

# ASIMETO

ASIMETO U.S. CATALOG 2016

**AHB** Tooling & Machinery, Inc.  
Complete Metalworking Solutions  
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# Index

ASIMETO

Micrometers



5-38

Calipers



39-60

Indicators



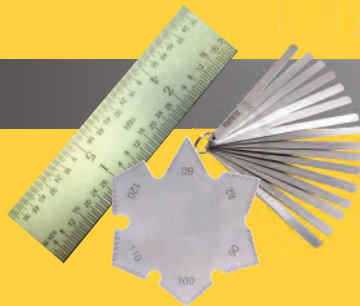
61-92

Depth, Height & Bore Gages



93-102

Gages



103-126

Optical Instruments



127-130

Kits



131-136

# ASIMETO

**Empowering Possibilities**

**Precision** is not only defined by degrees of exactness. It is defined by the vision and skill of engineers. By problems solved, challenges overcome and reputations made. The real value of precision is the power it gives engineers to turn plans into reality.

Asimeto was founded in 2007 by renowned German metrologist Manfred Eisinger. Since then, the company has rapidly established a reputation for manufacturing high-performance precision tools and solutions and delivering them at unexpectedly affordable prices.

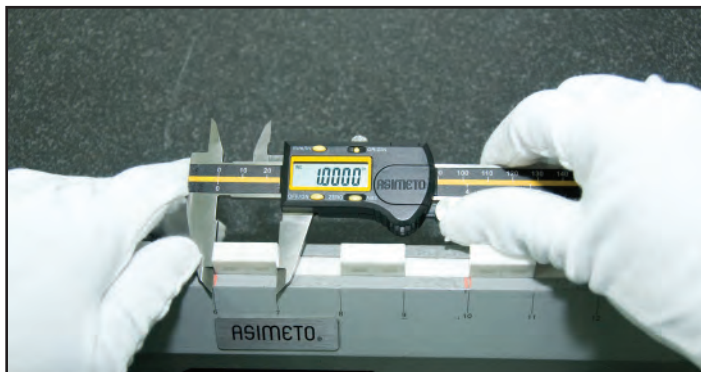
Asimeto continues to win market share by applying German metrological design, American technological innovation and Asian manufacturing competitiveness across a broad range of integrated precision solutions, distributed through a global network. Every tool is ISO17025 certified for dependable accuracy and to ensure calibration is compliant with the regulatory requirements of each local market. Increasingly, Asimeto is the choice of engineers the world over including companies like Volkswagen, Guhring and Boeing. We invite you to discover why.

## Introduction to Asimeto Calibration Laboratory

The quality and measuring accuracy of all Asimeto precision tools is guaranteed by the Asimeto Calibration Laboratory. All tools are inspected for conformance to the Asimeto design specifications and are then processed through the Asimeto calibration laboratory. Only the latest state of the art calibration equipment has been selected, from the leading global manufacturers, to ensure that the calibration costs are contained by increasing throughput, without compromising measurement accuracy or repeatability.

The Asimeto Calibration Laboratory has designed and incorporated universal calibration software that applies the applicable accuracy standard to the specific destination market of the precision measuring tool. ASME, DIN and JIG are all supported.

It all means precisely that the dedication and diligence of the Asimeto Calibration Laboratory assures you that the accuracy is within the specifications of your local standard.



2

Product Description

### Calibration Certificate

# ASIMETO

**Part Number** 105-02-1      **Tool** DIGITAL OUTSIDE MICROMETER  
**Serial Number** 101148840      **Range** 1" - 2"  
**Standard Name** ASME B89      **Resolution** 0.00005"

**Visual Inspection** Passed  
**Function Inspection** Passed

#### Outside Measurements

Reading	Nominal Value	Tolerance +/-	Deviation +/-	Disposition*
1	1.00000	0.0002"	0.00000	<input checked="" type="checkbox"/>
2	1.14900	0.0002"	0.00005	<input checked="" type="checkbox"/>
3	1.40000	0.0002"	0.00000	<input checked="" type="checkbox"/>
4	1.80000	0.0002"	0.00000	<input checked="" type="checkbox"/>
5	1.85000	0.0002"	-0.00005	<input checked="" type="checkbox"/>
6	2.00000	0.0002"	-0.00010	<input checked="" type="checkbox"/>

Disposition

3

Inspection Point & Result

1

	Inspection Serial Number	NIST Number	PTB Number
Gauge Block Set	530-40	07-54807-A	4939 PTB 05

**Humidity** 50 % $\pm$ 15%  
**Temperature** 20 °C $\pm$ 0.5°C  
**Uncertainty** 1.5  $\mu$ m  $\times$  10<sup>-6</sup> $\times$ L  
**Inspector Name** Alex

\* Check mark indicates within tolerance.



Asimeto Inc. www.asimeto.com



Traceable No.

4

# Micrometers

Digital Outside Micrometers With/Without SPC Output	6-7
Economic Digital Outside Micrometers	8
Vernier Outside Micrometers & Sets	9-10
Interchangeable Anvil Micrometers	11-12
Disc Micrometers	13
Spline Micrometers	14
Deep Throat Micrometers	15
Point Micrometers	16
Digital Single Point Micrometers	17
Universal Micrometers	17
V-Anvil Micrometers	18
Multi-Anvil Micrometers	19
Tube Micrometers	20
Ball Anvil Tube Micrometers	21
Digital Blade Micrometers	22
Wire, Hub & Can Seam Micrometers	23
Screw Thread Micrometers & Anvils	24
Snap Gages	25
Indicating Micrometers	26
Micrometer Standards	26
Micrometer Anvil Attachments	27
Thread Measuring Triangle Set	27
Flange Groove Micrometers	28
Inside Micrometers	29
Digital Two & Three Point Internal Micrometers	30
Two & Three Point Internal Micrometers Inch/Metric	31-32
Tubular Inside Micrometers - Extension Type	33
Dual Measurement Inside Micrometers	33
Inside Micrometers - Interchangeable Rod Type	34
Depth Micrometers	35-36
Digital Micrometer Heads	37
Micrometer Stands	37
Micrometer Heads	38

## Digital Outside Micrometers / With SPC Output

**Features:**

- Resolution - Scale: .0001" / 0.01mm
- Flatness: 0.000012"
- Protection level IP65
- Dual Ratchet combines both the Ratchet Stop and the Friction Thimble
- Upon switch on the display will read the actual absolute measuring position
- Automatic On/Off to maximize battery life
- Inch/Metric conversion
- Absolute or incremental measuring modes
- Carbide tipped measuring faces
- Come with long form calibration certificates



Inch Range	Resolution	Range Accuracy	Metric mm	Resolution	Accuracy	Thimble Type	With SPC Code No.
0-1	.00005"	±.0001"	0-25	.001mm	±.002mm	Dual Ratchet	7105015
1-2	.00005"	±.0002"	25-50	.001mm	±.002mm	Dual Ratchet	7105025
2-3	.00005"	±.0002"	50-75	.001mm	±.003mm	Dual Ratchet	7105035
3-4	.00005"	±.0002"	75-100	.001mm	±.003mm	Dual Ratchet	7105045
4-5	.00005"	±.0002"	100-125	.001mm	±.003mm	Dual Ratchet	7105055
5-6	.00005"	±.0002"	125-150	.001mm	±.003mm	Dual Ratchet	7105065

**Sets**

Inch /Metric Range	Quantity	Thimble Type	Code No.
0-3"	3	Dual Ratchet	7105639
0-4"	4	Dual Ratchet	7105649
0-6"	6	Dual Ratchet	7105669

## SPC Data Output Cable



<b>USB Code</b>
7900054



## Digital Outside Micrometers / Without SPC Output

**Features:**

- Fully Calibrated
- Accuracy: Per B89.1.13-2001 specification
- Carbide measuring faces
- Automatic on/off to maximize battery life
- Inch/Metric conversion
- Absolute or incremental measuring modes
- Come with long form calibration certificates



Range	Inch Resolution	Accuracy	Range mm	Metric Resolution	Accuracy	Thimble Type	Without SPC Code No.
6-7	.00005"	±.0002"	150-175	.001mm	±.004mm	Ratchet	7105071
7-8	.00005"	±.0002"	175-200	.001mm	±.004mm	Ratchet	7105081
8-9	.00005"	±.0002"	200-225	.001mm	±.004mm	Ratchet	7105091
9-10	.00005"	±.0003"	225-250	.001mm	±.004mm	Ratchet	7105101
10-11	.00005"	±.0003"	250-275	.001mm	±.005mm	Ratchet	7105111
11-12	.00005"	±.0003"	275-300	.001mm	±.005mm	Ratchet	7105121

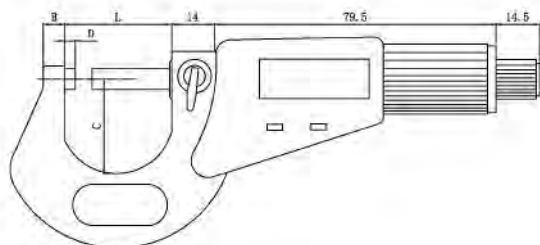
## Economic Digital Outside Micrometers

### Features:

- Fully Calibrated
- Carbide tipped measuring faces
- Painted frame
- Friction thimble
- Inch/Metric conversion
- Absolute or incremental measuring modes
- Come with long form calibration certificates



Range	Resolution	Accuracy	Code No.
0-1"/0-25mm	.00005"/0.001mm	±.00016"/0.004mm	7116011
1-2"/25-50mm	.00005"/0.001mm	±.00016"/0.004mm	7116021
2-3"/50-75mm	.00005"/0.001mm	±.0002"/0.005mm	7116031
3-4"/75-100mm	.00005"/0.001mm	±.0002"/0.005mm	7116041
4-5"/100-125mm	.00005"/0.001mm	±.00024"/0.006mm	7116051
5-6"/125-150mm	.00005"/0.001mm	±.00024"/0.006mm	7116061
<b>Sets</b>			
0-3"/0-75mm (3pc)			7116631
0-4"/0-100mm (4pc)			7116641
0-75mm/0-3" (3pc)			7116630

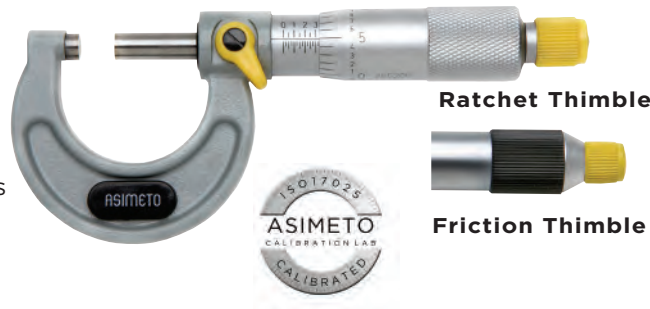


Range Inch/Metric	C mm	L mm	B mm	D mm
0-1"/0-25mm	24	32	6	3
1-2"/25-50mm	32	57	8	3
2-3"/50-75mm	45	82	8	3
3-4"/75-100mm	57	107	10	3
4-5"/100-125mm	70	133	10	3
5-6"/125-150mm	82	158	10	3

## Outside Micrometers - Inch

### Features:

- Fully Calibrated
- Locking clamp
- Carbide faces
- Satin chrome finish
- Come with long form calibration certificates



Range	Graduation	Accuracy	Thimble Type	Code No.
0-0.6"	.001"	±.0001"	Ratchet	7101961
0-1"	.001"	±.0001"	Ratchet	7101011
1-2"	.001"	±.0002"	Ratchet	7101021
2-3"	.001"	±.0002"	Ratchet	7101031
3-4"	.001"	±.0002"	Ratchet	7101041
4-5"	.001"	±.0002"	Ratchet	7101051
5-6"	.001"	±.0002"	Ratchet	7101061
6-7"	.001"	±.0002"	Ratchet	7101071
7-8"	.001"	±.0002"	Ratchet	7101081
8-9"	.001"	±.0002"	Ratchet	7101091
9-10"	.001"	±.0003"	Ratchet	7101101
10-11"	.001"	±.0003"	Ratchet	7101111
11-12"	.001"	±.0003"	Ratchet	7101121
0-1"	.001"	±.0001"	Friction	7103015
1-2"	.001"	±.0002"	Friction	7103025
0-1"	.0001"	±.0001"	Ratchet	7101013
1-2"	.0001"	±.0002"	Ratchet	7101023
2-3"	.0001"	±.0002"	Ratchet	7101033
3-4"	.0001"	±.00015"	Ratchet	7101043
4-5"	.0001"	±.00015"	Ratchet	7101053
5-6"	.0001"	±.00015"	Ratchet	7101063
6-7"	.0001"	±.0002"	Ratchet	7101073
7-8"	.0001"	±.0002"	Ratchet	7101083
8-9"	.0001"	±.0002"	Ratchet	7101093
9-10"	.0001"	±.00025"	Ratchet	7101103
10-11"	.0001"	±.00025"	Ratchet	7101113
11-12"	.0001"	±.00025"	Ratchet	7101123
0-1"	.0001"	±.0001"	Friction	7103017
1-2"	.0001"	±.0001"	Friction	7103027

### Sets

Range	Grad.	Notes	Code No.
0-3" (3 pc set)	.001"	All Ratchet Stop	7101639
0-4" (4 pc set)	.001"	All Ratchet Stop	7101649
0-6" (6 pc set)	.001"	All Ratchet Stop	7101669
6-12" (6 pc set)	.001"	All Ratchet Stop	7101829
0-12" (12 pc set)	.001"	All Ratchet Stop	7101729
0-3" (3 pc)	.0001"	• 0-1"+1-2" Friction 2-3" Ratchet	7101637
0-4" (4 pc)	.0001"	• 0-1"+1-2" Friction 2-3"+3-4" Ratchet	7101647
0-6" (6 pc)	.0001"	• 0-1"+1-2" Friction 2-3" to 5-6" Ratchet	7101667
6-12" (6 pc)	.0001"	• All Ratchet Stop	7101827
0-12" (12 pc)	.0001"	• 0-1"+1-2" Friction 2-3" to 11-12" Ratchet	7101727

## Outside Micrometers - Metric

### Features:

- Fully Calibrated
- Locking clamp
- Carbide faces
- Satin chrome finish
- Come with long form calibration certificates



**Ratchet Thimble**



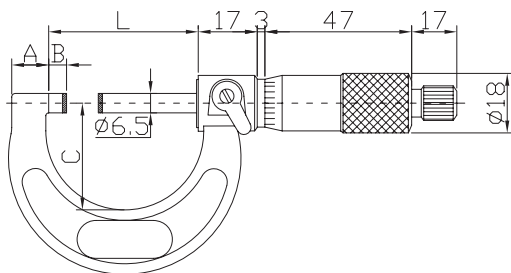
**Friction Thimble**



Range	Graduation	Accuracy	Thimble Type	Code No.
0-25mm	0.001mm	±0.004mm	Ratchet	7101012
0-25mm	0.01mm	±0.004mm	Ratchet	7101010
25-50mm	0.001mm	±0.004mm	Ratchet	7101022
25-50mm	0.01mm	±0.004mm	Ratchet	7101020
50-75mm	0.001mm	±0.005mm	Ratchet	7101032
50-75mm	0.01mm	±0.005mm	Ratchet	7101030
75-100mm	0.001mm	±0.005mm	Ratchet	7101042
75-100mm	0.01mm	±0.005mm	Ratchet	7101040
100-125mm	0.001mm	±0.006mm	Ratchet	7101052
100-125mm	0.01mm	±0.006mm	Ratchet	7101050
125-150mm	0.001mm	±0.006mm	Ratchet	7101062
125-150mm	0.01mm	±0.006mm	Ratchet	7101060
150-175mm	0.001mm	±0.007mm	Ratchet	7101072
150-175mm	0.01mm	±0.007mm	Ratchet	7101070
175-200mm	0.01mm	±0.007mm	Ratchet	7101080
200-225mm	0.01mm	±0.008mm	Ratchet	7101090
225-250mm	0.01mm	±0.008mm	Ratchet	7101100
250-275mm	0.01mm	±0.009mm	Ratchet	7101110
275-300mm	0.01mm	±0.009mm	Ratchet	7101120
0-25mm	0.01mm	±0.004mm	Friction	7103014
25-50mm	0.01mm	±0.004mm	Friction	7103024

### Sets

Range	Grad.	Notes	Code No.
0-75mm (3 pc set)	0.01mm	All Ratchet Stop	7101638
0-150mm (6 pc set)	0.01mm	All Ratchet Stop	7101668
0-300mm (12 pc set)	0.01mm	All Ratchet Stop	7101728
0-150mm (6 pc set)	0.001mm	All Ratchet Stop	7101666
0-300mm (12 pc set)	0.001mm	All Ratchet Stop	7101726

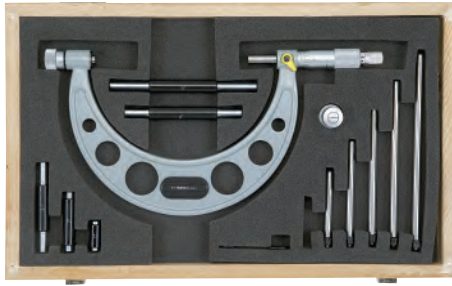


Range Inch/Metric	A mm	B mm	C mm	L mm
0-1"/0-25mm	9	3	28	32
1-2"/25-50mm	14	3	38	57
2-3"/50-75mm	14.5	3	49	82
3-4"/75-100mm	15	3	60	107
4-5"/100-125mm	16.5	3	73	133
5-6"/125-150mm	16.5	3	85	158
6-7"/150-175mm	19.4	3	104	183
7-8"/175-200mm	19.4	3	117	209
8-9"/200-225mm	19.4	3	130	234
9-10"/225-250mm	19.4	3	142	260
10-11"/250-275mm	19.4	3	155	285
11-12"/275-300mm	19.4	3	168	310

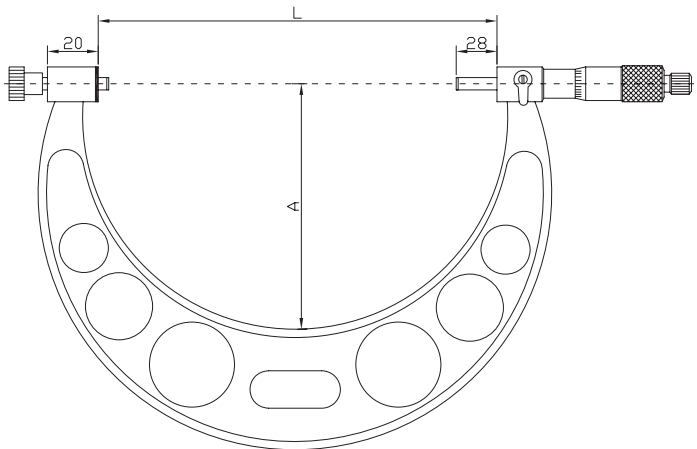
## Digital Interchangeable Anvil Micrometers

### Features:

- Fully Calibrated
- Ratchet stop
- Locking clamp
- Carbide faces
- Satin chrome finish
- Sizes over 12" have a welded pipe frame
- Inch/Metric conversion
- Absolute or incremental measuring modes
- Come with long form calibration certificates



Range	Resolution	Accuracy	Notes	Code No.
<b>Inch</b>				
0-6"	.00005"	± 0.0002"	with 6 Anvils & 5 Standards	7115061
6-12"	.00005"	± 0.0003"	with 6 Anvils & 6 Standards	7115121
12-16"	.00005"	± 0.0004"	with 4 Anvils & 2 Standards	7115161
16-20"	.00005"	± 0.0005"	with 4 Anvils & 2 Standards	7115201
20-24"	.00005"	± 0.0006"	with 4 Anvils & 2 Standards	7115241
24-28"	.00005"	± 0.0006"	with 4 Anvils & 2 Standards	7115281
28-32"	.00005"	± 0.0007"	with 4 Anvils & 2 Standards	7115321

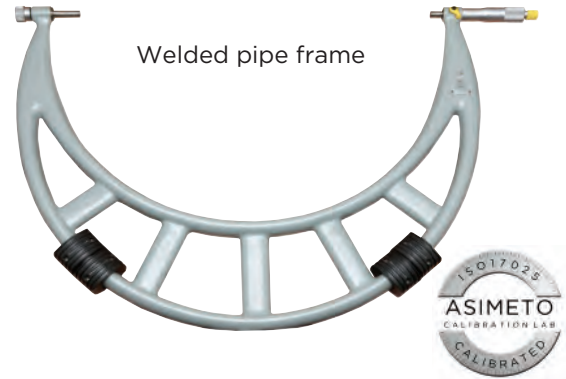
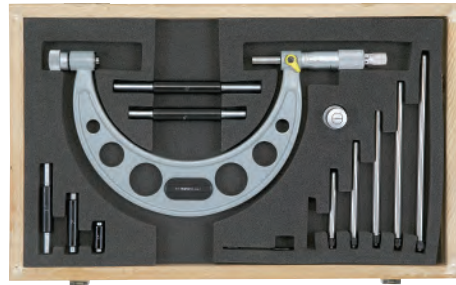


Range Inch/Metric	A mm	L mm
0-6"/0-150mm	82	158
6-12"/150-300mm	165	308
12-16"/300-400mm	224	409
16-20"/400-500mm	275	509
20-24"/500-600mm	321	609
24-28"/600-700mm	371	709
28-32"/700-800mm	426	809

## Interchangeable Anvil Micrometers

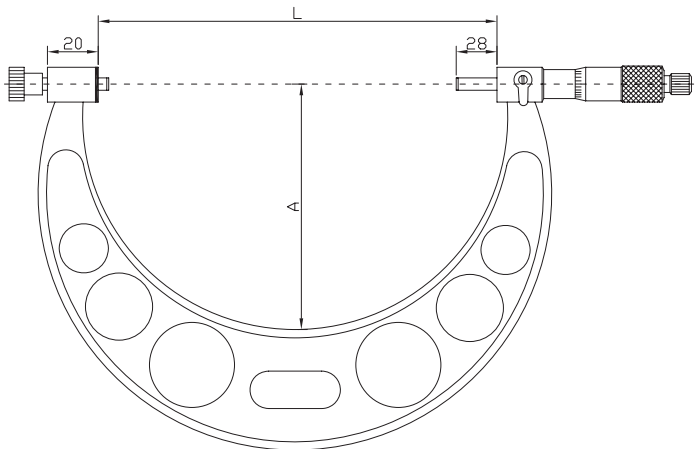
### Features:

- Fully Calibrated
- Ratchet stop
- Locking clamp
- Carbide faces
- Satin chrome finish
- Sizes over 12" have a welded pipe frame
- Come with long form calibration certificates



Range	Grad.	Accuracy	Notes	Code No.
<b>Inch</b>				
0-6"	.001"	± 0.0002"	with 6 Anvils & 5 Standards	7111061
0-6"	.0001"	± 0.0002"	with 6 Anvils & 5 Standards	7111063
6-12"	.001"	± 0.0003"	with 6 Anvils & 6 Standards	7111121
6-12"	.0001"	± 0.0003"	with 6 Anvils & 6 Standards	7111123
12-16"	.001"	± 0.0004"	with 4 Anvils & 2 Standards	7111161
12-16"	.0001"	± 0.0004"	with 4 Anvils & 2 Standards	7111163
16-20"	.001"	± 0.0005"	with 4 Anvils & 2 Standards	7111201
16-20"	.0001"	± 0.0005"	with 4 Anvils & 2 Standards	7111203
20-24"	.001"	± 0.0006"	with 4 Anvils & 2 Standards	7111241
20-24"	.0001"	± 0.0006"	with 4 Anvils & 2 Standards	7111243
24-28"	.001"	± 0.0006"	with 4 Anvils & 2 Standards	7111281
28-32"	.001"	± 0.0007"	with 4 Anvils & 2 Standards	7111321
32-36"	.001"	± 0.0008"	with 4 Anvils & 2 Standards	7111361
36-40"	.001"	± 0.0008"	with 4 Anvils & 2 Standards	7111401
<b>Metric</b>				
0-150mm	0.01mm	± 0.006mm	with 6 Anvils & 5 Standards	7111060
150-300mm	0.01mm	± 0.009mm	with 6 Anvils & 6 Standards	7111120
300-400mm	0.01mm	± 0.011mm	with 4 Anvils & 2 Standards	7111160
400-500mm	0.01mm	± 0.013mm	with 4 Anvils & 2 Standards	7111200

Note: The individual anvils are matched as a set with the frame. The accuracy cannot be guaranteed if used with a different frame.



Range Inch/Metric	A mm	L mm
0-6"/0-150mm	82	158
6-12"/150-300mm	165	308
0-4"/0-100mm	57	108
4-8"/100-200mm	114	208
8-12"/200-300mm	165	308
12-16"/300-400mm	224	409
16-20"/400-500mm	275	509
20-24"/500-600mm	321	609
24-28"/600-700mm	371	709
28-32"/700-800mm	426	809
32-36"/800-900mm	476	909
36-40"/900-1000mm	576	1009

## Disc Micrometers



### Features:

- Fully Calibrated
- Non rotating spindle
- Ratchet Stop
- Inch/Metric conversion
- Absolute or incremental measuring modes
- Automatic On/Off
- Sizes over 1" come with standard
- Come with long form calibration certificates

### Features:

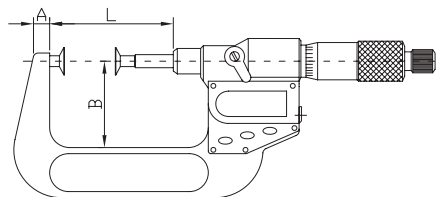
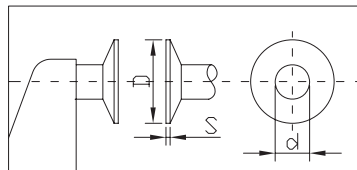
- Fully Calibrated
- Graduation: Inch: .0001"/Metric: 0.01mm
- Measures root tangent length of spur gears and helical gears
- .03"/0.7mm edge thickness to enter narrow recesses.
- Ratchet Stop
- Sizes over 1" come with standard
- Come with long form calibration certificates

### Digital

Range	Resolution	Accuracy	Notes	Code No.
0-1" / 0-25mm	.0005"/.001mm	±.0001"	Disc Diameter .79"	7145011
1-2" / 25-50mm	.0005"/.001mm	±.0002"	Disc Diameter .79" with Standard	7145021
2-3" / 50-75mm	.0005"/.001mm	±.0002"	Disc Diameter .79" with Standard	7145031
3-4" / 75-100mm	.0005"/.001mm	±.0002"	Disc Diameter .79" with Standard	7145041

### Mechanical

Range	Grad.	Accuracy	Notes	Code No.
<b>Inch</b>				
0-1"	.0001"	±.0001"	Rotating Spindle	7141011
1-2"	.0001"	±.0002"	Rotating Spindle	7141021
2-3"	.0001"	±.0002"	Rotating Spindle	7141031
1-2"	.0001"	±.0002"	Non-Rotating Spindle	7141023
<b>Metric</b>				
0-25mm	0.01mm	±0.004mm	Rotating Spindle	7141010
25-50mm	0.01mm	±0.004mm	Rotating Spindle	7141020
50-75mm	0.01mm	±0.005mm	Rotating Spindle	7141030
75-100mm	0.01mm	±0.005mm	Rotating Spindle	7141040
25-50mm	0.01mm	±0.004mm	Non-Rotating Spindle	7141022
50-75mm	0.01mm	±0.005mm	Non-Rotating Spindle	7141032



Range Inch/Metric	A mm	B mm	L mm	D mm	S mm	d mm
0-1"/0-25mm	8	32	43	20	0.7	8
1-2"/25-50mm	8	44.5	68	20	0.7	8
2-3"/50-75mm	8	57	93	20	0.7	8
3-4" / 75-100mm	10	70	118.5	20	0.7	8

## Spline Micrometers



### Features:

- Fully Calibrated
- Automatic on/off to maximize battery life
- Inch/Metric conversion
- Absolute or incremental measuring modes
- Ratchet stop
- Carbide faces
- “A” anvil: Ø2mm x 5mm
- “B” anvil: Ø3mm x 10mm
- Come with long form calibration certificates

### Features:

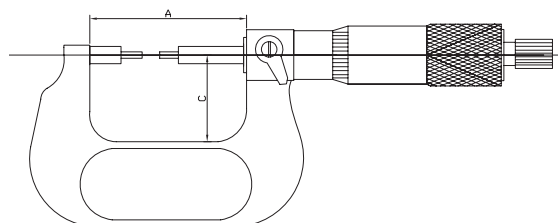
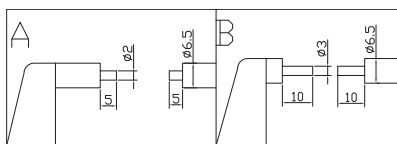
- Fully Calibrated
- Ratchet stop
- Carbide faces
- “A” anvil: Ø2mm x 5mm
- “B” anvil: Ø3mm x 10mm
- Come with long form calibration certificates

### Digital

Range	Resolution	Accuracy	Notes	Code No.
<b>Inch Thimble</b>				
0-1”/0-25mm	.00005”/0.001mm	±.0001”	“A” anvil	7118011
1-2”/25-50mm	.00005”/0.001mm	±.0002”	“A” anvil	7118021
0-1”/0-25mm	.00005”/0.001mm	±.0001”	“B” anvil	7118013
1-2”/25-50mm	.00005”/0.001mm	±.0002”	“B” anvil	7118023
<b>Metric Thimble</b>				
1-2”/25-50mm	.00005”/0.001mm	±.0002”	“A” anvil	7118020

### Mechanical

Range	Grad.	Accuracy	Notes	Code No.
<b>Inch Thimble</b>				
0-1”/0-25mm	.00005”/0.001mm	±.0001”	“A” anvil	7118611



Range Inch/Metric	A mm	C mm
0-1”/0-25mm	57	32
1-2”/25-50mm	82	44.5



## Digital Deep Throat Micrometers

### Features:

- Fully Calibrated
- Digital Resolution: .00005"/0.001mm
- Thimble Graduation: .0001"/0.01mm
- Automatic on/off to maximize battery life
- Inch/Metric conversion
- Absolute or incremental measuring modes
- Ratchet stop
- Carbide faces
- Come with long form calibration certificates



Range	Throat Depth	Accuracy	Anvils	Code No.
<b>Inch Thimble</b>				
0-1"/0-25mm	150mm	±.0003"/0.006mm	B	7157315
1-2"/25-50mm	150mm	±.0003"/0.006mm	B	7157325
0-1"/0-25mm	150mm	±.0003"/0.006mm	C	7157515
0-1"/0-25mm	300mm	±.0003"/0.007mm	A	7157017

## Deep Throat Micrometers

### Features:

- Fully Calibrated
- Thimble Graduation: .0001"/0.01mm
- Ratchet stop
- Carbide faces
- Come with long form calibration certificates



Range	Throat Depth	Accuracy	Anvils	Code No.
<b>Inch</b>				
0-1"	150mm	±.0003"	A	7150015
0-1"	300mm	±.0003"	A	7150017
1-2"	100mm	±.0002"	A	7150023
1-2"	150mm	±.0003"	A	7150025
<b>Metric</b>				
0-25mm	150mm	±0.006mm	C	7150514
25-50mm	150mm	±0.006mm	A	7150024

## Point Micrometers

### Features:

- Fully Calibrated
- Pointed spindle and anvil for measuring the web thickness of drills, small grooves, and other hard to reach dimensions
- Ratchet stop
- Carbide measuring faces
- Inch/Metric conversion
- Absolute and incremental measuring modes
- Protection level IP65
- Come with long form calibration certificates

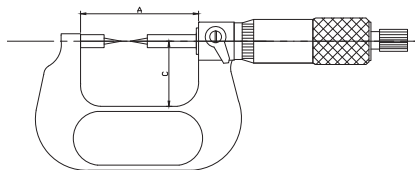
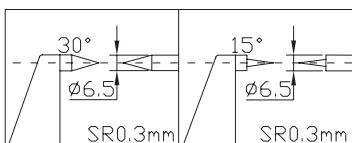


### Digital

Range	Resolution	Accuracy	Notes	Code No.
0-1"/0-25mm	.00005"	±.0001"	15° point	7126011
1-2"/25-50mm	.00005"	±.0002"	15° point	7126021
2-3"/50-75mm	.00005"	±.0002"	15° point	7126031
3-4"/75-100mm	.00005"	±.0002"	15° point	7126041
0-1"/0-25mm	.00005"	±.0001"	30° point	7126013
1-2"/25-50mm	.00005"	±.0002"	30° point	7126023
2-3"/50-75mm	.00005"	±.0002"	30° point	7126033
3-4"/75-100mm	.00005"	±.0002"	30° point	7126043

### Mechanical

Range	Grad.	Accuracy	Notes	Code No.
<b>Inch</b>				
0-1"	.001"	±.0001"	15° point	7122011
1-2"	.001"	±.0002"	15° point	7122021
1-2"	.0001"	±.0002"	15° point	7122025
0-1"	.001"	±.0001"	30° point	7122013
0-1"	.0001"	±.0001"	30° point	7122017
1-2"	.001"	±.0002"	30° point	7122023
1-2"	.0001"	±.0002"	30° point	7122027
2-3"	.0001"	±.0002"	30° point	7122037
<b>Metric</b>				
0-25mm	0.01mm	±0.004mm	15° point	7122010
75-100mm	0.01mm	±0.005mm	15° point	7122040
25-50mm	0.01mm	±0.004mm	30° point	7122022
50-75mm	0.01mm	±0.005mm	30° point	7122032
75-100mm	0.01mm	±0.005mm	30° point	7122042

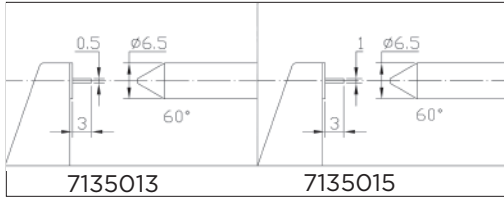


Range Inch/Metric	A mm	C mm
0-1"/0-25mm	57	32
1-2"/25-50mm	82	44.5
2-3"/50-75mm	107	57
3-4" / 75-100mm	132.6	69.5

## Digital Single Point Micrometers

**Features:**

- Fully Calibrated
- Protection level IP65
- For measuring the height of crimp contacts
- Carbide tipped measuring faces
- Gray painted steel frame
- Ratchet stop
- Inch/Metric conversion
- Absolute or incremental measuring modes
- Come with long form calibration certificates



Range	Resolution	Accuracy	Code No.
0-1"/0-25mm	.00005"/0.001mm	±.0001"/0.002mm	7135013
0-1"/0-25mm	.00005"/0.001mm	±.0001"/0.002mm	7135015

## Digital Universal Micrometers

**Features:**

- Fully Calibrated
- Protection level IP65
- With 7 pairs of interchangeable anvils for a wide range of applications
- Grey painted steel frame
- Ratchet stop
- Inch/Metric conversion
- Absolute or incremental measuring modes
- Come with long form calibration certificates



Range	Resolution	Accuracy	Code No.
<b>Inch Thimble</b>			
0-1"/0-25mm	.00005"/0.001mm	±.0001"/0.004mm	7146011
1-2"/25-50mm	.00005"/0.001mm	±.0002"/0.004mm	7146021

## Digital V-Anvil Micrometers

### Features:

- Fully Calibrated
- Measures the outside diameter of cutting tools such taps, reamers and end mills with an odd number of flutes
- Carbide measuring faces
- Ratchet Stop
- Inch/Metric conversion
- Absolute or incremental measuring modes
- Protection level IP65
- Come with long form calibration certificates

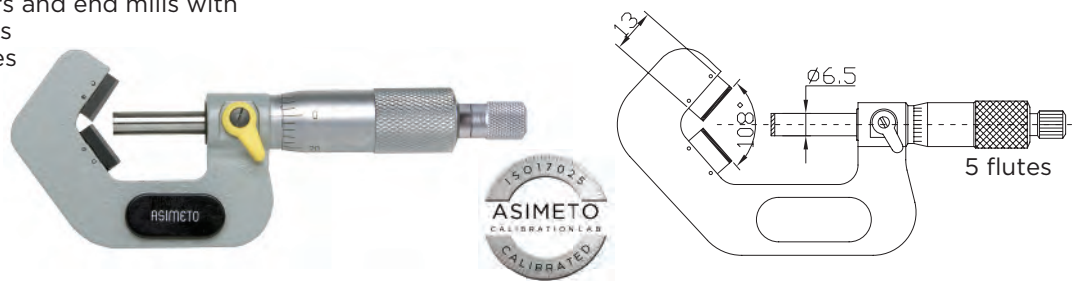


Range	Resolution	Accuracy	Code No.
<b>Inch</b>			
<b>For 3 Flutes</b>			
0.4 - 0.6"	.0005"	±.0001"	7155011
0.2 - 0.8"	.0005"	±.0001"	7155021
<b>For 5 Flutes</b>			
0.2 - 1.0"	.0005"	±.0001"	7155015
1.0 - 1.8"	.0005"	±.0002"	7155025
<b>Metric</b>			
<b>For 3 Flutes</b>			
5-20mm	0.001mm	±0.004mm	7155020
<b>For 5 Flutes</b>			
5-25mm	0.001mm	±0.004mm	7155014
25-45mm	0.001mm	±0.005mm	7155024

## V-Anvil Micrometers

### Features:

- Fully Calibrated
- Measures the outside diameter of cutting tools such taps, reamers and end mills with an odd number of flutes
- Carbide measuring faces
- Ratchet Stop
- Come with long form calibration certificates



Range	Resolution	Accuracy	Code No.
<b>For 3 Flutes</b>			
0.4 - 0.6"	.001"	±.0001"	7151011
0.2 - 0.8"	.001"	±.0001"	7151021
0.8 - 1.4"	.001"	±.0002"	7151031
<b>For 5 Flutes</b>			
0.2 - 1.0"	.001"	±.0001"	7151015
1.0 - 1.8"	.001"	±.0002"	7151025

## Multi-Anvil Micrometers



### Features:

- Fully Calibrated
- Measures tube thickness, shoulder edge distance, rivet head height, with interchangeable anvils (flat anvil, rod anvil)
- Ratchet stop
- Inch/Metric conversion
- Absolute or incremental measuring modes
- Come with long form calibration certificates



### Features:

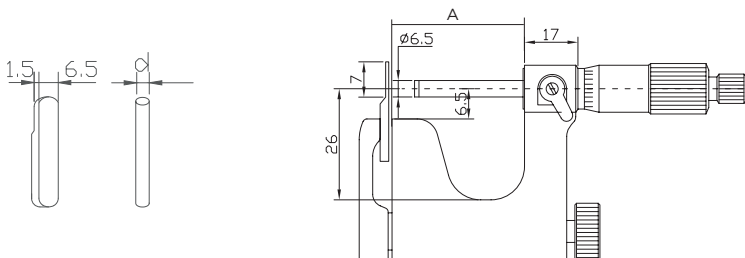
- Fully Calibrated
- Measures tube thickness, shoulder edge distance, rivet head height, with interchangeable anvils (flat anvil, rod anvil)
- Friction Thimble
- Come with long form calibration certificates

### Digital

Range	Resolution	Accuracy	Notes	Code No.
<b>Inch</b>				
0-1"	0.00005"	±.0001"	with Flat and Rod Anvils	7125011
1-2"	0.00005"	±.0002"	with Flat and Rod Anvils & Standard	7125021
<b>Metric</b>				
0-25mm	0.001mm	±0.002mm	with Flat and Rod Anvils	7125010

### Mechanical

Range	Grad.	Accuracy	Notes	Code No.
<b>Inch</b>				
0-1"	0.0001"	±.0001"	with Flat and Rod Anvils	7121013
1-2"	0.0001"	±.0002"	with Flat and Rod Anvils & Standard	7121023

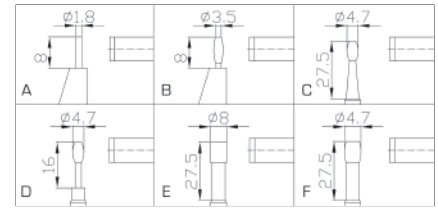


Range Inch/Metric	A mm	d mm
0-1"/0-25mm	28.5	ø3
1-2"/25-50mm	53.5	ø5

## Digital Tube Micrometers

### Features:

- Digital Resolution: .00005"/0.001mm
- Thimble Graduation: .0001"/0.01mm
- Automatic on/off to maximize battery life
- Inch/Metric conversion
- Absolute or incremental measuring modes
- Ratchet stop
- Carbide faces
- Come with long form calibration certificates

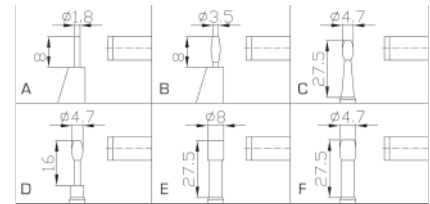


Range	Accuracy	Anvil	CodeNo.
0-1"/0-25mm	±.0001"/0.004mm	A	7113011
1-2"/25-50mm	±.0002"/0.004mm	A	7113021
0-1"/0-25mm	±.0001"/0.004mm	B	7113111
1-2"/25-50mm	±.0002"/0.004mm	B	7113121
0-1"/0-25mm	±.0001"/0.004mm	C	7113211
1-2"/25-50mm	±.0002"/0.004mm	C	7113221
0-1"/0-25mm	±.0001"/0.004mm	D	7113311
1-2"/25-50mm	±.0002"/0.004mm	D	7113321
0-1"/0-25mm	±.0001"/0.004mm	E	7113411
1-2"/25-50mm	±.0002"/0.004mm	E	7113421
0-1"/0-25mm	±.0001"/0.004mm	F	7113511
1-2"/25-50mm	±.0002"/0.004mm	F	7113521

## Tube Micrometers

### Features:

- Graduation: .0001"/0.01mm
- Ratchet stop
- Carbide faces
- Gray painted steel frame
- Come with long form calibration certificates

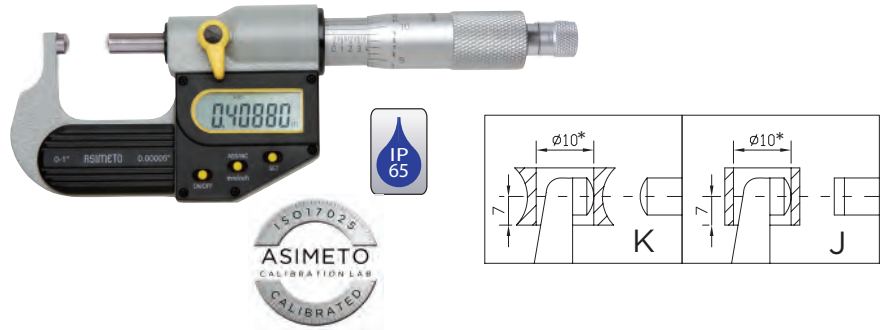


Range	Accuracy	Anvil	Code No.
0-1"/0-25mm	±.0001"/0.004mm	A	7114011
1-2"/25-50mm	±.0002"/0.004mm	A	7114021
0-1"/0-25mm	±.0001"/0.004mm	B	7114111
1-2"/25-50mm	±.0002"/0.004mm	B	7114121
0-1"/0-25mm	±.0001"/0.004mm	C	7114211
1-2"/25-50mm	±.0002"/0.004mm	C	7114221

## Ball Anvil Digital Tube Micrometers

### Features:

- Fully Calibrated
- Digital Resolution: .00005"/0.001mm
- Thimble Graduation: .0001"/0.01mm
- Automatic on/off to maximize battery life
- Inch/Metric conversion
- Absolute or incremental measuring modes
- Ratchet stop
- Carbide faces
- "J" style: Flat faced spindle
- "K" style: Ball faced spindle
- Come with long form calibration certificates



Range	Accuracy	Notes	Code No.
<b>Inch Thimble</b>			
0-1"/0-25mm	±.0001"/±0.002mm	J style	7147011
1-2"/25-50mm	±.0002"/±0.002mm	J style	7147021
0-1"/0-25mm	±.0001"/±0.002mm	K style	7147013
1-2"/25-50mm	±.0002"/±0.002mm	K style	7147023

## Ball Anvil Tube Micrometers

### Features:

- Fully Calibrated
- Thimble Graduation: .0001"/0.01mm
- Ratchet stop
- Carbide faces
- "J" style: Flat faced spindle
- "K" style: Ball faced spindle
- Come with long form calibration certificates



Range	Accuracy	Notes	Code No.
<b>Metric Thimble</b>			
0-25mm	±0.004mm	J style	7143010
25-50mm	±0.004mm	J style	7143020
50-75mm	±0.005mm	J style	7143030
0-25mm	±0.004mm	K style	7143012
25-50mm	±0.004mm	K style	7143022
50-75mm	±0.005mm	K style	7143032

## Blade Micrometers

### Features:

- Fully Calibrated
- For measuring the groove diameter of shafts, keyways, and other hard to reach portions
- Ratchet Stop
- Non-rotating spindle
- Carbide measuring faces
- Inch/Metric conversion
- Absolute or incremental measuring modes
- Come with long form calibration certificates

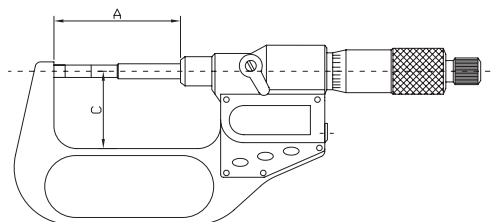
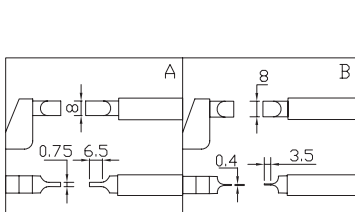


### Digital

Range	Resolution	Accuracy	Blade Dimensions Depth x Length	Code No.
<b>Inch Thimble</b>				
0-1" / 0-25mm	.00005" / 0.001mm	±.0001"	.030" x .250"	7117011
1-2" / 25-50mm	.00005" / 0.001mm	±.0002"	.030" x .250"	7117021
2-3" / 50-75mm	.00005" / 0.001mm	±.0002"	.030" x .250"	7117031
3-4" / 75-100mm	.00005" / 0.001mm	±.0002"	.030" x .250"	7117041
0-1" / 0-25mm	.00005" / 0.001mm	±.0001"	.016" x .118"	7117013
1-2" / 25-50mm	.00005" / 0.001mm	±.0002"	.016" x .118"	7117023
<b>Metric Thimble</b>				
0-25mm / 0-1"	.00005" / 0.001mm	±0.003mm	.030" x .250"	7117010

### Mechanical

Range	Graduation	Accuracy	Blade Dimensions Depth x Length	Code No.
<b>Inch</b>				
0-1"	0.0001"	±.0001"	.030" x .250"	7112011
1-2"	0.0001"	±.0002"	.030" x .250"	7112021
2-3"	0.0001"	±.0002"	.030" x .250"	7112031
3-4"	0.0001"	±.0002"	.030" x .250"	7112041
0-1"	0.0001"	±.0001"	.016" x .118"	7112013
1-2"	0.0001"	±.0002"	.016" x .118"	7112023
<b>Metric</b>				
0-25mm	0.01mm	±0.004mm	.030" x .250"	7112010
25-50mm	0.01mm	±0.004mm	.030" x .250"	7112020
50-75mm	0.01mm	±0.005mm	.030" x .250"	7112030
75-100mm	0.01mm	±0.005mm	.030" x .250"	7112040
0-25mm	0.01mm	±0.004mm	.016" x .118"	7112012
25-50mm	0.01mm	±0.004mm	.016" x .118"	7112022



Range Inch/Metric	A mm	C mm
0-1"/0-25mm	57	32
1-2"/25-50mm	82	44.5
2-3"/50-75mm	107	57
3-4" / 75-100mm	132.6	69.5



## Wire Micrometers

**Features:**

- Fully Calibrated
- Chrome-plated steel feet frame
- Carbide tipped measuring faces
- For measuring the diameter of wire and small spheres
- Ratchet stop
- Come with long form calibration certificates



Range	Graduation	Accuracy	Code No.
0 - .4"	0.001"	±.0001"	7161011

## Hub Micrometers

**Features:**

- Fully Calibrated
- Carbide tipped measuring faces
- Measures the hub thickness and shoulders inside the bore
- Ratchet stop
- Come with long form calibration certificates



Range	Graduation	Accuracy	Code No.
0-1"	.0001"	±.0001"	7160011
1-2"	.0001"	±.0002"	7160021
2-3"	.0001"	±.0002"	7160031

## Can Seam Micrometers

**Features:**

- Fully Calibrated
- Painted steel frame
- Measures the width, height, and depth of can seams
- Come with long form calibration certificates



Range	Graduation	Accuracy	Code No.
0 - 0.6"	.001"	±.0001"	7162011

## Screw Thread Micrometers

### Features:

- Fully Calibrated
- For measuring various screw threads
- Automatic on/off to maximize battery life
- Inch/Metric conversion
- Absolute or incremental measuring modes
- Ratchet stop
- Interchangeable tips are optional
- Non-rotating spindle
- Come with long form calibration certificates

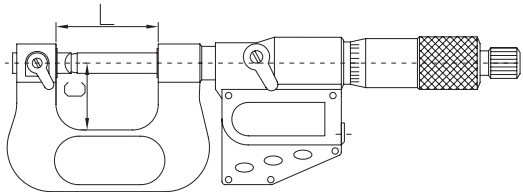


### Digital

Range (in.)	Inch Resolution	Accuracy	Range (mm)	Metric Resolution	Accuracy	Code No.
0-1"	.00005"	±.0001"	0-25	.001mm	±.004mm	7136011
1-2"	.00005"	±.0002"	25-50	.001mm	±.004mm	7136021
2-3"	.00005"	±.0002"	50-75	.001mm	±.005mm	7136031
3-4"	.00005"	±.0002"	75-100	.001mm	±.005mm	7136041

### Mechanical

Range	Grad.	Accuracy	Notes	Code No.
<b>Inch</b>				
0-1"	.001"	±.0001"		7132011
0-1"	.0001"	±.0001"		7132013
1-2"	.001"	±.0002"	with Standard	7132021
1-2"	.0001"	±.0002"	with Standard	7132023
2-3"	.001"	±.0002"	with Standard	7132031
2-3"	.0001"	±.0002"	with Standard	7132033
3-4"	.001"	±.0002"	with Standard	7132041
3-4"	.0001"	±.0002"	with Standard	7132043
4-5"	.001"	±.0002"	with Standard	7132051
5-6"	.001"	±.0002"	with Standard	7132061
<b>Metric</b>				
0-25mm	0.01mm	±0.004mm		7132010
25-50mm	0.01mm	±0.004mm	with Standard	7132020

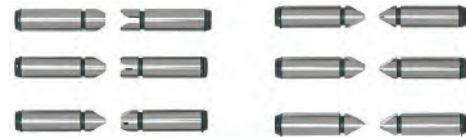


Range Inch/Metric	L mm	C mm
0-1"/0-25mm	42	26
1-2"/25-50mm	67	38
2-3"/50-75mm	92	50
3-4" / 75-100mm	117.6	62
4-5"/100-125mm	143	70
5-6"/125-150mm	168.2	82

## Anvils

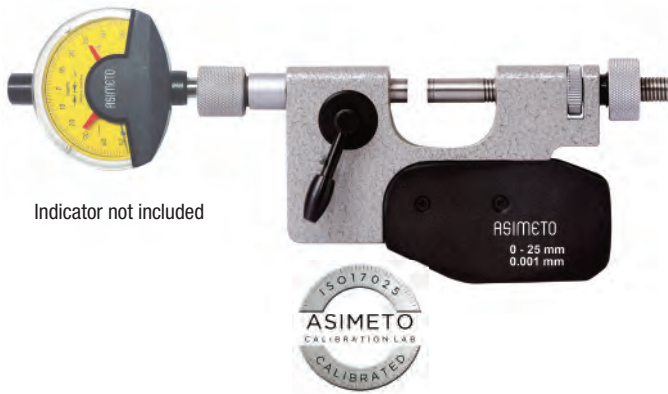
### Features:

- For screw 60° ISO



T.P.I.	Pitch (in./mm)	Notes	Code No.
64-48 (M1)	.016-.019"/0.4-0.5mm	1 pair	7130610
44-28 (M2)	.024-.035"/0.6-0.9mm	1 pair	7130620
24-14 (M3)	.04-.068"/1.0-1.75mm	1 pair	7130630
13-9 (M4)	.079-.118"/2.0-3.0mm	1 pair	7130640
8-5 (M5)	.138-.196"/3.5-5.0mm	1 pair	7130650
4.5-3.5 (M6)	.217-.275"/5.5-7.0mm	1 pair	7130660
64-3.5	.016-.275"/0.4-7.0mm	6 pc Set	7130600

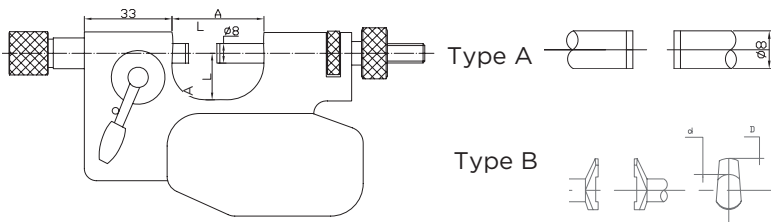
## Snap Gages



**Features:**

- Fully Calibrated
- Gray painted steel frame
- Carbide tipped measuring faces
- Dial gage is not included
- 8mm diameter stem dial gage
- Suitable for quickly measuring dimensions of mass-produced work pieces
- Come with long form calibration certificates

Range (in.)	Code No.
0-1"	7181011
0-2"	7181021
2-4"	7181041



Range Inch	L mm	A mm
0-1"	34	18
1-2"	62	32
2-4"	112	62
4-6"	162	85
6-8"	212	110

## Snap Gages

**Features:**

- Fully Calibrated
- Gray painted steel frame
- Dial gage is not included
- 8mm diameter stem dial gage
- Suitable for quickly measuring dimensions of mass-produced work pieces
- The measuring anvils are designed with an angle to allow for easy insertion of the work piece
- Dimensions of measuring face: 14 x 11mm
- Come with long form calibration certificates



Range	L	B	Code No.
0-1"	42mm	20mm	7182011
0-2"	69mm	32.5mm	7182021
2-3"	94mm	45mm	7182031
3-4"	119mm	57.7mm	7182041
4-5"	144mm	70mm	7182051
5-6"	169mm	82.5mm	7182061
7-8"	219mm	107.5mm	7182081

## Indicating Micrometers

### Features:

- Fully Calibrated
- Resolution:  
Indicator: .00005" / 0.001mm  
Scale: .0001" / 0.002mm
- Carbide tipped measuring faces
- Gray painted steel frame
- Indicator range:  $\pm 0.04$ mm
- Retractable anvil with an indicator for precision measurement of mass-produced parts
- Come with long form calibration certificates



Range	Accuracy	Code No.
<b>Inch</b>		
0-1"	$\pm .0001$ "	7152011
1-2"	$\pm .0002$ "	7152021
2-3"	$\pm .0002$ "	7152031
3-4"	$\pm .0002$ "	7152041
<b>Metric</b>		
0-25mm	$\pm 0.002$ mm	7152010
25-50mm	$\pm 0.002$ mm	7152020

## Micrometer Standards

### Features:

- Used for zero point setting of outside micrometers.
- Heat insulating handle to prevent heat expansion due to body temperature
- Flat measuring face

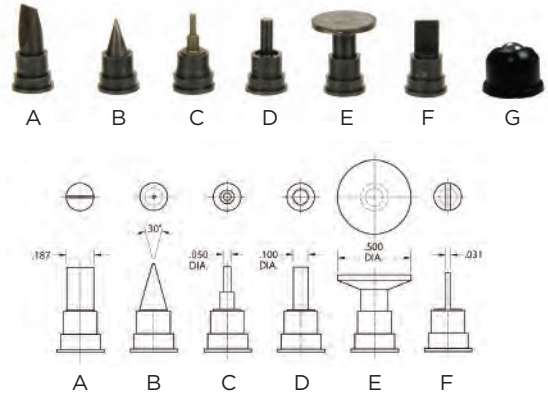


Size	Accuracy	Diameter	Code No.
1"	$\pm 0.00005$ "	.276"	7110011
2"	$\pm 0.0001$ "	.276"	7110021
3"	$\pm 0.0001$ "	.276"	7110031
4"	$\pm 0.0001$ "	.315"	7110041
5"	$\pm 0.00015$ "	.315"	7110051
6"	$\pm 0.00015$ "	.315"	7110061
7"	$\pm 0.00015$ "	.315"	7110071
8"	$\pm 0.00015$ "	.315"	7110081
9"	$\pm 0.00020$ "	.315"	7110091
10"	$\pm 0.00020$ "	.315"	7110101
11"	$\pm 0.00020$ "	.315"	7110111
12"	$\pm 0.00025$ "	.630"	7110121
13"	$\pm 0.00025$ "	.630"	7110131
14"	$\pm 0.00025$ "	.630"	7110141
15"	$\pm 0.00025$ "	.630"	7110151
16"	$\pm 0.00025$ "	.630"	7110161
17"	$\pm 0.00025$ "	.630"	7110171
18"	$\pm 0.00025$ "	.630"	7110181
20"	$\pm 0.00030$ "	.630"	7110201
23"	$\pm 0.00030$ "	.630"	7110221

## Micrometer Anvil Attachments

**Features:**

- A must accessory for every micrometer
- Each anvil is 1/2" long & comes with reinforced holding boot
- Anvils are hardened steel with Black Oxide finish
- Fits .235" and .250" spindle diameters



Description	Notes	Code No.
A) Knife	30 degrees	7146750
B) Comparator	30 degrees	7146760
C) Spline	.100" face	7146720
D) Super Spline	.050" face	7146710
E) Disc	.500" face	7146740
F) Blade	.300" thick	7146730
G) Ball Attachment	.200"	7146770

## Thread Measuring Triangle Set



**Features:**

- Measures simulated thread pitch diameter to reference thread chart provided for all 60° threads
- Made of hardened steel

<b>Set includes:</b>	<b>Code No.</b>
2 thread triangles	7146800
2 rubber holding bands	
Protective hinged plastic case complete with Unified thread chart	

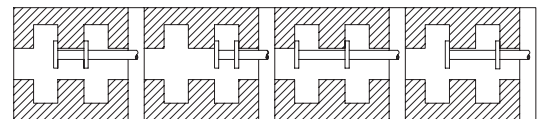
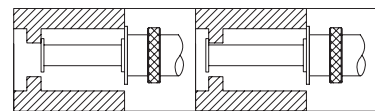
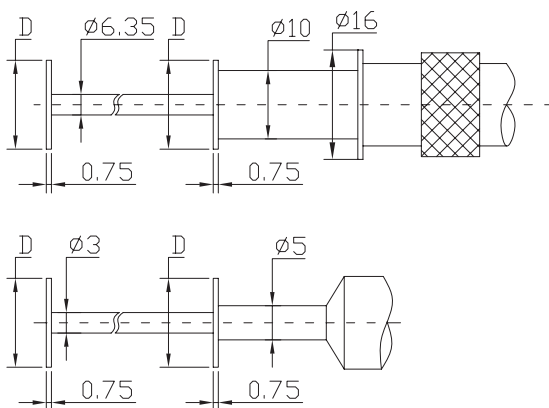
## Flange Groove Micrometers

### Features:

- Fully Calibrated
- Graduation: .001"/0.01mm
- Parallelism: .001"/0.01mm
- Non-rotating spindle with bi-directional ratchet stop
- Contact faces allow for the measurement of both internal and external grooves, widths, and flanks
- Come with long form calibration certificates



Flange Dia.	Range Outside	Range Inside	Accuracy	Code No.
<b>Without Measuring Force</b>				
6.5mm	0-1"	.06-1.05"	±.001"	7163011
13mm	0-1"	.06-1.05"	±.001"	7163013
13mm	1-2"	1.05-2.05"	±.001"	7163023
13mm	2-3"	2.05-3.05"	±.001"	7163033
13mm	3-4"	3.05-4.05"	±.001"	7163043
6.5mm	0-25mm	1.6-26.5mm	±0.01mm	7163010
13mm	0-25mm	1.6-26.5mm	±0.01mm	7163012
13mm	25-50mm	26.5-51.5mm	±0.01mm	7163022
<b>Two-directional Measuring Force</b>				
6.5mm	0-1"	.06-1.05"	±.001"	7163611
13mm	1-2"	1.05-2.05"	±.001"	7163623



## Digital Inside Micrometers

### Features:

- Fully Calibrated
- Resolution: .00005"/0.001mm
- Carbide faces
- Ratchet Stop
- .2"-1.2"/5-30mm & 1.0"-2.0"/25-50mm ranges are supplied with setting rings
- Come with long form calibration certificates



1" and over



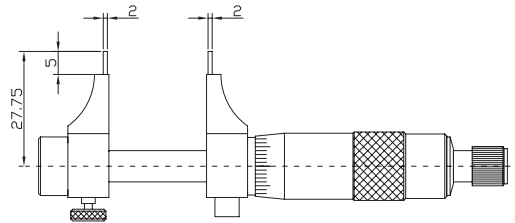
.2"-1.2"

Range	Resolution	Accuracy	Code No.
<b>Inch Thimble</b>			
.2"-1.2" / 5-30mm	.00005"/.001mm	±.0001"	7207011
1.0"-2.0" / 25-50mm	.00005"/.001mm	±.0002"	7207021
2.0"-3.0" / 50-75mm	.00005"/.001mm	±.0002"	7207031
3.0"-4.0" / 75-100mm	.00005"/.001mm	±.0002"	7207041
5.0"-6.0" / 125-150mm	.00005"/.001mm	±.0002"	7207061
6.0"-7.0" / 150-175mm	.00005"/.001mm	±.0002"	7207071
7.0"-8.0" / 175-200mm	.00005"/.001mm	±.0002"	7207081
<b>Metric Thimble</b>			
.2"-1.2" / 5-30mm	.00005"/.001mm	±.007mm	7207010

## Inside Micrometers

### Features:

- Fully Calibrated
- Carbide measuring faces
- Caliper type jaws are made of high grade tool steel
- Ratchet stop
- Come with long form calibration certificates



Range	Grad.	Accuracy	Notes	Code No.
<b>Inch</b>				
.2"-1.18"	.001"	±.0001"	c/w ring gage	7203011
1-2"	.001"	±.0002"	c/w ring gage	7203021
2-3"	.001"	±.0002"		7203031
3-4"	.001"	±.0002"		7203041
<b>Metric</b>				
5-30mm	0.01mm	±0.004mm	c/w ring gage	7203010
25-50mm	0.01mm	±0.004mm	c/w ring gage	7203020
75-100mm	0.01mm	±0.005mm		7203040

## Digital Two & Three Point Internal Micrometers

### Features:

- Fully Calibrated
- Digital Resolution: .00005"/0.001mm
- Carbide tipped contact points
- Ratchet Stop
- Protection level IP65
- Setting rings supplied
- Measuring contact points are designed to allow measurements near to the bottom of blind holes
- Models up to 6mm or .24" have two measuring points and models over 7mm or .275" have three measuring points
- Come with long form calibration certificates



Range	Thimble Graduation	Accuracy	Setting Rings	L	A	Extension Rods	Code No.
0.1 - 0.12"	0.0001"	±0.00016"	.1"	12.5mm	-	-	7208071
0.12 - 0.16"	0.0001"	±0.00016"	.16"	22.5mm	-	-	7208081
0.16 - 0.2"	0.0001"	±0.00016"	.16"	22.5mm	-	-	7208091
0.2 - 0.24"	0.0001"	±0.00016"	.24"	22.5mm	-	-	7208101
0.24 - 0.28"	0.0001"	±0.00016"	.24"	22.5mm	0.5mm	-	7208105
0.275 - 0.35"	0.0001"	±0.00016"	.275"	53.5mm	0.5mm	100mm	7208111
0.35 - 0.425"	0.0001"	±0.00016"	.35"	53.5mm	0.5mm	100mm	7208121
0.425 - 0.5"	0.0001"	±0.00016"	.5"	53.5mm	0.5mm	100mm	7208131
0.5 - 0.65"	0.0002"	±0.00016"	.65"	80mm	0.5mm	150mm	7208241
0.65 - 0.8"	0.0002"	±0.00016"	.65"	80mm	0.5mm	150mm	7208251
0.8 - 1.0"	0.0002"	±0.00016"	1"	90mm	0.5mm	150mm	7208261
1 - 1.2"	0.0002"	±0.00016"	1"	90mm	0.5mm	150mm	7208271
1.2 - 1.6"	0.0002"	±0.00016"	1.6"	97mm	0.5mm	150mm	7208281
1.6 - 2.0"	0.0002"	±0.0002"	1.6"	97mm	0.5mm	150mm	7208291
2.0 - 2.5"	0.0002"	±0.0002"	2.5"	114mm	0.5mm	150mm	7208301
2.5 - 3.0"	0.0002"	±0.0002"	2.5"	114mm	0.5mm	150mm	7208311
3.0 - 3.5"	0.0002"	±0.0002"	3.5"	114mm	0.5mm	150mm	7208321
3.5 - 4.0"	0.0002"	±0.0002"	3.5"	114mm	0.5mm	150mm	7208331
4.0 - 5.0"	0.0002"	±0.0002"	4.5"	145mm	0.5mm	150mm	7208341
5.0 - 6.0"	0.0002"	±0.0002"	5.5"	145mm	0.5mm	150mm	7208351
6.0 - 7.0"	0.0002"	±0.0002"	6.5"	145mm	0.5mm	150mm	7208361
7.0 - 8.0"	0.0002"	±0.0002"	7.5"	145mm	0.5mm	150mm	7208371
8.0 - 9.0"	0.0002"	±0.00028"	8.5"	145mm	0.5mm	150mm	7208381
9.0 - 10.0"	0.0002"	±0.00028"	9.5"	145mm	0.5mm	150mm	7208391
10.0 - 11.0"	0.0002"	±0.00028"	10.5"	145mm	0.5mm	150mm	7208401
11.0 - 12.0"	0.0002"	±0.00028"	11.5"	145mm	0.5mm	150mm	7208411
<b>Inch Sets</b>							
.08 - .12" (2pc)	0.0001"		c/w 0.1" Setting Ring				7208619
.12 - .28" (4pc)	0.0001"		c/w 0.16", 0.24" Setting Rings				7208629
0.275 - 0.5" (3pc)	0.0001"		c/w 0.275", 0.35", 0.5" Setting Rings & 4.0" Extension				7208639
0.5 - 0.8" (2pc)	0.0002"		c/w 0.65" Setting Ring & 6.0" Extension				7208649
0.8 - 2.0" (4pc)	0.0002"		c/w 1.0", 1.6" Setting Rings & 6.0" Extension				7208659
2.0 - 4.0" (4pc)	0.0002"		c/w 2.5", 3.5" Setting Rings & 6.0" Extension				7208669

Dimension .08 - .24"



Dimension .275" and over





## Two & Three Point Internal Micrometers (Inch)

### Features:

- Fully Calibrated
- Carbide tipped contact points
- Ratchet Stop
- Setting rings supplied
- Measuring contact points are designed to allow measurements near to the bottom of blind holes
- Models up to .24" have two measuring points and models over .275" have three measuring points
- Come with long form calibration certificates



Range	Thimble Graduation	Accuracy	Setting Rings	L	A	Extension Rods	Code No.
0.08 - 0.1"	0.0001"	±0.00016"	.1"	12.5mm	-	-	7209061
0.1 - 0.12"	0.0001"	±0.00016"	.1"	12.5mm	-	-	7209071
0.12 - 0.16"	0.0001"	±0.00016"	.16"	22.5mm	-	-	7209081
0.16 - 0.2"	0.0001"	±0.00016"	.16"	22.5mm	-	-	7209091
0.2 - 0.24"	0.0001"	±0.00016"	.24"	22.5mm	-	-	7209101
0.24 - 0.28"	0.0001"	±0.00016"	.24"	22.5mm	0.5mm	-	7209105
0.275 - 0.35"	0.0001"	±0.00016"	.275"	53.5mm	0.5mm	100mm	7209111
0.35 - 0.425"	0.0001"	±0.00016"	.35"	53.5mm	0.5mm	100mm	7209121
0.425 - 0.5"	0.0001"	±0.00016"	.5"	53.5mm	0.5mm	100mm	7209131
0.5 - 0.65"	0.0002"	±0.00016"	.65"	80mm	0.5mm	150mm	7209241
0.65 - 0.8"	0.0002"	±0.00016"	.65"	80mm	0.5mm	150mm	7209251
0.8 - 1.0"	0.0002"	±0.00016"	1"	90mm	0.5mm	150mm	7209261
1 - 1.2"	0.0002"	±0.00016"	1"	90mm	0.5mm	150mm	7209271
1.2 - 1.6"	0.0002"	±0.00016"	1.6"	97mm	0.5mm	150mm	7209281
1.6 - 2.0"	0.0002"	±0.0002"	1.6"	97mm	0.5mm	150mm	7209291
2.0 - 2.5"	0.0002"	±0.0002"	2.5"	114mm	0.5mm	150mm	7209301
2.5 - 3.0"	0.0002"	±0.0002"	2.5"	114mm	0.5mm	150mm	7209311
3.0 - 3.5"	0.0002"	±0.0002"	3.5"	114mm	0.5mm	150mm	7209321
3.5 - 4.0"	0.0002"	±0.0002"	3.5"	114mm	0.5mm	150mm	7209331
4.0 - 5.0"	0.0002"	±0.0002"	4.5"	145mm	0.5mm	150mm	7209341
5.0 - 6.0"	0.0002"	±0.0002"	5.5"	145mm	0.5mm	150mm	7209351
6.0 - 7.0"	0.0002"	±0.0002"	6.5"	145mm	0.5mm	150mm	7209361
7.0 - 8.0"	0.0002"	±0.0002"	7.5"	145mm	0.5mm	150mm	7209371
8.0 - 9.0"	0.0002"	±0.00028"	8.5"	145mm	0.5mm	150mm	7209381
9.0 - 10.0"	0.0002"	±0.00028"	9.5"	145mm	0.5mm	150mm	7209391
10.0 - 11.0"	0.0002"	±0.00028"	10.5"	145mm	0.5mm	150mm	7209401
11.0 - 12.0"	0.0002"	±0.00028"	11.5"	145mm	0.5mm	150mm	7209411
<b>Inch Sets</b>							
.08 - .12" (2pc)	0.0001"		c/w 0.1" Setting Ring				7209619
.12 - .28" (4pc)	0.0001"		c/w 0.16", 0.24" Setting Rings				7209629
0.275 - 0.5" (3pc)	0.0001"		c/w 0.275", 0.35", 0.5" Setting Rings & 4.0" Extension				7209639
0.5 - 0.8" (2pc)	0.0002"		c/w 0.65" Setting Ring & 6.0" Extension				7209649
0.8 - 2.0" (4pc)	0.0002"		c/w 1.0", 1.6" Setting Rings & 6.0" Extension				7209659
2.0 - 4.0" (4pc)	0.0002"		c/w 2.5", 3.5" Setting Rings & 6.0" Extension				7209669

Dimension 2-6mm/.08 - .24"



Dimension 6mm/.275" and over



## Two & Three Point Internal Micrometers (Metric)

### Features:

- Fully Calibrated
- Carbide tipped contact points
- Ratchet Stop
- Setting rings supplied
- Measuring contact points are designed to allow measurements near to the bottom of blind holes
- Models up to 6mm have two measuring points and models over 7mm have three measuring points
- Come with long form calibration certificates



Range	Thimble Graduation	Accuracy	Setting Rings	L	A	Extension Rods	Code No.
6-8mm	0.001mm	±0.004mm	6mm	53.5mm	0.5mm	100mm	7209110
8-10mm	0.001mm	±0.004mm	8mm	53.5mm	0.5mm	100mm	7209120
10-12mm	0.001mm	±0.004mm	10mm	53.5mm	0.5mm	100mm	7209130
12-16mm	0.005mm	±0.004mm	16mm	80mm	0.5mm	150mm	7209240
16-20mm	0.005mm	±0.004mm	16mm	80mm	0.5mm	150mm	7209250
20-25mm	0.005mm	±0.004mm	25mm	90mm	0.5mm	150mm	7209260
25-30mm	0.005mm	±0.004mm	25mm	90mm	0.5mm	150mm	7209270
30-40mm	0.005mm	±0.004mm	40mm	97mm	0.5mm	150mm	7209280
40-50mm	0.005mm	±0.005mm	40mm	97mm	0.5mm	150mm	7209290
50-63mm	0.005mm	±0.005mm	62mm	114mm	0.5mm	150mm	7209300
62-75mm	0.005mm	±0.005mm	62mm	114mm	0.5mm	150mm	7209310
75-88mm	0.005mm	±0.005mm	87mm	114mm	0.5mm	150mm	7209320
87-100mm	0.005mm	±0.005mm	87mm	114mm	0.5mm	150mm	7209330
<b>Metric Sets</b>							
2-3mm (2pc)	0.001mm	c/w 2.5mm Setting Ring					7209618
3-6mm (3pc)	0.001mm	c/w 4mm, 5mm, 6mm Setting Rings					7209628
6-12mm (3pc)	0.001mm	c/w 6mm, 8mm, 10mm Setting Rings & 100mm Extension					7209638
12-20mm (2pc)	0.005mm	c/w 16mm Setting Ring & 150mm Extension					7209648
20-50mm (4pc)	0.005mm	c/w 25mm, 40mm Setting Rings & 150mm Extension					7209658
50-100mm (4pc)	0.005mm	c/w 62mm, 87mm Setting Rings & 150mm Extension					7209668

Dimension 2-6mm/.08 - .24"



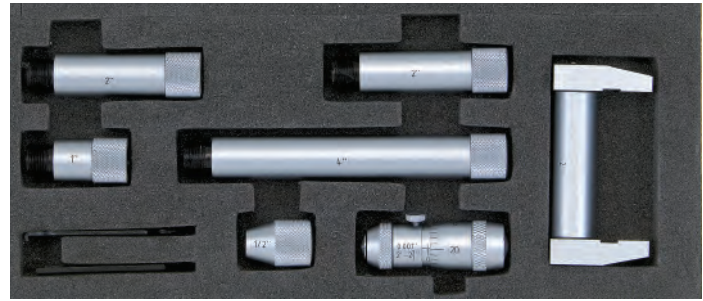
Dimension 6mm/.275" and over



## Tubular Inside Micrometers - Extension Type

**Features:**

- Fully Calibrated
- Offers a wide range of ID measurements by combining extension rods with the micrometer head.
- Come with long form calibration certificates

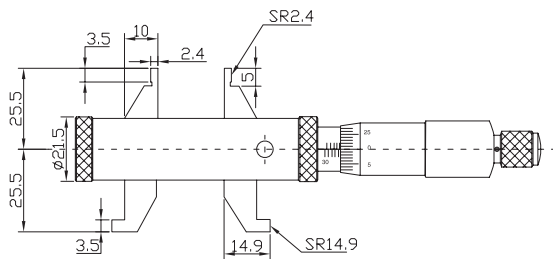


Range	Rods (Dia. .50")	Notes	Code No.
<b>Inch</b>			
2-12"	.5", 1", 2" (2pcs), 4"	Includes .50" .001" Mic head	7240011
2-40"	.5", 1", 2", 4" (2pcs), 6", 8", 12"	Includes .50" .001" Mic head	7240021
<b>Metric</b>			
50-300mm	13, 25, 50 (2pcs), 100mm	Includes 13.0mm 0.01mm Mic head	7240010

## Dual Measurement Inside Micrometers

**Features:**

- Fully Calibrated
- For all kinds of inside measurements
- Bi-directional graduation for easy reading in both directions
- Supplied with setting rings (Ø1.2" / Ø30mm dia)
- Come with long form calibration certificates



Upper Range	Lower Range	Graduation	Accuracy	Code No.
.2 - 1.2"	1.2 - 2.2"	.001"	±.00024"	7206011
5-30mm	30-55mm	0.01mm	±0.008mm	7206010

## Inside Micrometers - Interchangeable Rod Type

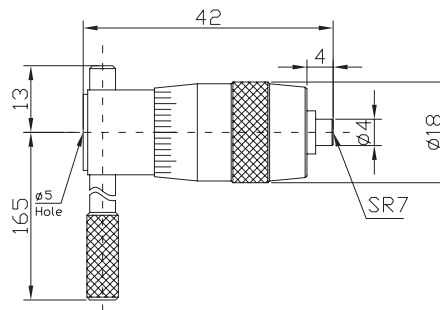


**Features:**

- Fully Calibrated
- Rods marked with its measuring range
- Satin chrome finish throughout
- All contact points hardened for extra long tool life
- Come with long form calibration certificates

Range	Head Travel	Grad.	Spacing Collar	Rod Dia.	Notes	Code No.
<b>Inch</b>						
1-2"	.25"	.001"	.250"	.248"	1" Mic head & 2 Rods	7242021
2-8"	.50"	.001"	.500"	.248"	2" Mic head & 6 Rods	7242081
2-12"	.50"	.001"	.500"	.248"	2" Mic head & 10 Rods	7242121
8-20"	1.00"	.001"	1", 2"	.355"	8" Mic head & 3 Rods	7242201
8-40"	1.00"	.001"	1", 2"	.355"	8" Mic head & 8 Rods	7242401
<b>Metric</b>						
25-50mm	7.0mm	0.01mm	6.0mm	6.3mm	25mm Mic head & 2 Rods	7242020

Accuracy Metric  $(6+L/50)\mu\text{m}$ ,  
 Inch  $[0.0003+0.00005(L/2)]''$   
 L=maximum measuring length



## Digital Depth Micrometers

### Features:

- Fully Calibrated
- Resolution: .00005" / 0.001mm
- .157 Dia. interchangeable rod lengths can be adjusted after wear on the measuring tip
- Ratchet Stop
- Satin Chrome finish throughout
- Protection level IP65
- Absolute and incremental measuring modes
- Auto On/Off
- Inch/Metric conversion
- Come with long form calibration certificates



Range	Thimble Grad.	Accuracy	Base Length	Notes	Code No.
<b>Inch</b>					
0-4"	.0001"	±0.0002"	2.5"	With Int. Rods: 4pcs	7205041
0-6"	.0001"	±0.0002"	2.5"	With Int. Rods: 6pcs	7205061
0-4"	.0001"	±0.0002"	4.0"	With Int. Rods: 4pcs	7205043
0-6"	.0001"	±0.0002"	4.0"	With Int. Rods: 6pcs	7205063
<b>Metric</b>					
0-100mm	0.01mm	±0.005mm	63mm	With Int. Rods: 4pcs	7205040
0-150mm	0.01mm	±0.005mm	63mm	With Int. Rods: 6pcs	7205060
0-100mm	0.01mm	±0.005mm	101.6mm	With Int. Rods: 4pcs	7205042
0-150mm	0.01mm	±0.005mm	101.6mm	With Int. Rods: 6pcs	7205062

## Digit Depth Micrometers

### Features:

- Fully Calibrated
- Resolution: .001" / 0.01mm
- .157 Dia. interchangeable rod lengths can be adjusted after wear on the measuring tip
- Ratchet Stop
- Satin Chrome finish throughout
- Come with long form calibration certificates



Range	Thimble Grad.	Accuracy	Base Length	Notes	Code No.
<b>Inch</b>					
0-4"	.0001"	±0.0002"	2.5"	With Int. Rods: 4pcs	7202041•
0-6"	.0001"	±0.0002"	2.5"	With Int. Rods: 6pcs	7202061•
0-4"	.0001"	±0.0002"	4.0"	With Int. Rods: 4pcs	7202043•
0-6"	.0001"	±0.0002"	4.0"	With Int. Rods: 6pcs	7202063•
<b>Metric</b>					
0-150mm	0.01mm	±0.005mm	101.6mm	With Int. Rods: 6pcs	7202062•

• Available only while quantities last.

## Half-Base Depth Micrometers

### Features:

- Fully Calibrated
- .157 Dia. interchangeable rod lengths can be adjusted after wear on the measuring tip
- Ratchet Stop
- Satin Chrome finish throughout
- Come with long form calibration certificates

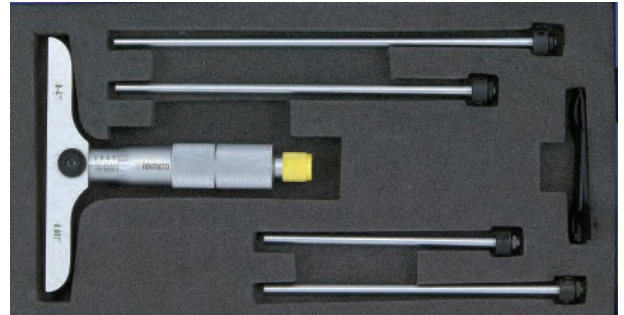


Range	Thimble Grad.	Accuracy	Base Length	Notes	Code No.
<b>Inch</b>					
0-4"	.0001"	±0.0002"	57mm	With Int. Rods: 4pcs	7201047
0-6"	.0001"	±0.0002"	57mm	With Int. Rods: 6pcs	7201067

## Depth Micrometers

### Features:

- Fully Calibrated
- .157 Dia. interchangeable rod lengths can be adjusted after wear on the measuring tip
- Ratchet Stop
- Satin Chrome finish throughout
- Come with long form calibration certificates



Range	Grad.	Accuracy	Base Length	Notes	Code No.
<b>Inch</b>					
0-4"	.001"	±0.0002"	2.5"	With Int. Rods: 4pcs	7201041
0-4"	.0001"	±0.0002"	2.5"	With Int. Rods: 4pcs	7201045
0-6"	.001"	±0.0002"	2.5"	With Int. Rods: 6pcs	7201061
0-6"	.0001"	±0.0002"	2.5"	With Int. Rods: 6pcs	7201065
0-12"	.001"	±0.00028"	2.5"	With Int. Rods: 12pcs	7201121
0-12"	.0001"	±0.00028"	2.5"	With Int. Rods: 12pcs	7201125
0-4"	.0001"	±0.0002"	4.0"	With Int. Rods: 4pcs	7201049
0-6"	.001"	±0.0002"	4.0"	With Int. Rods: 6pcs	7201063
0-6"	.0001"	±0.0002"	4.0"	With Int. Rods: 6pcs	7201069
0-12"	.001"	±0.00028"	4.0"	With Int. Rods: 12pcs	7201123
0-12"	.0001"	±0.00028"	4.0"	With Int. Rods: 12pcs	7201129
<b>Metric</b>					
0-50mm	0.01mm	±0.004mm	63.5mm	With Int. Rods: 2pcs	7201020
0-100mm	0.01mm	±0.005mm	63.5mm	With Int. Rods: 4pcs	7201040
0-150mm	0.01mm	±0.005mm	63.5mm	With Int. Rods: 6pcs	7201060
0-100mm	0.01mm	±0.005mm	101.6mm	With Int. Rods: 4pcs	7201042
0-150mm	0.01mm	±0.005mm	101.6mm	With Int. Rods: 6pcs	7201062

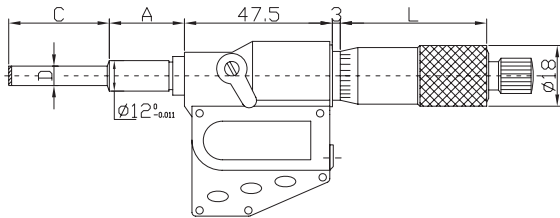
## Digital Micrometer Head

### Features:

- Fully Calibrated
- IP65 Protection
- On/Off Sensor
- Ratchet Stop
- Extra large LCD readout
- Carbide Face
- Inch/Metric conversion
- Come with long form calibration certificates



Range	Resolution	Accuracy	Code No.
0-1" / 0-25mm	.00005" / 0.001mm	±.0001"	7165011



Range Inch/Metric	D mm	A mm	C mm	L mm
0-1"/0-25mm	ø6.5	17.5	28.5	47

## Micrometer Stands



steel base



aluminum base



cast-iron base

- These stands are designed to allow bench top use with hand micrometers

Notes	Code No.
Painted steel base	7109010
Painted aluminum base	7109020
Painted cast-iron base	7109021

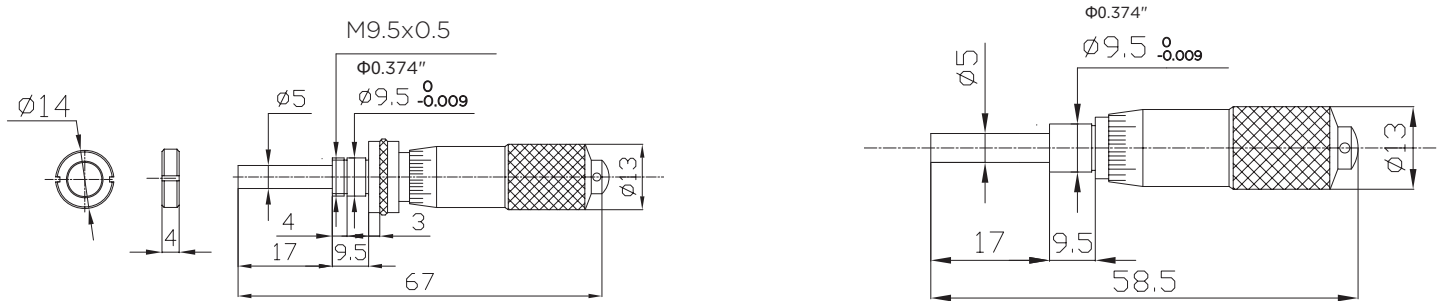
## Micrometer Heads

**Features:**

- Fully Calibrated
- Satin Chrome finish
- Come with long form calibration certificates



Range	Graduation	Accuracy	Notes	Code No.
<b>Inch</b>				
0-.5"	.001"	±.0001"	.197" dia. face / without spindle lock / without clamp nut	7169051
0-.5"	.001"	±.0001"	.197" dia. face / with spindle lock / with clamp nut	7169053
0-.5"	.001"	±.0001"	.197" dia. face / without spindle lock / Spherical Face type, without clamp nut	7169055
0-.5"	.001"	±.0001"	.197" dia. face / with spindle lock / with clamp nut / Spherical face	7169057
0-.5"	.001"	±.0001"	.250" dia. Carbide face / with spindle lock / with clamp nut	7169351
0-.5"	.001"	±.0001"	.250" dia. Carbide face, Spherical face type / without spindle lock / without clamp nut	7169353
0-1"	.001"	±.0001"	.250" dia. Carbide face, Spherical face type / without spindle lock / with clamp nut	7169011
<b>Metric</b>				
0-13mm	0.01mm	±0.02mm	5mm face / without spindle lock / without clamp nut	7169050
0-13mm	0.01mm	±0.02mm	5mm face / with spindle lock / with clamp nut	7169052





# Calipers

IP67 Coolant Proof Digital Calipers	40-41
Absolute Digital Calipers	41
Digital Calipers	42
Dial Calipers	43-44
Vernier Calipers	45
Heavy Duty Digital Calipers	46
ABS Heavy Duty Digital Calipers	46
Heavy Duty Vernier Calipers	47-48
Long Jaw Vernier Calipers	49
Forester Calipers	49
Digital Calipers With Adjustable Measuring Jaw	50
Digital Snap Gages	51
Digital Calipers For Inside Grooves	52
Digital Gage w/ Single Wide Measuring Face	52
Digital Gear Tooth Calipers	53
Digital Universal Depth Gages	54
Depth Base Attachments For Calipers	54
Universal Caliper Accessory Kit & Centerline Gages	55
Groove Measurement Caliper Jaws	56
Caliper Extender Attachments	57
Digital External Caliper Gages	58
Dial Internal Caliper Gages	58
Thickness Gages	59
Digital Linear Scales	60

## IP67 Coolant Proof Digital Calipers

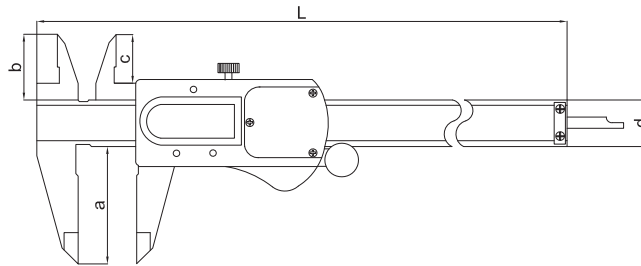
### Features:

- Fully Calibrated
- Absolute function, there is no need to set the zero
- Hold function for easy reading
- Absolute or incremental measuring modes
- Inch/Metric conversion
- Metal Housing, the design will allow the caliper to be used in normal workshop conditions and is resistant to coolant, water, dust or oil
- Auto power on/off
- Power: 3V lithium battery
- Come with long form calibration certificates

Calipers



Range	Resolution	Accuracy	Code No.
0-6" / 0-150mm	.0005" / 0.01mm	±.001"	7305062
0-8" / 0-200mm	.0005" / 0.01mm	±.0015"	7305082
0-12" / 0-300mm	.0005" / 0.01mm	±.0015"	7305122



Range Inch/Metric	L mm	a mm	b mm	c mm	d mm
0-6"/0-150mm	236	40	21	16.5	16
0-8"/0-200mm	286	50	24	19.5	16
0-12"/0-300mm	400	60	25	20.5	16

## IP67 Coolant Proof Digital Calipers - Sylvac

### Features:

- Fully Calibrated
- Conforms to IP67 rating
- Inch/Metric conversion
- Auto power On/Off
- Sylvac system
- Come with long form calibration certificates



Range	Resolution	Accuracy	Code No.
0-6" / 0-150mm	.0005" / 0.01mm	±.001"/0.02mm	7301060
0-8" / 0-200mm	.0005" / 0.01mm	±.0015"/0.03mm	7301080
0-12" / 0-300mm	.0005" / 0.01mm	±.0015"/0.03mm	7301120

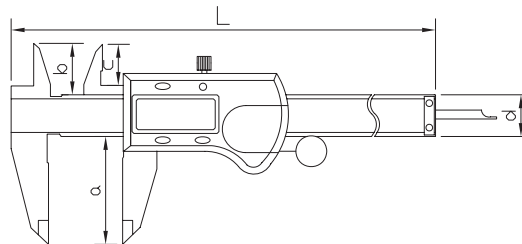
## Absolute Digital Calipers

### Features:

- Fully Calibrated
- Inch/Metric conversion
- The ZERO/ABS changes the measurement mode from absolute to incremental
- Come with long form calibration certificates



Range	Resolution	Accuracy	Code No.
0-6" / 0-150mm	.0005" / 0.01mm	±.001"	7307563
0-8" / 0-200mm	.0005" / 0.01mm	±.0015"	7307583
0-12" / 0-300mm	.0005" / 0.01mm	±.0015"	7307623



Range Inch/Metric	L mm	a mm	b mm	c mm	d mm
0-6"/0-150mm	236	40	21	16.5	16
0-8"/0-200mm	286	50	24	19.5	16
0-12"/0-300mm	400	60	25	20.5	16

## USB Data Output Cable



Code
7900054

## Digital Calipers

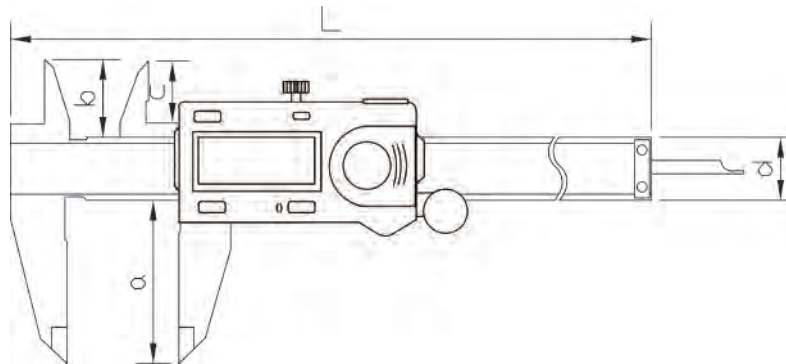
### Features:

- Fully Calibrated
- Large LCD readout
- Inch/Metric conversion
- Come with long form calibration certificates



Range	Resolution	Accuracy	Code No.
<b>With Thumb Wheel</b>			
0-6" / 0-150mm	.0005" / 0.01mm	±.001"	7307065
0-8" / 0-200mm	.0005" / 0.01mm	±.0015"	7307085
0-8" / 0-200mm	.0005" / 0.01mm	±.0015"	7307081•
0-12" / 0-300mm	.0005" / 0.01mm	±.0015"	7307125

• Available only while quantities last.

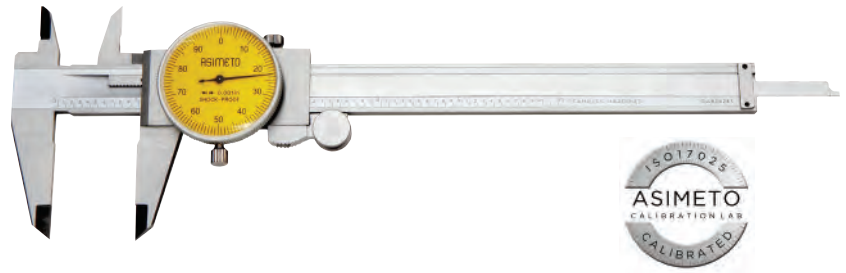


Range Inch/Metric	L mm	a mm	b mm	c mm	d mm
0-6"/0-150mm	236	40	21	16.5	16
0-8"/0-200mm	286	50	24	19.5	16
0-12"/0-300mm	400	60	25	20.5	17

## Dial Calipers - Stainless Steel

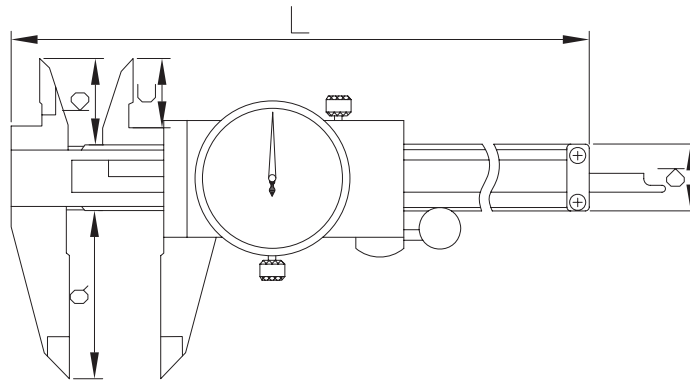
### Features:

- Fully Calibrated
- Hardened Stainless Steel
- Come with long form calibration certificates



Range	Graduation	Range per Rev	Accuracy	Code No.
<b>Inch</b>				
0-4"	.001"	.200"	±.001"	7303041•
0-6"	.001"	.100"	±.001"	7303061
0-8"	.001"	.100"	±.0015"	7303081
0-12"	.001"	.100"	±.0015"	7303121
<b>Metric</b>				
0-150mm	.01mm	1.0mm	±0.02mm	7303060
0-200mm	.01mm	1.0mm	±0.03mm	7303080
0-300mm	.01mm	1.0mm	±0.04mm	7303120
0-200mm	.02mm	1.0mm	±0.03mm	7303082
0-300mm	.02mm	1.0mm	±0.04mm	7303122

• Available only while quantities last.



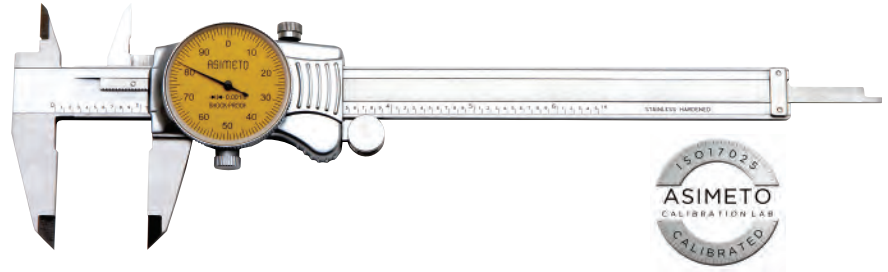
Range Inch/Metric	L mm	a mm	b mm	c mm	d mm
0-6"/0-150mm	234	40	21	16.5	16
0-8"/0-200mm	290	50	23.5	19	17
0-12"/0-300mm	393	64	24.5	20	17

## Dial Calipers - Diecast Aluminum

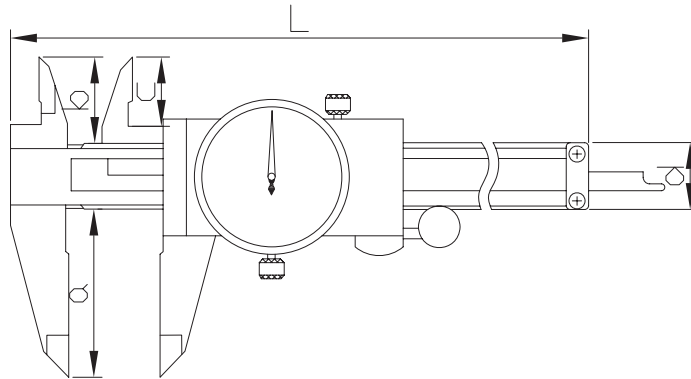
### Features:

- Fully Calibrated
- Sturdy Aluminum diecast housing can be used in the harshest of manufacturing environments, including situations with hot steel chips, without damage.
- The dual pinion mechanism offers ultra smooth feel.
- Preloaded pinion offers better repeatability
- Thumbwheel
- Come with long form calibration certificates

Calipers



Range	Graduation	Range per Rev	Accuracy	Code No.
<b>Inch</b>				
0-6"	.001"	.100"	±.001"	7304065
0-8"	.001"	.100"	±.0015"	7304085
0-12"	.001"	.100"	±.0015"	7304125
<b>Metric</b>				
0-150mm	.01mm	1.0mm	±0.02mm	7304064
0-150mm	.02mm	1.0mm	±0.02mm	7304066
0-200mm	.02mm	1.0mm	±0.03mm	7304086

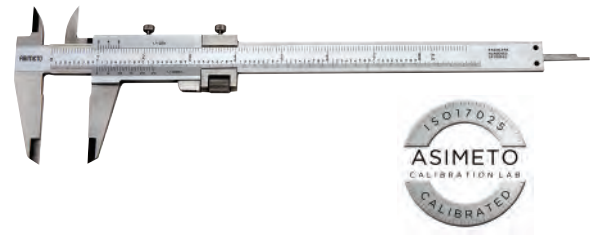
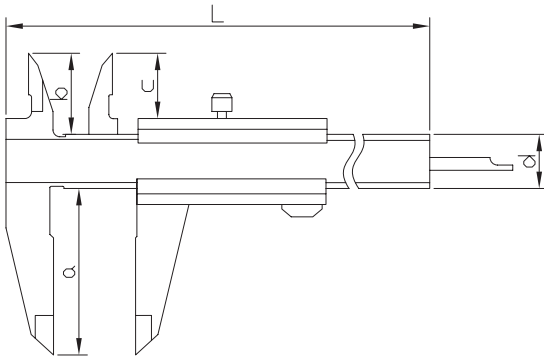


Range Inch/Metric	L mm	a mm	b mm	c mm	d mm
0-6"/0-150mm	234	40	21	16.5	16
0-8"/0-200mm	290	50	23.5	19	17
0-12"/0-300mm	393	64	24.5	20	17

## Vernier Calipers

### Features:

- Fully Calibrated
- Available in Plain, Thumb Clamp and Fine Adjustment.
- Stainless Steel
- Measuring surfaces allow for the measurement of external diameters, internal diameters, depths, and steps
- Upper and lower scales on the slider are angled to reduce parallax error
- Come with long form calibration certificates



Range		Graduation		Accuracy	L mm	a mm	b mm	c mm	d mm	Code No.
Lower	Upper	Lower	Upper							
<b>Plain Vernier</b>										
0-6"	0-6"	.001"	1/128"	±.001"	235	40	21	16.5	16	7341061
0-150mm	0-6"	.05mm	1/128"	±0.06mm	235	40	21	16.5	16	7341060
0-200mm	0-8"	.05mm	1/128"	±0.07mm	297	50	23.5	19	16	7341080
0-150mm	0-6"	.02mm	.001"	±0.03mm	235	40	21	16.5	16	7341064
0-200mm	0-8"	.02mm	.001"	±0.03mm	297	50	23.5	19	16	7341084
0-300mm	0-12"	.02mm	.001"	±0.04mm	410	64	27	22	20	7341124
<b>Thumb Clamp</b>										
0-6"	0-6"	.001"	1/128"	±.001"	228	40	21	16.5	16	7351061
0-150mm	0-6"	0.02mm	.001"	±0.03mm	228	40	21	16.5	16	7351064
0-200mm	0-8"	0.02mm	.001"	±0.03mm	290	50	23.5	19	17	7351084
<b>Fine Adjustment</b>										
0-11"	0-11"	.001"	1/128"	±.0015"						7361111
0-130mm	0-5"	0.02mm	.001"	±0.03mm	228	40	21	16	16	7361056
0-180mm	0-7"	0.02mm	.001"	±0.03mm	290	50	23.5	19	17	7361076
0-280mm	0-11"	0.02mm	.001"	±0.04mm	410	64	27.5	22	20	7361116

## Heavy Duty Digital Calipers

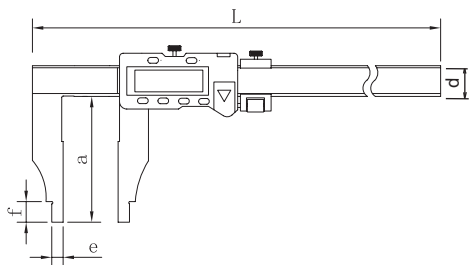
### Features:

- Fully Calibrated
- Designed with fine adjustment to allow precise movement of the slider
- Internal measurement jaws are rounded to provide accurate measurement of internal diameters
- Minimum internal diameter measurement capability of 20mm
- Inch/Metric conversion
- Six buttons
- Zero setting at any position
- Without upper jaws
- Come with long form calibration certificates



Calipers

Range	Jaw Length	Accuracy	Code No.
0-20"/0-500mm	150mm	±0.05mm	7315240
0-40"/0-1000mm	150mm	±0.10mm	7315406



Range Inch/Metric	L mm	a mm	d mm	e mm	f mm
0-24"/0-500mm	680	150	25	10	18
0-40"/0-1000mm	1230	200	32	10	25

## SPC Data Output Cable



Code
7900054

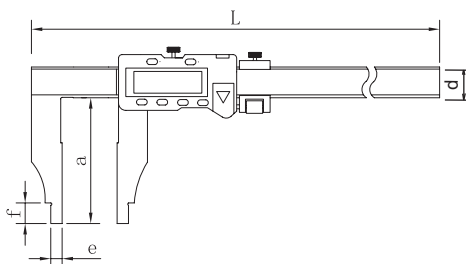
## ABS Heavy Duty Digital Calipers

### Features:

- Fully Calibrated
- Resolution: .0005" / 0.01mm
- Designed with fine adjustment to allow precise movement of the slider
- Internal measurement jaws are rounded to provide accurate measurement of internal diameters
- Minimum internal diameter measurement capability of 20mm
- Inch/Metric conversion
- Six buttons
- Zero setting at any position
- Models are available with or without upper jaws
- Absolute delivery reliable measurement
- Come with long form calibration certificates



Range	Jaw Length	Accuracy	Code No.
0-12"/0-300mm	90mm	±0.04mm	7315126



Range Inch/Metric	L mm	a mm	d mm	e mm	f mm
0-12"/0-300mm	470	90	25	10	18



## Heavy Duty Digital Calipers - Sylvac System



**Features:**

- Fully Calibrated
- Resolution: .0005" / 0.01mm
- Lightweight design
- Optimum guidance and sliding characteristics due to double vee guides
- Precision ground Stainless Steel jaws
- Inch/Metric conversion
- Come with long form calibration certificates

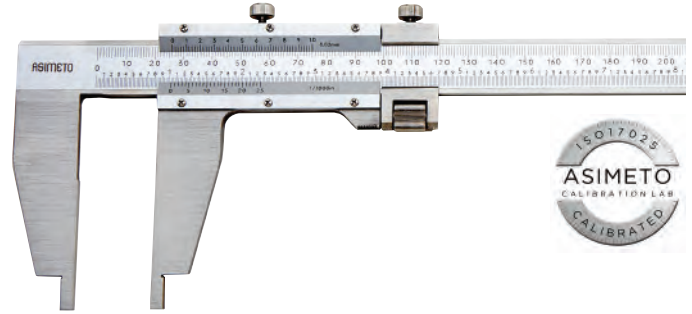


Range	Accuracy	Jaw Length	Internal Jaw	Notes	Code No.
<b>With Upper Jaws</b>					
0-12"/300mm	±0.04mm	90mm	10mm	-	7312120
0-20"/500mm	±0.05mm	90mm	10mm	-	7312200
0-32"/800mm	±0.06mm	90mm	10mm	-	7312320
<b>w/o Upper Jaws</b>					
0-40"/1000mm	±0.06mm	150mm	20mm	Sylvac Electronics	7312402

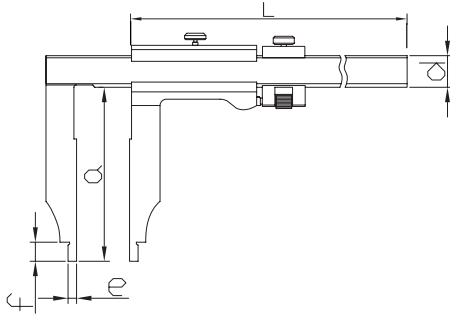
## Heavy Duty Vernier Calipers

### Features:

- Fully Calibrated
- Nib style jaws and fine adjustment
- Come with long form calibration certificates



Lower	Range	Upper	Lower	Graduation	Upper	Accuracy	Jaw Depth	Code No.
0-12"	0-300mm	.001"	0.02mm	±.0015"	2.95"	7311121		
0-18"	0-450mm	.001"	0.02mm	±.002"	3.94"	7311181		
0-24"	0-600mm	.001"	0.02mm	±.002"	3.94"	7311241		
0-40"	0-1000mm	.001"	0.02mm	±.003"	5.51"	7311401		



Range Inch/Metric	L mm	a mm	d mm	e mm	f mm
0-12"/0-300mm	450	75	20	5	12
0-18"/0-450mm	685	100	25	10	25
0-24"/0-600mm	835	100	32	10	25
0-40"/0-1000mm	1235	150	32	10	25

## Long Jaw Vernier Calipers

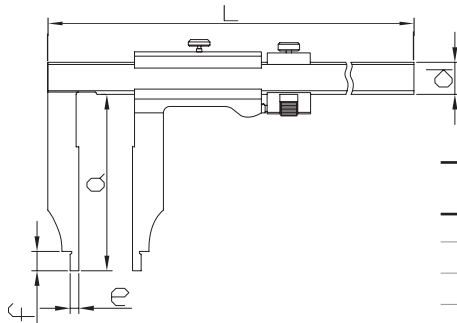
### Features:

- Fully Calibrated
- Upper Scale: .001"  
Lower Scale: 0.02mm
- Fine adjustment carriage
- Long jaws for measuring hard to reach places.
- Jaws have round faces for accurate ID measurement.
- Come with long form calibration certificates



Calipers

Range		Graduation		Accuracy	Jaw Depth	Code No.
Lower	Upper	Lower	Upper			
0-300mm	0-12"	0.02mm	.001"	±.0015"	90mm	7311123
0-500mm	0-20"	0.02mm	.001"	±.0020"	200mm	7311203
0-1000mm	0-40"	0.02mm	.001"	±.0030"	200mm	7311403
0-12"	0-300mm	.001"	0.02mm	±0.04mm	3.55"	7311124
0-20"	0-500mm	.001"	0.02mm	±0.06mm	7.87"	7311204
0-40"	0-1000mm	.001"	0.02mm	±0.10mm	7.87"	7311404



Range Inch/Metric	L mm	a mm	d mm	e mm	f mm
0-12"/0-300mm	450	90	20	5	12
0-20"/0-500mm	735	200	30	10	23
0-30"/0-750mm	985	200	32	10	25
0-40"/0-1000mm	1235	200	32	10	25

## Forester Calipers

### Features:

- Fully Calibrated
- Made of aluminum with plastic handle
- Come with long form calibration certificates



Range	Graduation	Jaw Length	Code No.
0-500mm	5mm	255mm	7322910
0-800mm	5mm	410mm	7322920
0-1000mm	5mm	410mm	7322930

## Digital Calipers With Adjustable Measuring Jaw

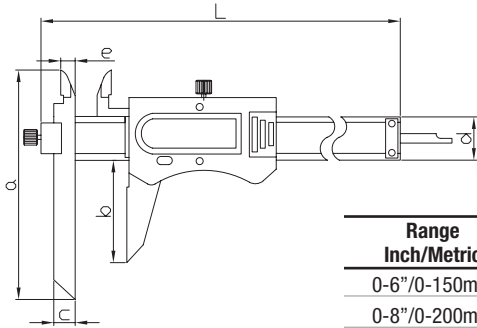
### Features:

- Fully Calibrated
- Resolution: 0005" / 0.01mm
- Stationary jaw on the beam is designed with vertical movement for the purpose of measuring various steps of different heights
- Inch/Metric conversion
- Zero setting at any position
- Come with long form calibration certificates



Calipers

Range	Adjustable Jaw Length	Accuracy	Code No.
0-6"/150mm	110mm	±.0015"/0.04mm	7317060
0-12"/300mm	300mm	±.0020"/0.05mm	7317120



Range Inch/Metric	L mm	a mm	b mm	c mm	d mm	e mm
0-6"/0-150mm	239	110	40	10	16	7
0-8"/0-200mm	680	150	25	10	18	7
0-12"/0-300mm	1030	150	32	10	25	7

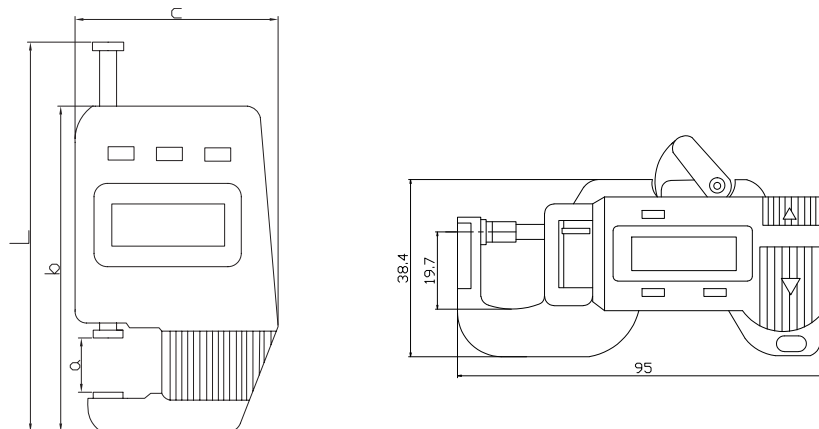
## Digital Snap Gages

### Features:

- Fully Calibrated
- Inch/Metric conversion
- Come with long form calibration certificates



Range	Resolution	Accuracy	Code No.
<b>Horizontal</b>			
0-.5" / 0-12mm	.0005" / 0.01mm	±.0015"/.03mm	7325300
0-1" / 0-25mm	.0005" / 0.01mm	±.0015"/.04mm	7325320
<b>Vertical</b>			
0-.6" / 0-15mm	.0005" / 0.01mm	±.0015"/.03mm	7325500
0-1" / 0-25mm	.0005" / 0.01mm	±.0015"/.04mm	7325520



Range Inch/Metric	L mm	a mm	b mm	c mm
0-.6"/0-15mm	102.6	15.5	83.6	51
0-1"/0-25mm	132.8	26	104	61

## Digital Calipers For Inside Grooves

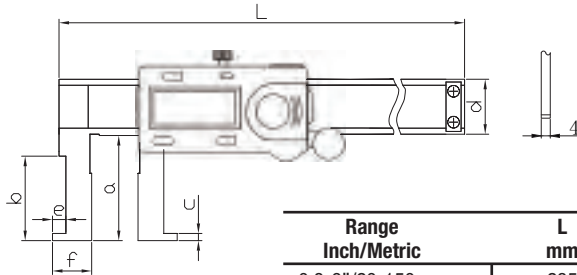
### Features:

- Fully Calibrated
- Measures internal grooves, bores, and other details
- Inch/Metric conversion
- Zero setting at any position for incremental measurement
- Come with long form calibration certificates



Calipers

Range	Resolution	Accuracy	Code No.
0.8-6"/20-150mm	.0005"/0.01mm	±.001"/0.04mm	7315067
1.6-8"/40-200mm	.0005"/0.01mm	±0015"/0.04mm	7315087

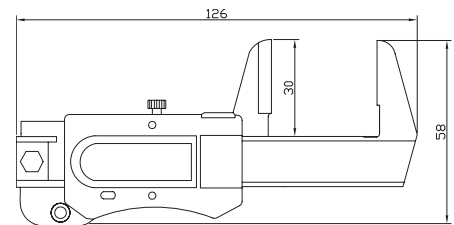


Range Inch/Metric	L mm	a mm	b mm	c mm	d mm	e mm	f mm
0.8-6"/20-150mm	235	46	40	1	16	5	10
1.6-8"/40-200mm	287	76	70	1.5	16	7	20
2-12"/50-300mm	390	86	80	1.5	17	8	25

## Digital Gage w/ Single Wide Measuring Face

### Features:

- Fully Calibrated
- Zero setting at any position
- Easy operation and normally used for the measurement of small work pieces
- Inch/Metric conversion
- Comes with long form calibration certificate



Range	Resolution	Accuracy	Code No.
0-1.2"/0-30mm	.0005"/0.01mm	±.0015"/0.03mm	7325360

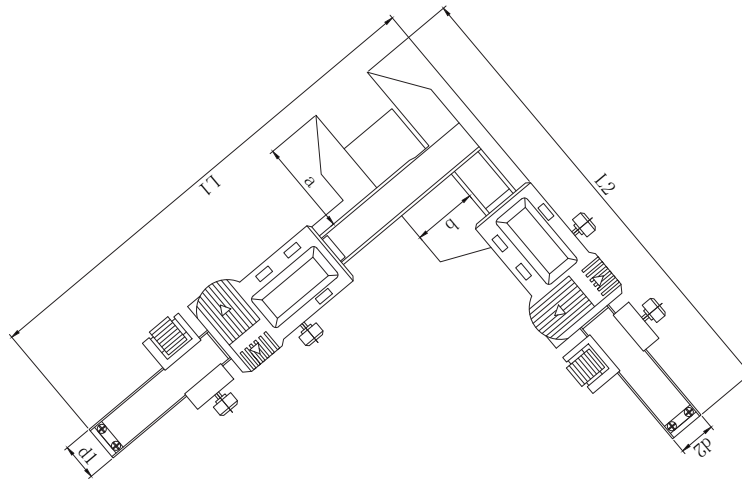
## Digital Gear Tooth Calipers

### Features:

- Fully Calibrated
- Zero-setting at any position
- Inch/Metric conversion
- Measures the chordal gear tooth thickness at the chordal addendum (pitch circle)
- Come with long form calibration certificates



Range	Resolution	Accuracy	L1 mm	L2 mm	a mm	b mm	d1 mm	d2 mm	Code No.
1-25mm	.0005" / 0.01mm	±.03mm	156	156.5	30.5	21	13	13	7328060
5-50mm	.0005" / 0.01mm	±.03mm	210	185.5	50.5	50.5	13	13	7328062



## Digital Universal Depth Gages

### Features:

- Lightweight design
- Easy to read display
- Optimum sliding characteristics are ensured by double vee guides
- Measurement head of hard-coated aluminum with two tapped holes at 90° to take the measuring tips
- Inch/Metric conversion
- LR44 1.5V battery
- Complete with 150mm, 300mm, 450mm bases included



Range	Resolution	Accuracy	Code No.
0-12"/300mm	.0005"/0.01mm	±0.04mm	7312126
0-20"/500mm	.0005"/0.01mm	±0.05mm	7312206
0-32"/800mm	.0005"/0.01mm	±0.06mm	7312326

## Depth Base Attachments For Calipers

### Features:

- Transforms your Dial, Vernier, or Digital Caliper into a depth measurement device, without the expense of standalone gages
- Fits all brands of calipers
- Precision ground
- Screw locking clamp



Base Length	Calipers	Material	Code No.
3"/78.5mm	up to 200mm	Stainless Steel	7327669
3"	4-6"	Cold Rolled Steel	7327653
4"	4-6"	Cold Rolled Steel	7327654
5"	12"	Cold Rolled Steel	7327655



## Universal Caliper Accessory Kit

### Features:

- The original caliper jaw attachment accessory
- The square bodies attach to the jaws of any 4", 6", and 8" caliper. Threaded holes are located in the front, both sides, and the bottom of the bodies, allowing the use of the points on any side
- Measures slots, grooves, shoulders, holes, pockets, and takes ID and OD measurements
- Steel with Black Oxide finish



Calipers

Kit Contents	Quantity	Notes	Kit Code No.
Universal Caliper Bodies	1 pair	3/8" square x 2" length, slot for caliper jaws is .147 wide. 4-40 holes for set screws fasten the body to the caliper jaw	7300110
Flat Points	1 pair	3/16" diameter x .810" length, 4-48 threads	
Cone Points	1 pair	3/16" diameter x .810" length, 4-48 threads	
Stem Points	1 pair	3/16" body diameter, .084 stem diameter x .820" length, 4-48 threads	
Ball Points	1 pair	3/16" diameter x .810" length, 4-48 threads	

## Centerline Gage Attachments

### Features:

- Measures centerline distances
- Easily attaches to Dial, Vernier, and Digital Calipers
- 60° conical points
- Hardened steel with Black Oxide finish
- Attaches with set screws
- Supplied in High Impact Tubes with hex wrench



Calipers	Minimum Measuring	Dia.	O.A.L.	Slot Width	Code No.
4", 6", 8"	3/8"	.375"	2-5/16"	.127"	7300130
12"	1/2"	.500"	2.762"	.144"	7300140

## Groove Measurement Caliper Jaws

### Features:

- Fits on any 6" Dial, Vernier, or Digital Caliper
- Enables the measurement of hard to reach work piece characteristics such as internal grooves
- Measuring range of .200" to 6.000"
- Designed with an alignment pin ensuring correct alignment of the measuring surfaces
- Supplied in a fitted plastic case

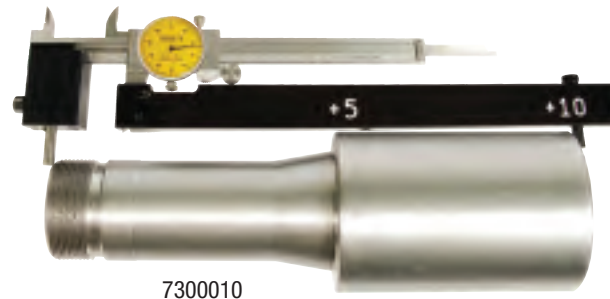


Min. Measure	Feet Width	Max Depth	Groove Depth	Code No.
.200"	.015"	.400"	.050"	7300210
.300"	.015"	.625"	.070"	7300220
.600"	.025"	1.000"	.200"	7300230
.725"	.040"	1.250"	.255"	7300240
External Measure	.024"	3.000"	.375"	7300250
<b>Set</b> 5 Pair Set Includes all jaws listed above				7300205

## Caliper Extender Attachments

### Features:

- Allows both inside and outside measurements of up to 51" with your 6" Dial, Vernier, or Digital Caliper. These extender kits allow you to perform measuring operations without the expense of purchasing a stand alone caliper, which could cost thousands of dollars. For the occasional measuring situation, these kits provide the answer at a reasonable cost
- Extension bars are made from high grade Aluminum, and black anodized with white numerals for clarity.
- All mounting hardware and calibration rods are included
- Complete instructions accompany this easy to use kit. Choose the model that fits the range of measurements you need.
- Caliper not included



7300010



7300011



7300014



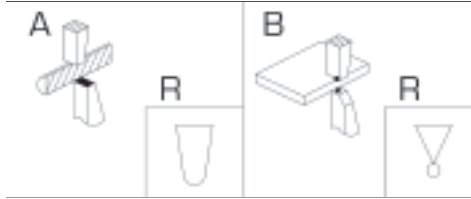
7300015

Description	Tolerance	Code No.
26" Extension	±.003"	7300010
36" Extension	±.003"	7300020
51" Extension	±.004"	7300030
1/2" Projection Pins (pair)	-	7300011
1" Projection Pins (pair)	-	7300012
1-1/2" Projection Pins (pair)	-	7300013
Centerline Gage Pins	-	7300014
Layout Kit	-	7300015

## Digital External Caliper Gages

### Features:

- Fully Calibrated
- Resolution: .0002"
- Designed to measure hard to access external work piece characteristics
- Provides comparison readings and must be set to the nominal dimension using either a micrometer or setting rings
- Display housing can be rotated  $\pm 170^\circ$
- Come with long form calibration certificates



Range	Arm Length	Tip Length	Accuracy	Tip	Code No.
0 - .8"	35mm	1.5mm	$\pm .00012"$	A	7404211
.4 - 1.2"	55mm	3.5mm	$\pm .00012"$	B	7404223

## Dial Internal Caliper Gages

### Features:

- Fully Calibrated
- Resolution: .0005"/0.01mm
- Designed to measure internal grooves, and other intricate detailed internal characteristics
- Provides comparison readings and must be set to the nominal dimension using either a micrometer or setting rings
- Come with long form calibration certificates



Range	Arm Length	Tip Length	Accuracy	Tip	Code No.
<b>Inch</b>					
.2 - .6"	20mm	1.5mm	$\pm .0008"$	A	7403111
.4 - 1.2"	55mm	3.5mm	$\pm .00012"$	B	7403223
.8 - 1.6"	80mm	6.5mm	$\pm .00012"$	B	7403233
1.2 - 2.0"	80mm	8.5mm	$\pm .00012"$	B	7403243
<b>Metric</b>					
5-15mm	20mm	1.5mm	$\pm 0.02\text{mm}$	A	7403110
10-20mm	25mm	3.0mm	$\pm 0.02\text{mm}$	B	7403122

## Thickness Gages

### Features:

- Fully Calibrated
- Designed for the measurement of paper, film, wire, sheet metal, jewelry, leather and other materials
- Flat anvils
- Come with long form calibration certificates



### Digital

Range	Resolution	Accuracy	Throat Depth	Code No.
0-0.4"/0-10mm	.0005"/0.01mm	±.001"/0.015mm	30mm	7495010
0-0.4"/0-10mm	.0005"/0.01mm	±.001"/0.015mm	120mm	7495020
0-0.4"/0-10mm	.00005"/0.001mm	±.0005"/0.01mm	30mm	7495013

### Dial

Range	Resolution	Accuracy	Throat Depth	Code No.
0-10mm	0.01mm	±0.015mm	30mm	7491010
0-10mm	0.01mm	±0.015mm	120mm	7491020

## Digital Linear Scales

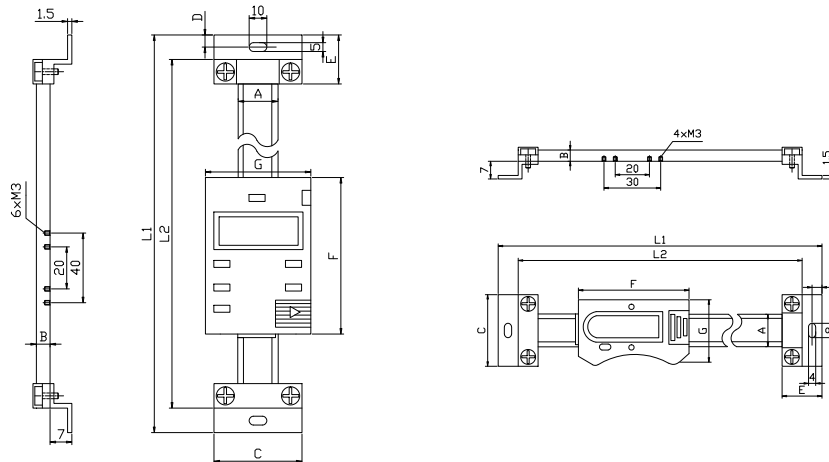
### Features:

- Fully Calibrated
- Inch/Metric conversion
- Absolute or incremental measuring modes
- Units are supplied with the necessary mounting brackets required for most popular installations
- Come with long form calibration certificates



Calipers

Range	Resolution	Accuracy	Code No.
6"/150mm	.0005"/0.01mm	±.0015"/0.03mm	7326060
8"/200mm	.0005"/0.01mm	±.0015"/0.03mm	7326080



Range Inch/Metric	A mm	B mm	C mm	D mm	E mm	F mm	G mm	L1 mm	L2 mm
<b>Horizontal</b>									
6"/150mm	16	4	36	6	24	58	34	259	235
8"/200mm	16	4	36	6	24	58	34	310	286
12"/300mm	16	4	36	6	24	58	34	444	420
<b>Vertical</b>									
6"/150mm	20	4	40	6	24	70	40	294	270
8"/200mm	20	4	40	6	24	70	40	344	320
12"/300mm	20	4	40	6	24	70	40	444	420

# Indicators

IP65 Digital Indicators	62
Digital Indicators	62
Digital Indicators With Analog Display	63
Ultra Precision Dial Gages	64
AGD1 Dial Indicators	65
AGD2 Dial Indicators	66
Back Plunger Type Dial Indicators	67
Digital Test Indicator	67
Holding Bar Assembly	67
Dial Test Indicators	68
Extended Range Dial Test Indicators	69
Centering Indicators	70
Extended Range Dial Test Indicator Sets	71
Float N Lock Positioners	72
Zero Set Holder, Zero Set Universal Attachment	72
Double-Jointed Dovetail Holder	73
Spring-Loaded Tension Clamps	73
Clamps With Dovetails, Swivel & Dovetail Stem Sets	74
Inside/Outside Diameter Groove Gages	75
Dial Indicator Depth Bases, Universal Dovetail Indicator Holder	75
Axial Support Bracket, Centering Holders	76
Contact Points	76-82
Asimeto Replacement Tips for Alternate Test Indicators	83-85
CMM Styli & Accessories	86-88
Magnetic Bases	89-91
Dial Gage Stands	92

## Digital Indicators

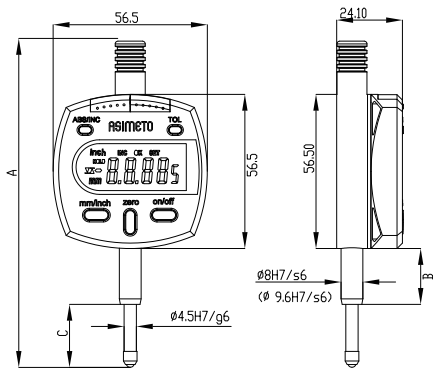
### Features:

- Fully Calibrated
- Tolerance measurement feature
- Inch/Metric conversion
- The maximum, minimum, or runout value can be displayed during measurement
- Come with long form calibration certificates

- Absolute and incremental measuring modes
- SR44 battery
- Flat Back (attached) and Lug Back supplied
- 3/8" stem diameter for inch models and 8mm stem diameter for metric models
- The IP65 has a 330 deg. screen rotation

### Standard

Range	Resolution	Accuracy	Code No.
<b>Inch</b>			
0-0.5" / 0-12.5mm	.00005" / 0.001mm	±0.0003" / ±0.007mm	7405955
0-0.5" / 0-12.5mm	.0005" / 0.01mm	±.0008" / ±0.02mm	7405951
0-1" / 0-25mm	.0005" / 0.01mm	±.0012" / ±0.03mm	7405011
0-1" / 0-25mm	.00005" / 0.001mm	±.0002" / ±0.005mm	7405015
0-2" / 0-50mm	.0005" / 0.01mm	±.0012" / ±0.02mm	7405021
<b>Metric</b>			
0-0.5" / 0-12.5mm	.0005" / 0.01mm	±.0008" / ±0.02mm	7405950
0-1" / 0-25mm	.0005" / 0.01mm	±.0012" / ±0.03mm	7405010
0-1" / 0-25mm	.00005" / 0.001mm	±.0002" / ±0.005mm	7405014



Range Inch/Metric	A mm	B mm	C mm
0-0.5"/0-12.5mm	122	26	24
0-1"/0-25mm	174	47	41
0-2"/0-50mm	248	71	61

## SPC Data Output Cable



Code
7900200

## IP65 Digital Indicators

Range	Resolution	Accuracy	Code No.
<b>Inch</b>			
0-.5"	.0005"	±.0008"	7407013
0-1"	.0005"	±.0012"	7407023
0-2"	.0005"	±.0012"	7407033
0-.5"	.00005"	±.00016"	7407015
0-1"	.00005"	±.0002"	7407025
0-2"	.00005"	±.00025"	7407035

## SPC Data Output Cable



Code
7900070





## Digital Indicators With Analog Display

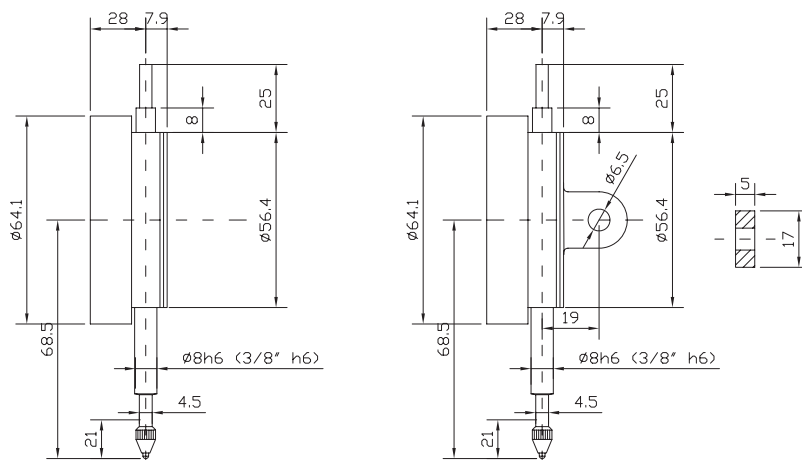
### Features:

- Fully Calibrated
- Tolerance measurement feature
- Inch/Metric conversion
- Come with long form calibration certificates



Indicators

Range	Resolution	Accuracy	Notes	Code No.
0-0.25" / 0-6.35mm	.00005" / 0.002mm	±.0003" / ±0.006mm	Flat Back (attached) and Lug Back supplied	7406251
0-.5" / 0-12.5mm	.00005" / 0.002mm	±.0003" / ±0.008mm	Flat Back (attached) and Lug Back supplied	7406051
0-1" / 0-25mm	.00005" / 0.002mm	±.0006" / ±0.015mm	Flat Back (attached) and Lug Back supplied	7406011



## Ultra Precision Dial Gages

### Features:

- Fully Calibrated
- Made in Germany, high precision dial gage commonly used in the automotive industry for checking fixtures.
- Limited dial gage movement eliminates error caused by multiple rotations of the dial gage that may be missed by the operator
- Effective shockproof system for gage protection
- Pinions and shafts are jeweled to increase gage longevity
- Easy zeroing of the dial to the gage master
- Safety cap prevents unintentional movement
- Stem and spindle made of stainless steel and provide measurement sensitivity
- Tolerance markers are provided for easy reading interpretation
- Repeatability: .000025"/0.0005mm
- Stem diameter: 3/8" or 8mm
- Come with long form calibration certificates



Indicators

Range	Resolution	Accuracy	Code No.
.004"	.00005"	.00006"	7422211
0.1mm	0.001mm	0.0012mm	7422212

## AGD1 Dial Indicators

### Features:

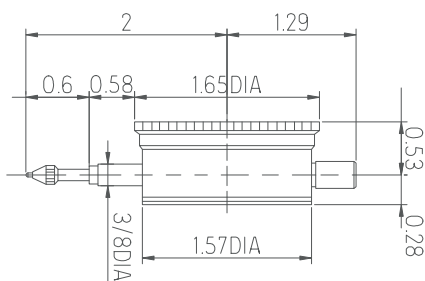
- Fully Calibrated
- Graduation: Inch: .001" Metric: 0.01mm
- Dial face dia. 1.65"
- Jeweled bearings
- Lug Back
- Come with long form calibration certificates



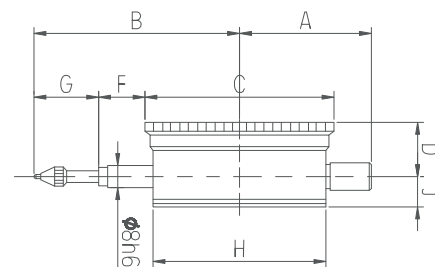
Range	Dial Reading	Range per Rev	Stem Dia.	Code No.
<b>Inch</b>				
0 - .25"	0-100	.1"	3/8"	7401061
0 - .25"	0-50-0	.1"	3/8"	7401063
0 - .25"	0-25-0	.05"	3/8"	7401065
<b>Metric</b>				
0-5mm	0-100	1mm	3/8"	7401051
0-5mm	0-50-0	1mm	3/8"	7401053
0-5mm	0-100	1mm	8mm	7401050

Indicators

Inch Dimension



Metric Dimension



Range Inch/Metric	A mm	B mm	C mm	D mm	F mm	G mm	H mm	J mm
0-.25"-0-5mm	30.6	46.4	42	13.5	14.7	10.7	40	7

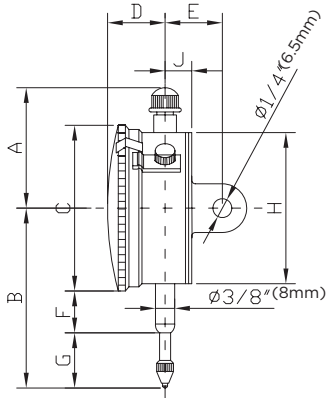
## AGD2 Dial Indicators

### Features:

- Fully Calibrated
- Dial face dia. 2.20"
- Lug Back
- Easy to read dial face
- Come with long form calibration certificates

Indicators

Range	Grad.	Dial Reading	Range per Rev.	Stem Dia.	Code No.
<b>Inch</b>					
0-.05"	.0001"	0-5-0	.01"	3/8"	7402013
0-.05"	.0001"	10-0	.01"	3/8"	7402011
0-.25"	.0005"	0-25-0	.05"	3/8"	7402065
0-.5"	.0005"	0-50	.05"	3/8"	7402125
0-1"	.0005"	0-50	.05"	3/8"	7402265
0-.25"	.001"	0-100	.1"	3/8"	7402061
0-.25"	.001"	0-50-0	.1"	3/8"	7402063
0-.5"	.001"	0-100	.1"	3/8"	7402121
0-.5"	.001"	0-50-0	.1"	3/8"	7402123
0-1"	.001"	0-100	.1"	3/8"	7402261
0-1"	.001"	0-50-0	.1"	3/8"	7402263
0-2"	.001"	0-100	.1"	3/8"	7402511
<b>Metric</b>					
0-3mm	.01mm	0-100	1mm	3/8"	7402031
0-3mm	.01mm	0-50-0	1mm	3/8"	7402033
0-5mm	.01mm	0-100	1mm	3/8"	7402051
0-10mm	.01mm	0-100	1mm	3/8"	7402101
0-10mm	.01mm	0-50-0	1mm	3/8"	7402103
0-20mm	.01mm	0-50-0	1mm	3/8"	7402201
0-25mm	.01mm	0-50-0	1mm	3/8"	7402253
0-1mm	.001mm	0-200	0.2mm	8mm	7402010
0-1mm	.001mm	0-100-0	0.2mm	8mm	7402012
0-10mm	.01mm	0-50-0	1mm	8mm	7402102
0-20mm	.01mm	0-100	1mm	8mm	7402202
<b>Shock Proof</b>					
0-5mm	.01mm	0-100	1mm	8mm	7402054
0-10mm	.01mm	0-100	1mm	8mm	7402108
0-20mm	.01mm	0-100	1mm	8mm	7402208
<b>IP54 Water Proof</b>					
0-0.4"	.001"	0-100	0.1"	3/8"	7402267
0-0.4"	.0005"	0-50	0.05"	3/8"	7402269



Range	A	B	C	D	E	F	G	H	J
Inch	Inch	Inch	Inch	Inch	Inch	Inch	Inch	Inch	Inch
0-.05"	1.76	2.39	2.28	0.64	0.76	0.69	0.56	2.11	0.32
0-.25"	1.48	2.54	2.28	0.64	0.76	0.69	0.71	2.11	0.32
0-.5"	1.48	2.74	2.28	0.64	0.76	0.69	0.91	2.11	0.32
0-1"	1.48	3.21	2.28	0.64	0.76	0.69	1.38	2.11	0.32
0-2"	4.73	5.5	2.28	0.7	0.76	2	2.34	2.11	0.32
Metric	mm	mm	mm	mm	mm	mm	mm	mm	mm
0-1mm	45	62	58	16.2	19.3	18.3	15	53.5	8.1
0-3mm	43.7	68.5	58	16.3	19	18.3	15	53.5	8.1
0-5mm	43.7	68.5	58	16.3	19	18.3	15	53.5	8.1
0-10mm	43.7	68.5	58	16.3	19	18.3	15	53.5	8.1
0-20mm	37.5	80.5	58	16.3	19.4	17.5	34	53.5	8.4
0-25mm	37.5	80.5	58	16.3	19.4	17.5	34	53.5	8.4

## Back Plunger Type Dial Indicators

**Features:**

- Fully Calibrated
- Graduation .001" / 0.01mm
- Easy to read dial face with dial revolution counter
- Back plunger type dial indicators are designed to be used in fixtures and other applications that the dial reading is best viewed from an axis parallel to that of the indicator measuring axis
- Come with long form calibration certificates



Range	Accuracy	Range/Rev.	Dial Dia.	Stem Dia.	Dial Reading	Code No.
1"	±.001"	1"	1.6"	Ø3/8"	0-100	7422111

## Digital Test Indicator

**Features:**

- Fully Calibrated
- Inch/Metric conversion
- With Ø8mm and Ø4mm dovetail stems
- Positive and negative measurement
- Tolerance setting
- With Ruby tipped contact point
- Come with long form calibration certificates



Range	Resolution	Accuracy	Code No.
.02" / 0.5mm	0.0001" / 0.001mm	.0005" / 0.009mm	7505010

• Available only while quantities last.

## Holding Bar Assembly



Shank Dia.	Length	Swivel Clamp	Code No.
5/16	4"	c/w Dovetail, Holds 3/8 & .157 Stem Dia.	7500212
3/8 x 7/16	4"	c/w Dovetail, Holds 8mm & 4mm Stem Dia.	7500216

Indicators

## Test Indicators

### Features:

- Fully Calibrated
- Jeweled bearings
- Inch units come with 3/8 & 8mm dovetail stems
- Metric unit comes with 6mm & 8mm dovetail stems
- Easy to read yellow face
- 32mm and 40mm face diameters available
- Come with long form calibration certificates



Vertical

### Full Set

Carbide tipped point  
Dia. 2mm

Steel point  
Dia. 1mm

Stem Dia.  
Metric 4mm  
Inch .157"

Swivel Clamp  
Metric for 4mm, &  
8mm Dia.  
Inch for 3/8", & .157" Dia.

Holding Bar  
Metric 9x9x100mm  
Inch .25"x.5"x4"

### Base Set

Stem Dia.  
Metric 8mm  
Inch 3/8"

Knurled  
Clamping  
Ring

Wrench

Horizontal

Range.	Grad.	Dial Reading	Accuracy	Type	Code No.
<b>Inch</b>					
.008"	.0001"	0-4-0	±.0001"	Horizontal	7501783
.008"	.0001"	0-4-0	±.0001"	Vertical	7501785
.03"	.0005"	0-15-0	±.0005"	Horizontal	7501733
.03"	.0005"	0-15-0	±.0005"	Vertical	7501735
<b>Inch Sets</b>					
.008"	.0001"	0-4-0	±.0001"	Horizontal	7501787
.03"	.0005"	0-15-0	±.0005"	Horizontal	7501738
<b>Metric - 32mm Face</b>					
0.2mm	0.002mm	0-100-0	±0.004mm	Horizontal	7501020
0.5mm	0.01mm	0-25-0	±0.01mm	Horizontal	7501050
0.8mm	0.01mm	0-40-0	±0.01mm	Horizontal	7501080
1.0mm	0.01mm	0-50-0	±0.01mm	Horizontal	7501100
0.8mm	0.01mm	0-40-0	±0.013mm	Vertical	7501084
<b>Metric - 40mm Face</b>					
0.5mm	0.01mm	0-25-0	±0.01mm	Horizontal	7502050
0.8mm	0.01mm	0-40-0	±0.01mm	Horizontal	7502080
<b>Metric Sets</b>					
0.5mm	0.01mm	0-25-0	±0.01mm	Horizontal	7501059
0.8mm	0.01mm	0-40-0	±0.01mm	Horizontal	7501087
1.0mm	0.01mm	0-50-0	±0.01mm	Horizontal	7501109

## Extended Range Dial Test Indicators

### Features:

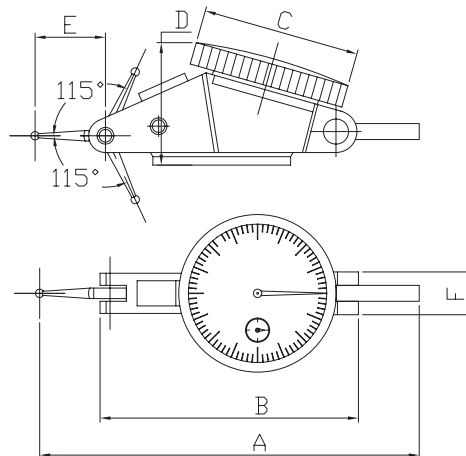
- Fully Calibrated
- Jeweled bearing design and resistant to magnetic fields
- Stem diameter: Inch: 3/8", Metric: 8mm
- Carbide contact point swivels 210°
- Come with long form calibration certificates



Range	Graduation	Dial Reading	Accuracy	Type	Code No.
<b>Inch</b>					
.060"	.001"	0-15-0	±.0012"	Horizontal w/ 30mm dial	7503061
.060"	.0005"	0-15-0	±0012"	Horizontal w/ 30mm dial	7503561
.060"	.0005"	0-15-0	±0012"	Horizontal w/ 38mm dial	7504561
.060"	.001"	0-15-0	±.0012"	Vertical w/ 30mm dial	7503063
.060"	.0005"	0-15-0	±0012"	Vertical w/ 30mm dial	7503563
.060"	.0005"	0-15-0	±0012"	Vertical w/ 38mm dial	7504563

Indicators

Horizontal



A	B	C	D	E	F
mm	mm	mm	mm	mm	mm
91	64	30/38	36	19.7	12.3

## Centering Indicators

### Features:

- Fully Calibrated
- Operating speed not to exceed 800 rpm
- Range: Internal: 5/32" - 12"  
External: Up to 12"
- Includes: 6 pc feeler set, center locating feeler
- Come with long form calibration certificates



Indicators

Dial Range	Graduation	Accuracy	Stem Dia.	Code No.
0-.15"	.0005"	±.0002"	0.375"	7469008

Description	Length	Capacity	Code No.
6 pc Feeler Set			7469011
ID Feeler	6"/150mm	12"/300mm	7469014
OD Feeler	6"/150mm	12"/300mm	7469017
Center Locating Feeler			7469018
Feeling Rod			7469019



## Extended Range Dial Test Indicator Sets #1

### Features:

- Double the range of most indicators
- Jeweled movement

### Standard Accessories:

- Calibration certificate, instruction manual, Warranty card, indicator, wrench
- Height Gage Bar with Swivel Clamp w/ 5/32", 7/32", 1/4" holes
- Axial Support with 3/8" Stem and Dovetail
- Reduction Sleeve 3/8" to 5/32"
- Two dovetail stems, 3/8" and 5/32"
- Three contact points: 0.4" (hardened steel), .08", .12" (Tungsten Carbide) x 5/8" long



Range	Graduation	Accuracy	Dial Dia.	Indicator	Code No.
.060"	.0005"	±.0012"	38mm	Horizontal (7504561)	7504811
.060"	.0005"	±.0012"	30mm	Horizontal (7503561)	7504813
.060"	.001"	±.0012"	30mm	Horizontal (7503061)	7504815

Indicators

## Extended Range Dial Test Indicator Set #2

### Features:

- Double the range of most indicators
- Jeweled movement

### Standard Accessories:

- Calibration certificate, instruction manual, Warranty card, indicator, wrench
- Xtra-Mag magnetic base with 2 universal ball sockets
- Micro-fine adjustment screw
- 3-9/16" extension arm
- Two dovetail stems, 3/8" and 5/32"
- Three contact points: 0.4" (hardened steel), .08", .12" (Tungsten Carbide) x 5/8" long



Range	Graduation	Accuracy	Dial Dia.	Indicator	Code No.
.060"	.0005"	±.0012"	38mm	Horizontal (7504561)	7504821

## Float N Lock Positioners



**Features:**

- An excellent dial indicator holder.
- All metal parts used.
- Precision angled bearings interface and lock the ball precisely with a small turn of the locking knob. Excellent rigidity factor.
- Self-compensating, no need to disassemble to re-establish tension (as with other designs).
- Right angle notch (for 90° positioning) can be swung to any point 360° and then locked.

Description	Code No.
Mounting Bottom Holes 3/8"-16	7605700
Magnetic Base (90 lb. Pull) 3-1/4" x .435" High	7605710

Indicators

## Zero Set Holder



**Features:**

- The ZeroSet fits all dovetail equipped Indicators, and is used for checking set-ups.
- Checks the alignment of the centers of round materials in relation to the cutting head.
- Speeds set up operations enormously.
- Equipped with a spindle post with 1/4", 3/8", and 1/2" diameters, and has an effective measuring range of 3/8" thru 9".
- Test indicator is not included.

Description	Code No.
Zero Set Holder	7500150

## Zero Set Universal Attachment



**Features:**

- For use with any dovetail test indicator allowing a multitude of positioning possibilities in either direction
- Angles up to 90 degrees on either side.
- Allows for an infinite range of measurements over an extensive area.
- Test indicator is not included.

Description	Code No.
Zero Set Universal Attachment	7500160

## Double-Jointed Dovetail Holder

**Features:**

- Brass Setting Nut allows orientation of the indicator in a full 360 degrees, with secure clamping.
- It also allows a fine adjustment for the indicator of .060 up and down.
- 3/8" diameter body for secure clamping
- 4-1/2" overall reach
- Fits all dovetail equipped Indicators



Shank Dia.	Overall Length	Code No.
3/8"	4-3/4"	7500270

Indicators

## Spring-Loaded Tension Clamps

**Features:**

- A complete range of sizes for all applications
- Used for setting up and fixturing all types of instruments
- Available with clamping ranges from 5/32" to 1/2"
- Overall length for all sizes is 1-3/4"
- Steel with Black Oxide finish
- New Stainless Steel sizes also available



Clamp Hole	End Hole	Steel Code No.	Stainless Steel Code No.
5/16"	5/32"	7500300	7500400
5/16"	1/4"	7500301	7500401
3/8"	1/4"	7500302	7500402
1/4"	1/4"	7500303	7500403
5/16"	5/16"	7500304	7500404
3/8"	5/16"	7500305	7500405
3/8"	3/8"	7500306	7500406
1/2"	3/8"	7500307	7500407
1/2"	5/16"	7500308	7500408

## Clamps With Dovetails

**Features:**

- For any Indicator equipped with rods or dovetails.
- Used to fixture Indicators on Surface Gages, Gage Stands, Magnetic Bases, Height Gages, Transfer Stands, and many others.
- Steel with Black Oxide finish.



7500363



7500364



7500360

Mounting Hole	Code No.
3/8" and 7/32"	7500360
3/8" and 1/4"	7500361
7/32" and 5/32"	7500363
1/4" and 1/8" plus adjustable hole up to 1/4"	7500364

Indicators

## Swivel Clamp



Description	Code No.
For 8mm & 6mm Dia. Dovetail Stem	7500252

## Dovetail Stem Sets



Size	Code No.
3/8"	7500311
5/32"	7500313
8mm	7500310
6mm	7500312

## Inside/Outside Diameter Groove Gages

**Features:**

- A quick way to inspect steps, counterbores, keyways and face O-ring grooves
- Available in 0-6" and 6-12" ranges
- Black Anodized Aluminum



Range	Code No.
0" - 6"	7500370
6" - 12"	7500380

## Dial Indicator Depth Bases



**Features:**

- Ground flat and parallel on both top and bottom surfaces.
- Set screw in bases holds Indicator in place.
- Black Oxide finish.

Base Length	Dia. of Hole	Code No.
65mm	3/8"	7500391
100mm	3/8"	7500393

## Universal Dovetail Indicator Holder



**Features:**

- 1/4" shank diameter with 3" reach.
- This spring loaded holder locks in any of (4) 90 degree quadrants, and allows many variable angles of holding.
- Brass contact will not scar indicator.
- Fits all dovetail equipped indicators.
- Stainless Steel

Description	Code No.
Universal Dovetail Indicator Holder	7500410

## Axial Support Bracket



### Features:

- Used for mounting Indicators with dovetails or rods.
- 3/8" diameter body for secure clamping, with 5-1/2" overall reach.
- Bends in many directions

Shank Dia.	Overall Length	Code No.
3/8"	5-1/4"	7500260

## Centering Holders



- Allows large diameter cylinder or holes to be centered

Description	Code No.
8mm Dia. Stem	7500350
.25" Dia. Stem	7500351

## Contact Points

- Carbide or Steel Ball



Ball Dia.	Thread	Tip Length	Indicator Range/Resolution	Code No.
<b>Carbide Ball</b>				
Ø2mm	M2 x 0.4mm	21.45mm	1mm/0.01mm	7500122
Ø3mm	M2 x 0.4mm	21.95mm	1mm/0.01mm	7500132
Ø2mm	M2 x 0.4mm	14.7mm	0.2mm/0.002mm	7500722
Ø2mm	M1.6 x 0.35mm	21.8mm	0.4mm/0.002mm	7500822
<b>Steel Ball</b>				
Ø1mm	M2 x 0.4mm	20.95mm	1mm/0.01mm	7500111
Ø1mm	M2 x 0.4mm	15.9mm	0.03"/0.0005"	7500611
Ø1mm	M1.6 x 0.35mm	21.3mm	1.6mm/0.01mm	7500811
Ø3mm	M1.6 x 0.35mm	22.3mm	0.06"/0.0005"	7500831

## Ball Indicator Points

### Features:

- Precision contact points for use on standard travel dial indicators.
- Fits all AGD Group 1, 2, 3 and 4 indicators.



Ball Dia.	Length	Body Dia.	Thread	Code No.
<b>Carbide</b>				
2mm	1/4"	0.187	4-48	7477001
2mm	3/4"	0.187	4-48	7477021
2mm	1"	0.187	4-48	7477031
3mm	1/4"	0.187	4-48	7477041
3mm	1/2"	0.187	4-48	7477051
3mm	3/4"	0.187	4-48	7477061
4mm	1/4"	0.187	4-48	7477081
4mm	3/4"	0.187	4-48	7477101
3mm	1/4"	0.187	M2.5	7477040
3mm	1/2"	0.187	M2.5	7477050
3mm	3/4"	0.187	M2.5	7477060
4mm	1/4"	0.187	M2.5	7477080
4mm	1/2"	0.187	M2.5	7477090
4mm	3/4"	0.187	M2.5	7477100
<b>Stainless Steel</b>				
7/32"	7/32"	5/8"	4-48	7477163
7/32"	7/32"	13/16"	4-48	7477173
7/32"	7/32"	7/8"	4-48	7477183
3/16"	3/16"	1"	4-48	7477193
<b>Ruby Ball</b>				
3mm	1/4"	0.187	4-48	7477161
3mm	3/4"	0.187	4-48	7477181
3mm	1"	0.187	4-48	7477191
4mm	1/4"	0.187	4-48	7477201
4mm	1/2"	0.187	4-48	7477211
4mm	3/4"	0.187	4-48	7477221
3mm	1/4"	0.187	M2.5	7477160
3mm	1/2"	0.187	M2.5	7477170
3mm	3/4"	0.187	M2.5	7477180
3mm	1"	0.187	M2.5	7477190
4mm	1/4"	0.187	M2.5	7477200
4mm	1/2"	0.187	M2.5	7477210
4mm	3/4"	0.187	M2.5	7477220

## Flat & Cone Indicator Points

**Features:**

- Each point is carefully manufactured of Stainless Steel.
- 4-48 threads for use in AGD 1, 2, 3, 4 indicators.

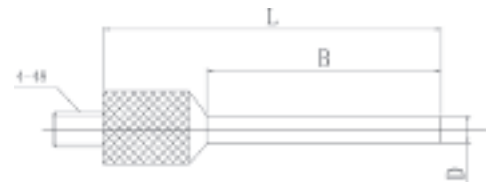


Indicators

Body Dia.	Length	Code No.
<b>Flat</b>		
5/16"	0.175"	7477033
7/32"	0.175"	7477043
7/32"	1/4"	7477053
7/32"	3/8"	7477063
7/32"	1/2"	7477073
7/32"	5/8"	7477083
7/32"	3/4"	7477093
7/32"	7/8"	7477103
7/32"	1-1/4"	7477123
<b>Cone</b>		
7/32"	1/2"	7477203
7/32"	7/8"	7477233
7/32"	1"	7477243

## Flat Carbide Needle Indicator Points

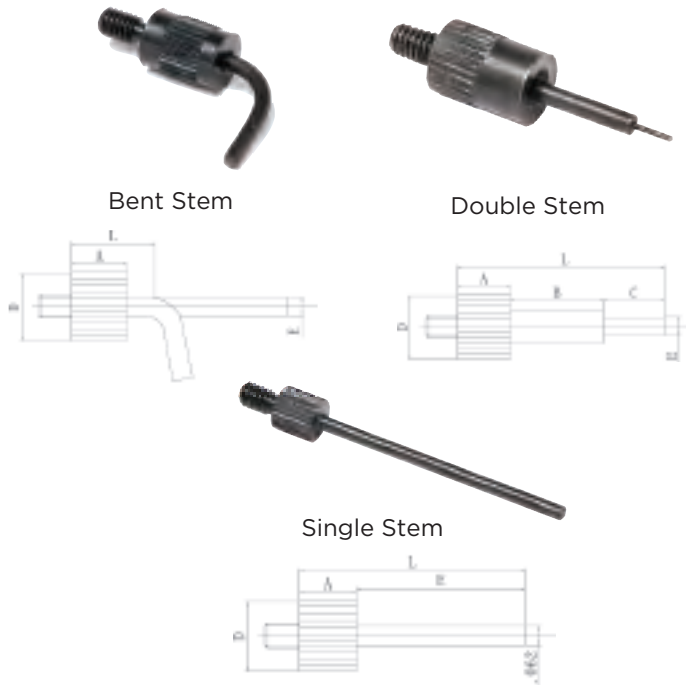
- 4-48 thread



D	B	L	Code No.
0.015	0.12	0.4	7477015
0.031	0.12	0.4	7477025
0.031	0.5	0.78	7477035
0.062	0.5	0.8	7477045
0.062	1	1.3	7477055
0.078	1	1.3	7477065



## Stem Indicator Points



**Features:**

- Each point is carefully manufactured of Stainless Steel.
- 4-48 threads for use in AGD 1, 2, 3, 4 indicators.

Type	D	A	E	L	C	B	Code No.
Bent Stem	7/32"	5/16"	1/16"	7/16"			7477017
Double Stem	7/32"	1/4"	0.023"	.960"	.1"	.585"	7477037
Double Stem	7/32"	1/4"	0.023"	.960"	.235"	.47"	7477047
Single Stem	3/16"	3/16"	1-5/32"	1-5/32"			7477057

Indicators

## Contact Point Adapter



**Features:**

- Point is 7/32" diameter, 1/2" length
- Steel, soft and Black Oxide plated
- Metric to English conversion point

Description	Code No.
4-48 Internal Threads to M2.5 External Threads	7477381

## Straight Metric Indicator Stem Bushing



**Features:**

- Accepts 8mm stem, converts to 3/8" diameter stem.
- Straight bushing, no head.
- .500" length.
- Brass, Nickel Plated.

Description	Code No.
Straight Metric Indicator Stem Bushing	7500320

## 6pc Dial Indicator Contact Point Set



**Features:**

- A top quality contact assortment for the professionally equipped dial indicator.
- Thread: 4-48.

Set Contents	Qty	Set Code No.
.220" Convex Point	1	7477068
.323" Convex Point	1	
.394" Convex Point	1	
.323" Flat Points	1	
.394" Flat Points	1	
.984" Taper Point	1	

Indicators

## 10pc Dial Indicator Contact Point Set



**Features:**

- A top quality contact assortment for the professionally equipped dial indicator. Includes the following contacts, secured in a machined ring suitable for workbench or flat storage.
- Thread: 4-48.

Set Contents	Qty	Set Code No.
3/8" CNC Qualified Roller Bearing	1	7477108
1/2" CNC Qualified Roller Bearing	1	
3mm Ruby Tip x 1/2" long	1	
Flat Steel Point 7/32" diameter X 1/4" long	1	
Flat Steel Point 7/32" diameter X 1/2" long	1	
Flat Steel Point 7/32" diameter X 3/4" long	1	
Flat Steel Point 7/32" diameter X 1-1/4" long	1	
Flat Contact 1/4" wide	1	
Flat Contact 1/2" wide	1	
.060 Steel Ball Tip, 5/16" long	1	

## 11pc Dial Indicator Contact Point Set



**Features:**

- The most popular Indicator points, including Flat, Ball, Cone, and Stems.
- Fits all AGD 1, 2, 3 and 4 style drop indicators.
- All points have 4-48 thread and are Steel with Black Oxide Plating.

Set Contents	Qty	Set Code No.
Flat Point 7/32" Dia X .250 Long	1	7477118
Flat Point 7/32" Dia X .380 Long	1	
Flat Point 7/32" Dia X .500 Long	1	
Flat Point 7/32" Dia X .625 Long	1	
Flat Point 7/32" Dia X .875 Long	1	
Flat Point 7/32" Dia X 1.250 Long	1	
Ball Point 7/32" Dia X .225 Long	1	
Ball Point 7/32" Dia X .625 Long	1	
Cone Point 7/32" Dia X .750 Long	1	
Cone Point 7/32" Dia X .625 Long	1	
Bent Stem Point 1/16" Dia X .312 Long	1	

Indicators

## 14pc Dial Indicator Contact Point Set



**Features:**

- A top quality contact assortment for the professionally equipped dial indicator. Includes the following contacts, secured in a machined ring suitable for workbench or flat storage.
- Thread: 4-48.

Set Contents	Qty	Set Code No.
3/8" Ground Flat Bottom Contact, 3/8" Long	1	7477148
1/2" Ground Flat Bottom Contact, 3/8" Long	1	
1/2" Button Contact, Steel Black Oxide	1	
3/8" Button Contact, Steel Black Oxide	1	
1/2" Long 90 Degree Cone Point Contact, Steel Black Oxide	1	
1/16" Ball Contact, 1/4" Long, Steel Black Oxide	1	
5/8" Long Tapered Contact, Steel Black Oxide	1	
Button Contact, 13/64" Dia X 5/32" Long, Steel Black Oxide	1	
Shock Absorbing Contact Point	1	
9/32" Long Cone Point, Steel Hard, Black Oxide	1	
1" Long Polished Radius Point, Steel Hard Black Oxide	1	
3/4" Long Polished Radius Point, Steel Black Oxide	1	
1/2" Long Polished Radius Point, Steel Black Oxide	1	
1/4" Long Polished Radius Point, Steel Black Oxide	1	

## 22pc Dial Indicator Contact Point Set

### Features:

- The most popular indicator points, including Flat, Ball, Cone, and Stems.
- Fits all AGD 1, 2, 3 and 4 style drop indicators.
- All points have 4-48 thread and are Steel with Black Oxide Plating.



Indicators

Set Contents	Qty	Set Code No.
Flat Point 7/32" Dia X .175 Long	1	7477228
Flat Point 7/32" Dia X .250 Long	1	
Flat Point 7/32" Dia X .380 Long	1	
Flat Point 7/32" Dia X .500 Long	1	
Flat Point 7/32" Dia X .625 Long	1	
Flat Point 7/32" Dia X .750 Long	1	
Flat Point 7/32" Dia X .875 Long	1	
Flat Point 7/32" Dia X .895 Long	1	
Flat Point 7/32" Dia X 1.250 Long	1	
Ball Point 7/32" Dia X .225 Long	1	
Ball Point 7/32" Dia X .395 Long	1	
Ball Point 7/32" Dia X .625 Long	1	
Ball Point 7/32" Dia X .875 Long	1	
Ball Point 7/32" Dia X .825 Long	1	
Cone Point 7/32" Dia X .875 Long	1	
Cone Point 7/32" Dia X .750 Long	1	
Cone Point 7/32" Dia X .625 Long	1	
Cone Point 7/32" Dia X .500 Long	1	
Bent Stem Point 1/16" Dia X .312 Long	1	
Double Stem Point 1/16" Dia X .935 Long	1	
Stem Point 1/16" Dia X 1.350 Long	1	
Double Stem Point 1/16" Dia X .955 Long	1	

## Dial Indicator Extension Rods & Sets

### Features:

- Use to gain extra length.
- 7/32" diameter points.
- Stainless Steel.



Length	Thread	Code No.
1/2"	4-48	7477107
3/4"	4-48	7477117
1"	4-48	7477127
1-1/4"	4-48	7477137
1-1/2"	4-48	7477147
1-3/4"	4-48	7477157
2"	4-48	7477167
2-1/2"	4-48	7477177
3"	4-48	7477187
4"	4-48	7477197
6"	4-48	7477207
1/2"	M2.5x0.45	7477106
3/4"	M2.5x0.45	7477116
1"	M2.5x0.45	7477126
1-1/4"	M2.5x0.45	7477136
1-1/2"	M2.5x0.45	7477146
1-3/4"	M2.5x0.45	7477156
2"	M2.5x0.45	7477166
2-1/2"	M2.5x0.45	7477176
3"	M2.5x0.45	7477186
4"	M2.5x0.45	7477196
6"	M2.5x0.45	7477206
<b>Sets</b>		
1", 2", 3" in each set	4-48	7477038
	M2.5x0.45	7477048

## Asimeto Replacement Tips for Alternate Test Indicators

### Replacement Tips for MITUTOYO Test Indicators

**Note:**

- Available only while quantities last.

Ball Dia.	Tip Length	Thread	Code No.
<b>Steel Ball</b>			
.040"	0.7"	M1.7 x 0.35	7478122
.080"	0.7"	M1.7 x 0.35	7478132
.120"	0.7"	M1.7 x 0.35	7478142
.040"	1"	M1.7 x 0.35	7478402
.080"	1"	M1.7 x 0.35	7478412
.120"	1"	M1.7 x 0.35	7478422
.040"	1.5"	M1.7 x 0.35	7478472
.080"	1.5"	M1.7 x 0.35	7478482
.120"	1.5"	M1.7 x 0.35	7478492
<b>Carbide Ball</b>			
.040"	0.5"	M1.7 x 0.35	7478152
.080"	0.7"	M1.7 x 0.35	7478322
.080"	1"	M1.7 x 0.35	7478572

### Replacement Tips for STARRETT Test Indicators

- Metric tips fit model numbers: 708, 708M, 709, 709M Series
- Inch tips fit model numbers: 811, 811M Series

Ball Dia.	Tip Length	Starrett Code No.	Code No.
<b>Steel Ball</b>			
.032"	5/8"	PT23062	7478441
.078"	5/8"	PT22315	7478461
.032"	1-5/16"	PT23064	7478481
.078"	1-5/16"	PT23011	7478501
<b>Carbide Ball</b>			
1mm	13/16"	PT23942	7478401
2mm	13/16"	PT23914	7478411

**Note:** • Available only while quantities last.

### Replacement Tips for PEACOCK Test Indicators

**Note:**

- Available only while quantities last.

Ball Dia.	Tip Length	Thread	Code No.
<b>Carbide Ball</b>			
.038"	3/4"	M1.7 x 0.35	7478631
.078"	3/4"	M1.7 x 0.35	7478641
.038"	1-3/4"	M1.7 x 0.35	7478661
.078"	1-3/4"	M1.7 x 0.35	7478671
.125"	1-3/4"	M1.7 x 0.35	7478681



Indicators

## Asimeto Replacement Tips for Alternate Test Indicators

### Replacement Tips for INTERRAPID Test Indicators

**Note:**

- Available only while quantities last.

Ball Dia.	Tip Length	Thread	Code No.
<b>Steel Ball</b>			
.031"	11/16"	M1.7 x 0.35	7478253
.060"	11/16"	M1.7 x 0.35	7478263
.080"	11/16"	M1.7 x 0.35	7478273
.031"	13/16"	M1.7 x 0.35	7478313
.060"	13/16"	M1.7 x 0.35	7478323
.080"	13/16"	M1.7 x 0.35	7478333
<b>Carbide Ball</b>			
.015"	11/16"	M1.7 x 0.35	7478373
.031"	11/16"	M1.7 x 0.35	7478383
.060"	11/16"	M1.7 x 0.35	7478393
.080"	11/16"	M1.7 x 0.35	7478403
.093"	11/16"	M1.7 x 0.35	7478413
.031"	13/16"	M1.7 x 0.35	7478463
.060"	13/16"	M1.7 x 0.35	7478473
.080"	13/16"	M1.7 x 0.35	7478483
.031"	1.450"	M1.7 x 0.35	7478523
.080"	1.450"	M1.7 x 0.35	7478533
.015"	1-3/4"	M1.7 x 0.35	7478563
.031"	1-3/4"	M1.7 x 0.35	7478573
.080"	1-3/4"	M1.7 x 0.35	7478583
.080"	2-3/4"	M1.7 x 0.35	7478613
.100"	2-3/4"	M1.7 x 0.35	7478623
<b>Ruby Ball</b>			
2mm	11/16"	M1.7 x 0.35	7478633
2mm	13/16"	M1.7 x 0.35	7478643
2mm	1-3/4"	M1.7 x 0.35	7478653



Indicators

### Replacement Tips for TECLOCK Test Indicators

**Note:**

- Available only while quantities last.

Ball Dia.	Tip Length	Thread	Code No.
<b>Steel Ball</b>			
.038"	3/4"	M1.7 x 0.35	7478040
.125"	3/4"	M1.7 x 0.35	7478060
.038"	1-1/2"	M1.7 x 0.35	7478070
<b>Ruby Ball</b>			
2mm	3/4"	M1.7 x 0.35	7478110
2mm	1-1/2"	M1.7 x 0.35	7478120

## Asimeto Replacement Tips for Alternate Test Indicators

### Replacement Tips for FOWLER Test Indicators

**Note:**

- Available only while quantities last.

Ball Dia.	Tip Length	Thread	Code No.
<b>Carbide Ball</b>			
.040"	.780"	M1.6 x 0.35	7478081
.080"	.780"	M1.6 x 0.35	7478091

### Replacement Tips for COMPAC Test Indicators

**Note:**

- Available only while quantities last.

Ball Dia.	Tip Length	Thread	Code No.
<b>Carbide Ball</b>			
.080"	.720"	M1.6 x 0.35	7478410
.080"	1.44"	M1.6 x 0.35	7478430

### Tips for BROWN & SHARPE Test Indicators

**Note:**

- Available only while quantities last.

Ball Dia.	Tip Length	Thread	Code No.
<b>Steel Ball</b>			
.040"	1/2"	M1.4 x 0.3	7478200
.080"	1/2"	M1.4 x 0.3	7478210
.120"	1/2"	M1.4 x 0.3	7478220
.080"	1-7/16"	M1.4 x 0.3	7478230
<b>Carbide Ball</b>			
.015"	1/2"	M1.4 x 0.3	7478240
.040"	1/2"	M1.4 x 0.3	7478250
.080"	1/2"	M1.4 x 0.3	7478260
.120"	1/2"	M1.4 x 0.3	7478270
.080"	11/16"	M1.4 x 0.3	7478280
.015"	1-7/16"	M1.4 x 0.3	7478290
.040"	1-7/16"	M1.4 x 0.3	7478300
.080"	1-7/16"	M1.4 x 0.3	7478310
.120"	1-7/16"	M1.4 x 0.3	7478320
<b>Ruby Ball</b>			
2mm	1/2"	M1.4 x 0.3	7478330
2mm	1-7/16"	M1.4 x 0.3	7478340



Indicators

## CMM Styli - M2 Thread



Indicators

Ball Dia.	Length	Renishaw Functional Equivalent	Carbide Probes	SPI	Q Mark	Code No.
1mm Ruby	10mm		265-1R	12-620-1	TM2-1010	7478016
3mm Ruby	10mm	PS1R A/5000/3604		14-988-0	TM2-3010	7478046
6mm Ruby	10mm	PS14R A/5000/4156	265-6R	12-625-0	TM2-6010	7478056
1mm Ruby	20mm	PS23R A/5000/7808	266-1R	12-621-9	TM2-1020-07	7478076
2mm Ruby	20mm	PS2D a/5000/3603	266-2R	12-622-7	TM2-2020	7478096
3mm Ruby	20mm	PS16R A/5000/4160	266-3R	12-623-5	TM2-4020	7478106
4mm Ruby	20mm	PS17R A/5000/4161	266-4R	12-624-3	Tm2-4020	7478116
1.5mm Ruby	40mm					7478136
3mm Ruby	40mm					7478146

## CMM Styli - M3 Thread

Ball Dia.	Length	Renishaw Functional Equivalent	Carbide Probes	Q Mark	Code No.
1mm Ruby	10mm				7478206
1mm Ruby	20mm	PS1-9R A/5000/3551	261-1R	TM3-1020	7478236
3mm Ruby	20mm	PS1-11R A/5000/3553	261-3R	TM3-3020	7478256

## CMM Extensions - M2 Thread

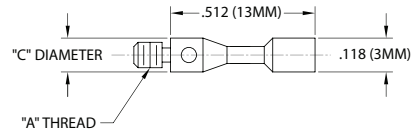
- Stainless Steel



Length	Diameter	Renishaw Functional Equivalent	Carbide Probes	SPI	Q Mark	Code No.
10mm	3mm	SE4 M/5000/3647	265-E10	12-631-8	VM2-10	7478616
20mm	3mm	SE5 M/5000/3648	265-E20	12-632-6	VM2-20	7478626
30mm	3mm	SE6 M/5000/4162	265-E30	12-633-4	VM2-30	7478636
40mm	3mm	SE18 M/5000/7779	266-E40	14-983-1	VM2-40	7478656
60mm	3mm			14-984-9		7478666

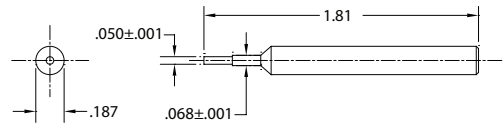


## Cylinder Styli



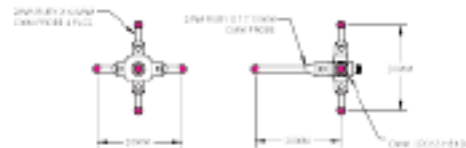
Thread	Cylinder Dia.	Styli Length	Base Dia.(C)	Code No.
M2 x 0.4	3mm	13mm	3mm	7478506

## CMM Styli Universal Wrench



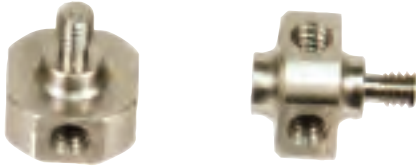
Description	Code No.
CMM Styli Universal Wrench	7478556

## CMM Star Styli Six Pcs Set

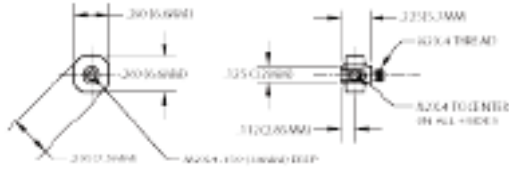


Set Contains	Qty	Description	Set Code No.
CMM Crosshead	1	6.6mm x 6.6mm x 5.7mm, M2 X 0.4	7478536
Ruby Ball Probe	1	2mm x 17.2mm	
Ruby Ball Probe	4	2mm x 6.6mm	

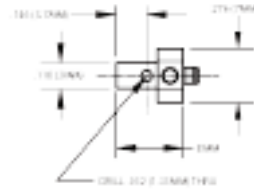
## CMM Crossheads



7478586



7478566

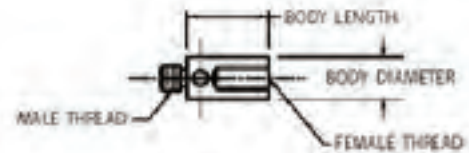


Indicators

Description	Code No.
CMM Crosshead	7478586
CMM Crosshead with 3mm Shank	7478566

## CMM Adaptor Tips

- Converts your probe head to a different thread size, allowing multiple uses of CMM Styli or accessories.



Male Length	Female Length	Body Dia.	Body Length	Renishaw Functional Equivalent	Carbide Probes	Fowler	Q Mark	Code No.
M3 x 0.5	M2 x 0.4	4mm	5mm	SA3 M/5000/4163	261-AD5	14-986-4	RM3-M2	7478906
M2 x 0.4	M3 x 0.5	4mm	10mm	SA2 M/5000/4164	265-AD7	14-979-9	RM2-M3	7478916
M4 x 0.7	M2 x 0.4	6.3mm	5mm	SA5 M/5000/6622	399	14-980-7		7478926
M2 x 0.4	M4 x 0.7	6.3mm	15mm			14-981-5	RM4-M2	7478936

## Articulating Arm Magnetic Bases

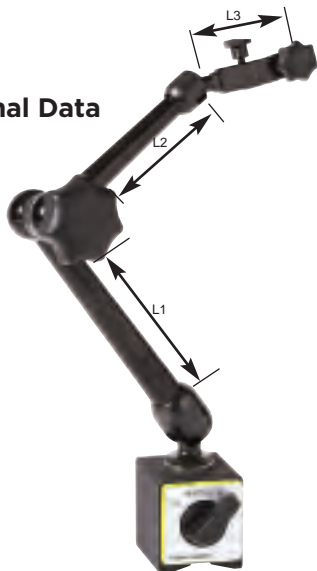


- Accepts test indicators with dovetail clamping mechanism
- Dial gages can be held by the 3/8" or 8mm diameter stem or by the lug backing plate
- Arm has 3 articulating joints that can be locked with the single hand knob
- The rotary knob switches natural magnet on or off
- The precision surfaces and the bottom V are securely fastened to the ferrous work piece or machine table when the rotary knob is in the on position
- Slot: 6.5mm
- Working Angle 150°

Magnetic Power	Magnetic Base (L x W x H)	Height	Code No.
30 kg	36 x 30 x 35mm	195mm	7602011
80 kg	60 x 50 x 55mm	350mm	7602021
80 kg	60 x 50 x 55mm	440mm	7602031
130 kg	117 x 50 x 55mm	690mm	7602051
80 kg	60 x 50 x 55mm	390mm	7602310

Indicators

### Dimensional Data



Model	L1	L2	L3
Type I	65mm	55mm	60mm
Type II	110mm	110mm	60mm
Type III	150mm	140mm	60mm
Type IV	345mm	230mm	60mm

## Hydraulic Magnetic Bases



- Accepts test indicators with dovetail clamping mechanism
- Dial gages can be held by the 3/8" or 8mm diameter stem or by the lug backing plate
- The rotary knob switches natural magnet on or off
- The precision surfaces and the bottom V are securely fastened to the ferrous work piece or machine table when the rotary knob is in the on position
- Working Angle 150°

Magnetic Power	Magnetic Base (L x W x H)	Height	Code No.
80 kg	60 x 50 x 55mm	385mm	7603010
100 kg	73 x 50 x 55mm	685mm	7603020

Indicators

## Permanent Magnetic Base



- With permanent magnetic base, without On/Off switch
- Dovetail groove included

Magnetic Power	Main Body	Main Stem Length	Dia. of Hole	Slot	Code No.
17 kg	Ø30 x 25mm	85mm	Ø6mm	6mm	7601120

## Forced Locking Magnetic Bases



- Accepts test indicators with dovetail clamping mechanism
- Dial gages can be held by the 3/8" or 8mm diameter stem or by the lug backing plate
- New design, holding more solid and reliable, more stable performance, higher accuracy
- The precision surfaces and the bottom V are securely fastened to the ferrous work piece or machine table, when the rotary knob is in the on position

Magnetic Power	Magnetic Base (L x W x H)	Main Stem	Sub Pole	Code No.
80 kg	60 x 50 x 55mm	Ø12 x 180mm	Ø10 x 160mm	7604010
100 kg	117 x 50 x 55mm	Ø18 X 350mm	Ø16 x 200mm	7604040

Indicators

## Magnetic Bases



### Features:

- For Indicators with 3/8 stems and or Lug backs with 1/4 hole dia.
- On/Off switch
- 132 lbf magnetic pull

Model	Pull Action	Code No.
With 6" Rod and Universal clamp	132 lbf	7601011
With 6" Adjustable Rod / Fine Adjustment	132 lbf	7601021

## Dial Gage Stands

- Both column and metal stage are hardened and precision lapped
- With  $\varnothing 8\text{mm}$  H7 clamping hole
- Measuring range 100mm



7670010



7670110

Size	Flatness	Pillar	Verticality	Code No.
$\varnothing 50\text{mm}$	0.002mm	207 x $\varnothing 35\text{mm}$	0.03mm	7670010
60 x 68mm	0.002mm	207 x $\varnothing 35\text{mm}$	0.03mm	7670110
98 x 115mm	0.005mm	235 x $\varnothing 35\text{mm}$	0.05mm	7670120

# Depth, Height & Bore Gages

Digital Interchangeable Rod Type Depth Gages .....	.94
Dial Interchangeable Rod Type Depth Gages .....	.94
Digital Depth Calipers .....	.95
Digital Tire Depth Gage .....	.95
Digital Depth Calipers With Single Hook .....	.96
Digital Depth Calipers With Double Hook .....	.96
Vernier Depth Calipers .....	.97
Digital Bore Gages .....	.98
Dial Bore Gages & Gage Extensions .....	.99
Double Beam Digital Height Gages w/ Hand Wheel .....	.100
Double Beam Digit Counter Height Gages .....	.100
Single Beam Digital Height Gages With Hand Wheel .....	.101
Digital Height Gages .....	.101
Vernier Height Gages .....	.102
Surface Plate Cleaners .....	.102

## Digital Interchangeable Rod Type Depth Gages

**Features:**

- Fully Calibrated
- The total measuring range is accomplished with threaded depth rods in 1" or 20mm intervals
- The base surface is precisely finished and hardened for accurate repeatable measurements
- Inch/Metric conversion
- Stroke 12.7mm
- Includes 10 rods
- Come with long form calibration certificates



Range	Resolution	Accuracy	Base Length	Code No.
0-4"/100mm	.0005"/0.01mm	±.001"/0.02mm	63x17mm	7475040
0-4"/100mm	.0005"/0.01mm	±.001"/0.02mm	101.5x17mm	7475042

Depth, Height & Bore Gages

## Dial Interchangeable Rod Type Depth Gages

**Features:**

- Fully Calibrated
- The total measuring range is accomplished with threaded depth rods in 1" or 20mm intervals
- The base surface is precisely finished and hardened for accurate repeatable measurements
- Stroke 1"
- Includes 4 rods
- Come with long form calibration certificates



Range	Graduation	Accuracy	Base Length	Code No.
0-4"	.001"	±.002"	2.5"x.63"	7473041
0-4"	.001"	±.002"	4"x.63"	7473043



## Digital Depth Calipers

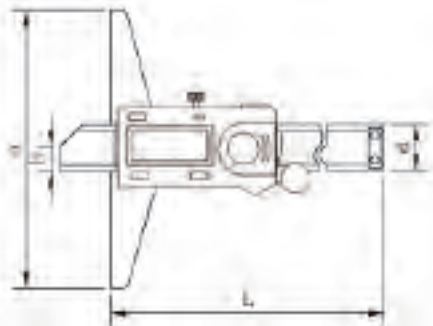
### Features:

- Fully Calibrated
- Extra large LCD readout
- Inch/Metric conversion
- Precision ground measuring surfaces
- Come with long form calibration certificates



Range	Resolution	Accuracy	Code No.
0-6" / 0-150mm	.0005" / 0.01mm	±.001"	7327067
0-8" / 0-200mm	.0005" / 0.01mm	±.0015"	7327087
0-8" / 0-200mm	.0005" / 0.01mm	±.0015"	7327080•
0-12" / 0-300mm	.0005" / 0.01mm	±.0015"	7327127
0-12" / 0-300mm	.0005" / 0.01mm	±.0015"	7327120•

• Available only while quantities last.



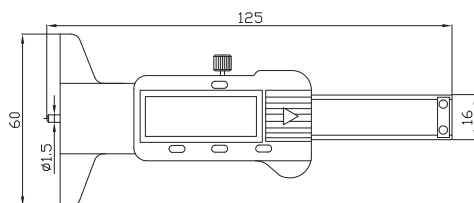
Range Inch/Metric	L mm	a mm	b mm	d mm
0-6"/0-150mm	230	100	6	14.5
0-8"/0-200mm	280	100	6	14.5
0-12"/0-300mm	380	100	6	14.5

Depth, Height & Bore Gages

## Digital Tire Depth Gage

### Features:

- Fully Calibrated
- The origin point is retained throughout the life of the battery
- Inch/Metric conversion
- Spherical end anvil
- Come with long form calibration certificates



Range	Resolution	Accuracy	Base Length	Code No.
0-1.2"/0-30mm	.0005"/0.01mm	±.0015"/0.03mm	60mm	7321010

## Digital Depth Calipers With Single Hook

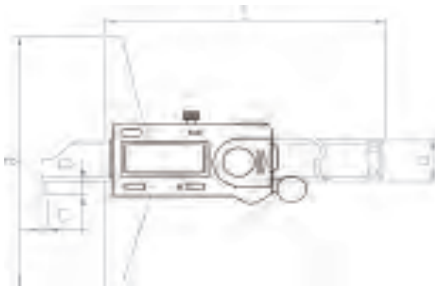
### Features:

- Fully Calibrated
- Stationary measuring surface on the beam protrudes at right angles (hook) to allow for measurement of depths, internal groove positions, and other intricate measurements.
- All measuring surfaces are hardened
- Come with long form calibration certificates



Range	Resolution	Accuracy	Code No.
0-6" / 0-150mm	.0005" / 0.01mm	±.001"/.02mm	7322067
0-6" / 0-150mm	.0005" / 0.01mm	±.001"/.02mm	7322065•
0-8" / 0-200mm	.0005" / 0.01mm	±.0015"/.03mm	7322087
0-12" / 0-300mm	.0005" / 0.01mm	±.0015"/.04mm	7322127
0-12" / 0-300mm	.0005" / 0.01mm	±.0015"/.04mm	7322125•

• Available only while quantities last.



Range Inch/Metric	L mm	a mm	b mm	c mm	d mm
0-6"/0-150mm	230	100	5	2	14.5
0-8"/0-200mm	280	100	5	2	14.5
0-12"/0-300mm	380	100	5	2	14.5

## Digital Depth Calipers With Double Hook

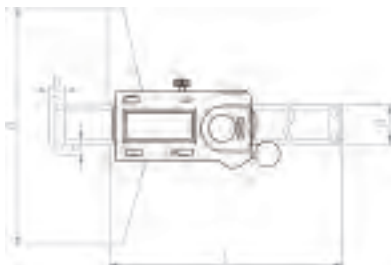
### Features:

- Fully Calibrated
- Hooked measuring surfaces are used for measurement of internal or external grooves and other intricate workpiece characteristics
- All measuring surfaces are hardened
- Come with long form calibration certificates



Range	Resolution	Accuracy	Code No.
0-6" / 0-150mm	.0005" / 0.01mm	±.001"/0.02mm	7323067
0-6" / 0-150mm	.0005" / 0.01mm	±.001"/0.02mm	7323065•
0-8" / 0-200mm	.0005" / 0.01mm	±.0015"/0.03mm	7323087
0-8" / 0-200mm	.0005" / 0.01mm	±.0015"/0.03mm	7323085•
0-12" / 0-300mm	.0005" / 0.01mm	±.0015"/0.04mm	7323127
0-12" / 0-300mm	.0005" / 0.01mm	±.0015"/0.04mm	7323125•

• Available only while quantities last.



Range Inch/Metric	L mm	a mm	b mm	c mm	d mm
0-6"/0-150mm	230	100	5	2	14.5
0-8"/0-200mm	280	100	5	2	14.5
0-12"/0-300mm	380	100	5	2	14.5

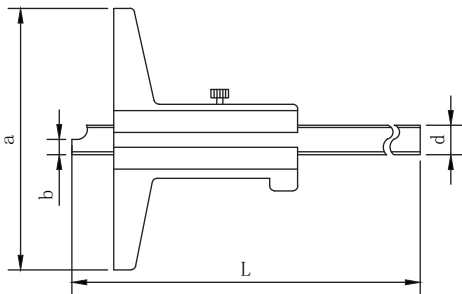
## Vernier Depth Calipers

### Features:

- Fully Calibrated
- Precision ground measuring surfaces
- Come with long form calibration certificates



Range	Graduation	Accuracy	Code No.
Inch			
0-6"	.001"	±.001"	7321061
0-8"	.001"	±.0015"	7321081



Range Inch/Metric	L mm	a mm	b mm	c mm
0-6"/0-150mm	250	100	5	10
0-8"/0-200mm	300	100	5	10
0-300mm	400	100	5	10

## Digital Bore Gages

### Features:

- Fully Calibrated
- Resolution: .00005"
- Dynamic carbide contact point
- .24-.4" range is with fixed anvils
- .4-.7" range is with plate guide and fixed anvils
- .7-1.4" range is with canister and fixed anvils
- Over 1.4" range is with wheel guide and inserting anvils
- Come with long form calibration certificates



.24-.4"/6-10mm  
Fixed Anvil



.4-.74"/10-18mm  
Plate Guide



.7-1.4"/18-35mm  
Canister Guide



Over 1.4"/35mm  
Wheel Guide

Depth, Height & Bore Gages

Range	No. Anvils	No. Spacers	No. Sub-anvils	Probe Depth	Code No.
.24-.4"	9	-	-	2"	7485111
.4-.7"	9	1	-	4"	7485121
.7-1.4"	10	2	-	4"	7485211
1.4-2.4"	6	3	-	6"	7485221
2-6"	11	3	1	6"	7485311
6-10"	6	5	1	16"	7485321
10-16"	6	5	2	16"	7485331

## Dial Bore Gages

### Features:

- Fully Calibrated
- Graduation: .0001" / 0.01mm
- Fixed measuring points made of steel
- Movable probe pin with carbide ball
- Come with long form calibration certificates



Range	No. Anvils	No. Spacers	No. Sub-Anvils	Probe Depth	Code No.
<b>Inch</b>					
.24"-.4"	9 pcs	-	-	2"	7483111
.4"-.7"	9 pcs	1	-	4"	7483121
.7"-.1.4"	10 pcs	2	-	6"	7483211
1.4"-.2.4"	6 pcs	4	-	6"	7483221
2.0"-.6.0"	11 pcs	4	1	6"	7483311
6.0"-.10.0"	6 pcs	6	1	10"	7483321
10.0"-.16.0"	6 pcs	6	2	16"	7483331
<b>Metric</b>					
10-18mm	9 pcs	1	-	100mm	7484120
18-35mm	9 pcs	2	-	150mm	7484210
35-50mm	6 pcs	4	-	150mm	7484220
50-160mm	11 pcs	4	1	150mm	7484310

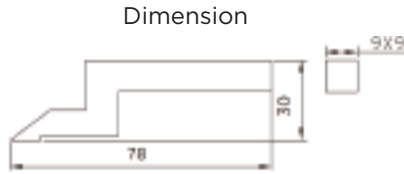
**Note: For .0005" Graduation Purchase Code # 7402065 Dial Indicator**

### Sets

Range	Graduation	Individual Holders	Indicator	Code No.
18-160mm	0.001mm	18-35, 35-50, 50-160mm	7402012 (1x0.001mm)	7483638
18-160mm	0.001mm	18-35, 35-50, 50-160mm	7402032 (3x0.01mm)	7484638

Depth, Height & Bore Gages

## Double Beam Digital Height Gages w/ Hand Wheel

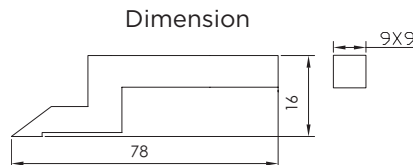


### Features:

- Fully Calibrated
- Large LCD display
- Hand wheel design for fine adjustment
- Inch/Metric conversion
- Carbide tipped scriber
- Zero setting on any position
- Come with long form calibration certificates

Range	Resolution	Accuracy	Code No.
0-12" / 0-300mm	.001" / 0.01mm	±.001" / 0.02mm	7627120
0-18" / 0-450mm	.001" / 0.01mm	±.0015" / 0.03mm	7627180
0-24" / 0-600mm	.001" / 0.01mm	±.0015" / 0.03mm	7627240

## Double Beam Digit Counter Height Gages

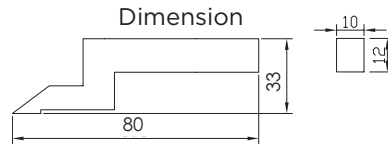


### Features:

- Fully Calibrated
- Dial & digital counter reading
- Hand wheel for easier travel
- Carbide tipped scriber
- The digit counter provides bi-directional positioning and the capability of setting zero at any position
- Come with long form calibration certificates

Range	Dial Grad.	Counter Grad.	Accuracy	Code No.
<b>Inch</b>				
0-12"	.001"	.1" (Dual Reading)	±.0015"	7623121
0-18"	.001"	.1" (Dual Reading)	±.002"	7623181
0-24"	.001"	.1" (Dual Reading)	±.002"	7623241
0-40"	.001"	.1" (Dual Reading)	±.003"	7623401
<b>Metric</b>				
0-300mm	0.01mm	1.0mm (Dual Reading)	±0.04mm	7623120
0-450mm	0.01mm	1.0mm (Dual Reading)	±0.4mm	7623180
0-600mm	0.01mm	1.0mm (Dual Reading)	±0.07mm	7623240
0-1000mm	0.01mm	1.0mm (Dual Reading)	±0.07mm	7623400

## Single Beam Digital Height Gages With Hand Wheel

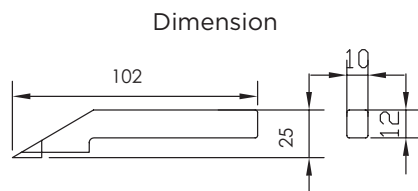


### Features:

- Fully Calibrated
- Large LCD display
- Hand wheel design for fine adjustment
- Inch/Metric conversion
- Carbide tipped scriber
- Zero setting on any position
- Come with long form calibration certificates

Range	Resolution	Accuracy	Code No.
0-12" / 0-300mm	.0005" / 0.01mm	±.0015"/0.04mm	7626120
0-18" / 0-450mm	.0005" / 0.01mm	±.0015"/0.04mm	7626180
0-24" / 0-600mm	.0005" / 0.01mm	±.0020"/0.05mm	7626240

## Digital Height Gages

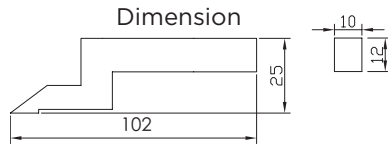


### Features:

- Fully Calibrated
- Fine adjustment
- Easy to read large LCD display
- Inch/Metric conversion
- Origin memory eliminates the need to zero the reading each time the height gage is turned on
- The base is designed with a thermal heat isolation hand grip
- Come with long form calibration certificates

Range	Resolution	Accuracy	Code No.
0-12" / 0-300mm	.0005" / 0.01mm	±.0015"	7625120
0-24" / 0-600mm	.0005" / 0.01mm	±.0020"	7625240

## Vernier Height Gages



### Features:

- Fully Calibrated
- Fine adjustment for easy setting
- Satin chrome finish
- Carbide tipped scriber
- Come with long form calibration certificates

Range	Grad.	Accuracy	Code No.
0-12"/0-300mm	1/128"/0.05mm	±.0015"	7621120
0-24"/0-600mm	1/128"/0.05mm	±.002"	7621240

## Surface Plate Cleaners



### Features:

- An exclusive formulation that is extremely effective for the cleaning and care of granite surface plates
- Works quickly and effectively, leaves no residue on the granite.

Description	Code No.
Pint	7607510
Pint Spray Pump	7607520
Quart	7607530
1/2 Gallon	7607540
Gallon	7607550
5 Gallon	7607560



# Gages

Angle, Radius & Thickness Gages .....	104
Thread Pitch Gages .....	105
Thread Measuring Wire Set .....	106
Telescoping Gages .....	106
American Standard & Wire Gages .....	107
Countersink Angle Gage .....	107
Universal Sliding Bevel .....	107
Rigid Steel Rules .....	108
Flexible Steel Rules .....	109
Drill Point Gages, Pocket Rules, Adjustable Hook Rules .....	110
Round Bar Center Finder .....	111
Depth & Angle Gages, Combination Square Sets .....	111
Wiggler Set, Spring Dividers and Calipers .....	112
Digital, Universal Bevel & Dial Protractors .....	113
Digital Protractors - Level Type .....	114
CNC Tool Setting Gages, Magnetic Base Protractor .....	114
Automatic Weld Size Welding Gage .....	115
Bridge Cam, Welding Gage .....	115
Steel Squares, Diemaker's Square Set .....	116
Individual Rectangular Gage Blocks .....	117
Rectangular Gage Block Sets - Inch/Metric .....	118
36pc Round Space Block Set .....	119
Precision Inspection Gage Ball Sets .....	119
Individual Pin Gages, Premium Pin Gage Handles .....	120
Pin Gage Sets .....	121
Precision Parallel Sets, Ultra Precision Wavy Parallel Set .....	122
High Precision Adjustable & Ball Bearing V-Blocks .....	123
ANSI Inch Thread Plug Gages & Ring Gages .....	124-125
Impact Hardness Tester & Surface Roughness Standards Set ..	126
Sine Bar Riser Kit .....	126

## Angle Gage Set



### Features:

- Material: Satin finished stainless steel
- Each gage has eight precision radii
- The contour of each gage has: 50% of primary angle and complementary angles including internal and external angles
- Various purposes including alignment of the lathe tool bit and for checking cutting tool geometry
- Primary Angle: 5°D to 90°D in 5° steps
- Accuracy: ±5"

Description	Code No.
18 pc Angle Gage Set	7605010

## Radius Gages



### Features:

- Size is marked on each gage leaf
- Gage profiles have both convex and concave radii

Range	Qty	Composition	Notes	Code No.
1/32-17/64"	16 pairs	1/32-17/64 x 64ths	90° arc	7605401
1/32-1/4"	15 pairs	1/32-1/4 x 64ths	180° arc	7605411
17/64-1/2"	16 pairs	17/64-1/2 x 64ths	180° arc	7605421
1/64-1/2"	25 pairs	1/64-17/64 x 64ths, 9/32-1/2x32nd	-	7605441

## Thickness "Feeler" Gages



### Features:

- Thickness is marked on each leaf
- Each leaf is detachable if necessary
- Leaf width: 1/2" or 13mm

Range	Qty	Composition	Length	Code No.
.002-.035"	26	.002-.018 x .001 step	3"	7605301•
		.022, .024, .025, .028, .030, .032, .035		
0.05-1mm	13	0.05-0.3mm x 0.05mm step	100mm	7605330•
		0.4mm-1mm x 0.1mm		
0.05-1mm	13	0.05-0.3mm x 0.05mm step	150mm	7605332•
		0.4mm-1mm x 0.1mm		

• Available only while quantities last.

## Thread Pitch Gages

### Features:

- Each individual gage is stamped with the thread pitch size



### Metric Screw Pitch Gages (60°)

Range	No. of Leaves	Composition of Leaves	Code No.
0.25-2.5mm	28	0.25 - 0.90mm by 0.05mm , 1 - 2mm x 0.1mm step, Plus 1.25, 1.75, 2.5mm	7605500
0.35-6mm	22	0.35, 0.4, 0.45, 0.5, 0.6, 0.7, 0.75, 0.8, 1, 1.25, 1.5, 1.75, 2, 2.5, 3, 3.5, 4, 4.5, 5, 5.5, 6mm, and 60° angle gage	7605510
0.4-7mm	21	0.4, 0.5, 0.7, 0.75, 0.8, 0.9, 1, 1.25, 1.5, 1.75, 2, 2.5, 3, 3.5, 4, 4.5, 5, 5.5, 6, 6.5, 7mm	7605520
0.4-7mm	18	0.4, 0.5, 0.75, 1, 1.25, 1.5, 1.75, 2, 2.5, 3, 3.5, 4, 4.5, 5, 5.5, 6, 6.5, 7mm	7605530

### Unified Screw Pitch Gages (60°)

Range	No. of Leaves	Composition of Leaves	Code No.
4-42 TPI	30	4, 4-1/2, 5, 5-1/2, 6, 7, 8, 9, 10, 11, 11-1/2, 12, 13, 14, 15, 16, 18, 20, 22, 24, 26, 27, 28, 30, 32, 34, 36, 38, 40, 42 TPI	7605502
4-84 TPI	51	4, 4-1/2, 5, 5-1/2, 6, 7, 8, 9, 10, 11, 11-1/2, 12, 13, 14, 15, 16, 18, 20, 22, 24, 26, 27, 28, 30 - 84 by 2 , TPI	7605512

### Metric and Unified Screw Pitch Gages (60°)

Range	No. of Leaves	Composition of Leaves	Code No.
0.4-7mm 4-42 TPI	51	7605520 and 7605502	7605508
0.5-6mm 4-56 TPI	28	0.5, 1, 1.25, 1.5, 1.75, 2, 2.5, 3, 3.5, 4, 4.5, 5, 5.5, 6mm and 4, 6, 7, 8, 10, 11, 11-1/2, 12, 13, 16, 20, 28, 32 TPI	7605518

### Whitworth Screw Pitch Gages (55°)

Range	No. of Leaves	Composition of Leaves	Code No.
4-60 TPI	28	4, 4-1/2, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 16, 18, 20, 22, 24, 25, 26, 28, 30, 32, 34, 36, 40, 48, 60 TPI	7605515

## Thread Measuring Wire Set



**Features:**

- 48 wires - 16 different sizes
- Measures all threads from 3 - 48 threads per inch
- Measures all metric threads from 0.5mm to 6mm
- Also measures ACME threads
- Laminated chart included

Description	Code No.
Thread Wire Set	7697300

## Telescoping Gages

**Features:**

- Plunger is spring loaded and expands within the bore, allowing measurement of the internal diameter



Range	Depth	Model	Code No.
.315"-.500"	4.2"	A	7487011
.500"-.748"	4.4"	B	7487021
.748"-1.26"	4.4"	C	7487031
1.26"-2.126"	5.85"	D	7487041
2.126"-3.54"	5.85"	E	7487051
3.54"-5.90"	5.85"	F	7487061
.315-5.90" Set of 6		A,B,C,D,E,F	7487869
.500-5.90" Set of 5		B,C,D,E,F	7487859
.315-2.126" Set of 4		A,B,C,D	7487849
.315"-.500"	12"		7487013
.500"-.748"	12"		7487023
.748"-1.26"	12"		7487033
1.26"-2.126"	12"		7487043
2.126"-3.54"	12"		7487053
3.54"-5.90"	12"		7487063

## American Standard & Wire Gages



**Features:**

- Made of heavy gage hardened steel 62 RC.
- Satin chrome finish, no glare.
- Gaging slots meet Federal Specifications.
- Front face shows gage size, back shows decimal equivalents adjacent to each slot.

Description	Code No.
American Standard and B&S Gage for measuring wire dia. and non-ferrous sheets with copper, aluminum and wrought iron.	7607600
US Standard Gage for measuring steel, plate iron, and uncoated sheet metal	7607610

## Countersink Angle Gage



**Features:**

- Easily verifies countersink angles.
- Graduated in 32nds for depth measurement.
- Standard angles are 60, 82, 90, 100, 110 and 120°

Description	Code No.
Countersink Angle Gage	7607620

## Universal Sliding Bevel



**Features:**

- Straight slot allows for a wide variety of adjustments and angle settings not easily obtained with ordinary bevels
- Contains straight and offset slots on 6" adjustable blade.
- Duplicate any angle.
- Handle is 3-1/2" long with a straight slot.

Description	Code No.
Universal Sliding Bevel	7606650 •

• Available only while quantities last.

## Rigid Steel Rules

### Features:

- Made of hardened and tempered steel.
- Durable finishes for rust and wear durability.
- Satin Chrome: Precisely etched, then black filled.
- Meets federal accuracy specifications.
- Thickness: 0.04"
- Micro-fine graduations:
  - 4R - 8ths, 16ths, 32nds, 64ths
  - 5R - 32nds, 64ths, 10ths, 100ths
  - 16R - 32nds, 64ths, 50ths, 100ths
  - E/M - 32nd, 64ths, 1/2 mm, 1 mm



Range	Type	Width	Code No.
6"	5R	3/4"	7606102•
6"	16R	3/4"	7606103•
6"/150mm	E/M	3/4"	7606104•
12"	4R	1"	7606111•
12"	5R	1"	7606112•
12"	16R	1"	7606113•
12"/300mm	E/M	1"	7606114•
18"	4R	1-1/8"	7606121•
18"	5R	1-1/8"	7606122•
18"	16R	1-1/8"	7606123•
18"/450mm	E/M	1-1/8"	7606124•
24"	4R	1-1/8"	7606131•
24"	5R	1-1/8"	7606132•
24"/600mm	E/M	1-1/8"	7606134•
36"	4R	1-1/4"	7606140•
36"	5R	1-1/4"	7606141•
36"	16R	1-1/4"	7606142•
36"/900mm	E/M	1-1/4"	7606143•
48"	4R	1-1/4"	7606150•
48"/1200mm	E/M	1-1/4"	7606151•

• Available only while quantities last.

## Flexible Steel Rules

### Features:

- Made of hardened and tempered steel.
- Durable finishes for rust and wear durability.
- Satin Chrome: Precisely etched, then black filled.
- Meets federal accuracy specifications.
- Thickness: 0.02"
- Micro-fine graduations:
  - 4R - 8ths, 16ths, 32nds, 64ths
  - 5R - 32nds, 64ths, 10ths, 100ths
  - 16R - 32nds, 64ths, 50ths, 100ths
  - E/M - 32nd, 64ths, 1/2 mm, 1 mm
  - M - 1/2 mm, 1 mm, 1/2 mm, 1 mm



Range	Type	Width	Code No.
6"	4R	1/2"	7606401•
6"	5R	1/2"	7606402•
6"	16R	1/2"	7606403•
6"/150mm	E/M	1/2"	7606404•
12"	4R	1/2"	7606411•
12"	5R	1/2"	7606412•
12"	16R	1/2"	7606413•
12"/300mm	E/M	1/2"	7606414•
300mm	M	1/2"	7606417•
18"	4R	3/4"	7606421•
18"	5R	3/4"	7606422•
18"	16R	3/4"	7606423•
18"/450mm	E/M	3/4"	7606424•
24"	4R	3/4"	7606431•
24"	5R	3/4"	7606432•
24"	16R	3/4"	7606433•
24"/600mm	E/M	3/4"	7606434•

• Available only while quantities last.

## Drill Point Gages



**Features:**

- To check drills with 118° point angles.
- Sliding Head graduated in 32nds to verify equal length of cutting edges.
- Rule graduated in 64ths and 32nds on one side; 16ths and 8ths on reverse side.
- Removable end clip.
- Head only fits steel rules 3/4" wide x 0.040" thick.

Description	Code No.
Sliding Head with 6" Rule	7605610•
Sliding Head Only	7605611•

• Available only while quantities last.

## Pocket Rule



**Features:**

- Stainless Steel
- Hardened and tempered.
- Includes pocket clip.
- Micro-fine graduations:  
10R - 32nds, 64ths  
Decimal equivalent chart on opposite face

Range	Type	Width	Code No.
6"	10R	1/4"	7607571•

• Available only while quantities last.

## Adjustable Hook Rules



**Features:**

- Satin Chrome Finish
- Tool steel, hardened and tempered.
- Accuracy meets federal specifications.
- Hard chrome finish - no glare.
- Furnished with adjustable hook.
- Thickness: 0.040".
- Micro-fine graduations:  
4R - 8ths, 16ths, 32nds, 64ths  
16R - 32nds, 64ths, 50ths, 100ths  
E/M - 32nds, 64ths, 1/2 mm, 1 mm

Range	Type	Width	Code No.
6"	4R	3/4"	7605620•
6"	16R	3/4"	7605621•
6"	E/M	3/4"	7605622•
12"	4R	1"	7605623•
12"	16R	1"	7605624•
12"	E/M	1"	7605625•

• Available only while quantities last.



## Round Bar Center Finder



### Features:

- Accurately and quickly locates the center of round work pieces.
- Shank is held in collet or chuck and center is easily indicated by visual alignment of etched lines.
- Satin chrome finish.
- 3" capacity.

Description	Code No.
Round Bar Center Finder	7607280

## Depth & Angle Gages



### Features:

- Hardened steel head with 2-1/2" base
- Angles: 30°, 45°, 60° both sides
- Stainless steel blade:  
6" x 7/32" with 32nds & 64ths graduations
- Rod: Non-graduated, for holes under 3/32" diameter

Notes	Code No.
Head With Blade	7607580
Head With Blade and Rod	7607581

## 12" Combination Square Set

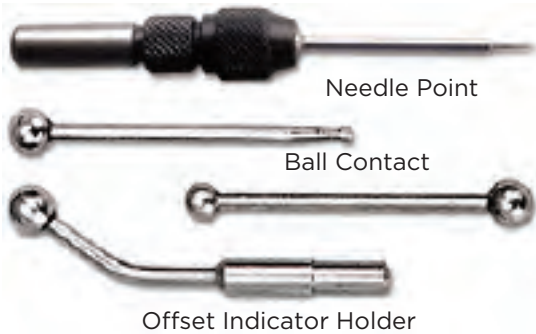


### Features:

- Graduation: Protractor: 1°  
Blade: 64ths, 32nds, 1mm, .5mm (E/M)
- Blade is hardened and tempered
- Heads are hardened cast finish in baked enamel
- 45° Centre Gauge

Description	Blade Length	Code No.
4 Pc Set (With E/M rule)	12"/300mm	7490204
2 Pc Set (Rule, Square)	12"/300mm	7490202
4 Pc Set (With 4R rule)	12"/300mm	7490214
<b>Parts</b>		
Lock Nut		7490200
12"/300mm 4R Stainless Steel Rule		7490210
12"/300mm E/M Stainless Steel Rule		7490208

## Wiggler Set



**Features:**

- Versatile Center & Edge Finder with 4 interchangeable attachments which snap conveniently into the special chuck.
- Ball swivel joint permits adjustments to an angular position or true concentricity.
- Set includes offset indicator holder, ball contact attachment- 0.250" dia., disc contact attachment- 0.100" dia. and needle point attachment.

Replacement Attachments	Description	Set Code No.
Chuck		7607290
Needle Point	Length: Closed 2-3/8", Open 4-1/8"	
Ball Contact	Shank Dia.: 3/8", Ball Dia.: 0.250"	
Disc Contact	0.100" Dia.	
Offset Indicator Holder		

## Spring Dividers and Calipers

**Features:**

- Manufactured from hardened, durable material
- Contact surfaces are rounded



Range	Style	Code No.
6"	Spring Divider	7606310
8"	Spring Divider	7606320
10"	Spring Divider	7606330
12"	Spring Divider	7606340
6"	Outside Spring Caliper	7606312
8"	Outside Spring Caliper	7606322
10"	Outside Spring Caliper	7606332
12"	Outside Spring Caliper	7606342
6"	Inside Spring Caliper	7606314
8"	Inside Spring Caliper	7606324
10"	Inside Spring Caliper	7606334
12"	Inside Spring Caliper	7606344

## Digital Protractor



**Features:**

- Resolution: 30"/0.008°
- Accuracy: ±5min
- Measuring range: 0-360°
- Range selection: 1x360°, 2x180°, 4x90°
- Dual reading LCD displays arc minutes/decimal degrees
- With fine adjustment
- Preset function

Blades included	Code No.
6"/150mm, 8"/200mm, 12"/300mm	7490150

## Universal Bevel Protractors



**Features:**

- Dial graduation: 1°, Vernier 5'
- Designed to provide precise angular measurements
- Magnifying glass is provided for easier reading
- Can be used with a standard height gage to provide angular measurement from reference plate
- Accuracy: ±5min

Description	Code No.
With 6"/150mm blade	7490061
With 8"/200mm blade	7490062
With 12"/300mm blade	7490063
With all three blades 6", 8", 12"	7490060

## Dial Protractor



**Features:**

- Measuring range: 0-360°
- Graduation: 5'
- Designed with analog readout and fine adjustment to provide precise angular measurements
- Can be used with a standard height gage to provide angular measurement from reference plate
- Accuracy: ±5min

Blades included	Code No.
6"/150mm, 8"/200mm, 12"/300mm	7490100

## Digital Protractors - Level Type



**Features:**

- This protractor provides an immediate digital reading of any angle in a full circle with 0°-90°-0°-90°-0° readings.
- ABS/ZERO button allows two measuring modes, Standard and Alternate Reference
- Four 90° quadrants for display purposes
- HOLD button for freezing a reading in an unreadable position
- V-grooves on top and bottom for use on curved surfaces
- 7490162 comes with a magnetic bottom for easy fixing

Range	Resolution	Accuracy	Code No.
360°	0.1°	±0.1°	7490160
360°	0.1°	±0.1°	7490162

## CNC Tool Setting Gages



**Features:**

- Designed for use on CNC slant bed machines.
- Accurately sets turning, boring and facing tools on the centerline of the workpiece.
- Adjustable to any slant angle (360°).
- Includes easy-to-read laser etched protractor.

Description	Code No.
Deluxe Tool Setting Gage	7607030

## Magnetic Base Protractor



**Features:**

- Machined V-Base and leg ends have a strong magnetic pull making it easy to secure to the work piece.
- Used for tool rooms and machine shops to find center of round stock and to make angular adjustments.
- 2-3/8" dial face has machine-divided graduations to 1 degree in four 90° quadrants.
- Maximum V-Opening: 3-3/16"
- Overall length of legs: 4-13/16"
- Accuracy: ±3 minutes.

Description	Code No.
Magnetic Base Protractor	7607270

## Automatic Weld Size Welding Gage



**Features:**

- For accurate inspection of butt and fillet type welds. Checks size of fillet welds, permissible tolerance of convexity, concavity, and reinforcement of butt welds.
- Stainless steel, pocket size construction.
- Inch readings
- Convexity and concavity sizes preset in accordance with AWS D1-1.

Description	Code No.
Automatic Weld Size Gage	7607630

## Bridge Cam Welding Gage



**Features:**

- This versatile cam-type weld gage can be used for checking surfaces, angles, depths, etc.
- Can measure fit-up bevels, weld reinforcement, fillet weld leg length, undercuts and pits, throat of fillet weld, angles to 60° height of weld metal, and misalignments.
- High quality stainless steel construction.
- Quick and accurate measurement of most common weld sizes.
- Readings in Inch and Metric.
- Adjustable scale compensates for wear on pointer.

Description	Code No.
Bridge Cam Welding Gage	7606640

## Steel Squares

**Features:**

- Made of precision ground hardened Stainless Steel



7639230



7639244



7639344

Inch Size	Metric Size	Squareness	Style	Code No.
<b>General Type</b>				
2" x 1.6"	50 x 40mm	0	Regular	7639214
2" x 1.6"	50 x 40mm	0	Bevel	7639210
3" x 2"	75 x 50mm	0	Regular	7639224
3" x 2"	75 x 50mm	0	Bevel	7639220
4" x 2.75"	100 x 70mm	0	Regular	7639234
4" x 2.75"	100 x 70mm	0	Bevel	7639230
6" x 4"	150 x 100mm	0	Regular	7639244
6" x 4"	150 x 100mm	0	Bevel	7639240
8" x 5"	200 x 130mm	0	Regular	7639254
8" x 5"	200 x 130mm	0	Bevel	7639250
<b>With Wider Base "Engineers Square"</b>				
6" x 4"	150 x 100mm	0	Regular	7639344
6" x 4"	150 x 100mm	0	Bevel	7639340
8" x 5"	200 x 130mm	0	Regular	7639354
8" x 5"	200 x 130mm	0	Bevel	7639350

## Diemaker's Square Set

Gages



**Features:**

- Use for precise miniature layouts.
- Hardened and ground with very fine finish Extremely accurate.
- Set includes: 3 hardened beveled edge squares; 3/4", 1-1/4", 2-3/8" plus 1- 1/2" triangular straight edge with handle complete in a fitted case.
- Straight edge sides are machined in the middle for clearance of burs and dirt.

Specifications of Squares:	Beam	Blade
	1-15/16"	2-15/16"
	1-1/8"	1-9/16"
	3/4"	1"

Description	Code No.
Diemaker's Square Set	7606670

## Individual Rectangular Gage Blocks

• Grade 0



Size (in.)	Code No.	Size (in.)	Code No.
0.05	7651010	0.127	7651520
0.05005	7651020	0.128	7651530
0.0503	7651030	0.129	7651540
0.0506	7651040	0.13	7651550
0.0507	7651050	0.131	7651560
0.0508	7651060	0.132	7651570
0.0509	7651070	0.133	7651580
0.052	7651080	0.134	7651590
0.053	7651090	0.135	7651600
0.054	7651100	0.136	7651610
0.055	7651110	0.137	7651620
0.056	7651120	0.138	7651630
0.058	7651130	0.139	7651640
0.06	7651140	0.14	7651650
0.1	7651150	0.141	7651660
0.1001	7651170	0.142	7651670
0.1002	7651180	0.143	7651680
0.1003	7651190	0.144	7651690
0.1004	7651200	0.145	7651700
0.1005	7651210	0.146	7651710
0.1006	7651220	0.147	7651720
0.1007	7651230	0.148	7651730
0.1008	7651240	0.149	7651740
0.1009	7651250	0.15	7651750
0.101	7651260	0.16	7651760
0.102	7651270	0.17	7651770
0.103	7651280	0.18	7651780
0.104	7651290	0.19	7651790
0.105	7651300	0.2	7651800
0.106	7651310	0.21	7651810
0.107	7651320	0.25	7651820
0.108	7651330	0.3	7651830
0.109	7651340	0.35	7651840
0.110	7651350	0.4	7651850
0.111	7651360	0.45	7651860
0.112	7651370	0.5	7651870
0.113	7651380	0.55	7651880
0.114	7651390	0.6	7651890
0.115	7651400	0.65	7651900
0.116	7651410	0.7	7651910
0.117	7651420	0.75	7651920
0.118	7651430	0.8	7651930
0.119	7651440	0.85	7651940
0.120	7651450	0.9	7651950
0.121	7651460	0.95	7651960
0.122	7651470	1	7651970
0.123	7651480	2	7651980
0.124	7651490	3	7651990
0.125	7651500	4	7652000
0.126	7651510		

## Rectangular Gage Block Sets - Inch



### Features:

- Individual serial numbers on each block, regardless of grade
- A complete certificate of calibration traceable to the N.I.S.T showing the deviation of each block.
- All sets are supplied in deluxe fitted wooden case
- Mirror polished surfaces provide superior wringing characteristics.

Blocks per Set	Blocks In Set	Grade	Former Grade	Code No.
81	1 Block: 0.050"	0 AS-1 AS-2	(2) (3) (B)	7650010 7650011 7650012
	10 Blocks: 0.1000"-0.1009" x 0.0001" steps			
	49 Blocks: 0.101"-0.149" x 0.001" steps			
	17 Blocks: 0.150"-0.950" x 0.050" steps			
36	4 Blocks: 1.000"-4.000" x 1.000" steps	0 AS-1 AS-2	(2) (3) (B)	7650020 7650021 7650022
	1 Block: 0.050"			
	10 Blocks: 0.1000"-0.1009" x 0.000" steps			
	9 Blocks: 0.101"-0.109" x 0.001" steps			
	9 Blocks: 0.110"-0.190" x 0.010" steps			
	4 Blocks: 0.200"-0.500" x 0.100" steps			
	3 Blocks: 1,2,4"			

## Rectangular Gage Block Sets - Metric



### Features:

- Individual serial numbers on each block, regardless of grade
- A complete certificate of calibration traceable to the N.I.S.T showing the deviation of each block.
- All sets are supplied in deluxe fitted wooden case
- Mirror polished surfaces provide superior wringing characteristics.

Blocks per Set	Blocks In Set	Grade	Former Grade	Code No.
88	1 Block: 1.0005mm	AS-1	(3)	7650181
	9 Blocks: 1.001-1.009mm x 0.01mm steps			
	49 Blocks: 1.01-1.49mm x 0.01mm steps			
	19 Blocks: 0.5-9.5 x 0.5mm steps			
87	10 Blocks: 10-100mm x 10mm steps	AS-1	(3)	7650130
	9 Blocks: 1.001-1.009mm x 0.01mm steps			
	49 Blocks: 1.01-1.49mm x 0.01mm steps			
	19 Blocks: 0.5-9.5 x 0.5mm steps			
	10 Blocks: 10-100mm x 10mm steps			



## 36pc Round Space Block Set



**Features:**

- For quickly setting stops and setups in lathes, milling machines, drill presses, etc. Also excellent for setting sine bars.
- Each block marked for size. Overall diameter 0.750"
- 1/4"-28 threaded hole through center of block
- Working surface hardened to 58-60 HRC
- Working surfaces precision ground and lapped to  $\pm 0.000050$ "
- 4 connecting screws supplied to form desired length

Description	Included	Code No.
38pc Set	.050, .060, .0625, .070, .080, .090, .100, .101, .102, .103, .104, .105, .106, .107, .108, .109, .110, .120, .125, .130, .140, .150, .160, .170, .180, .190, .200, .300, .400, .500, .600, .700, .800, .900, 1.00 (2 ea.)	7679950

## Precision Inspection Gage Ball Sets



**Features:**

- Meets all grade 25 AFBMA standards
- Chrome alloy steel, hardened to 63 HRC
- Surface finish to 1.5 micro-inches
- Within 0.0001"/0.0025mm of actual size
- Spherical accuracy within 0.000025"/0.0006mm

Quantity	Description	Code No.
32 Pair	1/32" - 1" by 32nds	7679901
25 Pair	1mm to 25mm by 1mm increments	7679900

## Individual Pin Gages

### Features:

- Bright finish and Black Oxide available
- Black Oxide coating prevents corrosion and shows gage wear
- Class ZZ guaranteed to 0.0002" tolerance limit
- Each gage over 0.060" marked with size and direction of tolerance
- Hardened drill rod RC60-62
- 2" long
- 10 micron finish or better



### Plus Tolerance +0.0002"/-0

Size	Bright Code No.	Black Oxide Code No.
0.125"	7220125	7290125
0.187"	7220187	7290187
0.250"	7220250	7290250
0.377"	7220377	7290377
0.500"	7220500	7290500
0.625"	7220625	7290625
0.750"	7220750	7290750
0.875"	7220875	7290875
1.000"	7221000	7291000

### Minus Tolerance +0/-0.0002"

Size	Bright Code No.	Black Oxide Code No.
0.125"	7210125	7230125
0.187"	7210187	7230187
0.250"	7210250	7230250
0.377"	7210377	7230377
0.500"	7210500	7230500
0.625"	7210625	7230625
0.750"	7210750	7230750
0.875"	7210875	7230875
1.000"	7211000	7231000

## Premium Pin Gage Handles



### Features:

- Machined from solid aluminum, this premium handle can hold diameters from 1/32" to 1/2"
- GO and NO GO marked on handle
- Completely self contained, does not require bushings

Description	Code No.
Aluminum	7697400
Green Anodized Aluminum	7697401
Purple Anodized Aluminum	7697402
Red Anodized Aluminum	7697403
Yellow Anodized Aluminum	7697404

## Pin Gage Sets

### Features:

- Furnished in molded plastic case



### Plus Tolerance +0.0002"/-0

Qty	Range	Finish	Code No.
50	0.011"-0.060" x .001" step	Bright	7697010
190	0.061"-0.250" x .001" step	Bright	7697020
250	0.251"-0.500" x .001" step	Bright	7697030
125	0.501"-0.625" x .001" step	Bright	7697040
125	0.626"-0.750" x .001" step	Bright	7697050
82	0.751"-0.832" x .001" step	Bright	7697060
84	0.833"-0.916" x .001" step	Bright	7697070
84	0.917"-1.000" x .001" step	Bright	7697080
50	0.011"-0.060" x .001" step	Black Oxide	7697090
190	0.061"-0.250" x .001" step	Black Oxide	7697100
250	0.251"-0.500" x .001" step	Black Oxide	7697110
125	0.501"-0.625" x .001" step	Black Oxide	7697120
125	0.626"-0.750" x .001" step	Black Oxide	7697130
82	0.751"-0.832" x .001" step	Black Oxide	7697140
84	0.833"-0.916" x .001" step	Black Oxide	7697150
84	0.917"-1.000" x .001" step	Black Oxide	7697160

### Minus Tolerance +0/-0.0002"

Qty	Range	Finish	Code No.
50	0.011"-0.060" x .001" step	Bright	7697012
190	0.061"-0.250" x .001" step	Bright	7697022
250	0.251"-0.500" x .001" step	Bright	7697032
125	0.501"-0.625" x .001" step	Bright	7697042
125	0.626"-0.750" x .001" step	Bright	7697052
82	0.751"-0.832" x .001" step	Bright	7697062
84	0.833"-0.916" x .001" step	Bright	7697072
84	0.917"-1.000" x .001" step	Bright	7697082
50	0.011"-0.060" x .001" step	Black Oxide	7697092
190	0.061"-0.250" x .001" step	Black Oxide	7697102
250	0.251"-0.500" x .001" step	Black Oxide	7697112
125	0.501"-0.625" x .001" step	Black Oxide	7697122
125	0.626"-0.750" x .001" step	Black Oxide	7697132
82	0.751"-0.832" x .001" step	Black Oxide	7697142
84	0.833"-0.916" x .001" step	Black Oxide	7697152
84	0.917"-1.000" x .001" step	Black Oxide	7697162
<b>Metric</b>			
55	0.2-1.28mm x 0.02mm step	Bright	7697202

## Precision Parallel Sets

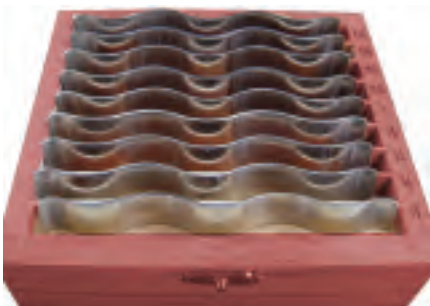


**Features:**

- Hardened and ground high grade alloy steel
- Hardness 52-58 HRC
- 6" length
- Absolute heights are nominal
- Supplied in durable plastic case
- Width Accuracy:  $\pm 0.0008$ "
- Length Accuracy:  $\pm 0.0006$ "

Description	Thickness	Range	Parallelism	Accuracy	Code No.
8 Pair	1/2"	7/8" to 1-3/4" x 1/8"	$\pm 0.0003$ "	$\pm 0.0003$ "	7607080
9 Pair	1/4"	3/4" to 1-3/4" x 1/8"	$\pm 0.0002$ "	$\pm 0.0002$ "	7607090
10 Pair	1/8"	1/2" to 1-5/8" x 1/8"	$\pm 0.0002$ "	$\pm 0.0002$ "	7607100
10 Pair	1/32"	1/2" to 1-5/8" x 1/8"	$\pm 0.0002$ "	$\pm 0.0002$ "	7607101

## Ultra Precision Wavy Parallel Set



**Features:**

- Made of high quality spring steel, hardened, stress relieved, and precision ground
- Parallel within  $\pm 0.0002$ ", paired  $\pm 0.0002$ "
- Includes 9 pairs 4-1/4" long with the following heights: 1/2", 5/8", 3/4", 7/8", 1", 1-1/8", 1-1/4", 1-3/8", 1-1/2"
- Shims can be compressed, useful for the holding of thin parts

Description	Code No.
Ultra Precision Wavy Parallel Set	7607660

## High Precision Adjustable V-Blocks



**Features:**

- Precision made tool that performs all of the functions normally requiring the use of various blocks, shims, or non-precision machinist jacks. Supports single and multiple diameter shafts, bars, etc. by quickly adjusting height.
- Wide 120 degree angle with 2-3/4" opening accommodates diameters from 3/16" to 5 inches
- Top faces are precision ground parallel to the base
- Position lock prevents vibration creeping.
- Total height adjustment: 9/16", 0.050" per revolution, 0.001" dial increments.
- Base dimensions: 4" W x 1-3/4" L, V opening: 2-3/4", 1-3/16" wide.
- Height: approximately 3" closed, 3-9/16" opened.

Description	Code No.
2 Pc Set	7607070

## Ball Bearing V-Blocks



**Features:**

- Ideal for use where inspection set-ups are not possible using plain V-Blocks. This unique product allows you to inspect and detect out of round conditions, defects, and lobes without damage to parts or blocks.
- Accuracy of ball sphericity: 0.000025" on small and medium sets 0.00005" on large set
- Balls finished to .2 micro inches, hardened to 62 RC.
- Overall accuracy of matched pairs: 35 microns
- Cast iron base and housing are heat stabilized and seasoned
- Sold in pairs with clamps and test ball
- Base dimensions:  
 Small Pair: 2-3/16" square x 1-1/16" O/A height  
 Medium Pair: 3-3/8" square x 1-5/8" O/A height  
 Large Pair: 4-3/4" square x 2-1/2" O/A height

Description	Cap. Range	Ball Dia.	Wt. Cap. Lbs.	Code No.
Small Pair	3/64" - 2-1/4"	1/2"	220	7607210
Medium Pair	3/32" - 5"	15/16"	1100	7607220
Large Pair	3/16" - 15"	1-1/2"	2000	7607230

## ANSI Inch Thread Plug Gages & Adjustable Ring Gages

**Features:**

- Fully Calibrated
- Gold aluminum handles
- ANSI Standard
- Come with long form calibration certificates



Size	Double End Plug Gage Code No.	Adjustable GO Ring Gage Code No.	Adjustable NO GO Ring Gage Code No.
2" - 56	7695042	7695044	7695045
2" - 64	7695052	7695054	7695055
3" - 48	7695062	7695064	7695065
4" - 40	7695082	7695084	7695085
4" - 48	7695092	7695094	7695095
5" - 40	7695102	7695104	7695105
5" - 44	7695112	7695114	7695115
6" - 32	7695122	7695124	7695125
6" - 40	7695132	7695134	7695135
8" - 32	7695142	7695144	7695145
8" - 36	7695152	7695154	7695155
10" - 24	7695162	7695164	7695165
10" - 32	7695172	7695174	7695175
12" - 24	7695182	7695184	7695185
12" - 28	7695192	7695194	7695195
1/4" - 20	7695202	7695204	7695205
1/4" - 28	7695212	7695214	7695215
1/4" - 32	7695222	7695224	7695225
5/16" - 18	7695232	7695234	7695235
5/16" - 24	7695242	7695244	7695245
5-16" - 32	7695252	7695254	7695255
3/8" - 16	7695262	7695264	7695265
3/8" - 24	7695272	7695274	7695275
3/8" - 32	7695282	7695284	7695285
7/16" - 14	7695292	7695294	7695295
7/16" - 20	7695302	7695304	7695305
7/16" - 28	7695312	7695314	7695315
1/2" - 13	7695322	7695324	7695325
1/2" - 20	7695332	7695334	7695335
1/2" - 28	7695342	7695344	7695345

• Available only while quantities last.

## NPT Thread Gages



**Features:**

- Fully Calibrated
- NPT ANSI/ASME B.1.20.1
- Come with long form calibration certificates

Size	Plug Gage Code No.	Ring Gage Code No.
1/16"-27	7690401•	-
1/8"-27	7690411	7690413
1/4"-27	7690421	7690423
3/8"-18	7690431	7690433
1/2"-14	7690441	7690443
3/4"-14	7690451	7690453
1"-11.5	7690461	7690463
1-1/4"-11.5	7690471	7690473
1-1/2"-11.5	7690481	7690483
2"-11.5	7690491	7690493
2-1/2"-8	7690501	7690503
3"-8	7690511	7690513

- Available only while quantities last.

## Master Setting Ring Gage



**Features:**

- Fully Calibrated
- Hardened Steel
- Come with long form calibration certificates

Size	Accuracy	Taper/Ovality	Code No.
1.000"	±.00008"	0.000024"	7679090

## Impact Hardness Tester



### Features:

- Used for determining the hardness of ferrous and non-ferrous metals
- Hardness is displayed in an "L" value that can be converted into Brinell, Rockwell, Vickers, and Shore Hardness.

### Specifications:

- Range: 330-890HL
- Impact capacity: 11 Nmm
- Testing direction: Arbitrary
- Power: DC 6.0 V
- Mass of impact body: 5.5g
- Diameter of carbide ball: 3mm

Code No.: 7640171

## Surface Roughness Standards Set



- Used for the visual comparison of surface roughness
- Set of 30 specimens, 7/8" x 3/8" electro-formed, solid nickel

Code No.: 7506010

Qty.	Desc.	Roughness
2	Flat Lapping	0.05; 0.1µm (2; 4µm)
4	Reaming	0.2; 0.4; 0.8; 1.6µm (8; 16; 32; 63µm)
6	Grinding	0.05; 0.1; 0.2; 0.4; 0.8; 1.6µm (2; 4; 8; 16; 32; 63µm)
6	Horiz. Milling	0.4; 0.8; 1.6; 3.2; 6.3; 12.5µm (16; 32; 63; 125; 250; 500µm)
6	Vert. Milling	0.4; 0.8; 1.6; 3.2; 6.3; 12.5µm (16; 32; 63; 125; 250; 500µm)
6	Turning	0.4; 0.8; 1.6; 3.2; 6.3; 12.5µm (16; 32; 63; 125; 250; 500µm)

## Sine Bar Riser Kit



### Sine Bar:

- 5" length, 1" body size.
- Hardened and ground steel.
- Top parallel to bottom of rolls within 0.0002".

### Riser:

- 18 risers: 1/2, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 1/4T and 1/2T.
- Within 0.0001" of exact constants.
- Note: Risers to be used individually, not to be stacked. 1/4T and 1/2T are to obtain angle of 1/4" and 1/2" taper per foot respectively.

Description	Code No.
Sine Bar Riser Kit	7605730



# Optical Instruments

Optical Comparator .....	.128
Vertical Profile Projector .....	.129
XC-100L Microscope .....	.130
MS-2 Microscope .....	.130

## Optical Comparator

### Features:

- With 2 Digital Indicators (1" and 2" travel).
- Large 12" x 3" t-slot stage with 6" horizontal and 2-1/2" vertical travel.
- 12" 1 quadrant protractor screen.
- Rotatable screen with fine adjustment.
- 5 minutes vernier
- Overlay clips
- Exclusive high and low intensity profile illumination switch



Model	Description	Code No.
Type I	c/w 10X Lens	7641090•

• Available only while quantities last.

## Vertical Profile Projector

### Features:

- Used to inspect the profiles of a wide variety of parts and components
- Designed to provide an excellent quality image with accurate magnification
- The error of the contour measuring is under 0.08% deviation
- A convenient foot switch transfers the coordinate data to the data processing system
- Provides the data processing system and foot-switch, which are convenient to output and gather the data

### Standard Accessories

- |   |       |
|---|-------|
| • Main body   | 1 pcs |
| • Lens  | 1 pcs |
| • Corresponding semi-reflective<br>(Equipped with the Lens) | 1 pcs |
| • Spring Fixture of screen                                  | 4 pcs |
| • 2m Power wire   | 1 pcs |
| • Instruction manual  | 1 pcs |
| • Certification   | 1 pcs |
| • Packaging list  | 1 pcs |
| • 4A/5 x 20 Fuse  | 5 pcs |
| • 24V 150W Halogen bulb                                     | 2 pcs |

Description	Code No.
Vertical Profile Projector	7641010

Imaging Direction	Direct Image			
Working Table	Stage Size (mm)	340 x 152		
	Glass Table Size (mm)	196 x 96		
	X-Axis Travel(mm)	150		
	Y-Axis Travel (mm)	50		
	Z-Axis Travel (mm)	90 (for focusing)		
	Measuring Accuracy	4.0+L/25 μm		
Projector Screen	Resolution (X/Y-Axis)	0.001mm (1μm) or 0.0005mm (0.5μm)		
	Dimension	12" (Ø312mm), usable range >Ø300mm		
	Rotary Range	0° - 360°		
Objective Lens	Angle Resolution	1' or 0.01°		
	Magnification	10X Standard	20X option	50X option
	Object View (mm)	Ø30	Ø15	Ø6
	Working Distance (mm)	77.7	44.3	38.4
Data Processing System	DC-3000 multi-function data processing system: Coordinate skew, mm/inch conversion, ABS/INC conversion, Zero setting, calculation, 0°, 90°, 270°, 360° conversion, linear compensation			
Illumination	Transmission and reflected light source: 24V/150W halogen lamp			
Power	110V/220V(AC), 50/60Hz, 400W total power			
Light Source Cooling	Forced air cooling			
Dimensions	770 x 550 x 1100			
Weight	130kg			



## Microscope XC-100L



### Features:

- Sharp stereo erect image over a wide field of view. It is suitable for spot examination for the machining industry, paper making, print, and textile, etc.
- Features small size, light weight, nice design and easy operation
- Working Distance: 7mm
- Pen illumination

### Standard Accessories

- Eyepiece, Lamp, Instruction Manual

Graduation	Magnification	Field Of View	Objective	Code No.
0.01mm	100X	1.6mm	10X	7642010

## Microscope MS-2



### Features:

- Sharp stereo erect image over a wide field of view
- Rotatable objective, 45° inclined and 360° rotatable

### Standard Accessories

- Eyepiece, Glass Stage, Instruction Manual

Magnification	Field Of View	Working Distance	Objective	Code No.
20X	8.5mm	80mm	2X	7642011

# Kits

8pc Ultimate Metrology Kit .....	.132
5pc Precision Tool Kit .....	.132
Analog Plus Kits .....	.133
Asimeto Precision Tools Kit #5 .....	.134
Asimeto Indicator/Mag Base Kit .....	.135
Dial/Digit Height Gage Combos .....	.136

## 8pc Ultimate Metrology Kit



- 6" X .001" Aluminum Dial Caliper
- 6" x .0005" Absolute Digital Caliper
- 0-1" x .001" Outside Micrometer
- 0-1" x .00005" IP65 Digital Micrometer
- 1/2" x .001" AGD2 Dial Indicator
- 1/2" x .0005" Digital Indicator
- .03" x .005" Dial Test Indicator
- Articulating Arm Magnetic Base

Description	Code No.
Ultimate Metrology Kit	7285086

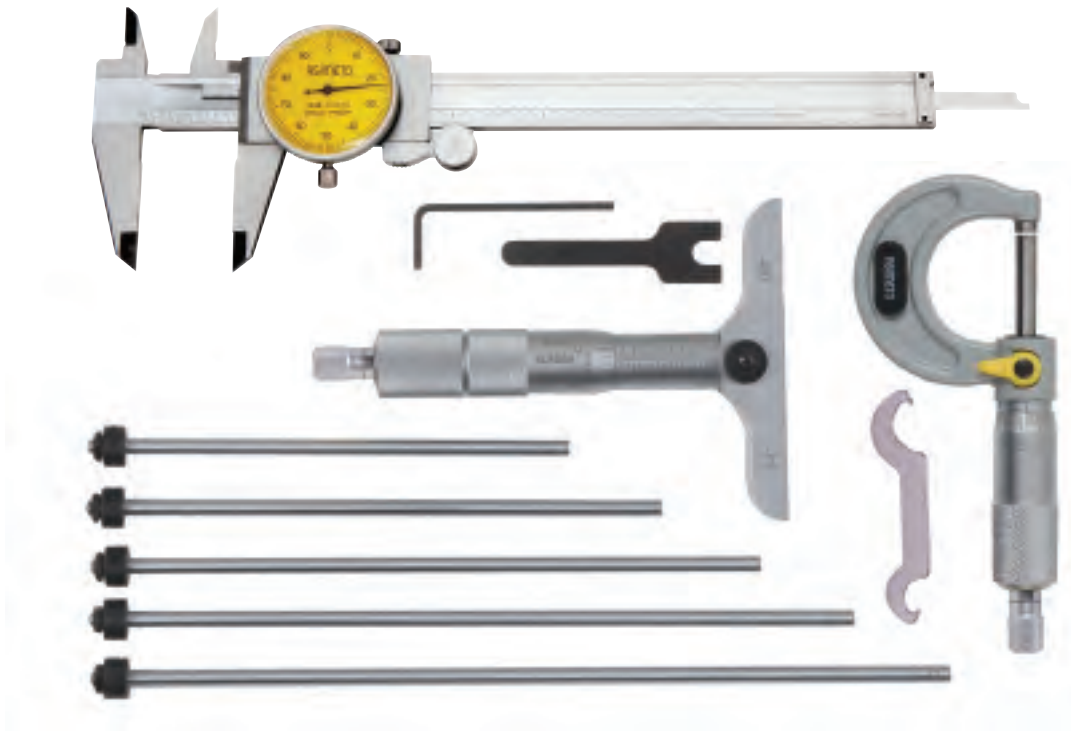
## 5pc Precision Tool Kit



- 6" x .0005" Sylvac Digital Caliper
- .03" x .0005" Dial Test Indicator
- 1" x .001" AGD2 Dial Indicator
- 0-1" x .0001" Outside Micrometer
- Articulating Arm Magnetic Base

Description	Code No.
5pc Precision Tool Kit	7960161

## “Analog Plus” Kit



- 6" x .001" Dial Caliper
- 0-1" x .0001" Outside Micrometer
- 0-6" x .001" Depth Micrometer

Description	Code No.
"Analog Plus" Kit	7960021

## Asimeto Precision Tools Kit #5



Description	Code No.
Includes 1 each of the following: <ul style="list-style-type: none"> <li>• 7101013 (0-1" micrometer .0001")</li> <li>• 7101023 (1-2" micrometer .0001")</li> <li>• 7307081 (8"/200mm digital caliper)</li> <li>• 7402261 (0-1" dial indicator .001")</li> <li>• 7601011 (magnetic base)</li> <li>• 7606009 (6" pocket rule)</li> </ul>	500-155



## Asimeto Indicator/Mag Base Kit #1



Description	Code No.
Includes 1 each of the following: <ul style="list-style-type: none"> <li>• 7602021 (Type II triple jointed magnetic base)</li> <li>• 7401061 (0-.25" .001" AGD1 dial indicator)</li> </ul>	500-216

## Asimeto Indicator/Mag Base Kit #2



Description	Code No.
Includes 1 each of the following: <ul style="list-style-type: none"> <li>• 7602031 (Type III triple jointed magnetic base)</li> <li>• 7402261 (0-1" .001" AGD2 dial indicator)</li> </ul>	500-730

## Digital Height Gage Combos



Description	Code No.
<b>12"/300mm Digital Height Gage Combo</b> Includes 1 each of the following: <ul style="list-style-type: none"> <li>• 7625120 (0-12"/300mm digital height gage)</li> <li>• 7501733 (Asimeto .0005" x .03" dial test indicator)</li> <li>• Holding bar &amp; clamp</li> </ul>	500-150
<b>24"/600mm Digital Height Gage Combo</b> Includes 1 each of the following: <ul style="list-style-type: none"> <li>• 7625240 (0-24"/600mm digital height gage)</li> <li>• 7501733 (Asimeto .0005" x .03" dial test indicator)</li> <li>• Holding bar &amp; clamp</li> </ul>	500-151

## Dial/Digit Height Gage Combos



Description	Code No.
<b>12" Dial/Digit Height Gage Combo</b> Includes 1 each of the following: <ul style="list-style-type: none"> <li>• 7623121 (0-12" .001" dial/digit height gage)</li> <li>• 7501733 (Asimeto .0005" x .03" dial test indicator)</li> <li>• Holding bar &amp; clamp</li> </ul>	500-147
<b>18" Dial/Digit Height Gage Combo</b> Includes 1 each of the following: <ul style="list-style-type: none"> <li>• 7623181 (0-18" .001" dial/digit height gage)</li> <li>• 7501733 (Asimeto .0005" x .03" dial test indicator)</li> <li>• Holding bar &amp; clamp</li> </ul>	500-148
<b>24" Dial/Digit Height ZGage Combo</b> Includes 1 each of the following: <ul style="list-style-type: none"> <li>• 7623241 (0-24" .001" dial/digit height gage)</li> <li>• 7501733 (Asimeto .0005" x .03" dial test indicator)</li> <li>• Holding bar &amp; clamp</li> </ul>	500-149

## INCH TO METRIC CONVERSION TABLES

Decimals to Millimetres				Fractions to Decimals to Millimetres					
Decimal	mm	Decimal	mm	Fraction	Decimal	mm	Fraction	Decimal	mm
0.001	0.0254	0.500	12.7000	1/64	0.0156	0.3969	33/64	0.5156	13.0969
0.002	0.0508	0.510	12.9540	1/32	0.0312	0.7938	17/32	0.5312	13.4938
0.003	0.0762	0.520	13.2080	3/64	0.0469	1.1906	35/64	0.5469	13.8906
0.004	0.1016	0.530	13.4620						
0.005	0.1270	0.540	13.7160						
0.006	0.1524	0.550	13.9700	1/16	0.0625	1.5875	9/16	0.5625	14.2875
0.007	0.1778	0.560	14.2240						
0.008	0.2032	0.570	14.4780						
0.009	0.2286	0.580	14.7320	5/64	0.0781	1.9844	37/64	0.5781	14.6844
		0.590	14.9860	3/32	0.0938	2.3813	19/32	0.5938	15.0813
0.010	0.2540			7/64	0.1094	2.7781	39/64	0.6094	15.4781
0.020	0.5080								
0.030	0.7620								
0.040	1.0160	0.600	15.2400	1/8	0.1250	3.1750	5/8	0.6250	15.8750
0.050	1.2700	0.610	15.4940						
0.060	1.5240	0.620	15.7480						
0.070	1.7780	0.630	16.0020	9/64	0.1406	3.5719	41/64	0.6406	16.2719
0.080	2.0320	0.640	16.2560	5/32	0.1562	3.9688	21/32	0.6562	16.6688
0.090	2.2860	0.650	16.5100	11/64	0.1719	4.3656	43/64	0.6719	17.0656
		0.660	16.7640						
0.100	2.5400	0.670	17.0180						
0.110	2.7940	0.680	17.2720	3/16	0.1875	4.7625	11/16	0.6875	17.4625
0.120	3.0480	0.690	17.5260						
0.130	3.3020								
0.140	3.5560			13/64	0.2031	5.1594	45/64	0.7031	17.8594
0.150	3.8100			7/32	0.2188	5.5563	23/32	0.7188	18.2563
0.160	4.0640	0.700	17.7800	15/64	0.2344	5.9531	47/64	0.7344	18.6531
0.170	4.3180	0.710	18.0340						
0.180	4.5720	0.720	18.2880						
0.190	4.8260	0.730	18.5420	1/4	0.2500	6.3500	3/4	0.7500	19.0500
		0.740	18.7960						
0.200	5.0800	0.750	19.0500						
0.210	5.3340	0.760	19.3040	17/64	0.2656	6.7469	49/64	0.7656	19.4469
0.220	5.5880	0.770	19.5580	9/32	0.2812	7.1438	25/32	0.7812	19.8438
0.230	5.8420	0.780	19.8120	19/64	0.2969	7.5406	51/64	0.7969	20.2406
0.240	6.0960	0.790	20.0660						
0.250	6.3500								
0.260	6.6040			5/16	0.3125	7.9375	13/16	0.8125	20.6375
0.270	6.8580								
0.280	7.1120	0.800	20.3200						
0.290	7.3660	0.810	20.5740	21/64	0.3281	8.3344	53/64	0.8281	21.0344
		0.820	20.8280	11/32	0.3438	8.7313	27/32	0.8438	21.4313
0.300	7.6200	0.830	21.0820	23/64	0.3594	9.1281	55/64	0.8594	21.8281
0.310	7.8740	0.840	21.3360						
0.320	8.1280	0.850	21.5900						
0.330	8.3820	0.860	21.8440	3/8	0.3750	9.5250	7/8	0.8750	22.2250
0.340	8.6360	0.870	22.0980						
0.350	8.8900	0.880	22.3520						
0.360	9.1440	0.890	22.6060	25/64	0.3906	9.9219	57/64	0.8906	22.6219
0.370	9.3980			13/32	0.4063	10.3188	29/32	0.9062	23.0188
0.380	9.6520			27/64	0.4220	10.7156	59/64	0.9219	23.4156
0.390	9.9060								
		0.900	22.8600						
0.400	10.1600	0.910	23.1140	7/16	0.4374	11.1125	15/16	0.9375	23.8125
0.410	10.4140	0.920	23.3680						
0.420	10.6680	0.930	23.6220						
0.430	10.9220	0.940	23.8760	29/64	0.4531	11.5094	61/64	0.9531	24.2094
0.440	11.1760	0.950	24.1300	15/32	0.4689	11.9063	31/32	0.9688	24.6063
0.450	11.4300	0.960	24.3840	31/64	0.4882	12.3031	63/64	0.9844	25.0031
0.460	11.6840	0.970	24.6380						
0.470	11.9380	0.980	24.8920						
0.480	12.1920	0.990	25.1460	1/2	0.5000	12.7000	1	1.0000	25.4000
0.490	12.4460	1.000	25.4000						

## IP Ratings

### First Digit

The first digit indicates the level of protection that the enclosure provides against access to hazardous parts (e.g., electrical conductors, moving parts) and the ingress of solid foreign objects.

Level	Protected Against	Effective Against
0	--	No protection against contact and ingress of objects.
1	Objects >50mm	Any large surface of the body, such as the back of the hand, but no protection against deliberate contact with a body part
2	Objects >12.5mm	Fingers or similar objects
3	Objects >2.5mm	Tools, thick wires, etc.
4	Objects >1mm	Most wires, screws, etc.
5	Dust protected	Ingress of dust is not entirely prevented, but it must not enter in sufficient quantity to interfere with the satisfactory operation of the equipment; complete protection against contact.
6	Dust tight	No ingress of dust; complete protection against contact.

### Second Digit

Protection of the equipment inside the enclosure against harmful ingress of water.

Level	Protected Against	Effective Against
0	Not protected	--
1	Dripping water	Dripping water (vertically falling drops) shall have no harmful effect.
2	Dripping water when tilted up to 15°	Vertically dripping water shall have no harmful effect when the enclosure is tilted at an angle up to 15° from its normal position.
3	Spraying water	Water falling as a spray at any angle up to 60° from the vertical shall have no harmful effect.
4	Splashing water	Water splashing against the enclosure from any direction shall have no harmful effect.
5	Water jets	Water projected by a nozzle against enclosure from any direction shall have no harmful effect.
6	Powerful water jets	Water projected in powerful jets against the enclosure from any direction shall have no harmful effect.
7	Immersion up to 1m	Ingress of water in harmful quantity shall not be possible when the enclosure is immersed in water under defined conditions of pressure and time (up to 1m of submersion).
8	Immersion beyond 1m	The equipment is suitable for continuous immersion in water under conditions which shall be specified by the manufacturer. Note: Normally, this will mean that the equipment is hermetically sealed. However, with certain types of equipment, it can mean that water can enter but only in such a manner that produces no harmful effects.

# INDEX

<b>A</b>			
Absolute Digital Calipers	41, 46	Linear Scales	60
Angle Gage		Long Jaw	49
Countersink	107	Single Measuring Face	52
Depth & Angle Gage	111	Snap Gages	51
Set	104	Spring	112
		Thickness Gages	59
		Universal Depth Gage	54
		Vernier	45, 48-49
<b>B</b>		Center Finder, Round Bar	111
Bases, Magnetic	89-91	Centering Indicator	70
Bevel		Cleaner, Surface Plate	102
Edge Square	116	CMM Styli & Accessories	86-88
Protractor, Universal	113	CNC Tool Setting Gage	114
Sliding, Universal	107	Combination Square Set	111
Blade Micrometer	22	Comparator	
Blocks		Optical	128
V	123	Contact Point	
Gage	117-118	Adapters	79
Space	119	Contact Points	
Bore Gage Extensions	99	Ball	77
Bore Gages	98-99	Cone	78
Bushing, Indicator Stem	79	Flat Carbide Needle	78
		Flat End	78
		For Alternate Test Ind.	83-85
		Sets	80-82
		Spherical End	76
		Stem Points	79
		Coolant Proof	
		Digital Calipers	40-41
		Countersink Angle Gage	107
<b>C</b>			
Cable, SPC	6, 41, 46, 62	<b>D</b>	
Caliper		Depth & Angle Gages	111
Attachments, Depth Base	54	Depth Calipers	95-97
Centerline Attachments	55	Depth Gages	
Extender Attachments	57	Depth Calipers	95-97
Groove Measurement Jaws	56	Interchangeable Rod	94
Universal Accessory Kit	55	Tire	95
Calipers		Universal	54
Absolute	41, 46	Depth Micrometers	35-36
Adjustable Measuring Jaw	50	Dial	
Coolant Proof, IP67	40-41	Bore Gages	99
Depth Gage, Universal	54	Calipers	43-44, 58-59
Dial	43-44, 58-59	Gage Stand	92
Digital	40-42, 46, 47, 50-54, 58-60	Height Gages	100
Forester	49	Indicators	64-67
Gear Tooth	53	Test Indicators	68-71
Heavy Duty	46-48	Thickness Gages	59
Inside Groove	52		
Internal Caliper Gages	58	Digital	
IP67 Coolant Proof	40-41	Bore Gages	98
		Calipers	40-42, 46, 47, 50-54, 58-60
		Depth Gages	54, 94-96
		Height Gages	100-101
		Indicators	62-63, 67
		Micrometers	6-8, 11, 13-22, 24, 29-30, 35
		Protractors	113-114
		Scales	60
		Dividers, Spring	112
		Drill Point Gages	110
		<b>E</b>	
		Electronic	
		Bore Gages	98
		Calipers	40-42, 46, 47, 50-54, 58-60
		Depth Gages	54, 94-96
		Height Gages	100-101
		Indicators	62-63, 67
		Micrometers	6-8, 11, 13-22, 24, 29-30, 35
		Protractors	113-114
		Scales	60
		Engineer's Squares	116
		<b>F</b>	
		Feeler Gages	104
		Flexible Rules	109
		<b>G</b>	
		Gage Balls	119
		Gage Blocks	117-118
		Gages	
		Balls	119
		Bore	98-99
		CNC Tool Setting	114
		Countersink Angle	107
		Depth	54, 94-99
		Depth & Angle	111
		Dial, Ultra Precision	64
		Drill Point	110
		Feeler	104
		Height	100-102
		Internal Caliper	58
		Pin	120-121

Radius	104
Ring	124-125
Single Measuring Face	52
Snap	25, 51
Telescoping	106
Thickness	59, 104
Thread Pitch	105, 124-125
Thread Plug	124-125
Welding, Automatic Size	115
Welding, Bridge Cam	115
Wire	107
Gear Tooth Caliper	53

## H

Handles, Pin Gauge	120
Hardness Tester	126
Heads, Micrometer	37-38
Height Gages	
Digital	101
Double Beam	100
Single Beam	100
Vernier	102

## Holdings

Indicator	67, 72-76
Magnetic	89-91

## I

Impact Hardness Tester	126
Indicating Micrometers	26

## Indicator

Axial Support Bracket	76
Centering Holder	76
Clamps	73-74
Contact Points	76-85
Depth Bases	75
Dovetail Holders	73-75
Dovetail Stem Set	74
Extension Rods	82
Float N Lock Positioners	72
Holding Bar Assembly	67
Groove Gage Attachment	75
Stem Bushing, Straight	79
Swivel Clamp	74
Tension Clamps	73
Universal Dovetail Holder	75
Zero Set Holders	72

Indicator Accessories	72-92
Indicator Points	76-85

## Indicators

Back Plunger Dial Type	67
Centering	70
Dial Gage, Ultra Precision	64
Dial Test	68-71
Dial, AGD1	65
Dial, AGD2	66
Dial, Back Plunger Type	67
Digital	62
Digital w/ Analog Display	63
IP65	62
Test, Dial	68-71
Test, Digital	67
Test, Extended Range	71
Ultra Precision Dial Gage	64

Inside Micrometers	29-34
--------------------	-------

## K

### Kits, Precision Tool

Analog Plus	133
Height Gage Combos	136
Indicator/Mag Base Sets	135
Precision Tool Kit #5	134
Precision Tool Kit, 5pc	132
Ultimate Metrology, 8pc	132

## L

Linear Scales	60
---------------	----

## M

### Magnetic Bases

Articulating Arm	89
Forced Locking	91
Hydraulic	90
Permanent	90
Standard	91

### Micrometer

Anvil Attachments	27
Anvils, Screw Thread	24
Heads	37-38
Standards	26
Stands	37

### Micrometers

Ball Anvil	21
Blade	22
Can Seam	23
Deep Throat	15

Depth	35-36
-------	-------

Disc	13
Flange Groove	28
Hub	23
Indicating	26
Inside	29-34
Inside, Dual Measurement	33
Inside, Interchangeable Rod	34
Inside, Tubular	33
Interchangeable Anvil	11-12
Internal, 2 & 3 Point	30-32
Multi-Anvil	19
Outside, Digital	6-8
Outside, Digital, Economic	8
Outside, Vernier	9-10
Point	16-17
Screw Thread	24
Single Point	17
Snap Gages	25
Spline	14
Universal	17
V-Anvil	18
Vernier	9-10, 12-16, 18-24, 26, 28-29, 31-34, 36
Wire	23
Microscopes	130

## N

NPT Thread Gages	125
------------------	-----

## O

Optical Comparator	128
--------------------	-----

## P

### Parallels

Precision Sets	122
Ultra Precision Wavy Sets	122

### Pin Gages

Handles	120
Individual	120
Sets	121

### Pocket

Feeler Gages	104
Rules	110
Thickness Gages	104

Points, Indicator	76-85
-------------------	-------

Precision Tool Kits	see Kits
---------------------	----------

Profile Projector, Vertical	129
-----------------------------	-----

Projector, Vertical Profile	129
Protractors	
Dial	113
Digital	113
Level Type, Digital	114
Magnetic Base	114
Universal Bevel	113

## R

Radius Gages	104
Ring Gage, Master Setting	125
Roughness Standards	126
Rules	
Flexible	109
Pocket	110
Rigid	108
Steel, Flexible	109
Steel, Rigid	108

## S

Scales, Linear	60
Screw	
Pitch Gages	105, 124-125
Thread Micrometers	24
Sine Bar Riser Kit	126
Sliding Bezel, Universal	107
Snap Gages	25, 51
Space Blocks	119
SPC Cable	
Calipers, Absolute	41
Calipers, Heavy Duty	46
Indicators, Digital	62
Indicators, IP65	62
Micrometers	6
Spring Calipers	112
Spring Dividers	112
Squares	
Combination Set	111
Die Maker's Set	116
Engineer's	116
Steel	116
Stands	
Dial Gage	92
Surface Plate Cleaner	102
Surface Roughness Standards	126
Sylvac System Tools	41, 47

## T

Telescoping Gages	106
Test Indicators	
Centering Indicator	70
Dial	68-71
Digital	67
Extended Range	71
Testers, Hardness	126
Thickness Gages	
Feeler Gages	104
Dial	59
Digital	59
Thread	
NPT Gages	125
Pitch Gages	105, 124-125
Plug Gages	124-125
Ring Gages	124-125
Triangle Set	27
Wire Set	106
Tire Depth Gage	95
Tubular Inside Micrometers	33

## U

Ultimate Metrology Kit	132
Universal Bevel Protractor	113
Universal Sliding Bezel	107

## V

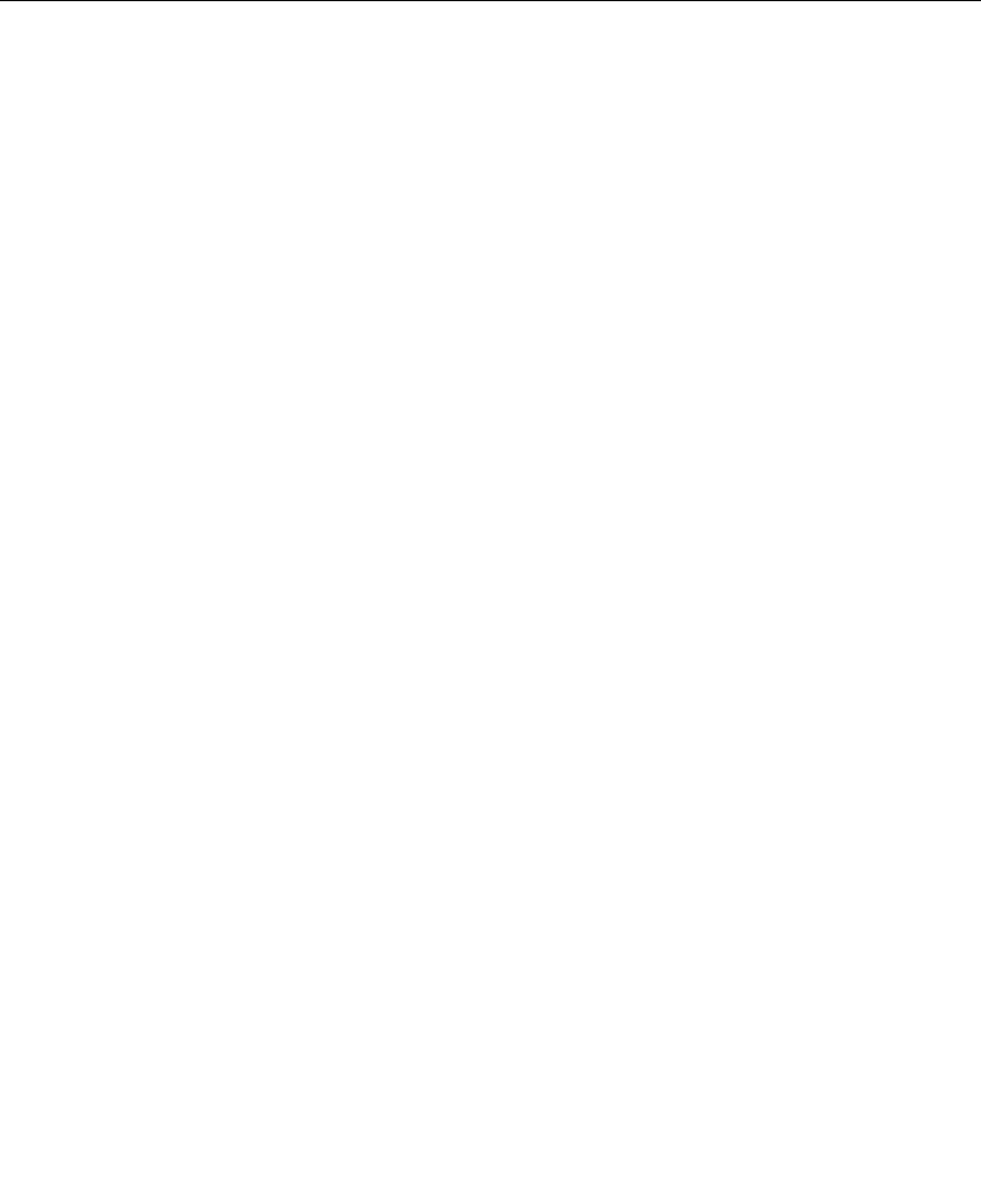
V-Blocks	
Adjustable, High Precision	123
Ball Bearing	123
High Precision Adjustable	123
Vernier	
Calipers	45, 48-49
Height Gages	102
Micrometers	9-10, 12-16, 18-24, 26, 28-29, 31-34, 36
Vertical Profile Projector	129

## W

Welding Gages	
Automatic Weld Size	115
Bridge Cam	115
Wiggler Set	112
Wire Gage	107









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