

Article designation

ACC570	3	-2	-SA	-I
				Output: I = 4 ... 20 mA U = 0.5 ... 4.5
			Connection: SA = Connector axial	
		Measuring range in ± g		
	Number of axes			
High-precision acceleration sensor				

Decommissioning, Disposal

➔ Remove the power and output cable 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.

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Technical Data

Model	ACC570x-1	ACC570x-2	ACC570x-4	ACC570x-8
Number of axes	1 or 2	2 or 3		
Measuring range	±1 g	±2 g	±4 g	±8 g
Noise	20 µg / √Hz			
Sensitivity	8 mA/g	4 mA/g	2 mA/g	1 mA/g
Zero	12 mA or 2.5 V			
Linearity	0.15 % FSO			
Frequency range	0 ... 1000 Hz			
Response time	1.1 ms			
Cross axis sensitivity	1 % FSO			
Temperature coefficient ¹	Sensitivity	±30 ppm / °C		
	Zero offset	±30 ppm / °C		
Supply voltage	12 ... 32 VDC			
Power consumption	1 W			
Measured value output	analog	Current 4 ... 20 mA (max. 200 Ω) or 0.5 ... 4.5 V (min. 1 k Ω) ²		
Protection class	IP 67 (plugged state)			
Shock	DIN EN 60068-2-2-27 (1500 g, 0.5 ms, half-sine shock, 3x in each direction)			
Weight	250 g			
Material	Aluminum die-cast			
Start-up time	< 20 ms			

FSO = Full Scale Output

All specifications are typical for +25 °C, unless otherwise stated.

1) Typ. with ambient temperatures between -40 ... +85 °C

2) Voltage output on request



Assembly Instructions
inertialSENSOR
ACC570x analog



Warnings

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

> Risk of injury

> Damage to or destruction of the sensor.

The supply voltage must not exceed the specified limits.

> 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

Ensure that the coupling nuts of the connectors are firmly tightened.

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

Notes on CE Marking

The following apply to the inertialSENSOR ACC570x analog:

- 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.

Installation and Assembly

i For cable assembly, please observe the Chapter Warnings.

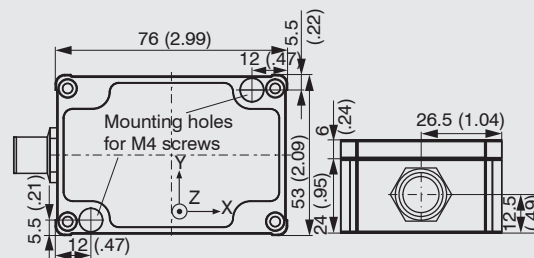


Abb. 1 Dimensional drawing with orientation of measurement axes, dimensions in mm (inches), not to scale

Pin assignment

i Use a PCx/5-M12 cable from Micro-Epsilon or a customer-specific cable according to the pin assignment to connect the sensor.

Pin	Color (cable PCx/5-M12) ¹	ACC5701	ACC5702	ACC5703
1	Brown	12 ... 32 VDC		
2	White	GND		
3	Blue	X out		
4	Black	n.c.	Y out	Y out
5	Gray	n.c.	n.c.	Z out

	M12x1 housing connector View on connector side <i>Abb. 2 Pin assignment for power supply and signal</i>
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1) Available as an accessory.

Unpacking/Included in Delivery

- 1 Sensor

Proper Environment

- Protection class: IP 67 (connected)
- Temperature range:
 - Operation: -40 °C ... +85 °C ¹
 - Storage: -40 °C ... +85 °C
- Ambient pressure: Atmospheric pressure

1) Customer-specific designs with high temperature cable up to 125° available

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.