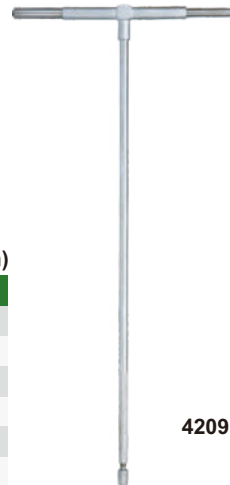


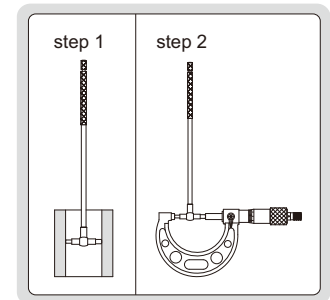
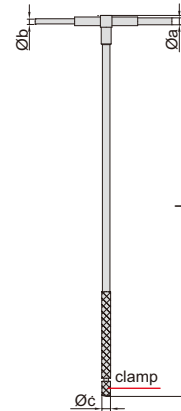
LONG HANDLE TELESCOPING GAGES

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

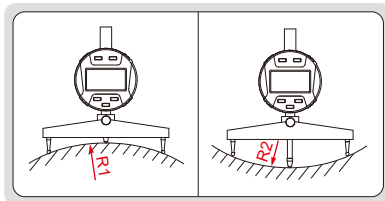
Code	Range	L	Øa	Øb	Øc
4209-1	8-12.7mm	300	3.9	2.9	6.2
4209-2	12.7-19mm	300	5.3	3.8	6.2
4209-3	19-32mm	300	5.3	3.8	6.2
4209-4	32-54mm	300	7.6	6.1	7.2
4209-5	54-90mm	300	7.6	6.1	7.2
4209-6	90-150mm	300	7.6	6.1	7.2



4209-6



DIGITAL RADIUS GAGE (LOW ACCURACY)



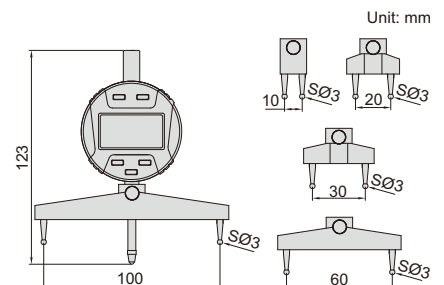
- Resolution: 0.005mm/0.0002"
- Buttons: on/off, hold, mm/inch, s (select jaws), zero
- Measure radius of internal or external arcs
- Display can be rotated by 320°
- Supplied with 5 jaws for different sizes of arc
- Battery CR2032, automatic power off



2183



ATTENTION: NO DATA OUTPUT



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

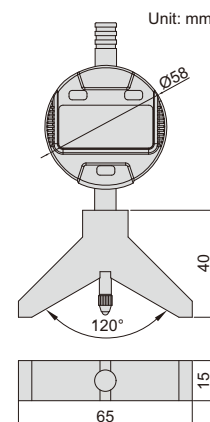
*R is the radius to be measured. For example, radius is 100mm, the accuracy is ±0.01x100=±1mm

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)



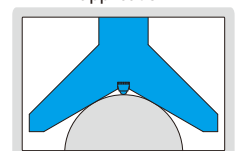
2188-55



pin gage (included)



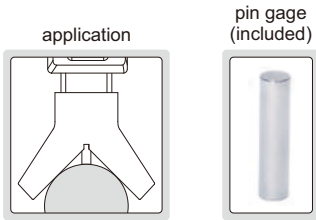
application



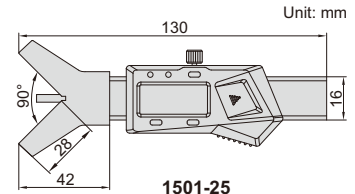
Code	Range (radius)	Resolution	Accuracy
2188-55	4-53mm/0.16-2.09"	0.01mm/0.0005"	±0.02mm

DIGITAL RADIUS CALIPERS

ATTENTION: THE ACTUAL RADIUS IS 2.414 TIMES OF THE READING



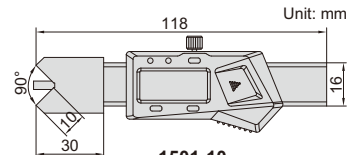
1501-25



1501-25



1501-10

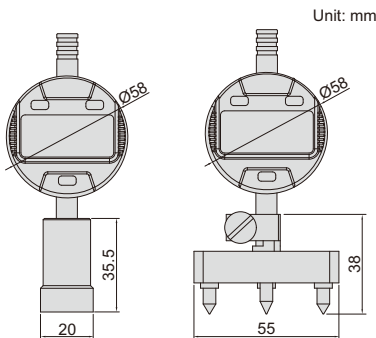


1501-10

- 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

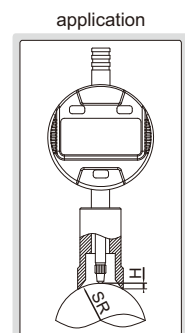


2190-1250

- 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

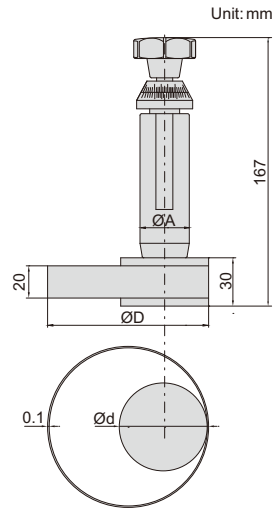




TAPE BORE GAGES

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

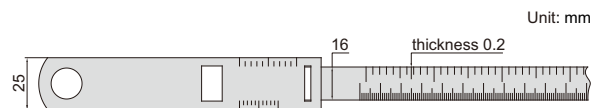
CIRCUMFERENCE TAPES

INSIZE PLUS
MADE IN EUROPE

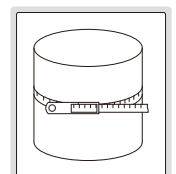


7115-3460

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



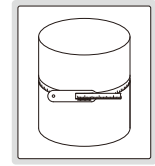
Code	Circumference range	Diameter range	Accuracy	
			Circumference	Diameter
7115-950 *	150-950mm	Ø50-300mm	±0.60mm	±0.20mm
7115-2200	940-2200mm	Ø300-700mm	±0.60mm	±0.20mm
7115-3460	2190-3460mm	Ø700-1100mm	±0.60mm	±0.20mm
7115-4720	3450-4720mm	Ø1100-1500mm	±0.90mm	±0.30mm
7115-5980	4710-5980mm	Ø1500-1900mm	±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

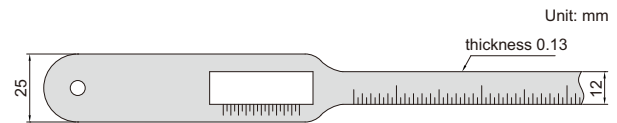
INSIZE PLUS
MADE IN EUROPE



- 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



Unit: mm

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

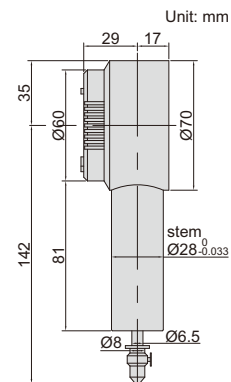
Built-in wireless

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

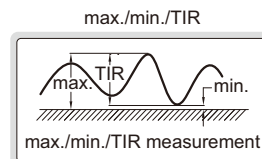
Code	Range	Accuracy	Hysteresis	Remark
2140-6WL	0-6mm/0-0.24"	1.6µm	0.8µm	flat back



2140-6



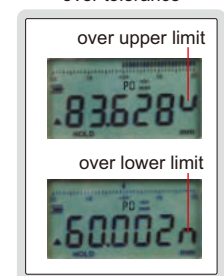
Unit: mm



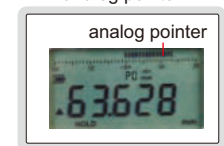
wireless receiver
2134-R1, 2134-R2 (optional)



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

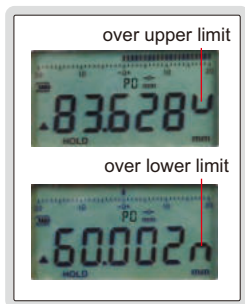
ATTENTION: RECHARGEABLE BATTERY,
FOR 24 HOURS CONTINUOUS WORKING

**INSPECTION
CERTIFICATE**
TRACEABLE TO NIST

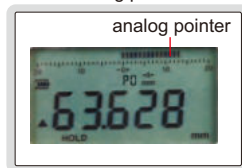
HIGH PRECISION DIGITAL INDICATORS

7

warning when
over tolerance



analog pointer



2133-10

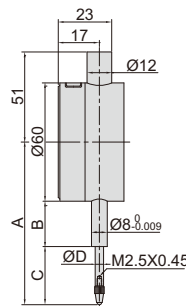


2133-25

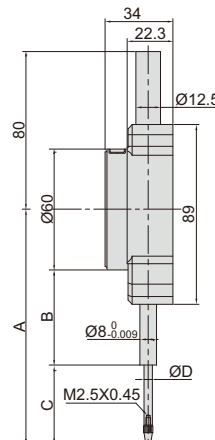


2133-50

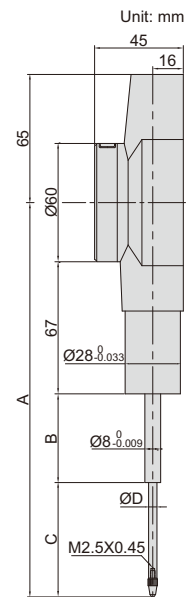
- Linear ball bearings for ten million times use
- Absolute encoder, the original data remains after power off
- Reading in digital and analog
- Data output
- Button function: data output, tolerance, data preset, data hold, measuring direction change, max./min./TIR, power off time, on/off, mm/inch, adjust 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)



2133-10
2133-101



2133-25
2133-251



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
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"

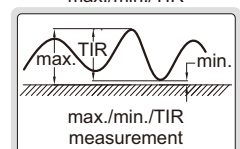
Code	Range	Accuracy	Hysteresis	A	B	C	ØD	Remark
2133-101 *	12.7mm/0.5"	1.5µm	1µm	77.4mm	26mm	21.4mm	4mm	flat back
2133-251 *	25.4mm/1"	1.8µm	1µm	116.1mm	42.5mm	44mm	4mm	flat back

* Supplied with manufacturer inspection certificate traceable to NIST USA

spindle lift knob is included



max./min./TIR



WIRELESS HIGH PRECISION DIGITAL INDICATORS

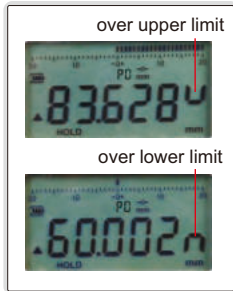
ATTENTION: RECHARGEABLE BATTERY, FOR 24 HOURS CONTINUOUS WORKING

LINEAR BALL BEARINGS FOR TEN MILLION TIMES USE

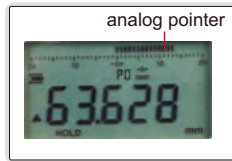
ABSOLUTE ENCODER, THE ORIGINAL DATA REMAINS AFTER POWER OFF

INSPECTION CERTIFICATE
TRACEABLE TO NIST

warning when over tolerance

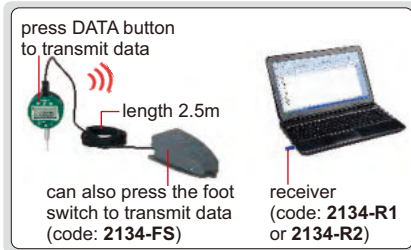


analog pointer



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)

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

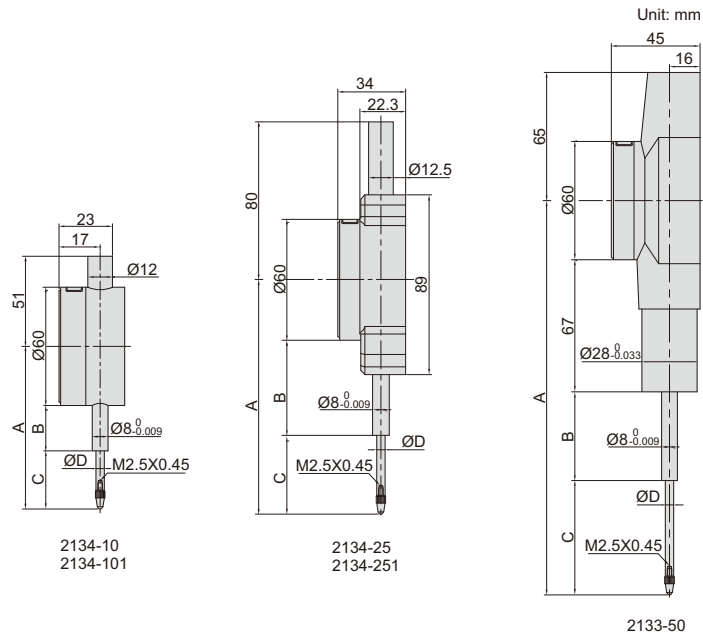
High precision

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



2134-10
2134-101

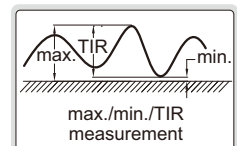
2134-25
2134-251

2133-50

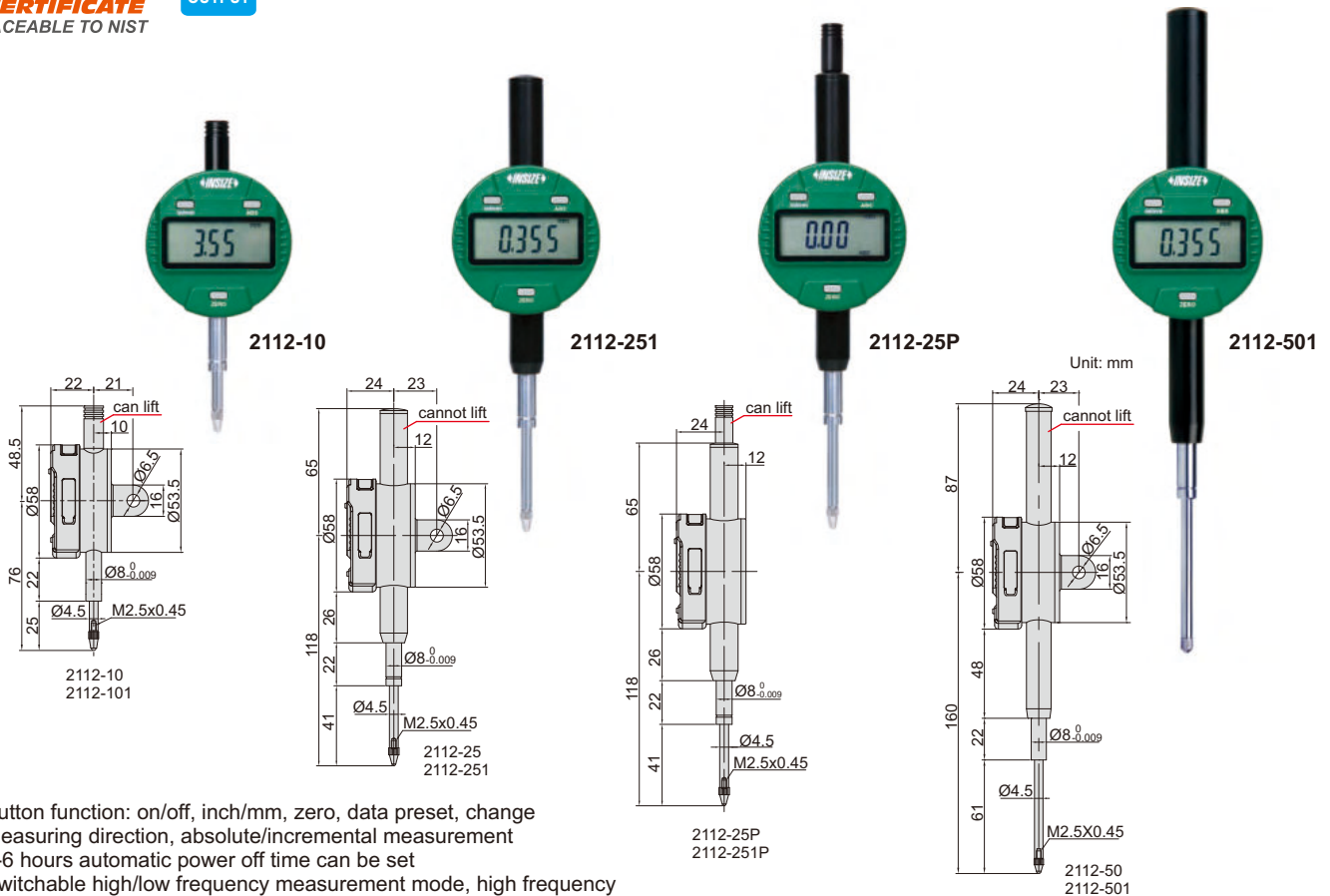
spindle lift knob is included



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

* Supplied with manufacturer inspection certificate traceable to NIST USA

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



spindle lift knob is included



DATA
OUTPUT

**INSPECTION
CERTIFICATE**
TRACEABLE TO NIST

DIGITAL INDICATORS (ADVANCED TYPE)



2103-10



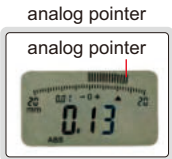
2104-25



2104-25P



2103-50

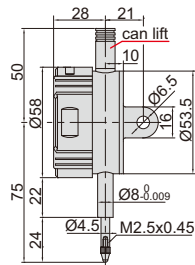


analog pointer

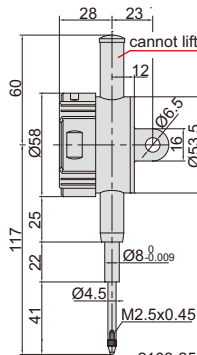
analog pointer



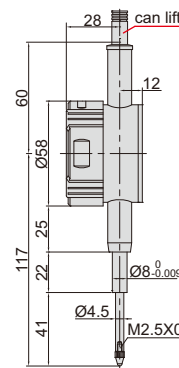
spindle lift knob is included



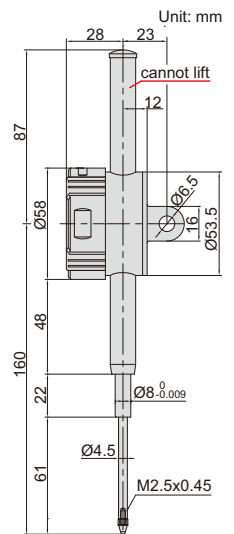
2103-10
2104-10



2103-25
2104-25



2103-25P
2104-25P

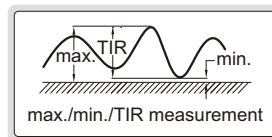


2103-50
2104-50

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)

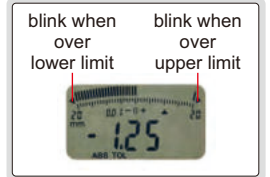
max./min./TIR



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

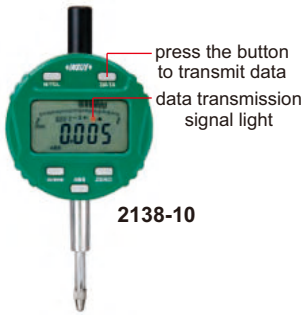


* Supplied with manufacturer inspection certificate traceable to NIST USA

DIGITAL INDICATORS (WITH TRANSMISSION BUTTON AND SIGNAL LIGHT)

DATA OUTPUT

INSPECTION CERTIFICATE
TRACEABLE TO NIST



2138-10



2139-25



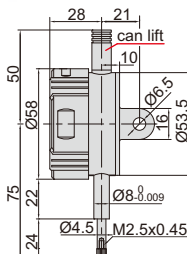
2139-25P



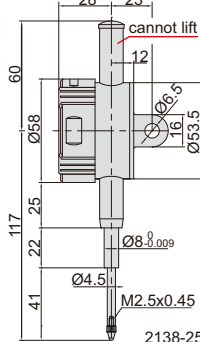
2138-50



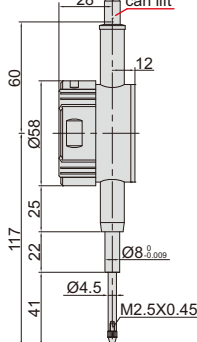
display can be rotated by 320°



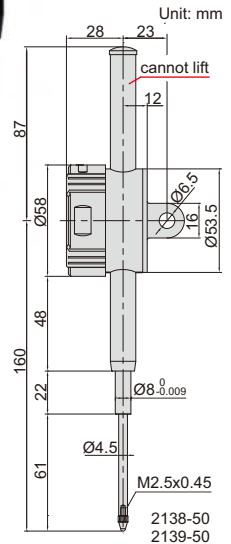
2138-10
2139-10



2138-25
2139-25



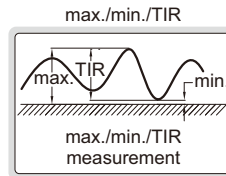
2138-25P
2139-25P



Unit: mm

2138-50
2139-50

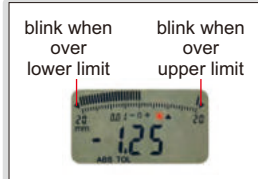
- Reading in digital and analog
- Display can be rotated by 320°
- Button function: on/off, zero, tolerance Go and No-Go display, data preset, measuring direction change, max./min./TIR measurement, inch/metric conversion, absolute/incremental measurement, data output
- 0-6 hours automatic power off time 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/0.00005"

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

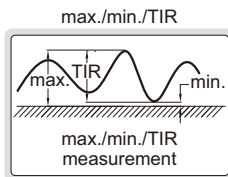


2138-25P/50P
2129-25P/50P

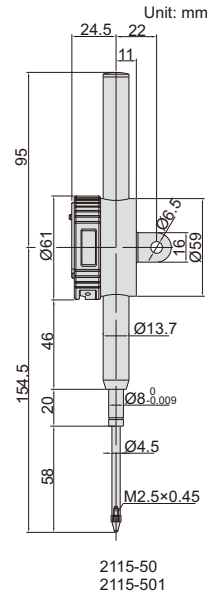
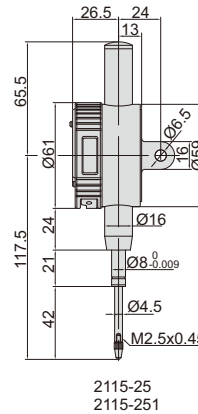
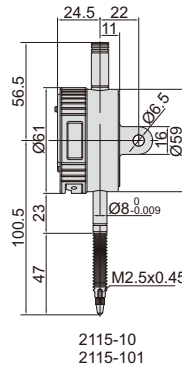
pull lift cap to lift point



*Supplied with manufacturer inspection certificate traceable to NIST USA



- 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

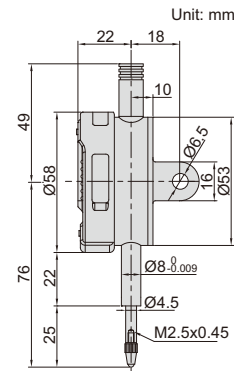
INSPECTION CERTIFICATE
TRACEABLE TO NIST

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

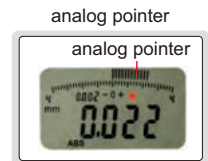
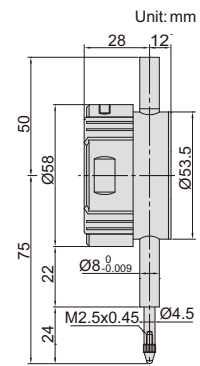
THE ORIGINAL DATA REMAINS AFTER POWER OFF

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**)



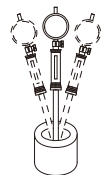
Code	Range	Resolution	Accuracy	Hysteresis	Remark
2108-10F*	12.7mm/0.5"	0.002mm/0.0001" (can switch to: 0.01mm/0.0005")	20µm	10µm	flat back
2108-101F*	12.7mm/0.5"	0.001mm/0.00005"	5µm	2µm	flat back

*Supplied with manufacturer inspection certificate traceable to NIST USA

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



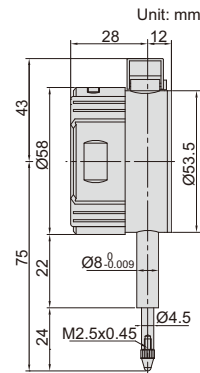
The minimum value tracking function can find the diameter automatically.



DIGITAL INDICATORS WITH LIFTING LEVER

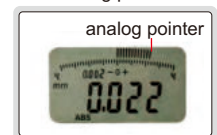


2109-10

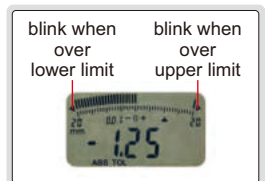


- Reading in digital and analog
- Display can be rotated by 320°
- Button function: tolerance Go and No-Go display, data preset, measuring direction change, max./min./TIR measurement, inch/metric conversion, absolute/incremental measurement
- Keep preset data and tolerance data in memory after restart
- 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

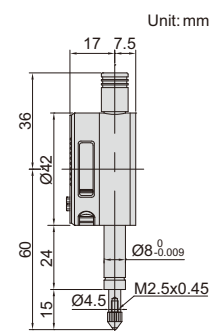
* Supplied with manufacturer inspection certificate traceable to NIST USA

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

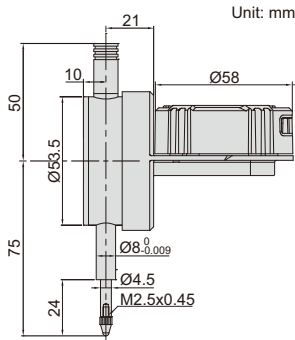
* Supplied with manufacturer inspection certificate traceable to NIST USA

BACK PLUNGER TYPE DIGITAL INDICATORS

DATA
OUTPUT

**INSPECTION
CERTIFICATE**
TRACEABLE TO NIST

7

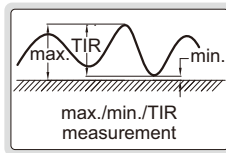


2118-10

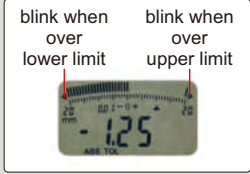
spindle lift knob
is included



max./min./TIR



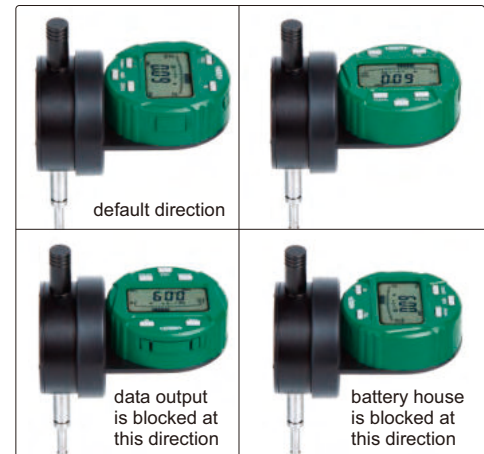
warning when over tolerance



analog pointer
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°



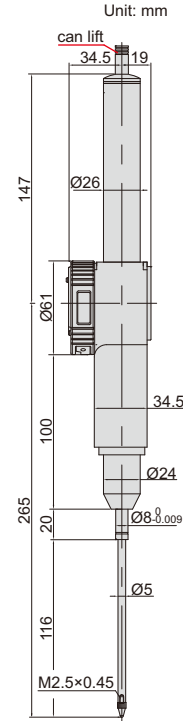
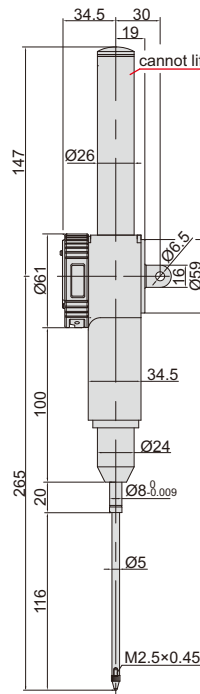
- Display can rotate 320°, and display direction is changeable
- Reading in digital and analog
- Button function: tolerance Go and No-Go display, data preset, measuring direction change, max./min./TIR measurement, inch/metric conversion, absolute/incremental measurement
- Keep preset data and tolerance 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)

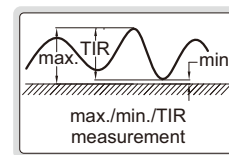
Resolution 0.01mm/0.0005"

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

max./min./TIR



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			

application

