

Setting the correct pre-tension force

Clavis and SM4 belt tension gauges – simple, practical and efficient

Clavis and SM4 belt tension gauges allow you to measure the resonant frequency of a vibrating belt span. This resonant frequency directly depends on the belt tension. When starting to use or servicing a drive, these gauges are indispensable when it comes to properly adjusting the pre-tension force. A correct pre-tension force minimizes the load on the bearings, optimizes the running of the belt and, thus, extends the life of the drive. Moreover, it reduces the noise level and balances non-parallelism of wide polyurethane timing belts.



Clavis uses microphones to acoustically measure the frequency of the vibrating belt.

- Measuring ranges: 30 Hz ... 600 Hz (standard) and 10 Hz ... 300 Hz
- Precision: +/- 1 %
- For all polyurethane drive belt models with different tension members (e. g. steel, aramid, glass-fibre)
- Broad portfolio of replaceable sensor heads
- Integrated calibration equipment
- Battery-powered
- Steel tuning fork for fast frequency sampling included
- Ships with a calibration certificate and a case



Span tension gauge SM4 uses a sensor to measure the frequency of the vibrating belt.

- Measuring range: 7 Hz ... 350 Hz
- Precision: +/- 5 %
- For all polyurethane drive belt models with different tension members (e. g. steel, aramid, glass-fibre)
- Large display
- Weighs just 110 g
- Belt clip
- Battery-powered
- Ships with a transport case and protective sleeve