Digimar | Height Measuring Instruments

Whether it's simply scribing a workpiece or completing complex measurements in two dimensions – Digimar guarantees a maximum of both flexibility and quality. Our motorized height measuring instruments are simple to operate and provide a high level of measuring convenience and reliability.

Quick Height

Digimar 817 CLM

124.6906

Mahr

Digimar | Height Gages

Digimar 817 CLM Quick Height

Height measuring instrument Digimar 817 CLM with the innovative Quick Mode. Fast measurements with the highest accuracy. Extensive measurement and evaluation options with maximum ease of use.

The Best Solution for Every Measuring Task

QUICK MODE

Fast measurement "by hand"
Extremely simple operation thanks to "Quick Mode", the innovative solution from Mahr (patent pending).

Fig. 1: Move the measuring slide manually in the direction of the measuring object.

Fig. 2: The motor starts the measuring process automatically.

Measuring with Keypad (short keys) at the Base

Ideal for measuring large workpieces with air bearings.

Using the buttons built into the base, the user can easily move the measuring slide to the desired position and start the measurement. This makes it easier to measure large workpieces that cannot be moved or positioned. The user can leave both hands on the measuring device (air bearing key and quick keys) and measure the workpiece completely.

Highest Accuracy and Reliability

- High-precision incremental measuring system with dual-reading head system, insensitive to scale contamination

- Robust stainless steel guide column

- Measuring carriage guided in precision ball bearings

- Temperature compensation via integrated temperature sensor

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Quick Height

Digimar 817 CLM

Ergonomic Operating and Display Element

- Large, backlit display
- Self-explanatory operator guidance via icons

Convenient operation of all measurement functions via function **keys** with clear symbols.
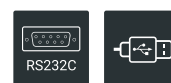
- Can be freely positioned with swivel arm

Universal Measuring Possibilities

- Extensive measuring functions in 1D and 2D

- Dynamic measurement functions with analog display

- Automatic perpendicularity and straightness measurement (with accessories)

- Automated measuring sequences (measuring programs)

- Autofunction for chain measurements and distance measurement

Extensive Evaluation Possibilities

- Data transfer to PC via RS232 or USB (via adapter) e.g. in MS Excel via MarCom software

- Storage of measured values on integrated USB memory (recognized by the PC as a removable drive) or USB flash drive
- Extensive statistical evaluation

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Digimar 817 CLM
Height Measuring Instrument

FEATURES

Functions
- Top or bottom contacting
- Web width or distances between grooves, including center of web or groove
- Bore or shaft diameter, including center of bore or shaft
- Bore reversing point (up or down)
- Shaft reversing point (up or down)
- Calculating distances or symmetry
- Dynamic measuring functions
- Perpendicularity measurement
- Straightness measurement
- Measurement in 2D mode
- Measuring programs
- Statistical evaluation
- Measuring data processing
- Large and clearly defined function keys
- Easy to read background lit graphic LCD display
- Operator guidance with self-explanatory icons / pictograms
- Operator prompts and menus are available in several languages
- Possible to set additional zero points on a work piece
- Additional measurement instruments with Opto RS232 interface can be connected
- Secure the future due to software update potential
- Automatic Stand-by switch mode
- Selectable Auto-off function, without loss of measured values
- Excellent accuracy and reliabilty due to the optical incremental measurement system with the double reader head
- Dynamic probing system enabling high repeatability
- Air bearings system for light and smooth movement
- Precise measuring head on stainless steel guideways
- Motorized measuring carriage simplifies measurement runs
- Probe constant remains after the instrument is switched off
- Integrated rechargeable battery with a long operating time span for power source independent measurement
- Temperature compensation with an integrated temperature sensor
- **Software:** MarCom Professional free download: **www.mahr.com/marcom** (only for Mahr data cables and wireless systems with USB and RS232 interface)
- **Package contains:** height measuring instrument including operating and display unit, carrier 817h1, probe K6/51, setting block 817 eb, instruction manual, power source, USB cable, protection cover, calibration certificate

TECHNICAL DATA

Order no.		4429010	4429011	4429012
Product type			817 CLM	
Measuring range	mm	0 –350	0 –600	0 –1000
Measuring range	inch	0 –14"	0 –24"	0 –40"
Application range from	mm		170	
Application range up to	mm	520	770	1170
Resolution	mm		0.01, 0.005, 0.001, 0.0005, 0.0001	
Resolution	inch		.001", .0005", .0001", .00005", .00001"	
Error limit	µm		(1.8+L/600) L in mm	
Repeatability bores	µm		1	
Repeatability planes	µm		0.5	
Perpendicularity error in µm	µm	5	6	10
Operating time max.	h		10	
Measuring force	N		1.0 +/–0.2 N	
Relative humidity non-condensing	%		65	
Working temperature	°C		20	
Operating temperature	°C		10 –40	
Product weight	kg	25.00	30.00	35.00
Data interface			USB, RS232C, Wireless	
Standard			Factory standard	

ACCESSORIES

Order no.	Product name	Product type
7024634	Data connection cable RS232C (3 m)	
4102333	817 USB Adapter cable RS232-USB (0.2 m)	817 USB
4102233	Transmitter for e-Stick	RS232 e
4102230	Receiver	e-Stick
4221525	Surface plate made from granite, 1000 x 630 mm	107 G
4221573	Stand, 1000 x 630 mm	107 Ug
4221526	Surface plate made from granite, 1200 x 800 mm	107 G
4221574	Stand, 1200 x 800 mm	107 Ug

RS232 e;
RS232 f;
817 f

e-Stick

107 Ug

Digimar 816 CL
Height Measuring Instrument

RS232C

FEATURES

Basic measuring functions
- Top or bottom contacting
- Web width or distances between grooves, including center of web or groove
- Bore or shaft diameter, including center of bore or shaft
- Bore reversing point (up or down)
- Shaft reversing point (up or down)
- Calculating distances or symmetry
- Dynamic measuring functions
- Measuring program
- Measuring data processing

Operating and display unit
- Easy to read backlit graphic LCD
- Clear function keys
- Language-neutral operator guidance with self-explanatory symbols
- Possible to set additional zero points
- Memory can store up to 99 measured values
- Excellent accuracy and reliabilty due to the optical incremental measurement system with the double reader head
- Dynamic probing system enabling high repeatability
- Air bearings system for light and smooth movement
- Precise measuring head on stainless steel guideways
- Motorized measuring carriage simplifies measurement runs
- Temperature compensation with an integrated temperature sensor
- Probe constant remains after the instrument is switched off
- Integrated rechargeable battery with a long operating time span for power source independent measurement
- **Software:** MarCom Professional free download:
  www.mahr.com/marcom
  (only for Mahr data cables and wireless systems with USB and RS232 interface)
- **Package contains:** height measuring instrument incl. operating and display unit, carrier 817h1, probe K6/51, setting block 817 eb, instruction manual, power source, protection cover, calibration certificate

TECHNICAL DATA

Order no.		4429030	4429031
Product type		816 CL	
Measuring range	mm	0 –350	0 – 600
Measuring range	inch	0 –14"	0 –24"
Application range from	mm	170	
Application range up to	mm	520	770
Resolution	mm	0.01, 0.001	
Resolution	inch	.00005", .0001"	
Error limit	μm	(2.8+L/300) L in mm	
Repeatability bores	μm	3	
Repeatability planes	μm	2	
Perpendicularity error in μm	μm	15	20
Operating time max.	h	10	
Measuring force	N	1.0 +/–0.2 N	
Relative humidity non-condensing	%	65	
Working temperature	°C	20	
Operating temperature	°C	10 –40	
Product weight	kg	25.00	30.00
Data interface		Opto RS232C, USB, Wireless	
Standard		Factory standard	

ACCESSORIES

Order no.	Product name	Product type
4346023	2000 USB Data connection cable USB (2 m)	2000 USB
4346020	Data connection cable RS232C (2 m)	2000 r
4102232	Transmitter for e-Stick	2000 e
4102230	Receiver	e-Stick
4221526	Surface plate made from granite, 1200 x 800 mm	107 G
4221574	Stand, 1200 x 800 mm	107 Ug
4221525	Surface plate made from granite, 1000 x 630 mm	107 G
4221573	Stand, 1000 x 630 mm	107 Ug

2000 e   e-Stick   107 Ug