

Type 02175

Temperature sensors Pt with MA head up to 400°C



- head stem

Characteristics

Sensor 1x or 2 x Pt 100

Connection 2-wire, sensors in tolerance class A

4-wire

4 mm stem diameter

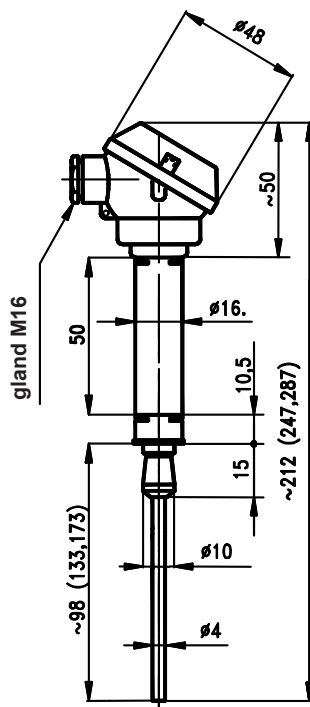
Mounting in wells.

Description - use

The sensors are designed for temperature measuring. The sensor signal can be evaluated for temperature measuring registration or signalisation. The product is subject to ČSN EN 60751 and related standards. They are connected by means of terminal block in the head. Wells and stems are form stainless steel. Temperature of Al head is max. -40 to +100°C.

Dimension drawing

- sensor with head MA



Technical data

Measuring range: -5 0 to +400°C

Measuring current: 1 mA

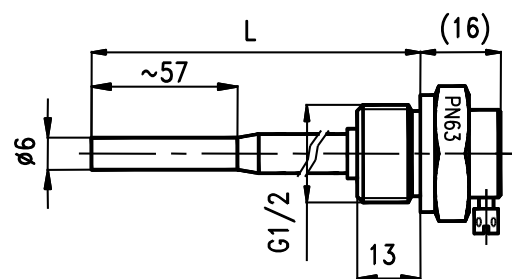
Tolerance class: A, B according to ČSN EN 60751 (in 2x Pt only B)

Protection class: IP 54

Temperature reaction time: no well - water 15 s, air 50 s
with well - water 20 s, air 80 s

Accessories upon order

- wells



Well order No.	L
31 02170 606602	85
31 02170 606603	120
31 02170 606604	160

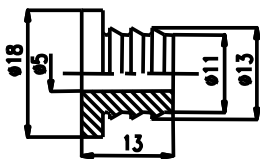
- wells are supplied with sealing Cu ring and sealing option

Covered connection into terminal block placed in the head. Head lid diameter 48 mm. Temperature of Al head is -40 to +100°C. Material: stem - stainless steel class 17 (DIN 1.4541), head - Al

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

Due to continual technical development the manufacturer reserves the right to change parameters without prior notification.

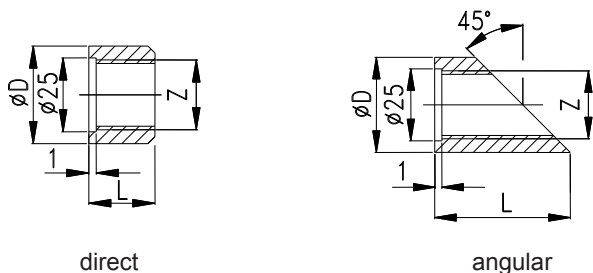
- rubber bushing



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

Order No.: **405 061 014 516**
 Materiál: silicone (max. 180°C)

- weld-on-pieces



Order No. weld-on-piece	Type	Z	L	ØD
405 911 081 416	direct	G1/2	19	28
405 911 081 616	angular	G1/2	40	28
405 911 081 816			46	

The weld-on-pieces are supplied with sealing Cu rings and have aperture for sealing option.

Materiál: welding steel class 11 (DIN 1.0308, DIN 2391)

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

Order No.	Dimension
405 911 082 716	21 x 25

Warranty

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

Order example:

1 temperature sensor, type 02175, Pt100, 2 wire connection, tolerance class B, stem length 98 mm

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]
-50	80,31	110	142,29	270	201,31
-40	84,27	120	146,07	280	204,90
-30	88,22	130	149,83	290	208,48
-20	92,16	140	153,58	300	212,05
-10	96,09	150	157,33	310	215,61
0	100,00	160	161,05	320	219,15
10	103,90	170	164,77	330	222,68
20	107,79	180	168,48	340	226,21
30	111,67	190	172,17	350	229,72
40	115,54	200	175,86	360	233,21
50	119,40	210	179,53	370	236,70
60	123,24	220	183,19	380	240,18
70	127,08	230	186,84	390	243,64
80	130,90	240	190,47	400	247,09
90	134,71	250	194,10	410	250,53
100	138,51	260	197,71	420	253,96

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

Tolerance class	Tolerance $\Delta T/K$ temperature t in °C	tolerance at t = 0 °C	
		$\Delta T/K$	Pt 100 [Ω]
A ČSN EN 60751	$\pm 0,15 + 0,002 t $	$\pm 0,15$	99,94 to 100,06
B ČSN EN 60751	$\pm 0,30 + 0,005 t $	$\pm 0,30$	99,88 to 100,12

Ordering devices

Code	Name
30 02175 9	Temperature sensor with head MA
	Code Measuring resistance, internal connection
1	1 x Pt 100 two-wire connection
2	1 x Pt 100 four-wire connection
3	2 x Pt 100 - only accuracy class B
	Code Material of the head, base
1	Al head, base 50 mm
	Code Tolerance class
1	A (ČSN EN 60751)
2	B (ČSN EN 60751)
	Code Stem dimensions
20	Ø 4, L = 98 mm
30	Ø 4, L = 133 mm
40	Ø 4, L = 173 mm
30 02175 9	1 1 2 20
	Ordered No