

# Type 05120, 05121 02827, 02927



## Cable temperature sensors KST (KSTz) Pt, Ni

- cable
- cable Ex
- cable with screws
- cable with screws Ex



### Characteristics

#### KST Pt

- measured resistance Pt 100, 3-wire connection
- measured resistance Pt 500, Pt 1000, 2-wire connection

#### KST Ni

- measured resistance Ni 1000, 2-wire connection

### Technical data

Sensor:	<b>KST Pt:</b> Pt 100, Pt 500, Pt 1000 <b>KST Ni:</b> Ni 1000
Measuring range:	-40 ÷ +180°C, -30 ÷ +170°C - for KST. Ex
Measuring current:	1 mA
Temperature coefficient:	Ni: 5 000, 6 180 ppm/K
Temperature class:	Pt: B according to ČSN EN 60751
<b>Design ..Ex</b> (according to ČSN EN 60079-15)	
classification:	II 3 G Ex nA II (T3) - T6, -30°C ≤ Ta ≤ +170°C,
Mounting:	KST: free without well, into the well <b>Je</b> KSTz: into the weld-on-piece
Connection:	silicone cable: Ø 4 mm, wire: 0,34 mm <sup>2</sup>
Ingress protection:	IP 65
Time factor:	KST: without well: water 8 s, air 45 s with well <b>Je</b> : water 35 s KSTz: air 45 s water 8 s
Max. overpressure KSTz:	4 MPa/100°C, 3,1 MPa/180°C

### Description - use

The sensors are designed for temperature measuring. The sensor signal can be evaluated for temperature measuring registration or signalisation. Temperature cable sensor **KST Pt** forms measuring resistance Pt imbedded in copper casing length 30 or 44 mm. The signal outlet is by means of silicon cable.

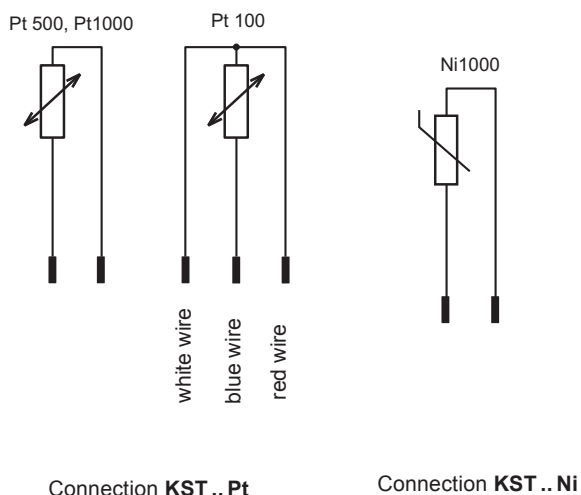
Sensors in design II 3 G Ex nA II (T3)-T6 - it represents non-sparking device „nA“ group „II“ category „3“. They are suitable for environment with explosion hazard zone 2 except for the mines.

Sensor **KST Ni** contains measuring resistance Ni. The construction is identical to sensor KST Pt.

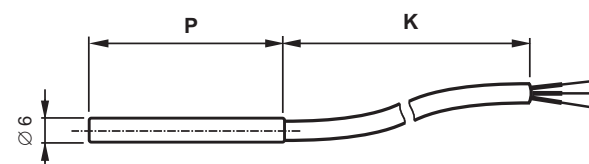
Encased sensor of the sensor is designed for assembly in well **Je**, where it is attached by means of **plastic clamping insert** (see Accessories). The sensor can be used separately, potentially with attaching or outdoor holder.

Design **KSTz** with sensor placed in stainless stem with screwing. It is assembled with screwing into the weld-on-piece.

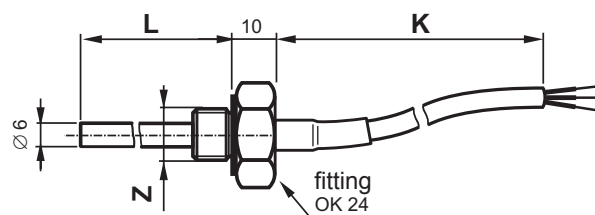
### Sensor connection



### Dimension drawing



Cable sensor **KST**



Cable sensors **KSTz**

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

## Ordering devices

Code	Name
40 05120 8	Cable temperature sensor <b>KST</b>
Code	Measuring resistance
0	Pt100
2	Pt500
3	Pt1000
4	Ni1000, 5000 ppm/K
5	Ni1000, 6180 ppm/K
Code	Casing P [mm]
30	44
31	30
Code	Cable K [m]
01	1,6
02	2,5
03	4,0
04	6,0

40 05120 8	3	30	03	Ordered No.
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**Order example:** 1 temperature sensor, type 05120 (KST), Pt1000, casing 44 mm, cable 4 m.

Code	Name
40 05121 8	Cable temperature sensor <b>KST.Ex</b>
Code	Measuring resistance
0	Pt100
2	Pt500
3	Pt1000
4	Ni1000, 5000 ppm/K
5	Ni1000, 6180 ppm/K
Code	Casing P [mm]
30	44
Code	Cable K [m]
01	1,6
02	2,5
03	4,0
04	6,0

40 05121 8	0	30	02	Ordered No.
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**Order example:** 1 temperature sensor, type 05121 (KST.Ex), Pt100, casing 44 mm, cable 2.5 m.

Code	Name
40 02827 9	Cable temperature sensor <b>KSTz</b>
Code	Measuring resistance
0	Pt100
2	Pt500
3	Pt1000
4	Ni1000, 5000 ppm/K
5	Ni1000, 6180 ppm/K
Code	Screw thread
1	G 1/4
2	M 12 x 1,5
3	G 1/2
4	M 20 x 1,5
Code	Stem L [mm]
03	30
04	40
06	60
10	100
16	160
25	250
Code	Cable K [m]
1	1,6
2	2,5
4	4,0
6	6,0

40 02827 9	0	2	10	2	Ordered No.
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**Order example:** 1 temperature sensor, type 02827 (KSTz), Pt100, thread screws M12 x 1,5, stem length 100 mm, cable 2,5 m.

Code	Name
40 02927 9	Cable temperature sensor <b>KSTz.Ex</b>
Code	Measuring resistance
0	Pt100
2	Pt500
3	Pt1000
4	Ni1000, 5000 ppm/K
5	Ni1000, 6180 ppm/K
Code	Screw thread
1	G 1/4
2	M 12 x 1,5
3	G 1/2
4	M 20 x 1,5
Code	Stem L [mm]
03	30
04	40
06	60
10	100
16	160
25	250
Code	Cable K [m]
1	1,6
2	2,5
4	4,0
6	6,0

40 02927 9	0	1	10	4	Ordered No.
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**Order example:** 1 temperature sensor, type 02927 (KSTz.Ex), Pt100, thread screws G1/4, stem length 100 mm, cable 4 m.

## Warranty

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