

**TEMPERATURE SENSORS  
TRPT1**

**DESCRIPTION**

The TRPT1 Pt100 resistance temperature sensors are specially designed for general industrial use. The sensing element is an RTD three wire device according to EN 60751 Class A.

The sensor consists of a probe, a connection head and a measurement insert. The probe is made of austenitic stainless steel and the connection head is made of aluminium. The supply lines to the measurement insert are insulated from each other and from the probe tube with a ceramic insulator.

The sensor can be connected directly to a temperature indicator or controller that has a three wire Pt100 input.

**MAIN FEATURES**

- Head type B-KNE.
- Three wire sensing element.
- Fast response time.
- Easy to install.

- OPTIONS:**
- Special designs under request.
  - Transmitter assembly 4 to 20 mA output.
  - ATEX approved version.
  - Clamping connection hygienic sensor.
  - Higher operating limits.
  - Special design for air temperature measurements.

- USE:** Measurement in pipelines and vessels.

**AVAILABLE**

- MODELS:**
- TRPT1 – simple sensor.
  - TRPT1T – sensor and transmitter.

**SIZES AND**

- CONNECTIONS:** 1/2" male threaded ISO 228.

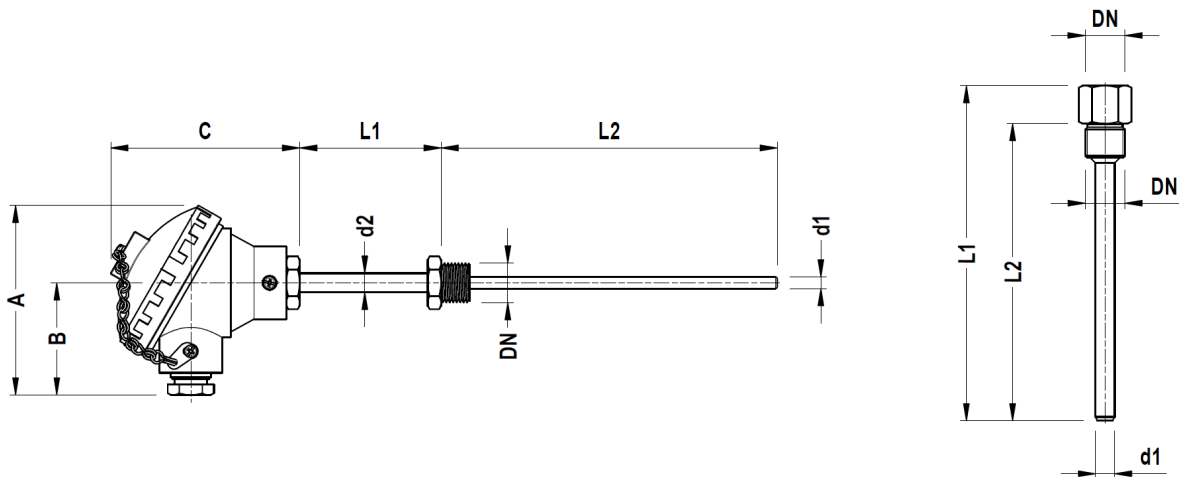
**INSTALLATION:**

- In any position.
- See IMI – Installation and maintenance instructions.



LIMITING CONDITIONS	
Operating temperatures (Class A)	- 10 °C to 300 °C
Max. operating conditions	36,5 bar @ 400 °C
Ambient temperature	- 20 °C to 80 °C

TECHNICAL DATA		
TYPE	TRPT1	TRPT1T
Enclosure	KNE	KNE
Enclosure protection according to EN60529: 1991/A1:20	IP 66	IP 66
Electrical connection	M20 x 1,5	M20 x 1,5
Available standard ranges	-10 to 300 °C	-10 to 300 °C Other ranges programmable
Output	Pt100 to EN 60751 – Class A	Loop powered 4 to 20 mA
Supply	–	10 to 30 V DC
Maximum loop resistance	–	681 Ohm at 24 V DC 954 Ohm at 30 V DC
Transmitter – Thermal drift measurement deviation	–	Input 0,06 °C / 10 °C Output 0,02% of span / 10 °C
Maximum values for connection of the current loop circuit (+ and – connections)	–	U <sub>o</sub> = 30 V DC P <sub>i</sub> = 800 mW



DIMENSIONS (mm)														
TEMPERATURE SENSOR										THERMOWELL				
MODEL	A	B	C	L1	L2	DN	d1	d2	WGT. (kg)	SIZE	L1	L2	d1	WGT. (kg)
TRPT1 – 100	99	59	99	74	115	1/2"	6	10	0,47	1/2"	129	109	10	0,11
TRPT1 – 150	99	59	99	74	165	1/2"	6	10	0,48	1/2"	179	159	10	0,13

MATERIALS		
POS. N°	DESIGNATION	MATERIAL
1	Head	Aluminium alloy
2	Probe	AISI 316L / 1.4404
3	Process connection	AISI 316 / 1.4401
4	Thermowell (pocket)	AISI 316 / 1.4401

