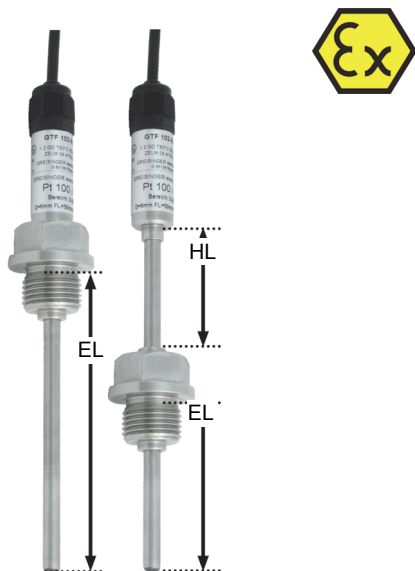


Product Information

Temperature probe

Ex temperature probe GTF 102-Ex



Length of neck tube	no neck tube (for $T \leq 100\text{ °C}$) with neck tube (for $T > 100\text{ °C}$)
Electrical connection	silicone cable, standard length 1m
Mounting	by process connection
Suitable for potentially explosive atmospheres	zone 0/1, zone 1, zone 2, zone 20/21 zone 21, zone 22

Dimensions

Head / capsule	$\varnothing$ = approx. 15 mm, L = approx. 53 mm
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- For use in potentially explosive gaseous or dust mixtures
- Potential-free temperature probe made of stainless steel
- Assembled according to customer preferences

Characteristics

The screw-in temperature probe GTF 102-Ex is a mounting probe for usage in potentially explosive atmospheres. The modular build up ensures greatest flexibility and the possibility to fit it to the existing conditions. Therefore parameters like length, diameter, cable or type of protection ("i" or "e") can be adjusted.

There are 2 different sensor types available for the measuring unit of GTF 102-Ex: resistance thermometer Pt100, Pt1000 or thermocouple type K, type N (standard). Only sheathed resistance thermometer or sheathed thermocouple are used.

The probes can be customized according to customer requirements.

Technical data

Sensor element : Pt100, PT1000 (sheathed element),
4-wire;
type K (NiCr-Ni) or type N (NiCrSi-NiSi)
sheathed thermocouple

Measuring range

Pt100 / Pt1000 : -200...+100 °C (600 °C with neck tube)
Type K / type N : -200...+100 °C (900 °C with neck tube)

Accuracy

Pt100 / Pt1000 : DIN class B
Type K / type N : class 1
Type of protection : "i" intrinsic safe
"e" increased safety

Ambient temperature : -20...+60 °C (protection type "e")
-20...+80 °C (protection type "i")

continued on next page

Process connection	cylindrical or metric thread
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Product Information

Temperature probe

Ordering code

1. 2. 3. 4. 5. 6.
GTF102-Ex - - - - - -
7. 8. 9. 10. 11. 12.
 - - - - -

1. Sensor element			
P	Pt100		
S	Pt1000		
T	thermocouple type K		
U	thermocouple type N		
2. Neck tube			
K	no neck tube (for T ≤ 100 °C)		
M	with neck tube (fr T >100 °C)		
3. Ambient temperature			
A	standard range -20..+60 °C		
H	higher ambient temperature -20..+80 °C (only available in combination with protection type "I")		
4. Type of process connection			
1	G-thread (cylindrical thread)		
2	M-thread (metric thread)		
5. Size of process connection			
1	⅛ (for G-thread)	not possible for zone 0/1 and zone 20/21	
2	¼ (for G-thread)		
3	⅜ (for G-thread)	not possible for zone 0/1 and zone 20/21	
4	½ (for G-thread)		
5	¾ (for G-thread)		
6	8x1 (for M-thread)		
7	10x1 (for M-thread)		
8	14x1 (for M-thread)		
6. Length of neck tube HL			
xxx	length in mm (e.g. 050 = 50 mm)		
7. Probe diameter Ø			
x	3 mm, 4 mm, 5 mm, 6 mm, 8 mm (e.g. 8 = 8 mm) Note: • Ø 3 mm only for Pt100 / Pt1000 possible • the min. length is then 60 mm • the probe tip is Ø 3 mm (for first approx. 30 mm) and then Ø = 6 mm • for zone 0/1, 20/21 only Ø 6/8 mm possible		
8. Fitting length EL			
xxxx	length in mm (e.g. 0100 = 100 mm)		
9. Cable length (4-wire)			
x	length in m (e.g. 1 = 1 m)		
10. Type of protection			
e	increased safety due to potting of encapsulation (only permissible for zone 1 and 2 or zone 21 and 22)		
i	intrinsic safe		
11. Potentially explosive atmospheres			
00	gaseous mixture, zone 0/1 (sensor tube in zone 0 / cable sleeve in zone 1)		
01	gaseous mixture, zone 1		
02	gaseous mixture, zone 2		
20	dust, zone 20/21 (sensor tube in zone 20 / cable sleeve in zone 21)		
21	dust, zone 21		
22	dust, zone 22		
12. Measuring range			
xxx	desired measuring range (e.g. -50..+100 °C)		