

With Ceramic Isolation

# TF-CX Series Temperature Sensor



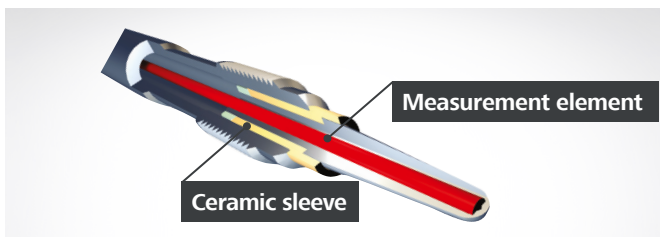
The Gneuss CX Series Temperature Sensors are specially designed for precise temperature measurement of the melt stream.

Their resulting high accuracy is due to the incorporation of the advanced G-Isolate ceramic insulation surrounding the entire measuring element. Commonly influenced by the barrel temperature, the CX series probes with G-Isolate guarantee an accurate reading, independent of the flange or tool location. The design of the CX exceeds the recommended guidelines of the Plastics and Rubber trade association according to EUROMAP 31.

## Configuration options

- Thermocouple Type J, L, K or RTD
- 1/2"20 UNF or M 18 x 1,5 process connection
- Special materials for measuring tip (abrasive or corrosive materials)
- Available as transmitter with 0...10 V or 4...20 mA
- Amplifier for Ex-areas (4...20 mA) with BUZ head
- Measuring tip length available from 0 mm (0 inch) (flush) to 25 mm (1 inch)
- G-Isolate ceramic sleeve (illustration)

## Ceramic insulated measurement tip



The melt temperature sensors with thermally insulated measurement tip provide the user with a precise and meaningful measurement. Distortion of the measurement value by external or internal heat influences is minimized. The sensor with ceramic insulated measurement tip is therefore particularly recommended for use with thermally sensitive materials due to the authentic measurements which it provides.

- Measuring tip isolated with high-performance ceramic
- Highly precise temperature measurement
- Plug connections with gold-plated contacts
- Extremely robust conical measuring element (rheologically optimized)
- Applications up to 500°C (932°F) media temperature
- 100% market compatible
- Conforms to EUROMAP 31

## Product variations (examples)



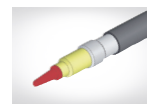
### EX-version

4...20 mA Transmitter BUZ head



### Cable protection option

Flexible component with G-Armor



### Special design TF

With fully ceramic sensor tip



### Connector selection

Thermocouple or RTD

## Order specification TF-XX Melt temperature sensors

Order specification		TF																			
<b>Standard version</b>																					
<input type="checkbox"/>		TF																			
<b>Version</b>																					
<input type="checkbox"/>	ceramically isolated measuring tip		C	X																	
<input type="checkbox"/>	<b>Measuring tip in steel construction</b>		M	X																	
<b>Process connection</b>																					
<input type="checkbox"/>	1/2" UNF 2A					1 2	A														
<input type="checkbox"/>	M18 x 1,5 A					1 8	A														
<b>Sensor tip length [mm]</b>																					
<input type="checkbox"/>	0mm					0 0															
<input type="checkbox"/>	5mm					0 5															
<input type="checkbox"/>	10mm					1 0															
<input type="checkbox"/>	15mm					1 5															
<input type="checkbox"/>	20mm					2 0															
<input type="checkbox"/>	25mm					2 5															
<input type="checkbox"/>	Special length					T 9															
<b>Sensor tip material</b>																					
<input type="checkbox"/>	Stainless steel (standard)										S										
<input type="checkbox"/>	Stainless steel (martensitic)										R										
<input type="checkbox"/>	Alloy C4										H										
<input type="checkbox"/>	Special material										Y										
<b>Shaft length [rigid]</b>																					
<input type="checkbox"/>	152 mm, 6" (Standard)										S 0										
<input type="checkbox"/>	203 mm, 8,0"										S 1										
<input type="checkbox"/>	254 mm, 10,0"										S 2										
<input type="checkbox"/>	318 mm, 12,5"										S 3										
<input type="checkbox"/>	356 mm, 14,0"										S 4										
<input type="checkbox"/>	406 mm, 16,0"										S 5										
<input type="checkbox"/>	456 mm, 18,0"										S 6										
<input type="checkbox"/>	76 mm, 3,0"										S 8										
<input type="checkbox"/>	Special shaft length										S 9										
<b>Exit junction</b>																					
<input type="checkbox"/>	no cable exit Plug connection		*	2							F 0										
<input type="checkbox"/>	Cable exit 100 mm, 4"		*	10							F 1										
<input type="checkbox"/>	Cable exit 1016 mm, 400"		*	10							F 2										
<input type="checkbox"/>	Cable exit 3000 mm, 1181"		*	10							F 3										
<input type="checkbox"/>	BUZ-head		*	7							F 4										
<input type="checkbox"/>	Special length										F 9										
<b>Sensor element + output signal</b>																					
<input type="checkbox"/>	Thermocouple Type J (simplex)		*	1							T 1	J									
<input type="checkbox"/>	Thermocouple Type L (simplex)		*	1							T 1	L									
<input type="checkbox"/>	Thermocouple Type K (simplex)		*	1							T 1	K									
<input type="checkbox"/>	Thermocouple Type J (duplex)		*	3							T 2	J									
<input type="checkbox"/>	Thermocouple Type L (duplex)		*	3							T 2	L									
<input type="checkbox"/>	Thermocouple Type K (duplex)		*	3							T 2	K									
<input type="checkbox"/>	RTD PT100 2-Wire system		*	1							P T	2									
<input type="checkbox"/>	RTD PT100 3-Wire system		*	1,3							P T	3									
<input type="checkbox"/>	RTD PT100 4-Wire System		*	3							P T	4									
<input type="checkbox"/>	4-20mA 2-wire EX approved (BUZ)		*	6+4							E X	A									
<input type="checkbox"/>	4-20mA 2-wire		*	6+8							2	M	A								
<input type="checkbox"/>	0-10V		*	6+9							V	D	C								
<input type="checkbox"/>	Special output signal										9	9	9								
<b>Electrical Connection</b>																					
<input type="checkbox"/>	2-pole, goldcontacts																				2 G
<input type="checkbox"/>	4-pole, goldcontacts																				4 G
<input type="checkbox"/>	2-pole Thermocouple connector																				2 T
<input type="checkbox"/>	4-pole Thermocouple connector																				4 T
<input type="checkbox"/>	open cable end																				L O
<input type="checkbox"/>	terminal screw		*	5																	S K
<b>Special design</b>																					
<input type="checkbox"/>	without																				0 0 0
<input type="checkbox"/>	Customer specific construction																				x x x

\*1 Electrical connection "2G" or "2T"

\*2 Electrical connection "2G" or "4G"

\*3 Electrical connection "4G" or "4T"

\*4 Electrical connection "SK"

\*5 Only in conjunction with "F4 BUZ-head"

\*6 Only with RTD PT100 3-wire

\*7 Only in conjunction with rigid shaft

\*8 Electrical connection "2G"

\*9 Electrical connection "4G"

\*10 Electrical connection "2T" and "4T" or "LO"