

Product information

Optical devices with tailstock Mar4D PLQ 3200-T2

Product features

• Speed:

- Axis movements with a unique speed of up to 200 mm/s
- Very fast and high-resolution matrix camera with a large field of view of 15x10 mm (WxH)
- Joint evaluation of all collected measurement data via MarWin

• Productivity:

- Many different measuring functions combined in one device
- Flexible workpieces with up to D=210 mm, L=450 mm and 50 kg measured directly in production next to the production machines
- Increased measuring capacities and reduced waiting time

• Precision:

- Compensation of eccentrics of several millimeters to 1 µm in less than 30 seconds
- Integrated environmental controls, such as active temperature compensation of the device, ensure consistent measurement quality and significantly reduce waste
- The motorized tailstock with clamping force monitoring prevents operator influences and increases the reproducibility of the measurement results

• User-friendliness:

- The ergonomic housing and interior design enables convenient and gentle operation for many hours
- Light curtains and interior monitoring protect people and measuring devices
- All devices are "robot-ready" and automation solutions, such as robot loading, can be implemented quickly and directly via our specialized MES department



Item no.: 5553250

Technical data

| | |
|---|---|
| Travel/measuring path X1 axis | 200 mm |
| Pos./Meas. path Z-axis | 450 mm |
| Positioning speed C-axis | 0.2 - 15 1/min |
| Positioning speed X1 axis | 0.5 - 200 mm/s |
| Positioning speed Z-axis | 0.5 - 200 mm/s |
| Workpiece length max. | 450 mm |
| Workpiece diameter max. | 210 mm |
| Table load max. | 50 kg |
| Error limit Length | $MPE \leq (2.4 + l/200) \mu\text{m}; 'l' \text{ in mm}$ |
| Error limit diameter | $MPE \leq (1.3 + d/150) \mu\text{m}; 'd' \text{ in mm}$ |
| Measured value resolution Length | 0.01 - 0.0001 mm |
| Measured value resolution diameter | 0.01 - 0.0001 mm |
| Angular resolution | 0.01 - 0.0001 ° |
| Reference temperature | 20 °C |
| Sensors | optical |
| Optical system | telecentric precision optics, image field approx. 15 x 10 mm (W x H) |
| Camera system | CMOS matrix camera |
| Special equipment | motorized tailstock |
| Measuring computer | AIO PC or industrial AIO PC with UPS (each incl. Microsoft Windows 10 IoT LTSC) |
| Operating temperature | 10 °C to 35 °C |
| Storage and transport temperature | 5 °C to 60 °C |
| Sound pressure level | <75 dB(A) |
| Permissible humidity | max. 70 %; non-condensing |
| Mains voltage | 90 - 240 V |
| Mains frequency | 50/60 Hz |
| Power consumption max. | 850 W |
| Transportation options | suitable for air freight |
| Scope of delivery | PC holder and two 60° centering tips (2 - 44 mm) |