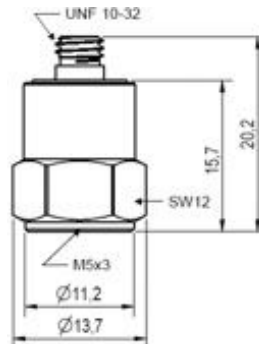


# Standard Accelerometer

**KS78C100**

## Properties

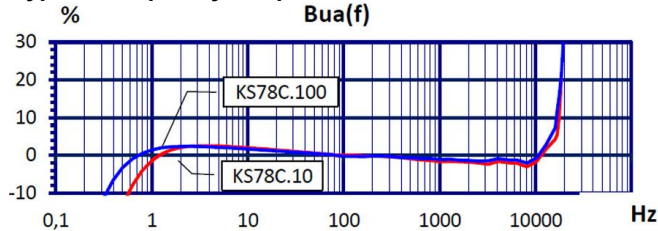
- Low-cost shear type IEPE accelerometer
- Two sensitivity versions (10 and 100 mV/g)
- Includes electronic data sheet (TEDS; IEEE 1451.4; Template 25 w. DS2431)
- Suitable for light test objects
- Insulated base against ground loops



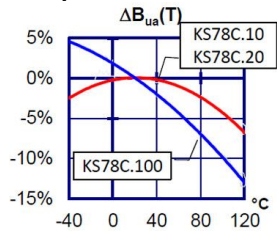
Piezo design	Shear design	
Output	IEPE	
Voltage sensitivity	100	mV/g
Sensitivity tolerance	20	%
Measurement range, pos./neg.	60	g
Destruction limit	6000	g
Transverse sensitivity	<5	%
Lower frequency limit (3 dB)	0,2	Hz
Upper frequency limit (3 dB)	20000	Hz
Lower frequency limit (10 %)	0,4	Hz
Upper frequency limit (10 %)	16000	Hz
Lower frequency limit (5 %)	0,6	Hz
Upper frequency limit (5 %)	14000	Hz
Resonant frequency	>42	kHz
Resonance amplitude	25	dB
Constant current supply	2 - 20	mA
Bias voltage at 4 mA	12 - 14,5	V
Output impedance	<100	Ω
Residual noise; wide band; RMS	<400 (0,5 - 20000 Hz)	μg
Noise density 1 Hz	50	μg/√Hz
Noise density 10 Hz	10	μg/√Hz
Noise density 100 Hz	3	μg/√Hz
Noise density 1000 Hz	1	μg/√Hz
Operating temperature range	-40 - 120	°C
Temperature coefficient of voltage sensitivity	-0,08 (<0 °C)	%/K
	-0,1 (0 - 40 °C)	%/K
	-0,12 (40 - 80 °C)	%/K
	-0,14 (>80 °C)	%/K
Temperature transient sensitivity	0,08	m/s <sup>2</sup> /K
Magnetic field sensitivity	1,5	m/s <sup>2</sup> /T
Weight without cable	11.2	g
Case material	Stainless steel	
Connector direction	axial	
Connector	UNF10-32	
Mounting	M5	
Isolated mounting	yes	



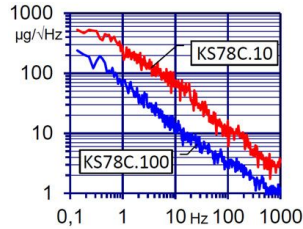
## Typical Frequency Response



## 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
- 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

- 001: Sensor probe; M5
- 002: Bees wax for temporary sensor attachment
- 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
- 708: Rare earth magnetic base; M5; SW15; 120 °C
- 029: Adhesive insulating flange; M5; D15; >250 °C
- 030: Triaxial mounting cube; M5; □21

## Delivery version with accessories kit KS78C100/01

- 009-UNF-BNC-1,5: Low-noise cable; 1,5 m; UNF 10-32 to BNC; 120 °C; D2,1
- 003: Mounting stud; M5 x 8
- 003: Mounting stud; M5 x 8
- 001: Sensor probe; M5
- 708: Rare earth magnetic base; M5; SW15; 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/s<sup>2</sup> to 200 m/s<sup>2</sup>.



Manfred Weber

**Metra Mess- und Frequenztechnik in Radebeul e.K.**

Meissner Str. 58

01445 Radebeul

Tel. +49 (0)351 836 2191

Internet: [www.MMF.de](http://www.MMF.de)

Email: [Info@MMF.de](mailto:Info@MMF.de)

Fax: +49 (0)351 836 2940

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