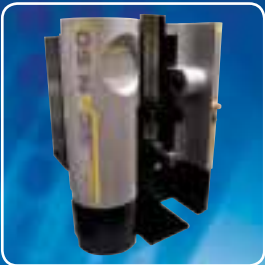




**BOWERS GROUP**

THE ESSENTIAL METROLOGY CATALOGUE **16/17**



Partners in Precision

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**BOWERS GROUP**

## **Bowers Group**

As a leading supplier of quality metrology instruments to organisations throughout the world, Bowers Group has developed into a respected global leader in the field of measurement. Our first-class reputation has been built on the continuing Group ethos of striving for excellence in both the comprehensive range of products that we supply and the many quality services that we provide to our customers. The Group's aim is to build on its hard-won reputation and continue to exceed customers' expectations.

Reflecting the all-inclusive nature of our products and services, Bowers UK provides British industry with the widest choice of cost effective, quality measuring instruments currently available. Supplementing Bowers' own famous range of gauges, our enviable 'sole UK agent' status means that we can offer superior products from many pre-eminent metrology companies, such as Trimos, Sylvac, Gagemaker, Innovatest, ACCRETECH and Wyler. Bowers' diverse range of quality measuring instruments allows us to offer cost effective solutions to UK industries' measuring challenges. Helping in the decision making process, our network of skilled Sales Engineers is happy to give on-site demonstrations of our full product range.



## **Baty International**

Baty International is one of the world's leading manufacturers of Optical Profile Projectors, Co-ordinate Measuring Systems and Gauging Products. Baty's product range includes two dimensional (profile measuring) equipment and full 3 dimensional (coordinate measuring) systems. Baty also services and calibrates contact and non contact dimensional measuring equipment. Baty products are for industrial, manufacturing and professional use, on the shop-floor, in tool rooms, and in other areas where precision measurement is critical.



## **Moore & Wright**

Founded in 1906 by innovative young engineer Frank Moore, Moore & Wright has been designing, manufacturing and supplying precision measuring equipment to global industry for over 100 years. With roots fixed firmly in Sheffield, the company began by manufacturing a range of calipers, screwdrivers, punches and other engineer's tools.

Now part of Bowers Group, Moore & Wright continues its commitment to supplying industry with high quality, affordable products. Its ongoing pledge to research and development ensures that Moore & Wright remains at the forefront of global innovation.



## **CV Instruments**

With the largest selection of portable and bench hardness testers currently available within the UK, the CV arm of Bowers Group has evolved into an all-inclusive material testing quality instrument supplier, with cost effective solutions to coating thickness, surface finish and many other disciplines now available.

**Bowers is also exclusive UK reseller for the following leading metrology brands:**



EUROPE



## Traditional External Micrometer 1961 Series

### Features

Standard: BS870, DIN 863/1, ISO361

- Tungsten carbide measuring faces
- 6.5mm spindle diameter
- Speeder type ratchet
- Locking lever
- Choice of standard or vernier type sleeve
- Tapered bow frame
- Supplied in plastic pocket case
- Adjusting key
- Capacity of 0-25mm / 0-1"
- Pearl-chrome plated frame with insulation pads



### ACCURACY

Micrometer Range Max Size up to	Measuring Faces		Screw Pitch Accuracy
	Flatness	Parallelism	
25mm	0.001mm	0.003mm	0.003mm
1"	0.00005"	0.0001"	0.0001"

### MECHANICAL EXTERNAL MICROMETER

Code No	Range (mm)	Resolution (mm)	Code No	Range (inch)	Resolution (inch)
1961M	0-25	0.01	1961	0-1	0.001
1961MB	0-25	0.002	1961B	0-1	0.0001

## Traditional External Micrometer 1965 Series

### Features

Standard: BS870, DIN 863/1, ISO361

- Tungsten carbide measuring faces
- 6.5mm spindle diameter
- Speeder type ratchet
- Locking lever
- Choice of standard or vernier type sleeve
- Tapered bow frame
- Supplied in plastic pocket case
- Adjusting key
- Capacity from 0-25mm / 0-1"
- Blue textured frame finish



### ACCURACY

Micrometer Range Max Size up to	Measuring Faces		Screw Pitch Accuracy
	Flatness	Parallelism	
25mm	0.001mm	0.003mm	0.003mm
1"	0.00005"	0.0001"	0.0001"

### MECHANICAL EXTERNAL MICROMETER

Code No	Range (mm)	Resolution (mm)	Code No	Range (inch)	Resolution (inch)
1965M	0-25	0.01	1965	0-1	0.001
1965MB	0-25	0.002	1965B	0-1	0.0001



# Moore & Wright Traditional External Micrometers, 966 Series

Complies with: BS870, DIN 863/1, ISO361

## 966 Series Features:

- Tungsten carbide measuring faces
- Blue textured frame finish
- Speeder type ratchet
- Locking lever
- Adjusting key
- Supplied in case
- Choice of standard or vernier type sleeve
- Spindle diameter 6.5mm
- Supplied with setting standard



## ACCURACY

Micrometer Range	Measuring Faces		Screw Pitch
Max Size up to	Flatness	Parallelism	Accuracy
50mm	0.001mm	0.003mm	0.003mm
2"	0.00005"	0.0001"	0.0001"
150mm	0.001mm	0.005mm	0.003mm
6"	0.00005"	0.0002"	0.0001"

## MOORE & WRIGHT MICROMETER SETTING STANDARDS

Metric			Imperial		
Code No	Length (mm)	Tolerance +/- (mm)	Code No	Length (inch)	Tolerance +/- (inch)
980S25	25mm	0.001	980S01	1	0.00005
980S50	50mm	0.002	980S02	2	0.0001
980S75	75mm	0.002	980S03	3	0.0001
980S100	100mm	0.002	980S04	4	0.0001
980S125	125mm	0.002	980S05	5	0.0001

Hardened and Ground Steel Measuring Faces with Flat Ends  
Fitted Insulating Sleeve  
Marked with Nominal Size

## MECHANICAL EXTERNAL MICROMETERS - IMPERIAL: 1-6"

Code No	Range (inch)	Description	Code No	Range (inch)	Description
19662	1-2	0.001" Carbide anvils	1966B2	1-2	0.0001" Carbide anvils
19663	2-3	0.001" Carbide anvils	1966B3	2-3	0.0001" Carbide anvils
19664	3-4	0.001" Carbide anvils	1966B4	3-4	0.0001" Carbide anvils
19665	4-5	0.001" Carbide anvils	1966B5	4-5	0.0001" Carbide anvils
19666	5-6	0.001" Carbide anvils	1966B6	5-6	0.0001" Carbide anvils

## MECHANICAL EXTERNAL MICROMETERS - METRIC: 25-150MM

Code No	Range (mm)	Description	Code No	Range (mm)	Description
1966M50	25-50	0.01mm Carbide anvils	1966MB50	25-50	0.002mm Carbide anvils
1966M75	50-75	0.01mm Carbide anvils	1966MB75	50-75	0.002mm Carbide anvils
1966M100	75-100	0.01mm Carbide anvils	1966MB100	75-100	0.002mm Carbide anvils
1966M125	100-125	0.01mm Carbide anvils	1966MB125	100-125	0.002mm Carbide anvils
1966M150	125-150	0.01mm Carbide anvils	1966MB150	125-150	0.002mm Carbide anvils

## External Micrometer 200 Series

### Features

Standard: DIN 863 / 1

- Tungsten carbide measuring faces
- Satin - chrome scale
- Hammertone finish frame with insulated grip
- Tapered for easier access to difficult areas
- Locking lever
- Constant force ratchet
- Supplied in plastic case
- Adjusting key



#### EXTERNAL MICROMETER METRIC

Code No	Range (mm)	Resolution (mm)
MW200-01	0-25	0.01
MW200-02	25-50	0.01
MW200-03	50-75	0.01
MW200-04	75-100	0.01

#### EXTERNAL MICROMETER IMPERIAL

Code No	Range (inch)	Resolution (inch)
MW200-01I	0-1	0.0001
MW200-02I	1-2	0.0001
MW200-03I	2-3	0.0001
MW200-04I	3-4	0.0001

## Workshop Blade Micrometer 275 Series

### Features

Standard: DIN 863

- For measuring grooves, keyways etc.
- Blade 6.5mm non-rotating spindle
- Blade: 1.25mm thick
- Satin-chrome scale
- Hammertone finish frame with insulated grip
- Tapered for easier access to difficult areas
- Constant force ratchet on thimble
- Supplied in plastic case
- Adjusting key



#### BLADE EXTERNAL MICROMETER

Code No	Range (mm)	Resolution (mm)
MW275-01	0-25	0.01
MW275-02	25-50	0.01
MW275-03	50-75	0.01
MW275-04	75-100	0.01



## Traditional Micrometers, Boxed Sets

Complies with BS870, DIN 863 / 1, ISO361, where applicable.

Each set is supplied in a fitted case.

### Features

- Resolutions of 0.01mm or 0.002mm metric, or 0.001" or 0.0001" imperial
- Tungsten carbide 6.5mm diameter anvils
- Supplied with setting standards
- Supplied in case
- Locking lever
- Adjusting key



### RESOLUTION 0.01MM

Code No	Range (mm)	Description
MEB-122M	0-75	Carbide anvils
MEB-322M	0-150	Carbide anvils
MEB-522M	0-300	Carbide anvils

### RESOLUTION 0.002MM

Code No	Range (mm)	Description
MEB-222M	0-75	Carbide anvils
MEB-422M	0-150	Carbide anvils
MEB-622M	0-300	Carbide anvils

### RESOLUTION 0.001"

Code No	Range (inch)	Description
MEB-122E	0-3	Carbide anvils
MEB-322E	0-6	Carbide anvils
MEB-522E	0-12	Carbide anvils

### RESOLUTION 0.0001"

Code No	Range (inch)	Description
MEB-222E	0-3	Carbide anvils
MEB-422E	0-6	Carbide anvils
MEB-622E	0-12	Carbide anvils

## Point Micrometer 270 Series

### Features

Standard: DIN 863

- Pointed spindle and anvil for measuring the web thickness of drills, small grooves, keyways and other hard to reach places
- Hammertone finished frame with high quality insulated grip
- Tapered for easier access to difficult areas
- With tungsten carbide measuring faces and constant force ratchet on thimble
- Packed in plastic box with standard and adjusting key



### POINT MICROMETER

Code No	Range (mm)	Resolution (mm)	Point Angle
MW270-01	0-25	0.01	15°
MW270-02	25-50	0.01	15°
MW270-03	50-75	0.01	15°
MW270-04	75-100	0.01	15°
MW270-05	0-25	0.01	30°
MW270-06	25-50	0.01	30°
MW270-07	50-75	0.01	30°
MW270-08	75-100	0.01	30°

## Workshop Digital Point Micrometer 270 Series

### Features

Standard: DIN 863

- Pointed spindle and anvil for measuring the web thickness of drills, small grooves, keyways and other hard to reach places
- With constant force ratchet thimble
- Hammertone finished frame with high quality insulated grip
- Tapered for easier access to difficult areas
- Functions: mm/inch conversion, ABS/INC, on/off, zero-setting, battery low indication
- Packed in plastic box with standard setting rod



### DIGITAL POINT MICROMETER

Code No	Range (mm)	Range (inch)	Resolution (mm)	Resolution (inch)	Point Angle
MW270-01DDL	0-25	0-1	0.001	0.00005	30°
MW270-02DDL	25-50	1-2	0.001	0.00005	30°
MW270-03DDL	50-75	2-3	0.001	0.00005	30°
MW270-04DDL	75-100	3-4	0.001	0.00005	30°





# Workshop Digital Micrometer 200 Series

## Features

Standard: DIN 863

- Large LCD display
- Tapered for easier access to difficult areas
- Hammertone finished frame with high quality insulated grip
- Tungsten carbide measuring faces and constant force ratchet on thimble
- Functions: mm/inch conversion, ABS/INC, zero setting
- Packed in plastic box with standard (over 25mm)



### WORKSHOP DIGITAL EXTERNAL MICROMETER

Code No	Range (mm)	Range (inch)	Resolution (mm)	Resolution (inch)
MW200-01DBL	0-25	0-1	0.001	0.00005
MW200-02DBL	25-50	1-2	0.001	0.00005
MW200-03DBL	50-75	2-3	0.001	0.00005
MW200-04DBL	75-100	3-4	0.001	0.00005

# Digital External Micrometer 201 Series

## Features

Standard: DIN 863

- Protected to IP54 specifications
- Rugged steel design
- Large LCD display
- Absolute and Incremental modes
- Carbide measuring faces
- Ball attachment included
- Packed in plastic box with standard (over 25mm)



### DIGITAL EXTERNAL MICROMETER

Code No	Range (mm)	Range (inch)	Resolution (mm)	Resolution (inch)
MW201-01DAB	0-25	0-1	0.001	0.00005
MW201-02DAB	25-50	1-2	0.001	0.00005
MW201-03DAB	50-75	2-3	0.001	0.00005
MW201-04DAB	75-100	3-4	0.001	0.00005

## Sylvac S\_Mike PRO

Complies with: DIN 863



### Features

- Automatic wake-up by moving the measuring spindle
- Sleep mode after 20 min. of no use
- Position memorised in sleep mode
- Water protected for heavy-duty work with coolants and lubricants, protection rating IP67 according to IEC 60529, with or without connector
- Measuring range 0-102mm covered with 3 instruments only
- Set of 3 micrometers 0-102mm available
- Quick displacement of the measuring spindle 12mm / rotation
- Battery life 12,000 hours
- Non-rotating spindle
- Preset function
- Setting masters provided where applicable



30-903-0300



Available with Bluetooth



30-903-1301

### S\_MIKE PRO - STANDARD

Code No	Range (mm)	Maximum Error (µm)	Repeatability (µm)	Proximity	Protection Rating
30-903-0300*	0-30	3	1	USB / RS 232 / Digimatic / Wireless	IP67 with or without connector
30-903-0600	30-66	4	1	USB / RS 232 / Digimatic / Wireless	IP67 with or without connector
30-903-1000	66-102	5	1	USB / RS 232 / Digimatic / Wireless	IP67 with or without connector
30-903-1360	100-136	7	2	USB / RS 232 / Digimatic / Wireless	IP67 with or without connector
30-903-1600	125-161	8	2	USB / RS 232 / Digimatic / Wireless	IP67 with or without connector
30-903-0306	0-30	3	1	Bluetooth 4.0	IP67 with or without connector
30-903-0606	30-66	4	1	Bluetooth 4.0	IP67 with or without connector
30-903-1006	66-102	5	1	Bluetooth 4.0	IP67 with or without connector

\*Adjustable measuring force 5N / 10N

Code No	Range (mm)	Description	Proximity	Protection Rating
30-903-1301	0-102	Sylvac S_Mike PRO Box Set	USB / RS 232 / Digimatic / Wireless	IP67 with or without connector



## Sylvac S\_Mike PRO Ø2 & S\_Mike PRO - BLADE

Complies with: DIN 863



### Features

- Automatic wake-up by moving the measuring spindle
- Sleep mode after 20 min. of no use
- Position memorised in sleep mode
- Water protected for heavy-duty work with coolants and lubricants, protection rating IP67 according to IEC 60529, with or without connector
- Quick displacement of the measuring spindle 12mm / rotation
- Battery life 12,000 hours
- Non-rotating spindle
- Preset function
- Bluetooth available with different anvils on request

Tempered steel knife shaped anvils 0.7mm



30-903-0302

Tempered steel anvils type Ø 2mm



30-903-0301

Tempered steel disc anvils



30-903-0303

### S\_MIKE PRO Ø2 - 2MM DIAMETER ANVILS

Code No	Range (mm)	Maximum Error (µm)	Repeatability (µm)	Proximity	Protection Rating
30-903-0301*	0-25	3	1	USB / RS 232 / Digimatic / Wireless	IP67 with or without connector
30-903-0601	25-60	4	1	USB / RS 232 / Digimatic / Wireless	IP67 with or without connector
30-903-1001	60-95	5	1	USB / RS 232 / Digimatic / Wireless	IP67 with or without connector

\*Adjustable measuring force 5N / 10N

### S\_MIKE PRO - BLADE ANVILS

Code No	Range (mm)	Maximum Error (µm)	Repeatability (µm)	Proximity	Protection Rating
30-903-0302*	0-25	3	1	USB / RS 232 / Digimatic / Wireless	IP67 with or without connector
30-903-0602	25-60	4	1	USB / RS 232 / Digimatic / Wireless	IP67 with or without connector
30-903-1002	60-95	5	1	USB / RS 232 / Digimatic / Wireless	IP67 with or without connector
30-903-1302	95-120	6	2	USB / RS 232 / Digimatic / Wireless	IP67 with or without connector
30-903-1602	120-145	7	2	USB / RS 232 / Digimatic / Wireless	IP67 with or without connector

\*Adjustable measuring force 5N / 10N

### S\_MIKE PRO - SPECIAL ANVILS

Code No	Range (mm)	Maximum Error (µm)	Repeatability (µm)	Description	Proximity	Protection Rating
30-903-0303*	0-30	4	1	With disc anvil	USB / RS 232 / Digimatic / Wireless	IP67 with or without connector
30-903-0304*	0-25	3	1	With spherical anvil on one side	USB / RS 232 / Digimatic / Wireless	IP67 with or without connector
30-903-0305*	0-25	3	1	With 2 spherical anvils	USB / RS 232 / Digimatic / Wireless	IP67 with or without connector

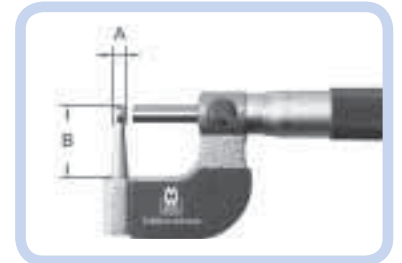
\*Adjustable measuring force 5N / 10N

## Tube Micrometer 255 Series

### Features

Standard: DIN 863

- Micrometer for measuring tube wall thickness
- With spherical anvil
- Satin - chrome scale
- Hammertone finished frame with insulated grip
- Tungsten carbide measuring faces on spindle
- Constant force ratchet on thimble
- Supplied in plastic box



### TUBE MICROMETER

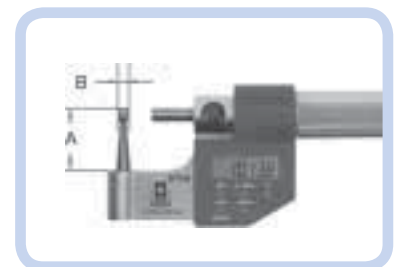
Code No	Range (mm)	Resolution (mm)	Dimn – A	Dimn – B
MW255-01	0-25	0.01	27.5mm	4.75mm
MW255-02	25-50	0.01	27.5mm	4.75mm

## Digital Tube Micrometer 255-DDL Series

### Features

Standard: DIN 863

- Digital micrometer for measuring tube wall thickness
- With spherical anvil
- With constant force ratchet thimble
- Chrome plated frame
- Functions: mm/inch conversion, on/off, zero-setting, battery low indication, hold, 0...ABS
- Packed in plastic box with standard and battery cover key



### DIGITAL TUBE MICROMETER

Code No	Range (mm)	Range (inch)	Resolution (mm)	Resolution (inch)	Dimn – A	Dimn – B
MW255-01DDL	0-25	0-1	0.001	0.00005	27.5mm	4.75mm
MW255-02DDL	25-50	1-2	0.001	0.00005	27.5mm	4.75mm



## Caliper Type Inside Micrometer 280 Series

### Features

Standard: DIN 863

- For measuring the inside of a bore or hole
- Resolution 0.01mm
- With constant force ratchet thimble
- Satin chrome finished frame
- Constant force ratchet
- Locking clamp for positive locking of spindle
- Packed in plastic box with setting ring and adjusting key



MW280-01



MW280-04

### CALIPER TYPE INSIDE MICROMETER

Code No	Range (mm)	Resolution (mm)	Setting Rings
MW280-01	5-30	0.01	Yes
MW280-02	25-50	0.01	Yes
MW280-03	50-75	0.01	No
MW280-04	75-100	0.01	No
MW280-05	100-125	0.01	No
MW280-06	125-150	0.01	No
MW280-07	150-175	0.01	No
MW280-08	175-200	0.01	No

## Digital Caliper Type Inside Micrometer 280-DDL Series

### Features

Standard: DIN 863

- For measuring the inside of a bore or hole
- With constant force ratchet thimble
- Satin chrome finished frame with high quality insulated grip
- Functions: mm / inch conversion, tolerance indication, ABS / INC, preset, on / off, zero-setting, battery low indication



MW280-01DDL



MW280-05DDL

### DIGITAL CALIPER TYPE INSIDE MICROMETER

Code No	Range (mm)	Range (inch)	Resolution (mm)	Resolution (inch)	Setting Rings
MW280-01DDL	5-30	0.2-1.2	0.001	0.00005	Yes
MW280-02DDL	25-50	1-2	0.001	0.00005	Yes
MW280-03DDL	50-75	2-3	0.001	0.00005	No
MW280-04DDL	75-100	3-4	0.001	0.00005	No
MW280-05DDL	100-125	4-5	0.001	0.00005	No
MW280-06DDL	125-150	5-6	0.001	0.00005	No

## Workshop External Micrometer Set 215 Series

### Features

Standard: DIN 863

- Satin-chrome scale
- Satin-chrome forged steel frame with insulated grip
- With tungsten carbide measuring faces and constant force ratchet
- Packed in wooden box with standards and adjusting key



### WORKSHOP EXTERNAL MICROMETER SET - Metric

Code No	Range (mm)	Resolution (mm)	Note
MW215-01BL	0-75	0.01	3 Micrometers In Set
MW215-02BL	0-100	0.01	4 Micrometers In Set
MW215-03BL	0-150	0.01	6 Micrometers In Set
MW215-04BL	0-200	0.01	8 Micrometers In Set

### WORKSHOP EXTERNAL MICROMETER SET - Imperial

Code No	Range (inch)	Resolution (inch)	Note
MW215-01BLI	0-3	0.001	3 Micrometers In Set
MW215-02BLI	0-4	0.001	4 Micrometers In Set
MW215-03BLI	0-6	0.001	6 Micrometers In Set
MW215-04BLI	0-8	0.001	8 Micrometers In Set

## Micrometer with Interchangeable Anvils 217 Series

### Features

Standard: DIN 863

- Features wide measuring range with interchangeable anvils
- Hardened and ground spindles/anvils
- Strong forged steel frame, hammer tone finish, quality insulated grip
- Satin-chrome scale
- With tungsten carbide measuring faces and constant force ratchet
- Packed in wooden box with standard and adjusting key



### MICROMETER WITH INTERCHANGEABLE ANVILS

Code No	Range (mm)	Resolution (mm)
MW217-01	0-100	0.01
MW217-02	0-150	0.01
MW217-03	100-200	0.01
MW217-04	150-300	0.01
MW217-05	200-300	0.01



## Large External Micrometer 210 Series

### Features

Standard: DIN 863

- Strong forged steel frame, hammertone finish, quality insulated grip
- Satin-chrome scale
- With tungsten carbide measuring faces and constant force ratchet
- Packed in wooden box with standard and adjusting key



### LARGE EXTERNAL MICROMETER

Code No	Range (mm)	Resolution (mm)
MW210-01	100-125	0.01
MW210-02	125-150	0.01
MW210-03	150-175	0.01
MW210-04	175-200	0.01
MW210-05	200-225	0.01
MW210-06	225-250	0.01
MW210-07	250-275	0.01
MW210-08	275-300	0.01

## Digital Large External Micrometer 210-DDL Series



### Features

Standard: DIN 863

- Strong forged steel frame, hammertone finish, quality insulated grip
- With tungsten carbide measuring faces and constant force ratchet
- Functions: mm/inch conversion, set, on/off zero-setting, data-output, battery low indication, hold, 0...ABS
- Packed in wooden box with standard and battery cover key

### EXTERNAL MICROMETER - Metric Range Only

Code No	Range (mm)	Resolution (mm)
MW210-01DDL	100-125	0.001
MW210-02DDL	125-150	0.001
MW210-03DDL	150-175	0.001
MW210-04DDL	175-200	0.001
MW210-05DDL	200-225	0.001
MW210-06DDL	225-250	0.001
MW210-07DDL	250-275	0.001
MW210-08DDL	275-300	0.001

## Moore & Wright Traditional External Micrometers, 971 Series: 150-450mm / 6-18"

Complies with: BS870, DIN 863/1, ISO361, where applicable

### Features

- Capacities from 150-450mm / 6-18"
- Lightweight frame with ribs and reliefs providing both high strength and user comfort
- Blue textured frame finish
- Hardened steel or tungsten carbide anvils 6.8mm diameter
- 'Speeder' type ratchet and locking lever
- Supplied in a case with recess for setting gauge
- Setting gauge supplied separately

### ACCURACY

Micrometer Capacity Max Size up to	Measuring Faces		Screw Pitch
	Flatness	Accuracy	Accuracy
225mm	0.001mm	0.005mm	0.003mm
9"	0.00005"	0.0002"	0.0001"
300mm	0.003mm	0.008mm	0.003mm
12"	0.0001"	0.0003"	0.0001"
375mm	0.003mm	0.013mm	0.005mm
15"	0.0001"	0.0005"	0.0002"
450mm	0.003mm	0.015mm	0.005mm
18"	0.0001"	0.0006"	0.0002"

### MOORE & WRIGHT TRADITIONAL EXTERNAL MICROMETERS, 971 SERIES: 150-450MM / 6-18"

Code No	Description	Size
1971M175	0.01mm Carbide Anvils	150-175mm
19717	0.001" Carbide Anvils	6-7"
1971M200	0.01mm Carbide Anvils	175-200mm
19718	0.001" Carbide Anvils	7-8"
1971M225	0.01mm Carbide Anvils	200-225mm
19719	0.001" Carbide Anvils	8-9"
1971M250	0.01mm Carbide Anvils	225-250mm
197110	0.001" Carbide Anvils	9-10"
1971M275	0.01mm Carbide Anvils	250-275mm
197111	0.001" Carbide Anvils	10-11"
1971M300	0.01mm Carbide Anvils	275-300mm
197112	0.001" Carbide Anvils	11-12"
1971M325	0.01mm Carbide Anvils	300-325mm
197113	0.001" Carbide Anvils	12-13"
1971M350	0.01mm Carbide Anvils	325-350mm
197114	0.001" Carbide Anvils	13-14"
1971M375	0.01mm Carbide Anvils	350-375mm
197115	0.001" Carbide Anvils	14-15"
1971M400	0.01mm Carbide Anvils	375-400mm
197116	0.001" Carbide Anvils	15-16"
1971M425	0.01mm Carbide Anvils	400-425mm
197117	0.001" Carbide Anvils	16-17"
1971M450	0.01mm Carbide Anvils	425-450mm
197118	0.001" Carbide Anvils	17-18"

### SETTING STANDARD

Code No	Size	Diameter (mm)
980M150	150mm	8.0
9806	6"	8.0
980M175	175mm	9.5
9807	7"	9.5
980M200	220mm	9.5
9808	8"	9.5
980M225	225mm	9.5
9809	9"	9.5
980M250	250mm	9.5
98010	10"	9.5
980M275	275mm	9.5
98011	11"	9.5
980M300	300mm	11.1
98012	12"	11.1
980M325	325mm	11.1
98013	13"	11.1
980M350	350mm	11.1
98014	14"	11.1
980M375	375mm	12.5
98015	15"	12.5
980M400	400mm	12.5
98016	16"	12.5
980M425	425mm	12.5
98017	17"	12.5







# Moore & Wright Traditional Adjustable Micrometers

Complies with BS870, DIN 863 / 1, ISO361, where applicable

## Features

- Hardened steel or tungsten carbide measuring faces
- 6.8mm spindle diameter
- 'Speeder' type ratchet
- Locking lever
- Each model supplied complete with setting gauges
- Blue textured frame finish
- Ribbed bow frames (sizes up to 150mm / 6")
- Lightweight fabricated tubular bow frame (sizes 750-1800mm / 36-72")
- All sizes supplied in either a durable plastic or aluminium framed case



Visit [bowersgroup.co.uk](http://bowersgroup.co.uk) for our range of spares and accessories.

## METRIC WITH STEEL / CARBIDE ANVILS 0.01MM READING

Code No	Description	Code No	Description	Range (mm)	Setting Gauges	Interchangeable Anvils
940MX	Steel Anvils	MEA021M	Carbide Anvils	0-50	1	2
941MX	Steel Anvils	MEA041M	Carbide Anvils	0-100	3	4
942MX	Steel Anvils	MEA051M	Carbide Anvils	50-150	4	4
943MX	Steel Anvils	MEA081M	Carbide Anvils	100-200	4	4
945MX	Steel Anvils	MEA121M	Carbide Anvils	200-300	4	4
1044MX150	Steel Anvils	MEA061M	Carbide Anvils	0-150	5	6
1044MX300	Steel Anvils	MEA131M	Carbide Anvils	150-300	6	6
1044MX450	Steel Anvils	MEA181M	Carbide Anvils	300-450	6	6
1044MX600	Steel Anvils	MEA241M	Carbide Anvils	450-600	6	6
1044MX750	Steel Anvils	MEA301M	Carbide Anvils	600-750	3	6
MEA360M	Steel Anvils	MEA361M	Carbide Anvils	750-900	3	6
MEA420M	Steel Anvils	MEA421M	Carbide Anvils	900-1050	3	6
MEA480M	Steel Anvils	MEA491M	Carbide Anvils	1050-1200	3	6
MEA540M	Steel Anvils	MEA541M	Carbide Anvils	1200-1350	3	6
MEA600M	Steel Anvils	MEA601M	Carbide Anvils	1350-1500	3	6
MEA660M	Steel Anvils	MEA661M	Carbide Anvils	1500-1650	3	6
MEA720M	Steel Anvils	MEA721M	Carbide Anvils	1650-1800	3	6

## ACCURACY

Micrometer Range	Measuring Faces		Screw Pitch Accuracy
	Flatness	Parallelism	
0-50mm	0.001mm	0.008mm	0.003mm
0-100mm	0.001mm	0.010mm	0.003mm
50-150mm	0.001mm	0.013mm	0.003mm
100-200mm	0.001mm	0.013mm	0.003mm
200-300mm	0.003mm	0.015mm	0.003mm
0-150mm	0.003mm	0.003mm	0.003mm
150-300mm	0.003mm	0.003mm	0.003mm
300-450mm	0.003mm	0.005mm	0.005mm
450-600mm	0.003mm	0.005mm	0.005mm
600-750mm	0.003mm	0.005mm	0.005mm
750-900mm	0.003mm	0.005mm	0.005mm
900-1050mm	0.003mm	0.005mm	0.005mm
1050-1200mm	0.003mm	0.005mm	0.005mm
1200-1350mm	0.003mm	0.005mm	0.005mm
1350-1500mm	0.003mm	0.005mm	0.005mm
1500-1650mm	0.003mm	0.005mm	0.005mm
1650-1800mm	0.003mm	0.005mm	0.005mm

## IMPERIAL WITH STEEL / CARBIDE ANVILS 0.001" READING

Code No	Description	Code No	Description	Range (inch)	Setting Gauges	Interchangeable Anvils
940X	Steel Anvils	MEA021E	Carbide Anvils	0-2	1	2
941X	Steel Anvils	MEA041E	Carbide Anvils	0-4	3	4
942X	Steel Anvils	MEA051E	Carbide Anvils	2-6	4	4
943X	Steel Anvils	MEA081E	Carbide Anvils	4-8	4	4
945X	Steel Anvils	MEA121E	Carbide Anvils	8-12	4	4
1044X6	Steel Anvils	MEA061E	Carbide Anvils	0-6	5	6
1044X12	Steel Anvils	MEA131E	Carbide Anvils	6-12	6	6
1044X18	Steel Anvils	MEA181E	Carbide Anvils	12-18	6	6
1044X24	Steel Anvils	MEA241E	Carbide Anvils	18-24	6	6
1044X30	Steel Anvils	MEA301E	Carbide Anvils	24-30	3	6
MEA360E	Steel Anvils	MEA361E	Carbide Anvils	30-36	3	6
MEA420E	Steel Anvils	MEA421E	Carbide Anvils	36-42	3	6
MEA480E	Steel Anvils	MEA481E	Carbide Anvils	42-48	3	6
MEA540E	Steel Anvils	MEA541E	Carbide Anvils	48-54	3	6
MEA600E	Steel Anvils	MEA601E	Carbide Anvils	54-60	3	6
MEA660E	Steel Anvils	MEA661E	Carbide Anvils	60-66	3	6
MEA720E	Steel Anvils	MEA721E	Carbide Anvils	66-72	3	6

## ACCURACY

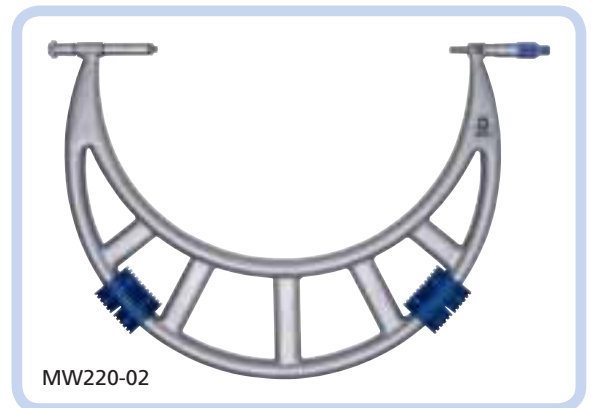
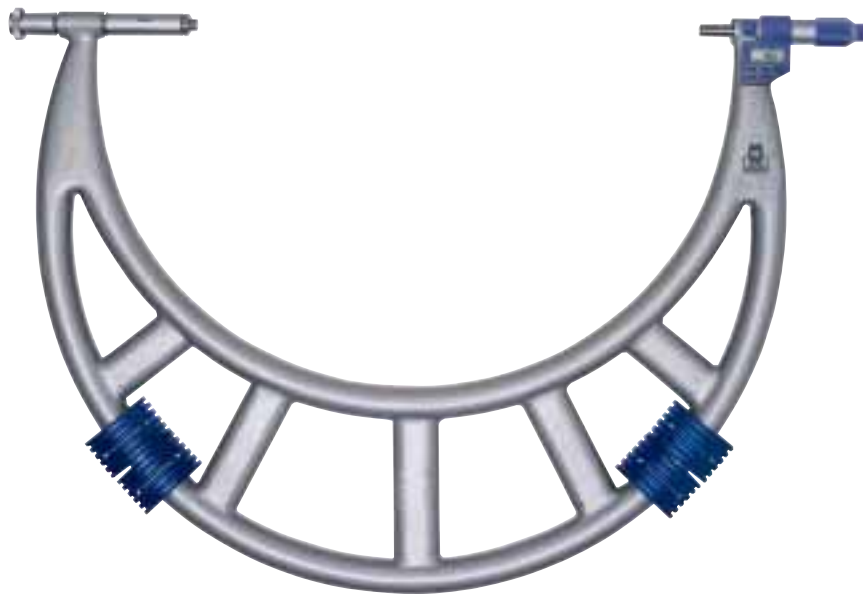
Micrometer Range	Measuring Faces		Screw Pitch Accuracy
	Flatness	Parallelism	
0-2"	0.00005"	0.003"	0.0001"
0-4"	0.00005"	0.0004"	0.0001"
2-6"	0.00005"	0.0005"	0.0001"
4-8"	0.00005"	0.0005"	0.0001"
8-12"	0.0001"	0.0006"	0.0001"
0-6"	0.0001"	0.0001"	0.0001"
6-12"	0.0001"	0.0001"	0.0001"
12-18"	0.0001"	0.0002"	0.0002"
12-18"	0.0001"	0.0002"	0.0002"
24-30"	0.0001"	0.0002"	0.0002"
30-36"	0.0001"	0.0002"	0.0002"
36-42"	0.0001"	0.0002"	0.0002"
42-48"	0.0001"	0.0002"	0.0002"
48-54"	0.0001"	0.0002"	0.0002"
54-60"	0.0001"	0.0002"	0.0002"
60-66"	0.0001"	0.0002"	0.0002"
66-72"	0.0001"	0.0002"	0.0002"

## Large Adjustable External Micrometer 220 Series

### Features

Standard: DIN 863 / IAIS

- Features wide measuring range with interchangeable anvils
- Hardened and ground spindles/anvils
- Tube type low weight, Dur-al frame with insulated grips
- With tungsten carbide measuring faces and constant force ratchet on thimble
- Packed in a wooden box with setting standard and adjusting key
- Large 7.5mm character height digital display
- Functions: tolerance indication, ABS/INC, preset, on/off, zero-setting, battery low indication



### LARGE ADJUSTABLE EXTERNAL MICROMETER

Code No	Range (mm)	Resolution (mm)
MW220-01	300-400	0.01
MW220-02	400-500	0.01
MW220-03	500-600	0.01
MW220-04	600-700	0.01
MW220-05	700-800	0.01
MW220-06	800-900	0.01
MW220-07	900-1000	0.01
MW220-08	1000-1200	0.01
MW220-09	1200-1400	0.01

### LARGE ADJUSTABLE DIGITAL EXTERNAL MICROMETER - Metric Range Only

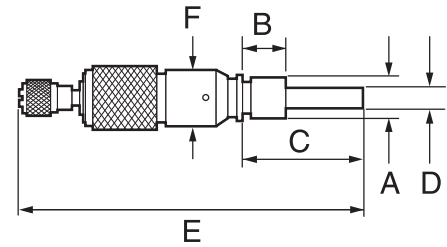
Code No	Range (mm)	Resolution (mm)
MW220-01DDL	300-400	0.001
MW220-02DDL	400-500	0.001
MW220-03DDL	500-600	0.001
MW220-04DDL	600-700	0.001
MW220-05DDL	700-800	0.001
MW220-06DDL	800-900	0.001
MW220-07DDL	900-1000	0.001



## Moore & Wright Micrometer Heads

Complies with BS1734 and DIN 863 where applicable

Moore & Wright micrometer heads are available in a range of standard sizes and configurations. However, if you have specific requirements which are not covered by the models listed below then please contact our Customer Service Department.



### METRIC: MICROMETER HEADS

Code No	Range (mm)	Principal dimensions in mm						Basic Features			Description
		Dimn – A	Dimn – B	Dimn – C	Dimn – D	Dimn – E	Dimn – F	Ratchet	Locking Screw	Speeder	
MHM-522M	0-25	12.7	19.0	50.8	6.8	122.0	16.5	Yes	No	No	Flat Spindle
MHM-543M	0-25	9.525	19.0	45.6	6.8	122.0	16.5	Yes	Yes	Yes	Flat Spindle
MW310-15R	0-15	9.5	9.5	26.0	5.0	61.0	13.5	No	No	No	Spherical Spindle

### SMALL MICROMETER HEAD

Code No	Range (mm)	Note	Resolution (mm)	Dimn – A	Dimn – B	Dimn – C	Dimn – D	Dimn – E	Dimn – F
MW310-15	0-15	Measuring face - Flat	0.01	9.50	9.50	26.00	5.00	61.00	13.50
MW310-25	0-25	Measuring face - Flat	0.01	12.00	16.00	46.00	6.50	115.00	18.00

### IMPERIAL: MICROMETER HEADS

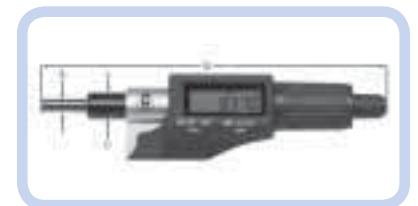
Code No	Range (inch)	Principal dimensions in inches						Basic Features			Description
		Dimn – A	Dimn – B	Dimn – C	Dimn – D	Dimn – E	Dimn – F	Ratchet	Locking Screw	Speeder	
MHM-543E	0-1	0.375	0.75	1.795	0.268	4.813	0.650	Yes	Yes	Yes	Flat Spindle
MHM-771E	0-1	0.5	0.75	2.000	0.268	4.531	1.138	No	No	Yes	Flat Spindle

## Digital Micrometer Head 312 Series

### Features

Standard: DIN 862

- Universal micrometer head for X-Y stages or other purposes
- Large LCD display
- Constant force ratchet thimble
- Functions: mm/inch conversion, ABS/INC, zero-setting



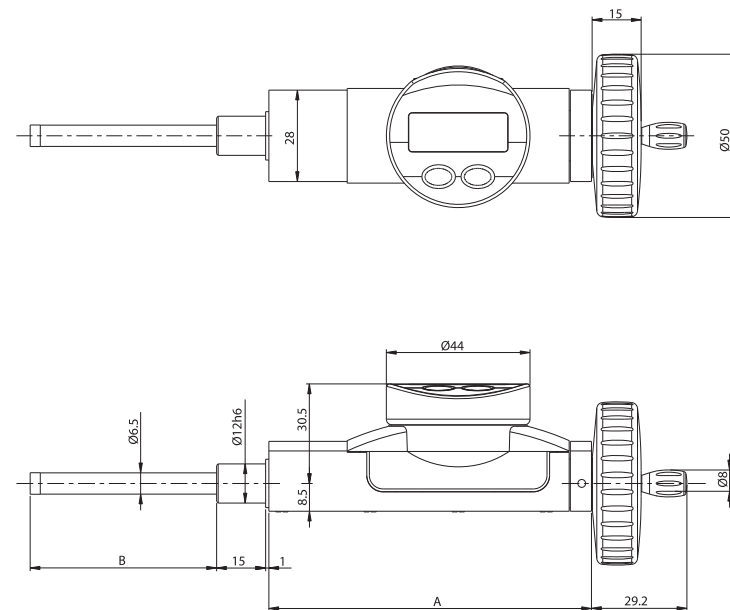
### DIGITAL MICROMETER HEAD

Code No	Range (mm)	Range (inch)	Resolution (mm)	Resolution (inch)	Dimn – A	Dimn – B	Dimn – C
MW312-25D	0-25	1	0.001	0.00005	6.5	150	12.0

## Sylvac Digital Micrometer Heads

### Features

- Data output RS232, combined with external power supply
- Fine adjustment available (accessories)
- Type H and V (same model)
- Reduced dimensions, compact design
- Selection of measuring direction, preset function, absolute of relative measurement



### DIGITAL MICROMETER HEADS

Code No	Range (mm)	Maximum Error	Repeatability (mm)	Resolution (mm)	Dimn – A	Dimn – B
30-852-2001	0-25	5	2	0.001	74.5	33.1
30-852-2011	0-50	8	2	0.001	98.5	57.1

Code No	Description
30-852-2310	Fine adjustment device



## Tubular Internal Micrometer 300 Series

### Features

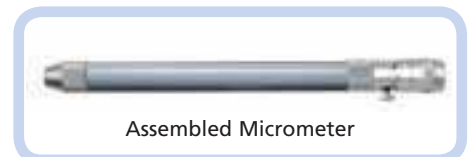
Standard: DIN 863

- Ideal for large diameters
- With tungsten carbide measuring faces
- All measuring faces are micro-lapped
- Satin-chromed scale and body with lock screw
- All extension pieces equipped with gauge parts are under constant spring loading
- Packed in a wooden box
- Supplied with setting piece



### TUBULAR INTERNAL MICROMETER

Code No	Range (mm)	Resolution (mm)
MW300-01	50-250	0.01
MW300-02	50-600	0.01
MW300-04	150-2000	0.01



## Moore & Wright Traditional Internal Micrometers 900 Series

Each model comprises a measuring head, a set of extension rods and a spacing collar to facilitate alternative measuring ranges. The smaller models (901, 902 & 903) have detachable extension handles. All models supplied in a fitted case.

Complies with: BS959

### Features

- Supplied in a fitted case

### METRIC

Code No	Range (mm)	Head Range (mm)
901M	25-55	5
902M	50-210	10
903M	50-310	10
908M825	200-825	25

### IMPERIAL

Code No	Range (inch)	Head Range (inch)
901	1-2	0.25
902	2-8	0.50
903	2-12	0.50
908-33	8-33	1.00



## Moore & Wright Traditional Internal Micrometer G700 / G710 Series

### Features

Standard: BS959

- Suitable for applications requiring a wide measuring range
- Stick micrometer consists of a micrometer with a set of extension rods
- All models supplied in a fitted case

Please Note: When using a stick micrometer, the instrument should be fully supported to prevent sagging and inaccuracies.



Micrometer head with a range of rods and terminal end.



G710

### METRIC ACCESSORIES

Code No	Description	Range (mm)
G700M	Micrometer Head*	-
MST-791M	Extension Rod	25
MST-792M	Extension Rod	50
MST-793M	Extension Rod	75
MST-794M	Extension Rod	150
MST-795M	Extension Rod	300
MST-796M	Extension Rod	600

\*Complete with Terminal End

### IMPERIAL ACCESSORIES

Code No	Description	Range (inch)
G700E	Micrometer Head*	-
MST-791E	Extension Rod	1
MST-792E	Extension Rod	2
MST-793E	Extension Rod	3
MST-794E	Extension Rod	6
MST-795E	Extension Rod	12
MST-796E	Extension Rod	24

\*Complete with Terminal End

### METRIC: 150MM-6175MM, RESOLUTION 0.01MM

Code No	Range (mm)	Head Range (mm)	Rod Length (mm)
G704M	150-1375	25	25, 50, 75, 150, 300, 600
G710M	150-3175	25	25, 50, 75, 150, 300, 4 x 600
G720M	150-6175	25	25, 50, 75, 150, 300, 9 x 600

### IMPERIAL: 6" -20' 7", RESOLUTION 0.001"

Code No	Range (inch)	Head Range (inch)	Rod Length (inch)
G704	6-55	1	1, 2, 3, 6, 12, 24
G710	6-127	1	1, 2, 3, 6, 12, 4 x 24
G720	6-247	1	1, 2, 3, 6, 12, 9 x 24



## Micrometer Ball Attachment

### Features

- To suit the 1961, 1965 and 1966 series micrometers
- Can be fitted to the anvil or spindle on external micrometer series 1961, 1965 and 1966 to enable round or irregular surfaces to be measured
- The ball is hardened and moves freely to allow contact with the object being measured

Note: Always deduct the ball diameter from any reading.



### MICROMETER BALL ATTACHMENT

Code No	Description	Diameter (mm)	Diameter (inch)	Note
878M	6.5mm and 6.8mm	6.0 ball	-	1 of each spindle size supplied
878	0.256" and 0.268"	-	0.250 ball	1 of each spindle size supplied

## Micrometer Stand

### Features

- Designed for micrometers up to 100mm
- Painted cast iron base with plastic covered clamping jaws
- Angle adjustable

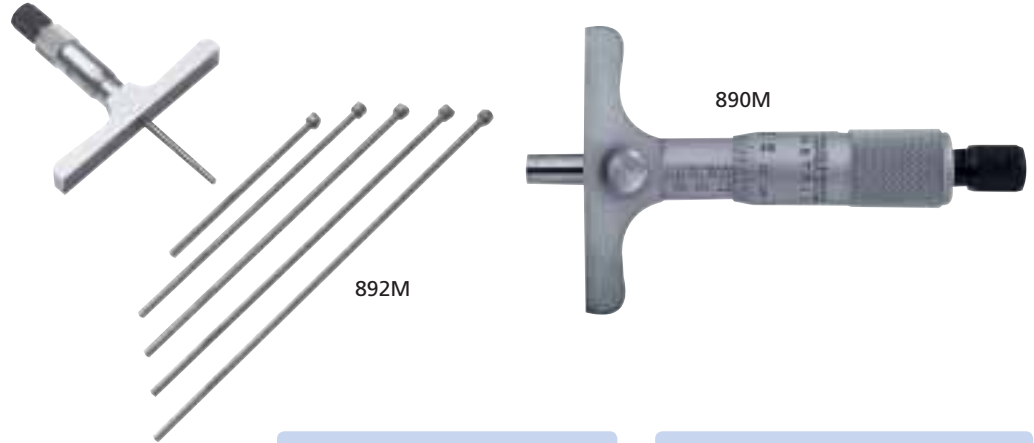


### MICROMETER STAND

Code No	Description
MW279-01A	Stand for micrometers up to 100mm

## Moore & Wright Traditional Depth Gauge Micrometer

Complies with BS6468:1984



### 890 Series:

- Fixed depth rod, 6.5mm diameter
- 63.5mm / 2 1/2" base length
- 'Speeder' type ratchet
- Lock screw

### 891 Series:

- Interchangeable depth rods, 4.5mm diameter
- 63.5mm / 2 1/2" base length

### 892 Series:

- As 891 Series except for: 100mm / 4" base length

### DEPTH GAUGE MICROMETER - METRIC

Code No	Range (mm)
890M	0-25
891M75	0-75
891M150	0-150
891M300	0-300
892M75	0-75
892M150	0-150
892M300	0-300

### DEPTH GAUGE MICROMETER - IMPERIAL

Code No	Range (inch)
890	0-1
8913	0-3
8916	0-6
89112	0-12
8923	0-3
8926	0-6
89212	0-12

## Digital Depth Micrometer 305-DDL Series

### Features

Standard: DIN 863

- Interchangeable rods (spherical ends)
- Rods are hardened and spherically lapped
- Constant force ratchet thimble
- Satin chrome finished base
- Functions: mm / inch conversion, set, on/off, zero-setting, battery low indication, hold, 0...ABS



### DIGITAL DEPTH MICROMETER

Code No	Range (mm)	Range (inch)	Resolution (mm)	Resolution (inch)	Size of Base (mm)
MW305-00DDL	0-25	0-1	0.001	0.00005	100
MW305-01DDL	0-50	0-2	0.001	0.00005	100
MW305-02DDL	0-100	0-4	0.001	0.00005	100
MW305-03DDL	0-150	0-6	0.001	0.00005	100
MW305-04DDL	0-200	0-8	0.001	0.00005	100
MW305-05DDL	0-300	0-12	0.001	0.00005	100











## Bowers Snapmic

The revolutionary Bowers Snapmic shares the best attributes of a high quality digital micrometer and a flexible snap gauge. Its wide application range, adjustable support platen and ingenious snap action enable the rapid and accurate measuring of a wide range of parts.

An adjustable support stand is available to aid the speed of batch part measurement.

As well as its many standard uses the flexible nature of the Bowers Snapmic allows it to be configured to suit a multitude of specialised external measuring applications, the gauge can be supplied with special anvils to facilitate the trouble-free measurement of threads, splines, grooves, etc. The optional sturdy Snapmic stand permits the rapid accurate measurement of batch parts.

**WiFi**  
Option

**RS232**

### Features

- Measuring range 0-30mm & 30-60mm
- 2 preset memories
- Preset recall
- Zero set
- Max / min / Tolerance / Hold function
- Metric / inch conversion
- Switchable resolution 0.01 / 0.001mm 0.0005 / 0.00005"
- RS-232 output
- Half duplex transmission
- Bench stand available
- 8mm diameter anvils
- Special contact tips available for threads, gear tooth measurement, splines, grooves etc
- Adjustable backstop
- Repeatability: 1µm / 0.00005"



### STANDS

Code No	Description
EST0001	Stand

### BOWERS SNAPMIC

Code No	Range (mm)	Resolution (mm)	Flatness (µm)	Parallelism (µm)	Accuracy (µm)
EIM030M	0-30	0.001	0.3	1.0	4
EIM060M	30-60	0.001	0.6	2.0	5

## Digital Absolute Snap Micrometer 202 Series

### Features

- Absolute Measuring System
- RS232 Digimatic output
- CR2032 battery
- Non rotating spindle
- Constant measuring force
- Quick & repeatable measurement



### DIGITAL ABSOLUTE SNAP MICROMETER

Code No	Range (mm)	Range (inch)	Resolution (mm)	Resolution (inch)	Accuracy (mm)	Accuracy (inch)
MW202-01DABS	0-25	0-1	0.001	0.00005	0.003	0.00015
MW202-02DABS	25-50	1-2	0.001	0.00005	0.003	0.00015
MW202-03DABS	50-75	2-3	0.001	0.00005	0.004	0.0002
MW202-04DABS	75-100	3-4	0.001	0.00005	0.004	0.0002

### DATA CABLE

Code No	Description
MW-Y100/700USB	Data Cable-USB to suit all DABS products



**BOWERS GROUP**



**Machine DRO**

EtcYVgGdVY, =dYYZHdc, =Zg [dgYh] gZ, : C&&%7O

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**Website:** | | | #b VX] cZ!Ygd#d#`

