

Type 02080

Temperature sensors Pt to 350°C



- cable with adjustment for well
- cable without adjustment for well

Characteristics

Sensor 1x Pt 100, Pt 500, Pt 1000

2-wire connection

Technical data

Measuring range: 0 to +350°C

Measuring current: to 1mA

Tolerance class: B according to ČSN EN 60751

Protection class: IP 20

Temperature reaction time: no well - water 6 s, air 20 s
with well - water 15 s, air 40 s

Cross section of connection line: 2 x 0,34 mm²

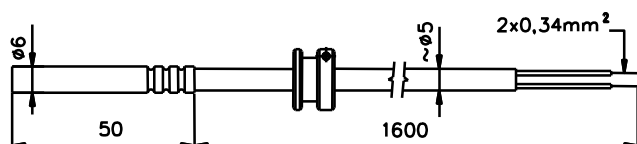
Description - use

The sensors are designed for temperature measuring. The sensor signal can be evaluated for temperature measuring registration or signalisation. The sensors are designed for use at higher temperatures. The product is subject to ČSN EN 60751.

Sensors form measuring resistance Pt encased in copper casing (stainless casing upon request), signal output by 2-wire cable with external braid. Cable temperature resistance up to +350°C.

Dimension drawing

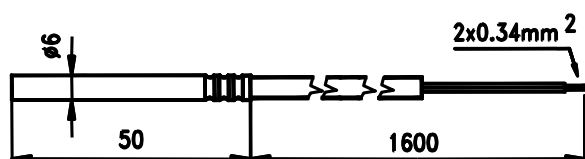
- cable sensor with adjustment for well



Temperature sensing in greater depths. Combination with silicone bushing up to max temperature +180°C is possible for wall passage.

Material: casing - Cu, fibre glass cable insulation with silicone, braid with stainless wires

- cable sensor with adjustment for well

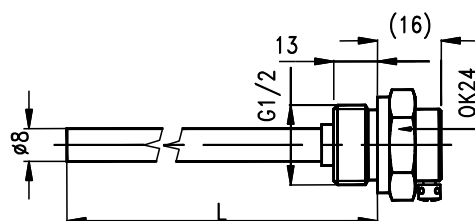


Temperature sensing in greater depths. Combination with silicone bushing up to max temperature +180°C is possible for wall passage.

Material: casing - Cu, fibre glass cable insulation with silicone, braid with stainless wires

Accessories upon order

- wells



Material: stainless steel class 17 (DIN 1.4541), PN 63 dle ČSN 13 0010

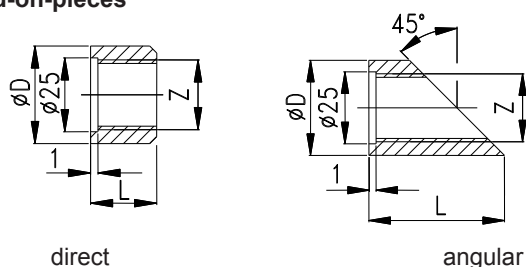
- supplied with sealing Cu ring and sealing option

Well order No.	Z	L
405 911 082 216 01	G 1/2	54
405 911 082 916 01		100
405 911 083 116 01		160
405 911 082 416 01	M 20x1,5	54
405 911 083 016 01		100
405 911 083 216 01		160

- sealing rings Cu (package 10 pcs) - for wells and weld-on-pieces

Order No.	Dimension
405 911 082 616	13 x 17
405 911 082 716	21 x 25
405 911 082 816	20 x 24

- weld-on-pieces



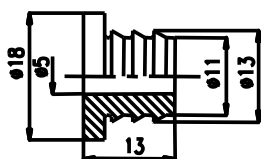
direct

angular

Order No. weld-on-piece	Type	Z	L	Ø D
405 911 081 416	direct	G1/2	19	28
405 911 081 016		G1/4	26	20
405 911 081 616	angular	G1/2	40	28
405 911 081 816		G1/2	46	28
405 911 081 216	angular	G1/4	33	20
405 911 081 516		G1/4	33	20
405 911 081 116	direct	M20x1,5	19	28
405 911 081 716		M12x1,5	26	20
405 911 081 916	angular	M20x1,5	40	28
405 911 081 316		M12x1,5	46	28

Supplied with sealing Cu rings and sealing option.
Materiál: welding steel class 11 (DIN 1.0308, DIN 2391)

- rubber bushing

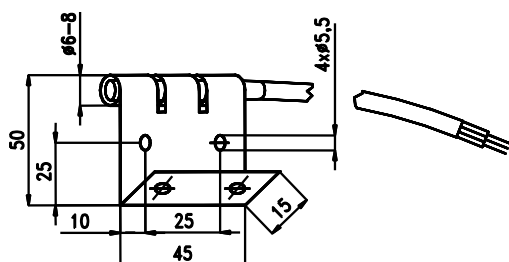


The bushing has a function of wall, sheet metal plug, etc.

Order No.: 405 061 014 516

Materiál: silicone (max. 180°C)

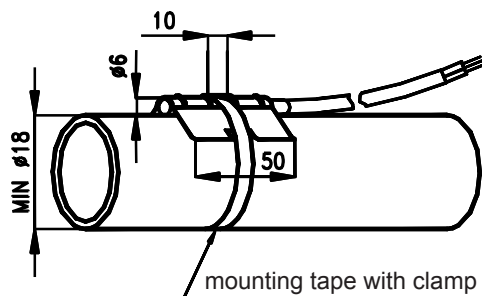
- holder V (outdoor)



Order No.: 405 011 073 216

Materiál: steel class 11 (DIN 1.0320) with PÚ

- holder P (attachable)



Order No.: 40 05120 804001(Ø6)

Materiál: copper

Permitted resistance deviations of Pt sensors from rated values for tolerance classes specified in °C

Tolerance class	Tolerance $\Delta T/K$ temperature in °C	tolerance at $t = 0^\circ\text{C}$	
		$\Delta T/K$	Pt 100 [Ω]
B ČSN EN 60751	$\pm 0.30 + 0.005 t $	± 0.30	99,88 to 100,12

Rated values of measuring resistance Pt for information purposes depending on temperature (ČSN EN 60751)

t [°C]	Pt100 [Ω]	t [°C]	Pt100 [Ω]	t [°C]	Pt100 [Ω]
0	100,00	130	149,83	260	197,71
10	103,90	140	153,58	270	201,31
20	107,79	150	157,33	280	204,90
30	111,67	160	161,05	290	208,48
40	115,54	170	164,77	300	212,05
50	119,40	180	168,48	310	215,61
60	123,24	190	172,17	320	219,15
70	127,08	200	175,86	330	222,68
80	130,90	210	179,53	340	226,21
90	134,71	220	183,19	350	229,72
100	138,51	230	186,84	360	233,21
110	142,29	240	190,47	370	236,70
120	146,07	250	194,10	380	240,18

Ordering devices

Code	Name
30 02080 9	Cable temperature sensor
Code	Measuring resistance
10	Pt100
20	Pt500
30	Pt1000
Code	Tolerance class
2	B according to ČSN EN 60,751
Code	Cable length
1	1.6 m
Code	Well length, design
0	without adjustment for well
1	for well L=54 mm
2	for well L=100 mm
3	for reservoir L= 160 mm

30 02080 9	10	2	1	2	Ordered No.
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Order example: 1 temperature sensor, type 02080, Pt100, tolerance class B, cable length 1,6 m, for well L=100 mm

Warranty

24 months warranty is provided from the delivery date unless specified otherwise in the purchase contract.