

Product information

Temperature - Hygienic Design

**Temperature probe
 GTL 261 / 261M
 GTL 281 / 281M**



Electric connection : G 1/2"
 Clamping torque : 5..20 Nm
 Fitting length : 50, 100, 150, 250 mm
 Probe head : Ø 18 mm
Protection tube and probe tip:
 Ø 6 mm protection tube Ø 6 mm without taper
 Ø 3 mm protection tube Ø 6 mm and tapered probe tip Ø 3 mm
 Response time : FS Ø 3 mm: T₉₀ ≤ 1.5 s
 FS Ø 6 mm: T₉₀ ≤ 7.4 s
 Working pressure : max. 10 bar
Material
 Probe head : 1.4305
 Protection tube and tip : 1.4404
 Protection class : IP67 / IP69K
 CE conformity : EN 61326-1:2013 / -2-3:2013

Design types

	GTL 261 / 261M	GTL 281 / 281M
Electric connection	cable connection M12-plug, 4-pin (1.4305)	fixed cable 2.5 m, PVC LIYY 281: 4 x 0.25 mm ² 281M: 2 x 0.25 mm ²

Transducer GTML2 (only for GTL 261M / GTL 281M)

Integrated head transmitter
 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
 Measuring output : analog, 4..20 mA, 2-wire
 Output signal in case of error : < **3.75 mA** or > 21.5 mA, selectable *
 Filter : integrated low-pass, 4-step *
 Reaction time : < 150 ms (filter 0), < **300 ms (filter 1)**
 < 800 ms (filter 2), < 3 s (filter 3)
 Working 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**.



- G 1/2" process connection hygienic
- Hygienic design and easy-to-sterilize measuring point
- Sensor completely made of stainless steel

Characteristic

The temperature probes are designed for temperature measurements in pipes or tanks.

They can be used for example for monitoring the CIP / SIP procedures or temperature measurements in milk tanks.

The probes can be provided with different electric connections and with or without integrated head transmitter.

Specifications

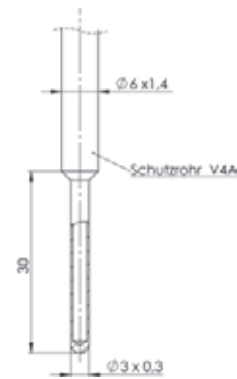
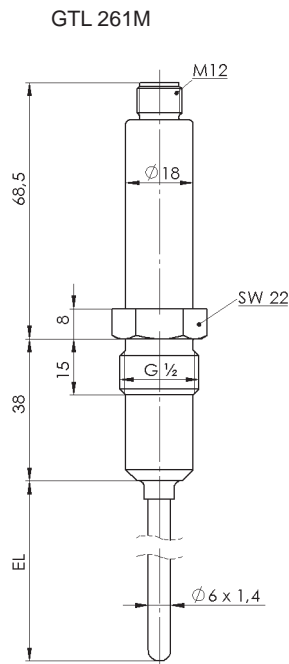
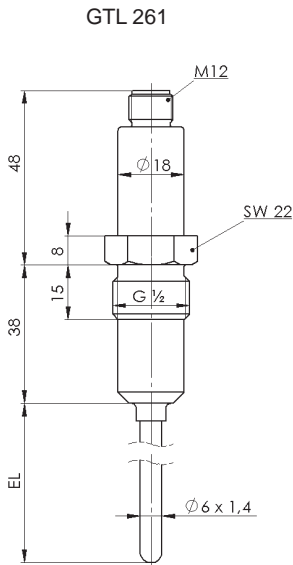
Temperature ranges : ambience: -40..+80 °C
 probe tip: -40..+200 °C
 CIP- / SIP-temperature: 140 °C < 30 min.
 Measuring resistor : Pt100
 Accuracy : class A, class AA

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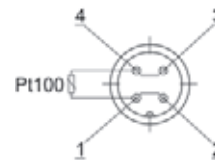
Dimensions



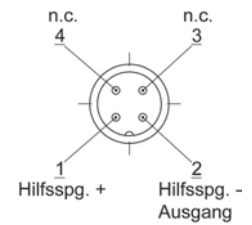
Connection

Design type GTL 261 or GTL 261M:

without transducer (4-wire):

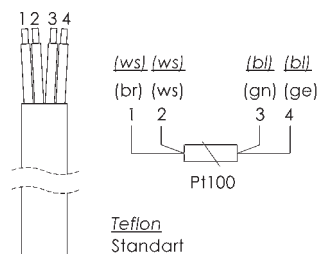


with transducer (2-wire):

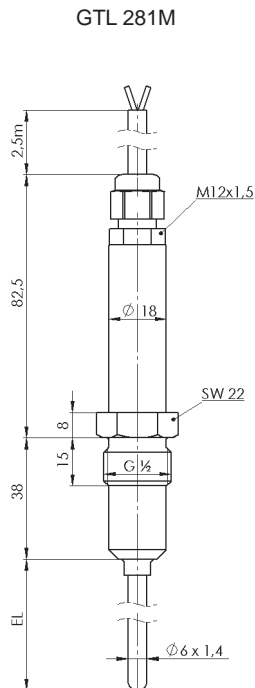
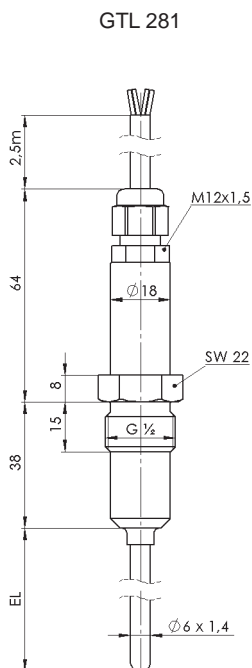
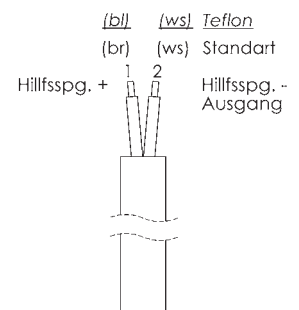


Design type GTL 281 or GTL 281M:

without transducer (4-wire):



with transducer (2-wire):



Option

TK	Design type GTL 281 and GTL 281M with Teflon cable GTL 280: 4 x 0.14 mm ² GTL 280M: 2 x 0.14 mm ² Teflon cable up to 200 °C
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Product information

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Product key

Information on suitable weld-in sleeves can be found in product information GHM*adapt*/Accessories.

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GTL - - - - - -

1. Design type	
261	cable connection M12-plug, without integrated transducer
261M	cable connection M12-plug with integrated transducer
281	fixed cable (PVC) connection 2.5m, without integrated transducer
281M	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 261M and 281M	
00	without transducer (design types 261 / 281)
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 neck tube (100 mm)
TK	Teflon cable for connection via fixed cable (only available for GTL 281 / 281M)
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)
APZ4P	acceptance test certificate 3.1 with 4 measuring points (0°C, 70°C + 2 test points freely selectable)