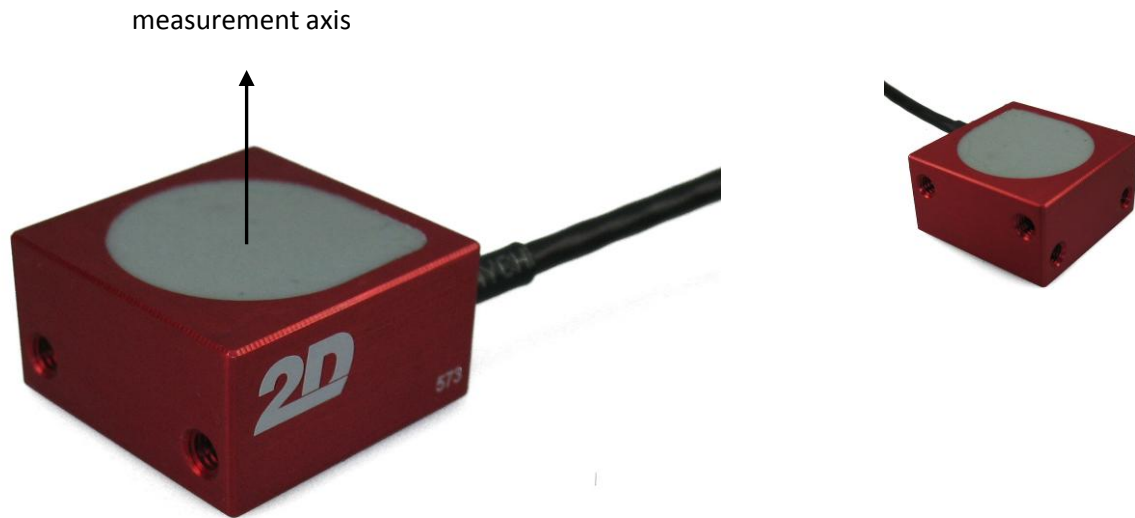


SA-ACxxHQ1-000

Static accelerometer (1 axis) high quality



Key Features:

- Sensor/amplifier combination to measure axial acceleration
- No temperature drift influence
- No vibration influence to the signal
- High resistance to vibration shock
- Different measuring ranges between $\pm 1G$ to $\pm 50G$ are possible
- Sensor / amplifier combination will be delivered with calibration sheet

Technical specifications

Electrical characteristics		Mechanical characteristics	
Supply voltage	V 12	Aluminum Housing	
Output voltage	V 0-5	Dimensions	mm ³ 30 x 30x 20
Measuring range	G $\pm 1/ 3/ 5/ 10/ 50$	Weight	g 40
Frequency response	Hz 50Hz std.	Cable	
Error for linearity	% of FS <1	Wire cross section	4 x AWG26
Shock resistance	G 10000	Type	Raychem EPD
		Length	mm 1200
Environmental data		Connector type	Binder 719, 5PM
Ambient operating range	°C -25 to +100		
Humidity	% 5 to 95		
Protection class:	IP 67		
Options		Ordering information	
Different frequency responses available	25Hz, 100Hz, 200Hz, 400Hz	Different measuring ranges are possible ($\pm 1G$ to $\pm 50G$)	
Cover plate available		$\pm 5G$	SA-AC05HQ1-000
		$\pm 10G$	SA-AC10HQ1-000
		$\pm 50G$	SA-AC01HQ1-000

xx... different measuring range $\pm 1G$ to $\pm 50G$

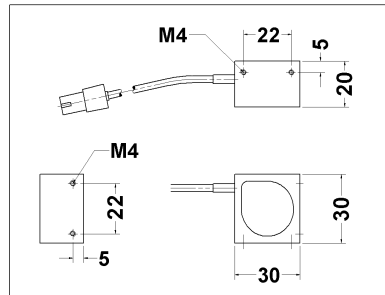
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SA-ACxxHQ1-000

Static accelerometer (1 axis) high quality

Dimensions

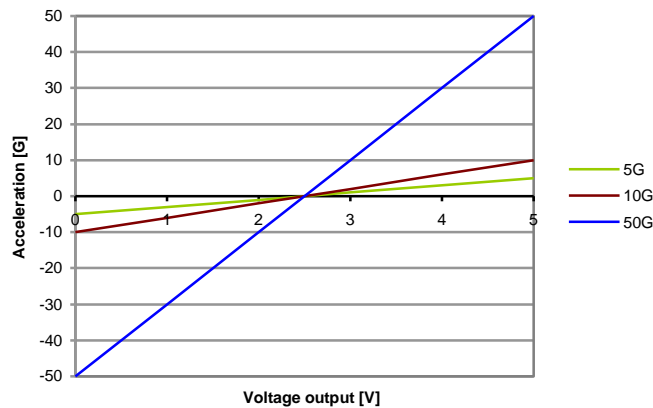


Formulas to calculate physical values

SA-ACxxHQ1-200		Multiplier			Offset				
12 Bit A/D	Acceleration [G]	=	2 * xx / 4095	*	Digits	-	xx		
16 Bit A/D	Acceleration [G]	=	2 * xx / 65535	*	Digits	-	xx		
Voltage	Acceleration [G]	=	2	4	20	*	Volt	-	xx

SA-AC05HQ1	SA-AC10HQ1	SA-AC50HQ1
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Replace the **xx** with the acceleration of your sensor. Possible values are 5, 10 or 50G (other values on request)

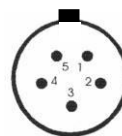


Connector layout

Pin	Name	Description	Colour
1	AGND	Analog ground	black
2	n.c.	Not connected	-
3	+12V	Power supply	red
4	n.c.	Not connected	-
5	Signal	Analog signal	white

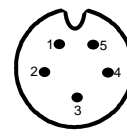
Connector type

Mating plug



Front view
Binder 719 5PF

Connector at sensor



Front view
Binder 719 5PM

xx... different measuring range ±1G to ±50G

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