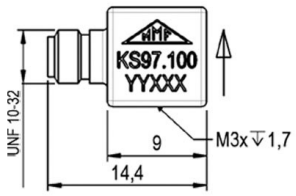
Standard Accelerometer

KS97B10

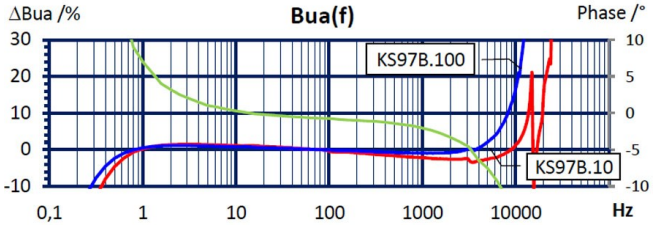
Properties

- Well suited for modal and structural analysis
- Wide dynamic range
- Low amplitude and phase error
- Easy mounting by cubic case with M3 thread
- Sensitive axis transverse to connector
- Two sensitivity versions (10 and 100 mV/g)
- Includes electronic data sheet (TEDS; IEEE 1451.4; Template 25 w. DS2431)

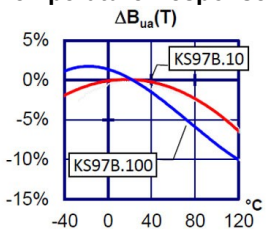


Piezo design	Shear design	
Output	IEPE	
Voltage sensitivity	10	mV/g
Sensitivity tolerance	20	%
Measurement range, pos./neg.	500	g
Destruction limit	8000	g
Transverse sensitivity	<5	%
Lower frequency limit (3 dB)	0,2	Hz
Upper frequency limit (3 dB)	18000	Hz
Lower frequency limit (10 %)	0,4	Hz
Upper frequency limit (10 %)	12000	Hz
Lower frequency limit (5 %)	0,6	Hz
Upper frequency limit (5 %)	10500	Hz
Resonant frequency	>40	kHz
Resonance amplitude	25	dB
Constant current supply	2 - 20	mA
Bias voltage at 4 mA	11 – 14,5	V
Output impedance	<100	Ω
Residual noise; wide band; RMS	<3000 (0,5 - 20000 Hz)	µg
Noise density 1 Hz	400	µg/√Hz
Noise density 10 Hz	100	µg/√Hz
Noise density 100 Hz	30	µg/√Hz
Noise density 1000 Hz	15	µg/√Hz
Operating temperature range	-40 - 120	°C
Temperature coefficient of voltage sensitivity	0,03 (<0 °C)	%/K
	0 (0 - 40 °C)	%/K
	-0,03 (40 - 80 °C)	%/K
	-0,06 (>80 °C)	%/K
Temperature transient sensitivity	1,5	m/s²/K
Magnetic field sensitivity	4,5	m/s²/T
Weight without cable	2.4	g
Case material	Aluminum/stainless steel	
Connector direction	radial	
Connector	UNF10-32	
Mounting	M3	

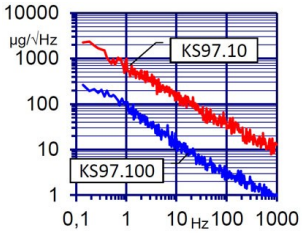
Typical Frequency Response



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
- 016: Coupler UNF 10-32 (female) to UNF 10-32 (female)
- 017: Plug adapter UNF10-32 (female) to BNC (male)
- 117: Plug adapter UNF10-32 (female) to BNC (female)
- 025: Plug adapter UNF10-32 (female) to TNC (male)

Mounting Accessories

- 021: Mounting stud; M3 x 6
- 106: Insulating flange; 2 x M3; Ø12; 110 °C
- 129: Adhesive pad insulating; flange M3; Ø12; 110 °C
- 108: Rare earth magnetic base; M3; Ø10; 120 °C
- 038: Instant adhesive

Delivery version with accessories kit KS97B10/01

- 009-UNF-BNC-1,5: Low-noise cable; 1,5 m; UNF 10-32 to BNC; 120 °C; Ø2,1
- 021: Mounting stud; M3 x 6
- 002: Bees wax for temporary sensor attachment
- 106: Insulating flange; 2 x M3; Ø12; 110 °C
- 129: Adhesive pad insulating; flange M3; Ø12; 110 °C
- 108: Rare earth magnetic base; M3; Ø10; 120 °C

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.

ilac-MRA DAkkS Deutsche Akkreditierungsstelle D-K-21664-01-00

Metra Meß- und Frequenztechnik Radebeul GmbH & Co. KG
Meißner Str. 58a
01445 Radebeul
Tel. +49 (0)351 836 2191
Internet: www.MMF.de
Email: Info@MMF.de
Fax: +49 (0)351 836 2940