2018
2019

MEASURING INSTRUMENTS

CATALOGUE NO. E22

INSIZE

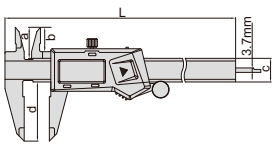
DIGITAL CALIPERS (STANDARD MODEL)

DATA OUTPUT

INSPECTION CERTIFICATE TRACEABLE TO DKD

1108-150

- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Data output
- Meet DIN862
- Made of stainless steel
- Optional accessory: data output cable



(mm)

Code	Range	Accuracy	L	a	b	c	d
1108-150*	0-150mm/0-6"	±0.02mm	236	21	16	16	40
1108-200*	0-200mm/0-8"	±0.03mm	286	24	19	16	50
1108-300*	0-300mm/0-12"	±0.03mm	400	25	20.5	17	60

*Supplied with manufacturer inspection certificate traceable to DKD Germany

WATERPROOF DIGITAL CALIPERS

IP67 WATERPROOF

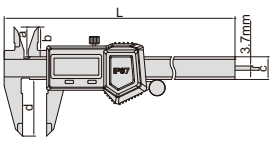
INSPECTION CERTIFICATE TRACEABLE TO DKD

ATTENTION: IT IS NECESSARY TO SET ZERO AFTER POWER ON EACH TIME

ATTENTION: NO DATA OUTPUT

1118-150B

- IP67 dust/waterproof
- Resolution: 0.01mm/0.0005"
- Button function: zero, on/off, mm/inch, ABS/REL, hold
- Battery CR2032
- Meet DIN862
- Made of stainless steel



(mm)

Code	Range	Accuracy	L	a	b	c	d
1118-150B*	0-150mm/0-6"	±0.03mm	236	21	16	16	40
1118-200B*	0-200mm/0-8"	±0.03mm	286	24	19	16	50
1118-300B*	0-300mm/0-12"	±0.03mm	400	25	20.5	17	60

*Supplied with manufacturer inspection certificate traceable to DKD Germany

DIGITAL CALIPER WITH ROUND DEPTH BAR

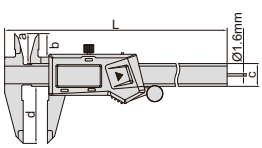
DATA OUTPUT

INSPECTION CERTIFICATE TRACEABLE TO DKD

1119-150

round depth bar Ø1.6mm

- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Data output
- Meet DIN862
- Made of stainless steel
- Optional accessory: data output cable



(mm)

Code	Range	Accuracy	L	a	b	c	d
1119-150*	0-150mm/0-6"	±0.03mm	236	21	16	16	40

*Supplied with manufacturer inspection certificate traceable to DKD Germany

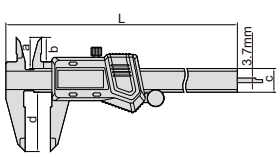
DIGITAL CALIPERS

INSPECTION CERTIFICATE TRACEABLE TO DKD

ATTENTION: NO DATA OUTPUT

1114-150A

- Zinc alloy housing for digital unit
- Resolution: 0.01mm/0.0005"
- Buttons: zero, on/off, mm/inch
- Automatic power off, move the digital unit to turn on power
- Battery CR2032, meet DIN862
- Made of stainless steel



(mm)

Code	Range	Accuracy	L	a	b	c	d
1114-150A*	0-150mm/0-6"	±0.03mm	236	21	16	16	40
1114-200A*	0-200mm/0-8"	±0.03mm	286	24	19	16	50
1114-300A*	0-300mm/0-12"	±0.03mm	400	25	20.5	17	60

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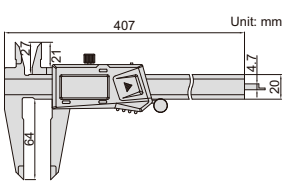
HEAVY DUTY 300mm DIGITAL CALIPER

DATA OUTPUT

INSPECTION CERTIFICATE TRACEABLE TO DKD

1196-300

- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Data output
- Meet DIN862
- Made of stainless steel
- Optional accessory: data output cable



Code	Range	Accuracy
1196-300*	0-300mm/0-12"	±0.03mm

*Supplied with manufacturer inspection certificate traceable to DKD Germany

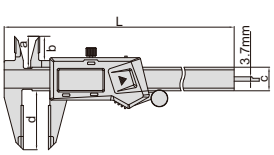
DIGITAL CALIPER WITH CARBIDE TIPPED JAWS

INSPECTION CERTIFICATE TRACEABLE TO DKD

1110-150A

DATA OUTPUT

- Carbide tipped jaws for inside and outside measurements
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Battery CR2032, data output
- Meet DIN862
- Made of stainless steel
- Optional accessory: data output cable



(mm)

Code	Range	Accuracy	L	a	b	c	d
1110-150A*	0-150mm/0-6"	±0.03mm	236	21	16	16	40

*Supplied with manufacturer inspection certificate traceable to DKD Germany
- Sizes available up to 300mm

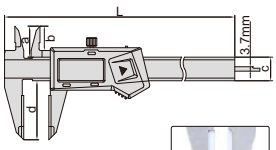
DIGITAL CALIPER WITH CERAMIC TIPPED JAWS

INSPECTION CERTIFICATE
TRACEABLE TO DKD

DATA OUTPUT

1193-150

- Ceramic tipped jaws for outside measurement, extremely wear-resistant, non-magnetic, non-conductive
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Battery CR2032, data output
- Meet DIN862
- Made of stainless steel
- Optional accessory: data output cable



ceramic tipped jaws

(mm)

Code	Range	Accuracy	L	a	b	c	d
1193-150*	0-150mm/0-6"	±0.03mm	235	21	16.5	16	40

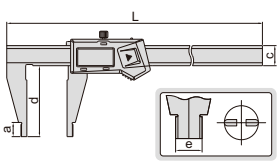
*Supplied with manufacturer inspection certificate traceable to DKD Germany
-Sizes available up to 300mm

DIGITAL CALIPERS

DATA OUTPUT

1170-300

- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Data output
- Made of stainless steel
- Optional accessory: data output cable



(mm)

Code	Range	Accuracy	a	c	d	e	L
1170-306	0-300mm/0-12"	±0.04mm	12	17	60	10	420
1170-300	0-300mm/0-12"	±0.04mm	12	17	90	10	420

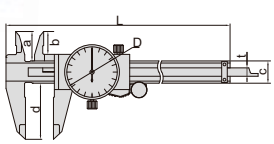
DIAL CALIPERS

INSPECTION CERTIFICATE
TRACEABLE TO DKD

SHOCK PROOF

1312-150A

- Shockproof dial indicator
- Made of stainless steel



Dial indicator graduation 0.02mm (mm)

Code	Range	Accuracy	L	a	b	c	d	D	t
1312-150A*	0-150mm	±0.03mm	235	21	16.5	16	40	Ø39	6.5
1312-200A*	0-200mm	±0.03mm	288	24	19	16	48	Ø39	6.5
1312-300A*	0-300mm	±0.03mm	410	28	22	20	62	Ø44.5	7.5

Dial indicator graduation 0.01mm (mm)

Code	Range	Accuracy	L	a	b	c	d	D	t
1311-150A*	0-150mm	±0.03mm	235	21	16.5	16	40	Ø39	6.5
1311-200A*	0-200mm	±0.03mm	288	24	19	16	48	Ø39	6.5
1311-300A*	0-300mm	±0.03mm	410	28	22	20	62	Ø44.5	7.5

*Supplied with manufacturer inspection certificate traceable to DKD Germany

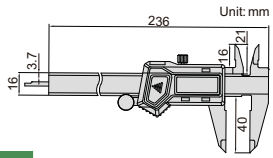
LEFT HAND DIGITAL CALIPER

INSPECTION CERTIFICATE
TRACEABLE TO DKD

DATA OUTPUT

1130-150

- Designed for left handed users
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Battery CR2032, data output
- Meet DIN862
- Made of stainless steel
- Optional accessory: data output cable



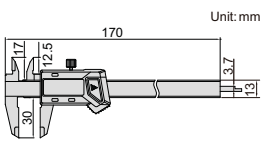
Code	Range	Accuracy
1130-150*	0-150mm/0-6"	±0.03mm

*Supplied with manufacturer inspection certificate traceable to DKD Germany
-Sizes available up to 300mm

MINI DIGITAL CALIPER

ATTENTION: NO DATA OUTPUT

1111-100A



- Resolution: 0.01mm/0.0005"
- Buttons: zero, mm/inch, on/off
- Automatic power off, move the digital unit to turn on power
- Battery LR44
- Meet DIN862
- Made of stainless steel

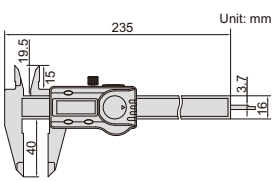
Code	Range	Accuracy
1111-100A	0-100mm/0-4"	±0.02mm

PLASTIC DIGITAL CALIPER

ATTENTION: NO DATA OUTPUT

1139-150

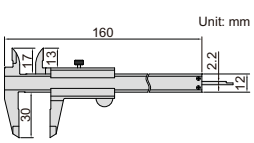
- Made of hard plastic, non-magnetic and non electric conductive
- Prevent workpieces from scratching by calipers
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch
- Battery CR2032, automatic power off



Code	Range	Accuracy
1139-150	0-150mm/0-6"	±0.1mm

MINI VERNIER CALIPER

1203-1003



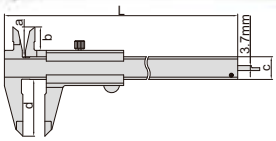
- Meet DIN862
- Made of stainless steel
- Satin chrome plated reading surface

Code	Range	Graduation	Accuracy
1203-1003	0-100mm	0.05mm	±0.05mm

VERNIER CALIPERS

1205-150S

- Meet DIN862
- Made of stainless steel
- Satin chrome plated reading surface



Graduation 0.05mm/1/128" (mm)

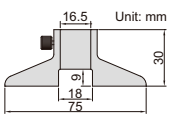
Code	Range	Accuracy	L	a	b	c	d
1205-150S	0-150mm/0-6"	±0.05mm	235	20.5	15.5	16	40
1205-200S	0-200mm/0-8"	±0.05mm	290	23.5	19	17	50
1205-300S	0-300mm/0-12"	±0.05mm	414	27.5	22	20	64

Graduation 0.02mm/0.001" (mm)

Code	Range	Accuracy	L	a	b	c	d
1205-1502S	0-150mm/0-6"	±0.03mm	235	20.5	15.5	16	40
1205-2002S	0-200mm/0-8"	±0.03mm	290	23.5	19	17	50
1205-3002S	0-300mm/0-12"	±0.03mm	414	27.5	22	20	64

DEPTH BASE ATTACHMENT

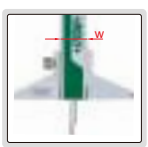
6140



VIDEO

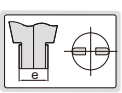
- To increase the stability of depth measurement
- Suitable for digital calipers and dial calipers
- Made of stainless steel

Code	Application
6140	Suitable for calipers with beam width (w) 16mm

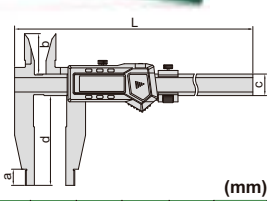


DIGITAL CALIPERS

DATA OUTPUT



1136-501



- Resolution: 0.01mm/0.0005"
- Button function: on/off, zero, mm/inch, ABS, data preset
- Battery CR2032
- Data output
- Made of stainless steel
- Optional accessory: data output cable

(mm)

Code	Range	Accuracy	a	b	c	d	e	L
1136-501	0-500mm/0-20"	±0.05mm	18	45	24	100	20	675
1136-601	0-600mm/0-24"	±0.05mm	18	45	24	100	20	770
1136-1002	0-1000mm/0-40"	±0.08mm	24	60	31	150	20	1220

Sizes available up to 2000mm

DIGITAL CALIPER

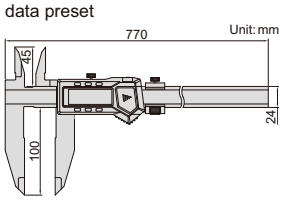
DATA OUTPUT

1135-601

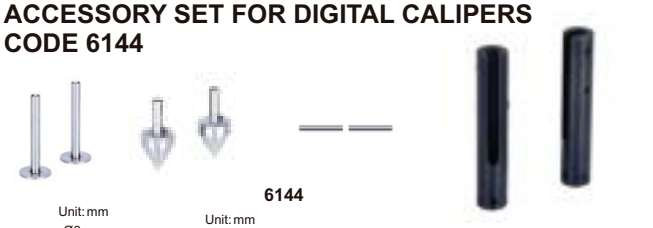
- Resolution: 0.01mm/0.0005"
- Button function: on/off, zero, mm/inch, ABS, data preset
- Battery CR2032
- Data output
- Made of stainless steel
- Optional accessory: data output cable

Code	Range	Accuracy
1135-601	0-600mm/0-24"	±0.05mm

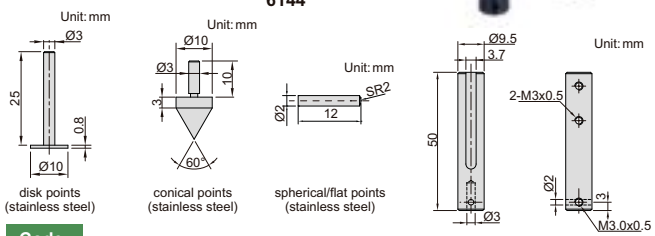
Sizes available up to 1000mm



ACCESSORY SET FOR DIGITAL CALIPERS CODE 6144

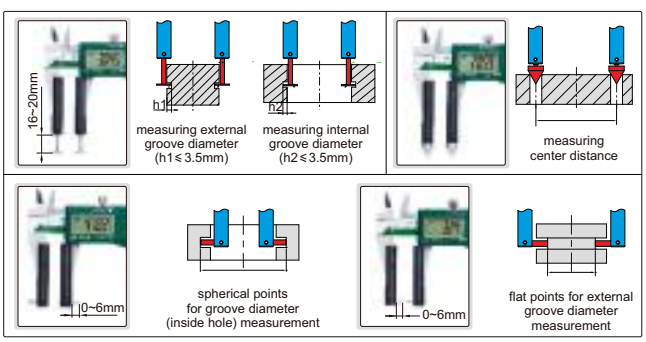


6144



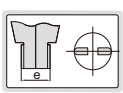
Code
6144

- Suitable for 0-150mm/0-6" and 0-200mm/0-8" digital calipers (thickness of lower jaws ⩽3.7mm)

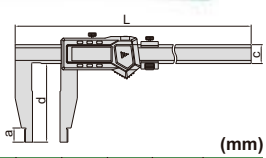


DIGITAL CALIPERS

DATA OUTPUT



1106-501



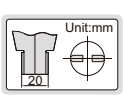
- Resolution: 0.01mm/0.0005"
- Button function: on/off, zero, mm/inch, ABS, data preset
- Battery CR2032, data output
- Made of stainless steel
- Optional accessory: data output cable

(mm)

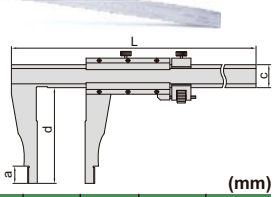
Code	Range	Accuracy	a	c	d	e	L
1106-501	0-500mm/0-20"	±0.05mm	18	24	100	20	675
1106-601	0-600mm/0-24"	±0.05mm	18	24	100	20	770
1106-1002	0-1000mm/0-40"	±0.08mm	24	31	150	20	1220

Sizes available up to 3000mm

VERNIER CALIPERS



1214-600



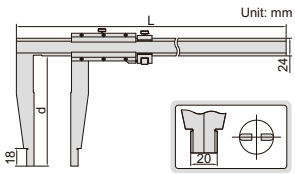
- Graduation: 0.02mm/0.001"
- With fine adjustment
- Made of stainless steel
- Satin chrome plated reading surface

(mm)

Code	Range	Accuracy	a	c	d	L
1214-500	0-500mm/0-20"	±0.05mm	18	24	100	670
1214-600	0-600mm/0-24"	±0.05mm	18	24	100	770
1214-1000	0-1000mm/0-40"	±0.08mm	24	32	140	1216

Sizes available up to 2000mm

LONG JAW VERNIER CALIPERS



1215-532

- Graduation: 0.02mm/0.001"
- With fine adjustment
- Made of stainless steel
- Satin chrome plated reading surface

(mm)

Code	Range	Accuracy	d	L
1215-532	0-500mm/0-20"	±0.06mm	200	670
1215-622	0-600mm/0-24"	±0.06mm	150	770

Sizes available up to 3000mm

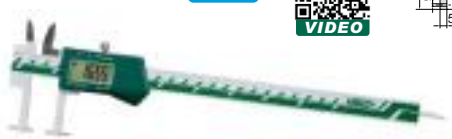
DIGITAL CALIPER WITH INTERCHANGEABLE POINTS CODE 1526-200

DATA OUTPUT

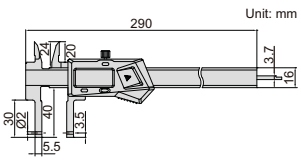
VIDEO

depth stop **6143** (**optional**)

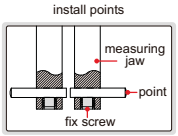
preset buttons



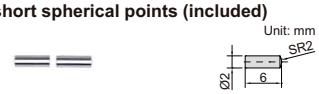
1526-200



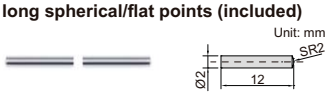
install points



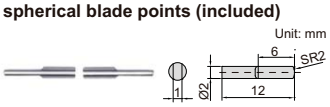
short spherical points (included)



long spherical/flat points (included)



spherical blade points (included)



- Supplied with 3 pairs of points and zero setting block for external measurement
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, set, mm/inch, preset (+, -)
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Data output
- Made of stainless steel
- Optional accessory: points (code **1526-T101**, **7392**, **7391**, **7381**, **7321**), depth stop (code **6143**), data output cable

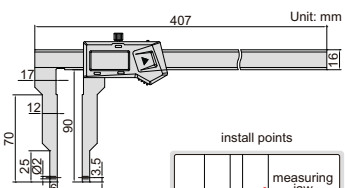
zero setting block for external measurement (included)

Point	Range	Accuracy	Application
short spherical points	12-212mm/0.5-8.5"(internal)	±0.03mm	for grooves inside small hole
long spherical/flat points	24-224mm/1-8.8"(internal) 0-187mm/0-7.5"(external)	±0.03mm	spherical points for grooves inside hole flat points for external grooves
spherical blade points	24-224mm/1-8.8"(internal) 0-187mm/0-7.5"(external)	±0.03mm	for narrow grooves inside hole

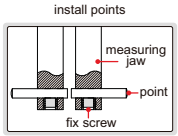
DIGITAL CALIPER WITH INTERCHANGEABLE POINTS CODE 1124-300A

DATA OUTPUT

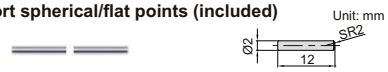
1124-300A



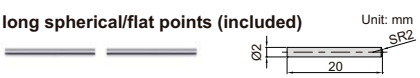
install points



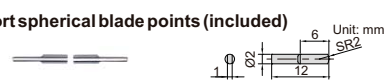
short spherical/flat points (included)



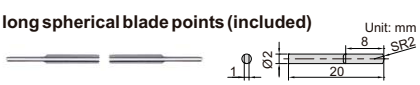
long spherical/flat points (included)



short spherical blade points (included)



long spherical blade points (included)



preset buttons

depth stop **6143** (**optional**)

zero setting block for external measurement (included)

VIDEO

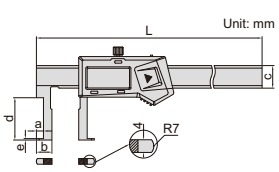
- Supplied with 4 pairs of points and zero setting block for external measurement
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, set, mm/inch, preset (+, -)
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Data output
- Made of stainless steel
- Optional accessory: points (code **1526-T101**, **7392**, **7391**, **7381**, **7321**), depth stop (code **6143**), data output cable

Point	Range	Accuracy	Application
short spherical/ flat points	24-324mm/1-12.7"(internal) 0-288mm/0-11.3"(external)	±0.04mm	spherical points for grooves inside hole (small hole) flat points for external grooves
long spherical/ flat points	40-340mm/1.5-13.3"(internal) 0-272mm/0-10.7"(external)	±0.04mm	spherical points for grooves inside hole (large hole) flat points for external grooves
short spherical blade points	24-324mm/1-12.7"(internal) 0-288mm/0-11.3"(external)	±0.04mm	for narrow grooves inside hole (small hole)
long spherical blade points	40-340mm/1.5-13.3"(internal) 0-272mm/0-10.7"(external)	±0.04mm	for narrow grooves inside hole (large hole)

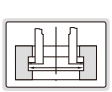
DIGITAL INSIDE GROOVE CALIPERS

- Measure groove diameter
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, set, mm/inch, preset (+,-)
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Data output
- Made of stainless steel
- Optional accessory: depth stop (code **6143**), data output cable

1120-150A

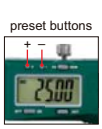


DATA OUTPUT



VIDEO

preset buttons



depth stop **6143** (**optional**)

(mm)

Code	Range	Accuracy	L	a	b	c	d	e
1120-150A	22-150mm	±0.04mm	250	5	11	16	30	1
1120-200A	25-200mm	±0.04mm	310	5	12.5	16	40	1

Sizes available up to 300mm

DIGITAL INSIDE POINT CALIPER

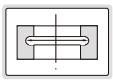
DATA OUTPUT

VIDEO

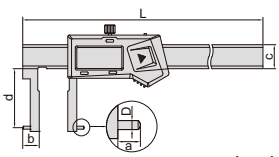
preset buttons

1121-150A

depth stop **6143** (**optional**)



- Measure groove diameter
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, set, mm/inch, preset (+,-)
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Data output
- Made of stainless steel
- Optional accessory: depth stop (code **6143**), data output cable



(mm)

Code	Range	Accuracy	L	a	b	c	d	D
1121-150A	24-150mm	±0.04mm	250	5	12	16	30	Ø2

Sizes available up to 300mm

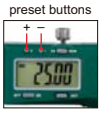
DIGITAL INSIDE GROOVE CALIPER

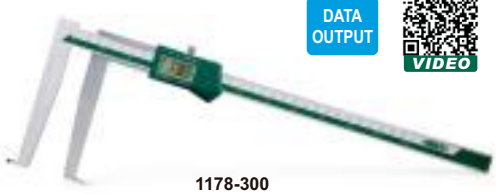
DATA OUTPUT

VIDEO

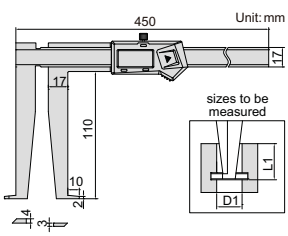
depth stop **6143** (**optional**)

preset buttons





1178-300



sizes to be measured

- Measure diameter of grooves inside bores
- Resolution 0.01mm/0.0005"
- Buttons: on/off, set, mm/inch, preset (+, -)
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Data output
- Made of stainless steel
- Optional accessory: depth stop (code **6143**), data output cable

(mm)

D1	L1
Ø25	<50
Ø26	<60
Ø27~300	<110

Code	Range	Accuracy
1178-300	25-300mm/1.18-12"	±0.05mm

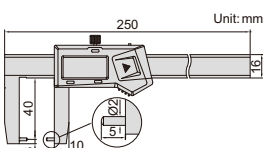
DIGITAL OUTSIDE POINT CALIPER

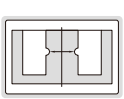
DATA OUTPUT

1185-150A

depth stop **6143** (**optional**)

- Measure wall thickness inside bores and recesses
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Data output
- Made of stainless steel
- Optional accessory: depth stop (code **6143**), data output cable

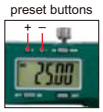




Code	Range	Accuracy
1185-150A	0-150mm/0-6"	±0.04mm

DIGITAL INSIDE GROOVE CALIPER

preset buttons



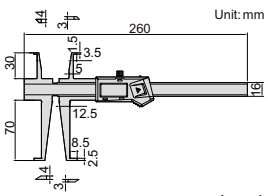
DATA OUTPUT

VIDEO

depth stop **6143** (**optional**)

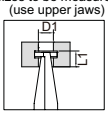
1176-150

- Measure diameter of grooves inside bores
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, set, mm/inch, preset (+,-)
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Data output
- Made of stainless steel
- Optional accessory: depth stop (code **6143**), data output cable

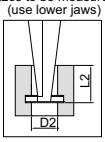


(mm)

sizes to be measured (use upper jaws)



sizes to be measured (use lower jaws)



D1	L1	D2	L2	D2	L2
Ø9	<8	Ø15	<10	Ø19	<42
Ø10	<15	Ø16	<18	Ø20	<50
Ø11~150	<30	Ø17	<26	Ø21	<58
		Ø18	<34	Ø22~150	<70

Code	Range of upper jaw	Range of lower jaw	Accuracy
1176-150	9-150mm/0.35-6"	15-150mm/0.59-6"	±0.04mm

DIGITAL INSIDE GROOVE CALIPER

preset buttons

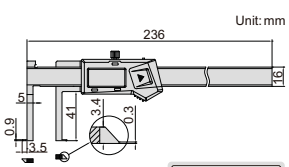
DATA OUTPUT

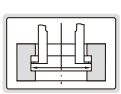
VIDEO

depth stop **6143** (**optional**)

1520-150

- Measure diameter of grooves inside small bores
- Resolution 0.01mm/0.0005"
- Buttons: on/off, set, mm/inch, preset (+, -)
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Data output
- Made of stainless steel
- Optional accessory: depth stop (code **6143**), data output cable

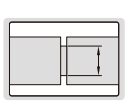




Code	Range	Accuracy
1520-150	11-150mm/0.43-6"	±0.04mm

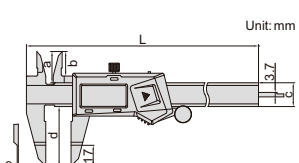
DIGITAL BLADE CALIPER

DATA OUTPUT



1188-150A

- The blade jaws fit into small grooves
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Data output
- Made of stainless steel
- Optional accessory: data output cable



(mm)

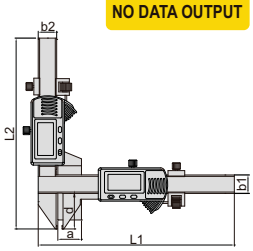
Code	Range	Accuracy	L	a	b	c	d	e
1188-150A	0-150mm/0-6"	±0.03mm	235	21	16.5	16	40	0.75

Sizes available up to 300mm

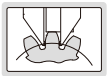
DIGITAL GEAR TOOTH CALIPER

ATTENTION: NO DATA OUTPUT

1181-M25A



- Resolution: 0.01mm/0.0005"
- Carbide tips
- Buttons: zero, on/off, mm/inch
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Made of stainless steel

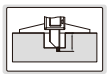


(mm)

Code	Range	Accuracy	L1	L2	a	b1	b2	d
1181-M25A	M1-25mm	±0.04mm	170	165.5	21	16	16	30.5

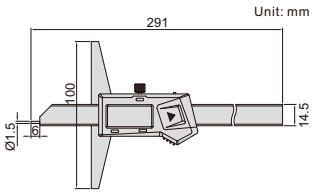
DIGITAL POINT DEPTH GAGE

DATA OUTPUT



1143-200A

Unit: mm



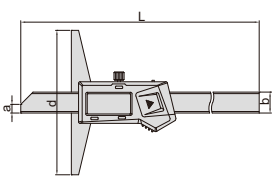
- Buttons: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Meet DIN862
- Battery CR2032
- Data output
- Made of stainless steel
- Optional accessory: data output cable

Code	Range	Resolution	Accuracy
1143-200A	0-200mm/0-8"	0.01mm/0.0005"	±0.03mm

DIGITAL DEPTH GAGES (STANDARD MODEL)

DATA OUTPUT

1141-150A



- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Meet DIN862
- Battery CR2032
- Data output
- Made of stainless steel
- Optional accessory: data output cable

(mm)

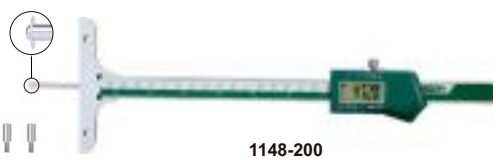
Code	Range	Accuracy	L	a	b	d
1141-150A	0-150mm/0-6"	±0.03mm	230	6	14.5	100
1141-200A	0-200mm/0-8"	±0.03mm	280	6	14.5	100
1141-300A	0-300mm/0-12"	±0.03mm	380	6	14.5	150

Sizes available up to 500mm

DIGITAL DEPTH GAGE WITH ROUND DEPTH BAR

VIDEO

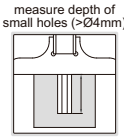
DATA OUTPUT | MEASURE DEPTH OF SMALL HOLES (>Ø4mm) | MEASURE WIDTH AND DEPTH OF GROOVES INSIDE BORE



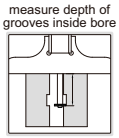
1148-200

preset buttons

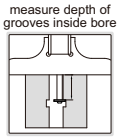
measure depth of small holes (>Ø4mm)



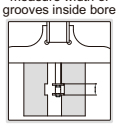
measure depth of grooves inside bore

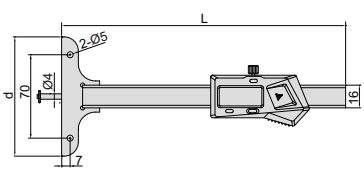


measure depth of grooves inside bore

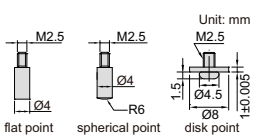


measure width of grooves inside bore





Unit: mm



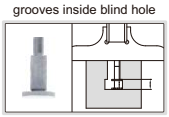
- Resolution: 0.01mm/0.0005"
- Supplied with three interchangeable points (flat, spherical, disk)
- Buttons: on/off, set, mm/inch, preset (+, -)
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Data output
- Made of stainless steel
- Optional accessory: data output cable, disk points (see below table), extension base (code **6141**, for **1148-200**)

1148-P101 (**optional**)

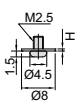
extension base for **1148-200** (**optional**)

6141 series

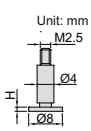
1148-P103 (**optional**), measure width of bottom grooves inside blind hole



Unit: mm



1148-P101 and **1148-P102**



1148-P103 and **1148-P104**

(mm)

Code	Range*	Accuracy	L	d	Remark
1148-200	0-200mm/0-8"	±0.03mm	300	101	with mounting holes for extension base

*When disk points are used, the range is reduced by 10mm

OPTIONAL DISK POINTS

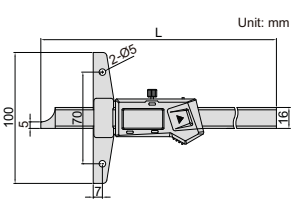
Code	Description	H	Remark
1148-P101	0.5mm disk point	0.5±0.005mm	for narrow grooves
1148-P102	0.7mm disk point	0.7±0.005mm	for narrow grooves
1148-P103	1mm disk point	1±0.005mm	for grooves inside blind hole
1148-P104	0.5mm disk point	0.5±0.005mm	for grooves inside blind hole

DIGITAL DEPTH GAGES WITH MOUNTING HOLES FOR EXTENSION BASE

DATA OUTPUT

1147-150

Unit: mm



- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Meet DIN862
- Battery CR2032
- Data output
- Made of stainless steel
- Optional accessory: data output cable, extension base (code **6141**)

(mm)

Code	Range	Accuracy	L
1147-150	0-150mm/0-6"	±0.03mm	237
1147-200	0-200mm/0-8"	±0.03mm	287

Sizes available up to 300mm

extension base (optional)

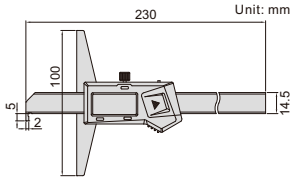
6141 series

DIGITAL HOOK DEPTH GAGE

DATA OUTPUT

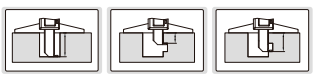
1142-150A

- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Data output
- Made of stainless steel
- Optional accessory: data output cable



Code	Range	Accuracy
1142-150A	0-150mm/0-6"	±0.03mm

Sizes available up to 300mm



VERNIER DEPTH GAGES (STANDARD MODEL)

1240-200

Gradution 0.02mm (mm)

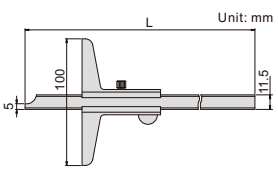
Code	Range	Accuracy	L
1240-1501	0-150mm	±0.03mm	245
1240-2001	0-200mm	±0.03mm	282
1240-3001	0-300mm	±0.04mm	382

Gradution 0.05mm (mm)

Code	Range	Accuracy	L
1240-150	0-150mm	±0.05mm	245
1240-200	0-200mm	±0.05mm	282
1240-300	0-300mm	±0.08mm	382

Sizes available up to 500mm

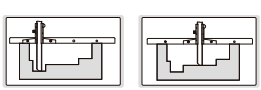
- Made of stainless steel
- Satin chrome plated reading surface

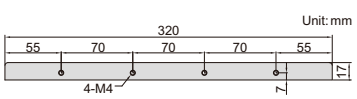


EXTENSION BASE

VIDEO

6141-320

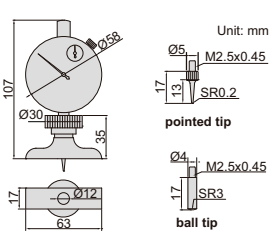




- Supplied with two screws
- Made of stainless steel
- Suitable for depth gages series **1147**, **1148**, **1247**, **1248** and **1249**

Code	Length
6141-320	320mm

DIAL DEPTH GAGE



2341-101A

- Dial indicator graduation: 0.01mm
- Stainless steel base
- Supplied with pointed tip and ball tip

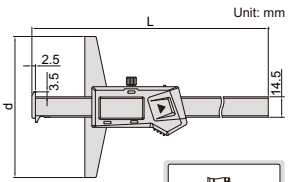
Code	Range	Dial indicator stroke	Accuracy
2341-101A	0-10mm	10mm	±0.017mm

DIGITAL DOUBLE HOOK DEPTH GAGES

DATA OUTPUT

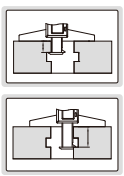
1144-150A

- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Meet DIN862
- Battery CR2032
- Data output
- Made of stainless steel
- Optional accessory: data output cable



(mm)

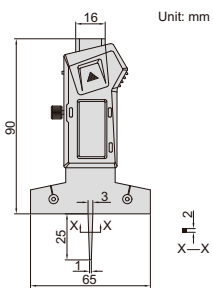
Code	Range	Accuracy	L	d
1144-150A	0-150mm/0-6"	±0.03mm	233	100
1144-200A	0-200mm/0-8"	±0.03mm	283	100
1144-300A	0-300mm/0-12"	±0.03mm	383	150



MINI DIGITAL DEPTH GAGE

DATA OUTPUT

1145-25A



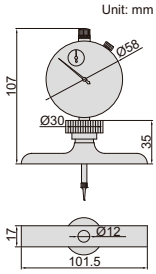
- Measure depth of small groove and hole, also measure depth of tire tread
- Buttons: on/off, zero, mm/inch
- Supplied with zero set surface
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Data output
- Made of stainless steel
- Optional accessory: data output cable

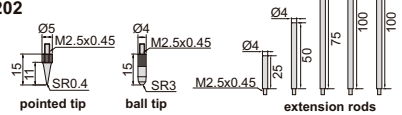
Code	Range	Accuracy	Resolution
1145-25A	0-25mm/0-1"	±0.03mm	0.01mm/0.0005"

DIAL DEPTH GAGE

VIDEO

2342-202





- Accuracy: ±0.03mm
- Dial indicator stroke: 30mm
- Dial indicator graduation: 0.01mm
- Stainless steel base
- Extension rods: 25mm (1 pc), 50mm (1 pc), 75mm (1 pc), 100mm (2 pcs)
- Supplied with pointed tip and ball tip

Code	Range	Base
2342-202	0-300mm	101.5x17mm

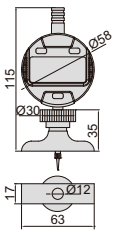
DIGITAL DEPTH GAGES

DATA OUTPUT

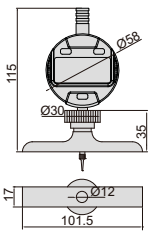
VIDEO

2141-202A

Unit: mm

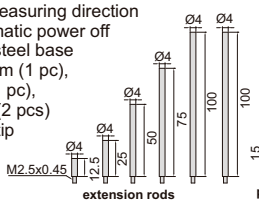


2141-201A

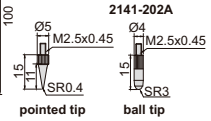


2141-202A

- Digital indicator stroke: 12.7mm/0.5"
- Digital indicator resolution: 0.01mm/0.0005"
- Button function: on/off, zero, mm/inch, ABS, data preset, change measuring direction
- CR2032 battery, automatic power off
- Data ouput, stainless steel base
- Extension rods: 12.5mm (1 pc), 25mm (1 pc), 50mm (1 pc), 75mm (1 pc), 100mm (2 pcs)
- Supplied with pointed tip and ball tip
- Optional accessory: data output cable



extension rods



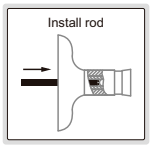
pointed tip ball tip

Code	Range	Accuracy	Base
2141-201A	0-300mm/0-12"	±20μm	63x17mm
2141-202A	0-300mm/0-12"	±20μm	101.5x17mm

DIGITAL DEPTH MICROMETER

IP65 WATERPROOF

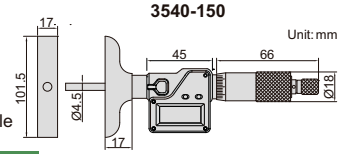
DATA OUTPUT



3540-150

- Resolution: 0.001mm/0.00005"
- Micrometer head accuracy: +/-3μm
- Rod accuracy: +/-(2+L/75)μm, L is the measuring range in mm
- Button function: on/off, set, mm/inch, ABS/INC
- IP65 dust/waterproof
- Data output
- LR44 battery, automatic power off
- Rods with flat end
- Ratchet stop
- Optional accessory: data output cable

Unit: mm



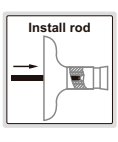
Code	Range	Rods
3540-150	0-150mm/0-6"	6 pcs

Sizes available up to 300mm

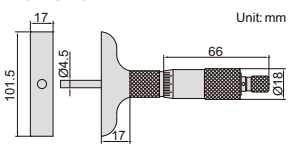
DEPTH MICROMETERS

- Meet DIN863-2
- Graduation: 0.01mm
- Micrometer head accuracy: +/-3μm
- Rod accuracy: +/-(2+L/75)μm, L is the measuring range in mm
- Rods with flat end
- Ratchet stop

3240-25



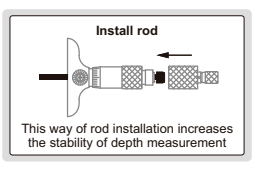
Unit: mm



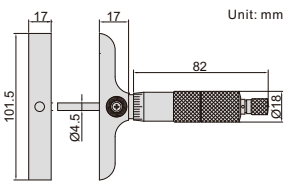
Code	Range	Rods
3240-25	0-25mm	1 pc
3240-100	0-100mm	4 pcs
3240-150	0-150mm	6 pcs
3240-300	0-300mm	12 pcs

DEPTH MICROMETERS

3241-100



Unit: mm



- Meet DIN863-2
- Graduation: 0.01mm
- Micrometer head accuracy: +/-3μm
- Rod accuracy: +/-(2+L/75)μm, L is the measuring range in mm
- Rods with flat end
- Ratchet stop

Code	Range	Rods
3241-25	0-25mm	1 pc
3241-100	0-100mm	4 pcs
3241-150	0-150mm	6 pcs
3241-300	0-300mm	12 pcs

DIGITAL HEIGHT GAGES (ECONOMIC MODEL)

ATTENTION: CAN NOT USE CLAMP FOR PROTRACTORS (CODE 2372-CLAMP)

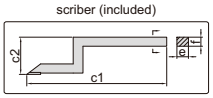
ATTENTION: LOW ACCURACY

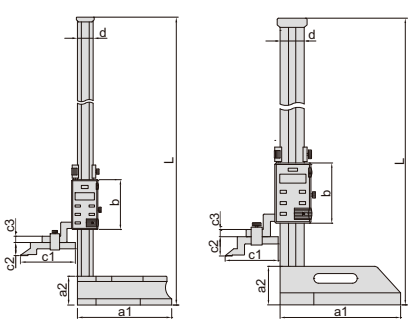
DATA OUTPUT

1150-500

1150-1000

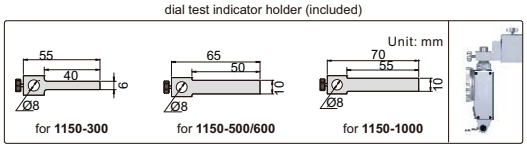
scriber (included)





type A type B

dial test indicator holder (included)



for 1150-300 for 1150-500/600 for 1150-1000

- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch, ABS/INC, data hold, TOL, set
- ABS/INC is for absolute and incremental measurement
- TOL is for tolerance measurement
- Carbide tipped scriber
- Made of stainless steel (except the base)
- LR44 battery
- Data output
- Supplied with dial test indicator holder
- Supplied with dust cover
- Optional accessory: data output cable (code **7301-SPC5**)

(mm)

Code	Range	Type	Accuracy	L	a1	a2	b	c1	c2	c3	d	e	f
1150-300	0-300mm/0-12"	A	±0.05mm	470	135	45	80	76	25	10	23	6	8
1150-500	0-500mm/0-20"	A	±0.06mm	720	180	55	95	103	25	12	30	10	12
1150-600	0-600mm/0-24"	A	±0.06mm	820	180	55	95	103	25	12	30	10	12
1150-1000	0-1000mm/0-40"	B	±0.08mm	1275	250	80	125	110	39	15	50	10	15

Sizes available up to 2000mm

dust cover (included)

DIGITAL HEIGHT GAGES WITH DRIVING WHEEL

DATA OUTPUT

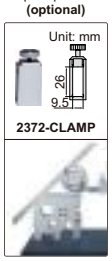
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch, preset +, preset -, hold
- Automatic power off, move the digital unit to turn on power
- Carbide tipped scriber
- Made of stainless steel
- Battery CR2032
- Data output
- Supplied with dust cover
- Optional accessory: data output cable, dial test indicator holder (code **6293-6**), clamp for protractors (code **2372-CLAMP**)

(mm)

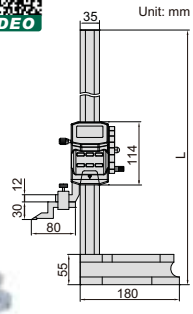
Code	Range	Accuracy	L
1156-300	0-300mm/0-12"	±0.03mm	515
1156-600	0-600mm/0-24"	±0.05mm	815

Sizes available up to 1000mm

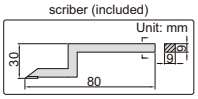
clamp for protractors **(optional)**



1156-300

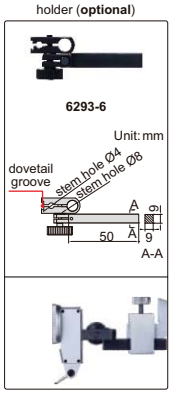


scriber (included)



dust cover (included)

dial test indicator holder **(optional)**



DIAL HEIGHT GAGE

- Dial indicator graduation: 0.01mm
- One counter reads in the plus direction and another in the minus direction, so incremental measurement can be made in either direction
- Carbide tipped scriber
- Made of stainless steel (except the base)
- With driving wheel
- Supplied with dust cover
- Optional accessory: dial test indicator holder (code **6293-6**), clamp for protractors (code **2372-CLAMP**)

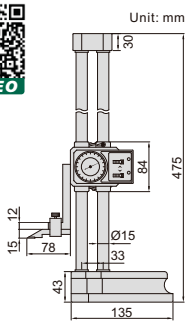
Code	Range	Accuracy
1351-300	0-300mm	±0.04mm

Sizes available up to 600mm

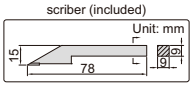
driving wheel on the back

dust cover (included)

1351-300

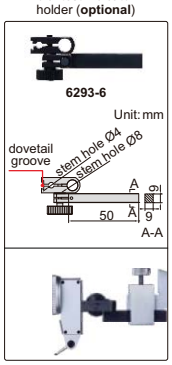


scriber (included)



clamp for protractors **(optional)**

dial test indicator holder **(optional)**



VERNIER HEIGHT GAGES

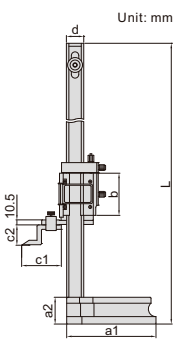
- Graduation: 0.02mm/0.001"
- Adjustable main scale to set zero
- Carbide tipped scriber
- Made of stainless steel (except the base)
- Satin chrome plated scale
- Supplied with magnifier
- With fine adjustment
- Supplied with dust cover
- Optional accessory: dial test indicator holder (code **6293-6**), clamp for protractors (code **2372-CLAMP**)

clamp for protractors **(optional)**

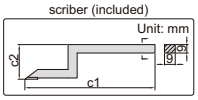
(mm)

Code	Range	Accuracy	L	a1	a2	b	c1	c2	d
1250-300	0-300mm/0-12"	±0.04mm	545	135	43	75	80	30	28
1250-600	0-600mm/0-24"	±0.05mm	870	180	54	85	80	41	35

1250-300

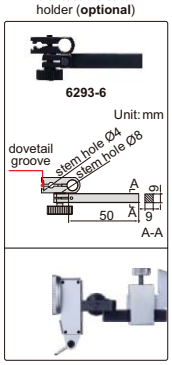


scriber (included)



dust cover (included)

dial test indicator holder **(optional)**



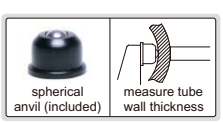
DIGITAL OUTSIDE MICROMETERS (WITH DATA OUTPUT)

IP65 WATERPROOF

DATA OUTPUT

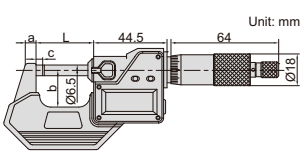
3101-25A

data output



INSPECTION CERTIFICATE
TRACEABLE TO DKD

- Resolution 0.001mm/0.00005"
- IP65 dust/waterproof
- Button function: on/off, set, mm/inch, ABS/INC
- Data output
- LR44 battery, automatic power off
- Carbide measuring faces
- Ratchet stop
- Supplied with spherical anvil
- Setting standards are included (except 0-25mm/0-1")
- Optional accessory: data output cable



(mm)

Code	Range	Accuracy	L	a	b	c
3101-25A*	0-25mm/0-1"	±2μm	34.5	6	25	3
3101-50A*	25-50mm/1-2"	±2μm	59.5	8	32	3

*Supplied with manufacturer inspection certificate traceable to DKD Germany

- Sizes available up to 300mm

DIGITAL OUTSIDE MICROMETERS (WITHOUT DATA OUTPUT)

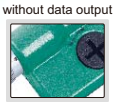
INSPECTION CERTIFICATE TRACEABLE TO DKD

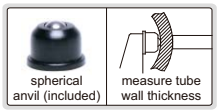
ATTENTION: NO DATA OUTPUT

IP65 WATERPROOF

3108-25A

without data output



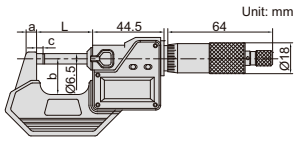


(mm)

Code	Range	Accuracy	L	a	b	c
3108-25A*	0-25mm/0-1"	±2µm	34.5	6	25	3
3108-50A*	25-50mm/1-2"	±2µm	59.5	8	32	3
3108-75A*	50-75mm/2-3"	±3µm	84.5	8	44.5	3
3108-100A*	75-100mm/3-4"	±3µm	109.5	8	57	3

*Supplied with manufacturer inspection certificate traceable to DKD Germany
- Sizes available up to 200mm

- Resolution 0.001mm/0.00005"
- IP65 dust/waterproof
- Button function: on/off, set, mm/inch, ABS/INC
- No data output
- LR44 battery, automatic power off
- Carbide measuring faces
- Ratchet stop
- Supplied with spherical anvil
- Setting standards are included (except 0-25mm/0-1")

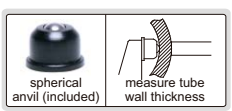


DIGITAL OUTSIDE MICROMETERS

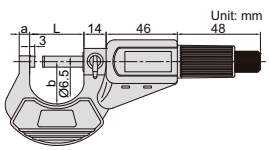
INSPECTION CERTIFICATE TRACEABLE TO DKD

ATTENTION: NO DATA OUTPUT

3109-25A



- Resolution 0.001mm/0.00005"
- Button function: on/off, set, mm/inch, ABS/INC
- No data output
- LR44 battery, automatic power off
- Carbide measuring faces
- Friction thimble
- Supplied with spherical anvil
- Setting standards are included (except 0-25mm/0-1")



(mm)

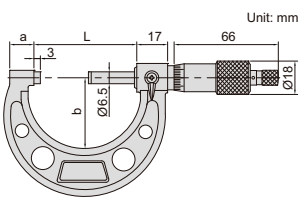
Code	Range	Accuracy	L	a	b
3109-25A*	0-25mm/0-1"	±2µm	32	6	27.5
3109-50A*	25-50mm/1-2"	±2µm	57	8	37
3109-75A*	50-75mm/2-3"	±3µm	82	8	50
3109-100A*	75-100mm/3-4"	±3µm	107	10	61

*Supplied with manufacturer inspection certificate traceable to DKD Germany

1µm GRADUATION OUTSIDE MICROMETERS

INSPECTION CERTIFICATE TRACEABLE TO DKD

3210-25A



- Graduation: 0.001mm
- Carbide measuring faces
- Meet DIN863-1
- Ratchet stop
- Supplied with setting standards (except 0-25mm)

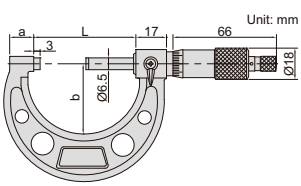
(mm)

Code	Range	Accuracy	L	a	b
3210-25A*	0-25mm	4µm	32	9	28
3210-50A*	25-50mm	4µm	57	14	38
3210-75A*	50-75mm	5µm	82	15	49
3210-100A*	75-100mm	5µm	107	15	60

*Supplied with manufacturer inspection certificate traceable to DKD Germany
- Sizes available up to 200mm

OUTSIDE MICROMETERS

INSPECTION CERTIFICATE TRACEABLE TO DKD



3203-50A

3203-25A

- Graduation: 0.01mm
- Carbide measuring faces
- Ratchet stop
- Meet DIN863-1
- Supplied with setting standards (except 0-25mm)

3203-1004A

Set

Code	Range	Micrometers included	Packaging
3203-1004A*	0-100mm	3203-25A, 3203-50A, 3203-75A, 3203-100A	blow mould case
3203-1506A	0-150mm	3203-25A, 3203-50A, 3203-75A, 3203-100A, 3203-125A, 3203-150A	blow mould case

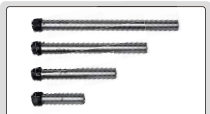
*Supplied with manufacturer inspection certificate traceable to DKD Germany

Individual (mm)

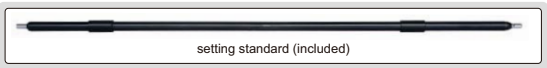
Code	Range	Accuracy	L	a	b
3203-25A*	0-25mm	±2µm	32	9	28
3203-50A*	25-50mm	±2µm	57	14	38
3203-75A*	50-75mm	±2µm	82	15	49
3203-100A*	75-100mm	±3µm	107	15	60
3203-125A	100-125mm	±3µm	133	16.5	73
3203-150A	125-150mm	±3µm	158	16.5	85
3203-175A	150-175mm	±4µm	183	19.4	104
3203-200A	175-200mm	±4µm	209	19.4	117
3203-225A	200-225mm	±4µm	234	19.4	130
3203-250A	225-250mm	±5µm	260	19.4	142
3203-275A	250-275mm	±5µm	285	19.4	155
3203-300A	275-300mm	±5µm	310	19.4	168

OUTSIDE MICROMETERS WITH INTERCHANGEABLE ANVILS

- Graduation: 0.01mm
- Ratchet stop
- Meet DIN863-3
- Carbide measuring faces
- Supplied with setting standards



interchangeable anvils (included) for different measuring ranges



setting standard (included)

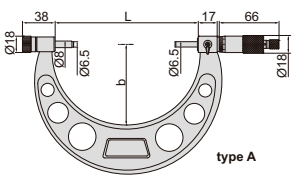
3206-150A

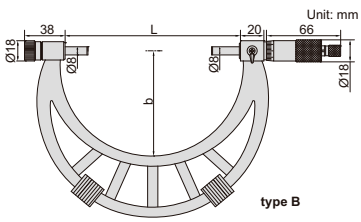
3206-400

(mm)

Code	Range	Type	Accuracy	L	b	Setting standard (included)
3206-150A	0-150mm	A	6μm	158	82	25, 50, 75, 100, 125
3206-300A	150-300mm	A	9μm	308	165	150, 175, 200, 225, 250, 275
3206-400	300-400mm	B	11μm	409	224	325, 375
3206-500	400-500mm	B	13μm	509	275	425, 475

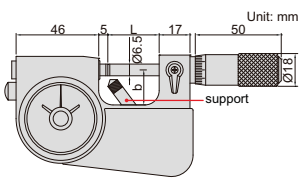
Sizes available up to 1000mm





INDICATING MICROMETER

3332-25



- Meet DIN863-3
- Micrometer head graduation: 0.002mm
- Micrometer head accuracy: 4μm
- Dial indicator: range ±0.04mm, graduation 0.001mm, accuracy 0.001mm
- Carbide measuring faces
- Supplied with setting standards

(mm)

Code	Micrometer head range	L	b	Remark
3332-25	0-25mm	28.5	19	with support

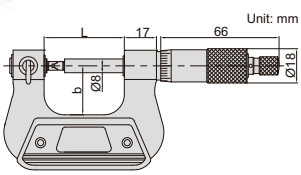
Sizes available up to 100mm

SCREW THREAD MICROMETER

NON-ROTATING SPINDLE

measuring tips are not included

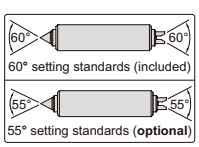
3281-25A



- Measure pitch diameter of screw threads
- Graduation 0.01mm
- Non-rotating spindle
- Ratchet stop
- Supplied with 60° setting standards
- Optional accessary: 55° setting standards, measuring tips (code **7381**)

accuracy of micrometers with tips (mm)

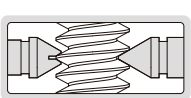
Pitch	Range
	0-25
0.4~0.5	±0.01
0.6~0.8	±0.01
1~1.25	±0.012
1.5~2.0	±0.014
2.5~3.5	±0.016



(mm)

Code	Range	L	b
3281-25A	0-25mm	42	26

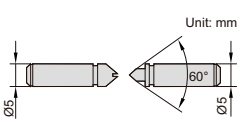
Sizes available up to 200mm



MEASURING TIPS FOR SCREW THREAD MICROMETERS

Metric and unified thread (60° thread angle)

Code	Pitch
7381-TS	6 pairs/set: 0.4-0.5mm/64-48TPI, 0.6-0.9mm/44-28TPI, 1-1.75mm/24-14TPI, 2-3mm/13-9TPI, 3.5-5mm/8-5TPI, 5.5-7mm/4.5-3.5TPI

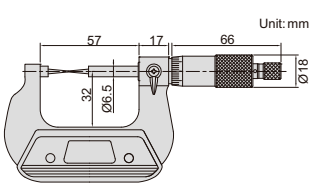


60° thread angle

- Supplied in pair
- Suitable for **3281, 3581** series micrometers

POINT MICROMETER

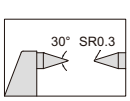
3230-25A



- Measure the web thickness of drills, small grooves and keyways
- Graduation: 0.01mm
- Ratchet stop
- Carbide tips
- Supplied with setting standards (except 0-25mm)

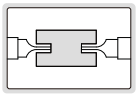
Code	Range	Accuracy
3230-25A	0-25mm	4μm

Sizes available up to 100mm

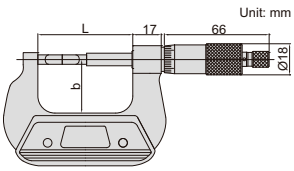


BLADE MICROMETERS

NON-ROTATING SPINDLE



3232-25A

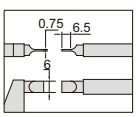


- Meet DIN863-3
- Measure the groove diameter of shafts and keyways
- Graduation: 0.01mm
- Non-rotating spindle
- Ratchet stop
- Supplied with setting standards (except 0-25mm)

(mm)

Code	Range	Accuracy	L	b
3232-25A	0-25mm	4µm	57	32
3232-50A	25-50mm	4µm	82	44.5

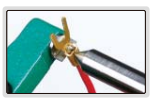
Sizes available up to 175mm



DIGITAL CRIMP HEIGHT MICROMETER

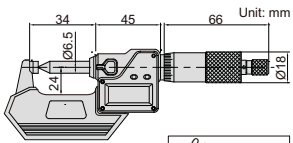
DATA OUTPUT

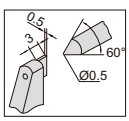
IP65 WATERPROOF



3566-25BA

- Measure the height of crimp contact
- Resolution 0.001mm/0.00005"
- IP65 dust/waterproof
- Button function: on/off, set, mm/inch, ABS/INC
- Data output
- LR44 battery, automatic power off
- Ratchet stop
- Optional accessory: data output cable

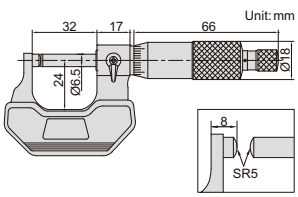




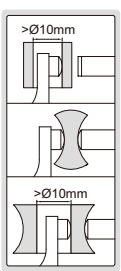
Code	Range	Accuracy
3566-25BA	0-25mm/0-1"	±4µm

SPHERICAL ANVIL TUBE MICROMETER

3260-25SA



- Meet DIN863-3
- Measure wall thickness of tubes
- Graduation 0.01mm
- Ratchet stop
- Carbide measuring faces
- Supplied with setting standards (except 0-25mm)

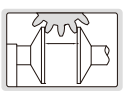


Code	Range	Accuracy
3260-25SA	0-25mm	4µm

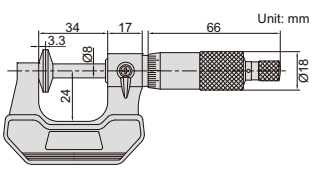
Sizes available up to 100mm

DISK MICROMETER

VIDEO



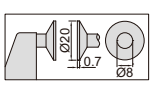
3282-25



- Meet DIN863-3
- Measure root tangent length of gear
- Graduation: 0.01mm
- Ratchet stop
- Supplied with setting standards

Code	Range	Accuracy	Parallelism
3282-25	0-25mm	4µm	5µm

Sizes available up to 100mm

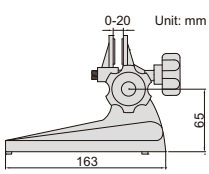


MICROMETER STAND

Code
6301

- Suitable for micrometers up to 100mm

6301

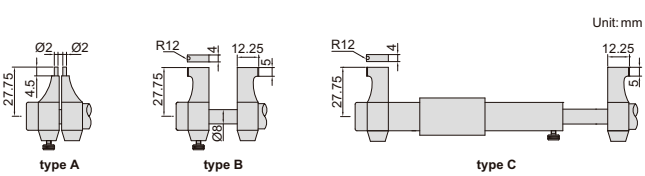


INSIDE MICROMETERS

3220-50

- Graduation: 0.01mm
- Ratchet stop
- Carbide measuring faces
- Optional accessory: setting ring (code **6312**), micrometer stand and clamp (code **6301** and **6301-1**)

micrometer stand with clamp (**optional**)

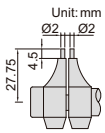


Code	Range	Type	Setting ring	Accuracy
3220-30	5-30mm	A	5mm (included)	7µm
3220-50	25-50mm	B	25mm (included)	8µm
3220-75	50-75mm	B	50mm **(optional)**	9µm
3220-100	75-100mm	C	75mm **(optional)**	10µm

DIGITAL INSIDE MICROMETER

DATA OUTPUT

3520-30

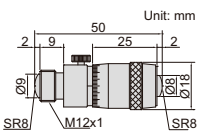


- Resolution 0.001mm/0.00005"
- Button function: on/off, set, mm/inch, ABS/INC
- Data output
- LR44 battery, automatic power off
- Ratchet stop
- Carbide measuring faces
- Optional accessory: data output cable, setting ring (code **6312**)

Code	Range	Setting ring	Accuracy
3520-30	5-30mm/0.2-1.2"	5mm (included)	±5μm

Sizes available up to 100mm

TUBULAR INSIDE MICROMETERS



3222-300

- Graduation: 0.01mm
- Accuracy: (3+n+L/50)μm
  n=number of rods,
  L=maximum measuring length (mm)
- Supplied with setting standards
- Carbide measuring faces

Code	Range	Travel of micrometer head	Extension rods
3222-300	50-300mm	13mm	13mm, 25mm, 50mm (2pcs), 100mm
3222-500	50-500mm	13mm	13mm, 25mm, 50mm (2pcs), 100mm, 200mm
3222-600	50-600mm	13mm	13mm, 25mm, 50mm, 100mm, 150mm, 200mm
3222-1000	50-1000mm	13mm	13mm, 25mm, 50mm (2pcs), 100mm, 200mm (2pcs), 300mm

Sizes available up to 1500mm

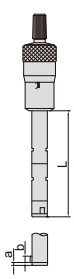
THREE POINTS INTERNAL MICROMETERS

INSPECTION CERTIFICATE

micrometer stand with clamp (**optional**)

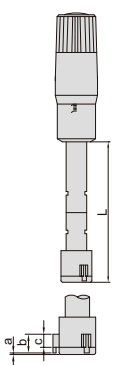
- Meet DIN863-4
- 6-12mm: graduation 0.001mm,
  12-100mm: graduation 0.005mm
- Ratchet stop
- Optional accessory: setting rings (code **6312**), micrometer stand and clamp (code **6301** and **6301-2**)

3227-8



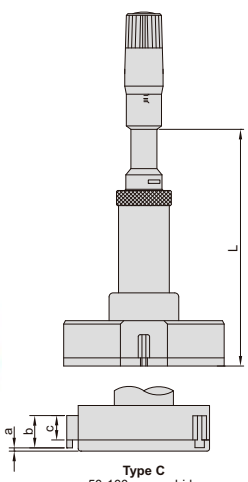
Type A
6-12mm, steel measuring points

3227-16



Type B
12-50mm, carbide measuring points

3227-100



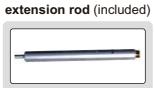
Type C
50-100mm, carbide measuring points

Individual (mm)

Code	Range	Type	Accuracy	Setting ring	Extension rod (included)	L	a	b	c
3227-8*	6-8mm	A	4μm	Ø6mm(included)	100mm	54.5	1.5	2.5	—
3227-10*	8-10mm	A	4μm	Ø8mm(included)	100mm	54.5	1.5	2.5	—
3227-12*	10-12mm	A	4μm	Ø10mm(included)	100mm	54.5	1.5	2.5	—
3227-16*	12-16mm	B	4μm	Ø16mm(included)	150mm	80	0.5	6	4.5
3227-20*	16-20mm	B	4μm	Ø16mm(included)	150mm	80	0.5	6	4.5
3227-25*	20-25mm	B	4μm	Ø25mm(included)	150mm	90	0.5	8	6
3227-30*	25-30mm	B	4μm	Ø25mm(included)	150mm	90	0.5	8	6
3227-40*	30-40mm	B	4μm	Ø40mm(included)	150mm	97	0.5	14	12
3227-50*	40-50mm	B	5μm	Ø40mm(included)	150mm	97	0.5	14	12
3227-63*	50-63mm	C	5μm	Ø62mm(included)	150mm	114	0.5	17.5	14.5
3227-75*	62-75mm	C	5μm	Ø62mm(included)	150mm	114	0.5	17.5	14.5
3227-88*	75-88mm	C	5μm	Ø87mm(included)	150mm	114	0.5	17.5	14.5
3227-100*	87-100mm	C	5μm	Ø87mm(included)	150mm	114	0.5	17.5	14.5

setting ring (included)

extension rod (included)



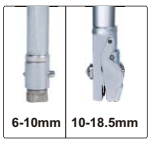
Set

Code	Range	Micrometers included	Setting ring (included)	Extension rod (included)
3227-123*	6-12mm	6-8mm, 8-10mm, 10-12mm	Ø6mm, Ø8mm, Ø10mm	100mm
3227-202*	12-20mm	12-16mm, 16-20mm	Ø16mm	150mm
3227-504*	20-50mm	20-25mm, 25-30mm, 30-40mm, 40-50mm	Ø25mm, Ø40mm	150mm
3227-1004*	50-100mm	50-63mm, 62-75mm, 75-88mm, 87-100mm	Ø62mm, Ø87mm	150mm

*Supplied with manufacturer inspection certificate

3227-504

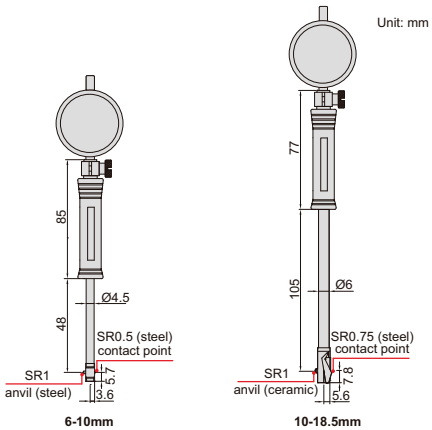
BORE GAGES FOR SMALL HOLES



ATTENTION: NOT SUITABLE FOR 0.001MM DIAL INDICATORS

- Repeatability: 0.003mm
- Optional accessory: setting ring (code **6312**)

Code	Range	Indicator	Accuracy
2852-10	6-10mm	dial indicator, range 3mm, graduation 0.01mm (code **2311-3F**)	±0.012mm
2852-18	10-18.5mm		±0.012mm



2852-10

BORE GAGES

ATTENTION: NOT SUITABLE FOR 0.001MM DIAL INDICATORS

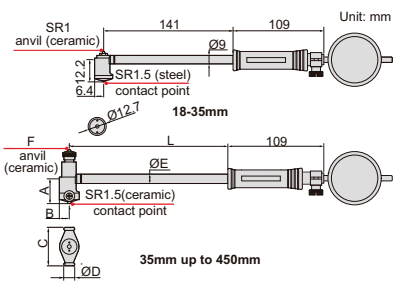
- Optional accessory: setting ring (code **6312**), long handle (code **7351**)

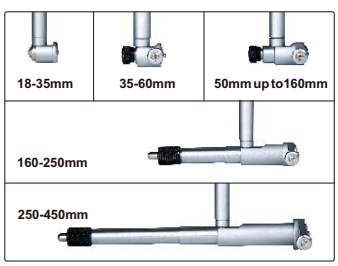
(mm)

Range	A	B	C	ØD	ØE	F	L
35-60mm	22	9	27	13	12.8	SR2	141
50-100mm	26	9	35	13	12.8	SR2	141
50-160mm	26	9	35	13	12.8	SR2	141
160-250mm	56.5	13	74.5	15	12.8	SR2	241
250-450mm	86.5	15	101.5	15	14.5	SR2.5	241

VIDEO

Code	Range	Indicator	Accuracy	Repeatability
2322-35A	18-35mm	dial indicator, range 10mm, graduation 0.01mm (code **2308-10FA**)	±0.015mm	0.003mm
2322-60A	35-60mm		±0.018mm	0.003mm
2322-100A	50-100mm		±0.018mm	0.003mm
2322-160A	50-160mm		±0.018mm	0.003mm
2322-250A	160-250mm		±0.018mm	0.003mm
2322-450A	250-450mm		±0.018mm	0.003mm





2322-35A

BORE GAGE SETS

ATTENTION: NOT SUITABLE FOR 0.001MM DIAL INDICATORS

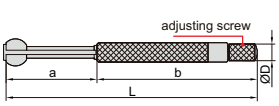
- Repeatability: 0.003mm
- Optional accessory: setting ring (code **6312**)

packaging (code **2824-S3**)

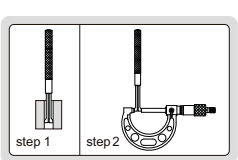
Code	Range	Indicator	Bore gages included	Accuracy
2824-S160	35-160mm	dial indicator, code **2308-10FA**, range 10mm, graduation 0.01mm	① 35-50mm (dial indicator and handle are not included) ② 50-160mm	35-50mm ±0.018mm 50-160mm ±0.018mm
2824-S3	18-160mm	dial indicator, code **2308-10FA**, range 10mm, graduation 0.01mm	① 18-35mm ② 35-60mm (dial indicator is not included) ③ 50-160mm (dial indicator is not included)	18-35mm ±0.015mm 35-60mm ±0.018mm 50-160mm ±0.018mm

2824-S160 **2824-S3**

SMALL HOLE GAGE SET



4208-1

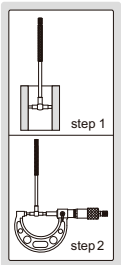


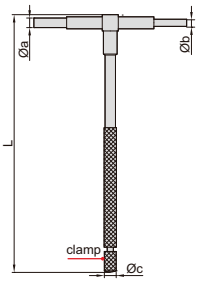
Range	L	a	b	ØD
3-5mm	76mm	24mm	52mm	5mm
5-7.5mm	79mm	27mm	52mm	5mm
7.5-10mm	88mm	30mm	58mm	6mm
10-13mm	91mm	34mm	58mm	6mm

- 4 gages per set
- For small holes, slots and grooves, etc.
- Satin chrome finish

Code	Total range	Gages included
4208-1	3-13mm	3-5mm, 5-7.5mm, 7.5-10mm, 10-13mm

TELESCOPING GAGE SET





4206-1

- 6 gages per set
- For quick measurement of inside diameter of holes and width of slots
- Satin chrome finish

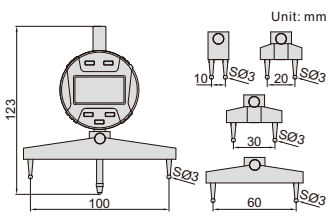
Range	L	Øa	Øb	Øc
8-12.7mm	115mm	3.9mm	2.9mm	6.2mm
12.7-19mm	115mm	5.3mm	3.8mm	6.2mm
19-32mm	115mm	5.3mm	3.8mm	6.2mm
32-54mm	137mm	7.6mm	6.1mm	7.2mm
54-90mm	137mm	7.6mm	6.1mm	7.2mm
90-150mm	137mm	7.6mm	6.1mm	7.2mm

Code	Total range	Gages included
4206-1	8-150mm	8-12.7mm, 12.7-19mm, 19-32mm, 32-54mm, 54-90mm, 90-150mm

DIGITAL RADIUS GAGE

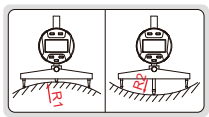
ATTENTION: NO DATA OUTPUT

VIDEO



2183

- Resolution: 0.005mm/0.00005"
- Buttons: on/off, hold, mm/inch, s (select jaws), zero
- Measure radius of internal or external arcs
- Display can be rotated by 320º
- Supplied with 5 jaws for different sizes of arc
- Battery CR2032, automatic power off



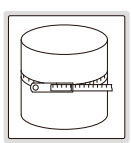
Code	Range of external radius (R1)	Range of internal radius (R2)	Accuracy (mm)
2183	5-910mm/0.2-35.83"	7-910mm/0.3-35.83"	±0.01R*

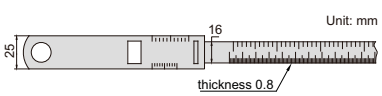
*R is the radius to be measured

CIRCUMFERENCE TAPES

ATTENTION: BASIC MODEL

7114-950



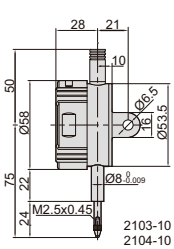


- Graduation: 0.1mm
- Measure diameter and circumference of pipes, trees, tires, etc.
- Laser engraved scale
- Made of stainless steel

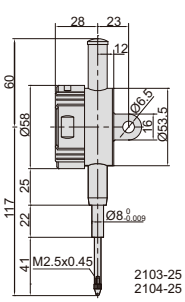
Code	Circumference range	Diameter range	Accuracy	
			Circumference	Diameter
7114-950	150-950mm	Ø50-300mm	±1.5mm	±0.5mm
7114-2200	940-2200mm	Ø300-700mm	±1.5mm	±0.5mm
7114-3460	2190-3460mm	Ø700-1100mm	±1.5mm	±0.5mm

DIGITAL INDICATORS (ADVANCED MODEL)

DATA OUTPUT



2103-10



2104-25

VIDEO

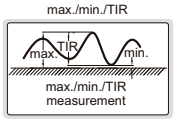
INSPECTION CERTIFICATE TRACEABLE TO NIST

- Reading in digital and analog
- Display can be rotated by 320º
- Button function: tolerance Go and No-Go display, data preset, measuring direction change, max./min./TIR measurement, inch/metric conversion, absolute/incremental measurement
- Keep preset data and tolerance data in memory after restart
- CR2032 battery, automatic power off
- Data output
- Optional accessory: data output cable, backs, contact points

analog pointer

warning when over tolerance

max./min./TIR



Resolution 0.001mm/0.00005"

Code	Range	Accuracy	Hysteresis	Remark
2103-10*	12.7mm/0.5"	5μm	2μm	lug back
2103-25*	25.4mm/1"	5μm	3μm	lug back
2103-10F*	12.7mm/0.5"	5μm	2μm	flat back
2103-25F*	25.4mm/1"	5μm	3μm	flat back

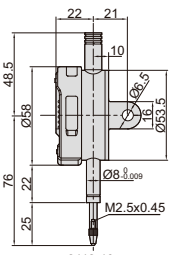
*Supplied with manufacturer inspection certificate traceable to NIST USA

spindle lift knob is included

Resolution 0.01mm/0.0005"

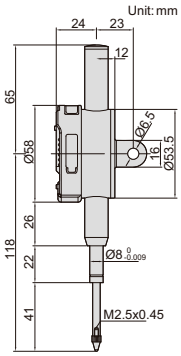
Code	Range	Accuracy	Hysteresis	Remark
2104-10*	12.7mm/0.5"	20μm	10μm	lug back
2104-25*	25.4mm/1"	20μm	10μm	lug back
2104-10F*	12.7mm/0.5"	20μm	10μm	flat back
2104-25F*	25.4mm/1"	20μm	10μm	flat back

DIGITAL INDICATORS (STANDARD MODEL)



2112-10
2112-101

2112-10



2112-25
2112-251

2112-251

INSPECTION CERTIFICATE
TRACEABLE TO NIST

DATA OUTPUT

- Button function: on/off, inch/mm, zero
- CR2032 battery, automatic power off
- Data output
- Optional accessory: data output cable, backs, contact points

spindle lift knob is included

Resolution 0.01mm/0.0005"

Code	Range	Accuracy	Hysteresis	Remark
2112-10*	12.7mm/0.5"	20μm	10μm	lug back
2112-25*	25.4mm/1"	20μm	10μm	lug back
2112-10F*	12.7mm/0.5"	20μm	10μm	flat back
2112-25F*	25.4mm/1"	20μm	10μm	flat back

Resolution 0.001mm/0.00005"

Code	Range	Accuracy	Hysteresis	Remark
2112-101*	12.7mm/0.5"	5μm	2μm	lug back
2112-251*	25.4mm/1"	5μm	3μm	lug back
2112-101F*	12.7mm/0.5"	5μm	2μm	flat back
2112-251F*	25.4mm/1"	5μm	3μm	flat back

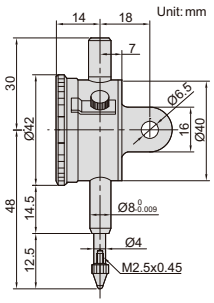
*Supplied with manufacturer inspection certificate traceable to NIST USA

COMPACT DIAL INDICATOR

INSPECTION CERTIFICATE
TRACEABLE TO NIST

JEWELED BEARING

2311-5



- Meet DIN878
- Jeweled bearing
- With lug back
- Supplied with limit pointers and bezel clamp
- Optional accessory: backs, contact points

Code	Range	Graduation	Accuracy	Hysteresis	Range/rev	Dial reading
2311-5*	5mm	0.01mm	14μm	3μm	0.5mm	0-50

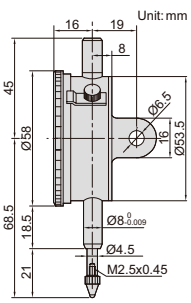
*Supplied with manufacturer inspection certificate traceable to NIST USA

DIAL INDICATORS (STANDARD MODEL)

INSPECTION CERTIFICATE
TRACEABLE TO NIST

JEWELED BEARING

2308-10A



- Graduation: 0.01mm
- Dial reading: 0-100
- Meet DIN878
- Jeweled bearing
- Supplied with limit pointers and bezel clamp
- Optional accessory: backs, contact points

Code	Range	Accuracy	Hysteresis	Range/rev	Remark
2308-10A*	10mm	17μm	3μm	1mm	lug back
2308-10FA*	10mm	17μm	3μm	1mm	flat back

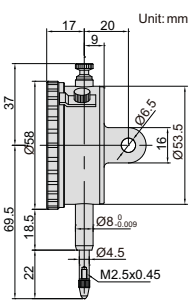
*Supplied with manufacturer inspection certificate traceable to NIST USA

DIAL INDICATORS (PROMOTION MODEL)

2301-10

INSPECTION CERTIFICATE
TRACEABLE TO NIST

carton box



- Graduation: 0.01mm
- Dial reading: 0-100
- Meet DIN878
- Jeweled bearing
- Supplied with limit hands and bezel clamp
- Packed in carton box
- Optional accessory: backs, contact points

Code	Range	Accuracy	Hysteresis	Range/rev	Remark
2301-10*	10mm	17μm	3μm	1mm	lug back with spare flat back
2301-10F*	10mm	17μm	3μm	1mm	flat back

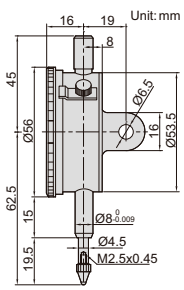
*Supplied with manufacturer inspection certificate traceable to NIST USA

PRECISION DIAL INDICATORS

INSPECTION CERTIFICATE
TRACEABLE TO NIST

JEWELED BEARING

2313-1A



- Graduation: 0.001mm
- Jeweled bearing
- Supplied with limit pointers and bezel clamp
- Optional accessory: backs, contact points

Code	Range	Accuracy	Hysteresis	Range/rev	Dial reading	Remark
2313-1A*	1mm	5μm	2μm	0.2mm	0-100-0	lug back
2313-1FA*	1mm	5μm	2μm	0.2mm	0-100-0	flat back

*Supplied with manufacturer inspection certificate traceable to NIST USA

SHOCKPROOF DIAL INDICATORS

JEWELED BEARING

SHOCK PROOF

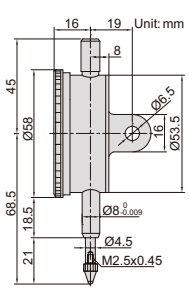
2314-10A

- Meet DIN878
- Graduation: 0.01mm
- Shockproof
- Jeweled bearing
- Supplied with limit pointers and bezel clamp
- Optional accessory: backs, contact points

INSPECTION CERTIFICATE
TRACEABLE TO NIST

Code	Range	Accuracy	Hysteresis	Range/rev	Dial reading	Remark
2314-10A*	10mm	20μm	3μm	1mm	0-100	lug back
2314-10FA*	10mm	20μm	3μm	1mm	0-100	flat back

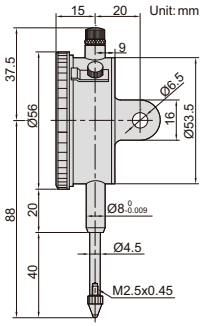
*Supplied with manufacturer inspection certificate traceable to NIST USA



DIAL INDICATORS (LONG STROKE)

INSPECTION CERTIFICATE
TRACEABLE TO NIST

2310-30A



- Graduation: 0.01mm
- Dial reading: 0-100
- Supplied with limit pointers and bezel clamp
- Optional accessory: backs, contact points

Code	Range	Accuracy	Hysteresis	Range/rev	Remark
2310-30A*	30mm	35μm	7μm	1mm	lug back
2310-30FA*	30mm	35μm	7μm	1mm	flat back

*Supplied with manufacturer inspection certificate traceable to NIST USA

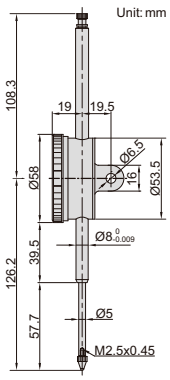
DIAL INDICATOR (LONG STROKE)

JEWELED BEARING

SHOCK PROOF

INSPECTION CERTIFICATE
TRACEABLE TO NIST

2309-50



- Graduation: 0.01mm
- Range/rev: 1mm
- Dial reading: 0-100
- Shockproof
- Jeweled bearing
- Flat back with spare lug back
- Supplied with limit pointers
- Optional accessory: backs, contact points

Code	Range	Accuracy	Hysteresis
2309-50*	50mm	40μm	8μm

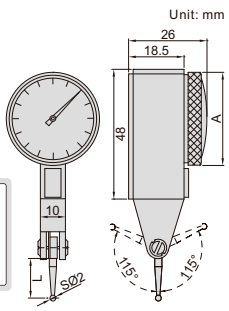
*Supplied with manufacturer inspection certificate traceable to NIST USA

DIAL TEST INDICATORS

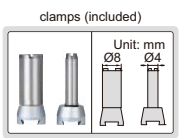
JEWELED BEARING

INSPECTION CERTIFICATE
TRACEABLE TO NIST

2380-08



- Meet DIN2270 (except **2380-02**, **2381-02**)
- Jeweled bearing
- Carbide contact point
- Two measuring directions
- Anti magnetic body
- Supplied with two clamps: diameter Ø4mm and Ø8mm
- Optional accessory: styli



Graduation: 0.01mm **(mm)**

Code	Range	Accuracy	Hysteresis	Dial reading	A	L
2380-08*	0.8mm	13μm	3μm	0-40-0	Ø30	13.5
2381-08*	0.8mm	13μm	3μm	0-40-0	Ø37	13.5

Graduation: 0.002mm **(mm)**

Code	Range	Accuracy	Hysteresis	Dial reading	A	L
2380-02*	0.2mm	6μm	2μm	0-100-0	Ø30	12.5
2381-02*	0.2mm	6μm	2μm	0-100-0	Ø37	12.5

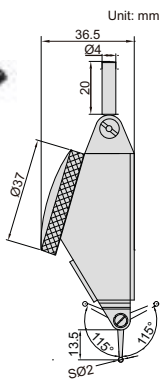
*Supplied with manufacturer inspection certificate traceable to NIST USA

LARGE RANGE DIAL TEST INDICATOR

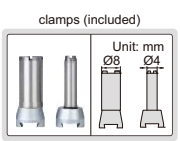
INSPECTION CERTIFICATE
TRACEABLE TO NIST

JEWELED BEARING

2386-16A



- Jeweled bearing
- Carbide contact point
- Two measuring directions
- Anti magnetic body
- Supplied with two clamps: diameter Ø4mm and Ø8mm
- Optional accessory: styli



Code	Range	Graduation	Accuracy	Hysteresis	Dial reading
2386-16A*	1.6mm	0.01mm	25μm	8μm	0-40-0

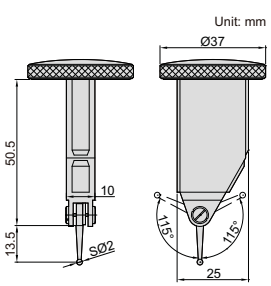
*Supplied with manufacturer inspection certificate traceable to NIST USA

BACK PLUNGER TYPE DIAL TEST INDICATOR

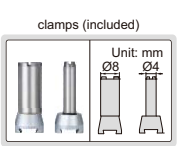
INSPECTION CERTIFICATE
TRACEABLE TO NIST

JEWELED BEARING

2398-08



- Meet DIN2270
- Jeweled bearing
- Carbide contact point
- Two measuring directions
- Anti magnetic body
- Supplied with two clamps: diameter Ø4mm and Ø8mm
- Optional accessory: styli



Code	Range	Graduation	Accuracy	Hysteresis	Dial reading
2398-08*	0.8mm	0.01mm	13μm	3μm	0-40-0

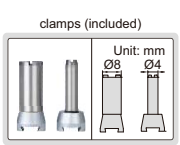
*Supplied with manufacturer inspection certificate traceable to NIST USA

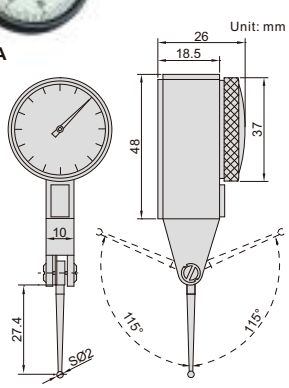
LONG STYLI DIAL TEST INDICATOR

INSPECTION CERTIFICATE
TRACEABLE TO NIST

JEWELED BEARING

2383-08A





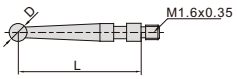
- Meet DIN2270
- Jeweled bearing
- Carbide contact point
- Two measuring directions
- Anti magnetic body
- Supplied with two clamps: diameter Ø4mm and Ø8mm
- Optional accessory: styli

Code	Range	Graduation	Accuracy	Hysteresis	Dial reading
2383-08A*	0.8mm	0.01mm	13μm	3μm	0-40-0

*Supplied with manufacturer inspection certificate traceable to NIST USA

STYLI FOR DIAL TEST INDICATORS

6284-3

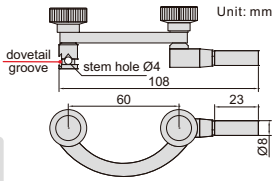


(mm)

Code	For dial test indicator	Material of contact point	L	D
6284-1	2380-08, 2398-08 2381-08, 2399-08	steel	13.5	SØ1
6284-3		carbide	13.5	SØ2
6284-4		ruby	13.5	SØ2

DIAL TEST INDICATOR CENTERING HOLDER

6291-1

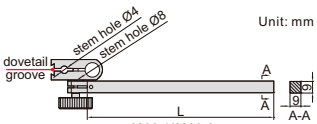


Code
6291-1

- Center cylinders or holes on machine tools

DIAL TEST INDICATOR HOLDERS

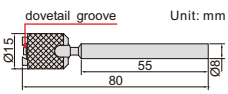
6293-1



Code	Stem section	Stem length (L)
6293-1	9x9mm	100mm
6293-6	9x9mm	50mm

DIAL TEST INDICATOR UNIVERSAL HOLDER

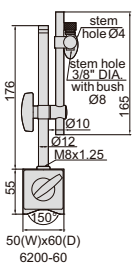
6297-1



Code
6297-1

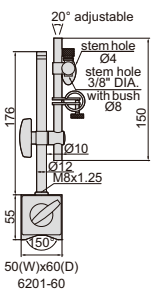
- Set the indicators at the desired attitude to the workpiece

MAGNETIC STANDS

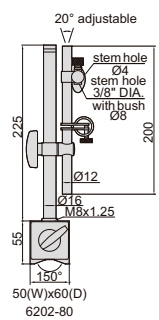


6200-60

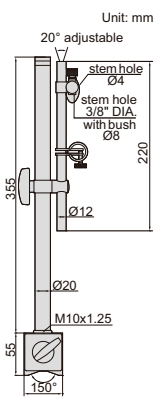
6201-60



6202-80



6202-100



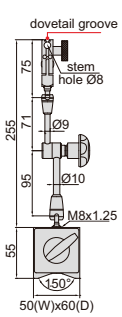
- For digital/dial indicators and dial test indicators

Code	Magnetic force	Applicable holding stem	Remark
6200-60	60kgf	Ø8mm, Ø4mm, 3/8" DIA.	without fine adjustment
6201-60	60kgf	Ø8mm, Ø4mm, 3/8" DIA.	with fine adjustment
6202-80	80kgf	Ø8mm, Ø4mm, 3/8" DIA.	with fine adjustment
6202-100	100kgf	Ø8mm, Ø4mm, 3/8" DIA.	with fine adjustment

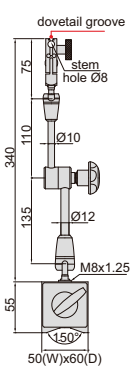
UNIVERSAL MAGNETIC STANDS

- For digital/dial indicators and dial test indicators

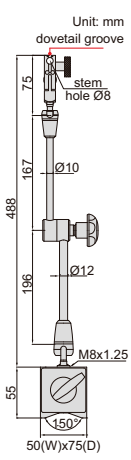
6210-81



6210-80



6210-100

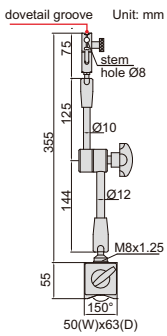


Code	Magnetic force	Applicable holding stem	Remark
6210-81	80kgf	Ø8mm	with fine adjustment and dovetail groove
6210-80	80kgf	Ø8mm	with fine adjustment and dovetail groove
6210-100	100kgf	Ø8mm	with fine adjustment and dovetail groove

UNIVERSAL MAGNETIC STAND (LIGHT DUTY)

ATTENTION: LOW LOCKING FORCE

- Magnetic force: 80kgf
- Applicable holding stem: Ø8mm
- For digital/dial indicators and dial test indicators



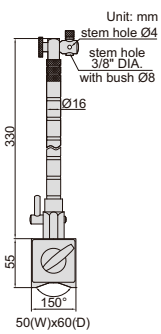
6208-80A

Code	Remark
6208-80A	with fine adjustment and dovetail groove

FLEX ARM MAGNETIC STAND

ATTENTION: FOR DIAL TEST INDICATORS ONLY

- For dial test indicators



6207-80A

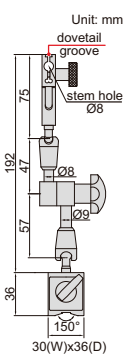
Code	Magnetic force	Applicable holding stem
6207-80A	80kgf	Ø8mm, Ø4mm, 3/8" DIA.

MINI MAGNETIC STAND

ATTENTION: FOR DIAL TEST INDICATORS ONLY

- For dial test indicators
- With fine adjustment and dovetail groove

6224-40



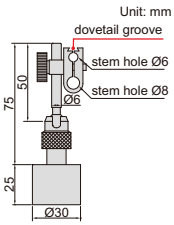
Code	Magnetic force	Applicable holding stem
6224-40	40kgf	Ø8mm

MINI MAGNETIC STAND

ATTENTION: FOR DIAL TEST INDICATORS ONLY

- For dial test indicators
- With dovetail groove

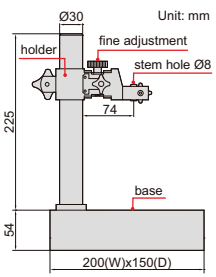
6211-10



Code	Magnetic force	Applicable holding stem
6211-10	10kgf	Ø6mm, Ø8mm

GRANITE DIAL INDICATOR STAND

dust cover (included)



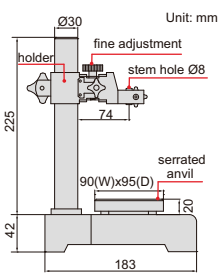
- Vertical travel of holder: 150mm
- Fine adjustment range: 2mm
- Base: flatness 2.5μm
- Supplied with dust cover

6866-150

Code	Applicable holding stem
6866-150	Ø8mm

DIAL INDICATOR STAND

dust cover (included)



6863-150

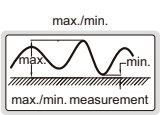
- Vertical travel of holder: 150mm
- Fine adjustment range: 2mm
- Supplied with dust cover

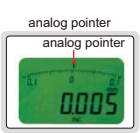
Code	Applicable holding stem	Anvil
6863-150	Ø8mm	serrated, flatness 1.5μm, hardness HRC60±2

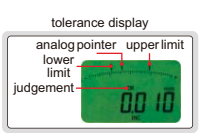
DIGITAL INTERNAL CALIPER GAGE

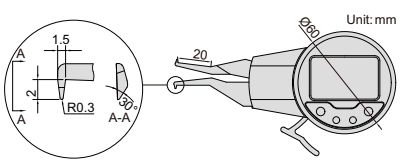
- Resolution: 0.005mm/0.0002"
- Repeatability: 0.01mm
- Reading in digit and analog
- Display can be rotated by 170°
- Button function: tolerance Go and No-Go display, data preset, max./min. measurement, data holding, inch/metric conversion, absolute/incremental measurement
- CR2032 battery, automatic power off
- Data output

2121-15







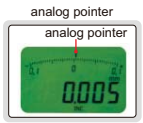


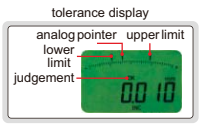
Code	Range	Accuracy
2121-15	5-15mm/0.2-0.6"	±0.03mm

Sizes available up to 60mm

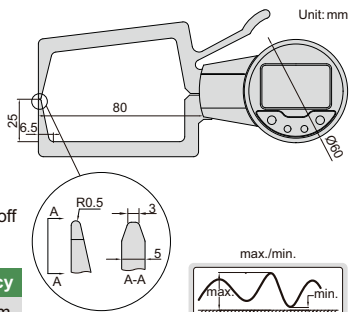
DIGITAL EXTERNAL CALIPER GAGE

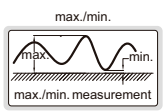
2131-21





- Resolution: 0.005mm/0.0002"
- Repeatability: 0.01mm
- Reading in digit and analog
- Display can be rotated by 170º
- Button function: tolerance Go and No-Go display, data preset, max./min. measurement, data holding, inch/metric conversion, absolute/incremental measurement
- CR2032 battery, automatic power off
- Data output





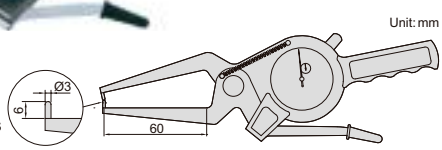
Code	Range	Accuracy
2131-21	0-20mm/0-0.8"	±0.03mm

Sizes available up to 60mm

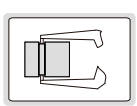
EXTERNAL DIAL CALIPER GAGE

VIDEO

2332-20



- Carbide measuring tips



Code	Range	Graduation	Accuracy
2332-20	0-20mm	0.01mm	±0.04mm

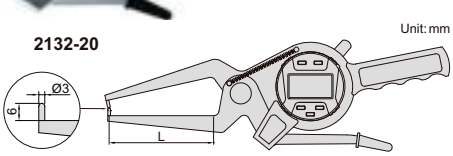
Sizes available up to 100mm

DIGITAL EXTERNAL CALIPER GAGE

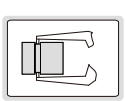
DATA OUTPUT

VIDEO

2132-20



- Carbide measuring tips
- Reading in digit and analog
- Display can be rotated by 320º
- Button function: tolerance Go and No-Go display, data preset, measuring direction change, max./min./range measurement, inch/metric conversion, absolute/incremental measurement
- CR2032 battery, automatic power off
- Data output
- Optional accessory: data output cable



(mm)

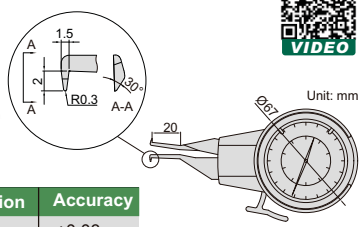
Code	Range	Resolution	Accuracy	L
2132-20	0-20mm/0-0.8"	0.01mm/0.0005"	±0.04mm	60

Sizes available up to 100mm

INTERNAL DIAL CALIPER GAGE

VIDEO

2222-15



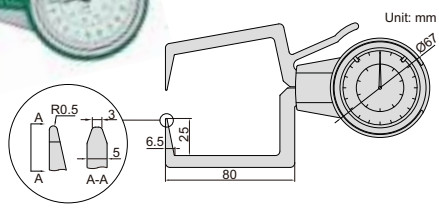
Code	Range	Graduation	Accuracy
2222-15	5-15mm	0.01mm	±0.03mm

Sizes available up to 60mm

EXTERNAL DIAL CALIPER GAGE

VIDEO

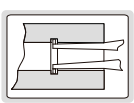
2333-201



Code	Range	Graduation	Accuracy
2333-201	0-20mm	0.01mm	±0.03mm

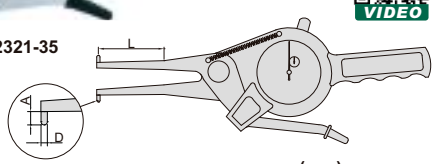
Sizes available up to 60mm

INTERNAL DIAL CALIPER GAGES



VIDEO

2321-35



- Carbide measuring tips

(mm)

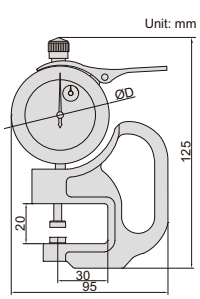
Code	Range	Graduation	Accuracy	L	A	D
2321-35	15-35mm	0.01mm	±0.04mm	50	3	Ø3
2321-55	35-55mm	0.01mm	±0.04mm	80	6	Ø3

Sizes available up to 135mm

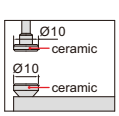
THICKNESS GAGES

2364-10

2364-1



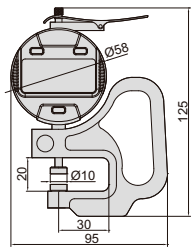
Code	Range	Graduation	Accuracy	ØD
2364-10	0-10mm	0.01mm	±0.02mm	58mm
2364-1	0-1mm	0.001mm	±0.005mm	56mm



DIGITAL THICKNESS GAGES

DATA OUTPUT

2871-101

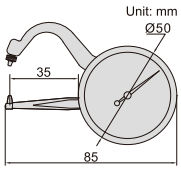


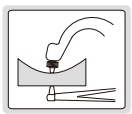
- Ceramic spindle tip and anvil
- Buttons: on/off, zero, mm/inch
- Battery CR2032, automatic power off
- Data output
- Optional accessory: data output cable

Code	Range	Resolution	Accuracy
2871-10	0-10mm/0-0.4"	0.01mm/0.0005"	±0.02mm
2871-101	0-10mm/0-0.4"	0.001mm/0.00005"	±0.005mm

THICKNESS GAGE

2862-101

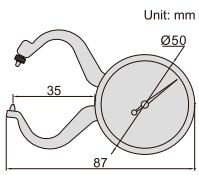


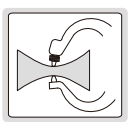


Code	Range	Graduation	Accuracy
2862-101	0-10mm	0.05mm	±0.1mm

THICKNESS GAGE

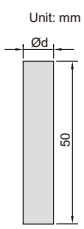
2863-10





Code	Range	Graduation	Accuracy
2863-10	0-10mm	0.05mm	±0.1mm

PIN GAGE SETS



4166-6D

- Meet DIN2267, grade 1
- Made of alloy steel
- Hardness HRC62-65
- Diameter accuracy: ±1μm

Code	Diameter Ød (mm)	Step	Pin gages per set
4166-0D	0.20, 0.21, 0.22, ···· 0.50	0.01mm	31
4166-1	0.50, 0.51, 0.52, ···· 1.00	0.01mm	51
4166-1D	1.00, 1.01, 1.02, ···· 1.50	0.01mm	51
4166-2	1.50, 1.51, 1.52, ···· 2.00	0.01mm	51
4166-2D	2.00, 2.01, 2.02, ···· 2.50	0.01mm	51
4166-3	2.50, 2.51, 2.52, ···· 3.00	0.01mm	51
4166-3D	3.00, 3.01, 3.02, ···· 3.50	0.01mm	51
4166-4	3.50, 3.51, 3.52, ···· 4.00	0.01mm	51
4166-4D	4.00, 4.01, 4.02, ···· 4.50	0.01mm	51
4166-5	4.50, 4.51, 4.52, ···· 5.00	0.01mm	51
4166-5D	5.00, 5.01, 5.02, ···· 5.50	0.01mm	51
4166-6	5.50, 5.51, 5.52, ···· 6.00	0.01mm	51
4166-6D	6.00, 6.01, 6.02, ···· 6.50	0.01mm	51
4166-7	6.50, 6.51, 6.52, ···· 7.00	0.01mm	51
4166-7D	7.00, 7.01, 7.02, ···· 7.50	0.01mm	51
4166-8	7.50, 7.51, 7.52, ···· 8.00	0.01mm	51
4166-8D	8.00, 8.01, 8.02, ···· 8.50	0.01mm	51
4166-9	8.50, 8.51, 8.52, ···· 9.00	0.01mm	51
4166-9D	9.00, 9.01, 9.02, ···· 9.50	0.01mm	51
4166-10	9.50, 9.51, 9.52, ···· 10.00	0.01mm	51

STEEL GAGE BLOCK SETS

INSPECTION CERTIFICATE

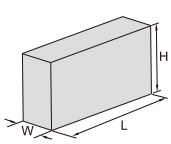
Dimension:

Size (L)	W	H
0.5≤L≤10mm	9mm	30mm
L>10mm	9mm	35mm

4100-287

- Made of alloy steel
- Meet ISO3650
- Supplied with manufacturer inspection certificate

Blocks per set	Blocks included in set			Code
	Size (mm)	Step (mm)	Quantity	Grade 2
87	1.001-1.009	0.001	9	4100-287
	1.01-1.49	0.01	49	
	0.5-9.5	0.5	19	
	10-100	10	10	
47	1.005		1	4100-247
	1.01-1.19	0.01	19	
	1.2-1.9	0.1	8	
	1-9	1	9	
	10-100	10	10	
32	1.005		1	4100-232
	1.01-1.09	0.01	9	
	1.1-1.9	0.1	9	
	1-9	1	9	
	10-30	10	3	
	50		1	



METRIC THREAD PLUG GAGES

4130-10

- Supplied with Go and No-Go end
- Class 6H
- Standard ISO1502

INSPECTION CERTIFICATE

ATTENTION: BASIC MODEL

Code	Size (mm)
4130-2D5*	M2.5x0.45
4130-3*	M3x0.5
4130-4*	M4x0.7
4130-5*	M5x0.8
4130-6*	M6x1
4130-8*	M8x1.25

Code	Size (mm)
4130-10*	M10x1.5
4130-12*	M12x1.75
4130-14*	M14x2
4130-16*	M16x2
4130-20*	M20x2.5
4130-24*	M24x3

*Supplied with manufacturer inspection certificate

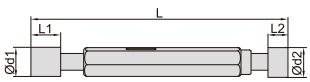
PLAIN PLUG GAGES

CUSTOM-MADE

OTHER CLASSES ARE AVAILABLE, SUCH AS H8; H9
OTHER DIAMETERS ARE AVAILABLE, SUCH AS 19,003mm
OTHER LENGTHS ARE AVAILABLE, SUCH AS 70mm

4124-12

- Supplied with Go and No-Go gages together
- Class H7
- Hardness HRC 60±2
- Standard DIN7150-2



Size tolerance of H7 (mm)

Diameter Ød	Size tolerance of Go gage (μm)	Size tolerance of No-Go gage (μm)	L1	L2	L
≥2, ≤3	+0.5 / +2.5	+9 / +11	6.5	4.5	20
>3, ≤6	+0.75 / +3.25	+10.75 / +13.25	8	6	24
>6, ≤10	+0.75 / +3.25	+13.75 / +16.25	10	7	29
>10, ≤14	+1 / +4	+16.5 / +19.5	12	8	34
>14, ≤18	+1 / +4	+16.5 / +19.5	14	10	36
>18, ≤24	+1 / +5	+19 / +23	16	12	42
>24, ≤30	+1 / +5	+19 / +23	18	14	42
>30, ≤40	+1.5 / +5.5	+23 / +27	20	15	55

Code	Diameter Ød (mm)	Code	Diameter Ød (mm)	Code	Diameter Ød (mm)
4124-3	3	4124-13	13		
4124-4	4	4124-14	14	4124-24	24
4124-5	5	4124-15	15	4124-25	25
4124-6	6	4124-16	16	4124-26	26
4124-7	7	4124-17	17	4124-28	28
4124-8	8	4124-18	18	4124-30	30
4124-9	9	4124-19	19	4124-35	35
4124-10	10	4124-20	20	4124-40	40
4124-11	11	4124-22	22		
4124-12	12	4124-23	23		

METRIC THREAD RING GAGES

INSPECTION CERTIFICATE

ATTENTION: BASIC MODEL

4120-16

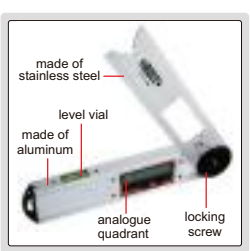
4120-16N

- Go and No-Go gages are supplied separately
- Class 6g
- Standard ISO1502

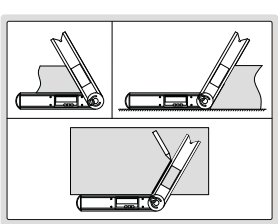
Code (Go)	Code (No Go)	Size (mm)	Code (Go)	Code (No Go)	Size (mm)
4120-2D5*	4120-2D5N*	M2.5x0.45	4120-10*	4120-10N*	M10x1.5
4120-3*	4120-3N*	M3x0.5	4120-12*	4120-12N*	M12x1.75
4120-4*	4120-4N*	M4x0.7	4120-14*	4120-14N*	M14x2
4120-5*	4120-5N*	M5x0.8	4120-16*	4120-16N*	M16x2
4120-6*	4120-6N*	M6x1	4120-20*	4120-20N*	M20x2.5
4120-8*	4120-8N*	M8x1.25	4120-24*	4120-24N*	M24x3

*Supplied with manufacturer inspection certificate

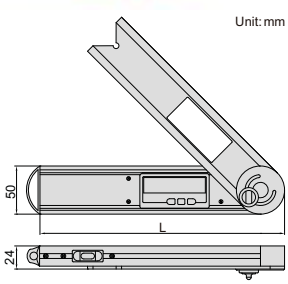
DIGITAL PROTRACTOR



2171-250



Unit: mm



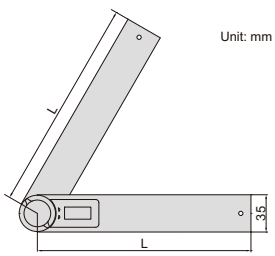
- Buttons: on/off, hold (keep the reading), zero, ABS (absolute and incremental measurement)
- Fix the locking screw at 4 positions for different measuring ranges: 0°~225°, -225°~0°, -45°~180°, -180°~45°
- Remove the locking screw for 360° range
- With level vial
- Battery CR2032
- Automatic power off

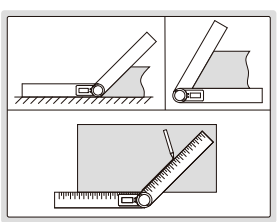
Code	Size (L)	Range	Resolution	Accuracy
2171-250	250mm	0-360°	0.05°	±0.15°

DIGITAL PROTRACTORS

2176-200

Unit: mm



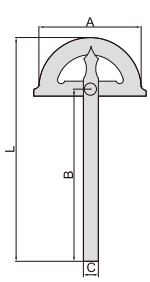


- Buttons: on/off, zero
- With clamping screw to lock the blades
- Graduation of blade: 1mm and 1/32"
- Made of stainless steel
- CR2032 battery
- Automatic power off

Code	Size (L)	Range	Resolution	Accuracy
2176-200	200mm	0-360°	0.1°	±0.3°
2176-300	300mm	0-360°	0.1°	±0.3°

PROTRACTORS

4799-180



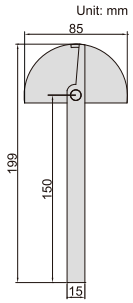
- Made of stainless steel
- Satin chrome plated scale
- With clamping screw

(mm)

Code	Size (AxB)	Range	Graduation	Accuracy	L	C
4799-180	80x120mm	0-180°	1°	±0.3°	168	11
4799-1120	120x150mm	0-180°	1°	±0.3°	220	14
4799-1150	150x200mm	0-180°	1°	±0.3°	285	16
4799-1200	200x300mm	0-180°	1°	±0.3°	413	20

PROTRACTOR

4780-85

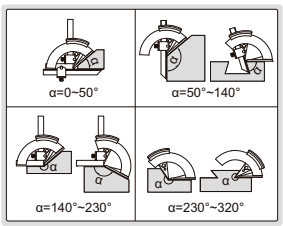


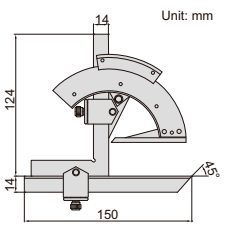
- Made of stainless steel
- Satin chrome plated scale
- With clamping screw

Code	Size	Range	Graduation	Accuracy
4780-85	85x150mm	0-180°	1°	±0.3°

PROTRACTOR

2374-320



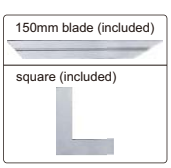


- Made of stainless steel
- Satin chrome plated scale

Code	Range	Graduation	Accuracy
2374-320	0-320°	2'	±2'

DIGITAL PROTRACTOR

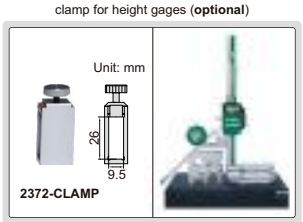
DATA OUTPUT

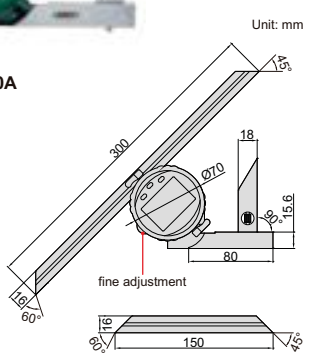


VIDEO

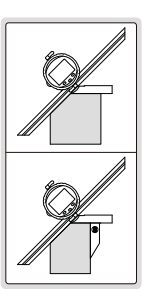
2172-360A

clamp for height gages (**optional**)



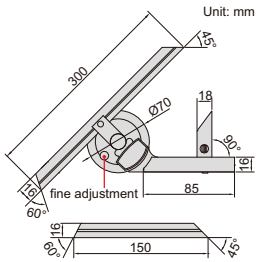


- Display in degree (for example 32.655°) and degree/minute/second (for example 32°39'30")
- SET button: preset the reading, change measuring direction
- MODE button: choose 0~90°, 0~180° or 0~360° display
- ZERO/ON/OFF button: zero and power on/off
- Battery CR2032, automatic power off
- Data output
- Supplied with square to set 90°
- Made of stainless steel
- Optional accessory: data output cable, clamp (code **2372-CLAMP**), suitable for height gages **1156**,**1351** and **1250**



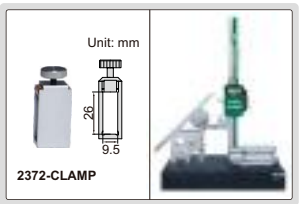
Code	Range	Graduation	Accuracy
2172-360A	0-360°	10"/0.005°	±5'

UNIVERSAL PROTRACTOR



2372-360

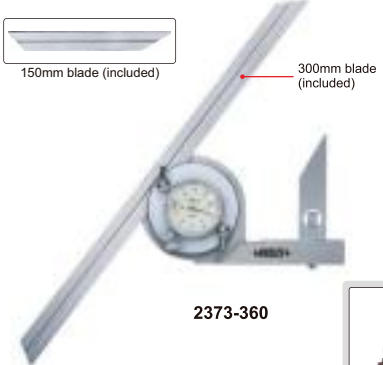
clamp for height gages (**optional**)

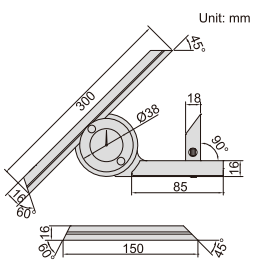


- Parallax-free reading
- Made of stainless steel
- Optional accessory: clamp (code **2372-CLAMP**), suitable for height gages **1156**, **1351** and **1250**

Code	Range	Graduation	Accuracy
2372-360	0-360°	5'	±5'

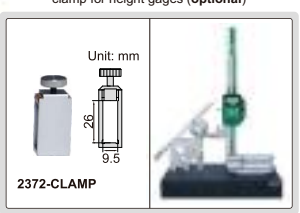
DIAL PROTRACTOR





2373-360

clamp for height gages (**optional**)

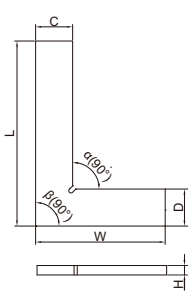


- Made of stainless steel
- Optional accessory: clamp (code **2372-CLAMP**), suitable for height gages **1156**, **1351** and **1250**

Code	Range	Graduation	Accuracy
2373-360	0-360°	5'	±5'

90° FLAT EDGE SQUARES

4791-100



- DIN875 grade 0
- Made of hardened stainless steel

(mm)

Code	Size (LxW)	Squareness		C	D	H
		Inside (α)	Outside (β)			
4791-100	100x70mm	7μm	7μm	20	20	5
4791-150	150x100mm	7μm	8μm	30	30	6

Sizes available up to 300x200mm

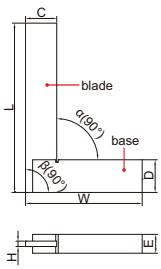
MACHINIST SQUARES WITH WIDE BASE

ATTENTION: LOW ACCURACY

ATTENTION: NO ANTI-RUST TREATMENT, NOT HARDENED

- Economic model
- DIN875 grade 2
- Made of carbon steel, no anti-rust treatment, not hardened

4707-100



(mm)

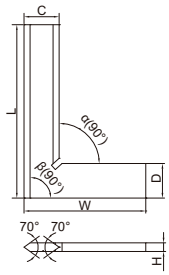
Code	Size (LxW)	Squareness		C	D	H	E
		Inside (α)	Outside (β)				
4707-75	75x50mm	26μm	28μm	16	16	3	9
4707-100	100x70mm	28μm	30μm	19	19	3	12
4707-150	150x100mm	33μm	35μm	25	25	3	16
4707-200	200x130mm	37μm	40μm	30	32	4	16
4707-250	250x165mm	42μm	45μm	30	32	4	19
4707-300	300x200mm	47μm	50μm	32	32	4	19

Sizes available up to 1000x550mm

90° BEVELED EDGE SQUARES

- DIN875 grade 00
- Satin chrome plating
- Beveled edges for inside and outside measurement
- Made of hardened stainless steel

4790-0100



(mm)

Code	Size (LxW)	Squareness		C	D	H
		Inside (α)	Outside (β)			
4790-050	50x40mm	2.4μm	2.5μm	13	13	4
4790-075	75x50mm	2.6μm	2.8μm	15	15	4
4790-0100	100x70mm	2.8μm	3.0μm	20	20	5
4790-0150	150x100mm	3.2μm	3.5μm	30	30	6
4790-0200	200x130mm	3.7μm	4.0μm	34	34	7

Sizes available up to 300x200mm

STRAIGHT EDGE

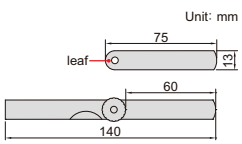
4700-100

- DIN874
- Beveled edge
- Made of hardened stainless steel
- Satin chrome plating

Code	Size (L)	Straightness	W	H
4700-150	150mm	2.6μm	6mm	30mm

Sizes available up to 500mm

FEELER GAGE



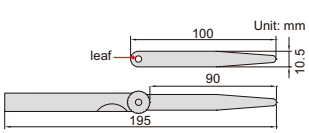
4601-25

- Made of hardened alloy steel
- Meet DIN2275
- Quantity of leaves: 25
- Accuracy: ±(3+T/80) μm, 'T' is the thickness of leaves in μm

Code	Range	Thickness of leaves included (mm)
4601-25	0.04-1.00mm	0.04, 0.05, 0.06, 0.07, 0.08, 0.09, 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, 0.95, 1.00

FEELER GAGES

4602-20

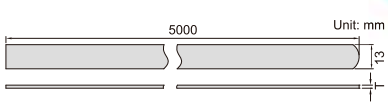


- Made of hardened alloy steel
- Meet DIN2275
- Accuracy: ±(3+T/80) μm, 'T' is the thickness of leaves in μm

Code	Range	Thickness of leaves included (mm)	Quantity of leaves
4602-13	0.05 - 1.00mm	0.05, 0.10, 0.15, 0.20, 0.25, 0.30, 0.40, 0.50, 0.60, 0.70, 0.80, 0.90, 1.00	13
4602-17	0.02 - 1.00mm	0.02, 0.03, 0.04, 0.05, 0.06, 0.07, 0.08, 0.09, 0.10, 0.15, 0.20, 0.25, 0.30, 0.40, 0.50, 0.75, 1.00	17
4602-20	0.05-1.00mm	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, 0.95, 1.00	20
4602-32	0.03-1.00mm	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, 0.35, 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, 1.00	32

FEELER GAGE TAPES

- Used as shims to accurately set spacing
- Made of hardened alloy steel
- Length 5m
- Width 13mm



4621-30

Code	Thickness (T)	Accuracy
4621-02	0.02mm	±4μm
4621-03	0.03mm	±4μm
4621-04	0.04mm	±4μm
4621-05	0.05mm	±4μm
4621-06	0.06mm	±4μm
4621-07	0.07mm	±5μm
4621-08	0.08mm	±5μm

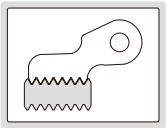
Code	Thickness (T)	Accuracy
4621-10	0.10mm	±5μm
4621-15	0.15mm	±6μm
4621-20	0.20mm	±8μm
4621-25	0.25mm	±9μm
4621-30	0.30mm	±9μm
4621-40	0.40mm	±12μm
4621-50	0.50mm	±14μm

PITCH GAGES

- Check the pitch of screw thread
- Accuracy: ±0.07mm
- Made of medium carbon steel

4820-124

ATTENTION: LOW ACCURACY



Metric 60° screw

Code	Range	Pitch of leaves included	Quantity of leaves
4820-124	0.25-7mm	0.25, 0.3, 0.35, 0.4, 0.5, 0.7, 0.75, 0.8, 0.9, 1, 1.25, 1.5, 1.75, 2, 2.5, 3, 3.5, 4, 4.5, 5, 5.5, 6, 6.5, 7mm	24

Unified 60° screw

Code	Range	Pitch of leaves included	Quantity of leaves
4820-230	4-42TPI	4, 4-1/2, 5, 5-1/2, 6, 7, 8, 9, 10, 11, 11-1/2, 12, 13, 14, 15, 16, 18, 20, 22, 24, 26, 27, 28, 30, 32, 34, 36, 38, 40, 42TPI	30

Metric 60° and Whitworth 55° screw

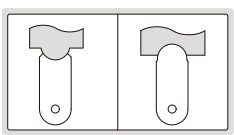
Code	Range	Pitch of leaves included	Quantity of leaves
4820-452	0.25-6mm	0.25, 0.3, 0.35, 0.4, 0.45, 0.5, 0.6, 0.7, 0.75, 0.8, 0.9, 1, 1.25, 1.5, 1.75, 2, 2.5, 3, 3.5, 4, 4.5, 5, 5.5, 6mm	52
	4-62TPI	4, 4-1/2, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 16, 18, 19, 20, 22, 24, 25, 26, 28, 30, 32, 36, 40, 48, 60, 62TPI	

Metric 60° and Unified 60° screw

Code	Range	Pitch of leaves included	Quantity of leaves
4820-552	0.4-7mm	0.4, 0.5, 0.6, 0.7, 0.75, 0.8, 0.9, 1, 1.25, 1.5, 1.75, 2, 2.5, 3, 3.5, 4, 4.5, 5, 5.5, 6, 6.5, 7mm	52
	4-42TPI	4, 4-1/2, 5, 5-1/2, 6, 7, 8, 9, 10, 11, 11-1/2, 12, 13, 14, 15, 16, 18, 20, 22, 24, 26, 27, 28, 30, 32, 34, 36, 38, 40, 42TPI	

RADIUS GAGES

ATTENTION: LOW ACCURACY



4801-17

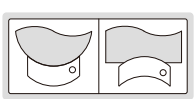
- Made of medium carbon steel

Code	Range	Radius of leaves included (mm)	Quantity of leaves (internal+external)	Accuracy
4801-17	1-7mm	1, 1.25, 1.5, 1.75, 2, 2.25, 2.5, 2.75, 3, 3.5, 4, 4.5, 5, 5.5, 6, 6.5, 7	17+17	±0.03mm
4801-16	7.5-15mm	7.5, 8, 8.5, 9, 9.5, 10, 10.5, 11, 11.5, 12, 12.5, 13, 13.5, 14, 14.5, 15	16+16	±0.035mm
4801-15	15.5-25mm	15.5, 16, 16.5, 17, 17.5, 18, 18.5, 19, 19.5, 20, 21, 22, 23, 24, 25	15+15	±0.042mm

RADIUS GAGE

- Quantity of leaves: 31 pcs
- Accuracy: ±0.06mm
- Made of stainless steel

4802-31

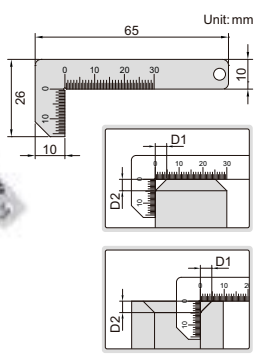


Code	Range	Radius of leaves included (mm)
4802-31	25-40mm	25, 25.5, 26, 26.5, 27, 27.5, 28, 28.5, 29, 29.5, 30, 30.5, 31, 31.5, 32, 32.5, 33, 33.5, 34, 34.5, 35, 35.5, 36, 36.5, 37, 37.5, 38, 38.5, 39, 39.5, 40

CHAMFER GAGE

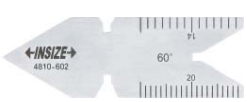
- To measure internal and external chamfers
- Made of stainless steel

4844-1

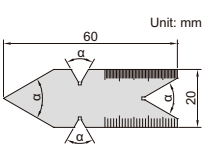


Code	Graduation	Accuracy
4844-1	0.5mm	±0.25mm

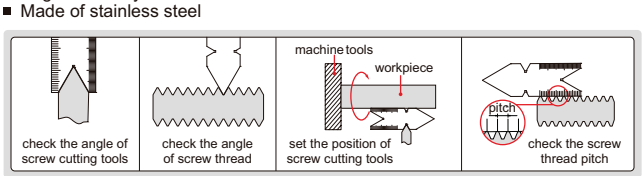
CENTER GAGES



4810-602



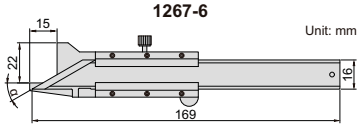
- To check and set screw cutting tools, and check the angle and pitch of screw thread
- Angle accuracy: ±30min.
- Made of stainless steel

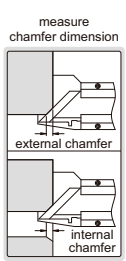


Code	Thread type	Angle (α)	Graduation
4810-601	METRIC 60°	60°	0.5mm and 1mm
4810-55	WHITWORTH 55°	55°	14ths and 20ths on front side, 24ths and 32ths on back side

CHAMFER GAGE

1267-6



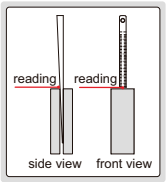


- Measure 45º chamfer dimension
- Made of stainless steel
- Satin chrome plated reading surface

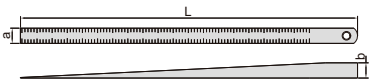
Code	Range	Accuracy	Graduation	Chamfer (α)
1267-6	0-10mm	±0.06mm	0.02mm	45º

TAPER GAGE

4630-1



- For quick measurement of slot width
- Stain chrome plated reading surface
- Made of stainless steel

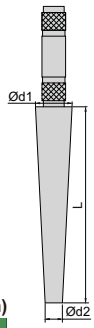


Code	Range	Graduation	Accuracy	L	a	b
4630-1	0.5-10mm	0.05mm	±0.07mm	220mm	10mm	10.5mm

TAPER BORE GAGES

- Quick measurement of bore diameter
- Hardened steel, HRC50-58
- Satin chrome plated surface
- Aluminium oxided handle

4852-15



(mm)

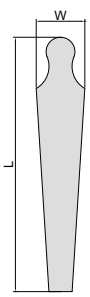
Code	Range	Graduation	Accuracy	L	Ød1	Ød2
4852-1	1-6.5mm	0.1mm	±0.05mm	62.5	7	0.8
4852-3	3-16mm	0.1mm	±0.05mm	143	17	2.8
4852-15	15-30mm	0.1mm	±0.05mm	165	31	14.7

TAPER GAGES

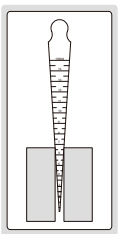
front

4833-2

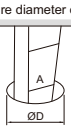
back



measure slot width



measure diameter of hole



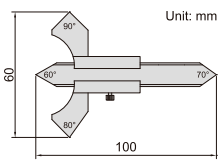
When measuring diameter of holes, correction on reading is needed due to the thickness of tape gage. For example, when reading A is 14.96mm, diameter ØD is 15mm.

- Measure opening, slot width, hole diameter, etc.
- Diameter correction table on the back (only for **4833-1**, **4833-2**)
- Made of stainless steel

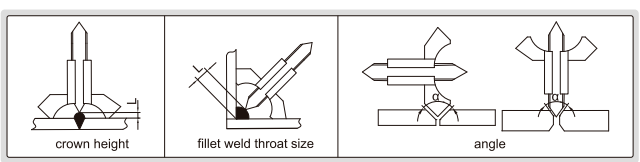
Code	Range	Graduation	Accuracy	L	W
4833-1	0.8-15mm	0.1mm	±0.1mm	146mm	17mm
4833-2	15-30mm	0.1mm	±0.1mm	159mm	30.4mm

WELDING GAGE

4830



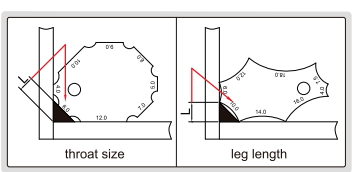
- Made of stainless steel
- Stain chrome plated reading surface

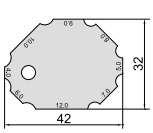


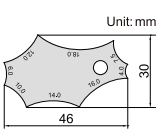
Code	Measurement	Range	Graduation	Accuracy
4830	crown height	0-8mm	0.1mm	±0.1mm
	fillet weld throat size	0-20mm	0.1mm	±0.3mm
	angle	60°, 70°, 80°, 90°	—	±1°

FILLET WELDING GAGE

4832-1



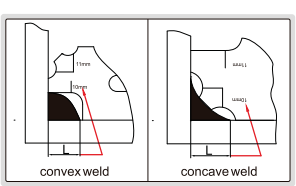




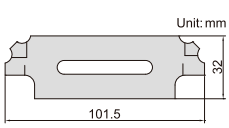
- Made of stainless steel
- Sizes marked on both faces

Code	Throat size (mm)	Leg length (mm)	Accuracy
4832-1	4, 5, 6, 7, 8, 9, 10, 12	4, 6, 7.5, 10, 12, 14, 16, 18	±0.5mm

FILLET WELDING GAGE



4836-1

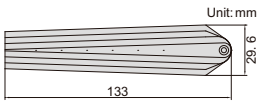


- Measure concave and convex weld sizes
- 7 blades are included
- Made of stainless steel

Code	Size (mm)	Accuracy
4836-1	3mm, 4mm, 5mm, 6mm, 8mm, 9mm, 10mm, 11mm, 12mm, 14mm, 16mm, 19mm, 22mm, 25mm	±0.5mm

TAPER GAGE SET

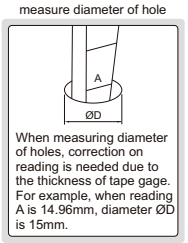
- Include 4 pcs (1-8mm, 8-15mm, 15-22mm, 22-29mm)
- Measure opening, slot width, hole diameter, etc.
- Diameter correction table on the back
- Made of stainless steel



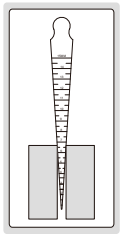
Code	Range	Graduation	Accuracy
4837-1	1-29mm	0.05mm	±0.05mm

front 4837-1 back

measure diameter of hole



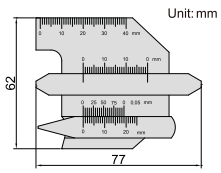
measure slot width



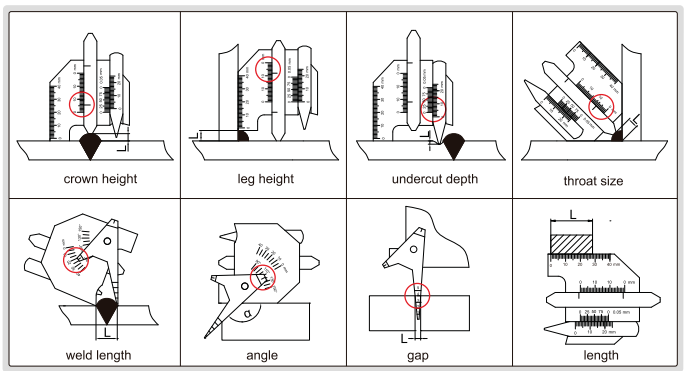
WELDING GAGE

front 4838-1 back

- Made of stainless steel



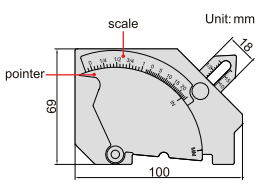
Code	Measurement	Range	Graduation	Accuracy
4838-1	crown height	0-10mm	1mm	±0.5mm
	leg height	0-14mm	1mm	±0.5mm
	undercut depth	0-5mm	0.05mm	±0.05mm
	throat size	0-13mm	1mm	±0.5mm
	weld length	0-40mm	1mm	±1mm
	angle	90°-150°	5°	±1°
	gap	0.5-5mm	1mm	±0.5mm
	length	0-40mm	1mm	±0.5mm



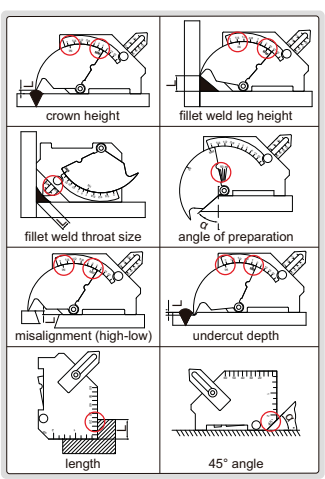
WELDING GAGE

front 4835-1 back

Code	Measurement	Range	Graduation	Accuracy
4835-1	crown height	0-25mm (0-1")	1mm (1/16")	±0.5mm
	fillet weld leg height	0-25mm (0-1")	1mm (1/16")	±0.5mm
	misalignment (high-low)	0-25mm (0-1")	1mm (1/16")	±0.5mm
	undercut depth	0-2mm (0-1/8")	1mm (1/16")	±0.5mm
	fillet weld throat size	0-20mm (0-3/4")	1mm (1/16")	±0.5mm
	angle of preparation	0-60°	5°	±1°
	length	0-60mm (0-2")	1mm (1/16")	±0.5mm
	45° angle	—	—	±1°



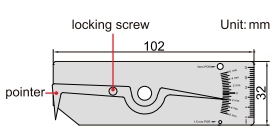
- Adjustable scale to compensate pointer wear
- Made of stainless steel



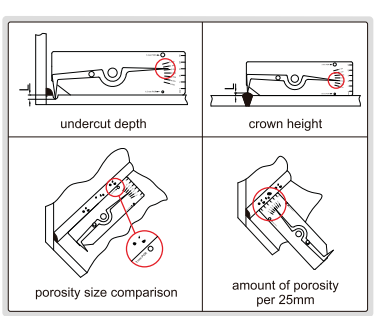
WELDING GAGE

- Pointer can be locked for later reference
- Made of stainless steel

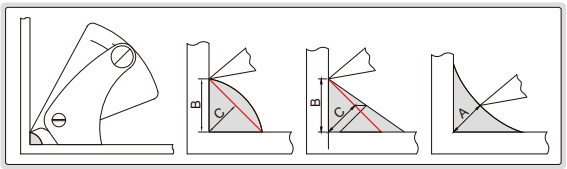
4834-1

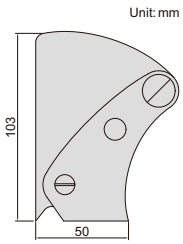


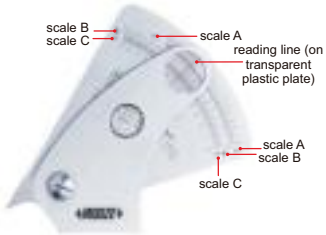
Code	Measurement	Range	Graduation	Accuracy
4834-1	undercut depth	0-6mm	0.5mm	±0.5mm
	crown height	0-6mm	0.5mm	±0.5mm
	porosity size comparison	1.5mm, 3mm	—	±0.2mm
	amount of porosity per 25mm	25mm	1mm	—



WELDING GAGE







4840-1

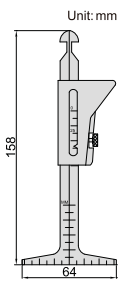
Code	Graduation	Accuracy
4840-1	0.2mm	±0.3mm

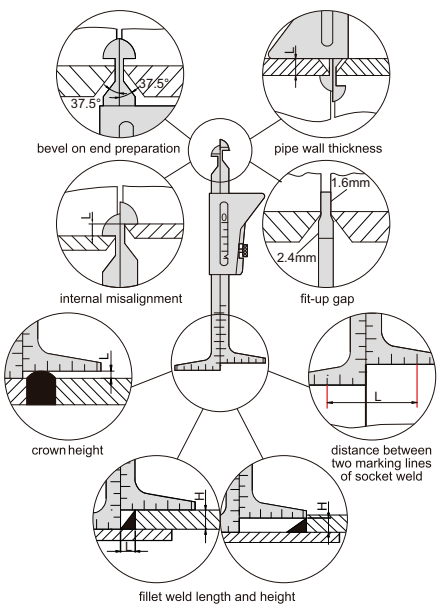
- Made of stainless steel

PIPE WELDING GAGE

- Made of stainless steel

front 4839-1 back

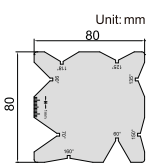




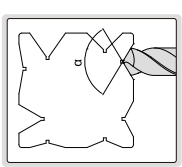
Code	Measurement	Range	Graduation	Accuracy
4839-1	bevel on end preparation	37.5°	—	±1°
	pipe wall thickness	0-45mm (0–1-3/4")	1mm (1/16")	±0.5mm
	internal misalignment	0-35mm (0–1-3/8")	1mm (1/32")	±0.5mm
	fit-up gap	1.6mm, 2.4mm	—	±0.1mm
	crown height	0-35mm (0–1-3/8")	1mm (1/32")	±0.5mm
	distance between two marking lines of socket weld	0-60mm (0–2-3/8")	1mm (1/16")	±0.5mm
	fillet weld length	0-30mm (0–1-1/4")	1mm (1/16")	±0.5mm
	fillet weld height	0-35mm (0–1-3/8")	1mm (1/32")	±0.5mm

DRILL ANGLE GAGE

4842-1



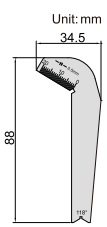
- Check drills with angle 60°, 70°, 90°, 118°, 125°, 135°, 150° or 160°
- Made of stainless steel

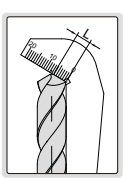


Code	Accuracy
4842-1	±0.5°

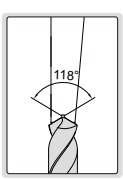
DRILL POINT GAGE

4843-1





- For twist drills with 118° angle, to check if the center of tip is concentric with the drill body
- Made of stainless steel

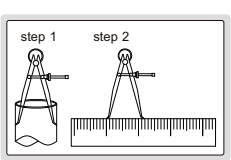


Code	Accuracy	
	Angle	Length
4843-1	±0.5°	±0.5mm

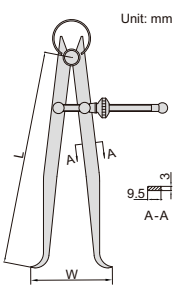
INSIDE SPRING CALIPERS

- Made of carbon steel

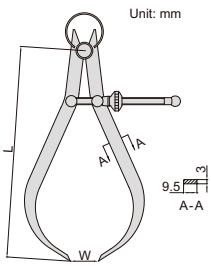
Code	Size (L)	Range (W)
7261-150	150mm	20 - 170mm
7261-200	200mm	22 - 220mm
7261-250	245mm	30 - 270mm
7261-300	300mm	30 - 320mm



7261-150



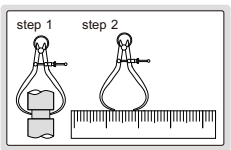
OUTSIDE SPRING CALIPERS



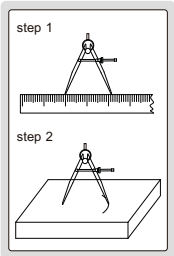
7262-150

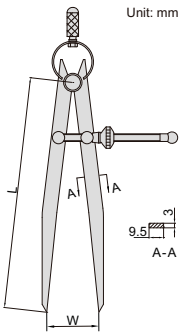
- Made of carbon steel

Code	Size (L)	Range (W)
7262-150	155mm	0-140mm
7262-200	210mm	0-210mm
7262-250	265mm	0-270mm
7262-300	310mm	0-320mm



SPRING DIVIDERS



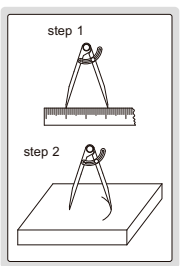


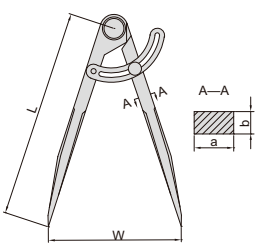
7260-150

- Made of carbon steel
- Hardened points

Code	Size (L)	Range (W)
7260-150	150mm	0-150mm
7260-200	200mm	0-210mm
7260-250	245mm	0-260mm
7260-300	300mm	0-320mm

DIVIDERS





7247-150

(mm)

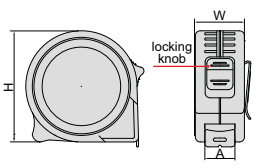
Code	Size (L)	Range (W)	a	b
7247-150	150mm	0-140mm	8.5	7
7247-200	200mm	0-190mm	10	7
7247-300	300mm	0-290mm	12	7

- Made of carbon steel
- Hardened points

MEASURING TAPES

EG II

7140-5



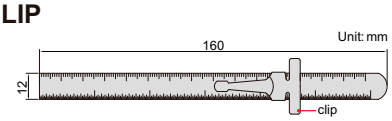
packaging

(mm)

Code	Range	Graduation	Width of tape A	W	H
7140-3	0-3m	1mm	16mm	28	62
7140-5	0-5m	1mm	19mm	30	68
7140-8	0-8m	1mm	25mm	38	78

POCKET RULE WITH SLIDING CLIP

7119-150



- With sliding clip, clip also can be used as depth gage base
- Inch/metric conversion table on the back
- Made of stainless steel

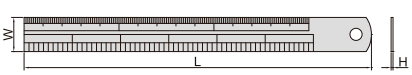
Code	Range	Graduation	Accuracy
7119-150	150mm/6"	1mm, 1/64"	±0.15mm

STEEL RULES

7110-300

- Graduation: 0.5mm, 1mm, 1/64", 1/32", 1/16"
- Semi-flexible rules
- Made of stainless steel
- Non-glare surface

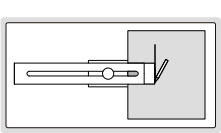
ATTENTION: BASIC MODEL



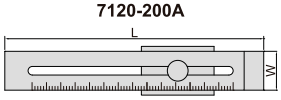
(mm)

Code	Range	Accuracy	L	W	H	Remark
7110-150	150mm/6"	±0.15mm	170	18	1.0	graduation on front and back
7110-300	300mm/12"	±0.15mm	330	25	1.0	graduation on front and back
7110-3001	300mm/12"	±0.15mm	325	30	1.0	graduation on front and back
7110-500	500mm/20"	±0.15mm	530	30	1.2	graduation on front and back
7110-600	600mm/24"	±0.20mm	630	30	1.2	graduation on front and back
7110-1000	1000mm/40"	±0.20mm	1040	32	1.5	graduation on front and back

MARKING GAGES



7120-200A



- Made of stainless steel
- Satin chrome finish

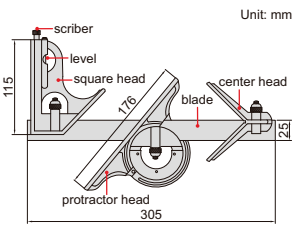
(mm)

Code	Range	Graduation	Accuracy	L	W
7120-200A	0-200mm	0.1mm	±0.1mm	250	40
7120-250A	0-250mm	0.1mm	±0.1mm	300	40
7120-300A	0-300mm	0.1mm	±0.1mm	350	40

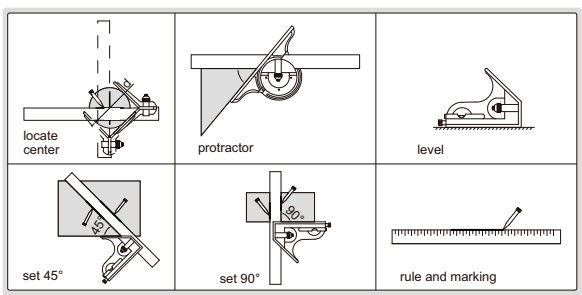
COMBINATION SQUARE SET

- Center head (made of cast iron): To locate center of cylinder with diameter (Ød): 30-100mm Accuracy: ±0.15mm
- Protractor head (made of cast iron): To set the blade at desired angle to an edge of a workpiece, and can be used to measure angles Range: 0-180°, accuracy: ±7min.
- Square head (made of cast iron): To set the blade at 90° or 45° to an edge of a workpiece Accuracy: ±8min for 90° square, ±10min for 45° square
- Blade (made of stainless steel): Range: 300mm/12", Graduation: 0.5mm and 1/32" on front face, 1mm and1/64" on back face
- Optional accessory: rigid rule (code **7113**)

2278-180

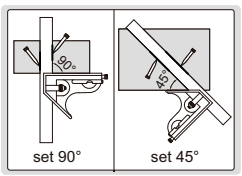


Code	Remark
2278-180	4-piece set

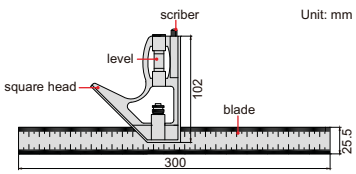


LIGHT DUTY COMBINATION SQUARE

2276-300



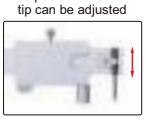
- Square head (made of zinc): To set the blade at 90° or 45° to an edge of a workpiece Accuracy: ±0.5°
- Blade (made of stainless steel): Range: 300mm, Graduation: 0.5mm and 1mm on front and back sides



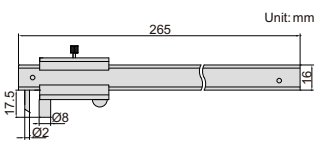
Code
2276-300

SCRIBER CALIPER

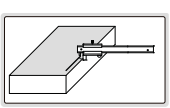
The position of scriber tip can be adjusted



7202-200A

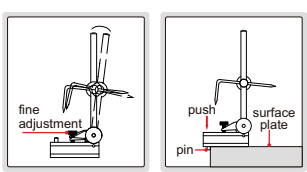


- Graduation: 0.1mm, 1/128"
- Made of stainless steel
- Satin chrome plated reading surface
- Carbide scriber tip
- Optional accessory: carbide scriber tip (code **SP-SCRIBER-7202**)

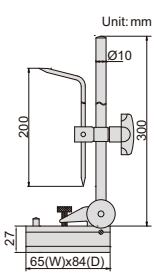


Code	Range	Accuracy
7202-200A	0-200mm/0-8"	±0.1mm

HEIGHT SCRIBER



- Grooved bottom for cylinder
- Two pins to be set against the edge of surface plate



6990-300A

Code
6990-300A

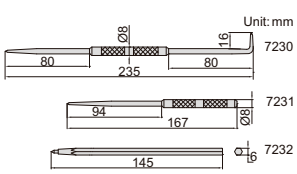
SCRIBERS

7230

7231

7232

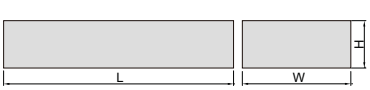
- Nickel plated



Code	Tip
7230	hardened tips
7231	hardened tip
7232	carbide tip

GRANITE SURFACE PLATES

CUSTOM-MADE SUPPLY SPECIAL SIZES ACCORDING TO CUSTOMER'S REQUEST



Grade 0

Code	Size (LxWxH)	Flatness	Weight (Kg)	Max. load (Kg)
6900-032*	300x200x60mm	5.4μm	11	60
6900-042*	400x250x60mm	5.9μm	18	100
6900-044*	400x400x60mm	6.3μm	29	120
6900-064*	630x400x80mm	7.0μm	60	130

*Supplied with manufacturer inspection certificate

6900-132

VIDEO

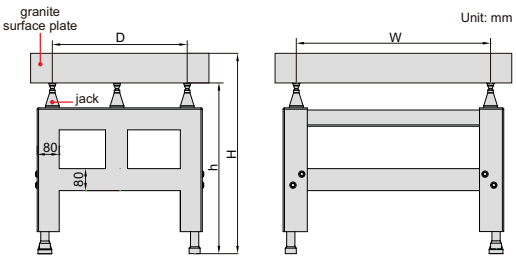
INSPECTION CERTIFICATE

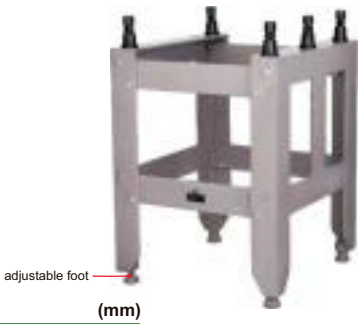
- Made of granite, free from deterioration or dimensional change over time, minimal changes in dimension due to temperature changes
- Meet DIN876, grade 00 is for inspection room or lab, grade 0 is for workshop
- Optional accessory: stand for granite surface plate (code **6902**), jack for granite surface plate (code **6903**)

STANDS FOR GRANITE SURFACE PLATE

VIDEO

- For medium size granite surface plates
- 5 jacks are included
- Adjusting range of jacks: 25mm
- One foot on the bottomis adjustable





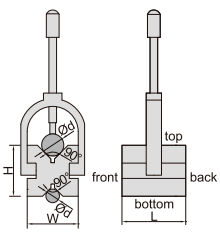
6902-64H

(mm)

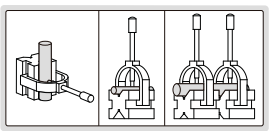
Code	For granite surface plate	W	D	H (with granite surface plate)	h (without granite surface plate)
6902-64H	630x400x80mm (code **6900-064** and **6900-164**)	352	224	1000-1025	920-945

V-BLOCK SETS

6896-11



- Hold cylindrical workpieces for inspection and machining
- Two V-blocks per set
- Made of alloy steel
- Hardened to HRC60±2
- V groove on the top for large shafts
- V groove on the bottom for small shafts
- Squareness of both V grooves to front and back sides: 5μm
- Height difference of a matched pair: 5μm

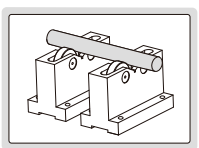


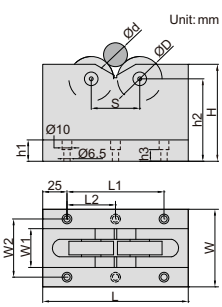
Code	Size (LxWxH)	Range of shafts (Ød)	Parallelism of both V grooves to top and bottom sides
6896-11	50x40x40mm	5-30mm	5μm
6896-12	80x63x63mm	7-63mm	5μm
6896-13	100x80x80mm	7-80mm	5μm

ROLLER BEARING V-BLOCK SET

- Runout accuracy: 5μm
- Parallelism of bearings to bottom: 12μm
- Two V-blocks per set
- Workpieces don't get damaged due to bearings
- Suitable for heavy workpieces

6888-1





Code	Size (LxWxH)	Code of bearings	Diameter of bearings (ØD)	Range of shafts (Ød)	Load capacity
6888-1	150x60x100mm	6303 ZZ	42mm	25-70mm	500kg

(mm)

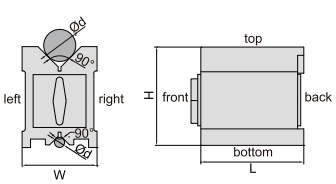
Code	W1	W2	h1	h2	h3	L1	L2	S
6888-1	22	44	20	85	12	100	–	60
6888-2	40	60	22	85	12	100	–	50
6888-3	60	80	30	124	20	180	90	120

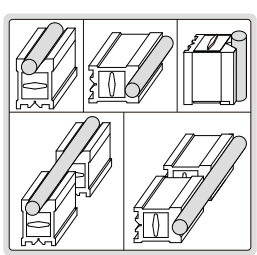
MAGNETIC V-BLOCK

STRONG MAGNETIC FORCE | HIGH PRECISION | HARDENED SURFACES

- Hardened, high accuracy, strong magnetic force, for grinding, light milling, drilling and inspection of round and square jobs
- Suitable for cast iron surface plates and granite surface plates
- V groove on the top for large shafts
- V groove on the bottom for small shafts
- All working surfaces are hardened to HRC60±2
- Magnetic force on top, bottom and two V grooves

6889-1

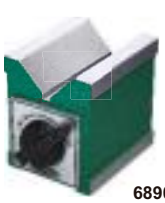




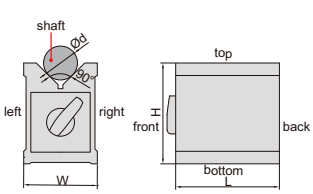
Matched pair

Code	Size (LxWxH)	Range of shafts (Ød)	Magnetic force	Parallelism of V grooves to top, bottom, left, right sides	Squareness of V grooves to back side	Height difference of a matched pair
6889-1	75x56x75mm	5-40mm	75kgf	5μm	5μm	5μm

MAGNETIC V-BLOCK

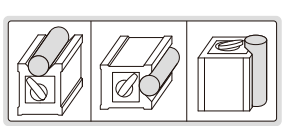


6890-702



- Hold cylindrical workpieces for inspection and machining
- Supplied in single piece
- Not hardened
- Not suitable for steel or iron surface
- Parallelism of V groove to top, bottom, left and right sides: 10μm
- Squareness of V groove to back side: 10μm

ATTENTION: NOT SUITABLE FOR STEEL OR IRON SURFACE | ATTENTION: NOT HARDENED

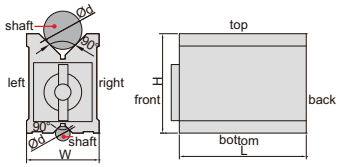


Code	Size (LxWxH)	Range of shafts (Ød)	Magnetic force
6890-702	70x60x73mm	6-44mm	56kgf

MAGNETIC V-BLOCK

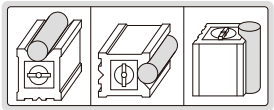
- Hold cylindrical workpieces for inspection and machining
- Supplied in single piece
- Not hardened
- V groove on the top for large shafts
- V groove on the bottom for small shafts
- Not suitable for steel or iron surface

6801-1202



ATTENTION: NOT SUITABLE FOR STEEL OR IRON SURFACE

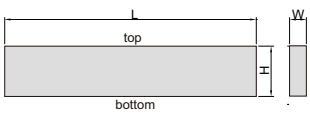
ATTENTION: NOT HARDENED



Code	Size (LxWxH)	Range of shafts (Ød)	Magnetic force	Parallelism of V grooves to top, bottom, left, right sides	Squareness of V grooves to back side
6801-1202	100x70x95mm	6-67mm	80kgf	10μm	10μm

PARALLEL SET

6533-144



- Parallelism between top and bottom: 5μm
- Height difference of a matched pair: 5μm
- Hardened to HRC55-60
- Made of alloy tool steel

(mm)

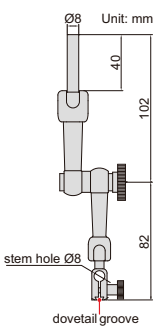
Code	Parallels per set	Length (L)	Thickness (W)	Height (H)
6533-144	14 pairs	150	10	14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 35, 40, 45, 50

DIAL TEST INDICATOR CENTERING HOLDER

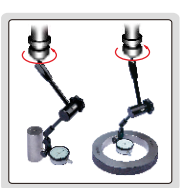
- Center cylinders or holes on machine tools
- Can be used with dial test indicators

Code
6295-1A

6295-1A



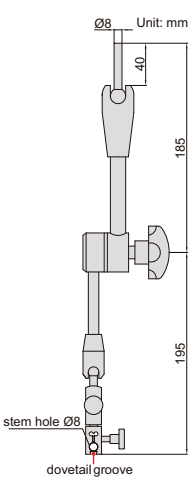
INDICATOR CENTERING HOLDER



- Center cylinders or holes on machine tools
- Can be used with dial test indicators or dial indicators

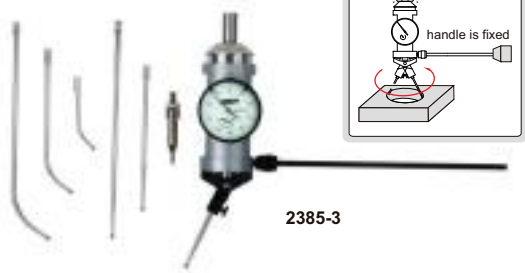
Code
6294-1A

6294-1A

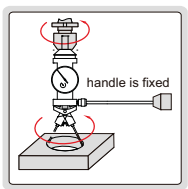


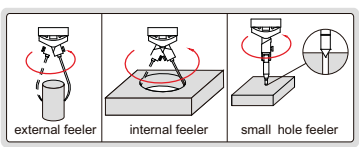
CENTERING INDICATOR

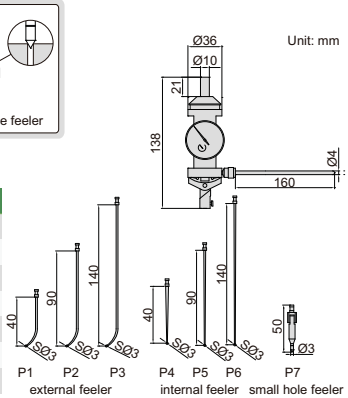
VIDEO



2385-3







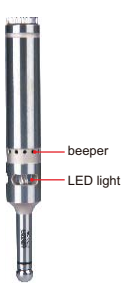
Feeler	Measuring diameter	Accuracy
P1	Ø0-60mm	±0.04mm
P2	Ø0-160mm	±0.06mm
P3	Ø0-250mm	±0.08mm
P4	Ø3.2-80mm	±0.04mm
P5	Ø3.2-180mm	±0.06mm
P6	Ø3.2-280mm	±0.08mm
P7	Ø0-2.8mm	±0.04mm

Code
2385-3

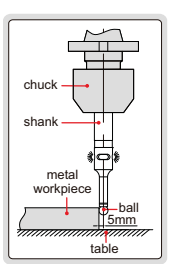
- Provides quick and accurate centering in boring and milling set-up

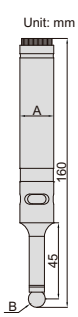
ELECTRONIC EDGE FINDERS

6566-2



6566-3



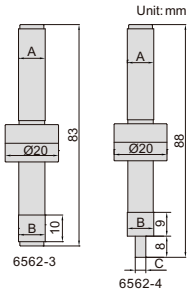


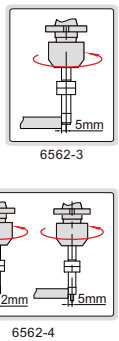
- Accuracy: 5μm
- The shank is electrically conducted to the metal workpiece through the chuck and table, the LED lights up and the beeper sounds (only for **6566-3**), when the ball touches the workpiece
- Not suitable for rotary use
- Hardened shank and contact ball

Code	Shank (A)	Contact ball (B)	Beeper	Battery
6566-2	Ø20mm	SØ10mm	without	23AE, 12Vx1pc
6566-3	Ø20mm	SØ10mm	with	23AE, 12Vx1pc

EDGE FINDERS

6562-3 6562-4

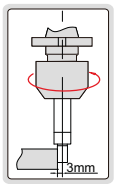




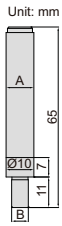
- Hardened shank and contact point

Code	Shank(A)	Contact point (B)	Contact point (C)	Accuracy
6562-3	Ø10mm	Ø10mm	—	5μm
6562-4	Ø10mm	Ø10mm	Ø4mm	5μm

EDGE FINDER



6567-1

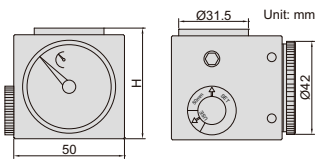


- Hardened shank and contact point

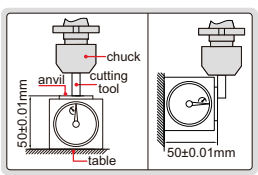
Code	Shank (A)	Contact point (B)	Accuracy
6567-1	Ø10mm	Ø6mm	8μm

ZERO SETTER

2397-502A



- Magnetic base
- Accuracy: ±10μm

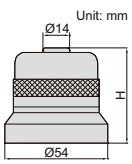


Code	Height (H)	Test force
2397-502A	50mm	9N (at 50mm)

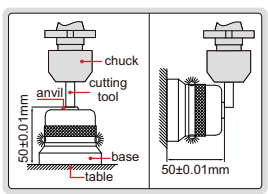
ELECTRONIC ZERO SETTER

ATTENTION: HIGH TEST FORCE

6550-50A



- Accuracy: ±10μm
- The base is electrically conducted to the cutting tools through the table and chuck, the LED lights up when the cutting tool touches the anvil
- Magnetic base
- Battery LR44



Code	Height (H)	Test force
6550-50A	50mm	27N (at 49mm)

DATA OUTPUT CABLES (KEYBOARD FORMAT)

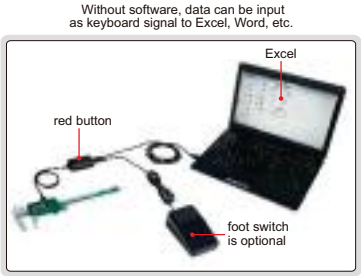
VIDEO

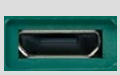
7302-SPC3A

7304-2

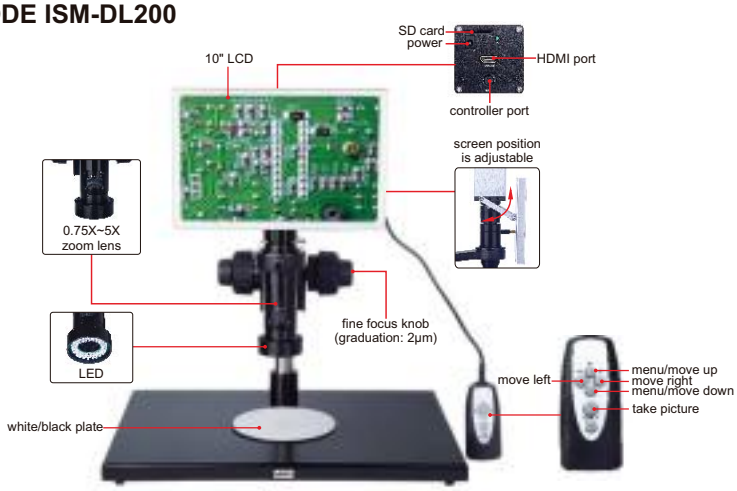
7302-HUB

Without software, data can be input as keyboard signal to Excel, Word, etc.



Code	Description	Plug to product	Socket on product	Plug to computer	Applicable products
7302-SPC5A	cable for digital calipers (length 2.5m)			USB	digital calipers; digital height gages
7302-SPC5B					digital depth gages
7302-SPC4	cable for **1103** (length 2.5m)				digital calipers
7302-SPC6	cable for digital micrometers (length 2.5m)				digital micrometers; digital three points internal micrometers
7302-SPC3A	cable for digital indicators (length 2.5m)				digital indicators; digital protractors
7304-2	foot switch with cable (length 1.5m)				
7302-HUB	HUB converter (length 0.3m, four USB ports to computer)				

DIGITAL MICROSCOPE (WITH DISPLAY)
CODE ISM-DL200



TAKE PICTURES

VIDEO

1X camera adapter
(**optional**)

0.5X camera adapter
(included)

2X auxiliary objective
(**optional**)

1X auxiliary objective
1X auxiliary objective
(included)

crosshair (white/black)

4G memory card
and holder (included)

- Take pictures, saved to memory card
- Automatic white balance and exposure
- Brightness, contrast ratio, gain are adjustable

X-Y glass stage **(optional)**
(X-Y travel: 74×60mm)

SPECIFICATION

Magnification	18X~112X
Sensor	1/3" CMOS
Pixel	1.3M
Resolution	1280×800
Frame rate	60fps
Output	HDMI
Power supply	power adapter
Dimension (L×W×H)	400×300×430mm
Weight	6kg

OPTIONAL ACCESSORY

1X camera adapter	**ISM-DL-CA1X**
2X auxiliary objective	**ISM-DL-OB2X**
X-Y glass stage (travel: 74×60mm)	**ISM-DL-STAGE**

STANDARD DELIVERY

Main unit	1 pc
0.5X camera adapter	1 pc
1X auxiliary objective	1 pc
4G memory card and holder	1 pc
White/black plate	1 pc
HDMI cable	1 pc
Power adapter	1 pc

MAGNIFICATION, FOCUS DISTANCE AND VIEW FIELD

Auxiliary Objective	Specification	Camera adapter	
		0.5X (included)	1X (optional)
1X (included)	Magnification	18~112X	36~224X
	Focus distance	70±2mm	70±2mm
	View filed	12.8×8.4~2×1.3mm	6.3×4.3~1×0.65mm
2X (optional)	Magnification	36~224X	72~448X
	Focus distance	29±2mm	29±2mm
	View field	6.3×4.3~1×0.65mm	3.3×2~0.51×0.38mm

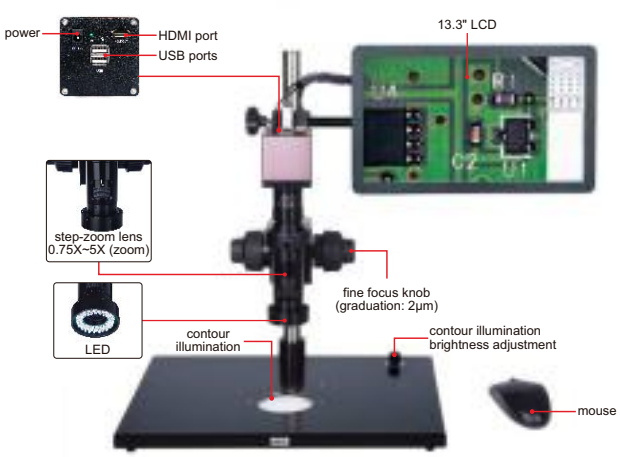
DIGITAL MEASURING MICROSCOPE (WITH DISPLAY)

VIDEO

TAKE PICTURES | MEASUREMENT | BUILT-IN SOFTWARE WITHOUT COMPUTER

- 1080P high-definition image
- Built-in software without computer, operation by mouse
- Take pictures, saved to USB flash disk
- Measurement results can be output to Excel
- Automatic white balance and exposure
- Brightness, contrast ratio, gain are adjustable

X-Y glass stage **(optional)**
(X-Y travel: 74×60mm)



ISM-DL301 (with contour illumination)

To be continued

Continued from previous page

1X camera adapter
(**optional**)

2X auxiliary objective
(**optional**)

16G USB flash disk
(included)

calibration plate
(included)

1X auxiliary objective
(included)

0.5X camera adapter
(included)

SPECIFICATION

Code	ISM-DL301** (with contour illumination)
Magnification	15X~100X
Sensor	1/2" CMOS
Pixel	2M
Resolution	1920×1080
Frame rate	60fps
Output	HDMI
Power supply	power adapter and 220V, 50/60Hz**
Dimension (L×W×H)	570×300×430mm
Weight	6.5kg

Add "-U**" on code No. when power supply is 110V, 50/60Hz

STANDARD DELIVERY

Main unit	1 pc
0.5X camera adapter	1 pc
1X auxiliary objective	1 pc
Calibration plate	1 pc
16G USB flash disk	1 pc
White/black plate	1 pc
Mouse	1 pc
HDMI cable	1 pc
Power adapter	2 pcs

MEASURING ACCURACY

Magnification	Measuring accuracy
15X	±8μm
30X	±6μm
50X	±6μm
80X	±4μm
100X	±4μm
>100X	±4μm

MAGNIFICATION, FOCUS DISTANCE AND VIEW FIELD

Auxiliary Objective	Specification	Camera adapter	
		0.5X (included)	1X (optional)
1X (included)	Magnification	15~100X	30~200X
	Focus distance	70±2mm	70±2mm
	View filed	16×11~2.5×1.6mm	7.8×5.3~1.2×0.8mm
2X (optional)	Magnification	30~200X	60~400X
	Focus distance	29±2mm	29±2mm
	View field	7.8×5.3~1.2×0.8mm	3.8×2.7~0.6×0.4mm

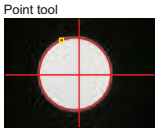
OPTIONAL ACCESSORY

1X camera adapter	ISM-DL-CA1X
2X auxiliary objective	ISM-DL-OB2X
X-Y glass stage (travel: 74×60mm)	ISM-DL-STAGE

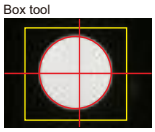
SOFTWARE

- **Language**: English
- **Output to Excel**
- **Edge-detection:**

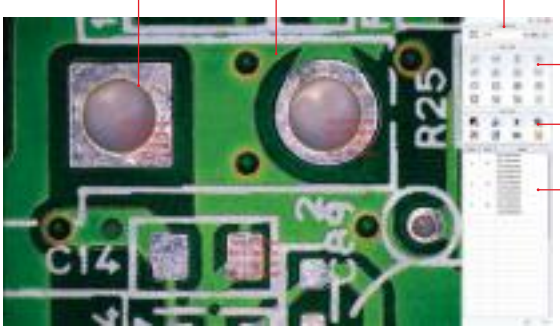
Point tool



Box tool



Click tool



- **Measurement tools:**

measure length of line or distance between two points

measure length of line or distance between two points in horizontal direction

measure length of line or distance between two points in vertical direction

measure angle from horizontal line

measure angle from vertical line

measure angle of two lines

measure distance between two parallel lines

measure distance between three parallel lines

measure distance between multiple parallel lines

measure distance between point and line

measure radius, length and angle of arc

measure girth and area of polygon

measure radius, diameter, girth and area of circle with three points

measure radius, diameter, girth and area concentric of circles

measure length, width, girth and area of rectangle

measure minimum distance between point and circle

measure distance between point and center of circle

measure maximum distance between point and circle

measure minimum distance between line and circle

measure distance between line and center of circle

measure maximum distance between line and circle

measure minimum distance between two circles

measure center distance between two circles

measure maximum distance between two circles

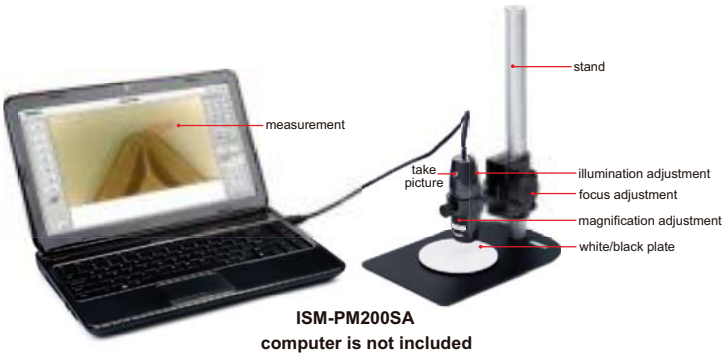
add text

measure radius, diameter, girth and area of circle with two points

cross hair

DIGITAL MEASURING MICROSCOPES

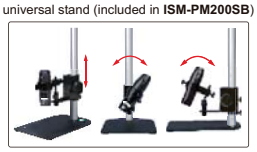
VIDEO



ISM-PM200SA
computer is not included

- Can take pictures and videos
- Supplied with software

universal stand (included in **ISM-PM200SB**)



SPECIFICATION

Code	ISM-PM200SA	ISM-PM200SB
Magnification	10X~200X	
Focus distance	short focus distance	
Stand	standard	universal
Focus support	included	
Calibration rule	graduation 0.1 and 1mm	
Pixel	2M (resolution: 1600×1200)	
Ilumination	built-in adjustable LED	
Power supply	USB 2.0 cable (voltage required: 5±0.1V)	

software CD (included)

filter (**optional**)

MAGNIFICATION, FOCUS DISTANCE, VIEW FIELD AND ACCURACY

Magnification	Focus distance	View field	Accuracy
50X	21mm	8.1×6.4mm	30μm
100X	13mm	3.9×3.1mm	15μm
150X	16mm	2.6×2.1mm	10μm
200X	19mm	1.8×1.5mm	8μm

OPTIONAL ACCESSORY

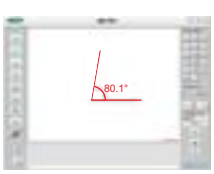
Green filter	ISM-PM-GREEN
Yellow filter	ISM-PM-YELLOW
Blue filter	ISM-PM-BLUE

SOFTWARE

- **Language:** English, Japanese, Korean, German, Turkey, Portuguese, Chinese
- **Operation system:** Windows 7/8/XP/Vista
- **Measurement tools:**
  - measure length of line or distance between two points
  - measure distance between point and line
  - measure distance between two parallel lines
  - measure length of continuous line
  - measure area of rectangle
  - measure radius, girth and area of circle
  - measure radius, length and angle of arc
  - measure distance between two circles
  - measure angle with three points
  - measure angle with two lines
  - add text
  - add number with circle
- **Edge detection measurement tools:**
  - detect line automatically, and calculate length
  - detect arc automatically, and calculate radius, angle and arc length
  - detect two lines automatically, and calculate angle
  - detect circle automatically, and calculate radius, girth and area
  - detect two parallel lines automatically, and calculate distance

- **Comparison tools:**
  Create line, angle or circle with desired size, to compare with workpieces.

create line | create angle | create circle with tolerance

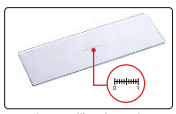


- **Data export to CAD or Excel:**

WiFi DIGITAL MEASURING MICROSCOPE
CODE ISM-WF200

VIDEO

plastic calibration rule
(graduation 1mm, included)


glass calibration rule
(graduation 0.1mm, included)

software CD
(included)

connected to iPad by WiFi

connected to Android device by WiFi

connected to computer by WiFi

connected to computer by USB cable

- Maximum working distance is 5m under WiFi mode
- Can be connected to multiple iPads, Android devices or computers at the same time under WiFi mode
- Take pictures and videos
- Supplied with software

stand (code **ISM-PM-STAND**, **optional**)

filter (**optional**)

SPECIFICATION

Magnification	10X~200X
Pixel	1.3M (resolution: 1280x1024)
Illumination	built-in adjustable LED
Power supply	built-in rechargeable battery

STANDARD DELIVERY

Microscope	1 pc
Base support	1 pc
Focus support ring for 80X/150X	1 pc
Focus support ring for 60X/200X	1 pc
Glass calibration rule (graduation 0.1mm)	1 pc
Plastic calibration rule (graduation 1mm)	1 pc
USB cable and software	1 pc
AC/DC adapter	1 pc

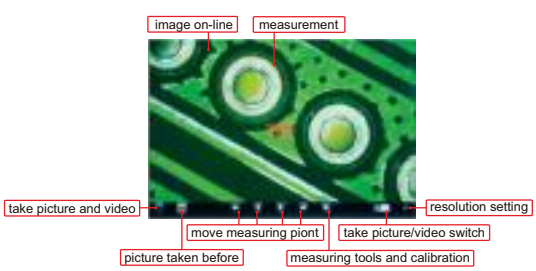
OPTIONAL ACCESSORY

Stand	**ISM-PM-STAND**
Green filter	**ISM-PM-GREEN**
Yellow filter	**ISM-PM-YELLOW**
Blue filter	**ISM-PM-BLUE**

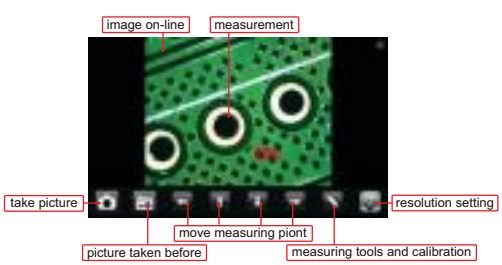
MAGNIFICATION, FOCUS DISTANCE, VIEW FIELD AND ACCURACY

Magnification	Focus distance	View field	Accuracy
50X	21mm	8.1×6.4mm	30μm
100X	13mm	3.9×3.1mm	15μm
150X	16mm	2.6×2.1mm	10μm
200X	19mm	1.8×1.5mm	8μm

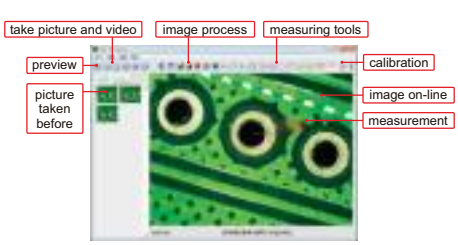
❶ Software ISM-PAD (for iPad by WiFi)



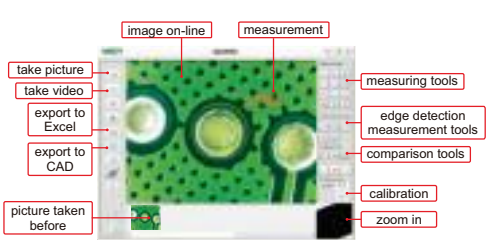
❷ Software ISM-APK (for Android devices by WiFi)



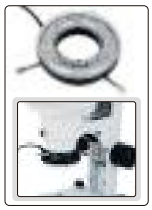
❸ Software ISM-WF Partner (for computer by WiFi)



❹ Software ISM-PRO (for computer by USB cable)



ZOOM STEREO MICROSCOPE
CODE ISM-ZS30



LED ring light(**optional**)

SPECIFICATION

Optical tube	binocular
Eyepiece (wide field)	10X (view field: Ø20mm)
Objective	1X~4.5X (zoom)
Zoom ratio	1:4.5
Pupil distance	55~75mm (adjustable)
Diopter adjustment	±5 diopter (two eyepieces)
Working distance of objective	97mm
Max. workpiece height	147mm
Illumination	adjustable reflected and transmitted LED light
Power supply	110/220V, 50/60Hz
Dimension (L×W×H)	260×190×400mm
Weight	4.3kg

STANDARD DELIVERY

Main unit	1 pc
WF 10X eyepiece	2 pcs
Ø95mm glass plate	1 pc
Ø95mm white/black plate	1 pc
Anti-dust cover	1 pc

OPTIONAL ACCESSORY

Auxiliary objective	0.5X	ISM-ZS30-OB05X
	0.63X	ISM-ZS30-OB06X
	0.75X	ISM-ZS30-OB07X
	2X	ISM-ZS30-OB2X
Eyepiece	10X dividing eyepiece (graduation 0.1mm/div.)	ISM-ZS30-EPD10X
	WF15X (view field: Ø16mm)	ISM-ZS50-EP15X
	WF20X (view field: Ø12mm)	ISM-ZS50-EP20X
Digital camera		ISM-D500
LED ring light		ISM-ZS-RL

ROUGHNESS TESTER
CODE ISR-C002

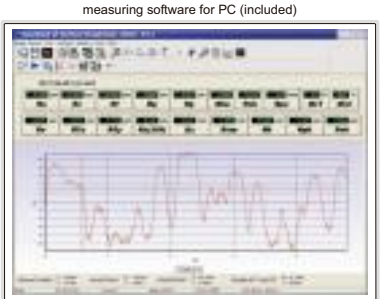
CAN BE CONTROLLED BY COMPUTER

DATA OUTPUT

VIDEO

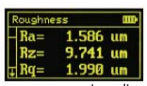
- 21 roughness parameters
- Connected with printer via bluetooth
- Display roughness values, profile and curve
- Memory of maximum 100 results
- Automatic power off

measuring software for PC (included)

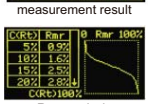


control the roughness tester by computer, display roughness values, profile and curve

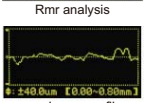
screen display



measurement result



Rmr analysis



roughness profile

light duty test stand (**optional**)

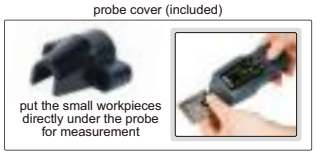
the maximum workpiece height is 220mm

heavy duty test stand (**optional**)

the maximum workpiece height is 310mm

adjustable stand (included)

probe cover (included)



put the small workpieces directly under the probe for measurement

software CD (included)

wireless printer (**optional**)

SPECIFICATION

Parameters		Ra, Rz, Rq, Rv, Rp, RS, R3z, R3y, Rt, Rz (JIS), Rk, Rku, Rsm, Rpc, Rpk, Rvk, Rsk, Mr1, Mr2, Ry (JIS), Rmax
Range		160μm
Accuracy		±10%
Resolution (Ra)		0.001μm
Probe	type	inductive
	stylus radius/angle	5μm/90°
	stylus material	diamond
Measuring force		4mN
Measuring unit		μm/μin
Cut off		0.25/0.8/2.5mm
Number of cut-offs		1 to 5
Traverse speed		0.5mm/s, 1mm/s
Memory		100 measurement results
Output		USB and bluetooth
Power		built-in rechargeable battery
Dimension (L×W×H)		141×55×40mm
Weight		400g

STANDARD DELIVERY

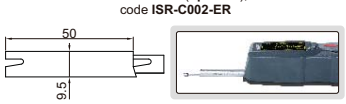
Main unit	1 pc
Standard probe	1 pc
Calibration block and support	1 pc of each
Adjustable stand	1 pc
Probe cover	1 pc
USB cable and software for PC	1 pc
AC/DC adapter	1 pc

OPTIONAL ACCESSORY

Extension rod	ISR-C002-ER
Transverse rod	ISR-C002-TR
Deep groove probe	ISR-C002-DGP
Small hole probe	ISR-C002-SBP
Light duty test stand	ISR-C002-STAND1
Heavy duty test stand	ISR-C002-STAND
Wireless printer	ISR-C002-PRINTER

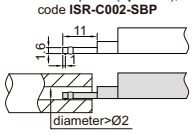
Unit: mm

extension rod (**optional**), code **ISR-C002-ER**

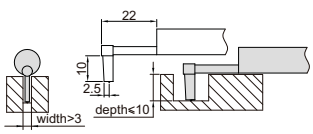


transverse rod (**optional**), code **ISR-C002-TR**

small hole probe (**optional**), code **ISR-C002-SBP**



deep groove probe (**optional**), code **ISR-C002-DGP**



ROUGHNESS TESTER
CODE ISR-C003

calibration block
(included)

VIDEO

STANDARD DELIVERY

Main unit	1 pc
Calibration block	1 pc
AC/DC adapter	1 pc

- Unit: μm, μin
- Automatic power off

SPECIFICATION

Parameters		Ra, Rz, Rq, Rt
Range		Ra, Rq: 0.05~15μm Rz, Rt: 0.1~50μm
Accuracy		±10%
Resolution (Ra)		0.01μm
Probe	type	piezoelectric
	stylus radius/angle	10μm/90°
	stylus material	diamond
Measuring force		5mN
Measuring unit		μm/μin
Cut off		0.25/0.8/2.5mm
Evaluation length		1.25mm for cut off 0.25mm 4mm for cut off 0.8mm 5mm for cut off 2.5mm
Traverse speed		0.75mm/s
Power		built-in rechargeable battery
Dimension (L×W×H)		106×70×24mm
Weight		200g

SURFACE ROUGHNESS SPECIMEN SET
CODE ISR-CS2

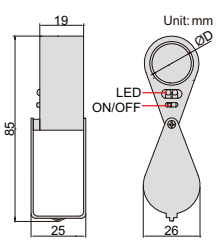
ATTENTION: PLEASE APPLY ANTI-RUST OIL AFTER USE

- For checking, identifying and specifying the roughness by symbol
- Made of carbon steel

Machining method	Roughness (Ra)	Roughness (Rz)	Quantity
Horizontal milling	0.4, 0.8, 1.6, 3.2, 6.3, 12.5μm 16, 32, 63, 125, 250, 500μin	1.6, 3.2, 6.3, 12.5, 25, 50μm	6 pcs
Vertical milling	0.4, 0.8, 1.6, 3.2, 6.3, 12.5μm 16, 32, 63, 125, 250, 500μin	1.6, 3.2, 6.3, 12.5, 25, 50μm	6 pcs
Turning	0.4, 0.8, 1.6, 3.2, 6.3, 12.5μm 16, 32, 63, 125, 250, 500μin	1.6, 3.2, 6.3, 12.5, 25, 50μm	6 pcs
Plain grinding	0.05, 0.1, 0.2, 0.4, 0.8, 1.6μm 2, 4, 8, 16, 32, 63μin	0.2, 0.4, 0.8, 1.6, 3.2, 6.3μm	6 pcs
Flat lapping	0.05, 0.1μm 2, 4μin	0.2, 0.4μm	2 pcs
External grinding	0.2, 0.4, 0.8, 1.6μm 8, 16, 32, 63μin	0.8, 1.6, 3.2, 6.3μm	4 pcs

FOLDING MAGNIFIER WITH ILLUMINATION

7515-10



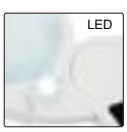
- Glass lens
- Powered by 3xLR927 batteries (included)

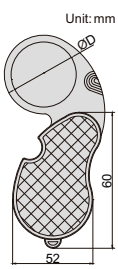
closed

Code	Magnification	Lens diameter (ØD)
7515-10	10X	Ø21mm

FOLDING MAGNIFIER WITH ILLUMINATION

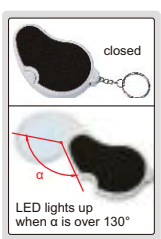
7514-1





- Plastic lens
- Powered by 2xCR1620 batteries (included)
- LED lights up automatically when α is over 130°

VIDEO



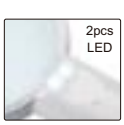
Code	Magnification	Lens diameter (ØD)
7514-1	2.5X	Ø45mm

MAGNIFIERS WITH ILLUMINATION

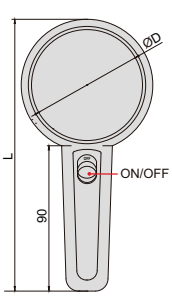
- Glass lens
- Powered by 3xAAA batteries (included)

(mm)

Code	Magnification	Lens diameter (ØD)	L
7513-2	2X	Ø75mm	170
7513-4	4X	Ø50mm	145



7513-2 7513-4



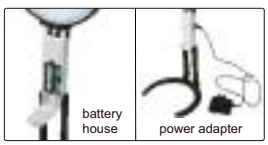
THREE WAYS MAGNIFIER WITH ILLUMINATION

- Plastic lens
- Powered by 2xAA batteries (included) or power adapter (110~240V, 50~60Hz)

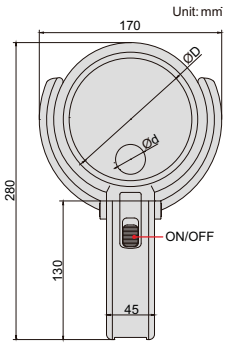
VIDEO

10pcs LED

three ways use



7512-1



Code	Magnification	Lens diameter (ØD)	Lens diameter (Ød)
7512-1	2X/4X	Ø120mm	Ø28mm

TABLE MAGNIFIER WITH ILLUMINATION CODE 7516-5D

60pcs LED

7516-5D

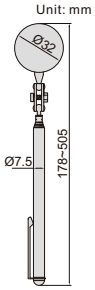
SPECIFICATION

Magnification	2.25X
Diopter	5D
Lens diameter	Ø122mm
Illumination	power: 7W, illuminance: 420lm
Power supply	100~240V, 50~60Hz

- LED illumination, working life 20000h

TELESCOPING INSPECTION MIRROR

7160-1



- Inspect hidden areas
- Rotation of the mirror: 360°
- Length of the handle is adjustable, the handle is made of brass and chrome plated

Code	Size of mirror	Length
7160-1	Ø32mm	178~505mm

PORTABLE HARDNESS TESTER CODE ISH-PHB

INSPECTION CERTIFICATE

VIDEO

hardness test block D (included)

small support ring (included)

wireless printer (**optional**)

- Based on Leeb (HLD), converted to Vickers (HV), Brinell (HB), Rockwell (HRC and HRB), Shore (HS) and tensile strength (MPa)
- Memory of 99 measurement values for browsing
- Set measurement times (1~9) to have average value
- Connected with printer via bluetooth
- Automatic power off
- According to ASTM A 956

SPECIFICATION

Min. reading	1HLD, 1HV, 1HB, 0.1HRC, 0.1HRB, 1HS, 1MPa	
Accuracy	±6HLD (when HLD=800)	
Display	Leeb (HLD), converted hardness, material, impact direction, test times, average value, date	
Output	bluetooth	
Applicable workpiece	minimum weight	5kg
		2kg (on solid support)
		0.1kg(coupled on plate)
	minimum thickness: 5mm	
	minimum radius of curved surface: 30mm	
	maximum roughness (Ra): 1.6μm	
Power supply	3×AAA batteries	
Dimension	150×84×28mm	
Weight	200g	

STANDARD DELIVERY

Main unit	1 pc
Impact device D	1 pc
Hardness test block D	1 pc
Small support ring	1 pc
Cleaning brush	1 pc

OPTIONAL ACCESSORY

Wireless printer	ISH-DS-PRINTER
Couplant	ISH-COUPLANT
Support rings	see details
Hardness test block D	ISH-BHLD

APPLICABLE MATERIAL AND HARDNESS RANGE FOR IMPACT DEVICE D

Material	HLD	HV	HB	HRC	HRB	HS	Tensile strength (MPa)
Steel & cast steel	300-900	81-955	81-654	20-68	38-100	32-100	375-2639
Tool steel	300-840	80-898		20-67			
Stainless steel	300-800	85-802	85-655		46-101		
Cast iron	360-650		93-334				
Cast aluminum alloy	170-570		19-164		23-84		
Brass	200-550		40-173		13-95		
Bronze	300-700		60-290				
Copper	200-690		45-315				

COATING THICKNESS GAGE
CODE 9501-1200

FOR MAGNETIC AND NON-MAGNETIC SUBSTRATES

DATA OUTPUT

VIDEO

- Magnetic induction probe (Fe) is to measure the thickness of non-magnetic coating on magnetic substrate
  Substrate: iron, steel, magnetic stainless steel (does not include non-magnetic stainless steel)
  Coating: zinc, copper, chrome, tin, plastic, powder, paint (nickel is not included)
- Eddy current probe (NFe) is to measure the thickness of non-conductive coating on non-magnetic substrate
  Substrate: copper, aluminum, zinc, non-magnetic stainless steel
  Coating: plastic, powder, paint, anodizing
- Low and high limits with judgement
- Automatic power off

SPECIFICATION

Probe type	Fe (included) magnetic induction probe	NFe (optional) eddy current probe	Fe90 (optional) magnetic induction probe for bores and grooves	Fe10 (optional) magnetic induction probe with big range
Measuring range	0~1250μm	0~1250μm	0~1250μm	500~10000μm
Accuracy	±(3%L+1)μm (range≤1250μm) ±(3%L+10)μm (range>1250μm) L is measuring thickness in μm			
Resolution	0.1μm (range<100μm)			
	1μm (range≥100μm)			
Measuring mode	continuous and single			
Minimum substrate thickness	0.5mm	0.3mm	0.5mm	2mm
Minimum measuring area	Ø7mm	Ø5mm	Ø7mm	Ø40mm
Minimum curvature radius of convex workpiece	1.5mm	3mm	- - -	10mm
Memory	500			
Power supply	2x1.5V AA batteries			
Dimension	128x68x32mm			
Weight	340g			

eddy current probe NFe (**optional**) with zero calibration block

magnetic induction probe (Fe90) for bores and grooves (**optional**)

zero calibration block for Fe (included)

calibration foils (included)

magnetic induction probe (Fe10) with big range (**optional**)

software CD (included)

STANDARD DELIVERY

Main unit	1 pc
Magnetic induction probe (Fe)	1 pc
Zero calibration block for Fe probe	1 pc
Calibration foils (50μm, 100μm, 250μm, 500μm, 1000μm)	1 set
1.5V AA battery	2 pcs
USB cable and software	1 pc

OPTIONAL ACCESSORY

Eddy current probe (NFe) with zero calibration block	9501-1200-NFE
Magnetic induction probe (Fe90) for bores and grooves	9501-1200-FE90
Magnetic induction probe (Fe10) with big range	9501-1200-FE10

ULTRASONIC THICKNESS GAGE (BASIC MODEL)
CODE ISU-100D

INSPECTION CERTIFICATE

VIDEO

ATTENTION: NOT SUITABLE FOR CASTING WORKPIECES

STANDARD DELIVERY

Main unit	1 pc
Transducer	1 pc
Couplant	1 bottle
Battery (AAA)	2 pcs

- Measure the thickness from one side of object, suitable for pipe, tank, etc.
- Applicable material: metal, plastic, glass, nylon, resin, ceramic, ice

SPECIFICATION

Measuring range		0.8~300mm
Resolution		0.01mm (range<100mm)
		0.1mm (range ≥ 100mm)
Accuracy		±0.04mm (range<10mm) ±(0.04+H/1000)mm (range 10~100mm) ±H/333mm (range≥100mm) H is the thickness to be measured in mm
Transducer	frequency	5MHz
	diameter (Ød)	10.8mm
Minimum size of pipe for measurement		20×1.2mm (diameter × wall thickness)
Applicable temperature		<60°C
Velocity		1000-9999m/s
Power supply		2×AAA batteries
Dimension		114×64×28mm
Weight		200g

PORTABLE REFRACTOMETER
CODE ISQ-RM30

SUITABLE FOR WATER BASED COOLANT

VIDEO

- Quickly measure the concentration of coolant
- Refer to the refraction factor of coolant, for example:
  the refraction factor of grinding emulsion is 2.1,
  the reading value is 6%, so the actual concentration is (2.1×6%)=12.6%

SPECIFICATION

Measuring range	0~32%
Graduation	0.2%
Dimension	27×40×160mm
Weight	175g

DIGITAL ANEMOMETER
CODE 9331-40

DATA OUTPUT

VIDEO

software (included), display measurement values and graph, save and output data

- Measure velocity, flow, temperature and relative humidity
- Velocity unit: m/s, km/h,mil/h, ft/m, ft/s, knots
- Flow unit: CMS (cubic meter per second), CMM (cubic meter per minute), CFM (cubic feet per minute)
- Temperature type: ambient, dew point, wet bulb
- Maximum and minimum modes
- Automatic power off

STANDARD DELIVERY

Main unit	1 pc
USB cable and software	1 pc
9V battery	1 pc

software CD (included)

SPECIFICATION

Measuring range	velocity	0.8~30m/s, 1.4~108km/h, 0.9~67.2mil/h, 1.3~98.5ft/s, 78~5900ft/m, 0.8~58.3knots
	flow	0~9999CMS, 0~99990CMM, 0~99990CFM
	temperature	-20~60°C/-4~140°F
	relative humidity	0~100%RH
Accuracy	velocity	±(2%+0.5) for m/s, km/h,mil/h, ft/s, knots ±(2%+50) for ft/m
	temperature	±1.5°C/±2.7°F
	relative humidity	±3% (20~80%RH), ±5% (<20%RH or >80%RH)
Resolution	velocity	0.01m/s, 0.01km/h, 0.01mil/h, 0.01ft/s, 1ft/m, 0.01knots
	flow	0.01CMS, 0.1CMM, 0.1CFM
	temperature	0.1°C/0.1°F
	relative humidity	0.1%RH
Flowing area range		0~9.999m²/0~9.999ft²
Sampling time		0.4s
Maximum working height		2000m
Output		USB
Power supply		9V battery
Dimension		165×85×38mm
Weight		200g

DIGITAL MOISTURE METER
CODE 9341-50

cover (included)

- Suitable for wood, smooth cement, hard gypsum, mixed mortar, brick, etc.
- Measure moisture, temperature and relative humidity
- Temperature type: ambient, dew point, wet bulb
- Maximum and minimum modes
- Automatic power off

STANDARD DELIVERY

Main unit	1 pc
Battery (AAA)	2 pcs

VIDEO

SPECIFICATION

Measuring depth		0~50mm
Measuring range	Moisture	0~60%
	temperature	-10~50°C/14~122°F
	relative humidity	0~100%RH
Accuracy	Moisture	±2%
	temperature	±2%
	relative humidity	±5%RH
Resolution	Moisture	0.1%
	temperature	0.1°C/0.1°F
	relative humidity	0.1%RH
Sampling time		0.5s for moisture
		1s for temperature and relative humidity
Power supply		2×AAA batteries
Dimension		130×56×29mm
Weight		206g

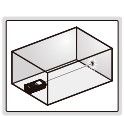
LASER DISTANCE METER
CODE 9561-80

VIDEO

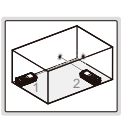
- Large display with backlight
- Unit: m, ft, in
- Distance, area, volume and height measurement
- Continuos measuring mode to track maximum and minimum value
- Memory of 99 measurement values
- Automatic power off: laser 20s, main unit 150s

SPECIFICATION

Measuring range	0.05~80m
Accuracy	±3mm
Resolution	1mm, 10mm, 0.1", 0.01ft
Measuring speed	0.5 second
Laser type	635nm, Class II, <1mW
Power supply	3×AAA batteries, for 4000 measurements
Dimension (L×W×H)	120×60×28mm
Weight	175g

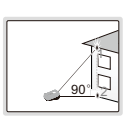


distance measurement



area measurement

volume measurement



height measurement

STANDARD DELIVERY

Main unit	1 pc
Battery (AAA)	3 pcs

CONTACT DIGITAL TACHOMETER
CODE 9222-199

- Unit: RPM, m/min, m/sec, ft/min, ft/sec, in/min
- Maximum and minimum modes
- Memory 100 measurement values
- Automatic power off

VIDEO

cone cavity head (included)

cone head (included)

wheel with 0.1m perimeter (included)

wheel with 6" perimeter (included)

Extension rod (included)

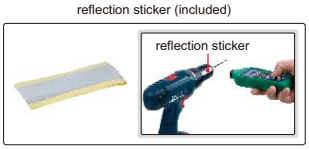
SPECIFICATION

Measuring range	50~19999RPM
Accuracy	± (0.03%+2) RPM
Resolution	0.01RPM (range 50~99.99RPM)
	0.1RPM (range 100~9999.9RPM)
	1RPM (range 10000~19999RPM)
Power supply	4×AAA batteries
Dimension	183×60×27mm
Weight	122g

STANDARD DELIVERY

Main unit	1 pc
Wheel with 0.1m perimeter	1 pc
Wheel with 6" perimeter	1 pc
Cone cavity head	1 pc
Cone head	1 pc
Extension rod	1 pc
Battery (AAA)	4 pcs

NON-CONTACT DIGITAL TACHOMETER
CODE 9221-999



VIDEO

- Maximum and minimum modes
- Memory 100 measurement values
- Automatic power off

STANDARD DELIVERY

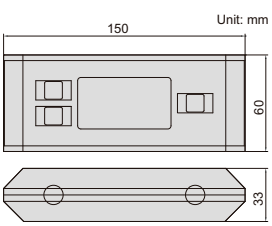
Main unit	1 pc
Reflection sticker	1 roll
Battery (AAA)	4 pcs

SPECIFICATION

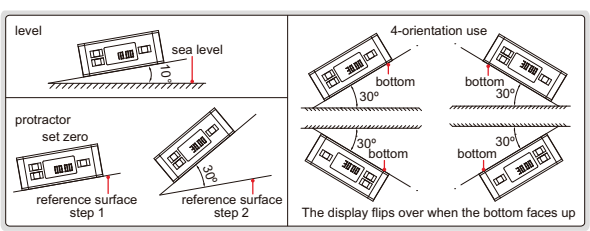
Measuring range	50~99999RPM
Accuracy	±(0.03%+2) RPM
Resolution	0.01RPM (range 50~99.99RPM)
	0.1RPM (range 100~9999.9RPM)
	1RPM (range 10000~99999RPM)
Measuring distance	50~250mm
Power supply	4×AAA batteries
Dimension	155×60×27mm
Weight	118g

DIGITAL LEVEL AND PROTRACTOR

IP54 WATERPROOF | ABSOLUTE LEVEL | BACKLIGHT | BUZZER ALARM AT 0° AND 90°



2179-360

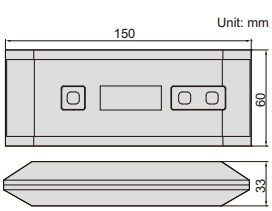


- IP54 dust/waterproof
- Aluminum frame
- Magnetic bottom with V-groove for shafts
- The sea level is permanently set inside the chip, zero setting is not needed when batteries are replaced
- Buttons: ON/OFF, absolute and incremental measurement, keep the reading, buzzer alarm, unit(mm/m, %, in/ft) , backlight
- Two AAA batteries
- Automatic power off

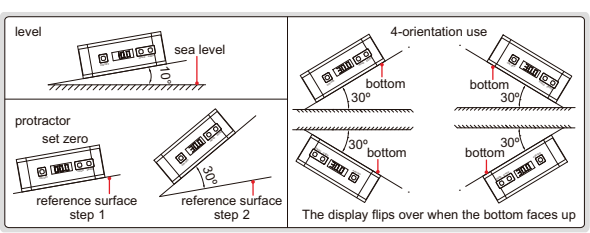
VIDEO

Code	Range	Resolution	Accuracy
2179-360	0-360° (90°x4)	0.05° (=0.873mm/m)	at 0° and 90°: ±0.1°; others: ±0.2°

DIGITAL LEVEL AND PROTRACTOR



2173-360



- Aluminum frame
- Magnetic bottom with V-groove for shafts
- Zero setting can be made on any plain surfaces
- Buttons: ON/OFF, ZERO, HOLD (keep the reading)
- CR2032 battery, automatic power off

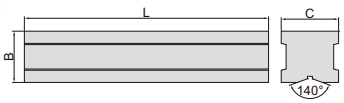
Code	Range	Resolution	Accuracy
2173-360	0-360° (90°x4)	0.1° (= 1.745 mm/m)	at 0° and 90°: ±0.1°; others: ±0.2°

BLOCK LEVELS

ATTENTION: BASIC MODEL

VIDEO

4903-200A



- V-groove on bottom for shafts (shafts dia. 15~70mm)
- With transverse vial
- Supplied with adjusting wrench

(mm)

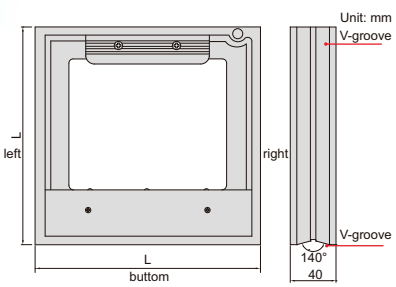
Code	Length (L)	Sensitivity	B	C
4903-150A	150mm	0.02mm/m (=0.001°)	40	45
4903-200A	200mm	0.02mm/m (=0.001°)	42	47
4903-300A	300mm	0.02mm/m (=0.001°)	45	50

FRAME LEVEL

ATTENTION: BASIC MODEL

4902-200

- V-groove on bottom and left for shafts (shafts dia. 15~70mm)
- With transverse vial
- Supplied with adjusting wrench

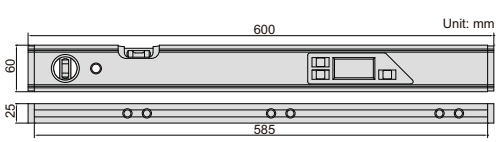


VIDEO

Code	Sensitivity	Size (LxL)
4902-200	0.02mm/m (=0.001°)	200x200mm

DIGITAL LEVEL

4910-600



BACKLIGHT

ABSOLUTE LEVEL

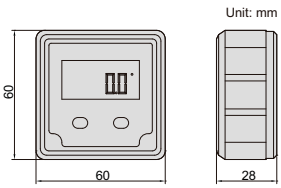
BUZZER ALARM AT 0° AND 90°

- With transverse and longitudinal vials
- Used as level and protractor
- Aluminum frame
- Magnetic bottom
- The sea level is permanently set inside the chip, zero setting is not needed when batteries are replaced
- Buttons: ON/OFF, absolute and incremental measurement, keep the reading, buzzer alarm, unit (mm/m, %, in/ft) conversion, backlight
- The display flips over when the bottom faces up
- Two AAA batteries
- Automatic power off

Code	Range	Resolution	Accuracy
4910-600	0-360°(90°x4)	0.1°(=1.745 mm/m)	at 0° and 90°: ±0.1°, others: ±0.2°

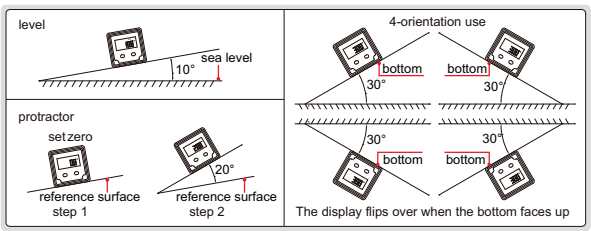
DIGITAL LEVEL AND PROTRACTOR

BACKLIGHT | ABSOLUTE LEVEL | MAGNETIC BOTTOM | DISPLAY FLIPS OVER WHEN THE BOTTOM FACES UP



2170-1

VIDEO



- Aluminum frame
- Magnetic bottom
- The display flips over when the bottomfaces up
- The backlight is on automatically when in use, and automatically off in 15 minutes after use
- The sea level is permanently set inside the chip, zero setting is not needed when battery is replaced
- Buttons: ON/OFF, ZERO, absolute and incremental measurement
- One AAA battery
- Automatic power off in 5 minutes

Code	Range	Resolution	Accuracy
2170-1	4x90°	0.1° (= 1.745 mm/m)	at 0°and 90°: ±0.1°; others: ±0.2°

FORCE GAGES

VIDEO

- Push and pull test
- Peak(max.) or tracking mode

ISF-F500

OPTIONAL ACCESSORY

Test stand	ISF-MT500

flat push tip (included)

V type push tip (included)

knife-edge push tip (included)

point push tip (included)

pull clamp (included)

extension rod (included)

SPECIFICATION

Code		ISF-F50	ISF-F100	ISF-F200	ISF-F300	ISF-F500
Capacity	N	50	100	200	300	500
	kgf	5	10	20	30	50
Graduation	N	0.25	0.5	1	2	2.5
Accuracy		±1% (of load capacity)				

STANDARD DELIVERY

Main unit	1 pc
Push tip	4 pcs (flat, V type, knife-edge, point)
Pull clamp	1 pc
Extension rod	1 pc

TORQUE WRENCHES

ATTENTION: CLOCKWISE OPERATION ONLY

INSPECTION CERTIFICATE

VIDEO

IST-9WM335

- According to DIN ISO 6789, ASME B107.300
- All-metal construction, sturdy and durable

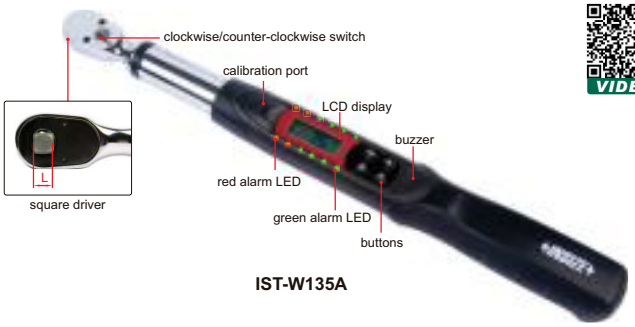
SPECIFICATION

Code	IST-9WM30	IST-9WM60	IST-9WM100	IST-9WM200	IST-9WM335	IST-9WM500	IST-9WM800	IST-9WM1000
Range (clockwise)	6~30N.m	10~60N.m	20~100N.m	40~200N.m	65~335N.m	100~500N.m	160~800N.m	200~1000N.m
Accuracy	±4%	±4%	±4%	±4%	±4%	±4%	±4%	±4%
Graduation	0.1N.m	0.25N.m	0.5N.m	1N.m	1N.m	2.5N.m	4N.m	5N.m
Square driver (D)	3/8"	3/8"	1/2"	1/2"	1/2"	3/4"	3/4"	3/4"
Length	318mm	388mm	443mm	468mm	528mm	855mm	1055mm	1055mm
Weight	820g	960g	1040g	1160g	1300g	5000g	5900g	5900g

DIGITAL TORQUE WRENCHES

INSPECTION CERTIFICATE

VIDEO



IST-W135A

- Clockwise and counter-clockwise operation
- Unit: N.m, in.lb, ft.lb, kg.cm
- Peak and track working mode
- Target torque value can be set, with audible and visible alarm:
  - Green LED light on and buzzer sounds when torque value is 90%~100% of target torque
  - Both green and red LED light on and buzzer sounds when target torque value is reached
- Power off automatically in 5 minutes without any operations
- Non-slip grip handle
- With damp record
- With overload record (once the torque reaches 110% of the maximum range)

OPTIONAL ACCURACY FOR 6~850N.m:
CLOCKWISE: ±1%
COUNTER-CLOCKWISE: ±2%

OPTIONAL ACCESSORY

Calibration cable	IST-W-CABLE

SPECIFICHE

Code	Range	Accuracy	Resolution	Square driver (L)	Power supply	Length	Weight
IST-W30A	6~30N.m	clockwise: ±2% counter-clockwise: ±3%	0.01N.m	1/4"	2×AA batteries	390mm	830g
IST-W135A	27~135N.m		0.1N.m	3/8"		415mm	950g
IST-W200A	40~200N.m		0.1N.m	1/2"		530mm	1.4kg
IST-W340A	68~340N.m		0.1N.m	1/2"		650mm	1.6kg
IST-W500A	100~500N.m	clockwise: ±2.5% counter-clockwise: ±3.5%	0.1N.m	3/4"		950mm	2.1kg
IST-W850A	170~850N.m		0.1N.m	3/4"		1220mm	2.55kg

DIAL TORQUE WRENCHES

VIDEO

INSPECTION CERTIFICATE

IST-DW70

- Clockwise and counter-clockwise operation
- According to DIN ISO 6789, ASME B107.300

SPECIFICATION

Code	IST-DW3D5	IST-DW9	IST-DW18	IST-DW35	IST-DW70	IST-DW140	IST-DW240	IST-DW350
Range	0.7~3.5N.m 6~30in.lb	1.8~9N.m 15~75in.lb	3.6~18N.m 30~150in.lb	7~35N.m 60~300in.lb	14~70N.m 120~600in.lb	28~140N.m 20~100ft.lb	48~240N.m 35~175ft.lb	70~350N.m 50~250ft.lb
Accuracy	±3%	±3%	±3%	±3%	±3%	±3%	±3%	±3%
Graduation	0.05N.m 0.5in.lb	0.1N.m 1in.lb	0.2N.m 2in.lb	0.5N.m 5in.lb	1N.m 10in.lb	2N.m 1ft.lb	3N.m 2.5ft.lb	2.5N.m 2.5ft.lb
Square driver (D)	1/4"	1/4"	3/8"	3/8"	3/8"	1/2"	1/2"	1/2"
Length	254mm	254mm	254mm	254mm	378mm	546mm	546mm	546mm
Weight	480g	480g	480g	480g	820g	1300g	1300g	1300g

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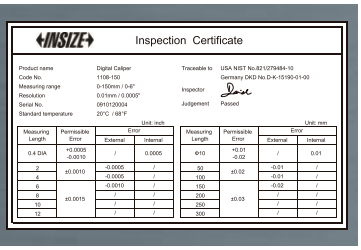
INSIZE Inspection Certificate

Product name: Digital Caliper
Code No.: 1108-150
Measuring range: 0-150mm / 0-6"
Resolution: 0.01mm / 0.0005"
Serial No.: 0601023004
Standard temperature: 20°C / 68°F
Traceable to: USA NIST No.821/279484-10; Germany DKD No.D-K-15190-01-00
Inspector: Jose
Judgement: Passed

Unit: inch

Measuring Length	Permissible Error	Error External	Error Internal
0.4 DIA.	+0.0005 -0.0010	/	0.0005
2	±0.0010	-0.0005	/
4		-0.0005	/
6		-0.0010	/
8	±0.0015	/	/
10		/	/
12		/	/

Unit: mm

Measuring Length	Permissible Error	Error External	Error Internal
Φ10	+0.01 -0.02	/	0.01
50	±0.02	-0.01	/
100		-0.01	/
150		-0.02	/
200	±0.03	/	/
250		/	/
300		/	/

VIDEO

Please scan QR code to watch the operation video of the products

Obtain information about our complete line of product from our website or general catalogue

INSIZE
Precision Instrument

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Printed on February 10th, 2018