



2017
2018

MEASURING INSTRUMENTS

CATALOGUE NO. EU256



All products in this catalogue are usually available from stock of INSIZE Europe at Spain (subject to our final confirmation)

WATERPROOF DIGITAL CALIPERS

**INSPECTION
CERTIFICATE**
TRACEABLE TO DKD

ATTENTION: NO
DATA OUTPUT

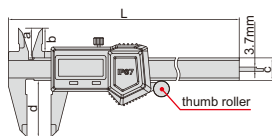
IP67
WATERPROOF

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



1118-150BW

- 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



Without thumb roller

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

With thumb roller

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 CALIPERS (STANDARD MODEL)

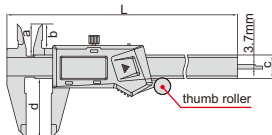
**INSPECTION
CERTIFICATE**
TRACEABLE TO DKD

DATA
OUTPUT



1108-150W

- 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



Without thumb roller

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

With thumb roller

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	16	60

*Supplied with manufacturer inspection certificate traceable to DKD Germany

DIGITAL CALIPERS

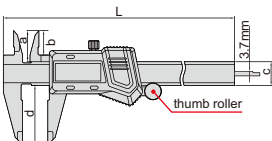
**INSPECTION
CERTIFICATE**
TRACEABLE TO DKD

ATTENTION: NO
DATA OUTPUT



1114-150AW

- 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



Without thumb roller

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

With thumb roller

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

*Supplied with manufacturer inspection certificate traceable to DKD Germany

METRIC DIGITAL CALIPERS

DATA
OUTPUT

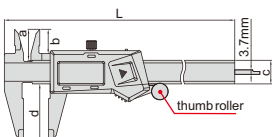
LOCK READING WITH
"HOLD" BUTTON

**INSPECTION
CERTIFICATE**
TRACEABLE TO DKD



1109-150W

- Resolution: 0.01mm
- Buttons: on/off, zero, hold
- 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	Thumb roller	L	a	b	c	d
1109-150W *	0-150mm	±0.03mm	without	236	21	16	16	40
1109-200W *	0-200mm	±0.03mm	without	286	24	19	16	50
1109-300W *	0-300mm	±0.03mm	without	400	25	20.5	16	60
1109-150 *	0-150mm	±0.03mm	with	236	21	16	16	40
1109-200 *	0-200mm	±0.03mm	with	286	24	19	16	50
1109-300 *	0-300mm	±0.03mm	with	400	25	20.5	16	60

*Supplied with manufacturer inspection certificate traceable to DKD Germany

DIGITAL CALIPERS WITH CARBIDE TIPPED JAWS

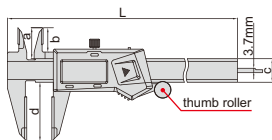
INSPECTION
CERTIFICATE
TRACEABLE TO DKD

DATA
OUTPUT



1110-150AW

- 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



Without thumb roller

(mm)

Code	Range	Accuracy	L	a	b	c	d
1110-150AW*	0-150mm/0-6"	±0.03mm	236	21	16	16	40
1110-200AW*	0-200mm/0-8"	±0.03mm	286	24	19	16	50
1110-300AW*	0-300mm/0-12"	±0.03mm	400	25	20.5	16	60

With thumb roller

(mm)

Code	Range	Accuracy	L	a	b	c	d
1110-150A*	0-150mm/0-6"	±0.03mm	236	21	16	16	40
1110-200A*	0-200mm/0-8"	±0.03mm	286	24	19	16	50
1110-300A*	0-300mm/0-12"	±0.03mm	400	25	20.5	16	60

*Supplied with manufacturer inspection certificate traceable to DKD Germany

DIGITAL CALIPER WITH CERAMIC TIPPED JAWS

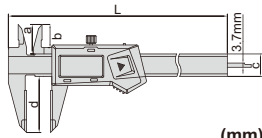
DATA
OUTPUT

INSPECTION
CERTIFICATE
TRACEABLE TO DKD



1193-150W

- 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
- Made of stainless steel
- Meet DIN862
- Optional accessory: data output cable



Code	Range	Accuracy	L	a	b	c	d
1193-150W*	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

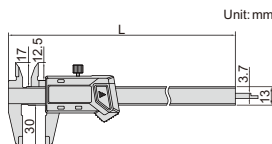
MINI DIGITAL CALIPERS

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	L
1111-75A	0-75mm/0-3"	±0.02mm	144mm
1111-100A	0-100mm/0-4"	±0.02mm	170mm

DIGITAL CALIPERS WITH ROUND DEPTH BAR

DATA
OUTPUT

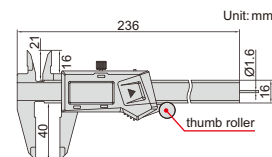
INSPECTION
CERTIFICATE
TRACEABLE TO DKD



1119-150W



- 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	Thumb roller
1119-150W*	0-150mm/0-6"	±0.03mm	without
1119-150*	0-150mm/0-6"	±0.03mm	with

*Supplied with manufacturer inspection certificate traceable to DKD Germany

LEFT HAND DIGITAL CALIPERS

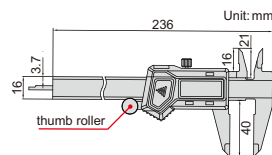
INSPECTION
CERTIFICATE
TRACEABLE TO DKD

DATA
OUTPUT



1130-150W

- 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	Thumb roller
1130-150W*	0-150mm/0-6"	±0.03mm	without
1130-150*	0-150mm/0-6"	±0.03mm	with

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

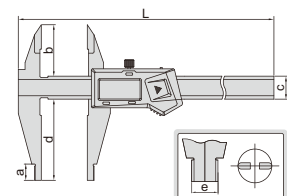
DIGITAL CALIPERS

DATA
OUTPUT



1171-300

- 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



Code	Range	Accuracy	L	a	b	c	d	e
1171-200	0-200mm/0-8"	±0.03mm	320	12	38	17	60	10
1171-306	0-300mm/0-12"	±0.04mm	420	12	38	17	60	10
1171-300	0-300mm/0-12"	±0.04mm	420	12	38	17	90	10

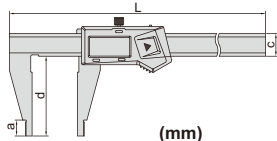
DIGITAL CALIPERS

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



Code	Range	Accuracy	L	a	c	d	e
1170-200	0-200mm/0-8"	±0.03mm	320	12	17	60	10
1170-306	0-300mm/0-12"	±0.04mm	420	12	17	60	10
1170-300	0-300mm/0-12"	±0.04mm	420	12	17	90	10

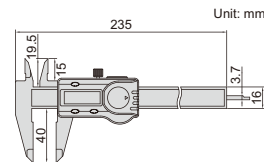
PLASTIC DIGITAL CALIPER

ATTENTION:
NO DATA OUTPUT



1139-150

- Made of hard plastic, non-magnetic and non-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

DIAL CALIPERS

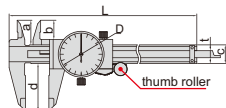
INSPECTION
CERTIFICATE
TRACEABLE TO DKD

SHOCK
PROOF



1312-150A

- Shockproof dial indicator
- Made of stainless steel



Dial indicator graduation: 0.02mm

Code	Range	Accuracy	Thumb roller	L	a	b	c	d	D	t
1312-150AW *	0-150mm	±0.03mm	without	235	21	16.5	16	40	Ø39	6.5
1312-200AW *	0-200mm	±0.03mm	without	288	24	19	16	48	Ø39	6.5
1312-300AW *	0-300mm	±0.03mm	without	410	28	22	20	62	Ø44.5	7.5
1312-150A *	0-150mm	±0.03mm	with	235	21	16.5	16	40	Ø39	6.5
1312-200A *	0-200mm	±0.03mm	with	288	24	19	16	48	Ø39	6.5
1312-300A *	0-300mm	±0.03mm	with	410	28	22	20	62	Ø44.5	7.5

Dial indicator graduation: 0.01mm

Code	Range	Accuracy	Thumb roller	L	a	b	c	d	D	t
1311-150AW *	0-150mm	±0.03mm	without	235	21	16.5	16	40	Ø39	6.5
1311-200AW *	0-200mm	±0.03mm	without	288	24	19	16	48	Ø39	6.5
1311-300AW *	0-300mm	±0.03mm	without	410	28	22	20	62	Ø44.5	7.5
1311-150A *	0-150mm	±0.03mm	with	235	21	16.5	16	40	Ø39	6.5
1311-200A *	0-200mm	±0.03mm	with	288	24	19	16	48	Ø39	6.5
1311-300A *	0-300mm	±0.03mm	with	410	28	22	20	62	Ø44.5	7.5

* Supplied with manufacturer inspection certificate traceable to DKD Germany

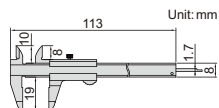
MINI VERNIER CALIPER



1204-70

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

Code	Range	Graduation	Accuracy
1204-70	0-70mm	0.05mm	±0.05mm



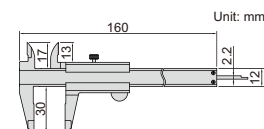
MINI VERNIER CALIPER



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



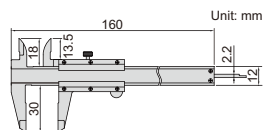
MINI VERNIER CALIPER



1201-1003

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

Code	Range	Graduation	Accuracy
1201-1003	0-100mm	0.05mm	±0.05mm



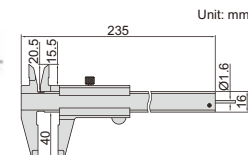
VERNIER CALIPER WITH ROUND DEPTH BAR



1202-150

- Graduation: 0.05mm/1/128"
- Round depth bar
- Meet DIN862
- Made of stainless steel
- Satin chrome plated reading surface

Code	Range	Accuracy
1202-150	0-150mm/0-6"	±0.05mm

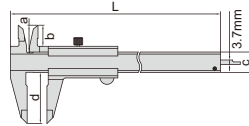


VERNIER CALIPERS



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 0.05mm

(mm)

Code	Range	Accuracy	L	a	b	c	d
1205-1503S	0-150mm	±0.05mm	235	20.5	15.5	16	40
1205-2003S	0-200mm	±0.05mm	290	23.5	19	17	50
1205-3003S	0-300mm	±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

Graduation 0.02mm

(mm)

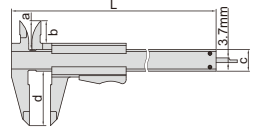
Code	Range	Accuracy	L	a	b	c	d
1205-1501S	0-150mm	±0.03mm	235	20.5	15.5	16	40
1205-2001S	0-200mm	±0.03mm	290	23.5	19	17	50
1205-3001S	0-300mm	±0.03mm	414	27.5	22	20	64

VERNIER CALIPERS WITH THUMB CLAMP



1223-150

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



Graduation 0.05mm/1/128"

(mm)

Code	Range	Accuracy	L	a	b	c	d
1223-150	0-150mm/0-6"	±0.05mm	230	20.5	16.5	16	40
1223-200	0-200mm/0-8"	±0.05mm	295	23.5	19	16	50

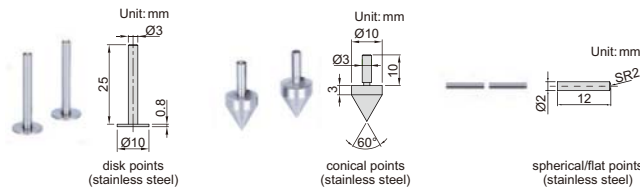
Graduation 0.02mm/0.001"

(mm)

Code	Range	Accuracy	L	a	b	c	d
1223-1502	0-150mm/0-6"	±0.03mm	230	20.5	16.5	16	40
1223-2002	0-200mm/0-8"	±0.03mm	295	23.5	19	16	50

Sizes available up to 300mm

ACCESSORY SET FOR DIGITAL CALIPERS CODE 6144



Unit: mm

disk points (stainless steel)

Unit: mm

conical points (stainless steel)

Unit: mm

spherical/flat points (stainless steel)

measuring external groove diameter (h1 ≤ 3.5mm)

measuring internal groove diameter (h2 ≤ 3.5mm)

measuring center distance

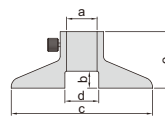
spherical points for groove diameter (inside hole) measurement

flat points for external groove diameter measurement

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

Code
6144

DEPTH BASE ATTACHMENTS



6140



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

(mm)

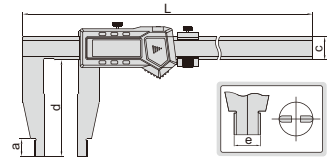
Code	a	b	c	d	e	Application
6140	16.5	9	75	18	30	Suitable for calipers with beam width (w) 16mm
6140-300A	20	15	125	22	34	Suitable for calipers with beam width (w) 20mm

DIGITAL CALIPERS



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
1106-301	0-300mm/0-12"	±0.05mm	18	24	100	20	420
1106-302	0-300mm/0-12"	±0.05mm	18	24	150	20	420
1106-451	0-450mm/0-18"	±0.05mm	18	24	100	20	625
1106-501	0-500mm/0-20"	±0.05mm	18	24	100	20	675
1106-502	0-500mm/0-20"	±0.06mm	18	24	150	20	675
1106-503	0-500mm/0-20"	±0.06mm	24	31	200	20	675
1106-601	0-600mm/0-24"	±0.05mm	18	24	100	20	770
1106-802	0-800mm/0-32"	±0.07mm	24	31	150	20	1025
1106-1002	0-1000mm/0-40"	±0.08mm	24	31	150	20	1220
1106-1502	0-1500mm/0-60"	±0.11mm	24	42	150	20	1780
1106-2002	0-2000mm/0-80"	±0.14mm	24	42	150	20	2290

Sizes available up to 3000mm

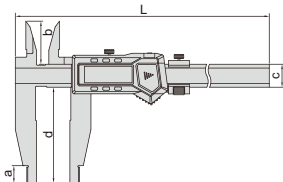
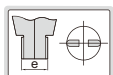
DIGITAL CALIPERS

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
1136-301	0-300mm/0-12"	±0.05mm	18	45	24	100	20	420
1136-501	0-500mm/0-20"	±0.05mm	18	45	24	100	20	675
1136-502	0-500mm/0-20"	±0.06mm	18	45	24	150	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

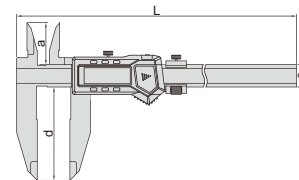
DIGITAL CALIPERS

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



(mm)

Code	Range	Accuracy	a	c	d	L
1135-451	0-450mm/0-18"	±0.05mm	45	24	100	625
1135-601	0-600mm/0-24"	±0.05mm	45	24	100	770
1135-1002	0-1000mm/0-40"	±0.08mm	60	31	150	1220

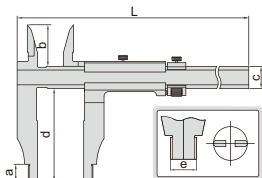
VERNIER CALIPERS (SOLID TYPE)

DATA
OUTPUT



1236-521

- With fine adjustment
- Made of stainless steel
- Satin chrome plated reading surface



Graduation 0.05mm/1/128" (mm)

Code	Range	Accuracy	a	b	c	d	e	L
1236-524	0-500mm/0-20"	±0.08mm	18	45	24	150	20	670
1236-614	0-600mm/0-24"	±0.08mm	18	45	24	100	20	770
1236-1024	0-1000mm/0-40"	±0.12mm	24	60	31	150	20	1230

Graduation 0.02mm (mm)

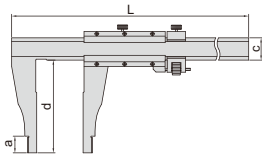
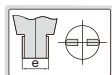
Code	Range	Accuracy	a	b	c	d	e	L
1236-511	0-500mm	±0.05mm	18	45	24	100	20	670
1236-1021	0-1000mm	±0.08mm	24	60	31	150	20	1230

VERNIER CALIPERS



1214-500

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



(mm)

Code	Range	Accuracy	a	c	d	e	L
1214-300	0-300mm/0-12"	±0.05mm	10	20	75	10	410
1214-450	0-450mm/0-18"	±0.05mm	18	24	100	20	620
1214-500	0-500mm/0-20"	±0.05mm	18	24	100	20	670
1214-600	0-600mm/0-24"	±0.05mm	18	24	100	20	770
1214-1000	0-1000mm/0-40"	±0.08mm	24	32	140	20	1216

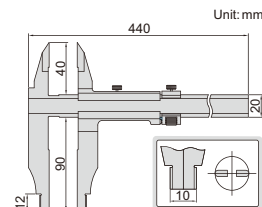
Sizes available up to 2000mm

VERNIER CALIPERS (SOLID TYPE)



1207-514

- Graduation 0.05mm/1/128"
- With fine adjustment
- Made of stainless steel
- Satin chrome plated reading surface



Code	Range	Accuracy
1207-394	0-300mm/0-12"	±0.07mm

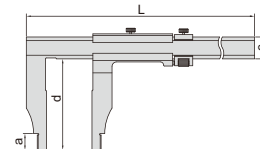
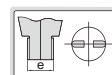
Sizes available up to 1000mm

VERNIER CALIPERS (SOLID TYPE)



1208-511

- With fine adjustment
- Made of stainless steel
- Satin chrome plated reading surface



Graduation 0.05mm/1/128" (mm)

Code	Range	Accuracy	a	c	d	e	L
1208-214	0-200mm/0-8"	±0.06mm	10	20	100	10	330
1208-394	0-300mm/0-12"	±0.07mm	10	20	90	10	410
1208-324	0-300mm/0-12"	±0.07mm	18	24	150	20	410
1208-524	0-500mm/0-20"	±0.08mm	18	24	150	20	670
1208-614	0-600mm/0-24"	±0.08mm	18	24	100	20	770
1208-824	0-800mm/0-32"	±0.09mm	24	31	150	20	1030
1208-1024	0-1000mm/0-40"	±0.12mm	24	31	150	20	1230

Graduation 0.02mm (mm)

Code	Range	Accuracy	a	c	d	e	L
1208-521	0-500mm	±0.06mm	18	24	150	20	670
1208-1021	0-1000mm	±0.08mm	24	31	150	20	1230

Sizes available up to 2000mm

UNIVERSAL CALIPER CODE 1125-600

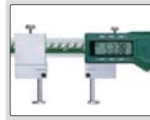
DATA
OUTPUT



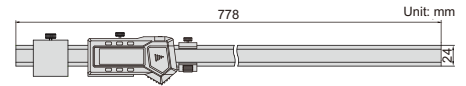
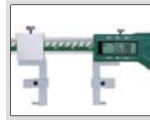
1125-600

- Buttons: on/off, set, mm/inch, ABS, 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

working with stands



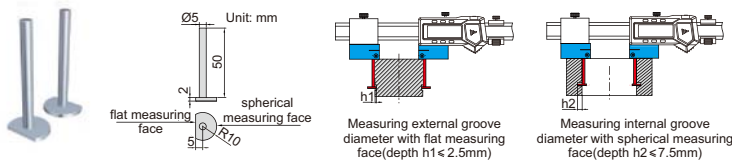
working with measuring jaws



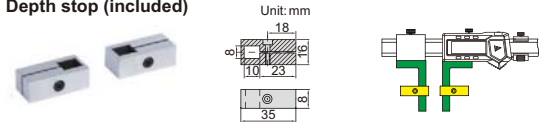
Code	Range*	Resolution	Accuracy
1125-600	0-600mm/0-24"	0.01mm/0.0005"	±0.05mm

*The range changes according to different points

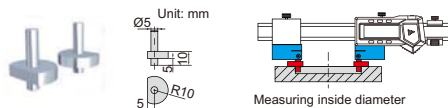
Half disk points (included)



Depth stop (included)

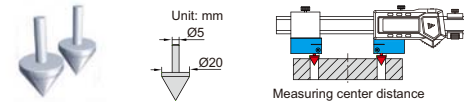


Round shoulder points (optional)



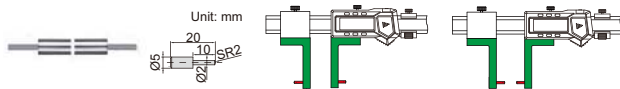
Code
1125-T102

Conical points (optional)

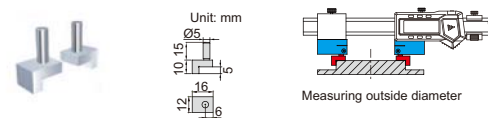


Code
1125-T101

Spherical points (included)

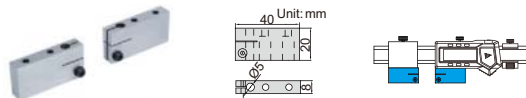


Flat shoulder points (optional)

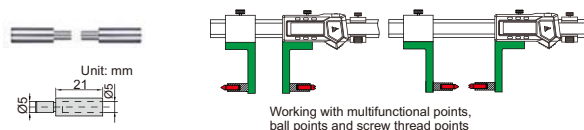


Code
1125-T103

Stands (included)

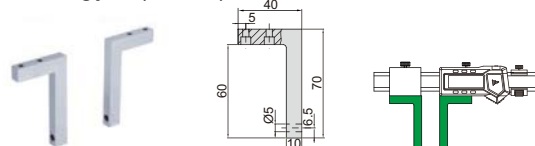


Point sleeve (optional)



Code
1125-T104

Measuring jaws (included)



Multifunctional points 7392 (optional)



Ball points 7391 (optional)



Screw thread points 7381, 7321 (optional)



DIGITAL CALIPER WITH INTERCHANGEABLE POINTS CODE 1526-200

DATA
OUTPUT



depth stop 6143
(optional)



zero setting block for
external measurement
(included)



Point sleeve (optional)

1526-T101

Multifunctional points 7392 (optional)



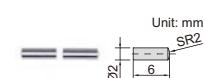
Ball points 7391 (optional)



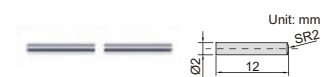
Screw thread points 7381, 7321 (optional)



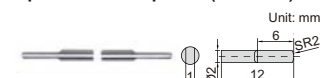
Short spherical points (included)



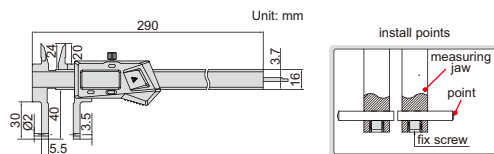
Long spherical/flat points (included)



Spherical blade points (included)



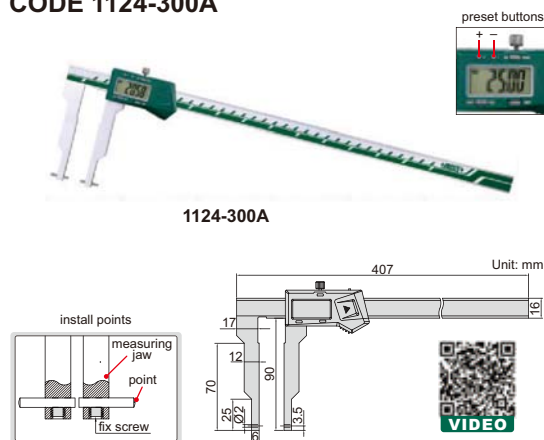
1526-200



- 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

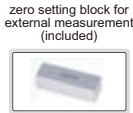
Point	Range	Accuracy	Application
short spherical points	12-212mm/0.5-8.5"(internal)	±0.03mm	for grooves inside small hole
long spherical/flat points	24-224mm/1-8.8"(internal) 0-187mm/0-7.5"(external)	±0.03mm	spherical points for grooves inside hole flat points for external grooves
spherical blade points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



1124-300A

- 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



Multifunctional points 7392 (optional)



Ball points 7391 (optional)



Screw thread points 7381, 7321 (optional)



Short spherical/flat points (included)



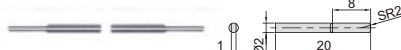
Long spherical/flat points (included)



Short spherical blade points (included)



Long spherical blade points (included)



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)

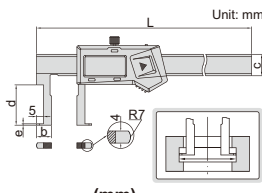
DIGITAL INSIDE GROOVE CALIPERS

DATA
OUTPUT



1120-150A

- 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	b	c	d	e
1120-150A	22-150mm	±0.04mm	250	11	16	30	1
1120-200A	25-200mm	±0.04mm	310	12.5	16	40	1
1120-300A	30-300mm	±0.05mm	410	15	17	50	1.5

DIGITAL INSIDE POINT CALIPERS

DATA
OUTPUT

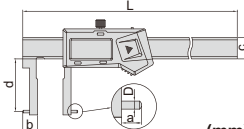
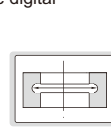
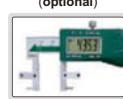


1121-150A

- 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



depth stop 6143
(optional)



(mm)

Code	Range	Accuracy	L	a	b	c	d	D
1121-150A	24-150mm	±0.04mm	250	5	12	16	30	Ø2
1121-200A	25-200mm	±0.04mm	310	5	12.5	16	40	Ø2
1121-3001A	50-300mm	±0.06mm	410	8	25	17	80	Ø3

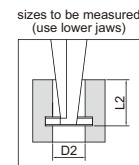
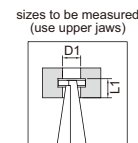
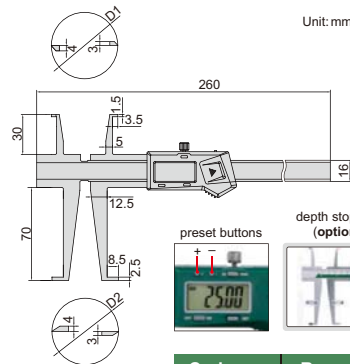
DIGITAL INSIDE GROOVE CALIPER

DATA
OUTPUT



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)		(mm)	
D1	L1	D2	L2
Ø9	<8	Ø15	<10
Ø10	<15	Ø16	<18
Ø11~150	<30	Ø17	<26
		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

DATA
OUTPUT

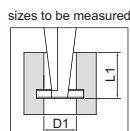
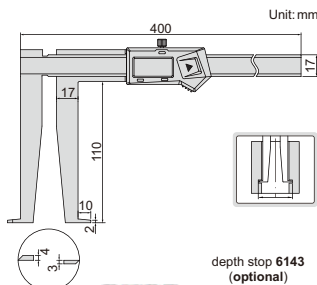


1178-300

- 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



Unit: mm



	(mm)
D1	L1
Ø25	<50
Ø26	<60
Ø27~300	<110

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



DIGITAL INSIDE GROOVE CALIPER

DATA
OUTPUT

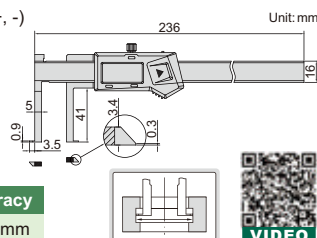


1520-150

- 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



depth stop 6143 (optional)



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



DIGITAL OUTSIDE POINT CALIPER

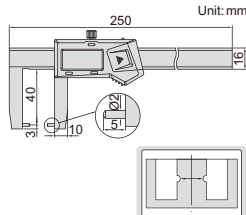
DATA
OUTPUT



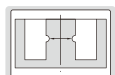
1185-150A

- 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

depth stop 6143 (optional)



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



DIGITAL OUTSIDE NECK CALIPER

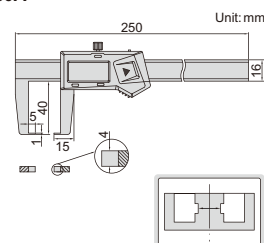
DATA
OUTPUT

depth stop 6143 (optional)



1187-150A

- Measure grooves 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
1187-150A	0-150mm/0-6"	±0.04mm

DEPTH STOP FOR CALIPERS

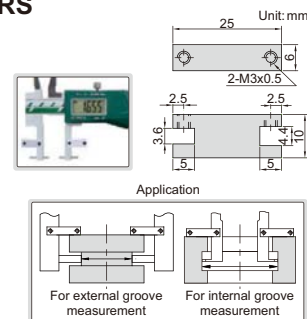


6143



- Supplied in pair
- Made of stainless steel
- Suitable for caliper series 1124, 1526, 1520, 1176, 1178, 1120, 1121, 1187 and 1185

Code
6143



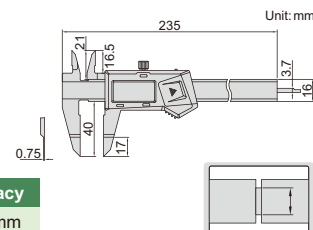
DIGITAL BLADE CALIPERS

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



Code	Range	Accuracy
1188-150A	0-150mm/0-6"	±0.03mm

Sizes available up to 300mm

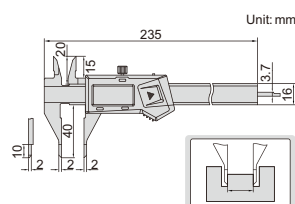
DIGITAL SMALL POINT CALIPER

DATA
OUTPUT



1169-150

- Small pointed jaws fit into small grooves 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: data output cable



Code	Range	Accuracy
1169-150	0-150mm/0-6"	±0.03mm

DIGITAL INSIDE KNIFE-EDGE CALIPER

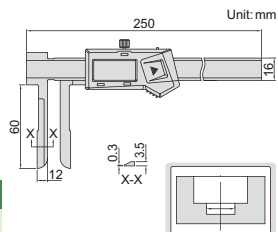
DATA
OUTPUT



1123-150A

- Measure diameter of deep step holes
- 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
1123-150A	15-150mm/0.6-6"	±0.05mm



DIGITAL POINT CALIPER

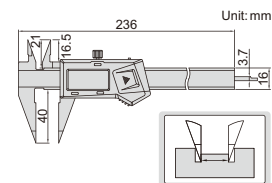
DATA
OUTPUT



1183-150A

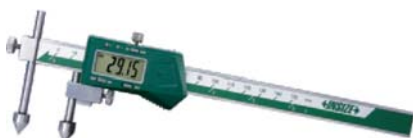
- Pointed jaws fit into small grooves and recesses
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Battery CR2032, data output
- Made of stainless steel
- Optional accessory: data output cable

Code	Range	Accuracy
1183-150A	0-150mm/0-6"	±0.03mm



DIGITAL OFFSET CENTERLINE CALIPER

DATA
OUTPUT

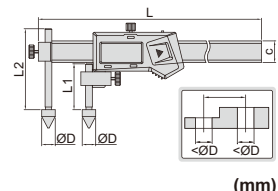


1192-150A

- Measure hole center distance in the same or offset planes
- 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: data output cable

Code	Range	Accuracy	c	ØD	L1	L2	L
1192-150A	10-150mm/0.4-6"	±0.05mm	16	10	32	65	236

Sizes available up to 1500mm



DIGITAL HOOK CALIPER

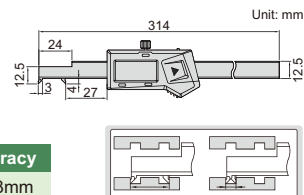
DATA
OUTPUT



1122-200A

- Measure width of groove inside bores
- 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
1122-200A	3-200mm/0.12-8"	±0.03mm



DIGITAL OFFSET CALIPERS

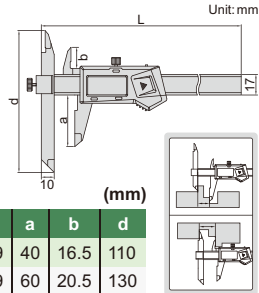
DATA
OUTPUT



1186-150A

- The left jaw can slide up and down to facilitate measurement of stepped sections
- 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	L	a	b	d
1186-150A	0-150mm/0-6"	±0.04mm	239	40	16.5	110
1186-300A	0-300mm/0-12"	±0.05mm	389	60	20.5	130



DIGITAL TUBE THICKNESS CALIPER

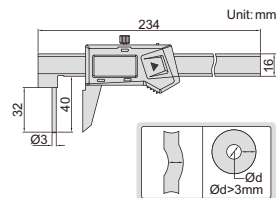
DATA
OUTPUT



1161-150A

- Measure wall thickness of tubes
- 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

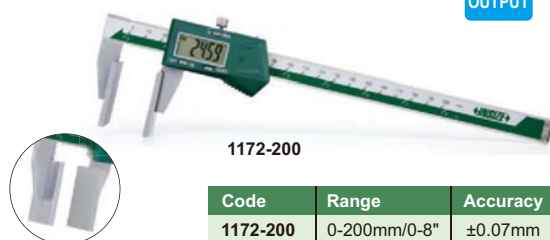
Code	Range	Accuracy
1161-150A	0-150mm/0-6"	±0.05mm



DIGITAL CALIPER WITH LARGE MEASURING FACES

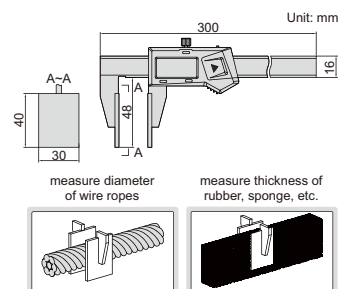
DATA
OUTPUT

- Measure diameter of wire ropes, and thickness of soft materials like rubber, sponge, etc.
- 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



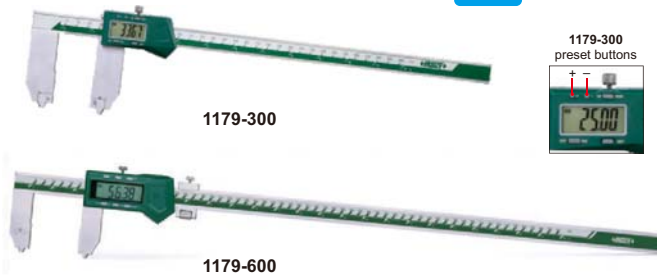
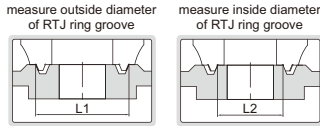
1172-200

Code	Range	Accuracy
1172-200	0-200mm/0-8"	±0.07mm



DIGITAL RTJ RING GROOVE CALIPERS

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

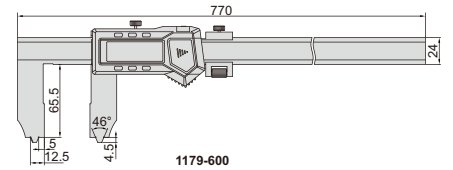
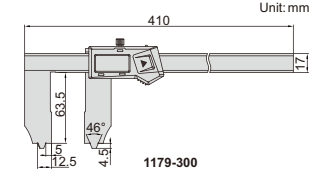
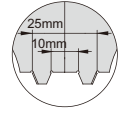
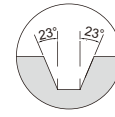


DATA
OUTPUT



applicable for RTJ ring
grooves with angle 23°

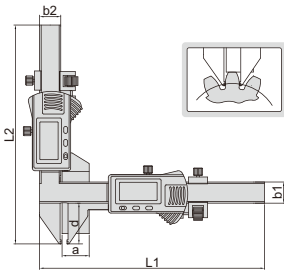
10mm and 25mm need to
be added on the reading



Code	Range (inside diameter of RTJ ring groove)	Range (outside diameter of RTJ ring groove)	Angle of RTJ ring groove	Accuracy
1179-300	10-300mm/0.4-12"	25-300mm/1-12"	23°	±0.06mm
1179-600	10-600mm/0.4-24"	25-600mm/1-24"	23°	±0.07mm

DIGITAL GEAR TOOTH CALIPERS

DATA
OUTPUT



- Resolution: 0.01mm/0.0005"
- Carbide tips
- Buttons: zero, on/off, mm/inch
- Battery LR44, data output
- Made of stainless steel
- Optional accessory: data output cable

1181-M25A

(mm)

Code	Range	Accuracy	L1	L2	a	b1	b2	d
1181-M25A	M1-25mm	±0.04mm	170	165.5	21	16	16	30.5
1181-M50A	M5-50mm	±0.04mm	220	190	50.5	16	16	55

DIGITAL DISK BRAKE CALIPER

DATA
OUTPUT

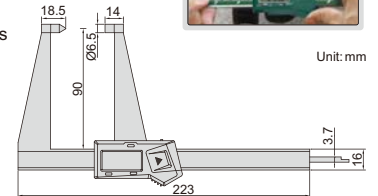


1162-125A

RELATIVE PRODUCT: DISK BRAKE
MICROMETER (CODE 3288-, 3588-)



- Measure thickness of disk brakes
- 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



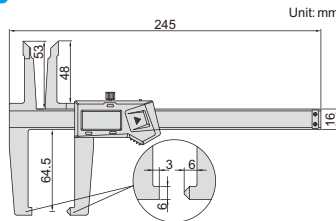
Code	Range	Accuracy
1162-125A	0-125mm/0-5"	±0.05mm

DIGITAL DISK BRAKE AND PAD CALIPER

RELATIVE PRODUCT: DISK BRAKE
MICROMETER (CODE 3288-, 3588-)

DATA
OUTPUT

- Measure thickness of disk brakes and pad wear
- 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



1167-150A

Code	Range	Accuracy
1167-150A	0-150mm/0-6"	±0.07mm



WATERPROOF DIGITAL DEPTH GAGES

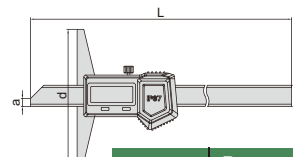
ATTENTION: NO
DATA OUTPUT

IP67
WATERPROOF

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



1149-150



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

Code	Range	Accuracy	L	a	b	d
1149-150	0-150mm/0-6"	±0.03mm	240	6	16	100
1149-200	0-200mm/0-8"	±0.03mm	290	6	16	100
1149-300	0-300mm/0-12"	±0.03mm	390	6	16	150

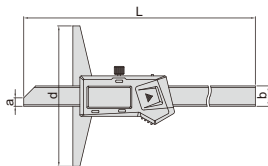
DIGITAL DEPTH GAGES (STANDARD MODEL)



1141-150A

DATA
OUTPUT

- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Meet DIN862 (except 1141-500A)
- 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
1141-500A	0-500mm/0-20"	±0.05mm	585	7	15	150

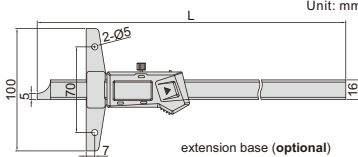
DIGITAL DEPTH GAGES WITH MOUNTING HOLES FOR EXTENSION BASE



1147-300

DATA
OUTPUT

- 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)



Unit: mm

extension base (optional)

6141 series

Code	Range	Accuracy	L
1147-150	0-150mm/0-6"	±0.03mm	237mm
1147-200	0-200mm/0-8"	±0.03mm	287mm
1147-300	0-300mm/0-12"	±0.03mm	403mm

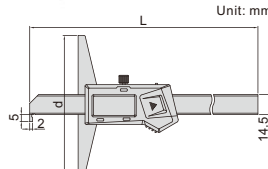
DIGITAL HOOK DEPTH GAGES



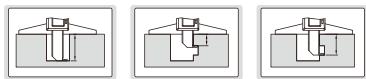
1142-150A

DATA
OUTPUT

- 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



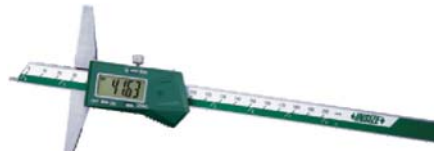
Unit: mm



Code	Range	Accuracy	L	d
1142-150A	0-150mm/0-6"	±0.03mm	230mm	100mm
1142-200A	0-200mm/0-8"	±0.03mm	280mm	100mm

Sizes available up to 300mm

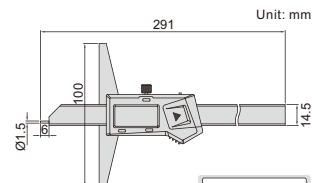
DIGITAL POINT DEPTH GAGE



1143-200A

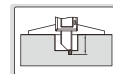
DATA
OUTPUT

- 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



Unit: mm

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



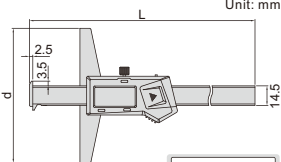
DIGITAL DOUBLE HOOK DEPTH GAGES



1144-150A

DATA
OUTPUT

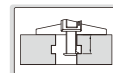
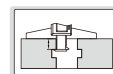
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Meet DIN862
- Battery CR2032, data output
- Made of stainless steel
- Optional accessory: data output cable



Unit: mm

(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



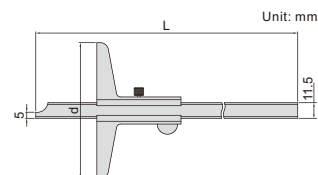
VERNIER DEPTH GAGES (STANDARD MODEL)



1240-2001

DATA
OUTPUT

- Made of stainless steel
- Satin chrome plated reading surface



Unit: mm

Graduation 0.05mm

(mm)

Code	Range	Accuracy	L	d
1240-150	0-150mm	±0.05mm	245	100
1240-200	0-200mm	±0.05mm	282	100
1240-300	0-300mm	±0.08mm	382	100

Graduation 0.02mm

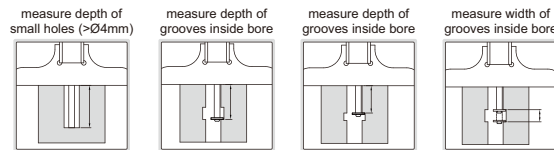
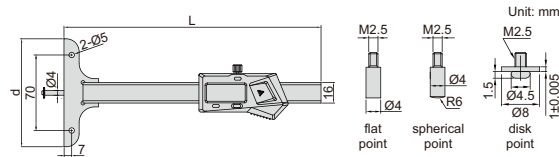
(mm)

Code	Range	Accuracy	L	d
1240-1501	0-150mm	±0.03mm	245	100
1240-2001	0-200mm	±0.03mm	282	100
1240-3001	0-300mm	±0.04mm	382	100

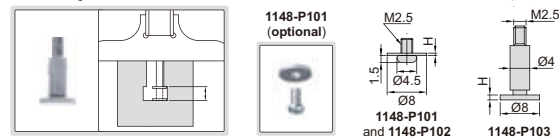
Sizes available up to 500mm

DIGITAL DEPTH GAGES WITH ROUND DEPTH BAR

- 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)



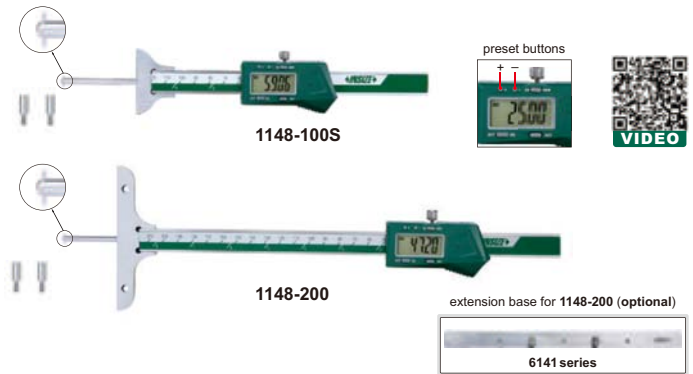
1148-P103 (optional), measure width of bottom grooves inside blind hole



MEASURE WIDTH AND DEPTH OF GROOVES INSIDE BORE

MEASURE DEPTH OF SMALL HOLES (>Ø4mm)

DATA OUTPUT



Code	Range*	Accuracy	L	d	Remark
1148-100S	0-100mm/0-4"	±0.02mm	200	45	
1148-100	0-100mm/0-4"	±0.02mm	200	85	
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

VERNIER DEPTH GAGES

WITH MOUNTING HOLES FOR EXTENSION BASE



1247-1501



- Made of stainless steel
- Satin chrome plating finish on reading surface
- Optional accessory: extension base (code 6141)

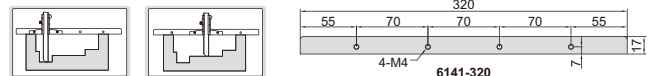
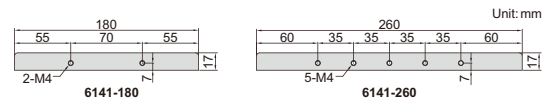
Code	Range	Accuracy	Graduation	L
1247-150	0-150mm	±0.05mm	0.05mm	240mm
1247-200	0-200mm	±0.05mm	0.05mm	290mm
1247-300	0-300mm	±0.08mm	0.05mm	390mm

Sizes available up to 1000mm

EXTENSION BASES



6141-260



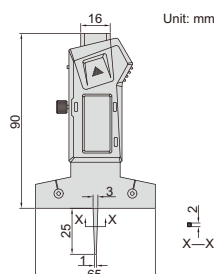
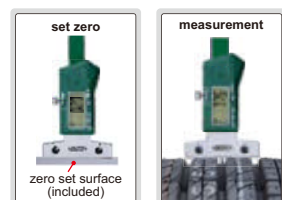
- Supplied with two screws
- Made of stainless steel
- Suitable for depth gages series 1147, 1148, 1247, 1248 and 1249



Code	Length
6141-180	180mm
6141-260	260mm
6141-320	320mm

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"

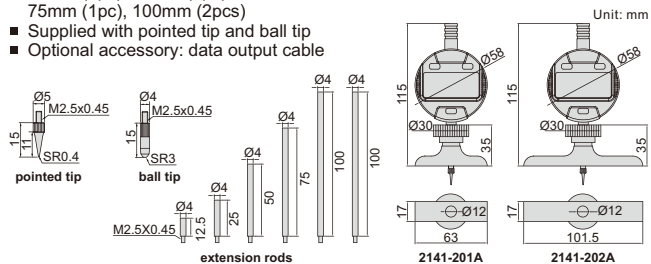
DIGITAL DEPTH GAGE

DATA
OUTPUT

- Accuracy: $\pm 0.02\text{mm}$
- Button function: on/off, zero, mm/inch, ABS, data preset, change measuring direction
- CR2032 battery
- Automatic power off
- Data output
- Stainless steel base
- Extension rods: 12.5mm (1pc), 25mm (1pc), 50mm (1pc), 75mm (1pc), 100mm (2pcs)
- Supplied with pointed tip and ball tip
- Optional accessory: data output cable



2141-202A



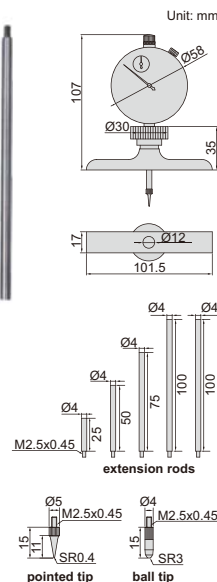
Code	Range	Digital indicator stroke	Digital indicator resolution	Base
2141-201A	0-300mm/0-12"	12.7mm/0.5"	0.01mm/0.0005"	63x17mm
2141-202A	0-300mm/0-12"	12.7mm/0.5"	0.01mm/0.0005"	101.5x17mm

DIAL DEPTH GAGE



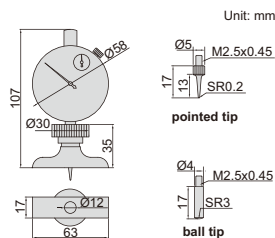
2342-202

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



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

DIAL DEPTH GAGE



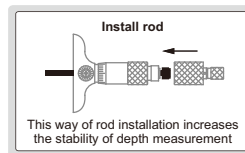
- Dial indicator graduation: 0.01mm
- Stainless steel base
- Supplied with pointed tip and ball tip



2341-101A

Code	Range	Dial indicator stroke	Accuracy
2341-101A	0-10mm	10mm	$\pm 0.017\text{mm}$

DEPTH MICROMETERS

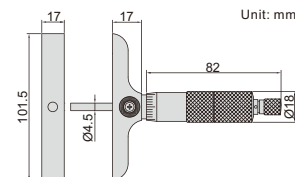


- Graduation: 0.01mm
- Meet DIN863-2
- Micrometer head accuracy: $\pm 3\mu\text{m}$
- Rod accuracy: $\pm (2+L/75)\mu\text{m}$, L is the measuring range in mm
- Rods with flat end
- Ratchet stop



3241-100

Code	Range	Rods
3241-25	0-25mm	1pc
3241-50	0-50mm	2pcs
3241-100	0-100mm	4pcs
3241-150	0-150mm	6pcs
3241-300	0-300mm	12pcs

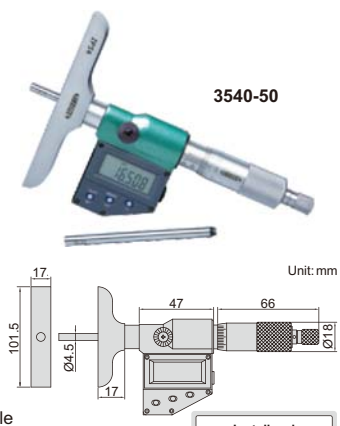


DIGITAL DEPTH MICROMETERS

IP54
WATERPROOF

DATA
OUTPUT

- Resolution: 0.001mm/0.00005"
- Micrometer head accuracy: $\pm 3\mu\text{m}$
- Rod accuracy: $\pm (2+L/75)\mu\text{m}$, L is the measuring range in mm
- Button function: on/off, set, mm/inch, ABS/INC, data output
- IP54 dust/waterproof
- Data output
- LR44 battery, automatic power off
- Rods with flat end
- Ratchet stop
- Optional accessory: data output cable



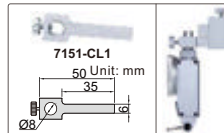
3540-50

Code	Range	Rods
3540-50	0-50mm/0-2"	2pcs
3540-150	0-150mm/0-6"	6pcs
3540-300	0-300mm/0-12"	12pcs

VERNIER HEIGHT GAGES (LIGHT DUTY)

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

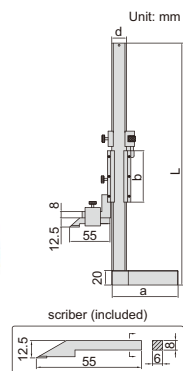
dial test indicator holder (optional)



- Graduation: 0.02mm/0.001"
- Carbide tipped scriber
- Made of stainless steel (except the base)
- Satin chrome plated scale
- Optional accessory: dial test indicator holder (code 7151-CL1)

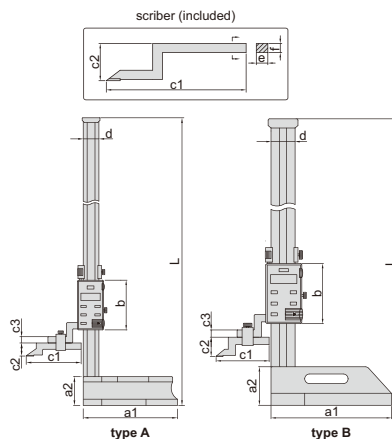


1253-200



Code	Range	Accuracy	L	a	b	d
1253-150	0-150mm/0-6"	$\pm 0.03\text{mm}$	265	75	57	16
1253-200	0-200mm/0-8"	$\pm 0.03\text{mm}$	325	90	70	20

DIGITAL HEIGHT GAGES (ECONOMIC MODEL)



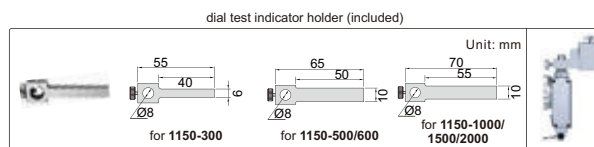
Code	Range	Type	Accuracy	L	a1	a2	b	c1	c2	c3	d	e	f
1150-300	0-300mm/0-12"	A	±0.05mm	470	135	45	80	76	25	10	23	6	8
1150-500	0-500mm/0-20"	A	±0.06mm	720	180	55	95	103	25	12	30	10	12
1150-600	0-600mm/0-24"	A	±0.06mm	820	180	55	95	103	25	12	30	10	12
1150-1000	0-1000mm/0-40"	B	±0.08mm	1275	250	80	125	110	39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

Sizes available up to 2000mm

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

ATTENTION:
LOW ACCURACY

DATA
OUTPUT



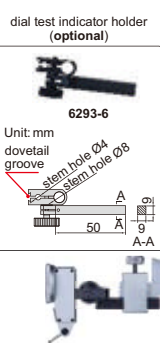
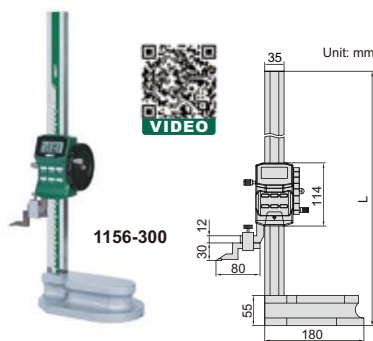
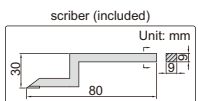
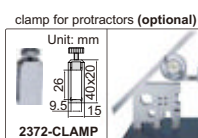
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch, ABS/INC, data hold, TOL, set
- ABS/INC is for absolute and incremental measurement
- TOL is for tolerance measurement
- Carbide tipped scriber
- Made of stainless steel (except the base)
- LR44 battery
- Data output
- Supplied with dial test indicator holder
- Supplied with dust cover (except 1150-1500/2000)
- Optional accessory: data output cable (code 7301-SPC5)



DIGITAL HEIGHT GAGES WITH DRIVING WHEEL

DATA
OUTPUT

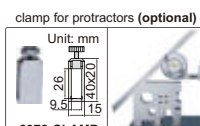
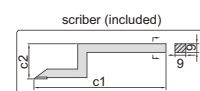
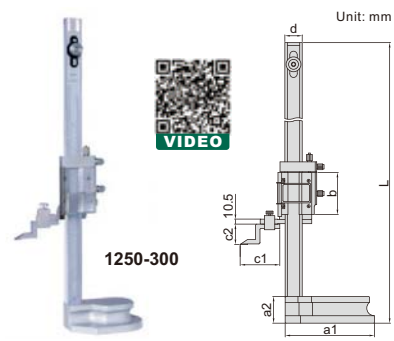
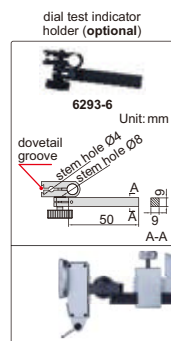
METAL
RACK



- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch, 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)

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

VERNIER HEIGHT GAGES



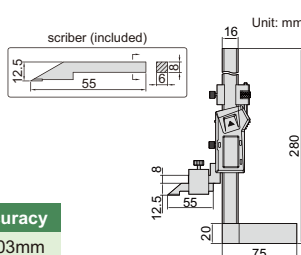
- Graduation: 0.02mm/0.001"
- Adjustable main scale to set zero
- Carbide tipped scriber
- Made of stainless steel (except the base)
- Satin chrome plated scale
- Supplied with magnifier
- With fine adjustment
- Supplied with dust cover
- Optional accessory: dial test indicator holder (code 6293-6),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

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

DIGITAL HEIGHT GAGE (LIGHT DUTY)

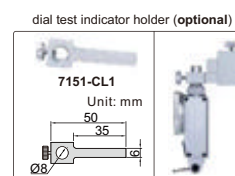
- Buttons: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Carbide tipped scriber
- With fine adjustment
- Made of stainless steel
- Battery CR2032, data output
- Optional accessory: data output cable, dial test indicator holder (code 7151-CL1)

Code	Range	Resolution	Accuracy
1154-150	0-150mm/0-6"	0.01mm/0.0005"	±0.03mm



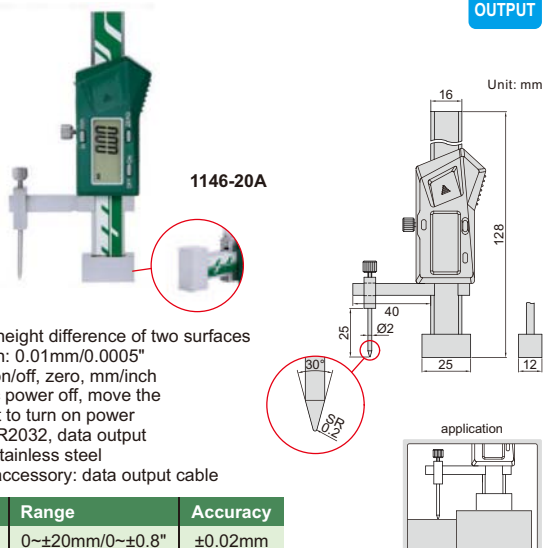
ATTENTION: CAN NOT USE CLAMP
FOR PROTRACTORS (CODE 2372-CLAMP)

DATA
OUTPUT



MINI DIGITAL HEIGHT GAGE

DATA
OUTPUT



- Measure height difference of two surfaces
- 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
1146-20A	0~±20mm/0~±0.8"	±0.02mm

DIGITAL OUTSIDE MICROMETERS (WITH DATA OUTPUT)

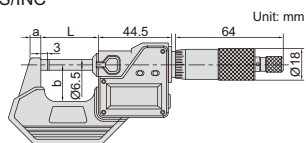
INSPECTION
CERTIFICATE
TRACEABLE TO DKD



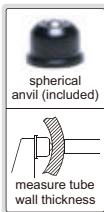
IP65
WATERPROOF

DATA
OUTPUT

- Resolution 0.001mm/0.00005" (resolution of 3101-275A and 3101-300A is 0.001mm/0.0001")
- 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



Code	Range	Accuracy	L	a	b
3101-25A*	0-25mm/0-1"	±2μm	34.5	6	25
3101-50A*	25-50mm/1-2"	±2μm	59.5	8	32
3101-75A*	50-75mm/2-3"	±3μm	84.5	8	44.5
3101-100A*	75-100mm/3-4"	±3μm	109.5	8	57
3101-125A	100-125mm/4-5"	±3μm	135	10	70
3101-150A	125-150mm/5-6"	±3μm	160.5	10	82



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

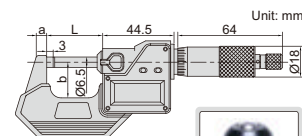
DIGITAL OUTSIDE MICROMETERS (WITHOUT DATA OUTPUT)

INSPECTION
CERTIFICATE
TRACEABLE TO DKD

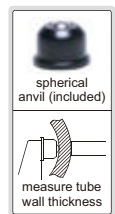
ATTENTION: NO
DATA OUTPUT



- Resolution: 0.001mm
- 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")



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



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

DIGITAL OUTSIDE MICROMETERS

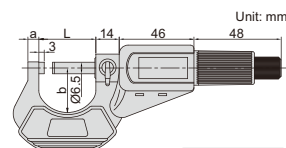
ATTENTION: NO
DATA OUTPUT

INSPECTION
CERTIFICATE
TRACEABLE TO DKD

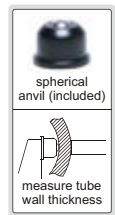


3109-25A

- 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")



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

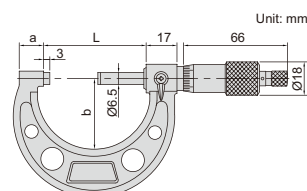
1μm GRADUATION OUTSIDE MICROMETERS

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



3210-25A

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



Set

Code	Range	Micrometers included
3210-1004A*	0-100mm	3210-25A, 3210-50A, 3210-75A, 3210-100A
3210-1506A	0-150mm	3210-25A, 3210-50A, 3210-75A, 3210-100A, 3210-125A, 3210-150A

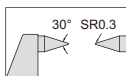
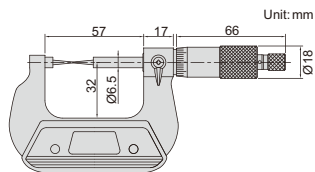
*Supplied with manufacturer inspection certificate traceable to DKD Germany
- Sizes available up to 200mm

POINT MICROMETER



3230-25A

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



Code	Range	Graduation	Accuracy
3230-25A	0-25mm	0.01mm	4μm

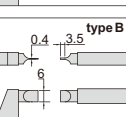
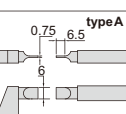
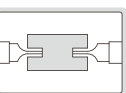
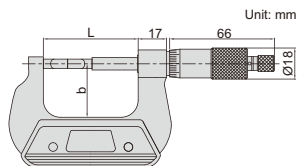
Sizes available up to 100mm

BLADE MICROMETERS



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)



Code	Range	Type	Accuracy	L (mm)	b (mm)
3232-25A	0-25mm	A	4μm	57	32
3232-50A	25-50mm	A	4μm	82	44.5
3232-75A	50-75mm	A	5μm	107	57
3232-100A	75-100mm	A	5μm	132.6	69.5
3232-25BA	0-25mm	B	4μm	57	32

Sizes available up to 175mm

DIGITAL POINT MICROMETERS

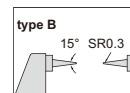
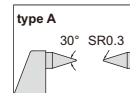
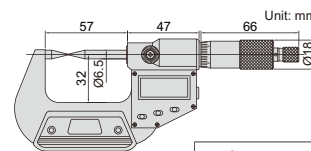
IP54
WATERPROOF

DATA
OUTPUT



3530-25A

- Measure the web thickness of drills, small grooves and keyways
- Resolution 0.001mm/0.00005"
- IP54 dust/waterproof
- Button function: on/off, set, mm/inch, ABS/INC, data output
- Data output
- LR44 battery, automatic power off
- Ratchet stop
- Carbide tips
- Supplied with setting standards (except 0-25mm/0-1")
- Optional accessory: data output cable



Code	Range	Type	Accuracy
3530-25A	0-25mm/0-1"	A	±4μm
3530-25BA	0-25mm/0-1"	B	±4μm

Sizes available up to 100mm

DIGITAL BLADE MICROMETERS

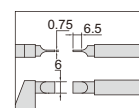
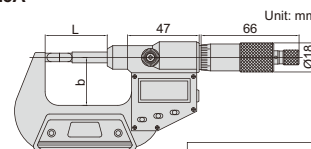
NON-ROTATING
SPINDLE

DATA
OUTPUT



3532-25A

- Measure the groove diameter of shafts and keyways
- Resolution 0.001mm/0.00005"
- Non-rotating spindle
- Button function: on/off, set, mm/inch, ABS/INC, data output
- Data output
- LR44 battery, automatic power off
- Ratchet stop
- Supplied with setting standards (except 0-25mm/0-1")
- Optional accessory: data output cable



Code	Range	Accuracy	L (mm)	b (mm)
3532-25A	0-25mm/0-1"	±4μm	57	32
3532-50A	25-50mm/1-2"	±4μm	82	44.5

Sizes available up to 100mm

DIGITAL SPLINE MICROMETER

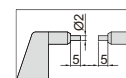
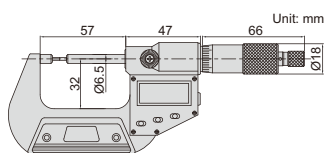
IP54
WATERPROOF

DATA
OUTPUT



3533-25BA

- Measure splined shafts, slots and keyways
- IP54 dust/waterproof
- Button function: on/off, set, mm/inch, ABS/INC, data output
- Data output
- LR44 battery, automatic power off
- Ratchet stop
- Carbide measuring faces
- Supplied with setting standards (except 0-25mm/0-1")
- Optional accessory: data output cable



Code	Range	Accuracy	Resolution
3533-25A	0-25mm/0-1"	±4μm	0.001mm/0.00005"

Sizes available up to 100mm

DIGITAL CRIMP HEIGHT MICROMETER

RELATIVE PRODUCT: DIGITAL CRIMP
HEIGHT CALIPER (CODE 1165-150A)

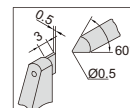
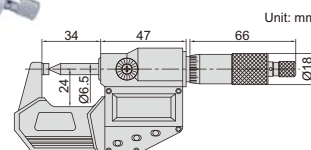
DATA
OUTPUT

IP54
WATERPROOF



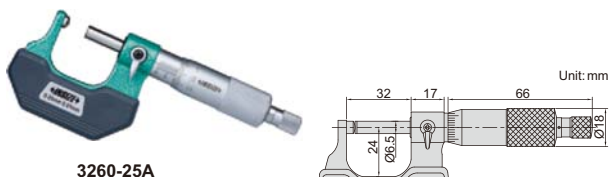
3566-25BA

- Measure the height of crimp contact
- Resolution: 0.001mm/0.00005"
- IP54 dust/waterproof
- Button function: on/off, set, mm/inch, ABS/INC, data output
- 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 MICROMETERS

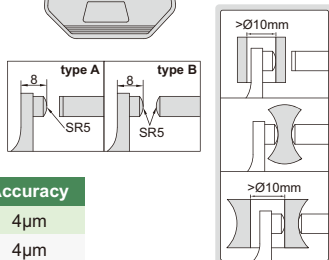


3260-25A

- 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	Type	Accuracy
3260-25A	0-25mm	A	4μm
3260-25SA	0-25mm	B	4μm

Sizes available up to 100mm



DIGITAL NON-ROTATING SPINDLE DISK MICROMETERS

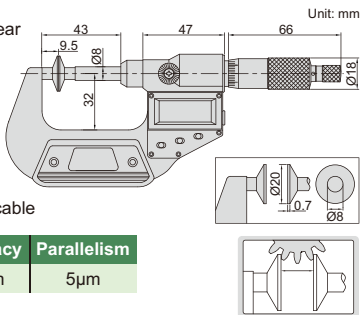


3594-25A

- Measure root tangent length of gear
- Resolution 0.001mm/0.00005"
- Non-rotating spindle
- Button function: on/off, set, mm/inch, ABS/INC, data output
- Data output, LR44 battery
- Automatic power off
- Ratchet stop
- Supplied with setting standards
- Optional accessory: data output cable

Code	Range	Accuracy	Parallelism
3594-25A	0-25mm/0-1"	±4μm	5μm

Sizes available up to 100mm



DATA OUTPUT

NON-ROTATING SPINDLE



DIGITAL SPHERICAL ANVIL TUBE MICROMETERS

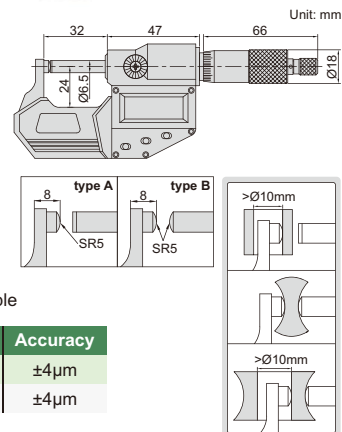


3560-25A

- Measure wall thickness of tubes
- Resolution 0.001mm/0.00005"
- IP54 dust/waterproof
- Button function: on/off, set, mm/inch, ABS/INC, data output
- Data output
- LR44 battery, automatic power off
- Ratchet stop
- Carbide measuring faces
- Supplied with setting standards (except 0-25mm/0-1")
- Optional accessory: data output cable

Code	Range	Type	Accuracy
3560-25A	0-25mm/0-1"	A	±4μm
3560-25SA	0-25mm/0-1"	B	±4μm

Sizes available up to 100mm



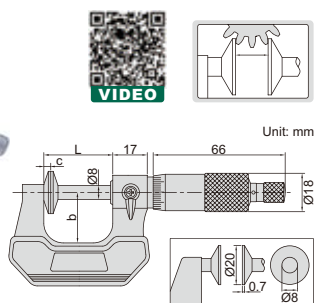
DISK MICROMETERS



3282-25

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

Code	Range	Accuracy	Parallelism	L	b	c
3282-25	0-25mm	4μm	5μm	34	24	3.3
3282-50	25-50mm	4μm	5μm	59	32	3.3
3282-75	50-75mm	5μm	5μm	85	45	3.3
3282-100	75-100mm	5μm	5μm	110	57	3.3



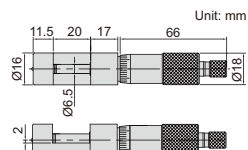
WIRE MICROMETER



3285-10

- Meet DIN863-3
- Measure diameter of wires and small balls
- Graduation 0.01mm
- Ratchet stop
- Carbide measuring faces

Code	Range	Accuracy
3285-10	0-10mm	4μm



MICROMETER SETTING STANDARDS



6310-100

Code	Length	Accuracy	D
6310-25	25	±1.5μm	Ø7
6310-50	50	±2μm	Ø7
6310-75	75	±2.5μm	Ø7
6310-100	100	±3μm	Ø8

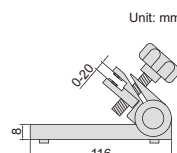
MICROMETER STAND

- Suitable for micrometers up to 100mm

Code
6300



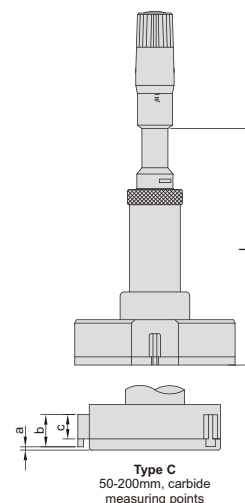
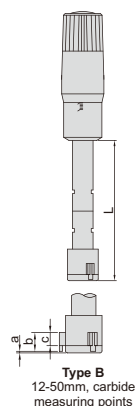
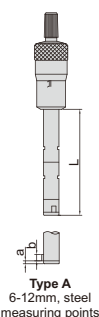
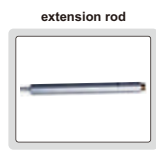
6300



THREE POINTS INTERNAL MICROMETERS



- Meet DIN863-4
- 6-12mm: graduation 0.001mm, 12-300mm: graduation 0.005mm
- Ratchet stop
- Optional accessory: setting rings (code 6312), micrometer stand and clamp (code 6301 and 6301-2)



Individual

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
3227-125 *	100-125mm	C	5µm	Ø112.5mm (optional)	150mm	145	0.5	19.5	14.5
3227-150 *	125-150mm	C	5µm	Ø137.5mm (optional)	150mm	145	0.5	19.5	14.5
3227-175 *	150-175mm	C	5µm	Ø162.5mm (optional)	150mm	145	0.5	19.5	14.5
3227-200 *	175-200mm	C	5µm	Ø187.5mm (optional)	150mm	145	0.5	19.5	14.5

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

- Sizes available up to 300mm

Interchangeable jaws



100-200mm: have two sets of jaws for different measuring range (For example, 3227-125 has 100-112.5mm and 112.5-125mm jaws)

Micrometer stand with clamp

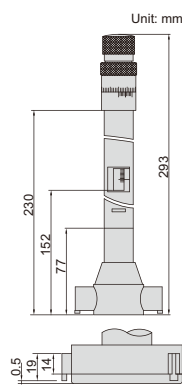


3227-504

WIDE RANGE THREE POINTS INTERNAL MICROMETERS



- Meet DIN863-4
- Graduation 0.001mm
- Carbide measuring faces
- Ratchet stop
- Setting rings are included (except 200-300mm)



Code	Range	Accuracy	Setting ring
3228-70 *	50-70mm	5µm	Ø50mm (included)
3228-100 *	70-100mm	5µm	Ø70mm (included)
3228-150 *	100-150mm	6µm	Ø100mm (included)
3228-250 *	150-250mm	8µm	Ø150mm (included)

* Supplied with manufacturer inspection certificate

- Sizes available up to 300mm

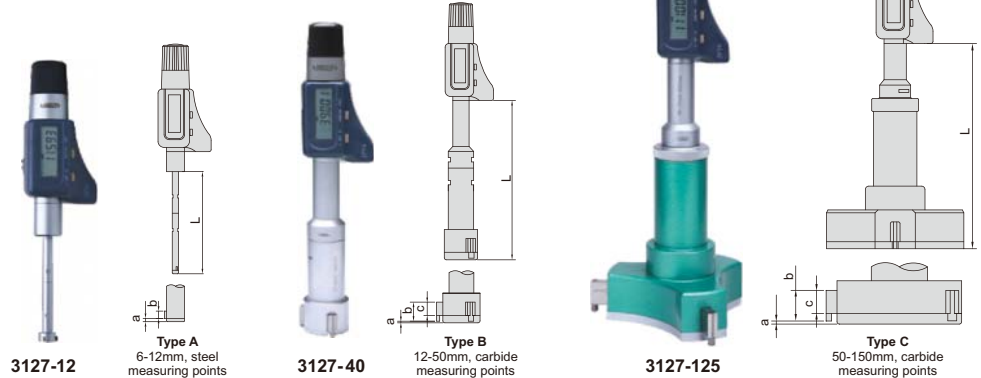
DIGITAL THREE POINTS INTERNAL MICROMETERS

DATA
OUTPUT

IP54
WATERPROOF

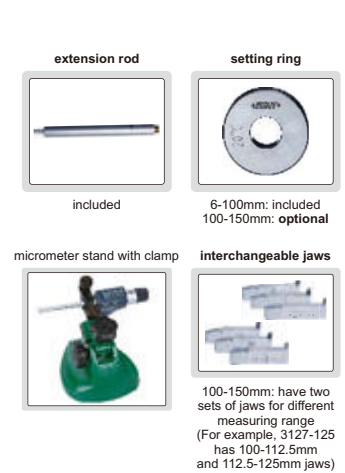
INSPECTION
CERTIFICATE

- Meet DIN863-4
- Resolution 0.001mm/0.00005"
- IP54 dust/waterproof
- Buttons: on/off, set, mm/inch, ABS/INC
- Data output
- LR44 battery, automatic power off
- Ratchet stop
- Optional accessory: data output cable, setting ring (code **6312**), micrometer stand and clamp (code **6301** and **6301-2**)



Individual

Code	Range	Type	Accuracy	Setting ring	Extension rod (included)	L	a	b	c
3127-8 *	6-8mm/0.24-0.31"	A	4μm	Ø6mm (included)	100mm	54.5	1.5	2.5	—
3127-10 *	8-10mm/0.31-0.39"	A	4μm	Ø8mm (included)	100mm	54.5	1.5	2.5	—
3127-12 *	10-12mm/0.39-0.47"	A	4μm	Ø10mm (included)	100mm	54.5	1.5	2.5	—
3127-16 *	12-16mm/0.47-0.63"	B	4μm	Ø16mm (included)	150mm	80	0.5	6	4.5
3127-20 *	16-20mm/0.63-0.79"	B	4μm	Ø16mm (included)	150mm	80	0.5	6	4.5
3127-25 *	20-25mm/0.79-0.98"	B	4μm	Ø25mm (included)	150mm	90	0.5	8	6
3127-30 *	25-30mm/0.98-1.18"	B	4μm	Ø25mm (included)	150mm	90	0.5	8	6
3127-40 *	30-40mm/1.18-1.57"	B	4μm	Ø40mm (included)	150mm	97	0.5	14	12
3127-50 *	40-50mm/1.57-1.97"	B	5μm	Ø40mm (included)	150mm	97	0.5	14	12
3127-63 *	50-63mm/1.97-2.48"	C	5μm	Ø62mm (included)	150mm	114	0.5	17.5	14.5
3127-75 *	62-75mm/2.44-2.95"	C	5μm	Ø62mm (included)	150mm	114	0.5	17.5	14.5
3127-88 *	75-88mm/2.95-3.46"	C	5μm	Ø87mm (included)	150mm	114	0.5	17.5	14.5
3127-100 *	87-100mm/3.43-3.94"	C	5μm	Ø87mm (included)	150mm	114	0.5	17.5	14.5
3127-125 *	100-125mm/3.94-4.92"	C	5μm	Ø112.5mm (optional)	150mm	150	0.5	19.5	14.5
3127-150 *	125-150mm/4.92-5.91"	C	5μm	Ø137.5mm (optional)	150mm	150	0.5	19.5	14.5



Set

Code	Range	Micrometers included	Setting ring (included)	Extension rod (included)
3127-123 *	6-12mm/0.24-0.47"	6-8mm, 8-10mm, 10-12mm	Ø6mm, Ø8mm, Ø10mm	100mm
3127-202 *	12-20mm/0.47-0.79"	12-16mm, 16-20mm	Ø16mm	150mm
3127-504 *	20-50mm/0.79-1.97"	20-25mm, 25-30mm, 30-40mm, 40-50mm	Ø25mm, Ø40mm	150mm
3127-1004 *	50-100mm/1.97-3.94"	50-63mm, 62-75mm, 75-88mm, 87-100mm	Ø62mm, Ø87mm	150mm

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



3127-504

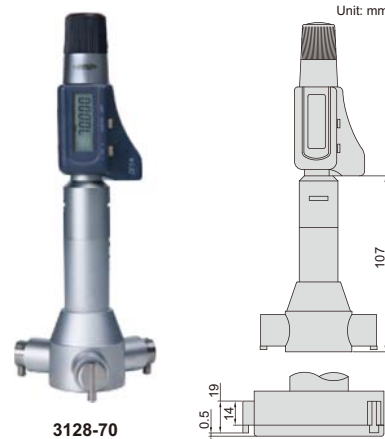
DIGITAL WIDE RANGE THREE POINTS INTERNAL MICROMETERS

- Meet DIN863-4
- Resolution 0.001mm/0.00005"
- IP54 dust/waterproof
- Buttons: on/off, set, mm/inch, ABS/INC
- Data output, LR44 battery, automatic power off
- Carbide measuring faces
- Ratchet stop
- Supplied with extension rods
- Setting rings are included (except 200-300mm)
- Optional accessory: data output cable



Code	Range	Accuracy	Setting ring	Extension rod (included)
3128-70 *	50-70mm/1.97-2.76"	5μm	Ø50mm (included)	150mm
3128-100 *	70-100mm/2.76-3.94"	5μm	Ø70mm (included)	150mm
3128-150 *	100-150mm/3.94-5.91"	6μm	Ø100mm (included)	150mm
3128-250 *	150-250mm/5.91-9.84"	8μm	Ø150mm (included)	150mm
3128-300 *	200-300mm/7.87-11.81"	9μm	Ø200mm (optional)	150mm

- * Supplied with manufacturer inspection certificate



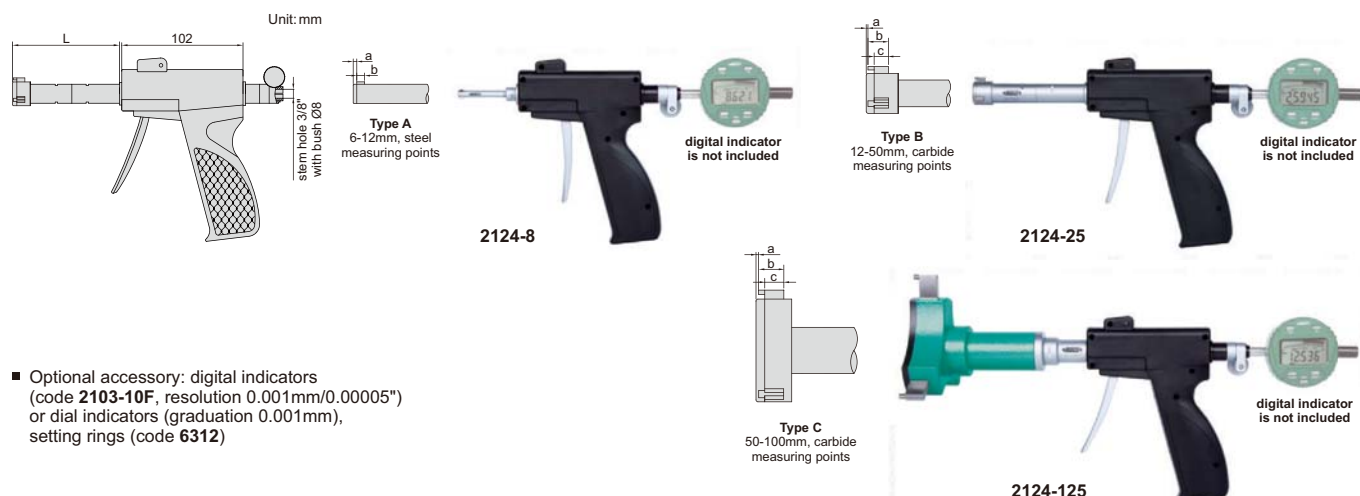
3128-70

INSPECTION
CERTIFICATE

IP54
WATERPROOF

DATA
OUTPUT

PISTOL GRIP THREE POINTS BORE GAGES



- Optional accessory: digital indicators (code 2103-10F, resolution 0.001mm/0.00005") or dial indicators (graduation 0.001mm), setting rings (code 6312)

Individual

Code	Range	Type	Accuracy (without digital indicator)	Setting ring (included)	Extension rod (included)	L	a	b	c
2124-8 *	6-8mm	A	4µm	Ø6mm	100mm	50	1.5	2.5	—
2124-10 *	8-10mm	A	4µm	Ø8mm	100mm	50	1.5	2.5	—
2124-12 *	10-12mm	A	4µm	Ø10mm	100mm	50	1.5	2.5	—
2124-16 *	12-16mm	B	4µm	Ø16mm	150mm	65	0.5	6	4.5
2124-20 *	16-20mm	B	4µm	Ø16mm	150mm	65	0.5	6	4.5
2124-25 *	20-25mm	B	4µm	Ø25mm	150mm	91	0.5	8	6
2124-30 *	25-30mm	B	4µm	Ø25mm	150mm	91	0.5	8	6
2124-40 *	30-40mm	B	4µm	Ø40mm	150mm	97	0.5	14	12
2124-50 *	40-50mm	B	5µm	Ø40mm	150mm	97	0.5	14	12
2124-63 *	50-63mm	C	5µm	Ø62mm	150mm	112	0.5	17.5	14.5
2124-75 *	62-75mm	C	5µm	Ø62mm	150mm	112	0.5	17.5	14.5
2124-88 *	75-88mm	C	5µm	Ø87mm	150mm	112	0.5	17.5	14.5
2124-100 *	87-100mm	C	5µm	Ø87mm	150mm	112	0.5	17.5	14.5

setting ring (included)



extension rod (included)



Set

Code	Range	Probes included	Setting ring (included)	Extension rod (included)
2124-S123 *	6-12mm	6-8mm, 8-10mm, 10-12mm	Ø6mm, Ø8mm, Ø10mm	100mm
2124-S202 *	12-20mm	12-16mm, 16-20mm	Ø16mm	150mm
2124-S504 *	20-50mm	20-25mm, 25-30mm, 30-40mm, 40-50mm	Ø25mm, Ø40mm	150mm
2124-S1004 *	50-100mm	50-63mm, 62-75mm, 75-88mm, 87-100mm	Ø62mm, Ø87mm	150mm

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



2124-S504

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	35-50mm (dial indicator and handle are not included) 50-160mm	35-50mm ±0.018mm 50-160mm ±0.018mm
2824-S3	18-160mm	dial indicator, code 2308-10FA, range 10mm, graduation 0.01mm	18-35mm 35-60mm (dial indicator is not included) 50-160mm (dial indicator is not included)	18-35mm ±0.015mm 35-60mm ±0.018mm 50-160mm ±0.018mm



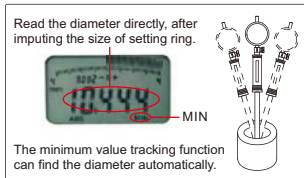
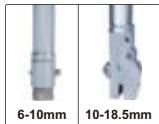
2824-S160

2824-S3

BORE GAGES FOR SMALL HOLES

ATTENTION: NOT SUITABLE
FOR 0.001MM DIAL INDICATORS

DATA
OUTPUT

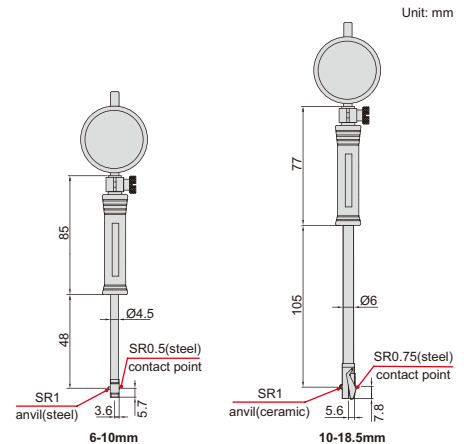


- Repeatability: 0.003mm
- Optional accessory:
setting ring (code 6312)



2852-10

2152-10



Unit: mm

With dial indicator

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

With digital indicator

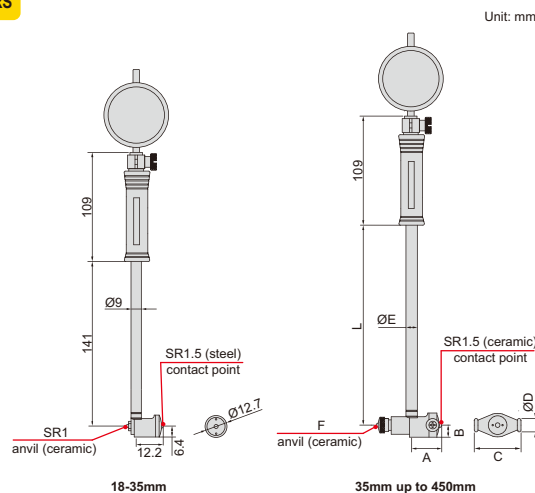
Code	Range	Indicator	Accuracy
2152-10	6-10mm	digital indicator, range 12.7mm/0.5", resolution 0.002mm/0.0001" (code 2108-10F)	±0.012mm
2152-18	10-18.5mm		±0.012mm

BORE GAGES

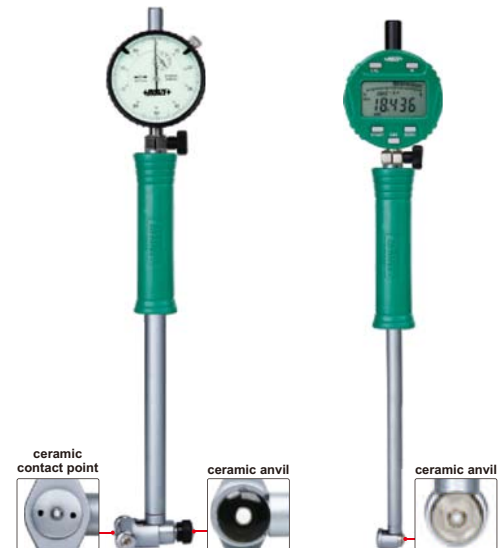
ATTENTION: NOT SUITABLE
FOR 0.001MM DIAL INDICATORS

DATA
OUTPUT

- Repeatability: 0.003mm
- Optional accessory:
setting ring (code 6312),
long handle (code 7351)



Unit: mm



2322-160A

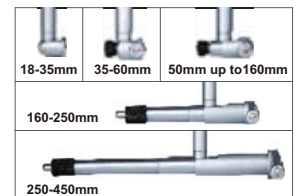
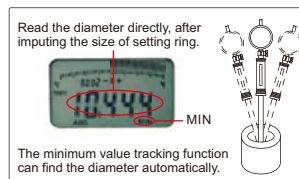
2122-35A

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
100-160mm	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

(mm)



VIDEO



With dial indicator

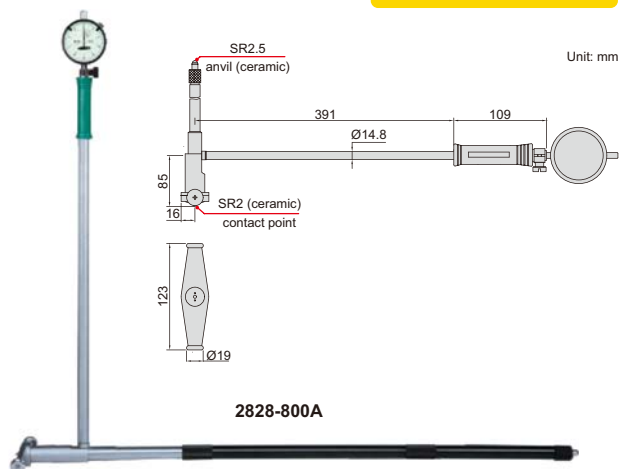
Code	Range	Indicator	Accuracy
2322-35A	18-35mm	dial indicator, range 10mm, graduation 0.01mm (code 2308-10FA)	±0.015mm
2322-60A	35-60mm		±0.018mm
2322-100A	50-100mm		±0.018mm
2322-160A	50-160mm		±0.018mm
2322-161A	100-160mm		±0.018mm
2322-250A	160-250mm		±0.018mm
2322-450A	250-450mm		±0.018mm

With digital indicator

Code	Range	Indicator	Accuracy
2122-35A	18-35mm	digital indicator, range 12.7mm/0.5", resolution 0.002mm/0.0001" (code 2108-10F)	±0.015mm
2122-60A	35-60mm		±0.018mm
2122-160A	50-160mm		±0.018mm
2122-250A	160-250mm		±0.018mm
2122-450A	250-450mm		±0.018mm

BORE GAGE

ATTENTION: NOT SUITABLE
FOR 0.001MM DIAL INDICATORS

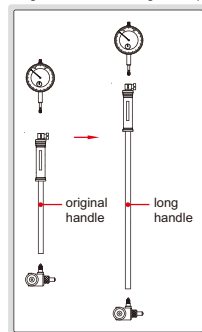


- Repeatability: 0.003mm

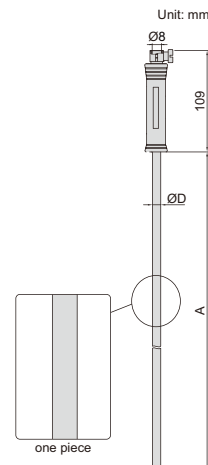
Code	Range	Accuracy	Indicator
2828-800A	400-800mm	±0.025mm	dial indicator, code 2308-10FA, range 10mm, graduation 0.01mm

LONG HANDLES

method of use (replace the
original handle with long handle)



7351-EX11



- To assist deep-hole measurement
- Can be used for bore gages 2322 and 2122

Code	Applicable bore gages	A	ØD
7351-EX11	35-60mm, 50-100mm, 50-160mm, 100-160mm	475mm	13mm
7351-EX12		980mm	13mm
7351-EX21	160-250mm, 250-450mm	480mm	14.5mm

SETTING RINGS

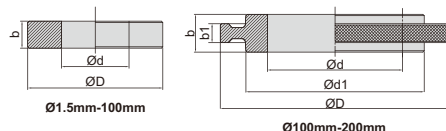
INSPECTION
CERTIFICATE

CAN SUPPLY CUSTOM SETTING RING FROM Ø1.500MM
TO Ø200.000MM, FOR EXAMPLE, Ø17.085MM

- For zero setting of inside micrometers, three points internal micrometers and bore gages
- Deviation (difference between the ordered size and the size marked on the setting ring when supplied): For example, the ordered size is Ø10.125mm, the size marked on the setting ring when supplied may be Ø10.127mm
- Meet DIN2250-1:2008



6312-20



Diameter d **	b	D	Deviation	Roundness and cylindricity
Ø3-5	5	22	±2.0µm	0.4µm
Ø5-10	8	32	±2.0µm	0.4µm
Ø10-15	10	38	±3.0µm	0.5µm
Ø15-18	12	45	±3.0µm	0.5µm
Ø18-20	12	45	±3.0µm	0.6µm
Ø20-25	14	53	±3.0µm	0.6µm
Ø25-30	16	63	±4.0µm	0.6µm
Ø30-32	16	63	±4.0µm	0.7µm
Ø32-40	18	71	±4.0µm	0.7µm
Ø40-50	20	85	±4.0µm	0.7µm
Ø50-60	20	100	±4.0µm	0.8µm
Ø60-70	24	112	±4.0µm	0.8µm
Ø70-80	24	125	±4.0µm	0.8µm
Ø80-90	24	140	±4.0µm	1.0µm
Ø90-100	24	160	±4.0µm	1.0µm

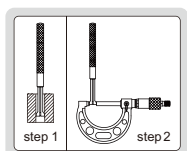
Diameter d **	b	b1	d1	D	Deviation	Roundness and cylindricity
Ø100-110	28	14	132	170	±5.0µm	1.0µm
Ø110-120	28	16	140	180	±5.0µm	1.0µm
Ø120-130	28	16	150	190	±6.0µm	1.2µm
Ø130-140	28	18	160	200	±6.0µm	1.2µm
Ø140-150	28	18	170	212	±6.0µm	1.2µm
Ø150-160	28	20	180	224	±6.0µm	1.2µm
Ø160-170	32	20	190	236	±6.0µm	1.2µm
Ø170-180	32	20	200	250	±6.0µm	1.2µm
Ø180-190	32	22	212	265	±7.0µm	1.4µm
Ø190-200	32	22	224	280	±7.0µm	1.4µm

** For example Ø3-5mm means Ø3mm < diameter d ≤ Ø5mm

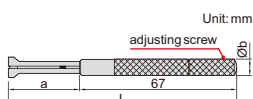
Code	Size (mm)	Code	Size (mm)	Code	Size (mm)
6312-3 *	Ø3	6312-24 *	Ø24	6312-48 *	Ø48
6312-4 *	Ø4	6312-25 *	Ø25	6312-49 *	Ø49
6312-5 *	Ø5	6312-27 *	Ø27	6312-50 *	Ø50
6312-6 *	Ø6	6312-28 *	Ø28	6312-55 *	Ø55
6312-7 *	Ø7	6312-29 *	Ø29	6312-60 *	Ø60
6312-8 *	Ø8	6312-30 *	Ø30	6312-62 *	Ø62
6312-9 *	Ø9	6312-31 *	Ø31	6312-65 *	Ø65
6312-10 *	Ø10	6312-32 *	Ø32	6312-70 *	Ø70
6312-11 *	Ø11	6312-33 *	Ø33	6312-75 *	Ø75
6312-12 *	Ø12	6312-34 *	Ø34	6312-80 *	Ø80
6312-13 *	Ø13	6312-35 *	Ø35	6312-85 *	Ø85
6312-14 *	Ø14	6312-36 *	Ø36	6312-87 *	Ø87
6312-15 *	Ø15	6312-37 *	Ø37	6312-90 *	Ø90
6312-16 *	Ø16	6312-39 *	Ø39	6312-95 *	Ø95
6312-17 *	Ø17	6312-40 *	Ø40	6312-100 *	Ø100
6312-18 *	Ø18	6312-42 *	Ø42	6312-125 *	Ø125
6312-20 *	Ø20	6312-43 *	Ø43	6312-150 *	Ø150
6312-21 *	Ø21	6312-44 *	Ø44	6312-175 *	Ø175
6312-22 *	Ø22	6312-45 *	Ø45	6312-200 *	Ø200
6312-23 *	Ø23	6312-47 *	Ø47		

* Supplied with manufacturer inspection certificate

SMALL HOLE GAGE SET



4208-1



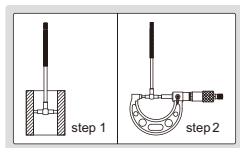
- 4 gages per set
- For small holes, slots and grooves, etc.
- Satin chrome finish

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

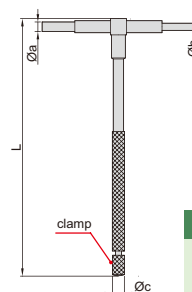
Range	L	a	Øb
3-5mm	90	22.5	5.5
5-7.5mm	97.6	30	5.5
7.5-10mm	102.8	35	8.5
10-13mm	108	40	8.5

TELESCOPING GAGE SET

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



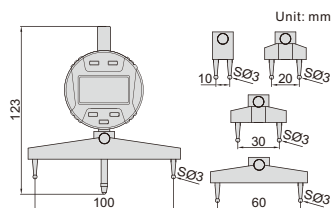
4206-1



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

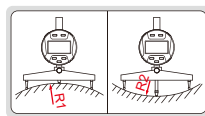
Code	Total range	Gages included (mm)
4206-1	8-150mm	8-12.7, 12.7-19, 19-32, 32-54, 54-90, 90-150

DIGITAL RADIUS GAGE



2183

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



Measuring jaw	Range of external radius (R1)	Range of internal radius (R2)
10mm	5-11mm	7-13.4mm
20mm	11-22mm	13.4-25mm
30mm	22-83mm	25-87mm
60mm	83-250mm	87-250mm
100mm	250-910mm	250-910mm

Code	Range of external radius (R1)	Range of internal radius (R2)	Resolution	Accuracy (mm)
2183	5-910mm/0.2-35.83"	7-910mm/0.3-35.83"	0.005mm/0.00005"	±0.01R*

*R is the radius to be measured

ATTENTION: NO DATA OUTPUT

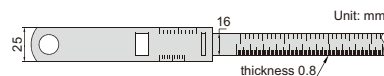
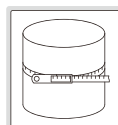
CIRCUMFERENCE TAPES

ATTENTION: BASIC MODEL

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



7114-950

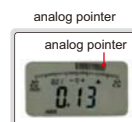


Code	Circumference range	Diameter range	Accuracy	
			Circumference	Diameter
7114-950	60-950mm	Ø20-300mm	±1.5mm	±0.5mm
7114-2200	940-2200mm	Ø300-700mm	±1.5mm	±0.5mm
7114-3460	2190-3460mm	Ø700-1100mm	±1.5mm	±0.5mm

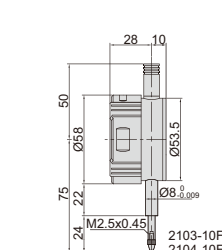
DIGITAL INDICATORS (ADVANCED MODEL)

INSPECTION CERTIFICATE
TRACEABLE TO NIST

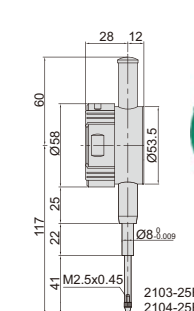
DATA OUTPUT



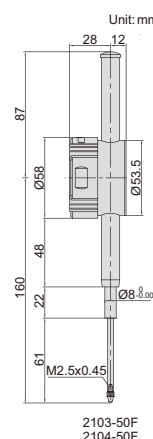
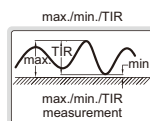
- Reading in digital and analog
- Display can be rotated by 320°
- Button function: tolerance Go and No-Go display, data preset, measuring direction change, max./min./TIR measurement, inch/metric conversion, absolute/incremental measurement
- CR2032 battery, automatic power off
- Data output
- Optional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



2103-10F



2104-25F



2103-50F

Resolution 0.001mm/0.00005"

Code	Range	Accuracy	Hysteresis	Remark
2103-10F*	12.7mm/0.5"	5µm	2µm	flat back
2103-25F*	25.4mm/1"	5µm	3µm	flat back
2103-50F*	50.8mm/2"	6µm	3µm	flat back

Resolution 0.01mm/0.0005"

Code	Range	Accuracy	Hysteresis	Remark
2104-10F*	12.7mm/0.5"	20µm	10µm	flat back
2104-25F*	25.4mm/1"	20µm	10µm	flat back
2104-50F*	50.8mm/2"	30µm	10µm	flat back

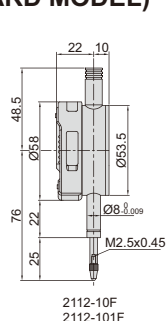
*Supplied with manufacturer inspection certificate traceable to NIST USA

DIGITAL INDICATORS (STANDARD MODEL)

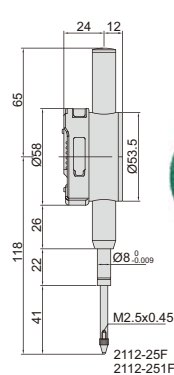
INSPECTION
CERTIFICATE
TRACEABLE TO NIST

DATA
OUTPUT

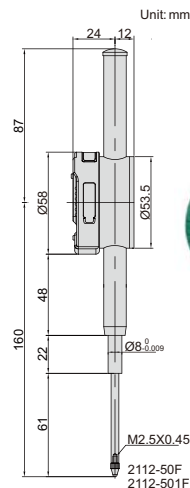
spindle lift knob is included



2112-101F



2112-251F



2112-501F

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

Resolution 0.01mm/0.0005"

Code	Range	Accuracy	Hysteresis	Remark
2112-10F*	12.7mm/0.5"	20µm	10µm	flat back
2112-25F*	25.4mm/1"	20µm	10µm	flat back
2112-50F*	50.8mm/2"	30µm	10µm	flat back
2112-10*	12.7mm/0.5"	20µm	10µm	lug back
2112-25*	25.4mm/1"	20µm	10µm	lug back
2112-50*	50.8mm/2"	30µm	10µm	lug back

*Supplied with manufacturer inspection certificate traceable to NIST USA

Resolution 0.001mm/0.00005"

Code	Range	Accuracy	Hysteresis	Remark
2112-101F*	12.7mm/0.5"	5µm	2µm	flat back
2112-251F*	25.4mm/1"	5µm	3µm	flat back
2112-501F*	50.8mm/2"	6µm	3µm	flat back

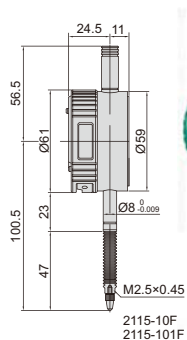
WATERPROOF DIGITAL INDICATORS

INSPECTION
CERTIFICATE
TRACEABLE TO NIST

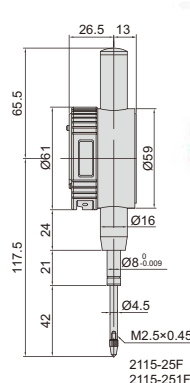
DATA
OUTPUT

WATERPROOF

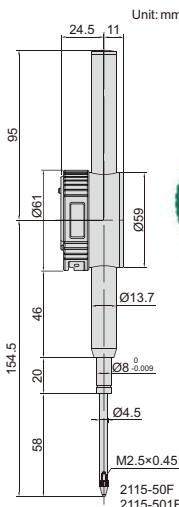
spindle lift knob is included
(except 2115-101F, 2115-10F)



2115-10F



2115-25F



2115-50F

Resolution 0.001mm/0.00005"

Code	Range	Dust/waterproof	Accuracy	Hysteresis	Remark
2115-101F*	12.7mm/0.5"	IP65	5µm	2µm	flat back
2115-251F*	25.4mm/1"	IP54	5µm	3µm	flat back
2115-501F*	50.8mm/2"	IP54	6µm	3µm	flat back

Resolution 0.01mm/0.0005"

Code	Range	Dust/waterproof	Accuracy	Hysteresis	Remark
2115-10F*	12.7mm/0.5"	IP65	20µm	10µm	flat back
2115-25F*	25.4mm/1"	IP54	20µm	10µm	flat back
2115-50F*	50.8mm/2"	IP54	30µm	10µm	flat back

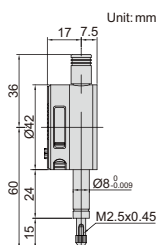
*Supplied with manufacturer inspection certificate traceable to NIST USA

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

COMPACT DIGITAL INDICATORS

INSPECTION
CERTIFICATE
TRACEABLE TO NIST

DATA
OUTPUT



2114-5F

- Button function:
 - in/mm: short press for inch/metric conversion
 - long press to change measuring direction
 - ABS: short press for absolute/incremental measurement
 - long press to preset data
 - 0/ON: short press to turn on when power is off
 - short press to set zero when power is on
 - long press to turn off
- CR1632 battery, automatic power off
- Data output
- Optional accessory: data output cable, contact points

Code	Range	Resolution	Accuracy	Hysteresis	Remark
2114-5F*	5mm/0.2"	0.01mm/0.0005"	20µm	10µm	flat back

*Supplied with manufacturer inspection certificate traceable to NIST USA

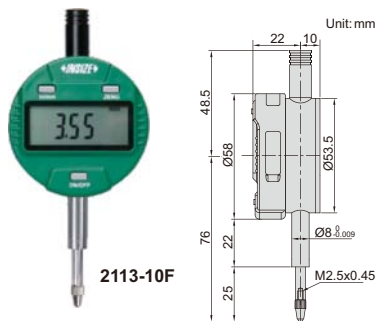
NO AUTO POWER OFF DIGITAL INDICATORS

INSPECTION
CERTIFICATE
TRACEABLE TO NIST

DATA
OUTPUT

ONE BATTERY FOR
4000 WORKING HOURS

- No auto power off, tracking the deformation of mould and steel structure for a long time
- Low power consumption
- Button function: on/off, zero, inch/mm
- CR2032 battery, data output
- With flat back
- Optional accessory: data output cable (code 7305-SPC1A), backs, contact points



spindle lift knob is included



data output cable (optional)



Code	Range	Resolution	Accuracy	Hysteresis
2113-10F*	12.7mm/0.5"	0.01mm/0.0005"	20µm	10µm
2113-101F*	12.7mm/0.5"	0.001mm/0.00005"	5µm	2µm

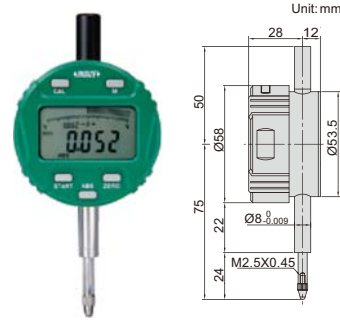
*Supplied with manufacturer inspection certificate traceable to NIST USA

DIGITAL INDICATOR FOR BORE GAGES

INSPECTION
CERTIFICATE
TRACEABLE TO NIST

DATA
OUTPUT

- Specially designed for bore gages
- The minimum value tracking function can find the diameter automatically
- Read the diameter directly, after inputting the size of setting ring
- Reading in digital and analog
- Display can be rotated by 320°
- Button function: minimum value tracking, calibration, data preset, inch/metric conversion, absolute/incremental measurement
- CR2032 battery, automatic power off
- Data output
- With flat back
- Optional accessory: data output cable, backs, contact points



2108-10F



Code	Range	Resolution	Accuracy	Hysteresis
2108-10F *	12.7mm/0.5"	0.002mm/0.0001"	20µm	10µm

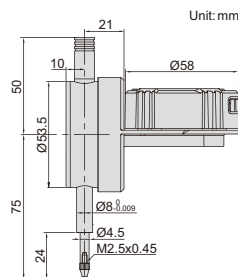
*Supplied with manufacturer inspection certificate traceable to NIST USA

BACK PLUNGER TYPE DIGITAL INDICATORS

- Display can rotate 320°, and display direction is changeable
- Reading in digital and analog
- Button function: tolerance Go and No-Go display, data preset, measuring direction change, max./min./TIR measurement, inch/metric conversion, absolute/incremental measurement
- CR2032 battery, automatic power off
- Data output
- With flat back
- Optional accessory: data output cable, backs, contact points



2118-10



INSPECTION
CERTIFICATE
TRACEABLE TO NIST

DATA
OUTPUT

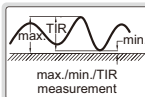
spindle lift knob is included



display can rotate 320°



max./min./TIR



display direction is changeable



Remark: To change above direction, 4 fixing screws on the back of display need to be removed first.

Code	Range	Resolution	Accuracy	Hysteresis
2118-10 *	12.7mm/0.5"	0.01mm/0.0005"	20µm	10µm

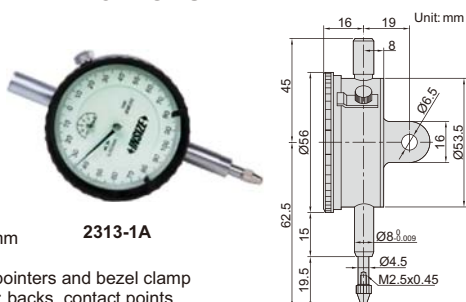
*Supplied with manufacturer inspection certificate traceable to NIST USA

PRECISION DIAL INDICATORS

INSPECTION
CERTIFICATE
TRACEABLE TO NIST

JEWELLED
BEARING

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



2313-1A

Code	Range	Accuracy	Hysteresis	Range/rev	Dial reading	Remark
2313-1FA*	1mm	5µm	2µm	0.2mm	0-100-0	flat back
2313-2FA*	2mm	8µm	2.5µm	0.2mm	0-100-0	flat back
2313-1A*	1mm	5µm	2µm	0.2mm	0-100-0	lug back

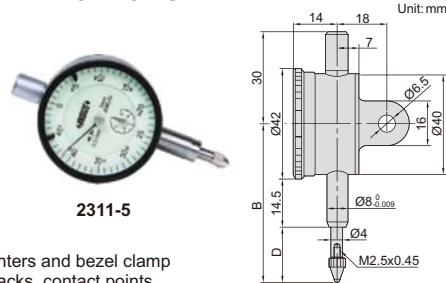
*Supplied with manufacturer inspection certificate traceable to NIST USA

COMPACT DIAL INDICATORS

INSPECTION
CERTIFICATE
TRACEABLE TO NIST

JEWELLED
BEARING

- Range/rev: 0.5mm
- Dial reading: 0-50
- Meet DIN878
- Jeweled bearing
- Supplied with limit pointers and bezel clamp
- Optional accessory: backs, contact points



2311-5

Code	Range	Graduation	Accuracy	Hysteresis	Remark	B	D
2311-3F*	3mm	0.01mm	14µm	3µm	flat back	46	10.5
2311-5F*	5mm	0.01mm	16µm	3µm	flat back	48	12.5
2311-3*	3mm	0.01mm	14µm	3µm	lug back	46	10.5
2311-5*	5mm	0.01mm	16µm	3µm	lug back	48	12.5

*Supplied with manufacturer inspection certificate traceable to NIST USA

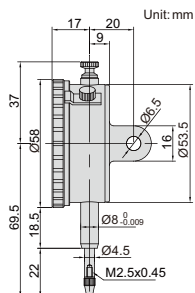
DIAL INDICATORS (PROMOTION MODEL)

**INSPECTION
CERTIFICATE**
TRACEABLE TO NIST



2301-10

- 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



Unit: mm

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

*Supplied with manufacturer inspection certificate traceable to NIST USA

DIAL INDICATORS (STANDARD MODEL)

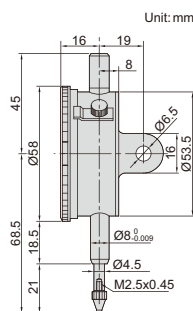
**INSPECTION
CERTIFICATE**
TRACEABLE TO NIST

**JEWELLED
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



Unit: mm

Code	Range	Accuracy	Hysteresis	Range/rev	Remark
2308-3FA *	3mm	14μm	3μm	1mm	flat back
2308-5FA *	5mm	16μm	3μm	1mm	flat back
2308-10FA *	10mm	17μm	3μm	1mm	flat back
2308-3A *	3mm	14μm	3μm	1mm	lug back
2308-5A *	5mm	16μm	3μm	1mm	lug back
2308-10A *	10mm	17μm	3μm	1mm	lug back

*Supplied with manufacturer inspection certificate traceable to NIST USA

SHOCKPROOF DIAL INDICATORS

**INSPECTION
CERTIFICATE**
TRACEABLE TO NIST

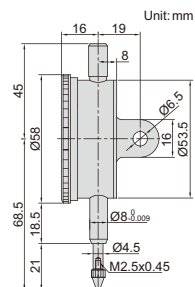
**JEWELLED
BEARING**

**SHOCK
PROOF**



2314-10A

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



Unit: mm

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

*Supplied with manufacturer inspection certificate traceable to NIST USA

WATERPROOF DIAL INDICATORS

**INSPECTION
CERTIFICATE**
TRACEABLE TO NIST

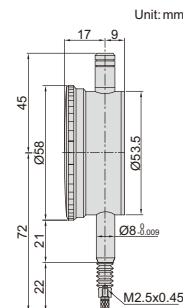
**IP54
WATERPROOF**

**JEWELLED
BEARING**



2324-10

- Dial reading: 0-100
- Meet DIN878
- IP54 dust/waterproof
- Jeweled bearing
- With flat back



Unit: mm

Code	Range	Graduation	Accuracy	Hysteresis	Range/rev
2324-10F *	10mm	0.01mm	17μm	3μm	1mm

*Supplied with manufacturer inspection certificate traceable to NIST USA

BACK PLUNGER TYPE DIAL INDICATORS

**INSPECTION
CERTIFICATE**
TRACEABLE TO NIST

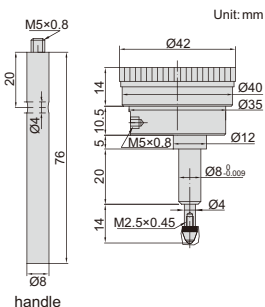


handle (included)



2357-5

- Dial reading: 0-100
- Supplied with handle
- With limit pointers
- Optional accessory: contact points



Unit: mm

Code	Range	Graduation	Accuracy	Hysteresis	Range/rev
2357-5 *	5mm	0.01mm	15μm	5μm	1mm

*Supplied with manufacturer inspection certificate traceable to NIST USA

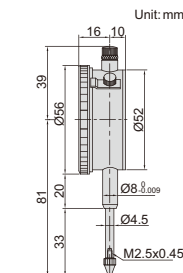
DIAL INDICATORS (LONG STROKE)

**INSPECTION
CERTIFICATE**
TRACEABLE TO NIST



2302-25F

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



Unit: mm

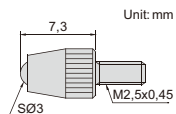
Code	Range	Accuracy	Hysteresis	Range/rev	Remark
2302-25F *	25mm	35μm	7μm	1mm	flat back

*Supplied with manufacturer inspection certificate traceable to NIST USA

CONTACT POINTS



6282-0101

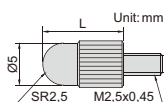


BALL POINT

Code	Material of measuring face	L (mm)
6282-0101	carbide	7.3
6282-0103	ceramic	73.
6282-0104	carbide	8.3



6282-0205

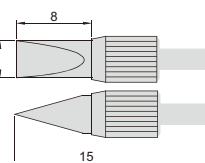


SHELL TYPE POINT

Code	Material of measuring face	L
6282-0205	steel	15mm
6282-0210	steel	30mm



6282-1001

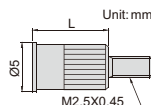


KNIFE EDGE POINT

Code	Material of measuring face
6282-1001	steel



6282-1101

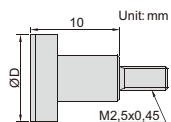


FLAT POINT

Code	Material of measuring face	L (mm)
6282-1101	steel	8



6282-1201

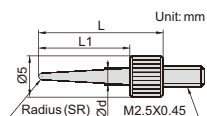


FLAT POINT

Code	Material of measuring face	ØD
6282-1201	steel	10mm
6282-1202	steel	15mm
6282-1203	steel	20mm
6282-1204	steel	25mm
6282-1205	steel	30mm



6282-1601

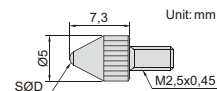


NEEDLE POINT

Code	Material of measuring face	L1	L	SR	Ød
6282-1601	steel	11	15	0.4	2
6282-1602	steel	13	17	0.2	2
6282-1603	steel	21	25	0.4	3
6282-1604	steel	31	35	0.4	3



6282-0303

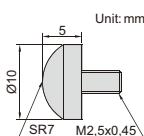


BALL POINT

Code	Material of measuring face	SØD
6282-0301	steel	1mm
6282-0302	carbide	1,5mm
6282-0303	carbide	1,8mm
6282-0304	carbide	2,5mm
6282-0305	carbide	4mm



6282-0401

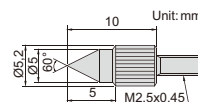


SPHERICAL POINT

Code	Material of measuring face
6282-0401	steel



6282-0601



CONICAL POINT

Code	Material of measuring face
6282-0601	steel



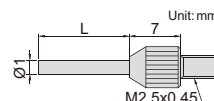
6282-1301

FLAT POINT

Code	Material of measuring face
6282-1301	carbide



6282-1706

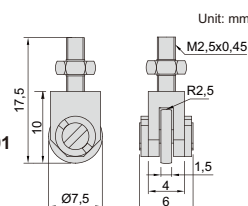


NEEDLE POINT

Code	Material of measuring face	ØD	L
6282-1705	carbide	1	8
6282-1706	carbide	1	10
6282-1707	carbide	1	20
6282-1708	carbide	1	40
6282-1712	carbide	1.5	20
6282-1713	carbide	1.5	40
6282-1714	carbide	2	8
6282-1715	carbide	2	18
6282-1716	carbide	2	28
6282-1717	carbide	2	40



6282-1901



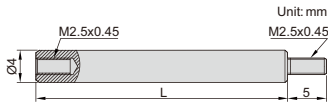
ROLLER POINT

Code	Material of measuring face
6282-1901	steel

EXTENSION RODS



6282-2010



Code	Material	L
6282-2001	steel	10mm
6282-2002	steel	15mm
6282-2003	steel	20mm
6282-2004	steel	25mm
6282-2005	steel	30mm
6282-2006	steel	35mm

Code	Material	L
6282-2007	steel	40mm
6282-2008	steel	45mm
6282-2009	steel	50mm
6282-2010	steel	55mm
6282-2011	steel	60mm
6282-2012	steel	65mm

Code	Material	L
6282-2013	steel	70mm
6282-2014	steel	75mm
6282-2015	steel	80mm
6282-2016	steel	90mm
6282-2017	steel	100mm

SPINDLE LIFT KNOB



7332



- For dial/digital indicators with spindle diameter Ø4.5mm or Ø5mm

Code
7332

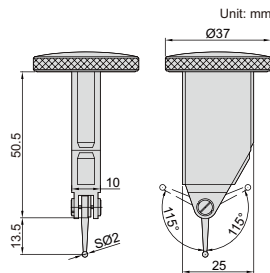
BACK PLUNGER TYPE DIAL TEST INDICATOR



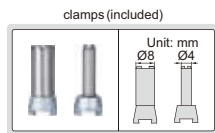
JEWELLED BEARING



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

DIAL TEST INDICATORS

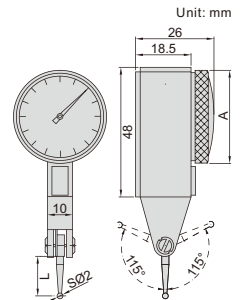
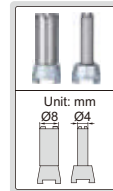


JEWELLED BEARING



2380-08

clamps (included)



- 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

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

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

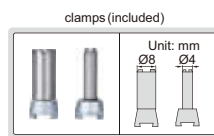
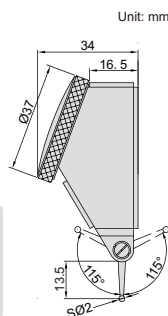
TILTED FACE TYPE DIAL TEST INDICATOR



JEWELLED BEARING



2399-08



- 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
2399-08*	0.8mm	0.01mm	13µm	3µm	0-40-0

*Supplied with manufacturer inspection certificate traceable to NIST USA

LONG STYLI DIAL TEST INDICATOR

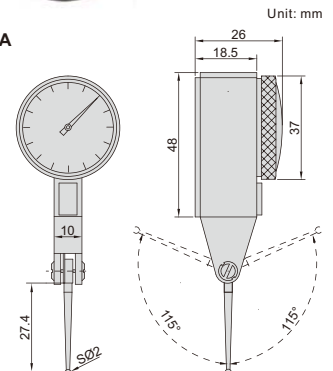
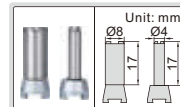


JEWELLED BEARING



2383-08A

clamps (included)



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

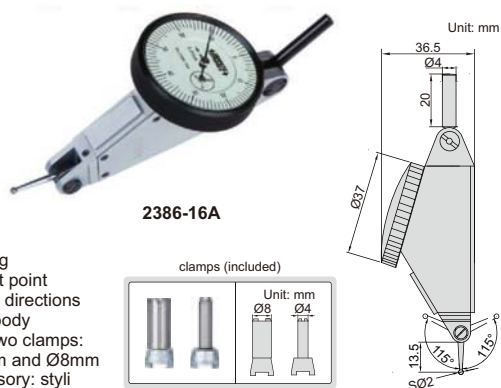
Code	Range	Graduation	Accuracy	Hysteresis	Dial reading
2383-08A*	0.8mm	0.01mm	13µm	3µm	0-40-0

*Supplied with manufacturer inspection certificate traceable to NIST USA

LARGE RANGE DIAL TEST INDICATOR

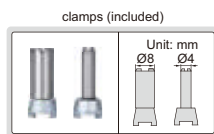
INSPECTION
CERTIFICATE
TRACEABLE TO NIST

JEWELLED
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



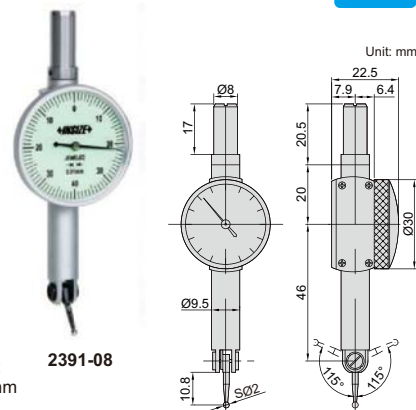
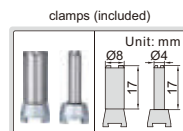
Code	Range	Graduation	Accuracy	Hysteresis	Dial reading
2386-16A*	1.6mm	0.01mm	25µm	8µm	0-40-0

*Supplied with manufacturer inspection certificate traceable to NIST USA

ROUND BODY DIAL TEST INDICATOR

INSPECTION
CERTIFICATE
TRACEABLE TO NIST

JEWELLED
BEARING



2391-08

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

Code	Range	Graduation	Accuracy	Hysteresis	Dial reading
2391-08*	0.8mm	0.01mm	13µm	3µm	0-40-0

*Supplied with manufacturer inspection certificate traceable to NIST USA

CLAMPS FOR DIAL TEST INDICATORS

Code	ØD
6298-1	Ø4mm
6298-2	Ø8mm



6298-1

6298-2

DIAL TEST INDICATOR HOLDERS



6293-1



6293-2

Code	Stem section	Stem length (L)
6293-1	9x9mm	100mm
6293-6	9x9mm	50mm
6293-2	Ø8mm	115mm



DIAL TEST INDICATOR CENTERING HOLDER

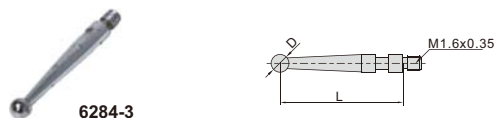


6291-1

Code
6291-1

- Center cylinders or holes on machine tools

STYLI FOR DIAL TEST INDICATORS



6284-3

Code	For dial test indicator	Material of contact point	L	D
6284-1	2380-08,	steel	13.5	SØ1
6284-3	2398-08	carbide	13.5	SØ2
6284-4	2381-08,	ruby	13.5	SØ2
6284-8	2399-08	carbide	13.5	SØ3
6284-21	2380-02	steel	12.5	SØ1
6284-22	2381-02	carbide	12.5	SØ2
6284-71	2391-08	carbide	10.8	SØ2

DIAL TEST INDICATOR HOLDER



6296-1

- Supplied with hex key

Code
6296-1

DIAL TEST INDICATOR UNIVERSAL HOLDER



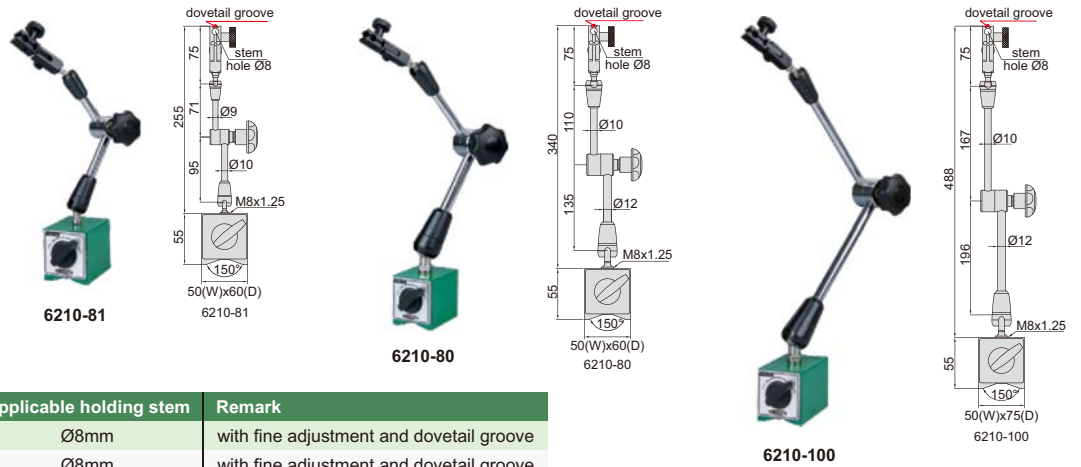
6297-1

- Set the indicators at the desired attitude to the workpiece

Code
6297-1

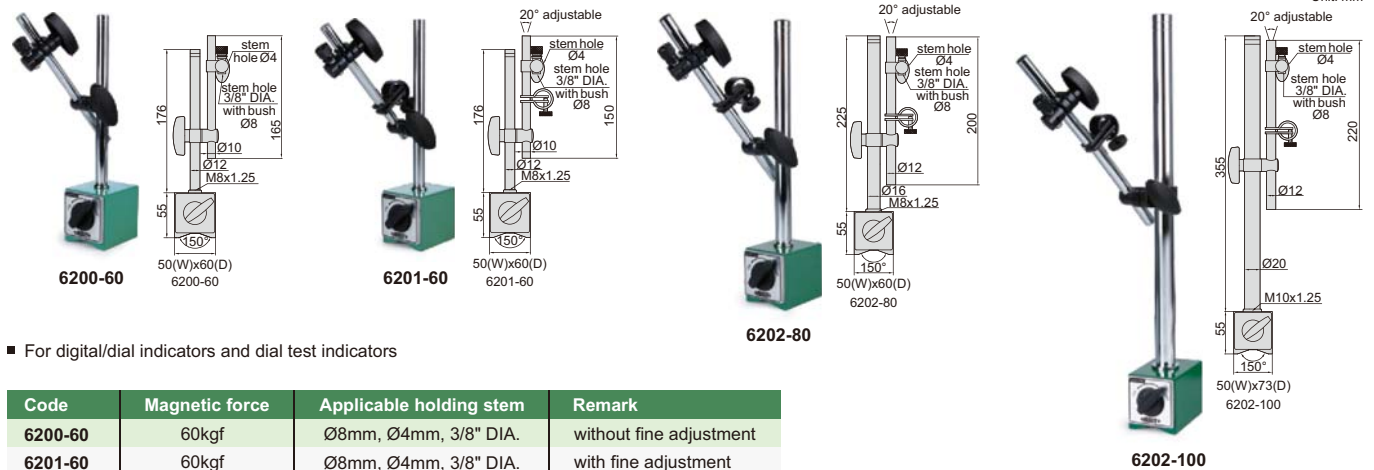
UNIVERSAL MAGNETIC STANDS (HEAVY DUTY)

- For digital/dial indicators and dial test indicators



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

MAGNETIC STANDS



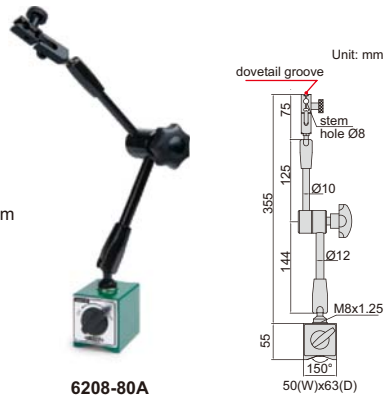
- For digital/dial indicators and dial test indicators

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 STAND (LIGHT DUTY)

ATTENTION: LOW LOCKING FORCE

- Applicable holding stem: Ø8mm
- For digital/dial indicators and dial test indicators

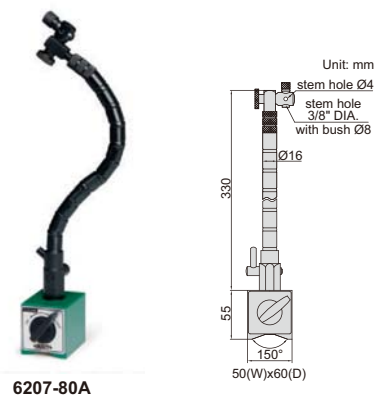


Code	Magnetic force	Remark
6208-80A	80kgf	with fine adjustment and dovetail groove

FLEX ARM MAGNETIC STAND

ATTENTION: FOR DIAL TEST INDICATORS ONLY

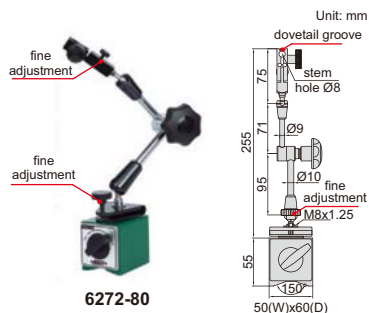
- For dial test indicators



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

MAGNETIC STAND WITH DOUBLE FINE ADJUSTMENT

- Magnetic force: 80kgf
- With double fine adjustments on the head and on the base
- For digital/dial indicators and dial test indicators



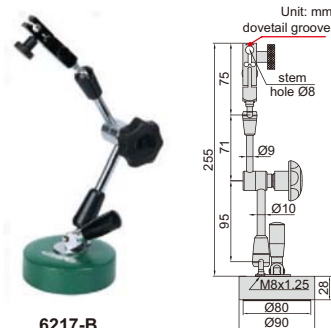
6272-80

Code	Applicable holding stem	Remark
6272-80	Ø8mm	with double fine adjustment and dovetail groove

VACUUM STAND



- Diameter of vacuum disc: Ø80mm
- For granite surface plates or cast iron surface plates
- For digital/dial indicators and dial test indicators



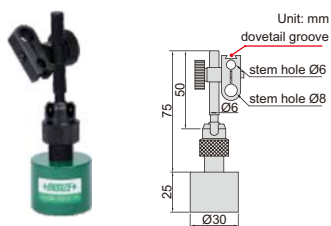
6217-B

Code	Vacuum force	Applicable holding stem	Remark
6217-B	80kgf	Ø8mm	with fine adjustment and dovetail groove

MINI MAGNETIC STAND

ATTENTION: FOR DIAL TEST INDICATORS ONLY

- For dial test indicators
- With dovetail groove



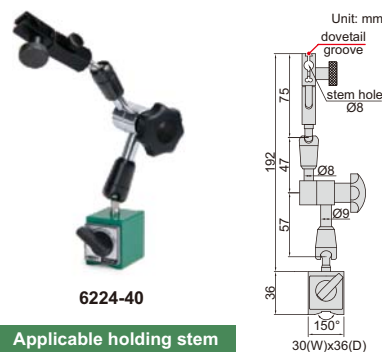
6211-10

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

MINI MAGNETIC STAND

ATTENTION: FOR DIAL TEST INDICATORS ONLY

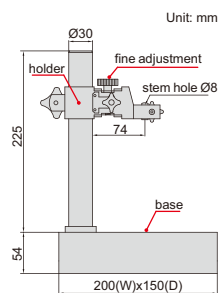
- For dial test indicators
- With fine adjustment and dovetail groove



6224-40

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

GRANITE DIAL INDICATOR STAND



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

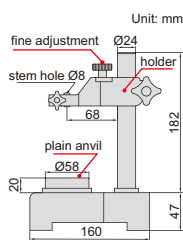


6866-150

Code	Applicable holding stem	Base
6866-150	Ø8mm	flatness 2.5µm



DIAL INDICATOR STAND



- Vertical travel of holder: 100mm
- Fine adjustment range: 2mm
- Applicable holding stem: Ø8mm
- Supplied with dust cover

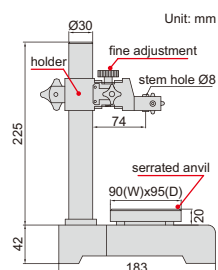


6862-1002

Code	Anvil
6862-1002	plain, flatness 1.5µm, hardness HRC60±2



DIAL INDICATOR STAND



6863-150

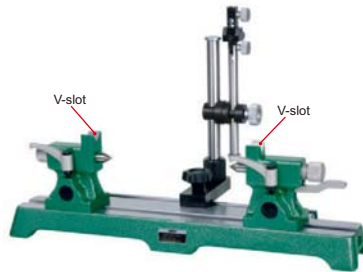
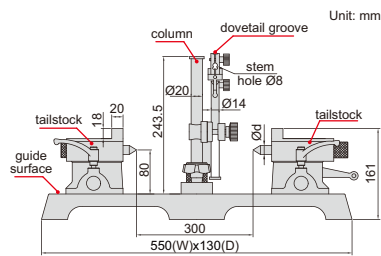


- Vertical travel of holder: 150mm
- Fine adjustment range: 2mm
- Supplied with dust cover

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



BENCH CENTER (BASIC MODEL)



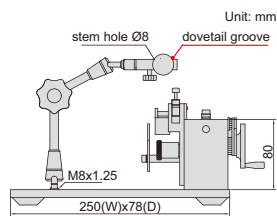
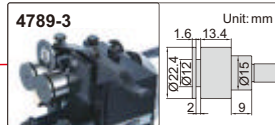
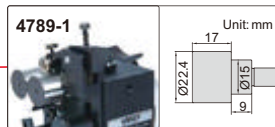
4782-300

- Runout accuracy: 2µm
- Center height: 80mm
- Distance between two centers: 300mm
- Hardened cast-iron guide surface
- Movable column
- V-slot for cylinder Ø4-Ø22mm

Code	Parallelism	Diameter of center (Ød)	Load
4782-300	0.01mm	Ø16mm	25kg

*Parallelism of two centers to the guide surface

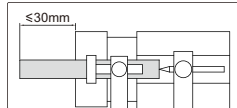
CONCENTRICITY GAGES



- Optional accessory: dial test indicator, mini magnetic stand (code 6224-40)



recommended outstretch length ≤ 30mm

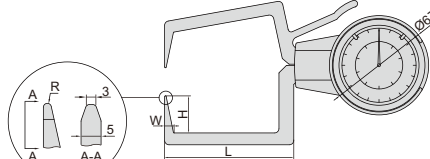


Code	Accuracy	Applicable diameter
4789-1	2µm	Ø3.5mm-25mm
4789-3	2µm	Ø1mm-25mm

EXTERNAL DIAL CALIPER GAGE



2333-201



Unit: mm

(mm)

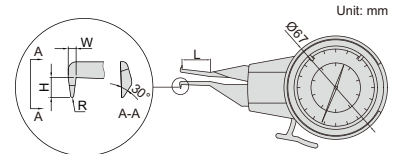
Code	Range	Graduation	Accuracy	L	H	W	R
2333-201	0-20mm	0.01mm	±0.03mm	80	25	6.5	R0.5

Sizes available up to 60mm

INTERNAL DIAL CALIPER GAGES



2222-15



Unit: mm

Code	Range	Graduation	Accuracy	L	H	W	R
2222-15	5-15mm	0.01mm	±0.02mm	20	2	2.5	R0.3
2222-25	5-25mm	0.01mm	±0.03mm	35	1.5	1.0	R0.3
2222-301	10-30mm	0.01mm	±0.03mm	55	5.5	2.5	R0.5
2222-401	20-40mm	0.01mm	±0.03mm	80	6.0	3.0	R0.5

Sizes available up to 60mm

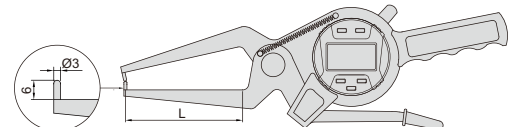
DIGITAL EXTERNAL CALIPER GAGE

DATA OUTPUT

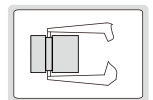


2132-20

Unit: mm



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



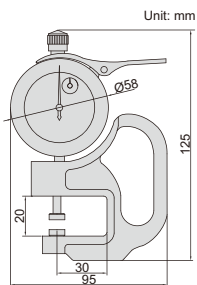
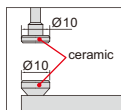
Code	Range	Resolution	Accuracy	L (mm)
2132-20	0-20mm/0-0.8"	0.01mm/0.0005"	±0.04mm	60

Sizes available up to 100mm

THICKNESS GAGE



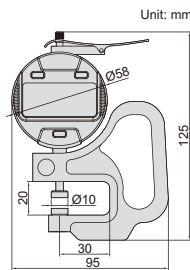
2364-10



Code	Range	Graduation	Accuracy
2364-10	0-10mm	0.01mm	±0.02mm

DIGITAL THICKNESS GAGES

DATA
OUTPUT



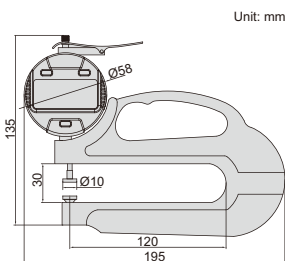
2871-101

- 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

DIGITAL THICKNESS GAGE

DATA
OUTPUT



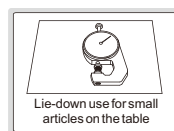
2872-10

- 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
2872-10	0-10mm/0-0.4"	0.01mm/0.0005"	±0.02mm

THICKNESS GAGE

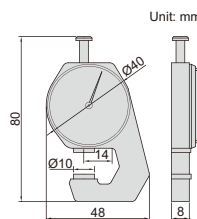
SUITABLE FOR
JEWELLERY



Lie-down use for small
articles on the table



2361-10

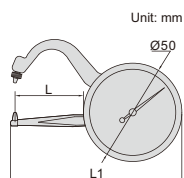
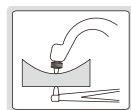


Code	Range	Graduation	Accuracy
2361-10	0-10mm	0.1mm	±0.05mm

THICKNESS GAGE



2862-101



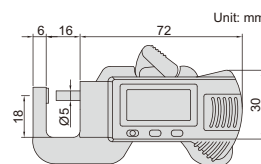
Code	Range	Graduation	Accuracy	L	L1
2862-101	0-10mm	0.05mm	±0.1mm	35mm	85mm

DIGITAL SNAP GAGE

DATA
OUTPUT



2166-12



- Optional accessory: data output cable

Code	Range	Resolution	Accuracy
2166-12	0-12mm/0-0.5"	0.01mm/0.0005"	±0.03mm

DIAL SNAP GAGE

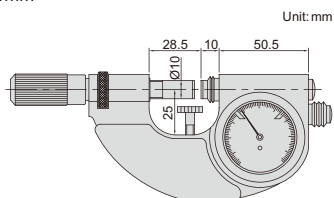
IP54
WATERPROOF

ATTENTION:
BASIC MODEL

- Go/No-Go judgement for mass production
- Dial indicator: range ±0.04mm, graduation 0.001mm, accuracy 0.001mm
- IP54 dust/waterproof
- Measuring force: 5-10N
- Carbide measuring faces
- Supplied with setting standards (except 0-25mm)



3334-25



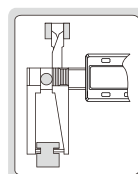
Code	Range
3334-25	0-25mm

Sizes available up to 100mm

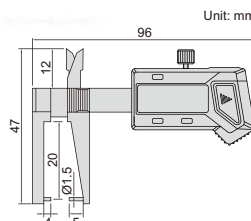
DIGITAL 3-PURPOSE SNAP GAGE

SUITABLE FOR
JEWELLERY

ATTENTION: NO
DATA OUTPUT



2164-25A



- Resolution: 0.01mm/0.0005"
- Buttons: zero, mm/inch, on/off
- Battery LR44
- Made of stainless steel

Code	Range	Accuracy
2164-25A	0-25mm/0-1"	±0.03mm

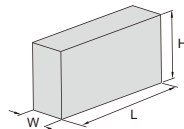
INDIVIDUAL STEEL GAGE BLOCKS



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



4101-B70



Dimension:

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

CUSTOM SIZES
CAN SUPPLY ANY SIZES FROM 0.5~1000MM, SUCH AS 72.672MM
SIZE<100MM: MOQ 6PCS PER SIZE
SIZE>100MM: MOQ 3PCS PER SIZE

Grade 1

Code	Size
4101-BD5	0.5mm
4101-B1	1mm
4101-B1D001	1.001mm
4101-B1D002	1.002mm
4101-B1D003	1.003mm
4101-B1D004	1.004mm
4101-B1D005	1.005mm
4101-B1D006	1.006mm
4101-B1D009	1.009mm
4101-B1D01	1.01mm
4101-B1D02	1.02mm
4101-B1D03	1.03mm
4101-B1D04	1.04mm
4101-B1D05	1.05mm
4101-B1D06	1.06mm
4101-B1D07	1.07mm
4101-B1D08	1.08mm
4101-B1D09	1.09mm
4101-B1D1	1.1mm
4101-B1D12	1.12mm
4101-B1D15	1.15mm
4101-B1D16	1.16mm
4101-B1D18	1.18mm
4101-B1D19	1.19mm

Grade 1

Code	Size
4101-B1D2	1.2mm
4101-B1D21	1.21mm
4101-B1D22	1.22mm
4101-B1D24	1.24mm
4101-B1D25	1.25mm
4101-B1D26	1.26mm
4101-B1D27	1.27mm
4101-B1D3	1.3mm
4101-B1D32	1.32mm
4101-B1D33	1.33mm
4101-B1D34	1.34mm
4101-B1D35	1.35mm
4101-B1D36	1.36mm
4101-B1D37	1.37mm
4101-B1D4	1.4mm
4101-B1D42	1.42mm
4101-B1D43	1.43mm
4101-B1D45	1.45mm
4101-B1D46	1.46mm
4101-B1D47	1.47mm
4101-B1D48	1.48mm
4101-B1D49	1.49mm
4101-B1D5	1.5mm
4101-B1D6	1.6mm

Grade 1

Code	Size
4101-B1D7	1.7mm
4101-B1D8	1.8mm
4101-B1D9	1.9mm
4101-B2	2mm
4101-B2D5	2.5mm
4101-B3	3mm
4101-B3D5	3.5mm
4101-B4	4mm
4101-B4D5	4.5mm
4101-B5	5mm
4101-B5D5	5.5mm
4101-B6	6mm
4101-B7	7mm
4101-B7D5	7.5mm
4101-B8	8mm
4101-B8D5	8.5mm
4101-B9	9mm
4101-B9D5	9.5mm
4101-B10	10mm
4101-B11	11mm
4101-B12	12mm
4101-B13	13mm
4101-B14	14mm
4101-B15	15mm

Grade 1

Code	Size
4101-B16	16mm
4101-B18	18mm
4101-B20	20mm
4101-B21	21mm
4101-B22	22mm
4101-B23	23mm
4101-B25	25mm
4101-B30	30mm
4101-B35	35mm
4101-B40	40mm
4101-B45	45mm
4101-B50	50mm
4101-B60	60mm
4101-B70	70mm
4101-B75	75mm
4101-B80	80mm
4101-B90	90mm
4101-B100	100mm
4101-B125	125mm
4101-B131D4	131.4mm
4101-B150	150mm

Sizes available up to 1000mm

Grade 0

Code	Size
4101-A1	1mm
4101-A10	10mm
4101-A100	100mm

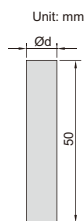
Grade 2

Code	Size
4101-C1	1mm
4101-C10	10mm
4101-C100	100mm
4101-C200	200mm
4101-C250	250mm
4101-C300	300mm

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
4166-2S	1.00, 1.01, 1.02, ... 2.00	0.01mm	101
4166-3S	2.00, 2.01, 2.02, ... 3.00	0.01mm	101
4166-4S	3.00, 3.01, 3.02, ... 4.00	0.01mm	101
4166-5S	4.00, 4.01, 4.02, ... 5.00	0.01mm	101
4166-6S	5.00, 5.01, 5.02, ... 6.00	0.01mm	101
4166-7S	6.00, 6.01, 6.02, ... 7.00	0.01mm	101
4166-8S	7.00, 7.01, 7.02, ... 8.00	0.01mm	101
4166-9S	8.00, 8.01, 8.02, ... 9.00	0.01mm	101
4166-10S	9.00, 9.01, 9.02, ... 10.00	0.01mm	101

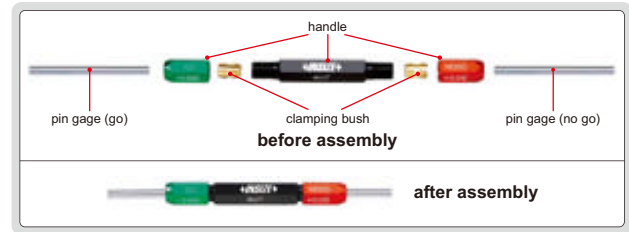
Code	Diameter Ød (mm)	Step	Pin gages per set
4166-411	1.0, 1.1, 1.2, ... 5.0	0.1mm	41
4166-511	5.0, 5.1, 5.2, ... 10.0	0.1mm	51
4166-512	10.0, 10.1, 10.2, ... 15.0	0.1mm	51

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
4166-10D	10.00, 10.01, 10.02, ... 10.50	0.01mm	51

PIN GAGE HANDLES



- Wrench is needed to install pins
- Clamping bushes (0.2~7.14mm) are made of brass, clamping bushes (7.14~20.62mm) are made of aluminum

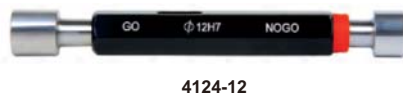


Code	Applicable pin gage diameter	Including	
		Handle	Clamping bush (mm)
7341-0S	0.2-1.02mm	1pc	6 pairs (the clamping range are 0.2-0.38, 0.38-0.51, 0.51-0.64, 0.64-0.76, 0.76-0.89, 0.89-1.02)
7341-1S	1.02-1.91mm	1pc	7 pairs (the clamping range are 1.02-1.14, 1.14-1.27, 1.27-1.40, 1.40-1.52, 1.52-1.65, 1.65-1.78, 1.78-1.91)
7341-2S	1.91-3.33mm	1pc	8 pairs (the clamping range are 1.91-2.08, 2.08-2.26, 2.26-2.44, 2.44-2.62, 2.62-2.79, 2.79-2.97, 2.97-3.15, 3.15-3.33)
7341-3S	3.33-4.57mm	1pc	7 pairs (the clamping range are 3.33-3.51, 3.51-3.68, 3.68-3.86, 3.86-4.04, 4.04-4.22, 4.22-4.39, 4.39-4.57)
7341-4S	4.57-5.79mm	1pc	6 pairs (the clamping range are 4.57-4.78, 4.78-4.98, 4.98-5.18, 5.18-5.38, 5.38-5.59, 5.59-5.79)
7341-5S	5.79-7.14mm	1pc	6 pairs (the clamping range are 5.79-5.99, 5.99-6.20, 6.20-6.40, 6.40-6.63, 6.63-6.88, 6.88-7.14)
7341-6S	7.14-8.66mm	1pc	6 pairs (the clamping range are 7.14-7.39, 7.39-7.65, 7.65-7.90, 7.90-8.15, 8.15-8.41, 8.41-8.66)

Code	Applicable pin gage diameter	Including	
		Handle	Clamping bush (mm)
7341-7S	8.66-10.31mm	1pc	6 pairs (the clamping range are 8.66-8.92, 8.9-9.17, 9.17-9.42, 9.42-9.70, 9.70-10.01, 10.01-10.31)
7341-8S	10.31-11.81mm	1pc	4 pairs (the clamping range are 10.31-10.67, 10.67-11.05, 11.05-11.43, 11.43-11.81)
7341-9S	11.81-12.95mm	1pc	3 pairs (the clamping range are 11.81-12.19, 12.19-12.57, 12.57-12.95)
7341-10S	12.95-14.71mm	1pc	4 pairs (the clamping range are 12.95-13.51, 13.51-13.89, 13.89-14.30, 14.30-14.71)
7341-11S	14.71-16.13mm	1pc	4 pairs (the clamping range are 14.71-15.09, 15.09-15.49, 15.49-15.88, 15.88-16.13)
7341-12S	16.13-17.88mm	1pc	4 pairs (the clamping range are 16.13-16.66, 16.66-17.07, 17.07-17.48, 17.48-17.88)
7341-13S	17.88-19.30mm	1pc	4 pairs (the clamping range are 17.88-18.26, 18.26-18.67, 18.67-19.05, 19.05-19.30)
7341-14S	19.30-20.62mm	1pc	2 pairs (the clamping range are 19.30-19.84, 19.84-20.62)

PLAIN PLUG GAGES

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

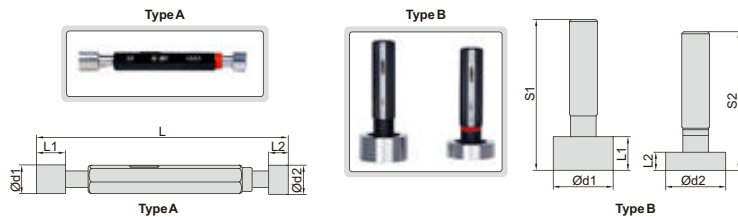


CUSTOM-MADE
OTHER CLASSES ARE AVAILABLE, SUCH AS H8, H9
OTHER DIAMETERS ARE AVAILABLE, SUCH AS 19.003mm
OTHER LENGTHS ARE AVAILABLE, SUCH AS 70mm

Size tolerance of H7

(mm)

Diameter Ød	Size tolerance of Go gage (µm)	Size tolerance of No-Go gage (µm)	L1	L2	L	S1, S2
≥2, ≤3	+0.5 / +2.5	+9 / +11	6.5	4.5	62	—
>3, ≤6	+0.75 / +3.25	+10.75 / +13.25	8	6	74	—
>6, ≤10	+0.75 / +3.25	+13.75 / +16.25	10	7	87	—
>10, ≤14	+1 / +4	+16.5 / +19.5	12	8	99	—
>14, ≤18	+1 / +4	+16.5 / +19.5	14	10	114	—
>18, ≤24	+1 / +5	+19 / +23	16	12	132	—
>24, ≤30	+1 / +5	+19 / +23	18	14	136	—
>30, ≤40	+1.5 / +5.5	+23 / +27	20	15	155	—
>40, ≤50	+1.5 / +5.5	+23 / +27	25	18	169	—
>50, ≤65	+1.5 / +6.5	+27.5 / +32.5	30	18	—	164, 152
>65, ≤80	+1.5 / +6.5	+27.5 / +32.5	35	25	—	169, 159
>80, ≤100	+2 / +8	+32 / +38	35	25	—	169, 159



Code	Diameter	Type	Code	Diameter	Type	Code	Diameter	Type	Code	Diameter	Type	Code	Diameter	Type
4124-2	2mm	A	4124-13	13mm	A	4124-24	24mm	A	4124-38	38mm	A	4124-52	52mm	B
4124-3	3mm	A	4124-14	14mm	A	4124-25	25mm	A	4124-39	39mm	A	4124-55	55mm	B
4124-4	4mm	A	4124-15	15mm	A	4124-26	26mm	A	4124-40	40mm	A	4124-60	60mm	B
4124-5	5mm	A	4124-16	16mm	A	4124-28	28mm	A	4124-41	41mm	A	4124-65	65mm	B
4124-6	6mm	A	4124-17	17mm	A	4124-29	29mm	A	4124-42	42mm	A	4124-70	70mm	B
4124-7	7mm	A	4124-18	18mm	A	4124-30	30mm	A	4124-44	44mm	A	4124-75	75mm	B
4124-8	8mm	A	4124-19	19mm	A	4124-31	31mm	A	4124-45	45mm	A	4124-80	80mm	B
4124-9	9mm	A	4124-20	20mm	A	4124-32	32mm	A	4124-46	46mm	A	4124-85	85mm	B
4124-10	10mm	A	4124-21	21mm	A	4124-34	34mm	A	4124-47	47mm	A	4124-100	100mm	B
4124-11	11mm	A	4124-22	22mm	A	4124-35	35mm	A	4124-49	49mm	A			
4124-12	12mm	A	4124-23	23mm	A	4124-36	36mm	A	4124-50	50mm	A			

METRIC THREAD PLUG GAGES



ATTENTION:
BASIC MODEL



4130-10

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

Set

Code	Thread plug gages included
4130-S7 *	M3x0.5 (4130-3), M4x0.7 (4130-4), M5x0.8 (4130-5), M6x1 (4130-6), M8x1.25 (4130-8), M10x1.5 (4130-10), M12x1.75 (4130-12)

Individual

Code	Size (mm)	Code	Size (mm)	Code	Size (mm)	Code	Size (mm)
4130-2 *	M2x0.4	4130-8 *	M8x1.25	4130-20 *	M20x2.5	4130-42 *	M42x4.5
4130-2D5 *	M2.5x0.45	4130-9 *	M9x1.25	4130-22 *	M22x2.5	4130-45 *	M45x4.5
4130-3 *	M3x0.5	4130-10 *	M10x1.5	4130-24 *	M24x3	4130-48 *	M48x5
4130-3D5 *	M3.5x0.6	4130-11 *	M11x1.5	4130-27 *	M27x3	4130-52 *	M52x5
4130-4 *	M4x0.7	4130-12 *	M12x1.75	4130-30 *	M30x3.5	4130-56 *	M56x5.5
4130-5 *	M5x0.8	4130-14 *	M14x2	4130-33 *	M33x3.5	4130-60 *	M60x5.5
4130-6 *	M6x1	4130-16 *	M16x2	4130-36 *	M36x4		
4130-7 *	M7x1	4130-18 *	M18x2.5	4130-39 *	M39x4		

*Supplied with manufacturer inspection certificate

METRIC FINE THREAD PLUG GAGES



ATTENTION:
BASIC MODEL

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



4139-20G

Code	Size (mm)	Code	Size (mm)	Code	Size (mm)	Code	Size (mm)	Code	Size (mm)	Code	Size (mm)
4139-3D *	M3x0.35	4139-9P *	M9x1	4139-14L *	M14x0.75	4139-20R *	M20x1.5	4139-30P *	M30x1	4139-42P *	M42x1
4139-4G *	M4x0.5	4139-10G *	M10x0.5	4139-14P *	M14x1	4139-20T *	M20x2	4139-30R *	M30x1.5	4139-42R *	M42x1.5
4139-5G *	M5x0.5	4139-10L *	M10x0.75	4139-14Q *	M14x1.25	4139-22L *	M22x0.75	4139-30T *	M30x2	4139-42T *	M42x2
4139-6G *	M6x0.5	4139-10P *	M10x1	4139-14R *	M14x1.5	4139-22P *	M22x1	4139-33P *	M33x1	4139-42V *	M42x3
4139-6L *	M6x0.75	4139-10Q *	M10x1.25	4139-16L *	M16x0.75	4139-22R *	M22x1.5	4139-33R *	M33x1.5	4139-45P *	M45x1
4139-7G *	M7x0.5	4139-11P *	M11x1	4139-16P *	M16x1	4139-22T *	M22x2	4139-33T *	M33x2	4139-45R *	M45x1.5
4139-7L *	M7x0.75	4139-12G *	M12x0.5	4139-16R *	M16x1.5	4139-24P *	M24x1	4139-36R *	M36x1.5	4139-45T *	M45x2
4139-8G *	M8x0.5	4139-12L *	M12x0.75	4139-18G *	M18x0.5	4139-24R *	M24x1.5	4139-36T *	M36x2	4139-45V *	M45x3
4139-8L *	M8x0.75	4139-12P *	M12x1	4139-18L *	M18x0.75	4139-24T *	M24x2	4139-36V *	M36x3		
4139-8P *	M8x1	4139-12Q *	M12x1.25	4139-18P *	M18x1	4139-27P *	M27x1	4139-39R *	M39x1.5		
4139-9G *	M9x0.5	4139-12R *	M12x1.5	4139-18R *	M18x1.5	4139-27R *	M27x1.5	4139-39T *	M39x2		
4139-9L *	M9x0.75	4139-14G *	M14x0.5	4139-20P *	M20x1	4139-27T *	M27x2	4139-39V *	M39x3		

*Supplied with manufacturer inspection certificate

METRIC FINE THREAD RING GAGES



ATTENTION:
BASIC MODEL



4129-10P



4129-10PN

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

Code (GO)	Code (NOGO)	Size (mm)	Code (GO)	Code (NOGO)	Size (mm)	Code (GO)	Code (NOGO)	Size (mm)
4129-4G *	4129-4GN *	M4x0.5	4129-12R *	4129-12RN *	M12x1.5	4129-27R *	4129-27RN *	M27x1.5
4129-5G *	4129-5GN *	M5x0.5	4129-14L *	4129-14LN *	M14x0.75	4129-27T *	4129-27TN *	M27x2
4129-6G *	4129-6GN *	M6x0.5	4129-14P *	4129-14PN *	M14x1	4129-30P *		M30x1
4129-6L *	4129-6LN *	M6x0.75	4129-14Q *	4129-14QN *	M14x1.25	4129-30R *	4129-30RN *	M30x1.5
4129-7L *	4129-7LN *	M7x0.75	4129-14R *	4129-14RN *	M14x1.5	4129-30T *	4129-30TN *	M30x2
4129-8G *	4129-8GN *	M8x0.5	4129-16L *	4129-16LN *	M16x0.75	4129-33P *	4129-33PN *	M33x1
4129-8L *	4129-8LN *	M8x0.75	4129-16P *	4129-16PN *	M16x1	4129-33T *	4129-33TN *	M33x2
4129-8P *	4129-8PN *	M8x1	4129-16R *	4129-16RN *	M16x1.5	4129-36P *	4129-36PN *	M36x1
4129-9G *	4129-9GN *	M9x0.5	4129-18P *	4129-18PN *	M18x1	4129-36R *	4129-36RN *	M36x1.5
4129-9L *	4129-9LN *	M9x0.75	4129-18R *	4129-18RN *	M18x1.5	4129-36T *	4129-36TN *	M36x2
4129-9P *	4129-9PN *	M9x1	4129-18T *	4129-18TN *	M18x2	4129-36V *	4129-36VN *	M36x3
4129-10G *	4129-10GN *	M10x0.5	4129-20G *		M20x0.5		4129-39PN *	M39x1
4129-10L *	4129-10LN *	M10x0.75	4129-20P *	4129-20PN *	M20x1	4129-39T *	4129-39TN *	M39x2
4129-10P *	4129-10PN *	M10x1	4129-20R *	4129-20RN *	M20x1.5	4129-39V *	4129-39VN *	M39x3
4129-10Q *	4129-10QN *	M10x1.25	4129-20T *		M20x2	4129-42P *	4129-42PN *	M42x1
4129-11G *	4129-11GN *	M11x0.5	4129-22P *	4129-22PN *	M22x1	4129-42R *	4129-42RN *	M42x1.5
4129-11L *		M11x0.75	4129-22R *	4129-22RN *	M22x1.5	4129-42T *	4129-42TN *	M42x2
4129-11P *	4129-11PN *	M11x1	4129-22T *		M22x2	4129-42V *	4129-42VN *	M42x3
4129-12G *	4129-12GN *	M12x0.5	4129-24P *	4129-24PN *	M24x1	4129-45R *	4129-45RN *	M45x1.5
4129-12L *	4129-12LN *	M12x0.75	4129-24R *	4129-24RN *	M24x1.5	4129-45T *	4129-45TN *	M45x2
4129-12P *	4129-12PN *	M12x1	4129-24T *	4129-24TN *	M24x2	4129-45V *	4129-45VN *	M45x3
4129-12Q *	4129-12QN *	M12x1.25	4129-27P *	4129-27PN *	M27x1			

*Supplied with manufacturer inspection certificate

METRIC THREAD RING GAGES

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



ATTENTION:
BASIC MODEL



Individual

Code (GO)	Code (NOGO)	Size (mm)	Code (GO)	Code (NOGO)	Size (mm)
4120-2 *	4120-2N *	M2x0.4	4120-11 *	4120-11N *	M11x1.5
4120-2D2 *	4120-2D2N *	M2.2x0.45	4120-12 *	4120-12N *	M12x1.75
4120-2D5 *	4120-2D5N *	M2.5x0.45	4120-14 *	4120-14N *	M14x2
4120-3 *	4120-3N *	M3x0.5	4120-16 *	4120-16N *	M16x2
4120-3D5 *	4120-3D5N *	M3.5x0.6	4120-18 *	4120-18N *	M18x2.5
4120-4 *	4120-4N *	M4x0.7	4120-20 *	4120-20N *	M20x2.5
4120-5 *	4120-5N *	M5x0.8	4120-22 *	4120-22N *	M22x2.5
4120-6 *	4120-6N *	M6x1	4120-24 *	4120-24N *	M24x3
4120-7 *	4120-7N *	M7x1	4120-27 *	4120-27N *	M27x3
4120-8 *	4120-8N *	M8x1.25	4120-30 *	4120-30N *	M30x3.5
4120-9 *	4120-9N *	M9x1.25	4120-33 *	4120-33N *	M33x3.5
4120-10 *	4120-10N *	M10x1.5			

Go ring gage set

Code	Thread ring gages included
4120-S7 *	M3x0.5 (4120-3), M4x0.7 (4120-4), M5x0.8 (4120-5), M6x1 (4120-6), M8x1.25 (4120-8), M10x1.5 (4120-10), M12x1.75 (4120-12)

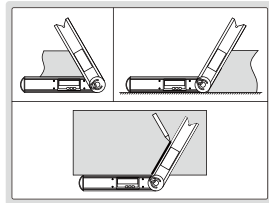
No Go ring gage set

Code	Thread ring gages included
4120-S7N *	M3x0.5 (4120-3N), M4x0.7 (4120-4N), M5x0.8 (4120-5N), M6x1 (4120-6N), M8x1.25 (4120-8N), M10x1.5 (4120-10N), M12x1.75 (4120-12N)

* Supplied with manufacturer inspection certificate

WATERPROOF DIGITAL PROTRACTOR (HEAVY DUTY)

- Suitable for setting horizontal and vertical mitre angles of cutting machine
- Buttons: ON/OFF, HOLD/SUP, SPR/CNR/MTR/BVL
- IP54 dust/waterproof
- With transverse and longitudinal vials
- 2xAAA batteries
- Absolute level, zero setting is not needed when batteries are replaced
- Backlight will turn off in one minute after no data changing, automatic power off in 5 minutes



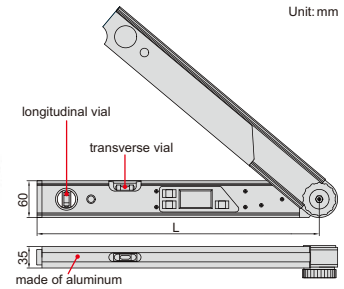
2174-225

AUTOMATIC
BACKLIGHT

ABSOLUTE
LEVEL

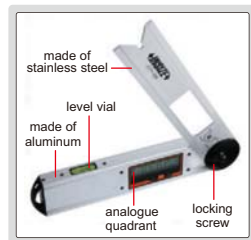
IP54
WATERPROOF

Unit: mm



Code	Size (L)	Range	Resolution	Accuracy
2174-225	490mm	0 - 225°	0.05°	±0.10°

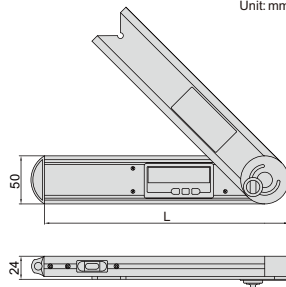
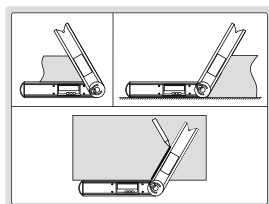
DIGITAL PROTRACTOR



2171-250

- 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

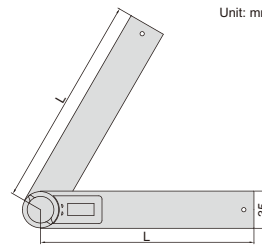
Unit: mm



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

DIGITAL PROTRACTORS

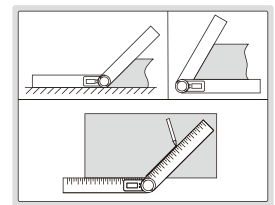
Unit: mm



2176-300

- Resolution: 0.1°
- 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	Accuracy
2176-200	200mm	0-360°	±0.3°
2176-300	300mm	0-360°	±0.3°



PROTRACTOR

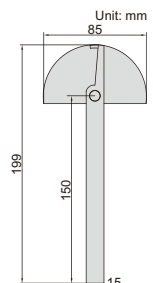
Unit: mm



4780-85

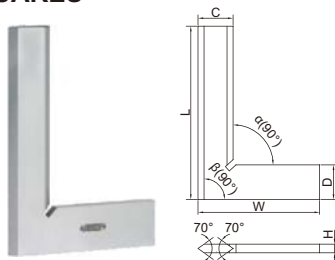
- Made of stainless steel
- Satin chrome plated scale
- With clamping screw

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



90° BEVELED EDGE SQUARES

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



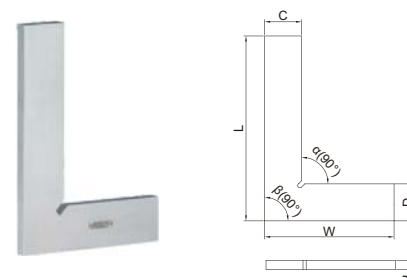
4790-0100

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
4790-0300	300x200mm	4.6μm	5.0μm	40	40	8

(mm)

90° FLAT EDGE SQUARES

- DIN875 grade 0
- Made of hardened stainless steel



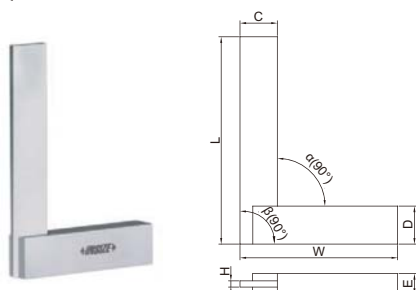
4791-100

Code	Size (LxW)	Squareness		C	D	H
		Inside (α)	Outside (β)			
4791-50	50x40mm	6μm	6μm	15	15	4
4791-75	75x50mm	6μm	7μm	15	15	4
4791-100	100x70mm	7μm	7μm	20	20	5
4791-150	150x100mm	7μm	8μm	30	30	6
4791-200	200x130mm	8μm	9μm	30	30	7
4791-250	250x165mm	9μm	10μm	35	35	7
4791-300	300x200mm	10μm	11μm	40	40	8

(mm)

90° FLAT EDGE SQUARES WITH WIDE BASE

- DIN875 grade 0
- Made of hardened stainless steel



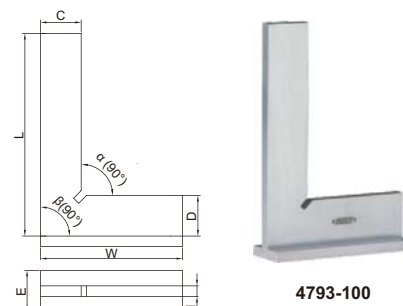
4792-100

Code	Size (LxW)	Squareness		C	D	H	E
		Inside (α)	Outside (β)				
4792-50	50x40mm	6μm	6μm	12	12	3	10
4792-75	75x50mm	6μm	7μm	14	14	3	10
4792-100	100x70mm	7μm	7μm	18	18	3	10
4792-150	150x100mm	8μm	8μm	22	22	4	12
4792-200	200x130mm	9μm	9μm	25	25	4	12

(mm)

90° FLAT EDGE SQUARES WITH WIDE BASE

- DIN875 grade 0
- Made of hardened stainless steel



4793-100

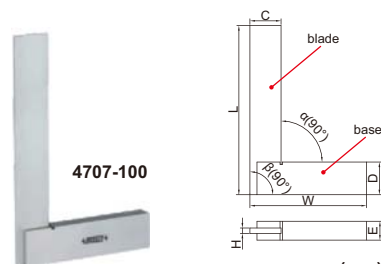
Code	Size (LxW)	Squareness		C	D	H	E
		Inside (α)	Outside (β)				
4793-50	50x40mm	6μm	6μm	13	13	4	13
4793-75	75x50mm	6μm	7μm	15	15	4	15
4793-100	100x70mm	7μm	7μm	20	20	5	20
4793-150	150x100mm	7μm	8μm	30	30	6	30
4793-200	200x130mm	8μm	9μm	30	30	7	30
4793-250	250x165mm	9μm	10μm	35	35	7	35
4793-300	300x200mm	10μm	11μm	40	40	8	40

(mm)

MACHINIST SQUARES WITH WIDE BASE

ATTENTION:
LOW ACCURACY

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



4707-100

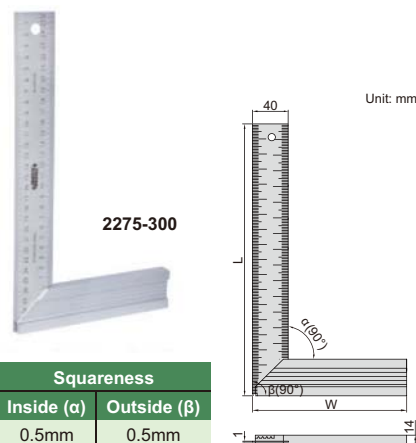
Code	Size (LxW)	Squareness		C	D	H	E
		Inside (α)	Outside (β)				
4707-75	75x50mm	26μm	28μm	16	16	3	9
4707-100	100x70mm	28μm	30μm	19	19	3	12
4707-150	150x100mm	33μm	35μm	25	25	3	16
4707-200	200x130mm	37μm	40μm	30	32	4	16
4707-250	250x165mm	42μm	45μm	30	32	4	19
4707-300	300x200mm	47μm	50μm	32	32	4	19
4707-400	400x250mm	56μm	60μm	38	38	5	22
4707-500	500x300mm	65μm	70μm	45	50	6	25

(mm)

Sizes available up to 1000x550mm

TRY SQUARE

- Graduation: 1mm
- Stainless steel blade, aluminum base

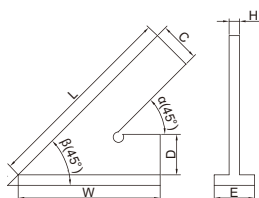


2275-300

Code	Size (LxW)	Squareness	
		Inside (α)	Outside (β)
2275-300	300x170mm	0.5mm	0.5mm

Unit: mm

45° SQUARES WITH WIDE BASE



4747-100

- Made of hardened stainless steel

Code	Size (LxW)	Accuracy		C	D	H	E
		Inside (α)	Outside (β)				
4747-150	150x100mm	32μm	36μm	20	20	5	20
4747-200	200x130mm	36μm	41μm	25	25	5	25

STRAIGHT EDGES

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



4700-100

Code	Size (L)	Straightness	W	H
4700-100	100mm	2.4μm	5	25
4700-150	150mm	2.6μm	6	30
4700-200	200mm	2.8μm	6	30
4700-300	300mm	3.2μm	8	40

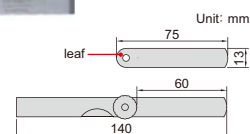
Sizes available up to 500mm

FEELER GAGE



4601-25

- Range: 0.04-1.00mm
- Made of hardened alloy steel
- Meet DIN2275
- Accuracy: $\pm(3+T/80)$ μm, 'T' is the thickness of leaves in μm

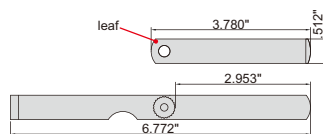


Code	Thickness of leaves included (mm)	Quantity of leaves
4601-25	0.04, 0.05, 0.06, 0.07, 0.08, 0.09, 0.10, 0.15, 0.20, 0.25, 0.30, 0.35, 0.40, 0.45, 0.50, 0.55, 0.60, 0.65, 0.70, 0.75, 0.80, 0.85, 0.90, 0.95, 1.00	25

FEELER GAGE



4608-31



- .010" is made of brass, others are made of hardened alloy steel
- Each blade is marked with inch/metric size

Code	Range	Quantity of Leaves
4608-31	.0015" ~ .035"	32

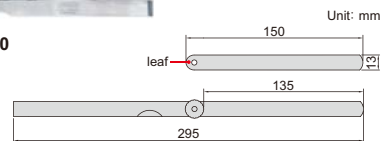
Thickness of leaves included	Accuracy
.010" (brass)	±.00039"
.0015", .002"	±.0002"
.0025", .003", .004", .005", .006", .007"	±.00028"
.008", .009"	±.00035"
.010", .011"	±.00039"
.012", .013"	±.00047"
.014", .015"	±.00051"
.016", .017"	±.00055"
.018", .019"	±.00059"
.020", .021"	±.00067"
.022", .023"	±.00071"
.024", .025", .026"	±.00075"
.028"	±.00091"
.030"	±.00094"
.032", .035"	±.00102"

LONG FEELER GAGE



4605-20

- Range: 0.05-1.00mm
- Made of hardened alloy steel
- Meet DIN2275
- Accuracy: $\pm(3+T/80)$ μm, 'T' is the thickness of leaves in μm



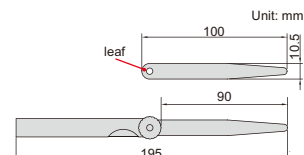
Code	Thickness of leaves included (mm)	Quantity of leaves
4605-20	0.05, 0.10, 0.15, 0.20, 0.25, 0.30, 0.35, 0.40, 0.45, 0.50, 0.55, 0.60, 0.65, 0.70, 0.75, 0.80, 0.85, 0.90, 0.95, 1.00	20

FEELER GAGES

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

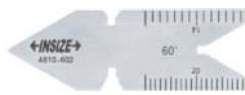
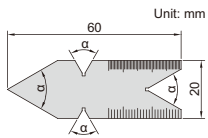


4602-20

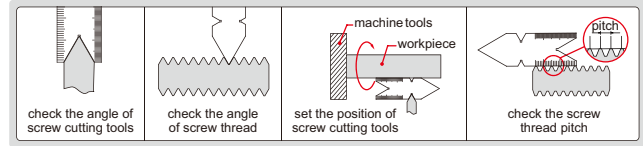


Code	Range	Thickness of leaves included (mm)	Quantity of leaves
4602-13A	0.03-0.50mm	0.03, 0.04, 0.05, 0.06, 0.07, 0.08, 0.09, 0.10, 0.15, 0.20, 0.30, 0.40, 0.50	13
4602-13	0.05-1.00mm	0.05, 0.10, 0.15, 0.20, 0.25, 0.30, 0.40, 0.50, 0.60, 0.70, 0.80, 0.90, 1.00	13
4602-17	0.02-1.00mm	0.02, 0.03, 0.04,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

CENTER GAGES



4810-602



- To check and set screw cutting tools, and check the angle and pitch of screw thread
- Angle accuracy: $\pm 30\text{min}$.
- Made of stainless steel

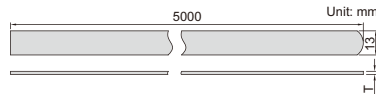
Code	Thread type	Angle (α)	Graduation
4810-601	METRIC 60°	60°	0.5mm and 1mm
4810-55	WHITWORTH 55°	55°	14ths and 20ths on front side, 24ths and 32ths on back side

FEELER GAGE TAPES



4621-30

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



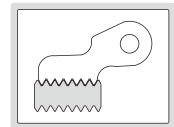
Code	Thickness (T)	Accuracy	Code	Thickness (T)	Accuracy	Code	Thickness (T)	Accuracy
4621-02	0.02mm	$\pm 4\mu\text{m}$	4621-12	0.12mm	$\pm 5\mu\text{m}$	4621-50	0.50mm	$\pm 14\mu\text{m}$
4621-03	0.03mm	$\pm 4\mu\text{m}$	4621-15	0.15mm	$\pm 6\mu\text{m}$	4621-55	0.55mm	$\pm 14\mu\text{m}$
4621-04	0.04mm	$\pm 4\mu\text{m}$	4621-18	0.18mm	$\pm 7\mu\text{m}$	4621-60	0.60mm	$\pm 14\mu\text{m}$
4621-05	0.05mm	$\pm 4\mu\text{m}$	4621-20	0.20mm	$\pm 8\mu\text{m}$	4621-65	0.65mm	$\pm 14\mu\text{m}$
4621-06	0.06mm	$\pm 4\mu\text{m}$	4621-25	0.25mm	$\pm 9\mu\text{m}$	4621-70	0.70mm	$\pm 17\mu\text{m}$
4621-07	0.07mm	$\pm 5\mu\text{m}$	4621-30	0.30mm	$\pm 9\mu\text{m}$	4621-75	0.75mm	$\pm 17\mu\text{m}$
4621-08	0.08mm	$\pm 5\mu\text{m}$	4621-35	0.35mm	$\pm 11\mu\text{m}$	4621-80	0.80mm	$\pm 19\mu\text{m}$
4621-09	0.09mm	$\pm 5\mu\text{m}$	4621-40	0.40mm	$\pm 12\mu\text{m}$	4621-90	0.90mm	$\pm 22\mu\text{m}$
4621-10	0.10mm	$\pm 5\mu\text{m}$	4621-45	0.45mm	$\pm 12\mu\text{m}$			

PITCH GAGES

- Check the pitch of screw thread
- Accuracy: $\pm 0.07\text{mm}$
- Made of medium carbon steel



4820-124



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

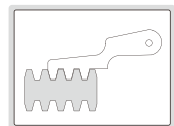
Code	Range	Pitch of leaves included	Quantity of leaves
4820-552	0.4-7mm	0.4, 0.5, 0.6, 0.7, 0.75, 0.8, 0.9, 1, 1.25, 1.5, 1.75, 2, 2.5, 3, 3.5, 4, 4.5, 5, 5.5, 6, 6.5, 7mm	52
	4-42TPI	4, 4-1/2, 5, 5-1/2, 6, 7, 8, 9, 10, 11, 11-1/2, 12, 13, 14, 15, 16, 18, 20, 22, 24, 26, 27, 28, 30, 32, 34, 36, 38, 40,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

PITCH GAGES



4824-12

- Check the pitch of screw thread
- Accuracy: $\pm 0.07\text{mm}$
- Made of medium carbon steel



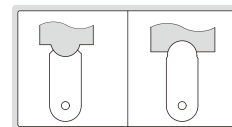
Code	Range	Thread type	Pitch of leaves included	Quantity of leaves
4824-12	2-20mm	Tr30°	2, 3, 4, 5, 6, 7, 8, 9, 10, 12, 16, 20mm	12

RADIUS GAGES

- Made of medium carbon steel

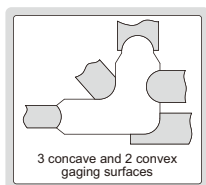


4801-17



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 SET



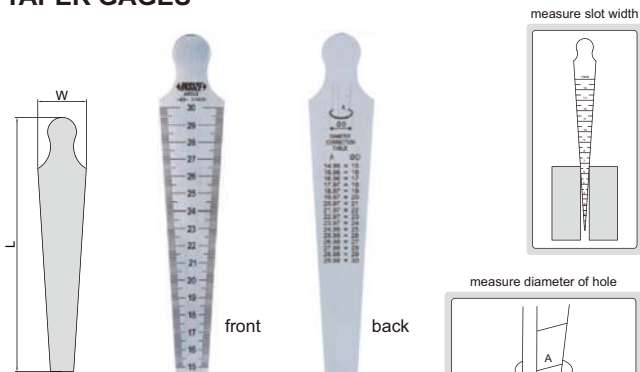
- Accuracy: ±0.05mm
- Each piece has 3 concave and 2 convex gaging surfaces
- Supplied with handle
- Made of medium carbon steel



4804-26

Code	Range	Radius of leaves included (mm)	Quantity of leaves
4804-26	0.5-13mm	0.5, 1, 1.5, 2, 2.5, 3, 3.5, 4, 4.5, 5, 5.5, 6, 6.5, 7, 7.5, 8, 8.5, 9, 9.5, 10, 10.5, 11, 11.5, 12, 12.5, 13	26

TAPER GAGES

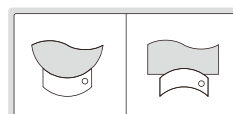


- Measure opening, slot width, hole diameter, etc.
- Diameter correction table on the back (only for 4833-1, 4833-2)
- Made of stainless steel

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
4833-3	30-45mm	0.1mm	±0.1mm	166mm	45.4mm
4833-4	45-60mm	0.1mm	±0.1mm	170mm	60.5mm

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

RADIUS GAGE



4802-31

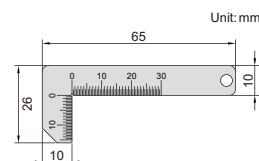
- Accuracy: ±0.06mm
- Made of stainless steel

Code	Range	Radius of leaves included (mm)	Quantity of leaves
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	31pcs

CHAMFER GAGE



4844-1



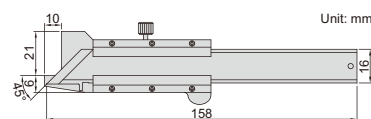
- To measure internal and external chamfers
- Made of stainless steel

Code	Graduation	Accuracy
4844-1	0.5mm	±0.25mm

CHAMFER GAGE

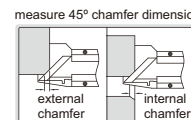


1267-6



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

Code	Range	Accuracy	Graduation
1267-6	0-6mm	±0.06mm	0.02mm

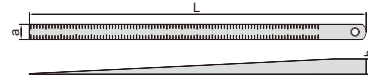
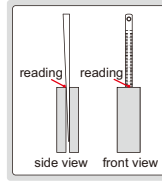


TAPER GAGES



4630-1

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



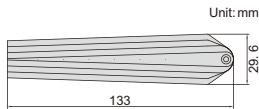
(mm)

Code	Range	Graduation	Accuracy	L	a	b
4630-3	0.4-6mm	0.05mm	±0.04mm	164	12.5	6.5
4630-1	0.5-10mm	0.05mm	±0.07mm	220	10	10.5
4630-2	0.5-15mm	0.1mm	±0.08mm	184	12.5	16.5

TAPER GAGE SET



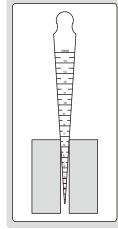
4837-1



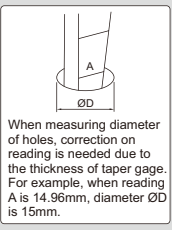
- Include 4pcs (1-8mm, 8-15mm, 15-22mm, 22-29mm)
- Measure opening, slot width, hole diameter, etc.
- Diameter correction table on the back
- Made of stainless steel

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

measure slot width

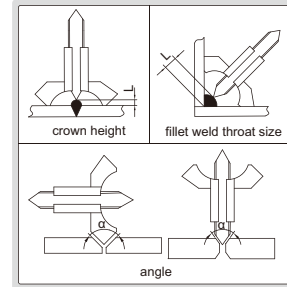


measure diameter of hole

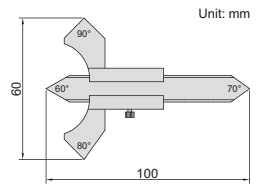


When measuring diameter of holes, correction on reading is needed due to the thickness of taper gage. For example, when reading A is 14.96mm, diameter ØD is 15mm.

WELDING GAGE



4830



Unit: mm

- 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°

DIGITAL WELDING GAGE

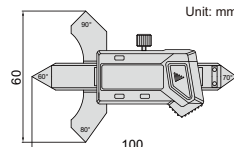
ATTENTION:
NO DATA OUTPUT

- Buttons: zero, mm/inch, on/off
- Battery LR44
- Made of stainless steel

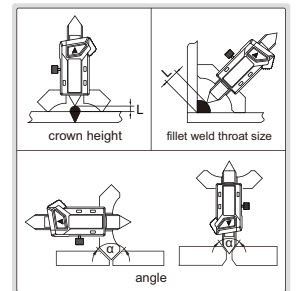


4831-20A

Code	Measurement	Range	Resolution	Accuracy
4831-20A	crown height	0-7mm	0.01mm/0.0005"	±0.03mm
	fillet weld throat size	0-20mm	0.01mm/0.0005"	±0.1mm
	angle	60°, 70°, 80°, 90°	—	±1°



Unit: mm



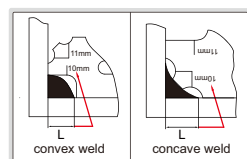
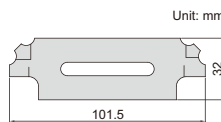
FILLET WELDING GAGE



4836-1

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

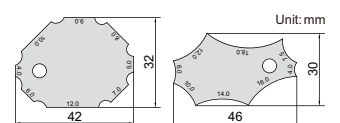
Code	Size	Accuracy
4836-1	3mm, 4mm, 5mm, 6mm, 8mm, 9mm, 10mm, 11mm, 12mm, 14mm, 16mm, 19mm, 22mm, 25mm	±0.5mm



FILLET WELDING GAGE



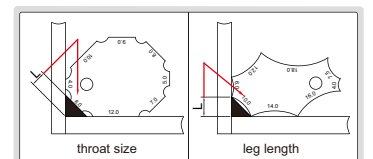
4832-1



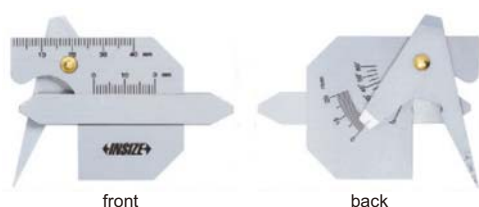
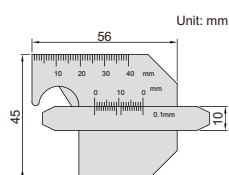
Unit: mm

- 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

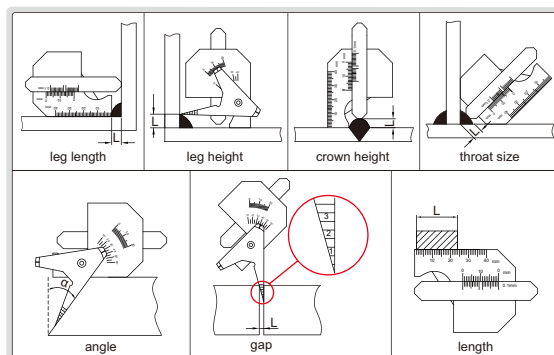


WELDING GAGE



6832-1

- Made of stainless steel
- Stain chrome plated surface



Code	Measurement	Range	Graduation	Accuracy
6832-1	leg length	0-10mm	0.1mm	±0.1mm
	leg height	0-20mm	1mm	±0.5mm
	crown height	0-10mm	0.1mm	±0.1mm
	throat size	0-10mm	0.1mm	±0.1mm
	angle	0°-60°	5°	±1°
	gap	1-3.5mm	0.5mm	±0.5mm
	length	0-40mm	1mm	±0.5mm

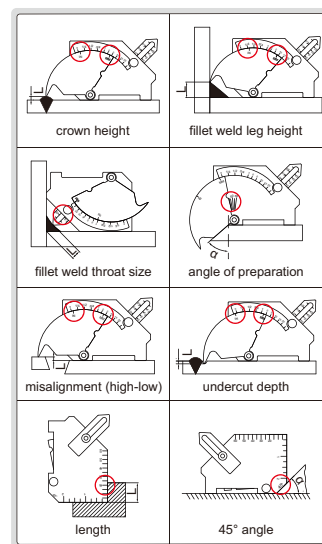
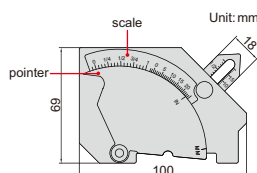
WELDING GAGE

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

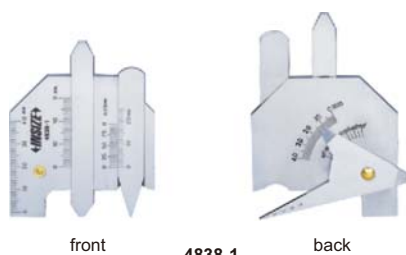


4835-1

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°

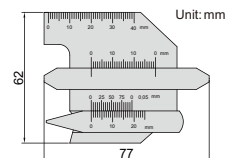


WELDING GAGE

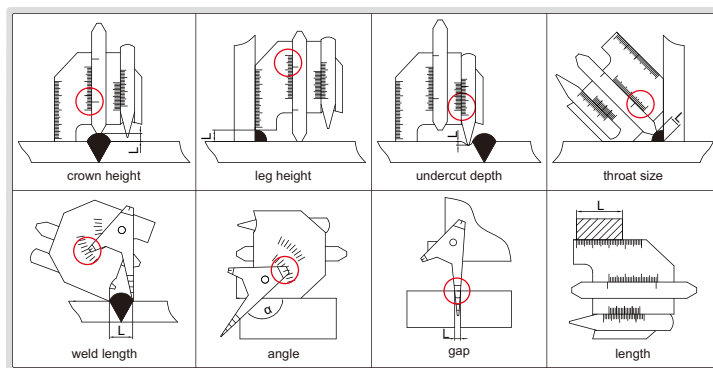


4838-1

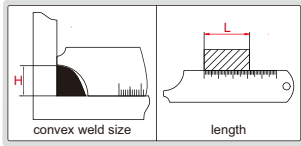
- Made of stainless steel



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

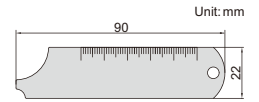


FILLET WELDING GAGE



4847-1

- Measure convex weld sizes
- 3 blades are included
- Made of stainless steel

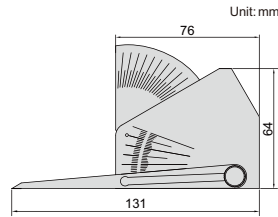


Code	Measurement	Range	Graduation	Accuracy
4847-1	convex weld size	4, 6, 8, 10, 12, 14mm	—	±0.5mm
	length	0 - 50mm	1mm	±0.5mm

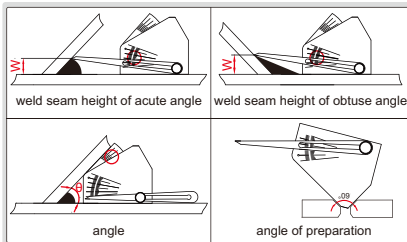
FILLET WELDING GAGE



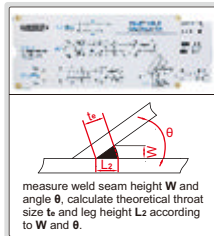
4846-1



- Calculating card is included
- Made of stainless steel



calculating card (included)

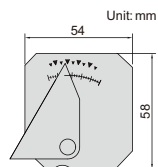


Code	Measurement	Range	Graduation	Accuracy
4846-1	weld seam height W	0-50mm/0-2"	2mm/.050"	±1mm
	angle θ	30° - 90°	2.5°	±1°
	60° angle	—	—	±0.5°

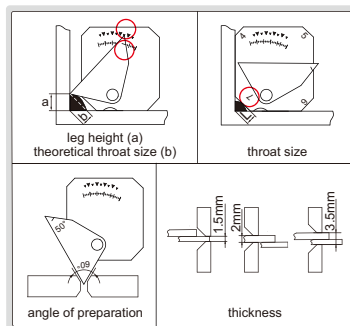
WELDING GAGE



4850-1



- Made of stainless steel

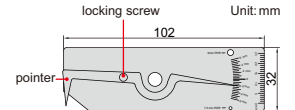


Code	Measurement	Range	Graduation	Accuracy
4850-1	leg height (a)	2-12mm	1mm	±0.5mm
	theoretical throat size (b)	0-18mm	1mm	±0.5mm
	throat size	4, 5, 6, 7mm	—	±0.5mm
	angle of preparation	50°, 60°	—	±1°
	thickness	1.5, 2, 3.5mm	—	±0.2mm

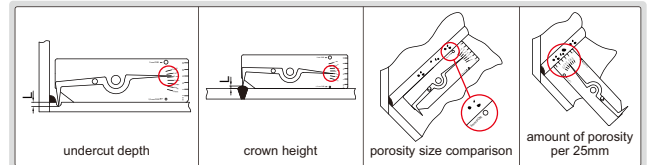
WELDING GAGE



4834-1



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

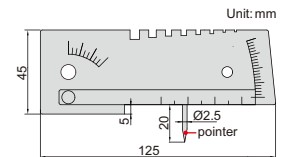


Code	Measurement	Range	Graduation	Accuracy
4834-1	undercut depth	0-6mm	0.5mm	±0.5mm
	crown height	0-6mm	0.5mm	±0.5mm
	porosity size comparison	1.5mm, 3mm	—	±0.2mm
	amount of porosity per 25mm	25mm	1mm	—

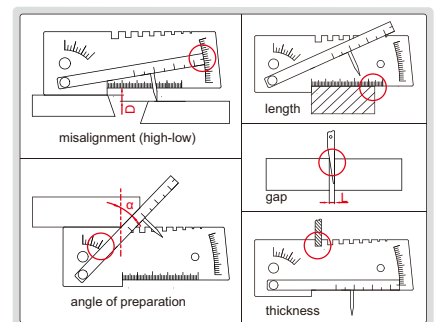
WELDING GAGE



4848-1



- Made of stainless steel



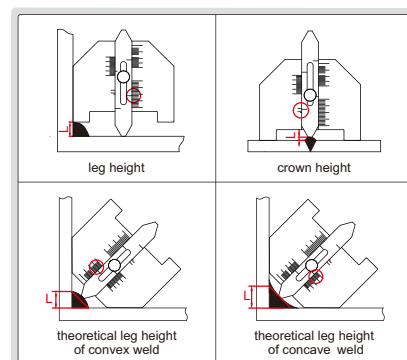
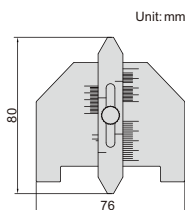
Code	Measurement	Range	Graduation	Accuracy
4848-1	misalignment (high-low)	-5mm~+15mm	1mm	±0.5mm
	angle of preparation	0°-45°	5°	±2.5°
	length	0-50mm	1mm	±0.5mm
	gap	1-4mm	0.5mm	±0.25mm
	thickness	1, 1.2, 2.0, 2.5, 3.0, 3.25, 4.0, 5.0mm	—	±0.1mm

WELDING GAGE

- Made of stainless steel

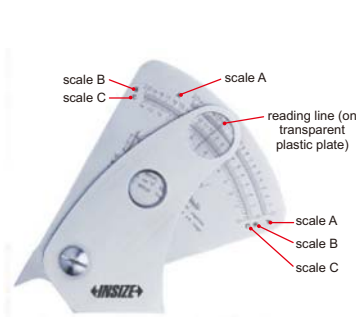


4851-1



Code	Measurement	Range	Graduation	Accuracy
4851-1	leg height	0-20mm	1mm	±0.5mm
	crown height	0-3mm	—	±0.5mm
	theoretical leg height of convex weld	0-20mm	1mm	±0.5mm
	theoretical leg height of concave weld	0-20mm	1mm	±0.5mm

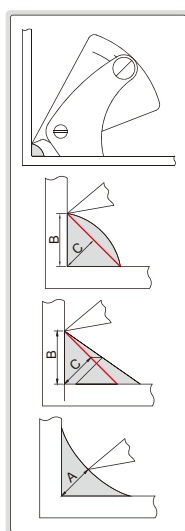
WELDING GAGE



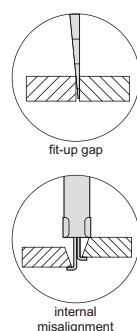
4840-1

- Made of stainless steel

Code	Graduation	Accuracy
4840-1	0.2mm	±0.3mm



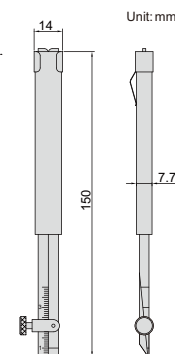
PIPE WELDING GAGE



- Made of stainless steel



4841-1



Code	Measurement	Range	Graduation	Accuracy
4841-1	internal misalignment	0-30mm	1mm	±0.5mm
	fit-up gap	0.7-4mm	0.1mm	±0.1mm

PIPE WELDING GAGE

- Made of stainless steel

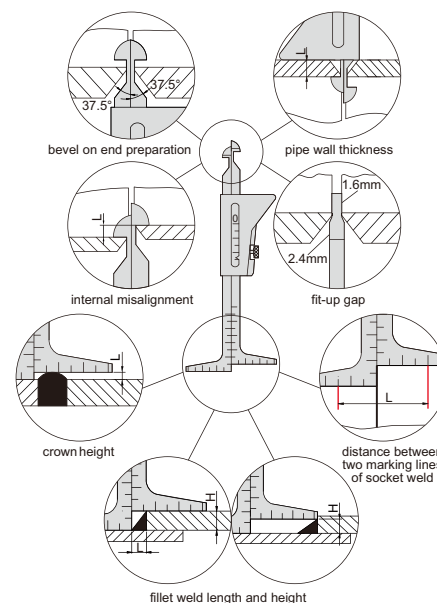
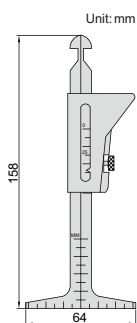


front



back

4839-1

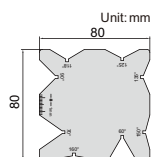


Code	Measurement	Range	Graduation	Accuracy
4839-1	bevel on end preparation	37.5°	—	±1°
	pipe wall thickness	0-45mm (0-1-3/4")	1mm (1/16")	±0.5mm
	internal misalignment	0-35mm (0-1-3/8")	1mm (1/32")	±0.5mm
	fit-up gap	1.6mm, 2.4mm	—	±0.1mm
	crown height	0-35mm (0-1-3/8")	1mm (1/32")	±0.5mm
	distance between 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

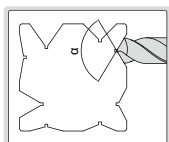


4842-1



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

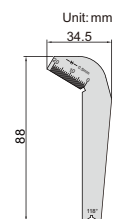
Code	Accuracy
4842-1	±0.5°



DRILL POINT GAGE

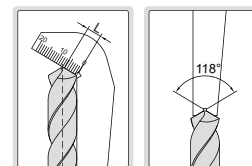


4843-1



- 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



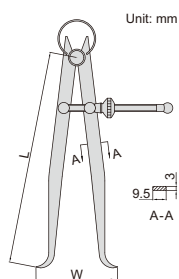
INSIDE SPRING CALIPERS



tips

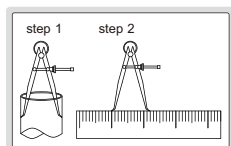


7261-150



- 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



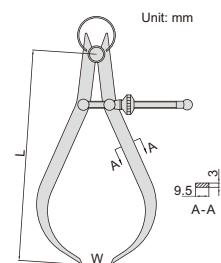
OUTSIDE SPRING CALIPERS



tips

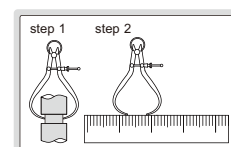


7262-150



- Made of carbon steel

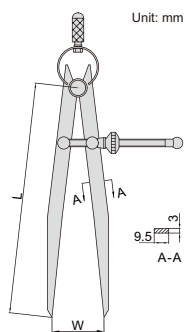
Code	Size (L)	Range (W)
7262-150	155mm	0-140mm
7262-200	210mm	0-210mm
7262-250	265mm	0-270mm
7262-300	310mm	0-320mm



SPRING DIVIDERS

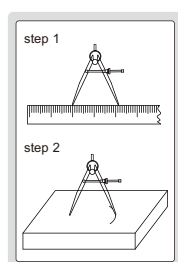


7260-150



- Made of carbon steel
- Hardened points

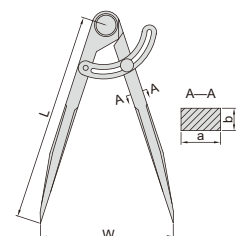
Code	Size (L)	Range (W)
7260-150	150mm	0-150mm
7260-200	200mm	0-210mm
7260-250	245mm	0-260mm
7260-300	300mm	0-320mm



DIVIDERS

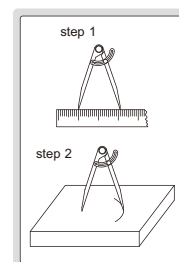


7247-150



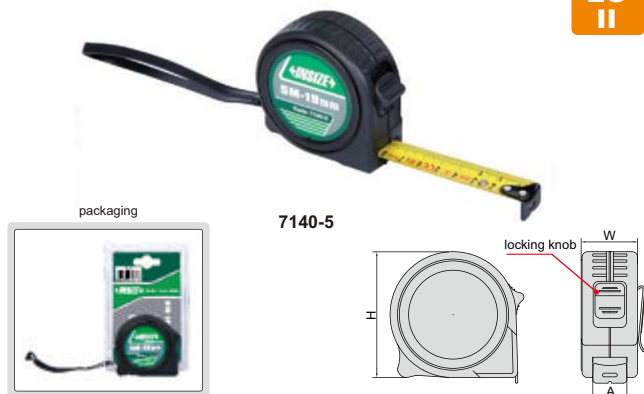
- Made of carbon steel
- Hardened points

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



MEASURING TAPES

EG
II

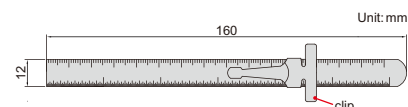


Code	Range	Graduation	Width of tape A	W	H
7140-3	0-3m	1mm	16mm	28mm	62mm
7140-5	0-5m	1mm	19mm	30mm	68mm
7140-8	0-8m	1mm	25mm	38mm	78mm

POCKET RULE WITH SLIDING CLIP



7119-150



- With sliding clip, clip also can be used as depth gage base
- With 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 RULE

ATTENTION:
BASIC MODEL



7110-300



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

Code	Range	Accuracy	L	W	H	Remark
7110-150	150mm/6"	±0.15mm	170	18	1.0	graduation on front and back
7110-200	200mm/8"	±0.15mm	220	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
7110-1500	1500mm/60"	±0.35mm	1550	38	1.8	graduation on front

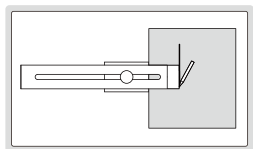
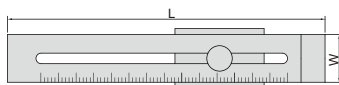
Sizes available up to 2000mm

MARKING GAGES



7120-200A

- Made of carbon steel
- Satin chrome plated

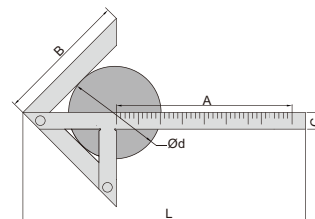


Code	Range	Graduation	Accuracy	L	W
7120-200A	0-200mm	0.1mm	±0.1mm	250mm	40mm
7120-250A	0-250mm	0.1mm	±0.1mm	300mm	40mm
7120-300A	0-300mm	0.1mm	±0.1mm	350mm	40mm

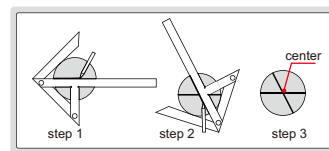
CENTER MARKING GAGES



7205-100



- Accuracy: ±0.15mm
- Marking the center of round plates and shafts
- Made of stainless steel
- Satin chrome plated



Code	Size (AxB)	Diameter of shafts (Ød)	C	L
7205-100	100x70mm	4-90mm	12mm	153mm
7205-150	150x130mm	4-190mm	15mm	245mm
7205-200	200x150mm	6-220mm	15mm	310mm

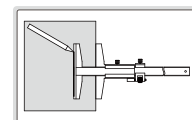
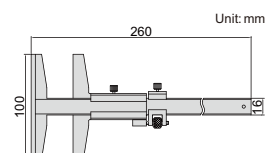
T-SHAPE MARKING GAGE

- Graduation: 0.05mm
- Made of stainless steel
- Satin chrome plated reading surface

Code	Range	Accuracy
1275-150A	0-150mm	±0.05mm



1275-150A



2-PIECE MEASURING TOOL SET

Includes:

- 1) Digital caliper, range 0-150mm/0-6", resolution 0.01mm/0.0005" (code **1108-150W**)
- 2) Digital outside micrometer, range 0-25mm/0-1", resolution 0.001mm/0.00005" (code **3109-25B**)

Code

5022-W



5022-W

2-PIECE MEASURING TOOL SET

Includes:

- 1) Dial test indicator, range 0.8mm, graduation 0.01mm (code **2380-08**)
- 2) Magnetic stand

Code

5023



5023

2-PIECE MEASURING TOOL SET

Includes:

- 1) Dial indicator, range 10mm, graduation 0.01mm (code **2308-10A**)
- 2) Magnetic stand (code **6201-60**)

Code

5024



5024

4-PIECE MEASURING TOOL SETS

Includes:

- 1) Vernier caliper, range 0-150mm/0-6"
- 2) Outside micrometer, range 0-25mm, graduation 0.01mm (code **3202-25A**)
- 3) 90° beveled edge square, 100x70mm, grade 0 (code **4790-1000**)
- 4) Steel rule, 150mm/6" (code **7110-150**)



5041

Code	Remark
5041	Vernier caliper, graduation 0.05mm/1/128" (code 1205-150S)
5041-2	Vernier caliper, graduation 0.02mm/0.001" (code 1205-1502S)

5-PIECE MEASURING TOOL SET

Includes:

- 1) Digital caliper, range 0-150mm/0-6", resolution 0.01mm/0.0005" (code **1108-150W**)
- 2) Digital outside micrometer, range 0-25mm/0-1", resolution 0.001mm/0.00005" (code **3109-25B**)
- 3) Digital indicator, range 12.7mm/0.5", resolution 0.01mm/0.0005" (code **2112-10**)
- 4) Magnetic stand (code **6201-60**)
- 5) Micrometer stand (code **6300**)

Code

5052-W



5052-W

4-PIECE MEASURING TOOL SET

Includes:

- 1) Digital caliper, range 0-150mm/0-6", resolution 0.01mm/0.0005" (code **1108-150W**)
- 2) Outside micrometer, range 0-25mm, graduation 0.01mm, (code **3202-25A**)
- 3) 90° beveled edge square, 100x70mm, grade 0 (code **4790-1000**)
- 4) Steel rule, 150mm/6" (code **7110-150**)



5042-W

Code
5042-W

6-PIECE MEASURING TOOL SETS

Includes:

- 1) Vernier caliper, range 0-150mm/0-6"
- 2) Outside micrometer, range 0-25mm graduation 0.01mm (code **3202-25A**)
- 3) 90° beveled edge square, 100x70mm grade 00 (code **4790-0100**)
- 4) Straight edge, 100mm (code **4700-100**)
- 5) Spring divider, 150mm (code **7260-150**)
- 6) Steel rule, 200mm/8" (code **7110-200**)



5063

Code	Remark
5063	Vernier caliper, graduation 0.05mm/1/128" (code 1205-150S)
5063-2	Vernier caliper, graduation 0.02mm/0.001" (code 1205-1502S)

13-PIECE MEASURING TOOL SETS

Includes:

- 1) Digital caliper, range 0-150mm/0-6", resolution 0.01mm/0.0005"
- 2) Outside micrometer, range 0-25mm, graduation 0.01mm (code **3202-25A**)
- 3) Dial indicator, range 10mm, graduation 0.01mm (code **2308-10A**)
- 4) Magnetic stand (code **6201-60**)
- 5) Protractor, range 0-180°, graduation 1° (code **4799-180**)
- 6) Pitch gauge, range 0.25-7mm, 24pcs, metric 60° thread (code **4820-124**)
- 7) Radius gauge, range 1-7mm (code **4801-17**)
- 8) Feeler gauge, range 0.05-1.00mm, 20pcs (code **4602-20**)
- 9) 90° beveled edge square, 100x70mm, grade 0 (code **4790-1000**)
- 10) Scriber (code **7230**)
- 11) Steel rule, 150mm/6" (code **7110-150**)
- 12) Depth base attachment (code **6140**)
- 13) Zero setting bar



5013-W

Code	Remark
5013-W	Digital caliper, without thumb roller code 1108-150W
5013	Digital caliper, with thumb roller code 1108-150

GRANITE SURFACE PLATES



- 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)



6900-132

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



Grade 00

Code	Size (LxWxH)	Flatness	Weight (Kg)	Load (Kg)
6900-132 *	300x200x60mm	2.7µm	11	30
6900-142 *	400x250x60mm	2.9µm	18	50
6900-144 *	400x400x60mm	3.1µm	29	60
6900-153 *	500x315x70mm	3.2µm	33	60
6900-164 *	630x400x80mm	3.5µm	60	65
6900-166 *	630x630x100mm	3.8µm	119	75
6900-185 *	800x500x100mm	3.9µm	120	100
6900-1106 *	1000x630x140mm	4.4µm	265	200
6900-1128 *	1200x800x160mm	4.9µm	461	500

* Supplied with manufacturer inspection certificate

Grade 0

Code	Size (LxWxH)	Flatness	Weight (Kg)	Load (Kg)
6900-032 *	300x200x60mm	5.4µm	11	60
6900-042 *	400x250x60mm	5.9µm	18	100
6900-044 *	400x400x60mm	6.3µm	29	120
6900-053 *	500x315x70mm	6.4µm	33	120
6900-064 *	630x400x80mm	7.0µm	60	130
6900-066 *	630x630x100mm	7.6µm	119	150
6900-085 *	800x500x100mm	7.8µm	120	200
6900-0106 *	1000x630x140mm	8.7µm	265	400
6900-0128 *	1200x800x160mm	9.8µm	461	1000

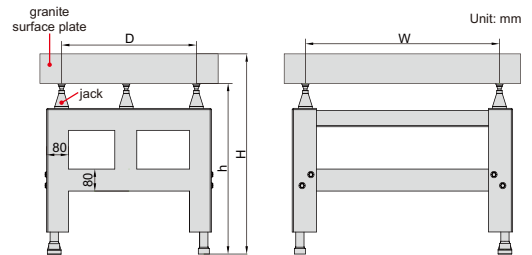
STANDS FOR GRANITE SURFACE PLATES



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



6902-64A



Low stands

Code	For granite surface plate	W	D	H (with granite surface plate)	h (without granite surface plate)
6902-64A	630x400x80mm (code 6900-064 and 6900-164)	352	224	775-800	695-720
6902-85A	800x500x100mm (code 6900-085 and 6900-185)	448	280	775-800	675-700
6902-106A	1000x630x140mm (code 6900-0106 and 6900-1106)	560	352	755-780	615-640
6902-128A	1200x800x160mm (code 6900-0128 and 6900-1128)	672	448	755-780	595-620

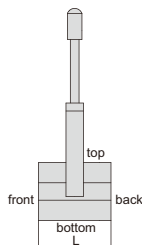
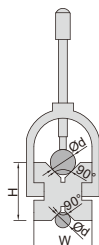
High stands

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
6902-85H	800x500x100mm (code 6900-085 and 6900-185)	448	280	1000-1025	900-925
6902-106H	1000x630x140mm (code 6900-0106 and 6900-1106)	560	352	1000-1025	860-885
6902-128H	1200x800x160mm (code 6900-0128 and 6900-1128)	672	448	1000-1025	840-865

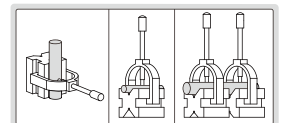
V-BLOCK SETS



6896-11



- Squareness of both V grooves to front and back sides: 5µm
- 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

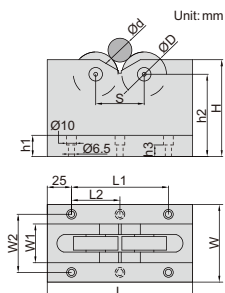


Code	Size (LxWxH)	Range of shafts (Ød)	Parallelism of both V grooves to top and bottom sides	Height difference of a matched pair
6896-11	50x40x40mm	5-30mm	5µm	5µm
6896-12	80x63x63mm	7-63mm	5µm	5µm
6896-13	100x80x80mm	7-80mm	5µm	5µm

ROLLER BEARING V-BLOCK SETS

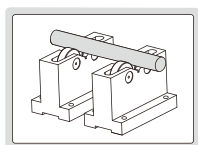


6888-1



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

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



Code	Size (LxWxH)	Diameter of bearings (ØD)	Range of shafts (Ød)	Load capacity
6888-1	150x60x100mm	42mm	25-70mm	500kg
6888-2	150x80x100mm	47mm	5-55mm	1000kg
6888-3	230x100x150mm	72mm	70-200mm	1000kg

MAGNETIC V-BLOCKS

HARDENED SURFACES

HIGH PRECISION

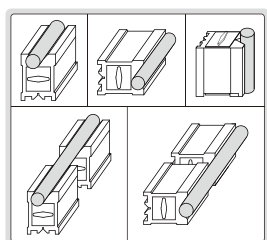
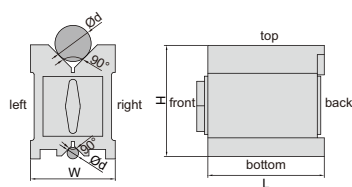
STRONG MAGNETIC FORCE



6889-11



6889-1



- Parallelism of V groove to top, bottom, left, right sides: 5µm
- Squareness of V groove to back side: 5µm
- Hardened, high accuracy, strong magnetic force, for grinding, light milling, drilling and inspection of round and square jobs
- All working surfaces are hardened to HRC60±2
- Magnetic force on top, bottom and two V grooves
- V groove on the top for large shafts
- V groove on the bottom for small shafts
- Suitable for cast iron surface plates and granite surface plates

Individual

Code	Size (LxWxH)	Range of shafts (Ød)	Magnetic force
6889-11	75x56x75mm	5-40mm	75kgf
6889-22	100x70x95mm	5-65mm	100kgf

Matched pair

Code	Size (LxWxH)	Range of shafts (Ød)	Magnetic force	Height difference of a matched pair
6889-1	75x56x75mm	5-40mm	75kgf	5µm
6889-2	100x70x95mm	5-65mm	100kgf	5µm

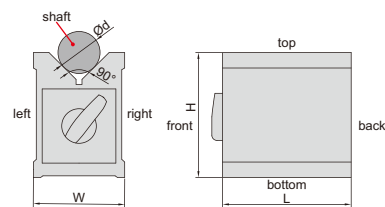
MAGNETIC V-BLOCK

ATTENTION: NOT HARDENED

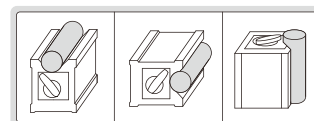
ATTENTION: NOT SUITABLE FOR STEEL OR IRON SURFACE



6890-702



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



Code	Size (LxWxH)	Range of shafts (Ød)	Magnetic force	Squareness of V groove to back side
6890-702	70x60x73mm	6-44mm	56kgf	10µm

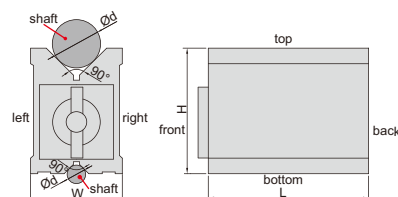
MAGNETIC V-BLOCKS

ATTENTION: NOT HARDENED

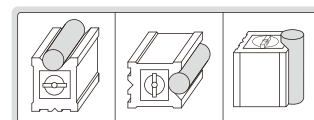
ATTENTION: NOT SUITABLE FOR STEEL OR IRON SURFACE



6801-1202



- Parallelism of V grooves to top, bottom, left and right side: 10µm
- 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



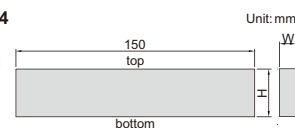
Code	Size (LxWxH)	Range of shafts (Ød)	Magnetic force	Squareness of V groove to back side
6801-1202	100x70x95mm	6-67mm	80kgf	10µm

PARALLEL SETS



6533-144

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



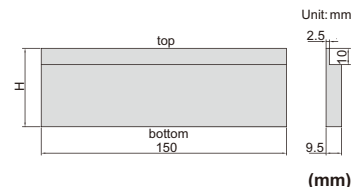
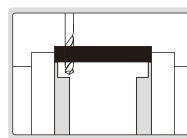
Code	Parallels per set	Thickness (W)	Height (H)
6533-10	10 pairs	3	13, 16, 19, 22, 25, 28, 31, 35, 38, 41
6533-144	14 pairs	10	14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 35, 40, 45, 50

PARALLEL SET



- Hardened to HRC55-60
- Made of alloy tool steel

6534-6



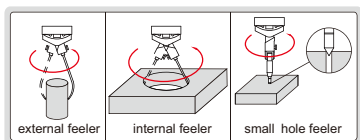
(mm)

Code	Parallels per set	Parallelism between top and bottom	Height difference of a matched pair	Height (H)
6534-6	6 pairs	5µm	5µm	25, 30, 35, 40, 45, 48

CENTERING INDICATOR



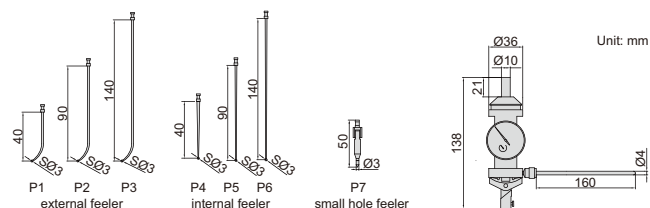
2385-3



external feeler

internal feeler

small hole feeler



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

Code

2385-3

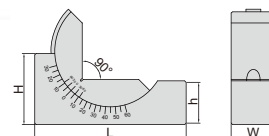
Feeler	Measuring diameter	Accuracy
P1	Ø0-60mm	±0.04mm
P2	Ø0-160mm	±0.06mm
P3	Ø0-250mm	±0.08mm
P4	Ø3.2-80mm	±0.04mm
P5	Ø3.2-180mm	±0.06mm
P6	Ø3.2-280mm	±0.08mm
P7	Ø0-2.8mm	±0.04mm

ADJUSTABLE ANGLE BLOCKS



6535-30

- Graduation of angle: 10'
- Made of hardened tool steel
- With locking screw



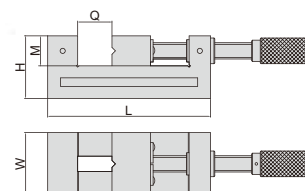
Code	Size (LxWxH)	h	Adjustable angle	Accuracy of angle
6535-30	102x30x49mm	30mm	30°~0°~60°	10'

PRECISION VISES



6525-76

- Parallelism: 4µm/100mm
- Squareness: 6µm/100mm
- Made of SK2 tool steel
- Hardness HRC52-58



Code	Jaw opening (Q)	Jaw width (W)	L	H	M
6525-73	0-73mm	63mm	176mm	63mm	30mm
6525-76	0-76mm	73mm	190mm	73mm	35mm
6525-120	0-120mm	98mm	255mm	82mm	40mm

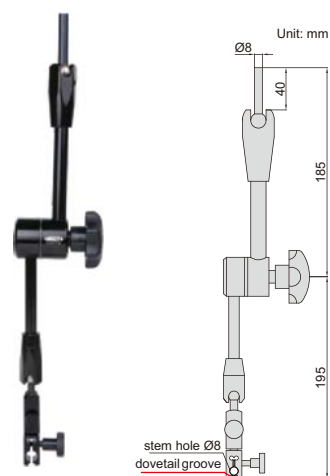
INDICATOR CENTERING HOLDER



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

Code

6294-1A



6294-1A

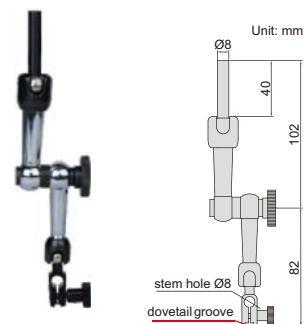
DIAL TEST INDICATOR CENTERING HOLDER



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

Code

6295-1A



6295-1A

3D TESTER

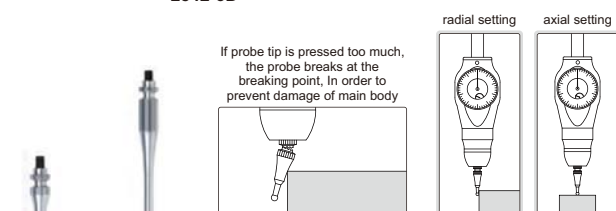
INSIZE PLUS
MADE IN GERMANY

ANTI MAGNETIC
CARBIDE CONTACT POINT

COMPACT
DESIGN



2842-3D



2842-N1

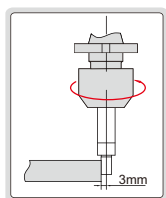
2842-N2

Code	Range	Graduation	Accuracy
2842-3D	1.5mm	0.01mm	0.01mm

Probe (optional) (mm)

Code	Name	L	D
2842-N1	standard probe	27	SØ3
2842-N2	long probe	62	SØ6

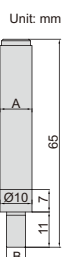
EDGE FINDER



- Hardened shank and contact point

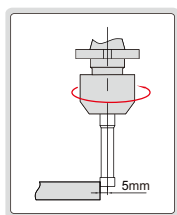


6567-1



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

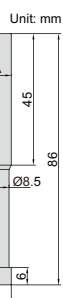
CERAMIC EDGE FINDER



- Ceramic contact point, non magnetic



6568-1



Code	Shank (A)	Contact point (B)	Accuracy
6568-1	Ø10mm	Ø10mm	8µm

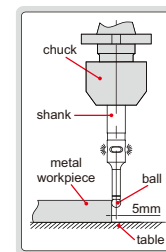
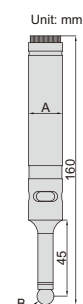
ELECTRONIC EDGE FINDERS



6566-2



6566-3



- 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)	Accuracy	Beeper	Battery
6566-2	Ø20mm	SØ10mm	5µm	without	23AE, 12Vx1pc
6566-3	Ø20mm	SØ10mm	5µm	with	23AE, 12Vx1pc

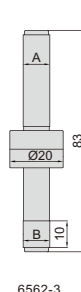
EDGE FINDERS



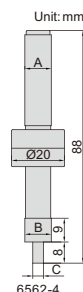
6562-3



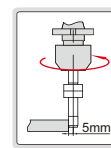
6562-4



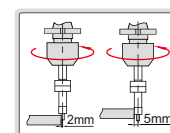
6562-3



6562-4



6562-3



6562-4

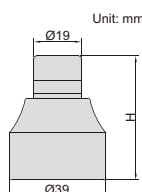
- Hardened shank and contact point

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

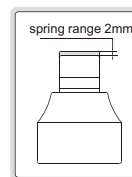
ELECTRONIC ZERO SETTER

INSIZE PLUS
MADE IN GERMANY

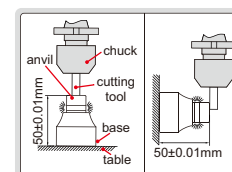
LOW TEST
FORCE



6553-50



- 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
- Two batteries LR44



Code	Height (H)	Accuracy	Test force
6553-50	50mm	±10µm	7N (at 49mm)

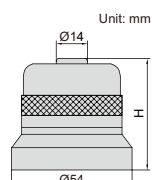
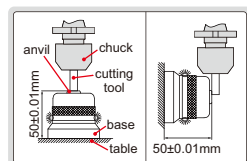
ELECTRONIC ZERO SETTER

ATTENTION:
HIGH TEST FORCE



6550-50A

- Test force: 27N (at 49mm)
- 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



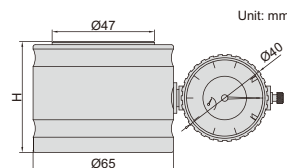
Code	Height (H)	Accuracy
6550-50A	50mm	±10µm

ZERO SETTER

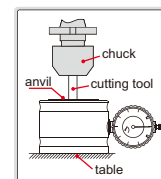
INSIZE PLUS
MADE IN GERMANY



6554-50



Code	Height (H)	Accuracy	Test force
6554-50	50mm	±10µm	9N (at 50mm)

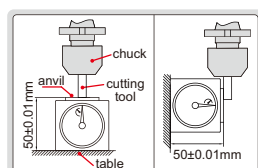
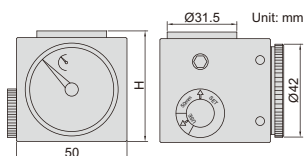


ZERO SETTER



2397-502A

- Magnetic base
- Test force: 9N (at 50mm)



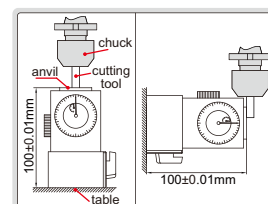
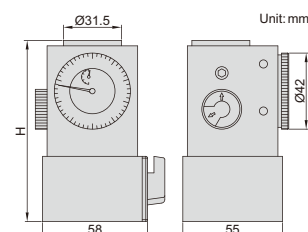
Code	Accuracy	Height (H)
2397-502A	±10µm	50mm

ZERO SETTER



2394-100A

- Magnetic base with on-off switch
- Test force: 9N (at 100mm)



Code	Height (H)	Accuracy
2394-100A	100mm	±10µm

USB DATA OUTPUT CABLES

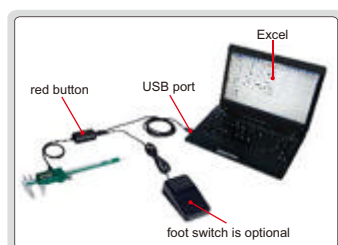
7302-SPC5A 7302-SPC5B 7302-SPC2A 7302-SPC6 7302-SPC3A 7302-SPC4



7304-2



- Connect to USB port of computer
- Without software, data can be input as keyboard signal to Excel, Word, etc.
- Press the red button or foot switch (optional) to input data

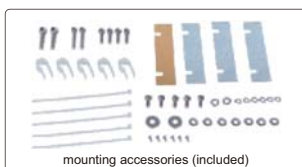
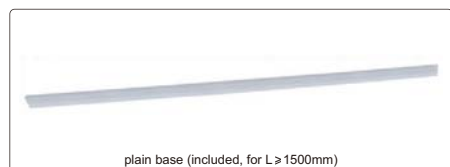


Code	Description	Remark
7302-SPC5A	cable (length 2.5m)	for digital calipers and digital depth gages (not for 1103)
7302-SPC5B	cable (length 2.5m)	for digital calipers and digital depth gages (not for 1103)
7302-SPC2A	cable (length 2.5m)	for digital micrometers (not for 3631, 3632, 3108, 3109, 3635)
7302-SPC6	cable (length 2.5m)	for digital micrometers (not for 3631, 3632, 3108, 3109, 3635)
7302-SPC3A	cable (length 2.5m)	for digital indicators digital protractors
7302-SPC4	cable (length 2.5m)	for digital calipers 1103 series (for 1103 only)
7304-2	foot switch with cable (length 1.5m)	optional

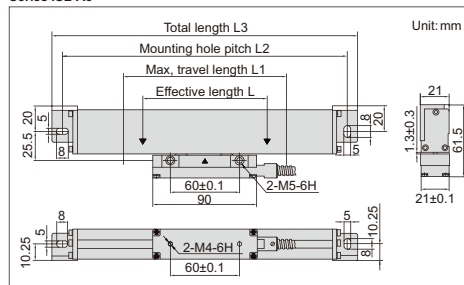
LINEAR GAGE



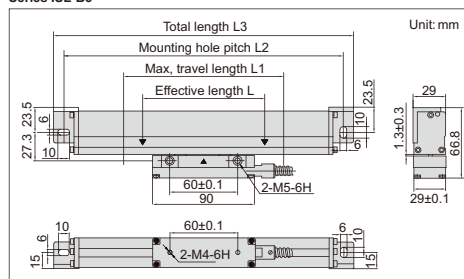
ISL-A5-300



Series ISL-A5



Series ISL-B5



Effective length (L)	Code
Series ISL-A5	
200mm	ISL-A5-200
250mm	ISL-A5-250
300mm	ISL-A5-300
350mm	ISL-A5-350
400mm	ISL-A5-400
450mm	ISL-A5-450
500mm	ISL-A5-500
600mm	ISL-A5-600
750mm	ISL-A5-750
800mm	ISL-A5-800
1000mm	ISL-A5-1000

Effective length (L)	Code
Series ISL-B5	
500mm	ISL-B5-500
600mm	ISL-B5-600
700mm	ISL-B5-700
800mm	ISL-B5-800
900mm	ISL-B5-900
1000mm	ISL-B5-1000
1100mm	ISL-B5-1100
1300mm	ISL-B5-1300
1500mm	ISL-B5-1500
1600mm	ISL-B5-1600
1700mm	ISL-B5-1700
2000mm	ISL-B5-2000

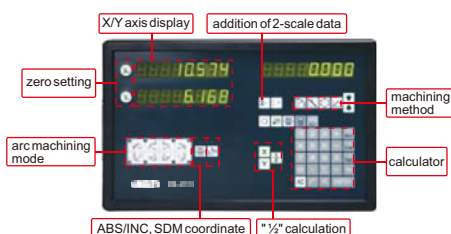
SPECIFICATION

Code	Series ISL-A5		Series ISL-B5	
L1 (mm)	L+30(L<950)	L+50(L≥950)	L+30(L<950)	L+50(L≥950)
L2 (mm)	L+132(L<950)	L+152(L≥950)	L+136(L<950)	L+156(L≥950)
L3 (mm)	L+149(L<950)	L+169(L≥950)	L+154(L<950)	L+174(L≥950)
Resolution	5μm		5μm	
Max. response speed	90m/min		60m/min	
Scale grating pitch	20μm			
Scale reference point pitch	50mm			
Accuracy	±(5+5L/1000)μm L is the effective length in mm			
Cable length	3.5m (L: 50-950mm), 5m (L: 1000-1500mm), 10m (L: 1600-2000mm)			

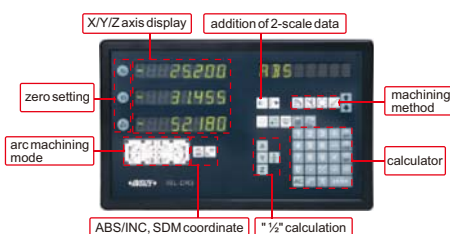
STANDARD DELIVERY

Main Unit	1pc
'L' shape support	1pc
Anti-dust cover	1pc
Plain base	1pc (for L ≥ 1500mm)
Mounting accessories	1package

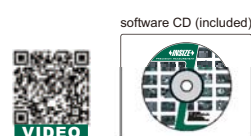
COUNTERS



ISL-DR2



ISL-DR3



SPECIFICATION

Code	ISL-DR2	ISL-DR3
Application	two-axis	three-axis
Scale input ports	2	3
Resolution	0.05μm, 0.1μm, 0.2μm, 0.5μm, 1μm, 2μm, 5μm, 10μm, 20μm, 50μm	
Functions	addition of 2-scale data, linearity error compensation, smoothing, RS232C interface unit, BCD code out, zero setting, preset, resolution setting, counting direction setting, inch/mm conversion, ABS/INC conversion, expansion/contraction coefficient setting, "1/2" calculation, detecting RI, bolt-hole circle machining, ramp circle machining	
Power supply	110/220V, 50/60Hz	
Dimension	295x185x45mm	
Weight	1.45kg	

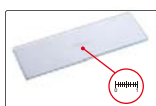
STANDARD DELIVERY

Main unit	1pc
Mounting bracket	1pc
Ground cable	1pc
RS232C cable	1pc
Software CD for RS232C	1pc

WiFi DIGITAL MEASURING MICROSCOPE CODE ISM-WF200



calibration rule
(graduation 1mm, included)



calibration rule
(graduation 0.1mm, included)



software CD
(included)

- 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

SPECIFICATION

Magnification	10X~200X
Pixel	1.3M (resolution: 1280×1024)
Illumination	built-in adjustable LED
Power supply	built-in rechargeable battery

STANDARD DELIVERY

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

OPTIONAL ACCESSORY

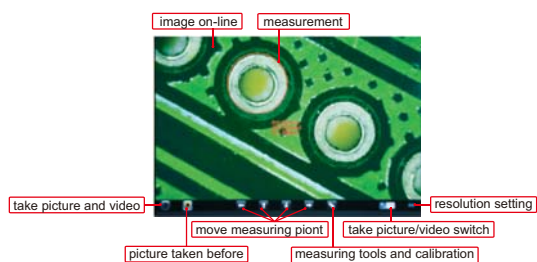
Stand	ISM-WSTD
Green filter	ISM-PM-GREEN
Yellow filter	ISM-PM-YELLOW
Blue filter	ISM-PM-BLUE



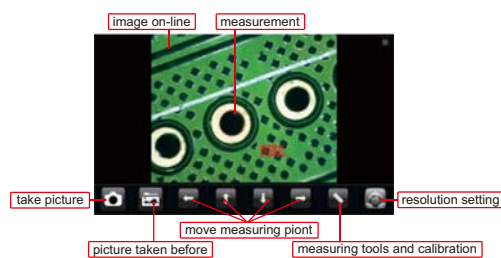
MAGNIFICATION, FOCUS DISTANCE, VIEW FIELD AND ACCURACY

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

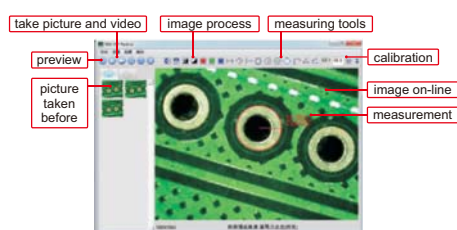
1 Software ISM-PAD (for iPad by WiFi)



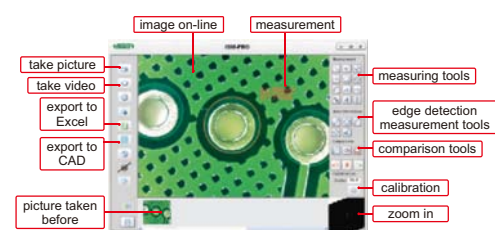
2 Software ISM-APK (for Android devices by WiFi)



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



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



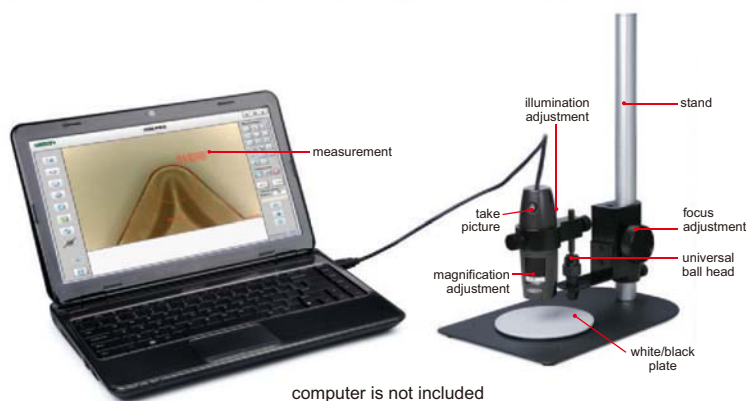
DIGITAL MEASURING MICROSCOPES



stand (included)



- Can take pictures and videos
- Supplied with software

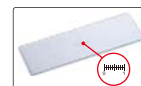


computer is not included

ISM-PM200SB



calibration rule (included, graduation 1mm)



calibration rule (included, graduation 0.1mm)



focus support (included)



software CD (included)



filter (optional)

SPECIFICATION

Code	ISM-PM200SB	ISM-PM600SB	ISM-PM160LA
Magnification	10X~200X	450X~600X	35X~160X
Type	short focus distance	short focus distance	long focus distance
Focus support	included	not included	not included
Calibration rule	graduation 0.1 and 1mm	graduation 0.1mm	graduation 0.1 and 1mm
Pixel	2M (resolution: 1600×1200)		
Illumination	built-in adjustable LED		
Power supply	USB 2.0 cable (voltage required: 5±0.1V)		

OPTIONAL ACCESSORY

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

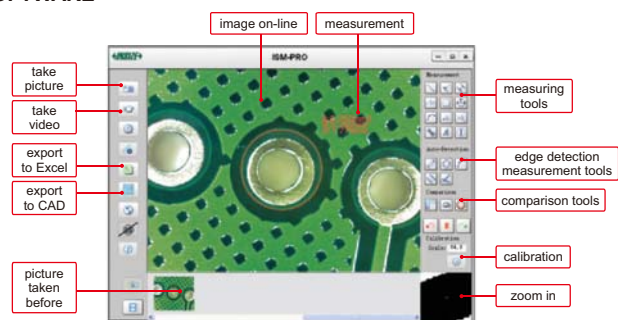
MAGNIFICATION, FOCUS DISTANCE, VIEW FIELD AND ACCURACY

ISM-PM200SB			
Magnification	Focus distance	View field (mm)	Accuracy
50X	21mm	8.1×6.4	30μm
100X	13mm	3.9×3.1	15μm
150X	16mm	2.6×2.1	10μm
200X	19mm	1.8×1.5	8μm

ISM-PM600SB			
Magnification	Focus distance	View field (mm)	Accuracy
450X	1.4mm	0.85×0.67	6μm
500X	5.5mm	0.76×0.61	6μm
550X	8.6mm	0.69×0.55	5μm
600X	11.5mm	0.63×0.51	5μm

ISM-PM160LA			
Magnification	Focus distance	View field (mm)	Accuracy
50X	62mm	8.1×6.4	30μm
100X	45mm	3.9×3.1	15μm
160X	50mm	2.4×1.9	10μm

SOFTWARE



■ Edge detection measurement tools:

- detect two parallel lines automatically and calculate distance
- detect two lines automatically, and calculate angle
- detect circle automatically, and calculate radius, girth and area
- detect line automatically, and calculate length
- detect arc automatically, and calculate radius, angle and arc length

■ Data export to CAD or Excel:



- **Language:** English, Japanese, Korean, German, Turkey, Portuguese, Chinese
- **Operation system:** Windows 7/8/XP/Vista
- **Measuring tools:**

- measure length of line or distance between two points
- measure area of rectangle
- measure radius, length and angle of arc
- measure distance between two parallel lines
- measure angle with two lines
- measure distance between two circles
- measure distance between point and line
- measure length of continuous line
- measure angle with three points
- measure radius, girth and area of circle
- add number with circle
- add text

■ Comparison tools:

Create line, angle or circle with desired size, to compare with workpieces

- create line
- create angle
- create circle with tolerance

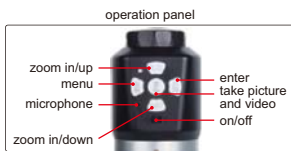


DIGITAL MEASURING MICROSCOPE CODE ISM-DM40

FOCUS DISTANCE OF
CAMERA IS ADJUSTABLE

TAKE PICTURES
AND VIDEOS

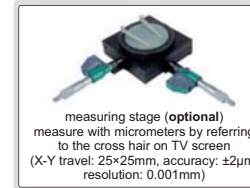
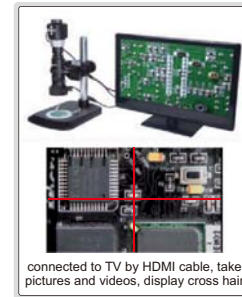
MEASUREMENT
(ON COMPUTER)



- Connected to TV and computer
- Take pictures and videos, saved to memory card
- Measurement on computer with accuracy $\pm 0.01\text{mm}$
- Large working distance because focus distance of camera is adjustable
- Automatic white balance and exposure, white-black display mode
- Automatic power off

SPECIFICATION

Magnification		15X~205X (on 19" monitor)
Pixel		3.5M
Sensor		1/3" CMOS
Resolution	HDMI output	1920×1080, 1280×720, 640×480
	picture	2304×1536, 2304×1296, 1920×1080, 1280×720, 800×480
	video	1920×1080, 1280×720, 800×480
Output		USB/HDMI
Power supply		5V (>500mA)
Dimension (L×W×H)		273×205×310mm
Weight		3.5kg



STANDARD DELIVERY

Main unit	1pc
8G memory card and holder	1pc
HDMI cable (for TV)	1pc
USB cable and software (for computer)	1pc
Calibration rule (graduation 0.1mm)	1pc
Calibration rule (graduation 1mm)	1pc

LENS SCALE, MAGNIFICATION AND FOCUS DISTANCE

Lens scale	Magnification (on 19" monitor)	Focus distance (mm)
0.7X	15~40X	24~252
1X	30~50X	27~155
2X	70~80X	81~117
3X	110~120X	94~111
4X	140~160X	101~110
5X	180~205X	103~109

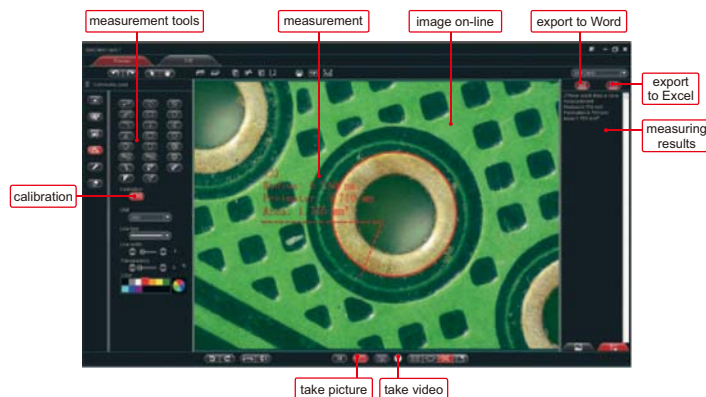
MAGNIFICATION, VIEW FIELD AND FOCUS DISTANCE

Magnification (on 19" monitor)	View field (mm)	Focus distance
15X	28×16	252mm
30X	13.5×7.5	155mm
50X	8×4.8	124mm
100X	4.2×2.4	110mm
150X	2.7×1.5	108mm
200X	2.1×1.2	105mm

OPTIONAL ACCESSORY

Measuring stage	ISM-DM40-STAGE
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SOFTWARE FOR COMPUTER

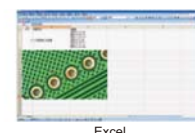
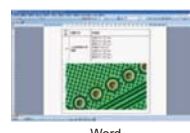


- **Language:** Chinese, English, Japanese, German, French
- **Operation system:** Windows XP/7/8/10

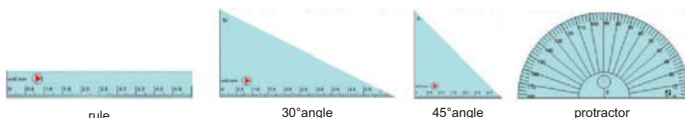
Measurement tools:

- measure length of line or distance between two points
- measure length of continuous line
- measure radius, length and angle of arc
- measure angle with three points
- measure distance between two circles
- measure distance between two parallel lines
- measure length, width, girth and area of rectangle
- measure distance between point and line
- measure axis lengths, girth and area of ellipse
- measure center distance between parallel lines
- measure circumference and area of polygon
- measure angle with two lines
- measure radius, girth and area of circle

Data export to Word or Excel:



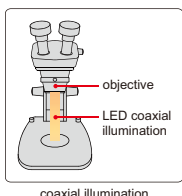
- **Comparison tools:**
Create rule, angle or protractor, to compare with workpieces.



DIGITAL ZOOM MICROSCOPE CODE ISM-ZS60

COAXIAL
ILLUMINATION

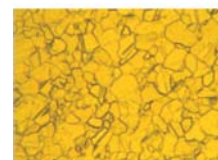
MEASUREMENT
(ON COMPUTER)



computer is not included



observe the scratches or points on smooth surface



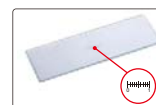
observe the metallurgical structure



calibration rule
(included, graduation 1mm)



10X objective (included)



calibration rule
(included, graduation 0.1mm)



software CD (included)

SPECIFICATION

Magnification		38X~230X (on 19" monitor)
Pixel		5M
Sensor		1/2.5" CMOS
Resolution	picture	2592×1944, 1920×1080, 1600×1200, 1280×960, 1280×720,1024×768, 800×600, 640×480
	video	1920×1080, 1600×1200, 1280×960, 1280×720, 1024×768, 800×600, 640×480
Max. workpiece height		215mm
Illumination		LED coaxial illumination
Output		USB
Power supply		5V, >500mA
Dimension (L×W×H)		290×260×480mm
Weight		5.1kg

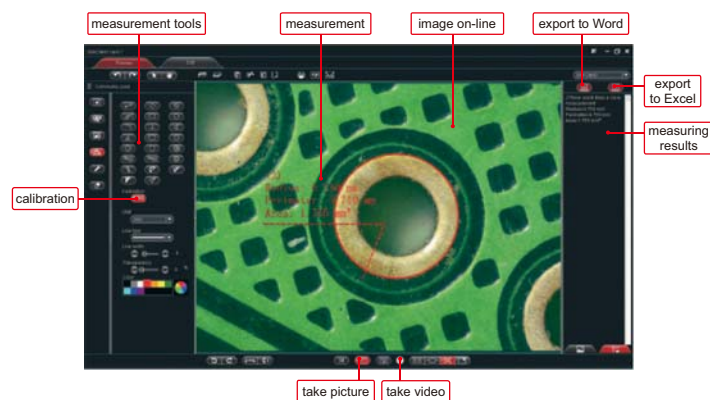
OBJECTIVE SCALE, MAGNIFICATION, VIEW FIELD AND FOCUS DISTANCE

Objective scale	Magnification (on 19" monitor)	View field	Focus distance
0.8X	38X	7×5mm	130mm
1X	46X	5.5×4.1mm	125mm
2X	92X	2.7×2mm	118mm
3X	144X	1.8×1.3mm	116mm
4X	184X	1.3×1mm	115mm
5X	230X	1.1×0.8mm	114mm

STANDARD DELIVERY

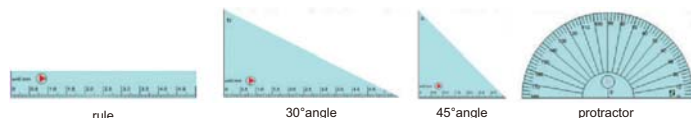
Main unit	1pc
Digital camera	1pc
LED illumination	1pc
10X objective	2pcs
Calibration rule (graduation 0.1mm)	1pc
Calibration rule (graduation 1mm)	1pc
Software CD	1pc
Anti-dust cover	1pc

SOFTWARE FOR COMPUTER



■ Comparison tools:

Create rule, angle or protractor, to compare with workpieces.



- **Language:** Chinese, English, Japanese, German, French
- **Operation system:** Windows XP/7/8/10

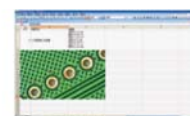
■ Measurement tools:

- ☐ measure length of line or distance between two points
- ☐ measure length of continuous line
- ☐ measure radius, length and angle of arc
- ☐ measure angle with three points
- ☐ measure distance between two circles
- ☐ measure distance between two parallel lines
- ☐ measure length, width, girth and area of rectangle
- ☐ measure distance between point and line
- ☐ measure axis lengths, girth and area of ellipse
- ☐ measure center distance between parallel lines
- ☐ measure circumference and area of polygon
- ☐ measure angle with two lines
- ☐ measure radius, girth and area of circle

■ Data export to Word or Excel:



Word



Excel

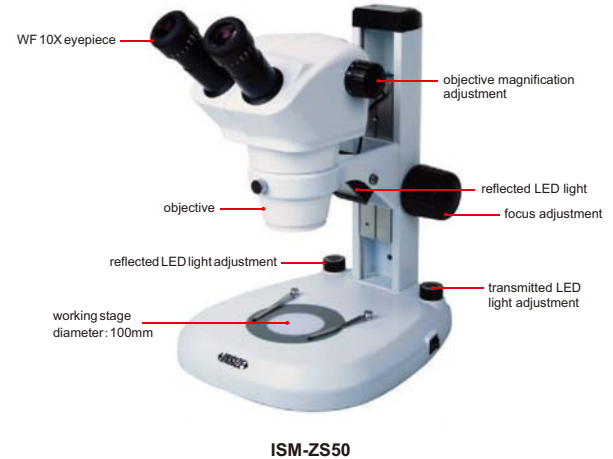
ZOOM STEREO MICROSCOPES

SPECIFICATION

Code	ISM-ZS50	ISM-ZS50T
Optical tube	binocular	trinocular
Eyepiece (wide field)	10X (view field: Ø22mm)	
Objective	0.8X~5X (zoom)	
Zoom ratio	1:6.3	
Pupil distance	55-75mm (adjustable)	
Diopter adjustment	±5 diopter (two eyepieces)	
Working distance of objective	115mm	
Max. workpiece height	215mm	
Illumination	adjustable reflected and transmitted LED light	
Power supply	110/220V, 50/60Hz	
Dimension (L×W×H)	290x260x480mm	
Weight	4.9kg	

STANDARD DELIVERY

Main unit	1pc
WF10X eyepiece	2pcs
Ø100mm glass plate	1pc
Ø100mm white/black plate	1pc
Anti-dust cover	1pc



ISM-ZS50

OPTIONAL ACCESSORY

Auxiliary objective	0.5X	ISM-ZS50-OB05X
	2X	ISM-ZS50-OB2X
Eyepiece	10X dividing eyepiece(0.1mm/div.)	ISM-ZS50-EPD10X
	WF15X (view field: Ø16mm)	ISM-ZS50-EP15X
	WF20X (view field: Ø12mm)	ISM-ZS50-EP20X
Digital camera		ISM-D500

ZOOM STEREO MICROSCOPE CODE ISM-ZS30

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



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 (0.1mm/div.)	ISM-ZS30-EPD10X
	WF15X (view field: Ø16mm)	ISM-ZS50-EP15X
	WF20X (view field: Ø12mm)	ISM-ZS50-EP20X
Digital camera		ISM-D500

PORTABLE MEASURING MICROSCOPE

SPECIFICATION

Code	ISM-PM100
Total magnification	100X
Eyepiece	10X with graduation
Objective (achromatic)	10X (numerical aperture: 0.25)
Working distance	7mm
Graduation	0.01mm
Viewing field	Ø1.8mm
Focus range	30mm
Illumination	LED light
Diameter of base	Ø63mm
Height	210mm
Weight	650g

STANDARD DELIVERY

Main unit	1pc
Pen light	1pc
Battery (AAA)	2pcs



ISM-PM100

DIGITAL CAMERA CODE ISM-D500

software CD (included)



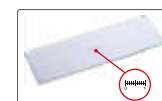
adapter 0.45X

- Insert into eyepiece tube or camera connector of microscopes
- Supplied with software

SPECIFICATION

Sensor	1/2.5" CMOS
Pixel	5M
Resolution	2592×1944 or 1296×972
Frame rate	3fps (2592×1944) 12fps (1296×972)
Exposure	manual or auto, exposure time is adjustable
SNR	41dB
Power supply	USB
Weight	400g

application



calibration rule
(graduation 0.1mm, included)



connector Ø23.2/Ø30mm
(included)

STANDARD DELIVERY

Main body	1pc
Adapter 0.45X	1pc
Calibration rule (graduation 0.1mm)	1pc
Connector Ø23.2/Ø30mm	1pc
USB cable	1pc
Software disc	1pc

OPTIONAL ACCESSORY

Connector Ø23.2/Ø30.5mm	ISM-DCA-CON
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THREE WAYS MAGNIFIER WITH ILLUMINATION



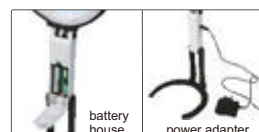
10pcs LED



three-ways use

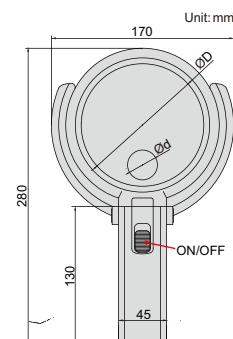


7512-1



battery house

power adapter



Unit: mm

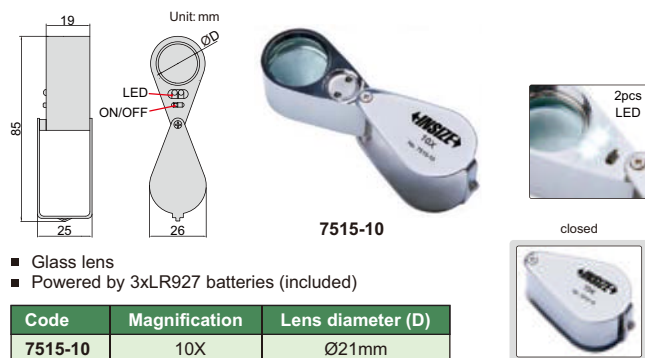
- Plastic lens
- Powered by 2xAAA batteries (included) or power adapter (110~240V, 50~60Hz)

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

FOLDING MAGNIFIER



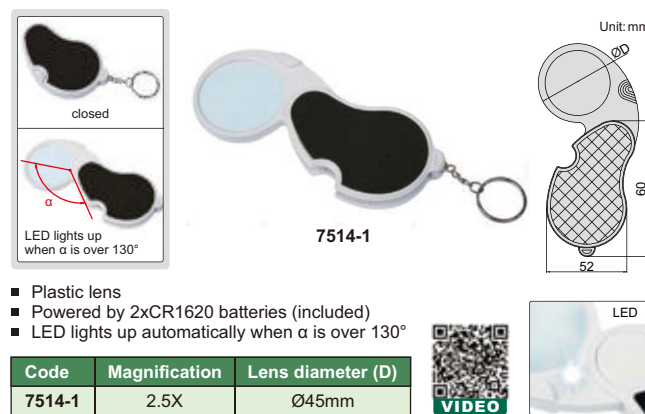
FOLDING MAGNIFIER WITH ILLUMINATION



MAGNIFIERS WITH ILLUMINATION



FOLDING MAGNIFIER WITH ILLUMINATION



MANUAL 360° SWIVEL VIDEOSCOPIES

ATTENTION: THE CABLE CAN BE BENT BUT CAN'T BE SET AT A FIXED SHAPE

STEEL WIRE WEAVED CABLE RESISTANCE TO BREAK AND WEAR

IP65 WATERPROOF

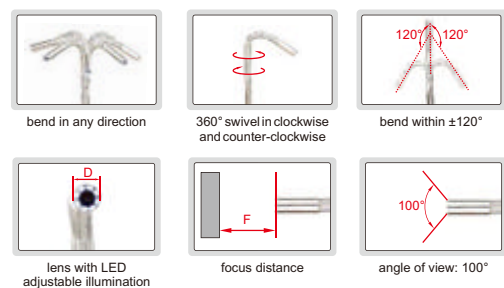


STANDARD DELIVERY

Main unit	1pc
Cable with lens	1pc
8G SD card	1pc
AC/DC adapter	1pc
Video output cable	1pc
USB cable	1pc

OPTIONAL ACCESSORY

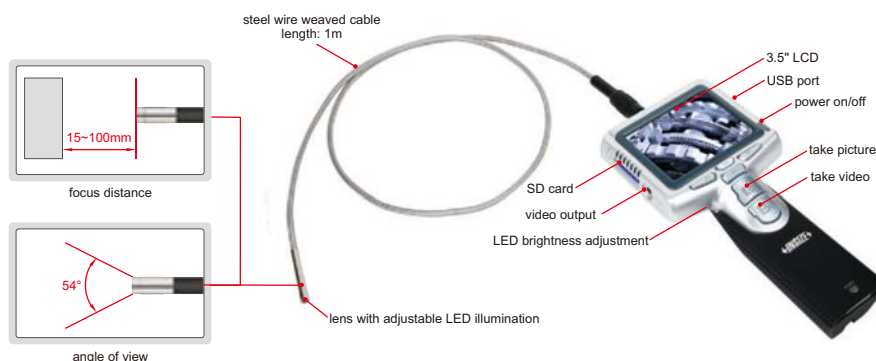
Base	ISV-2000D-BASE
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SPECIFICATION

Code	ISV-2000D	ISV-2001D	ISV-3000D
Lens	diameter (D)	6.5mm	4.5mm
	focus distance (F)	15mm~∞	8~80mm
	illumination	8pcs LED	6pcs LED
	pixel	0.3M	
	resolution	640x480	
	dust/waterproof	IP65	
	bend control	manual joystick	
Cable	length	1.5m	3mm
	type	steel wire weaved cable	
Main unit	function	take picture, take video	
	file format	picture: JPG, video, AVI	
	image process	brightness, image quality zoom (1X, 2X, 3X, 4X, 5X)	
	memory	8G SD card	
	output	TV, USB	
	power supply	rechargeable battery (for 2 hours working) AC/DC adapter (for continuous working)	
Weight	650g	800g	600g

VIDEOSCOPE CODE ISV-E10



ATTENTION: THE CABLE CAN BE BENT
BUT CAN'T BE SET AT A FIXED SHAPE

STEEL WIRE WEAVED CABLE
RESISTANCE TO BREAK AND WEAR

OPTIONAL CABLE
LENGTH 3M, 5M AND 10M

IP65
WATERPROOF

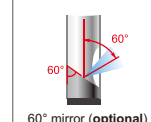
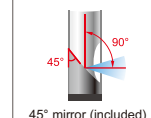
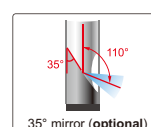


SPECIFICATION

Lens	diameter	5.5mm
	pixel	0.3M
	resolution	640×480
Cable	frame rate	30fps
	length	1m
Main unit	type	steel wire weaved cable
	function	take picture, take video
	file format	picture: JPG, video: AVI
	image process	brightness, contrast, color saturation
	memory	2G SD card
	output	TV, USB
Weight	power supply	rechargeable battery (for 3 hours working)
		450g

STANDARD DELIVERY

Main unit	1pc
Cable with lens	1pc
2G SD card	1pc
45° mirror	1pc
AC/DC adapter	1pc
Video output cable	1pc
USB cable	1pc
Lens cleaning kit	1pc



OPTIONAL ACCESSORY

35° mirror	ISV-E55-M35
60° mirror	ISV-E55-M60

COATING THICKNESS GAGE (BASIC MODEL) CODE ISO-1000F

MEASURE NON-MAGNETIC COATING
ON MAGNETIC SUBSTRATES



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

SPECIFICATION

Probe type	Fe (included)	NFe (optional)
Measuring range	0~1250μm	
Accuracy	±(3%L+1)μm L is measuring thickness in μm	
Resolution	0.1μm (range<50μm)	
	1μm (range≥50μm)	
Repeatability	±(2%L)μm L is measuring thickness in μm	
Measuring mode	continuous and single	
Minimum substrate thickness	0.5mm	0.3mm
Minimum measuring area	Ø7mm	Ø5mm
Minimum curvature radius of convex workpiece	1.5mm	
	3mm	
Memory	500	
Power supply	3x1.5V AAA batteries	
Dimension	155×72×27mm	
Weight	230g	

STANDARD DELIVERY

Main unit	1pc
Magnetic induction probe (Fe)	1pc
Zero calibration block for Fe probe	1pc
Calibration foils (50μm, 100μm, 250μm, 500μm, 1000μm)	1set
1.5V AAA battery	3pcs

OPTIONAL ACCESSORY

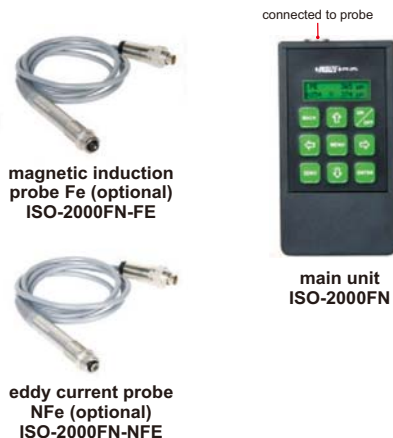
Eddy current probe (NFe) with zero calibration block	ISO-1000F-NFE
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COATING THICKNESS GAGE

INSIZE PLUS
MADE IN GERMANY

FOR MAGNETIC AND
NON-MAGNETIC SUBSTRATE

SUITABLE FOR SMALL SURFACES,
CONCAVE OR CONVEX SURFACES



MAIN UNIT SPECIFICATION

Code	ISO-2000FN	
Measuring range	magnetic induction probe (Fe)	0~2000μm
	eddy current probe (NFe)	0~800μm
Accuracy	±(1.5+2%)μm L is measuring thickness in μm	
Resolution	0.1μm (range<100μm)	
	1μm (range 100~1000μm)	
	10μm (range ≥ 1000μm)	
Repeatability	1μm (range 0~1000μm)	
	10μm (range ≥ 1000μm)	
Measuring mode	continuous or single	
Calibration mode	four points calibration	
Minimum substrate thickness	magnetic induction probe (Fe): 0.2mm, eddy current probe (NFe): 0.05mm	
Minimum measuring area	5x5mm, calibration should be made on workpiece without coating, test stand (optional) is recommended in order to have same position for calibration and measurement	
Power supply	2x1.5V AA batteries	
Dimension of main unit	122x65x22mm	
Weight of main unit	150g	

- Suitable for small surfaces, concave or convex surfaces
- 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 (does not include nickel)
- Eddy current probe (NFe) is to measure the thickness of non-conductive coating on non-magnetic metal substrate
Substrate: copper, aluminum, zinc, non-magnetic stainless steel
Coating: plastic powder, paint, anodizing

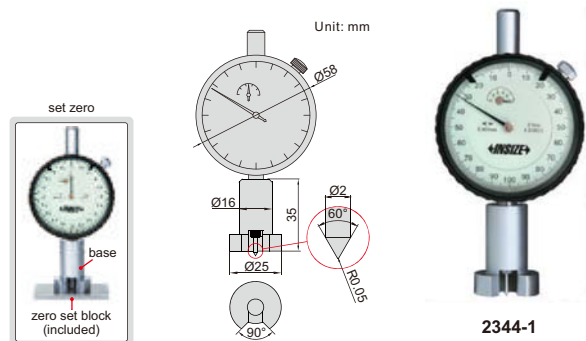
STANDARD DELIVERY

Main unit	1pc
Zero calibration block for Fe probe	1pc
Zero calibration block for NFe probe	1pc
Standard foil	7pcs
Battery (AA)	2pcs

PROBE (OPTIONAL) SPECIFICATION

Magnetic induction probe (Fe)	ISO-2000FN-FE
Eddy current probe (NFe)	ISO-2000FN-NFE

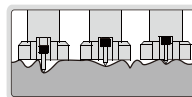
SURFACE PROFILE GAGE



- Measure peak-to-valley height of blast cleaned surface. If the profile is too low, the adhesion of the coating to the surface will be reduced. If the profile is too high, there is the danger that the profile peaks will remain uncoated, allowing rust spots to occur.
- Meet ASTM D 4417-B
- Zero set block is included, set zero before measurement
- Stainless steel base

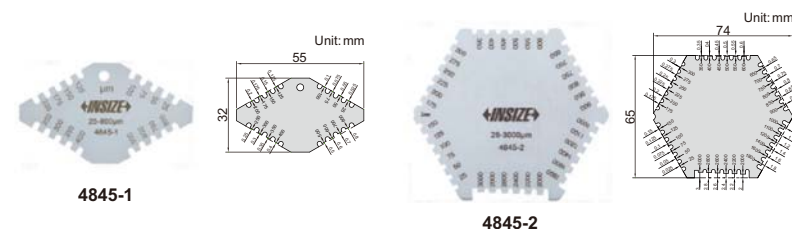


measure peak-to-valley height of blast cleaned surface



Code	Range	Dial indicator stroke	Dial indicator graduation	Accuracy
2344-1	0-1mm	1mm	0.001mm	±0.005mm

WET FILM GAGE



- Made of stainless steel

Code	Range	Accuracy	Thickness
4845-1	25-800μm	±5μm	1.8mm
4845-2	25-3000μm	25-100μm: ±5μm 100μm-3000μm: ±5%	1mm

ULTRASONIC THICKNESS GAGE CODE ISU-250C



DATA
OUTPUT



software CD
(included)

- Measure the thickness from one side of object, suitable for pipe, tank, etc.
- Applicable material: metal, plastic, glass, nylon, resin, ceramic, ice
- Low and high limits with judgement
- Average calculation of maximum 9 readings
- Memory of maximum 5000 readings with location number

SPECIFICATION

Resolution	0.01mm (range<100mm)
	0.1mm (range≥100mm)
Repeatability	0.03mm (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
Velocity	1000-9999m/s
Power supply	2×1.5V AAA batteries
Dimension	64×116×27mm
Weight	220g

SPECIFICATION OF TRANSDUCERS

Code	Frequency	Diameter (Ød)	Measuring range	Minimum size of pipe for measurement (diameter × wall thickness)	Applicable temperature	Application
ISU-T08	5.0MHz	10.8mm	0.8~300mm	20×1.2mm	<60°C	general use
ISU-T04	10.0MHz	6mm	0.7~20mm	10×1mm	<60°C	for small tube
ISU-T06	7.5MHz	8.5mm	0.7~50mm	15×1.2mm	<60°C	for thin material
ISU-T12	2.0MHz	16.3mm	2~400mm	30×4mm	<60°C	for casting steel
ISU-T13	5.0MHz	13mm	2~200mm	25×3mm	<350°C	for high temperature



STANDARD DELIVERY

Main unit	1pc
Transducer ISU-T08	1pc
Battery (AAA)	2pcs
Couplant (for ISU-T04, ISU-T06, ISU-T08, ISU-T12)	1bottle
USB cable and software disc	1pc

OPTIONAL ACCESSORY

Transducer	ISU-T04, ISU-T06, ISU-T12, ISU-T13
Couplant (for ISU-T13)	ISU-HT5-COUPPLANT

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



ATTENTION: NOT SUITABLE
FOR CASTING WORKPIECES



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



STANDARD DELIVERY

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

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

ROUGHNESS TESTER CODE ISR-S400

INSIZE PLUS
MADE IN ITALY



CUSTOM-MADE
PROBES ARE AVAILABLE

DATA
OUTPUT

PROBE CAN
BE CHANGED



software CD
(included)



heavy duty test stand (optional)



light duty test stand (optional)

- Automatic probe leveling
- Language: English, French, German, Italian, Spanish, Portuguese
- 12 roughness parameters
- Can set tolerance
- Measuring range up to 400μm, can measure grit and shot blasting
- Traverse length up to 16mm
- The probe can be set at 90° or 270°, for transverse measurement
- Memory of maximum 100 results



probe cover (included), can put the small
workpieces directly on the probe for measurement



output software (included), output data
and graphic to Excel, make report



measuring software (optional), can control the roughness tester,
display roughness values, profile and curve, data statistics



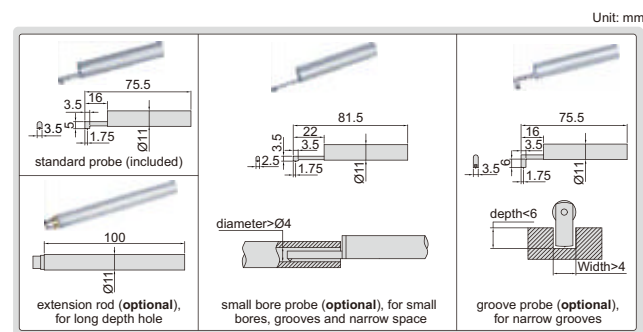
adjustable stand (included)



transverse measurement

SPECIFICATION

Parameters		Ra, Rq, Rt, Rz, Rc, Rmax, Rsm, Rpc, Rmr, R, AR, Rx
Range		Ra: 0~100μm, Rt: 0.05~400μm
Accuracy		±3%
Resolution (Ra)		0.001μm
Probe	type	inductive
	stylus radius/angle	5μm/90°
	stylus material	diamond
Measuring force		0.75mN
Measuring unit		μm/μin
Cut off		0.25/0.8/2.5mm
Number of cut-offs		1 to 5
Traverse speed		1mm/s
Memory		100 measurement results
Output		USB
Power		built-in rechargeable battery
Dimension (L×W×H)		122x52x68mm
Weight		650g



STANDARD DELIVERY

Main unit	1pc
Standard probe	1pc
Calibration block	1pc
Adjustable stand	1pc
AC/DC adapter	1pc
Probe cover	1pc
USB cable and output software	1pc

OPTIONAL ACCESSORY

Extension rod	ISR-S400-ER100
Probe	see details
USB cable and measuring software	ISR-S-SOFTWARE
Heavy duty test stand	ISR-S400-DK
Light duty test stand	ISR-S400-STAND

ROUGHNESS TESTER CODE ISR-C002

DATA
OUTPUT



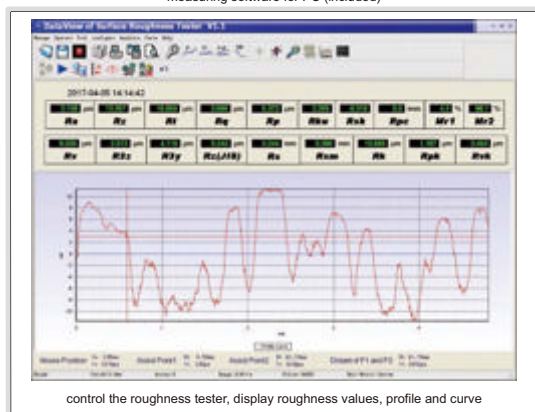
software CD
(included)



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)



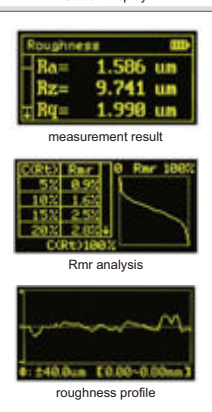
control the roughness tester, display roughness values, profile and curve

test stand (optional)



the maximum workpiece
height is 310mm

screen display



roughness profile

wireless printer (optional)



probe cover (included)



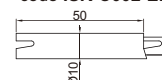
put the small workpieces directly
under the probe for measurement

adjustable stand (included)

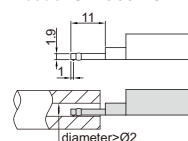


Unit: mm

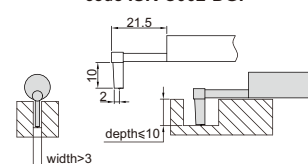
extension rod (optional),
code ISR-C002-ER



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



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



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

OPTIONAL ACCESSORY

Extension rod	ISR-C002-ER
Deep groove probe	ISR-C002-DGP
Small hole probe	ISR-C002-SBP
Test stand	ISR-C002-STAND
Wireless printer	ISR-C002-PRINTER

ROUGHNESS TESTER CODE ISR-C003



calibration block and support (included)

- Unit: μm , μin
- Automatic power off



STANDARD DELIVERY

Main unit	1pc
Calibration block and support	1pc of each
AC/DC adapter	1pc



SPECIFICATION

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



ISR-CS2

- 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, 12.5 μm	1.6, 3.2, 6.3, 12.5, 25, 50 μm	6pcs
	16, 32, 63, 125, 250, 500 μin		
Vertical milling	0.4, 0.8, 1.6, 3.2, 6.3, 12.5 μm	1.6, 3.2, 6.3, 12.5, 25, 50 μm	6pcs
	16, 32, 63, 125, 250, 500 μin		
Turning	0.4, 0.8, 1.6, 3.2, 6.3, 12.5 μm	1.6, 3.2, 6.3, 12.5, 25, 50 μm	6pcs
	16, 32, 63, 125, 250, 500 μin		
Plain grinding	0.05, 0.1, 0.2, 0.4, 0.8, 1.6 μm	0.2, 0.4, 0.8, 1.6, 3.2, 6.3 μm	6pcs
	2, 4, 8, 16, 32, 63 μin		
Flat lapping	0.05, 0.1 μm	0.2, 0.4 μm	2pcs
	2, 4 μin		
External grinding	0.2, 0.4, 0.8, 1.6 μm	0.8, 1.6, 3.2, 6.3 μm	4pcs
	8, 16, 32, 63 μin		

DIGITAL SOUND LEVEL METER CODE 9351-130

DATA
OUTPUT



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



- Automatically select best range: 30~80dB, 40~90dB, 50~100dB, 60~110dB, 70~120dB, 80~130dB
- Over range indicator
- Real time, average, maximum modes
- Memory 16000 measurement values
- AC signal output: 0.707 Vrms at FS, impedance approx. 600 Ω
- DC signal output: 10mV/dB, impedance approx. 100 Ω
- Automatic power off



software CD
(included)

SPECIFICATION

Measuring range	30~130dB
Accuracy	$\pm 2\text{dB}$
Resolution	0.1dB
Sampling time	0.5s for digital, 0.05s for analogue
Response time	fast: 125ms, slow: 1s
Frequency	30Hz~8KHz
Frequency weighting	A/C
Microphone	electret condenser type
Output	RS232, AC/DC
Power supply	6×AAA batteries
Dimension	265×80×69mm
Weight	317g

STANDARD DELIVERY

Main unit	1pc
RS232 cable and software	1pc
Output connector	1pc
Battery (AAA)	6pcs

DIGITAL ANEMOMETER CODE 9331-40



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)
	relative humidity	0.1%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



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

DATA
OUTPUT

- 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	1pc
USB cable and software	1pc
9V battery	1pc

DIGITAL MOISTURE METER CODE 9341-50

- 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



cover (included)



STANDARD DELIVERY

Main unit	1pc
Battery (AAA)	2pcs

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

INFRARED THERMOMETER CODE 9110-500

k-type sensor (included)



- Fast measurement with infrared or k-type sensor
- Maximum, minimum, average and difference modes
- Low and high limits with judgement
- Memory 20 measurement values
- Automatic power off

STANDARD DELIVERY

Main unit	1pc
K-type sensor	1pc
9V battery	1pc

SPECIFICATION

Measuring range	infrared	-60~500°C/-76~932°F
	k-type sensor	-40~1080°C/-40~1976°F
Accuracy	infrared	±(1.5%+2)°C/±(1.5%+4)°F
	k-type sensor	±(1%+2)°C/±(1%+4)°F
Resolution		0.1°C/0.1°F (range<199.9), 1°C/1°F (range>199.9)
Distance to spot ratio (D:S)		12:1
Emissivity		0.1~1 (adjustable)
Laser type		630~670nm, Class II, <1mW
Response time		<500ms
Power supply		9V battery
Dimension		176×132×49mm
Weight		223g

NON-CONTACT DIGITAL TACHOMETER CODE 9221-999

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



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



reflection sticker (included)



STANDARD DELIVERY

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

CONTACT DIGITAL TACHOMETER CODE 9222-199



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



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

STANDARD DELIVERY

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



LASER DISTANCE METER CODE 9561-80

SPECIFICATION

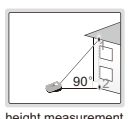
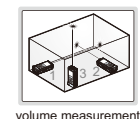
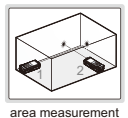
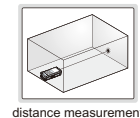
Measuring range	0.05~80m
Accuracy	±3mm
Resolution	1mm, 10mm, 0.1", 0.01ft
Measuring speed	0.5 second
Laser type	635nm, Class II, <1mW
Power supply	3×AAA batteries, for 4000 measurements
Dimension (L×W×H)	120×60×28mm
Weight	175g



level



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



STANDARD DELIVERY

Main unit	1pc
Battery (AAA)	3pcs

PORTABLE REFRACTOMETER CODE ISQ-RM30

SUITABLE FOR WATER
BASED COOLANT



- 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 $(2.1 \times 6\%) = 12.6\%$

SPECIFICATION

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



60° GLOSS METER CODE ISQ-DG6

- To test the gloss of coating, such as painting, varnish, printing ink, etc.
- To test the material surfaces, such as metal, granite, ceramic, plastic, paper, etc.
- According to ISO 2813, ASTM D2457, ASTM D523
- Automatic power off



VIDEO



base with calibration block (included)

SPECIFICATION

Incidence angle	60°
Measuring range	0~150GU
Resolution	0.1GU
Accuracy	±1.2GU
Repeatability	0.4GU
Zero set error	0.2GU
Measuring area	20×10mm
Power supply	1×1.5V AA battery
Dimension	123×38×65mm
Weight	300g

STANDARD DELIVERY

Main unit	1pc
Base with calibration block	1pc
Spare calibration block	1pc

DIGITAL LEVEL AND PROTRACTOR

IP54
WATERPROOF

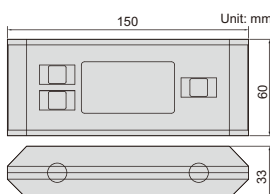
ABSOLUTE
LEVEL

BACKLIGHT

BUZZER ALARM
AT 0° AND 90°



2179-360



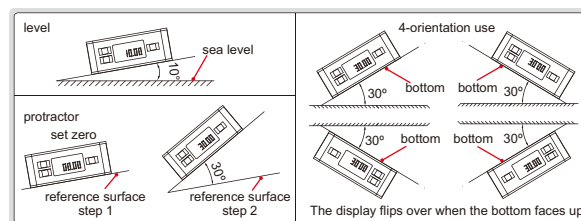
Unit: mm

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



VIDEO

- 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



DIGITAL LEVEL AND PROTRACTOR

BACKLIGHT

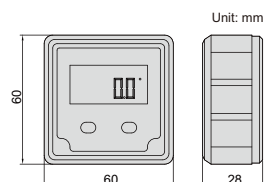
ABSOLUTE
LEVEL

MAGNETIC
BOTTOM

DISPLAY FLIPS OVER WHEN
THE BOTTOM FACES UP



2170-1



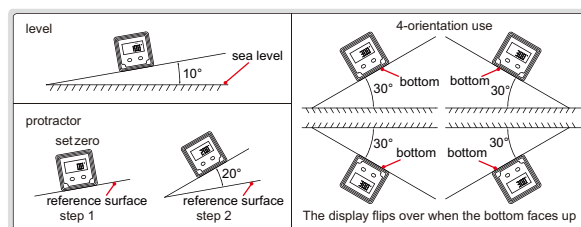
Unit: mm

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



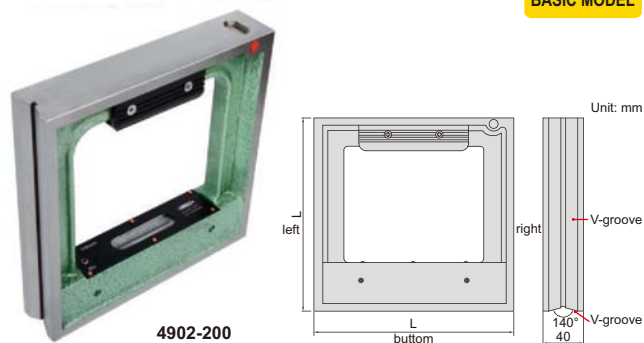
VIDEO

- Aluminum frame
- Magnetic bottom
- The display flips over when the bottom faces 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



FRAME LEVELS

ATTENTION:
BASIC MODEL



4902-200

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

Code	Sensitivity	Size (LxL)
4902-200	0.02mm/m (=0.001°)	200x200mm
4902-300	0.02mm/m (=0.001°)	300x300mm



BLOCK LEVELS

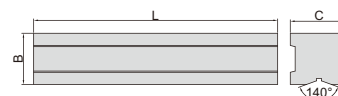
ATTENTION:
BASIC MODEL



4903-200A



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

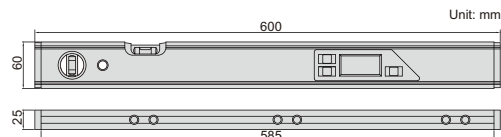


Code	Length (L)	Sensitivity	B	C
4903-150A	150mm	0.02mm/m (=0.001°)	40mm	45mm
4903-200A	200mm	0.02mm/m (=0.001°)	42mm	47mm
4903-300A	300mm	0.02mm/m (=0.001°)	45mm	50mm
4903-C200	200mm	0.05mm/m (=0.0029°)	42mm	47mm

DIGITAL LEVEL



4910-600



- 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

BUZZER ALARM
AT 0° AND 90°

BACKLIGHT

ABSOLUTE
LEVEL

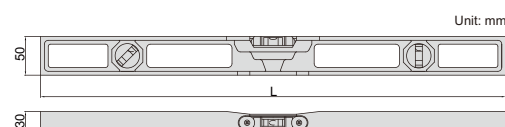
Code	Range	Resolution	Accuracy
4910-600	0-360° (90°x4)	0.1° (=1.745mm/m)	0° and 90°: ±0.1°; others: ±0.2°

ALUMINUM ALLOY LEVELS



4911-600

- Die casting aluminum alloy frame
- With three vials: 180°, 90° and 45°
- Zero position of vial 180° can be set



Code	Length (L)	Accuracy
4911-400	400mm	0.75mm/m
4911-600	600mm	0.75mm/m
4911-800	800mm	0.75mm/m

ALUMINUM LEVELS

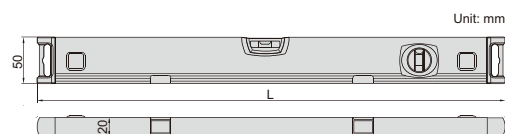
VIALS MADE IN ISRAEL
LIFETIME WARRANTY

MAGNETIC
BASE



4914-600

- Shockproof horizontal and vertical vials
- Magnetic base
- Shock absorbing rubber end caps
- Working temperature: -15°C~55°C



Code	Size (L)	Accuracy
4914-600	600mm	0.5mm/m (.006in/ft)
4914-1000	1000mm	0.5mm/m (.006in/ft)

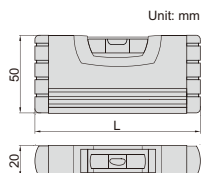
PORTABLE LEVEL

MAGNETIC
BASE

VIALS MADE IN ISRAEL
LIFETIME WARRANTY



4912-100



Unit: mm

- Shockproof vials
- Magnetic base
- Shock absorbing rubber end caps
- Working temperature: -15°C~55°C



packaging

Code	Size (L)	Accuracy
4912-100	100mm	0.5mm/m (.006in/ft)

CAST ALUMINUM LEVEL

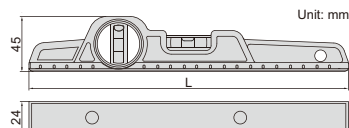
MAGNETIC
BASE

VIALS MADE IN ISRAEL
LIFETIME WARRANTY



4913-250

- Shockproof horizontal and vertical vials
- Magnetic base
- Working temperature: -15°C~55°C
- Cast aluminum body



Unit: mm

Code	Size (L)	Accuracy
4913-250	250mm	0.5mm/m (.006in/ft)



packaging

ULTRASONIC HARDNESS TESTER CODE ISHU-330

INSPECTION
CERTIFICATE

DATA
OUTPUT

Application:

1. For steel, non-ferrous metal and alloy
2. Test surface hardening layers (carburized, nitriding, high frequency hardened, etc.) and plating (like chrome plating)
3. Suitable for thin wall or edge of workpieces
4. Suitable for small areas like arc, conical surface and other complex shapes
5. Suitable for small or light workpieces
6. Suitable for narrow spaces, like grooves and blind holes
7. Test large workpieces at any direction
8. Suitable for rough surfaces



cover



software CD
(included)



test flat surfaces
(with the cover)



test cylinder surfaces
(use V-groove on the cover)



test narrow areas
(remove the cover)

SPECIFICATION OF MAIN UNIT

Hardness scale	HV, HB, HRC, MPa	
Range	100~940HV, 80~650HB, 20~70HRC, 370~1740MPa	
Resolution	1HV, 1HB, 0.1HRC, 1MPa	
Accuracy	HB	±3%
	HV	±3%
	HRC	±1.5%
Data output	USB	
Operating temperature	-20°C~+40°C	
Power supply	built-in rechargeable battery	
Dimension of main unit	120×60×25mm	
Weight of main unit	200g	

- Small test indentation
- Test force and time are not affected by the operator
- Quick test, only 2 seconds
- Average and statistics test modes
- Memory of 1024 test results for browsing and output
- Automatic power off
- Anti-dust and waterproof



VIDEO

	steel	alloy steel	stainless steel	aluminum	user material
HRC					
HB					
HV					
user scale					

BACK

SELECT

select the material and scale, use the corresponding standard hardness blocks or workpieces for calibration (calibration of HRC, HB and HV for steel are already made, calibration is needed before use other materials and scales)

SPECIFICATION OF PROBE

Type	A (standard)	B (optional)
Test force	50N	10N (small force)
Application	general use	plating
Maximum roughness of workpiece (Ra)	2.5μm	1.5μm
Minimum weight of workpiece (direct measurement)	0.1kg *	0.1kg *
Minimum thickness of workpiece (direct measurement)	1mm *	1mm *
Minimum radius of workpiece	5mm	5mm
Minimum thickness of surface hardening layer or plating	0.1mm	0.03mm
Minimum test area	Ø1mm	Ø1mm
Dimension and weight of probe	140×Ø37mm, 271g	145×Ø37mm, 271g

* If the weight or thickness of workpiece is less than required, the workpiece should be fixed or coupled on solid support

STANDARD DELIVERY

Main unit	1pc
Probe A	1pc
Rechargeable battery	2pcs
Charger	1pc
USB cable and software	1pc

OPTIONAL ACCESSORY

Probe B	ISHU-460-B
Couplant	ISH-COUPPLANT

ULTRASONIC HARDNESS TESTER (ADVANCED MODEL) CODE ISHU-460

INSPECTION
CERTIFICATE

DATA
OUTPUT

Application:

1. For steel, non-ferrous metal and alloy
2. Can test surface hardening layers (carburized, nitriding high frequency hardened, etc.) and plating (like chrome plating)
3. Suitable for thin wall or edge of workpieces
4. Suitable for small areas like arc, conical surface and other complex shapes
5. Suitable for small or light workpieces
6. Suitable for narrow spaces, like grooves and blind holes
7. Can test large workpieces at any direction
8. Suitable for rough surfaces

SPECIFICATION OF MAIN UNIT

Hardness scale		HV, HB, HRB, HRC, HS
Range		100~940HV, 80~650HB, 20~93HRB, 20~70HRC, 25~100HS, 370~1740MPa
Resolution		1HV, 1HB, 1HRB, 0.1HRC, 1HS
Accuracy	HB	±3%
	HV	±3%
	HRC	±1.5%
Data output		USB
Operating temperature		-20°C ~ +40°C
Power supply		built-in rechargeable battery
Dimension and weight of main unit		160×80×40mm, 315g



cover

- Small test indentation
- Test force and time are not affected by the operator
- Quick test, only 2 seconds
- Memory of 1000 test results
- Automatic power off
- Anti-dust and waterproof



software CD
(included)



VIDEO



test flat surfaces (with the cover)



test cylinder surfaces
(use V-groove on the cover)



test narrow areas
(remove the cover)

SPECIFICATION OF PROBE

Type	A (standard)	B (optional)
Measuring force	50N	10N (small force)
Application	general use	plating
Maximum roughness of workpiece (Ra)	2.5μm	1.5μm
Minimum weight of workpiece (direct measurement)	0.1kg*	0.1kg*
Minimum thickness of workpiece (direct measurement)	1mm*	1mm*
Minimum radius of workpiece (direct measurement)	5mm	5mm
Minimum thickness of surface hardening layer or plating	0.1mm	0.03mm
Minimum measuring area	Ø1mm	Ø1mm
Dimension and weight of probe	140×Ø37mm, 271g	145×Ø37mm, 271g

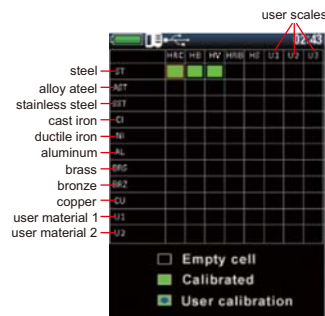
STANDARD DELIVERY

Main unit	1pc
Probe A	1pc
AC/DC adapter	1pc
USB cable and software	1pc

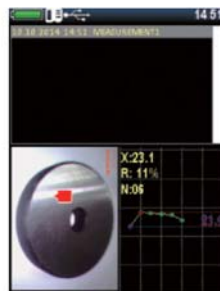
OPTIONAL ACCESSORY

Probe B	ISHU-460-B
Couplant	ISH-COUPANT

*If the weight or thickness of workpiece is less than required, the workpiece should be fixed or coupled on solid support



select the material and scale, use the corresponding standard hardness blocks or workpieces for calibration (calibration of HRC, HB and HV for steel are already made, calibration is needed before use other materials and scales)



can take a picture on the workpiece and get a report with testing result and picture, the report can be sent to computer



back



Graph display mode, show average value, relative range and test times



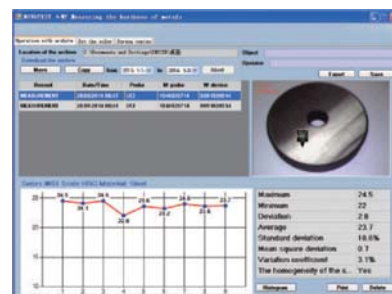
Histogram display mode, show average value, relative range and relative standard deviation



Statistics display mode, show maximum, minimum, deviation, average, relative range and test times



Smart display mode, can set tolerance, automatically reject the result when out of tolerance



software (included), can output data, get and print reports, screen capture, set screen colors of hardness tester

PORTABLE LEEB HARDNESS TESTER CODE ISH-SPHA

- Based on Leeb (HL), converted to Vickers (HV), Brinell (HB), Rockwell (HRC and HRB), Shore (HS) and tensile strength (MPa)
- Connected with printer via bluetooth
- Connected with computer via USB port
- Up to 800 test results can be saved
- Low and high limits with judgement
- Touch screen operation, large display with backlight
- Language: English, Chinese, Italian, German, French and Portuguese
- Automatic power off
- According to ASTM A 956

SPECIFICATION

Min. reading	1HL, 1HV, 1HB, 0.1HRC, 0.1HRB, 1HS, 1MPa
Accuracy	±6HL (when HL=800)
Display	Leeb(HL), converted hardness, material, impact direction, test times, average value, deviation, time
Output	bluetooth and USB
Power supply	built-in rechargeable battery
Dimension	135×83×24mm
Weight	350g

STANDARD DELIVERY

Main unit	1pc
Impact device D	1pc
Printer	1pc
Hardness test block D	1pc
Small support ring	1pc
Cleaning brush	1pc
AC/DC adapter	1pc
USB cable and software disc	1pc
Pen for touch screen	1pc



DATA
OUTPUT



VIDEO



software CD
(included)



hardness test block D
(included)



small support ring
(included)



wireless printer
(optional)

OPTIONAL ACCESSORY

Impact device DC	ISH-SPHA-DC
Impact device C	ISH-SPHA-C
Impact device D+15	ISH-SPHA-D15
Impact device DL	ISH-SPHA-DL
Impact device G	ISH-SPHA-G
Hardness test block D *	ISH-BHLD
Hardness test block G *	ISH-BHLG
Couplant	ISH-COUPPLANT
Support rings	see details

* Hardness test block G (ISH-BHLG) is for impact device G (ISH-SPHA-G).
Hardness test block D (ISH-BHLD) is for all others impact devices.

PORTABLE LEEB HARDNESS TESTER CODE ISH-PHB

- 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



hardness test block D
(included)



small support ring
(included)



wireless printer
(optional)

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	



VIDEO

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				

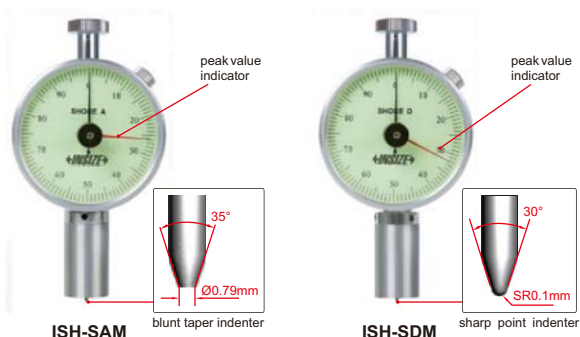
STANDARD DELIVERY

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

OPTIONAL ACCESSORY

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

SHORE DUROMETERS



- According to ISO868, ISO7619, ASTM D 2240
- With peak value indicator
- Optional accessory: test stand ISH-STAC and ISH-STD



VIDEO

SPECIFICATION

Code	ISH-SAM	ISH-SDM
Scale	Shore A	Shore D
Application	natural rubber, soft elastomer, etc.	hard elastomer, plastic, hard rubber, etc.
Measuring range*	10~90HA	20~90HD
Graduation	1HA	1HD
Indenter protrusion	2.5mm	2.5mm
Dimension	115x60x25mm	
Net weight	160g	

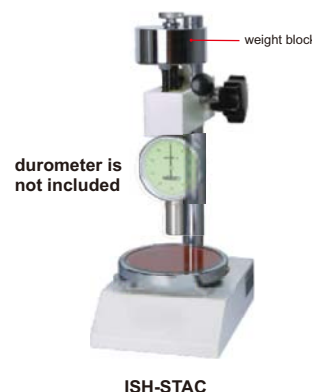
* Use ISH-SDM when measuring result is higher than 90HA
Use ISH-SAM when measuring result is lower than 20HD

TESTING STAND FOR SHORE DUROMETER

- Perform repeatable hardness measurement due to fewer possibilities of human error or measurement variations

SPECIFICATION

Code	ISH-STAC
Applicable durometer	ISH-SAM
Stage diameter	Ø100mm
Maximum workpiece height	75mm
Weight block	1kg



DIGITAL FORCE GAGES

- Push and pull test
- Units: N, gf, kgf, ozf, lbf
- 500 memories
- Automatic power off
- Metal case
- LCD display with backlight, can turn 180°
- Overload alarm



ISF-1DF100



VIDEO



software CD (included)



printer (optional)



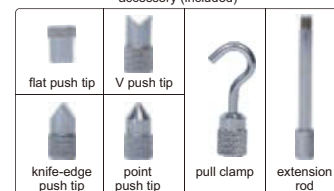
SPECIFICATION

Code	ISF-1DF10	ISF-1DF50	ISF-1DF100	ISF-1DF500	ISF-1DF1000
Load capacity (N)	10	50	100	500	1000
Resolution (N)	0.01	0.01	0.1	0.1	1
Accuracy	±0.3% (of load capacity)				
Measuring mode	tracking, peak (max.), low and high limits with judgement				
Power supply	built-in rechargeable battery				
Dimension	150×73×33mm				
Weight	450g				

STANDARD DELIVERY

Main unit	1pc
AC/DC adapter	1pc
USB cable and software	1pc
Push/pull accessory	6pcs (flat push tip, V push tip, knife-edge push tip, point push tip, pull clamp, extension rod)

accessory (included)



OPTIONAL ACCESSORY

Printer	ISF-DF-PRINTER
Test stand	ISF-MT1K

DIGITAL FORCE GAGES (HIGH ACCURACY)

- Push and pull test
- Peak (max.) and tracking mode
- Units: mN, N, gf, kgf, ozf, lbf, MPa (only for type B)
- Low and high limits with judgement
- 1000 memories
- Automatic power off
- Metal case, touch buttons
- LCD display with backlight, can automatically turn 180°
- Overload alarm



ISF-DF100A

DATA
OUTPUT



VIDEO

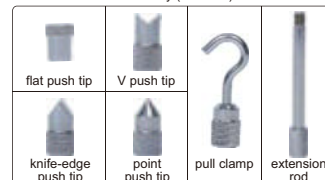
software CD
(included)



printer (optional)



accessory (included)



SPECIFICATION

Code	ISF-DF50A	ISF-DF100A	ISF-DF200A	ISF-DF500A	ISF-DF1KA
Type	internal sensor				
Load capacity (N)	50	100	200	500	1000
Resolution (N)	0.005	0.01	0.05	0.05	0.1
Accuracy	±0.2% (of load capacity)				
Power supply	built-in rechargeable battery				

STANDARD DELIVERY

Code	ISF-DF50A	ISF-DF100A	ISF-DF200A	ISF-DF500A	ISF-DF1KA
Main unit	1pc				
AC/DC adapter	1pc				
USB cable and software	1pc				
Push/pull accessory	6pcs (flat push tip, V push tip, knife-edge push tip, point push tip, pull clamp, extension rod)				

OPTIONAL ACCESSORY

Printer	ISF-DF-PRINTER
Test stand	ISF-MT1K

TEST STAND FOR DIGITAL FORCE GAGES CODE ISF-MT1K

- For digital force gages (code ISF-1DFxx and ISF-DFxx)
- To be used in vertical and horizontal orientation

SPECIFICATION

Load capacity	1000N
Travel	200mm (3mm vertical movement per revolution of handwheel)
Dimension	196x250x446mm
Weight	13kg

OPTIONAL ACCESSORY

Digital scale (range: 200mm, resolution: 0.01mm/0.0005")	ISF-MT1K-SCALE
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force gages are
not included



horizontal orientation test



digital scale (optional)

FORCE GAGES



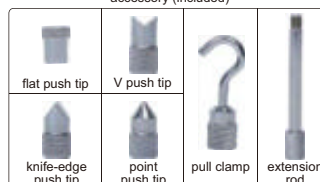
VIDEO

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



ISF-F500

accessory (included)



SPECIFICATION

Code		ISF-F10	ISF-F20	ISF-F30	ISF-F50	ISF-F100	ISF-F200	ISF-F300	ISF-F500
Capacity	N	10	20	30	50	100	200	300	500
	kgf	1	2	3	5	10	20	30	50
Graduation	N	0.05	0.1	0.2	0.25	0.5	1	2	2.5
Accuracy		±1% (of load capacity)							

STANDARD DELIVERY

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

OPTIONAL ACCESSORY

Test stand	ISF-MT500
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TEST STAND FOR FORCE GAGES CODE ISF-MT500

- For force gages (code ISF-FXX)
- To be used in vertical and horizontal orientation



horizontal orientation test

SPECIFICATION

Load capacity	500N
Travel	150mm (3mm vertical movement per revolution of handwheel)
Dimension	160×240×460mm
Weight	12kg



VIDEO

force gages is not included



DIAL TENSION GAGES

- Clockwise and counter-clockwise use
- For electronic and precision mechanical industry, such as measure contact pressure of relay, adjust the tension or compression of spring

SPECIFICATION (Unit: N)

Code	ISF-TGD1	ISF-TGD5	ISF-TG1	ISF-TG5
Capacity (N)	0.1	0.5	1	5
Graduation (N)	0.002	0.01	0.02	0.1
Accuracy	±2% (full scale)			
Dimension (L×W×H)	90×47×19mm			
Weight	60g			



ISF-TG5

SPECIFICATION (Unit: gf)

Code	ISF-TG10	ISF-TG30	ISF-TG50	ISF-TG100	ISF-TG150	ISF-TG300	ISF-TG500
Capacity (gf)	10	30	50	100	150	300	500
Graduation (gf)	0.2	0.5	1	2	2.5	5	10
Accuracy	±2% (full scale)						
Dimension (L×W×H)	90×47×19mm						
Weight	60g						

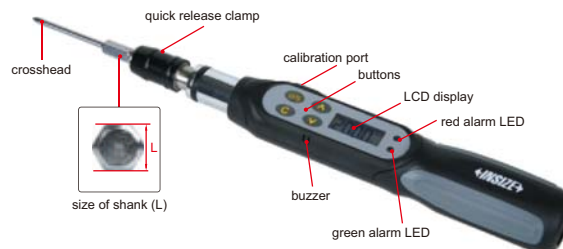


VIDEO

DIGITAL TORQUE SCREWDRIVERS



- Clockwise and counter-clockwise operation
- Unit: cN.m, in.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 target torque value is 90%~100% of target torque
 - Red LED light on and buzzer sounds when target torque value is reached
- Power off automatically in 5 minutes without any operations



IST-SD200

SPECIFICATION

Code		IST-SD50	IST-SD200
Range		10~50cN.m	40~200cN.m
Accuracy	clockwise	±3%	±2.5%
	counter-clockwise	±4%	±3.5%
Resolution		0.1cN.m	0.1cN.m
Size of shank (L)		1/4"	1/4"
Power supply		1xAAA battery	
Length		193mm	203mm
Weight		190g	200g

software CD (included)



VIDEO



OPTIONAL ACCESSORY

Calibration cable	IST-SD-CABLE
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DIGITAL TORQUE WRENCHES

- 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)



IST-W135A

SPECIFICHE

Code	Range	Accuracy	Resolution	Square driver (L)	Power supply	Length	Weight
IST-W30A	6~30N.m	clockwise: $\pm 2\%$ counter-clockwise: $\pm 3\%$	0.01N.m	1/4"	2×AA batteries	390mm	830g
IST-W135A	27~135N.m		0.1N.m	3/8"		415mm	950g
IST-W500A	100~500N.m	clockwise: $\pm 2.5\%$ counter-clockwise: $\pm 3.5\%$	0.1N.m	3/4"		950mm	2.1kg

OPTIONAL ACCESSORY

Calibration cable	IST-W-CABLE
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TORQUE WRENCHES

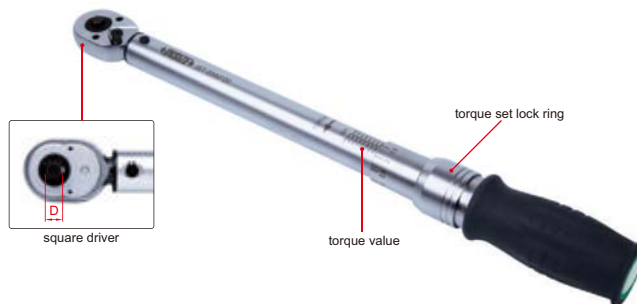
ATTENTION: CLOCKWISE OPERATION ONLY



ACCURACY $\pm 3\%$



- According to DIN ISO 6789, ASME B107.300-2010

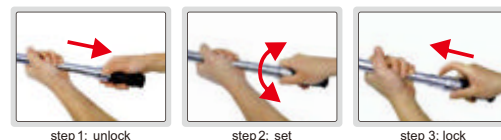


IST-2WM100

SPECIFICATION

Code	IST-2WM25	IST-2WM60	IST-2WM100	IST-2WM200	IST-2WM340
Range (clockwise)	5~25N.m	10~60N.m	20~100N.m	40~200N.m	60~340N.m
Accuracy	$\pm 3\%$	$\pm 3\%$	$\pm 3\%$	$\pm 3\%$	$\pm 3\%$
Graduation	0.2N.m	0.5N.m	0.5N.m	1N.m	2N.m
Square driver (D)	1/4"	3/8"	3/8"	1/2"	1/2"
Length	281mm	337mm	436mm	512mm	614mm
Weight	590g	760g	1320g	1580g	1800g

Set torque:



DIAL TORQUE WRENCHES

ACCURACY $\pm 4\%$

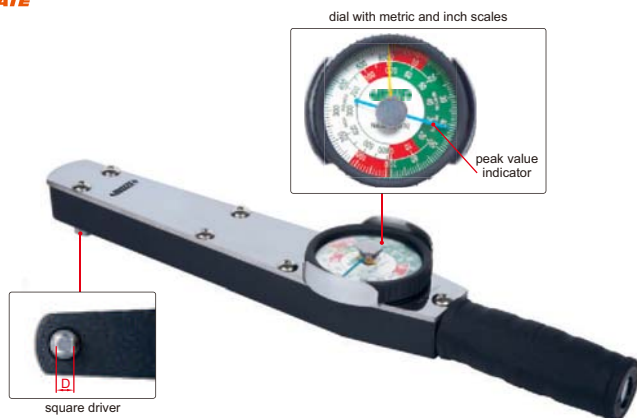


- Clockwise and counter-clockwise operation
- According to DIN ISO 6789, ASME B107.300-2010



SPECIFICATION

Code	IST-DW18	IST-DW35	IST-DW70	IST-DW140
Range	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
Accuracy	$\pm 4\%$	$\pm 4\%$	$\pm 4\%$	$\pm 4\%$
Graduation	0.2N.m 2in.lb	0.5N.m 5in.lb	1N.m 10in.lb	2N.m 1ft.lb
Square driver (D)	3/8"	3/8"	3/8"	1/2"
Length	254mm	254mm	378mm	546mm
Weight	480g	480g	820g	1300g



IST-DW70

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INSIZE		Inspection Certificate					
Product name	Digital Caliper	Traceable to	USA NIST No.821/279484-10 Germany DKD No.D-K-15190-01-00				
Code No.	1108-150	Inspector	<i>David</i>				
Measuring range	0-150mm / 0-6"	Judgement	Passed				
Resolution	0.01mm / 0.0005"						
Serial No.	0910120004						
Standard temperature	20°C / 68°F						
Unit: inch							
Measuring Length	Permissible Error	Error		Measuring Length	Permissible Error	Error	
		External	Internal			External	Internal
0.4 DIA	+0.0005 -0.0010	/	0.0005	Φ10	+0.01 -0.02	/	0.01
2	±0.0010	-0.0005	/	50	±0.02	-0.01	/
4		-0.0005	/	100		-0.01	/
6		-0.0010	/	150		-0.02	/
8		/	/	200		/	/
10	±0.0015	/	/	250	±0.03	/	/
12		/	/	300		/	/



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