

# Product information

## Roughness and Contour Measuring Station MarSurf VD 140

### Product features

#### MarSurf VD Series -

The MarSurf family is complemented:

The easy change between roughness and contour tracing system

Depending on the measuring task, either the BFW roughness probe system for surface roughness or the C 11 contour probe system for contour measurements can be changed by the operator (hot-plug capable). The new system offers the advantages of combining the highly dynamic C 11 contour probe system with the high-precision BFW probe system, which is particularly suitable for fine surfaces.

The new measuring station concept combines speed, reliability and flexibility.

The aim is to increase the profitability of the system for your company.

The measuring stations are operated with the user-friendly MarWin software (MarWin Easy Roughness & Contour or MarWin Professional Roughness & Contour).

### Application

#### Machine building

Bearings, threads, threaded rods, ball screws, shafts, racks

#### Metrology close to production

Contour measurement in a semi-automatic process

#### Automotive industry

Steering, brake system, gearbox, crankshaft, camshaft, cylinder head

#### Medicine

Contour measurement for hip and knee endoprostheses, medical screws, dental implants



Item no.: 6269020

### Technical data

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| <b>Resolution</b>                        | with roughness probe system:<br>Measuring range 1: 7.6 nm<br>Measuring range 2: 0.76 nm<br><br>with contour probe system:<br>max. 6 nm (with 210 mm probe arm)   |
| <b>Start of traversing length (in X)</b> | 0.0  |
| <b>Probe arm length</b>                  | with roughness probe system:<br>45 mm to 135 mm<br><br>with contour probe system:<br>210 mm to 490 mm  |
| <b>Guide deviation</b>                   | with roughness probe system:<br>0.07 $\mu\text{m}$ / 20 mm<br>0.35 $\mu\text{m}$ / 60 mm<br>0.4 $\mu\text{m}$ / 140 mm   |
| <b>Measuring speed</b>                   | 0.02 mm/s to 10 mm/s   |
| <b>End of traversing length (in X)</b>   | 140.0  |
| <b>Positioning speed</b>                 | X: 0.02 mm/s to 200 mm/s<br>Z: 0.02 mm/s to 50 mm/s  |
| <b>Probe</b>                             | Roughness probe system (skidless)<br>Contour probe system  |
| <b>Measuring range mm</b>                | with roughness probe system<br>500 $\mu\text{m}$ ( $\pm 250 \mu\text{m}$ ) for probe arm length 45 mm<br>1500 $\mu\text{m}$ ( $\pm 750 \mu\text{m}$ ) for probe arm length 135 mm<br><br>with contour probe system<br>70 mm with probe arm length 350 mm<br>max. 100 mm with probe arm length 490 mm |
| <b>Traversing lengths</b>                | 0.1 mm to 140 mm   |
| <b>Measuring force (N)</b>               | with roughness probe system:<br>0.7 mN<br><br>4 mN to 30 mN, adjustable via software   |
| <b>Weight</b>                            | 200 KG   |