

IMPERR

ABOUT US

IMPERR Measuring Instrument Co.,LTD. Established in May, 2002, is a global company integrating IMPERR Electronics Co., Ltd is our production line, manufacturing and trade of measuring tools.

As a professional entity integrating industry and trade, we can provide our global customers with reliable delivery of products and services of consistent quality. Our perfect equipment and strong artwork design capability enable us to manufacture high quality tool products to satisfy our customers' different requirements. To guarantee our global customers with consistent quality, we have got CE and ROHS certificate for our products.

we specialize in precision measurement equipments,we always carry out "quality first,customers first, technology first, integrity-based" our product are suitable for various trades and industries.

such as electronic appliances,electromagnetic machinery, auto parts, power machinery,building doors and windows.spring manufacturing,medical equipment,furniture,elevators,woodworking, as well as schools.if you need customized products please feel free to contact us.



CONTENTS

1.Angle Measuring Series	01-06	11.Online Testing Series	41-42
2.Caliper Series	07-16	12.Fast Tester	43-48
3.Depth Caliper Series	17-18	13.Concentricity Gage Series	49-56
4.Digital Linear Scales Series	19-21	14.Hardness Tester Series	57-64
5.Height Gauge Series	22	15.Force Gauge Series	65-66
6.Outside Micrometer Series	23-24	16.Machine Stand	66-68
7.Indicator Series	25-29	17.Spring Tester Series	69
8.Thickness Gauge Series	30-36	18.Torque Tester Series	70-74
9. Inside Diameter Measuring Series	37-38	19.Tension Gauge Series	75-77
10.Part Of Measuring Tool	39-40	20.Vibration Meter	78-79

SPC Cable with software



Features

- Use SPC under special software
- Connect with computer UBS plug S-02:special plug to caliper

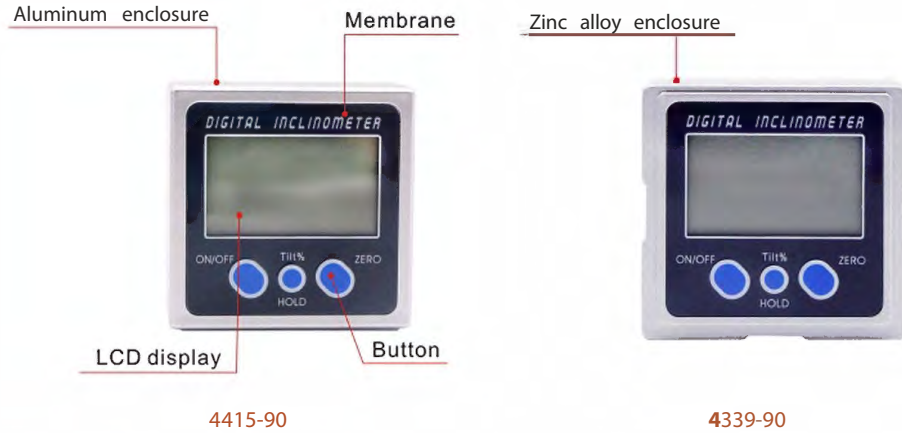
SPC Cable with software, can be use on office interface.



Features

- Can be use on office interface.
- Connect with computer UBS plug S-01:special plug to caliper

Level Box



Features

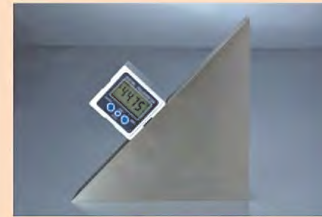
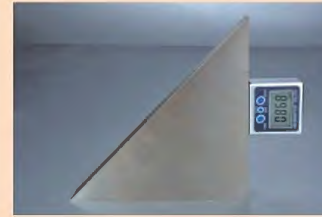
- Measuring plane containing disk magnets can stick to the surface to be measured.
- Works great for miter saws and table saws.
- Portable size, convenient to co-work with other measuring tools and enlarge measuring range.
- Quick display of the measured value on big LCD screen.
- With on-off power switch & Auto power-off for option.
- Reversible reading allowing to read display to right side up.
- Relative-absolute measurement interchange at any position, ABS function.
- Used for angle measurement in automotive, woodworking, building, drilling machinery etc.

Technical Data

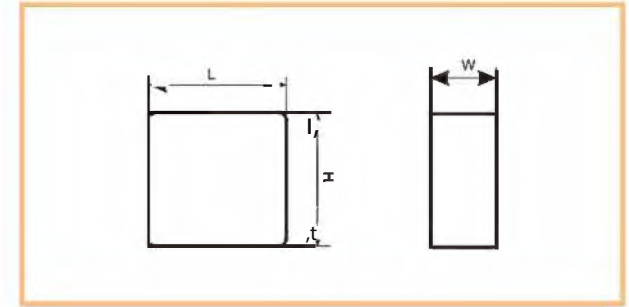
Model number	Resolution	measuring range	Accuracy	Repeatability	I'H'W(mm)	Net Weight(g)	Magnet
4415-90	0.05°	4-90°	±0.2°	0.1°	57*57*30.5	173.5	in bottom
4339-90	0.05°	4-90°	±0.2°	0.1°	61*59*30.5	189.5	in three surfaces
4415-180	0.05°(<100°) 0.1°(100°-180°)	2°-180°	±0.2°	0.1°	57*57*30.5	173.5	in bottom

Work temperature	0°C-40°C
Working humidity	≤80%RH
Battery	9V battery
Function	On/Off, Relative/absolute measurement interchange at any position, Zero setting at any position, Angle and slope readout conversion, Data hold, Automatic Power Off in 5 minutes, With 3 built-in magnets (with diameter 10mm on measuring surface)

CE RoHS



Dimensional Drawings



Digital Level Box



Technical Data

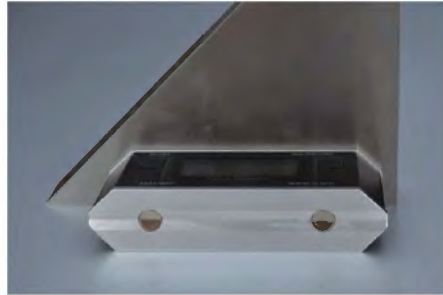
Model number	Resolution	measuring range	Accuracy	Repeatability	I'WW(mm)	Net Weight(ol)	Magnet
4315-90A	0.05°	4-90°	±0.2°	0.1°	57*57*30.5	57.5	in bottom
4315-180A	0.05°(<100°) 0.1°(100°-180°)	2°-180°	±0.2°	0.1°	57*57*30.5	57.5	in bottom

Work temperature	0°C-40°C
Working humidity	≤80%RH
Battery	9V battery
Function	On/Off, Relative/absolute measurement interchange at any position, Zero setting at any position, Angle and slope readout conversion, Data hold, Automatic Power Off in 5 minutes, With 3 built-in magnets (with diameter 10mm on measuring surface)

Digital Protractor



Light



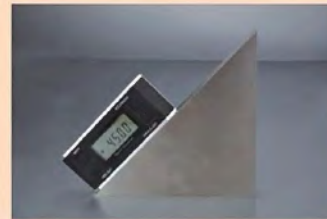
4340-90



no Light



4340-90D



CE RoHS

Technical Data

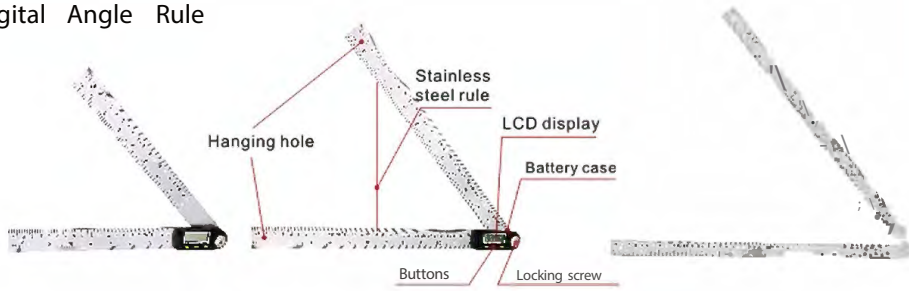
Model number	Resolution	Accuracy	Measuring range	Power	Magnet	Illuminate
4340-90	0.05°	±0.15° (0° and 90°: ±0, 10°)	°: 4-90°; mm/m: 1000 mm/m; %:100%; in/fi: 12 in/fi	DC3V (AAAx2)	yes	yes
4340-90D	0.05°				no	yes
4340-90B	0.05°				yes	no
4340-900 B	0.05°				no	no

Work temperature	0~40°C
Working humidity	≤80%RH
Battery	7# battery
Function	ABS, On/Off, Relative/absolute measurement Interchange at any position, Zero-setting at any position, Angle and slope readout conversion, Data hold, Automatic Power off in 5 minutes

Features

- Four function keys.
- Degree and percentage of slope in conversion.
- With protractor, inclinometer and level ruler 3-in-1
- With on-off power switch & Auto power-off for option.
- Quick display of the measured value on big LCD screen.
- The readout always in upright position at any given angle.
- Accurate aluminum structure, magnets on V-groove base plate.
- Relative/absolute measurement interchange at any position.
- With lock knob to lock the measuring angle in any position conveniently.
- Used for angle measurement in automotive, building, drilling machinery etc.

Digital Angle Rule



4422-200

4422-300

4422-500

Technical Data

Model number	Resolution (degree)	Measuring Range(degree)	Accuracy (degree)
4422-200	0.05	0-360	±0.3
4422-300	0.05	0-360	±0.3
4422-500	0.05	0-360	±0.3

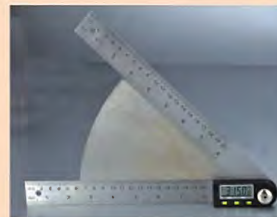
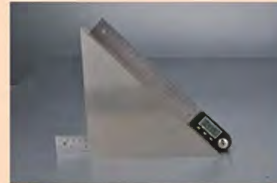
Work temperature	0~c,40~c
Working humidity	80%
Battery	3V CR2032 environmental lithium battery
Battery life	Approx. 1 year under normal use
Function	On/Off,Zero-set, Inch/mm, Automatic Power Off, With lock screw . Reversible to display figures upside down

Features

- 2-in-1 , to measure both length and angle.
- Stainless steel scale achieve durable using.
- Easily operation with three function keys.
- Inside & outside angle measure.
- Quick display of the measured value on big LCD screen.
- With on-off power switch & Auto power-off for option.
- Fastening screw to fix the measuring angle in any position.
- Both measure the angle and length, metric and inch display.
- Compact structure to achieve convenient carrying and using.
- Easily drawing line with the stainless steel rule.
- it could be well used into various field instead of angle rule straight ruler and square etc.

Dimensional Drawings

Model number	L (mm)	b (mm)	a (mm)	H (mm)	Weight(g)
4422-200	280	28	69.3	25.6	188.5
4422-300	380	28	69.3	25.6	238.5
4422-500	585	28	69.3	25.6	346.5



CE RoHS

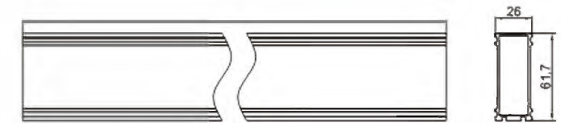
Digital Spirit Level



Features

- LCD readout hold function.
- Absolute level measurement function.
- Relative angle measurement function.
- slope and angle interchange function.
- special angle alarm and laser for option.
- Bottom with magnets.

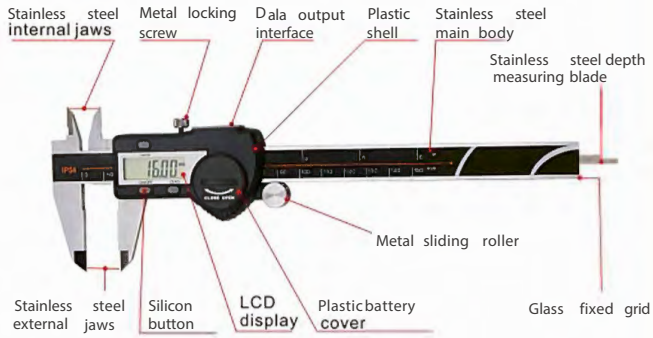
Dimensional Drawings



Technical Data

Model number	Specification (mm/Inch)	Measuring range	Resolution	Accuracy
4416-150	150/6	4x90°	0.05"	±0.2"
4416-225	225/9	4x90°	0.05"	±0.2"
4416-500	500/20	4x90°	0.05"	±0.2"
4416-600	600/24	4x90°	0.05"	±0.2"

Digital Caliper IP54



4110-150



4100-150

New model with Large LCD display

Specification

Model number	4110 / 5100
Type	Measurement for ID, OD, depth and step dimension
Capacitive grid transducer	Glass fixed grid
Protection	IP54
Display	LCD
Data Output	Yes
Max. response speed	3 meters/second
Battery	3VCR2032(5110) lithium battery/3R1632 lithium battery (5100)
Battery Life	Approx. 1 year under normal use
Functions	On/Off, Zero set, Inch/mm, Automatic Power On/Off, With lock screw

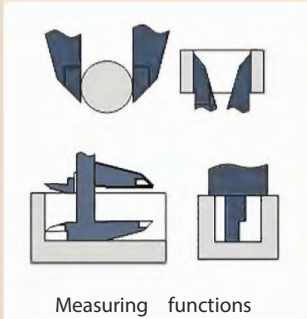
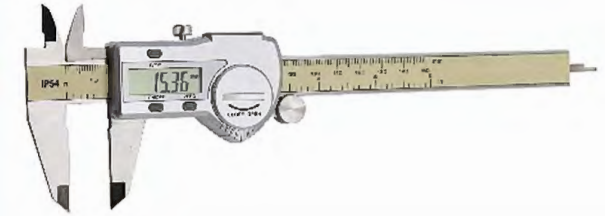
Features

- Hardness stainless steel main scale and measuring jaws.
- Stable & reliable performance, accurate readout, no overspeed error.
- Much better glass fixed grid.
- Fine cutting edge and level & smooth depth groove.
- Top grade exquisite workmanship.

CE RoHS

USB

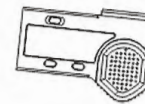
Dimensional Drawings



220

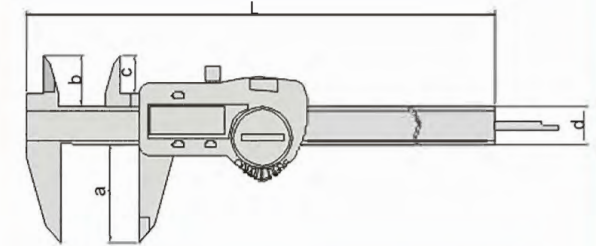


210



200

Optional model



Model number	a	b	c	d	L
0-150	40	20	15.5	16	235
0-200	50	24	19.5	16	287
0-300	60	26	21.5	16	390

Technical Data

Model number	Measuring range (mm)	Resolution (mm/inch)	Accuracy (mm)
4110-150	0-150	0.01/0.0005"	±0.02
4110-200	0-200	0.01/0.0005"	±0.03
4110-300	0-300	0.01/0.0005"	±0.04
4100-150	0-150	0.01/0.0005"	±0.02
4100-200	0-200	0.01/0.0005"	±0.03
4100-300	0-300	0.01/0.0005"	±0.04

Digital Caliper IP67



4111-150

Digital Outside Groove Caliper



4121-150

Specification

Model number	4111 4121
Capacitive grid transducer	Glass fixed grid
Display	LCD
Data Output	Yes
Max. response speed	3 meters/second
Battery	3V CR2032(5121) ,3V CR1632(5111) environmental lithium battery
Battery Life	Approx. 1 year under normal use
Functions	On/Off, Zero set, 1inch/mm, Automatic Power On/Off, With lock screw

Features

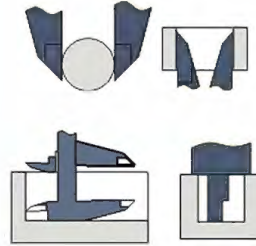
- Hardness stainless steel main scale and measuring jaws.
- Stable & reliable performance, accurate readout, no overspeed error.
- Much better glass fixed grid.
- Fine cutting edge and level & smooth depth groove.
- Top grade exquisite workmanship.
- Easy & smooth to side comfortable operation feeling.

CE RoHS

USB

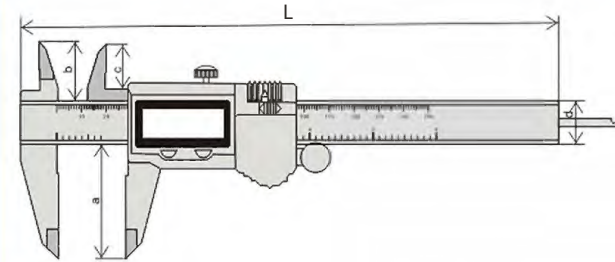
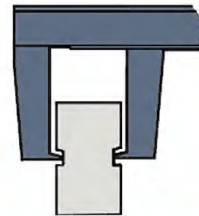
Dimensional Drawings

5111



Measuring functions

4121

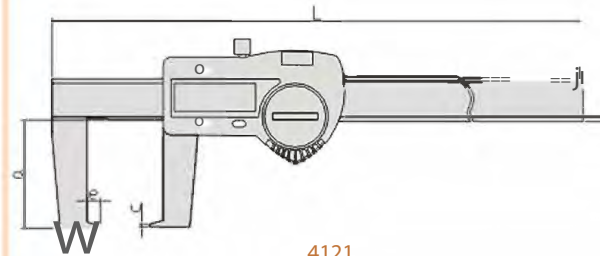


- Measurement for ID, OD, depth and step dimension

4111-150

Technical Data

Model number	Measuring range (mm)	Resolution (mm/inch)	Accuracy (mm)	a	b	c	d	L
4111-150	0-150mm	0.01/0.0005"	±0.02	40	20	15.5	16	235
4111-200	0-200mm	0.01/0.0005"	±0.03	50	24	19.5	16	287
4111-300	0-300mm	0.01/0.0005"	±0.04	60	26	21.5	16	390



- Outside groove measurement.
- IP54 waterproof.
- This model is equipped with special pointed jaws for outside measurement only.
- Specially designed for measure wall thickness inside bores and recesses.
- Minimum measurable hole diameter 22 mm.

4121

Technical Data

Model number	Measuring range (mm)	Resolution (mm/inch)	Accuracy (mm)	a	b	c	d	e	L
4121-150	0-150	0.01/0.0005"	±0.03	40	15	1	16	5	250
4121-200	0-200	0.01/0.0005"	±0.04	50	17	1	16	7	310
4121-300	0-300	0.01/0.0005"	±0.04	60	19	1.5	16	8	400

Digital inside Groove Caliper



4120-150

Digital inside Groove Type Caliper



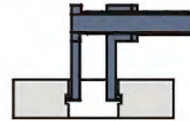
4130-150

Specification

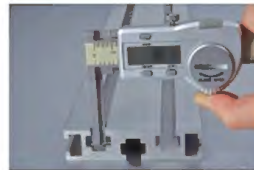
Model number	4120 5130
Type	inside groove measurement
Capacitive grid transducer	Glass fixed grid
Protection	IP54
Display	LCD
Data Output	Yes
Max. response speed	3 meters/second
Battery	3V CR2032 environmental lithium battery
Battery Life	Approx. 1 year under normal use
Functions	On/Off, Zero-set, Inch/mm, Automatic Power On/011, With lock screw

USB

4120-150



4130-150

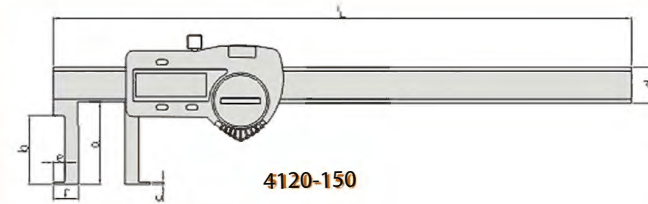


CE RoHS

Features

- This model is equipped with special inside-groove type jaws for inside measurement only.
- Specially designed for inside measurements in hard-to-reach places.
- Hardness stainless steel main scale and measuring jaws.
- Stable & reliable performance, accurate readout, no overspeed error.
- Much better glass fixed grid.
- Fine cutting edge and level & smooth depth groove.
- Top grade exquisite workmanship.
- Easy & smooth to slide comfortable operation feeling.

Dimensional Drawings

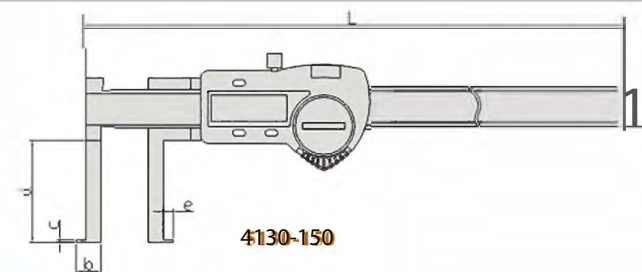


4120-150

• Minimum measurable hole diameter 22 mm

Technical Data

Model number	Measuring range (mm)	Resolution (mm/inch)	Accuracy (mm)	a	b	c	d	e	f	L
4120-150	22-150	0.0110.0005"	±0.03	36	30	1	16	5	11	250
4120-200	25-200	0.0110.0005"	±0.04	46	40	1	16	5	12.5	310
4120-300	30-300	0.0110.0005"	±0.05	56	50	1.5	16	5	15	400



4130-150

• Minimum measurable hole diameter 8 mm

Technical Data

Model number	Measuring range (mm)	Resolution (mm/inch)	Accuracy (mm)	a	b	c	d	e	L
4130-150A	8-150	0.01/0.0005"	±0.04	40	8	1	16	3	236
4130-200A	13-200	0.01/0.0005"	±0.04	50	13	1	16	5	286
4130-300A	15-300	0.01/0.0005"	±0.05	60	15	1.5	16	5	396

Digital Center Distance Caliper



4118-150

Digital Tube Thickness Caliper



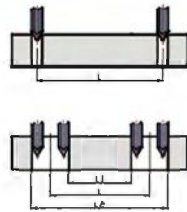
4117-150

Specification

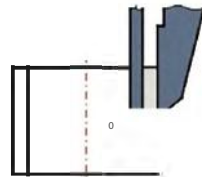
Model number	4118,5117
Capacitive grid transducer Protection	Glass fixed grid IP54
Display	LCD
Data Output	Yes
Max. response speed	3 meters/second
Battery	3V CR2032 environmental lithium battery
Battery Life	Approx. 1 year under normal use
Functions	On/Off,Zero-set, Inch/mm,Automatic Power On/Off, With lock screw

USB

4118-150



4117-150

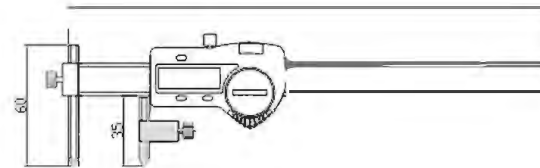


CE RoHS

Features

- Hardness stainless steel main scale and measuring jaws.
- Stable & reliable performance, accurate readout, no overspeed error.
- Much better glass fixed grid.
- Fine cutting edge and level & smooth depth groove.
- Top grade exquisite workmanship.
- Easy & smooth to side comfortable operation feeling.

Dimensional Drawings

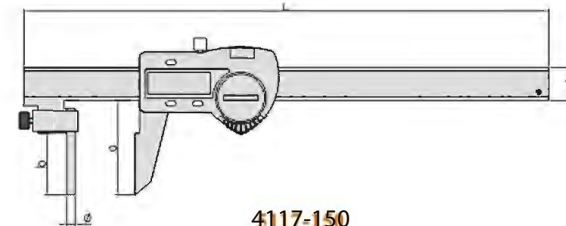


4118-150

- Hole centre-to-centre measurement
- This model is equipped with special pointed jaws for outside measurement only.
- Specially designed for hole centre-to-centre measurements.
- Can also measure from an edge to a hole centre.
- Hole centre-to-centre should be in the range 5-300mm.

Technical Data

Model number	Measuring range (mm)	Resolution (mm/inch)	Accuracy (mm)	L
4118-150	5-150	0.01/0.0005"	±0.04	240
4118-200	5-200	0.01/0.0005"	±0.06	290
4118-300	5-300	0.01/0.0005"	±0.08	390



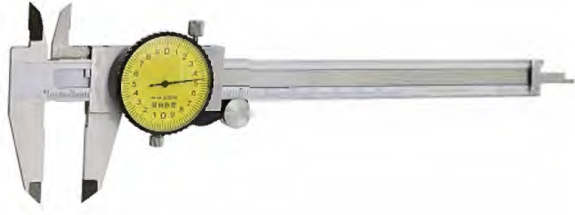
4117-150

- Tube thickness measurement
- This model is equipped with cylindrical anvil for tube wall-thickness type measurements.
- The beam-mounted jaw is a round bar that facilitates measurements of tube wall thickness.

Technical Data

Model number	Measuring range (mm)	Resolution (mm/inch)	Accuracy (mm)	a	b	0	L
4117-150	0-150	0.0110.0005"	±0.03	46	30	4	250
4117-200	0-200	0.0110.0005"	±0.03	50	34	4	300
4117-300	0-300	0.0110.0005"	±0.04	60	50	4	400

Dial Caliper

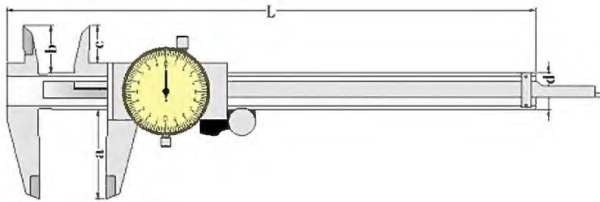


4105 - 150

Features

- Four functions of measuring inner diameter, outer diameter, depth and step.
- Made of stainless steel material, anti-rust performance
- Indicator bidirectional earthquake
- The metal shell has the function of preventing iron
- Rotary dial zero, then lock

Dimensional Drawings



Technical Data

Model number	Measuring range (mm)	Resolution (mm)	Accuracy (mm)	a(mm)	b(mm)	c(mm)	d(mm)	l(mm)
4105-150	0-150	0.02	±0.02	∅0	21	16	16	234
4105-200	0-200	0.02	±0.03	48	22.5	17.5	17	289
4105-300	0-300	0.02	±0.04	62	30	24.5	20	405
4105-150A	0-150	0.01	±0.02	∅0	21	16	16	234
4105-200A	0-200	0.01	±0.03	48	22.5	17.5	17	289

Vernier Caliper

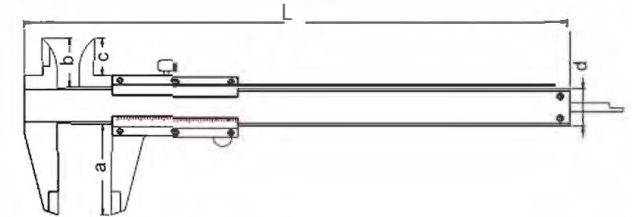


4108 - 150

Features

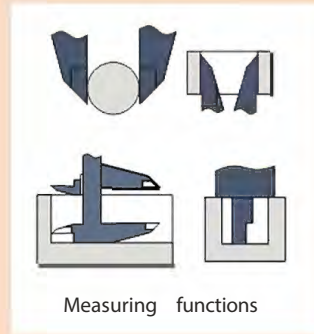
- Rod body with laser engraved line
- All measuring surface hardening, grinding
- To detect inner diameter, outside diameter, depth and step four dimensions

Dimensional Drawings



Technical Data

Model number	Measuring range	Resolution (mm)	Accuracy (mm)	a	b	c	d	L
4108-150	0-150	0.02	±0.02	40	21	16.5	16	234
4108-200	0-200	0.02	±0.03	50	23.5	18.5	16.5	300
4108-300	0-300	0.02	±0.04	60	28	22	17	415



Measuring functions

Digital Depth Caliper



4113-150

Digital Depth Caliper With Single Hook



4113-150A

Digital Depth Caliper With Double Hooks



4113-150B

Specification

Model number	4113 4113A 4113B
Type	Depth measurement
Capacitive grid transducer	Glass fixed grid
Protection	IP54
Display	LCD
Data Output	Yes
Max. response speed	3 meters/second
Battery	3V CR2032 environmental lithium battery
Battery Life	Approx. 1 year under normal use
Functions	On/Off,Zero-set,Inch/mm,Automatic On/Off, With lock screw

5113-150



4113-150A



4113 -1508



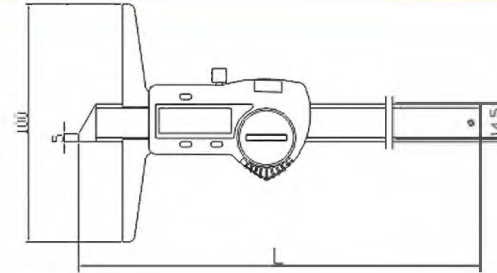
CE RoHS

USB

Features

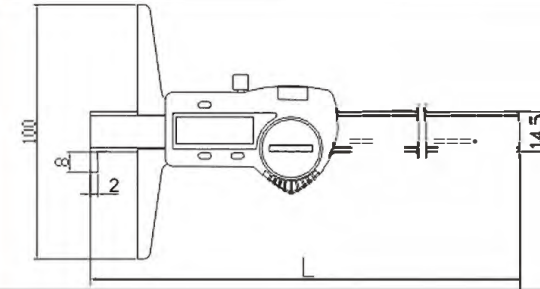
- Hardness stainless steel main scale and measuring jaws.
- Stable&reliable performance,accurate readout, no overspeed error.
- Much better glass fixed grid.
- Fine cutting edge and level & smooth depth groove.
- Top grade exquisite workmanship.
- Easy & smooth to slide comfortable operation feeling.

Dimensional Drawings



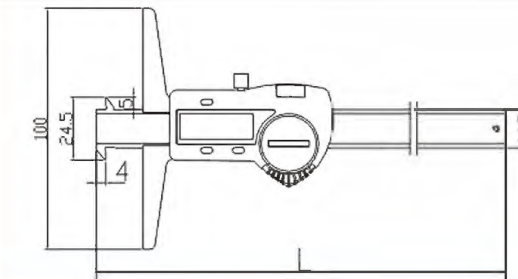
4113-150

- Convenient and direct precision measurement for depth,step ect in machining and civil use.



4113-150A

- Convenient and direct precision measurement for groove width and position dimension



4113-150B

- Convenient and direct precision measurement for groove width and position dimension.
- Accuracy: ± 0.03 (0-200mm)

Technical Data

Model number	Measuring range (mm)	Resolution (mm/inch)	Accuracy (mm)	L
4113-150	0-150mm	0.01/0.0005"	± 0.02	233
4113-200	0-200mm	0.0110.0005"	± 0.03	285
4113-300	0-300mm	0.01/0.0005"	± 0.04	390

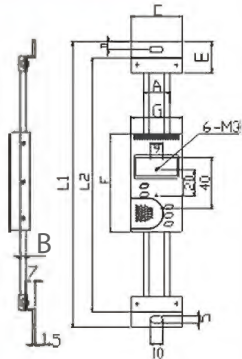
Vertical Type Digital Linear Scale



Features

- Stainless steel material manufactured under modern technology
- Zero-setting at any position
- Relative/absolute measurement interchange at any position (ABS function)
- mm/inch measurement system conversion.
- CR2032 3V environmental battery, battery life >1 year

Dimensional Drawings



Technical Data

Model number	A(mm)	B(mm)	C(mm)	D(mm)	E(mm)	F(mm)	G(mm)	H(mm)	L2(mm)
4401-100	20	4	40	6	24	75	40	263	239
4401-150	20	4	40	6	24	75	40	318	294
4401-200	20	4	40	6	24	75	40	368	344
4401-300	20	4	40	6	24	75	40	468	444

Technical Data

Part No.	Measuring range (mm)	Resolution (mm/inch)	Accuracy (mm)
4401-100	0-100mm	0.011/.0005"	±0.02
4401-150	0-150mm	0.011/.0005"	±0.03
4401-200	0-200mm	0.011/.0005"	±0.03
4401-300	0-300mm	0.011/.0005"	±0.04

USB

CE RoHS

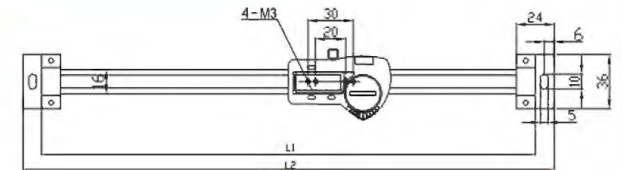
Horizontal Type Digital Linear Scale



Features

- Stainless steel material manufactured under modern technology
- Zero-setting at any position
- mm/inch measurement system conversion.
- CR2032 3V environmental battery, battery life >1 year

Dimensional Drawings



Technical Data

Model number	Measuring range (mm)	Resolution (mm/inch)	Accuracy (mm)	L1 (mm)	L2 (mm)
4402-100	0-100mm	0.01/.0005	±0.02	205	229
4402-150	0-150mm	0.01/.0005	±0.03	311	279
4402-200	0-200mm	0.01/.0005	±0.03		
4402-300	0-300mm	0.01/.0005	±0.04	420	
4402-400	0-400mm	0.01/.0005	±0.05	520	●●●
4402-500	0-500mm	0.01/.0005	±0.05	620	●●●

Digital Linear Scale With Remote Display

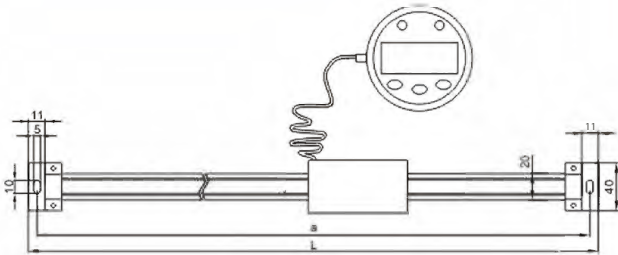


USB
CE RoHS

Features

it is use to be equipped together with various industry lathes and upgrade old lathe

Dimensional Drawings



Technical Data

Model number	Measuring range (mm)	Resolution (mm)	Accuracy (mm)	a(mm)	L(mm)
4403-150	0-150/0-6	0.01/0.0005	$\pm 0.06/\pm 0.0025$	278	287
4403-200	0-200/0-8	0.01/0.0005	$\pm 0.08/\pm 0.0035$	321	330
4403-300	0-300/0-12	0.01/0.0005	$\pm 0.10/\pm 0.004$	421	431
4403-600	0-600/0-24	0.01/0.0005	$\pm 0.15/\pm 0.006$	736	745
4403-500	0-500/0-20	0.01/0.0005	$\pm 0.15/\pm 0.006$	630	645

Digital Micrometer



420 2-25

IP65 Electronic Outside Micrometer



420 3-25

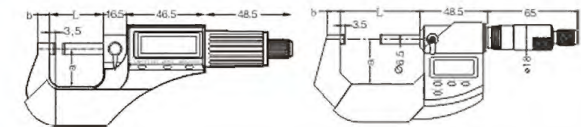
Technical Data

Model number	Measuring range (mm)	Resolution (mm)	Accuracy (mm)	a (mm)	b (mm)	L (mm)	Part No.	a (mm)	b (mm)	L (mm)
4202-25	0-25	0.001	± 0.003	22.5	7.0	32	5203-25	21	8.5	31.5
4202-50	25-50	0.001	± 0.003	31.3	7.9	57	5203-50	32	9.5	60
4202-75	50-75	0.001	± 0.004	47	8.0	82.5	5203-75	47	12.8	82.5
4202-100	75-100	0.001	± 0.004	55.3	12.8	107.5	5203-100	60.4	14.4	108

Features

- NO/OFF ... SET key: Power switch, Datum set
- ABS/INC ... unit key: Absolute & relative measuring, Metric/inch conversion
- Accuracy: 0.001mm
- Resolution: 0.001 mm
- Measuring force: 5-1 ON
- Power consumption $\leq 20\mu A$
- Storage temperature: $-20-60^{\circ}C$
- Operating temperature: $0-40^{\circ}C$

Dimensional Drawings



4202 -25

4203 -25

Dial Indicator



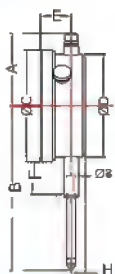
Specification

Model number	4301
Type	Plunger
Dial type	Balanced
Resolution	10mm
Resolution	0.01mm
Accuracy	±0.02 mm

Features

- Dial gauges with a large diameter dial face to easy reading.
- The moving parts made of special wear mainly stainless steel, with good resistance and anti-rust properties
- Smooth-adjusting bezels for easy setup
- Bevel clamp to lock the bezel in place
- Markers can be moved to provide reference points
- Small turn counter inside dial can counts the turns of the needle
- Shockproof structure of tuck
- Hard alloy probe
- With or without back lug for option

Dimensional Drawings



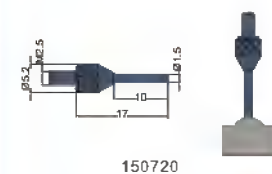
Technical Data

Model number	Measuring range (mm)	Resolution (mm)	Accuracy (mm)	A (mm)	B (mm)	ØC (mm)	ØD (mm)	E (mm)	F (mm)	H (mm)
4301-5	0-5	0.01	±0.010	46	68.5	60	55	16	17.5	8
4301-10	0-10	0.01	±0.02	46	68.5	60	55	16	17.5	8
4301-20	0-20	0.01	±0.03	38.5	66	60	55	16	17.5	8
4301-30	0-30	0.01	±0.03	38.5	87.5	60	55	16	17.5	8
4301-50	0-50	0.01	±0.04	46.5	121	76	71	16	32	9.5

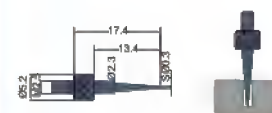
USB



Optional measuring head (mm)



150720



150721



150722

Electronic Digital Dial Indicator



4310-10

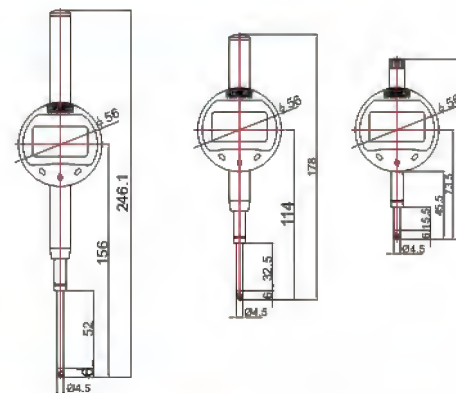


4310-25

Features

- Zero-setting at any position.
- mm/inch measurement system conversion.
- Absolute and relative measurements.
- Data output.
- Fast response(3m/s),no overspeed error failure.
- Quick display of the measured value on big LCD screen.
- CR2032 3V environmental lithium battery,battery life>1 year.
- Hardened alloy measuring head, compact firm structure, convenient stable operation.

Dimensional Drawings



Technical Data

Model number	Measuring range (mm)	Resolution (mm/Inch)	Accuracy (mm)
4310-10	0-12.7	0.001/0.0005	±0.004
4310-25	0-25.4	0.001/0.0005	±0.005
4310-50	0-50	0.001/0.0005	±0.006

Dial Test Indicator



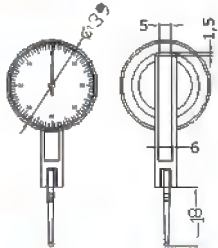
Specification

Model number	4312
Type	Lever
Dial Type	Balanced
Range	0.5mm
Accuracy	± 0.013 mm
Graduation	0.01mm
Measuring Force	0.3N or less
Remarks	Anti-magnetic, Jewelled bearing type

Features

- Facilitate accurate measurement of narrow and concave surfaces, and difficult to measure inside and outside diameters
- Provides easy access to shrouded surfaces that cannot be reached with conventional dial indicators.
- No-clutch mechanism for automatic reversal of measuring direction.
- Resistant to water and dust thanks to the one-piece bezel and O-ring seal for the crystal.
- High-sensitivity and quick response due to low-friction jewelled bearings.
- Measuring tip has two types: common type and red jewelry type.

Dimensional Drawings



Technical Data

Model number	Measuring range (mm)	Resolution (mm)	Accuracy (mm)
4312-05	0-0.5	0.01	± 0.013
4312-05A	0-0.5	0.01	± 0.013

Dial Test Indicator 0.2mm



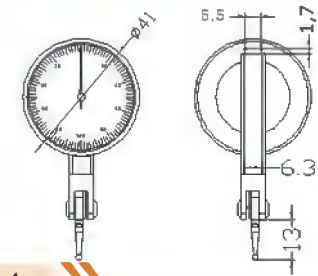
Specification

Model number	4313
Type	Lever
Dial Type	Balanced
Range	0.2mm
Accuracy	± 0.004 mm
Graduation	0.002mm
Measuring Force	0.3N or less
Remarks	Anti-magnetic, Jewelled bearing type

Features

- Facilitate accurate measurement of narrow and concave surfaces, and difficult to measure inside and outside diameters
- Provides easy access to shrouded surfaces that cannot be reached with conventional dial indicators.
- No-clutch mechanism for automatic reversal of measuring direction.
- Resistant to water and dust thanks to the one-piece bezel and O-ring seal for the crystal.
- High-sensitivity and quick response due to low-friction jewelled bearings.
- Measuring tip has two types: common type and red jewelry type.

Dimensional Drawings



Technical Data

Model number	Measuring range (mm)	Resolution (mm)	Accuracy (mm)
4313-02	0-0.2	0.002	± 0.004
4313-02A	0-0.2	0.002	± 0.004

Multi-Indicators



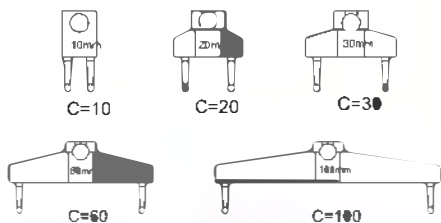
Features

- Measuring range: linear 0-13mm.
- Radius: 5-700mm
- Linear deviation: $\Delta S < 0.02\text{mm}$
- Radius deviation: $\Delta R < (0.02/2) R$
- CR2032 3V environmental lithium battery, battery life > 1 year.
- Workable temp: $0 \pm 40^\circ\text{C}$
- Storage temp: $-20^\circ\text{C} \pm 60^\circ\text{C}$
- Humidity: comparatively < 80%

Dimensional Drawings



Optional measuring head



Optional measuring head (mm)



P type



D type



S type



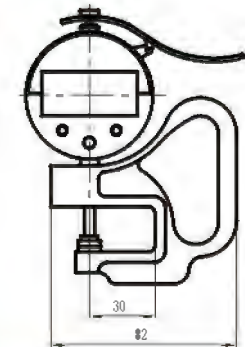
Digital Thickness Gauge



Features

- Ceramic measuring head, metal casing & handle, compact & firm structure, convenient & stable operation
- Three different alternative measuring head types
- 3V environmental Lithium battery, battery life > 1 year
- Measurement for the thickness of jewelry, leather, metal film, paper, rubber, fabric, and various metal panel, glass sheet etc

Dimensional Drawings



Technical Data

Model number	Measuring range	Resolution (mm/inch)	Accuracy (mm)	Throat Depth (mm)
4317-10	0-10mm	0.01/0.0005	±0.03	30
4319-25	0-25mm	0.01/0.0005	±0.03	30

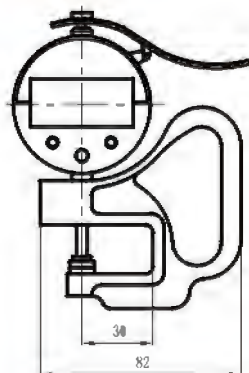
Digital Micron Thickness Gauge



Features

- Ceramic measuring head, metal casing & handle, compact & firm structure, convenient & stable operation
- CR2032 3V environmental Lithium battery, battery life >1 year
- Three different alternative measuring head types
- Measurement for the thickness of jewelry, leather, metal film, paper, rubber, fabric, and various metal panel, glass sheet etc

Dimensional Drawings



Technical Data

Model number	Measuring range	Resolution (mm/inch)	Accuracy (mm)	Throat Depth (mm)
4318-10	0-10mm	0.001/0.0005"	±0.007	30

Digital Tube Thickness Gauge



4321-10

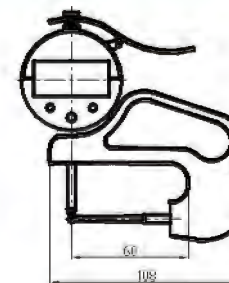


4320-10

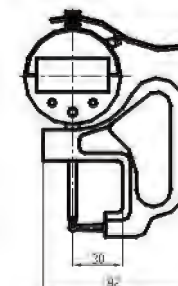
Features

- Fast display data for large LCD screen
- Automatic switching function
- Reset ZERO at any position
- mm/inch measurement system conversion
- CR2032 3V environmental battery
- Suitable to measuring the thickness of tube and measuring curved surface' thickness

Dimensional Drawings



4320-10



4321-10

Technical Data

Model number	Measuring range (mm)	Resolution (mm/inch)	Accuracy (mm)	Throat Depth
4320-10	0-10	0.01/0.0005"	±0.03	60mm
4321-10	0-10	0.01/0.0005"	±0.03	30mm



4320-10



RoHS



RoHS

Digital Thickness Gauge



4332-10

Digital Micron Thickness Gauge



4331-10

Digital Thickness Gauge With Roller Insert



4334-10

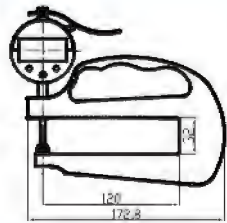


4335-10

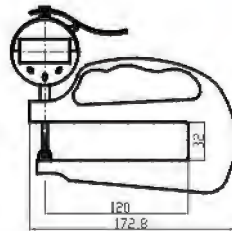
Features

- Ceramic measuring head, metal casing & handle, compact & firm structure, convenient & stable operation
- CR2032 3V environmental lithium battery, battery life >1 year
- Three different alternative measuring head types
- Measurement for the thickness of jewelry, leather, metal film, paper, rubber, fabric, and various metal panel, glass sheet etc

Dimensional Drawings



4332-10



4331-10

Technical Data

Model number	Measuring range (mm)	Resolution (mm/inch)	Accuracy (mm)	Throat Depth (mm)
4332-10	0-10	0.01/0.0005"	±0.03	120mm
4332-25	0-25	0.01/0.0005"	±0.03	120mm
4331-10	0-10	0.001/0.00005"	±0.009	120mm



4332-10



4334-10



4335-10

Optional measuring head (mm)

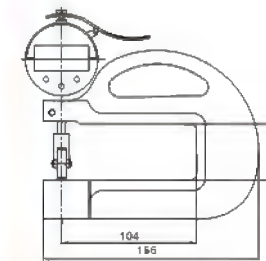


4331-10

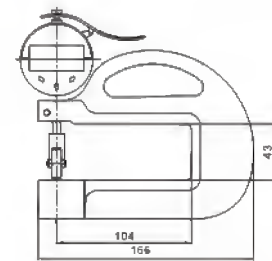
Features

- Ceramic measuring head, metal casing & handle, compact & firm structure, convenient & stable operation
- CR2032 3V environmental Lithium battery, battery life >1 year
- Three different alternative measuring head types
- Measurement for the thickness of jewelry, leather, metal film, paper, rubber, fabric, and various metal panel, glass sheet etc

Dimensional Drawings



4334-10



4335-10

Technical Data

Model number	Measuring range (mm)	Resolution (mm/inch)	Accuracy (mm)	Throat Depth (mm)
4334-10	0-10	0.01/0.0005"	±0.03	104
4335-10	0-10	0.001/0.00005"	±0.009	104

Electronic Digital Depth Gauge

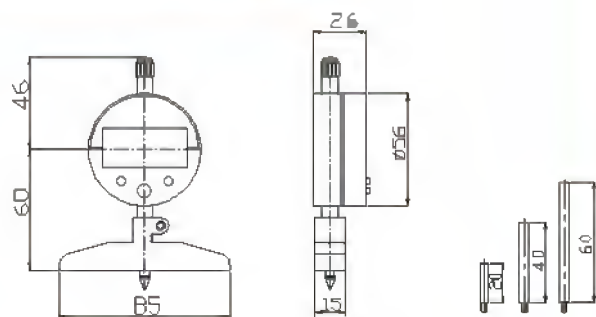


4328-100

Features

- Zero-setting at any position
- mm/inch measurement system conversion
- Hardened alloy measuring head, stainless steel base compact & firm structure, convenient & stable operation
- Measurement for inside hole dimension, groove depth and step height of workpiece

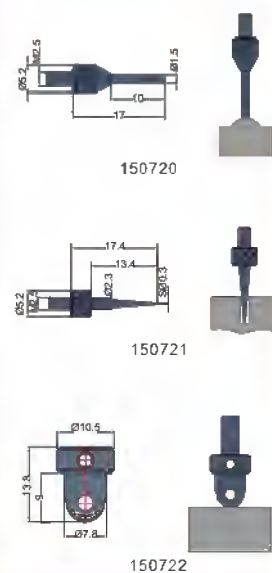
Dimensional Drawings



Technical Data

Model number	Measuring range (mm)	Resolution (mm/inch)	Accuracy (mm)
4328-100	0-100	0.01/0.0005"	±0.03

Optional measuring head (mm)



Digital Micron Bore Gauge



4337

Digital Bore Gauge



4336

Features

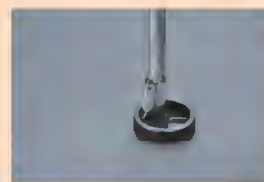
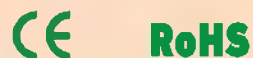
- Measurement for diameter, circularity, taper, and distance between parallel planes
- Super wide location bridge can insure self-centring automatically
- Measuring head is made up of movable carbide tipped anvil and replaceable fixed hardening steel ball anvil.

Dimensional Drawings



Technical Data

Model number	Measuring range	Resolution (mm)	Accuracy (mm)	part No.	Measuring range	Resolution (mm)	Accuracy (mm)
4336-10	6-10mm	0.01	±0.02	5337-10	6-10mm	0.001	±0.007
4336-18	10-18mm	0.01	±0.02	5337-18	10-18mm	0.001	±0.007
4336-35	18-35mm	0.01	±0.02	5337-35	18-35mm	0.001	±0.007
4336-50	35-50mm	0.01	±0.02	5337-50	35-50mm	0.001	±0.007
4336-160	50-160mm	0.01	±0.02	5337-160	50-160mm	0.001	±0.007
4336-250	160-250mm	0.01	±0.02	5337-250	160-250mm	0.001	±0.007
4336-450	250-450mm	0.01	±0.02	5337-450	250-450mm	0.001	±0.007



Vertical Type Digital Indicator



4307C

Remote Digital Indicator

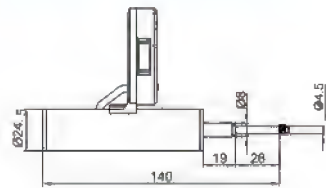


4307F

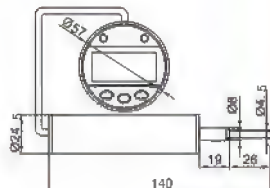
Features

- LCD display, display the measurement result and geometrical tolerances
- Battery : 3V CR2032 lithium battery
- Operating temperature : 0~+40°C
- Storage temperature : -10°C~+60°C
- Relative humidity ≤ 80%
- Low voltage alarm functions
- The back of the display is with magnet and hook

Dimensional Drawings



4307C



4307F

Technical Data

Model number	Measuring Range (mm)	Resolution (mm/in)	Accuracy (mm)
4307C-10	0-10	0.01/0.0005	±0.02
4307F-25	0-25	0.01/0.0005	±0.03

USB

CE RoHS

Concentricity Gauge



(C-10/ C-10G)



(C-20/ C-20G)



(C-40/ C-40G)

Technical Data

Model number	Indicator/Gauge Type	Suitable Diameter (mm)	Suitable Length (mm)	Accuracy (um)	L (mm)	H (mm)	d (mm)
C-10	Single Test Indicator	4-25	102	5um	216	109	114
C-20		10-50	102	5um	305	124	150
C-40		20-102	102	5um	360	118	150
C-10G	Single Test Indicator	4-25	102	3um	216	109	114
C-20G		10-50	102	3um	305	124	150
C-40G		20-102	102	3um	360	118	150

Concentricity Gage



(A-10 A-10G)

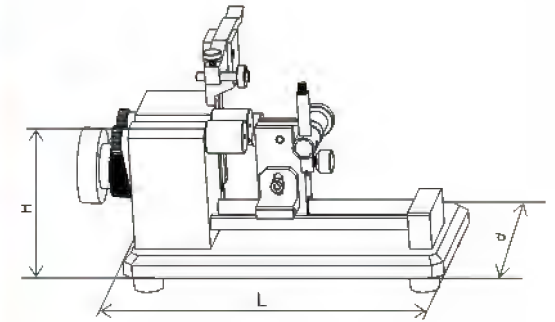


(K1-10 K1-10G)



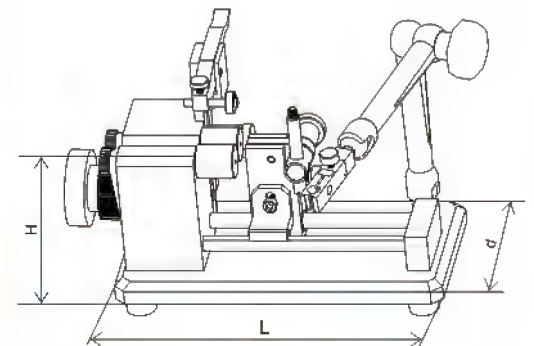
Dimensional Drawings

Measuring Diam: $\varnothing 4-25$



(A-10 A-10G)

Measuring Diam: $\varnothing 4-25$



(K1-10 K1-10G)

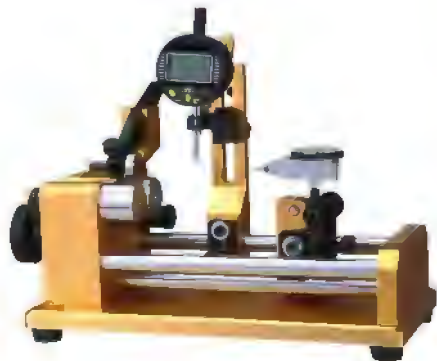
Concentricity Gage



(A-20 A-20G)



(K1-20 K1-20G)

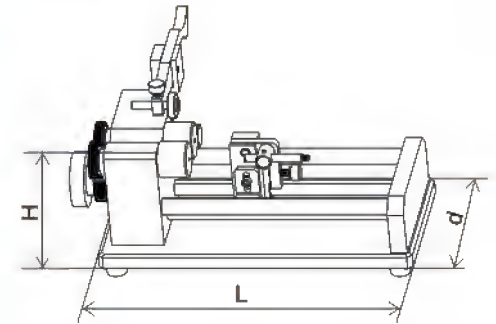


(K2-20 K2-20G)

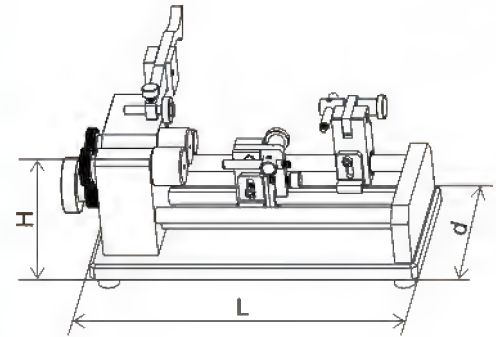


Dimensional Drawings

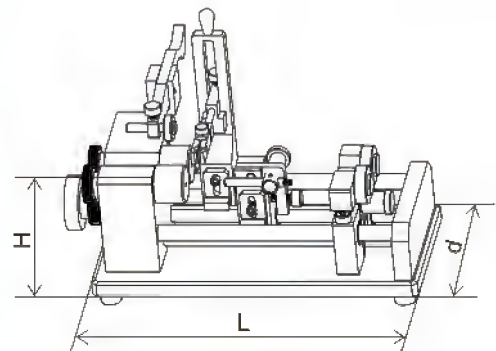
Measuring Diam: $\varnothing 10-50$



(A-20 A-20G)

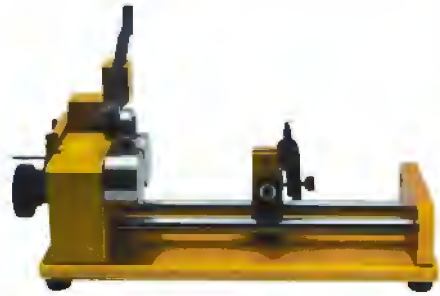


(K1-20 K1-20G)

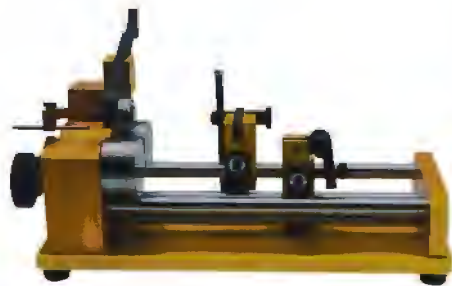


(K2-20 K2-20G)

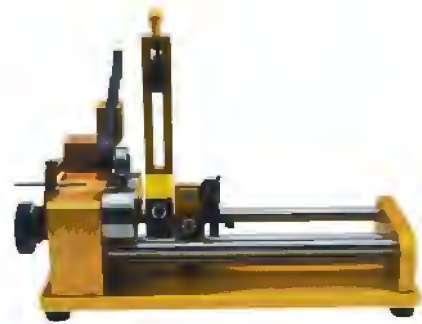
Concentricity Gage



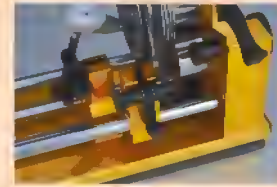
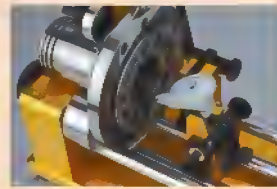
(A-40 A-40G)



(k1-40 k1-40G)

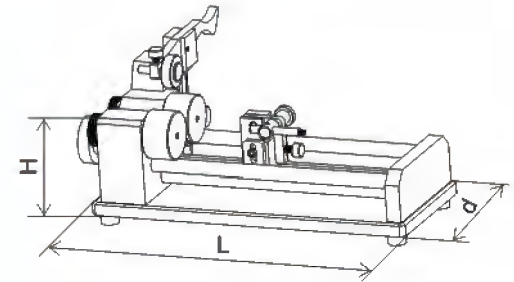


(k2-40 k2-40G)

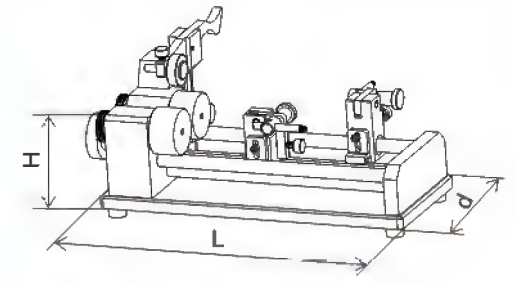


Dimensional Drawings

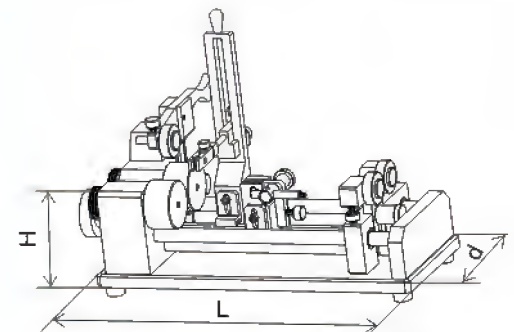
Measuring Diam: Ø20-102



(A-40 A-40G)



(k1-40 k1-40G)



(k2-40 k2-40G)

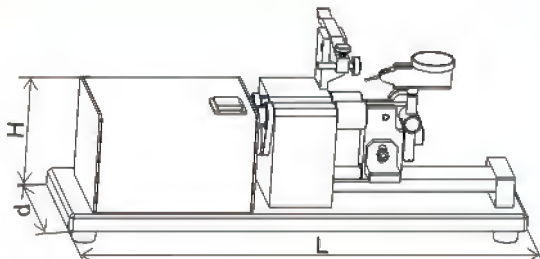
Concentricity Gage



Features

- Standard accuracy 0.005mm, and high accuracy 0.003mm
- Quick measuring, no need for re-tooling.
- Convenient operation, wide range of application.
- Easy to move, simple to maintain.
- Demand for operating environment is common.
- Custom made is available according to particularity of workpieces.
- Electronic Concentricity Gauge more convenient, fast and stable

Dimensional Drawings



Features

- Standard accuracy 0.005mm, and high accuracy 0.003mm
- Quick measuring, no need for re-tooling.
- Convenient operation, wide range of application.
- Easy to move, simple to maintain.
- Demand for operating environment is common.
- Custom made is available according to particularity of workpieces.

Technical Data

Model number	Indicator/Gauge Type	Suitable Diameter (mm)	Suitable Length (mm)	Accuracy (um)	L (mm)	H (mm)	d (mm)
B-10	Single Test Indicator	1-25	102	5um	216	109	114
A-10		4-25	102	5um	216	109	114
A-20		10-50	152	5um	305	124	150
A-40		20-102	203	5um	360	118	150
B1-10	Dual Test Indicators	1-25	102	5um	216	109	114
K1-10		4-25	102	5um	216	109	114
K1-20		10-50	152	5um	305	124	150
K1-40		20-102	203	5um	360	118	150
K2-20	Micron Gauge and Test Indicator	10-50	152	5um	305	124	150
K2-40		20-102	203	5um	360	118	150
B-10G	Single Test Indicator	1-25	102	3um	216	109	114
A-10G		4-25	102	3um	216	109	114
A-20G		10-50	152	3um	305	124	150
A-40G		20-102	203	3um	360	118	150
B1-10G	Dual Test Indicators	1-25	102	3um	216	109	114
K1-10G		4-25	102	3um	216	109	114
K1-20G		10-50	152	3um	305	124	150
K1-40G		20-102	203	3um	360	118	150
K2-20G	Micron Gauge and Test Indicator	10-50	152	3um	305	124	150
K2-40G		20-102	203	3um	360	118	150
A-10d	Single Test Indicator	4-25	102	5um	331	109	114
A-20d		10-50	152	5um	462	124	150
A-40d		20-102	152	5um	462	118	150
K1-10d	Dual Test Indicators	4-25	102	5um	331	109	114
K1-20d		10-50	152	5um	462	124	150
K1-40d		20-102	152	5um	462	118	150
K2-20d	Micron Gauge and Test Indicator	10-50	152	5um	462	124	150
K2-40d		20-102	152	5um	462	118	150
A-10Gd	Single Test Indicator	4-25	102	3um	331	109	114
A-20Gd		10-50	152	3um	462	124	150
A-40Gd		20-102	152	3um	462	118	150
K1-10Gd	Dual Test Indicators	4-25	102	3um	331	109	114
K1-20Gd		10-50	152	3um	462	124	150
K1-40Gd		20-102	152	3um	462	118	150
K2-20Gd	Micron Gauge and Test Indicator	10-50	152	3um	462	124	150
K2-40Gd		20-102	152	3um	462	118	150

MX-A Shore Hardness Tester



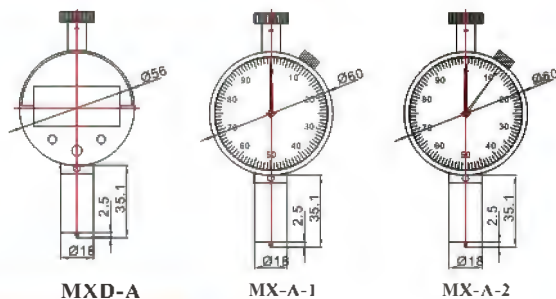
MX-C Shore Hardness Tester



Features

MX-A hardness tester is widely applied in the low and medium hardness plastic, all kinds of rubber, multi-dimensional fat, leather, wax hardness test etc. The product refers to ISO868 and the ISO7619 international standard production, conforms to GB/T531, JB6148 and the JJG304 standard.

Dimensional Drawings



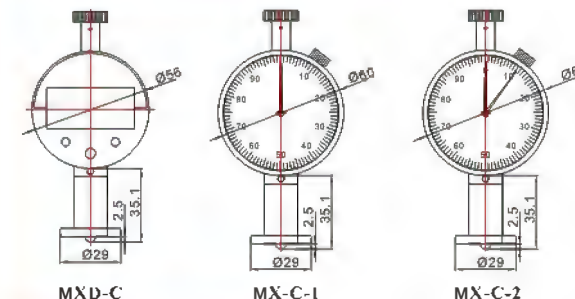
Technical Data

Measuring range	0-100HA
Recommended measurement range	10-90HA
Outline dimension	115x60x25mm
Pressure Needle Range	2.5mm
End pressure of Pressure Head	Ø0.79mm
Net weight	~0.13kg ~0.16kg

Features

MX-C hardness tester is used in measuring the hardness of oak model micro porous material which includes vesicant, when the compression ratio is 50%, the stress above 0.5kg/cm². It also can be used in other similar hardness materials.

Dimensional Drawings



Technical Data

Measuring range	0-100HC
Recommended measurement range	10-90HC
Outline dimension	115x60x25mm
pressure needle range	2.5mm
End pressure of Pressure Head	SR2.5mm
Net weight	~0.14kg ~0.16kg

CE RoHS



LX-D Shore Hardness Tester



MXD-D



MX-D-1

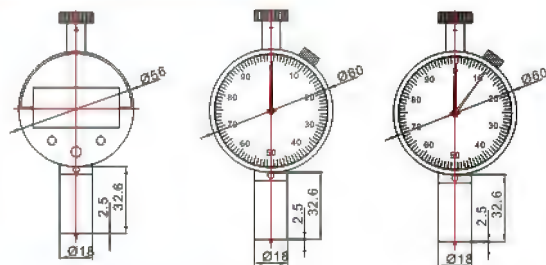


MX-D-2

Features

MX-D hardness tester is suitable for hardness test of high degree of hardness material, such as common hard rubber, hardened resin, acrylic, plexiglas, thermos plastic rubber, printing plate, fibre. The product conforms to HG/2489 and other related standard request.

Dimensional Drawings



MXD-D

MX-D-1

MX-D-2

Technical Data

Measuring range	0-100HD
Recommended measurement range	20-90HD
Outline dimension	115x60x25mm
pressure needle range	2.5mm
End pressure of Pressure Head	SR0.1mm
Net weight	~0.16kg ~0.14kg



CE RoHS

LAC-J LD-J Hardness Tester Stand



MAC-J



MD-J



MAC-YJ



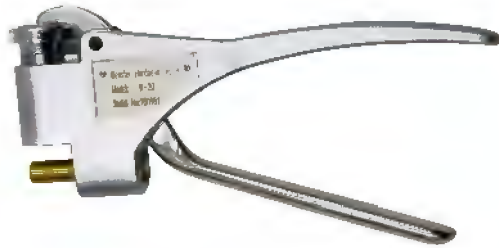
MD-YJ



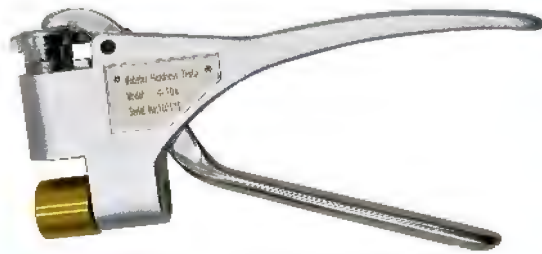
Features

The testing principle of hardness tester is compact, more reasonable that makes the stability and the accuracy of the test, it has a further improvement. And the use of high rigidity metal platform instead of the traditional, glass platform avoid the shortcomings of fragile glass platform. Especially in the testing of hardness test D, the users do not need to equipped with special hardness blocks make the testing more economic and convenient. MAC-J type is adapted to MX-A, MX-C hardness tester of our company. MD-J is adapted to our MX-D type hardness tester.

Webster Hardness Tester



W-20(0.6-6mm)



W-20a(0.6-13mm)



W-20b(0.6-8mm)

CE RoHS



Features

Mainly used to measure the aluminum alloy (1100 ~ 7075) hardness Measuring range 0 ~ 20HW (aluminum and aluminum alloy 25 ~ 110HRE)(Copper alloy 60 ~ 90HRF)

Accurate measurement range 5 ~ 18HW (determined by the instrument design principle)

Accuracy $\pm 0.5HW$

Resolution 1HW

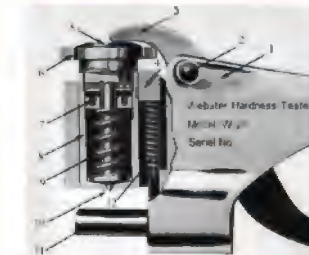
Measuring thickness:

W-20: 0.6~ 6mm (anvil diam 10mm)

W-20a: 0.6~ 13mm (anvil diam 10mm)(anvil cylinder diam 23.5mm)

W-20b: 0.6~ 8mm (anvil diam 6mm)

Instruments Instruction



- | | |
|----------------------|------------------|
| 1. Upper Handle | 10. Indenter |
| 2. Supporting Screw | 11. Anvil |
| 3. Lower Handle | 12. Reset Spring |
| 4. Reset Key | |
| 5. Adjusting Screw | |
| 6. Dial Head | |
| 7. Adjusting Nut | |
| 8. Indenter Cylinder | |
| 9. Load Spring | |

How It Works

Webster hardness tester is a kind of indentation hardness tester. Under certain force, press the indenter into the test sample surface, the pressing depth is in inverse proportion of the hardness. Webster hardness tester symbol is HW.

For the over-range sample test, the pointer indicates at 20 under force; for the low range sample test, the pointer does not move and indicates still against the left side of the case when under force.

How To Use

Put the measured object in the position between anvil and indenter, then hold the upper and lower handle, press with force, and draw the lower handle close to the upper handle, at the same time, the indenter components and dial head components will move towards anvil. Keep pressing when the indenter touch the measured object, until it does not move any more. Now the indicator readout is the Wechsler hardness value. It can be converted into Vickers and Rockwell etc hardness values according to the appendix table.

Instrument calibration

The instrument calibration has full scale calibration and standard test block calibration. There are 20 graduation on the dial plate. Full scale calibration means adjusting the pointer at 20 position, through adjusting the adjusting screw in the cover after the pointer don't move under empty stroke. Standard test block calibration means adjusting the pointer at the position indicating at the same value with that of the standardized test block, through adjusting the adjusting nut in the instrument cylinder, when putting and testing the standard test block between the anvil and the indenter.

Barcol Impressor Hardness Tester



834-1

Introduction

This convenient tool is used for testing the hardness of aluminium, copper, brass and a number of other materials including plastics and fibreglass. It can be used on fabricated parts as well as raw material.

Specification

Indenter	26° con head cone, head face diameter 0.157mm	
Testing Range	0-100H _{Ba} (25-135HBW)	
Resolution	0.5H _{Ba}	
Indication Error Hardness range	81-85H _{Ba} ±1H _{Ba}	42-48H _{Ba} ±2H _{Ba}
Repeatability Error	81-85H _{Ba} ±1.5H _{Ba}	42-48H _{Ba} ±2.5H _{Ba}
Weight	0.5kg	

Features

- Portable, convenient and easy to use - No training or experience required.
- Repeatable - Consistently accurate results each time.
- Versatile - Can be used in any position and in any space that will allow for the operators hand.
- Efficient - The hardness reading is instantly indicated on the dial, no waiting, pre-loading or separate measurement required.

Digital Leeb Hardness Tester



PL-140
without printer



PL-150 without
printer



PL-160
with printer

Introduction

Digital Leeb hardness tester is developed Leeb hardness measurement principle based on the internationally popular metal material hardness tester. It has high accuracy, small size, easy to operate, and a wide range of measurement, especially for large, heavy-duty malleable pieces, example: roll turbine shaft, and applied to the components already installed and can not be demolished, for example, ; site hardness testing of pressure vessels, turbine units and other equipment. Leeb hardness tester is widely used in petrochemical, aerospace, electric power, gas, automotive, shipbuilding, railways, machinery manufacturing and other industries.

Features

- Can test a variety of materials
- Test direction is unrestricted
- Can print the test results
- May at any time modify the data
- Automatic detection of battery voltage, low-voltage prompts
- Big screen can display a variety of parameters
- Measurement accuracy of ±8HL (HLD=800 5 point arithmetic average)

Technical Data

Operating Temperature	0-40°C
Storage temperature	-20-50°C
Operating voltage	4.7V-6.0V
Power Supply	4 Section 1100mAH rechargeable battery
Charging power	not more than 200mA
Weight	580g (with D impact device)
Best Dimension	233X91X31(mm)
Specifications	Ø40X44 rolls of printing paper printing paper



EF Digital Force Gauge

Product Description

The HF series digital force gauge with compact size, high accuracy, they are easy to operate and handy to carry out. Widely applied in electron, high & low voltage electrical appliance, hardware, automobile parts, lighter and ignition system, light industry, mechanical, textile, and so on industries for testing of pull or push load test, insertion force or pull and destructive experiment.

Features

- High accuracy high resolution: accuracy 0.5, the minimum reading 0.001 N.
- Six measuring models: stand mode, pull-push peak mode, pull peak mode, the external mode on-off mode, external saving on-off mode, have maximum increasing test efficiency.
- Three display-way for option: real time, peak, auto-peak.
- Three unit conversion: N, Kg, Lb.
- Peak holding function: can grab the peak value during test
- Comparison: free set upper and lower deviation, LCD displays "MAX" and "MIN" respectively and buzzer alarm
- Signal output function: can set comparison value, it output signal when the measuring force value is larger than comparison value.
- Auto-peak function: keep displaying peak value for 2 seconds and then relieve automatically.
- Automatic shut down function: automatic shut down without ten-minute operation.
- Calculate function: can calculate the max, min value and so on in every test when connecting computer.
- Turnover LCD display screen: when press "print" key, the screen can turn over 180 degrees.
- The real time analysis function: can be connected to computer, synchronous, display test curve on computer when testing and make various kinds of analysis



EF-2-1000



EF50N-200K



EF3000N-1000K



EF 1 000N-200K
EF 100K-2000K
(Clamps do not include)

Technical Data

Type	EF-2EF-3	EF-5	EF-10EF-20	EF-30EF-50EF-100	EF-200EF-300	EF-500EF-1000	EF-2000	EF-3000	EF-5000EF-10000	EF-20000EF-30000	EF-50000EF-100000	EF-200000EF-300000	EF-500000EF-1000000	EF-2000000EF-3000000	EF-5000000EF-10000000	EF-20000000EF-30000000
Peak load value	2N 0.2kg 0.5lb	3N 0.3kg 0.7lb	5N 0.5kg 1.1lb	10N 1kg 2.2lb	20N 2kg 4.5lb	30N 3kg 6.5lb	50N 5kg 11lb	100N 10kg 22lb	200N 20kg 45lb	300N 30kg 65lb	500N 50kg 110lb	1000N 100kg 220lb	2000N 200kg 450lb	3000N 300kg 650lb	5000N 500kg 1100lb	10000N 1000kg 2200lb
Load division value	0.01N 0.001kg 0.001lb	0.01N 0.001kg 0.001lb	0.01N 0.001kg 0.001lb	0.01N 0.001kg 0.001lb	0.01N 0.001kg 0.001lb	0.01N 0.001kg 0.001lb	0.01N 0.001kg 0.001lb	0.01N 0.001kg 0.001lb	0.01N 0.001kg 0.001lb	0.01N 0.001kg 0.001lb	0.01N 0.001kg 0.001lb	0.01N 0.001kg 0.001lb	0.01N 0.001kg 0.001lb	0.01N 0.001kg 0.001lb	0.01N 0.001kg 0.001lb	0.01N 0.001kg 0.001lb
Sensor structure	Inside type				Both		Outside type									
Accuracy	±1%															
Power	7.2V 1.2Vx6 Ni-MH Battery group															
Charge time	4-5h															
Auto shut off	-1h															
Battery life	≥300 times															
Charger	Input: AC100-240V 50/60Hz Output: DC 18V 300mA															

EK Analog Force Gauge

Product Description

The NK series analog Force Gauge with compact size, high accuracy, they are easy to operate and handy to carry out, and can show the unit of newton and kilogram at the same time, The PEAK/TRACK knob of it can switch between the peak value load test and the continuous load test, They are excellent products which can take the places of the old style force gauges, and widely applied in electric, high & low voltage electric appliance, hardware, automobile parts, lighter and ignition system, light industry, mechanical, textile and so on industries for test of pull or push load test insertion force or pull and destructive experiment



Technical Data

Model	EK-20	EK-30	EK-50	EK-100	EK-200	EK-300	EK-500	PLB-20	PLB-30	PLB-50	PLB-100	PLB-200	PLB-300	PLB-500	PLB-1000	PLB-2000	PLB-4000	PLB-10000	
Max load	20N /2kg	30N /3kg	50N /5kg	100N /10kg	200N /20kg	300N /30kg	500N /50kg	20N /4.4lb	30N /6.6lb	50N /11lb	10N /22lb	200N /44lb	300N /66lb	500N /110lb	45lb /2kg	11lb /5kg	22lb /10kg	45lb /20kg	110lb /50kg
Min load	2N /0.2kg	3N /3kg	5N /0.5kg	10N /1kg	20N /2kg	30N /3kg	50N /5kg	2N /0.4lb	3N /0.6lb	5N /1lb	10N /2lb	20N /4lb	30N /6lb	50N /10lb	4.5lb /0.2kg	1lb /0.5kg	2.2lb /1.1kg	4.5lb /2.2kg	11lb /5.5kg
Indep. load size	0.1N/ 20g	0.2N /20g	0.25N /50g	0.5N /100g	1.0N /200g	2.0N /200g	2.5N /500g	0.1N /0.04lb	0.2N /0.04lb	0.25N /0.1lb	0.5N /0.2lb	1.0N /0.4lb	2.0N /0.4lb	2.5N /1.0lb	0.02kg /0.2kg	0.05kg /0.1kg	0.1kg /0.2kg	0.2kg /0.2kg	0.5kg /0.5kg
rod journey	10mm																		
Outline	dimension 26x66x36mm																		

WG Digital torque wrench

Product Description

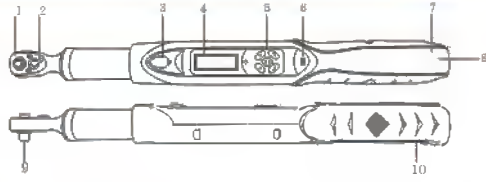
Digital torque wrench is different from general torque wrench, it has strong operation function including torque setting, time setting, mode setting, data storage, data clear, data output and user calibration function. It is easy to operate, it reduce the requirements for the operator by install the digital display. It is widely used for the automotive industry, machinery industry, such as bolt fastening and control.



Features

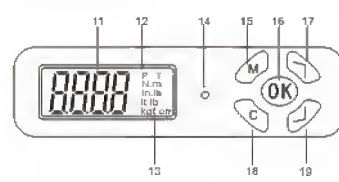
- Digital torsional readings
- Accuracy +/-2 (range 20~100%)
- Clockwise and counterclockwise both operated
- Peak hold and real-time mode
- Buzzer and LED indication (reach preset torque value)
- Four units (ft-lb, in-lb, N-m, kgf.cm)
- 100 records can be stored
- Communication function
- Auto-shut down within 5 minutes

Function and name of each part



- 1、double-sided ratchet head
- 2、direction paddle
- 3、communication hole
- 4、LCD screen
- 5、button
- 6、buzzer
- 7、battery case

- 8、battery cover
- 9、ratchet torque square head
- 10、Handle



- 11、torque value
- 12、P (peak mode) 、 T (Real-time mode)
- 13、Unit { N.m, in.lb, ft.lb, kgf.cm }
- 14、LED indicator
- 15、menu button
- 16、Ok button
- 17、up button
- 18、cancel button
- 19、down button

Technical Data

Model	WG2 -010	WG2 -030	WG3-0 30	WG3-0 60	WG3 -085	WG3 -135	WG4 -135	WG4 -200	WG4 -340	WG6- 500	WG6- 850
Max. Operation Range (N.m)	10N.m/7.3 7ft.lb/8.5 0in.lb/101 .97kgf.cm	30N.m/22. 12ft.lb/26 5.5in.lb/30 5.91kgf.c m	30N.m/2 2.12ft.lb /265.5in .lb/305. m	60N.m/4 4.25ft.lb /531.04i n.lb/411 m	85N.m /62.69 ft.lb/7 n.lb/1195i 52.31i n.lb/8 66.75k gf.cm	135N.m/9 99.57ft.l /1195i n.lb/137 6.61kgf. cm	135N.m/9 9.57ft.lb/1 195in.lb/1 376.61kgf. cm	200N.m/ 147.5ft.l b/1770i n.lb/203 9.43kgf. cm	340N.m/ 250ft.lb/ 3009in.l b/3467. 03kgf.c. cm	500N.m/ 4424in.l b/368.7f t.lb/509 6.88kgf. cm	850N.m/ 7521in.l b/626.8f t.lb/866 7.58kgf. cm
Square Drive (inches)	1/4		3/8			1/2			3/4		
Measured Torque Range (N.m)	0.5~10	1.5~30	1.5~30	2~60	4.25~85	6.75~135	6.75~135	10~200	17~340	25~500	42.5~85
Length	390		420			655					
Accuracy	Clockwise: ±2% counterclockwise: ±2.5%									Clockwise: ±2.5% Counterclockwise: ±3.5%	
Data storage capacity	100										
Operation mode	Peak hold mode (P) / Real-time mode (T)										
Unit	N.m, in.lb, ft.lb, kgf.cm										
Ratchet head type	Double-side ratchet head										
Number of ratchet gear	36									18	
Button	5										
Battery	AA battery × 2 1.5V (No. 5 battery)										
Operation temperature	-10℃~60℃										
Storage temperature	-20℃~70℃										
humidity	No condensation to 90%										
Drop test height	1 meter										
Vibration test condition	10G										
Life time test	10000 times										

AYQ Preset Torque Driver



Product Description

- AYQ Idling torque screwdriver with torque requirements for tightening the screw fastening the workpiece.
- Clockwise operation of the product,value can be pre-set torque.
- Exceeds the set value screwdriver idling,priority control efforts can be threaded fastening.
- The utility model patent No. ZL201320290870. 9

Technical Data

Type	LTDK-1.5	LTDK-3	AYQ-0.6	AYQ-1.2	AYQ-3	AYQ-6
Torque range	0.1-1.5(kgf.cm)	0.2-3.0(kgf.cm)	0.1-0.6(N.m)	0.2-1.2(N.m)	0.5-3(N.m)	1-6(N.m)
Division value(N.m)	0.01(kgf.cm)	0.02(kgf.cm)	0.01(N.m)	0.02(N.m)	0.05(N.m)	0.1(N.m)
Precision	99mm		161mm		186mm	
Full size(mm)	Ø17mm		Ø26mm		Ø31mm	
Handle diameter(mm)	About 0.1kg		About 0.3kg		About 0.4kg	
Net weight						±5%
Connection size						6.35mm

NQ Torque Driver

Product Description

ANQ Dial Torque Driver is our new product, it is use for cars, auto-bike, machine, electronic and so on. It is use for the torque of parts, easy to handle, easy to use, can keep long time. It is a necessary tool to test the torque of maintain and check equipment set.

Technical Data

Model	Capacity (N.m)	Division value (N.m)	Accuracy (%)	Long(mm)	Hex union size (mm)
NQ-0.6	0.1-0.6	0.01	±5	270	6.35
NQ-1.2	0.2-1.2	0.02			
NQ-3	0.25-3	0.05			
NQ-6	0.5-6	0.1			
NQ-9	0.75-9	0.15			
NQ-12	1-12	0.2			



TG,TN Tension Gauge

Product Description

Tension meter relay connections to apply pressure, electronic switches, micro-switches, valves, spring widening pressure, dial spindle pressure measurement equipment, automatic telephone equipment connections and pressure mechanical pressure armature, tape recorders buffer pressure point of contact pressure and other precision pressure, tension tests, tighten force instrument. Widely used in electrical manufacturing, mechanical manufacturing, automotive light industry and in scientific research and resting industry.



TN series

TG series

Technical Data

Type	Units:N						Units:G					
	TN-0.3	TN-0.5	TN-1	TN-1.5	TN-3	TN-5	TG-30	TG-50	TG-100	TG-150	TG-300	TG-500
Max measured value	0.3N	0.5N	1N	1.5N	3N	5N	30g	50g	100g	150g	300g	500g
Division value	0.01N	0.02N	0.05N	0.05N	0.1N	0.2N	1g	2g	5g	5g	10g	20g
Measuring range	0.06-0.3	0.1-0.5	0.2-1	0.3-1.5	0.6-3	1-5	6-30	10-50	20-100	30-150	60-300	100-500
	0.06N	0.1N	0.2N	0.3N	0.6N	1N	6g	10g	20g	30g	60g	100g
G.W.(kg)	0.25kg											

TF Yarn Tension Meter

Product Description

TF series Yarn Tension Meter is a instrument which applied in textile industry. And it also could test the Small metal lines. Characteristic: Referred the principle of the pulley block. Guide wheel is precision bearings with small resistance, make the measuring result more accurate.



Technical Data

Model	TF-25	TF-50	TF-75	TF-100	TF-150	TF-250
Range(gw)	25-2-25	50-4-50	75-5-75	100-10-100	150-10-150	250-20-250
Minimum scale value(gw)	1	2	5	5	5	10
Accuracy	±1%					

Tension Gauge

Product Description

Tension meter relay connections to apply pressure, electronic switches, micro-switches, valves, spring widening pressure, dial spindle pressure measurement equipment, automatic telephone equipment connections and pressure mechanical pressure armature, tape recorders buffer pressure point of contact pressure and other precision pressure, tension tests, tighten force instrument. Widely used in electrical manufacturing, mechanical manufacturing.



Technical Data

Model	TL-1	TL-2	TL-3	TL-5	TL10	TL20
Max. Load	1N	2N	3N	5N	10N	20N
	0.1Kg	0.2Kg	0.3Kg	0.5Kg	1Kg	2Kg
	0.21Lb	0.41Lb	0.62Lb	1.03Lb	2.07Lb	4.14Lb
	3.6Oz	7.2Oz	10.8Oz	18Oz	36Oz	72Oz
	100g	200g	300g	500g	1000g	2000g
Load Division Value	0.001N				0.01N	
	0.0001kg				0.001kg	
	0.0001Lb				0.001Lb	
	0.001Oz				0.01Oz	
	0.1g				1kg	
Precision	±0.5%					
Power	AAA battery*4					
Use life	≥100 hours					
Dimension	128mm*66mm*28mm					
Net weight	About 145g					

EV Electric Double column Vertical Test Stand

Features

EV electric vertical machine is a push-pull load test stand specially equipped for HF series and NK series force gauges. This product adopts dual vertical pole structure, featured by good stability, wide application and easy to use, etc., with the functions of step-less speed regulation, manual (crawl) and automatic switching. This product is appropriate for the push-pull load, plug power and other destructive tests in the industries of rubber, plastics, light textile, building doors and windows, composite materials, wire and cable, auto parts, power machinery and research institutions, etc.

Technical Data

Model	AEV-5000	AEV-5000 (Heighten)	AVE-10000	AVE-20000	AEV-30000
Max Load	5000N		10000N	20000N	30000N
Travel	220mm	220mm (Can custom made from 220mm to 1000)			
Speed	15-240mm/min				
Working Voltage	AC 100-240V				
Outline dimension (mm)	400X250X1050		400X250X1300		840X400X2400 (mm)
Net Weight	56kg	60kg	88kg		



Gauge and digital scale need to buy separately

AEL Electric Single-column Vertical Machine

Product Description

AEL Single-column Vertical Machine is force load test platform specially matched for HF and NK series force measurement gauge. The product is double vertical rod structure, featuring good stability, wide applicable scope and convenience, as well as step-less speed regulation, manual (point) and automatic control switching functions. Applicable for tests of force load, insertion and withdrawal, destruction in such industries as rubber and plastic, light industry-textile, constructional door and window, composite materials, electric wire and cable, parts and accessories for automobile, power machinery, scientific research institutes, etc.



Gauge need to buy separately

Technical Data

Model	EL-200-500N	EL-400-500N	EL-700-500N	EL-200-1000N	EL-400-1000N	EL-700-1000N
Max load	500N			1000N		
Travel	200MM	400MM	700MM	200MM	400MM	700MM
Speed	25-280mm/min					
Voltage	AC 100-240V					
Outline dimension (mm)	280X340X780	280X340X980	280X340X1270	280X340X780	280X340X980	280X340X1270
Net weight	38KG	40KG	42KG	38KG	40KG	42KG

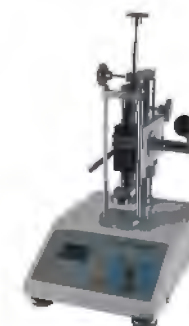
TH Spring Extension And Compression Tester



ATH-10-30



ATH-50-500



ATH-1000-5000

Product Description

As a special-purpose instrument, this testing machine is used to test amount of deformation and characteristic of load relation of extension and compression springs. It can be applied to the testing of working load of extension and compression springs under certain working length. Advanced and highly integrated chip microprocessor is adopted by this machine, which also has liquid crystal display (English) and metal enclosure. The interference-killing feature of the system is thus greatly improved.

Features

- Liquid crystal display (English); better Human Machine Interface (HMI)
- High precision and resolution
- Three kinds of measurement units can be selected (N, Lb and Kg); inter-conversion is available
- The user can independently set up acceleration of gravity of the place of usage. In this way, the testing and unit conversion would be more accurate
- 99 sets of test data can be stored; the user can directly look over store and delete data in the machine
- The user can freely shift among the following three patterns: Real-time and peak-value patterns and the pattern of automatic peak value
- It has the function of client setup and free setup of upper and lower limits (corresponding to audible and visual alarms), storage value, holding value, automatic storage time of peak value, automatic shutdown time (non-operation), etc
- Judgment of acceptance or rejection of test data to be printed and stored, maximum value and mean value (only for tape printing machine)
- MODBUS-RTU standard agreement is adopted for communication, USB interface is adopted for better connection with configuration and PLC connection

Technical Data

Type	TH-10	TH-20	TH-30	TH-50	TH-100	TH-150	TH-200	TH-300	TH-500	TH-1000	TH-2000	TH-3000	TH-5000
Maximum testing load	10N	20N	30N	50N	100N	150N	200N	300N	500N	1000N	2000N	3000N	5000N
	1KG	2KG	3KG	5KG	10KG	15KG	20KG	30KG	50KG	100KG	200KG	300KG	500KG
	2.2Lb	4.5Lb	6.5Lb	11Lb	22Lb	33Lb	45Lb	65Lb	110Lb	220Lb	450Lb	650Lb	1100Lb
Minimum resolution	0.001N			0.01N				0.1N					
	0.001kg			0.001kg				0.01kg					
	0.0001Lb			0.001Lb				0.01Lb					
Diameter of the plate	34mm			48mm				100mm					
Maximum free length of measurable spring	50mm			150mm				200mm					
Range of travel of the displacement scale	60mm			90mm				150mm					
Division value of the displacement scale	0.01mm												
Indication error	±1%												
Power Supply	100-240V-50-60Hz												
N.W	~14.5kg			~18kg				~67kg					
Size	490x280x300mm			570x280x300mm				790x260x320mm					

NL Digital Torque Meter



NL-500A~20
without printer



NL-500A~20
with printer



NL-50-500



NL-1000-5000

Product Description

Digital torque meter is an intelligent multi-functional measuring instrument which is designed for testing various kinds of torque. It main used in testing and calibrating various kinds of electric pneumatic screwdriver set, the torque of torque wrench, all kinds of products refer to testing of screw down force, parts torsion destructive testing etc. With features of simple operation, high precision, easy to carry, complete functions etc. It's widely used in various used in various kinds of electric, light industry, machinery manufacturing, research institutions, etc.

Features

- High precision, high resolution, quick sampling speed, full-screen display.
- Adopting high precision torque sensor, with torque direction display.
- Upper and lower limit value setting, red and green indicating lights and buzzer audible and visual alarm.
- Three units can be switched each other (N·m, Kg·cm, Lb·in).
- Real-time peak, automatic peak three models of optional switch.
- Use USB interface and PC communications, synchronous test function can connect to the computer, computer synchronous display test force graph and the detailed test process, can save, print, doing all sorts of analysis.
- Peak holding, remove automatically function, remove time to set freely.
- Large storage, can save 99 groups of test data.
- Without automatic shutdown function, time can be set freely.

Technical Data

Type Index	With printer	NL-1P	NL-2P	NL-3P	NL-5P	NL-10P	NL-20P	NL-50P	NL-100P	NL-200P	NL-300P	NL-500P	NL-1000P	NL-2000P	NL-3000P	NL-5000P
	No printer	NL-1	NL-2	NL-3	NL-5	NL-10	NL-20	NL-50	NL-100	NL-200	NL-300	NL-500	NL-1000	NL-2000	NL-3000	NL-5000
Measuring range/ Division value	Nm	1.0000/ 0.0001	2.0000/ 0.0001	3.0000/ 0.0001	5.0000/ 0.0001	10.000/ 0.001	20.000/ 0.001	50.000/ 0.001	100.00/ 0.01	200.00/ 0.01	300.00/ 0.01	500.00/ 0.01	1000.0/ 0.1	2000.0/ 0.1	3000.0/ 0.1	5000.0/ 0.1
	Kp/cm	10.210/ 0.001	20.421/ 0.001	30.631/ 0.001	51.052/ 0.001	102.10/ 0.01	204.21/ 0.01	510.52/ 0.01	1021.0/ 0.1	2042.0/ 0.1	3063.1/ 0.1	5105.2/ 0.1	10210/ 1	20420/ 1	30630/ 1	51051/ 1
	Lb·in	0.862/ 0.001	17.24/ 0.001	26.566/ 0.001	44.311/ 0.001	88.62/ 0.01	177.24/ 0.01	443.11/ 0.01	886.2/ 0.1	1772.4/ 0.1	2658.6/ 0.1	4431.1/ 0.1	8862.2/ 1	17724/ 1	26586/ 1	44311/ 1
Precision	±1%												±1%			
Measurement Sampling Frequency	2000HZ												2000HZ			
Power	8.4V 1.2Vx7 Ni-MH Battery group												8.4V 1.2Vx7 Ni-MH Battery group			
Charging Time	4~6Hours												4~6Hours			
Continuous using time of battery	About 10Hours												About 10Hours			
Battery life	≥300 times												≥300 times			
Size	With printer:230mmx95mmx180mm No printer:230mmx70mmx125mm						With printer:rear display part 230mmx130mmx180mm Measuring device part 180mmx130mmx180mm No printer: Host display part 230mmx70mmx125mm Measuring device part 180mmx130mmx180mm						With printer:Host display part 230mmx85mmx180mm No printer:Host display part 230mmx70mmx125mm			
Net Weight	With printer:4KG No printer:2KG						With printer:8.5KG No printer:3.4KG						With printer:8.5KG No printer:3.4KG			
Power adapter	Input: AC110V 50HZ/AC220V 50HZ Output: DC 12V 500mA															