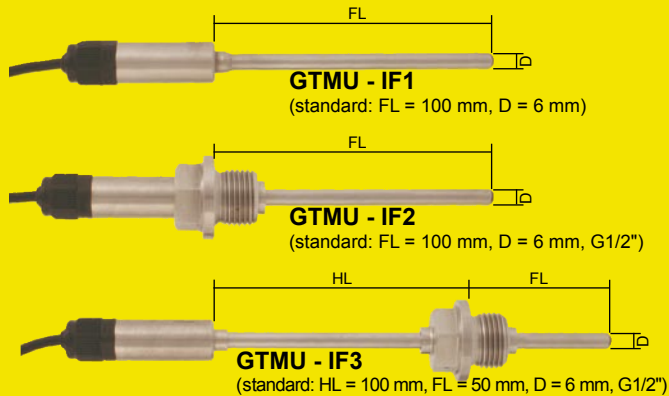


## Temperature transmitter with digital adjustment



**GTMU - IF1**

**GTMU - IF2**

**GTMU - IF3**

### Specification:

**Meas. range:** *The probe length FL has to be chosen long enough, that the allowable temperature range of the electronics situated in the tube sleeve is not exceeded.*

**GTMU - IF1 (standard):** - 30,0 ... +100,0 °C

**GTMU - IF2 (standard):** - 30,0 ... +100,0 °C

**GTMU - IF3 (standard):** - 70,0 ... +400,0 °C

**other measuring ranges (max. -200 ... +500°C) upon request**

**Meas probe:** internal Pt1000-sensor

**Accuracy:** (at nominal temperature = 25°C)

**Electronic:** ±0,2% of meas. value ±0,2°C

**Meßfühler:** standard: DIN class B

*optionally higher sensor accuracy available*

**Output signal:** 4 ... 20 mA (2-wire)

**Auxiliary energy:**  $U_v = 10 \dots 30$  V DC

**Permissible burden:**  $R_A \leq (U_v - 10V) / 0,022A$  [ $R_A$  in Ohm,  $U_v$  in V]

**Scaling:** the transducer can be scaled freely within the measuring ranges via GTMU-IF programming tool.

**Operating temperature of electronic (in tube sleeve):** -25 to 60°C

**Housing:** stainless steel housing

**Dimensions:** depending on sensor construction

**tube sleeve:**  $\varnothing 15 \times 35$  mm (without screwing)

**tube length FL:** 100 or 50 mm *or on customer requirement*

**tube diameter D:**  $\varnothing 6$  mm *or on customer requirement*  
(available  $\varnothing$ : 4, 5, 6 and 8 mm)

**collar tube length HL:** 100 mm *or on customer requirement*

**thread:** G1/2" *or on customer requirement*

(available threads M8x1, M10x1, M14x1.5, G1/8", G1/4", G3/8", G1/2", G3/4")

**Electric connection:** approx. 1m long 4-pin cable  
(2 x current loop, 2 x interface)

### Options (upcharges):

- FL=...: longer tube, *each started further 100mm*
- HL=...: longer collar tube, *each started further 100mm*
- D=...: other tube diameter
- G=...: other thread upon request
- MB=...: other measuring ranges, set by factory

### Accessories:

#### **GTMU-IF - Programming tool**

USB-interface adaptor for GTMU-IF, incl. configuration software

## Analog Pt100-transmitter with digital adjustment



### **T03 BU /WE \*1** (transmitter 0-10V, set by our works)

\*1 = please specify design-type desired on your order.  
e.g. T03BU, Pt100 3-wire, 0...10V = 0 - 250°C

**General:** These transmitter are designed for industrial applications and are used to measure the temperature through Pt100 resistance thermometers in 2-/3-wire circuits connections. The 0...10V output signal is linear with temperature. The advantages of a continuous analog signal path and those of digital adjustment have been combined in the realization of this transmitter series.

### Specification:

**Measurement input:** Pt100 (DIN EN60751)

**Range limits:** -200 ... +850°C

**Meas. span:** 40 to 1050 K

**Zero shift:** at span < 75K: -40, -20, 0, 20 or 40°C  
at span = 75K: ± 50°C  
at span > 75K: ± (span \* 0.2 + 35°C)

**Sensor connection:** 2- or 3-wire connection

**Meas. current:** < 0,5 mA

**Max. perm. line resistance (3-wire):** 11 Ohm per conductor

**Sampling time:** continuous because of analog signal path

**Output signal:** 0...10 Volt, 3-wire technology

**Setting time on a temperature change:** ≤ 10 ms

**Transfer characteristic:** linear with temperature

**Transfer accuracy:** ≤ ±0.2% FS

**Calibration accuracy:** ≤ ±0.2°C or ±0.2% FS

**Supply voltage:**  $U_B$  15 ... 30 V DC

**Supply voltage error:** ±0.01 % FS / V

**Permissible load  $R_L$ :**  $R_L \geq 10$  kOhm

**Load error:** ≤ ±0.1% FS

**Operating temp.:** -40 ... +85 °C

**Relative humidity:** 0... 95 %RH (non condensing)

**Storage temperature:** -40 ... +100 °C

**Electromagnetic compatibility (EMC):**

conforming to  $\text{CE}$  acc. to DIN EN 61326

**Electric connection:** via terminals,  
cross section of connection terminals max. 1,75 mm<sup>2</sup>

**Housing:** PC-housing, suitable for installation in connection head acc. to DIN 43729 form B.

**Operating position:** unrestricted

**Dimensions:**  $\varnothing 44$  mm x 21 mm

**IP-rating:** housing: IP54, connection terminals: IP00

**Weight:** approx. 45 g

### Accessories:

#### **Rail adapter**

(rail adapter for snap-on to top-hat rail)

#### **Programming tool for T03BU**

The programming tool consists of: configurations software, connection cable RS 232-C (approx. 1m long, 9-pin Dsub-plug)