

## Micromar. A new generation with the Reference-System

### WATERPROOF MICROMETERS

► | With this new generation of reference micrometers, Mahr once again sets a new standard in the micrometer product segment. The new Reference system from Mahr is extremely energy efficient, when the micrometer is in standby mode almost no power is required; thus doubling the life span of the battery compared to a conventional digital micrometer. Due to the new Reference system from Mahr the handling of the digital micrometer has become considerably simpler and more far comfortable, as the zero position is secured, thus avoiding operating error. The Micromar Micrometer 40 EWR with the protection class IP65, offering excellent resistance against dust, coolants and lubricants and is ideal to be used in the most difficult workshop conditions. Furthermore, if you need to document your measured data, the MarConnect interface offers you the optimal connection to your evaluation system. | ◀

**1887**

**Micrometer  
40 G**



The **first Micrometer** from Mahr

**1931**

**Micrometer  
40 S**



„Super Micrometer“ in the present modern form with **satin chrome finish for easy reading and a thermal insulated inserts on the frame**

**1952**

**Indicating-Micrometer  
40 SF**



Micrometer with a **built-in dial comparator for high accuracy checking of quantity production parts**

**1991**

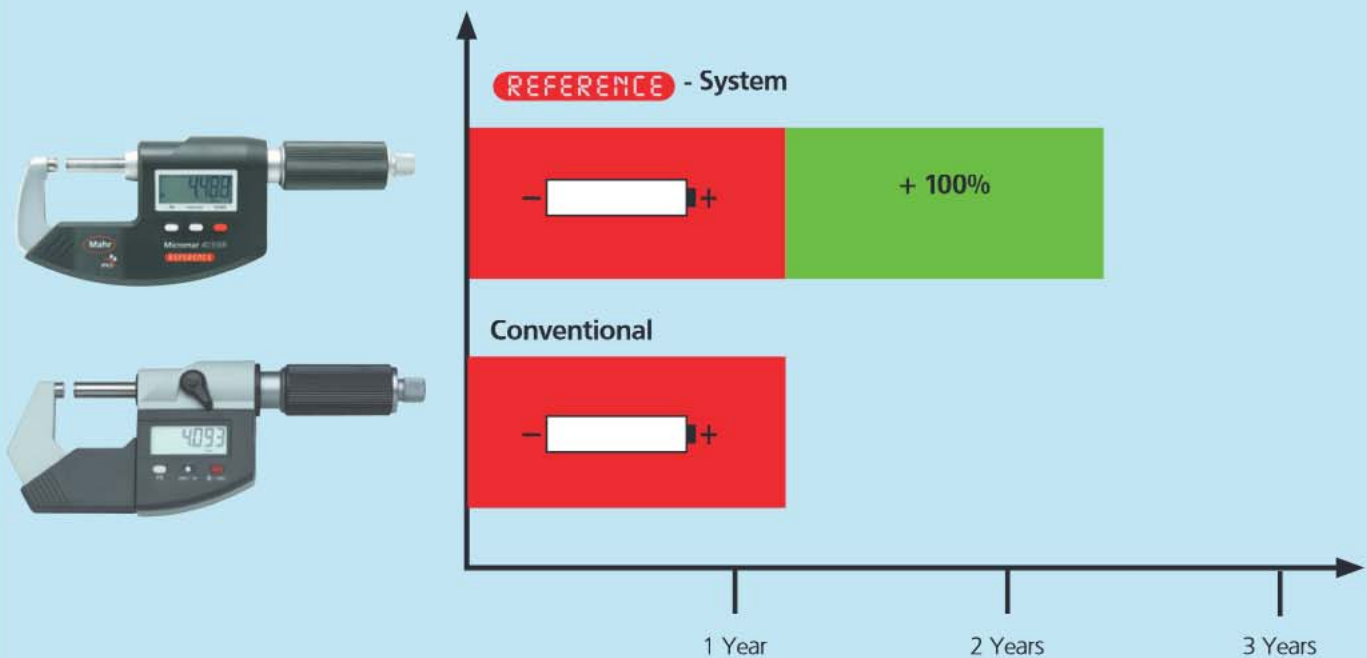
**Digital Micrometer  
40 E**



Digital Micrometer with a **Data Interface** for the evaluation and documentation of measured results

## The battery life span twice as long

The new Reference-System is very energy efficient, as in the standby mode, very little power is required, thus doubling the life span of the battery up to 2 ½ years.



## 2000

Digital Micrometer  
Micromar 40 EX



Digital Micrometer with a **MarConnect** interface for trouble free connection to all commercial available evaluation instruments

## 2003

Digital Micrometer  
Micromar 40 EW



Waterproof digital Micrometer with **protection class IP65**

## 2010

Digital Micrometer  
Micromar 40 EWR



**REFERENCE**

**Extremely long battery life span** and secure measurement due to the **Reference-Lock Function**

# Micromar. The Digital Micrometer Micromar 40 EWR

## WATERPROOF MICROMETERS

### Security due to the Reference-Lock function

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

The digital micrometer Micromar 40 EWR Reference is equipped with a LOCK function. With this key lock the zero position is secured and operating error is avoided.



### Large display

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



### The only one with a universal MarConnect interface

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



**USB ready:** for immediate connection to a PC, notebook. In conjunction with the MarCom software you can transfer your measured values directly into MS Excel or with keyboard code into any application.



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



**Mahr Opto RS232:** To connect to the COM interface on a PC.





### Ergonomic Design

The ergonomically formed and thermally insulated handle as well as the integrated ratchet in the thimble ensures both trouble free handling and accurate measurement results.



### Excellent resistance against dust, coolants and lubricants



Due to the outstanding protection against dust and water the digital micrometer Micromar 40 EWR Reference delivers precise and secure results even in the most difficult workshop conditions. The finished plastic components have an outstanding chemical resistance.



|               |           |                                       |
|---------------|-----------|---------------------------------------|
| Code Initials | <b>IP</b> | International Protection              |
| First digit   | <b>6</b>  | Dust-tight                            |
| Second digit  | <b>5</b>  | Protected against powerful water jets |

## Digital Micrometer Micromar 40 EWR



REFERENCE



### 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)

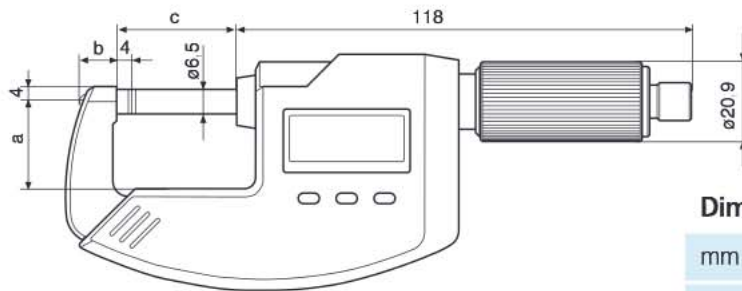
- Immediate measurement due to the Reference system
- MarConnect data output, choose alternatively USB  
OPTO RS232C  
Digimatic
- High contrast Liquid Crystal Display with 8.5 mm high digits

- 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 (from measuring range 25-50 mm)

### Technical Data

|        | Measuring range |          | Resolution      | Error limit G | Spindle thread pitch | Data output | Order no. |
|--------|-----------------|----------|-----------------|---------------|----------------------|-------------|-----------|
|        | mm              | (inch)   | mm / inch       | µm            | mm                   |             |           |
| 40 EWR | 0 - 25          | (0 - 1") | 0.001 / .00005" | 4             | 0.635                | —           | 4151721   |
| 40 EWR | 0 - 25          | (0 - 1") | 0.001 / .00005" | 4             | 0.635                | ●           | 4151705   |
| 40 EWR | 25 - 50         | (1 - 2") | 0.001 / .00005" | 4             | 0.635                | ●           | 4151706   |
| 40 EWR | 50 - 75         | (2 - 3") | 0.001 / .00005" | 5             | 0.635                | ●           | 4151707   |
| 40 EWR | 75 - 100        | (3 - 4") | 0.001 / .00005" | 5             | 0.635                | ●           | 4151708   |



Dimensions

| mm                 | a  | b    | c    |
|--------------------|----|------|------|
| 0 - 25 mm / 0-1"   | 23 | 9.5  | 31.5 |
| 25 - 50 mm / 1-2"  | 32 | 11.5 | 57   |
| 50 - 75 mm / 2-3"  | 44 | 13.5 | 82   |
| 75 - 100 mm / 3-4" | 57 | 15.5 | 107  |

## Accessories

|   | Order no.             |
|---|-----------------------|
| <b>Battery</b> 3V, Type CR 2032                                       | <b>4102520</b>        |
| <b>Data Connection Cable</b> USB (2 m)                                | <b>16 EXu 4102357</b> |
| <b>Data Connection Cable</b> Opto RS232C (2 m), with SUB-D jack 9-pin | <b>16 EXr 4102410</b> |
| <b>Data Connection Cable</b> Digimatic (2 m), Flat plug 10-pin        | <b>16 EXd 4102411</b> |

Accessories for Data Processing see Dimensional Metrology catalog, Chapter 11

## Digital Micrometer Set Micromar 40 EWR

| Application range | Order no.      | Remarks  |
|-------------------|----------------|--|
| 0 - 100 mm        | <b>4151709</b> | Includes: custom fitted plastic case, setting standards 25 mm, 50 mm and 75 mm |

