

## Liability for Material Defects

All components of the device have been checked and tested for functionality at the factory. However, if defects occur despite our careful quality control, MICRO-EPSILON or your dealer must be notified immediately.

The liability for material defects is 12 months from delivery. Within this period, defective parts, except for wearing parts, will be repaired or replaced free of charge, if the device is returned to MICRO-EPSILON with shipping costs prepaid. Any damage that is caused by improper handling, the use of force or by repairs or modifications by third parties is not covered by the liability for material defects. Repairs are carried out exclusively by MICRO-EPSILON.

Further claims can not be made. Claims arising from the purchase contract remain unaffected. In particular, MICRO-EPSILON shall not be liable for any consequential, special, indirect or incidental damage. In the interest of further development, MICRO-EPSILON reserves the right to make design changes without notification. For translations into other languages, the German version shall prevail.

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## Installation and Assembly

➔ Mount the sensor to the target using 2 x M4 screws or 2 x M4 threads through the two brass bushes in the brackets.

i For cable assembly, please observe the Chapter Warnings.

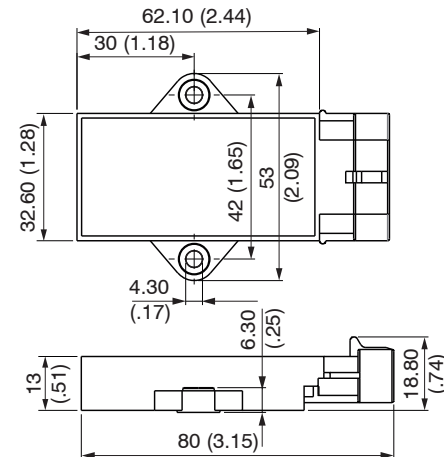
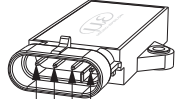


Abb. 1 Dimensional drawing, dimensions in mm (inches), not to scale

## Pin assignment

Pin	Color	ACC5301 Assignment	ACC5302 Assignment
1	Yellow	n. c.	Y
2	Green	X-axis	
3	Brown	GND	
4	White	Vcc	

 View:  
4-pin connector AMP Superseal 1.5

## Decommissioning, Disposal

➔ Remove the power supply cable and all output cables from the sensor.

Incorrect disposal may cause harm to the environment.

➔ Dispose of the device, its components and accessories, as well as the packaging materials in compliance with the applicable country-specific waste treatment and disposal regulations of the region of use.



Assembly Instructions  
**inertialSENSOR**  
ACC530x



## Safety

System operation assumes knowledge of the operating instructions. The following symbols are used in these operating instructions:



Indicates a hazardous situation which, if not avoided, may result in minor or moderate injury.

**NOTICE**

Indicates a situation that may result in property damage if not avoided.



Indicates a user action.

 Indicates a tip for users.

## Warnings



Connect the power supply and the display/output device according to the safety regulations for electrical equipment.

- > Risk of injury due to electric shock
- > Damage to or destruction of the sensor

**NOTICE**

The supply voltage must not exceed the specified limits.

- > Damage to or destruction of the sensor

Avoid shocks and impacts to the sensor.

- > Damage to or destruction of the sensor.

No sharp or heavy objects should be allowed to affect the cables. Avoid folding the cables. Do not bend more tightly than the minimum bending radius of the cables.

- > Damage or destruction of the cable, failure of the measuring device

Do not crush the cable. Protect the sensor cable against damage.

- > Damage or destruction of the cable, failure of the measuring device, data loss

## Notes on CE Marking

The following apply to the inertialSENSOR ACC530x:

- EU Directive 2014/30/EU
- EU Directive 2011/65/EU

The sensor fulfills the specification of the EMC requirements, if the instructions in the operating instructions are followed.

## Intended Use

The inertialSENSOR ACC530x is designed for use in industrial and laboratory areas. It is used for acceleration measurement. The measuring system must only be operated within the limits specified in the technical data. The sensor must be used in such a way that no persons are endangered or machines are damaged in the event of malfunction or total failure of the system. Take additional precautions for safety and damage prevention in case of safety-related applications.

## Proper Environment

- Protection class: IP 67
- Operating temperature: -40 ... +85 °C (-40 ... +185 °F)
- Storage temperature: -40 ... +85 °C (-40 ... +185 °F)
- Ambient pressure: Atmospheric pressure

FSO = Full Scale Output

All specifications valid at a room temperature of +25 °C

1) Also available on request with 0 ... 10 Hz

## Technical Data

Model	ACC530x-2
Number of axes	1 or 2
Measuring range	± 2 g
Resolution	2 mg
Sensitivity (analog output)	1 V/g or 4 mA/g
Zero	12 mA or 2.5 V
Linearity	±3 % FSO
Frequency range	0 ... 100 Hz <sup>1)</sup>
Cross axis sensitivity	5 % FSO
Supply voltage	10.8 ... 30 VDC
Power consumption	< 1 W
Operating temperature	-40 °C ... +85 °C
Storage temperature	-40 °C ... +85 °C
Analog output	Voltage 0.5 ... 4.5 V or current 4 ... 20 mA
Protection class	IP 67 (plugged state)
Shock	DIN EN 60068-2-27 (1000 g)
Weight	approx. 40 g
Material	(Glass fiber-reinforced) polyamide
Installation	Screw connection via mounting holes (M4)
Connection	AMP Superseal 1.5 connector