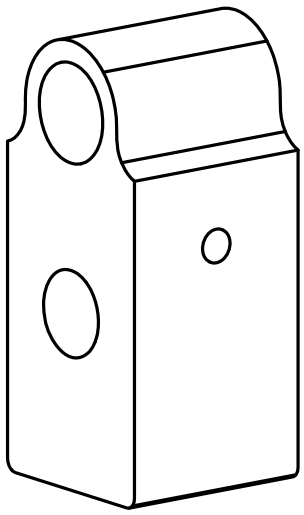
Operating instructions
Mounting adapter
E30468
E30469

UK

80291197/00 01/2020



1 Preliminary note

Technical data, approvals, accessories and further information at www.ifm.com.

1.1 Symbols used

▶ Instructions

→ Cross-reference

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

2 Safety instructions

- The device described is a subcomponent for integration into a system.
  - The manufacturer is responsible for the safety of the system.
  - The system manufacturer undertakes to perform a risk assessment and to create a documentation in accordance with legal and normative requirements to be provided to the operator and user of the system. This documentation must contain all necessary information and safety instructions for the operator, the user and, if applicable, for any service personnel authorised by the manufacturer of the system.
- Read this document before setting up the product and keep it during the entire service life.
- The product must be suitable for the corresponding applications and environmental conditions without any restrictions.
- Only use the product for its intended purpose (→ 3 Functions and features).
- If the operating instructions or the technical data are not adhered to, personal injury and/or damage to property may occur.
- The manufacturer assumes no liability or warranty for any consequences caused by tampering with the product or incorrect use by the operator.
- Installation, electrical connection, set-up, programming, configuration, operation and maintenance of the product must be carried out by personnel qualified and authorised for the respective activity.
- Protect units and cables against damage.

3 Functions and features

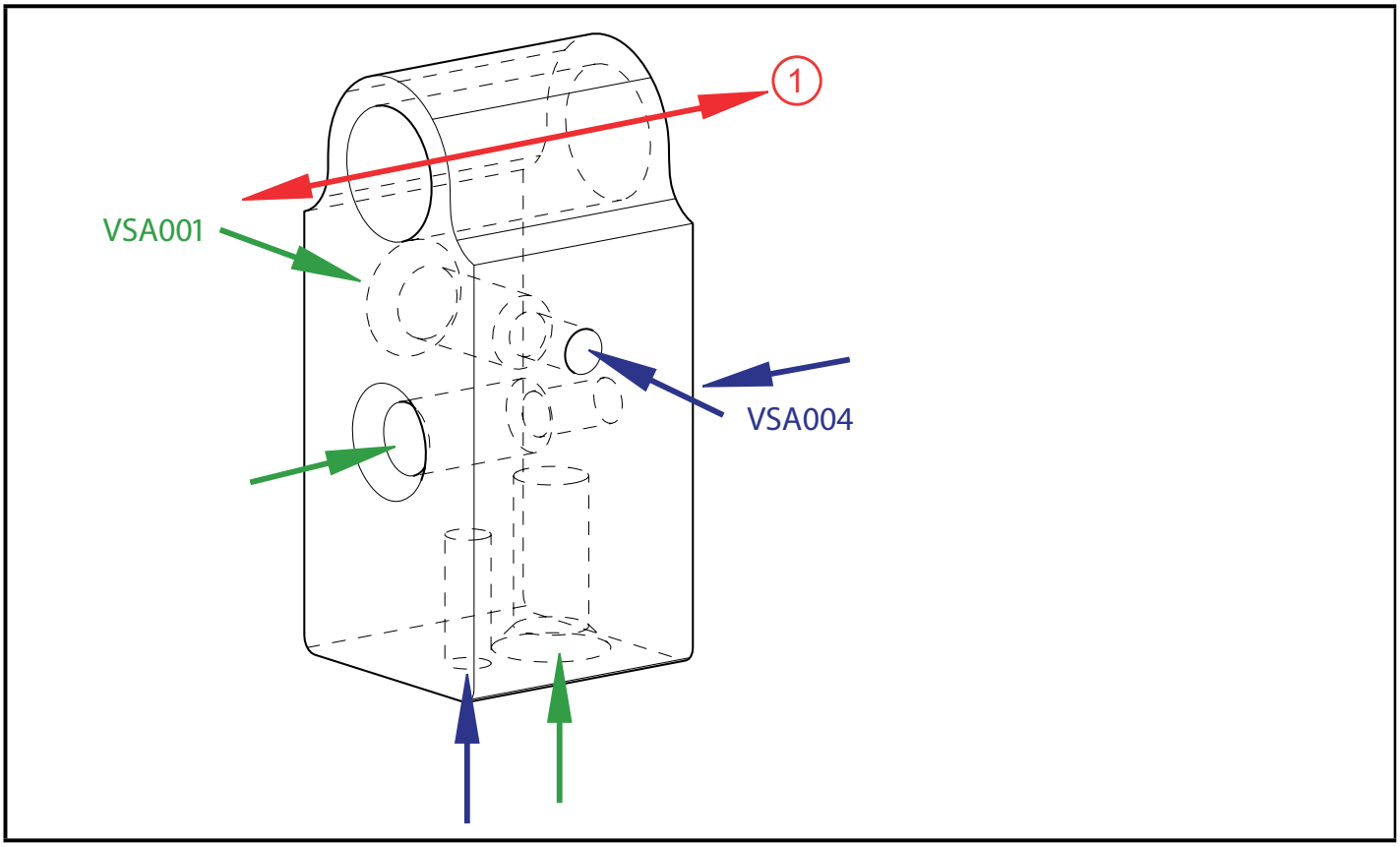
- Installation of acceleration sensors (VSA 001; VSA004, VSA005) using the supplied screws.

Order number	Description
E30468	for M10 and M12
E30469	for M6 and M8

4 Function

4.1 Application

2 bore holes are provided for the acceleration sensor, so that the measuring direction can either be parallel to the direction of the fastening screw or offset by 90°.



1: Direction of the fastening screw (z-axis)

The adapter is suited for machines with a vibration level that is predominantly low and constant during the entire operating time. The machines usually operate permanently at a constant rotational speed at a static operating point.

Examples

- Fans
- Electric drives (without servomotors)
- Rotary pumps

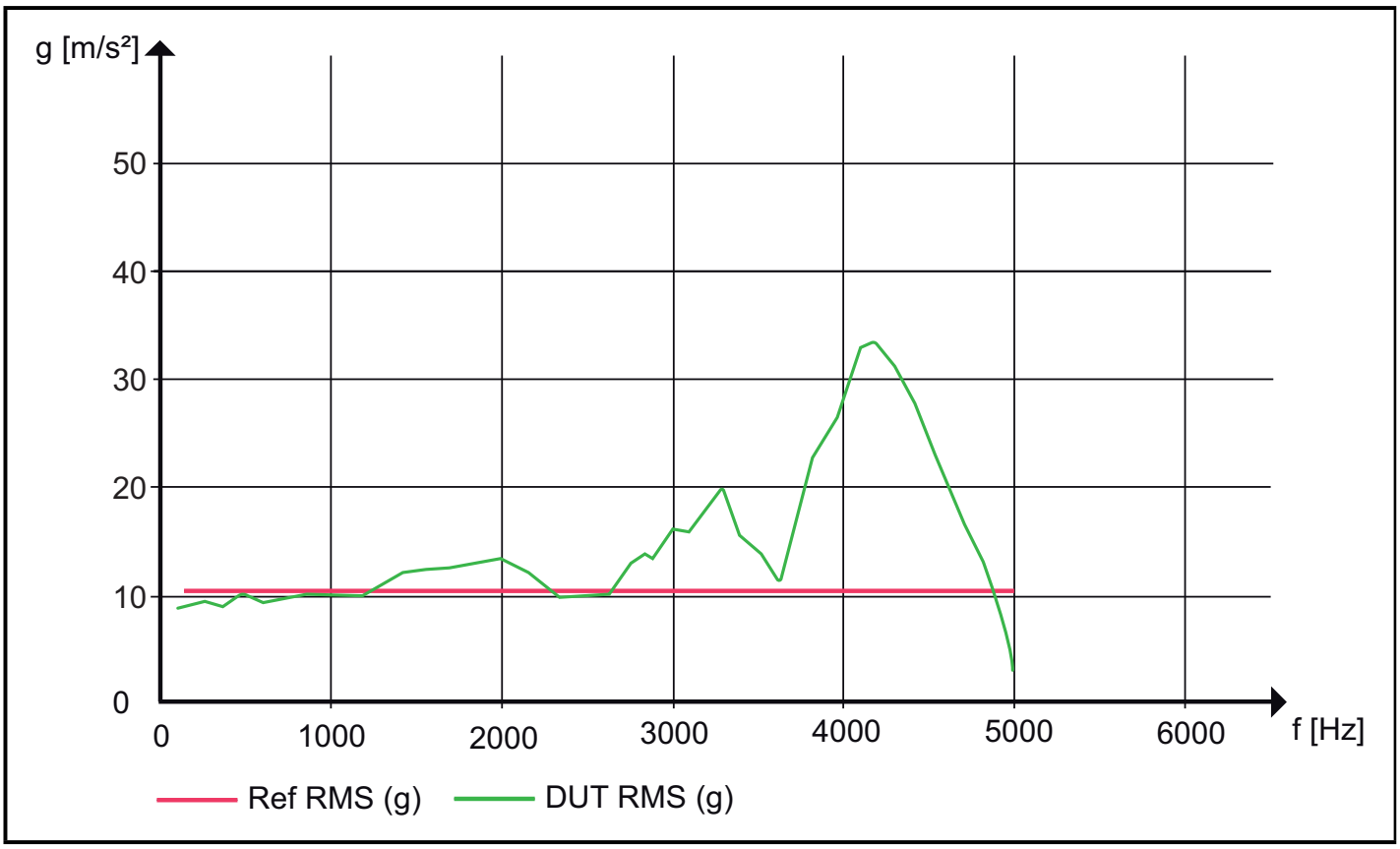
Machines that typically have high frequency vibrations are not suitable, i.e. turbo-machines, screw compressors, reciprocating compressors, machine tools or combustion engines.

4.2 Measurement influences

Using the adapter changes the vibrational properties of the measurement setup. Especially in case of bearing diagnostics and other high frequency vibrations, resonance and damping effects may falsify the measurement result.

4.3 Frequency responses

4.3.1 Typical frequency response of the adapter without sensor



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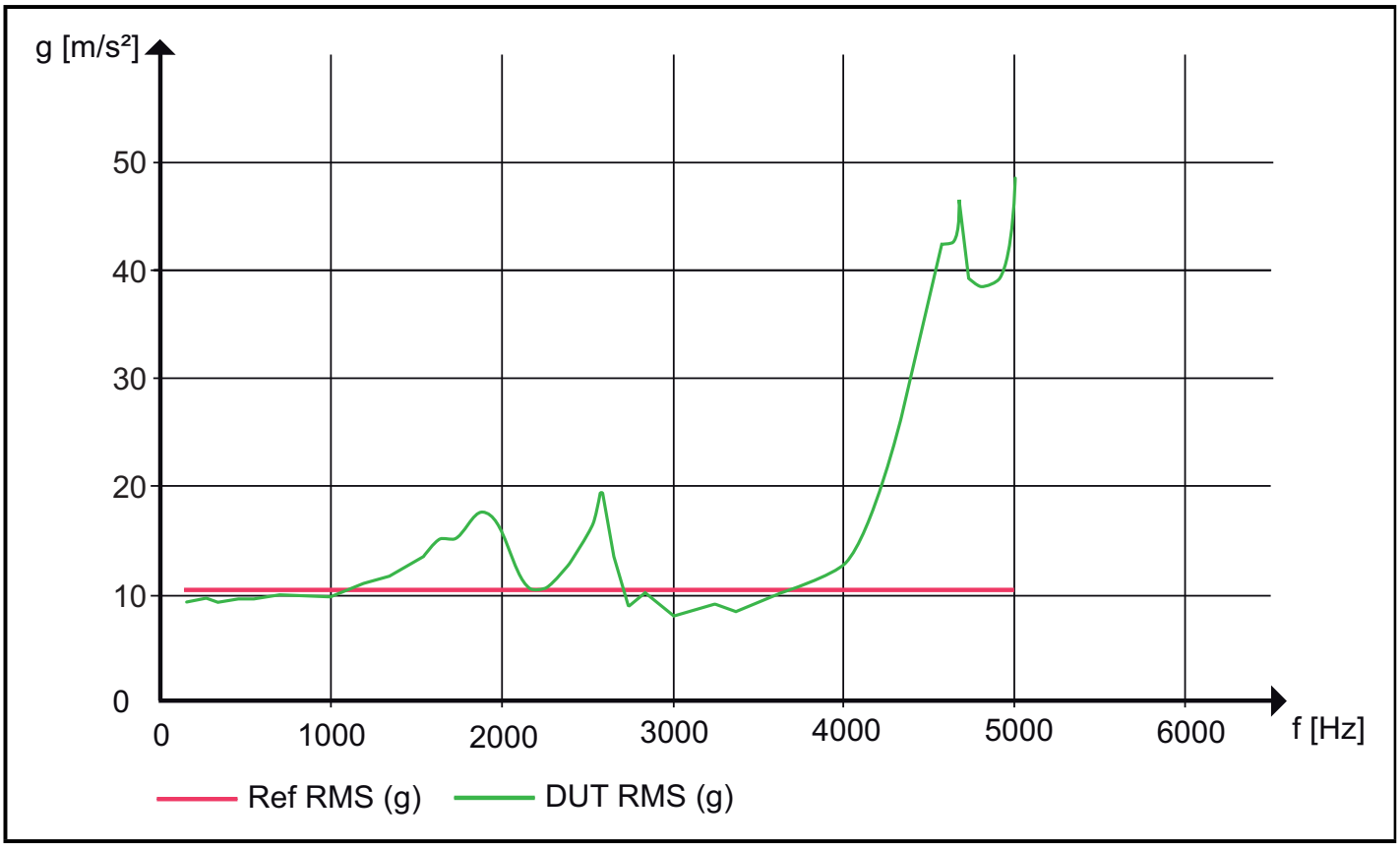
4.3.2 Typical frequency response of the adapter with sensor (VSA001)



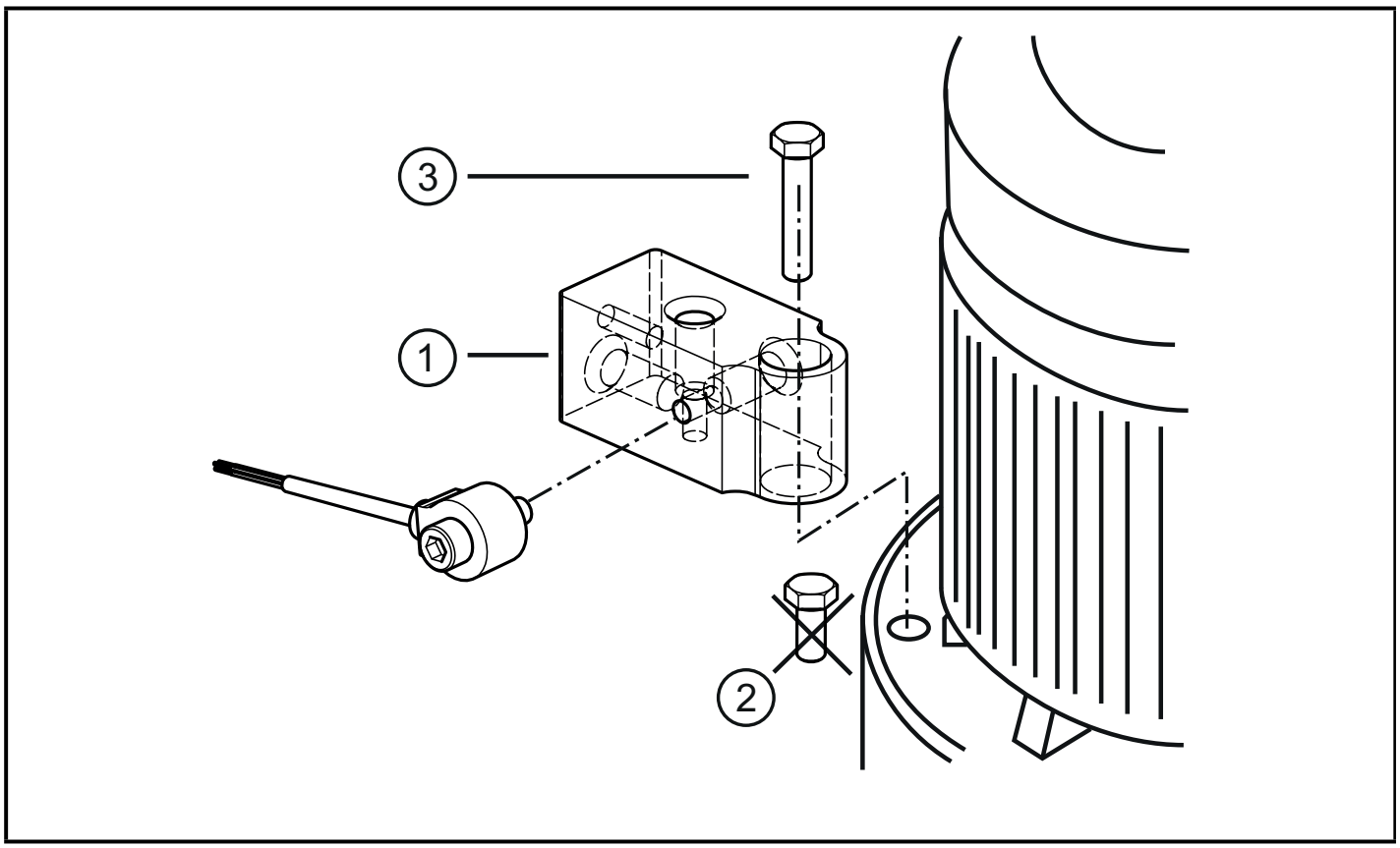
Ref = reference sensor
DUT = Device Under Test

5 Installation

- ▶ When choosing the installation location and the orientation of the adapter, please adhere to the specifications (e.g. measurement direction) of the acceleration sensor to be used.
- ▶ Please note the tightening torque value specified in the data sheet when mounting the sensor.

The adapter (1) is suitable for sensor installation on flange connections without additional bore holes.

- ▶ Replace an existing M6/M8 or M10/M12 flange screw (2) with an identical screw (3) with a thread that is 22.5 mm longer and fix it in the same position using the adapter (1).
- ▶ Tighten the adapter with the tightening torque of the removed screw.



6 Maintenance, repair, disposal

The operation of the unit is maintenance-free. It is not possible to repair the unit. Dispose of the unit in an environmentally friendly way in accordance with the applicable national regulations when it is no longer used.