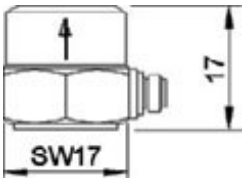
Standard Accelerometer

KS77C100

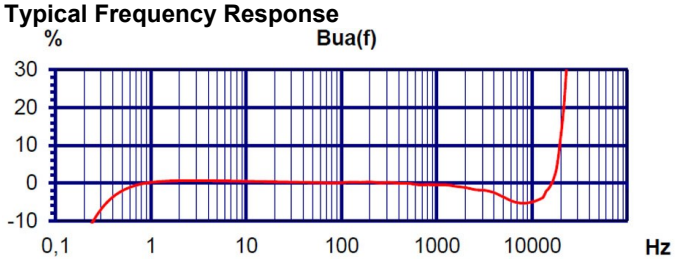
Properties

- Shear-type accelerometer with IEPE output
- Two sensitivity versions (10 and 100 mV/g)
- Low sensitivity to temperature transients
- Low influence of base bending effects
- High linear band width
- Low noise, high resolution
- Rugged stainless steel housing

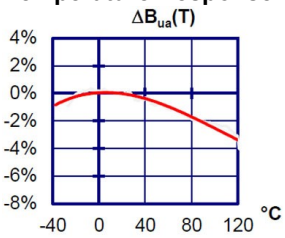


Piezo design	Shear design	
Output	IEPE	
Voltage sensitivity	100	mV/g
Sensitivity tolerance	5	%
Measurement range, pos./neg.	60	g
Destruction limit	6000	g
Transverse sensitivity	<5	%
Lower frequency limit (3 dB)	0,13	Hz
Upper frequency limit (3 dB)	24000	Hz
Lower frequency limit (10 %)	0,3	Hz
Upper frequency limit (10 %)	19000	Hz
Lower frequency limit (5 %)	0,4	Hz
Upper frequency limit (5 %)	18000	Hz
Resonant frequency	>32	kHz
Resonance amplitude	25	dB
Constant current supply	2 - 20	mA
Bias voltage at 4 mA	12 - 14	V
Output impedance	<130	Ω
Residual noise; wide band; RMS	<300 (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	0,02 (<0 °C)	%/K
	±0,00 (0 - 30 °C)	%/K
	-0,02 (40 - 80 °C)	%/K
	-0,04 (>80 °C)	%/K
Temperature transient sensitivity	0,03	m/s²/K
Weight without cable	23	g
Case material	Stainless steel	
Connector direction	radial	
Connector	UNF10-32	
Mounting	M5	

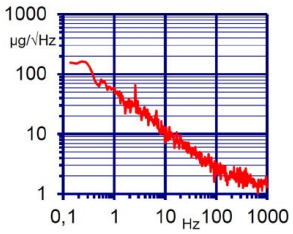
Typical Frequency Response



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

- 001: Sensor probe; M5
- 003: Mounting stud; M5 x 8
- 006: Insulating flange; 2 x M5; SW17; 80 °CS
- 029: Adhesive pad insulating; M5; Ø15; >250 °C
- 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
- 030: Triaxial mounting cube; M5; □21
- 700: Underwater pressure hull for installation of sensors; 20 Bar

Delivery version with accessories kit KS77C100/01

- 009-UNF-BNC-1,5: Low-noise cable; 1,5 m; UNF 10-32 to BNC; 120 °C; Ø2,1
- 003: Mounting stud; M5 x 8
- 002: Bees wax for temporary sensor attachment
- 006: Insulating flange; 2 x M5; SW17; 80 °CS
- 001: Sensor probe; M5
- 008: Rare earth magnetic base; M5; Ø22; 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.

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