

Surface resistance thermometers

- for temperatures from -50 to +260°C
- with protection fittings in different materials
- for round and flat surfaces
- quick and easy installation
- low thermal mass

Surface resistance thermometers are preferably used for temperature measurement on closed pipe systems or other round or flat surfaces. Simple installation by tension bands or hose clips avoids any mechanical preparation of the measurement site. An exception are Types 902522/10 and 902522/11, which have a mounting hole for screwing on to any surface.

Indirect temperature measurement avoids disturbing the flow of the medium. On the other hand, pressure and chemical effects have no influence on the life of the resistance thermometer.

The measurement object is hardly affected by the low thermal mass. A heat conduction paste can be supplied to improve the heat transfer. Large temperature differences between the measurement medium and the surroundings directly affect the measurement. In such cases, additional insulation is advisable.

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 can also be provided.



Technical data

Connection

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

Connecting cable

silicone, ambient temperature -50 to +180°C

Teflon, ambient temperature -190 to +260°C

Kapton, ambient temperature -50 to +205°C

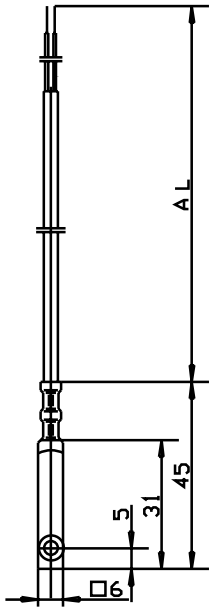
Protection tube

stainless steel 1.4571, aluminium, plastic

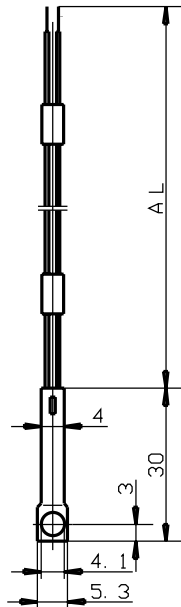
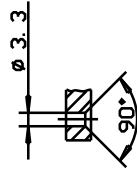
Measuring insert

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

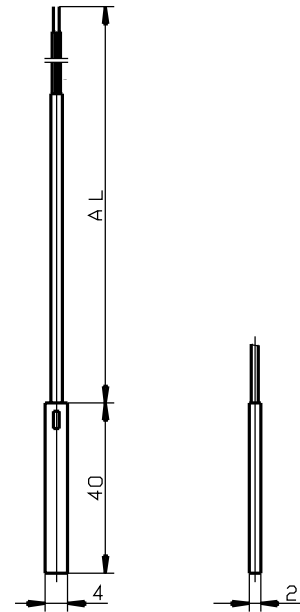
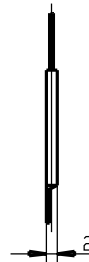
Dimensions



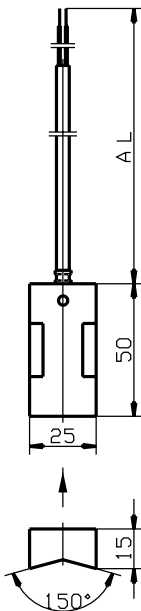
Type 902522/10



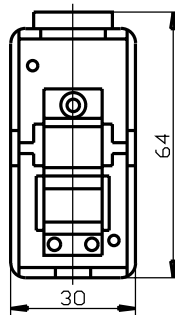
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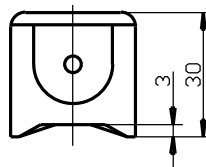
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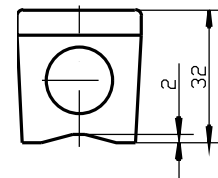
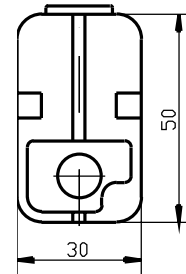
Type 902522/30



Type 902522/40



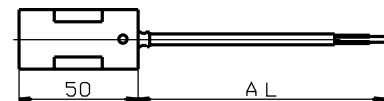
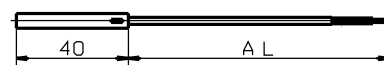
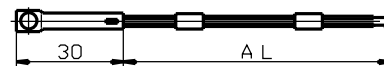
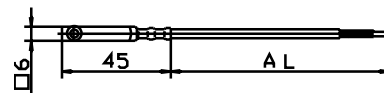
Type 902522/41
Type 902522/42



Order details: Surface resistance thermometers

(1) Basic version

	902522/10	Surface resistance thermometer with fixing hole, aluminium protection fitting
	902522/11	Surface resistance thermometer with fixing hole, stainless steel protection fitting
	902522/20	Surface resistance thermometer, stainless steel protection fitting
	902522/30	Surface resistance thermometer, aluminium protection fitting



		(2) Operating temperature in °C / connecting cable
	378	-50 to +180°C / silicone
	386	-50 to +260°C / Teflon
	391	-50 to +260°C / Kapton
		(3) Measuring insert
	1003	1 x Pt100 in 2-wire circuit
		(4) Tolerance class to EN 60 751
	1	Class B (standard)
	2	Class A
		(5) Connecting cable end
	04	tinned wires
	10	autosplice
	11	ferrules to DIN 46 228 Part 4 (standard)
	13	receptacle 6.3 to DIN 46 247
		(6) Connecting cable length AL in mm (500 ≤ AL ≤ 500000)
	2500	2500mm
	...	please specify in plain text (500mm steps)
		(7) Extra codes
	000	no extra code
	315	cable protector: coil
	316	cable protector: tube

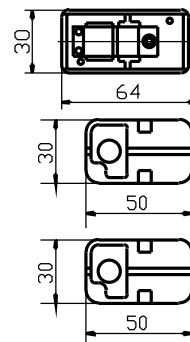
Order code **(1)** - **(2)** - **(3)** - **(4)** - **(5)** - **(6)** / **(7)** ,....
 Order example 902522/10 - 386 - 1003 - 1 - 11 - 2500 / 000¹

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

Order details: Surface resistance thermometers

(1) Basic version

	902522/40	Surface resistance thermometer, plastic case with metal contact strip
	902522/41	Surface resistance thermometer pipe surface probe
	902522/42	Surface resistance thermometer flat surface probe
x	x	x
	365	(2) Operating temperature in °C -50 to +120°C
x	x	x
	1003	(3) Measuring insert 1 x Pt100 in 2-wire circuit
	1004	1 x Pt500 in 2-wire circuit
	1005	1 x Pt1000 in 2-wire circuit
	1009	1 x Ni 1000 in 2-wire circuit
	1621	1 x KTY81-122 in 2-wire circuit
		(4) Tolerance class to EN 60 751
	x	0 tolerance with KTY sensor
	x	1 Class B (standard)
	x	2 Class A
x	x	x
	000	(5) Extra codes no extra code
	x	404 Protection IP65 (Pg9 cable gland)



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

Order example 902522/40 - 365 - 1003 - 1 / 000

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

Stock versions:

(1)	(2)	(3)	(4)	(5)	(6)	(7)	Sales No.
902522/10	- 386	- 1003	- 1	- 11	- 2500	/ 000	90/00306774
902522/11	- 386	- 1003	- 1	- 10	- 2500	/ 000	90/00065548
902522/20	- 391	- 1003	- 1	- 11	- 2500	/ 000	90/00065547
902522/30	- 378	- 1003	- 1	- 11	- 2500	/ 315	90/00065531

Stock versions:

(1)	(2)	(3)	(4)	(5)	Sales No.
902522/40	- 365	- 1003	- 1	/ 000	90/00055794
902522/41	- 365	- 1003	- 1	/ 000	90/00378669
902522/41	- 365	- 1003	- 1	/ 404	90/00376703