

## DO YOU WANT TO AIM EVEN HIGHER? FOR THIS THERE IS DIGIMAR.



The latest information on DIGIMAR products can be found on our website:

**[www.mahr.com](http://www.mahr.com), WebCode 204**

► | Mahr offers you a complete range of products in order for you to obtain the most reliable solution for all your measuring tasks. Whether it's simply scribing a work piece or complex measurements in two dimensions - Digimar Height Measuring Instruments guarantee a maximum of both flexibility and quality. Our motorized Height Measuring Instruments Digimar 817 CLM and 816 CL exceed all customer requirements; they are simple to operate, all the basic functions can be executed with a single key as well as offering a maximum of ease and accuracy.



Call Rapp Industrial for discounted pricing 724-789-7853 / 888-789-7288. Email us - [sales@rappindustrialsales.com](mailto:sales@rappindustrialsales.com)

## ► | Digimar. Height Measuring Instruments

### Overview

#### Digimar Height Measuring Instruments

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### Motorized Height Measuring Instruments

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High-End Height Measuring Instruments with 2D measurement and a statistics function

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### Height Measuring and Scribing Instrument

#### Digimar 814 SR

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# Digimar. Height Measuring Instruments

## OVERVIEW

	Digimar 817 CLM „Quick Height“		
			
Catalog page	2-4	2-4	2-4
Measuring range mm / <i>inch</i>	0-350 / <b>0-14"</b>	0-600 / <b>0-24"</b>	0-1000 / <b>0-40"</b>
Application range up to mm / <i>inch</i>	520 / <b>20.47"</b>	770 / <b>30.35"</b>	1170 / <b>46.06"</b>
Measuring error* in µm	1.8+L/600 (L in mm)	1.8+L/600 (L in mm)	1.8+L/600 (L in mm)
Quick Mode	●	●	●
1-D 	●	●	●
2-D 	●	●	●
Motorized measuring carriage	●	●	●
Scribing/marketing work pieces 			
Bore diameter 	●	●	●
Max-Min 	●	●	●
Tolerance monitoring 	●	●	●
Perpendicularity measurement 	●	●	●
Straightness measurement 	●	●	●
Angle calculation 	●	●	●
Statistics 	●	●	●
Measuring programs 	40	40	40
Temperature compensation 	●	●	●
Air bearings	●	●	●
Integrated USB memory 	●	●	●
Data interface	RS232	RS232	RS232
USB printer interface 	●	●	●
<b>Order no.</b>	<b>4429010</b>	<b>4429011</b>	<b>4429012</b>

\* At 20°C in conjunction with a base plate in accordance to DIN 876/0 and a standard probe K6/51

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Digimar 816 CL		Digimar M 814 N		Digimar M 814 G		Digimar 814 SR	
							
2-8	2-8	2-16	2-16	2-17	2-17	2-19	2-19
0-350 / <b>0-14"</b>	0-600 / <b>0-24"</b>	0-320 / <b>0-12"</b>	0-620 / <b>0-24"</b>	0-320 / <b>0-12"</b>	0-620 / <b>0-24"</b>	0-350 / <b>0-14"</b>	0-600 / <b>0-24"</b>
520 / <b>20.47"</b>	770 / <b>30.31"</b>	320 / <b>12.6"</b>	620 / <b>24.4"</b>	320 / <b>12.6"</b>	620 / <b>24.4"</b>	350 / <b>14"</b>	600 / <b>24"</b>
2.8+L/300 (L in mm)		20	30	20	30	40	50
•	•	•	•	•	•	•	•
•	•						
		•	•	•	•	•	•
•	•	•	•	•	•		
•	•	•	•	•	•		
		•	•	•	•		
1	1						
•	•						
•	•						
USB / RS232		Opto RS232		Opto RS232		USB / RS232 / Digimatic	
<b>4429030</b>	<b>4429031</b>	<b>4426540</b>	<b>4426542</b>	<b>4426541</b>	<b>4426543</b>	<b>4426100</b>	<b>4426101</b>

## Digimar 817 CLM Quick Height

► | The new Height Measuring Instrument **Digimar 817 CLM** with the innovative Quick Mode. Highly accurate rapid measurements, a wide range of measuring and evaluation options and excellent operator comfort. | ◀

### The best solution for all measuring tasks



#### Fast measurement per hand

Easy to operate due to the „Quick Mode“; an innovative solution from Mahr (patented).



Ill. 1. Move the measuring carriage by hand in the direction of the object to be measured.



Ill. 2. The motor starts, the measurement procedure will automatically be performed.

### Measurement using the keypad (speed keys) on the base



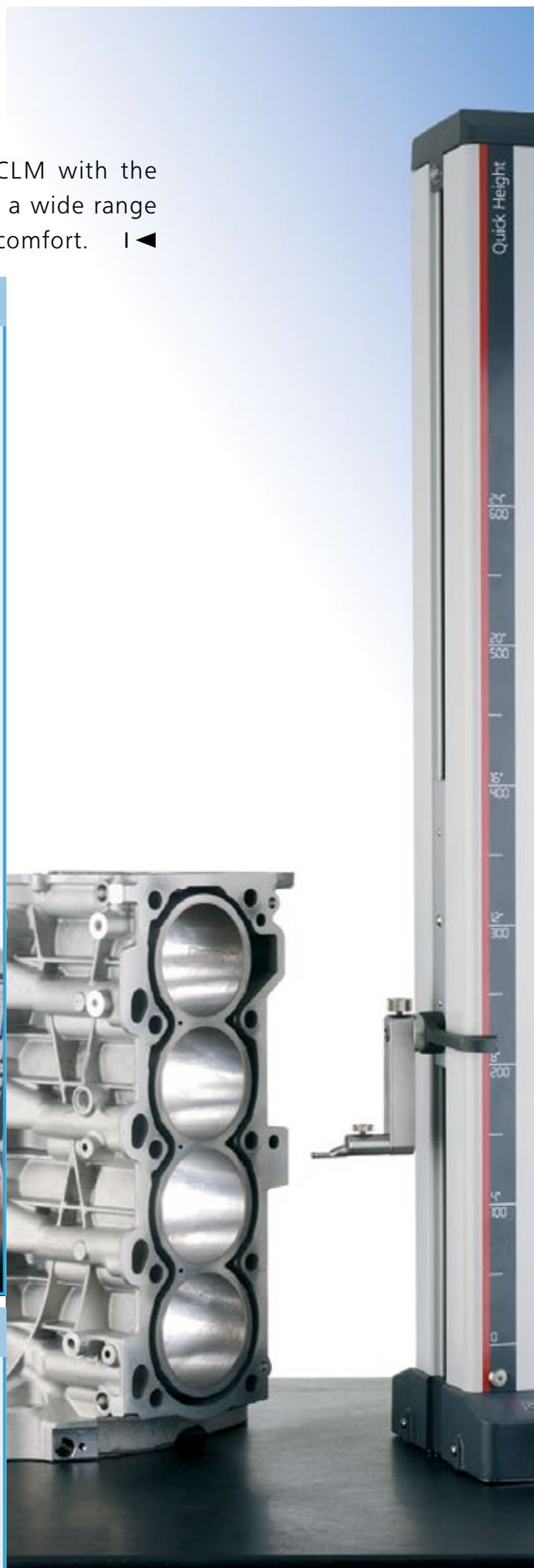
#### Ideal in conjunction with the air bearings for large workpieces.

By using the keys that are integrated into the base, the operator can comfortably move the measuring carriage into the desired position and start a measurement. This eases measurement particularly when measuring large workpieces as these do not have to be moved into position. The operator can keep both hands on the measuring instrument (one hand on the key for the air bearing and other on the high-speed keys) and measure the workpiece in one run.



### Highest accuracy and reliability

- Extremely accurate incremental measuring system with double reader head system, insensitive to the contamination of dirt
- Robust guide column, made from stainless steel
- Measuring head in precision ball bearings guide
- Temperature compensation with an integrated temperature sensor

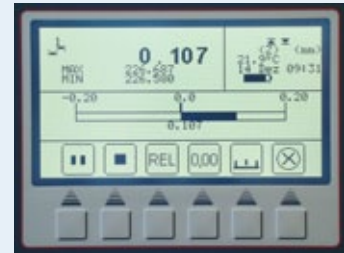


Digimar 817 CLM

## Ergonomic operating and display unit



- The display unit can be positioned freely with the swivel arm



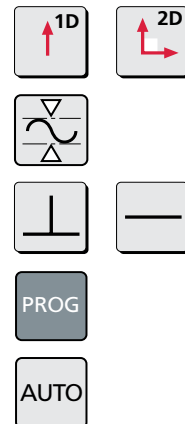
- Large, back-lit display
- Self-explanatory guided operation with icons



**Easy to operate all measurement functions with the function keys** due to the clearly defined symbols.

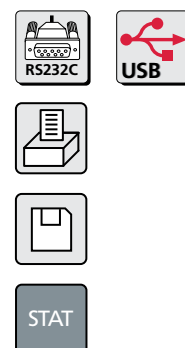
## Universal measurement possibilities

- Wide range of measurement functions in 1D or 2D
- Dynamic measurement functions with the analog display
- Automatic perpendicularity and straightness measurements (in conjunction with accessories)
- Automated measuring procedures (measurement programs)
- Auto function for chain measurements and distance measurements



## Extensive evaluation possibilities

- Transmit data to a PC via RS232 or USB (with an adapter) for example into MS Excel via the MarCom-Software
- Print measured values, statistics, etc. via a USB printer
- Save measured values in the integrated USB memory (will be recognized by a PC as an interchangeable disc drive) or on a USB dongle
- Broad range of statistical evaluations are available



## Height Measuring Instrument Digimar 817 CLM



See our brochure at  
**WebCode 12369**



### Features

#### Measuring system

- Excellent accuracy and reliability 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
- Motorised measuring carriage simplifies measurement runs
- Probe constant remains after the instrument is switched off
- Integrated rechargeable battery with a long operating time span for mains independent measurement
- Temperature compensation with an integrated temperature sensor

#### Operating and display unit

- 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
- RS232 and / or USB data output for further data processing
- Save measured data on the integrated USB memory or on a USB stick
- USB interface to connect a compatible USB printer
- Additional measuring 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
- Supplied with:  
Height Measuring Instrument incl. operating and display unit, Carrier 817h1, Probe K6/51, Setting block 817 eb, Operating instructions, Mains power adapter, USB cable and a Calibration certificate

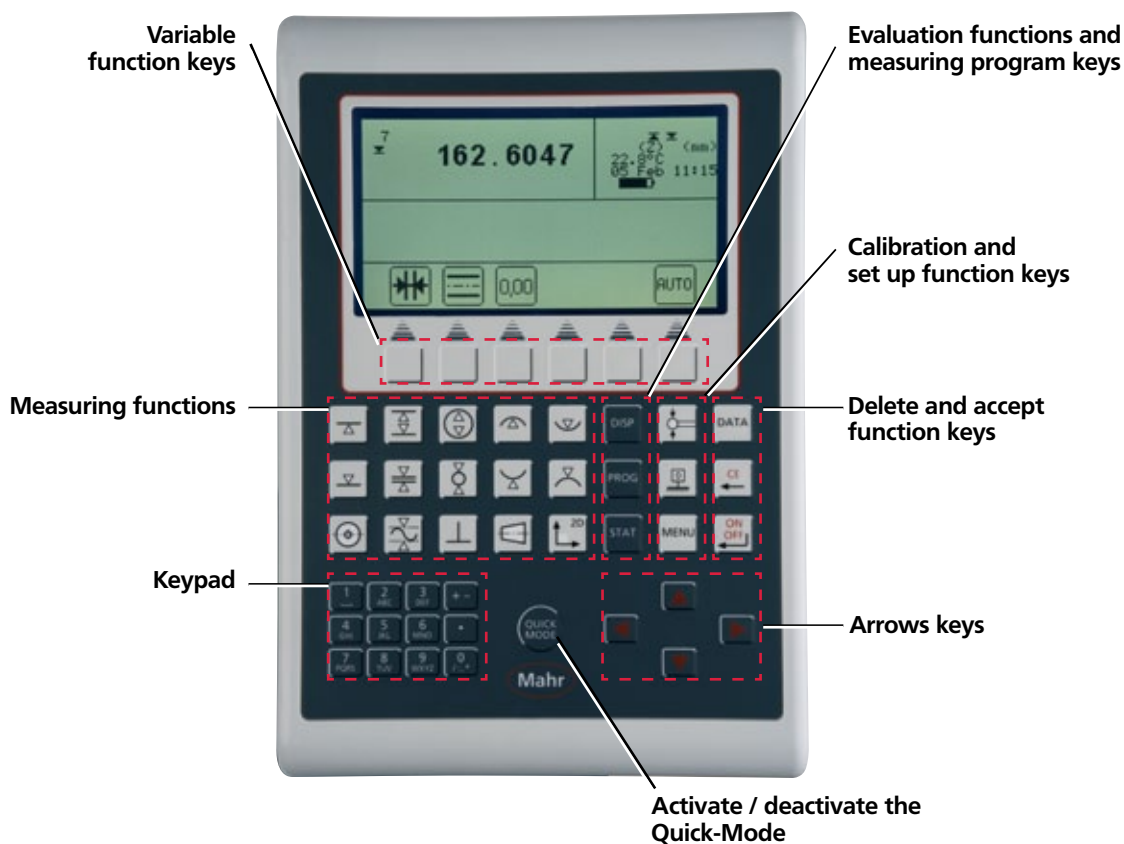
### Technical Data

Measuring range	mm / <i>inch</i>	350 / <b>14"</b>	600 / <b>24"</b>	1000 / <b>40"</b>
Range of application	mm / <i>inch</i>	520 / <b>20.47"</b>	770 / <b>30.31"</b>	1170 / <b>46.06"</b>
Resolution	mm inch	0.01 / 0.005 / 0.001 / 0.0005 / 0.0001 <b>.001" / .0005" / .0001" / .00005" / .00001"</b>		
Measuring error*	µm	(1.8 + L/600), L in mm		
Repeatability	µm	0.5 (plane) 1 (bore)		
Perpendicularity error (elect. adjusted)	µm	frontal ≤5	frontal ≤6	frontal ≤10
Operating time of rechargeable battery	h	up to 12		
Measuring force	N	1.0 ± 0.2		
Permissible relative air humidity	%	65 (non condensed)		
Working temperature	°C / °F	20 ± 1 / 68 ± 1.8		
Operating temperature	°C / °F	10 ... 40 / 50 ... 104		
3-point air cushion, height	µm	ca. 9		
Measuring system		incremental scale with optical reading		
Total height	mm / <i>inch</i>	741 / <b>29.17"</b>	985 / <b>38.78"</b>	1392 / <b>54.80"</b>
Base area (L x W)	mm / <i>inch</i>	240 x 250 / <b>9.45" x 9.84"</b>		
Weight	kg / lbs	25 / 55.15	30 / 66.14	35 / 77.16
<b>Order no.</b>		<b>4429010</b>	<b>4429011</b>	<b>4429012</b>

\* At 20°C in conjunction with a base plate in accordance to DIN 876/0 and a standard probe K6/51

## Height Measuring Instrument Digimar 817 CLM

### Operating and display unit



2D Operating and display unit

### Operating and display unit

#### Measurement

One dimensional (1D)		•
Two dimensional (2D)		•
Measuring programs (automatic run)		40
Perpendicularity / straightness measurement		•
Flatness / parallel deviation (Max, Min)		•
Roundness / run-out deviation (Max-Min)		•
Measuring a taper		•

#### Evaluation

- Statistics		•
- Transmit measured values to a PC via RS232		•
- Print measured values and diagrams on a USB printer		•
- Print out statistical evaluations		•
- Save measured values on the integrated USB memory or on a USB dongle		•

# Digimar 816 CL

► | The new Height Measuring Instrument **Digimar 816 CL**.

You want to obtain highly accurate measurement results without any complicated procedures? With the Digimar 816 CL you have the perfect partner for simple and accurate measurements both in the workshop or on the production line, just as you expect from Mahr! I ◀

## User-friendly operation. . .

. . . due to the

- Clearly displayed measured values
- Self-explanatory operator guidance

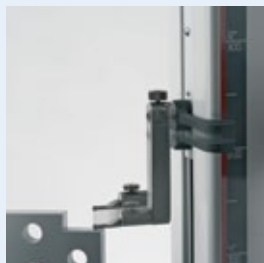


The operating and display unit has a background illuminated display.

## Precise measuring results. . .

. . . on the production line

- Robust design
- Measuring results independent of the user
- Reliable results even outside of the inspection room



Probe contact with the motorized measuring carriage.

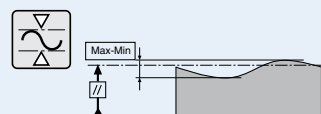


- Temperature compensation with an integrated temperature sensor

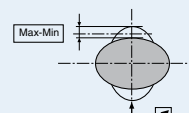
## Versatile

The Height Measuring Instrument Digimar 816 CL offers numerous practical measuring and evaluation functions:

- Convenient standard measuring functions
- Dynamic measuring functions

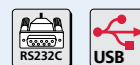


Parallel deviation



Roundness deviation

- Wide range of options for data evaluation



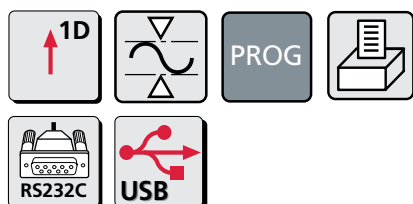
## The measuring program. . .

. . . is essential for repetitive component measurement



- Repetitive measuring procedures can easily be automated
- Simply create a measuring program with the Teach-In-mode
- Complex procedures can be started by just pressing one key

## Height Measuring Instrument Digimar 816 CL



### Features

#### Measuring system

- Excellent accuracy and reliability 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 for mains independent measurement

#### Operating and display unit

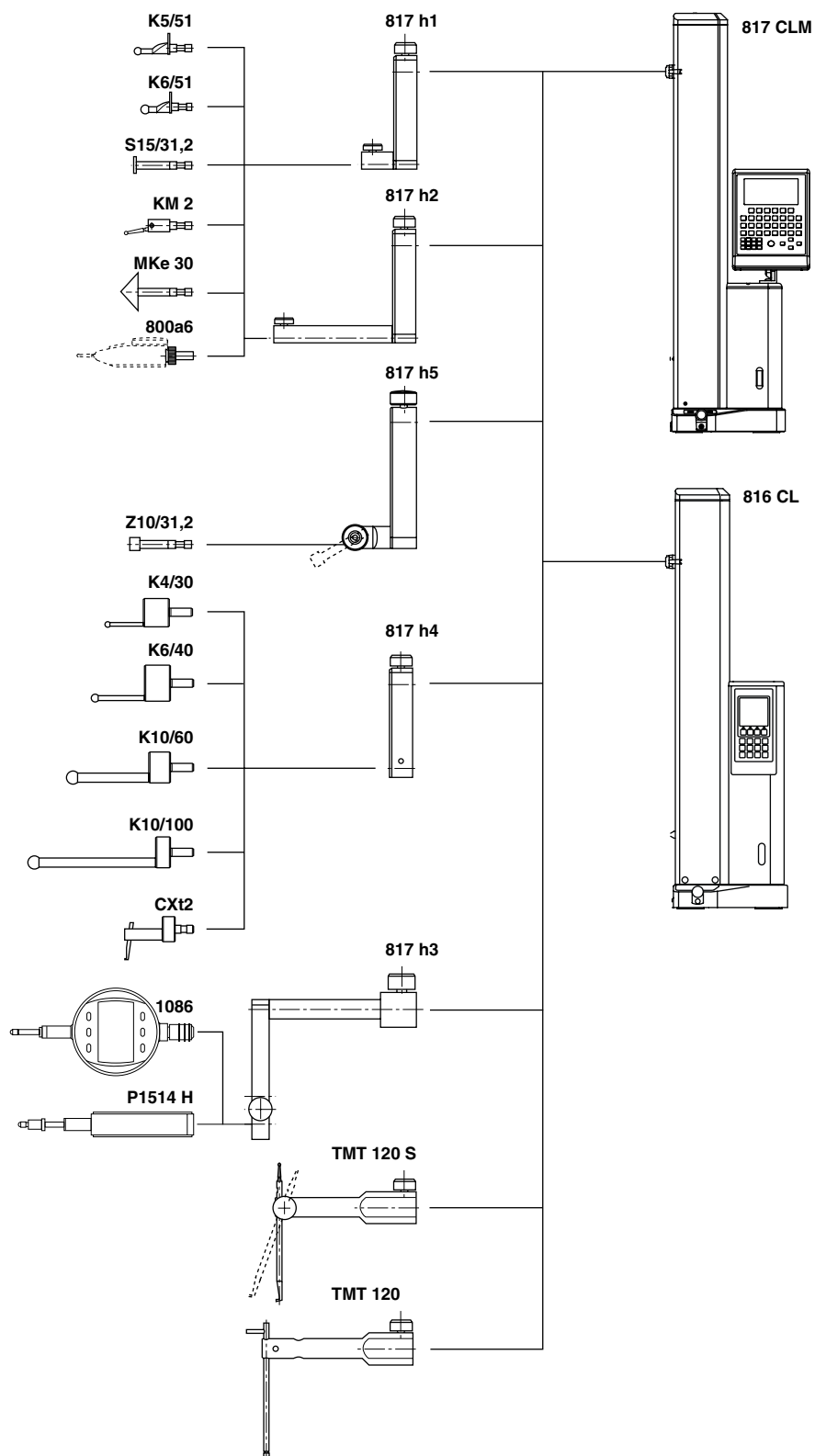
- Easy to read background lit graphic LCD display
- Large and clearly defined function keys
- Operator guidance with self-explanatory icons / pictograms
- Possible to set additional zero points on a work piece
- Memory can store up to 99 measured values
- MarConnect data output, select either:
  - USB
  - OPTO RS232C
- Supplied with:
  - Height Measuring Instrument incl. operating and display unit,
  - Carrier 817h1, Probe K6/51, Setting block 817 eb, Operating instructions, Mains power adapter and a Calibration certificate

### Technical Data

Measuring range	mm / <i>inch</i>	350 / <b>14"</b>	600 / <b>24"</b>
Range of application	mm / <i>inch</i>	540 / <b>21.26"</b>	770 / <b>30.31"</b>
Resolution	mm ( <i>inch</i> )	0.01 / 0.001 ( <b>.0001" / .00005"</b> )	
Measuring error*	μm	(2.8+L/300), L in mm	
Repeatability	μm	2 (plane) 3 (bore)	
Perpendicularity error (mech.)	μm	frontal ≤15	frontal ≤20
Operating time of rechargeable battery	h	up to 14	
Measuring force	N	1.0 ± 0.2	
Permissible relative air humidity	%	65 (non condensed)	
Working temperature	°C / °F	20 ±1 / 68 ±1.8	
Operating temperature	°C / °F	10 ... 40 / 50 ... 104	
3-point air cushion, height	μm	ca. 9	
Measuring system		incremental scale with optical reading	
Total height	mm / <i>inch</i>	741 / <b>29.17"</b>	985 / <b>38.78"</b>
Base area (L x W)	mm / <i>inch</i>	240 x 250 / <b>9.45" x 9.84"</b>	
Weight	kg / lbs	25 / 55.15	30 / 66.14
Order no.		<b>4429030</b>	<b>4429031</b>

\* 20°C with surface base plate according to DIN 876/0 and standard probe K6/51

## Overview of carriers and probes for Digimar 817 CLM / 816 CL



## Height Measuring Instruments Digimar 817 CLM / 816 CL

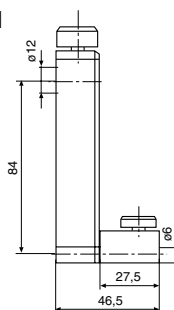
### Accessories

#### Carrier for probes with mount dia. 6 mm

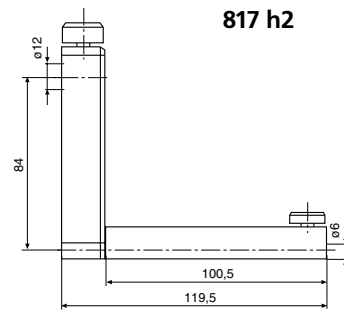
Catalog no.	Description	Shaft length mm	Order no.
<b>817 h1</b>	Carrier for a probe	27.5	<b>4429154*</b>
<b>817 h2</b>	Carrier for a probe	100	<b>4429219</b>
<b>817 h5</b>	Carrier with a joint for a probe	35	<b>4429454</b>

\* Supplied with standard accessories

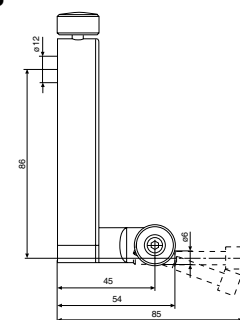
817 h1



817 h2



817 h5



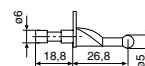
rotatable

#### Probes with mount dia. 6 mm

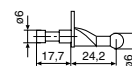
Catalog no.	Description	Order no.
<b>K5/51</b>	Spherical probe	<b>4429158</b>
<b>K6/51</b>	Spherical probe	<b>4429254*</b>
<b>S15/31,2</b>	Disc probe	<b>4429226</b>
<b>Z10/31,2</b>	Cylindrical probe	<b>4429227</b>
<b>MKe 30</b>	Taper probe	<b>4429228</b>
<b>KM 2</b>	Probe M2 incl. styli 800 ts, dia. 2 mm	<b>4429256</b>
<b>800 a6</b>	Mounting shaft 800 a6 for MarTest	<b>4301865</b>

\* Supplied with standard accessories

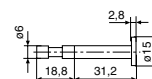
K 5/51



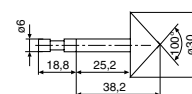
K 6/51



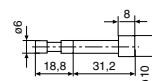
S 15/31,2



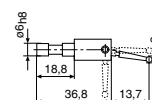
MKe 30



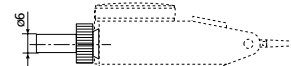
Z 10/31,2



KM 2



800 a6



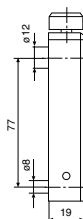
## Height Measuring Instruments Digimar 817 CLM / 816 CL

### Accessories

#### Carrier for probes with mount dia. 8 mm

Catalog no.	Description	Order no.
<b>817 h4</b>	Carrier for probes	<b>4429220</b>

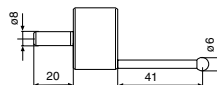
**817 h4**



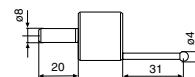
#### Probes with mount dia. 8 mm

Catalog no.	Ball dia. D mm	Order no.
<b>K4/30</b>	4	<b>7023813</b>
<b>K6/40</b>	6	<b>7023816</b>
<b>K10/60</b>	10	<b>7023810</b>
<b>K10/100</b>	10	<b>7023615</b>

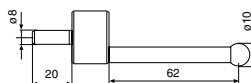
**K 6/40**



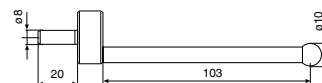
**K 4/30**



**K 10/60**



**K 10/100**

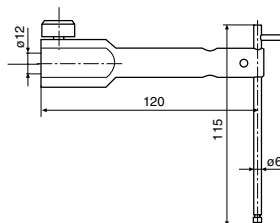


Universal probe CXt2 see page 2-14  
The above Probes requires the Probe Carrier 4429220 in order to be used on either an 817 CLM or 816 CL

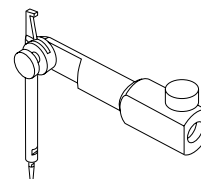
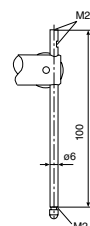
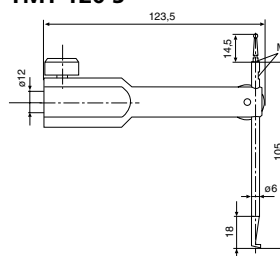
### Depth probes

Catalog no.	Description	Order no.
<b>TMT 120</b>	Depth probe incl. carrier	<b>4429221</b>
<b>TMT 120 S</b>	2 depth probes incl. carrier (rotatable)	<b>4429421</b>

**TMT 120**



**TMT 120 S**



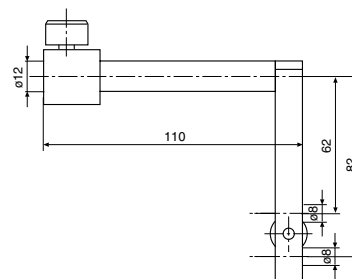
## Height Measuring Instruments Digimar 817 CLM / 816 CL

### Accessories for checking perpendicularity

#### Carrier for probes

Catalog no.	Description	Order no.
<b>817 h3</b>	Carrier for transducers	<b>4429206</b>

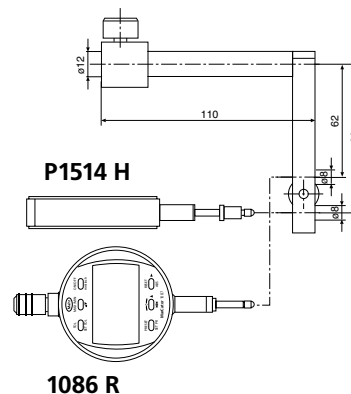
817 h3



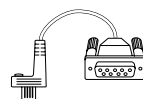
#### Transducers for checking perpendicularity

Catalog no.	Description	Order no.
<b>P1514 H</b>	Incremental probe, 12 mm incl. cable	<b>4426810*</b>
<b>1086 R</b>	Digital indicator, 12.5 mm Resolution 0.001 mm / .00005"	<b>4337620</b>
<b>16 EXr</b>	Data cable for digital indicator 1086 R	<b>4102410*</b>

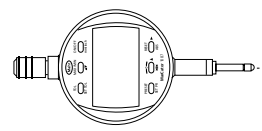
817 h3



\* Only for Digimar 817 CLM



16 EXr



1086 R

### Accessories

#### Setting blocks

Catalog no.	Description	Order no.
<b>817 eb</b>	Setting block	<b>4429168*</b>

817 eb

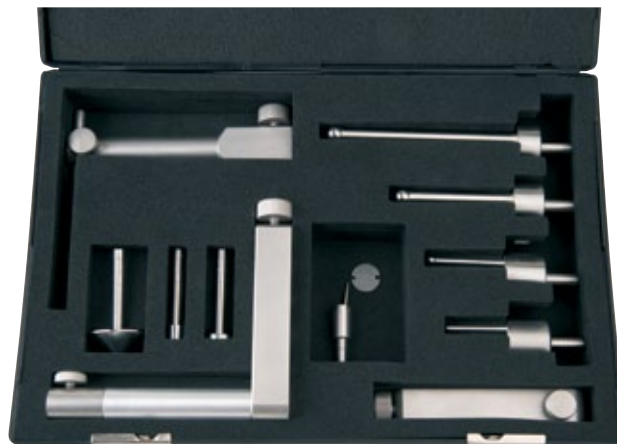


\* Supplied with standard accessories

## Height Measuring Instruments Digimar 817 CLM / 816 CL

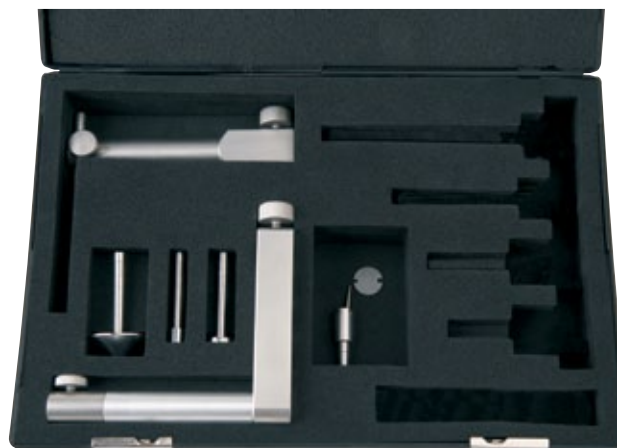
### Accessory sets for probes

<b>Probe set 817 ts1 consists of:</b>		<b>4429019</b>
	Carrying case for accessories	<b>4429020</b>
<b>817 h2</b>	Carrier for probes	<b>4429219</b>
<b>S15/31,2</b>	Disc probe	<b>4429226</b>
<b>Z10/31,2</b>	Cylindrical probe	<b>4429227</b>
<b>MKe 30</b>	Taper probe	<b>4429228</b>
<b>TMT 120</b>	Depth probe incl. carrier	<b>4429221</b>
<b>KM 2</b>	Probe for MarTest styli M2	<b>4429256</b>
<b>817 h4</b>	Carrier for probes	<b>4429220</b>
<b>K4/30</b>	Spherical probe	<b>7023813</b>
<b>K6/40</b>	Spherical probe	<b>7023816</b>
<b>K10/60</b>	Spherical probe	<b>7023810</b>
<b>K10/100</b>	Spherical probe	<b>7023615</b>



817 ts1

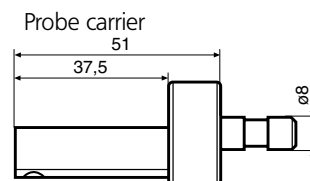
<b>Probe set 817 ts2 consists of:</b>		<b>4429018</b>
	Carrying case for accessories	<b>4429020</b>
<b>817 h2</b>	Carrier for probes	<b>4429219</b>
<b>S15/31,2</b>	Disc probe	<b>4429226</b>
<b>Z10/31,2</b>	Cylindrical probe	<b>4429227</b>
<b>MKe 30</b>	Taper probe	<b>4429228</b>
<b>TMT 120</b>	Depth probe incl. carrier	<b>4429221</b>
<b>KM 2</b>	Probe for MarTest styli M2	<b>4429256</b>



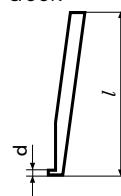
817 ts2

<b>Universal probe set CXt2 consists of:</b>		<b>7034000</b>
Case		<b>3015925</b>
Probe carrier		<b>3015917</b>
Measuring crook	Dimension d = 0.5 mm	Shaft length l = 78 mm <b>3015918</b>
Probe pin /tip:	Dimension dia. d = 1.2 mm	Shaft length l = 75 mm <b>3015919</b>
		l = 15.5 mm
Taper probe	Dimension dia. d = 0–7.5 mm	<b>3015920</b>
Spherical probe	Dimension TC dia. dk = 3 mm	l = 24 mm <b>3022000</b>
Spherical probe	Dimension TC dia. dk = 2 mm	l = 24 mm <b>3022001</b>
Spherical probe	Dimension TC dia. dk = 1 mm	l = 24 mm <b>3022002</b>
Extension M3 – M3	Dimension d = 4 mm	l = 20 mm <b>3015921</b>
Extension M3 – M2.5	Dimension d = 4 mm	l = 20 mm <b>3015888</b>

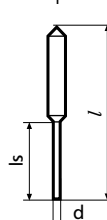
The above Probes requires the Probe Carrier 4429220 in order to be used on either an 817 CLM or 816 CL



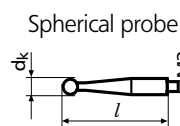
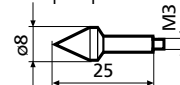
Measuring crook



Pin probe



Taper probe



Extension



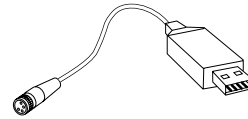
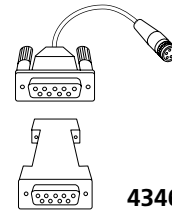
## Height Measuring Instruments Digimar 817 CLM / 816 CL

### Accessories for data transmission for 816 CL

#### Data connection cable

		Order no.
<b>Data connection cable</b> incl. MarCom Standard, USB (2 m)	<b>2000 usb</b>	<b>4346023</b>
<b>Data connection cable</b> Opto RS232C (2 m), with SUB-D jack 9-pin	<b>2000 r</b>	<b>4346020</b>

Accessories for Data Processing see Chapter 11

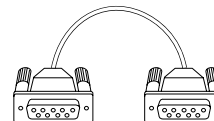
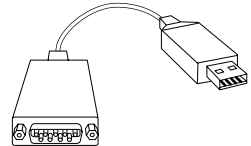
**4346023****4346020**

### Accessories for data transmission for 817 CLM

#### Data connection cable

	Order no.
<b>Data cable</b> 817 CLM to a PC	<b>7024634</b>
<b>Adapter cable</b> RS232-USB for Digimar 817 CLM incl. MarCom Standard	<b>4102333</b>

Accessories for Data Processing see Chapter 11

**7024634****4102333**

### Printer for 817 CLM

#### HP Ink jet printer

- Standard connectivity: USB - compatible with USB 2.0 specifications
- Compatible operating systems: Microsoft® Windows® 98 SE, Me, 2000, XP, 7, 8
- Standard printer languages HP PCL 3



*Similar to illustration*

HP Ink jet printer

Order no.

**4429015**

## Height Measuring and Scribing Instrument Digimar 814 N Standard version



### Applications

Ideal for measuring:

- Heights
- Center distances between bores and surfaces, widths of ledges, plus marking and scribing of workpieces

### Features

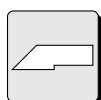
With extra rugged, cast iron base with three-point support. To be used on base plates, machine beds and work piece surfaces. Conversion to a 814 G version is quick and easy at any time.

- High accuracy
- Incremental inductive measuring system
- Measuring head with an ball bush guide
- Resistance free measuring system
- Large, easy to read digital display
- Measuring and display unit are incorporated in the measuring head
- Easy to operate due to the hand crank on the side of the measuring head
- Constant measuring force; acting upwards or downwards as required
- Measuring head can be locked in position, ideal for scribing tasks
- With fine adjustment
- Data transmission via Opto RS232C interface
- Digital Preset
- Zero setting in any position
- MAX, MIN and MAX-MIN functions
- Enter tolerance limit for 1 characteristic
- Switch between mm/inch
- Mains independent due to being battery operated
- Universal application due to a broad range of accessories

### Technical Data

Measuring range	mm / <i>inch</i>	320 / <b>12.6"</b>	620 / <b>24.4"</b>
Resolution	mm ( <i>inch</i> )	0.01 / 0.001 ( <b>.0005" / .00005"</b> )	
Measuring error	µm	20 / <b>.0008"</b>	30 / <b>.0012"</b>
Repeatability	µm		5 / <b>.0002"</b>
Perpendicularity error	µm	frontal 20 (300 mm)	frontal 30 (600 mm)
Operating time of the battery	h		2000
Measuring force	N		ca. 3
Working temperature	°C / °F		20 ±1 / 68 ±1.8
Operating temperature	°C / °F		5... 40 / 41...104
Measuring system			inductive
Total height	mm / <i>inch</i>	513 / <b>20.20"</b>	813 / <b>32.01"</b>
Cast iron base (L x W)	mm / <i>inch</i>	205 x 175 / <b>8.07" x 6.89"</b>	205 x 175 / <b>8.07" x 6.89"</b>
Weight	kg / lbs	6.2 / 13.22	10.5 / 23.15
Order no.		<b>4426540</b>	<b>4426542</b>

## Height Measuring and Scribing Instrument Digimar 814 G Base plate version



### Applications

Ideal for measuring:

- Heights
- Center distances between bores and surfaces, widths of ledges, plus marking and scribing of workpieces

### Features

Table plate is made of fine grained black granite (greenstone) which is extremely hard and stable.

Conversion to a 814 N version is quick and easy at any time.

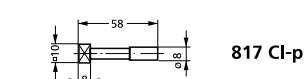
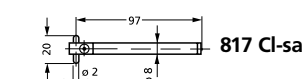
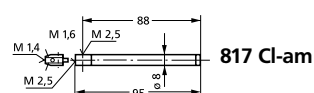
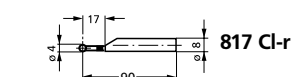
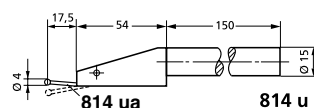
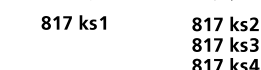
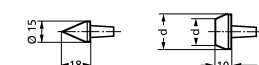
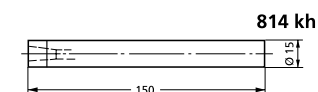
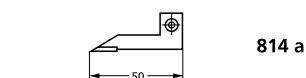
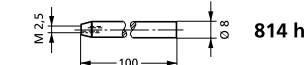
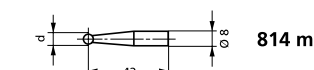
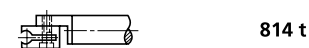
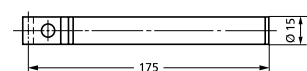
- High accuracy
- Incremental inductive measuring system
- Measuring head with an ball bush guide
- Resistance free measuring system
- Large, easy to read digital display
- Measuring and display unit are incorporated in the measuring head
- Easy to operate due to the hand crank on the side of the measuring head
- Constant measuring force; acting upwards or downwards as required
- Measuring head can be locked in position, ideal for scribing tasks
- With fine adjustment
- Data transmission via Opto RS232C interface
- Digital Preset
- Zero setting in any position
- MAX, MIN and MAX-MIN functions
- Enter tolerance limit for 1 characteristic
- Switch between mm/inch
- Mains independent due to being battery operated
- Universal application due to a broad range of accessories

### Technical Data

Measuring range	mm / <i>inch</i>	320 / <b>12.6"</b>	620 / <b>24.4"</b>
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Measuring error	μm	20 / <b>.0008"</b>	30 / <b>0.0012"</b>
Repeatability	μm		5 / <b>.0002"</b>
Perpendicularity error	μm	frontal 20 (300 mm)	frontal 30 (600 mm)
Operating time of the battery	h		2000
Measuring force	N		ca. 3
Working temperature	°C / °F		20 ±1 / 68 ±1.8
Operating temperature	°C / °F		5... 40 / 41...104
Measuring system			inductive
Total height	mm / <i>inch</i>	558 / <b>21.97"</b>	858 / <b>33.78"</b>
Granite plate (L x W)	mm / <i>inch</i>		200 x 300 / <b>7.87" x 11.81"</b>
Grade of accuracy			1 DIN 876
Weight	kg / lbs	14 / 30.86	18.3 / 35.27
Order no.		<b>4426541</b>	<b>4426543</b>

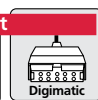
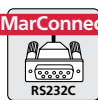
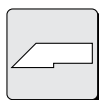
## Accessories for Height Measuring and Scribing Instrument Digimar 814 N / 814 G

			Order no.
<b>814 t</b>	Probe arm with joint for mounting probes, dial indicators, dial comparators and test indicators.		<b>4426510*</b>
	Length of mounting shank	150 mm	<b>(.591")</b>
	Mounting bore	8 mm	<b>(.315")</b>
<b>814 m</b>	Spherical probe	2 mm ball	<b>(.0787") 4426525</b>
	To mount in probe arm 814 t	3 mm ball	<b>(.118") 4426526</b>
		4 mm ball	<b>(.157") 4426512</b>
		5 mm ball	<b>(.197") 4426527</b>
		6 mm ball	<b>(.236") 4426511</b>
		7 mm ball	<b>(.276") 4426528</b>
		8 mm ball	<b>(.315") 4426509*</b>
<b>814 s</b>	Disc probe for measuring heights, distances, surfaces and edges. Especially recommended for narrow shoulders, e.g. on centering edges.		<b>4426513</b>
<b>814 h</b>	Probe holder	M 2.5	<b>4426514</b>
	to mount the styli of dial indicators and dial comparators. For special applications.		
<b>814 a</b>	Scriber for scribing and marking of work pieces. Carbide tipped. To be mounted on the Probe arm 814 t.		<b>4426515</b>
<b>814 kh</b>	Halter		<b>4426516</b>
<b>817 ks1</b>	Measuring taper	0 – 15	<b>(0 - .591") 4426071</b>
<b>817 ks2</b>	Measuring taper	14 – 20	<b>(.551" - .787") 4426072</b>
<b>817 ks3</b>	Measuring taper	18 – 24	<b>(.709" - .945") 4426073</b>
<b>817 ks4</b>	Measuring taper	23 – 30	<b>(.906" - 1.181") 4426074</b>
<b>814 u</b>	Two direction probe for measuring outside and inside diameters, width of ledges, recesses and slots. Actual ball diameter does not influence the results.	4 mm ball	<b>(.157") 4426517</b>
<b>814 ua</b>	Interchangeable probe arm for use in conjunction with the two direction probe 814 u	2 mm ball	<b>(.0787") 4426518</b>
<b>817 Cl-r</b>	Spherical probe	4 mm ruby ball	<b>(.157") 4426498</b>
<b>817 Cl-am</b>	Holder with connection thread	M 2.5, M 1.6, M 1.4	<b>4426434</b>
<b>817 Cl-sa</b>	Stylus with exchangeable measuring pin		<b>4426433</b>
<b>817 Cl-p</b>	Stylus with parallel measuring faces		<b>4426435</b>
	Battery 3 V, type CR 2032		<b>4102520*</b>
	Dust cover	0–320 mm	<b>(0 - 12.60") 4426616*</b>
	Dust cover	0–620 mm	<b>(0 - 24.41") 4426619*</b>
<b>814 Nf</b>	Cast iron base		<b>4426506**</b>
<b>814 Gf</b>	Table plate		<b>4426507**</b>
<b>814 X</b>	Column with measuring head	0–320 mm	<b>(0 - 12.60") 4426544</b>
<b>814 X</b>	Column with measuring head	0–620 mm	<b>(0 - 24.41") 4426545</b>
<b>16 ESv</b>	Data connection cable Opto RS232C	Length 2 m	<b>(6.56 ft) 4102510</b>



\* Scope of supply  
\*\* for upgrade

## Height Measuring and Scribing Instrument Digimar 814 SR



REFERENCE

### Application

- Scribing and marking of work pieces
- Measuring heights and distances



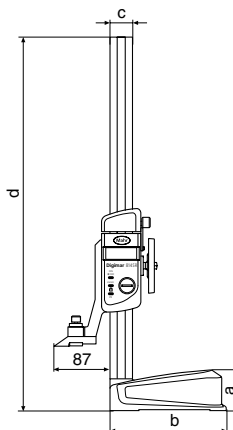
### Features

#### Functions:

RESET (Set the display to zero for relative measurement)  
 ABS (Switch between relative and absolute measurement)  
 mm/inch  
 Reference-Lock/Unlock  
 PRESET (To enter a numerical value)  
 DATA (Data transmission via connection cable)  
 Auto-ON/OFF

- Life of the battery up to 3 years
- Max. measuring speed 1.5 m/s (60"/s)
- MarConnect Data output: choose either  
 USB  
 OPTO RS232C  
 Digimatic

- High contrast Liquid Crystal Display with 12 mm high digits
- Sturdy heavy-duty base, easy to handle
- Hardened and lapped contact surface which produce both a smooth and even movement
- Slide and beam made of hardened stainless steel
- Hand crank for positioning and measuring
- Fine adjustment
- Locking screw
- Interchangeable scribe point, carbide tipped
- Scope of supply: Scribe point, cardboard box, battery and operating instructions



### Dimensions

mm	a	b	c	d
350	62	180 x 98	35 x 15	580
600	62	180 x 98	35 x 15	835

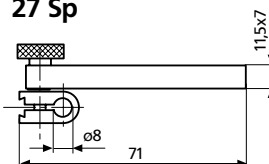
### Technical Data

Measuring range	Resolution	Error limit	Weight	Order no.
mm (inch)	mm / inch	mm / inch	kg / lbs	
350 (14")	0.01 / .0005"	0.04 / .0016"	7 / 15.43	4426100
600 (24")	0.01 / .0005"	0.05 / .0020"	8 / 17.64	4426101

### Accessories

	Order no.
Measuring / Scribe Point, carbide tipped	814 SRs 4123867
Holder for Test Indicators	27 Sp 4123041
Battery 3V, type CR 2032	4102520
Data Connection Cable USB (2 m)	16 EXu 4102357
Data Connection Cable Opto RS232C (2 m), with SUB-D jack 9-pin	16 EXr 4102410
Data Connection Cable Digimatic (2 m), Flat plug 10-pin	16 EWd 4102915

#### 27 Sp



#### 814 SRs

