

Mahr

## CD contour measuring station 140AG11, Type: CD140AG11R



### Order data

Order number	499301 CD140AG11R
GTIN	2050002079823
Item class	40W

### Description

#### Version:

The MarSurf CD 140 A has a touch probe system with a measurement range of up to 70 mm, and the stylus tips can be changed quickly and without the need for any tools – all without recalibration. The entry-level contour measurement technology from Mahr. The unique new MarSurf CD 140 AG 11 contour measuring gauge enables fast and accurate measurements.

#### Manual contour measuring station

The device offers impressive versatility, is easy to operate and can be used directly on site on the workpiece in stationary or mobile applications.

#### Feature:

Resolution: 19 nm

Dimensions in mm: 572x 905x 822 mm

Measuring speed: 0.1 mm/s – 10 mm/s

Positioning speed: X: 0.1 mm/s – 200 mm/s

Probe: Contour measuring system

Measurement range in mm: 70 mm with contact point length 350 mm

Gauging force (N): 4 mN to 30 mN, can be set using software

#### Advantage:

#### Fast measurements and changeovers

- Short measuring times thanks to high positioning and measuring speeds

- **Manual quick adjustment of the feed unit in the Z-axis with fine adjustment for optimum alignment**
- **Change the contact point quickly without tools thanks to magnetic mounting – without the need for re-calibration**
- **Selection of measuring force prevents incorrect measurements**

#### **Flexible and versatile in use**

- **Workpiece mounting plate provides sufficient space, even for large workpieces**
- **Large measurement range of 70 mm for many and varied applications**
- **Maximum handling flexibility thanks to mounting plate with 50 mm hole size**
- **Wide selection of contact points and accessories**

#### **Comprehensive software package**

- **Measurement of double contours, e.g. to determine diameters**
- **Optional roughness measurement as from  $Rz$  2  $\mu\text{m}$  is possible**
- **Simple and intuitive contour measurement and evaluation**
- **Start Quick & Easy programs by reading in DMC codes**

#### **Application:**

The computer-aided measuring station permits comprehensive and quick evaluation of the measurement results:

- **Comprehensive contour measurement functions, fast and simple**
- **Stylus tips can be changed without the need for tools**
- **Traversing velocity in X axis of up to 200 mm/s**
- **Simple creation of programs or individual measurements with MarWin**
- **Automatic evaluation, best contour fit, CAD contour comparison and many more.**
- **Can optionally be expanded with roughness measurement feature ( $Rz > 2 \mu\text{m}$ )**
- **Measurements with double stylus tip are possible**
- **Quick adjustment of the Z axis with easy-to-use handle**
- **Flexible mounting plate with 50 mm hole grid, e.g. for KMG workpiece holders**

#### **Mechanical engineering**

Bearings, threads, threaded rods, recirculating ball screw spindles, shafts, gear racks.

#### **Measurements in production environments**

Contour measurement in a semi-automatic process.

#### **Automobile industry**

Steering, braking system, transmission, crankshaft, camshaft, cylinder head.

#### **Medicine**

Contours of hip and knee end prostheses, contours of medical screws, contours of dental implants.

#### **Supplied with:**

Contour measuring machine, machine base incl. Y adjustment, PG A 36-350-25 contact element, MarWin EasyContour plus mobile software, contour calibration standard with 2 balls (45 mm and 6 mm). Incl. roughness option.

#### **Optional extras:**

PC, probe elements No. 499314 – 499318.

#### **Note:**

Commissioning and training available on request. **Only available in Germany and Austria!**

### Technical description

Contact point length	350 mm
Resolution	19 nm
Depth	572 mm
Measuring speed X	0.1 - 10 mm/s
Guide deviation Z	1 (over 140 mm) $\mu$ m
Width	822 mm
Height	905 mm
Positioning speed in X	1 - 200 mm/s
Measuring range Z	70 mm
Traverse path X	140 mm
Gauging force	4 - 30 mN
Type of product	Contour measurement bench