

# TGL-40 – TEMPERATURE SENSOR WITH A CABLE AND A METAL CASE

rev10-20eng

## DESCRIPTION AND APPLICATION

This cable temperature sensor is designed for measuring temperature of gaseous and liquid substances. The maximum temperature range of the sensor is  $-40^{\circ}\text{C}/+105^{\circ}\text{C}$ . The non-shielded input cable features PVC insulation rated for up to  $105^{\circ}\text{C}$ . The sensor's diameter allows for insertion into thermowells. When combined with the JTG 8 sump the sensor can be used to measure temperature in pipelines, or as a pressure device in accordance with the Government Regulation No.26/2003 Coll., as amended. The sensor is designed for universal use, the application must be chosen in accordance to the sensor's temperature and chemical durability of the metal case and the input cable.



## DECLARATION, CERTIFICATES, CALIBRATION

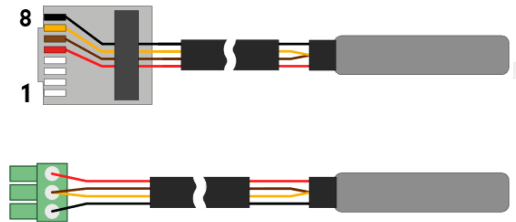
Manufacturer provides **EU Declaration of Conformity**

**Calibration** – All the products are subject to a final metrologic inspection performed by a comparison with etalons or working instruments. Continuity of etalons and working instruments is amended by Section 5 of Act no. 505/1990 on metrology. The manufacturer offers an option to deliver sensors calibrated in the SENSIT s.r.o. company laboratory (according to the requirements of the EN ISO/IEC 17025 standard as amended) or in an accredited laboratory.

## WIRING SCHEME

GND 8  
 1W+ 7  
 1W- 6  
 +5V 5

VCC  
 1W  
 GND



## SPECIFICATIONS

Sensor type	TGL-40
Use	universal
Measuring range	$-40$ to $105^{\circ}\text{C}$
Sensing element type; sens. element accuracy	1-Wire/DS18B20 $\pm 0.5^{\circ}\text{C}$ in range of $-10$ to $85^{\circ}\text{C}$ $\pm 2^{\circ}\text{C}$ in range of $-30$ to $100^{\circ}\text{C}$
Ingress protection	IP 67 according to EN 60529, as amended
Case material	DIN 1.4571 stainless steel
Case diameter	5,8 mm
Case length	40 mm
Input cable	PVC non-shielded $4 \times 0.14 \text{ mm}^2$ ;
Wire resistance	$>200 \text{ MOhm}$ at 500 VDC, $25^{\circ} \pm 3^{\circ}\text{C}$ ;
Electric strength	500 VAC according to EN 60730-1
Power supply	3 - 5 V from PELV or SELV power supply
Time response	$\tau_{0,5} < 7 \text{ s}$ ( $0.2 \text{ m.s}^{-1}$ in flowing water)

## DIMENSIONAL DRAFT

TGL sensor + a JTG8 thermowell

