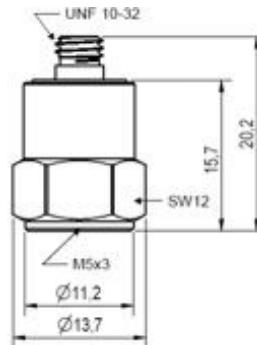


IEPE Accelerometer

KS78C10

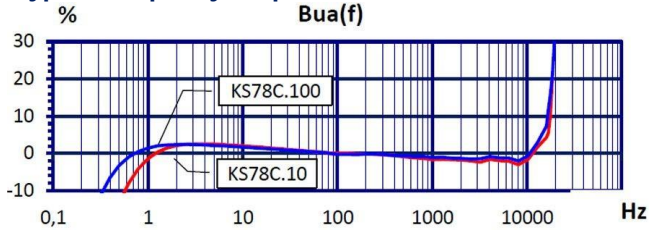
Properties

- 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

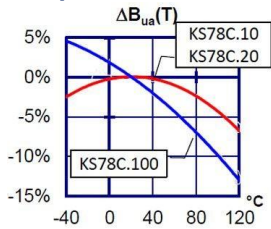


| | | |
|--|------------------------|---------------------|
| Piezo design | Shear design | |
| Output | IEPE | |
| Voltage sensitivity | 10 | mV/g |
| Sensitivity tolerance | 20 | % |
| Measurement range, pos./neg. | 500 | g |
| Destruction limit | 6000 | g |
| Transverse sensitivity | <5 | % |
| Lower frequency limit (3 dB) | 0,35 | Hz |
| Upper frequency limit (3 dB) | 23000 | Hz |
| Lower frequency limit (10 %) | 0,7 | Hz |
| Upper frequency limit (10 %) | 18000 | Hz |
| Lower frequency limit (5 %) | 1,4 | Hz |
| Upper frequency limit (5 %) | 15000 | Hz |
| Resonant frequency | >46 | 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 | <1000 (0,5 - 20000 Hz) | μg |
| Noise density 1 Hz | 250 | μg/√Hz |
| Noise density 10 Hz | 70 | μg/√Hz |
| Noise density 100 Hz | 10 | μg/√Hz |
| Noise density 1000 Hz | 3 | μg/√Hz |
| Operating temperature range | -40 - 120 | °C |
| Temperature coefficient of voltage sensitivity | 0,05 (<0 °C) | %/K |
| | 0 (0 - 40 °C) | %/K |
| | -0,05 (40 - 80 °C) | %/K |
| | -0,07 (>80 °C) | %/K |
| Temperature transient sensitivity | 0,1 | m/s ² /K |
| Magnetic field sensitivity | 3,5 | m/s ² /T |
| Weight without cable | 10.2 | g |
| Case material | Stainless steel | |
| Connector direction | axial | |
| Connector | UNF10-32 | |
| Mounting | M5 | |
| Isolated mounting | yes | |

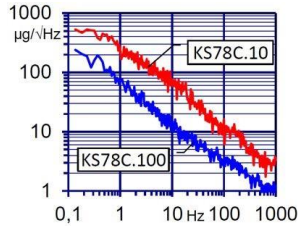
Typical Frequency Response



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 KS78C10/01

- 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/s² to 200 m/s².

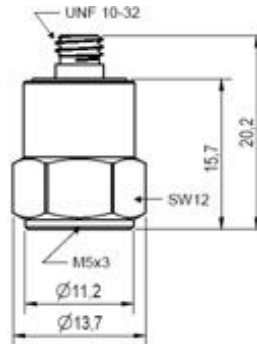


IEPE Accelerometer

KS78C100

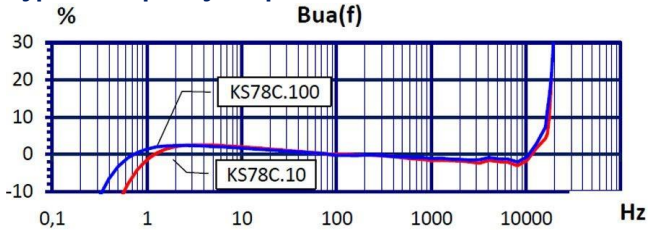
Properties

- 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

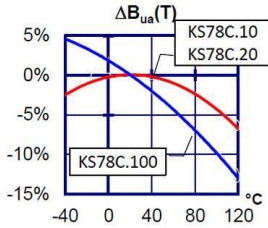


| Piezo design | Shear design | |
|--|-------------------------------------|--------------------------------|
| Output | IEPE | |
| Voltage sensitivity | 100 | mV/g |
| Sensitivity tolerance | 20 | % |
| Measurement range, pos./neg. | 60 | g |
| Destruction limit | 6000 | g |
| Transverse sensitivity | <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 | $\mu\text{g}/\sqrt{\text{Hz}}$ |
| Noise density 10 Hz | 10 | $\mu\text{g}/\sqrt{\text{Hz}}$ |
| Noise density 100 Hz | 3 | $\mu\text{g}/\sqrt{\text{Hz}}$ |
| Noise density 1000 Hz | 1 | $\mu\text{g}/\sqrt{\text{Hz}}$ |
| Operating temperature range | -40 - 120 | $^{\circ}\text{C}$ |
| Temperature coefficient of voltage sensitivity | -0,08 (<0 $^{\circ}\text{C}$) | %/K |
| | -0,1 (0 - 40 $^{\circ}\text{C}$) | %/K |
| | -0,12 (40 - 80 $^{\circ}\text{C}$) | %/K |
| | -0,14 (>80 $^{\circ}\text{C}$) | %/K |
| Temperature transient sensitivity | 0,08 | $\text{m}/\text{s}^2/\text{K}$ |
| Magnetic field sensitivity | 1,5 | $\text{m}/\text{s}^2/\text{T}$ |
| Weight without cable | 11.2 | g |
| Case material | Stainless steel | |
| Connector direction | axial | |
| Connector | UNF10-32 | |
| Mounting | M5 | |
| Isolated mounting | yes | |

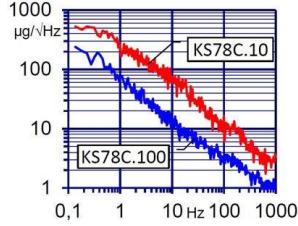
Typical Frequency Response



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/s² to 200
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