

# TMconnect

## Belt tension measuring device



The correct pre-tension force has a significant influence on the operating behaviour and lifetime of the entire belt drive. It is one of the very few measurement variables that can be set by the operator himself. That's why it is highly recommended to set and check the pre-tension force of the belt with the TMconnect belt tension measuring device.

The TMconnect measuring device allows quick and easy measuring of the belt pre-tension. It is all electronic and equipped with cutting-edge microprocessor technology. This guarantees easy handling and highest measuring accuracy. Measuring is possible for all v-belts, timing-belts and flat belts in the frequency range from 10 to 600 Hz.

Due to the acoustic measurement principle the type, colour and composition of the belts does not influence the measurement results. The principle of forced vibration applies. If a pulse is transmitted to the belt, it vibrates at first with all types of oscillations, while the high frequency oscillations are damping faster than the fundamental oscillation.

The frequency of the fundamental oscillation is directly proportional to the pre-tension force. This means that the higher the frequency, the higher the pre-tension force on the belt.

### Features

- Measuring range from 10 to 600 Hz
- Contactless, acoustic measuring technology with a highly-sensitive sensor for precise tension-measurement of all belt types
- Compact sensor head on a flexible goose-neck for measuring in hard-to-reach areas
- OLED display with easy-to-read symbols. Menu is intuitively structured
- Integrated, rechargeable lithium polymer battery
- Suitable for mobile phones with iOS 12.0 + and Android 6.0 +

#### Contact

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## Benefits

- Modern and functional design
- Ergonomic shape for easy one-handed use
- Device and buttons feel comfortable to the touch
- Additional useful functions available via our own App
- Automatic data transfer via Bluetooth
- Measurement of all belt types possible
- Device is delivered with a practical, shock-protective storage bag
- For high order quantities the device can be provided with your individual company-logo



## Specifications

<b>Article number</b>	09 1831 2209
<b>Measuring range</b>	10 to 600 Hz
<b>Measuring accuracy</b>	10 to 400 Hz $\pm$ 1% 400 to 600 Hz $\pm$ 2%
<b>Measuring method</b>	Contactless, acoustic measuring technology with a highly-sensitive sensor Compact sensor head on a flexible goose-neck 150 mm approx. for measuring in hard-to-reach areas
<b>Power supply</b>	Integrated, rechargeable lithium polymer battery USB-C cable and European plug are included
<b>Display</b>	OLED display 19.5 mm x 37 mm
<b>Dimensions</b>	Ergonomic shape for easy one-handed use
<b>Weight</b>	Approx. 100 g (including battery)

## Reference

The device is calibrated during the final inspection. Usually there is no requirement for any additional calibrations. In case of further mandatory calibrations due to internal guidelines we offer a so called manufacturer's calibration.

Here the device is checked by means of defined measuring points within the measuring range. The results are confirmed in a calibration record.

- The TMconnect measuring device is not approved respectively certified to be used within potentially explosive application areas
- Protect the device against dust and contamination
- Do not drop the device. Shocks of any kind can cause damages
- Do not allow water, solvents or other fluids to come into contact with the device. Also please do not use any volatile solvents for cleaning
- Do not expose the device to high temperatures or direct sunlight (for example storage in a car)