

Monitoring Machine Condition

VibroGard-R 1500



Advantages

- Data memory integrated
- Setup via PC software
- Data acquisition software for trend analysis
- Excellent price/ performance ratio
- Compact design
- CAN-Bus or Ethernet-interface as option
- Connection to eddy-current displacement sensors as option

Applications

- Condition monitoring of rotating machinery
- Simultaneous monitoring of overall vibration and rolling bearing condition
- Monitoring of process units (i.e. pressure, temperature)
- Machine monitoring under different operating conditions

Overall vibration v_{RMS} and roller bearing condition gSE can be measured and monitored using up to three accelerometers. Other process units can be monitored by attaching the appropriate sensor with an output signal of 0 - 10 VDC to the sensor port or using a temperature sensor of the type PT 1000 or KTY 84.

The limit values to be monitored are set via PC software for the respective operating condition.

If a limit value is exceeded an alarm is activated by switching an optocoupler output. The outputs can be easily connected to a controller (e.g. for alarm or shut-off purposes).

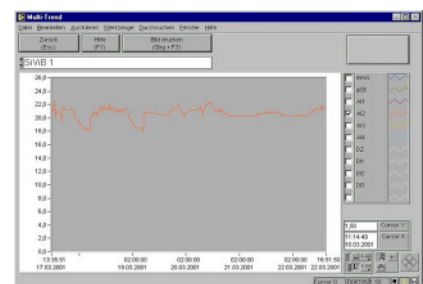
All measurement values can be stored cyclically at an adjustable interval time or automatically when alarm limits are exceeded.

The transfer of the data to a PC for evaluation can be performed using the serial port or a memory card (Smartcard).

Additional software can be used to chart trends to visually plot the deterioration of the machine condition. For an in-depth analysis of the failure cause, a frequency spectrum of the vibration signal can be calculated and plotted.

Description

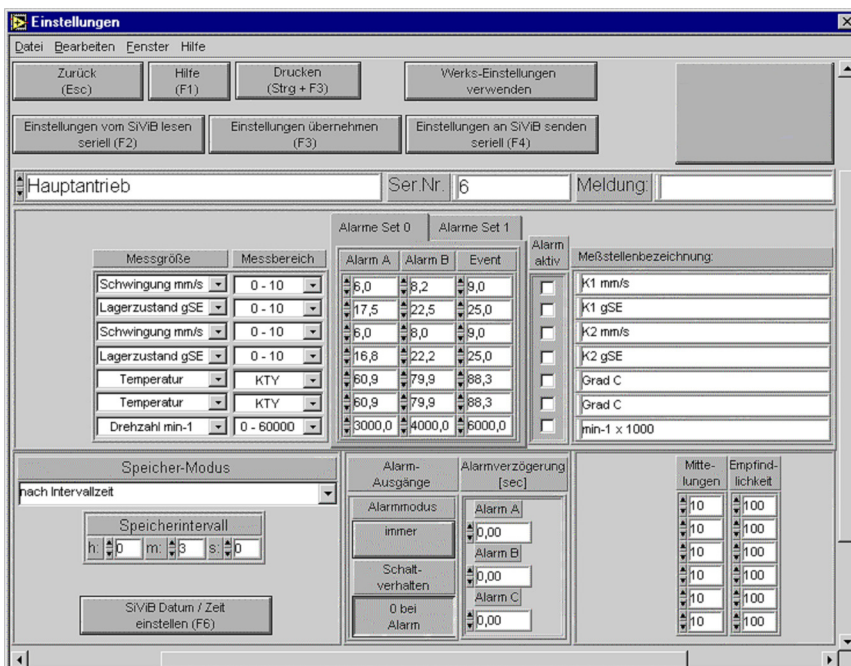
The compact vibration and rolling bearing monitor VibroGard-R is used for economical monitoring for example of electric motors, fans or pumps. It can handle different operating conditions, such as machining and idling of a machine tool.



Trend analysis

Technical data

VibroGard-R for accelerometers 10 / 100 mV/g	1511 / 1501	1512 / 1502	1513/ 1503
Speed range	0 - 60,000 RPM (1 pulse per revolution)		
Measuring ranges			
Vibrations	0.1 - 10/20/40/80 (mm/sec) _{RMS}		
Rolling bearing condition	0.1 - 10/20/40/80 gSE		
Process values	0 - 10 VDC		
Temperature	0 - 200 deg Cel.		
Inputs (terminal strip)			
Accelerometer with ICP interface	1	2	3
Temperature probe PT 1000, KTY 84 or process unit 0 - 10 VDC	4	2	0
Machine operating condition	1	1	1
Speed	1	1	1
Trigger signal	1	1	1
Switching state (24 VDC)	3	3	3
Outputs (terminal strip)			
Alarm (via optocoupler)	3	3	3
Sensor fault	1	1	1
Terminal strip	30 pins		
Power supply	24 VDC, approx. 170 mA		
Interface	RS 232C, D-Sub 9-pin		
Status display	via LEDs		
Housing			
Protection class	IP 20		
Dimensions	100 mm x 75 mm x 110 mm		
Mounting	Top-hat (DIN) rail (35 mm), control panel		



Scope of supply

- VibroGard-R
- Memory card
- Null modem cable
- Configuration software
- Operating instructions

Options

- Setting / data acquisition software
- Additional memory card
- Card reader
- CAN-Bus interface
- Ethernet interface
- Analogue outputs

All information without obligation, subject to change without notice!

Configuration via PC software