

- Specialists in:
- Condition Monitoring
  - Machine Diagnosis
  - Dynamic Balancing
  - Calibrations



## CALIBRATION CERTIFICATE

S.....

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Sensor	Brüel & Kjær
Type	AS-0xx
Serial No.	
Principal	
Sensor Ref.	N/A
Calibration Ref.	S.....

Sensitivity	Mfr. specification	Calibration
at 80 Hz	100 mV/g	mV/g

This sensor has been tested in accordance with our calibration procedure.

We confirm that the sensor complies to the relevant manufacturer tolerances: YES

Date of calibration:

Recommended date for recalibration:

Calibration engineer:

**H. v.d. Eijk**

Ouderkerk aan den IJssel,

VIBROSERVICE B.V.

The certificate of calibration is only valid with calibration ref. number and signature. All measuring instrumentation used for calibration is directly or indirectly traceable to national and international standards.

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### Calibration specifications

#### Ambient conditions

Room temperature: 20° C. ± 2° C.  
Relative humidity: 65 ± 10%

#### Calibration method

Reference calibration is performed by testing accelerometer sensitivity, frequency and amplitude response in our test- and calibration set up.

Method for the calibration of vibration and shock transducers is according to ISO 16063-21:2003 by comparison to a reference transducer.

Calibration procedures are described according to ISO 17025.

#### Calibration hardware:

- Brüel & Kjær Type 4808 Vibration exciter (Ser. No. 2202268)
- Brüel & Kjær Type 2712 Power amplifier (Ser.No. 2170378)
- Ucon Type VT-9002 Vibration controller (Ser. No. 193221047)
- PCB 301A 11 Reference standard accelerometer (Ser. No. 2505)
- Fluke 45 Voltage and frequency standard (Ser. No. 8140035)

Calibration standards are regularly checked by a third party laboratory, and are traceable to international standards.

#### Measurement uncertainty:

The indicated relative measuring inaccuracies are the total of the inaccuracies of the test procedure.

$$\Delta a_{AC} / a_{AC} \leq 2,0\%$$

$$\Delta U_{AC} / U_{AC} \leq 2,0\%$$

$$\Delta f / f \leq 1 \times 10^{-4} \text{ of measured value}$$

For 99,9% confidence level, the accuracy of this calibration is ±2%.

There is no part included for long term stability and no one for thermal drift of the calibration unit.

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### Sensitivity

Manufacturer specification:

Reference sensitivity at 80 Hz, 10 g: 100 mV/g.

Measured Reference Sensitivity:

Reference sensitivity at 80 Hz, 10 g: **mV/g**

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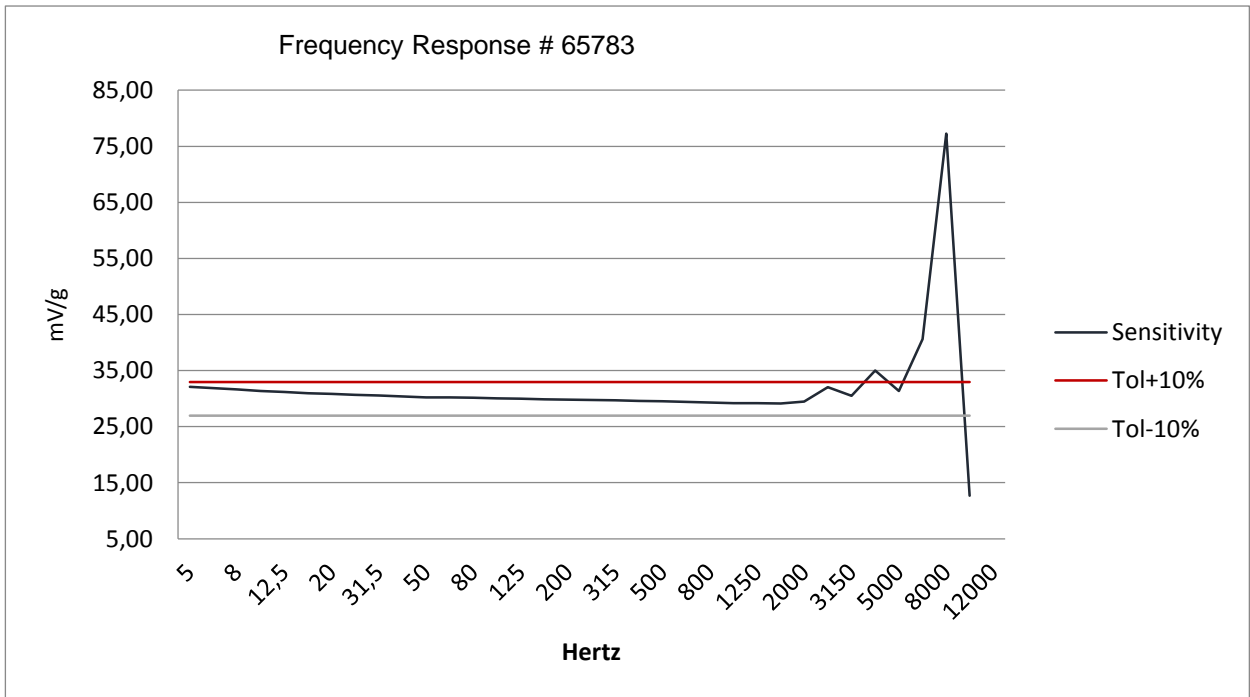
## Frequency Response

Manufacturer Specification:

Frequency range for measured reference sensitivity  $\pm 5\%$ : 3 Hz – 10 kHz

Measured frequency range: 5 Hz – 10 kHz.

Tolerances are relative to Measured Reference Sensitivity (page 3).



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### Amplitude Linearity

Manufacturer specification:  
Amplitude range: 500 g peak

Frequency during test: 80 Hz.

Tolerances are relative to Measured Reference Sensitivity (page 3).

