

Speed Sensor for Highly Dynamic Measurement.

Smart. Robust. Flexible.





Speed Sensor.

Sensitec speed sensor is designed for highly dynamic non-contact measuring of the rotational speed of a ferromagnetic toothed wheel with most flexibility in pitch and distance. Due to the ability to implement user specific functions the sensor is equipped with an UART-Interface. Some smart functions are already available as standard features.

The sensor itself consists of a sensor head with a magnetoresistive element and permanent magnet plus a remote processing unit with the main function to convert the analog signal to TTL-Level. Both units are accommodated in a solid sealed aluminum housing. The standard user outputs are open-end wires with the possibility to customize specific connectors on demand.

The sensor exhibits minimal temperature dependence. The operation is not affected by dirt or oil. The analog sensor signal is amplified and also available at the user output. Analog amplitude is independent of the rotational speed.

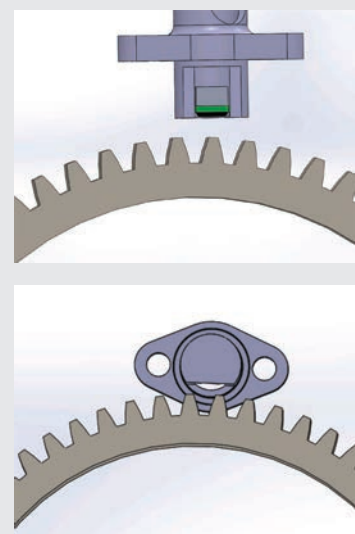
The communication interface enables setting of pulse/pause ratio of the output TTL-Signal, storing and reading of a serial number and operation-hour counter.

Optionally, the Sensitec speed sensor can be equipped with a PT1000 temperature sensor.

The design of the sensor head housing enables maximum flexibility of orientation to the measurement target.



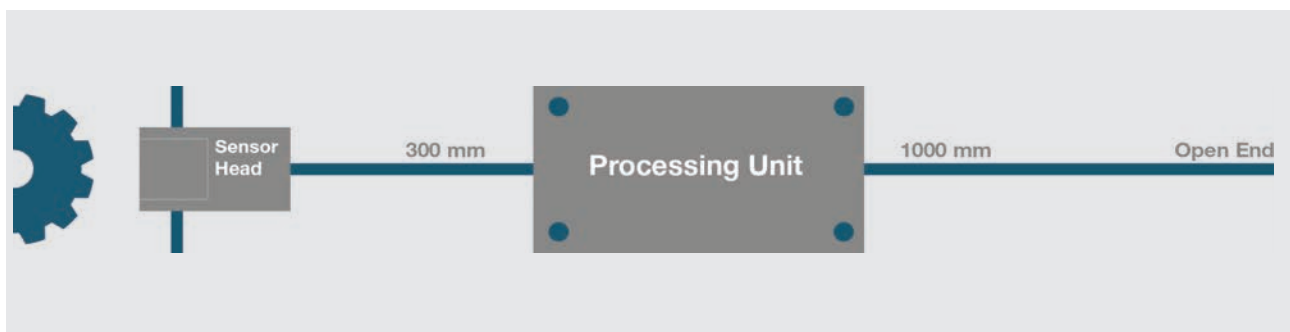
Analog and digital output of tooth frequency.



Possible arrangement of measuring heads.

High Flexibility of Tooth Pitch and Working Distance.

Main Features.



Sensor

- Tooth frequency 0.4 Hz to 30 kHz
- Gap between sensor and tooth: 1 mm to 5 mm
- Developed for ferro magnetic wheels with modul 0.6 – 2.5 / p = 2 mm – 8 mm
- Sensitive in different mounting orientations
- PT1000 Temperature sensor (option)
- Operating temperature up to 150°C
- Cable outlet straight or right angle
- Sealed aluminium housing
- Flexible high temperature cable (up to 200°C)
- Dimensions: Ø = 10 mm, length = 22 mm

Processing Unit

- Sealed aluminium housing
- Read/write UART interface
- Adjustable TTL pulse/pause ratio
- Operating hour counter
- Electronic type label
- Operating temperature up to 125°C
- Dimensions (L x W x H): 54 x 20 x 12 mm
- Supply voltage: 7 – 24 V (DC)

Input / Output

- Digital TTL-tooth frequency
- Analog amplified sensor signal
- Analog PT1000 temperature output (option)
- UART-Interface

Accessories

- Programming adapter
- Configuration software

Option

- Customer specific connector ¹⁾

¹⁾ Standard: cable outlet with open ends.

April 2016
Subject to technical changes.

Sensitec GmbH
Georg-Ohm-Str. 11
35633 Lahnau · Germany
Phone: +49 6441 9788-0
Fax: +49 6441 9788-17
E-Mail: sensitec@sensitec.com
www.sensitec.com

