

## Features

- 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".
- Temperature sensors can be connected directly to the terminal block.
- Cable lengths can not be changed, connected or modified.

## RS PRO Temperature Sensor

326825



RS PRO is the own brand of RS. The RS PRO Seal of Approval is your assurance of professional quality, a guarantee that every part is rigorously tested, inspected, and audited against demanding standards. Making RS PRO the Smart Choice for our customers.

## Product Description

- *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".*
  - *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.*

## Technical parameters

|                        |                                         |
|------------------------|-----------------------------------------|
| Range:                 | -20.. +80 °C (-4 ..176 °F)              |
| Scanning element:      | NTC 12K                                 |
| Tolerance:             | $\pm(0.15^{\circ}\text{C} + 0.002 t )$  |
| In air/in water:       | ( $\tau_{0.5}$ ) $\leq 18$ s            |
| In air/in water:       | ( $\tau_{0.9}$ ) $\leq 48$ s            |
| Cable material:        | PVC unshielded, 2x 0.25 mm <sup>2</sup> |
| Terminal material:     | polyamide                               |
| Protection degree:     | IP67                                    |
| Electrical strength:   | 2500 VAC                                |
| Insulation resistance: | > 200 M $\Omega$ at 500 VDC             |

$\tau_{65}$  (95): time, which sensor needs to heat up on 65 (95) % of ambient temperature of environment, in which is located.

## Types of temperature sensor

|         |       |
|---------|-------|
| Length: | 6 m   |
| Weight: | 130 g |

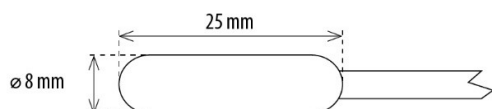
## Odporové hodnoty senzorů v závislosti na teplotě

| Temperature (°C/°F) | Sensor NTC (kΩ) |
|---------------------|-----------------|
| 20 / 68             | 14.7            |
| 30 / 86             | 9.8             |
| 40 / 104            | 6.6             |
| 50 / 122            | 4.6             |
| 60 / 140            | 3.2             |
| 70 / 158            | 2.3             |

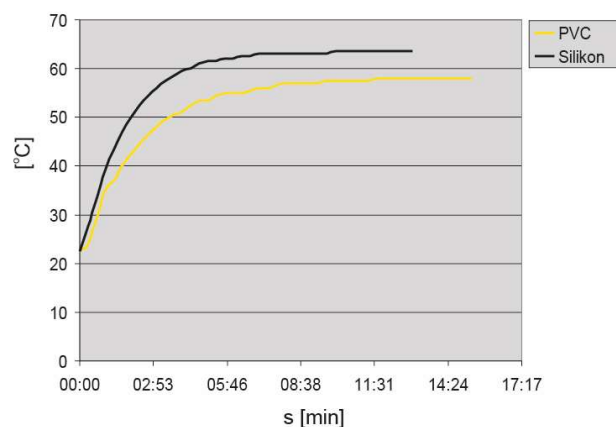
Tolerance of sensor NTC 12 kΩ is  $\pm 5\%$  by 25 °C/77 °F.

Long-term resistance stability by sensor Pt100 is 0.05 % (10 000 hours).

## Design and dimension



## Diagramm of sensor warm up via air



PVC - reaction to air temperature from 22.5 °C .. 58 °C

(from 72.5 .. 136.4 °F).

Silicone - reaction to air temperature from 22.5 °C .. 63.5 °C

(from 72.5 .. 144.5 °F).