novasens®

sensortechnik

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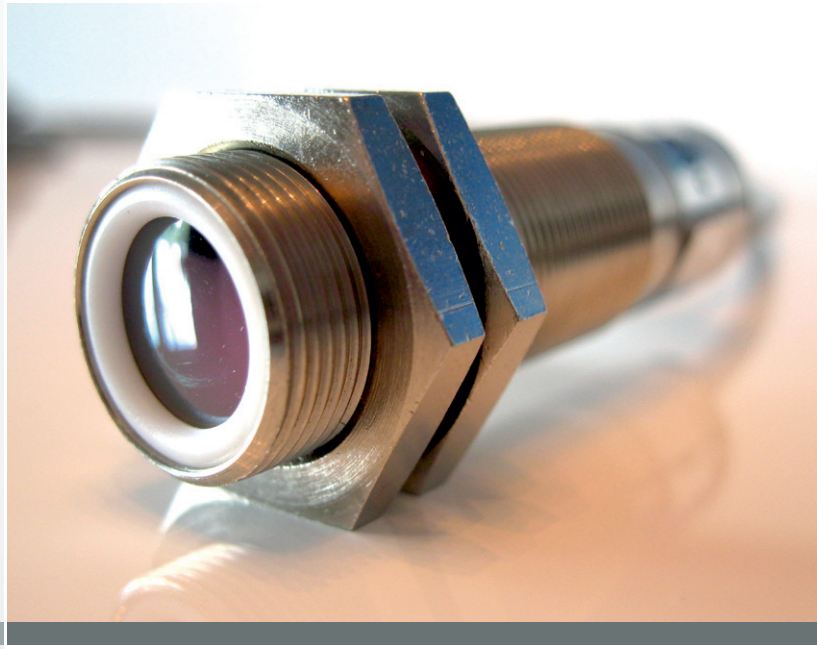
# novasens Infrared Sensor IR502G

## At a glance

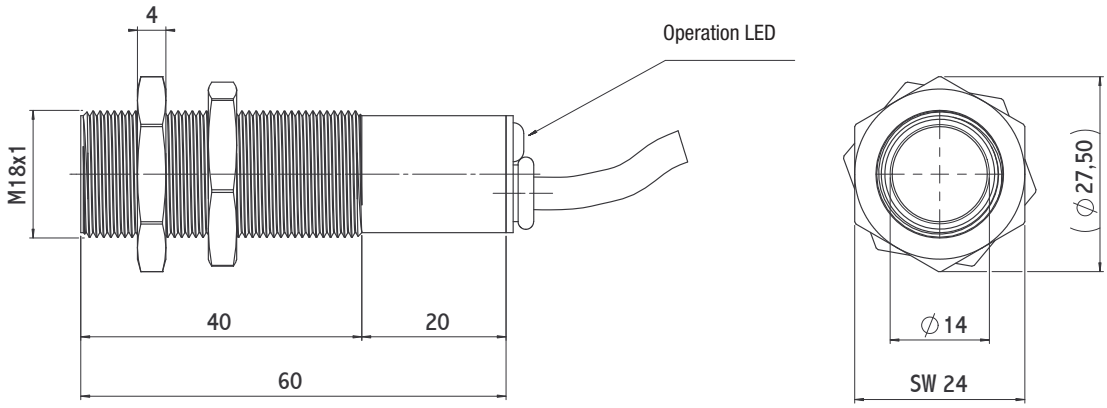
- Detection of small measurement spots over large measuring distances
- Quality, moisture-resistant germanium optics
- 3 m sensor cable, extendable up to 40m
- Robust and inured sensor housing
- Compact design



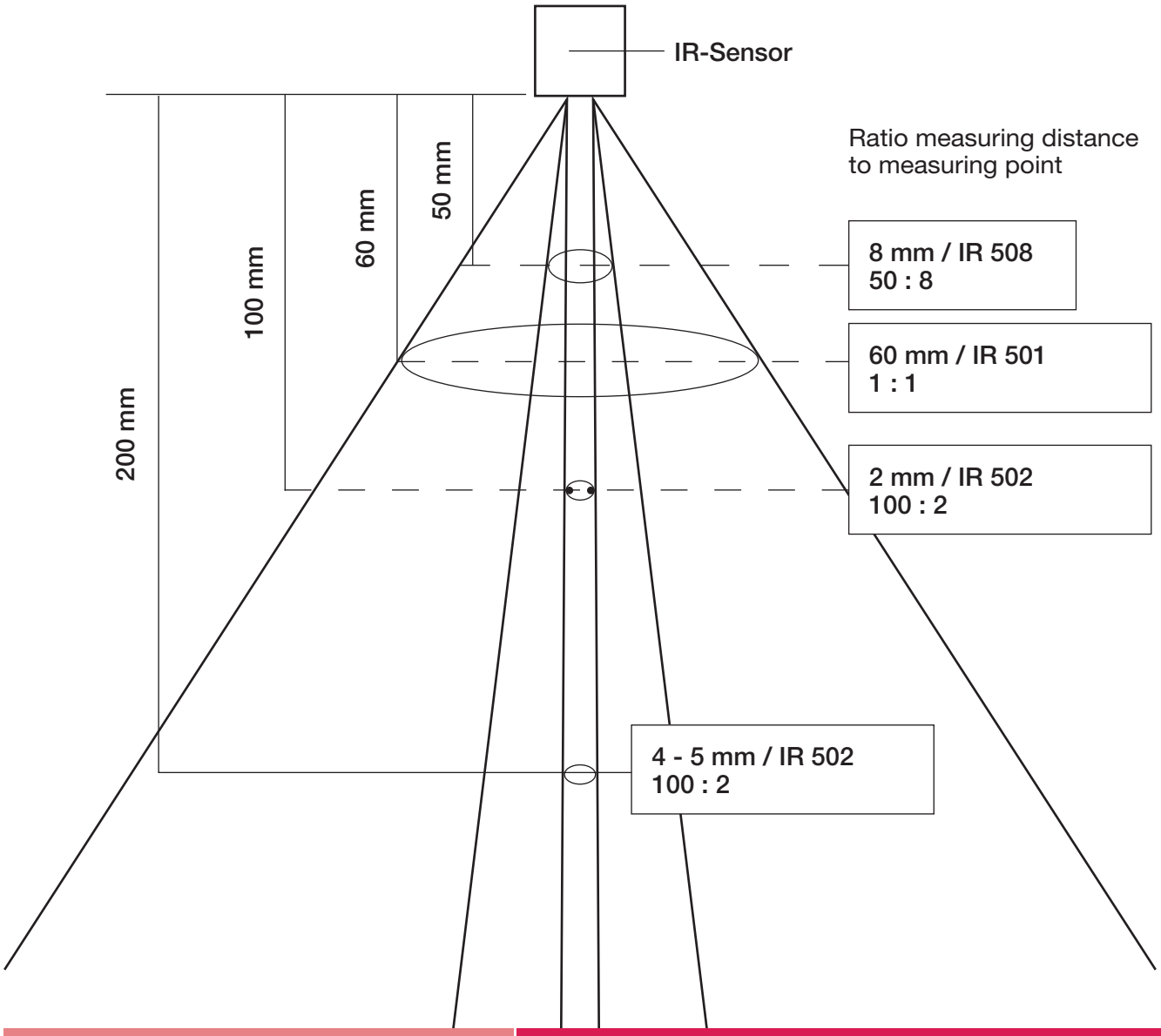
| Specifications | |
|---|---|
| Measuring range / Field of application | -40°C to +1000°C Temperature Measurement System novasens 2050<br>0-250% Hotmelt Control System novasens 2000 |
| Spectral range | 8-14 µm |
| Emissivity correction | 1,0 to 0,1 adjustable on controller |
| Dimensons | Length 62 mm x 18 mm diameter with M18x1 thread |
| Permissible moisture | 95% not condensing |
| Permissible ambient temperature | -20°C to +50°C |
| Distance to measuring spot | 100 mm : 2 mm |
| Accuracy | +/- 1% of reading |
| Repeat accuracy | 0,5°C (0-100°C), 1,0°C (over 100°C) |
| Reaction time | 60 ms |
| Resolution | 1/10°C |
| Outputs | 0-20 mA, 4-20 mA, 0-10VDC selectable on controller |
| Weight | 170 Grams (sensing head with 3m cable including plugs) |
| Protection class | IP64 |
| Delivery scope | Sensing head with 3 m cable including plugs and mounting screws |
| Conformity | RoHS-conformity |
| Model | 0200231 |

The sensor works as a part with the complete Infrared Temperature Measurement System novasens 2050 or the Hotmelt Control System novasens 2000.

## Dimensions




## Optical Specifications



# Variants and Options

## IR502GAC



For use in hot or dirty environments. Measuring distance to spot and sensor size as IR502G with additional compressed air supply for air cooling and lens cleaning

ArtNr. 0200236

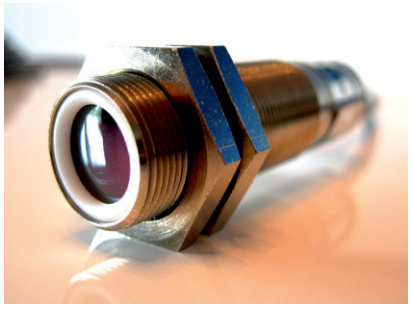
## IR502GACV40



Very robust sensor for use in very hot or dirty environments. Air cooling and lens cleaning by compressed air. 40 mm additional tube against contamination and interference

ArtNr. 0200241

## IR508G



Data as IR502G
Distance / spot 50:8
Example: measuring distance 50 mm = 8 mm spot size

ArtNr. 0200209

## Water cooled sensor housing



For use in very hot ambient temperatures, or directly on a heat source. Attachment with rotatable
T-piece for water supply, screw for all sensing heads

ArtNr. 0200239

## Sensor cable extension



Including plugs, per meter

ArtNr. 0200225

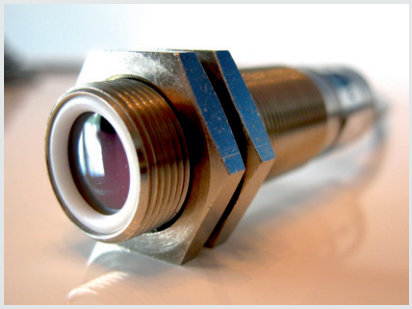
## Air filter F110




Replacement air filter F110 for all novasens sensors with air cooling and lens cleaning with compressed air

ArtNr. 0200215

## IR502GS/IR508GS



Data as IR502G/IR508G, with faster response time of 5 ms

ArtNr. 0200232

## IR502GW



Side cable output for sensors IR502G and IR508G, for use in confined areas.

ArtNr. 0200237

Specifications are subject to change.

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