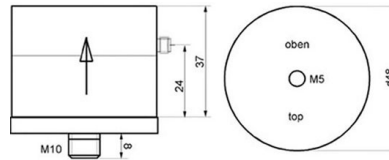


High Sensitivity Accelerometer

KB12VD

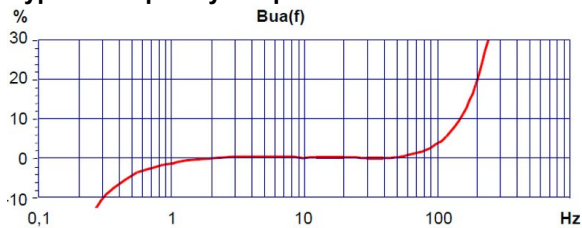
Properties

- Suited for seismic measurement and building vibration
- Vibration measurement at low frequencies
- Extremely sensitive piezo system without amplification
- Excellent resolution and lowest noise
- Particularly good sensitivity-to-mass ratio
- Air damping for resonance attenuation and overload protection by friction coupling

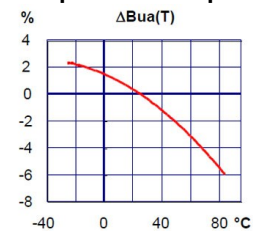


Piezo design	Bender design	
Output	IEPE	
Voltage sensitivity	10000	mV/g
Sensitivity tolerance	10	%
Measurement range, pos./neg.	0,6	g
Destruction limit	200	g
Transverse sensitivity	<5	%
Lower frequency limit (3 dB)	0,05	Hz
Upper frequency limit (3 dB)	260	Hz
Lower frequency limit (10 %)	0,16	Hz
Upper frequency limit (10 %)	160	Hz
Lower frequency limit (5 %)	0,25	Hz
Upper frequency limit (5 %)	130	Hz
Resonant frequency	>0,35	kHz
Resonance amplitude	15	dB
Constant current supply	2 bis 20	mA
Bias voltage at 4 mA	12 - 14	V
Output impedance	<130	Ω
Residual noise; wide band; RMS	<1,5 (0,5 - 300 Hz)	μg
Noise density 0.1 Hz	2	μg/√Hz
Noise density 1 Hz	0,5	μg/√Hz
Noise density 10 Hz	0,1	μg/√Hz
Noise density 100 Hz	0,03	μg/√Hz
Operating temperature range	-20 - 80	°C
Temperature coefficient of voltage sensitivity	±0,02 (<40 °C)	%/K
	>0,08 (>40 °C)	%/K
Temperature transient sensitivity	0,002	m/s²/K
Acoustic noise sensitivity	0,1	m/s²/Pa
Weight without cable	150	g
Case material	Aluminum	
Connector direction	radial	
Connector	UNF10-32	
Mounting	M5/M10	
Isolated mounting	yes	

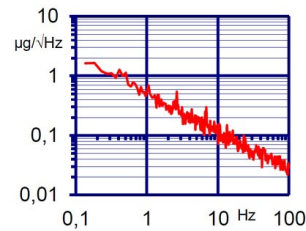
Typical Frequency Response



Temperature Response



Noise Characteristics



Connection Accessories

- 009-UNF-UNF-1,5: Low-noise cable; 1,5 m; UNF 10-32 to UNF 10-32; 120 °C; Ø2,1
- 009-UNF-BNC-1,5: Low-noise cable; 1,5 m; UNF 10-32 to BNC; 120 °C; Ø2,1
- 010-UNF-BNC-5: Low-noise cable; 5 m; UNF 10-32 to BNC; 120 °C; Ø2,1
- 010-UNF-BNC-10: Low-noise cable; 10 m; UNF 10-32 to BNC; 120 °C; Ø2,1
- 017: Plug adapter UNF10-32 (female) to BNC (male)

Mounting Accessories

- 003: Mounting stud; M5 x 8
- 045: Thread adapter; M5 x 4 male to UNF 10-32 x 4 male
- 046: Thread adapter; M5 x 4 male to 1/4-28 x 4 male
- 008: Rare earth magnetic base; M5; Ø22; 120 °C
- 330: Triaxial mounting cube; M10; □51
- 729: Tripod floor plate to DIN 45669-2

Delivery version with accessories kit KB12VD/01

- 009-UNF-BNC-1,5: Low-noise cable; 1,5 m; UNF 10-32 to BNC; 120 °C; Ø2,1

Notice: The standard delivery includes an individual data sheet.
This is a non-accredited measurement/calibration and consequently not covered by EA MLA.
On request, we offer a DIN EN ISO/IEC 17025:2018 accredited calibration
of the measurand acceleration in the measuring range 0.1 m/s² to 200 m/s².



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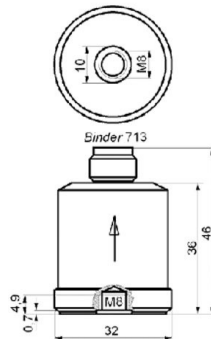


High Sensitivity Accelerometer

KS48C

Properties

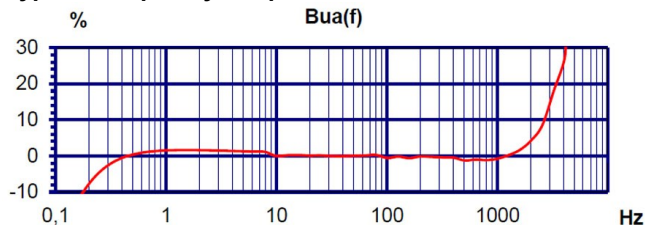
- Suited for seismic measurement and building vibration, particularly at low frequencies
- Extremely sensitive piezo system without amplification provides excellent resolution and lowest noise
- Robust design with M12 connector
- IP code IP67



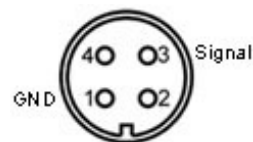
Piezo design	Shear design	
Output	IEPE	
Voltage sensitivity	1000	mV/g
Sensitivity tolerance	5	%
Measurement range, pos./neg.	6	g
Destruction limit	1000	g
Transverse sensitivity	<5	%
Lower frequency limit (3 dB)	0,07	Hz
Upper frequency limit (3 dB)	4000	Hz
Lower frequency limit (10 %)	0,2	Hz
Upper frequency limit (10 %)	2600	Hz
Lower frequency limit (5 %)	0,3	Hz
Upper frequency limit (5 %)	2000	Hz
Resonant frequency	>7	kHz
Resonance amplitude	25	dB
Constant current supply	2 bis 20	mA
Bias voltage at 4 mA	12 - 14	V
Output impedance	<130	Ω
Residual noise; wide band; RMS	<14 (0,5 - 10000 Hz)	μg
Noise density 0.1 Hz	20	μg/√Hz
Noise density 1 Hz	6	μg/√Hz
Noise density 10 Hz	1,3	μg/√Hz
Noise density 100 Hz	0,3	μg/√Hz
Noise density 1000 Hz	0,12	μg/√Hz
Operating temperature range	-20 - 120	°C
Temperature coefficient of voltage sensitivity	-0,02 (<40 °C)	%/K
	-0,03 (>40 °C)	%/K
Temperature transient sensitivity	0,0005	m/s²/K
Weight without cable	165	g
Case material	Stainless steel	
Connector direction	axial	
Connector	Binder 713	
Mounting	M8	
IP code	IP67	



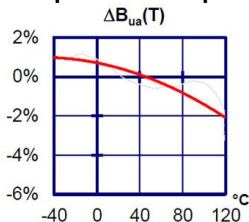
Typical Frequency Response



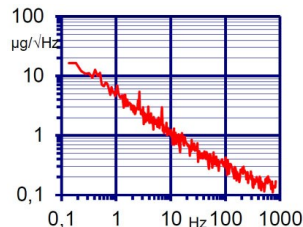
Contact Arrangement



Temperature Response



Noise Characteristics



Connection Accessories

- 080G: Plug Binder 713 (female) with screw terminals, IP67; straight
- 080W: Plug Binder 713 (female) with screw terminals, IP67; angled
- 085-B713G-PIG-5: IEPE cable; 5 m; Binder 713; straight; female. to pig tail; 80 °C; Ø5
- 085-B713W-PIG-5: IEPE cable; 5 m; Binder 713; angled; female to pig tail; 80 °C; Ø5
- 085-B713G-BNC-5: IEPE cable; 5 m; Binder 713; straight; female. to BNC; 80 °C; Ø5
- 085-B713W-BNC-5: IEPE cable; 5 m; Binder 713; angled; female. to BNC; 80 °C; Ø5

Mounting Accessories

- 043: Mounting stud; M8 x 10
- 044: Thread adapter; M5 female to M8 x 4 male
- 206: Screwed insulating flange; 2 x M8; Ø30; 110 °C
- 229: Adhesive pad; conductive; M8; Ø25; >250 °C
- 208: Rare earth magnetic base; M8; Ø30; 120 °C
- 230: Triaxial mounting cube; M8; □34
- 729: Tripod floor plate to DIN 45669-2
- 700: Underwater pressure hull for installation of sensors; 20 Bar

Delivery version with accessories kit KS48C/01

- 208: Rare earth magnetic base; M8; Ø30; 120 °C
- 206: Screwed insulating flange; 2 x M8; Ø30; 110 °C
- 043: Mounting stud; M8 x 10
- 085-B713G-BNC-5: IEPE cable; 5 m; Binder 713; straight; female. to BNC; 80 °C; Ø5

Notice: The standard delivery includes an individual data sheet.

This is a non-accredited measurement/calibration and consequently not covered by EA MLA.

On request, we offer a DIN EN ISO/IEC 17025:2018 accredited calibration of the measurand acceleration in the measuring range 0.1 m/s² to 200 m/s².



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