

Thank you for choosing a NIVELCO instrument.

1. APPLICATION

Resistance thermometers are the fundamental elements of the industrial process control. The design of the TGP-□□□-□ resistance thermometer-family enables temperature metering in industrial applications. Primarily they can be used for fast bearing temperature measurement of high-performance machines.

2. TECHNICAL DATA

TGP-□□□-□	
Process temperature	-50...+180 °C (-58...+356 °F)
Sensor	Pt100
Accuracy class	A, B (as per EN 60751)
Measuring current	1 mA
Housing material	1.4571 stainless steel
Electrical connection	silicone rubber and shield, 3 x 0.75mm ² (AWG18)
Process connection	As per order code
Cable shielding	Tinned copper braid
Cable length	6 m (236")
Cable diameter	7 mm (0.275")
Insertion length	30, 50, 100, 160, 380 mm (1.2", 2", 3.9", 6.3", 15")
Ingress protection	IP65
Electrical protection	Class III
Insulation resistance	min. 10 MΩ at +20 °C ±5 °C (+68 °F ±9 °F)
	min. 1 MΩ at the highest operating temperature
Voltage test	500 V, 50 Hz AC for 1 min., at +20 °C ±5 °C (+68 °F ±9 °F)
Weight	0.55 kg (1.2 lbs)
Time constant (9/10)	< 20 s
Pressure	max. 6 MPa

2.1. ACCESSORIES

- User's manual
- Warranty Card
- Eu declaration of Conformity

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THERMOCONT

TGP
BEARING TEMPERATURE SENSORS

USER'S MANUAL



NIVELCO



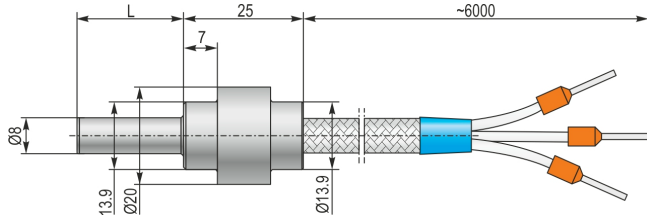
Manufacturer:
NIVELCO Process Control Co.
H-1043 Budapest, Dugonics u. 11.
Tel.: +36-1-889-0100
E-mail: sales@nivelco.com www.nivelco.com

2.2. ORDER CODE

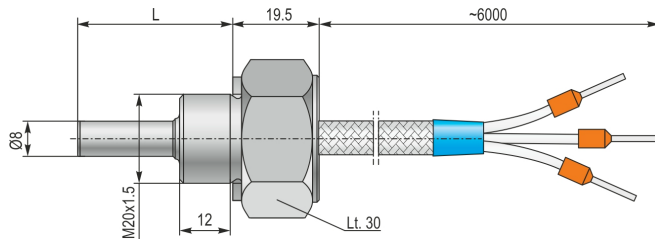
T G P -

Process connection	Code	Sensor	Code	Probe (L)	Code
Rimmed	1	Class A Pt 100	1	30 mm	1
M20 x 1.5	2	Class B Pt 100	2	50 mm	2
				100 mm	3
				160 mm	4
				380 mm	5

2.3. DIMENSIONS



Rimmed connection



M20 x 1.5 threaded connection

3. MOUNTING

The thermal sensor can be mounted into the $\varnothing 8$ mm ($\varnothing 0.314''$) hole which is suitable for the insertion length.

4. WIRING

One terminal of the Pt100 temperature sensor is the two wires marked with the same colour and the third unmarked wire is the other terminal of the Pt100.

Therefore 2- or 3-wire sensor wiring is also possible.

5. MAINTENANCE, REPAIR

The device does not require regular maintenance. The warranty card contains the terms and conditions. Before returning the device for repairs, it must be cleaned thoroughly. The parts in contact with the medium may contain harmful substances; therefore, they must be decontaminated.

Our official form ([Returned Equipment Handling Form](#)) must be filled and enclosed in the parcel. Download it from our website www.nivelco.com. The device must be sent back with a declaration of decontamination. A statement must be provided in the declaration that the decontamination process was successfully completed and that the device is clean from any hazardous substances.

6. STORAGE CONDITIONS

Ambient temperature: $-25 \dots +55$ °C ($-13 \dots +131$ °F)
Relative humidity: max. 98 %

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NIVELCO reserves the right to change anything in this manual without notice!