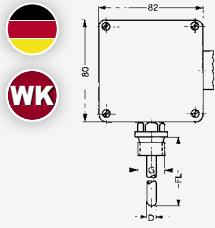
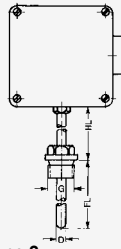


Temperature transducer GTMU complete with Pt100 or NiCr-Ni (type K) sensor



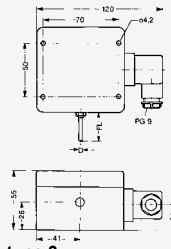
design type 1
for direct screw connection probe with threaded stem „G“

Standard type:
G = 1/2", FL = 100 mm, D = 6 mm



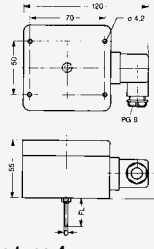
design type 2
for high temperatures threaded stem at a distance of HL (collar tube) from housing

Standard type:
G = 1/2", HL = 50 mm, FL = 100 mm, D = 6 mm



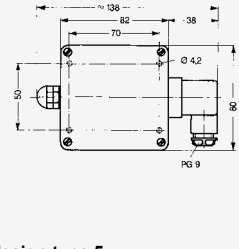
design type 3
indoor / outdoor probe for direct wall mounting

Standard type::
FL = 50 mm, D = 3 mm



design type 4
duct probe centrally mounted sensor tube pointing downwards. (for clamping ring screw connection p.r.t. page 139)

Standard type:
FL = 100 mm, D = 6 mm



design type 5
for external probes measuring transducer for Pt 100 or NiCr-Ni sensors already existing on site or for applications where sensor and housing need to be spaced. (e.g. due to extremely high ambient temperatures or to design reasons).

- GTMU-AP1** Temperature transducer
- GTMU-AP2** Temperature transducer
- GTMU-AP3** Temperature transducer
- GTMU-AP4** Temperature transducer
- GTMU-AP5** Temperature transducer

General:
You can choose between 5 design types of the GTMU and 2 sensor types to get an optimised solution for your needs. The types 1 - 4 are supplied complete with sensor, measuring transducer etc., calibrated and thus ready for use. Type 5 does not include sensor which is either already existing at your works or will have to be ordered separately according to your specifications (p.r.t. pages 131-132, 135-136)

Specification:
Practical sensor elements:
- **resistance thermometer:** Pt100 class B (higher sensor precision p.r.t. page 126)
- **thermocouple:** NiCr-Ni class 1

Max. measuring ranges: (not available for every design type)
Pt100: -200 ... +800 °C
NiCr-Ni: -200 ... +1372 °C

Standard measurings ranges:
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 ... 1200 °C
optional: any other measuring range against upcharge

Accuracy electronics: ±0,2 % FS (Pt100) or ±0,2 % ±0,5 °C (NiCr-Ni)
Higher precision e.g. via optionally different transducer (GITT01, RT420)

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) (not available for GITT01, RT420)

Auxiliary energy: Uv = 12 ... 30 V DC (at 0-10 V: Uv = 18 ... 30 V DC); (for special types GTMU/GITT and GTMU/RT420: 8 ... 30 V)

Reverse voltage protection: 50 V permanently
Allowable burden (for 4-20 mA): $R_A [Ω] ≤ (U_v [V] - 12V) / 0,02 A$ (for special types GITT and RT420 refer to this pages)

Allowable load (for 0-__ Volt): $R_L > 3000 Ω$
Ambient temperature electronics: 0 ... +70 °C (-40 ... +85 °C at .../RT420 and .../GITT)

Temperature coefficient:
Pt100: 0,01 % / °C
NiCr-Ni: 0,05 % / °C
Storage temperature: -20 ... +70 °C

Housing: ABS (IP65)
Probe tube: stainless steel
Probe length: for standard length please refer to design type, optional: any other tube length possible
Thread „G“: 1/2" (standard), optional: G1/4", G3/8", M5, M6, M8, M10, M12
Probe diameter „D“: 3, 4, 5, 6 or 8 mm
Sensor installation:
Pt100: sensors will be electrically insulated at our works.

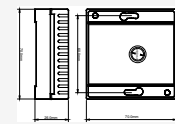
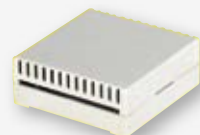
NiCr-Ni:	sensors are not electrically insulated as a standard (connection between sensor and outer sheathing). Optional electrically insulated design-type available.
Mounting:	with holes for wall mounting
Mounting distance:	70 x 50 mm (W x H)
Fixing screws:	max. shaft-Ø 4 mm
Electric connection:	elbow plug acc. to EN 175301-803/A (IP65)
Sensor connection: (for type 5)	Pt 100: 2- or 3-wire connection possible. NiCr-Ni: 2-wire only PG 7 screwed conduit entry for sensor cable connection by screw-type terminal on PC board

Option:

- GTMU / GITT**
electrically isolated transducer (available sensors: Pt100, Pt1000, NiCr-Ni, only output 4-20 mA possible)
- GTMU / RT420**
transducer for outdoor usage (available sensors: Pt100, only output 4-20 mA possible)
- **AV...:**
other output signal (please state desired output voltage - not available with GITT and RT420)
- **MB=...:**
any other measuring range (please state desired measuring range)
No upcharge for option -AV..., -MB if more than 10 pcs per type are ordered.
- **LACK:**
encapsulated PC board (for outdoor application, i.e. applications where condensation is possible)
- **POT:**
electrically insulated NiCr-Ni-probe
- **FL=...:**
longer tube
- **HL=...:**
longer collar tube
- **D=...:**
other probe diameter
- **G=...:**
other thread
- **VO:**
on-site display (for output signal 4-20 mA, auxiliary energy Uv = 17 ... 30 V DC)

Ordering information:
At least necessary ordering information: design type, sensor and meas. range. If no additional data is added to the design type, the probe will be manufactured with standard dimensions.
Ordering examples:
GTMU, type 1, Pt100 DIN KL.B., 0 ... 100 °C
GTMU, type 3, NiCr-Ni, 0 ... 1200 °C, FL=100 mm, D=4 mm, POT
We also offer the sensors without the integrated transducer. The sensor connection then are directly connected to the elbow plug.

- GTMU-OMU** design type 1
- GTMU-OMU** design type 2
- GTMU-OMU** design type 3 or design type 4. (available sensors: Pt100 (4-wire), Pt1000 (4-wire), NiCr-Ni)
- GTU-2R-OMU** designer housing for ambient (available sensors: Pt100 (4-wire), Pt1000 (4-wire))



Note: the housing also maybe mounted directly to a concealed distribution box.

Handheld instrument
Display / Controller
Logger / EASYBus
Transmitter
Temperature probe
Alarm / Protection