

FORCE GAUGE / BELT TENSION METER

PCE-BTM 2000A



- » **Measurement of the oscillation frequency of the drive belt**
- » **Intuitive controls**
- » **Calculation of the tension force**
- » **Display of the belt tension in N**
- » **6 menu languages**
- » **Memory for 750 measured values**
- » **Sensor on gooseneck**
- » **Input of belt length and belt mass**

Belt tension meter for fast and accurate measurement of belt tension

The belt tension meter is an optically measuring maintenance tool for determining the belt tension force. This belt tension meter consists of a display device and a sensor head attached on a semi-flexible gooseneck. The advantage of the gooseneck is that the sensor head can be flexibly positioned. Due to the mobility of the gooseneck, the sensor can measure the strand force even in hard to reach places. The belt tension measuring device measures the belt tension (in Newton) and the belt frequency (in Hz) of the belt in the stationary state.

A small impulse on the belt is sufficient to set the belt vibrating. The belt tension meter measures with the sensor the natural frequency of the belt generated in this way and visualizes it on the display. The belt tension meter can directly determine the actual tension (in Newton / Pound Force) of the belt from the belt frequency combined with the optionally entered belt length and belt mass. However, entering this data is not necessarily required in order to carry out the measurements directly with the belt tension measuring device. The measurement units in the device can be switched between N (SI unit) and pound force (US unit).

The reading is always shown as the belt frequency in Hz on the display of the belt tension measuring device. The intuitive graphic menu is visualized on the high-contrast display of the belt tension measuring device in six different languages.

Specification

Frequency	
Measuring range	10 ... 900 Hz
Resolution	0,1 Hz
Accuracy	±(1 % of Rd +4 digits)

General technical data	
Repeat accuracy	±1 Hz
Storage medium	Internal memory
Storage capacity	750 Values
Memory capacity (additional information)	15 folders with 50 measuring points each
Sensor length	16 cm
Belt length	9,999 m
Menu language	English, Spanish, German, French, Italian, Dutch
Protection class (device)	IP40
Power supply	batteries
(Rechargeable) battery	3 x 1,5 V AA battery , Alkali-manganese
Capacity	3000 mAh
Performance	4,5 Wh
Operating conditions	0 ... 50 °C , 0 ... 95 % RH
Storage conditions	-20 ... 65 °C , 0 ... 95 % RH
Dimensions (L x W x H)	150 x 80 x 38 mm
Weight	170 g