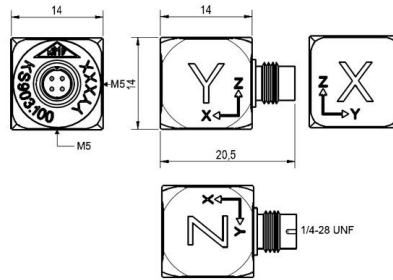


## Triaxial Accelerometer

## KS903B10

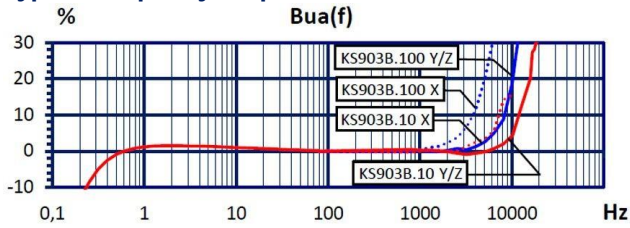
### Properties

- Small dimensions
- Excellent phase response
- High resolution
- Low temperature coefficient
- Includes electronic data sheet (TEDS; IEEE 1451.4; Template 25 w. DS2431)
- Well suited for modal and structural analysis
- Two sensitivity versions (10 and 100 mV/g)

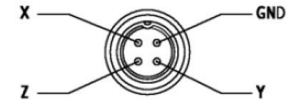


|  |                              |                     |
|--|------------------------------|---------------------|
| Piezo design                                   | Shear design                 |                     |
| Output   | IEPE                         |                     |
| Voltage sensitivity                            | 10                           | mV/g                |
| Sensitivity tolerance                          | 10                           | %                   |
| Measurement range, pos./neg.                   | 600                          | g                   |
| Destruction limit                              | 7000                         | g                   |
| Transverse sensitivity                         | <5                           | %                   |
| Lower frequency limit (3 dB)                   | 0,15                         | Hz                  |
| Upper frequency limit (3 dB)                   | 11000 (X); 22000 (Y/Z)       | Hz                  |
| Lower frequency limit (10 %)                   | 0,25                         | Hz                  |
| Upper frequency limit (10 %)                   | 7000 (X); 14000 (Y/Z)        | Hz                  |
| Resonant frequency                             | >30 (X); >50 (Y/Z)           | kHz                 |
| Resonance amplitude                            | 25                           | dB                  |
| Constant current supply                        | 2 - 20                       | mA                  |
| Bias voltage at 4 mA                           | 12 - 14,5                    | V                   |
| Output impedance                               | <100                         | $\Omega$            |
| Residual noise; wide band; RMS                 | <3000 (0,5 - 20000 Hz)       | $\mu$ g             |
| Noise density 1 Hz                             | 400                          | $\mu$ g/ $\sqrt$ Hz |
| Noise density 10 Hz                            | 150                          | $\mu$ g/ $\sqrt$ Hz |
| Noise density 100 Hz                           | 40                           | $\mu$ g/ $\sqrt$ Hz |
| Noise density 1000 Hz                          | 15                           | $\mu$ g/ $\sqrt$ Hz |
| Operating temperature range                    | -30 - 100                    | $^{\circ}$ C        |
| Temperature coefficient of voltage sensitivity | $\pm$ 0,01 (<0 $^{\circ}$ C) | %/K                 |
|  | -0,01 (0 - 40 $^{\circ}$ C)  | %/K                 |
|  | -0,03 (40 - 80 $^{\circ}$ C) | %/K                 |
|  | -0,04 (>80 $^{\circ}$ C)     | %/K                 |
| Temperature transient sensitivity              | 2                            | m/s <sup>2</sup> /K |
| Magnetic field sensitivity                     | 15                           | m/s <sup>2</sup> /T |
| Weight without cable                           | 6.2                          | g                   |
| Case material                                  | Aluminum; hard coated        |                     |
| Connector direction                            | axial/radial                 |                     |
| Connector                                      | 1/4-28 UNF male              |                     |
| Mounting                                       | M5 (Y/Z); adhesive           |                     |

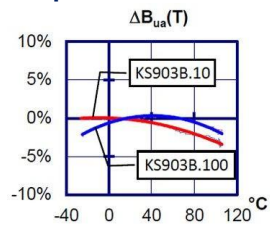
## Typical Frequency Response



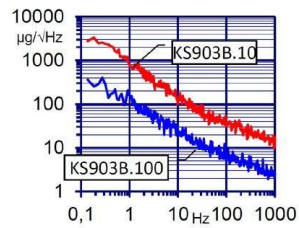
## Contact Arrangement



## Temperature Coefficient



## Noise Characteristics



## Connection Accessories

- 091-CMR-B711-3: Cable for IEPE sensors; 3 m; 1/4"-28; 4 pins to Binder 711; male; 120 °C; D2,1
- 034-B711f-BNC: Adapter Binder 711; 0,5 m; 4 pin; female. to 3 x BNC; male; 80 °C

## Mounting Accessories

- 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

## Delivery version with accessories kit KS903B10/01

- 091-CMR-B711-3: Cable for IEPE sensors; 3 m; 1/4"-28; 4 pins to Binder 711; male; 120 °C; D2,1
- 034-B711f-BNC: Adapter Binder 711; 0,5 m; 4 pin; female. to 3 x BNC; male; 80 °C
- 708: Rare earth magnetic base; M5; SW15; 120 °C
- 029: Adhesive insulating flange; M5; D15; >250 °C
- 003: Mounting stud; M5 x 8

**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>.

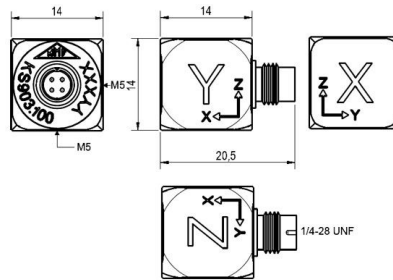


## Triaxial Accelerometer

**KS903B100**

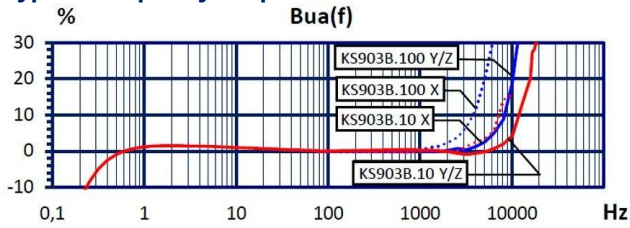
### Properties

- Small dimensions
- Excellent phase response
- High resolution
- Low temperature coefficient
- Includes electronic data sheet (TEDS; IEEE 1451.4; Template 25 w. DS2431)
- Well suited for modal and structural analysis
- Two sensitivity versions (10 and 100 mV/g)

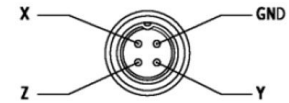


|  |                                   |                     |
|--|-----------------------------------|---------------------|
| Piezo design                                   | Shear design                      |                     |
| Output   | IEPE                              |                     |
| Voltage sensitivity                            | 100                               | mV/g                |
| Sensitivity tolerance                          | 10                                | %                   |
| Measurement range, pos./neg.                   | 60                                | g                   |
| Destruction limit                              | 3000                              | g                   |
| Transverse sensitivity                         | <5                                | %                   |
| Lower frequency limit (3 dB)                   | 0,15                              | Hz                  |
| Upper frequency limit (3 dB)                   | 7000 (X); 12000 (Y/Z)             | Hz                  |
| Lower frequency limit (10 %)                   | 0,25                              | Hz                  |
| Upper frequency limit (10 %)                   | 4000 (X); 7000 (Y/Z)              | Hz                  |
| Resonant frequency                             | >13 (X); >15 (Y); >17 (Z)         | kHz                 |
| Resonance amplitude                            | 25                                | dB                  |
| Constant current supply                        | 2 - 20                            | mA                  |
| Bias voltage at 4 mA                           | 12 - 14,5                         | V                   |
| Output impedance                               | <100                              | $\Omega$            |
| Residual noise; wide band; RMS                 | <400 (0,5 - 20000 Hz)             | $\mu$ g             |
| Noise density 1 Hz                             | 150                               | $\mu$ g/ $\sqrt$ Hz |
| Noise density 10 Hz                            | 25                                | $\mu$ g/ $\sqrt$ Hz |
| Noise density 100 Hz                           | 7                                 | $\mu$ g/ $\sqrt$ Hz |
| Noise density 1000 Hz                          | 2                                 | $\mu$ g/ $\sqrt$ Hz |
| Operating temperature range                    | -30 - 100                         | $^{\circ}$ C        |
| Temperature coefficient of voltage sensitivity | $\pm$ 0,04 (<0 $^{\circ}$ C)      | %/K                 |
|  | 0,02 (0 - 40 $^{\circ}$ C)        | %/K                 |
|  | $\pm$ 0,01 (40 - 80 $^{\circ}$ C) | %/K                 |
|  | -0,02 (>80 $^{\circ}$ C)          | %/K                 |
| Temperature transient sensitivity              | 0,13                              | m/s $^2$ /K         |
| Magnetic field sensitivity                     | 2,9                               | m/s $^2$ /T         |
| Weight without cable                           | 9                                 | g                   |
| Case material                                  | Aluminum; hard coated             |                     |
| Connector direction                            | axial/radial                      |                     |
| Connector                                      | 1/4-28 UNF male                   |                     |
| Mounting                                       | M5 (Y/Z); adhesive                |                     |

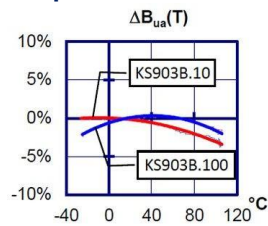
## Typical Frequency Response



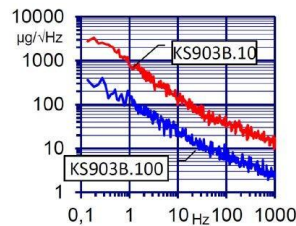
## Contact Arrangement



## Temperature Coefficient



## Noise Characteristics



## Connection Accessories

- 091-CMR-B711-3: Cable for IEPE sensors; 3 m; 1/4"-28; 4 pins to Binder 711; male; 120  $^{\circ}C$ ; D2,1
- 034-B711f-BNC: Adapter Binder 711; 0,5 m; 4 pin; female. to 3 x BNC; male; 80  $^{\circ}C$

## Mounting Accessories

- 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  $^{\circ}C$
- 029: Adhesive insulating flange; M5; D15; >250  $^{\circ}C$

## Delivery version with accessories kit KS903B100/01

- 091-CMR-B711-3: Cable for IEPE sensors; 3 m; 1/4"-28; 4 pins to Binder 711; male; 120  $^{\circ}C$ ; D2,1
- 034-B711f-BNC: Adapter Binder 711; 0,5 m; 4 pin; female. to 3 x BNC; male; 80  $^{\circ}C$
- 708: Rare earth magnetic base; M5; SW15; 120  $^{\circ}C$
- 029: Adhesive insulating flange; M5; D15; >250  $^{\circ}C$
- 003: Mounting stud; M5 x 8

## 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  $m/s^2$  to 200  $m/s^2$ .

