

Temperature sensor

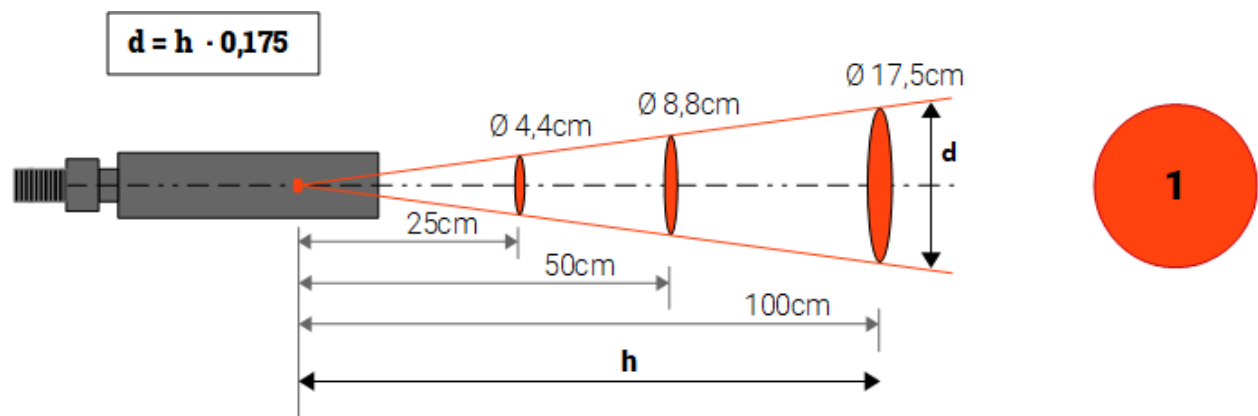
Infrared sensor with CAN interface for non-contact measurement of surface temperatures

Its compact size and robust design make it particularly interesting for mobile applications. Its wide measuring range enables a wide range of applications. The sensor can be digitally integrated via CAN bus.



Properties:

- CAN interface
- Field of view 10°
- Circular measuring point
- Wide measuring range for a wide range of applications
- Compact size without moving parts
- Available in two versions
 - o Compatible with the Völkel-Navigator
 - o CANopen (CiA 301 v4.2)



Example of use in asphalt construction:

- Subgrade measurement in front of the paver
- Surface temperature under the tandem roller

Technical data:

Overall dimensions	(W/H/D) 50mm x 25mm x 109mm
Housing / protection category	Aluminium housing, protection category IP69k (DIN EN 60529)
Weight	approx. 0,3kg
Connections	Built-in plug 5pol. M12
Supply	UB = 8..32V (reverse polarity protected), approx. 16mA at 12V
Sensor	Field of view: 10° Measuring range: -50°C to 360°C Accuracy: $\pm 0,5^{\circ}\text{C}$ (TObject. = TUmgeb. = 0..50°C) $\pm 2^{\circ}\text{C}$ (TObject. = 0..180°C TUmgeb. = 0..85°C)
Signal transmitter	1 optical signal transmitter (housing LED)
Interfaces	1 CAN (maximum baud rate: 1Mbit/s)
Operating temperature range	-40..85°C (housing temperature)
EMV	Road vehicles: ISO 10605, ISO 7637-1, ISO 7637-2, ISO 7637-3 Construction machinery: DIN EN ISO 13309 Agricultural and forestry machinery: DIN EN ISO 14982 Industrial use: DIN EN 61000-6-2, DIN EN 61000-6-4
Mechanical, climatic resilience	Cold: DIN EN 60068-2-1 Dry heat: DIN EN 60068-2-2 Vibration: DIN EN 60068-2-6 Temperature changes: DIN EN 60068-2-14 Shock: DIN EN 60068-2-27 Moist heat: DIN EN 60068-2-30 Free fall: DIN EN 60068-2-31

Pin assignment, 5-pin M12 built-in plug:

Pin-No.	Labelling	Description
1	SG	Signal ground
2	UB	Supply
3	DG	Supply mass
4	CH	CAN line H
5	CL	CAN line L

Overall dimensions:

