

# MAHR SPOTLIGHTS

All Products Available  
For Fast Delivery!



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PROMOTION PRICES VALID UNTIL  
4/30/2014



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EXACTLY

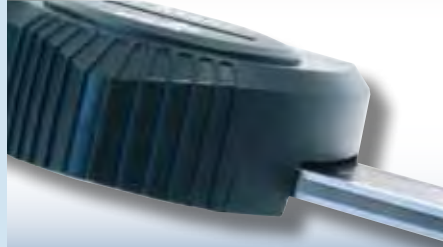


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PDF version

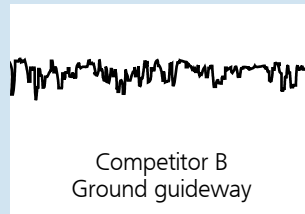
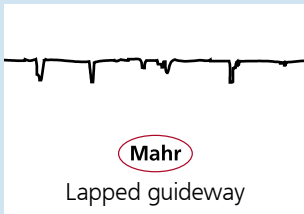
## MarCal. The new Generation of digital calipers with the Reference-System WATERPROOF CALIPERS

### Lapped guideways for superior performance

Only MarCal calipers have lapped guideway surfaces, these guarantee an even and sensitive run of the slide. Additionally, the service life of the caliper increases compared to a ground guideway due to the greater contact area on the guideway surface.



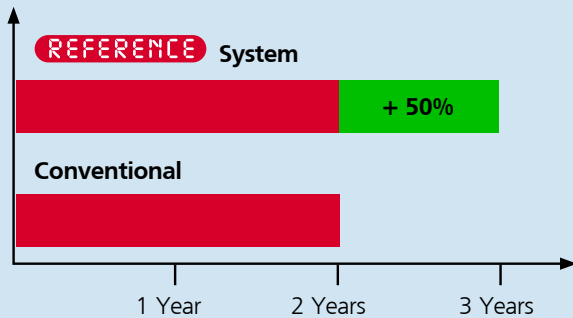
#### Surface of the guideway



Complete Line  
Full Feature Digital

### 50% longer battery lifetime

The new Reference system is extremely energy efficient as when the caliper is in standby mode; almost no power is required, thus extending the life of the battery to up to 50%.



### Security due to the Reference-Lock function

- Zero-position is secured
- Operating error is not possible

The Digital Caliper MarCal 16 EWR Reference is equipped with a LOCK function. With this key lock, the zero position is secured and operating error is avoided.



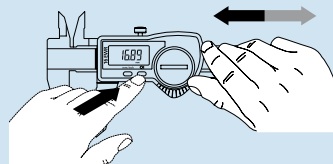
### MarCal - The innovative Reference-System

#### Just set reference once

All Mahr digital calipers with this logo **REFERENCE** are equipped with zero position just has to be set once: after setting the zero position, the zero reference is stored. Therefore, once the caliper is switched ON or the slide is moved, the caliper is in the zero position. There is no need to reset to zero with a conventional caliper once the caliper is switched ON.

#### REFERENCE System

- ① Switch ON



**REFERENCE**

Line of Digital Calipers



**List Price**  
\$179.00  
**Promo Price**  
**\$135.00**

### The only one with a universal MarConnect interface

Regardless of which evaluation device you are using, with a MarConnect interface you always have the optimal connection.



**USB ready:** For direct connection to a PC when using our MarCom software you can transfer your measured values directly into MS Excel or with a keyboard code into any application.



**Digimatic:** To connect to Digimatic compatible evaluation devices.



**Mahr Opto RS232C:** To connect to the COM interface on a PC.

### Ergonomic Design

The handy non-slip thumb support of the MarCal 16 EWR ensures even in contaminated working conditions trouble-free handling and therefore reliable measuring results.



The high-contrast display with 8.5 mm high digits enables accurate, fatigue-free reading of the measurement results.

### Excellent resistance against dust, coolant and lubricants

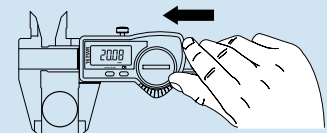


Due to the outstanding protection against dust and water, the Digital Caliper MarCal 16 EWR Reference delivers precise and secure results even in the most difficult workshop conditions.



h the innovative Reference-System. The  
ains stored for all further measurements.  
Immediately ready for measurement. The  
on has now become obsolete.

Result of measurement



Code Initials	<b>IP</b>	International Protection
First digit	<b>6</b>	Dust-tight
Second digit	<b>7</b>	Protected against temporary immersion in water

**MarCal. Digital Caliper 16 EWR with Reference System, Protection Class IP67**



**REFERENCE**

*Available for fast delivery*

List Price  
\$179.00  
Promo Price  
**\$135.00**

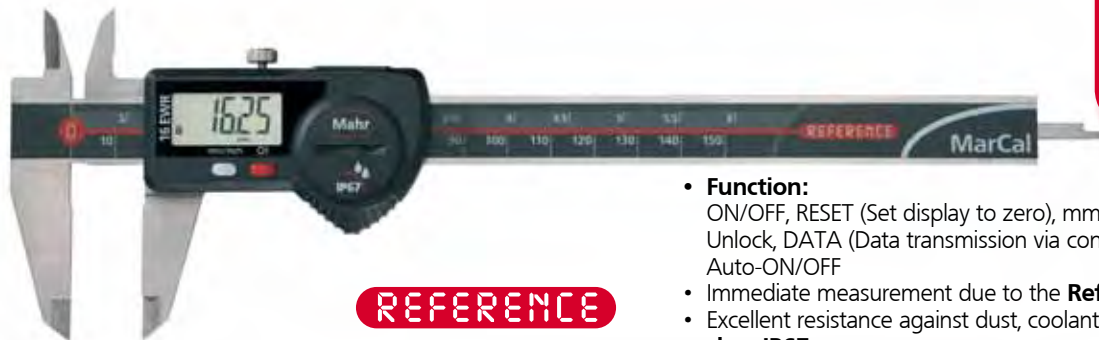
- **Functions:** ON/OFF, RESET (Set display to zero), mm/inch, Reference-Lock/Unlock, Auto-ON/OFF
- Immediate measurement due to the **Reference system**
- Excellent resistance against dust, coolants and lubricants, **Protection Class IP67**
- Life of the battery up to **3 years**
- High contrast Liquid Crystal Display with 8.5 mm high digits
- Lapped guideway



For further detailed information see:  
[www.mahr.com](http://www.mahr.com)  
WebCode 13526-11250

	Measuring range		Resolution mm / inch	Error Limit G mm	Depth rod		Friction Wheel	Order no.	List price	Promo price
	mm	(inch)								
16 EWR	150	(6")	0.01 / 0.0005"	0.03	●			4103060P	\$179.00	<b>\$135.00</b>
16 EWR	150	(6")	0.01 / 0.0005"	0.03		●		4103062P	\$179.00	<b>\$135.00</b>
16 EWR	150	(6")	0.01 / 0.0005"	0.03	●		●	4103061P	\$179.00	<b>\$135.00</b>
16 EWR	150	(6")	0.01 / 0.0005"	0.03		●	●	4103063P	\$179.00	<b>\$135.00</b>

**MarCal Digital Caliper 16 EWR with Reference System, Protection Class IP67 and output**



**REFERENCE**

List Price From  
\$214.00  
Promo Price From  
**\$175.00**

- **Function:** ON/OFF, RESET (Set display to zero), mm/inch, Reference-Lock/Unlock, DATA (Data transmission via connection cable), Auto-ON/OFF
- Immediate measurement due to the **Reference system**
- Excellent resistance against dust, coolants and lubricants, **protection class IP67**
- **MarConnect** data output, choose alternatively: USB, OPTO RS232C or Digimatic
- Life of the battery up to **3 years**
- High contrast Liquid Crystal Display with 8.5 mm high digits
- Measuring blades for inside measurement



For further detailed information see:  
[www.mahr.com](http://www.mahr.com)  
WebCode 2553

	Measuring Range		Resolution mm / inch	Error Limit G mm / inch	Depth Rod		Friction Wheel	Order no.	List price	Promo price
	mm	(inch)								
16 EWR	150	(6")	0.01 / 0.0005"	0.03 / 0.001"	●			4103064P	\$214.00	<b>\$175.00</b>
16 EWR	150	(6")	0.01 / 0.0005"	0.03 / 0.001"		●		4103066P	\$214.00	<b>\$175.00</b>
16 EWR	150	(6")	0.01 / 0.0005"	0.03 / 0.001"	●		●	4103065P	\$214.00	<b>\$175.00</b>
16 EWR	150	(6")	0.01 / 0.0005"	0.03 / 0.001"		●	●	4103067P	\$214.00	<b>\$175.00</b>
16 EWR	200	(8")	0.01 / 0.0005"	0.03 / 0.001"		●		4103068P	\$248.00	<b>\$191.00</b>
16 EWR	200	(8")	0.01 / 0.0005"	0.03 / 0.001"		●	●	4103069P	\$248.00	<b>\$191.00</b>
16 EWR	300	(12")	0.01 / 0.0005"	0.04 / 0.0015"				4103070P	\$371.00	<b>\$286.00</b>
16 EWR	300	(12")	0.01 / 0.0005"	0.04 / 0.0015"			●	4103071P	\$371.00	<b>\$286.00</b>

**MarCal. Digital Caliper 16 ER with Reference system and output**



List Price From  
\$155.00  
Promo Price From  
**\$118.00**

**Functions:**

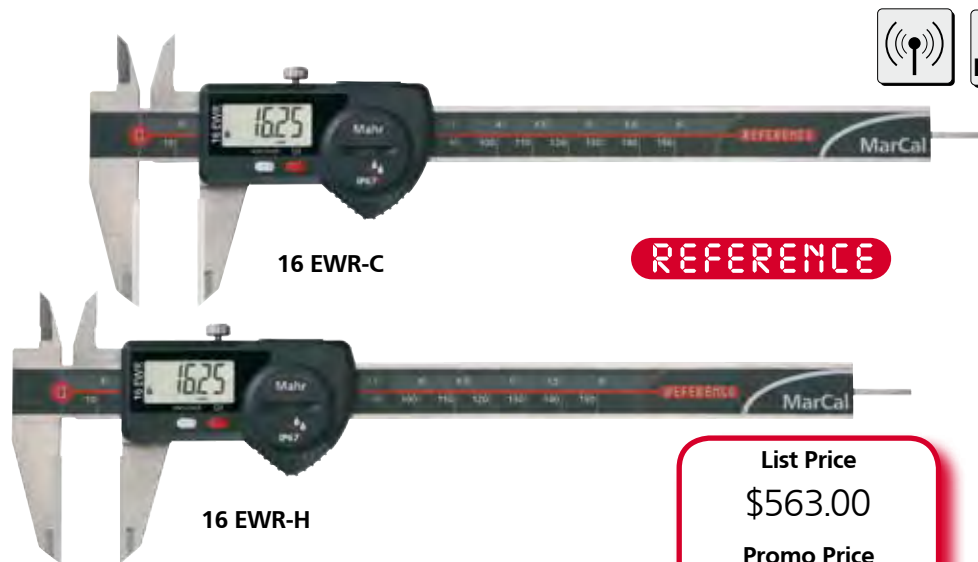
- ON/OFF, RESET (Set display to zero), mm/inch, Reference-Lock/Unlock, Auto-ON/OFF
- Immediate measurement due to the **Reference system**
- MarConnect** data output, choose alternatively: USB, OPTO RS232C or Digimatic
- Life of the battery up to **3 years**
- High contrast Liquid Crystal Display with 8.5 mm high digits
- Beam and crossbeam are made of hardened stainless steel



For further detailed information see:  
[www.mahr.com](http://www.mahr.com)  
WebCode 2184

	Measuring range		Resolution	Error limit G	Depth Rod			Order no.	List price	Promo price
	mm	(inch)			mm / inch	mm / inch	DIN 862			
16 ER	150	(6")	0.01 / 0.0005"	0.03 / 0.001"	•	•	•	4103002P	\$155.00	<b>\$118.00</b>
16 ER	150	(6")	0.01 / 0.0005"	0.03 / 0.001"	•	•	•	4103003P	\$155.00	<b>\$118.00</b>
16 ER	200	(8")	0.01 / 0.0005"	0.03 / 0.001"	•	•	•	4103004P	\$210.00	<b>\$147.00</b>
16 ER	300	(12")	0.01 / 0.0005"	0.04 / 0.0015"	•	•	•	4103005P	\$330.00	<b>\$229.00</b>

**MarCal 16 EWR carbide or ceramic measuring faces**



List Price  
\$347.00  
Promo Price  
**\$260.00**

**REFERENCE**

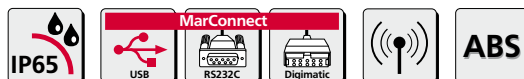
List Price  
\$563.00  
Promo Price  
**\$425.00**

- Features**
- Features are the same as the MarCal 16 EWR
  - Carbide or ceramic measuring faces

**Technical Data**

	Type	Measuring range		Resolution	Error limit G	Depth rod	Order no.	List price	Promo price
		mm	(inch)						
16 EWR-C	Ceramic outside measuring faces	150	(6")	0.01/ 0.0005"	0.03	•	4103072P	\$347.00	<b>\$260.00</b>
16 EWR-H	Carbide outside measuring faces	150	(6")	0.01/ 0.0005"	0.03	•	4103073P	\$563.00	<b>\$425.00</b>

## Digital Micrometer Micromar 40 EWR



REFERENCE

List Price From  
\$250.00  
Promo Price From  
**\$237.00**



### Features

#### Functions:

- RESET (Zero setting the display for Relative measurement)
- ABS (Switch between Relative and Absolute measurement) mm/inch
- Reference-Lock/Unlock
- PRESET (Reference setting)
- DATA (Data transmission via connection cable)
- Immediate measurement due to the Reference system
- MarConnect data output, choose alternatively USB  
OPTO RS232C  
Digimatic
- High contrast Liquid Crystal Display with 8.5 mm high digits
- Hard lacquered steel frame, heat insulated
- Spindle and anvil are carbide tipped
- Spindle is made of stainless steel, hardened throughout and ground
- Ratchet is integrated in the thimble
- Rapid drive
- Supplied with: Case, battery, operating instructions and setting standard (starting with measuring range 25-50 mm)

### Technical Data

	Measuring range		Resolution mm / inch	Error limit G* µm	Spindle thread pitch mm	Data output	Order no.	List price	Promo price
	mm	(inch)							
40 EWR	0 - 25	(0 - 1")	0.001 / 0.00005"	2	0.635	—	4151721P	\$250.00	<b>\$237.00</b>
40 EWR	0 - 25	(0 - 1")	0.001 / 0.00005"	2	0.635	●	4151705P	\$275.00	<b>\$252.00</b>
40 EWR	25 - 50	(1 - 2")	0.001 / 0.00005"	2	0.635	●	4151706P	\$285.00	<b>\$258.00</b>
40 EWR	50 - 75	(2 - 3")	0.001 / 0.00005"	3	0.635	●	4151707P	\$575.00	<b>\$458.00</b>
40 EWR	75 - 100	(3 - 4")	0.001 / 0.00005"	3	0.635	●	4151708P	\$603.00	<b>\$464.00</b>

\* at fixed zero point (better than DIN 863-1)

## Digital Micrometer Micromar 40 ER



**REFERENCE**



**List Price**  
\$227.00  
**Promo Price**  
**\$185.00**

### Features

#### Functions:

- RESET (Zero setting the display for Relative measurement)
- ABS (Switch between Relative and Absolute measurement)
- mm/inch
- Reference-Lock/Unlock
- PRESET (Reference setting)
- Immediate measurement due to the Reference system
- High contrast Liquid Crystal Display with 8.5 mm high digits
- Hard lacquered steel frame, heat insulated
- Spindle and anvil are carbide tipped
- Spindle is made of stainless steel, hardened throughout and ground
- Ratchet is integrated in the thimble
- Rapid drive
- Supplied with:  
Case, battery and operating instructions

### Technical Data

Measuring range	Resolution	Error limit G *	Spindle thread pitch	Order no.	List price	Promo Price
40 ER 0 - 25 (0-1")	0.001 / 0.00005"	2	0.635	4151601P	\$227.00	<b>\$185.00</b>

\* at fixed zero point (better than DIN 863-1)

## Portable Thickness Gages MaraMeter 22P

- 22P-20 has the indicator built into the frame for maximum ruggedness
- Lift lever for one hand operation
- Continuous reading dials with revolution counter for absolute measurement of thin materials, plastic films and small parts
- Thickness Gage XLI-22P-20 is supplied with the µMaxum II Digital Electronic Indicator and can be Left/Right hand operated or front mounted
- XLI-22P-20 digital indicator can be rotated for right or left-hand use

**List Price From**  
\$539.00  
**Promo Price From**  
**\$405.00**

**Available for fast delivery**



### Technical Data

	Measuring range		Throat depth	Dial diameter	Dial grad	Resolution	Order no.	List price	Promo price
	Max	Min							
Dial thickness gage	1.00"	0.0"	2.00	2.250"	0.001"	-	22P-20P	\$539.00	<b>\$405.00</b>
Digital thickness gage	1.00"	0.0"	2.00	2.250"	-	0.00001, 0.00002, 0.00005, 0.0001, 0.0002, 0.0005, 0.001, 0.002, 0.005, 0.01, 0.02, 0.01	XLI-22P-20P	\$817.00	<b>\$613.00</b>

## μMaxμm® II Digital Comparator



List Price From  
**\$367.00**  
Promo Price From  
**\$330.00**

### Features - μMaxμm II and μMaxμm II XL

#### Functions:

- Inch/Metric – operator selectable with switchable resolution.
- Normal / Reverse Sensing
- Preset capabilities to view actual size.
- “Absolute” Transducer – no overspeed errors or constant re-zeroing. Transducer always remembers its location, even if power is off.
- High resolution digital readout and analog bar graph – digital display shows deviation from zero or actual dimension size (Preset).
- Lightweight, contamination resistant – ruggedly built to withstand hard use – gasketed case, crystal and stem assemblies resist fluid contamination.
- Calibratable – if ever needed – values remembered even after battery change.
- Marconnect data output: USB, OPTO RS232C, Digimatic
- Auto-power down – provides extremely low battery consumption, assuring long life from readily available commercial batteries.
- Increased resolution (0.0002mm / 10uinch) for today's demanding tolerances.
- Unilateral Tolerances
- Go/NoGo Display Feature
- Resolution:
  - Selectable (mm / inch):
  - 0.0002 / **0.00001”**
  - 0.0005 / **0.00002”**
  - 0.001 / **0.00005”**
  - 0.002 / **0.0001”**
  - 0.005 / **0.0002”**
  - 0.01 / **0.0005”**
  - 0.02 / **0.001”**

### Ordering Information - μMaxμm II

Model	Range mm / inch	Accuracy % of digital range	Stem diameter	Stem Length	Order no.	List Price	Promo Price
Standard	±1.00 / <b>±0.040”</b>	±0.25% over ±0.50mm / <b>±0.020”</b> ±0.50% from	0.375”	11.7mm / <b>0.46”</b>	<b>2034101P</b>	\$367.00	<b>\$330.00</b>
Standard			0.375”	38.0mm / <b>1.50”</b>	<b>2034103P</b>	\$367.00	<b>\$330.00</b>
Standard			8mm	11.7mm / <b>0.46”</b>	<b>2034105P</b>	\$367.00	<b>\$330.00</b>
Standard			8mm	38.0mm / <b>1.50”</b>	<b>2034107P</b>	\$367.00	<b>\$330.00</b>
Advanced	±1.00mm / <b>±0.040”</b>	to ±1.00mm / <b>±0.040”</b>	0.375”	11.7mm / <b>0.46”</b>	<b>2034201P</b>	\$459.00	<b>\$413.00</b>
Advanced			0.375”	38.0mm / <b>1.50”</b>	<b>2034203P</b>	\$459.00	<b>\$413.00</b>
Advanced			8mm	11.7mm / <b>0.46”</b>	<b>2034205P</b>	\$459.00	<b>\$413.00</b>
Advanced			8mm	38.0mm / <b>1.50”</b>	<b>2034207P</b>	\$459.00	<b>\$413.00</b>
Advanced Perpendicular			0.375	11.7mm / <b>0.46”</b>	<b>2034401P</b>	\$459.00	<b>\$413.00</b>

### Accessories - μMaxμm II

	Order No.		Order No.
<b>Backs:</b>		<b>Other Hardware:</b>	
Flat Black (Standard on all models)	<b>EBK-1018</b>	Splash Cover	<b>ECV-1307-W2</b>
Lug Back (Horizontal / Vertical)	<b>EBK-1010</b>	Adaptor Bushing (8mm to 3/8")	<b>BU-197</b>
Post Back (0.5" dia. x 1" long)	<b>EBK-1012</b>	Thread Adaptor (M2.5 to 4-48 thread)	<b>AD-185</b>
Screw Back (11/16" dia x 0.5", 1/4-28 thread)	<b>EBK-1013</b>	Spring (for lighter gaging force: 35g)	<b>SP-351</b>
Adj. Slide Back (0.5" slot, 1/4-20 thread)	<b>EBK-1016</b>		
Adj. Rack Back*	<b>EBK-1014</b>		
*used on AT-28 or AT-116 - Sold seperately.			
<b>Data Interface:</b>			
USB Cable (for MarCom or PC, 2m length)	<b>4346023</b>		
RS232 Cable (Sub-D 9 pin, 2m length)	<b>4346020</b>		
Digimatic Cable (10pin plug, 2m length)	<b>4346021</b>		
Transmitter (Mahr t, used w/ FM1 Receiver)	<b>2121369</b>		


**Made in USA**  
Available for fast delivery



## μMaxμm® II XL Digital Indicator

### Features - μMaxμm II and μMaxμm II XL

#### Advanced Functions:

- Dynamic mode operation:
  - Max, Min, TIR
- Two point difference measurement – provides comparison of two readings or measuring locations.
  - ☰ - Calculate the distance between 2 measured values
- Multiplier factor for ratio measurements
- Hold function – holds reading on display until ready to resume measuring
- Data output with serial number identification capability 
- Data output with selectable continuous output or single request of reading(s)
- **Stem length 16mm/0.63"**

#### Optional Factory Configured Features:

- Locked Multiplier factor for ratio measurements
- Disabled sleep mode (manual ON/OFF)
- Locked inch or mm display unit
- Power up in inch or mm unit on battery change
- Setup mode lockout with password entry

### Ordering Information - μMaxμm® II XL

Model	Range	Resolution mm / inch	Accuracy mm / inch	Stem diameter	Order no.	List Price	Promo Price
US Version	0.5"	Selectable: Low: 0.1 / 0.005"	0.005 / 0.0002"	0.375"	<b>2034252P</b>	\$459.00	<b>\$413.00</b>
US Version	1.0"			0.375"	<b>2034212P</b>	\$529.00	<b>\$476.00</b>
World Version	12.5mm	High: 0.0002 / 0.00001"	0.008 / 0.00032"	8mm	<b>2034258P</b>	\$459.00	<b>\$413.00</b>
World Version	25mm			8mm	<b>2034218P</b>	\$529.00	<b>\$476.00</b>
World Version*	25mm			8mm	<b>2034210P</b>	\$529.00	<b>\$476.00</b>
World Version	50mm	High: 0.0002/0.00001"	0.009 / 0.00036"	8mm	<b>2034229P</b>	\$689.00	<b>\$620.00</b>
World Version	100mm			8mm	<b>2034249P</b>	\$847.00	<b>\$762.00</b>

\* No Spring Version

### Accessories - μMaxμm® II XL

	Order No.		Order No.
<b>Backs:</b>		<b>Other Hardware:</b>	
<b>Flat Back</b> (Standard on all models)	<b>EBK-1020</b>	<b>Splash Cover</b>	<b>ECV-1307-W2</b>
<b>Lug Back</b> (Horizontal / Vertical) .5" & 1" models	<b>BK-183</b>	<b>Adaptor Bushing</b> (8mm to 3/8")	<b>BU-197</b>
<b>Lug Back</b> (Horizontal / Vertical) 2" & 4" models	<b>BK-383</b>	<b>Thread Adaptor</b> (M2.5 to 4-48 thread)	<b>AD-185</b>
<b>Post Back</b> (0.5" dia. x 1" long)	<b>BK-2093</b>	<b>Lifting lever</b> (.05" tp 1.0" models):	
<b>Screw Back</b> (11/16" dia x 0.5", 1/4-28 thread)	<b>BK-692</b>	• <b>Right hand style</b>	<b>ELR-1092</b>
<b>Adj. Slide Back</b> (0.5" slot, 1/4-20 thread)	<b>BK-531</b>	• <b>Left hand style</b> (offset use only)	<b>ELR-1093</b>
<b>Adj. Rack Back*</b>	<b>BK-93</b>	• <b>Ox-bow style</b>	<b>LR-40</b>
<i>*used on AT-28 or AT-116 - Sold separately.</i>		<b>Adaptor Back</b>	<b>EPL-1914</b>
<b>Data Interface:</b>			
<b>USB Cable</b> (for MarCom or PC, 2m length)	<b>4346023</b>		
<b>RS232 Cable</b> (Opto-RS232C, 2m length)	<b>4346020</b>		
<b>Digimatic Cable</b> (10pin plug, 2m length)	<b>4346021</b>		
<b>Transmitter</b> (Mahr $\tau$ , used w/ FM1 Receiver)	<b>2121369</b>		

List Price From  
**\$459.00**

Promo Price From  
**\$413.00**
















Made in USA  
 Available for fast delivery

## How to Receive Your Free Caliper

► | This promotional brochure contains products carrying a **Free Caliper Symbol** as seen below. When you order a product with the Free Caliper Symbol from this brochure - by the special order number specified, you will also receive one free **16 ER** - our newest and performance packed caliper, order number **4103002**.

The values in this brochure are hot, but when combined with the free 16 ER they are untouchable!

Order yours today. | ◀



## Digimar. Height Measuring and Scribing Instrument 814 SR



**REFERENCE**

- Functions: RESET (Zero setting the display for Relative measurement), ABS (Switching from Relative to Absolute Measurement), mm/inch, Reference-Lock/Unlock, PRESET (enter a numerical value)
- Life of the battery up to **3 years**
- **MarConnect** data output, choose alternatively: USB, OPTO RS232C or 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
- Hand crank for positioning and measuring

**List Price**  
\$1,820.00  
**Promo Price**  
**\$1,650.00**  
Order no. 4426101+Cal



**List Price**  
\$1,400.00  
**Promo Price**  
**\$1,260.00**  
Order no. 4426100+Cal



For further detailed information see:  
[www.mahr.com](http://www.mahr.com)  
WebCode 12414-8410

	Measuring range		Resolution	Order no.	List Price	Promo Price
	mm	(inch)	mm/inch			
<b>814 SR</b>	350	(14")	0,01 / .0005"	<b>4426100+CAL</b>	\$1,400.00	<b>\$1,260.00</b>
<b>814 SR</b>	600	(24")	0,01 / .0005"	<b>4426101+CAL</b>	\$1,820.00	<b>\$1,650.00</b>

## Digimar Height Measuring Instrument 816 CL 1D

**Digimar 816 CL 350 / 600 mm:** The robust and user-friendly height measuring instrument.



### User-friendly



#### Clearly displayed measured values

- High contrast back-lit graphic display
- The actual measuring function is clearly shown in the display
- Retrace the measuring procedure in the list of measured values

#### Self-explanatory operator guidance

- Well-appointed functions keys, the function keys are clearly defined with a function symbol
- All standard functions can be directly executed by pressing just one key
- Further functions can be selected via the menu key

The operating and display unit has a back-lit display

### Precise measuring results on the production line



#### Robust design

- Robust guide column and measuring carriage
- The measuring system with the double reader head system is not only extremely accurate, but also insensitive to the contamination of dirt

#### Measuring results independent of the user

- The motorized measuring carriage minimizes the influence caused by the operator and simplifies the measuring procedures

Probe contact due to the motorized measuring carriage eliminates user error and increases accuracy



For further detailed information see:

[www.mahr.com](http://www.mahr.com)  
WebCode 13461

List Price  
\$5,470.00  
Promo Price  
**\$4,925.00**  
Order no. 4429030+Cal



816 CL 0 - 350 mm



816 CL 0 - 600 mm



List Price  
\$5,880.00  
Promo Price  
**\$5,295.00**  
Order no. 4429031+Cal

Measuring range	mm / inch	0-350 / 14"	0-600 / 24"
Application range	mm / inch	520 / 20.47"	770 / 30.31"
Resolution	mm / inch		
Measuring error*	µm		
1-D		•	•
Motorized measuring carriage		•	•
Bore diameter		•	•
Max-Min		•	•
Measuring program		1	1
Temperature compensation		•	•
Air bearings, 3-point air cushion		•	•
Data interface			Opto RS232 / USB

<b>Order no.</b>	<b>4429030+CAL</b>	<b>4429031+CAL</b>
List price	\$5,470.00	\$5,880.00
<b>Promo price</b>	<b>\$4,925.00</b>	<b>\$5,295.00</b>

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

## Digimar. Height Measuring Instrument Digimar 817 CLM Quick Height - 2D

**Digimar 817 CLM** Quick Height. 350 / 600 / 1000 mm: The new Height Measuring Instrument with the innovative Quick Mode. Highly accurate rapid measurements, a wide range of measuring and evaluation possibilities and excellent operator comfort.

### Fast measurement . . .

... by hand with "Quick-Mode" (patented)



### Display

Comfort to operate all measurement functions with the function keys



List Price From  
\$9,020.00  
Promo Price From  
**\$8,100.00**



817 CLM - 2D 0 - 350 mm



817 CLM - 2D 0 - 600 mm



817 CLM - 2D 0 - 1000 mm



For further detailed information see:

[www.mahr.com](http://www.mahr.com)

WebCode 12369-8298



	mm / in	2D		
Measuring range	mm / in	0-350 / 14"	0-600 / 24"	0-1000 / 40"
Application range	mm / in	520 / 20.47	770 / 30.31	1170 / 46.0
Resolution	mm	0.01 / 0.005 / 0.001 / 0.0005 / 0.0001		
	in	0.001" / 0.005" / 0.0001" / 0.00005" / 0.00001"		
Measuring error*	µm	1,8+L/600 (L in mm)		
Quick Mode		●	●	●
2-D		●	●	●
Motorized measuring carriage		●	●	●
Bore diameter		●	●	●
Max-Min		●	●	●
Tolerance monitoring		●	●	●
Perpendicularity / Straightness measurement		●	●	●
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+CAL</b>	<b>4429011+CAL</b>	<b>4429012+CAL</b>
<b>List price</b>		\$9,020.00	\$9,860.00	\$16,150.00
<b>Promo price</b>		<b>\$8,100.00</b>	<b>\$8,880.00</b>	<b>\$14,500.00</b>

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

## Digimar. Height Measuring Instrument Digimar 817 CLM Quick Height

### Easy to operate . . .

. . . all functions can be operated via the speed keys



Operating and display unit with back-lit display

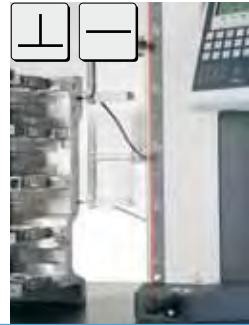
### Measuring program . . .

. . . for repetitive measurements / serial components



### Perpendicularity (with optional probes\*) . . .

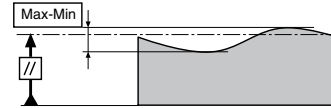
. . . and straightness measurements



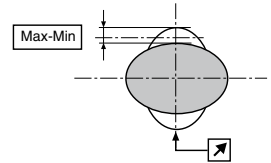
### Dynamic measuring functions



Determine MAX, MIN, MAX-MIN with just one measurement



• Parallel deviation



• Roundness deviation

\* Check with Mahr Federal Inc. for available electronic probe options

## Digimar. Probe Accessory Sets for 817 CLM / 816 CL

Probe Set 817 ts1		Shaft length	Mount
consists of:		mm	dia. mm
817 h2	Carrier for probes	100	—
S15/31,2	Disc probe	31.2	6
Z10/31,2	Cylindrical probe	31.2	6
MKe 30	Taper probe	38.2	6
TMT 120	Depth probe incl. carrier	120	—
KM 2	Probe for M2 incl. probe 800 ts	31.7	6
817 h4	Carrier for probes	—	8
K4/30	Spherical probe	31	8
K6/40	Spherical probe	31	8
K10/60	Spherical probe	62	8
K10/100	Spherical probe	103	8
Carrying case			
Probe Set 817 ts2		Shaft length	Mount
consists of:		mm	dia. mm
817 h2	Carrier for probes	100	—
S15/31,2	Disc probe	31.2	6
Z10/31,2	Cylindrical probe	31.2	6
MKe 30	Taper probe	38.2	6
TMT 120	Depth probe incl. carrier	120	—
KM 2	Probe for M2 incl. probe 800 ts	31.7	6
Carrying case			



From \$972.00

817 ts1



For further detailed information see:  
[www.mahr.com](http://www.mahr.com)  
 WebCode 12369-8298

Probe Set	Order no.	List Price	Promo Price
817 ts1	4429019P	\$1,570.00	\$1,413.00
817 ts2	4429018P	\$1,080.00	\$972.00

## Pocket Surf® PS1 The portable surface roughness measuring instrument

**ree**  
**16 ER Caliper**

**Integrated calibration standard**  
No external calibration standard required (patent pending)

**List Price**  
\$2,640.00

**Promo Price**  
**\$2,375.00**

**Order no. 6910214+Cal**

**Large display**  
All the information you need at a glance

**Directly selectable parameters**  
Ra, Rz

**Freely selectable button**  
Direct access to one parameter of your choice out of 24

**USB interface**  
PS1 is detected without a driver (similar to a flash drive)

**Flexibility thanks to 4 internal threaded bores**  
for clamping your own special accessories

**Start button on the right and on the left**  
Easy operation no matter if you are left or right handed

**Drive Unit**  
Can be rotated and moved in longitudinal direction

**Pick-up with removable pick-up protection**  
Measurement in compliance with standards  
Measuring force 0.7mN

### Your Benefits

#### Saves you time and money

Ease of operation means:

- No training: save time
- Switch on and measure
- 3 parameters directly at the press of a button

#### Reliable Measurement

- With integrated calibration standard
- Error free operation thanks to **standards compliance settings**
- Automatic cut-off selection
- Evaluation possible using **MarSurf XR 20** evaluation software or **MarSurf XR 20** unit

### Pocket Surf® PS1 Standard

The Pocket Surf PS1 comes in a complete set. Thanks to the carrying case, you always have your surface roughness measuring instrument with you as you pass through the production floor. Quick and reliable on-the-spot measurements ensure your quality requirements are met during the production process or incoming goods inspection.

- **Pocket Surf PS1** base unit
- Drive unit
- 1 standard pick-up, conforms to standards
- Integrated battery
- Roughness standard integrated into casing
- Height adjustment accessory
- Pick-up protection
- Charger / mains adapter
- Operating instructions
- Carrying case with shoulder strap and belt attachment
- USB cable
- Mahr Calibration Certificate

#### Optional accessories

80mm (3.15in) pick-up extension, pick-ups from 3mm (0.118in) dia. measurements in bores, offset pick-up, groove pick-up, gear flank pick-up, adapter for transverse tracing, **MSP2** printer with connection cable (**MarConnect**), vee-block for measurements on end faces, mounting device for measuring stand **ST-D / ST-F / ST-G**. **PC-Software PS1 Explorer** for documentation and records.



Order no.	List Price	Promo Price
<b>6910214+CAL</b>	\$2,640.00	<b>\$2,375.00</b>

## Long Range Indicator Calibrator

### Features

#### Model OPTIMAR 25

- A precision, benchtop instrument, providing a convenient means for calibrating a wide variety of precision measuring instruments including dial and digital indicators, dial and digital comparators, dial and digital test indicators, electronic probes and gageheads, Air Probes® and jet probes, or any other devices that magnify the linear displacement of a contact point or measuring spindle
- MarCheck, large clearly readable LCD monochrome digital display (240x160 pixels) with background illumination with 13mm/0.512" high digits
- User selectable for either inch or metric
- Output:
  - USB interface maxed at 3GB USB thumb drive
  - USB interface for PC
  - Selectable RS232 interface
  - **Includes certification of calibration**

**NEW**



**Order No.**  
2062722+CAL

**Price**  
\$7,895.00



**Price**  
**\$7,895.00**  
**Order no. 2062722+Cal**

### Technical Data

	Range	Resolution	Accuracy
Inch	1.00"	0.000005, 0.00001, 0.00005, 0.0001, 0.0005, 0.001	±10µ"
Metric	25mm	0.0001, 0.0005, 0.001, 0.005, 0.01, 0.1	±0.2µm

Description	Values
Display Power	110V - 60Hz, 240V - 50Hz
Dimensions Calibrator (approx)	<b>18"H x 6"W x 8"D</b> 460mm x 153mm x 204mm
Readout	<b>10'H x 7"W x 2.0"D</b> 260mm x 180mm 50mm
Weight - Calibrator	37 lbs. / 17 kg
Weight - MarCheck	3 lbs. / 1.4 kg

#### Normally furnished:

- Martest mounting shaft 3/8" diameter
- Adapter Bushing (8mm to .375") diameter
- MarCheck angle display stand

#### Order no.

- 4305875
- BU-197
- 5350403

#### Also available:

- Universal centering support 800b
- Martest dovetail mounting shaft 4mm diameter
- Foot switch for data transfer
- RS232 Null Modem cable 10 feet long
- Dial indicator inspection software QMSOFT®

#### Order no.

- 4305893
- 4305885
- 5360322
- 7024634
- 5350196



Test indicators



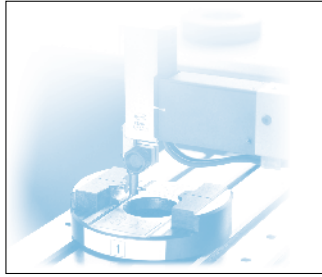
Dial comparator



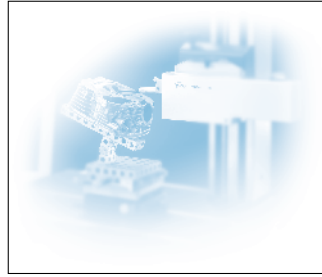
▶ | **DIMENSIONAL METROLOGY**



**Precision Gages**



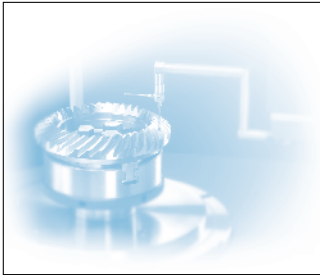
**Precimar.**  
Precision Length Metrology



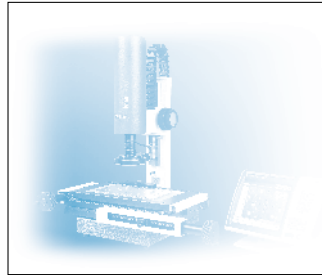
**MarSurf.**  
Surface Metrology



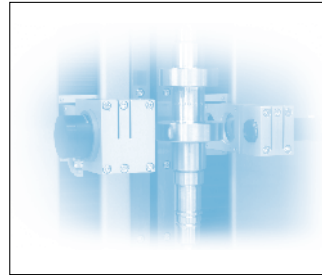
**MarForm.**  
Form Metrology



**MarGear.**  
Gear Metrology



**MarVision.**  
Optical Metrology



**MarShaft.**  
Shaft Metrology



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