

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_{SP}-value according to the impact momentum method. Changes of the condition of rolling element bearings become evident by monitoring the g_{SP}-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 20816.

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	0 to 999.9 mm/s _{eff} bzw. m/s ² _{eff}
	Rolling bearing condition	0 to 999.9 g _{SP}
	Speed	30 - 200,000 1/min / 0,5 - 3,333 Hz
	Temperature	0 to 200 °C / 32 to 392 °F
Frequency range	Vibration velocity	1-1,000/10-1,000/10-10,000 Hz
	Rolling bearing condition	5 to 50 kHz
	Belt frequency	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 measuring unit	Dimensions measuring unit	80 mm x 170 mm x 40 mm
	Dimensions plastic transport case	390 mm x 340 mm x 90 mm
Weight	Weight	350 g
	NiMH accumulator	3 x 2700 mAh
Operation time / Charging time	Operation time / Charging time	6 hrs. / ca. 2 hrs.
	Accelerometer	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

