

## Indoor, outdoor and duct resistance thermometers

- for temperatures from -30 to +80°C (200°C)
- for use in HVAC
- Protection IP20 to IP65
- for 2-wire, 3-wire or 4-wire connections
- available with transmitter

Indoor, outdoor and duct resistance thermometers for HVAC applications are mainly used for measuring the temperature in rooms, in air ducts and outdoors.

Various plastic housings for different forms of protection are available to suit the particular application.

The measuring insert is normally fitted with a Pt100 temperature sensor to EN 60 751, Class B in 2-wire circuit. Versions with Pt500, Pt1000 or Ni 1000 can also be supplied. Continuation in 3-wire and 4-wire circuit, starting from the terminals, is also possible. A transmitter can optionally be integrated.



### Technical data

#### Terminal box

plastic case PC (Type 902523/10 material ABS), IP20 to IP65,  
(Type 902523/25 material Makrolon), IP54 and IP65

#### Protection tube

stainless steel 1.4571; 5.4mm dia., 6mm dia.

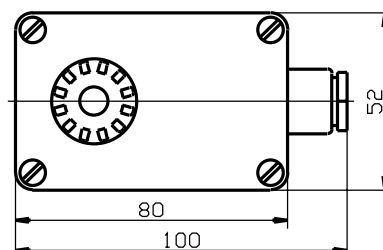
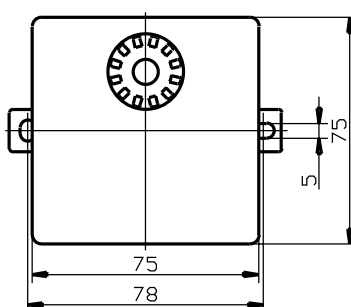
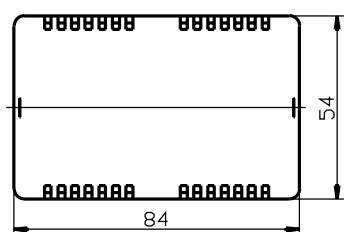
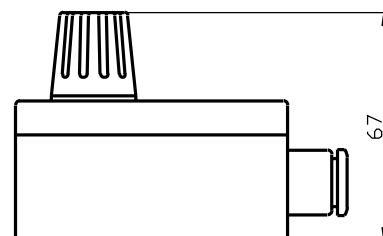
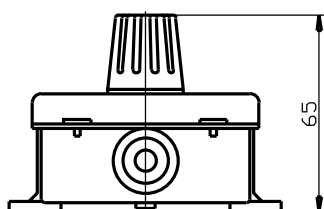
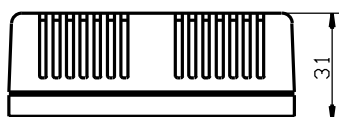
#### Measuring insert

Pt100 temperature sensor, EN 60 751, Cl. B, 2-wire circuit

#### Transmitter

analog transmitter, output signal 4 - 20mA

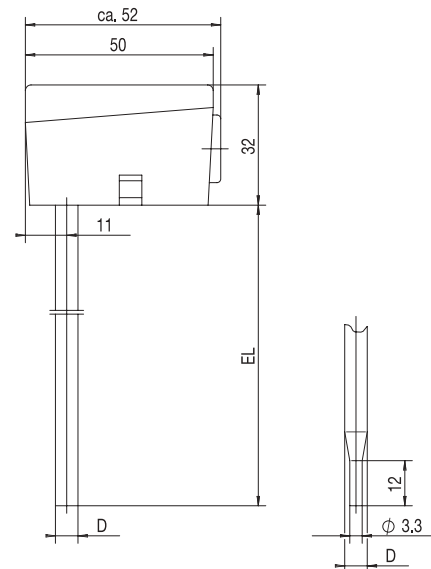
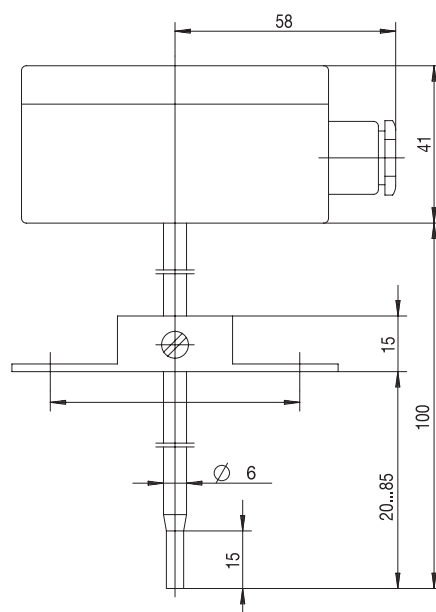
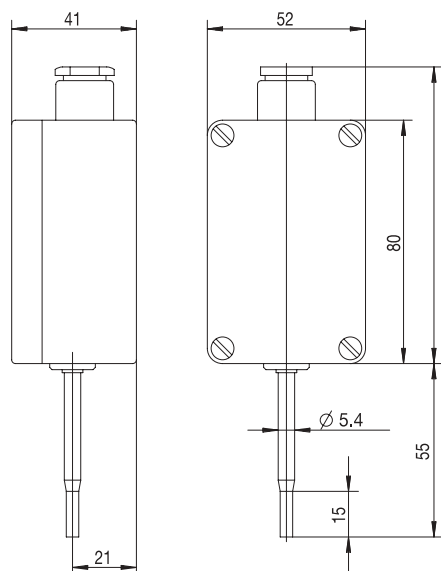
## Dimensions



Type 902523/10

Type 902523/11

Type 902523/12



Type 902523/13

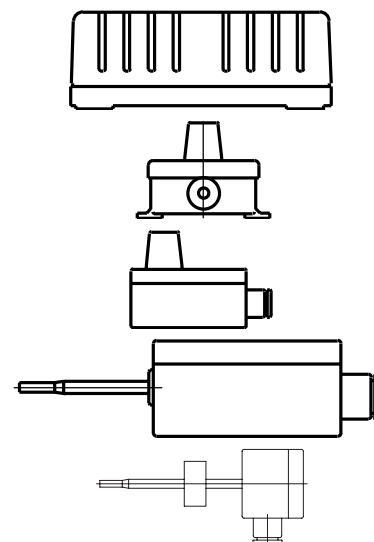
Type 902523/20

Type 902523/25

## Order details: Indoor, outdoor and duct resistance thermometers

### (1) Basic version

|           |                                                                                               |
|-----------|-----------------------------------------------------------------------------------------------|
| 902523/10 | Indoor resistance thermometer,<br>Protection IP20                                             |
| 902523/11 | Indoor and outdoor resistance thermometer,<br>Protection IP54                                 |
| 902523/12 | Indoor and outdoor resistance thermometer,<br>Protection IP65                                 |
| 902523/13 | Indoor and outdoor resistance thermometer<br>with stepped protection tube,<br>Protection IP65 |
| 902523/20 | Duct resistance thermometer with stepped<br>protection tube, Protection IP65                  |



### (2) Operating temperature in °C

|   |   |   |   |   |     |                                                              |
|---|---|---|---|---|-----|--------------------------------------------------------------|
| x | x | x | x | x | 568 | -30 to +60°C (range only in conjunction with extra code 330) |
| x | x | x | x | x | 572 | -30 to +80°C (standard)                                      |
| x | x | x | x | x | 803 | 0 to 40°C (range only in conjunction with extra code 330)    |
| x | x | x | x | x | 807 | 0 to 60°C (range only in conjunction with extra code 330)    |

### (3) Measuring insert

|   |   |   |   |   |      |                              |
|---|---|---|---|---|------|------------------------------|
| x | x | x | x | x | 1001 | 1 x Pt100 in 3-wire circuit  |
| x | x | x | x | x | 1003 | 1 x Pt100 in 2-wire circuit  |
| x | x | x | x | x | 1005 | 1 x Pt1000 in 2-wire circuit |
| x | x | x | x | x | 2001 | 2 x Pt100 in 3-wire circuit  |
| x | x | x | x | x | 2003 | 2 x Pt100 in 2-wire circuit  |

### (4) Tolerance class to EN 60 751

|   |   |   |   |   |   |                    |
|---|---|---|---|---|---|--------------------|
| x | x | x | x | x | 1 | Class B (standard) |
| x | x | x | x | x | 2 | Class A            |
| x | x | x | x | x | 3 | Class 1/3 DIN      |

### (5) Extra codes

|   |   |   |   |   |     |                                                   |
|---|---|---|---|---|-----|---------------------------------------------------|
| x | x | x | x | x | 000 | no extra code                                     |
| x | x | x | x | x | 330 | analog transmitter, in conjunction with 1 x Pt100 |

Order code

(1) - (2) - (3) - (4) / (5) ,...

Order example

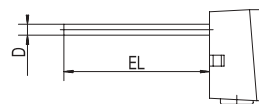
902523/10 - 572 - 1001 - 1 / 000<sup>1</sup>

1. List extra codes in sequence, separated by commas.

## Order details: Indoor, outdoor and duct resistance thermometers

### (1) Basic version

|   |           |                                                                         |
|---|-----------|-------------------------------------------------------------------------|
|   | 902523/25 | Duct resistance thermometer with plain protection tube, Protection IP54 |
| x | 380       | (2) Operating temperature in °C<br>-50 to +200°C                        |
| x | 1003      | (3) Measuring insert<br>1 x Pt100 in 2-wire circuit                     |
| x | 1005      | 1 x Pt1000 in 2-wire circuit                                            |
| x | 1009      | 1 x Ni 1000 in 2-wire circuit                                           |
| x | 1         | (4) Tolerance class to EN 60 751<br>Class B (standard)                  |
| x | 2         | Class A                                                                 |
| x | 6         | (5) Protection tube diameter D in mm<br>6mm                             |
| x | 100       | (6) Fitting length EL in mm (50 ≤ EL ≤ 500)<br>100mm                    |
| x | 150       | 150mm                                                                   |
| x | 200       | 200mm                                                                   |
| x | ...       | please specify in plain text (50mm steps)                               |
| x | 000       | (7) Process connection<br>no process connection                         |
| x | 252       | screwed pipe joint 1/2"                                                 |
| x | 254       | screwed pipe joint 1/2"                                                 |
| x | 662       | stop flange 6mm dia.                                                    |
| x | 000       | (8) Extra codes<br>no extra code                                        |
| x | 310       | protection tube stepped down from 6mm dia. to 3.3mm dia.                |
| x | 404       | Protection IP65                                                         |



Order code      (1) - (2) - (3) - (4) - (5) - (6) - (7) / (8) ,...

Order example      902523/25 - 380 - 1003 - 1 - 6 - 100 - 252 / 000<sup>1</sup>

1. List extra codes in sequence, separated by commas.

## Stock versions:

| (1)       | (2) | (3)  | (4) | (5)               | Sales No.   |
|-----------|-----|------|-----|-------------------|-------------|
| 902523/10 | 572 | 1001 | 1   | 000               | 90/00065671 |
| 902523/10 | 572 | 2001 | 1   | 000               | 90/00065672 |
| 902523/10 | 803 | 1003 | 1   | 330(0 to 40°C)    | 90/00064003 |
| 902523/10 | 807 | 1003 | 1   | 330(0 to 60°C)    | 90/00065717 |
| 902523/11 | 572 | 1003 | 1   | 000               | 90/00055723 |
| 902523/11 | 572 | 2003 | 1   | 000               | 90/00055724 |
| 902523/12 | 572 | 1003 | 1   | 000               | 90/00064881 |
| 902523/12 | 572 | 2003 | 1   | 000               | 90/00064882 |
| 902523/12 | 807 | 1003 | 1   | 330(0 to 60°C)    | 90/00064883 |
| 902523/13 | 572 | 1003 | 1   | 000               | 90/00064852 |
| 902523/13 | 572 | 2003 | 1   | 000               | 90/00064853 |
| 902523/13 | 568 | 1003 | 1   | 330(-30 to +60°C) | 90/00065073 |
| 902523/20 | 572 | 1003 | 1   | 000               | 90/00064894 |
| 902523/20 | 568 | 1003 | 1   | 330(-30 to +60°C) | 90/00065087 |
| 902523/20 | 807 | 1003 | 1   | 330(0 to 60°C)    | 90/00064896 |