

Intrinsically Safe Temperature Sensor for Measurement of Machinery and Device Parts **TOPE - 361Exi,**
TTJE - 361Exi,
TTKE - 361Exi

Specification

Temperature range / sensing element

-40÷550°C	Pt100	class B
-40÷1000°C	K	class 2
-40÷700°C	J	class 2

Sheath

- standard (pipe) execution, material: stainless steel 1.4541
length L [mm]: 50÷1000; operating temp.: -40÷400°C
- mineral insulated execution with sleeve, material: 1.4571
(for Pt), 1.4541 (for T, J), 2.4816 (for N, K), length L_{min} [mm]: 50
- operating temperature:

Sensor class 2, class B	Mineral insulated sheath diameter d [mm]			
	3	4,5	6	8
T	350°C	–	–	–
J	450°C	550°C	700°C	–
K, N	800°C	900°C	1000°C	1000°C
Pt100	400°C	–	550°C	–

Lead wire

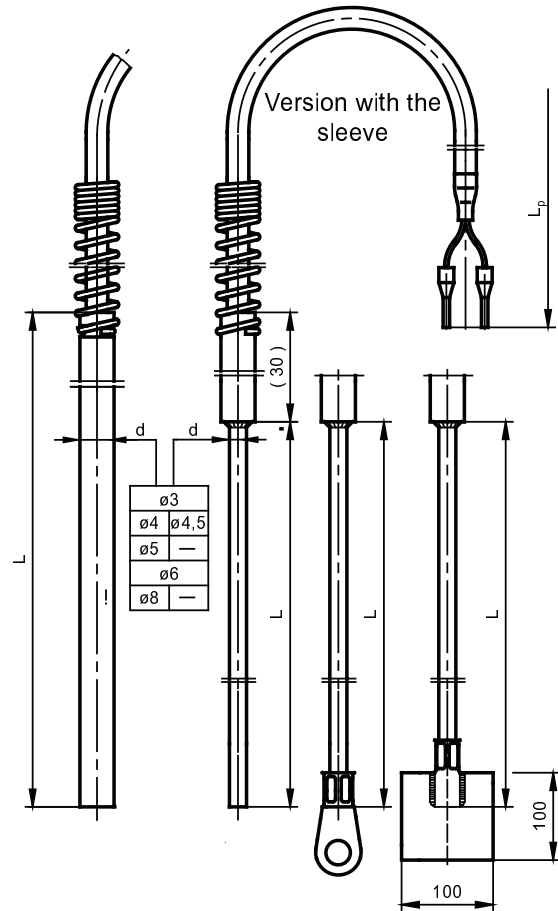
- Ws - stranded wire 0,22 mm² with fiberglass insulation, metallic overbraid, operating temp. up to 400°C
- Si - stranded wire 0,22 mm² with silicone insulation, operating temp. up to 180°C (inapplicable to pipe sheath d<6)
- lead wire length L_p [m]: 1,5 (standard)
- Cu wire resistance ~0,14 Ω/m = ~0,36°C

Constructional version

- Exi acc. to ATEX
- EC-Type Examination Certificate: **WE KDB 07ATEX055**
II 2G Ex ia IIC T6; II 2D Ex iaD 21 T85°C
- insulated hot junction SO

Options

- Pt500, Pt1000, T, N
- 3-, 4-wire connection for Pt100
- Pt100: class A -30÷250°C, class AA 0÷150°C; TC class 1
- TC sensor with sleeve terminations: eyelet tip or plate
- sensor mounting fittings – UG-1, UG-3, UG-8, UZK-1 – pp. 155÷156



Ordering code

Temperature sensor

	T	E	-	361	Exi	-	-	-	-	-	-	-
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Single: **no designation**

Double: **2**

Sensing element resistor Pt: **OP**
thermocouple: **TJ, TT, TN or TK**

Straight sheath: **no designation**

Sheath with sleeve: **T**

Sheath length L [mm]: **50** or other*

Sheath diameter d [mm]: **6** or other*

RTD/ thermocouple class: **A, B*/ 1, 2**

RTD type and connection: **Pt100 – 3-wire** or other*

Insulation type and lead wire length: **Ws-2 m** or other*

Special termination for version with sleeve e.g. plate: **30x50** or eyelet tip: **M5**

*Other parameters acc. to requirements

Ordering example: **TTKE-361TExi-400-6-2-Si-1,5 m-M5**

Quality Certificate or Calibration Certificate of Limatherm Sensor Accredited Laboratory for Temperature Measurements on request.