

Guard your assets - it pays!



Select exactly what you need

Safeguard your plant stoppers and other essential machines. The MG-4 is a stand-alone continuous monitoring unit, ideal for automatic surveillance of unmanned machines.

MG-04 uses:

- True RMS vibration severity measurement on one or two channels.
- True SPM bearing condition evaluation on two additional channels.

More than 90% of all mechanical faults are announced by increasing vibration or shock pulse levels. Planned maintenance and condition triggered emergency shutdown prevent accidents and production stops.

A cost-efficient package of options

Breakdown costs are always too high. MG-4 is insurance with a payback guarantee. Choose the channel combination that gives maximum safety at lowest cost. Measuring ranges, two-step alarm levels, alarm delays, and relay combinations can be programmed. Condition evaluation is automatic. There are no operating costs: install and feel safe.

Back-lighted
LCD display

Transducer
line test

Ex proof
accessories

Measuring results,
4 x 16 characters

Polycarbonate
casing, IP65
Easy mounting

Status display,
2 alarm levels

Easy
programming:
Measuring range
Alarm levels
Alarm delays

Automatic
condition
evaluation

30 years
condition monitoring
experience



Signal input, TNC,
2 channels VIB,
2 channels SPM

Analog outputs 4-20 mA,
alt. RS-485 port for LAN network

Relay outputs
1 x 250 V, 4 x 125 V

Power supply 230 V AC,
115 V AC, 15-30 V AC/ DC

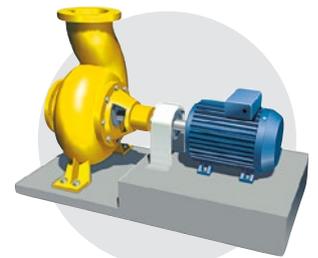
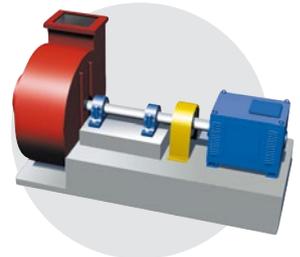
Dependable condition monitoring

Good asset management requires preventive maintenance based on condition information.

MG-4 uses the two most reliable methods for automatic machine fault detection. It provides

- shock pulse for early warning in case of poor bearing lubrication, stressed bearings, or the onset of damage
- maintenance alert in case of a significant increase in vibration severity.

Early condition alert is the best money saver - ample planning time for maintenance, no production stop, no damage. The analog outputs can send on-line condition information to your PLC. As an alternative the MG-4 can be equipped with a RS-485 port for sending complete data on LAN (Modbus network using RTU).



For better economy

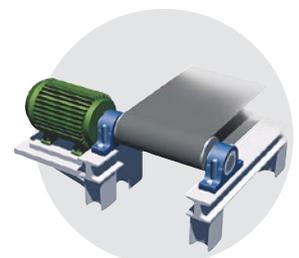
Breakdowns happen, but the big bang can be avoided. A shut down circuit, triggered by a sudden heavy increase of the vibration level, prevents

- danger to personnel and other hazards
- secondary damage to machines and surroundings
- unnecessary production stops and quality losses.

Good condition monitoring equipment has a very short payback time. Consider the downtime cost for your last machine failure, then make a sound investment.

Sound technique, fit for anything

MG-4 is easy to install on all types of rotating machinery. A wide range of transducers and installation accessories has proved reliable in many harsh industrial environments.



Specs and options – pick your own monitoring kit!

Technical specifications

General

| | |
|--------------------|---|
| Channels: | max. 2 VIB + 2 SPM |
| Outputs: | 4 - 20 mA analog signals, programmable ranges alt. RS-485 port for complete data via LAN network, Modbus RTU |
| Relays: | 250 V (1) 125 V (max. 4) |
| Power supply: | 230 V AC, 115 V AC, 15 – 30 V AC/V DC |
| Temperature range: | 0° to 50° C |
| 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: | 1150 grams |

Vibration channel (VIB)

| | |
|------------------|---|
| Measuring range: | 0.5 to 49.9 mm/s RMS 0.00 to 1.90 inch/s RMS |
| Resolution: | 0.1 mm/s 0.01 inch/s |
| Frequency range: | 3 - 1000, 3 - 2000 10 - 1000, 10 - 2000 or 100 - 1000 Hz |
| Alarm limits: | 2, programmable |
| Alarm delay: | 0 to 600 seconds |
| Transducer type: | IEPE (ICP®), type SLD or TRV-18/19/29/21 |

Bearing channel (SPM)

| | |
|-------------------------|---|
| SPM monitoring methods: | dBm/dBc or LR/HR with SPM evaluation |
| Measuring range: | 0 to 99 dBsv |
| Resolution: | 1 dBsv |
| Alarm limits: | 2, programmable |
| Alarm delay: | 0 to 600 seconds |
| System security: | transducer line test |
| Transducer type: | SPM 40000 or 42000 |



Sensitive instruments in their natural environment.
Tough, but they are made to last.

Part numbers

Standard configurations

| | |
|---------|--------------------------------|
| MG4-1A | 1 channel VIB |
| MG4-2A | 2 channels VIB |
| MG4-12A | 1 channel VIB, 2 channels SPM |
| MG4-22A | 2 channels VIB, 2 channels SPM |

Transducers

| | |
|-------------|---|
| SLD121B-M8 | Vibration transducer, 2-pin, 2-1000 Hz, M8 |
| SLD121B-UNF | Vibration transducer, 2-pin, 2-1000 Hz, UNF 1/4"-28 |
| SLD122B-M8 | Vibration transducer, 2-pin, 2-5000 Hz, M8 |
| SLD122B-UNF | Vibration transducer, 2-pin, 2-5000 Hz, UNF 1/4"-28 |
| TRV-18 | Vibration transducer, TNC, 3-1000 Hz, M8 |
| TRV-19 | Vibration transducer, TNC, 3-1000 Hz, UNF 1/4"-28 |
| TRV-20 | Vibration transducer, TNC, 2-5000 Hz, M8 |
| TRV-21 | Vibration transducer, TNC, 2-5000 Hz, UNF 1/4"-28 |
| TRX-18 | Isolated installation foot for TRV-18 and TRV-20 |
| TRX-19 | Isolated installation foot for TRV-19 and TRV-21 |
| 40000 | SPM transducer for cable length below 4 m |
| 42000 | SPM transducer for cable length 4–100 m |

Always within reach

Reliable equipment backed up by world wide service: SPM has experience from most branches of industry and is represented in more than 50 countries.



Ex proof accessories available.



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