Precimar. Workshop Length Metrology I <

Mahr

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Precimar. LINEAR 100 with UNITRON 2 CHA

Universal single-axis length measuring instrument with 2-channel display

Description

Internal and external measurements on workpieces < 100 mm

LINEAR 100 is a universal, user-friendly length measuring instrument for rapid, precise internal and external measurements up to 100 mm (4 in), directly in the manufacturing environment. The unit's simple design makes it possible to carry out measurements in no time at all and adapt quickly to new measurement tasks.

The **LINEAR 100** is very flexible when it comes to external measurements, with a direct measuring range of up to 50 mm (2 in) and an application range of up to 100 mm (4 in). For internal measurements, the application range is 15 mm to 100 mm (0.59 in to 4 in), with the additional option of 6 mm to 100 mm (0.24 in to 4 in). It is possible to switch from internal to external measurement at any time without having to recalibrate. The instrument can be used to measure and test lengths, diameters, gears and much more.

LINEAR 100 measuring station consisting of:

Linear 100 universal measuring instrument including 70 x 70 mm object table with electronic display (Unitron) and connection cable. Display software switches between English and German with RS 232 interface

- Measuring anvils for internal measurements from 15 mm to
- 100 mm and external measurements from 0 mm to 100 mm Measuring anvils for external measurements, planar diameter
- of 6.5 mm
- Cardboard packaging

Features

Key features at a glance:

- Damped measuring spindle with 2 pre-selectable measuring forces
- Measuring force remains virtually constant over the entire measuring range
- Integrated measuring system based on the Abbe principle
- Infinitely adjustable measuring tables for precise measuring position adjustment
- Combined internal/external measurement possible without recalibration
- Easily exchangeable anvils which can be tailored to suit the specific measurement task
- Solid cast body to avoid stresses and twisting errors from the outset
- UNITRON 2CHA 2-channel display (with optional stand)
- The UNITRON display has an RS 232 interface, making it easy to transfer measured values to PCs
- Optoface software (optional) allows measured values to be transferred to all Windows programs (e.g. Microsoft Excel)
- Various accessories are available on request



LINEAR 100. Technical Data

Measuring uncertainty	(1+L/100) μm
Direct measuring range	50 mm (2 in)
Application range	
for external measurements:	
for internal measurements:	15 to 100 mm, 6 to 100 mm if required
Support tables	Height adjustable for internal and
	external measurements
Measuring force	Can be set to 1 N or 3 N,
	switchable externally and internally
Order No.	5357001 Linear 100 measuring station

UNITRON 2 CHA. Technical Data

Display:	10-digit, height 13 mm (0.51 in),
	two columns
Resolution (switchable)	0.0001/0.001/0.005 mm (4/40/400 μin)
Interface	V24 (RS232)
Dialog display	16-digit, with password protection

Measuring functions

REL: Adopts values as interim reference

- +/- : Reverses measuring direction
- **CHA**: Changes channels (1+2)

MIN: Records the minimum measured value

MAX: Records the maximum measured value

- **DIF**: Displays the difference between the minimum and maximum values (radial run-out measurement)
- **TOL**: Displays analog tolerance (bar graph)
- PRE: Displays preset value
- **CLR**: Reference point (sets zero point)

Details on metrological accessories are available on request.