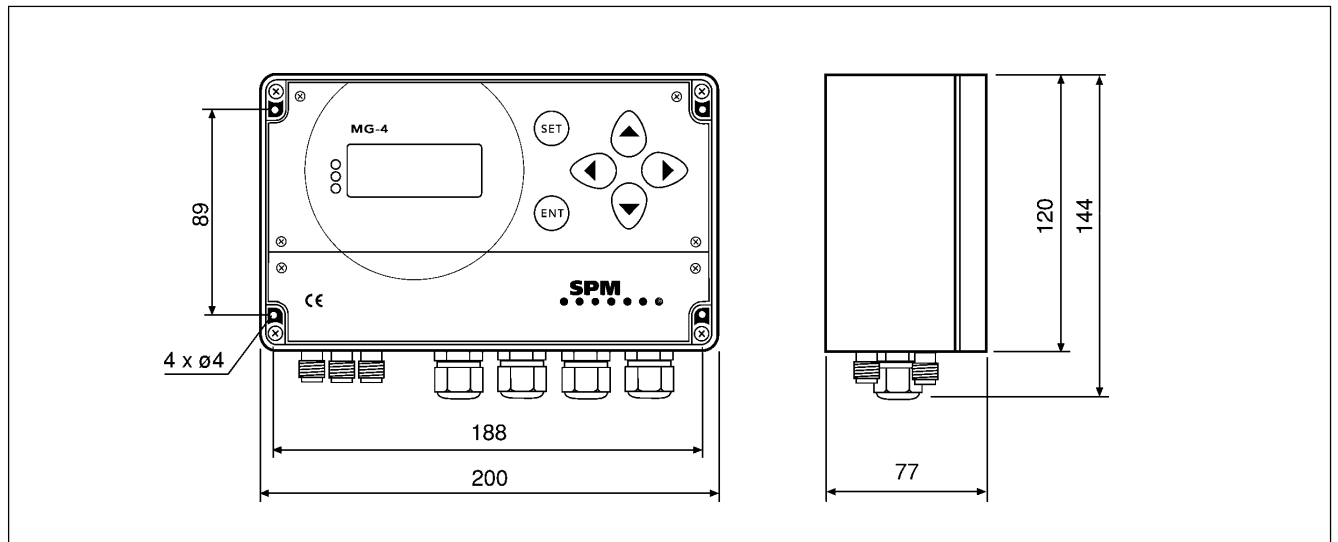


Measuring unit MG4-12



MG4-12 is a stand-alone measuring unit for continuous monitoring of machine vibration (one channel) and bearing condition (two channels). It measures vibration severity (true RMS value of vibration velocity) according to ISO 10816 and shock pulses according to the true SPM method.

MG4-12 provides:

- Two programmable alarm levels per channel and status display (green - yellow - red light)
- Display of measured value with continuous updates
- Analog output current 4 - 20 mA with programmable range or complete data on LAN (Modbus network using RTU)
- Relays 250 V (1) and 125 V (4) with programmable alarm levels.

MG4-12 has a casing for wall mounting, IP65. It can be supplied with mains power or be connected to a PLC. Measuring time, alarm levels, alarm delay and the channel/relay combinations are programmed, using the push buttons on the front panel.

The following options are selected on ordering the unit:

Power supply:

- 230 Vac, 115 Vac or 15 to 30 Vac/Vdc

Vibration channel:

- Lower frequency range 3, 10 or 100 Hz
- Upper frequency range 1000 or 2000 Hz
- Modification for vibration transducers without pre-amplifier (TRV-01, TRV-12/13)

Bearing channel:

- dBm/dBc or LR/HR technique

As an option the MG4 can be equipped with a RS-485 port for sending data via a LAN network. MG4 units equipped for network have no analog outputs.

Technical specifications

| | |
|-----------------------|----------------------------------------------------|
| Vibration channels: | 1 |
| SPM channels: | 2, multiplexing |
| Analog outputs (3): | 4 - 20 mA, selective range, no galvanic separation |
| Main relay (1): | 250 Vac, 5 A, 1250 VA |
| Secondary relays (4): | 125 Vac, 1 A, 60 VA, 150 Vdc, 1 A, 30 W |
| Power supply: | 230 Vac, 115 Vac or 15 to 30 Vac/Vdc max. 6 VA |
| Power consumption: | max. 6 VA |
| Temperature range: | 0° to 50° C (32° to 122° F) |
| Casing: | Polycarbonate/PVC, IP65 |
| Display screen: | LCD, 4 x 16 characters, back-lighted |
| Status display: | Green, yellow, red LED |
| Dimensions: | 200 x 144 x 77 mm |
| Weight: | 1140 grams |

Vibration channel (VIB)

| | |
|-------------------------|------------------------------------------------------------------|
| Measuring range: | 0.5 to 49.9 mm/s RMS (0 to 1.9 inch/s RMS) |
| Resolution: | 0.1 mm/s (0.01 inch/s) |
| Frequency, lower limit: | 3, 10, or 100 Hz |
| Frequency, upper limit: | 1000 or 2000 Hz |
| Measuring time: | Programmable 1 to 15 s |
| Alarm limits: | 2, programmable |
| Alarm delay: | 0 to 600 seconds, steps of 2 s |
| Fault indication: | Transducer line test for short and open circuit |
| Transducer type: | TRV-18/19 or TRV-20/21 with isolated installation foot TRX-18/19 |

Bearing channel (SPM)

| | |
|-------------------|---------------------------------------------------|
| SPM method: | dBm/dBc or LR/HR, evaluated |
| Measuring range: | 0 to 99 dBsv |
| Resolution: | 1 dBsv |
| Alarm limits: | 2, programmable |
| Alarm delay: | 0 to 600 seconds, steps of 2 s |
| Fault indication: | Transducer line test of measuring circuit quality |
| Transducer type: | SPM 40000 or 42000 |

