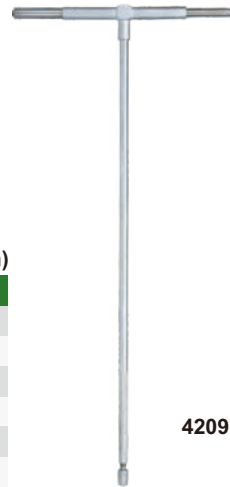


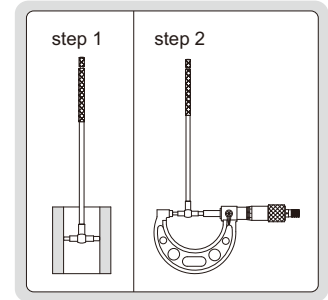
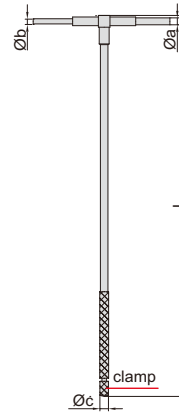
## LONG HANDLE TELESCOPING GAGES

- For quick measurement of inside diameter of deep holes and width of slots
- Satin chrome finish

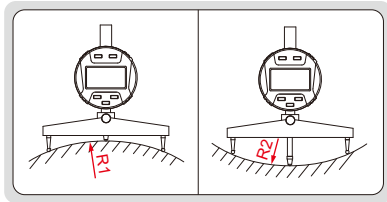
Code	Range	L	$\varnothing a$	$\varnothing b$	$\varnothing c$
4209-1	8-12.7mm	300	3.9	2.9	6.2
4209-2	12.7-19mm	300	5.3	3.8	6.2
4209-3	19-32mm	300	5.3	3.8	6.2
4209-4	32-54mm	300	7.6	6.1	7.2
4209-5	54-90mm	300	7.6	6.1	7.2
4209-6	90-150mm	300	7.6	6.1	7.2



4209-6



## DIGITAL RADIUS GAGE (LOW ACCURACY)



2183

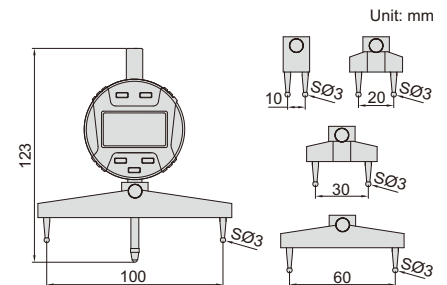


ATTENTION: NO DATA OUTPUT

- Resolution: 0.005mm/0.0002"
- 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

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

\*R is the radius to be measured. For example, radius is 100mm, the accuracy is  $\pm 0.01 \times 100 = \pm 1\text{mm}$

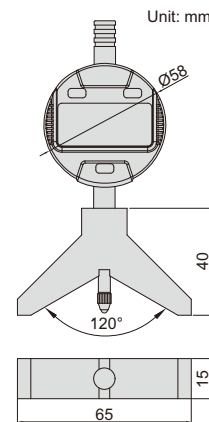


## DIGITAL RADIUS GAGE

- Measure radius of external arc, arc angle of measured surface should be larger than 60°
- Display radius value, no need to calculate
- Button function: on/off, zero, data preset, inch/mm
- Keep preset data in memory after restart
- CR2032 battery, automatic power off
- Data output
- Stainless steel base
- Supplied with pin gage for zero setting
- Optional accessory: data output cable (code 7315-50M, 7302-40M)



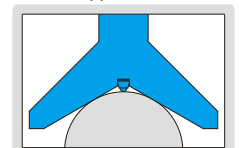
2188-55



pin gage (included)



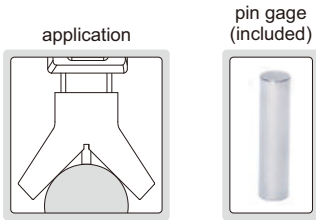
application



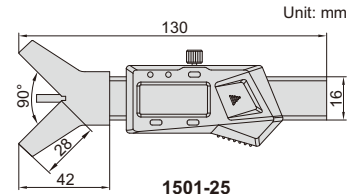
Code	Range (radius)	Resolution	Accuracy
2188-55	4-53mm/0.16-2.09"	0.01mm/0.0005"	$\pm 0.02\text{mm}$

## DIGITAL RADIUS CALIPERS

ATTENTION: THE ACTUAL RADIUS IS 2.414 TIMES OF THE READING



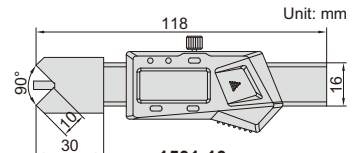
1501-25



1501-25



1501-10

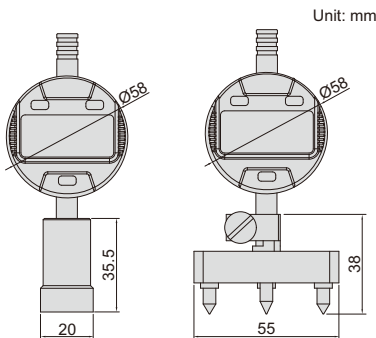


1501-10

- Measure radius of external arc, arc angle of measured surface should be larger than 90°
- 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
- Date output
- Made of stainless steel
- Supplied with pin gage for zero setting

Code	Range (radius)	Accuracy
1501-25	2-25mm/0.079-1"	±0.05mm
1501-10	2-10mm/0.079-0.394"	±0.05mm

## DIGITAL SPHERE RADIUS GAGES



2190-100

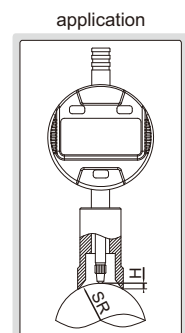


2190-1250

- Measure radius of sphere
- Button function: on/off, zero, data preset, inch/mm, change measuring direction, absolute/incremental measurement
- Keep preset data in memory after restart
- CR2032 battery, automatic power off
- Data output
- Optional accessory: data output cable (code 7315-50M, 7302-40M, 7306-40M)

Code	Range (radius)	Resolution	Accuracy	Radius calculation formula
2190-100	SR15-100mm	0.001mm/0.00005"	0.01SR*	$SR=50/H+H/2$
2190-1250	SR325-1250mm	0.001mm/0.00005"	0.01SR*	$SR=312.5/H+H/2$

\*SR is the radius to be measured. For example, radius is 100mm, the accuracy is 0.01x100=1mm

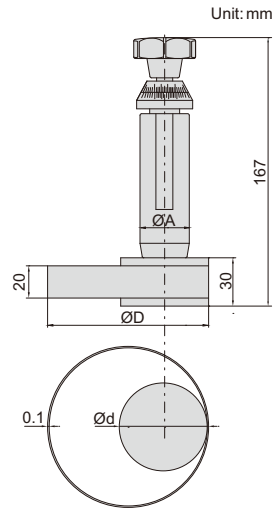




## TAPE BORE GAGES

**INSIZE PLUS**  
MADE IN EUROPE

- Measure internal diameter and circumference of soft materials like tubes, belts, etc.
- Graduation: 0.1mm
- Accuracy: 0.2mm



2430-100

(mm)

Code	Range ØD	Ød	ØA	Measuring depth
2430-24	14-24mm	13.5	13	15-60
2430-40	22-40mm	21.5	21	15-60
2430-60	35-60mm	34.5	30.5	15-96
2430-100	55-100mm	54.5	30.5	15-106
2430-180	95-180mm	94.5	30.5	15-106
2430-255	170-255mm	169.5	30.5	15-106
2430-330	245-330mm	244.5	30.5	15-106

6

CAN SUPPLY TAPE WIDTH  
6MM, 35MM, 60MM

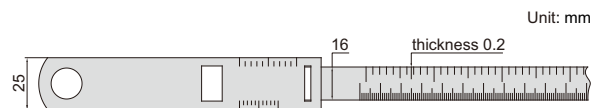
## CIRCUMFERENCE TAPES

**INSIZE PLUS**  
MADE IN EUROPE

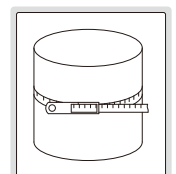


7115-3460

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



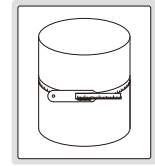
Code	Circumference range	Diameter range	Accuracy	
			Circumference	Diameter
7115-950 *	150-950mm	Ø50-300mm	±0.60mm	±0.20mm
7115-2200	940-2200mm	Ø300-700mm	±0.60mm	±0.20mm
7115-3460	2190-3460mm	Ø700-1100mm	±0.60mm	±0.20mm
7115-4720	3450-4720mm	Ø1100-1500mm	±0.90mm	±0.30mm
7115-5980	4710-5980mm	Ø1500-1900mm	±0.90mm	±0.30mm
7115-7230	5970-7230mm	Ø1900-2300mm	±1.05mm	±0.35mm
7115-8500	7220-8500mm	Ø2300-2700mm	±1.20mm	±0.40mm
7115-9760	8490-9760mm	Ø2700-3100mm	±1.35mm	±0.45mm
7115-11010	9730-11010mm	Ø3100-3500mm	±1.50mm	±0.50mm



\*When diameter range is Ø50-100mm, the accuracy of circumference is ±0.90mm, diameter is ±0.30mm

## CIRCUMFERENCE TAPES

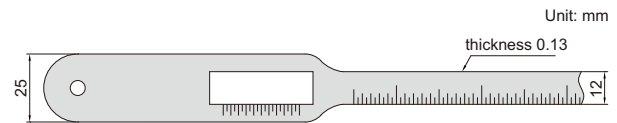
**INSIZE PLUS**  
MADE IN EUROPE



- Measure diameter of cables, thin plastic pipes, etc., which may deform
- Laser engraved scale
- Made of stainless steel

7116-115

Code	Diameter range	Graduation	Accuracy
7116-115	Ø20-115mm	0.05mm	±0.10mm
7116-230	Ø100-230mm	0.05mm	±0.10mm
7116-330	Ø200-330mm	0.05mm	±0.15mm
7116-620	Ø300-620mm	0.05mm	±0.20mm



## HIGH PRECISION DIGITAL INDICATORS

ABSOLUTE ENCODER, THE ORIGINAL  
DATA REMAINS AFTER POWER OFF

Ø28MM STEM SUITABLE FOR  
REINFORCED CLAMPING

DATA  
OUTPUT

LINEAR BALL BEARINGS  
FOR TEN MILLION TIMES USE

ATTENTION: RECHARGEABLE BATTERY,  
FOR 24 HOURS CONTINUOUS WORKING

- Linear ball bearings for ten million times use
- Ø28mm stem suitable for reinforced clamping
- Absolute encoder, the original data remains after power off
- Adjustable resolution: 0.0002mm/0.00001"  
0.001mm/0.00005"  
0.01mm/0.0005"
- Reading in digital and analog
- Button function: data output, tolerance, data preset, data hold, measuring direction change, max./min./TIR, power off time, on/off, mm/inch, adjust resolution
- Power: rechargeable battery, for 24 hours continuous working
- Ruby probe

### With data interface

Optional accessory:  
wireless transmitter, code 7315-60, wireless receiver, code 7315-2, 7315-3  
data output cable (keyboard format), code 7302-60  
data output cable (serial port format), code 7305-G60  
(cable length 3m, optional cable length maximum 15m; RS232 protocol, optional RS485 protocol)

Code	Range	Accuracy	Hysteresis	Remark
2140-6	0-6mm/0-0.24"	1.6µm	0.8µm	flat back

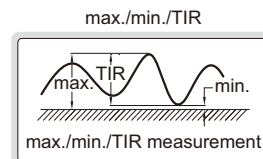
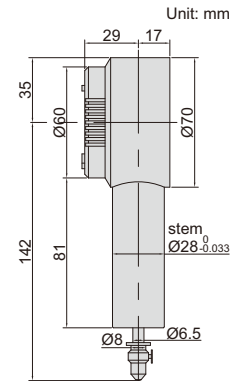
### Built-in wireless

Optional accessory:  
wireless receiver (keyboard format), code 2134-R1  
wireless receiver (serial port format), code 2134-R2

Code	Range	Accuracy	Hysteresis	Remark
2140-6WL	0-6mm/0-0.24"	1.6µm	0.8µm	flat back



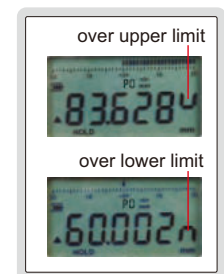
2140-6



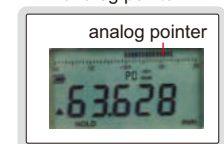
wireless receiver  
2134-R1, 2134-R2 (optional)



warning when  
over tolerance



analog pointer



LINEAR BALL BEARINGS  
FOR TEN MILLION TIMES USE

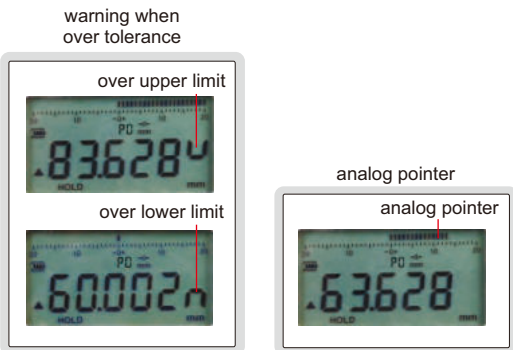
ABSOLUTE ENCODER, THE ORIGINAL  
DATA REMAINS AFTER POWER OFF

DATA  
OUTPUT

ATTENTION: RECHARGEABLE BATTERY,  
FOR 24 HOURS CONTINUOUS WORKING

**INSPECTION  
CERTIFICATE**  
TRACEABLE TO NIST

## HIGH PRECISION DIGITAL INDICATORS



2133-10

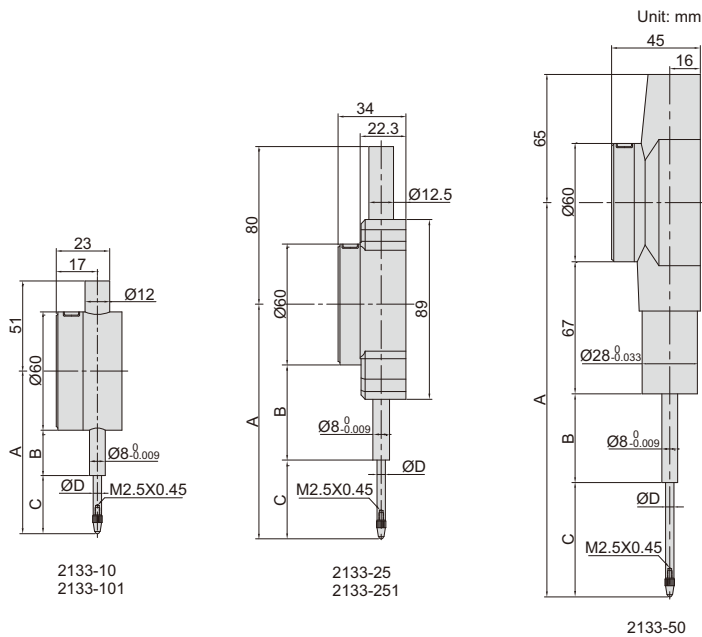


2133-25



2133-50

- Linear ball bearings for ten million times use
- Absolute encoder, the original data remains after power off
- Reading in digital and analog
- Data output
- Button function: data output, tolerance, data preset, data hold, measuring direction change, max./min./TIR, power off time, on/off, mm/inch, adjust resolution
- Power: rechargeable battery, for 24 hours continuous working
- Optional accessory: contact points (page 173~175) wireless transmitter, code **7315-60** data output cable (keyboard format), code **7302-60** data output cable (serial port format), code **7305-G60** (cable length 3m, optional cable length maximum 15m; RS232 protocol, optional RS485 protocol)



### Low precision

Carbide probe

Adjustable resolution: 0.0005mm/0.00002"  
0.001mm/0.00005"  
0.01mm/0.0005"

Code	Range	Accuracy	Hysteresis	A	B	C	ØD	Remark
2133-10 *	12.7mm/0.5"	3µm	1.5µm	75.4mm	20.6mm	24.8mm	5mm	flat back
2133-25 *	25.4mm/1"	3µm	1.5µm	109.5mm	38.5mm	41mm	5mm	flat back
2133-50 *	50.8mm/2"	3µm	1.5µm	201mm	32mm	72mm	4.5mm	flat back

### High precision

Ruby probe

Adjustable resolution: 0.0002mm/0.00001"  
0.001mm/0.00005"  
0.01mm/0.0005"

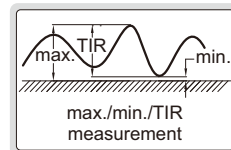
Code	Range	Accuracy	Hysteresis	A	B	C	ØD	Remark
2133-101 *	12.7mm/0.5"	1.5µm	1µm	77.4mm	26mm	21.4mm	4mm	flat back
2133-251 *	25.4mm/1"	1.8µm	1µm	116.1mm	42.5mm	44mm	4mm	flat back

\* Supplied with manufacturer inspection certificate traceable to NIST USA

spindle lift knob is included



max./min./TIR





## WIRELESS HIGH PRECISION DIGITAL INDICATORS

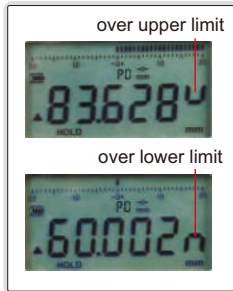
ATTENTION: RECHARGEABLE BATTERY, FOR 24 HOURS CONTINUOUS WORKING

LINEAR BALL BEARINGS FOR TEN MILLION TIMES USE

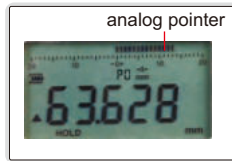
ABSOLUTE ENCODER, THE ORIGINAL DATA REMAINS AFTER POWER OFF

**INSPECTION CERTIFICATE**  
TRACEABLE TO NIST

warning when over tolerance

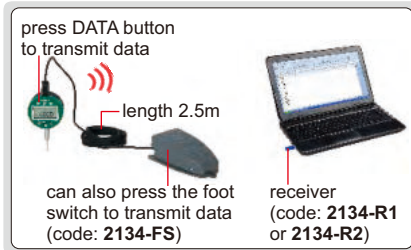


analog pointer



7

Transmit data



2134-10

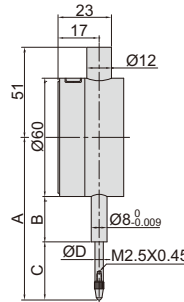


2134-25

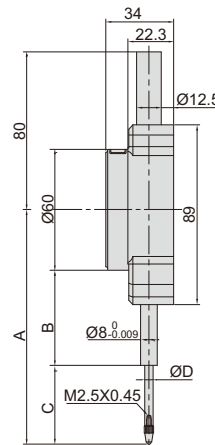


2134-50

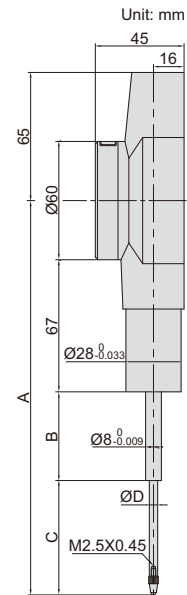
- Built-in wireless transmission, ZigBee single
- Linear ball bearings for ten million times use
- Absolute encoder, the original data remains after power off
- Reading in digital and analog
- Button function: data output, tolerance, data preset, data hold, measuring direction change, max./min./TIR, power off time, on/off, mm/inch, adjust resolution
- Power: rechargeable battery, for 24 hours continuous working
- Optional accessory: contact points (page 173~175) foot switch, code: **2134-FS** wireless receiver, code: **2134-R1** (keyboard format) **2134-R2** (serial port format)



2134-10  
2134-101



2134-25  
2134-251



2133-50

### Low precision

Carbide probe

Adjustable resolution: 0.0005mm/0.00002"  
0.001mm/0.00005"  
0.01mm/0.0005"

Code	Range	Accuracy	Hysteresis	A	B	C	ØD	Remark
2134-10*	12.7mm/0.5"	3µm	1.5µm	75.4mm	20.6mm	24.8mm	5mm	flat back
2134-25*	25.4mm/1"	3µm	1.5µm	109.5mm	38.5mm	41mm	5mm	flat back
2134-50*	50.8mm/2"	3µm	1.5µm	201mm	32mm	72mm	4.5mm	flat back

### High precision

Ruby probe

Adjustable resolution: 0.0002mm/0.00001"  
0.001mm/0.00005"  
0.01mm/0.0005"

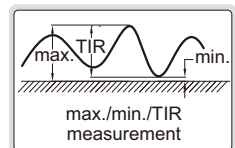
Code	Range	Accuracy	Hysteresis	A	B	C	ØD	Remark
2134-101*	12.7mm/0.5"	1.5µm	1µm	77.4	26	21.4	4	flat back
2134-251*	25.4mm/1"	1.8µm	1µm	116.1	42.5	44	4	flat back

\*Supplied with manufacturer inspection certificate traceable to NIST USA

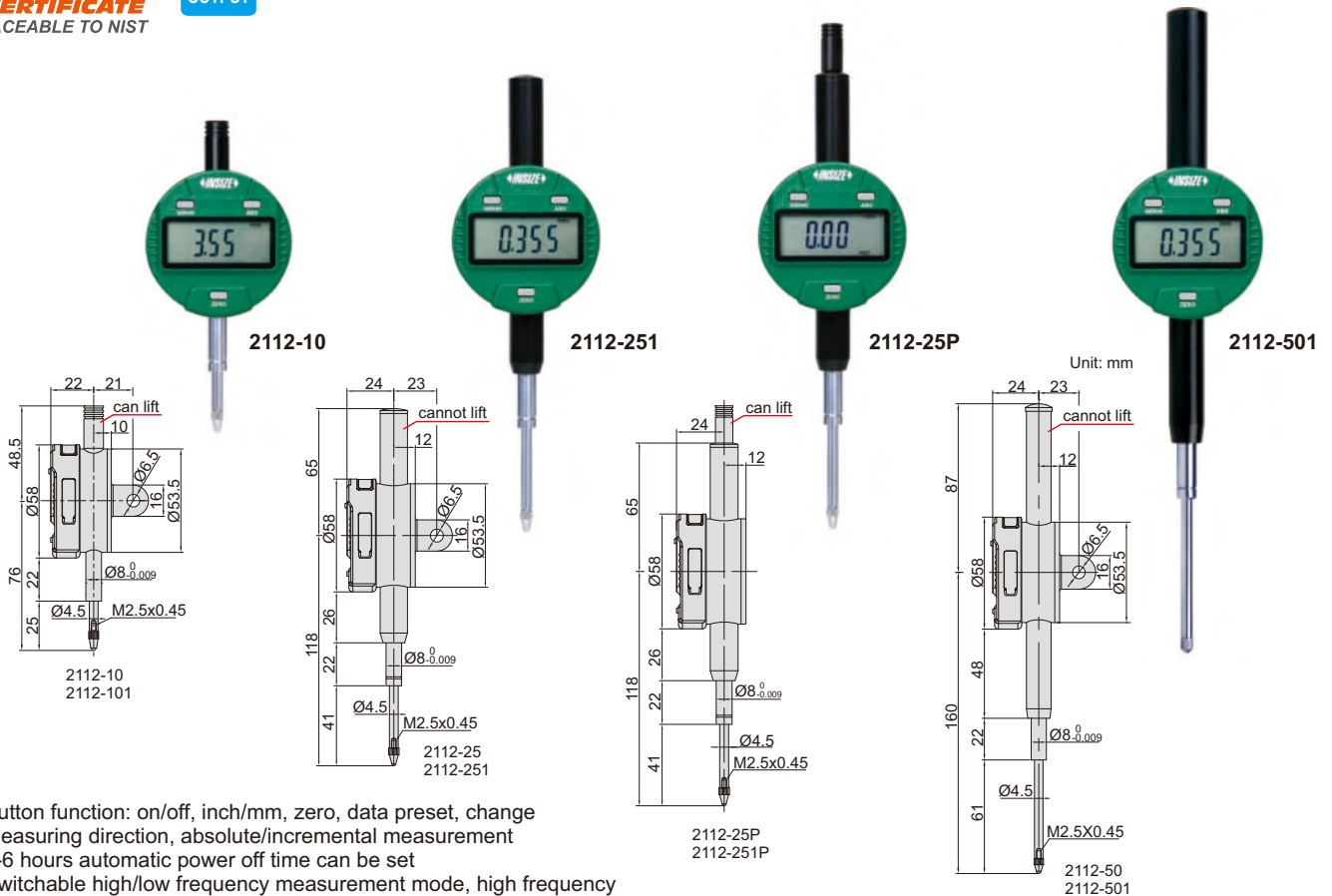
spindle lift knob is included



max./min./TIR



## DIGITAL INDICATORS (STANDARD TYPE)



- Button function: on/off, inch/mm, zero, data preset, change measuring direction, absolute/incremental measurement
- 0-6 hours automatic power off time can be set
- Switchable high/low frequency measurement mode, high frequency mode is suitable for high speed moving of spindle and has large power consumption, low power consumption in low frequency mode
- Keep preset data in memory after restart
- CR2032 battery, automatic power off
- Data output
- Optional accessory: data output cable (code 7315-50M, 7302-40M, 7305-40M), backs (page 176~177), contact points (page 173~175)

### Resolution 0.001mm/0.00005"

Code	Range	Accuracy	Hysteresis	Maximum measuring force	Remark
2112-101F*	12.7mm/0.5"	5µm	2µm	1.5N	flat back
2112-251F*	25.4mm/1"	5µm	3µm	2.2N	flat back
2112-501F*	50.8mm/2"	6µm	3µm	2.5N	flat back
2112-101*	12.7mm/0.5"	5µm	2µm	1.5N	lug back
2112-251*	25.4mm/1"	5µm	3µm	2.2N	lug back
2112-501*	50.8mm/2"	6µm	3µm	2.5N	lug back
2112-251P*	25.4mm/1"	5µm	3µm	2.2N	flat back, with lift cap
2112-501P*	50.8mm/2"	6µm	3µm	2.5N	flat back, with lift cap

### Resolution 0.01mm/0.0005"

Code	Range	Accuracy	Hysteresis	Maximum measuring force	Remark
2112-10F*	12.7mm/0.5"	20µm	10µm	1.5N	flat back
2112-25F*	25.4mm/1"	20µm	10µm	2.2N	flat back
2112-50F*	50.8mm/2"	30µm	10µm	2.5N	flat back
2112-10*	12.7mm/0.5"	20µm	10µm	1.5N	lug back
2112-25*	25.4mm/1"	20µm	10µm	2.2N	lug back
2112-50*	50.8mm/2"	30µm	10µm	2.5N	lug back
2112-25P*	25.4mm/1"	20µm	10µm	2.2N	flat back, with lift cap
2112-50P*	50.8mm/2"	30µm	10µm	2.5N	flat back, with lift cap

2112-251P/501P/25P/50P



spindle lift knob is included



\* Supplied with manufacturer inspection certificate traceable to NIST USA

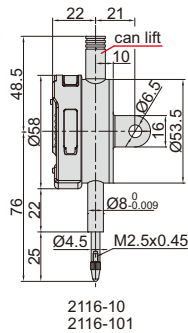
# METRIC DIGITAL INDICATORS

DATA OUTPUT

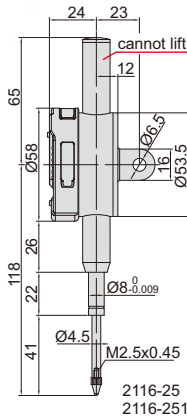
**INSPECTION CERTIFICATE**  
TRACEABLE TO NIST



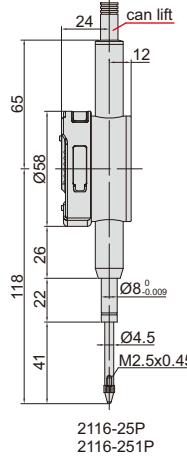
2116-10



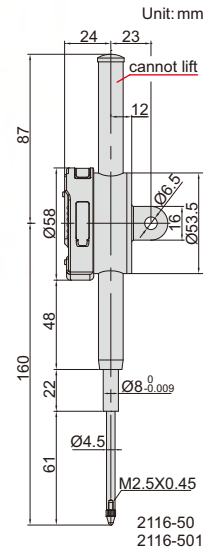
2116-251



2116-25P



2116-501



Unit: mm

- Button function: on/off, zero, data preset, change measuring direction, absolute/incremental measurement
- 0-6 hours automatic power off time can be set
- Switchable high/low frequency measurement mode, high frequency mode is suitable for high speed moving of spindle and has large power consumption, low power consumption in low frequency mode
- Keep preset data in memory after restart
- CR2032 battery, automatic power off
- Data output
- Optional accessory: data output cable (code **7315-50M**, **7302-40M**, **7305-40M**), backs (page 176~177), contact points (page 173~175)

### Resolution 0.001mm

Code	Range	Accuracy	Hysteresis	Maximum measuring force	Remark
2116-101F*	12.7mm	5µm	2µm	1.5N	flat back
2116-251F*	25.4mm	5µm	3µm	2.2N	flat back
2116-501F*	50.8mm	6µm	3µm	2.5N	flat back
2116-101*	12.7mm	5µm	2µm	1.5N	lug back
2116-251*	25.4mm	5µm	3µm	2.2N	lug back
2116-501*	50.8mm	6µm	3µm	2.5N	lug back
2116-251P*	25.4mm	5µm	3µm	2.2N	flat back, with lift cap
2116-501P*	50.8mm	6µm	3µm	2.5N	flat back, with lift cap

### Resolution 0.01mm

Code	Range	Accuracy	Hysteresis	Maximum measuring force	Remark
2116-10F*	12.7mm	20µm	10µm	1.5N	flat back
2116-25F*	25.4mm	20µm	10µm	2.2N	flat back
2116-50F*	50.8mm	30µm	10µm	2.5N	flat back
2116-10*	12.7mm	20µm	10µm	1.5N	lug back
2116-25*	25.4mm	20µm	10µm	2.2N	lug back
2116-50*	50.8mm	30µm	10µm	2.5N	lug back
2116-25P*	25.4mm	20µm	10µm	2.2N	flat back, with lift cap
2116-50P*	50.8mm	30µm	10µm	2.5N	flat back, with lift cap

\*Supplied with manufacturer inspection certificate traceable to NIST USA

2116-251P/501P/25P/50P



spindle lift knob is included





DATA  
OUTPUT

**INSPECTION  
CERTIFICATE**  
TRACEABLE TO NIST

## DIGITAL INDICATORS (ADVANCED TYPE)



2103-10



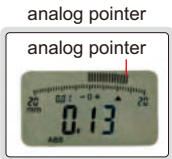
2104-25



2104-25P



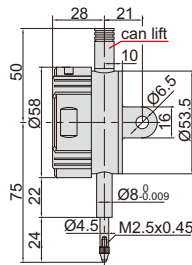
2103-50



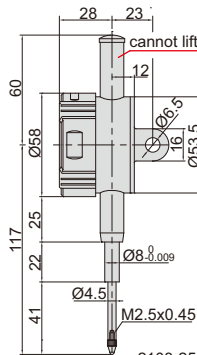
analog pointer

analog pointer

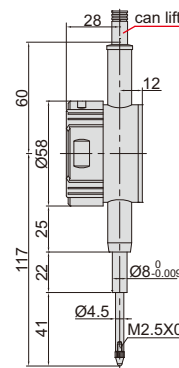
spindle lift knob is included



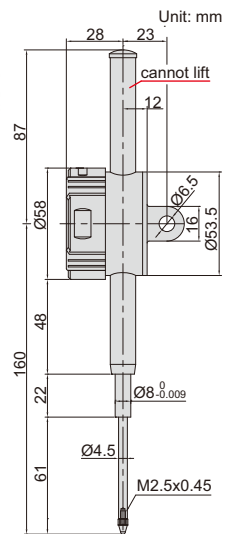
2103-10  
2104-10



2103-25  
2104-25



2103-25P  
2104-25P

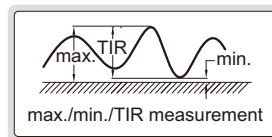


2103-50  
2104-50

Unit: mm

- 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
- 0-6 hours automatic power off time can be set
- Keep preset data and tolerance data in memory after restart
- CR2032 battery, automatic power off, data output
- Optional accessory: data output cable (code **7315-50M**, **7302-40M**, **7305-40M**), backs (page 176~177), contact points (page 173~175)

max./min./TIR

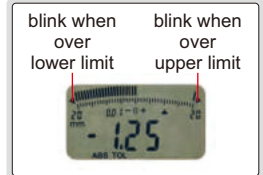


max./min./TIR measurement

### Resolution 0.001mm/0.0005"

Code	Range	Accuracy	Hysteresis	Maximum measuring force	Remark
2103-10F*	12.7mm/0.5"	5µm	2µm	1.5N	flat back
2103-25F*	25.4mm/1"	5µm	3µm	2.2N	flat back
2103-50F*	50.8mm/2"	6µm	3µm	2.5N	flat back
2103-10*	12.7mm/0.5"	5µm	2µm	1.5N	lug back
2103-25*	25.4mm/1"	5µm	3µm	2.2N	lug back
2103-50*	50.8mm/2"	6µm	3µm	2.5N	lug back
2103-25P*	25.4mm/1"	5µm	3µm	2.2N	flat back, with lift cap
2103-50P*	50.8mm/2"	6µm	3µm	2.5N	flat back, with lift cap

warning when over tolerance



### Resolution 0.01mm/0.0005"

Code	Range	Accuracy	Hysteresis	Maximum measuring force	Remark
2104-10F*	12.7mm/0.5"	20µm	10µm	1.5N	flat back
2104-25F*	25.4mm/1"	20µm	10µm	2.2N	flat back
2104-50F*	50.8mm/2"	30µm	10µm	2.5N	flat back
2104-10*	12.7mm/0.5"	20µm	10µm	1.5N	lug back
2104-25*	25.4mm/1"	20µm	10µm	2.2N	lug back
2104-50*	50.8mm/2"	30µm	10µm	2.5N	lug back
2104-25P*	25.4mm/1"	20µm	10µm	2.2N	flat back, with lift cap
2104-50P*	50.8mm/2"	30µm	10µm	2.5N	flat back, with lift cap

2103-25P/50P  
2104-25P/50P



display can be rotated by 320°



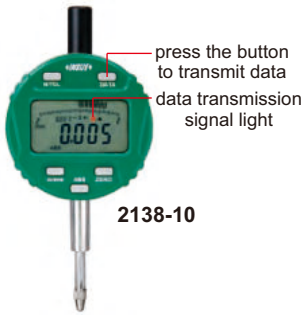
pull lift cap to lift point

\* Supplied with manufacturer inspection certificate traceable to NIST USA

## DIGITAL INDICATORS (WITH TRANSMISSION BUTTON AND SIGNAL LIGHT)

DATA OUTPUT

**INSPECTION CERTIFICATE**  
TRACEABLE TO NIST



2138-10



2139-25



2139-25P

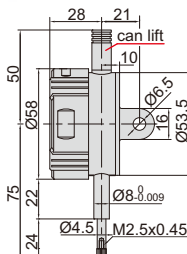


2138-50

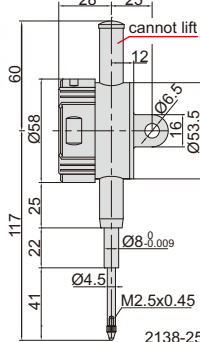
7



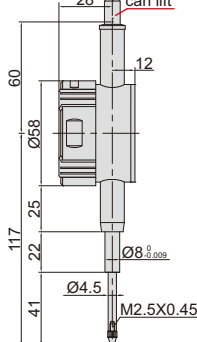
display can be rotated by 320°



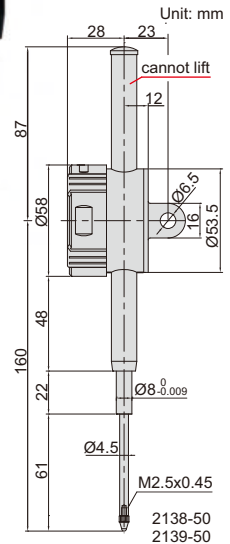
2138-10  
2139-10



2138-25  
2139-25



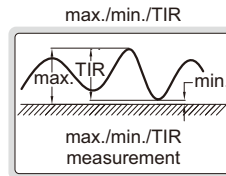
2138-25P  
2139-25P



Unit: mm

2138-50  
2139-50

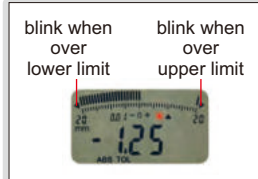
- Reading in digital and analog
- Display can be rotated by 320°
- Button function: on/off, zero, tolerance Go and No-Go display, data preset, measuring direction change, max./min./TIR measurement, inch/metric conversion, absolute/incremental measurement, data output
- 0-6 hours automatic power off time can be set
- Keep preset data and tolerance data in memory after restart
- CR2032 battery, automatic power off
- Data output
- Optional accessory: data output cable (code **7315-50M**, **7302-40M**, **7305-40M**), backs (page 176~177), contact points (page 173~175)



### Resolution 0.001mm/0.0005"

Code	Range	Accuracy	Hysteresis	Maximum measuring force	Remark
2138-10F*	12.7mm/0.5"	5µm	2µm	1.5N	flat back
2138-25F*	25.4mm/1"	5µm	3µm	2.2N	flat back
2138-50F*	50.8mm/2"	6µm	3µm	2.5N	flat back
2138-10*	12.7mm/0.5"	5µm	2µm	1.5N	lug back
2138-25*	25.4mm/1"	5µm	3µm	2.2N	lug back
2138-50*	50.8mm/2"	6µm	3µm	2.5N	lug back
2138-25P*	25.4mm/1"	5µm	3µm	2.2N	flat back, with lift cap
2138-50P*	50.8mm/2"	6µm	3µm	2.5N	flat back, with lift cap

warning when over tolerance



### Resolution 0.01mm/0.0005"

Code	Range	Accuracy	Hysteresis	Maximum measuring force	Remark
2139-10F*	12.7mm/0.5"	20µm	10µm	1.5N	flat back
2139-25F*	25.4mm/1"	20µm	10µm	2.2N	flat back
2139-50F*	50.8mm/2"	30µm	10µm	2.5N	flat back
2139-10*	12.7mm/0.5"	20µm	10µm	1.5N	lug back
2139-25*	25.4mm/1"	20µm	10µm	2.2N	lug back
2139-50*	50.8mm/2"	30µm	10µm	2.5N	lug back
2139-25P*	25.4mm/1"	20µm	10µm	2.2N	flat back, with lift cap
2139-50P*	50.8mm/2"	30µm	10µm	2.5N	flat back, with lift cap

analog pointer



spindle lift knob is included

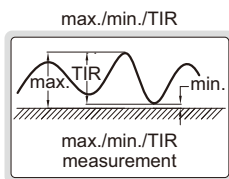
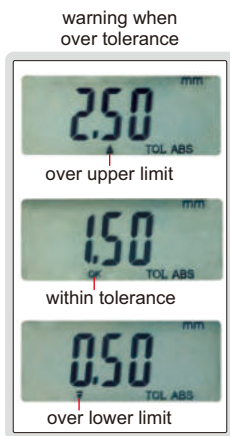


2138-25P/50P  
2129-25P/50P

pull lift cap to lift point



\*Supplied with manufacturer inspection certificate traceable to NIST USA



2115-10

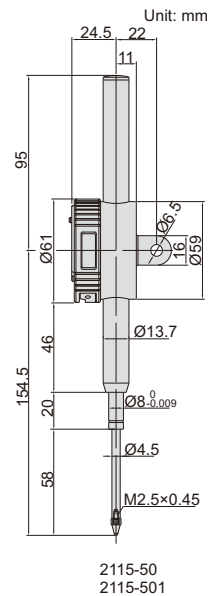
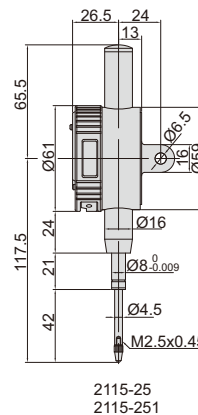
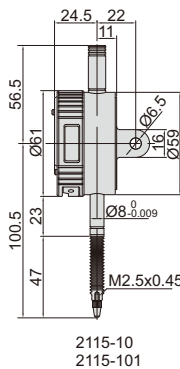


2115-25



2115-50

- Dust/waterproof
- Button function: on/off, zero, mm/inch, data preset, tolerance, change measuring direction, max./min./TIR measurement, absolute/incremental measurement
- Keep preset data and tolerance data in memory after restart
- CR2032 battery, automatic power off
- Data output
- Optional accessory: data output cable (code 7315-50M, 7302-40M, 7305-40M), backs (page 176~177), contact points (page 173~175)



**Resolution 0.001mm/0.00005"**

Code	Range	Dust/waterproof	Accuracy	Hysteresis	Remark
2115-101 *	12.7mm/0.5"	IP65	5µm	2µm	lug back
2115-251 *	25.4mm/1"	IP54	5µm	3µm	lug back
2115-501 *	50.8mm/2"	IP54	6µm	3µm	lug back
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
2115-10 *	12.7mm/0.5"	IP65	20µm	10µm	lug back
2115-25 *	25.4mm/1"	IP54	20µm	10µm	lug back
2115-50 *	50.8mm/2"	IP54	30µm	10µm	lug back
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

## ADJUSTABLE COEFFICIENT DIGITAL INDICATORS

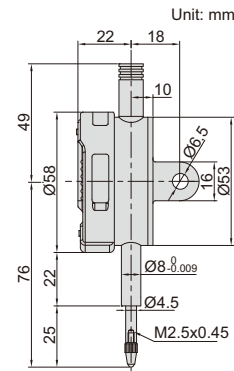
**INSPECTION CERTIFICATE**  
TRACEABLE TO NIST

DATA OUTPUT

- DISPLAY READING = COEFFICIENT X SPINDLE MOVEMENT.  
The coefficient can be adjusted from 0 to 9.9999.  
For example, coefficient is 4.5562, spindle moves 3.60mm, display reading is  $4.5562 \times 3.60 = 16.40\text{mm}$
- Button function: on/off, zero, data preset, inch/mm, coefficient set, measuring direction change
- Keep preset data in memory after restart
- CR2032 battery, automatic power off
- Data output
- Optional accessory: data output cable (code **7315-50M**, **7302-40M**, **7305-40M**), backs (page 176~177), contact points (page 173~175)



2501-10



spindle lift knob is included



Code	Range	Resolution	Accuracy	Hysteresis	Remark
2501-10*	12.7mm/0.5"	0.01mm/0.0005"	20µm	10µm	lug back
2501-10F*	12.7mm/0.5"	0.01mm/0.0005"	20µm	10µm	flat back

\*Supplied with manufacturer inspection certificate traceable to NIST USA

## DIGITAL INDICATORS FOR BORE GAGES (WITH TRANSMISSION BUTTON AND SIGNAL LIGHT)

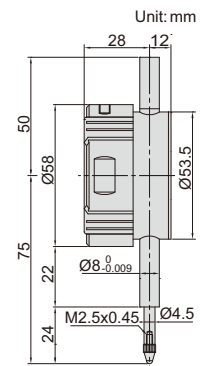
DATA OUTPUT

THE ORIGINAL DATA REMAINS AFTER POWER OFF

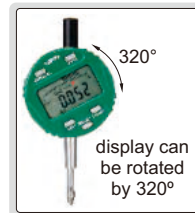
**INSPECTION CERTIFICATE**  
TRACEABLE TO NIST



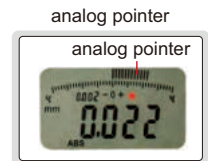
2108-10F



- 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: on/off, minimum value tracking, calibration, data preset, inch/metric conversion
- Data remains after power off, no need to recalibrate after power on
- CR2032 battery, automatic power off
- Data output
- Optional accessory: data output cable (code **7315-50M**, **7302-40M**, **7305-40M**), backs (page 176~177), contact points (page 173~175), spindle lift knob (code **7332**)



display can be rotated by 320°



Code	Range	Resolution	Accuracy	Hysteresis	Remark
2108-10F*	12.7mm/0.5"	0.002mm/0.0001" (can switch to: 0.01mm/0.0005")	20µm	10µm	flat back
2108-101F*	12.7mm/0.5"	0.001mm/0.00005"	5µm	2µm	flat back

\*Supplied with manufacturer inspection certificate traceable to NIST USA

Read the diameter directly, after inputting the size of setting ring.



The minimum value tracking function can find the diameter automatically.

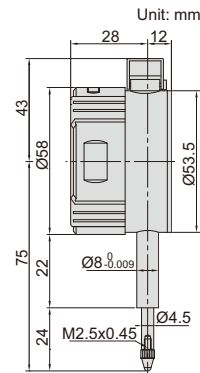




## DIGITAL INDICATORS WITH LIFTING LEVER

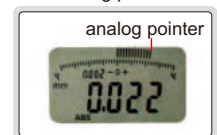


2109-10

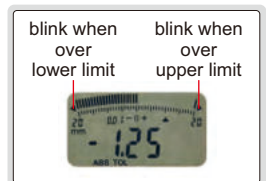


- Reading in digital and analog
- Display can be rotated by 320°
- Button function: tolerance Go and No-Go display, data preset, measuring direction change, max./min./TIR measurement, inch/metric conversion, absolute/incremental measurement
- Keep preset data and tolerance data in memory after restart
- CR2032 battery, automatic power off
- Data output
- Optional accessory: data output cable (code 7315-50M, 7302-40M, 7305-40M), backs (page 176~177), contact points (page 173~175)

analog pointer



warning when over tolerance



Code	Range	Resolution	Accuracy	Hysteresis	Remark
2109-10 *	10mm/0.4"	0.01mm/0.0005"	20µm	10µm	flat back
2109-101 *	10mm/0.4"	0.001mm/0.00005"	5µm	2µm	flat back

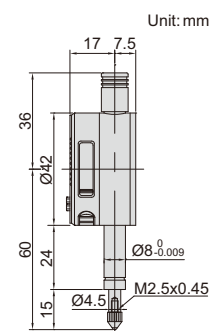
\* Supplied with manufacturer inspection certificate traceable to NIST USA

## COMPACT DIGITAL INDICATORS

- 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
- Keep preset data in memory after restart
- CR1632 battery, automatic power off
- Data output
- Optional accessory: data output cable (code 7315-50M, 7302-40M, 7305-40M), contact points (page 173~175)



2114-51F



Code	Range	Resolution	Accuracy	Hysteresis	Remark
2114-5F *	5mm/0.2"	0.01mm/0.0005"	20µm	10µm	flat back
2114-51F *	5mm/0.2"	0.001mm/0.00005"	5µm	2µm	flat back

\* Supplied with manufacturer inspection certificate traceable to NIST USA

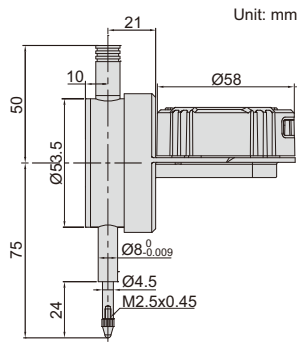


BACK PLUNGER TYPE DIGITAL INDICATORS

DATA  
OUTPUT

INSPECTION  
CERTIFICATE  
TRACEABLE TO NIST

7

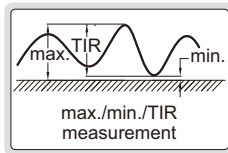


2118-10

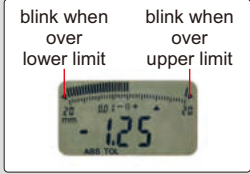
spindle lift knob  
is included



max./min./TIR



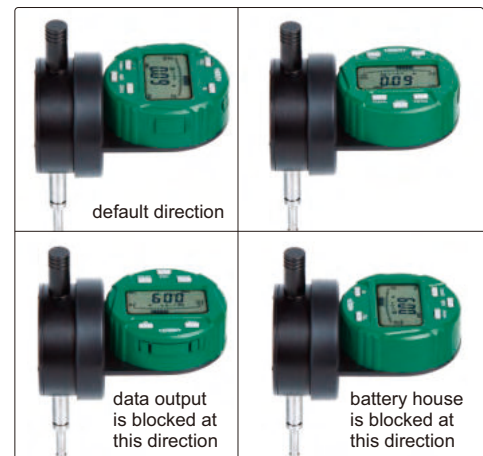
warning when over tolerance



analog pointer



display direction is changeable



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

display can rotate 320°



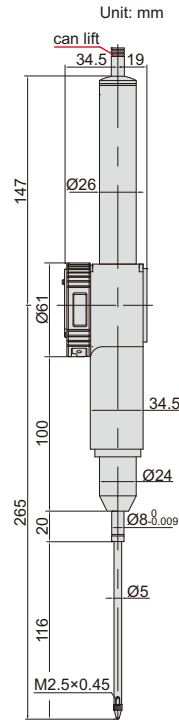
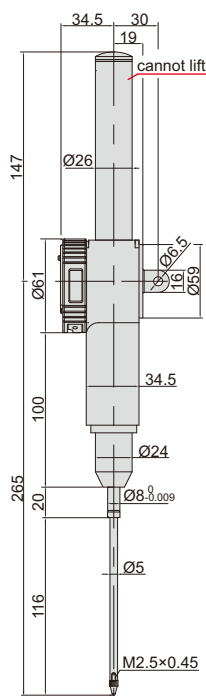
- Display can rotate 320°, and display direction is changeable
- Reading in digital and analog
- Button function: tolerance Go and No-Go display, data preset, measuring direction change, max./min./TIR measurement, inch/metric conversion, absolute/incremental measurement
- Keep preset data and tolerance data in memory after restart
- CR2032 battery, automatic power off
- Data output
- Optional accessory: data output cable (code 7315-50M, 7302-40M, 7305-40M), backs (page 176~177), contact points (page 173~175)

Code	Range	Resolution	Accuracy	Hysteresis	Remark
2118-10 *	12.7mm/0.5"	0.01mm/0.0005"	20µm	10µm	flat back
2118-101 *	12.7mm/0.5"	0.001mm/0.00005"	5µm	2µm	flat back

\* Supplied with manufacturer inspection certificate traceable to NIST USA

DATA OUTPUT

## LARGE STROKE DIGITAL INDICATORS



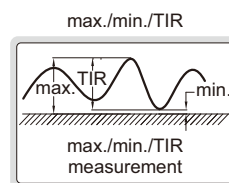
- Button function: on/off, zero, mm/inch, data preset, tolerance, change measuring direction, max./min./TIR measurement, absolute/incremental measurement
- Keep preset data and tolerance data in memory after restart
- CR2032 battery, automatic power off
- Maximum measuring force: 3.2N
- Data output
- Optional accessory: data output cable (code 7315-50M, 7302-40M, 7305-40M), backs (page 176~177), contact points (page 173~175)

### Resolution 0.01mm/0.0005"

Code	Range	Accuracy	Hysteresis	Remark
2117-100	100mm/4"	30µm	10µm	lug back
2117-100P	100mm/4"	30µm	10µm	flat back, with lift cap

### Resolution 0.001mm/0.00005"

Code	Range	Accuracy	Hysteresis	Remark
2117-1001	100mm/4"	9µm	3µm	lug back
2117-1001P	100mm/4"	9µm	3µm	flat back, with lift cap



spindle lift knob is included



## ZEROING FOOT SWITCHES

- For zeroing of digital indicators



Code	Description	Interface of digital indicators	Applicable products
7360-1	zeroing foot switch with cable (length 2.5m)		for digital indicators
7360-1M			

