

SA-ACxxSTy-000

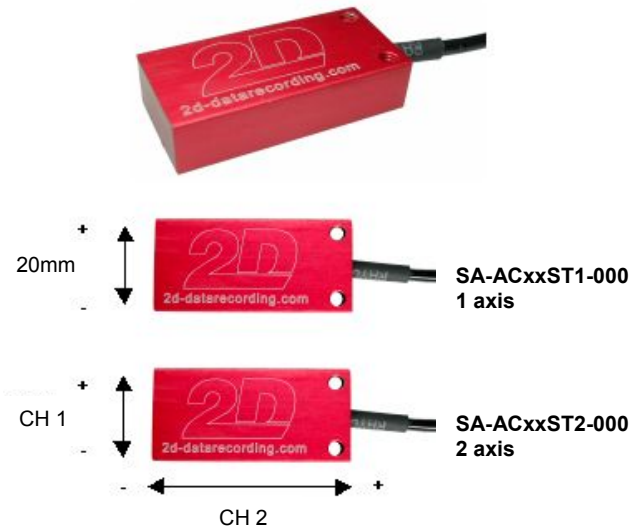
Static accelerometer basic

Function

- Sensor to measure accelerations in one or two directions

Notice

- Avoid vibrations over 50G on the sensor
- Avoid temperature drift
- Standard filter
 - ±5G 12dB, 10Hz
 - ± 50G 12dB, 10Hz



Technical specifications

Electrical characteristics

Voltage supply.....	12 V DC
Output voltage.....	0-5 V
Sensor element types.....	± 5 / ±50 G
.....	± 49.5 / ± 490.5 m / s ²
Frequency response.....	1 ms
Error for linearity.....	<1% of FS
Shock resistance (in measuring direction).....	1000 G

Calibration

Use the formulas on 2nd page to calculate the physical values

Mechanical characteristics

Dimensions.....	42 x 20 x 10 mm
Weight.....	33 g
Housing material.....	aluminium
Cable & Connector:	
type.....	Raychem EPD
wire cross section.....	4 x AWG26
length.....	1200 mm
connector (standard).....	Binder 719 5PM

Environmental data

Ambient operating range.....	-25 to +125 °C
Humidity.....	5 to 95 %

Ordering information

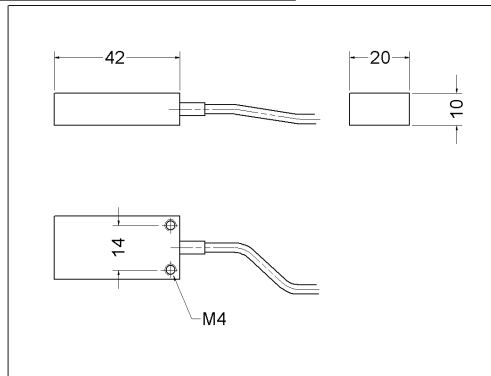
Art.No.:..... SA-ACxxSTy-000

see order code on 2nd page for more details

SA-ACxxSTy-000

Static accelerometer basic

Dimensions

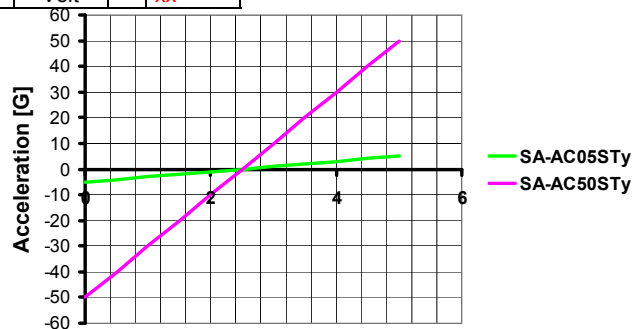


Formulas

	SA-ACxxSTy-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 20	*	Volt - xx

SA-AC05STy	SA-AC50STy
------------	------------

Replace the xx with the acceleration of your sensor:
 → Possible values are 5 or 50G



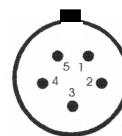
Connector layout

	Pin	Name	Description	Color (standard)
Analog-line Binder 719, 5pin	1	AGND	Analog Ground	black
	2	n.c.	Not connected	-
	3	+12V	Power supply	red
	4	n.c.	Not connected	-
	5	CH1+CH2	Analog signal	white(CH1) / green (CH2)

Output voltage [V]

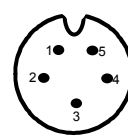
Connector type

Mating plug



Binder 719, 5 PF
(front side)

Connector at sensor



Binder 719, 5 PM
(front side)



Possible options on customer request !

Please note:

For the first order of special customer options please use the following order code: **SA-ACxxSTy-000**
 After the first order you will get from 2D a uniquely order code for your next orders.

Ordering information

Measuring ranges	order code
single axis ±5G	/ SA-AC05ST1-000
single axis ±50G	/ SA-AC50ST1-000
double axis ±5G	/ SA-AC05ST2-000
double axis ±50G	/ SA-AC50ST2-000