

Type 02805, 02806



Description - use

The sensors are designed for temperature measuring. The sensor signal can be evaluated for temperature measuring registration or signalisation. Temperature sensor **STK Pt** comprises of sensor Pt embedded in stem from stainless steel. The sensor outlets are terminated with connector attached to stainless screwing. Available in design up to 150°C (without extension), up to 200°C (extension 37 mm) and up to 300°C (extension 100 mm).

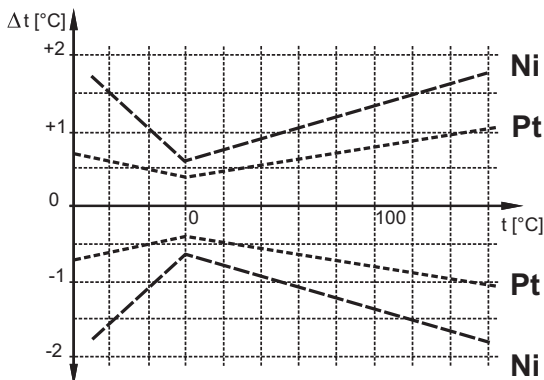
Temperature sensor range **STK Ni** comprises of resistance Ni, its mechanical construction complies with the platinum sensor.

Sensors STK, STK/I cannot be disassembled. The sensor design with screwing is assembled directly in the weld-on-piece design without screwing is designed for wells **Je** (see accessories).

Temperature sensor with current output series **STK/I** comprises of measuring resistance Pt100 embedded by heat conductive material to the bottom of the metal stem and current transmitter in metal casing.

Sensors STK/I are made from stainless steel with threads G1/4 and M12x1,5 and with various stem lengths.

The casing operating temperature must not exceed +75°C. It must be respected during the selection of the sensor extension length for the required measuring range (sensor without extension can be used only for the range -40°C to +60°C).



Tolerance zone of sensors STK.

Temperature sensors with connector STK (Pt, Ni), STK/I

- with connector
- with connector and current output

Characteristics

STK PT

- sensor Pt 100, 3-wire connection
- sensor Pt 500, Pt 1000, 2-wire connection

STK Ni

- sensor Ni 1000, 2-wire connection

STK/I

- current output 4-20 mA

Fast reaction, connection with connector.

Technical data

Sensor:	STK Pt: Pt 100, Pt 500, Pt 1000 STK Ni: Ni 1000
Measuring range:	STK Pt: -40 to +300°C STK Ni: -40 to +150°C
Measuring current:	1 mA max.
Tolerance class:	Pt: B according to ČSN EN 60751
Temperature coefficient:	Ni: 5 000, 6 180 ppm/K
Time stability:	0,05 % (10 000 hod)
Mounting:	to the weld-on-piece or well type Je
Max. overpressure:	without well: 4 MPa/100°C, 3,1 MPa/300°C with well: 4 MPa

Sensors with transmitter **STK/I**

Temperature sensor:	Pt 100
Measuring range:	-50°C to +400°C in 6-ranges
Current output:	4-20 mA, passive, unipolar
Voltage:	10 ÷ 36 V DC
Max current in the loop:	34 mA with sensor interruption
Accuracy:	± 1% from measuring range
Mounting:	into the weld-on-piece without well
Max. overpressure:	without well: 4 MPa/100°C, 3,1 MPa/300°C
Transmitter operating temperature:	-25 to +75°C

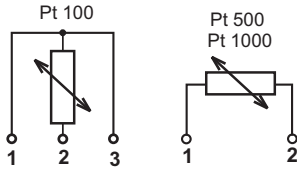
Connection: cable: Ø 3 ÷ 6 mm,
wire: 0,75 mm²

Max. connector temperature: +125°C

Time factor: without well: air: 45 s
water: 8 s
with well: water: 35 s

Ingress protection: IP 65

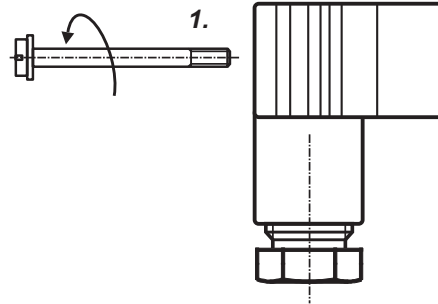
Terminal connection



Connection **STK Pt**

Connection **STK Ni**

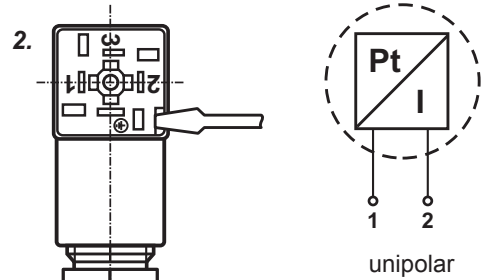
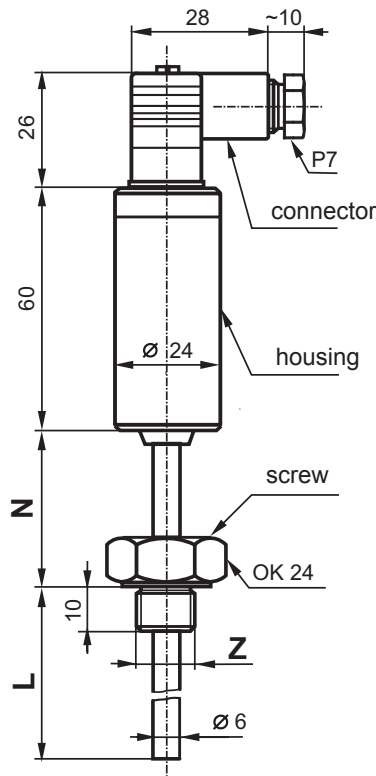
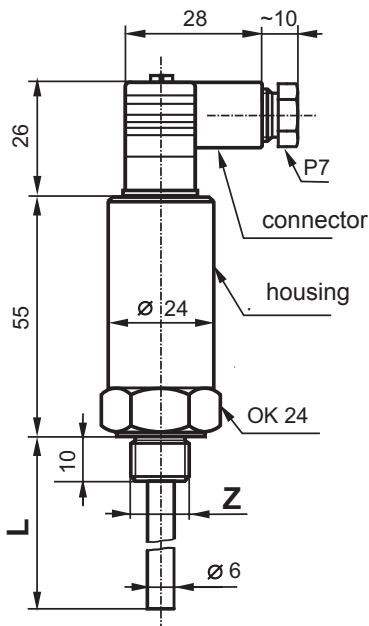
Sensor connection **STK/I** - procedure



Dimension drawing

Sensor **STK/I**

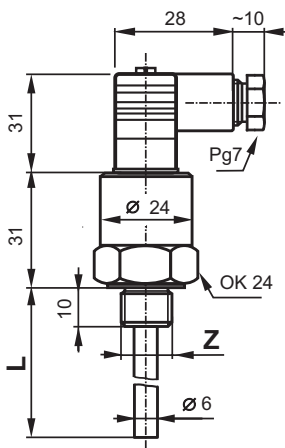
Materiál: stainless steel 1.4541
Accessories: sealing washer 20x12x2



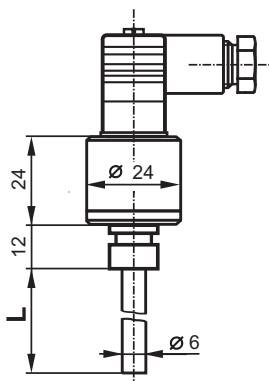
The connector construction enables 4 directions of terminal orientation as regards the cable bushing (at 90°).

Sensor **STK**

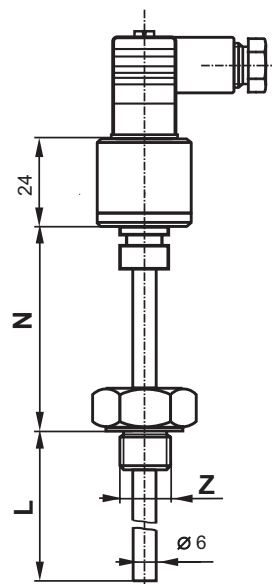
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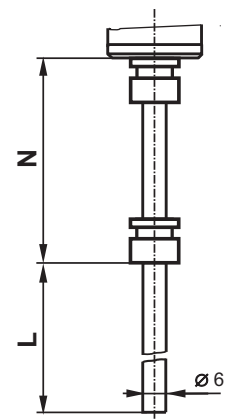
Sensor **STK** to 150°C with screws



Sensor **STK** to 150°C for mounting into well



Sensor **STK** to 200°C (300°C) with screws (only Pt100).



Sensor **STK** to 200°C (300°C) for mounting to well (only Pt100).

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

Ordering devices

Code	Name												
40 02805 9	Temperature sensor with connector STK												
	<table border="1"> <thead> <tr> <th>Code</th> <th>Measuring resistance</th> </tr> </thead> <tbody> <tr><td>1</td><td>Pt 100</td></tr> <tr><td>2</td><td>Pt 500</td></tr> <tr><td>3</td><td>Pt 1000</td></tr> <tr><td>5</td><td>Ni 1000, 5000 ppm/K</td></tr> <tr><td>6</td><td>Ni 1000, 6180 ppm/K</td></tr> </tbody> </table>	Code	Measuring resistance	1	Pt 100	2	Pt 500	3	Pt 1000	5	Ni 1000, 5000 ppm/K	6	Ni 1000, 6180 ppm/K
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40 02805 9	1	1	1	03	Ordered No.
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*) only with a thread

Order example: 1 temperature sensor, type 02805 (STK), Pt100, no extension, thread screws G1/4, stem length 30 mm

Code	Name														
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40 02806 9	4	1	1	04	Ordered No.
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Order example: 1 temperature sensor, type 02806 (STK/I), range 0 to +100°C, extension 37 mm, thread G1/4, length of stem 40 mm

Warranty

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

