

**AV0823B**

Triaxial Vibration Sensor in IEPE Technology

- Measurement Range  $\pm 12$  g
- Sensitivity 500 mV/g  $\pm 5$  %
- Frequency Range ( $\pm 3$  dB) 0.07 ... 6000 Hz
- Residual Noise (RMS)  $< 26$   $\mu$ g
- Temperature Range -30 ... +90 °C

**Features**

- IEPE output
- With high sensitivity, low frequency limit and very low noise, particularly suited for sensitive measurements at buildings (DIN 4150) and wind turbines

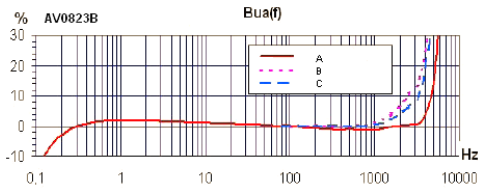
**Specifications**

Parameter	
<b>Dynamic specifications</b>	
Sensitivity	500 mV/g $\pm 5$ %
Range	$\pm 12$ g
Linear frequency range of Z axis	
$\pm 5$ %	0.17 ... 4000 Hz
$\pm 10$ %	0.13 ... 4800 Hz
$\pm 3$ dB	0.07 ... 6000 Hz
Resonant frequency (Z axis)	$> 9$ kHz (+25 dB)
Transverse sensitivity	$< 5$ %
<b>Electrical specifications</b>	
Constant current supply	2 ... 20 mA
Residual noise (RMS) broadband, 0.5 ... 20 kHz	$< 26$ $\mu$ g
Spectral noise	
0.1 Hz	2 $\mu$ g/ $\sqrt{\text{Hz}}$
1 Hz	0.8 $\mu$ g/ $\sqrt{\text{Hz}}$
10 Hz	0.2 $\mu$ g/ $\sqrt{\text{Hz}}$
100 Hz	0.08 $\mu$ g/ $\sqrt{\text{Hz}}$
Output impedance	$< 100$ $\Omega$ (4 mA)
Bias output voltage	12 ... 14 V
<b>Environmental specifications</b>	
Operating temperature	-30 ... +90 °C
Temperature coefficient of sensitivity	-0.05 %/K
Temperature transient sensitivity	0.0005 $\text{ms}^{-2}/\text{K}$
Destruction limit	2000 g
Environmental sealing	IP67

## Physical data

Sensing element design	Shear design
Weight without cable	365 grams
Case material	Stainless steel
Mounting hole	M8
Output connector	Binder 718 (M8 x 1)

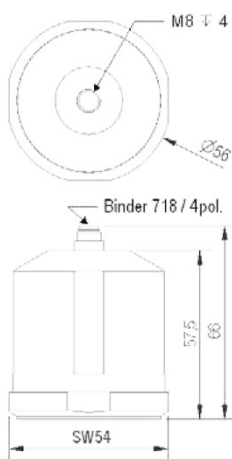
## Typical Amplitude Response (Z Axis)



### AV0823B +

A	Mounting stud M8
B	AV0529 mounting pad with coupling ring
C	AV0508 magnetic base M8

## Connections and Dimensions



View at pins of sensor socket (Binder 718)

All dimensions in mm, approx. values.

These drawings are for information only and not intended for construction purpose. Please ask for detailed drawings.

## Accessories

### Connection accessories

AV088W-M10	IEPE cable with plug Binder 711, 10 m long
AV0034-M005	Adapter Binder to 3 BNC plugs

### Mounting accessories

AV0508	Magnetic base M8
AV0529	Mounting pad with coupling ring for 360° turn incl. 10 hammer-set anchors for concrete / stone and tools
AV0629	Mounting pad (like AV0529) without coupling ring

## Mounting on Walls or Ceilings

1. Attach the mounting pad, e.g. with hammer-set anchor and screw.
2. Mount the AV0823B using the coupling ring and adjust the X and Y axes.



Due to continuous product development, ALTHEN and partners reserve the right to vary the foregoing details without prior notice.