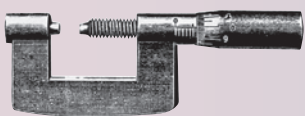# Micromar. A new generation with the Reference-System
WATERPROOF MICROMETERS

▶ | 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. I ◀

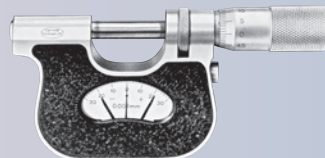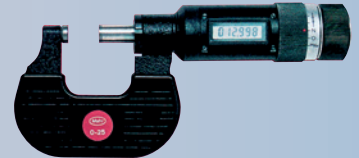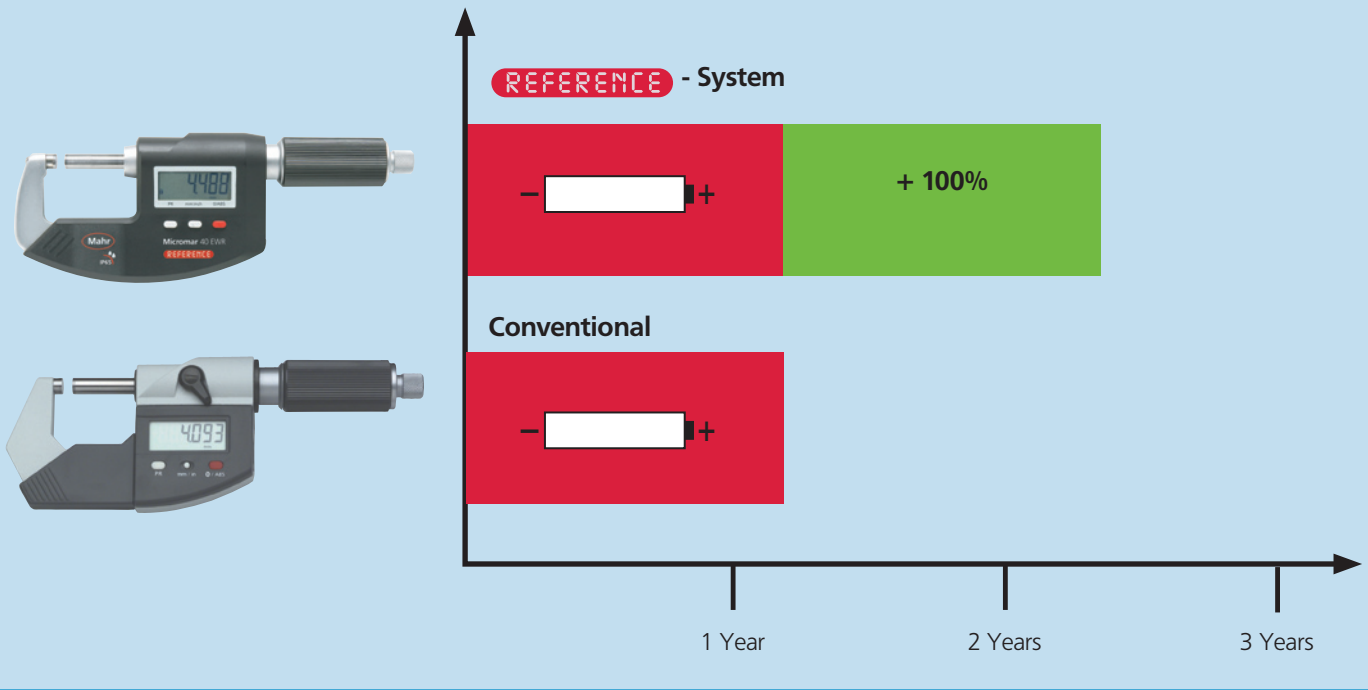| **1887**	**1931**	**1952**	**1991**
Micrometer 40 G	**Micrometer 40 S**	**Indicating-Micrometer 40 SF**	**Digital Micrometer 40 E**
The **first Micrometer** from Mahr	„Super Micrometer" in the present modern form with **satin chrome finish for easy reading and a thermal insulated inserts on the frame**	Micrometer with a **built-in dial comparator** for **high accuracy checking of quantity production parts**	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.

REFERENCE - System

+ 100%

Conventional

1 Year   2 Years   3 Years

2000

Digital Micrometer Micromar 40 EX

USB   RS232C   Digimatic
MarConnect

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

2003

Digital Micrometer Micromar 40 EW

IP65

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.

Micromar 40 EWR
REFERENCE

Large display

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

8.5 mm

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.

MarConnect
USB ready

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 evaulation devices.

Digimatic

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

RS232C

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

IP65

Due to the outstanding protection against dust and water the digital micrometer Mircomar 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	**IP**	International Protection
First digit	**6**	Dust-tight
Second digit	**5**	Protected against powerful water jets

Digital Micrometer Micromar 40 EWR

IP65 **DIN 863-1** **ABS** 🔒 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)
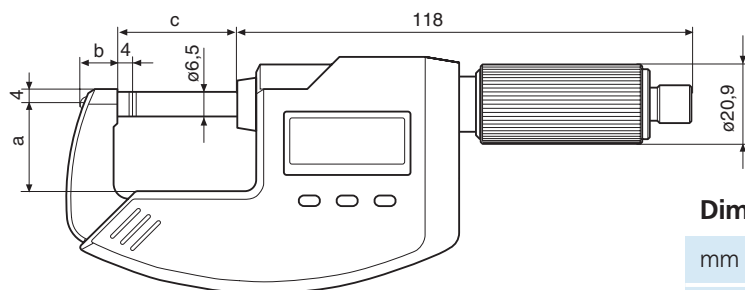DATA (Data transmission via connection cable)

• 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	USB RS232C Digimatic	
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.
Battery 3V, Type CR 2032		**4102520**
Data Connection Cable USB (2 m)	**16 EXu**	**4102357**
Data Connection Cable Opto RS232C (2 m), with SUB-D jack 9-pin	**16 EXr**	**4102410**
Data Connection Cable Digimatic (2 m), Flat plug 10-pin	**16 EXd**	**4102411**

Accessories for Data Processing see Dimensional Metrology catalog, Chapter 11

Digital Micrometer Set Micromar 40 EWR

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