

Application

The electronic vibration detector with a memory display is used to monitor all types of windows, doors, lightweight walls, glass blocks, shop windows and containers for a breach. It can be operated with all the intruder alarm control units from ABB.

Function

Mechanical vibrations are converted into electrical signals using a piezo-ceramic sensor and are evaluated in terms of frequency and amplitude. When a positive result is achieved, the signal is stored and displayed on the integrated LED until the memory is deleted by disconnecting the power supply via the control unit. The power supply and signalling are carried out on the same pair of cables. The sensitivity of the evaluation can be adjusted when the top of the housing is removed.

Design

The complete electronics is enclosed in a small, inconspicuous plastic housing together with the connected cable and is thus resistant to damp. A diode circuit enables the connection to the zone without the polarity having to be taken into account. The detector is available in brown and white.

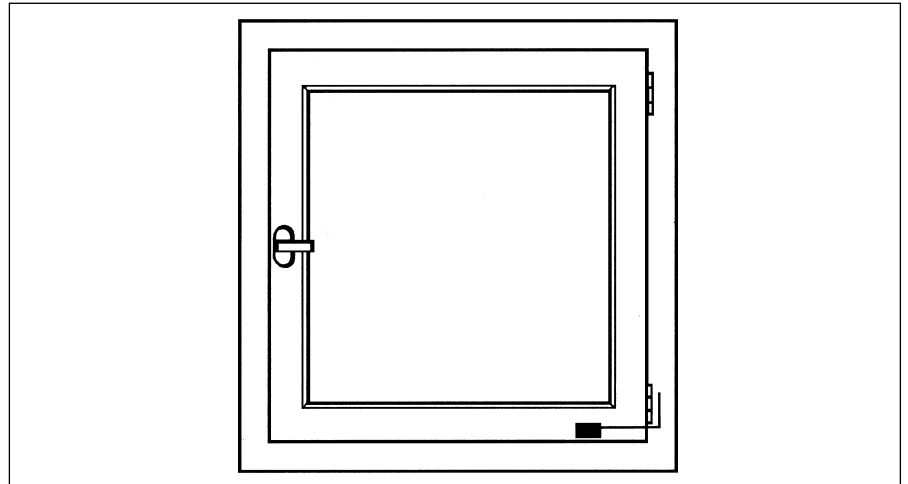
Installation

The detector is installed so that it is out of reach, depending on the respective flooring. It is mounted either using the screws supplied or with Loctite adhesive, depending on the application (not according to VdS). For monitoring glass areas on windows, doors or shopwindows the detector should be mounted on the frame of the element. Once the adhesive has hardened, the sensitivity can be set via testing before the top of the housing is placed in position.

Technical data

Operating voltage	3...15 V DC (from the zone)
Closed-circuit current	< 20 µA
Operating current	approx. 1 mA at 7 V
Memory display	Can be reset by interrupting the operating voltage
Cable	LIYY 4 x 0.14 mm ² , 4 m long
Temperature range	- 25° ... 60°C
Type of protection	IP 68
Dimensions (H x W x D)	10 x 40 x 22 mm

Installation example



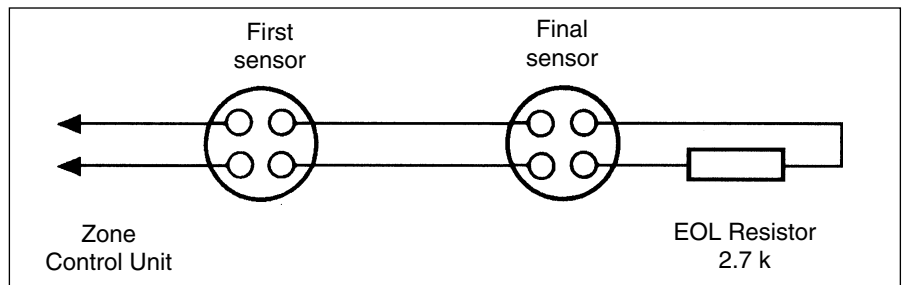
Max. effective radius on glass = 1.15 m
Max. effective radius on wood, steel, concrete = 0.55 m

Wiring diagram

Two adjacent cores are routed to the control unit (zone) and the two remaining cores are led to the next detector.

Solder the EOL resistor behind the last sensor.

A maximum of 10 sensors may be connected per zone.



Ordering information

Type	Colour	Product code
EMA/W	white	GH V922 0009 V0003
EMA/B	brown	GH V922 0009 V0004
VdS-No. G 19451 9		