

Push-in resistance thermometers with connecting cable

- for temperatures from -50 to +400°C
- as single or twin resistance thermometer
- in 2-wire, 3-wire or 4-wire circuit
- connecting cable in PVC, silicone, Teflon, or with metal braiding

Push-in resistance thermometers are preferred for measuring temperatures in liquids and gases. Applications include HVAC and refrigeration, heating installations, ovens, plant engineering, and laboratories.

Depending on the version, the connecting cables are suitable for dry or humid areas within the range -50 to +350°C. The connection of the cable to the protection tube incorporates strain relief. A cable protector can be supplied as an option.

The measuring insert is normally fitted with a Pt100 temperature sensor to EN 60 751, Class B in 2-wire circuit. Versions with Pt500 or Pt1000 are also available. Furthermore, there is a choice of 3-wire and 4-wire circuit connections.



Technical data

Connection**Connecting cable**

cable ends available as: bare wires, with ferrules, receptacles or multipole connectors

PVC, ambient temperature -5 to +80°C (+105°C)

silicone, ambient temperature -50 to +180°C

Teflon, ambient temperature -190 to +260°C

metal braiding, ambient temperature -50 to +350°C

a shielded connecting cable can be supplied as an option

Protection tube

stainless steel 1.4571, 5mm, 5.2mm, 6mm and 8mm dia., brass 6mm dia.

Measuring insert

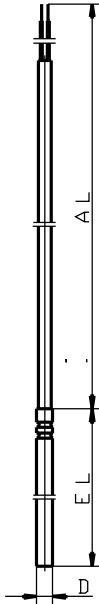
Pt100 temperature sensor, EN 60 751, Cl. B, 2-wire circuit

Response times

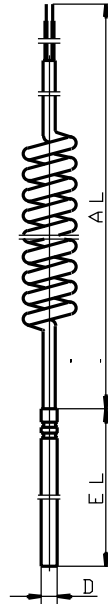
$t_{0,5}$ approx. 2sec, $t_{0,9}$ approx. 6sec, in water 0.2 m/sec, 6mm dia.

Accessories

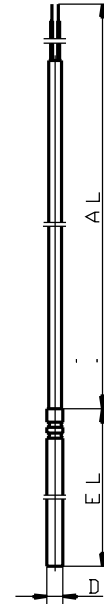
pocket, see Data Sheet 90.9721

Dimensions

Type 902105/10
Type 902105/15



Type 902105/20



Type 902105/30

Order details: Push-in resistance thermometers with connecting cable

(1) Basic version

902105/30 Push-in resistance thermometer with connecting cable, multi-piece protection tube (welded) in stainless steel



(2) Operating temperature in °C / connecting cable

x	380	-50 to +200°C / silicone
x	386	-50 to +260°C / Teflon
x	388	-50 to +260°C / metal braiding
x	402	-50 to +400°C / metal braiding
x	724	-5 to +80°C / PVC
x	912	-5 to +105°C / PUR (for 1 x 2-wire or 3-wire circuit only)

(3) Measuring insert

x	1001	1 x Pt100 in 3-wire circuit
x	1003	1 x Pt100 in 2-wire circuit
x	1011	1 x Pt100 in 4-wire circuit
x	2001	2 x Pt100 in 3-wire circuit
x	2003	2 x Pt100 in 2-wire circuit

(4) Tolerance class to EN 60 751

x	1	Class B (standard)
x	2	Class A

(5) Protection tube diameter D in mm

x	6	6mm
x	8	8mm

(6) Fitting length EL in mm (50 ≤ EL ≤ 500)

x	50	50mm
x	100	100mm
x	150	150mm
x	200	200mm
x	...	please specify in plain text (50mm steps)

(7) Connecting cable end

x	03	bare cable ends
x	11	ferrules to DIN 46 228 Part 4 (standard)
x	13	receptacle 6.3 to DIN 46 247
x	80	multipole connector (please specify type in plain text)

(8) Connecting cable length AL in mm (500 ≤ AL ≤ 500000)

x	2500	2500mm
x	...	please specify in plain text (500mm steps)

(9) Extra codes

x	000	no extra code
x	310	stepped protection tube
x	315	cable protector: coil
x	316	cable protector: tube
x	317	shielded connecting cable

Order code

(1) - (2) - (3) - (4) - (5) - (6) - (7) - (8) / (9) / ...

Order example

902105/30 - 380 - 1001 - 1 - 6 - 100 - 11 - 2500 / 000¹

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

Stock versions:

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	Sales No.							
902105/15	-	724	-	1003	-	1	-	6	-	50	-	11	-	2500	/	000	90/00058929
902105/20	-	730	-	1003	-	1	-	6	-	50	-	11	-	1100	/	000	90/00065495
902105/30	-	388	-	1003	-	1	-	6	-	50	-	11	-	2500	/	315,317	90/00055718
902105/30	-	388	-	1003	-	1	-	6	-	100	-	11	-	2500	/	315,317	90/00055719
902105/30	-	388	-	1001	-	1	-	6	-	50	-	11	-	2500	/	315,317	90/00065451
902105/30	-	388	-	1001	-	1	-	6	-	100	-	11	-	2500	/	315,317	90/00065453