

BELT TENSION METER

PCE-BTM 1000



- » **Measurement of the belt's oscillation frequency**
- » **Calculation of belt tension based on frequency**
- » **Input of belt length, belt mass, belt width max. 999.9 mm**
- » **Flexible gooseneck sensor for hard-to-reach areas**
- » **Display in Hz or N**
- » **Memory for 20 belt parameters**
- » **Automatic switch-off after 5 minutes**
- » **Acoustic measurement**

The belt tension meter is used to precisely check the tension of belts in machines and systems, thereby ensuring optimum power transmission. This belt tension meter measures the oscillation frequency of the belt and immediately calculates the belt tension, which is displayed directly in newtons. The measuring range is between 10 and 680 Hz, with an accuracy of ± 1 Hz for frequencies below 100 Hz and $\pm 1\%$ for frequencies above 100 Hz, with a total error of less than 5%.

Special features of the device include the flexible gooseneck sensor for hard-to-reach areas and the option to directly enter the belt length, belt mass and belt width (max. 999.9 mm), which makes the calculation of the belt tension particularly precise. The belt tension meter can be switched between displaying the oscillation frequency in Hz and the calculated belt tension in N. It is powered by 3 \times AA batteries, making it flexible to use.

This belt tension meter is primarily used in the maintenance of conveyor systems, mechanical engineering, the automotive industry and wherever belts need to be tensioned precisely to ensure the performance, safety and service life of the equipment.

Specification

Frequency

Measurement range up to 10 ... 100 Hz

Resolution 0,1 Hz

Accuracy ± 1 Hz

Frequency

Measurement range up to 100 ... 680 Hz

Resolution 0,1 Hz

Accuracy ± 1 %

General technical data

Units Hz, N

Display type LCD

Display size 2,8 Inch

Storage medium Internal memory

Storage capacity 20 Parameter

Automatic power-off 5 min

Dimensions Probe: L 115 mm x \varnothing 13 mm

Belt length 9999 mm

Belt width 999,9 mm/R

Belt mass 999,9 g/m

Menu language English, English (GB)

Protection class (device) IP52

(Rechargeable) battery 3 x 1,5 V AA battery , Alkali-manganese

Capacity 2970 mAh

Operating conditions 10 ... 50 °C , 0 ... 95 % RH

Storage conditions -5 ... 70 °C , 0 ... 95 % RH

Dimensions (L x W x H) 165 x 85 x 32 mm

Weight 230 g