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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 ±1G to ±50G available
- Sensor / amplifier combination will be delivered with calibration sheet

Options:

- Connector and cable length can be modified on customer request

Technical specifications

1 Axis acceleration		
Range	G	±1/ ±3/ ±5/ ±10/ ±50
Frequency response	Hz	25, 100, 200, 400, 550
Error of linearity	FS	<1%
Electrical characteristics		
Supply voltage	V	12
Output voltage	V	0 to 5
Current consumption @12 V	mA	4
Environmental data		
Protection class	IP	66
Ambient operating range	°C	-25 to +85
Humidity	%	5 to 95

Mechanical characteristics		
Housing material		Aluminum
Dimensions	mm	30x30x16
Weight sensor	g	10
Weight cable	g	40
Connector		Binder 719 5PM
Cable		Raychem EPD
Length	mm	1200
Wire cross section		4xAWG26
Vibration resistance		
Shock resistance acc element	G	10000
During time period of	ms	10
Vibration tested at	G	12
Measured with	Hz	1000

Ordering information	
Art. No. SA-AC05HQ1-000	± 5G
Art. No. SA-AC10HQ1-000	± 10G
Art. No. SA-AC50HQ1-000	± 50G

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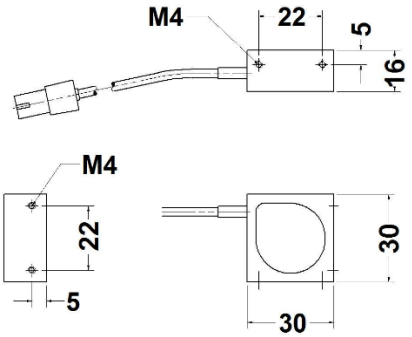
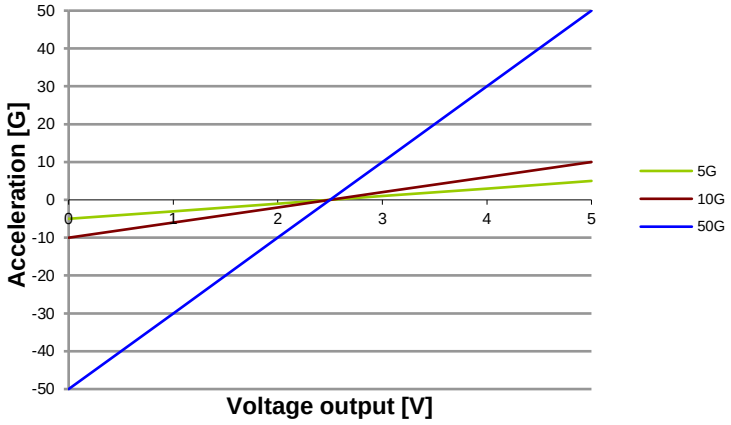
Dimensions



Calibration

SA-ACxxHQ1-000			Multiplicator						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				

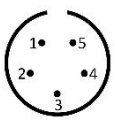


Connector layout

Connector type

Binder 719, 5PM

Pin	Name	Description	Color
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



front view

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