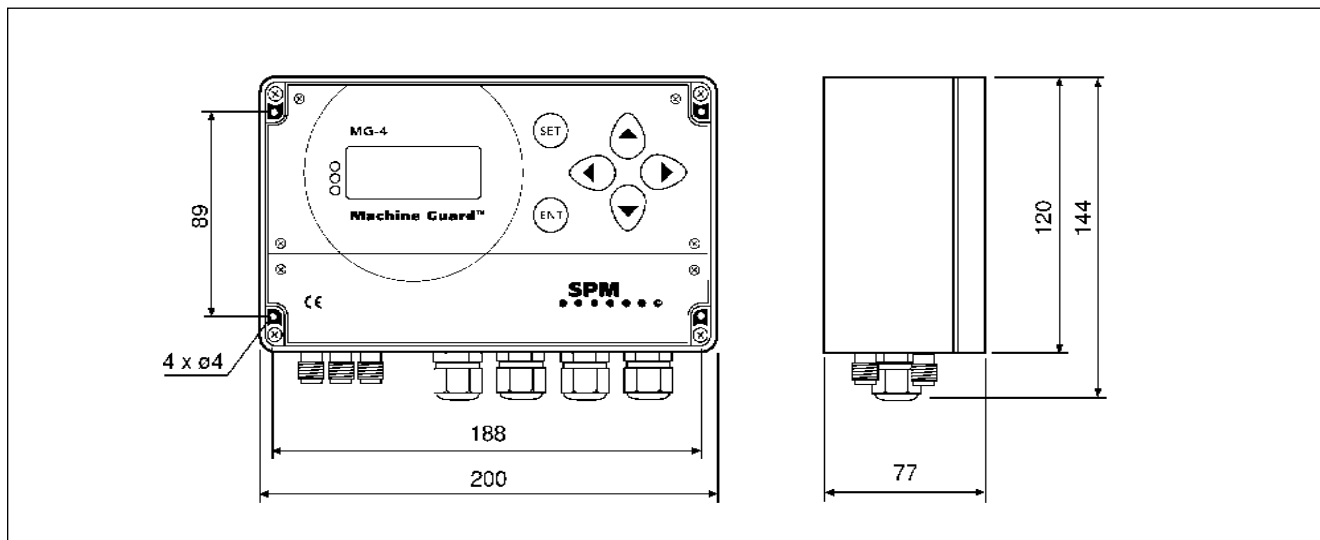


Machine Guard MG4-12



Machine Guard 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.

Machine Guard 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
Power consumption:	max. 6 VA
Temperature range:	0° to 50° C (32° to 122° F)
Casing:	Polycarbonate/PVC, IP65
Input connectors:	Silver plated brass, 10-15 µ
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:	SLD122 or TRV-18/19/20/21 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

