

TC, TZ | Temperature sensors



EAN code:
 TC-0: 8595188110075 TC-6: 8595188110082
 TC-3: 8595188110617 TC-12: 8595188110099

Technical parameters	TC	TZ
Range:	-20 to +80 °C (-4 to 176 °F)	-40 to +125 °C (-40 to 257 °F)
Scanning element:	NTC 12K	NTC 12K
Tolerance:	±(0.15 °C + 0.002 t)	±(0.15 °C + 0.002 t)
In air/in water:	(τ0.5) ≤ 18 s	(τ65) 62 s/8 s
In air/in water:	(τ0.9) ≤ 48 s	(τ95) 216 s/23 s
Cable material:	PVC unshielded, 2x 0.25 mm ²	silicon VO3SS-F 2D x 0.5 mm ²
Terminal material:	polyamide	stainless steel
Protection degree:	IP67	IP67
Electrical strength:	2500 VAC	2500 VAC
Insulation resistance:	> 200 MΩ at 500 VDC	> 200 MΩ at 500 VDC

Types of temperature sensors:

	TC-0	TZ-0
- length:	100 mm	110 mm
- weight:	5 g	4.5 g
	TC-3	TZ-3
- length:	3 m	3 m
- weight:	70 g	106 g
	TC-6	TZ-6
- length:	6 m	6 m
- weight:	130 g	216 g
	TC-12	TZ-12
- length:	12 m	12 m
- weight:	250 g	418 g

τ65 (95): time, which sensor needs to heat up on 65 (95) % of ambient temperature of environment, in which is located.

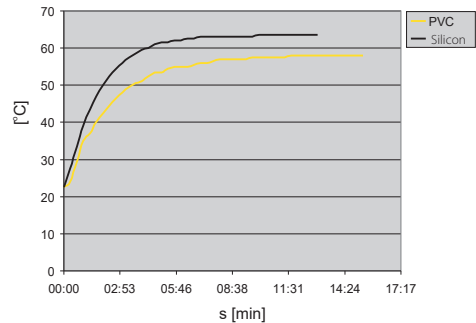
- Thermister temperature sensors are made of Negative Temperature Coefficient (NTC) embedded in a PVC or metal sleeve with a thermally-conductive sealer.
- **Sensor TC**
- lead-in cable to sensor TC is made of wire CYSY 2D x 0.5 mm/0.02".
- **Sensor TZ**
- cable VO3SS-F 2D x 0.5 mm/0.02" with silicone insulation for use in high temperature applications.
- silicone insulation for use in high temperature applications.
- Temperature sensors can be connected directly to the terminal block
- Cable lengths can not be changed, connected or modified.

Resistive values of sensors in dependance on temperature

Temperature (°C)	Sensor NTC (kΩ)
20	14.7
30	9.8
40	6.6
50	4.6
60	3.2
70	2.3

Tolerance of sensor NTC 12 kΩ is ± 5% by 25 °C/77 °F.

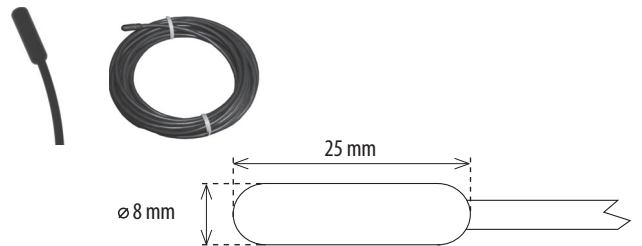
Diagramm of sensor warm up via air



PVC -reaction to water temperature from 22.5 °C to 58 °C.
 Silicone - reaction to water temperature from 22.5 °C to 63.5 °C.

Design and dimensions

TC



TZ

