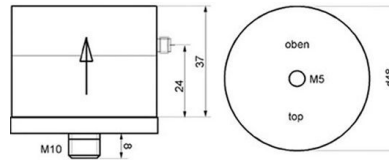


High Sensitivity Accelerometer

KB12VD

Properties

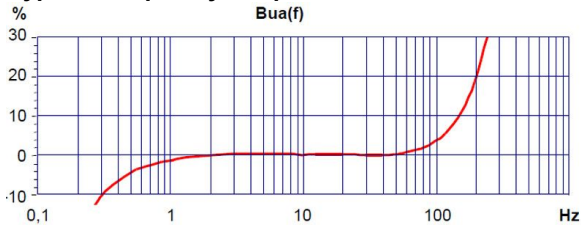
- Suited for seismic measurement and building vibration
- Vibration measurement at low frequencies
- Extremely sensitive piezo system without amplification
- Excellent resolution and lowest noise
- Particularly good sensitivity-to-mass ratio
- Air damping for resonance attenuation and overload protection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



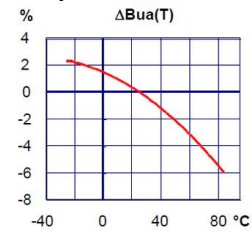
Piezo design	Bender design	
Output	IEPE	
Voltage sensitivity	10000	mV/g
Sensitivity tolerance	10	%
Measurement range, pos./neg.	0,6	g
Destruction limit	200	g
Transverse sensitivity	<5	%
Lower frequency limit (3 dB)	0,05	Hz
Upper frequency limit (3 dB)	260	Hz
Lower frequency limit (10 %)	0,16	Hz
Upper 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	<3 (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	



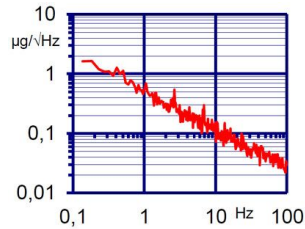
Typical Frequency Response



Temperature Coefficient



Noise Characteristics



Connection Accessories

- 009-UNF-UNF-1,5: Low-noise cable; 1,5 m; UNF 10-32 to UNF 10-32; 120 °C; D2,1
- 009-UNF-BNC-1,5: Low-noise cable; 1,5 m; UNF 10-32 to BNC; 120 °C; D2,1
- 010-UNF-BNC-5: Low-noise cable; 5 m; UNF 10-32 to BNC; 120 °C; D2,1
- 010-UNF-BNC-10: Low-noise cable; 10 m; UNF 10-32 to BNC; 120 °C; D2,1
- 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; D22; 120 °C
- 330: Triaxial mounting cube; M10; $\square 51$
- 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; D2,1

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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