

Contactless acoustic measurement with repeated accuracy



Features

- Contactless acoustic measurement with repeatable accuracy.
- Large range of measurement from 10 Hz to 600 Hz.
- High level of accuracy.
- OLED monochrome display white dot matrix 128 x 64 pixels
- Suppression of background noise.
- USB charging option for longer operational hours.
- Ergonomic design for the ease of measurement.

Operating instructions

The device is fully electronic and equipped with the latest microprocessor technology for simple measurement with high accuracy. It is suitable for all Belt types, e.g. V-belts, Timing Belts, Banded Belts, or Ribbed Belts, which are in the measuring frequency range between 10 Hz and 600 Hz. The type, color, and condition of the belt have no influence on the measurement result.

Switch on the unit with the On/Off button.

The display now briefly shows the start screen "Welcome". Then the display changes to the standard display with the main menu.

A short signal confirms readiness for measurement. All acoustic impulses are immediately recorded by the sensor.

The measurement should be taken in the middle of the free span length. Hold the sensor head at a distance of min. 1 cm to max. 3 cm from the Belt. A greater distance can falsify the measurement result. Using your hand or a suitable tool, e.g. a spanner or hammer handle, strike the Belt in the middle of the span length.

The sensor now measures the fundamental vibration frequency of the Belt.

As an indication of the measuring process, the ring symbol on the upper left side of the display is shown as a filled circle. ○>●

The measurement result is now shown in the field in the center of the display in Hertz (Hz).

The measurement that appears on the display should be compared to the theoretical (calculated) frequency (Hz). The Belt tension should be adjusted depending on the measurement result.

Technical specifications

Measuring range: 10 Hz to 600 Hz

Measuring accuracy: 10 Hz to 400 Hz: 1%, 400 Hz to 600 Hz: +2%.

Measuring method: Contactless acoustic with background noise suppression

Power supply: integrated lithium polymer battery pack 3.7V/850 mAh (USB charging possible)

Display: OLED display monochrome white dot matrix 128 x 64 pixels, display size 37 x 19.5 mm

Sensor: Acoustic sensor with electronic noise suppression on integrated gooseneck total length approx. 165 mm

Working temperature: 4°C to 60°C

Safety instructions

Before measurement begins, switch off the drive mechanism to ensure that neither the drive shaft nor the driven shaft is caused to rotate unintentionally. The relevant safety instructions should also be observed.