Measuring Tool



ЗМ	Tape Measure	205-206
***	Feeler Gauge	207-208
	Level	208
	Ruler/Angle Ruler	209
	Vernier Caliper	210-212
	Micrometer	213-214
	Laser Distance Meter	215













Tape Measure



No.	Ruler Length (m)	Tape Width L (mm)	-	T	M
91311A	2	13	12	120	8.6
91312A	3	16	12	120	13.6
91314A	5	19	12	120	23.3
91315A	5	25	12	120	30,5
91316A	7.5	25	6	60	22.3
91317A	10	25	6	60	28.6

▲ Excluded from lifetime warranty terms.



- TPE cover, not easy to damage when dropped Ruler tape double-sided printing
- Strong springs for longer life

No.	Ruler Length (m)	Tape Width L (mm)		8	囫
91333A	3.5	16	12		-
91334A	5	19	12		
91335A	5.5	25	6	-	(#)
91336A	7.5	25	6	-	-

A Excluded from lifetime warranty terms.

Grade-1 Precision Tape



- High precision up to JIS1
- Durable matte paint for easy reading in bright light
- Double-sided printing for easy reading on both sides
 Double-sided crochet hook with automatic resetting to ensure that both internal and external measurements starting from zero
- · Climbing hook provided for easy carrying

No.	Ruler Length (m)	Tape Width L (mm)	9	8	10
91311B	2	13	12	18	3
91312B	3	16	12	2	9
91314B	5	19	12	8	15
91315B	5	25	12	-	19
91316B	7.5	25	6	12	194
91317B	10	25	6	72	12
91322B	5M/16Ft.	19	12		

▲ Excluded from lifetime warranty terms.



*Nylon-coated steel ruler tape can be used in inclement weather or environment and can be scrubbed repeatedly



*Nylon-covered steel ruler tape can be washed





Tape Measure



- •TPE cover, not easy to damage when dropped •Ruler tape double-sided printing
- ·Strong springs for longer life

No.	Ruler Length (m)	Tape Width L (mm)	49	T	1
91341A	3.5	16	12	-	- 80
91342A	5	19	12	23	20
91343A	5.5	25	6	-	-
91344A	7.5	25	6	50	=

▲ Excluded from lifetime warranty terms.

Steel Tape Measure



- · Return quickly
- · ABS/TPR Cover, soft and shatter-proof
- · Metal tailhook for easy handling

No.	Ruler Length (m)	Tape Width L (mm)	#	B	囫
91351B	15	10	20	8	8
91353B	30	10	20	75	- 5

▲ Excluded from lifetime warranty terms.

Fiberglass Tape Measure



12345

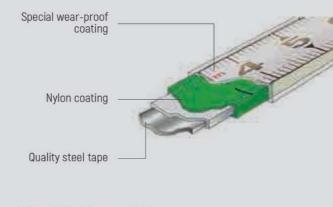
- · Measuring range 0-20 meters
- · ABS high-strength engineering plastics: strong and durable, good impact resistance Back hand-held design: easy to carry

 • Fiberglass ruler tape: rustproof and insulted

No.	Ruler Length (m)	Tape Width L (mm)	Θ	8	7
91361B	20	13	20	120	-
91362B	30	13	20	-	
91363B	50	13	20		-

▲ Excluded from lifetime warranty terms.

Nylon coating and wear-proof treatment technology



SATA tapes are nylon-coated











































09401 14Pc. Feeler Gauge Set 0.05-1.00mm









· Made of Mn steel, with polished surface

- Feeler Gauge: 0.05mm, 0.10mm, 0.15mm, 0.20mm, 0.25mm, 0.30mm, 0.40mm, 0.50mm, 0.60mm, 0.70mm, 0.80mm, 0.90mm, 1.00mm
- · Ruler: 2'

No.	#	B	圖
09401		24	1.8

A Excluded from lifetime warranty terms.



· Made of Mn steel, with polished surface

 Feeler Gauge: 0.02mm, 0.03mm, 0.04mm, 0.05mm, 0.10mm, 0.15mm, 0.20mm, 0.25mm, 0.30mm, 0.35mm, 0.40mm, 0.45mm, 0.50mm, 0.55mm, 0.60mm, 0.65mm, 0.70mm, 0.75mm, 0.80mm, 0.85mm, 0.90mm, 0.95mm, 1.00mm

No.	母	8	5
09405	Fan	36	3.7

▲ Excluded from lifetime warranty terms.

09402 16Pc. Feeler Gauge Set 0.05-1.00mm



· Made of Mn steel, with polished surface

 Feeler Gauge: 0.05mm, 0.10mm, 0.15mm, 0.20mm, 0.25mm, 0.30mm, 0.35mm, 0.40mm, 0.50mm, 0.55mm, 0.60mm, 0.70mm, 0.75mm, 0.80mm, 0.90mm, 1.00mm

No.	#	8	ā
09402		12	1.3

▲ Excluded from lifetime warranty terms.

09407 32Pc. Feeler Gauge Set 0.02-1.00mm, Metric & SAE



· Made of 65Mn steel, with polished surface

Specification

 Feeler Gauge: 0.02mm, 0.03mm, 0.04mm, 0.05mm, 0.06mm, 0.07mm, 0.08mm, 0.09mm, 0.10mm, 0.13mm, 0.15mm, 0.18mm, 0.20mm, 0.25mm, 0.25mm, 0.28mm, 0.30mm, 0.33mm, 0.38mm, 0.40mm, 0.45mm, 0.50mm, 0.55mm, 0.60mm, 0.63mm, 0.65mm, 0.70mm, 0.75mm, 0.80mm, 0.85mm, 0.90mm, 1.00mm

No.	8	8	ā
09407		24	3.1





23 Pc. Metric High Precision Feeler Set



- · Body made of Mn steel with surface polished
- · Ruler 4" long

Specification

 $\cdot \bar{0}.02, 0.03, 0.04, 0.05, 0.10, 0.15, 0.20, 0.25, 0.30, 0.35, 0.40, 0.45, 0.50, 0.55, 0.60, 0.65, 0.70, 0.75, 0.80, 0.85, 0.90,$ 5,1.00MM

No.	#	8	酒
09415	9	2	-

▲ Excluded from lifetime warranty terms.

32 Pc. Metric and Inch High Precision Feeler Set



- · Body made of Mn steel with surface polished
- · Ruler 3.5" long
- · Metric-inch system

Specification

0.02, 0.03, 0.04, 0.05, 0.06, 0.07, 0.08, 0.09, 0.10, 0.13, 0.15, 0.18, 0.20, 0.23, 0.25, 0.28, 0.30, 0.33, 0.38, 0.40, 0.45, 0.50, 0.55, 0.60, 0.63, 0.65, 0.70, 0.75, 0.80, 0.85, 0.90, 1.00MM

No.	#	8	7
09416	*		.*:

A Excluded from lifetime warranty terms.













































Level









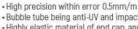












- Bubble tube being anti-UV and impact resistance, not easy to break
- · Highly elastic material of end cap, and the drop performance is good

No.	L(mm)	#	8	6
91601A	300	6	•	
91602A	450	6	-	-
91603A	600	6		
91604A	750	6	828	
91605A	900	6		
91606A	1200	6		-

A Excluded from lifetime warranty terms.

Magnetic Level





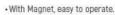












- · High precision within error 0.5mm/m
- · Bubble tube being anti-UV and impact resistance, not easy to break · Highly elastic material of end cap, and the drop performance is good

No.	L(mm)	B	8	10
91611A	300	6	30	
91612A	450	6	30	*
91613A	600	6	30	
91614A	750	6	30	
91615A	900	6	30	

▲ Excluded from lifetime warranty terms.

91616A 1200





















· Clear calibration and wear-resistance

No.	Spec.	#	쓩	圖
91401	150	12	144	4
91402	300	12	108	7.8
91403	500	10	90	12
91404	1000	10	40	12.3

A Excluded from lifetime warranty terms.

Vernier Height Gauge

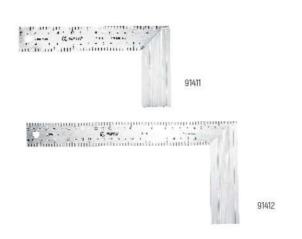


- The ruler frame has high fitting accuracy and smooth pulling
- The base can be replaced, enhancing the service life
 The base material is solid and the measurement is more stable.

No.	Range (mm)	Resolution(mm)	Accuracy (mm)	5	¥	靣
91542	0-200	0.02	± 0.03	1	4	1.5
91543	0-300	0.02	±0.04	1	4	(40)
91544	0-500	0.02	±0.04	1	2	-

▲ Excluded from lifetime warranty terms.

Carpenter's Squares



- Made of stainless steel
- · Clear calibration and wear-resistance

No.	Spec.	#	8	靣
91411	200	10	40	7.1
91412	300	10	40	10.1

 $lack \Delta$ Excluded from lifetime warranty terms.



Digital Height Gauge



- The ruler frame has high fitting accuracy and smooth pulling The base can be replaced, enhancing the service life.
- The base material is solid and the measurement is more stable

No.	Range (mm)	Resolution(mm)	Accuracy (mm)	5	B	M
91545	0-200	0.01	± 0.03	1	4	
91546	0-300	0.01	±0.04	1	4	120
91547	0-500	0.01	±0.04	1	2	



91501 Vernier Caliper 0-150mm



- Measurement range: 0-150mm
- Made of stainless steel, ensuring high measurement accuracy
- · For measurement of inner hole, outer circle and depth

No.	Measuring Range (mm)	Indexing (mm)	Accuracy(mm)	9	T	ā
91501	0-150	0.02	+/-0.02	6	36	12.2

A Excluded from lifetime warranty terms.

91503 Vernier Caliper 0-300mm

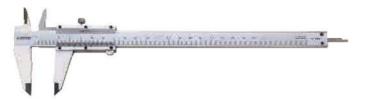


- Measurement range: 0-300mm
- Made of stainless steel, ensuring high measurement accuracy
- · For measurement of inner hole, outer circle and depth

No.	Measuring Range (mm)	Indexing (mm)	Accuracy(mm)	8	T	M
91503	0-300	0.02	+/-0.03	4	24	22.9

▲ Excluded from lifetime warranty terms.

91502 Vernier Caliper 0-200mm



- Measurement range: 0-200mm
- · Made of stainless steel, ensuring high measurement accuracy
- · For measurement of inner hole, outer circle and depth

No.	Measuring Range (mm)	Indexing (mm)	Accuracy(mm)	#	¥	6
91502	0-200	0.02	+/-0.02	6	36	17

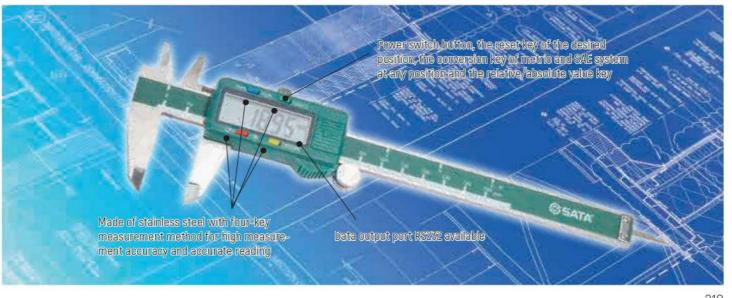
▲ Excluded from lifetime warranty terms.

91511 Digital Caliper 0-150mm



- Measurement range: 0-150mm and accurate reading Made of stainless steel, ensuring high measurement accuracy
- Reset at any position, and metric/inch conversion
- Relative/absolute value. With data output port RS232

No.	Measuring Range (mm)	Indexing (mm)	Accuracy(mm)	H	¥	Ō
91511	0-150	0.01	+/-0.03	6	36	13.9





















































91512 Digital Caliper 0-200mm



- Measurement range: 0-200mm and accurate reading Made of stainless steel, ensuring high measurement accuracy
 • Reset at any position, and metric/inch conversion
 • Relative/absolute value. With data output port RS232

No.	Measuring Range (mm)	Indexing (mm)	Accuracy(mm)	9	T	d
91512	0-200	0.01	+/-0.03	6	36	18

▲ Excluded from lifetime warranty terms.

91513 Digital Caliper 0-300mm



- · Measurement range: 0-300mm and accurate reading Made of stainless steel, ensuring high measurement accuracy
- Reset at any position, and metric/inch conversion
- Relative/absolute value. With data output port RS232

No.	Measuring Range (mm)	Indexing (mm)	Accuracy(mm)	4	T	M
91513	0-300	0.02	+/-0.03	4	24	19.8

A Excluded from lifetime warranty terms.

91521 Dial Caliper 0-150mm



- Measurement range: 0-150mm
- Made of stainless steel, easy to read
 Indicator core upgraded to two-way shockproof performance
 With outer ring locking device

No.	Measuring Range (mm)	Indexing (mm)	Accuracy(mm)	9	B	颪
91521	0-150	0.02	+/-0.03	6	36	13.8

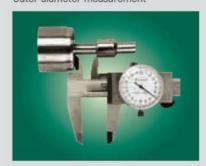
Excluded from lifetime warranty terms.



Measurement Applications



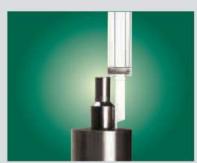
Outer diameter measurement



Inner diameter measurement



Difference measurement



Depth measurement



91522 Dial Caplier 0-200mm



- Measurement range: 0-200mm
- · Made of stainless steel, easy to read
- Indicator core upgraded to two-way shockproof performance
- With outer ring locking device

No.	Measuring Range (mm)	Indexing (mm)	Accuracy(mm)	9	S	ā
91522	0-200	0.02	+/-0.03	6	36	19.4

A Excluded from lifetime warranty terms.

91523 Dial Caplier 0-300mm



- Measurement range: 0-300mm
- Made of stainless steel, easy to read
 Indicator core upgraded to two-way shockproof performance
 With outer ring locking device

No.	Measuring Range (mm)	Indexing (mm)	Accuracy(mm)	-	T	囫
91523	0-200	0.02	+/-0.03	4	24	23

Excluded from lifetime warranty terms.

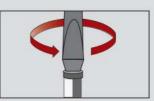


Common Sense for using SATA tools

Use tools correctly



Wrench size and nut type must be the



Make sure the tool is in normal use position



Repair frequently and replace rusty or damaged tools in time



When using with electric and pneumatic tools, please select special electric and pneumatic hand tools



Wear protective equipment if required by work environment



Make sure the cabinet is locked and pulley active before moving the toolbox























































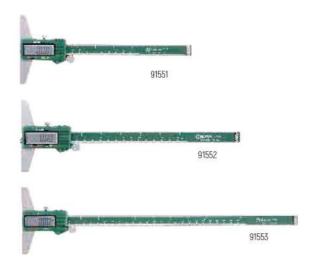












- Measuring base is polished twice to fit close to the measuring object
- · Large digital display for quick reading

No.	Measuring Range (mm)	Ħ	8	Ø
91551	0-150	6	36	7
91552	0-200	6	36	8
91553	0-300	6	24	10

▲ Excluded from lifetime warranty terms.

91531 **Outside Micrometer 0-25mm**



- Measurement range: 0-25mm
- Hard alloy measuring surface, ensuring high wear resistance
 With micrometer screw locking device

No.	Measuring Range (mm)	Indexing (mm)	Accuracy(mm)	母	T	颪
91531	0-25	0.01	+/-0.004	6	36	12.3

Excluded from lifetime warranty terms.

91532 **Outside Micrometer 25-50mm**



- Measurement range: 25-50mm
- Hard alloy measuring surface, ensuring high wear resistance
- · With micrometer screw locking device

No.	Measuring Range (mm)	Indexing (mm)	Accuracy(mm)	S	T	ā
91532	25-50	0.01	+/-0.004	6	36	16

▲ Excluded from lifetime warranty terms.

91533 **Outside Micrometer 50-75mm**



- Measurement range: 50-75mm
- · Hard alloy measuring surface, ensuring high wear resistance
- · With micrometer screw locking device

No.	Measuring Range (mm)	Indexing (mm)	Accuracy(mm)	4	¥	M
91533	50-75	0.01	+/-0.005	6	36	23.3

▲ Excluded from lifetime warranty terms.

91539 **Micrometer Base**



No.	#	留	園
91539		10	4



IP65 Digital Micrometer



No.	Measuring Range (mm)	Indexing (mm)	Accuracy(mm)	4	8	M
91534	0-25	0.001	0.002	6	36	7
91535	25-50	0.001	0.002	6	36	7

▲ Excluded from lifetime warranty terms.

Mechanical dial gauge



- · Hat lift design
- · Indication of value range, easy to read

No.	Measuring Range (mm)	Indexing (mm)	#	T	700
91561	0-5	0.01	¥		
91562	0-10	0.01	72	(4)	- 10

▲ Excluded from lifetime warranty terms.

IP54 Digital display dial indicator



- · Dust cap design with minimal environmental impact
- IP54 waterproof and dustproof design
- Zero at any position
- Metric to English conversion
- ·With data output interface

No.	Measuring Range (mm)	Indexing (mm)		8	<u>/@/</u>
91563	0-12.7	0.01	72	2	
91564	0-25.4	0.01	e	-	::::

A Excluded from lifetime warranty terms.

Lever dial indicator 91565



- · Gem bearing, high sensitivity, long service life
- Built in rubber pad for good shock resistance
 Hard alloy probe, more durable
- · Anti magnetic pointer, measurement not affected by magnetic field

No.	Measuring Range (mm)	Indexing (mm)	#	¥	M
91565	0-0.8	0.01	្ធ	ų.	Fig.

▲ Excluded from lifetime warranty terms.

MMagnetic base



Universal magnetic base

- · Universal shaft design for flexible rotation
- · With fine tuning function
- The special structure of the locking nut prevents rotation when adjusting the upper/lower arms

Mechanical magnetic base

- · Be able to lock the upper/lower arms separately
- The lower arm is fixed on the side of the base for greater stability

No.	Product Name	Measuring Range (KGF)	Clamping aperture(mm)	S	B	M
91566	Universal magnetic base	60	8	-		=
91567	Universal magnetic base	80	8	- 20	-	-
91568	Mechanical magnetic base	60	8	28	2	2
91569	Mechanical magnetic base	80	8	= 1	-	-













































62709 Laser Distance Meter 30M























Maximum measuring range¹ 0.2-30m Measurement accuracy +/-3 mm Measurement Unit m/ft+in Laser level Class 2 630-670nm, < 1mW Laser type Single measurement Soft rubber key Key 0°C ~40°C Operating temperature Storage temperature -10°C ~60°C Up to 5000 measurements Battery life Battery selection AAA 2 x 1.5V

· Use sighting board or a better reflecting surface if under sunlight or target is not reflecting well

After 3 minutes

30s

- 2 Accuracy
- In good measuring conditions (good measuring surface, room temperature, indoor lighting) etc.), the rated range can be reached. In poor measurement conditions, such as too strong light, weak reflection on the surface of the measured object or too large temperature difference, the error will increase
- Typical accuracy +/-3mm

Automatic laser shutdown

Automatic instrument shutdown

- · Small size for easy carrying
- · Single key for easy operation
- · HD backlight display for clear data display
- Rugged case for durability
- · 2 * AAA 15V batteries
- Automatic shutdown for saving power

No.	Spec.	9	8	濁
62709	30	8	20	13

Laser Distance Meter







62712

62713

0.2-60mm (62712) Range 0.2-100mm [62713] Accuracy 2 (2.0mm+5x10-5D) Single measurement Continuous measurement Area measurement Volume measurement Simple Pythagorean Quadratic Pythagorean Quadratic Pythagorean 2 Automatic level Automatic verticality Addition and Subtraction Angular Transducer

Angle measurement accuracy +/- (0.3° +0.1° +0.01 \times D) Front/rear benchmark Measuring Basis Measurement Unit m /ft/ in /ft+in

Auto shutdown Automatic shutdown after no operation for 3 minutes

Screen Type 20-inch screen History measurement record 20 sets Laser level Class 2 630-670nm, <1mw 0~+40 (32F~+104F) Laser type Operating temperature 115 × 49 × 26mm Size

- •The range data is referenced against the default rear benchmark; the maximum range will be changed according to different models. For the actual range, see the outer packing of the
- 2 Accuracy (refers to the measured distance):
- · In good measuring conditions (good measuring surface, room temperature, indoor lighting, etc.), the rated range can be reached. In poor measurement conditions, such as too strong light, weak reflection on the surface of the measured object or too large temperature difference, the error will increase
- 3 Angle measurement accuracy
- +01° is the error caused by temperature, D is +/-45, for example: 0 ° error is +/-0.3° at normal temperature, and 45° error is +/-0.85° at abnormal temperature
- Tip: Use sighting board or a better reflecting surface if under sunlight or target is not reflecting
- Typical accuracy +/-2mm
- Angle measurement function
- · High-definition backlight display capable of displaying 5 lines of data at the same time, with data comparison at a glance
- · Capable of storing 20 sets of history data
- · Capable of single measurement, continuous measurement, maximum/minimum measurement, area and volume measurement, hook, automatic leveling, automatic verticality, as well as Pythagorean, addition and subtraction operation
- · Prompt with beeper
- · Charging with Micro USB
- · Automatic shutdown for saving power

No.	Spec.	4	**	靣
62712	60	5	20	5.3
62713	100		20	5.3