

novasens Infrared Sensor IR502GACV40

At a glance

- Robust sensor for use in very hot or dirty environments
- Connection for compressed air supply for air cooling and lens cleaning
- 40 mm additional tube against contamination and interference
- Detection of small measurement spots over large measuring distances
- Quality, moisture-resistant germanium optics
- 3 m sensor cable, extendable up to 40 m

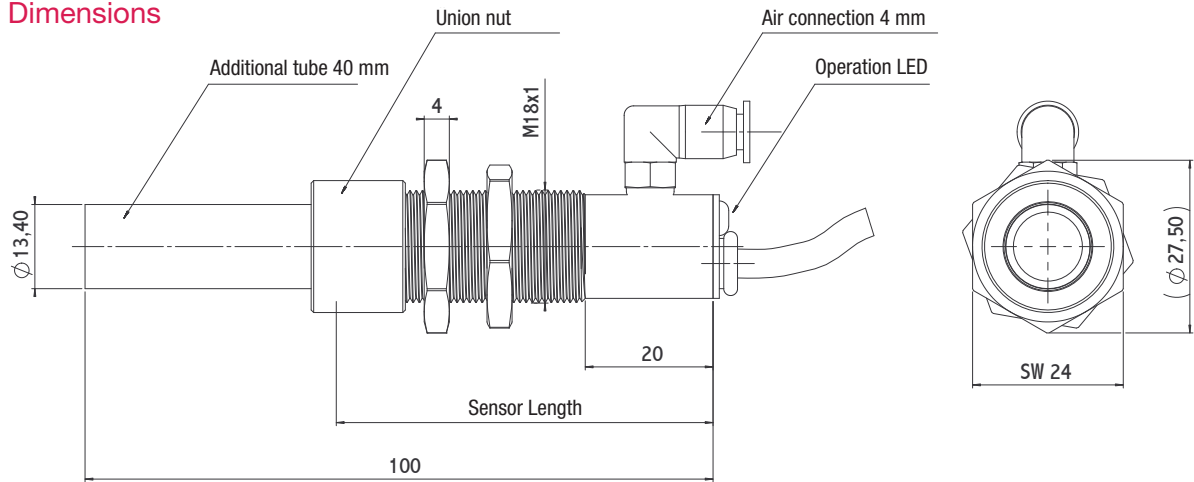


Specifications

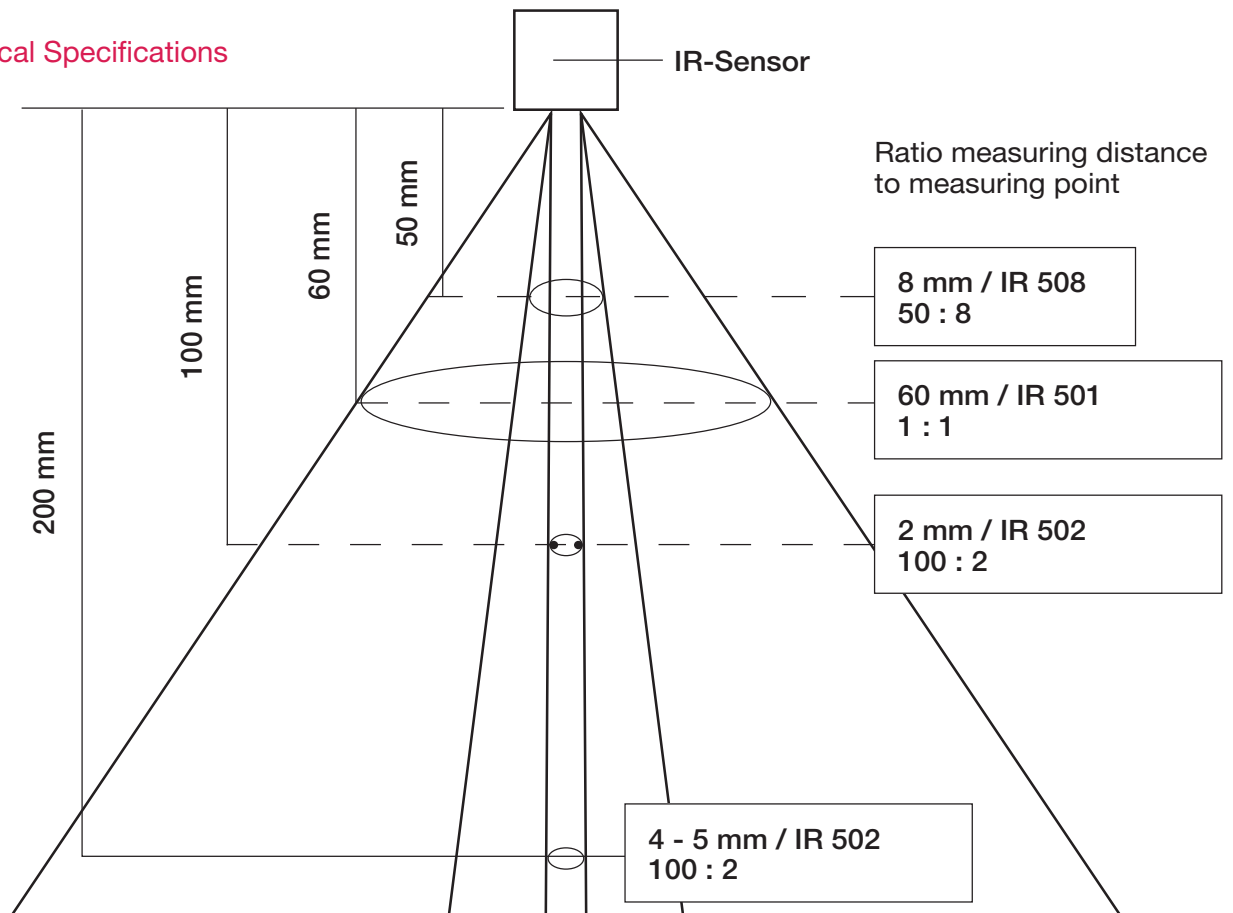
Measuring range / Field of application	-40°C to +1000°C Temperature Measurement System novasens 2050 0-250 % Hotmelt Control System novasens 2000
Spectral range	8-14 µm
Emissivity correction	1,0 to 0,1 adjustable on controller
Dimensions	Length 100 mm x 18 mm diameter with M18 x 1 thread
Permissible moisture	95% not condensing
Permissible ambient temperature	-20°C to +170°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, 0-10 VDC selectable on controller
Weight	210 Grams (sensing head with 3 m cable including plugs)
Protection class	IP64
Delivery scope	Sensing head with 3 m cable including plugs and mounting screws, air filter F110, 40 mm additional tube
Conformity	RoHS-conformity
Model	0200241

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



Pressure chart for air cooling and lens cleaning with compressed air

Pressure (bar)	Ambient temperature in °C	Pressure (bar)	Ambient temperature in °C
0,0	up to 50°C	1,0	105°C
0,1	above 50°C	1,2	120°C
0,2	60°C	1,4	140°C
0,3	70°C	1,7	150°C
0,7	90°C	2,0	170°C

Variants and Options

IR502G



Detection of small measurement spots over large measuring distances.
Distance / spotsize = 10 0mm/2 mm
Quality, moisture-resistant germanium optics

ArtNr. 0200231

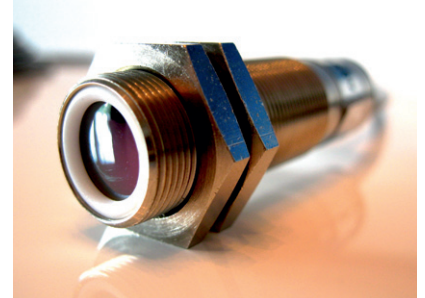
IR502GAC



Detection of small measurement spots over large measuring distances.
Distance / spotsize = 100 mm/2 mm
Quality, moisture-resistant germanium optics

ArtNr. 0200236

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.