



# Integrated Wireless

## MarCal | Micromar | MarCator



Handheld Measuring Tools

### Handheld measuring tools with Integrated Wireless transmission

Mahr's Integrated Wireless range of tools guarantees you precise measuring results with full mobility. The modern and easy way to measure – without the restrictions of wired technology.

# Maximum flexibility for every measuring task

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Whether you are measuring length, width, inner diameter or depth, with Mahr's Integrated Wireless measuring instruments you're perfectly equipped for every task. The wireless design gives you flexibility and freedom of movement in your measurements – whatever the manufacturing or production environment. The Integrated Wireless connection, together with your MarConnect interface, offers the optimal connection to your recording and evaluation program. Mahr's Integrated Wireless tools are compatible with Windows® Excel® or a complex CAQ/SPC software.

- No data loss; warning of connection issues
- Reference system for avoiding measurement errors
- Intuitive operation and easy handling
- Can be used individually in every production environment
- Easy integration with both Windows Excel and CAQ systems

# Table of Contents

**Best performance results**

Info | Page 4

Your interface for **even greater performance**

Info | Page 6

**Integrated** for improved performance

Info | Page 7

**MarCal** calipers  
Precise measuring results with convenient handling

Products | Page 8



Digital **calipers** for special applications

Overview | Page 16

**Micromar** micrometers  
Pinpoint length measurement with intuitive operation

Products | Page 18



**Micromar**  
Thread anvils

Accessories | Page 23

Digital **micrometers** for special applications

Overview | Page 24

**MarCator** indicators  
Static and dynamic measurements with superb operational reliability

Products | Page 26



# Best Performance in Every Step

Mahr's portfolio of wireless tools offers you maximum mobility for your measuring tasks. The wireless solution of Integrated Wireless measuring instruments means you can measure without impediment. Mahr measuring instruments are ideal tools for every manufacturing environment, reliably delivering the performance you have come to expect from state-of-the-art handheld measuring tools.

## Economical

By purchasing a USB receiver stick (i-Stick) for your computer, you can operate up to eight measuring tools at the same time and save additional costs for connection cables.

## Unclutter

Keep your workplace clear of restrictive data cables.

## ID Transmission

Serial and order numbers are sent out by the measuring device and stored in the recorded measurement log.



### Reliable

With integrated transmission, visual feedback is provided verifying data transmission. Error message signifies loss of data connector.



### Full Freedom of Movement

Mahr measuring tools allow exact measuring, even in the machine or on hard-to-reach workpieces.

6

Meter (19.6 ft.)  
Transmission Range

8

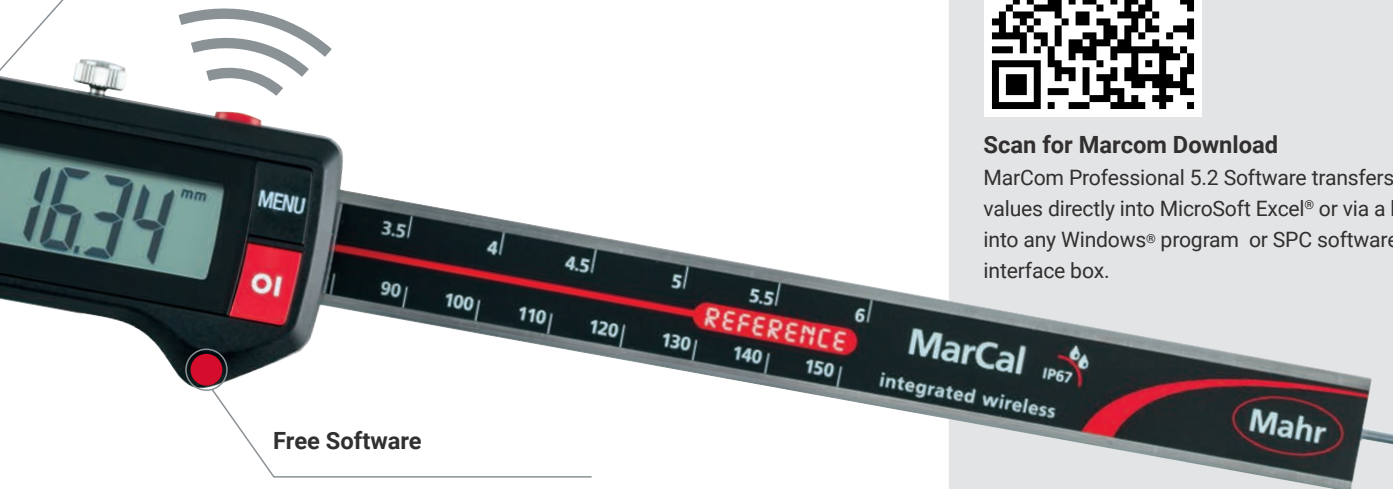
Measuring Tools  
per i-Stick Receiver

70

Products for  
Every Measuring Task

### Integrated Transmitter

Eliminate hazards such as cable breakage and wear.



### Free Software

Benefit from the MarCom Professional 5.2 interface software and transfer the measurement data individually and conveniently to your Windows applications or CAQ software.



### Scan for Marcom Download

MarCom Professional 5.2 Software transfers measuring values directly into MicroSoft Excel® or via a keyboard code into any Windows® program or SPC software using a virtual interface box.



MarCom Professional | Software

## Your interface for even greater performance

Combine your Integrated Wireless instruments with our multifunctional MarCom Professional Software. This versatile interface tool combines data acquisition and data transfer with your data processing. How you process the collected data is entirely up to you – for maximum flexibility choose from a range of output formats.

Output formats include:

- Virtual interface box: CAQ/SPC software
- Intelligent Excel interface: Microsoft Excel
- Emulation keyboard: Any Windows software
- Text file: flexible data processing

Download free of charge at:  
[www.mahr.com/marcom](http://www.mahr.com/marcom)



# Integrated for Improved Performance

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The key to successful manufacturing is smart, efficient quality control. It depends on simple and accurate data acquisition, as well as structured processing of the data. Mahr's portfolio of wireless tools with their integrated transmitters and perfectly coordinated software offers everything you need for the ideal measuring process.

## More **Reliability**

When using Mahr's Integrated Wireless technology, you can rely on a stable connection for transferring your measuring values. You will be alerted of any connection errors immediately, preventing the loss of valuable data.

## Maximum **Flexibility**

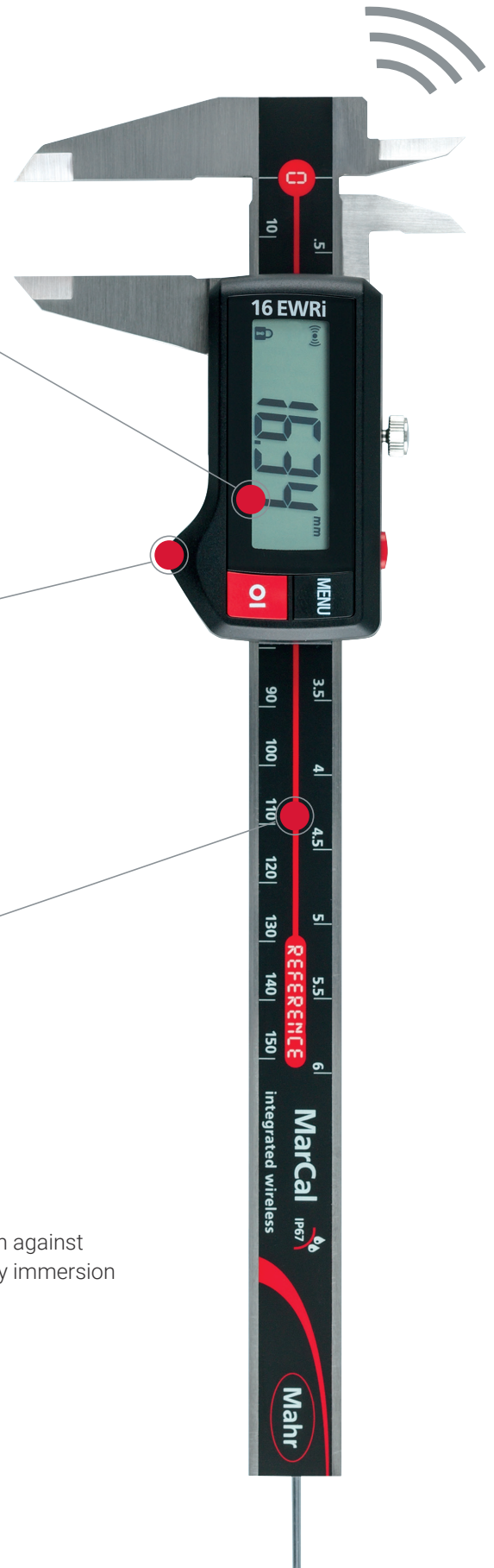
Mahr's wireless tools feature a compact and user-friendly design, enabling easy and precise measuring. This means that even in the tightest of spaces or most difficult-to-reach workpieces, you can efficiently complete all measuring tasks.

## Maximum **Compatibility**

Effortlessly operate multiple wireless measuring instruments at the same time. Mahr's wireless measuring tools offer exceptional connectivity in any working environment; incoming data streams are quickly and reliably assigned to the respective measuring instrument due to ID transmission. This flexibility allows you to import your measuring data to Excel or CAQ software as required and thereby tailor your measuring routine to your specific needs.

# The Latest Generation of Calipers

Integrated Wireless



## Large Display

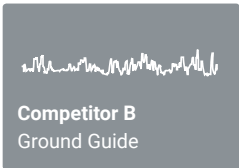
The high contrast display with 11 mm digits provides reliable, effortless measurement readings – even at a quick glance.

## Ergonomic Design

The handy thumb rest guarantees easy handling and prevents slipping even in dirty environments.

## Guide Quality

Lapped slideways provide the unique quality of even and sensitive gliding of the slide. In addition, the service life is longer than that of ground guides due to a much greater percentage contact area of the slideway.



**IP67** Protection against temporary immersion  
Dust-tight



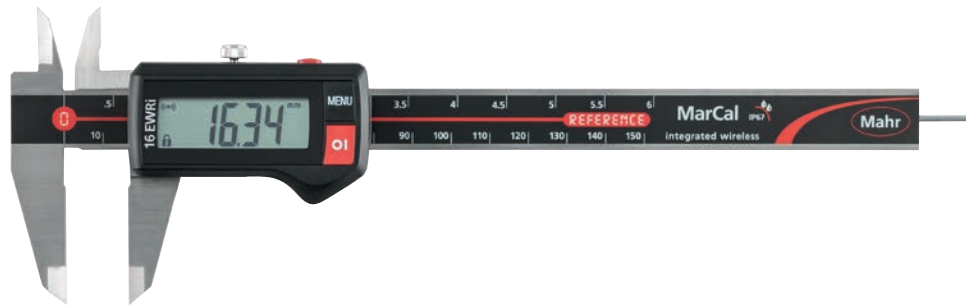


### Functions

- ON/OFF
- AUTO-ON/OFF
- HOLD  
(storage of measured values)
- RESET (set display to zero)
- PRESET (for entering a numerical value)
- Reversal of counting direction
- mm/inch
- LOCK function (key lock)
- DATA (data transmission)

### Features

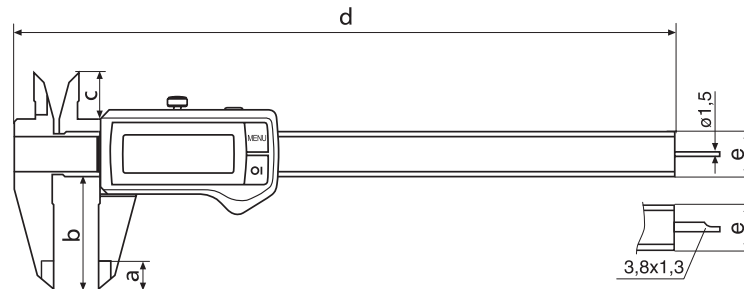
- High contrast analog display
- Locking screw above
- Lapped guideway
- Measuring blade for inside measurements
- Slide and beam made of hardened stainless steel
- Step measuring function
- Immediate measurements with Reference System
- Raised guideway for the protection of the scale
- Excellent resistance against dust, coolants and lubricants
- Dirt wipers are integrated in the slide
- FREE Marcom Professional Software download:  
[www.mahr.com/marcom](http://www.mahr.com/marcom)  
(only for Mahr data cables and wireless systems with USB and RS232 interface)
- **Digit Height:** 11 mm
- **Data Interface:** Integrated Wireless
- **Energy Supply:** Battery life approximately 3 years (approximately 6 months in wireless mode)
- **IP Protection Category:** IP 67
- **Package Contains:** battery, instruction manual, case



### Technical Data

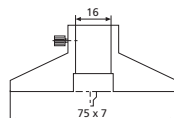
Order No.	Measuring Range	Resolution	Error Limit	Standard	Depth Rod	Friction Wheel
4103400	0 -150 mm / 0 - 6 in	0,01 mm / 0.0005 in	0,03 mm	DIN 862	Round	•
4103401					Rectangular	•
4103402						•
4103403						•
4103404						•
4103405	0 - 200 mm / 0 - 8 in	0,04 mm	Factory Standard		•	
4103406	0 - 300 mm / 0 -12 in				•	
4103407	0 -12 in				•	

Order No.	a	b	c	d	e
4103400	10 mm	40 mm	16 mm	235 mm	16 mm
4103401					
4103402					
4103403		50 mm	19 mm	285 mm	
4103404					
4103405	14 mm	64 mm	19 mm	388 mm	
4103406					
4103407					



### Accessories

Order No.	Product Name	Type
4102020	Depth bridge (75 mm x 7 mm)	16 Em
4102220	Receiver for instruments with Integrated Wireless	i-Stick
4102520	Battery 3 V, CR 2032	



16 Em



i-Stick

# MarCal 16 EWRi-V

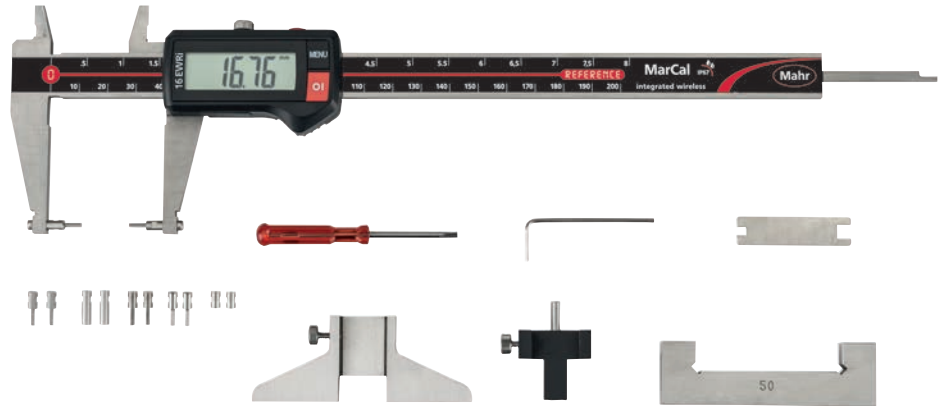
Digital Universal Caliper



REFERENCE

## Functions

- AUTO-ON/OFF
- ON/OFF
- DATA (data transmission via connection cable)
- HOLD (storage of measured values)
- PRESET (for entering a numerical value)
- RESET (set display to zero)
- mm/inch
- LOCK-Function (key lock)



## Features

- High contrast analog display
- Locking screw on top
- Lapped guideway
- Measuring blade for inside measurements
- Slide and beam made of hardened stainless steel
- Step measuring function
- Immediate measurements due to the Reference System
- Raised guideway for the protection of the scale
- Excellent resistance against dust, coolants and lubricants
- Dirt wipers are integrated in the slide
- FREE Marcom Professional Software download: [www.mahr.com/marcom](http://www.mahr.com/marcom) (only for Mahr data cables and wireless systems with USB and RS232 interface)
- **Digit Height:** 11 mm
- **Data Interface:** Integrated Wireless
- **Energy Supply:** Battery life approximately 3 years (approximately 6 months in wireless mode)
- **IP Protection Category:** IP 67
- **Package Contains:** battery, instruction manual, case, setting gage for inside measurement 16 Eel, measuring force device 16 Ec, depth measuring bridge 16 Em, anvils for outside and inside measurement 16 Eea 1-3

## Application:

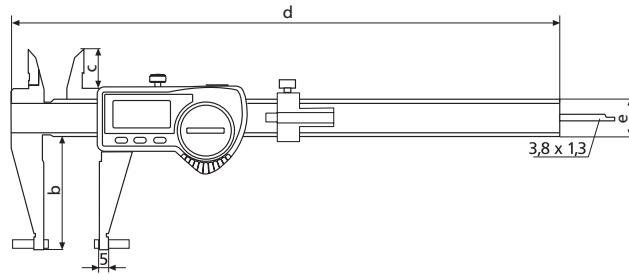
- Can be used as standard caliper (four measuring directions) with standard accessories for measuring recesses, grooves, etc.
- Can be used with special accessories for measuring threads, bores and gears



## Technical Data

Order No.	Measuring Range	Resolution	Error Limit	Standard	Depth Rod	Including Accessories
4118907	0 - 200 mm / 0 - 8 in	0,01 mm / 0.0005 in	0,03 mm	DIN 862	Rectangular	•

Order No.	b	c	d	e
4118907	48 mm	16,5 mm	285 mm	16 mm



## Accessories

Order No.	Product Name	Quantity	Unit	Type
4102020	Depth bridge (75 mm x 7 mm)			16 Em
4118810	Anvil for outside measurement (3,5 mm x 12 mm)			16 Eea 1
4118811	Anvil for outside measurement (1,5 mm x 6 mm)			16 Eea 2
4118812	Anvil for outside measurement (3,5 mm x 6 mm)			16 Eea 3
4118813	Anvil for inside measurement (3,5 mm x 6 mm)		Piece	16 Eei 1
4118814	Anvil for inside measurement (1,5 mm x 6 mm)			16 Eei 2
4118815	Anvil for inside measurement (3,5 mm x 6 mm)			16 Eei 3
4118816	Anvil for inside measurement (4 mm x 2,5 mm)			16 Eei 4
4118817	Setting gage for inside measurement (50 mm)			16 Eel
4118818	Measuring force device			16 Ec
4879602	Screws M2x8		Piece	
4118819	Mounting attachment for thread anvils 844 TG/844Tr and ball anvils 844 Tk			16 Eab
4102220	Receiver for instruments with Integrated Wireless			i-Stick
4102520	Battery 3 V, CR 2032			

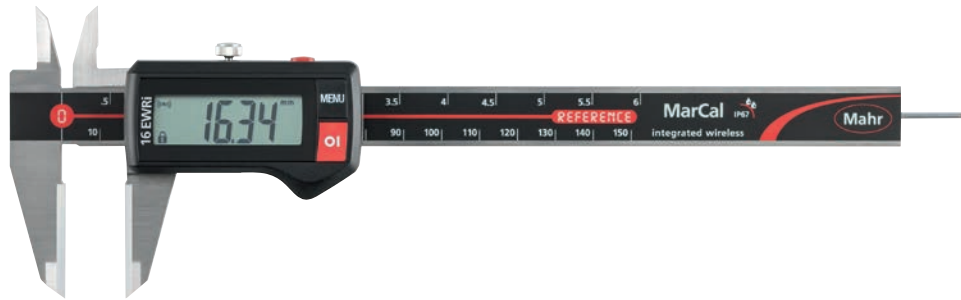


### Functions

- AUTO-ON/OFF
- ON/OFF
- mm/inch
- LOCK function (key lock)
- RESET (set display to zero)
- PRESET (for entering a numerical value)
- DATA (data transmission)
- HOLD (storage of measured values)

### Features

- High contrast analog display
- Locking screw on top
- Lapped guideway
- Measuring blade for inside measurements
- Slide and beam made of hardened stainless steel
- Step measuring function
- Immediate measurements due to the Reference System
- Raised guideway for the protection of the scale
- Excellent resistance against dust, coolants and lubricants
- Dirt wipers are integrated in the slide
- FREE Marcom Professional Software download: [www.mahr.com/marcom](http://www.mahr.com/marcom) (only for Mahr data cables and wireless systems with USB and RS232 interface)
- **Digit Height:** 11 mm
- **Data Interface:** Integrated Wireless
- **Energy Supply:** Battery life approximately 3 years (approximately 6 months in wireless mode)
- **IP Protection Category:** IP 67
- **Package Contains:** battery, instruction manual, case

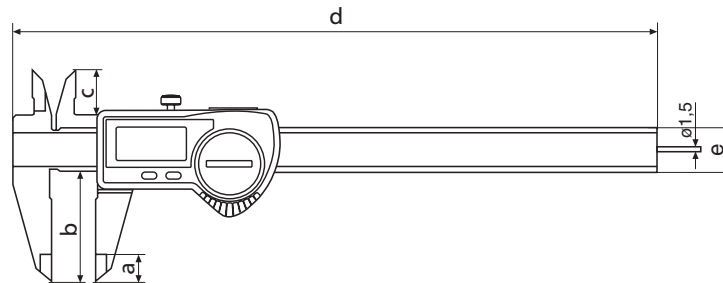


### Application:

- Used to measure hard materials
- Outer measuring surfaces made of ceramic

### Technical Data

Order No.	Measuring Range	Resolution	Error Limit	Standard	Depth Rod
4103372	0 - 150 mm / 0 - 6 in	0,01 mm / 0.0005 in	0,03 mm	DIN 862	Round



### Accessories

Order No.	Product Name	Type
4102220	Receiver for instruments with Integrated Wireless	i-Stick
4102520	Battery 3 V, CR 2032	



i-Stick

Integrated Wireless

# MarCal 16 EWri-H

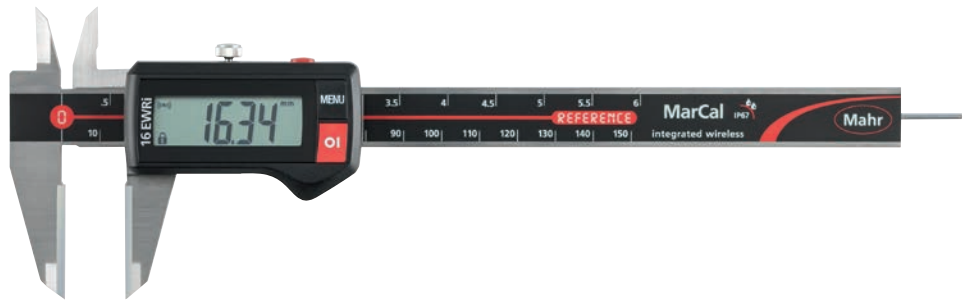
Digital Caliper for Special Applications



REFERENCE

## Functions

- AUTO-ON/OFF
- ON/OFF
- mm/inch
- LOCK function (key lock)
- RESET (set display to zero)
- PRESET (for entering a numerical value)
- DATA (data transmission)
- HOLD (storage of measured values)



## Features

- High contrast analog display
- Locking screw on top
- Lapped guideway
- Measuring blade for inside measurements
- Slide and beam made of hardened stainless steel
- Step measuring function
- Immediate measurements due to the Reference System
- Raised guideway for the protection of the scale
- Excellent resistance against dust, coolants and lubricants
- Dirt wipers are integrated in the slide
- FREE Marcom Professional Software download: [www.mahr.com/marcom](http://www.mahr.com/marcom) (only for Mahr data cables and wireless systems with USB and RS232 interface)
- **Digit Height:** 11 mm
- **Data Interface:** Integrated Wireless
- **Energy Supply:** Battery life approximately 3 years (approximately 6 months in wireless mode)
- **IP Protection Category:** IP 67
- **Package Contains:** battery, instruction manual, case

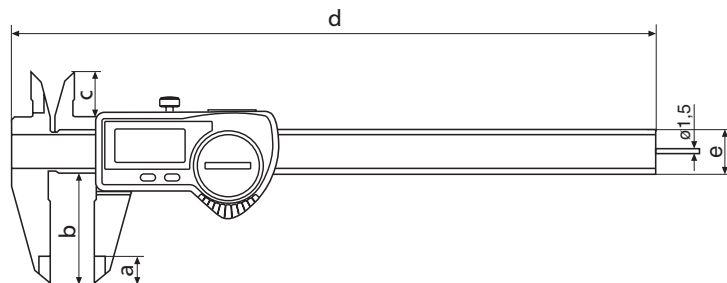
## Application:

- Used to measure hard materials
- Outer measuring surfaces made of carbide

## Technical Data

Order No.	Measuring Range	Resolution	Error Limit	Standard	Depth Rod
4103373	0 - 150 mm / 0 - 6 in	0,01 mm / .0005 in	0,03 mm	DIN 862	Round

Order No.	a	b	c	d	e
4103373	10 mm	40 mm	16 mm	235 mm	16 mm



## Accessories

Order No.	Product Name	Type
4102220	Receiver for instruments with Integrated Wireless	i-Stick
4102520	Battery 3 V, CR 2032	



i-Stick



### Functions

- AUTO-ON/OFF
- ON/OFF
- RESET (set display to zero)
- mm/inch
- PRESET (for entering a numerical value)
- LOCK function (key lock)
- HOLD (storage of measured values)
- Reversal of counting direction
- DATA (data transmission)

### Features

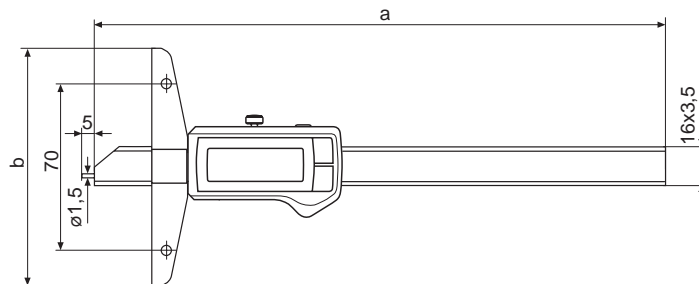
- High contrast analog display
- Locking screw on top
- Lapped guideway
- Measuring surfaces made of steel
- Slide and beam made of hardened stainless steel
- Immediate measurements due to the Reference System
- Raised guideway for the protection of the scale
- Excellent resistance against dust, coolants and lubricants
- Dirt wipers are integrated in the slide
- **Digit Height:** 11 mm
- **Data Interface:** Integrated Wireless
- **Energy Supply:** Battery life approximately 3 years (approximately 6 months in wireless mode)
- **IP Protection Category:** IP 67
- **Package Contains:** battery, instruction manual, case



### Technical Data

Order No.	Measuring Range	Resolution	Error Limit
4126755	0 -150 mm / 0 - 6 in	0,01 mm / 0.0005 in	0,03 mm
4126754	0 - 200 mm / 0 - 8 in		0,04 mm
4126756	0 - 300 mm / 0 - 12 in		0,05 mm
4126757	0 - 500 mm / 0 - 20 in		

Order No.	a	b
4126755	234 mm	100 mm
4126754	384 mm	150 mm
4126756	584 mm	

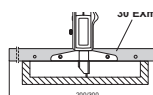


### Accessories

Order No.	Product name	Quantity Unit	Type
4102220	Receiver for instruments with Integrated Wireless		i-Stick
4102520	Battery 3 V, CR 2032		
4125611	Anvil (4 mm)	Piece	30 ESa
4126510	Cross beam extension (300 mm)		30 EXm
4126511	Cross beam extension (200 mm)		



i-Stick



30 EXm



30 ESa

# MarCal 30 EWRI

Digital Depth Gauge



## Functions

- ON/OFF
- AUTO-ON/OFF
- RESET (set display to zero)
- mm/inch
- PRESET (for entering a numerical value)
- LOCK function (key lock)
- HOLD (storage of measured values)
- Reversal of counting direction
- DATA (data transmission)

## Features

- High contrast analog display
- Locking screw on top
- Lapped guideway
- Measuring surfaces made of steel
- Slide and beam made of hardened stainless steel
- Immediate measurements due to the Reference System
- Raised guideway for the protection of the scale
- Excellent resistance against dust, coolants and lubricants
- Dirt wipers are integrated in the slide
- FREE Marcom Professional Software download: [www.mahr.com/marcom](http://www.mahr.com/marcom) (only for Mahr data cables and wireless systems with USB and RS232 interface)
- **Data Interface:** Integrated Wireless
- **Energy Supply:** Battery life approximately 3 years (approximately 6 months in wireless mode)
- **IP Protection Category:** IP 67
- **Package Contains:** battery, instruction manual, case



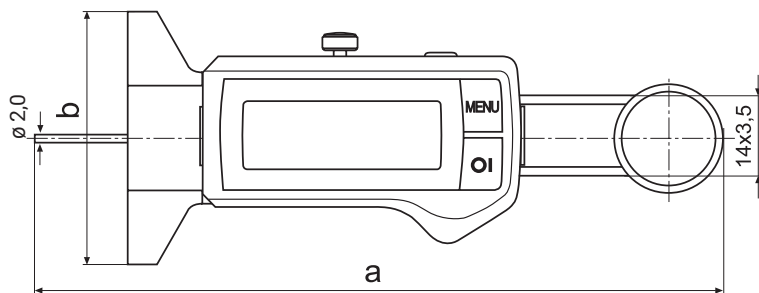
## Application:

- Small, handy, practical
- Ideal for mobile use in production, control and assembly
- For small measuring depths in bores and grooves

## Technical Data

Order No.	Measuring Range	Resolution	Error Limit	Standard	Depth Rod
4126751	0 - 25 mm / 0 - 1 in	0,01 mm / 0.0005 in	0,02 mm / 0.0008 in	Factory standard	Round

Order No.	a	b
4126751	129 mm	48 mm



## Accessories

Order No.	Product Name	Type
4102220	Receiver for instruments with Integrated Wireless	i-Stick
4102520	Battery 3 V, CR 2032	



i-Stick



# MarCal 30 EWri-U

Digital Depth Gauge



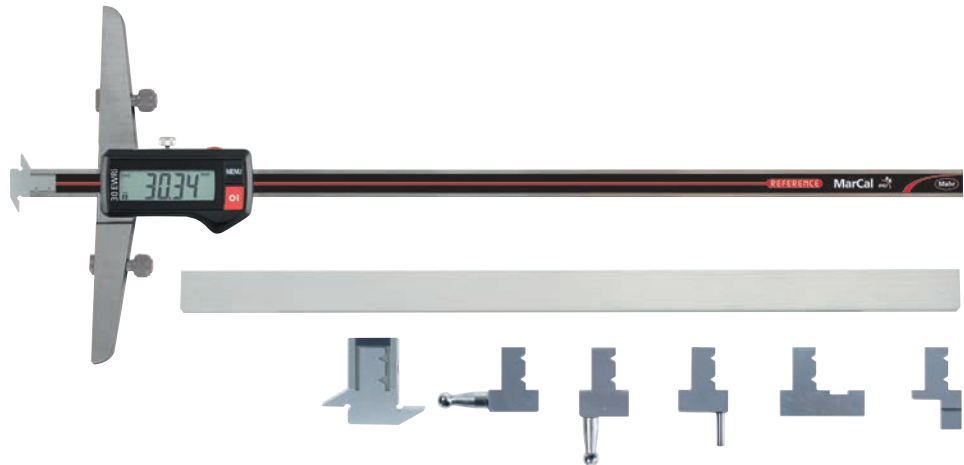
REFERENCE

## Functions

- ON/OFF
- AUTO-ON/OFF
- mm/inch
- LOCK function (key lock)
- RESET (set display to zero)
- PRESET (for entering a numerical value)
- DATA (data transmission)
- HOLD (storage of measured values)

## Features

- High contrast analog display
- Locking screw above
- Lapped guideway
- Measuring surfaces made of steel
- Slide and beam made of hardened stainless steel
- Immediate measurements due to the Reference System
- Raised guideway for the protection of the scale
- Excellent resistance against dust, coolants and lubricants
- Dirt wipers are integrated in the slide
- FREE Marcom Professional Software download: [www.mahr.com/marcom](http://www.mahr.com/marcom) (only for Mahr data cables and wireless systems with USB and RS232 interface)
- **Digit Height:** 11 mm
- **Data Interface:** Integrated Wireless
- **Energy Supply:** Battery life approximately 3 years (approximately 6 months in wireless mode)
- **IP Protection Category:** IP 67
- **Package Contains:** Measuring anvil 30 Ud (twin hook for widths and distances), battery, instruction manual, case



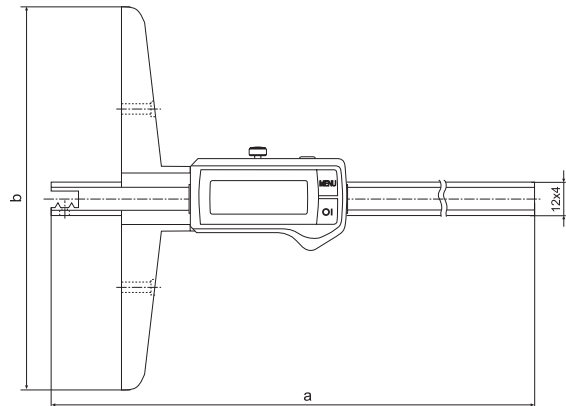
## Application:

- Measuring groove widths and distances between grooves (with standard 30 Ud anvil with twin hook)
- This depth gage can also be adapted to other measuring applications with the extensive range of optional accessories (anvils and adjustable measuring bridges)

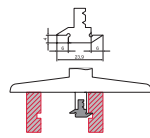
## Technical Data

Order No.	Measuring Range	Resolution	Error Limit	Standard
4126603	0 – 300 mm / 0 - 12 in	0,01 mm / 0.0005 in	0,04 mm	Factory standard
4126604	0 – 500 mm / 0 - 20 in		0,05 mm	

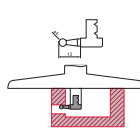
Order No.	a	b	c
4126603	385 mm	150 mm	16 mm
4126604	585 mm		



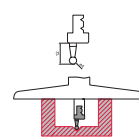
## Accessories



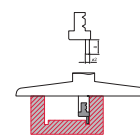
30 EUd  
Order No. 4126630



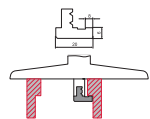
30 EUw  
Order No. 4126631



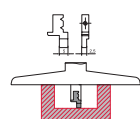
30 EUg  
Order No. 4126632



30 EUb  
Order No. 4126633



30 EUh  
Order No. 4126634



30 EUs  
Order No. 4126635



30 EUm Adjustable measuring bridge  
300 mm, Order No. 4126641  
400 mm, Order No. 4126641



i-Stick  
Order No. 4102220

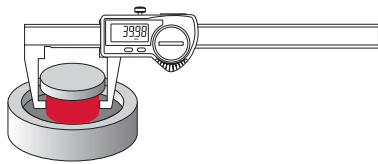
# MarCal

Digital Caliper for Special Applications

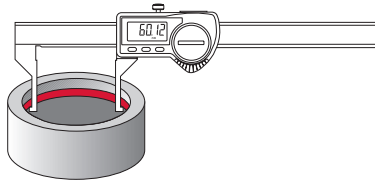


MarCal 16 EWri-BA

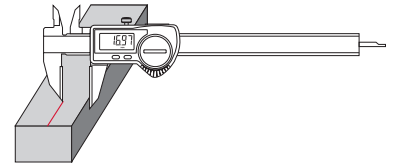
MarCal 16 EWri-AA



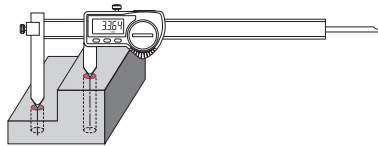
MarCal 16 EWri-AI



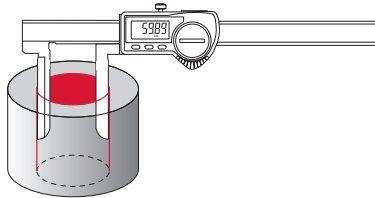
MarCal 16 EWri-AR



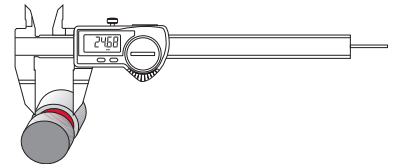
MarCal 16 EWri-BA



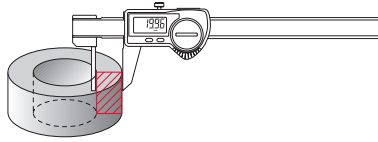
MarCal 16 EWri-LI



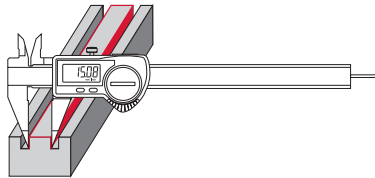
MarCal 16 EWri-NA



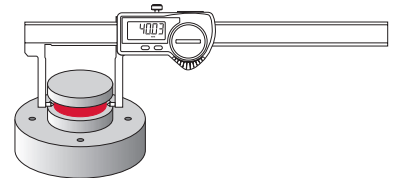
MarCal 16 EWri-RW



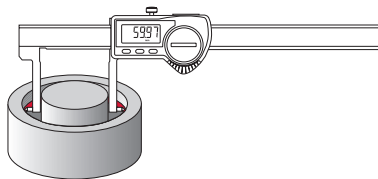
MarCal 16 EWri-S



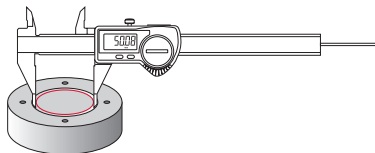
MarCal 16 EWri-SA



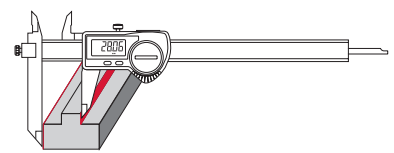
MarCal 16 EWri-SI



MarCal 16 EWri-SM



MarCal 16 EWri-VS



Integrated Wireless



## Functions

- ON/OFF
- AUTO-ON/OFF
- HOLD (storage of measured values)
- RESET (set display to zero)
- PRESET (for entering a numerical value)
- Reversal of counting direction
- mm/inch
- LOCK function (key lock)
- DATA (data transmission)
- High contrast analog display
- Locking screw on top
- Lapped guideway
- Measuring blade for inside measurements
- Slide and beam made of hardened stainless steel
- Step measuring function
- Immediate measurements due to the Reference System
- Raised guideway for the protection of the scale
- Excellent resistance against dust, coolants and lubricants
- Dirt wipers integrated in the slide
- FREE Marcom Professional Software download:  
**www.mahr.com/marcom**  
(only for Mahr data cables and wireless systems with USB and RS232 interface)
- **Digit Height:** 11 mm
- **Data Interface:** Integrated Wireless
- **Energy Supply:** Battery life approximately 3 years (approximately 6 months in wireless mode)
- **IP Protection Category:** IP 67
- **Package Contains:** battery, instruction manual, case

## Technical Data

Order No.	Model	Measuring Range	Resolution	Error Limit	Depth Rod
4103379	16 EWRI-AA	0 - 150 mm / 0 - 6 in	0,01 mm / 0.0005 in	0,03 mm	None
4103380	16 EWRI-AI	10 mm - 160 mm / 0.4 in - 6.3 in			Rectangular
4103382	16 EWRI-AR	0 - 200 mm / 0 - 8 in		0,04 mm	None
4103384	16 EWRI-BA	10 mm - 210 mm / 0.4 in - 8.3 in			Rectangular
4103385	16 EWRI-LI	10 mm - 200 mm / 0.4 in - 8 in		0,05 mm	None
4103374	16 EWRI-NA	0 - 150 mm / 0 - 6 in		0,03 mm	Round
4103381	16 EWRI-RW			0,05 mm	None
4103375	16 EWRI-S	0 - 140 mm / 0 - 5.5 in		0,03 mm	Round
4103377	16 EWRI-SA				None
4103378	16 EWRI-SI	20 mm - 170 mm / 0.8 in - 6.7 in		0,03 mm	Round
4103376	16 EWRI-SM	0 - 150 mm / 0 - 6 in			None
4103383	16 EWRI-VS	0 - 200 mm / 0 - 8 in		0,04 mm	Rectangular

Order No.	Measuring Range	Resolution	Error Limit	Standard
4126603	0 - 300 mm / 0 - 12 in	0,01 mm / 0.0005 in	0,04 mm	Factory standard
4126604	0 - 500 mm / 0 - 20 in		0,05 mm	

Order No.	Product Name	Type
4102220	Receiver	i-Stick
4102520	Battery 3 V, CR 2032	



i-Stick

# The Latest Generation of Micrometers

Integrated Wireless

**No Damage to Workpieces**

The non-rotating, contacting measuring system prevents scratches to sensitive and precision-machined surfaces. You can even measure thin metal foils for example, without them becoming twisted or deformed.

**Quick Sliding Adjustment**

The quick adjustment dramatically reduces measuring times: a spindle feed rate 10 times faster than the standard achieves a measuring path of 5 mm per revolution.

**Non-Rotating Spindle**

The non-rotating spindle maintains the engaged position. For example, when it comes to thread flank measurement using thread measuring wires, the two measuring wire holders always remain engaged with each other.

**Compact Design**

The handy size and sophisticated ergonomics enable the easiest one-handed operation in its compact class.

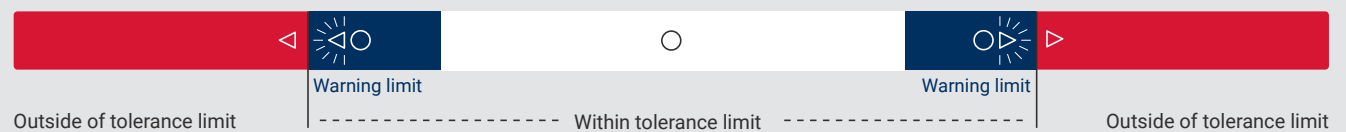
40 EWri-L

Mahr Micromar IP65

OR  $\equiv$  0 ABS H TOL

20.18 mm

## Tolerance Function with Warning Limits



# Micromar 40 EWri

Digital Micrometer Set



REFERENCE

## Functions

- RESET (set display to zero)
- ABS (display can be set to zero without losing reference to ORIGIN)
- mm/inch
- ORIGIN (for entering a numerical value)
- LOCK function (key lock)
- TOL (Tolerance and warning limits)
- HOLD (storage of measured values)
- DATA (data transmission)
- Bi-directional data interface (external input option of characteristic values and setting of individual lock functions by MarCom Software)

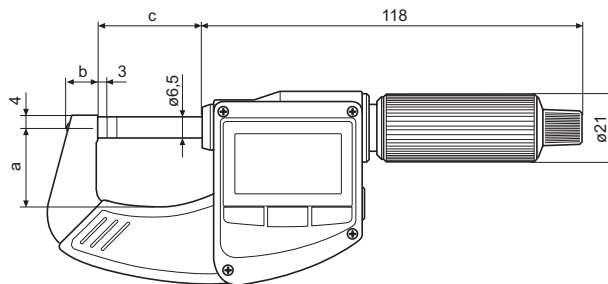
## Features

- High contrast analog display
- Hardened and ground stainless spindle
- Carbide tipped spindle and anvil
- Rapid drive
- Ratchet is integrated in the thimble
- Lacquered and heat insulated steel frame
- FREE Marcom Professional Software download: [www.mahr.com/marcom](http://www.mahr.com/marcom) (only for Mahr data cables and wireless systems with USB and RS232 interface)
- **Digit Height:** 10 mm
- **Data Interface:** Integrated Wireless
- **Energy Supply:** Battery life approximately 3 years (approximately 6 months in wireless mode)
- **IP Protection Category:** IP 65
- **Package Contains:** instruction manual, battery, setting values, case



## Technical Data

Order No.	Measuring Range	Resolution	Error Limit	Spindle Thread Pitch	Measuring Force
4157100	0 – 25 mm / 0 - 1 in	0,001 mm / 0.00005 in	2 µm	0,5 mm	5 – 10 N
4157101	25 mm – 50 mm / 1 in - 2 in				
4157102	50 mm – 75 mm / 2 in - 3 in		3 µm		
4157103	75 mm – 100 mm / 3 in - 4 in				
4157104	100 mm – 125 mm / 4 in - 5 in		6 µm		
4157105	125 mm – 150 mm / 5 in - 6 in				
4157106	150 mm – 175 mm / 6 in - 7 in		7 µm		
4157107	175 mm – 200 mm / 7 in - 8 in				
4157115	0 – 100 / 0 in - 4 in				



40 EWri set 4157115

Order No.	a	b	c
4157100	24 mm	9,5 mm	32 mm
4157101	36 mm	11 mm	57 mm
4157102	45 mm	13 mm	82 mm
4157103	57 mm	13 mm	107 mm

## Accessories

Order No.	Product Name	Type
4102220	Receiver for instruments with Integrated Wireless	i-Stick
4102520	Battery 3 V, CR 2032	
4158000	Stand for holding outside micrometers	41 H

Integrated Wireless

# Micromar 40 EWRI-L

Digital Micrometer



REFERENCE

## Functions

- RESET (set display to zero)
- ABS (display can be set to zero without losing reference to ORIGIN)
- mm/inch
- ORIGIN (for entering a numerical value)
- LOCK function (key lock)
- TOL (Tolerance and warning limits)
- HOLD (storage of measured values)
- DATA (data transmission via connection cable)
- Bi-directional data interface (external input option of characteristic values and setting of individual lock functions by MarCom Software)

## Features

- High contrast analog display
- Hardened and ground stainless spindle
- Hardened and ground stainless spindle
- QUICK DRIVE
- Rapid adjustment
- Sliding spindle
- Ratchet is integrated in the thimble
- Lacquered steel frame, heat insulated
- FREE Marcom Professional Software download: [www.mahr.com/marcom](http://www.mahr.com/marcom) (only for Mahr data cables and wireless systems with USB and RS232 interface)
- **Digit Height:** 10 mm
- **Data Interface:** Integrated Wireless
- **Energy Supply:** Battery life approximately 2 years (approximately 6 months in wireless mode)
- **IP Protection Category:** IP 65
- **Package Contains:** instruction manual, battery, setting standard (measuring range of 25 mm - 50 mm), case



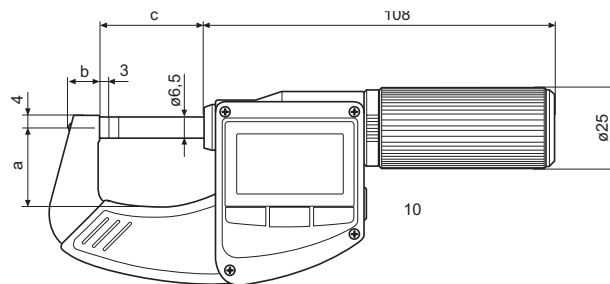
## Application:

- Avoiding workpiece damage: The non-rotating spindle has a infringing touch, which prevents scratch marks on sensitive and finely machined surfaces
- Ideal for measuring thin metal foils without twisting and bending them
- Thread flank measurement by using thread wires: Both wire holders always remain in the engaged position with the non-rotating spindle

## Technical Data

Order No.	Measuring Range	Resolution	Error Limit	Spindle Thread Pitch	Measuring Force
4157120	0 - 25 mm / 0 - 1 in	0,001 mm / 0.00005 in	2 µm	0,5 mm	5 N - 10 N
4157121	25 mm - 50 mm / 1 in - 2 in				
4157122	50 mm - 75 mm / 2 in - 3 in		3 µm		
4157123	75 mm - 100 mm / 3 in - 4 in				

Order No.	a	b	c
4157120	24 mm	9,5 mm	32 mm
4157121	36 mm	11 mm	57 mm
4157122	45 mm	13 mm	82 mm
4157123	57 mm	13 mm	107 mm



## Accessories

Order No.	Product Name	Type
4102220	Receiver for instruments with Integrated Wireless	i-Stick
4102520	Battery 3 V, CR 2032	
4158000	Stand for holding outside micrometers	41 H



41 H



i-Stick



# Micromar 40 EWri-V

Digital Micrometer



REFERENCE

## Functions

- RESET (set display to zero)
- ABS (display can be set to zero without losing reference to ORIGIN)
- mm/inch
- ORIGIN (for entering a numerical value)
- LOCK function (key lock)
- TOL (Tolerance and warning limits)
- HOLD (storage of measured values)
- DATA (data transmission via connection cable)
- Bi-directional data interface (external input option of characteristic values and setting of individual lock functions by MarCom Software)
- **Package Contains:** instruction manual, battery, case
- **For each pair of measuring anvils:**
  - 40 Ef flat  $\varnothing$  6.5 mm
  - 40 Ea offset  $2 \times 4$  mm
  - 40 Et plate  $\varnothing$  11.3 mm
  - 40 Eb spherical R= 5 mm
  - 40 Ep tapered  $60^\circ \varnothing$  0.3 mm – 5.5 mm
  - 40 Es blade 0.75 x 4 mm



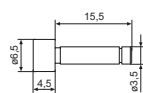
Integrated Wireless

## Application:

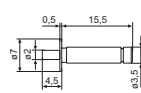
- Universal adjustment to different workpieces and measurement situations using individual interchangeable measuring anvils
- Thread flanks and spherical measuring anvils (optional accessories) can also be used

## Technical Data

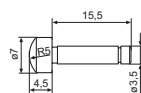
Order No.	Measuring Range	Resolution	Error Limit	Spindle Thread Pitch	Measuring Force	Standard
4157150	0 – 25 mm / 0 – 1 in	0,001 mm / 0.00005 in	4 $\mu$ m	5 mm	5 N – 10 N	DIN 863–3



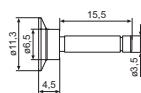
40 Ef



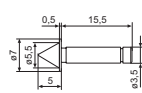
40 Ea



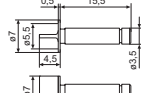
40 Er



40 Et



40 Ep



40 Es

## Accessories

Order No.	Product name	Type
4102220	Receiver for instruments with Integrated Wireless	i-Stick



i-Stick

# Micromar 40 EWRI-V

Digital Micrometer



REFERENCE

## Features

- High contrast analog display
- Hardened stainless spindle
- With mounting bores for measuring anvils with a shaft  $\varnothing$  3,5 mm
- Quick drive
- Rapid adjustment
- Sliding spindle
- Ratchet integrated in the thimble
- Lacquered and heat insulated steel frame
- FREE Marcom Professional Software download: [www.mahr.com/marcom](http://www.mahr.com/marcom) (only for Mahr data cables and wireless systems with USB and RS232 interface)
- **Digit Height:** 10 mm
- **Data Interface:** MarConnect (bidirectional), USB, Digimatic
- **Energy Supply:** Battery life approximately 3 years
- **IP Protection Category:** IP 65
- Package Contains: instruction manual, battery, case



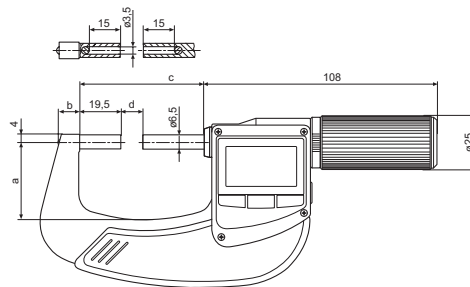
## Application:

- Universal adjustment to different workpieces and measurement situations using individual interchangeable measuring anvils
- Thread flanks and spherical measuring anvils (optional accessories) can also be used

## Technical Data

Order No.	Measuring Range	Resolution	Error Limit	Spindle Thread Pitch	Measuring Force	Standard
4157145	0 - 25 mm / 0 - 1 in	0,001 mm / 0.00005 in	4 $\mu$ m	5 mm	5 N - 10 N	DIN 863-3
4157146	25 mm - 50 mm / 1 in - 2 in		6 $\mu$ m			
4157147	50 mm - 75 mm / 2 in - 3 in					
4157148	75 mm - 100 mm / 3 in - 4 in					

Order No.	a	b	c	Mounting Hole
4157145	32 mm	11,5 mm	57 mm	For measuring anvils with a shaft diameter 3,5 mm x 15,5 mm
4157146	44 mm	13,5 mm	82 mm	
4157147	57 mm	15,5 mm	107 mm	
4157148	73 mm	17 mm	132,5 mm	



## Accessories

Order No.	Product name	Type
4102220	Receiver for instruments with Integrated Wireless	i-Stick



i-Stick

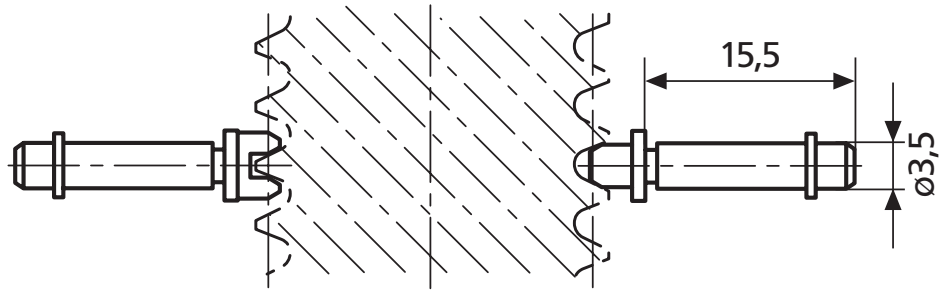
Integrated Wireless

# Micromar Thread Anvils

Digital Micrometer

## Features

- Hardened and wear resistant special steel
- Cylindrical mounting shank and retainer ring for rotatable mounting in the bore of the measuring spindle and anvil
- Pair comprised of V-anvil and cone

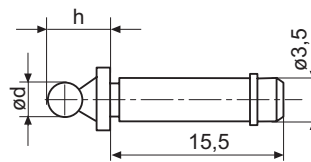


## Notes

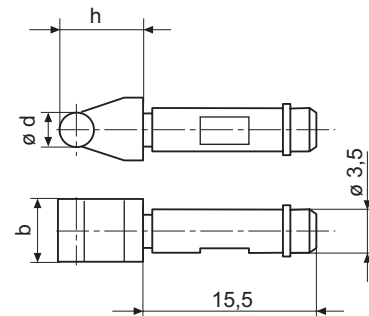
With a pitch of 0,2 mm - 0,45 mm, the V-anvil bridges 3 turns. It should therefore be set with 715 E thread adjustment pins, otherwise with 43 Z setting standards.

Thread Pitch	Taper	V-anvil
	Order No.	Order No.
<b>Pitch diameter, external thread</b>		
<b>Metric 60°</b>		
0,2	4173407	4173007
0,25	4173408	4173008
0,3	4173409	4173009
0,35	4173410	4173010
0,4	4173411	4173011
0,45	4173412	4173012
0,5 - 0,7	4173400	4173000
0,7 - 1	4173401	4173001
1,25 - 2	4173402	4173002
2 - 3,5	4173403	4173003
3,5 - 5	4173404	4173004
5 - 7	4173405	4173005
7 - 9	4173406	4173006
<b>Trapezoid 30°</b>		
1	4173650	4173250
1,5	4173651	4173251
2	4173652	4173252
3	4173653	4173253
4	4173654	4173254
5	4173655	4173255
6	4173656	4173256
7	4173657	4173257
8	4173658	4173258
9	4173659	4173259
10	4173660	4173260
12	4173661	4173261
14	4173662	4173262
16	4173663	4173263
18	4173664	4173264
20	4173665	4173265

Thread Pitch in TPI	Taper	V-anvil
	Order No.	Order No.
<b>Pitch diameter, external thread</b>		
<b>UST 60°</b>		
60 - 48	4173513	4173113
48 - 40	4173514	4173114
40 - 32	4173515	4173115
32 - 24	4173516	4173116
24 - 18	4173517	4173117
18 - 14	4173518	4173118
14 - 10	4173519	4173119
10 - 7	4173520	4173120
7 - 4,5	4173521	4173121
4,5 - 3	4173522	4173122
<b>Whitworth 55°</b>		
40 - 32	4173443	4173043
32 - 24	4173444	4173044
24 - 18	4173445	4173045
18 - 14	4173446	4173046
14 - 10	4173447	4173047
10 - 7	4173448	4173048
7 - 4,5	4173449	4173049
4,5 - 3	4173450	4173050
3 - 2,5	4179409	4179408



**MaraMeter**  
Ball contact



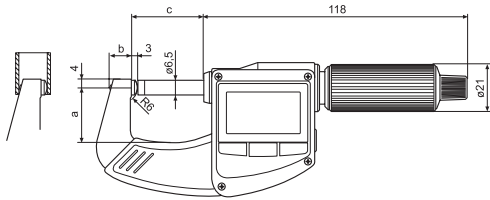
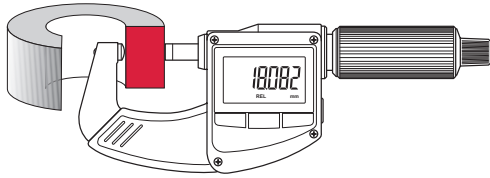
**MaraMeter**  
Roller blades, carbide

# Micromar

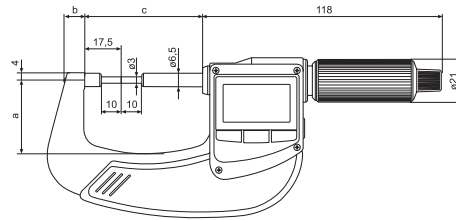
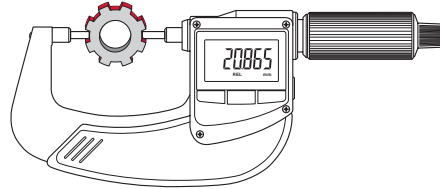
Digital Micrometers for Special Applications

Integrated Wireless

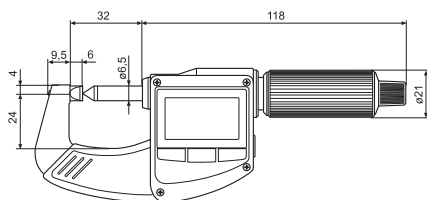
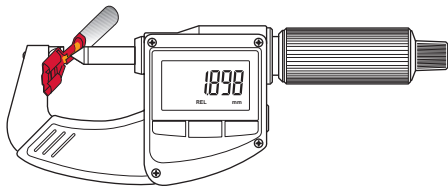
## 40 EWri-R



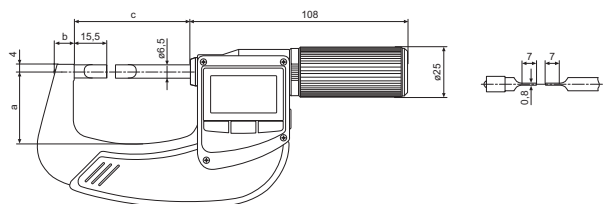
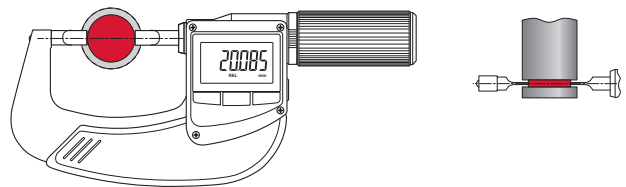
## 40 EWri-B



## 40 EWri-K



## 40 EWri-S





## Functions

- RESET (set display to zero)
- ABS (display can be set to zero without losing reference to ORIGIN)
- mm/inch
- ORIGIN (for entering a numerical value)
- LOCK function (key lock)
- TOL (tolerance and warning limits)
- HOLD (storage of measured values)
- DATA (data transmission)
- Bi-directional data interface (external input option of characteristic values and setting of individual lock functions by MarCom Software)

## Features

- High contrast analog display
- Hardened and ground stainless spindle
- Ratchet is integrated in the thimble
- Lacquered and heat insulated steel frame
- FREE Marcom Professional Software download: [www.mahr.com/marcom](http://www.mahr.com/marcom) (only for Mahr data cables and wireless systems with USB and RS232 interface)
- **Digit height:** 10 mm
- **Data interface:** Integrated Wireless
- **Energy Supply:** battery, life span approximately 2 years
- **IP Protection Category:** IP 65
- **Package Contains:** operation manual, battery, setting standard (from measuring range 25 mm - 50 mm), case

## Technical Data

Order No.	Model	Measuring Range	Measuring Face	Resolution	Error Limit	Spindle Thread Pitch	Measuring Force	Standard
4157132	40 EWRI-B	0 - 25 mm / 0 - 1 in	carbide	0,01 mm / 0.0005 in	4 µm	5 mm	5 N - 10 N	DIN 863-3
4157133		25 mm - 50 mm / 1 in - 2 in						
4157130	40 EWRI-R	0 - 25 mm / 0 - 1 in						
4157131		25 mm - 50 mm / 1 in - 2 in						
4157141	40 EWRI-S	0 - 25 mm / 0 - 1 in	hardened steel					
4157142		25 mm - 50 mm / 1 in - 2 in						
4157143		50 mm - 75 mm / 2 in - 3 in						
4157144		75 mm - 100 mm / 3 in - 4 in						
4157140	40 EWRI-K	0 - 20 mm / 0 in - 0.787 in	carbide			0,5 mm		Factory standard

## Accessories

Order No.	Product Name	Type
4102220	Receiver for instruments with Integrated Wireless	i-Stick



i-Stick

# The Latest Generation of Indicators

Integrated Wireless

## Clear Tolerance Display

The practical tolerance function makes tolerance deviations easy to detect due to clear symbols. Values that are below or above the permitted tolerance range are indicated by arrows in the display.

## Save Time with Reference System

After it has been set once, the zero position will be saved for all subsequent measurements, even after automatic switch-off in energy saving mode. Due to the Reference System, your measuring instrument will always be ready to measure.

## Absolute Function

The dial indicator can be set to zero in any position without losing its absolute reference.



Marameter 840 F with MarCator 1086 Ri



## MarConnect i-Stick

The compact i-Stick allows you to connect your wireless instruments to your work computer. Plug the receiver into a USB port and use up to eight measuring instruments at the same time. The MarCom Professional 5.2 FREE Software is the ideal interface for your applications.





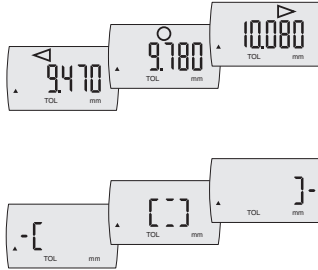
# MarCator 1086 Ri

## Digital Indicator



### Functions

- Switchable resolution
- ON/OFF
- RESET (set display to zero)
- mm/inch
- Reversal of counting direction
- PRESET (for entering a numerical value)
- TOL (enter tolerance limit values)
- <0> (tolerance GO/NO GO display mode)
- ABS (display can be set to zero without losing reference to preset)
- DATA (data transmission via connection cable)
- Factor (adjustable)
- LOCK (individual key lock)



### Application:

- Comprehensive measuring function for static measurements such as lengths, distances and length differences



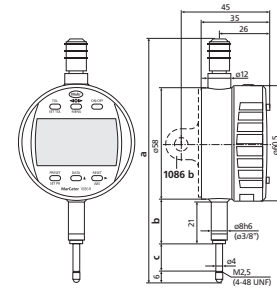
### Features

- Integrated Wireless transmitter
- High contrast LCD
- Operating and display unit (bezel) can be rotated through 280°
- Mounting shank and measuring spindle are both made of hardened stainless steel
- Immediate measurements due to the Reference System
- FREE Marcom Professional Software download: [www.mahr.com/marcom](http://www.mahr.com/marcom) (only for Mahr data cables and wireless systems with USB and RS232 interface)
- **Digit Height:** 11 mm
- **Data Interface:** Digimatic, Opto RS232C, USB, Integrated Wireless
- **IP Protection Category:** IP 42
- **Package Contains:** instruction manual, battery

### Technical Data

Order No.	4337624	4337625	4337626	4337627	4337628
Measuring Span	12,5 mm / 0.5 in	25 mm / 1 in	50 mm / 2 in	100 mm / 4 in	25 mm / 1 in
Resolution	0,0005 mm, 0,001 mm, 0,002 mm, 0,005 mm, 0,01 mm / 0.00002 in, 0.00005 in, 0.0001 in, 0.0002 in, 0.0005 in				
Error Limit	0,004 mm	0,008 mm	0,009 mm	0,004 mm	0,004 mm
Error Limit Over 50 Graduations	0,002 mm				
Repeatability	0,001 mm				
Measuring Force	0,65 N - 0,9 N	0,65 N - 1,15 N	1,25 N - 2,7 N	1,8 N - 3,5 N	0 - 0
Standard	Factory standard				
Lifting Protection Cap	.				

Order No.	a	b	c	Mounting Shaft
4337624	126,3 mm	23 mm	13,5 mm	8 mm
4337625	153,4 mm	26,8 mm	26,5 mm	
4337626	267,3 mm	40 mm	52 mm	
4337627	420,3 mm	91 mm	103 mm	
4337628	153,4 mm	26,8 mm	26,5 mm	



### Accessories

Order No.	Product Name	Type
4102220	Receiver for instruments with Integrated Wireless	i-Stick
4102357	16 EXu Data connection cable USB (2 m)	16 EXu
4102915	Digimatic data cable (2 m)	16 EWd
4102410	Data connection cable RS232C (2 m)	16 EXr
4375004	Protective cap for 1075 R / 1086 R / 1087 R	1086 s
4337421	Lug back	1086 b
4336311	Cable release (12,5 mm + 25 mm)	1085 a
4336237	Pneumatic lifting (12,5 mm + 25 mm)	1082 p
4310103	Adapter bushing (0.375 in O.D. / 8 mm ID)	940
4884464	Battery 3 V, Type CR 2450	
4336230	Pneumatic lifting (50 mm + 100 mm)	1082 p

Integrated Wireless

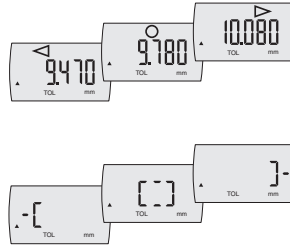
# MarCator 1086 Ri

Digital Indicator



## Functions

- Fixed resolution
- ON/OFF
- RESET (set display to zero)
- mm/inch
- Reversal of counting direction
- PRESET (for entering a numerical value)
- TOL (enter tolerance limit values)
- <0> (tolerance GO/NO GO display mode)
- ABS (display can be set to zero without losing reference to preset)
- DATA (data transmission via connection cable)
- Factor (adjustable)
- LOCK (individual key lock)



## Application:

- Comprehensive measuring function for static measurements such as lengths, distances and length differences



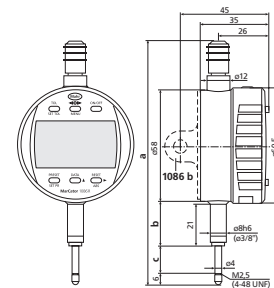
## Features

- Integrated Wireless transmitter
- High contrast LCD
- Operating and display unit (bezel) can be rotated through 280°
- Mounting shank and measuring spindle are both made of hardened stainless steel
- Immediate measurements due to the Reference System
- FREE Marcom Professional Software download: [www.mahr.com/marcom](http://www.mahr.com/marcom) (only for Mahr data cables and wireless systems with USB and RS232 interface)
- **Digit Height:** 11 mm
- **Data Interface:** Digimatic, Opto RS232C, USB, Integrated Wireless
- **IP Protection Category:** IP 42
- **Package Contains:** instruction manual, battery

## Technical Data

Order No.	4337134	4337135
Measuring Span	12,5 mm / 0.5 in	25 mm / 1 in
Resolution	0,01 mm / 0.0005 in	
Error Limit	0,02 mm	
Error Limit Over 50 Graduations	0,01 mm	
Repeatability	0,01 mm	
Measuring Force	0,65 - 0,9 N	0,65 - 1,15 N
Standard	Factory standard	
Lifting Protection Cap	•	

Order No.	a	b	c	Mounting Shaft
4337134	126,3 mm	23 mm	13,5 mm	8 mm
4337135	153,4 mm	26,8 mm	26,5 mm	8 mm



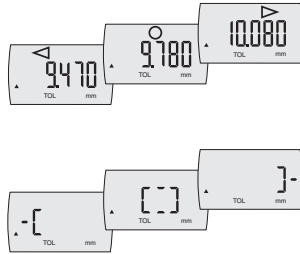
## Accessories

Order No.	Product Name	Type
4102220	Receiver for instruments with Integrated Wireless	i-Stick
4102357	Data connection cable USB (2 m)	16 EXu
4102915	Digimatic data cable (2 m)	16 EWd
4102410	Data connection cable RS232C (2 m)	16 EXr
4375004	Protective cap for 1075 R / 1086 R / 1087 R	1086 s
4337421	Lug back	1086 b
4310103	Adapter bush (0.375 in / 8 mm)	940
4336311	Cable release (12,5 mm + 25 mm)	1085 a
4336237	Pneumatic lifting (12,5 mm + 25 mm)	1082 p
4884464	Battery 3 V, CR 2032	



## Functions

- Switchable resolution with boot
- ON/OFF
- RESET (set display to zero)
- mm/inch
- Reversal of counting direction
- PRESET (for entering a numerical value)
- TOL (enter tolerance limit values)
- <0> (tolerance GO/NO GO display mode)
- ABS (display can be set to zero without losing reference to preset)
- DATA (data transmission via connection cable)
- Factor (adjustable)
- LOCK (individual key lock)



## Application:

- Comprehensive measuring function for static measurements such as lengths, distances and length differences



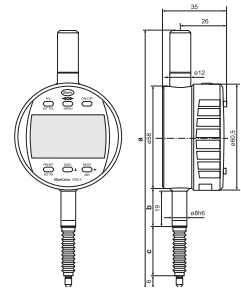
## Features

- Integrated Wireless transmitter
- High contrast LCD
- Operating and display unit (bezel) can be rotated through 280°
- Mounting shank and measuring spindle made of hardened stainless steel
- Immediate measurements due to the Reference System
- FREE Marcom Professional Software download: [www.mahr.com/marcom](http://www.mahr.com/marcom) (only for Mahr data cables and wireless systems with USB and RS232 interface)
- **Digit Height:** 11 mm
- **Data Interface:** Digimatic, Opto RS232C, USB, Integrated Wireless
- **IP Protection Category:** IP 54
- **Package Contains:** instruction manual, battery

## Technical Data

Order No.	4337142	4337143
Measuring Span	12,5 mm / 0.5 in	25 mm / 1 in
Resolution	0,0005 mm, 0,001 mm, 0,002 mm, 0,005 mm, 0,01 mm / 0.00002 in, 0.00005 in, 0.0001 in, 0.0002 in, 0.0005 in	
Error Limit	0,004 mm	
Error Limit over 50 Graduations	0,002 mm	
Repeatability	0,001 mm	
Measuring Force	0,65 N - 1,4 N	1 N - 2,25 N
Standard	Factory standard	
Protective Measuring Spindle Cap	•	

Order No.	a	b	c	Mounting Shaft
4337142	144,3 mm	21 mm	28,5 mm	8 mm
4337143	193,2 mm	24,8 mm	50 mm	



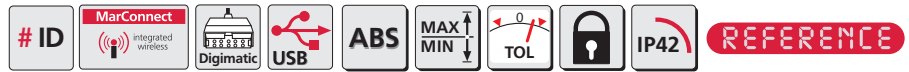
## Accessories

Order No.	Product Name	Type
4102220	Receiver for instruments with Integrated Wireless	i-Stick
4102357	Data connection cable USB (2 m)	16 EXu
4102915	Digimatic data cable (2 m)	16 EWd
4102410	Data connection cable RS232C (2 m)	16 EXr
4375004	Protective cap for 1075 R / 1086 R / 1087 R	1086 s
4337421	Lug back	1086 b
4336311	Cable release (12,5 mm + 25 mm)	1085 a
4310103	Adapter bush (0.375 in / 8 mm)	940
4336237	Pneumatic lifting (12,5 mm + 25 mm)	1082 p
4337472-E	Rubber bellows (12,5 mm)	
4884464	Battery 3 V, Type CR 2450	
4337474-E	Rubber bellows (25 mm)	

Integrated Wireless

# MarCator 1087 Ri

## Digital Indicator

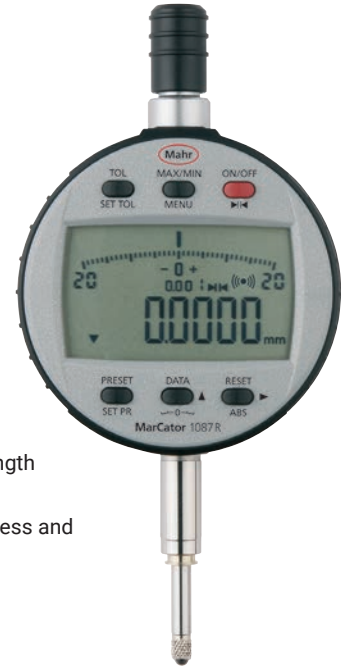


### Functions

- 0 (set the analog display to zero)
- ABS (display can be set to zero without losing reference to preset)
- AUTO-ON/OFF
- DATA (data transmission via connection cable)
- Factor (adjustable)
- LOCK (individual key lock)
- MAX/MIN memory for searching the reversal point
- ON/OFF
- PRESET (for entering a numerical value)
- RANGE (switch the measuring range and resolution)
- RESET (set display to zero)
- TIR (MAX-MIN) for testing flatness and concentricity
- TOL (enter tolerance limit values)
- Reversal of counting direction
- mm/inch

### Features

- Integrated Wireless transmitter
- High contrast LCD display
- Operating and display unit (bezel) can be rotated through 280°
- Lifter protection cap on the measuring spindle
- Clamping shaft and measuring pin made of hardened stainless steel
- Immediate measurements due to the Reference System
- FREE Marcom Professional Software download:  
[www.mahr.com/marcom](http://www.mahr.com/marcom) (only for Mahr data cables and wireless systems with USB and RS232 interface)
- **Digit Height:** 8,5 mm
- **Data Interface:** Digimatic, Opto RS232C, USB, Integrated Wireless
- **Energy Supply:** Battery operation
- **IP Protection Category:** IP 42
- **Package Contains:** instruction manual, battery



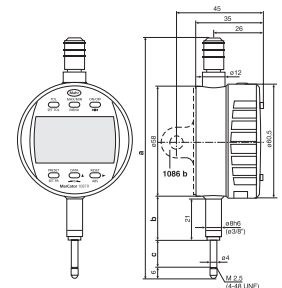
### Application:

- Comprehensive measuring functions for:
  - Static measurements such as lengths, distances and length differences
  - Dynamic measurements such as radial runout, straightness and flatness via MAX/MIN/MAX-MIN functions

### Technical Data

Order No.	4337663	4337665	4337667
Measuring Range	12,5 mm / 0.5 in	25 mm / 1 in	50 mm / 2 in
Resolution	0,0005 mm, 0,001 mm, 0,002 mm, 0,005 mm, 0,01 mm / 0.00002 in, 0.00005 in, 0.0001 in, 0.0002 in, 0.0005 in		
Readings	0,001 mm, 0,002 mm, 0,005 mm, 0,01 mm, 0,02 mm, 0,05 mm		
Range of Analog Display	± 0,01 mm, ± 0,02 mm, ± 0,04 mm, ± 0,1 mm, ± 0,2 mm		
Error Limit	0,004 mm		0,007 mm
Error Limit Over 50 Graduations	0,002 mm		
Repeatability	0,001 mm		
Measuring Force	0,65 n - 0,85 N	0,65 N - 0,9 N	1,25 N - 2,7 N
Standard	Factory standard		
Lifting Protection Cap	•		

Order No.	a	b	c	Mounting Shaft
4337663	126,3 mm	23 mm	13,5 mm	8 mm
4337665	153,4 mm	26,8 mm	26,5 mm	
4337667	267,3 mm	40 mm	52 mm	



### Accessories

Order No.	Product Name	Type
4102220	Receiver for instruments with Integrated Wireless	i-Stick
4102357	Data connection cable USB (2 m)	16 EXu
4102915	Digimatic data cable (2 m)	16 EWd
4102410	Data connection cable RS232C (2 m)	16 EXr
4375004	Protective cap for 1075 R / 1086 R / 1087 R	1086 s
4337421	Lug back	1086 b
4336237	Pneumatic lifting (12,5 mm + 25 mm)	1082 p
4336311	Cable release (12,5 mm + 25 mm)	1085 a
4310103	Adapter bush (0.375 in / 8 mm)	940
4884464	Battery 3 V, Type CR 2450	
4336230	Pneumatic lifting (50 + 100 mm)	1082 p



### Functions

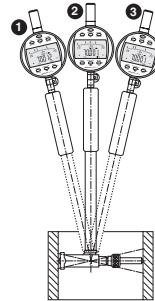
- ON/OFF
- RESET (set display to zero)
- mm/inch
- PRESET (for actual size) range up to 500 mm
- Reversal of counting direction
- TOL (enter tolerance limit values)
- START/STOP search for reversal point
- MAX/MIN memory for searching the reversal point
- ABS (display can be set to zero without losing reference to preset)
- 0 (set the analog display to zero)
- DATA (data transmission via connection cable)
- Factor (adjustable)
- LOCK (individual key lock)

### Features

- Integrated Wireless transmitter
- High contrast LCD display
- Operating and display unit (bezel) can be rotated through 280°
- Lifter protection cap on the measuring spindle
- Clamping shaft and measuring pin made of hardened stainless steel
- Immediate measurements due to the Reference System
- FREE Marcom Professional Software download: [www.mahr.com/marcom](http://www.mahr.com/marcom) (only for Mahr data cables and wireless systems with USB and RS232 interface)
- **Digit Height:** 8,5 mm
- **Data Interface:** Opto RS232C, Digimatic, USB, Integrated Wireless
- **Energy Supply:** Battery life approximately 3 years
- **IP Protection Category:** IP 42
- **Package Contains:** instruction manual, battery

### Application:

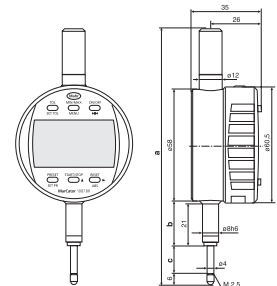
In measurements with a 2-point bore gage the reversing point can be calculated automatically during oscillation. Then a PRESET value can be assigned. The ACTUAL value measured is saved by the MIN or MAX function and is shown on the display. The 1087 BRI model can process 64 measured values per second, for fast measuring movements combined with measuring certainty.



### Technical Data

Order No.	4337664
Measuring Range	12,5 mm / 0.5 in
Resolution	0,0005 mm, 0,001 mm, 0,002 mm, 0,005 mm, 0,01 mm / 0.00002 in, 0.00005 in, 0.0001 in, 0.0002 in, 0.0005 in
Readings	0,001 mm, 0,002 mm, 0,005 mm, 0,01 mm, 0,02 mm, 0,05 mm
Range of Analog Display	± 0,01 mm, ± 0,02 mm, ± 0,04 mm, ± 0,1 mm, ± 0,2 mm
Error Limit	0,004 mm
Error Limit Over 50 Graduations	0,002 mm
Repeatability	0,001 mm
Measuring Force	0,65 N - 0,9 N
Standard	Factory standard
Protective Measuring Spindle Cap	.

Order No.	a	b	c	Mounting Shaft
4337664	126,3 mm	23 mm	13,5 mm	8 mm



### Accessories

Order No.	Product Name	Type
4102220	Receiver for instruments with Integrated Wireless	i-Stick
4102357	Data connection cable USB (2 m)	16 EXu
4102915	Digimatic data cable (2 m)	16 EWd
4102410	Data connection cable RS232C (2 m)	16 EXr
4375004	Protective cap for 1075 R / 1086 R / 1087 R	1086 s
4310103	Adapter bush (0.375 in / 8 mm)	940
4884464	Battery 3 V, Type CR 2450	



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