

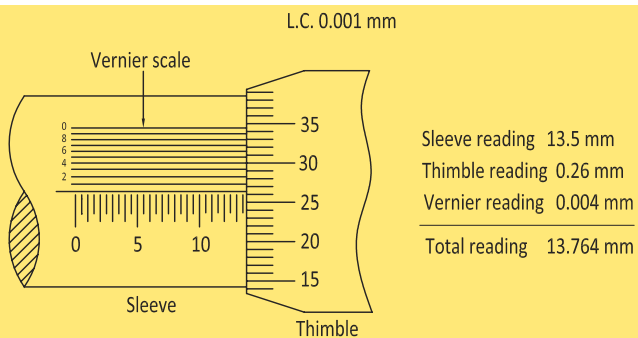
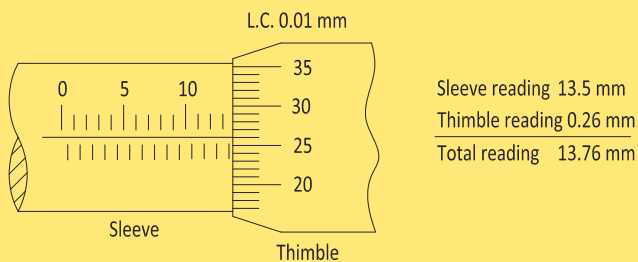


Micrometers

HOW TO READ A MICROMETER ?

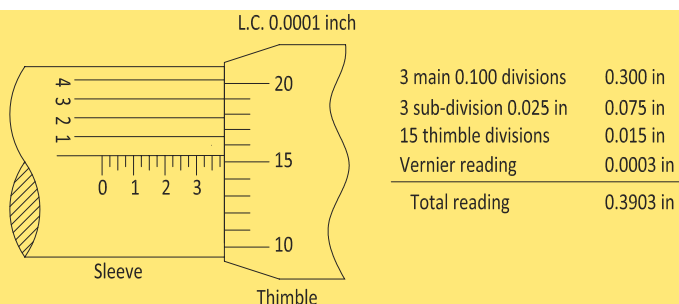
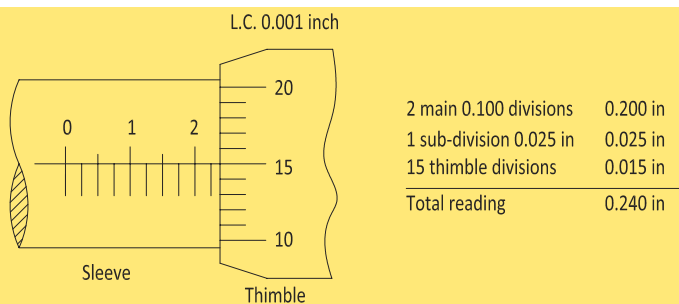
Metric Micrometer

One full turn of the thimble moves the spindle axially by 0.5 mm. On the sleeve, the 1 mm divisions are above the datum line and the 0.5 mm divisions are below the datum line. The thimble has fifty divisions; each division of the thimble scale equals 0.01 mm (0.5 mm divided by 50).

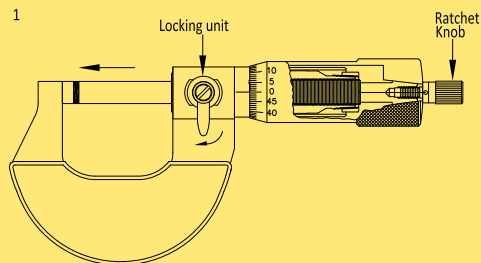


Inch Micrometer

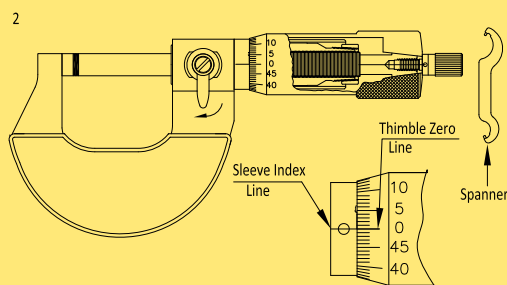
The main scale is divided into tenths of an inch (0.100 in) and each main division is subdivided into 4 equal parts, each division representing 0.025 in (0.1 divided by 4). One complete turn of the thimble, moves the spindle axially twenty five thousandths of an inch. The thimble has twenty five graduations, each graduation representing one thousandth of an inch.



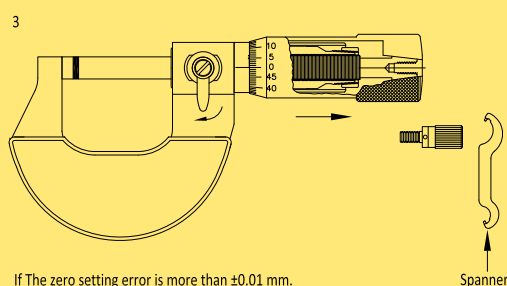
ZERO SETTING PROCEDURE



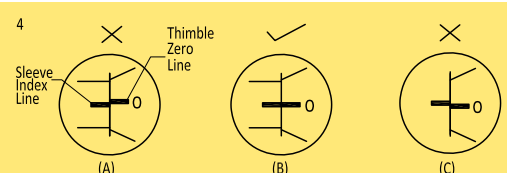
Clean the Measuring faces thoroughly. Use RATCHET KNOB to flush or bridge the measuring faces with each other (or with the faces of setting gauge for above 25 mm) & lock the SPINDLE by LOCKING UNIT & read the value.



If The zero setting error is about or less than ± 0.01 mm. Insert the spanner key into the hole on the sleeve on the opposite side of the index line, and rotate the sleeve to align the index line with the thimble zero line.



If The zero setting error is more than ± 0.01 mm. Loosen the ratchet knob by using the Spanner. Remove the ratchet knob outside & Press the thimble outward so that it can freely move, then align the thimble zero line with the sleeve index line. Lock the ratchet knob by using the Spanner at the original position to secure the thimble.

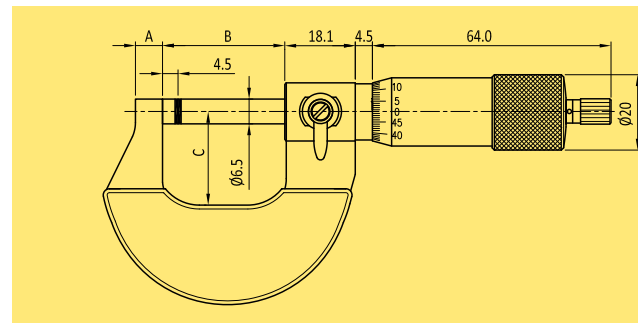
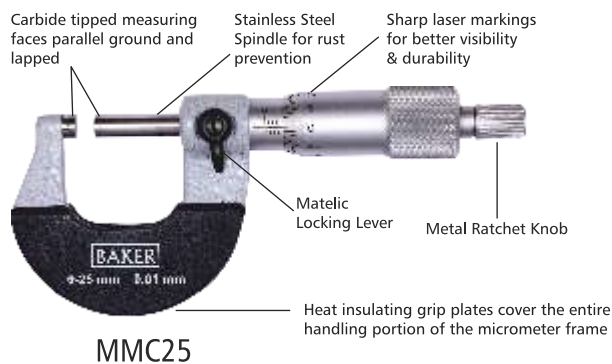


If Zero not set properly like fig.(B) then repeat the procedure.

External Micrometer



RANGE: 0-200 mm/0-8"



6MMC150



4MMC100



SET OF 6 MICROMETERS (0-150 mm/ 0-6")

SET OF 4 MICROMETERS (0-100 mm/ 0-4")

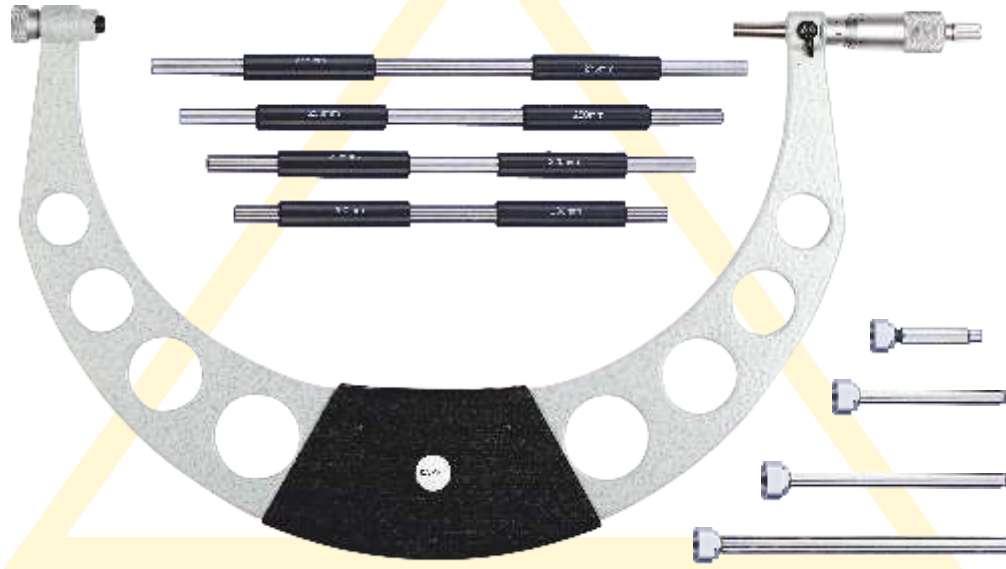
Measuring Range mm	Reading mm	Type	A mm	B mm	C mm	Measuring Range inch	Reading inch	Type
0-25	0.01	MMC25	7.1	32.5	25.5	0-1	0.001	INC1
	0.001	MMC25-1					0.0001	INC1-1
25-50	0.01	MMC50	7.1	57.5	30.5	1-2	0.001	INC2
	0.001	MMC50-1					0.0001	INC2-1
50-75	0.01	MMC75	8	83	45	2-3	0.001	INC3
	0.001	MMC75-1					0.0001	INC3-1
75-100	0.01	MMC100	8	108	58	3-4	0.001	INC4
	0.001	MMC100-1					0.0001	INC4-1
100-125	0.01	MMC125	8	133	67.5	4-5	0.001	INC5
	0.001	MMC125-1					0.0001	INC5-1
125-150	0.01	MMC150	8	158	82	5-6	0.001	INC6
	0.001	MMC150-1					0.0001	INC6-1
150-175	0.01	MMC175	8	183	93	6-7	0.001	INC7
175-200	0.01	MMC200	8	208	108	7-8	0.001	INC8
Set of Micrometers								
0-100 (Set of 4)	0.01	4MMC100				0-4 (Set of 4)	0.001	4INC4
	0.001	4MMC100-1					0.0001	4INC4-1
0-150 (Set of 6)	0.01	6MMC150				0-6 (Set of 6)	0.001	6INC6
	0.001	6MMC150-1					0.0001	6INC6-1

FEATURES

- Specification : IS, DIN, ASME & JIS
- Robust design withstands toughest workshop conditions
- Stainless steel spindle for rust prevention
- Measuring faces : Carbide tipped, micro lapped
- Measuring force : 5 to 10 N
- Metal ratchet stop for consistent measuring force
- Scale : Sleeve and thimble dull chrome plated
- Sharp Laser marking for better visibility & durability
- Heat Insulation grip plates cover the entire handling portion of the micrometer frame
- Metal spindle locking lever
- Delivered : Box, setting standard (from 25 mm upward), wrench, certificate of inspection

External Micrometer

EXTERNAL MICROMETER WITH INTERCHANGEABLE ANVILS

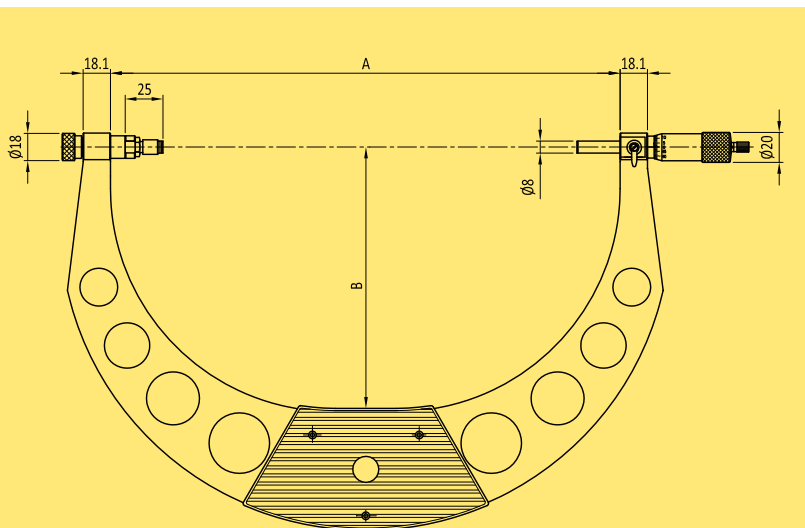


MMI200-300

Measuring Range mm	Reading mm	Type	A mm	B mm	Measuring Range inch	Reading inch	Type	Number Of Setting Standards	Number Of Interchangeable Anvils	Weight grams
0-100	0.01	MMI0-100	133	70	0-4	0.001	INI0-4	3	4	600
	0.001	MMI0-100-1				0.0001	INI0-4-1	3	4	
0-150	0.01	MMI0-150	183	95	0-6	0.001	INI0-6	5	6	850
	0.001	MMI0-150-1				0.0001	INI0-6-1	5	6	
150-300	0.01	MMI150-300	337	175	6-12	0.001	INI6-12	6	6	1700
	0.001	MMI150-300-1				0.0001	INI6-12-1	6	6	
200-300	0.01	MMI200-300	337	175	8-12	0.001	INI8-12	4	4	1700
	0.001	MMI200-300-1				0.0001	INI8-12-1	4	4	
*300-400	0.01	MMI300-400	437	225	12-16	0.001	INI12-16	4	4	2500
*400-500	0.01	MMI400-500	537	275	16-20	0.001	INI16-20	4	4	3000

NOTE:-

- *External Micrometer above Range 300 mm & 12 Inch, supplied without insulation grip plates
- Setting Standards - up to 300 mm & 12 inch - Both Ends Flat Face
Above 300 mm & 12 inch - Both Ends Spherical



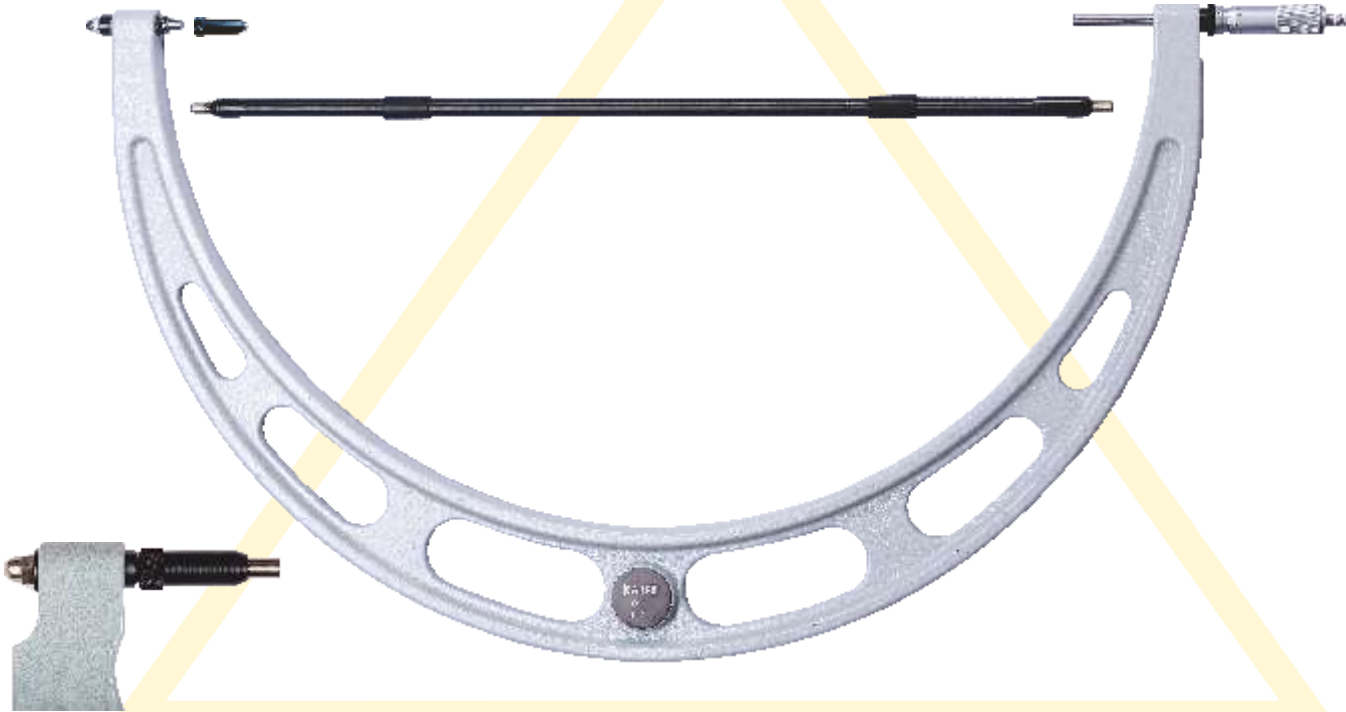
FEATURES

- Interchangeable anvils
- Robust design withstands toughest workshop conditions
- Stainless steel spindle (Ø8.0 mm, pitch 0.5mm & stroke 25 mm) for rust prevention
- Measuring faces : Carbide tipped, micro lapped spindle
: Carbide tipped, micro lapped anvils
- Measuring force : 5 to 15 N
- Metal ratchet stop for consistent measuring force
- Scale : Sleeve and thimble dull chrome plated
- Sharp Laser marking for better visibility & durability
- Metal spindle locking lever
- Delivered : Box, setting standard (refer table), wrench, setting standard holding sleeves over 300 mm, certificate of inspection

External Micrometer



EXTERNAL MICROMETER WITH ADD ON EXTENSION ANVIL



MME700-800

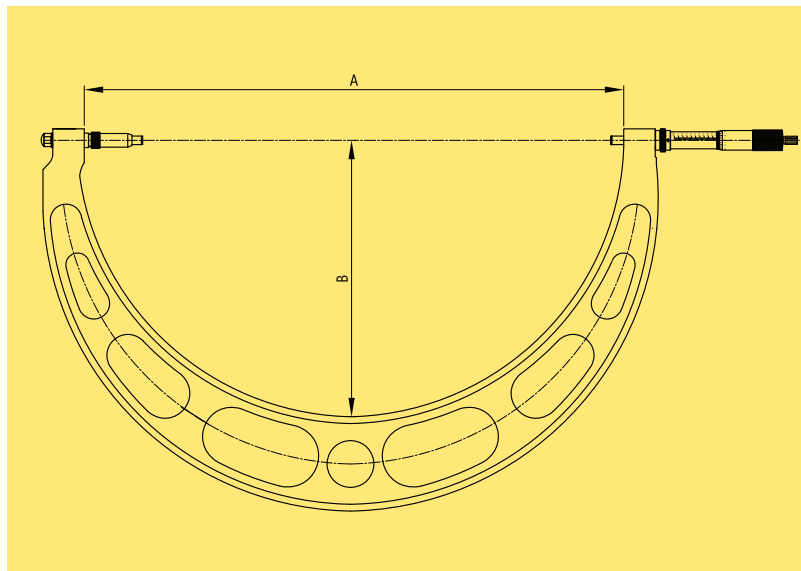
Measuring Range mm	Reading mm	Type	A mm	B mm	Measuring Range inch	Reading inch	Type	Number Of Setting Standards	Number Of Extension Anvil	Weight grams
500-600	0.01	MME500-600	644	325	20-24	0.001	INE20-24	1	1	3700
600-700	0.01	MME600-700	745	375	24-28	0.001	INE24-28	1	1	4300
700-800	0.01	MME700-800	846	425	28-32	0.001	INE28-32	1	1	4600
800-900	0.01	MME800-900	948	475	32-36	0.001	INE32-36	1	1	5600
900-1000	0.01	MME900-1000	1050	525	36-40	0.001	INE36-40	1	1	6800

NOTE:-

- Setting Standards - Both End Spherical

FEATURES

- Sturdy & light-weight Aluminum frame
- Stainless steel spindle (Ø10.0 mm, pitch 1.0 mm & stroke 50 mm) for rust prevention
- Measuring faces : Carbide tipped, micro lapped spindle
: Carbide tipped, micro lapped anvil & add on extension
- Measuring force : 5 -15 N
- Metal ratchet stop for consistent measuring force
- Scale : Sleeve and thimble dull chrome plated
- Sharp Laser marking for better visibility & durability
- Delivered : Box, setting standard (refer table), add on extension, wrench, setting standard holding sleeve and certificate of inspection



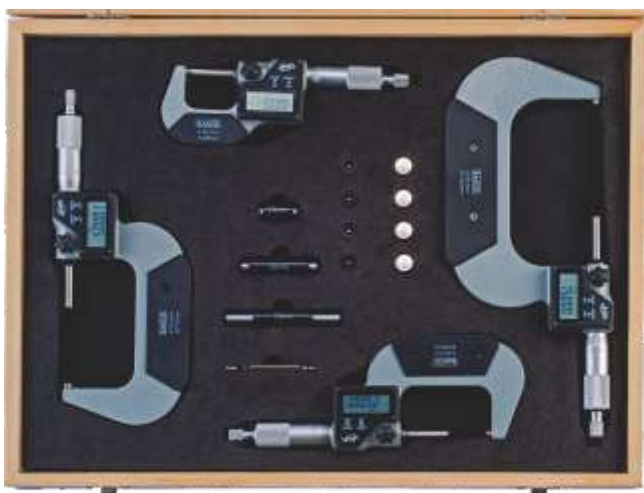


Digital External Micrometer

RANGE 0-200 mm/0-8"

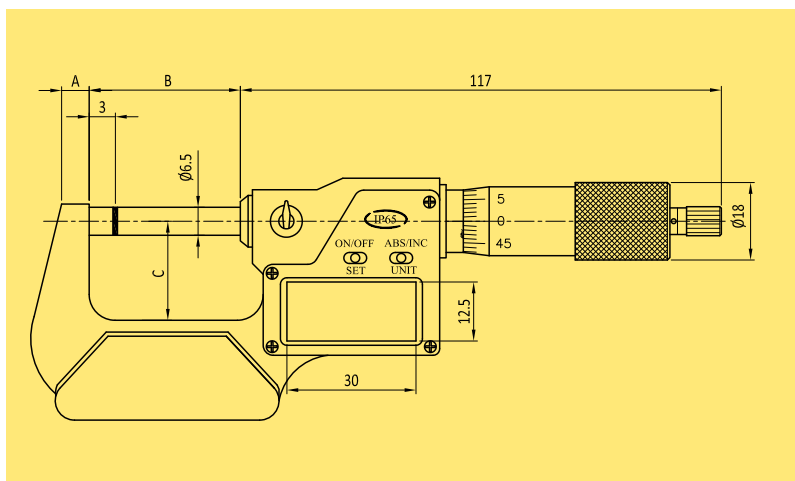


DMM25



4DMM100

SET OF 4 DIGITAL MICROMETERS (0-100 mm/0-4")



FEATURES

- Protection level IP65 against dust & water (coolant proof)
- Stainless steel spindle for rust prevention
- mm / inch conversion
- Auto power off
- SR44 battery
- Absolute & incremental measuring mode
- Easy operations with 2 buttons
- Measuring faces : Carbide tipped, micro lapped
- Measuring force : 5 -10 N
- Metal ratchet stop for consistent measuring force
- Scale : Sleeve and thimble dull chrome plated
- Sharp Laser marking for better visibility & durability
- Delivered : Box, setting standard (from 25 mm upward), 1 battery, ball attachment, wrench, certificate of inspection

MEASURING RANGE	READING	TYPE	TYPE (With Data Out Put)	A mm	B mm	C mm
0-25 mm / 0-1"	0.001 mm / 0.00005"	DMM25	DMM25-1	6.5	31	25
25-50 mm / 1-2"		DMM50	DMM50-1	8.5	56	32
50-75 mm / 2-3"		DMM75	DMM75-1	8.5	81.5	44.5
75-100 mm / 3-4"		DMM100	DMM100-1	8.5	106	57
100-125 mm / 4-5"		DMM125		17	133	82
125-150 mm / 5-6"		DMM150		17	158	82
150-175 mm / 6-7"		DMM175		19.5	183	95
175-200 mm / 7-8"		DMM200		19.5	209	107
Set of Micrometers						
0-100 mm / 0-4" (Set of 4)		4DMM100				

DATA OUTPUT FEATURES

USB compatible data output interface
Can be connected to PC through SPC cable P1502 and data can be transferred by switch P1601

Special External Micrometer



DISC: ROTATING

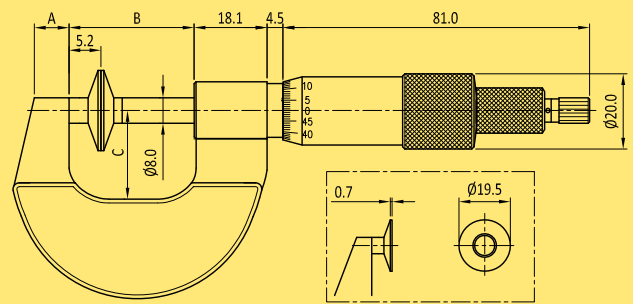
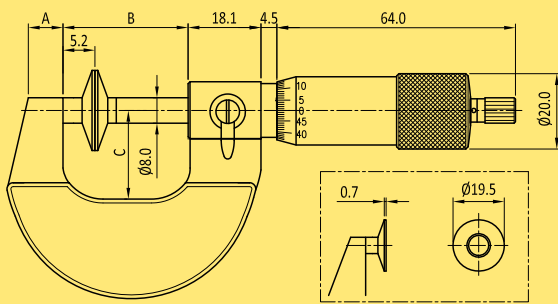


MMC25-D

DISC: NON-ROTATING



MMC25-ND



Measuring Range mm	Reading mm	Type	A mm	B mm	C mm	Measuring Range inch	Reading inch	Type
0 -25	0.01	MMC25-D	10	36	29	0 -1	0.001	INC1-D
25-50		MMC50-D	7.1	61.5	31	1-2		INC2-D
50-75		MMC75-D	8	87	45.5	2-3		INC3-D
75-100		MMC100-D	5.9	110	57.5	3-4		INC4-D

Measuring Range mm	Reading mm	Type	A mm	B mm	C mm	Measuring Range inch	Reading inch	Type
0 -25	0.01	MMC25-ND	10	36	29	0 -1	0.001	INC1-ND
25 - 50		MMC50-ND	7.1	61.5	31	1 - 2		INC2-ND
50 -75		MMC75-ND	8	87	45.5	2 - 3		INC3-ND
75 -100		MMC100-ND	5.9	110	57.5	3 - 4		INC4-ND

FEATURES

- Robust design withstands toughest workshop conditions
- Stainless steel spindle (Ø8.0 mm, pitch 0.5mm & stroke 25 mm) for rust prevention
- Measuring faces : Hardened steel
- Measuring force : 5 to 10 N
- Metal ratchet stop for consistent measuring force
- Scale : Sleeve and thimble dull chrome plated
- Sharp Laser marking for better visibility & durability
- Heat Insulation grip plates cover the entire handling portion of the micrometer frame
- Metal spindle locking lever
- Delivered : Box, setting standard (from 25 mm upward), wrench, certificate of inspection

Application

For measuring root tangent length of spur & helical gears, recess distances etc

FEATURES

- Robust design withstands toughest workshop conditions
- Stainless steel spindle (Ø8.0 mm, pitch 0.5mm & stroke 25 mm) for rust prevention
- Measuring faces : Hardened steel
- Measuring force : 5 to 10 N
- Metal ratchet stop for consistent measuring force
- Scale : Sleeve and thimble dull chrome plated
- Sharp Laser marking for better visibility & durability
- Heat Insulation grip plates cover the entire handling portion of the micrometer frame
- Metal spindle locking lever
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Application

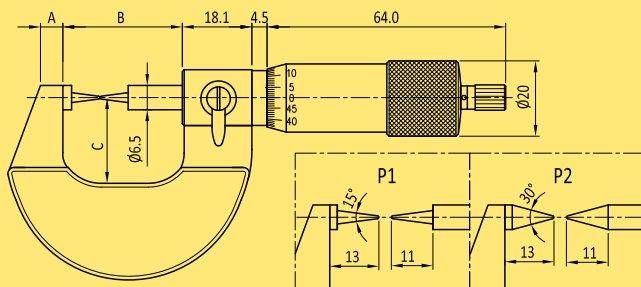
For measuring thickness of paper, felt, rubber, fabric etc

Special External Micrometer

POINT



MMC25-P2



Measuring Range mm	Reading mm	Point Angle	Type	A mm	B mm	C mm	Measuring Range inch	Reading inch	Type
0 -25	0.01	15°	MMC25-P1	7.1	57.5	30.5	0 -1	0.001	INC1-P1
		30°	MMC25-P2						INC1-P2
25-50		15°	MMC50-P1	8	83	45	1-2		INC2-P1
		30°	MMC50-P2						INC2-P2
50-75		15°	MMC75-P1	8	108	58	2-3		INC3-P1
		30°	MMC75-P2						INC3-P2
75-100	15°	MMC100-P1	8	133	67.5	3-4	INC4-P1		
	30°	MMC100-P2					INC4-P2		

FEATURES

- Robust design withstands toughest workshop conditions
- Stainless steel spindle for rust prevention
- Measuring faces : 15° & 30° hardened steel points having radius 0.3 mm approximately
- Measuring force : 5 to 10 N
- Metal ratchet stop for consistent measuring force
- Scale : Sleeve and thimble dull chrome plated
- Sharp Laser marking for better visibility & durability
- Heat Insulation grip plates cover the entire handling portion of the micrometer frame
- Metal spindle locking lever
- Delivered : Box, setting standard (from 25 mm upward), wrench, certificate of inspection

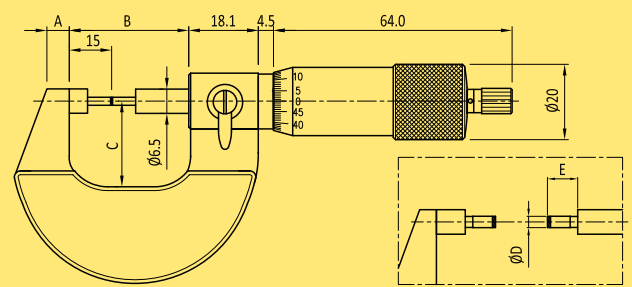
Application

For measuring web thickness of drills, small grooves, keyways

SPLINE



MMC25-S3



Measuring Range mm	Reading mm	Type	A mm	B mm	C mm	D mm	E mm	Measuring Range inch	Reading inch	Type
0 -25	0.01	MMC25-S2	7.1	57.5	30.5	2	5	0 -1	0.001	INC1-S2
		MMC25-S3				3	8			INC1-S3
25-50		MMC50-S3	8	83	45	3	8	1-2		INC2-S3
50-75		MMC75-S3	8	108	58	3	8	2-3		INC3-S3
75-100		MMC100-S3	8	133	67.5	3	8	3-4		INC4-S3

FEATURES

- Robust design withstands toughest workshop conditions
- Stainless steel spindle for rust prevention
- Measuring faces : Carbide tipped, micro lapped available in two types $\varnothing 2 \times 5$ mm & $\varnothing 3 \times 8$ mm
- Measuring force : 5 to 10 N
- Metal ratchet stop for consistent measuring force
- Scale : Sleeve and thimble dull chrome plated
- Sharp Laser marking for better visibility & durability
- Heat Insulation grip plates cover the entire handling portion of the micrometer frame
- Metal spindle locking lever
- Delivered : Box, setting standard (from 25 mm upward), wrench, certificate of inspection

Application

For measuring recesses, grooves, Splines, Slots, Keyways & small parts in precision work

Special External Micrometer



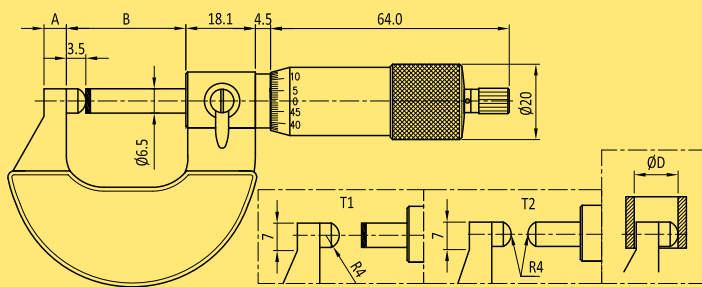
TUBE



MMC25-T1



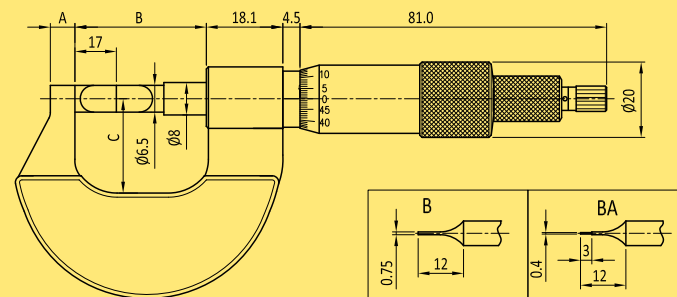
MMC25-T2



BLADE



MMC25-B



Measuring Range mm	Reading mm	Type	A mm	B mm	Min. Ø D mm	Measuring Range inch	Reading inch	Type
0 -25	0.01	MMC25-T1	5.5	32.5	9.5	0-1	0.001	INC1-T1
		MMC25-T2						INC1-T2
25-50	0.01	MMC50-T1	6	57.5	10	1-2	0.001	INC2-T1
		MMC50-T2						INC2-T2
50-75	0.01	MMC75-T1	8	83	12	2-3	0.001	INC3-T1
		MMC75-T2						INC3-T2
75-100	0.01	MMC100-T1	8	108	12	3-4	0.001	INC4-T1
		MMC100-T2						INC4-T2

Measuring Range mm	Reading mm	Type	A mm	B mm	C mm	Measuring Range inch	Reading inch	Type
0 -25	0.01	MMC25-B	7.1	57.5	30.5	0-1	0.001	INC1-B
		MMC25-BA						INC1-BA
25-50	0.01	MMC50-B	8	83	45	1-2	0.001	INC2-B
		MMC50-BA						INC2-BA
50-75	0.01	MMC75-B	8	108	58	2-3	0.001	INC3-B
		MMC75-BA						INC3-BA
75-100	0.01	MMC100-B	8	133	67.5	3-4	0.001	INC4-B
		MMC100-BA						INC4-BA

NOTE-
Carbide measuring faces available on request

NOTE-
B-Blade Thickness 0.75 mm
BA-Blade Thickness 0.40 mm
Measuring Range : 100 to 200 mm & Carbide measuring faces available on request

FEATURES

- Robust design withstands toughest workshop conditions
- Stainless steel spindle for rust prevention
- Measuring faces : Hardened steel available in two types:
T1 – one end spherical
T2 – both ends spherical
- Measuring force : 5 to 10 N
- Metal ratchet stop for consistent measuring force
- Scale : Sleeve and thimble dull chrome plated
- Sharp Laser marking for better visibility & durability
- Heat Insulation grip plates cover the entire handling portion of the micrometer frame
- Metal spindle locking lever
- Delivered : Box, setting standard (from 25 mm upward), wrench, certificate of inspection

Application
For measuring curved surfaces & wall thickness of tubes, rings, bearings etc

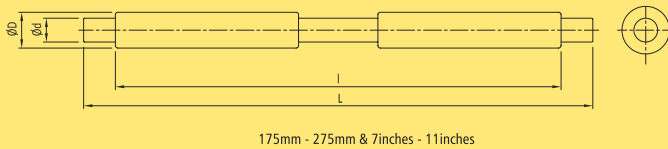
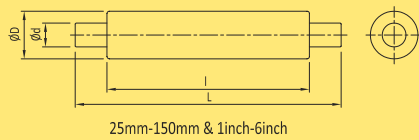
FEATURES

- Robust design withstands toughest workshop conditions
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- Scale : Sleeve and thimble dull chrome plated
- Sharp Laser marking for better visibility & durability
- Heat Insulation grip plates cover the entire handling portion of the micrometer frame
- Metal spindle locking lever
- Delivered : Box, setting standard (from 25 mm upward), wrench, certificate of inspection

Application
For measuring small grooves on shaft dia., keyways and other hard to reach geometries / profiles

Setting Standard, Depth Micrometer

FOR EXTERNAL MICROMETER



METRIC

Length (L) mm	Tolerance µm	l mm	Diameter (Ød) mm	Diameter (ØD) mm
25	± 1.5	20	7	11
50	± 2.0	40	7	11
75	± 2.5	40	7	11
100	± 3.0	60	8	12
125	± 3.5	60	8	12
150	± 4.0	60	8	12
175	± 4.5	135	8	12
200	± 5.0	160	8	12
225	± 5.5	160	8	12
250	± 6.0	180	8	12
275	± 6.5	195	8	12

INCH

Length (L) inch	Tolerance inch	l inch	Diameter (Ød) inch	Diameter (ØD) inch
1	± 0.00005	0.79	0.27	0.43
2	± 0.0001	1.65	0.27	0.43
3	± 0.0001	1.65	0.27	0.43
4	± 0.0001	2.45	0.31	0.47
5	± 0.00015	2.45	0.31	0.47
6	± 0.00015	2.45	0.31	0.47
7	± 0.00015	5.31	0.31	0.47
8	± 0.00015	6.31	0.31	0.47
9	± 0.0002	6.31	0.31	0.47
10	± 0.0002	7.15	0.31	0.47
11	± 0.0002	7.67	0.31	0.47

FEATURES

- Hardened, ground & lapped measuring faces
- Flat type measuring faces
- Measuring faces flatness 0.3 µm

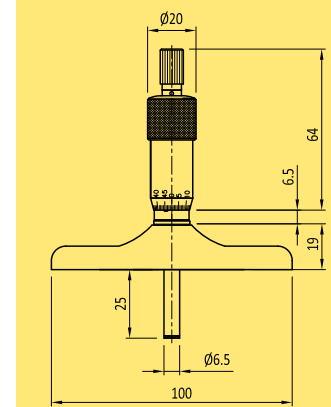
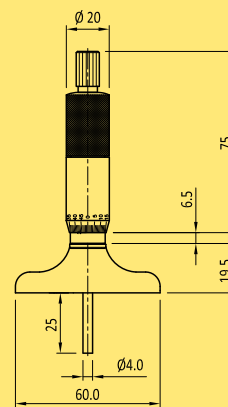
DEPTH



MMC100-DM60



MMC25-DM100



Measuring Range mm	Reading mm	Type	Measuring Range inch	Reading inch	Type
0-25	0.01	MMC25-DM60	0-1	0.001	INC1-DM60
	0.001	MMC25-1DM60		0.0001	INC1-1DM60
	0.01	MMC25-DM100		0.001	INC1-DM100
	0.001	MMC25-1DM100		0.0001	INC1-1DM100
	0.01	MMC25-DM60S		0.001	INC1-DM60S
	0.001	MMC25-1DM60S		0.0001	INC1-1DM60S
	0.01	MMC25-DM100S		0.001	INC1-DM100S
	0.001	MMC25-1DM100S		0.0001	INC1-1DM100S
0-100	0.01	MMC100-DM60	0-4	0.001	INC4-DM60
	0.01	MMC100-DM100		0.001	INC4-DM100
0-150	0.01	MMC150-DM60	0-6	0.001	INC6-DM60
	0.01	MMC150-DM100		0.001	INC6-DM100

FEATURES

- Robust design withstands toughest workshop conditions
- Base : Hardened, ground and lapped
- Stainless steel spindle for rust prevention
- Spindle Measuring faces:
carbide tipped, micro lapped (range 0-25 mm & 0- 1 inch)
Hardened steel, ground and lapped (range 0-100 mm & 0-4") & (0-150 mm & 0-6")
- Range (0-100 mm & 0-4") & (0-150 & 0-6") available with interchangeable rods
- Measuring force : 5 to 10 N
- Metal ratchet stop for consistent measuring force
- Scale : Sleeve and thimble dull chrome plated
- Sharp Laser marking for better visibility & durability
- Delivered : Box, wrench, certificate of inspection

Application

For Measuring depth of steps, shoulders etc

Internal Micrometer & Micrometer Stand



TUBULAR INTERNAL MICROMETER WITH EXTENSIONS

This is an extension rod type inside micrometer.

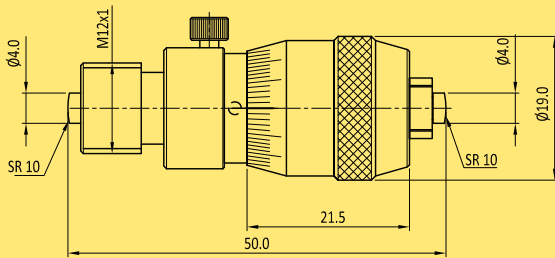
Interchangeable cylindrical extensions are spring-loaded in a protective sleeve with carbide tipped microlapped measuring faces



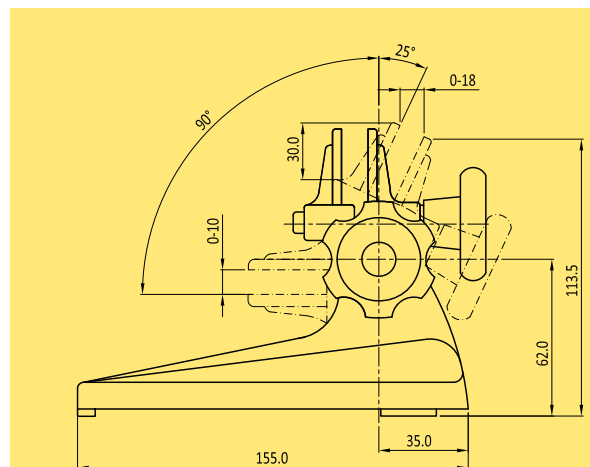
Measuring Range mm	Reading mm	Type	Extension Rods
50-150	0.01	MMT150	3 [13 mm, 25 mm 50 mm]
50-300		MMT300	5 [13 mm, 25 mm 50 mm (2 Nos.), 100 mm]
50-500		MMT500	6 [13 mm, 25 mm 50 mm (2 Nos.), 100 mm, 200 mm]
50-1000		MMT1000	8 [13 mm, 25 mm 50 mm (2 Nos.), 100 mm, 200 mm (2 Nos.), 300 mm]
50-1500		MMT1500	10 [13 mm, 25 mm 50 mm (2 Nos.), 100 mm, 200 mm (3 Nos.), 300 mm (2 Nos.)]

SPECIFICATIONS

- Robust design withstands toughest workshop conditions
- Accuracy : $\pm(3+n+L/50)\mu\text{m}$
 n = Number of extensions
 L = Maximum measuring range (mm)
- Measuring span : 13 mm
- Graduation : 0.010 mm
- Stainless steel spindle for rust prevention (pitch 0.5 mm)
- Measuring faces : carbide tipped, micro lapped
- Scale : Sleeve and thimble dull chrome plated
- Sharp Laser marking for better visibility & durability
- Delivered : Box, wrench, certificate of inspection



MICROMETER STAND



SPECIFICATIONS

- This stand keeps both hand free for operating the micrometer and positioning the workpiece.
- Useful for batch or mass type measurements in manufacturing and in quality assurance
- Suitable for micrometers up to 100 mm/4"
- Adjustable angle type

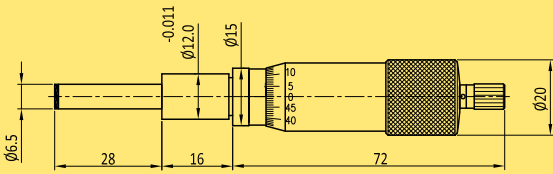


Micrometer Heads

ROTATING SPINDLE



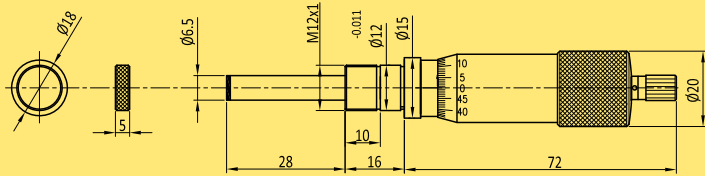
MM25-HP
Plain holding Ø12.0 mm



Measuring Range mm	Reading mm	Type	Measuring Range inch	Reading inch	Type
0 -25	0.01	MM25-HP	0-1	0.001	IN1-HP
	0.001	MM25-1HP		0.0001	IN1-1HP



MM25-HT
Threaded holding ØM12x1



Measuring Range mm	Reading mm	Type	Measuring Range inch	Reading inch	Type
0 -25	0.01	MM25-HT	0-1	0.001	IN1-HT
	0.001	MM25-1HT		0.0001	IN1-1HT

FEATURES

- Stainless steel spindle for rust prevention
- Measuring faces : carbide tipped, micro lapped
- Measuring force : 5 to 10 N
- Metal ratchet stop for consistent measuring force
- Scale : Sleeve and thimble dull chrome plated
- Sharp Laser marking for better visibility & durability
- Delivered : Plastic container & certificate of inspection

CUSTOMIZED MICROMETER HEAD

- We also manufacture Micrometer Heads as per customer requirements with rotating / non-rotating spindles.



NON-ROTATING SPINDLE

Differential Head (Extra fine feed) type

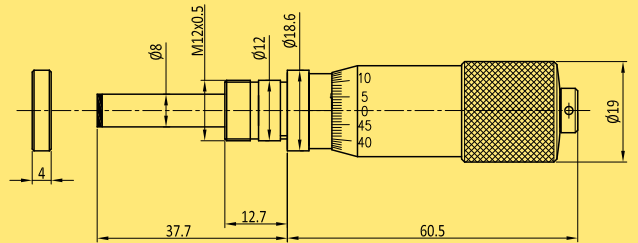
It is a differential mechanism micrometer head (extra fine feed) with a non-rotating spindle.

Differential travel allows ultra-fine, sensitive movement

Range : 0-1 mm

Reading : 0.001 mm

Spindle End : Flat (Carbide Tipped), micro lapped



FEATURES

- Stainless steel spindle for rust prevention
- Measuring faces : carbide tipped, micro lapped
- Scale : Sleeve and thimble dull chrome plated
- Sharp Laser marking for better visibility & durability
- Delivered : Plastic container & certificate of inspection



Micrometer heads with Non-rotating spindle

Internal Micrometer



XTA SERIES

Bowers' XT Analogue Internal Micrometers are an economical solution to accurate shop-floor bore measurement. The extended mechanical travel of these advanced Two or Three point gauges ensures that exchanging measuring anvils is now unnecessary. Their wide application range, 2 - 300mm, rugged construction and easy read scale, ensure both accuracy and ease of use. XT Analogue Internal Micrometers are supplied with UKAS certification. Bowers has launched the XTA Micro to cover the measuring range 2-20mm. The XTA Micro incorporates a more compact mechanical controller and Vernier scale for improved resolution.

TECHNICAL SPECIFICATIONS: Individual Instruments supplied with Setting Ring

Code No (mm)	Range (mm)	Code No (inch)	Range (inch)	Accuracy		Depth		Setting Ring	
				(mm)	(inch)	(mm)	(inch)	(mm)	(inch)
MXTA1M	2-2.5	MXTA1i	0.080-0.100	0.004	0.00015	9	0.35	2.50	0.1000
MXTA2M	2.5-3	MXTA2i	0.100-0.120	0.004	0.00015	9	0.35	2.50	0.1000
MXTA3M	3-4	MXTA3i	0.120-0.160	0.004	0.00015	12	0.47	4.00	0.1600
MXTA4M	4-5	MXTA4i	0.160-0.200	0.004	0.00015	18	0.70	4.00	0.1600
MXTA5M	5-6	MXTA5i	0.200-0.250	0.004	0.00015	18	0.70	5.00	0.2000
MXTA6M	6-8	MXTA6i	1/4-5/16	0.004	0.00015	58	2.28	8.00	0.3125
MXTA8M	8-10	MXTA8i	5/16-3/8	0.004	0.00015	58	2.28	8.00	0.3125
MXTA10M	10-12.5	MXTA10i	3/8-1/2	0.004	0.00015	58	2.28	12.50	0.5000
MXTA12M	12.5-16	MXTA12i	1/2-5/8	0.004	0.00015	62	2.44	12.50	0.5000
MXTA16M	16-20	MXTA16i	5/8-3/4	0.004	0.00015	62	2.44	20.00	0.7500
XTA20M	20-25	XTA20i	3/4-1	0.004	0.00015	66	2.62	20.00	0.7500
XTA25M	25-35	XTA25i	1-1 3/8	0.004	0.00015	66	2.62	35.00	1.3750
XTA35M	35-50	XTA35i	1 3/8-2	0.004	0.00015	80	3.15	35.00	1.3750
XTA50M	50-65	XTA50i	2-2 5/8	0.005	0.00020	80	3.15	65.00	2.6250
XTA65M	65-80	XTA65i	2 5/8-3 1/4	0.005	0.00020	80	3.15	65.00	2.6250
XTA80M	80-100	XTA80i	3 1/4-4	0.005	0.00020	100	3.94	80.00	3.2500
XTA100M	100-125	XTA100i	4-5	0.006	0.00025	115	4.53	125.00	5.0000
XTA125M	125-150	XTA125i	5-6	0.006	0.00025	115	4.53	125.00	5.0000
XTA150M	150-175	XTA150i	6-7	0.007	0.00030	115	4.53	175.00	7.0000
XTA175M	175-200	XTA175i	7-8	0.007	0.00030	115	4.53	175.00	7.0000
XTA200M	200-225	XTA200i	8-9	0.008	0.00030	118	4.65	225.00	9.0000
XTA225M	225-250	XTA225i	9-10	0.008	0.00030	118	4.65	225.00	9.0000
XTA250M	250-275	XTA250i	10-11	0.009	0.00035	118	4.65	275.00	11.0000
XTA275M	275-300	XTA275i	11-12	0.009	0.00035	118	4.65	275.00	11.0000

FEATURES

- Range 2 - 300 mm (0.080" - 12")
- 2 - 6mm 2 point/ 6 - 300mm 3 point measurement
- Graduation XTA Micro 2-6mm: 0.001mm, 6-20mm: 0.002mm
- Graduation XTA 20-300mm: 0.005mm
- Tungsten carbide measuring faces on all 3-point heads from 12.5mm
- Blind bore measurement from 2mm-6mm and above 12.5 mm (0.500")
- Extensions available above 6mm for deep hole measurement
- Ratchet stop to ensure consistent measurement
- Setting rings included with individual instruments and sets
- UKAS certificate supplied as standard with all XT mechanical micrometers
- Serial number on all gauges
- Internal Micrometers manufactured according to DIN 863, part 4
- After Sales Service



SETS: Supplied with analogue internal micrometers and setting rings

Range (mm)	Code No	Range (inch)	Code No
2-3mm	SMXTA1M	0.080-0.120	SMXTA1i
3-6mm	SMXTA2M	0.120-0.25	SMXTA2i
6-10mm	SMXTA3M	1/4-3/8	SMXTA3i
10-20mm	SMXTA4M	3/8-3/4	SMXTA4i
20-50mm	SXTA5M	3/4-2	SXTA5i
50-100mm	SXTA6M	2-4	SXTA6i
100-150mm	SXTA7M	4-6	SXTA7i
150-200mm	SXTA8M	6-8	SXTA8i

EXTENSIONS:

Code No.	Length		To Fit Heads	
	mm	inch	mm	inch
EGX 0200	63	2.5	6-10	1/4-3/8
EGX 0400	76	3.0	10-12.5	3/8-1/2
EGX 0500	100	4.0	12.5-20	1/2-3/4
EGX 0001	150	6.0	20-50	3/4-2
EGX 0004	150	6.0	50-300	2-12



Large Internal Micrometer

BAKER



RANGE: 400-1150 mm

Microtest AG is for more than 50 years specializing in measurement of internal diameters. Microtest products are in use all over the world and guarantee the highest precision over long periods of time.

The MICROTEST system is the only one that can measure internal diameters from 400 mm to 1150 mm, precisely and accurately. Based on its unique, robust design, Microtest are able to produce an instrument with unrivalled accuracy. These instruments are built very light and come with extra hard ratchets to achieve perfect self centering in a big bore. The instruments are suitable for both vertical and horizontal applications.

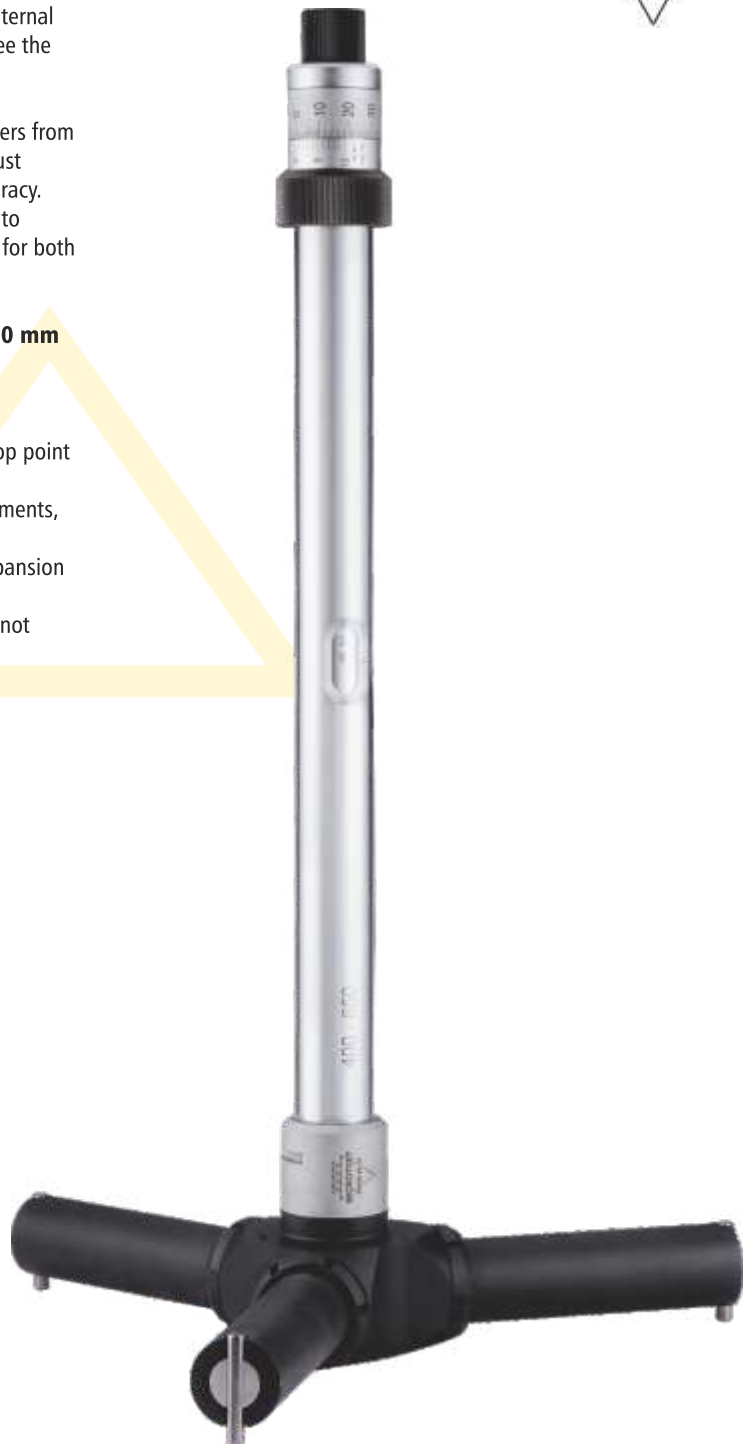
Available measuring ranges are: Ø400-650, Ø650-900, Ø900-1150 mm

Why use the Microtest System?

- The Microtest Measuring System reaches the high accuracy through simultaneous operation of three measuring spindles to obtain the stop point at which the measurement is taken
- A good vibration generated by the ratchet gives repeatable measurements, independent of the user's sense of touch
- The plastic coating protects against spray water, dirt and thermal expansion
- The temperature-compensated design enables precise & accurate measurements even if the standard ambient temperature of 20 °C is not maintained, since the material expansions of the work piece and the measuring instrument are almost completely balanced out
- Over and above this, the Microtest System is maintenance free

FEATURES

- Measuring Range: Ø400 – Ø1150 mm
- 1 µm reading with parallax-free readout
- Automatic self centering for easy & safe handling
- Deep blind hole measurement
- Extensions available on demand
- Insulated construction for thermal protection
- Automatic linear wear correction through easy adjustment
- Performance of higher accuracy at low cost
- High-strength aluminium housing
- Titanium-coated star housing
- Hardened chrome-steel measuring probes
- Tungsten carbide measuring anvils
- Torque-stable ratchet
- Made in Switzerland
- After sales service



IMMA400

Digital Internal Micrometer



XTH SERIES (PISTOL-GRIP)

Bowers' XT3 Hometric offers a new ergonomic design - including a larger and clearer LCD display - along with IP67 electronics protection, proximity output with optional built-in Bluetooth; both allow bi-directional communication giving greater flexibility for data acquisition and storage. The extended mechanical travel of the XT range means that special heads can also be manufactured to accommodate users most awkward measuring problems. Measuring heads for threads, splines, slots, grooves, deep-holes and many more applications are available. The XT3 Hometric pistol grip range of internal micrometers can be supplied as individual instruments or in complete sets.

TECHNICAL SPECIFICATIONS: Individual Instruments supplied with Digital Pistol Grip, Head and Ring

Code No (mm)	Range (mm)	Code No (inch)	Range (inch)	Accuracy		Depth		Display Unit	Setting Ring	
				(mm)	(inch)	(mm)	(inch)		(mm)	(inch)
XTH1M-BT	2-2.5	XTH1i-BT	0.080-0.100	0.004	0.00015	9	0.35	XTPG01-BT	2.50	0.1000
XTH2M-BT	2.5-3	XTH2i-BT	0.100-0.120	0.004	0.00015	9	0.35	XTPG01-BT	2.50	0.1000
XTH3M-BT	3-4	XTH3i-BT	0.120-0.160	0.004	0.00015	12	0.47	XTPG01-BT	4.00	0.1600
XTH4M-BT	4-5	XTH4i-BT	0.160-0.200	0.004	0.00015	18	0.70	XTPG01-BT	4.00	0.1600
XTH5M-BT	5-6	XTH5i-BT	0.200-0.250	0.004	0.00015	18	0.70	XTPG01-BT	5.00	0.2000
XTH6M-BT	6-8	XTH6i-BT	1/4-5/16	0.004	0.00015	58	2.28	XTPG02-BT	8.00	0.3125
XTH8M-BT	8-10	XTH8i-BT	5/16-3/8	0.004	0.00015	58	2.28	XTPG02-BT	8.00	0.3125
XTH10M-BT	10-12.5	XTH10i-BT	3/8-1/2	0.004	0.00015	58	2.28	XTPG02-BT	12.50	0.500
XTH12M-BT	12.5-16	XTH12i-BT	1/2-5/8	0.004	0.00015	62	2.44	XTPG02-BT	12.50	0.500
XTH16M-BT	16-20	XTH16i-BT	5/8-3/4	0.004	0.00015	62	2.44	XTPG02-BT	20.00	0.750
XTH20M-BT	20-25	XTH20i-BT	3/4-1	0.004	0.00015	66	2.62	XTPG03-BT	20.00	0.750
XTH25M-BT	25-35	XTH25i-BT	1-1 3/8	0.004	0.00015	66	2.62	XTPG03-BT	35.00	1.375
XTH35M-BT	35-50	XTH35i-BT	1 3/8-2	0.004	0.00015	80	3.15	XTPG03-BT	35.00	1.375
XTH50M-BT	50-65	XTH50i-BT	2-2 5/8	0.005	0.00020	80	3.15	XTPG03-BT	65.00	2.625
XTH65M-BT	65-80	XTH65i-BT	2 5/8-3 1/4	0.005	0.00020	80	3.15	XTPG03-BT	65.00	2.625
XTH80M-BT	80-100	XTH80i-BT	3 1/4-4	0.005	0.00020	100	3.94	XTPG03-BT	80.00	3.250
XTH100M-BT	100-125	XTH100i-BT	4-5	0.006	0.00025	115	3.94	XTPG04-BT	125.00	5.000
XTH125M-BT	125-150	XTH125i-BT	5-6	0.006	0.00025	115	3.94	XTPG04-BT	125.00	5.000
XTH150M-BT	150-175	XTH150i-BT	6-7	0.007	0.00030	115	3.94	XTPG04-BT	175.00	7.000
XTH175M-BT	175-200	XTH175i-BT	7-8	0.007	0.00030	115	3.94	XTPG04-BT	175.00	7.000
XTH200M-BT	200-225	XTH200i-BT	8-9	0.008	0.00030	118	3.94	XTPG04-BT	225.00	9.000
XTH225M-BT	225-250	XTH225i-BT	9-10	0.008	0.00030	118	4.05	XTPG04-BT	225.00	9.000
XTH250M-BT	250-275	XTH250i-BT	10-11	0.009	0.00035	118	4.05	XTPG04-BT	275.00	11.000
XTH275M-BT	275-300	XTH275i-BT	11-12	0.009	0.00035	118	4.05	XTPG04-BT	275.00	11.000

EXTENSIONS:

Code No.	Length		To Fit Heads	
	mm	inch	mm	inch
EGX 0200	63	2.5	6-10	1/4-3/8
EGX 0400	76	3.0	10-12.5	3/8-1/2
EGX 0500	100	4.0	12.5-20	1/2-3/4
EGX 0001	150	6.0	20-50	3/4-2
EGX 0004	150	6.0	50-300	2-12

FEATURES

- New ergonomic design with larger, clearer LCD swivel display
- IP67 Electronics
- Simple 2-button operation
- 4 preset memories
- Proximity RS232/USB output with optional built-in Bluetooth Low Energy (BLE)
- Bi-directional communication
- Range 2 - 300mm (0.080" - 12")
- 2 - 6mm 2 point / 6 - 300mm 3 point measurement
- Resolution 0.001 mm (0.00005")
- Tungsten carbide measuring faces on all 3-point heads from 12.5mm
- Blind bore measurement from 2mm - 6mm and above 12.5 mm (0.500")
- Extensions available above 6mm for deep hole measurement
- Setting rings included with individual instruments and sets
- UKAS certificates supplied as standard with all gauges
- Serial number on all digital readouts and measuring heads
- Heads with special anvils available to suit specific customer requirements (e.g., Threads, grooves, 2-point, spherical, splines etc)
- Internal Micrometers manufactured according to DIN 863, part 4
- After Sales Service



SETS: Supplied with digital pistol grip, heads and rings

Range (mm)	Code No	Range (inch)	Code No
2 - 6mm	SXTH1M-BT	0.080-0.25	SXTH1i-BT
6 - 10mm	SXTH3M-BT	1/4 - 3/8	SXTH3i-BT
10-20mm	SXTH4M-BT	3/8 - 3/4	SXTH4i-BT
20-50mm	SXTH5M-BT	3/4 - 2	SXTH5i-BT
50-100mm	SXTH6M-BT	2 - 4	SXTH6i-BT
100-150mm	SXTH7M-BT	4 - 6	SXTH7i-BT
150-200mm	SXTH8M-BT	6 - 8	SXTH8i-BT
100-200mm	SXTH9M-BT	4 - 8	SXTH9i-BT

LARGE SETS: Supplied with digital pistol grip, heads and rings

Range (mm)	Code No	Range (inch)	Code No
6 - 20 mm	SXTH10M-BT	1/4 - 3/4	SXTH10i-BT
20 - 100mm	SXTH11M-BT	3/4 - 4	SXTH11i-BT

Digital Internal Micrometer

BAKER



XTD SERIES

Bowers' XT3 digital internal micrometers offer a new ergonomic design - including a larger and clearer LCD display - along with IP67 electronics protection, proximity output with optional built-in Bluetooth; both allow bi-directional communication giving greater flexibility for data acquisition and storage. The extended mechanical travel of the XT range means that special heads can also be manufactured to accommodate users most awkward measuring problems. Measuring heads for threads, splines, slots, grooves, deep-holes and many more applications are available. The Bowers XT range of internal micrometers can be supplied as individual instruments or in complete sets.

TECHNICAL SPECIFICATIONS : Individual Instruments supplied with Digital Display Unit, Head and Ring

Code No (mm)	Range (mm)	Code No (inch)	Range (inch)	Accuracy		Depth		Display Unit	Setting Ring	
				(mm)	(inch)	(mm)	(inch)		(mm)	(inch)
XTD1M-BT	2-2.5	XTD1i-BT	0.080-0.100	0.004	0.00015	9	0.35	XTDU2-BT	2.50	0.1000
XTD2M-BT	2.5-3	XTD2i-BT	0.100-0.120	0.004	0.00015	9	0.35	XTDU2-BT	2.50	0.1000
XTD3M-BT	3-4	XTD3i-BT	0.120-0.160	0.004	0.00015	12	0.47	XTDU2-BT	4.00	0.1600
XTD4M-BT	4-5	XTD4i-BT	0.160-0.200	0.004	0.00015	18	0.70	XTDU2-BT	4.00	0.1600
XTD5M-BT	5-6	XTD5i-BT	0.200-0.250	0.004	0.00015	18	0.70	XTDU2-BT	5.00	0.2000
XTD6M-BT	6-8	XTD6i-BT	1/4-5/16	0.004	0.00015	58	2.28	XTDU6-BT	8.00	0.3125
XTD8M-BT	8-10	XTD8i-BT	5/16-3/8	0.004	0.00015	58	2.28	XTDU6-BT	8.00	0.3125
XTD10M-BT	10-12.5	XTD10i-BT	3/8-1/2	0.004	0.00015	58	2.28	XTDU10-BT	12.50	0.500
XTD12M-BT	12.5-16	XTD12i-BT	1/2-5/8	0.004	0.00015	62	2.44	XTDU10-BT	12.50	0.500
XTD16M-BT	16-20	XTD16i-BT	5/8-3/4	0.004	0.00015	62	2.44	XTDU10-BT	20.00	0.750
XTD20M-BT	20-25	XTD20i-BT	3/4-1	0.004	0.00015	66	2.62	XTDU20-BT	20.00	0.750
XTD25M-BT	25-35	XTD25i-BT	1-1 3/8	0.004	0.00015	66	2.62	XTDU20-BT	35.00	1.375
XTD35M-BT	35-50	XTD35i-BT	1 3/8-2	0.004	0.00015	80	3.15	XTDU20-BT	35.00	1.375
XTD50M-BT	50-65	XTD50i-BT	2-2 5/8	0.005	0.00020	80	3.15	XTDU50-BT	65.00	2.625
XTD65M-BT	65-80	XTD65i-BT	2 5/8-3 1/4	0.005	0.00020	80	3.15	XTDU50-BT	65.00	2.625
XTD80M-BT	80-100	XTD80i-BT	3 1/4-4	0.005	0.00020	100	3.94	XTDU50-BT	80.00	3.250
XTD100M-BT	100-125	XTD100i-BT	4-5	0.006	0.00025	115	4.53	XTDU100-BT	125.00	5.000
XTD125M-BT	125-150	XTD125i-BT	5-6	0.006	0.00025	115	4.53	XTDU100-BT	125.00	5.000
XTD150M-BT	150-175	XTD150i-BT	6-7	0.007	0.00030	115	4.53	XTDU100-BT	175.00	7.000
XTD175M-BT	175-200	XTD175i-BT	7-8	0.007	0.00030	115	4.53	XTDU100-BT	175.00	7.000
XTD200M-BT	200-225	XTD200i-BT	8-9	0.008	0.00030	118	4.65	XTDU200-BT	225.00	9.000
XTD225M-BT	225-250	XTD225i-BT	9-10	0.008	0.00030	118	4.65	XTDU200-BT	225.00	9.000
XTD250M-BT	250-275	XTD250i-BT	10-11	0.009	0.00035	118	4.65	XTDU200-BT	275.00	11.000
XTD275M-BT	275-300	XTD275i-BT	11-12	0.009	0.00035	118	4.65	XTDU200-BT	275.00	11.000

EXTENSIONS:

Code No.	Length		To Fit Heads	
	mm	inch	mm	inch
EGX 0200	63	2.5	6-10	1/4-3/8
EGX 0400	76	3.0	10-12.5	3/8-1/2
EGX 0500	100	4.0	12.5-20	1/2-3/4
EGX 0001	150	6.0	20-50	3/4-2
EGX 0004	150	6.0	50-300	2-12

FEATURES

- New ergonomic design with larger and clearer LCD display
- IP67 Electronics
- Simple 2-button operation
- 4 preset memories
- Proximity RS232/USB output with optional built-in Bluetooth Low Energy (BLE)
- Bi-directional communication
- Range 2 - 300mm (0.080" - 12")
- 2 - 6mm 2 point / 6 - 300mm 3 point measurement
- Resolution 0.001 mm / 0.00005"
- Tungsten carbide measuring faces on all 3-point heads from 12.5mm
- Blind bore measurement from 2mm - 6mm and above 12.5 mm (0.500")
- Extensions available above 6mm for deep hole measurement
- Ratchet stop to ensure consistent measurement
- Setting rings included with individual instruments and sets
- UKAS certificates supplied as standard with all gauges
- Serial number on all digital readouts and measuring heads
- Heads with special anvils available to suit specific customer requirements (e.g., Threads, grooves, 2-point, spherical, splines etc)
- Internal Micrometers manufactured according to DIN 863, part 4
- After Sales Service



SETS: Supplied with digital display unit, heads and rings

Range (mm)	Code No	Range (inch)	Code No
2 - 6mm	SXTD1M-BT	0.080-0.25"	SXTD1i-BT
6 - 10mm	SXTD3M-BT	1/4-3/8"	SXTD3i-BT
10-20mm	SXTD4M-BT	3/8-3/4"	SXTD4i-BT
20-50mm	SXTD5M-BT	3/4-2"	SXTD5i-BT
50-100mm	SXTD6M-BT	2-4"	SXTD6i-BT
100-150mm	SXTD7M-BT	4-6"	SXTD7i-BT
150-200mm	SXTD8M-BT	6-8"	SXTD8i-BT
100-200mm	SXTD9M-BT	4-8"	SXTD9i-BT

Digital Internal Micrometer



XT500 SERIES



ANVIL SETS 300-400mm



FEATURES

- Measuring range: 300-500mm
- New constant-force digital readout
- Single 300 mm setting ring covers full range
- Radiussed anvils of tool-steel for optimum centering
- Accuracy: 15 μ m
- Repeatability: 3 μ m
- IP67 electronics
- RS232 output
- Resolution 0.01/0.001 mm.
- Metric/inch switchable
- Fast, accurate measurement
- Extensions available for deeper bores
- Certificate of conformity with Internal Micrometer
- Supplied in fitted case
- After Sales Service

INDIVIDUAL INSTRUMENTS: Supplied with Digital Display Unit, measuring head with exchangeable anvils and setting ring.

Code No.	Range mm	Accuracy	Depth mm	Setting Ring (mm)
XT5001M-BT	300-325	15 μ m	120	300
XT5002M-BT	300-325, 325-350			
XT5003M-BT	300-325, 350-375			
XT5004M-BT	300-325, 375-400			
XT5005M-BT	300-325, 400-425			
XT5006M-BT	300-325, 425-450			
XT5007M-BT	300-325, 450-475			
XT5008M-BT	300-325, 475-500			

SETS: Supplied with Digital Display Unit, measuring head with exchangeable anvils and setting ring.

Code No.	Range (mm)
SXT3000M-BT	300-400
SXT4000M-BT	300-325, 400-500
SXT5000M-BT	300-500

XTL SERIES (LEVER TYPE)



INDIVIDUAL INSTRUMENTS: Supplied with head & ring

Code No (mm)	Range (mm)	Code No (inch)	Range (inch)	Accuracy		Depth		Lever Holder	Setting Ring	
				(mm)	(inch)	(mm)	(inch)		(mm)	(inch)
XTL6M	6-8	XTL6i	1/4-5/16	0.004	0.00015	58	2.28	XTLG01	8.00	0.312
XTL8M	8-10	XTL8i	5/16-3/8	0.004	0.00015	58	2.28	XTLG01	8.00	0.312
XTL10M	10-12.5	XTL10i	3/8-1/2	0.004	0.00015	58	2.28	XTLG02	12.50	0.500
XTL12M	12.5-16	XTL12i	1/2-5/8	0.004	0.00015	62	2.44	XTLG02	12.50	0.500
XTL16M	16-20	XTL16i	5/8-3/4	0.004	0.00015	62	2.44	XTLG02	20.00	0.750
XTL20M	20-25	XTL20i	3/4-1	0.004	0.00015	66	2.62	XTLG03	20.00	0.750
XTL25M	25-35	XTL25i	1-1 3/8	0.004	0.00015	66	2.62	XTLG03	35.00	1.375
XTL35M	35-50	XTL35i	1 3/8-2	0.004	0.00015	80	3.15	XTLG03	35.00	1.375
XTL50M	50-65	XTL50i	2-2 5/8	0.005	0.00020	80	3.15	XTLG03	65.00	2.625
XTL65M	65-80	XTL65i	2 5/8-3 1/4	0.005	0.00020	80	3.15	XTLG03	65.00	2.625
XTL80M	80-100	XTL80i	3 1/4-4	0.005	0.00020	85	3.35	XTLG03	80.00	3.250

FEATURES

- Measuring range 6-100mm (Diameters above 100 on request)
- Excellent for vertical bore measurement
- Simple 2-button operation
- 2 preset memories
- RS-232 output
- Self-centering heads
- Constant measuring pressure
- Fast, accurate measurement
- Resolution 0.001mm (0.00005")
- Tungsten carbide measuring faces on all 3-point heads from 12.5mm
- Blind bore measurement above 12.5mm (0.500")
- Extensions available for deep hole measurement
- Setting rings included with individual instruments and sets
- Serial number on all gauges and measuring heads
- Heads with special anvils available to suit specific customer requirements (e.g. Threads, grooves, 2-point, spherical, splines etc)
- Internal Micrometers manufactured according to DIN 863, part 4
- After Sales Service

SETS: Supplied with heads & rings.

Code No (mm)	Range (mm)	Code No (Inch)	Range (inch)
SXTL3M	6-10mm	SXTL3i	1/4-3/8"
SXTL4M	10-20mm	SXTL4i	3/8-3/4"
SXTL5M	20-50mm	SXTL5i	3/4-2"
SXTL6M	50-100mm	SXTL6i	2-4"





Microgauge Internal Micrometer



2-POINT BORE GAUGE

The new Micro Gauge 2-point bore gauging system has been designed specifically for the measurement of small bores between 1.0-10.0mm. Featuring a completely new digital readout and extremely compact overall dimensions, the Micro Gauge is truly a pocket-sized instrument. Digital readout and measuring head together are about the same size and format as a ballpoint pen which represents a big advantage for those needing to measure small precision parts and who need to have their gauge with them all the time. The clear LCD display is easily set using only two buttons and results are shown with switchable 0.01/0.001/0.0005mm resolution. Data transfer is via Proximity-RS232 or Proximity-USB output. The measuring heads are equipped with spherical hard-chromed contact points and are set in appropriate setting rings. Like all Bowers bore gauging products the MicroGauge system is available as individual instruments or as full sets.

TECHNICAL SPECIFICATION: Individual measuring set includes measuring head, cone, readout and setting ring

Measuring Head Code	Range (mm)	Range (Inch)	Min/Max Measuring Depth (mm)	Digital Readout	Cone	Setting Ring Code	Setting Ring (mm)
MGS11	0.95-1.15	0.037-0.045	0.6 / 11	MGU1	MGC1	MGR100	1.00
MGS12	1.07-1.25	0.042-0.049	0.6 / 11	MGU1	MGC1	MGR110	1.10
MGS13	1.17-1.35	0.046-0.053	0.6 / 11	MGU1	MGC1	MGR120	1.20
MGS14	1.27-1.45	0.050-0.057	0.6 / 11	MGU1	MGC1	MGR130	1.30
MGS15	1.37-1.55	0.054-0.061	0.6 / 11	MGU1	MGC1	MGR140	1.40
MGS16	1.50-1.90	0.059-0.075	0.9 / 17	MGU2	MGC2	MGR175	1.75
MGS17	1.80-2.20	0.071-0.087	0.9 / 17	MGU2	MGC2	MGR200	2.00
MGS18	2.05-2.45	0.081-0.096	0.9 / 17	MGU2	MGC2	MGR225	2.25
MGS19	2.25-2.75	0.089-0.108	1.2 / 22	MGU2	MGC3	MGR250	2.50
MGS20	2.50-3.00	0.098-0.118	1.2 / 22	MGU2	MGC3	MGR275	2.75
MGS21	2.75-3.25	0.108-0.128	1.2 / 22	MGU2	MGC3	MGR300	3.00
MGS22	3.00-3.50	0.118-0.138	1.2 / 22	MGU2	MGC3	MGR325	3.25
MGS23	3.25-3.75	0.128-0.148	1.2 / 22	MGU2	MGC3	MGR350	3.50
MGS24	3.50-4.00	0.138-0.157	1.2 / 22	MGU2	MGC3	MGR375	3.75
MGS25	3.75-4.25	0.148-0.167	1.2 / 22	MGU2	MGC3	MGR400	4.00
MGS26	3.65-4.35	0.144-0.171	2.0 / 40	MGU2	MGC4	MGR400	4.00
MGS27	4.15-4.85	0.163-0.191	2.0 / 40	MGU2	MGC4	MGR450	4.50
MGS28	4.65-5.35	0.183-0.211	2.0 / 40	MGU2	MGC4	MGR500	5.00
MGS29	5.15-5.85	0.203-0.230	2.0 / 40	MGU2	MGC4	MGR550	5.50
MGS30	5.65-6.35	0.222-0.250	2.0 / 40	MGU2	MGC4	MGR600	6.00
MGS31	6.15-6.85	0.242-0.270	2.0 / 40	MGU2	MGC4	MGR650	6.50
MGS32	6.65-7.35	0.262-0.290	2.0 / 40	MGU2	MGC4	MGR700	7.00
MGS33	7.15-7.85	0.281-0.309	2.0 / 40	MGU2	MGC4	MGR750	7.50
MGS34	7.65-8.35	0.301-0.329	2.0 / 40	MGU2	MGC4	MGR800	8.00
MGS35	8.15-8.85	0.321-0.349	2.0 / 50	MGU2	MGC4	MGR850	8.50
MGS36	8.65-9.35	0.340-0.368	2.0 / 50	MGU2	MGC4	MGR900	9.00
MGS37	9.15-9.85	0.360-0.388	2.0 / 50	MGU2	MGC4	MGR950	9.50
MGS38	9.65-10.35	0.380-0.408	2.0 / 50	MGU2	MGC4	MGR1000	10.00

SETS: Including digital readout, measuring heads, cone, depth stops and setting rings.

Code No.	Range (mm)
SMG001M	0.95-1.55
SMG002M	1.50-2.45
SMG003M	2.25-4.25
SMG004M	3.65-6.35
SMG005M	6.15-10.35

LARGE SETS: including digital readout, measuring heads, cone, depth stops and setting rings.

Code No.	Range (mm)
SMG010M	0.95-2.45
SMG011M	1.50-4.25
SMG012M	2.25-6.35

FEATURES

- System range: 1-10 mm
- New slim-line digital display
- Switchable resolution 0.01 / 0.001 / 0.0005 mm
- Simple 2-button operation
- Clear LCD display
- Data output: RS232 / USB proximity sensor
- Linearity: -Diameter 1.0-1.5 max 2% of measuring travel, min 0.001 mm
-Diameter 1.5-10 max 1% of measuring travel, min 0.001 mm
- Repeatability : 0.001 mm
- Hard-chromed ball-contacts
- Depth-stops available
- Stand available as an option
- After sales service



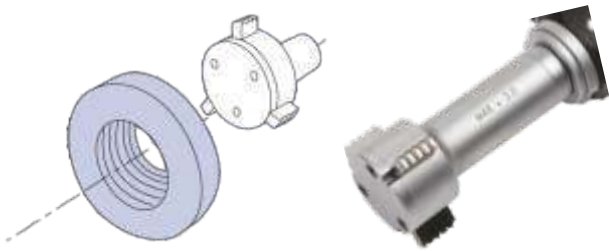


SPECIAL APPLICATIONS

Although Bowers produce the most comprehensive series of internal measuring equipment available, not all applications can be covered by the standard instrument range. In line with the customer care ethos, Bowers have earned a reputation for manufacturing special heads for measuring non-standard applications. The following information illustrates some of the many difficult measuring problems easily solved by these special heads.

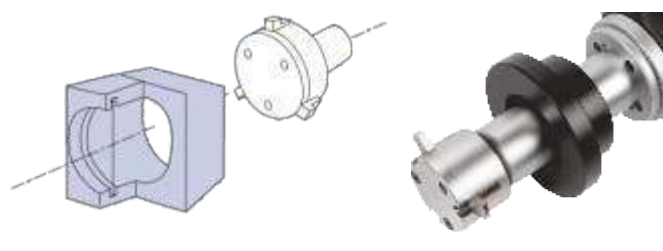
Screw Threads

To measure effective diameter of internal threads. Also available for pitch diameter measurement and major diameter measurement.



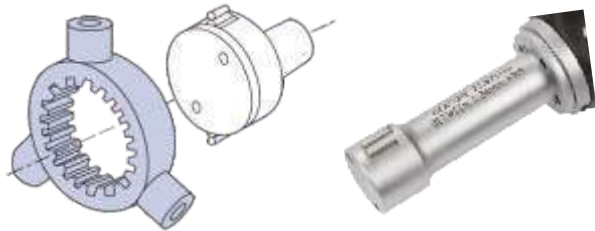
Grooves

To measure diameter of internal grooves i.e. Oil Seal, 'O' Ring, Ball Race, Annular, Special form grooves.



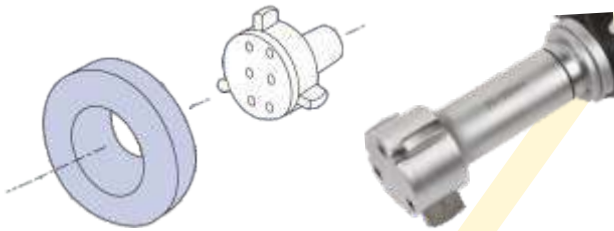
Internal Splines

To measure between pin or between ball diameter of internal splines. 2 and 3 point heads available. Also available for minor and major diameter measurement. Anvils manufactured from tool steel.



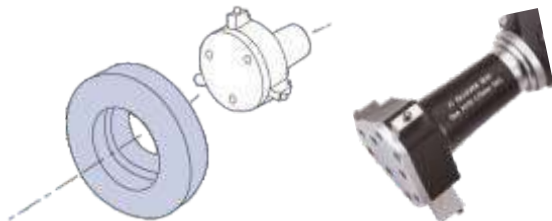
Spherical Radius

To measure spherical bores. Gives good repeatability even when out of line with bore Centre. 2 and 3 point heads available. Preferred in case of deep hole measurement also.



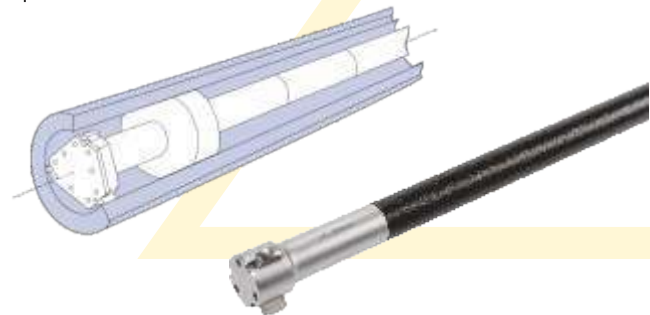
Ball Screw Threads

To measure diameters of ball screw threads using ball anvils.



Deep Hole

To measure bores up to 2 meters deep with standard extensions. Pneumatic system available from 50mm diameter for depths of up to 15 meters.



Products on demand:

Special heads for taper bores, bores with irregular spacing, Gun barrel heads, Automotive Hose heads, Slot width heads.