

*Thank you for choosing a NIVELCO instrument.*

## 1. APPLICATION

Resistance thermometers are a fundamental element of the industrial process control. The design of the **THERMOCONT TGP** resistance thermometer measures temperature in industrial applications. They can be used primarily for bearing temperature measurements of high-performance machines.

## 2. TECHNICAL DATA

	TGP-□□□-□
Process temperature	-50...+180 °C (-58...+356 °F)
Ambient temperature	-30...+100 °C (-22...+212 °F)
Sensor	Pt100
Accuracy class	"A" or "B" accuracy class in complying with EN 60751
Measuring current	1 mA
Material of sensor tube	1.4571 stainless steel
Electrical connection	SHFP type silicone rubber and shield, 3× 0.75 mm <sup>2</sup> (AWG18)
Process connection	As per order code
Cable shielding	Tinned copper braid protective jacket
Cable length	0.6...12 m (1.9...39.4 ft), ss per order code
Cable diameter	7 mm (0.275")
Insertion length	max. 380 mm (15"), As per order code
Ingress protection	IP65
Electrical protection	Class III
Insulation resistivity	min. 10 MΩ at +20 °C ±5 °C (+68 °F ±9 °F)
	min. 1 MΩ at the highest value operating temperature
Voltage-test	500 V, 50 Hz AC for 1 min., @ +20 °C ±5 °C (+68 °F ±9 °F)
Weight	0.55 kg (1.2 lbs)
Time constant (9 / 10)	< 20 s
Pressure	max. 60 bar (6 MPa)

### 2.1. ACCESSORIES

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

# THERMOCONT

TGP  
BEARING TEMPERATURE SENSORS

USER'S MANUAL



Dodávateľ:  
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NIVELCO

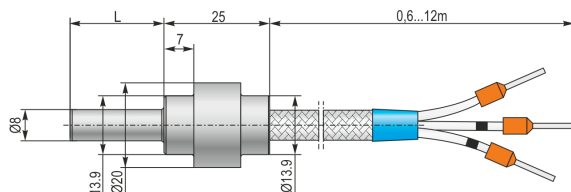
## 2.2. ORDER CODE

T G P -       -  

Process conn.	Code	Sensor	Code	Probe length (L)	Code	Cable length	Code
Rimmed	1	Class "A", Pt100	1	30 mm	1	0.6 m	0
M20x1,5	2	Class "B", Pt100	2	50 mm	2	1 m	1
½" NPT	3			100 mm	3	2 m	2
½" BSP	4			160 mm	4	3 m	3
				380 mm	5	6 m	4
						12 m	5

## 2.3. DIMENSIONS

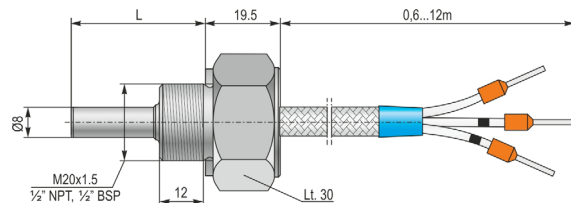
TGP-1□□-□



TGP-2□□-□

TGP-3□□-□

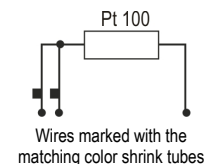
TGP-4□□-□



## 3. MOUNTING

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

## 4. WIRING



2- or 3-wire sensor wiring is also possible for the Pt100 temperature sensor.

## 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](http://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:  $-25...+60$  °C ( $-13...+140$  °F)  
Relative humidity: max. 98%

tgp112en22h04

April 2022

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