novasens®

sensortechnik

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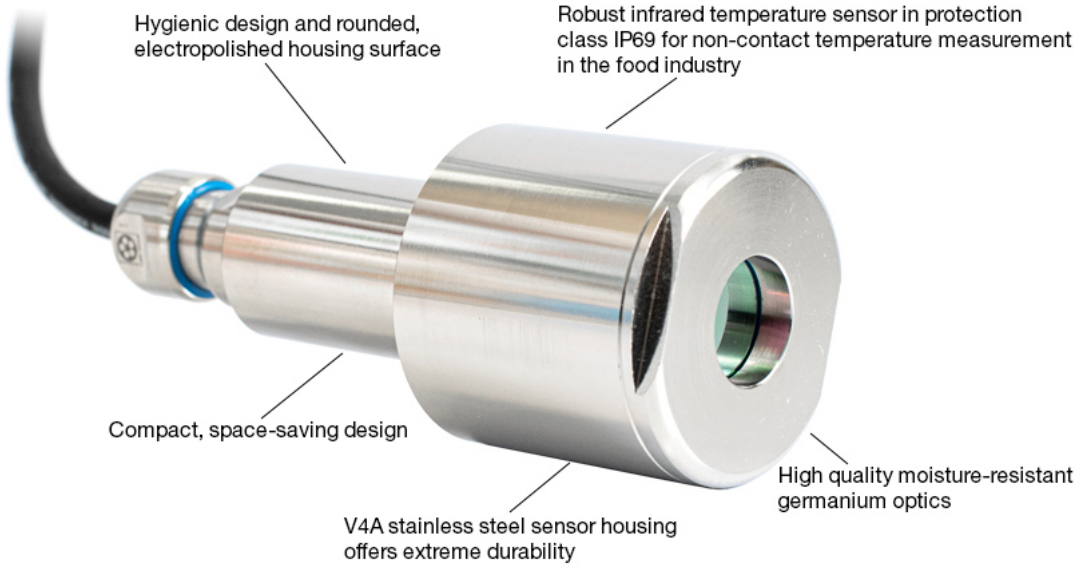
Infrarot Temperatur Sensor IR602

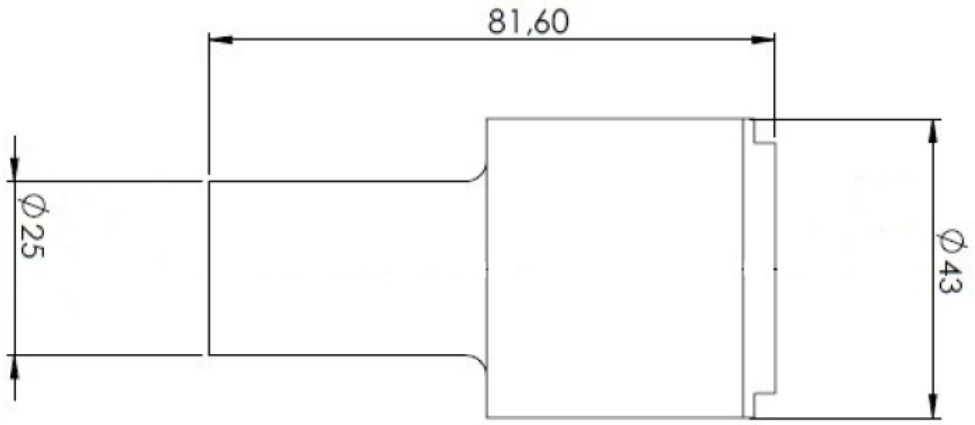


The novasens IR602 infrared temperature sensor is ideal for contactless temperature measurement in the food industry. Thanks to protection class IP69, the sensor is resistant in all production processes with high humidity or wet cleaning processes.
Its housing made of V4A stainless steel is extremely resistant and kept in a hygienic design.

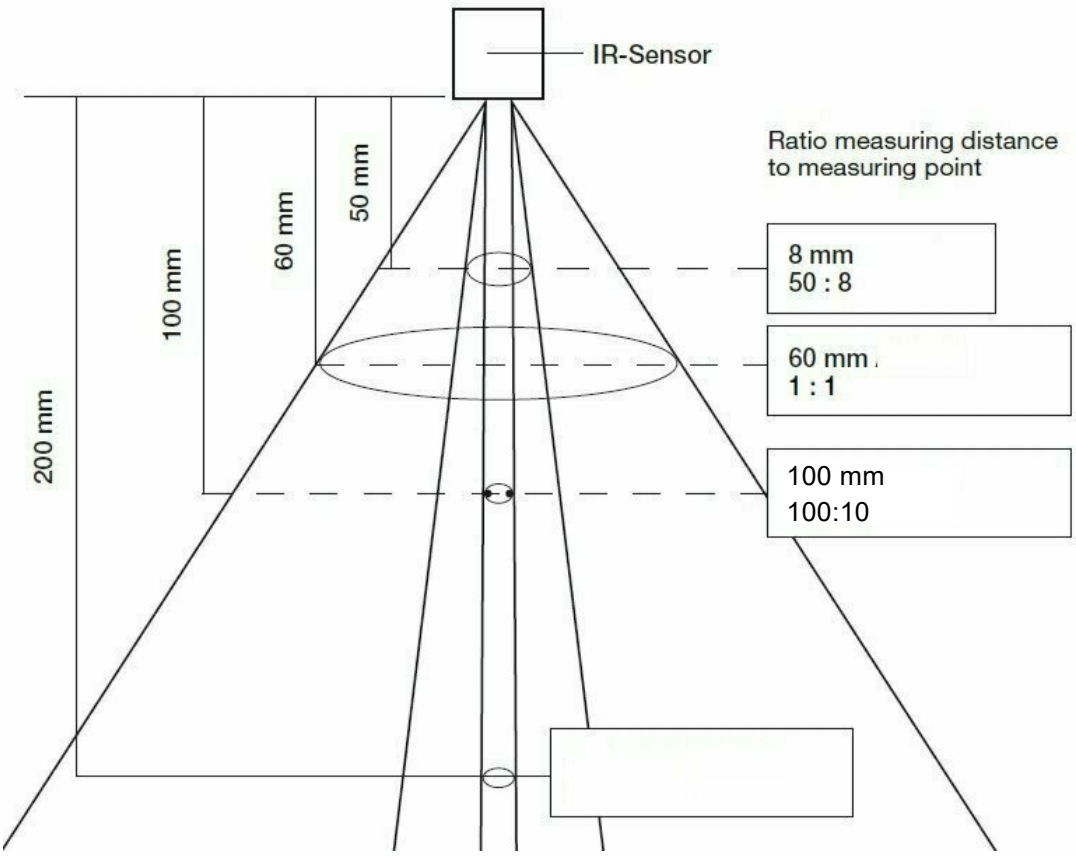
Technical Data	
Measuring ranges	0°-30°C, -10°C to +60°C, 0°–50°C, 0°-100°C, 0°-250°C, 0°-500°C, 0°-1000°C
Spectral range	8-14 µm
Emissivity correction	1,0 to 0,1 adjustable on controller
Dimensions	Length 83mm x 43mm diameter (without cable gland)
Permissible ambient temperature	-20°C to +50°C
Distance to measuring spot	100mm :10mm | 50mm : 8mm | 1:1
Accuracy	+/- 1% of reading
Repeat accuracy	0,5°C (0-100°C), 1,0°C (over 100°C)
Reaction time	60ms
Resolution	1/10°C
Outputs	0-20mA, 4-20mA, 0-10VDC selectable on controller
Weight	550 Grams (sensing head with 3m cable including plugs)
Housing material	V4A Stainless Steel 1.4571
Protection class	IP69 – 10 bar according DIN 40 050
Housing surface	Electro polished, surface roughness Ra < 0,8µm
Delivery scope	Sensing head with 3m cable including plugs
Conformity	RoHS-conformity, CE-Sign
Article number	0200250

The sensor works as a part with the complete Infrared Temperature Measurement System novasens 2050.

Dimensions



Optical Specifications



Use in hygiene zones

The sensor is suitable for use in hygiene zone 2, the so-called "spray zone".
The associated evaluation unit is only suitable for use in Hygiene Zone 3, the so-called "non-product zone".

Mechanical installation

In order not to damage the housing surface, only plastic clamping devices should be used to attach the sensor.
Avoid scratches and damage to the sensor housing during assembly!

If the sensor malfunctions

In the event of a malfunction, always send the sensor back to the manufacturer.
Never open the sensor yourself, otherwise the guarantee will be void!

Sensor lens

Always keep the sensor lens clean. Contamination or foreign bodies on the lens impair the measuring accuracy. Check the sensor lens regularly for damage and chipping.
Never use a sensor with a damaged lens.
Protect the lens of the sensor against aggressive cleaning agents and mechanical damage during the cleaning process.

Operation of the sensor

- Allow the sensor to settle in for 45 minutes after installation.
- Strong electromagnetic fields can disturb the function of the sensor and affect the measurement result. Therefore, avoid the proximity of strong electromagnetic interference sources such as electric motors, generators, arc welding devices, induction heaters etc.
- Only use the plug connections supplied.
- Is the sensor exposed to strong temperature fluctuations (cold/hot or hot/cold) it takes approx. 30 minutes for the sensor to measure itself before taking a temperature can stabilize.

Grounding

The sensor should (if necessary) be grounded through the sensor bracket on the machine.

Maintenance

To ensure permanent use of the sensor, the sensor must be sent back to the manufacturer once a year for maintenance.

Please note: the sensor lense need to be replaced from time to time, when you are cleaning the sensor according to HACCP with acid-containing cleaning supplies.

This depends on how often you clean the sensor and how high is the proportion of acids in your cleaning fluid. The acids wash away the antireflex coating of the sensor lense, so it goes "blind" and will lose accuracy. To do this, the sensor needs to be send back to us for replacing the lense.

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