

**SAFETY IS OUR PRIORITY**

**MS2003+ / VELOCITY SENSOR**



**Conforms to DIN 45669**

### **SENSOR**

MS2003+ to be linked to motion recorders such as :

- MR3000C

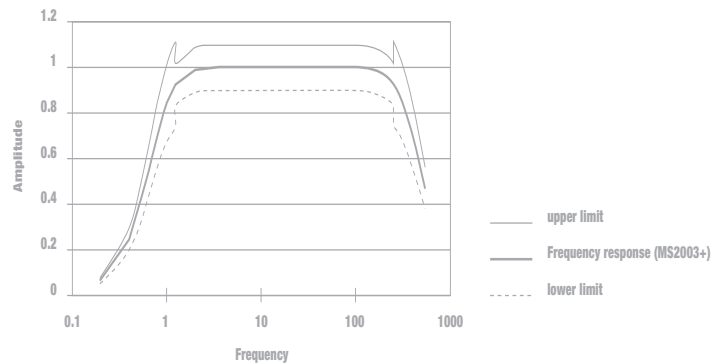
### **DATASHEET : MS2003+**

The MS2003+ velocity sensor is best suited for vibration monitoring according to DIN 4150. The excellent dynamic range and the broad frequency range fully cover the needs of the engineer in charge with structural dynamics.

## MS2003+ / VELOCITY SENSOR (conforms to DIN 45669)

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The rugged construction of the MS2003+ is designed to withstand the rough outdoor use. Each axis of the MS2003+ is calibrated individually. The sensor is shipped with a calibration certificate.



### Technical Specification

Type	Velocity sensor with linearized frequency response and built-in amplification A3HV 315/1 (triaxial) (according to DIN 45669) A1H 315/1 and A1V 315/1 (single axis) Deep Red Option (DRO) corresponds to short period geophone.
Principle	Active, electronically equalized geophone
Measuring range full scale	$\pm 11.4 \text{ cm/s}$ ( $f > 9 \text{ Hz}$ ), down to $1.2 \text{ cm/s}$ ( $f = 1 \text{ Hz}$ ) DRO : $\pm 2.28 \text{ mm/s}$
Sensitivity	$0.39 \text{ V/cm/s}$ (calibrated at $16 \text{ Hz}$ ) DRO : $19.5 \text{ V/cm/s}$
Case-to-coil motion	4 mm p-p
Frequency range	1 – 350 Hz (linear $\pm 10\%$ frequency response), see chart
Dynamic range	$> 130 \text{ dB}$ DRO : $110 \text{ dB}$
Linearity / Phase	According to DIN 45669 (class 1)
Cross axis sensitivity	According to DIN 45669 ( $< 5\%$ )
Supply voltage	$\pm 5.0 \text{ V}$
Power consumption	$< 10 \text{ mA}$ (per axis) DRO : $< 20 \text{ mA}$
Output voltage	$0 \text{ V} \pm 4.5 \text{ V}$
Temperature range	$-30^\circ\text{C}$ to $+60^\circ\text{C}$
Housing	Aluminium
Protection	IP 65 (splash-proof)
Self-Test	Integrated, active self-test (Mechanical and electronic tests)

### MS2003+ triaxial

Dimensions	122 x 120 x 80 mm
Weight	1.55 kg
Connector	Metallic self-latching push - pull connector with positioning key
Accessories	Mounting platform with levelling screws - weight: 1.9 kg
Option	Connector for external z-axis

### MS2003+ single axis (horizontal or vertical)

Dimensions	80 x 75 x 57 mm
Weight	0.45 kg
Connection	0.5 m interconnection cable with metallic, self-latching push-pull connector with positioning key
Accessories	Interconnection box (input for 3 single axis sensors, output like triaxial sensor) and extension lead 12110081

### Ordering Information

MS2003+ triaxial Horizontal mounting	14110222
Calibration certificate	In compliance with DIN 45669 part 3 30100014
MS2003+ uniaxial Horizontal mounting, vertical axis	14110221
Calibration certificate	In compliance with DIN 45669 part 3 30100016
MS2003+ uniaxial Horizontal mounting, horizontal axis	14110220
Calibration certificate	In compliance with DIN 45669 part 3 30100016
Mounting platform for MS2003+ triaxial	13000001
Mounting platform for MS2003+ uniaxial	13000004

For uniaxial kit, please contact your local representative or SYSCOM Instruments SA



MS2003+ with mounting and levelling platform

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