

Product information

Temperature probe

Temperature probe GTL 240



GTL 240
standard

GTL 240
with neck
tube



- G 1/2" standard process connection hygienic
- Sensor completely made of stainless steel

Characteristic

The temperature probes are designed for temperature monitoring in pipes and tanks, temperature measurements in steam and pressure pipes and for monitoring of CIP- / SIP- processes.

Suitable weld-in sleeves ensures disassembling of the temperature probe without process opening or interruption.

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
Electric connection	: G 1/2" standard
	: suitable weld-in sleeves
	: APHZ30-G12S, APHK35-G12S
	: (see accessories)



Fitting length	: 50, 100, 150, 250 mm
Probe head	: Ø 59 mm
Neck tube	: length 100 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: T ₉₀ ≤ 1.5 s
	: FS Ø 6 mm: T ₉₀ ≤ 7.4 s
Working pressure	: max. 10 bar
Material	
Probe head	: 1.4305
Neck tube	: 1.4305
Protection tube and tip	: 1.4404

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

Transducer GTML1

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
Accuracy	: < 0.2 % FS
Temperature drift	: < 0.01 % FS / K

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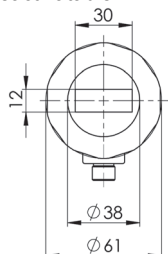
Product information

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Transducer GTML1 with on-site display

Transducer with integrated **on-site display (LCD)** only in combination with electric connection: cable connection M12 plug and integrated transducer (for further information see transducer GTML1).

Display : 4-digit LCD
Displayed unit : °C or °F, selectable *
Resolution : **0.1 °C** or 1 °C, selectable *
Background illumination : **activatable**, deactivatable *
Working temperature : -20..+60 °C

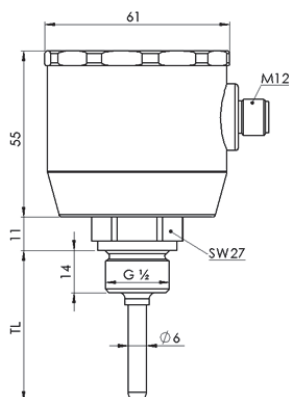


- * Programmable via GTL - Configuration tool (accessories) or buttons (only with on-site display)
- ** Programmable via GTL - Configuration tool (accessories)

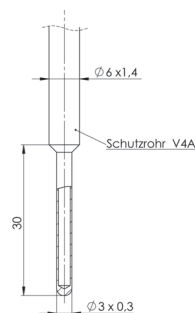
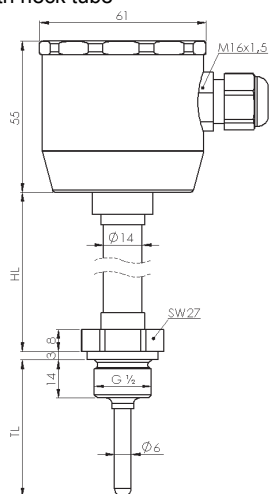
Note: The default settings are marked in **bold**.

Dimensions

GTL 240
standard



GTL 240 with neck tube

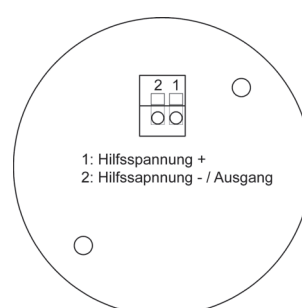
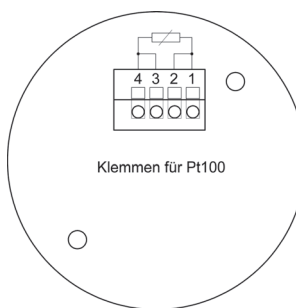


Connection

Electric connection: cable screwing M16x1.5 (PG)

without transducer (4-wire):

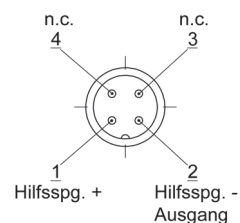
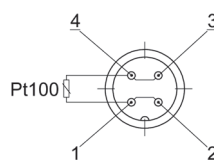
with transducer (2-wire):



Electric connection: cable connection M12-plug (1.4305)

without transducer (4-wire):

with transducer (2-wire):



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Product information

Temperature probe

Product key

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Notes on on-site display (LCD):

Permanently integrated transducer GTML1 (programmable) with on-site display only in combination with electric connection: cable connection M12 plug.

Information on suitable weld-in sleeves can be found in product information GHMadapt/Accessories.

1. Design type	
240	without neck tube
2. Electric connection	
P	cable screwing M16x1.5 (PG)
V	V2A cable screwing M16x1.5 (PG)
M	cable connection M12-plug
3. Immersion length TL	
0050	50 mm
0100	100 mm
0150	150 mm
0250	250 mm
xxxx	any EL in mm (e.g. 320 = 320 mm) Ø 6: max. 1000 mm
4. Diameter protection tube and probe tip	
6	Ø 6 mm, without taper
3	Ø 6 mm, with tapered probe tip Ø 3 mm
5. Accuracy class	
A	class A
D	class AA (1/3 class B)
6. Transducer	
0	without transducer
M	permanently integrated transducer GTML1, without display
V	permanently integrated transducer GTML1, on-site display (LCD)
R	exchangeable head transducer RT420
T	exchangeable head transducer T19
7. Measuring range	
0	without transducer
1	measuring range -10..+40 °C (-50..+50 °C for head transducer T19)
2	measuring range 0..50 °C
3	measuring range 0..100 °C
4	measuring range 0..150 °C
5	measuring range 0..200 °C
B	transducer with special measuring range in °C (not possible for head transducer T19), state special measuring range separately e.g.: 0..75 °C or -20..+30 °C Mind the minimum range of 50 °C.
8. Option	
00	without option
H	with neck tube (100 mm)
9. 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)