

# VIBER M2TM

SMART PRODUCTS FOR SMART PEOPLE

VIBER M2TM is designed for many applications, reliable and easy to use machine protector unit. VIBER M2TM can give an alarm or stop the machine if the set limit of this is achieved. The VIBER M2TM can send machine vibration information as well as transducer and cable condition to a PLC or other receiver.



## Machine Protector 1 or 2 Channels



## 1 or 2 Channels

### Each channel has:

- Three measuring ranges
- Two independent alarm levels with manual or auto reset
- Two selectable frequency ranges
- Current output proportional to the vibration level 4-20 mA, suitable for connection to a PLC
- Monitoring of transducer and cable failure
- Analysis signal on BNC and terminal output

### Common for both channels:

- Two independent changeover relays
- Two independent time delays of relay function
- One changeover relay for transducer or cable

### Description

The transducer signal is compensated in the input amplifier to correct signal level and selected frequency range. This signal is available at the front panel BNC connector and on terminals for further analysis.

The vibration always measured in velocity. This signal can be amplified in 3 selectable ranges 0-10, 0-20 and 0-100 mm/s. Other ranges are optional upon order of the product.

When the pre set signal levels are reached a LED lamp is lit. If the levels stays higher during the selected delay time (0-30 s) the relay is activated. The VIBER M2™ has manual or automatic resetting of the alarm status.

The signal level is converted to a corresponding current output between 4-20mA. This signal is available on terminals for connection to other instruments or data logger. The current output is disabled in case of transducer or cable failure.

### Enclosure

Sealed (IP65), PVC box with transparent lid for overview of vibration and/or temperature levels, alarm settings and alarm status.



## Channel card for accelerometers

### Input sensitivity

Standard 100mV/g: The positive input terminal supplies a 4 mA constant current at max. 20V to the built in transducer amplifier.

### Frequency range

2 - 4000 Hz are pre set. The lowest frequency range can be changed to 10 Hz on the pc-board.

### Analysis output

100mV/g between 2 -15000 Hz.  
Min load 10 k  $\Omega$ .

### Measuring range

Selectable between 0-10, 0-20 or 0-100 mm/s.  
This selection does not influence the sensitivity of the analysis output.

### Enclosure dimensions

Width 170mm, height 160mm, depth 130mm

**VIBER M2<sup>TM</sup>** is in compliance with following norms or documents; EN 61000-6-3:2007 EN 61000-6-1:2007

## Options

Customer specified frequency and measuring ranges.  
Adaption to temperature measurements with Pt100 elements or temperature sensor combined accelerometer with temperature sensor embedded.  
Flashtone siren mounted on the enclosure.  
Bearing condition

## RMS Value

The instrument measures the RMS value of the signal within the selected frequency range.

## Current output

The current output is 4-20 mA on pc-board.  
Maximum load not more than 600 ohm or 12V. 20 mA refers to 100% of selected measuring range.

## Time delay

The time delay of relay activation is adjustable between 0 and 30 sec.

## Relay output and functions

Single pole over relay 5A/250VAC or 5A/24V.  
The relay coils can be activated or deactivated below the alarm level. The 2-channel version has shared relays for both channels and the highest level activates the relay.

## Power supply

Standard is 100-240VAC or 24VDC.

## Ordering codes

M2-1/A for one accelerometer  
M2-1FT/A for one accelerometer and flashtone  
M2-2/A for two accelerometers  
M2-2FT/A for two accelerometers and flashtone



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