

AS28 20g...100g



Description

The acceleration sensor is based on the strain gage technology.

The accelerometer sensor is characterized by small dimensions and a high resonance frequency.

The AS28 can be used, for static measurements from 0 Hz, for example for measuring building vibrations or vibrations on bridges and other constructions.

The temperature drift of the zero point noticed with a maximum of 0.2% / ° C, because semiconductor strain gages are used.

The input range of the measuring amplifier must be large enough. (when full range should be used) The output signal of the AS28 is approximately 10 mV / V at full measuring range. The measuring amplifier GSV-1, GSV-2 and GSV-3 are available with matching input sensitivities of ± 5 , ± 10 and ± 20 mV / V.

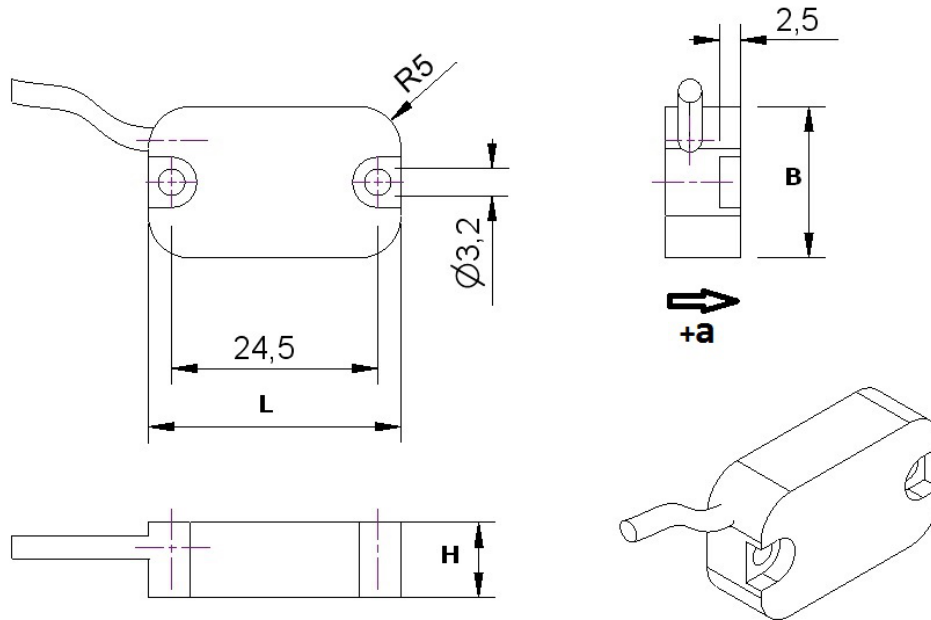
The variant AS28e includes integrated electronics.

The output is ± 2.00 volt for all sensors AS28e at full range.

The zero point is set at 2.5 volt.

The output signal of variant AS28 without electronic is within the range of 6 .. 15 mV / V and it is reported individually on a separate test protocol.

Dimensions



	H	L	B
AS28e	15	30	22
AS28	9	30	18

a+ positive Beschleunigung („acceleration“)

Technical Data

Electrical Data

Insulation resistance	2	GOhm
Rated range of excitation voltage f	2.5 ... 5	V
Operating range of excitation voltage f	2 ... 10	V
Zero signal	15	%FS
characteristic value range min	6	mV/V/FS
characteristic value range max	15	mV/V/FS

Precision data

Relative linearity error	0.5	%FS
Temperature effect on zero signal	0.2	%FS/K
Temperature effect on characteristic value	0.1	%RD/K
Cross-sensitivity	1	%RD

Connection Data

Connection type	4 conductor open
Name of the connection	STC-31V-4
Cable length	3 m

Environmental data

Rated temperature range f	-10 ... 70 °C
Operating temperature range f	-10 ... 85 °C
Environmental protection	IP66

Basic Data

Type	Beschleunigungssensor
Maximum acceleration	1000 g
Fastening	schrauben (2xM3)
Material	Aluminium alloy

Abbreviation: RD: „Reading“; FS: „Full Scale“;

1) The exact sensitivity is indicated in the test report;

Pin Configuration

Symbol	Description	Wire colour
+Us	positive bridge supply	red
-Us	negative bridge supply	black
+Ud	positive bridge output	green
-Ud	negative bridge output	white

*Pressure load: positive output signal.
Shield- transparent.*

accessories

Description		Description
	AS28-cube	Mountingblock for AS28; 50mm x 35mm x 35mm;
	AS28-plate	Magnetic plate, zinc plated, 60mm x 40mm x 1,9mm
	GSV-3USBx2	Measuring amplifier in aluminum housing (IP54) for sensors with strain gauges. Limiting frequency 1250Hz, input sensitivity 2 mV/V.
	GSV-3USBx2	Measuring amplifier in aluminum housing (IP54) for sensors with strain gauges. Limiting frequency 1250Hz, input sensitivity 3,5 mV/V.