Installation instructions
Vibration sensor

VSA003
VSA004
VSA005
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1 Preliminary note
• An instruction is indicated by “►“:
  Example: ► Mount the unit as shown.

Important note
Non-compliance can result in malfunction or interference.

Information
Supplementary note.

2 Safety instructions
• Please read the operating instructions prior to set-up of the device. Ensure that the product is suitable for your application without any restrictions.
• The unit conforms to the relevant regulations and EC directives.
• Improper or non-intended use may lead to malfunctions of the unit or to unwanted effects in your application.
• Installation, electrical connection, set-up, operation and maintenance of the unit must only be carried out by qualified personnel authorised by the machine operator.

3 Functions and features
• Vibration detection of machines and equipment
• For connection to diagnostic electronics VSExxx

4 Electrical connection
The unit must be connected by a qualified electrician.
The national and international regulations for the installation of electrical equipment must be adhered to.

► Disconnect power.
► Connect the unit.

| Wiring       | blue: GND / black: test / brown: L+ / white: out shield wire: screen |
4.1 Use of a screened cable for VSAx sensors
► Use a screened cable to avoid conducted interference.
► Connect the screened cable to the DIN rail in the control cabinet.
For wired units, the screen is connected to the sensor housing.

![Diagram of screened cable connection]

1: screen
2: DIN rail

4.2 Setting instructions
► Enter the scaling for the sensor in the configuration software VES003.

If the sensor is connected to channel 1:
VSA003: settings → Sensors → Sensor 1 → 17500 mg
VSA004 / VSA005: settings → Sensors → Sensor 1 → 25000 mg
If the sensor is connected to channel 2:
VSA003: settings → Sensors → Sensor 2 → 17500 mg
VSA004 / VSA005: settings → Sensors → Sensor 2 → 25000 mg etc.

5 Installation
► Mount only in a thick housing wall and vertical to the machine surface close to the bearing or at the end shield.
► Ensure that the signal direction is correct.
► Ensure a safe vibration transmission and allow no elastic intermediate layers.
► Fixing with glue or mounting screw (Torx cylinder screw no. 15, recommended tightening torque 5 Nm, M5 x 20, Ø hexagon socket 3.4 mm)
► For fixing, use a screw retaining compound.
6 Scale drawing

Dimensions in mm
1: shield wire
H = 12 (VSA003)
H = 13.5 (VSA004, VSA005)
L = 1.5 m (VSA003)
L = 3 m (VSA004)
L = 10 m (VSA005)

7 Approval (Limited voltage / Current)
The device shall be supplied from an isolating transformer having a secondary Listed fuse rated 1.0 A.

8 Maintenance, repair and disposal
If used correctly no maintenance and repair measures are necessary. After use dispose of the unit in an environmentally friendly way in accordance with the applicable national regulations.

9 Technical data
Technical data and further information at www.ifm.com