

**VIB-3A-IP-24-SP-Z0033****3-axial system for monitoring low-frequency vibrations (such as earthquakes) with 3 potential-free switching contacts**

- Measuring range $\pm 0,1$ g
- Frequency range 0 ... 20 Hz
- Supply voltage 20 ... 28 VDC
- Output: 3 potential free switching contacts (max. 30VDC/0,5A) with hold time

**Description**

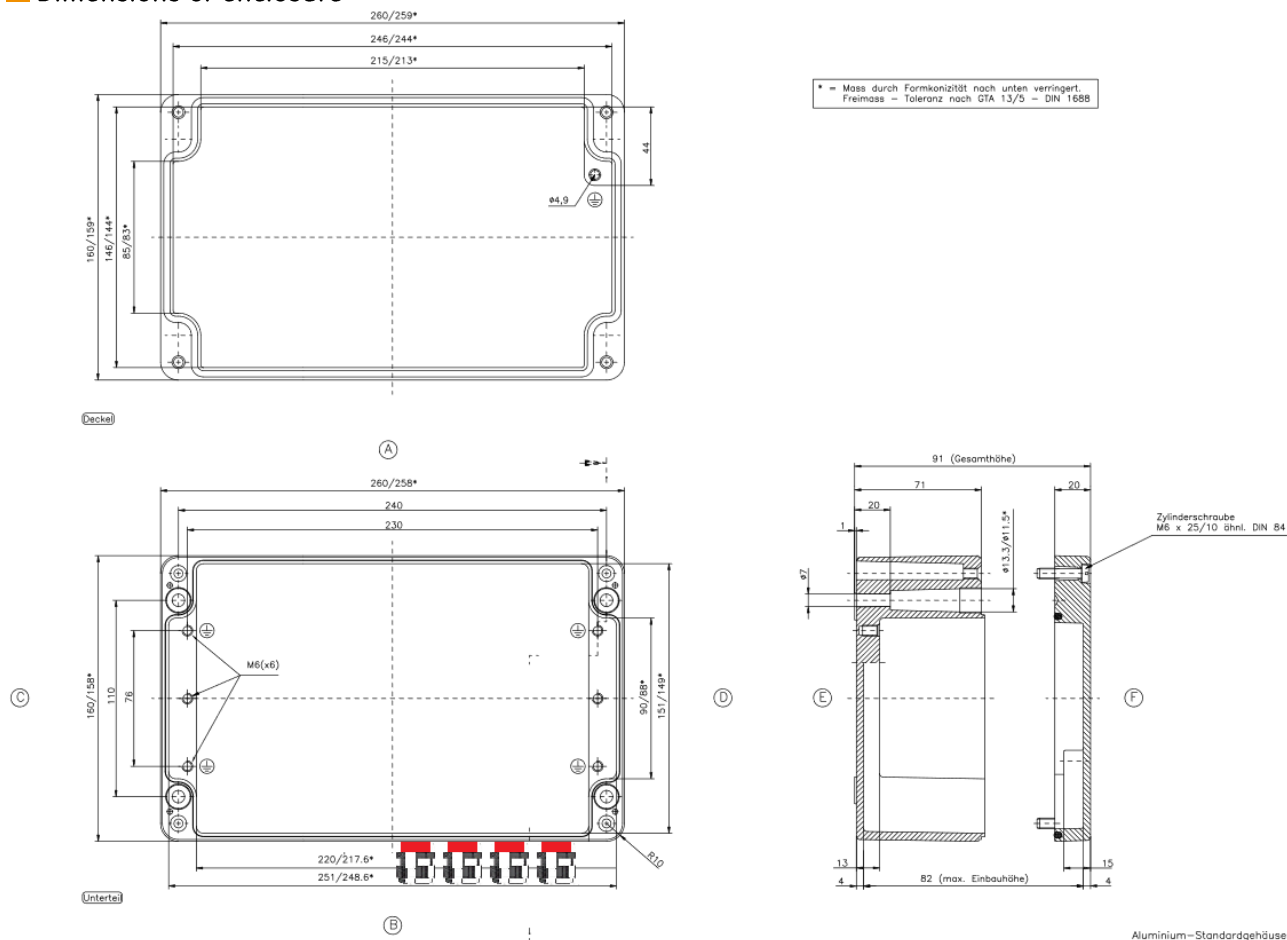
The VIB-3A-IP-24-SP-Z0033 3-axis industrial vibration measurement system, which consists of a combination of a filtered acceleration sensor and an adjustable evaluation circuit, is used to monitor X, Y, and Z axis low frequency vibrations and is intended for surface mounting. The system detects vibrations as pulses and evaluates them in relation to the adjustable limit. If the set number of pulses is exceeded, within an adjustable time window, the 3 potential-free switching contacts switch. This is additionally indicated by status LEDs.

The vibration measurement system is built into a rugged EMC-safe die-cast aluminum enclosure (IP65), which is ideal for use in harsh and industrial environments.

Specifications

Number of measuring axis:	3
Supply voltage:	20 ... 28 VDC
Power consumption:	max. 10 W; increased inrush current
Measuring range:	$\pm 0,1$ g
Frequency range (-3dB):	0 ... 20 Hz
Electrical connection:	M16x1,5 EMC cable glands on internal spring-cage terminal blocks
Setpoint (ST):	Adjustable by internal DIP switches: X&Y-axis: 0,02g/0,04g/0,06g/0,08g Z-axis: 0,02g/0,04g/0,06g/0,08g
Max. power rating of relay:	max. 30V / 0,5A
Switching accuracy:	+/-10% (FSO)
Hold time after switching:	ca. 60 sec (according to customer requirements on request)
Weight:	ca. 3500g
Enclosure:	EMC-safe aluminium die-cast enclosure
Protection class:	IP65
Dimensions (W x H x D):	160 x 260 x 90 mm (without EMC cable glands)
Temperature, storage:	+10 ... +40 °C
Temperature, operating:	-20 ... +60 °C

Dimensions of enclosure



Terminal Wiring

Electrical connections are made via the EMC cable glands to the internal spring-cage terminal blocks. The maximal connection cross section is 2,5 mm². Although this system is designed with a high degree of immunity to electromagnetic interferences (EMI), proper installation and wiring methods must be followed to ensure compatibility in each application.

Terminal	Description	
1	Supply voltage	20 ... 28 VDC
2	Ground supply voltage	
3	Reset	Reset for all 3 switching contacts
4 / 7 / 10	Relays 1 / 2 / 3: NC (normally closed)	Relays logic based on power-off state of system
5 / 8 / 11	Relays 1 / 2 / 3: COM	Relays logic based on power-off state of system
6 / 9 / 12	Relays 1 / 2 / 3: NO (normally open)	Relays logic based on power-off state of system

■ Ordering Information

VIB-3A-IP-24-SP-Z0033...

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■ Customized Requirements

Technical modifications according to customer requirements are available on request. Moreover, we deliver customized special solutions for a lot of measuring tasks in the section pressure, force, position and tilt measuring using our measuring transducers. Do not hesitate to contact us.

We reserve the right to do technical changes without prior notice.

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