

Product information

Temperature probe

**Temperature sensor
 GTL 369 / 369M
 GTL 389 / 389M**



- Without tread
- Hygienic design and easy-to-sterilize measuring point
- Sensor completely made of stainless steel

Characteristic

The temperature sensors are designed for temperature measurements in pipes of different nominal diameters or thin-walled tubes and tanks.

They can be used for example for process monitoring at tube curvatures, temperature measurements in pressure pipes or at measurements of pasty media in pipes

The immersion length can be varied by use of compression fitting. The probes can be provided with different electric connections and with or without integrated head transmitter.

Specifications

Temperature ranges : ambient : -40..+80 °C
 sensor tip : -40..+200 °C
 CIP- / SIP-temperature: 140 °C < 30 min.
 Measuring resistor : Pt100
 Accuracy : class A, class AA

Process connection : no thread
 suitable weld-in sleeves e.g.:
 GKEV-25/76, GEMK-25/76



Immersion length : 50, 100, 150, 250 mm
 Sensor head : Ø 18 mm

Thermowell and sensor tip:
 Ø 6 mm thermowell Ø 6 mm without taper
 Ø 3 mm thermowell Ø 6 mm and sensor tip Ø 3 mm

Response time : FS Ø 3 mm: T₉₀ ≤ 1.5 s
 FS Ø 6 mm: T₉₀ ≤ 7.4 s

Operating pressure : max. 10 bar

Material
 Sensor head : 1.4305
 Thermowell and tip : 1.4404

Protection class : IP67 / IP69K
 CE conformity : EN 61326-1:2013 / -2-3:2013

Design type

| | GTL 369 | GTL 389 |
|-----------------------|--------------------------|--|
| Electrical connection | M12-plug, 4-pin (1.4305) | fixed cable 2.5 m, LIYY 389: 4 x 0,25 mm ² 389M: 2 x 0,25 mm ² |

Transducer GTML2 (only for GTL 369M / GTL 389M)

Measuring range : -10..+40 °C * / 0..50 °C * / 0..100 °C *
 0..150 °C * / 0..200 °C *
 or freely in range -20..200 °C *
 Power supply : 10..30 V DC
 Output : analog, 4..20 mA, 2-wire
 Output signal in case of error : < **3.75 mA** > 21.5 mA, selectable *
 Filter : integrated low-pass, 4-step *
 Response time : < 150 ms (filter 0), < **300 ms (filter 1)**
 < 800 ms (filter 2), < 3 s (filter 3)
 Ambient temperature : -40..+70 °C
 Measurement accuracy : < 0.2 % FS
 Temperature drift : < 0.01 % FS / K

* Programmable via GTL - Configuration tool (accessories)

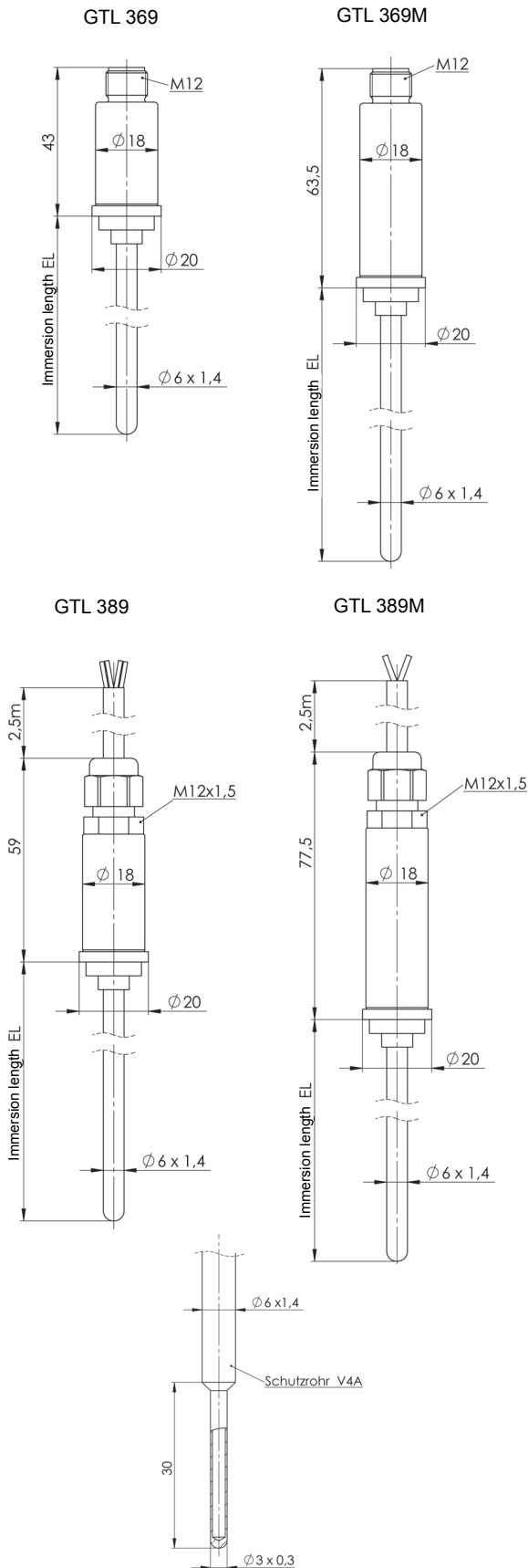
Note: The default settings are marked in **bold**.

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Product information

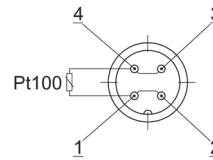
Temperature probe

Dimensions

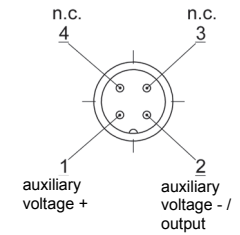


Connection

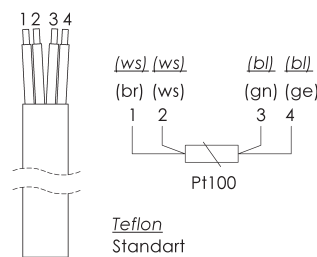
Design type GTL 369 or GTL 369M:
 without transducer (4-wire):



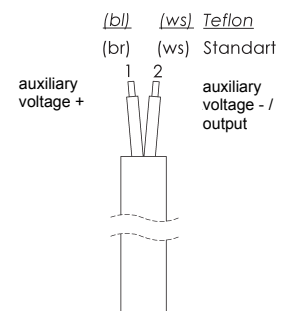
with transducer (2-wire):



Design type GTL 389 or GTL 389M:
 without transducer (4-wire):



with transducer (2-wire):



Option

| | |
|----|--|
| TK | Design type GTL 389 and GTL 389M with Teflon cable GTL 389: 4 x 0.14 mm ² / GTL 389M: 2 x 0.14 mm ² Teflon cable up to 200 °C |
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Product information

Product key

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| | |
|---|---|
| 1. Design type | |
| 369 | cable connection M12-plug, |
| 369M | cable connection M12-plug with integrated transducer |
| 389 | fixed cable (PVC) connection 2.5m |
| 389M | fixed cable (PVC) connection 2.5m, with integrated transducer |
| 2. Fitting length EL | |
| 0050 | 50 mm |
| 0100 | 100 mm |
| 0150 | 150 mm |
| 0250 | 250 mm |
| xxxx | any EL in mm (surcharge from 250 mm for each 100 mm started, up to max. fitting length: Ø 6: max. 1000 mm) |
| 3. Diameter protection tube and probe tip | |
| 6 | Ø 6 mm, without taper |
| 3 | Ø 6 mm, with tapered probe tip Ø 3 mm |
| 4. Accuracy class | |
| A | class A |
| D | class AA (1/3 class B) |
| 5. Transducer GTML2 (programmable) ONLY for design types 369M and 389M | |
| 00 | without transducer (design types 369 / 389) |
| M1 | measuring range -10..+40 °C |
| M2 | measuring range 0..50 °C |
| M3 | measuring range 0..100 °C |
| M4 | measuring range 0..150 °C |
| M5 | measuring range 0..200 °C |
| MB | transducer with special measuring range in °C (state special measuring range separately e.g.: 0..75 °C or -20..+30 °C Mind the minimum range of 50 °C.) |
| 6. Option | |
| 00 | without option |
| H | with spacer |
| TK | Teflon cable for connection via fixed cable (only available for 389 and 389M) (surcharge per meter) |
| 7. Certificate DIN EN 10204 (indicate only when required, multiple responses possible) | |
| WZ2.2 | factory certification 2.2 |
| APZMAT | acceptance test certificate 3.1 for material (in contact with products) |
| APZ2P | acceptance test certificate 3.1 with 2 measuring points (0°C / 70°C) |
| APZ3P | acceptance test certificate 3.1 with 3 measuring points (0°C, 70°C + 1 test point freely selectable) |

Information on suitable compression fittings can be found in section Accessories.