

# MAHR SPOTLIGHTS



**SPRING PROMOTION**  
**PROMOTION PRICES VALID UNTIL**  
**6/30/2012**

*Quantities  
may be limited*

|  
- 0 +



EXACTLY



## How to Receive Your Free Caliper

▶ | This promotional brochure is loaded with many products carrying a **Free Caliper Symbol** as seen here. 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 **4103000**. The values in this brochure are hot, but when combined with the free 16 ER they are untouchable! Order yours today. | ◀



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



List Price  
\$179.00  
Promo Price  
**\$130.00**

*Available for fast delivery*

- **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    | Error Limit<br>G | Depth rod |    | Friction Wheel | Order no.       | List price | Promo price     |
|---------------|-----------------|--------|---------------|------------------|-----------|----|----------------|-----------------|------------|-----------------|
|               | mm              | (inch) |               |                  | mm / inch | mm |                |                 |            |                 |
| <b>16 EWR</b> | 150             | (6")   | 0.01 /0.0005" | 0.03             | •         |    |                | <b>4103060P</b> | \$179.00   | <b>\$130.00</b> |
| <b>16 EWR</b> | 150             | (6")   | 0.01 /0.0005" | 0.03             |           | •  |                | <b>4103062P</b> | \$179.00   | <b>\$130.00</b> |
| <b>16 EWR</b> | 150             | (6")   | 0.01 /0.0005" | 0.03             | •         |    | •              | <b>4103061P</b> | \$179.00   | <b>\$130.00</b> |
| <b>16 EWR</b> | 150             | (6")   | 0.01 /0.0005" | 0.03             |           | •  | •              | <b>4103063P</b> | \$179.00   | <b>\$130.00</b> |

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



List Price From  
\$214.00  
Promo Price From  
**\$165.00**



- 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<br>mm / inch | Error Limit<br>G<br>mm / inch | Depth Rod |   | Friction Wheel | Order no.       | List price | Promo price     |
|---------------|-----------------|--------|-------------------------|-------------------------------|-----------|---|----------------|-----------------|------------|-----------------|
|               | mm              | (inch) |                         |                               |           |   |                |                 |            |                 |
| <b>16 EWR</b> | 150             | (6")   | 0.01 / 0.0005"          | 0.03 / 0.001"                 | •         |   |                | <b>4103064P</b> | \$214.00   | <b>\$165.00</b> |
| <b>16 EWR</b> | 150             | (6")   | 0.01 / 0.0005"          | 0.03 / 0.001"                 |           | • |                | <b>4103066P</b> | \$214.00   | <b>\$165.00</b> |
| <b>16 EWR</b> | 150             | (6")   | 0.01 / 0.0005"          | 0.03 / 0.001"                 | •         |   | •              | <b>4103065P</b> | \$228.00   | <b>\$165.00</b> |
| <b>16 EWR</b> | 200             | (8")   | 0.01 / 0.0005"          | 0.03 / 0.001"                 |           | • | •              | <b>4103069P</b> | \$276.00   | <b>\$199.00</b> |
| <b>16 EWR</b> | 300             | (12")  | 0.01 / 0.0005"          | 0.04 / 0.0015"                |           |   | •              | <b>4103071P</b> | \$420.00   | <b>\$295.00</b> |

**MarCal. Digital Caliper 16 ER with Reference System**



List Price  
\$129.00  
Promo Price  
**\$89.00**

- Functions:**
- ON/OFF
  - RESET (Set display to zero)
  - mm/inch
  - Reference-Lock/Unlock
  - Auto-ON/OFF
  - Immediate measurement due to the Reference system
  - Dirt wipers are integrated in the slide
  - Life of the battery up to 3 years
  - Max measuring speed 2.5 m/s (100"/s)

- High contrast Liquid Crystal Display with 8.5 mm high digits
- Lapped guideway
- Slide and beam made of hardened stainless steel
- Measuring blades for inside measurement
- Step measuring function
- Locking screw
- Supplied with: Case, battery, operating instructions

For further detailed information see:  
[www.mahr.com](http://www.mahr.com)  
WebCode 13522-11245

|              | Measuring range |        | Resolution<br>mm / inch | Error limit<br>G<br>mm | Depth Rod |   | Order no.       | List price | Promo price    |
|--------------|-----------------|--------|-------------------------|------------------------|-----------|---|-----------------|------------|----------------|
|              | mm              | (inch) |                         |                        |           |   |                 |            |                |
| <b>16 ER</b> | 150             | (6")   | 0.01 / 0.0005"          | 0.03 / 0.001"          | •         |   | <b>4103000P</b> | \$129.00   | <b>\$89.00</b> |
| <b>16 ER</b> | 150             | (6")   | 0.01 / 0.0005"          | 0.03 / 0.001"          |           | • | <b>4103001P</b> | \$129.00   | <b>\$89.00</b> |

### MarCal. Digital Caliper 16 ER with Reference system



**REFERENCE**

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 | DIN 862 |   |           |            |             |
| 16 ER | 150             | (6")   | 0.01 / 0.0005" | 0.03 / 0.001"  | •         | •       | • | 4103002P  | \$155.00   | \$118.00    |
| 16 ER | 150             | (6")   | 0.01 / 0.0005" | 0.03 / 0.001"  | •         | •       | • | 4103003P  | \$155.00   | \$118.00    |
| 16 ER | 200             | (8")   | 0.01 / 0.0005" | 0.03 / 0.001"  | •         | •       | • | 4103004P  | \$210.00   | \$147.00    |
| 16 ER | 300             | (12")  | 0.01 / 0.0005" | 0.04 / 0.0015" | •         | •       | • | 4103005P  | \$330.00   | \$229.00    |

### MarCal 16 EWR carbide or ceramic measuring faces



16 EWR-C



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

**REFERENCE**



16 EWR-H

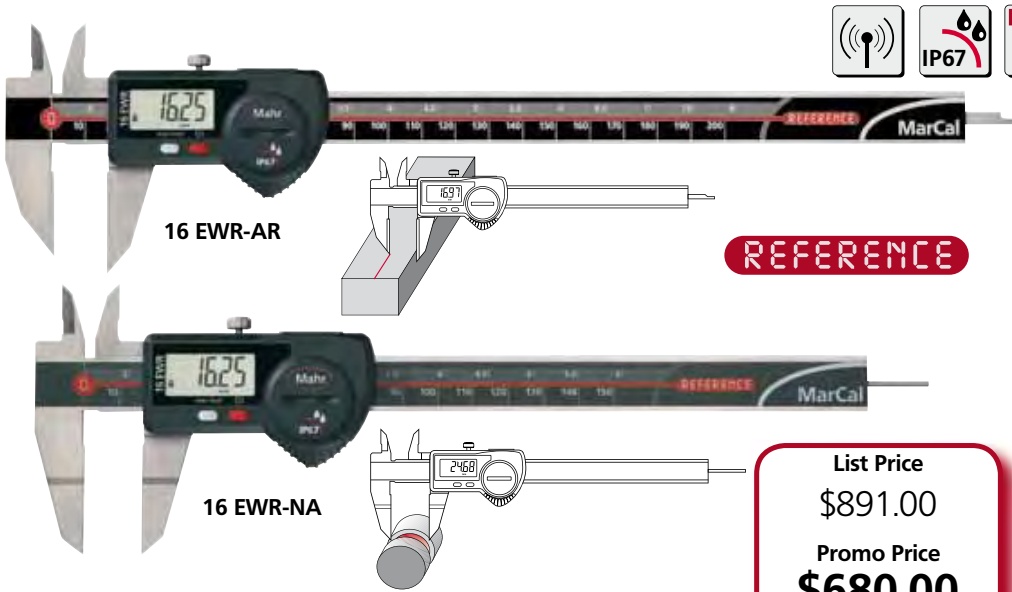
List Price  
\$563.00  
Promo Price  
**\$425.00**

**Features**  
Features are the same as the MarCal 16 EWR

### 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   | \$260.00    |
| 16 EWR-H | Carbide outside measuring faces | 150             | (6")   | 0.01 / 0.0005" | 0.03          | •         | 4103073P  | \$563.00   | \$425.00    |

**MarCal. 16 EWR 16 ER scribing or blade calipers**



**List Price**  
\$445.00  
**Promo Price**  
**\$335.00**

**REFERENCE**

**List Price**  
\$891.00  
**Promo Price**  
**\$680.00**

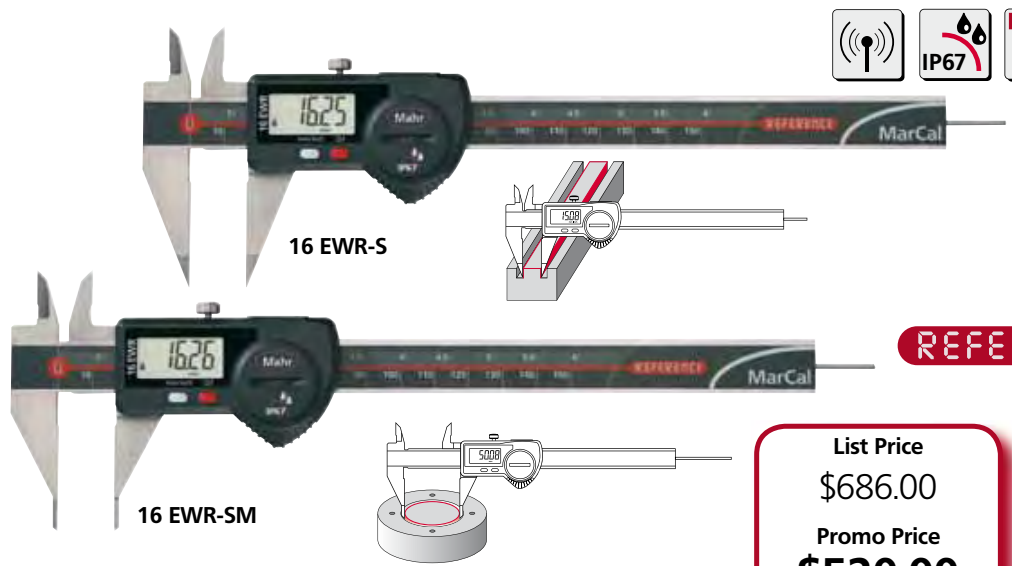
**Features**

- Features are the same as the MarCal 16 EWR
- The thin blade jaws fit into very small grooves

**Technical Data**

|                  | Type                     | Measuring range |        | Resolution     | Error limit<br>G | Depth rod | Order no.       | List price | Promo price     |
|------------------|--------------------------|-----------------|--------|----------------|------------------|-----------|-----------------|------------|-----------------|
|                  |                          | mm              | (inch) |                |                  |           |                 |            |                 |
| <b>16 EWR-AR</b> | Scribing/marking caliper | 200             | (8")   | 0.01 / 0.0005" | 0.03             | •         | <b>4103082P</b> | \$445.00   | <b>\$335.00</b> |
| <b>16 EWR-NA</b> | Keyseat caliper          | 150             | (6")   | 0.01 / 0.0005" | 0.03             | •         | <b>4103074P</b> | \$891.00   | <b>\$680.00</b> |

**MarCal 16 EWR pointed calipers**



**List Price**  
\$611.00  
**Promo Price**  
**\$465.00**

**REFERENCE**

**List Price**  
\$686.00  
**Promo Price**  
**\$520.00**

**Features**

- Features are the same as the MarCal 16 EWR
- Narrow tip jaws fit into very small grooves and tracks

**Technical Data**

|                  | Type                                | Measuring range |        | Resolution     | Error limit<br>G | Depth rod | Order no.       | List price | Promo price     |
|------------------|-------------------------------------|-----------------|--------|----------------|------------------|-----------|-----------------|------------|-----------------|
|                  |                                     | mm              | (inch) |                |                  |           |                 |            |                 |
| <b>16 EWR-S</b>  | Pointed caliper                     | 150             | (6")   | 0.01 / 0.0005" | 0.03             | •         | <b>4103075P</b> | \$611.00   | <b>\$465.00</b> |
| <b>16 EWR-SM</b> | Caliper with pointed measuring jaws | 150             | (6")   | 0.01 / 0.0005" | 0.03             | •         | <b>4103076P</b> | \$686.00   | <b>\$520.00</b> |

### MarCal 16 EWR offset centerline caliper

16 EWR-VS

16 EWR-BA

**REFERENCE**

**Features**

- Features are the same as the MarCal 16 EWR
- Main jaw is adjustable for height and easy alignment

#### Technical Data

|           | Type                       | Measuring range |              | Resolution    | Error limit<br>G | Depth rod<br> | Order no. | List price | Promo price     |
|-----------|----------------------------|-----------------|--------------|---------------|------------------|---------------|-----------|------------|-----------------|
|           |                            | mm              | (inch)       |               |                  |               |           |            |                 |
| 16 EWR-VS | Adjustable measuring jaws  | 0 - 200         | (0 - 8")     | 0.01/ 0.0005" | 0.03             | •             | 4103083P  | \$773.00   | <b>\$580.00</b> |
| 16 EWR-BA | Adjustable measuring jaws* | 10 - 210        | (0.4 - 8.3") | 0.01/ 0.0005" | 0.03             | •             | 4103084P  | \$726.00   | <b>\$550.00</b> |

\* to measure the distance between bores

### MarCal 16 EWR inward neck caliper

16 EWR-SA

16 EWR-AA

**REFERENCE**

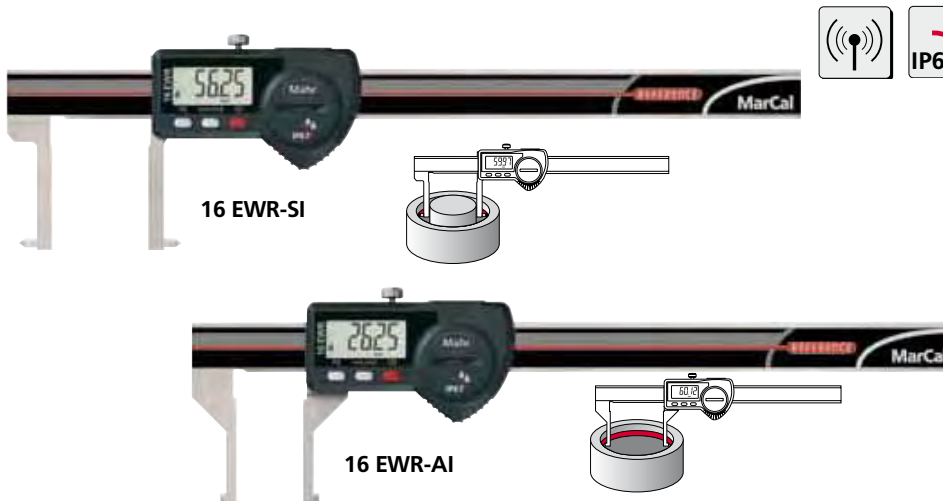
**Features**

- Features are the same as the MarCal 16 EWR
- For grooves and recesses

#### Technical Data

|           | Type                   | Measuring range |        | Resolution    | Error limit<br>G | Order no. | List price | Promo price     |
|-----------|------------------------|-----------------|--------|---------------|------------------|-----------|------------|-----------------|
|           |                        | mm              | (inch) |               |                  |           |            |                 |
| 16 EWR-SA | Inward angled contacts | 150             | (6")   | 0.01/ 0.0005" | 0.03             | 4103077P  | \$936.00   | <b>\$710.00</b> |
| 16 EWR-AA | Inward angled jaws     | 150             | (6")   | 0.01/ 0.0005" | 0.03             | 4103079P  | \$797.00   | <b>\$600.00</b> |

### MarCal 16 EWR outward neck caliper



16 EWR-SI

16 EWR-AI

REFERENCE

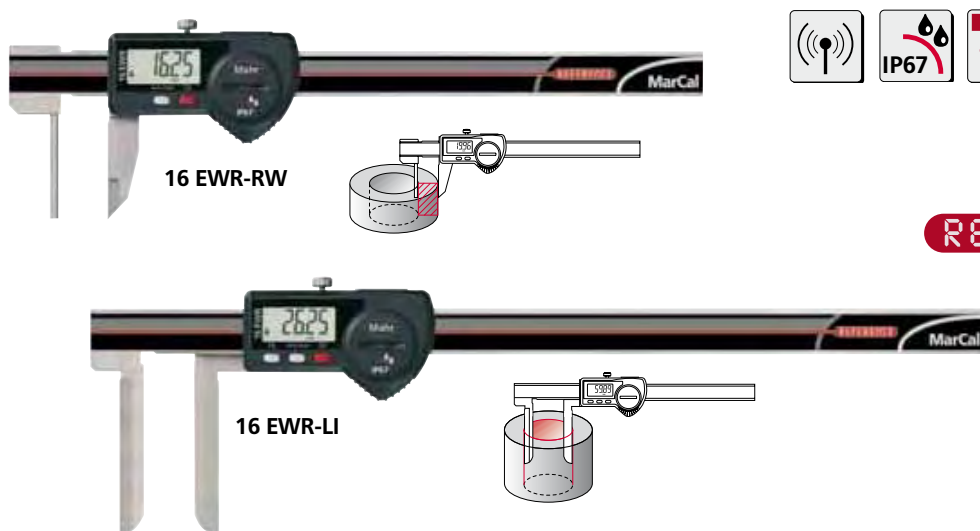
Features

- Features are the same as the MarCal 16 EWR
- Specially designed for inside measurements

#### Technical Data

|           | Type                    | Measuring range |              | Resolution    | Error limit<br>G | Order no. | List price | Promo price |
|-----------|-------------------------|-----------------|--------------|---------------|------------------|-----------|------------|-------------|
|           |                         | mm              | (inch)       |               |                  |           |            |             |
| 16 EWR-SI | Outward angled contacts | 20 - 170        | (0.8 - 6.7") | 0.01/ 0.0005" | 0.03             | 4103078P  | \$920.00   | \$699.00    |
| 16 EWR-AI | Outward angled jaws     | 10 - 160        | (0.4 - 6.3") | 0.01/ 0.0005" | 0.03             | 4103080P  | \$866.00   | \$650.00    |

### MarCal 16 EWR wall thickness or knife edge caliper



16 EWR-RW

16 EWR-LI

REFERENCE

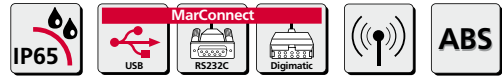
Features

- Features are the same as the MarCal 16 EWR
- Main scale jaw is round bar for measuring tube wall thickness

#### Technical Data

|           | Type                             | Measuring range |            | Resolution    | Error limit<br>G | Order no. | List price | Promo price |
|-----------|----------------------------------|-----------------|------------|---------------|------------------|-----------|------------|-------------|
|           |                                  | mm              | (inch)     |               |                  |           |            |             |
| 16 EWR-RW | Wall thickness measuring caliper | 0 - 150         | (0 - 6")   | 0.01/ 0.0005" | 0.05             | 4103081P  | \$774.00   | \$589.00    |
| 16 EWR-LI | With long narrow measuring jaws  | 10 - 200        | (0.4 - 8") | 0.01/ 0.0005" | 0.05             | 4103085P  | \$1,007.00 | \$760.00    |

## Digital Micrometer Micromar 40 EWR



REFERENCE

List Price From  
\$278.00  
Promo Price From  
**\$230.00**



### 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<br>mm / inch | Error limit<br>G *<br>µm | Spindle<br>thread pitch<br>mm | Data output<br> | Order no.       | List price | Promo price     |
|--------|-----------------|----------|-------------------------|--------------------------|-------------------------------|-----------------|-----------------|------------|-----------------|
|        | mm              | (inch)   |                         |                          |                               |                 |                 |            |                 |
| 40 EWR | 0 - 25          | (0 - 1") | 0.001 / 0.00005"        | 2                        | 0.635                         | —               | <b>4151721P</b> | \$278.00   | <b>\$230.00</b> |
| 40 EWR | 0 - 25          | (0 - 1") | 0.001 / 0.00005"        | 2                        | 0.635                         | ●               | <b>4151705P</b> | \$275.00   | <b>\$245.00</b> |
| 40 EWR | 25 - 50         | (1 - 2") | 0.001 / 0.00005"        | 2                        | 0.635                         | ●               | <b>4151706P</b> | \$285.00   | <b>\$250.00</b> |
| 40 EWR | 50 - 75         | (2 - 3") | 0.001 / 0.00005"        | 3                        | 0.635                         | ●               | <b>4151707P</b> | \$575.00   | <b>\$445.00</b> |
| 40 EWR | 75 - 100        | (3 - 4") | 0.001 / 0.00005"        | 3                        | 0.635                         | ●               | <b>4151708P</b> | \$603.00   | <b>\$450.00</b> |

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

## Digital Micrometer Micromar 40 ER



**REFERENCE**



List Price  
\$227.00  
Promo Price  
**\$180.00**

### 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     |
|--------------|-----------------|--------|------------------|-----------------|----------------------|-----------------|------------|-----------------|
|              | mm              | (inch) | mm / inch        | μm              | mm                   |                 |            |                 |
| <b>40 ER</b> | 0 - 25          | (0-1") | 0.001 / 0.00005" | 2               | 0.635                | <b>4151601P</b> | \$227.00   | <b>\$180.00</b> |

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

## MarCator. High Performance, Dial Indicators per ANSI/AGD Group 2

- A well thought-out design, the use of high quality components and materials as well as the precision engineered mechanism, guarantee the outstanding quality of these indicators
- The concentric "Speed Read Pointer" on 1.0" and .500" models) allows easy and safe reading of this dial indicator

List Price From  
\$114.00  
Promo Price From  
**\$69.00**

**Available for fast delivery**



2016002

2016005

**Limited Quantity**

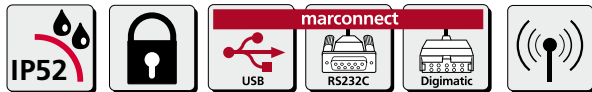


For further detailed information see:  
[www.mahr.com](http://www.mahr.com)  
WebCode 10942

### Technical Data

| Measuring Range | Graduation Value | Stem Diameter | Dial style | Range per Rev. | Rev. Counter | Order no.      | List price | Promo price    |
|-----------------|------------------|---------------|------------|----------------|--------------|----------------|------------|----------------|
| 0.250"          | 0.001            | 0.375         | 0 - 100    | 0.100"         | Standard     | <b>2016005</b> | \$114.00   | <b>\$69.00</b> |
| 0.500"          | 0.001            | 0.375         | 0 - 100    | 0.100"         | Speed Read   | <b>2016004</b> | \$119.00   | <b>\$74.00</b> |
| 1.00"           | 0.001            | 0.375         | 0 - 100    | 0.100"         | Speed Read   | <b>2016002</b> | \$130.00   | <b>\$79.00</b> |

## Digital Indicators 1075 R



**REFERENCE**



List Price From  
\$192.00

Promo Price From  
**\$145.00**

### Features

#### Functions:

- ON/OFF
- RESET (Set display to zero)
- mm/inch
- Reversal of counting direction
- PRESET (for entering a numerical value)
- DATA (data transmission with a data connection cable)
- LOCK-Function: Individual buttons can be locked
- Auto-OFF (selectable)
- Immediate measurement due to the Reference system
- Max measuring speed 1.5 m/sec (60"/sec)
- MarConnect Data output: choose either USB  
OPTO RS232C  
Digimatic
- High contrast Liquid Crystal Display with 12 mm high digits
- Operating temperature 10-40°C
- Class of protection IP52 according to IEC 60529

Scope of supply:  
Battery,  
Operating instructions

### Reference System - Just set once to zero

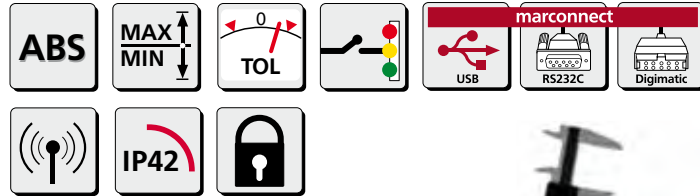
**REFERENCE** The new Digital Indicators 1075 R are equipped with the innovative Reference-System. The zero position only has to be set one time: once it is set, the zero remains stored for all further measurements. Therefore, when the indicator is switched ON or the measuring spindle is moved the indicator is immediately ready for measurement; thus the need to reset as with a conventional indicator is now obsolete.

### Technical Data

| Measuring range |        | Resolution |            | Span of error G * | Measuring force | Weight | Order no.       | List price | Promo price     |
|-----------------|--------|------------|------------|-------------------|-----------------|--------|-----------------|------------|-----------------|
| mm              | (inch) | mm         | / inch     | mm                | N               | g      |                 |            |                 |
| 12.5            | (.5")  | 0.01       | / 0.0005"  | 0.020             | 0.5 - 1         | 180    | <b>4336010P</b> | \$192.00   | <b>\$145.00</b> |
| 12.5            | (.5")  | 0.005      | / 0.0001"  | 0.015             | 0.5 - 1         | 180    | <b>4336020P</b> | \$260.00   | <b>\$199.00</b> |
| 12.5            | (.5")  | 0.001      | / 0.00005" | 0.005             | 0.5 - 1         | 180    | <b>4336030P</b> | \$317.00   | <b>\$240.00</b> |

\* in any zero point

## Long Range Digital Indicator Marcator 1088 with analog display



When Purchased Together

Shown with OMI-35B-41 and Lugback 4336310



50 mm

**25% Savings**

### Features

#### Functions:

- ON/OFF
- RESET (set digital and analog displays to zero)
- 0 - (set the analog display to zero)
- PRESET (enter any numerical values)
- DATA (data transmission)
- mm/inch-switchable
- Reversal of counting direction (switch value in digital display)
- MAX-MIN memory, ideal for searching the reversal point
- MAX-MIN memory, ideal for testing flatness and concentricity
- TOL (Enter tolerance limit values)
- LOCK: operating functions can be blocked via PC-Software
- Power supply via the main power adapter
- MarConnect data output USB, OPTO RS232C, or Digimatic
- Can be remotely operated via the interface (Opto RS232C)
- Control output compatible to Dial Comparators with limit contacts
- Operating and display unit (bezel) can be rotated 280°
- Class of protection IP54 in accordance to IEC 60529
- Operating temperature 5 - 40°C
- High contrast backlit LCD with 6.5 mm high digits
- Analog display with 4 mm pointer ensures better visual recognition, ideal when checking concentricity or flatness as well as searching for the reversal point when measuring bores
- Supplied with: Mains adapter, operating instructions

### Technical Data

| Measuring range |        | Resolution |          | Measuring force | Span of error* | Protection class | Order no.   | List price | Promo price     |
|-----------------|--------|------------|----------|-----------------|----------------|------------------|-------------|------------|-----------------|
| mm              | (inch) | mm         | inch     | N               | mm             |                  | 115 V       |            |                 |
| 50              | (2")   | 0.001      | 0.00005" | 1.25 - 2.7      | 0.008          | IP42             | 4337012+CAL | \$1,020.00 | <b>\$850.00</b> |

\*in any zero point

### Special Value

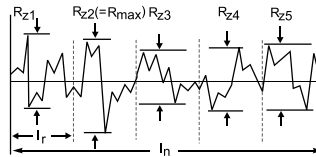
Universal comparator stand includes 1088 Digital Indicator, Lug Back and OMI-35B-41 with serrated anvil and fine adjustment arm (capacity 0.0" - 8.75" (0mm - 222mm).

| Order no.      | List price | Promo price     |
|----------------|------------|-----------------|
| OMI-35B-41+CAL | \$1,290.00 | <b>\$980.00</b> |

## Pocket Surf® The portable surface roughness gage



- Pocket-sized economically priced, completely portable instrument
- Solidly built, with a durable cast aluminum housing, to provide years of accurate, reliable surface finish gaging
- Can be used to measure any one of four, switch-selectable, parameters:  $R_a$ ,  $R_{max}/R_y$ ,  $R_z$



- Selectable traverse length 1, 3 or 5 cut-offs of 0.8 mm/.030"
- Operates in any position – horizontal, vertical, and upside down
- Four switchable probe positions – axial (folded) or at 90°, 180° or 270°
- Even difficult-to-reach surfaces such as inside and outside diameters are accessible
- Integrated data output for SPC-processing
- Easy-to-read LCD readout presents the measured roughness value, in microinches or micrometers

### Technical Data

#### Probing and Traverse Lengths

| Parameters            | Traverse Length (Nominal)  | Evaluation Length              | Number of Cutoffs/Switch Position |
|-----------------------|--|--------------------------------|-----------------------------------|
| $R_a/R_y$             | 2.0 mm/ .075"<br>3.5 mm/ .135"   | 0.8 mm/ .030"<br>2.4 mm/ .090" | 1<br>3                            |
| $R_a/R_z/R_{max}$     | 5.0 mm/ .195"  | 4.0 mm/ .150"                  | 5                                 |
| Traverse Speed        | 5.08 mm/ .2" per second  |                                |                                   |
| Cutoff                | .08 mm/ .030" ASME 2 RC-filter   |                                |                                   |
| Probe Type            | Piezoelectric  |                                |                                   |
| Maximum Stylus Force  | 15.0 mN / 1500 mgf   |                                |                                   |
| Power                 | Consumer-type alkaline battery, 9 Volt                                     |                                |                                   |
| Battery Capacity      | Approx. 2500 measurements, depending on frequency of use and output option |                                |                                   |
| Operating Temperature | 10° to 45°C / 50° to 113° F  |                                |                                   |
| Storage Temperature   | -20° to 65°C / -4° to 149° F   |                                |                                   |

**Made in USA**  
Available for fast delivery

#### Pocket Surf Sets

| Order no.               |                 |  | Price             |
|-------------------------|-----------------|--|-------------------|
| <b>EMD-1500-311+CAL</b> | <b>EGH-1019</b> | Probe, 90°, 10 µm radius, PMD-90101 Certified Specimen, incl. Test Certificate | <b>\$2,260.00</b> |
| <b>EMD-1500-312+CAL</b> | <b>EGH-1019</b> | Probe, 90°, 10 µm radius, EMD-90010 Precision Specimen                         | <b>\$2,180.00</b> |
| <b>EMD-1500-321+CAL</b> | <b>EGH-1026</b> | Probe, 90°, 5 µm radius, PMD-90101 Certified Specimen, incl. Test Certificate  | <b>\$2,260.00</b> |
| <b>EMD-1500-322+CAL</b> | <b>EGH-1026</b> | Probe, 90°, 5 µm radius, EMD-90010 Precision Specimen                          | <b>\$2,180.00</b> |

A Pocket Surf kit is furnished complete in a fitted case, and includes a Pocket Surf unit with a General Purpose Probe\*\* and a 3.2 µm/125 µinch (nominal) Reference Specimen\*\*, 9 Volt battery, Riser Plate and screwdriver.

\*\* Part Numbers listed in table above.

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

**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)

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

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

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

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

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

**free**  
**16 ER Caliper**

### 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.   | Price      |
|-------------|------------|
| 6910214+CAL | \$2,580.00 |

## 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  
\$8,750.00  
Promo Price From  
**\$6,499.00**



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

Measuring range  
Application range  
Resolution



Measuring error\*

Quick Mode

2-D

Motorized measuring carriage

Bore diameter

Max-Min

Tolerance monitoring

Perpendicularity / Straightness measurement

Measuring programs

Temperature compensation

Air bearings

Integrated USB memory

Data interface

USB printer interface

**Order no.**

**List price**

**Promo price**

|         | 2D          |             |              |
|---------|-------------|-------------|--------------|
| mm / in | 0-350 / 14" | 0-600 / 24" | 0-1000 / 40" |
| mm / in | 520 / 20.47 | 770 / 30.31 | 1170 / 46.0  |

|    |   |  |  |
|----|---|--|--|
| mm | 0.01 / 0.005 / 0.001 / 0.0005 / 0.0001          |  |  |
| in | 0.001" / 0.005" / 0.0001" / 0.00005" / 0.00001" |  |  |
| 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>                           | \$8,750.00         | \$9,570.00         | \$15,670.00        |
| <b>Promo price</b>                          | <b>\$6,499.00</b>  | <b>\$7,499.00</b>  | <b>\$11,999.00</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

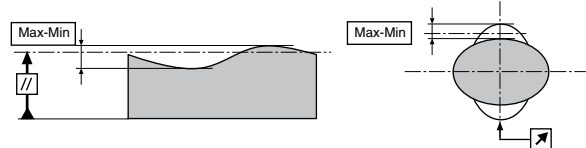


\* Check with Mahr Federal Inc. for available electronic probe options

### Dynamic measuring functions



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



• Parallel deviation

• Roundness deviation

## 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                   |              |         |



817 ts1



For further detailed information see:

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

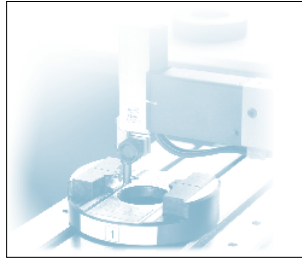
WebCode 12369-8298

| Probe Set | Order no. | Price      |
|-----------|-----------|------------|
| 817 ts1   | 4429019   | \$1,520.00 |
| 817 ts2   | 4429018   | \$1,040.00 |

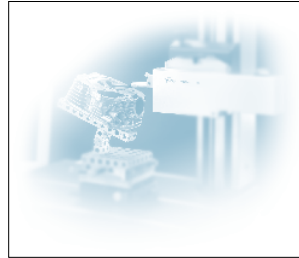
▶ | **DIMENSIONAL METROLOGY**



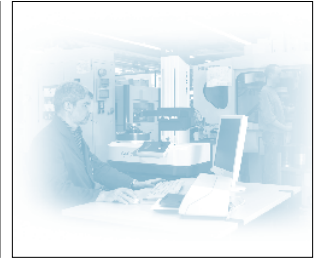
**Precision Gages**



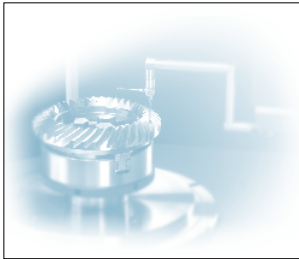
**Precimar.**  
Precision Length Metrology



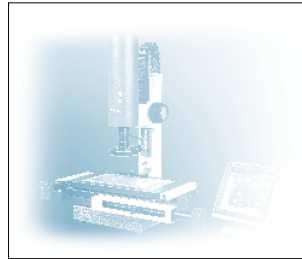
**MarSurf.**  
Surface Metrology



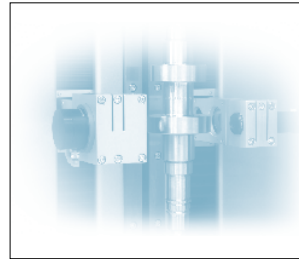
**MarForm.**  
Form Metrology



**MarGear.**  
Gear Metrology



**MarVision.**  
Optical Metrology



**MarShaft.**  
Shaft Metrology



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