

# Product information

## High-precision, fully automatic reference form measuring device MarForm MarForm MFU 200

### Product features

- Optimized for use in the measuring room and the achievement of reference quality
- High reproducibility of the measurement results through dynamic real-time compensation, which detects and corrects even the smallest deviations in the measurement sequence
- Productivity thanks to high temperature stability over a long period of time – no daily calibration necessary
- Extreme precision due to high-precision rotary axis with Mahr precision guides: roundness deviation of < 20 nm
- Intuitive to use and proven MarWin measurement and evaluation software



Item no.: **5440580**

### Technical data

|   |   |
|---|---|
| <b>Pos./Meas. path X-axis</b>                   | 200 mm  |
| <b>Pos./Meas. path Z-axis</b>                   | 320 mm  |
| <b>Positioning speed C-axis</b>                 | 0.1 - 200 1/min   |
| <b>Positioning speed X axis</b>                 | 0.1 - 100 mm/s  |
| <b>Positioning speed Z-axis</b>                 | 0.1 - 100 mm/s  |
| <b>Workpiece diameter max.</b>                  | 280 mm  |
| <b>Angular resolution C-axis (interpolated)</b> | 0.0001°   |
| <b>Axial running deviation C-axis</b>           | 0.02 + 0.0002 µm/mm*measuring radius (acc. to DIN EN ISO 1101)  |
| <b>Straightness deviation X-axis</b>            | 0.075 µm/measuring path (according to DIN EN ISO 1101)          |
| <b>Straightness deviation Z-axis</b>            | 0.1 µm/measuring path (according to DIN EN ISO 1101)            |
| <b>Positioning uncertainty X-axis</b>           | 2 µm (according to VDI/DGQ 3441) / 0.5 µm (with probe backlash) |
| <b>Positioning uncertainty Z-axis</b>           | 2 µm (according to VDI/DGQ 3441) / 1 µm (with probe backlash)   |
| <b>Reference temperature</b>                    | 20 °C   |
| <b>Centering and tilting table</b>              | motorized   |
| <b>Table diameter</b>                           | 180 mm  |
| <b>Table load max.</b>                          | 20 kg   |
| <b>Probe system</b>                             | Tactile 1D  |
| <b>Special equipment</b>                        | CNC-Tisch und dynamische Echtzeitkompensation                   |
| <b>Storage and transport temperature</b>        | -10 °C to 50 °C   |
| <b>Sound pressure level</b>                     | < 70 dB(A)  |
| <b>Permissible humidity</b>                     | max. 70 % relative humidity; non-condensing                     |
| <b>Mains voltage</b>                            | 230 V   |
| <b>Mains frequency</b>                          | 50 Hz   |
| <b>Weight basic unit</b>                        | 850 kg  |
| <b>Scope of delivery</b>                        | T7W probe system (incl. probe arm 3 x 60 mm)                    |