

## Measuring Vibrations, Speed, Temperature and Belt Tension

### Machine Control MC 1100



#### Advantages

- Capturing all important measuring values with one instrument
- Integrated speed sensor
- Portable and ready-to-operate
- Easy operation
- Universal application
- Excellent cost / performance ratio

#### Applications

- Checking machine vibrations
- Evaluation of the condition of rolling bearings
- Checking rotational speed
- Measuring temperature (Option)
- Check of belt tension (Option)
- Identification of critical operational areas
- Early detection of failures

Alternatively the vibration acceleration can be measured. This value is used for example when estimating human vibrations.

MC 1100 evaluates the vibration values for three selectable frequency ranges. Therefore also machines rotating at slow or very high speeds can be well assessed.

The vibration spectrum of rolling bearings is being analysed by the MC 1100 with the g<sub>SP</sub>-value according to the impact momentum method. Changes of the condition of rolling element bearings become evident by monitoring the g<sub>SP</sub>-value's trend

#### Description

The vibrometer MC 1100 is designed for simple and quick measurement of the vibration velocity  $v_{RMS}$ . This value is used for assessment of the vibration condition of rotating machinery acc. ISO 10816 - 1 to 6.

The functions of the MC 1100 can be extended with the functions „temperature measurement“ and „measuring the belt tension“ by applying the corresponding sensors (Options). MC 1100 then becomes a multifunctional measuring instrument for condition monitoring and machine maintenance.



Simple selection of measuring task

**All information without obligation, subject to change without notice!**



MC 1100 in plastic transport case



MC 1100 in Action

## Technical data

### MC 1100

Measurement range	Vibration velocity Rolling bearing condition Speed Temperature	0 to 999.9 mm/s <sub>eff</sub> bzw. m/s <sup>2</sup> <sub>eff</sub> 0 to 999.9 g <sub>SP</sub> 30 - 200,000 1/min / 0,5 - 3,333 Hz 0 to 200 °C / 32 to 392 °F
Frequency range	Vibration velocity Rolling bearing condition Belt frequency	1-1,000/10-1,000/10-10,000 Hz 5 to 50 kHz 10 to 1,000 Hz
Connections	1 BNC connector 1 5-pin jack 1 low-voltage socket	Vibration sensor Frequency- /Temperature sensor Accumulator charger
	LCD-Display, backlighted	122 x 32 pixel
	Dimensions	80 mm x 160 mm x 40 mm
	Weight	350 g
	NiMH accumulator	3 x 2700 mAh
	Operation time / Charging time	6 hrs. / ca. 2 hrs.
<b>Accelerometer</b>	HMA 1140	100 mV/g

## Scope of supply

- Measuring unit MC 1100
- Accelerometer HMA 1140, cable length 1,5 m
- Probe
- Magnetic base
- Accumulator charger
- Operation manual
- Transport case

## Options

- Measurement of belt tension incl. frequency sensor
- Temperature sensor
- Bag
- Battery-charging box

