



# MEAX PEN

## MEAX PEN CHECKS RUN-OUT AND BACKLASH

Meax Pen is a battery-powered measuring probe that connects wirelessly via Bluetooth to a mobile device using an App. MEAX Pen can be used for measurements like the run-out of machine spindles, back-lash in machine guideways, repeatability in fixtures or machine movements. The wireless transmission enables the sensor to be mounted in the machine without compromising the safety aspects for the operator with the machine doors closed.

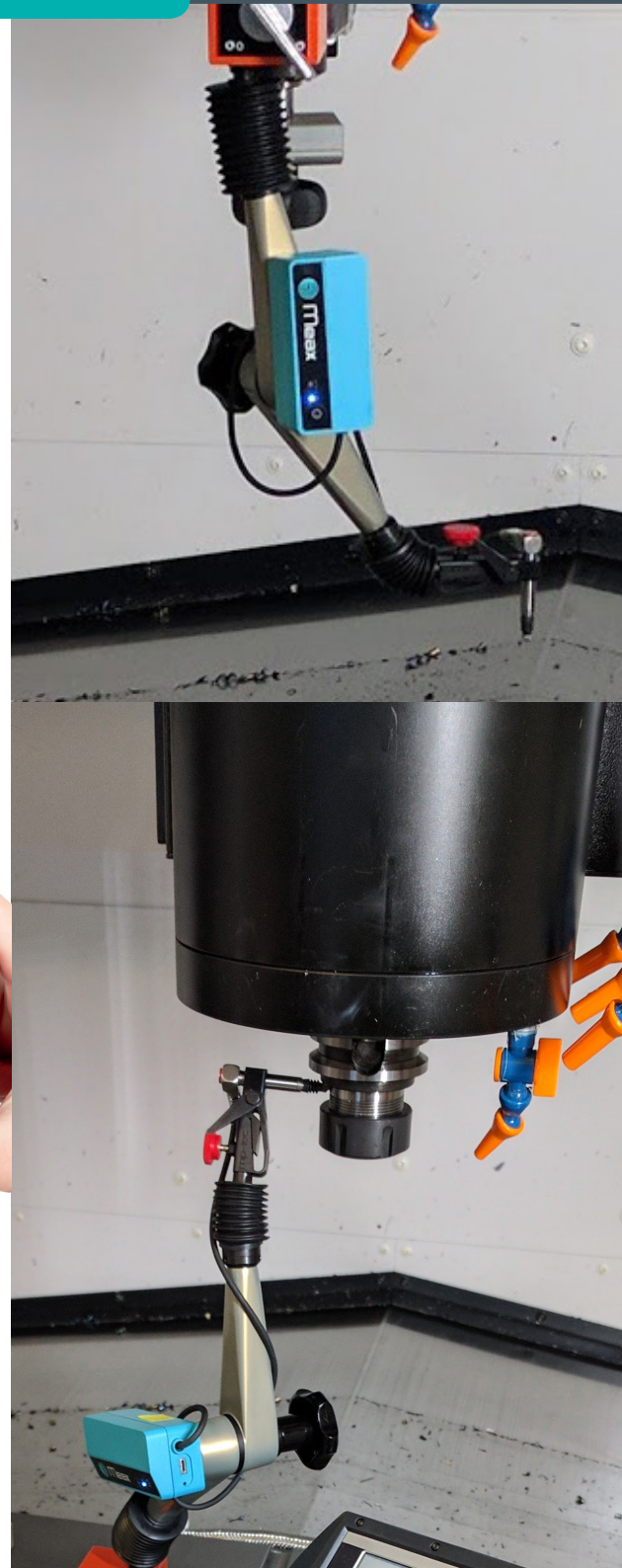


- **Bluetooth** (perform measurements with machine doors closed.)
- **High accuracy** (within 0.001 mm)
- **Remote Display**
- **Documentation**
- **App based**



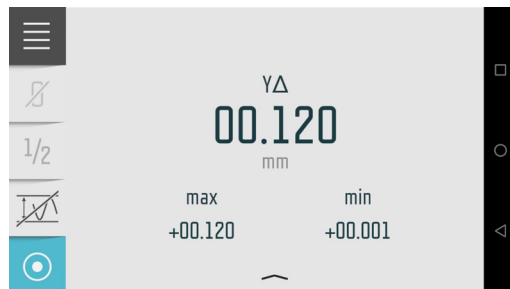
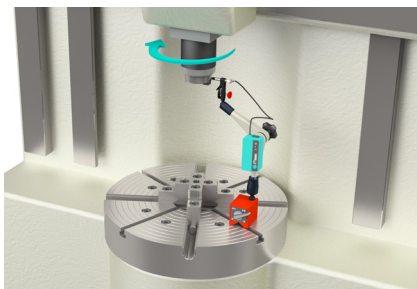
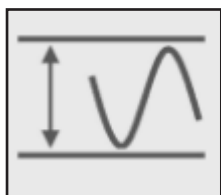
### Measurement range with high accuracy

The measuring sensor is a LVDT sensor with  $\pm 1$  mm or  $\pm 2.5$  mm measurement range with high accuracy (within 0.001 mm). The measuring sensor and battery assembly are enclosed and have a protection class of IP65 which will withstand coolant and oil. The built-in battery is charged using a USB micro connector and has an operating time of 11 hours. The enclosure for the battery box contains built-in magnets that allow the device to be easily attached to a measuring stand or directly on the machine stand.



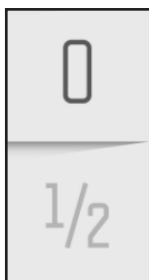
## Max-Min

Max-Min function used to measure run-out in machine spindles. The Meax Pen sensor is mounted in the preferred measurement direction and measurement. Measurements are compiled over an adjustable measurement time and the results are displayed as a difference between the maximum and minimum values.



## Live Display for MEAX Pen

Live Display for Meax Pen used to record measurement values from Meax Pen sensors. The function displays the values from the probe as real time values but can also record measurement values and present a fixed value for a measurement point. The program allows you to zero and halve the displayed measurement value. You can also record measurement values manually or register and save file.



## MEAX Pen is available in two sizes



- P100** Measuring range:  $\pm 1\text{mm}$   
Length: 60 mm (2.36")
- P250** Measuring range:  $\pm 2,5\text{mm}$   
Length: 85 mm (3.34")

## Technical specification

|                             |                                                                               |
|-----------------------------|-------------------------------------------------------------------------------|
| Casing, material:           | Polypropylene                                                                 |
| Operating temperature:      | 0 to 40°C (32 to 104 °F)                                                      |
| Weight:                     | P100 135 g (4.76 oz) P250 142 g (5,01 oz)                                     |
| Battery unit dimensions:    | 44 mm x 91 mm x 33 mm<br>(1.7" x 3.6" x 1.3")                                 |
| Measuring pen dimensions:   | P100 Length: 60 mm (2.36") P250 Length: 85 mm. (3.34")                        |
| Diameter:                   | 8 mm (0,31")                                                                  |
| Cable length:               | 400 mm (15,7")                                                                |
| Enclosure protection class: | IP 65 (dust proof and protected again                                         |
| Measuring pressure:         | 0,70 N $\pm$ 25%                                                              |
| Repeatability:              | 0,15 $\mu\text{m}$                                                            |
| Measurement accuracy:       | P100 $\pm$ Max (1+  2*K ;  7*K ) P250 $\pm$ MAX(5+ 2*K ;  7*K ) $\mu\text{m}$ |
| Diameter, measuring tip:    | $\varnothing$ 3 mm (0,12")                                                    |
| Thermal operation:          | 0,25 $\mu\text{m}/^{\circ}\text{C}$                                           |
| Wireless communication:     | Bluetooth transmitter/receiver Class I                                        |
| Communication range:        | 10 m (33 ft)                                                                  |
| Operating time:             | 11 hours of continuous operation                                              |
| Battery charging time:      | 8 hours (at room temperature with system OFF)                                 |
| Battery capacity:           | 10,4 Wh                                                                       |



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