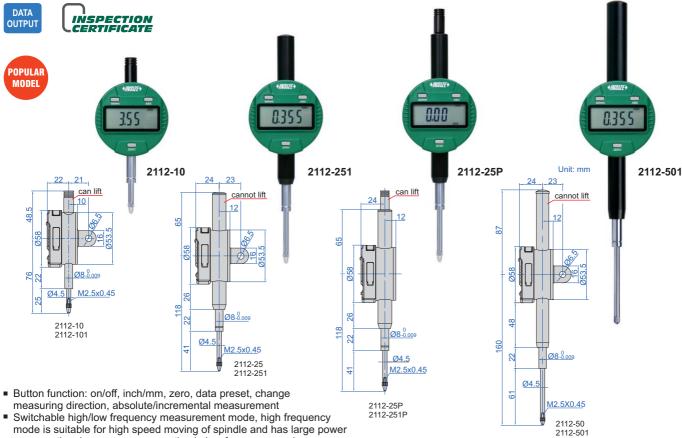
DIGITAL INDICATORS (STANDARD TYPE)



- 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 (time is adjustable)
- Data output

10

Optional accessory: wireless transmitter code 7315-50M (receiver is needed) page 6, bluetooth transmitter code 7214-50M page 12, data output cable code **7302-40M** page 21, **7305-40M** page 17, backs (page 277~278), contact points (page 272~276)

Resolution 0.001mm/0.00005"

Code	Range	Accuracy	Hysteresis	Maximum measuring force	Сар	Remark
2112-101F*	12.7mm/0.5"	5µm	2µm	1.5N	can lift	flat back
2112-251F*	25.4mm/1"	5µm	3µm	2.2N	cannot lift	flat back
2112-501F*	50.8mm/2"	6µm	3µm	2.5N	cannot lift	flat back
2112-101*	12.7mm/0.5"	5µm	2µm	1.5N	can lift	lug back
2112-251*	25.4mm/1"	5µm	3µm	2.2N	cannot lift	lug back
2112-501*	50.8mm/2"	6µm	3µm	2.5N	cannot lift	lug back
2112-251P*	25.4mm/1"	5µm	3µm	2.2N	can lift	flat back
2112-501P*	50.8mm/2"	6µm	3µm	2.5N	can lift	flat back

Resolution 0.01mm/0.0005"

rtocolution of						
Code	Range	Accuracy	Hysteresis	Maximum measuring force	Сар	Remark
2112-10F*	12.7mm/0.5"	20µm	10µm	1.5N	can lift	flat back
2112-25F *	25.4mm/1"	20µm	10µm	2.2N	cannot lift	flat back
2112-50F *	50.8mm/2"	30µm	10µm	2.5N	cannot lift	flat back
2112-10*	12.7mm/0.5"	20µm	10µm	1.5N	can lift	lug back
2112-25*	25.4mm/1"	20µm	10µm	2.2N	cannot lift	lug back
2112-50 *	50.8mm/2"	30µm	10µm	2.5N	cannot lift	lug back
2112-25P*	25.4mm/1"	20µm	10µm	2.2N	can lift	flat back
2112-50P*	50.8mm/2"	30µm	10µm	2.5N	can lift	flat back

^{*}Supplied with manufacturer inspection certificate

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

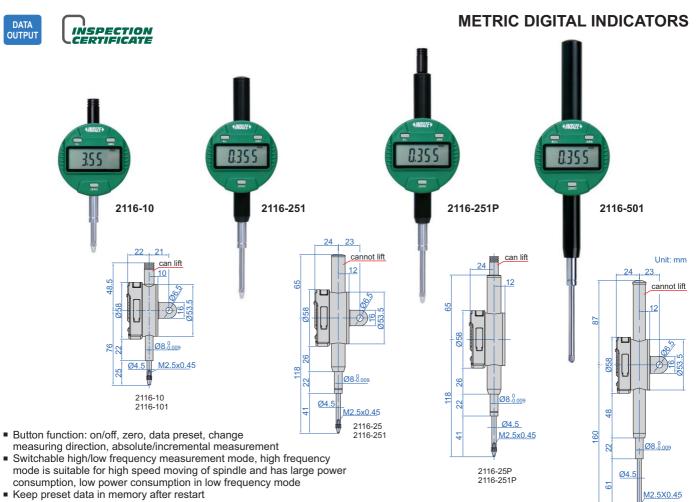


spindle lift knob is included



2116-50 2116-501





- CR2032 battery, automatic power off (time is adjustable)
- Data output
- Optional accessory: wireless transmitter code **7315-50M** (receiver is needed) page 6, bluetooth transmitter code **7214-50M** page 12, data output cable code 7302-40M page 21, 7305-40M page 17, backs (page 277~278), contact points (page 272~276)

Resolution 0.001mm

Code	Range	Accuracy	Hysteresis	Maximum measuring force	Сар	Remark
2116-101F*	12.7mm	5µm	2µm	1.5N	can lift	flat back
2116-251F*	25.4mm	5µm	3µm	2.2N	cannot lift	flat back
2116-501F*	50.8mm	6µm	3µm	2.5N	cannot lift	flat back
2116-101*	12.7mm	5µm	2µm	1.5N	can lift	lug back
2116-251*	25.4mm	5µm	3µm	2.2N	cannot lift	lug back
2116-501*	50.8mm	6µm	3µm	3μm 2.5N		lug back
2116-251P*	25.4mm	5µm	3µm	2.2N	can lift	flat back
2116-501P*	50.8mm	6µm	3µm	2.5N	can lift	flat back

Resolution 0.01mm

Code	Range	Accuracy	Hysteresis	Maximum measuring force	Сар	Remark
2116-10F*	12.7mm	20µm	10µm	1.5N	can lift	flat back
2116-25F *	25.4mm	20µm	10µm	2.2N	cannot lift	flat back
2116-50F *	50.8mm	30µm	10µm	2.5N	cannot lift	flat back
2116-10*	12.7mm	20µm	10µm	1.5N	can lift	lug back
2116-25*	25.4mm	20µm	10µm	2.2N	cannot lift	lug back
2116-50*	50.8mm	30µm	10µm	2.5N	cannot lift	lug back
2116-25P*	25.4mm	20µm	10µm	2.2N	can lift	flat back
2116-50P*	50.8mm	30µm	10µm	2.5N	can lift	flat back

^{*}Supplied with manufacturer inspection certificate

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





DIGITAL INDICATORS (ADVANCED TYPE)

INSPECTION CERTIFICATE





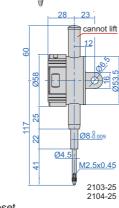




10



2103-10

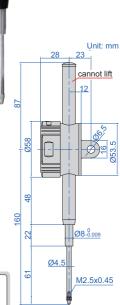


2104-25



max./min./TIR measurement

2104-25P



2103-50

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 (time is adjustable), data output
 Optional accessory: wireless transmitter code 7315-50M (receiver is needed) page 6, bluetooth transmitter code 7214-50M page 12, data output cable code 7302-40M page 21, 7305-40M page 17, backs (page 277~278), contact points (page 272~276)

Resolution 0.001mm/0.00005"

Code	Range	Accuracy	Hysteresis	Maximum measuring force	Сар	Remark
2103-10F*	12.7mm/0.5"	5µm	2µm	1.5N	can lift	flat back
2103-25F*	25.4mm/1"	5µm	3µm	2.2N	cannot lift	flat back
2103-50F*	50.8mm/2"	6µm	3µm	2.5N	cannot lift	flat back
2103-10 *	12.7mm/0.5"	5µm	2µm	1.5N	can lift	lug back
2103-25 *	25.4mm/1"	5µm	3µm	2.2N	cannot lift	lug back
2103-50 *	03-50 * 50.8mm/2"		3µm	2.5N	cannot lift	lug back
2103-25P*	03-25P* 25.4mm/1" 5μr		3µm	2.2N	can lift	flat back
2103-50P*	50.8mm/2"	6µm	3µm	2.5N	can lift	flat back

Resolution 0.01mm/0.0005"

Code	Range	Accuracy	Hysteresis	Maximum measuring force	Сар	Remark
2104-10F*	12.7mm/0.5"	20µm	10µm	1.5N	can lift	flat back
2104-25F*	25.4mm/1"	20µm	10µm	2.2N	cannot lift	flat back
2104-50F*	50.8mm/2"	30µm	10µm	2.5N	cannot lift	flat back
2104-10 *	12.7mm/0.5"	20µm	10µm	1.5N	can lift	lug back
2104-25 *	25.4mm/1"	20µm	10µm	2.2N	cannot lift	lug back
2104-50 *	4-50 * 50.8mm/2"		10µm	2.5N	cannot lift	lug back
2104-25P*	25.4mm/1"	20µm	10µm	2.2N	can lift	flat back
2104-50P*	50.8mm/2"	30µm	10µm	2.5N	can lift	flat back

^{*}Supplied with manufacturer inspection certificate

alarm when over tolerance

2103-50

2104-50



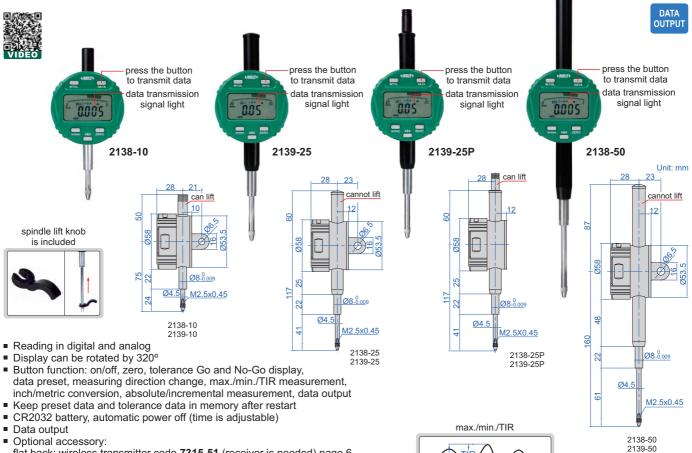






+INSIZE+

DIGITAL INDICATORS (WITH TRANSMISSION BUTTON AND SIGNAL LIGHT)



■ Optional accessory:
flat back: wireless transmitter code 7315-51 (receiver is needed) page 6,
bluetooth transmitter code 7214-51 page 12,
data output cable code 7302-40M page 21, 7305-40M page 17;
lug back: wireless transmitter code 7315-50M (receiver is needed) page 6,
bluetooth transmitter code 7214-50M page 12,
data output cable code 7302-40M page 21, 7305-40M page 17,

backs (page 277~278), contact points (page 272~276)

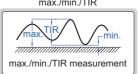
Resolution 0.001mm/0.00005"

Code	Range	Accuracy	Hysteresis	Maximum measuring force	Сар	Remark			
2138-10F*	12.7mm/0.5"	5µm	2µm	1.5N	can lift	flat back			
2138-25F*	25.4mm/1"	5µm	3µm	2.2N	cannot lift	flat back			
2138-50F*	50.8mm/2"	6µm	3µm	2.5N	cannot lift	flat back			
2138-10*	12.7mm/0.5"	5µm	2µm	1.5N	can lift	lug back			
2138-25*	25.4mm/1"	5µm	3µm	2.2N	cannot lift	lug back			
2138-50*	50.8mm/2"	6µm	3µm	2.5N	cannot lift	lug back			
2138-25P*	25.4mm/1"	5µm	3µm	2.2N	can lift	flat back			
2138-50P*	50.8mm/2"	6µm	3µm	2.5N	can lift	flat back			

Resolution 0.01mm/0.0005"

Code	Range	Accuracy	Hysteresis	Maximum measuring force	Сар	Remark
2139-10F*	12.7mm/0.5"	20µm	10µm	1.5N	can lift	flat back
2139-25F *	25.4mm/1"	20µm	10µm	2.2N	cannot lift	flat back
2139-50F*	50.8mm/2"	30µm	10µm	2.5N	cannot lift	flat back
2139-10*	12.7mm/0.5"	20µm	10µm	1.5N	can lift	lug back
2139-25*	25.4mm/1"	20µm	10µm	2.2N	cannot lift	lug back
2139-50*	50.8mm/2"	30µm	10µm	2.5N	cannot lift	lug back
2139-25P*	25.4mm/1"	20µm	10µm	2.2N	can lift	flat back
2139-50P*	50.8mm/2"	30µm	10µm	2.5N	can lift	flat back

^{*}Supplied with manufacturer inspection certificate



analog pointer



alarm when over tolerance

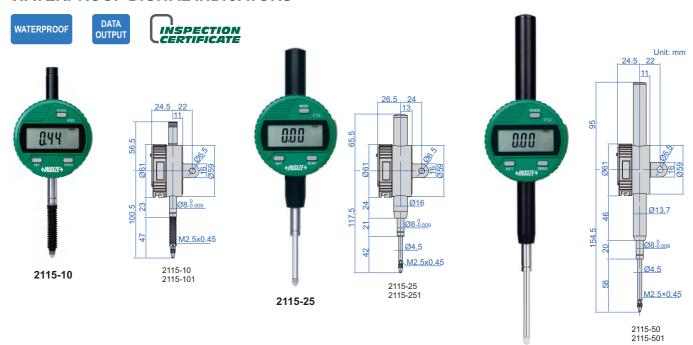


2138-25P/50P 2129-25P/50P





WATERPROOF DIGITAL INDICATORS



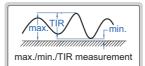
- Dust/waterproof
- Button function: on/off, zero, mm/inch, data preset, tolerance, change measuring direction, max./min./TIR measurement, absolute/incremental measurement
- Keep preset data and tolerance data in memory after restart
- CR2032 battery, automatic power off
- Data output
- Optional accessory: wireless transmitter code 7315-50M (receiver is needed) page 6, bluetooth transmitter code 7214-50M page 12, data output cable code **7302-40M** page 21, **7305-40M** page 17, backs (page 277~278), contact points (page 272~276)

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

2115-50



max./min./TIR



alarm when over tolerance



Resolution 0.001mm/0.00005"

Nesolution 0.00	111111111111111111111111111111111111111						
Code	Range	Dust/waterproof	Accuracy	Hysteresis	Maximum measuring force	Сар	Remark
2115-101*	12.7mm/0.5"	IP65	5µm	2µm	1.5N	cannot lift	lug back
2115-251*	25.4mm/1"	IP54	5µm	3µm	2.2N	cannot lift	lug back
2115-501*	50.8mm/2"	IP54	6µm	3µm	2.5N	cannot lift	lug back
2115-101F*	12.7mm/0.5"	IP65	5µm	2µm	1.5N	cannot lift	flat back
2115-251F*	25.4mm/1"	IP54	5µm	3µm	2.2N	cannot lift	flat back
2115-501F*	50.8mm/2"	IP54	6um	3um	2.5N	cannot lift	flat back

Resolution 0.01mm/0.0005"

Code	Range	Dust/waterproof	Accuracy	Hysteresis	Maximum measuring force	Сар	Remark
2115-10 *	12.7mm/0.5"	IP65	20µm	10µm	1.5N	cannot lift	lug back
2115-25 *	25.4mm/1"	IP54	20µm	10µm	2.2N	cannot lift	lug back
2115-50 *	50.8mm/2"	IP54	30µm	10µm	2.5N	cannot lift	lug back
2115-10F *	12.7mm/0.5"	IP65	20µm	10µm	1.5N	cannot lift	flat back
2115-25F *	25.4mm/1"	IP54	20µm	10µm	2.2N	cannot lift	flat back
2115-50F *	50.8mm/2"	IP54	30µm	10µm	2.5N	cannot lift	flat back

^{*}Supplied with manufacturer inspection certificate

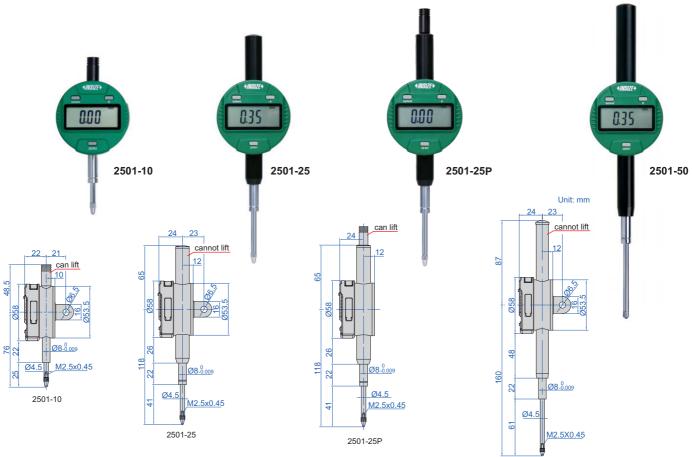
+INSIZE+







ADJUSTABLE COEFFICIENT DIGITAL INDICATORS

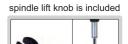


- DISPLAY READING = COEFFICIENT X SPINDLE MOVEMENT. The coefficient can be adjusted from 0 to 9.9999. For example, coefficient is 4.5562, spindle moves 3.60mm, display reading is 4.5562 x 3.60=16.40mm
- Button function: on/off, zero, data preset, inch/mm, coefficient set, measuring direction change
- 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 (time is adjustable)
- Data output
- Optional accessory: wireless transmitter code 7315-50M (receiver is needed) page 6, bluetooth transmitter code 7214-50M page 12, data output cable code 7302-40M page 21, 7305-40M page 17, backs (page 277~278), contact points (page 272~276)

Resolution 0.01mm/0.0005"

Code	Range	Accuracy	Hysteresis Maximum measuring force		Сар	Remark
2501-10*	12.7mm/0.5"	20µm	10µm	1.5N	can lift	lug back
2501-25*	25.4mm/1"	20µm	10μm 2.2N		cannot lift	lug back
2501-50*	50.8mm/2"	30µm	10µm	2.5N	cannot lift	lug back
2501-10F*	12.7mm/0.5"	20µm	10µm	1.5N	can lift	flat back
2501-25F*	25.4mm/1"	20µm	10µm	2.2N	cannot lift	flat back
2501-50F*	50.8mm/2"	30µm	10µm	2.5N	cannot lift	flat back
2501-25P*	25.4mm/1"	20µm	10µm	2.2N	can lift	flat back
2501-50P*	50.8mm/2"	30µm	10µm	2.5N	can lift	flat back

^{*}Supplied with manufacturer inspection certificate



2501-50



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





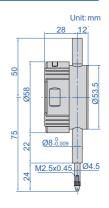




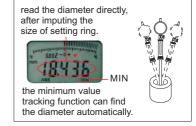
- Specially designed for bore gauges
- The minimum value tracking function can find the diameter automatically
- Read the diameter directly, after imputing the size of setting ring
- Reading in digital and analog
- Display can be rotated by 320°
- Button function: on/off, minimum value tracking, calibration, data preset, inch/metric conversion
- Data remains after power off, no need to recalibrate after power on
- CR2032 battery, automatic power off (time is adjustable)
- Data output
- Optional accessory: wireless transmitter code 7315-51B (receiver is needed) page 7, bluetooth transmitter code 7214-51B page 12, data output cable code 7302-40M page 21, backs (page 277~278), contact points (page 272~276), spindle lift knob (code 7332)











Code	Range	Resolution	Accuracy	Hysteresis	Maximum measuring force	Сар	Remark
2108-10F*	12.7mm/0.5"	0.002mm/0.0001" (can switch to: 0.01mm/0.0005")	20µm	10µm	1.5N	cannot lift	flat back
2108-101F*	12.7mm/0.5"	0.001mm/0.00005"	5µm	2µm	1.5N	cannot lift	flat back

2108-10F

WATERPROOF DIGITAL INDICATORS FOR BORE GAUGES

INSPECTION CERTIFICATE





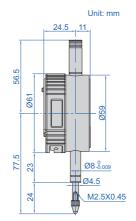
THE ORIGINAL DATA
REMAINS AFTER POWER OFF

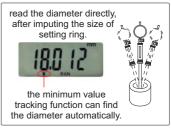
- Specially designed for bore gauges
- The minimum value tracking function can find the diameter automatically
- Read the diameter directly, after imputing the size of setting ring
- Button function: on/off, minimum value tracking, calibration, data preset, inch/metric conversion
- Data remains after power off, no need to recalibrate after power on
- CR2032 battery, automatic power off

 (time is a diseasely)
- (time is adjustable)
 Data output
- Optional accessory: wireless transmitter code 7315-51B (receiver is needed) page 7, bluetooth transmitter code 7214-51B page 12, data output cable code 7302-40M page 21, backs (page 277~278), contact points (page 272~276), spindle lift knob (code 7332)









Code	Range	Resolution	Accuracy	Hysteresis	Maximum measuring force	Сар	Remark
2137-10F*	12.7mm/0.5"	0.002mm/0.0001" (can switch to: 0.01mm/0.0005")	20µm	10µm	1.5N	cannot lift	flat back
2137-101F*	12.7mm/0.5"	0.001mm/0.00005"	5µm	2µm	1.5N	cannot lift	flat back

^{*}Supplied with manufacturer inspection certificate

^{*}Supplied with manufacturer inspection certificate

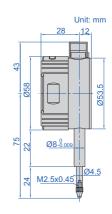






DIGITAL INDICATORS WITH LIFTING LEVER





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 (time is adjustable)
- Data output
- Optional accessory: wireless transmitter code 7315-50M (receiver is needed) page 6, bluetooth transmitter code 7214-50M page 12, data output cable code 7302-40M page 21, 7305-40M page 17, backs (page 277~278), contact points (page 272~276)

2109-10





Code	Range	Resolution	Accuracy	Hysteresis	Maximum measuring force	Remark
2109-10*	10mm/0.4"	0.01mm/0.0005"	20µm	10μm	1.5N	flat back
2109-101*	10mm/0.4"	0.001mm/0.00005"	5µm	2µm	1.5N	flat back

^{*}Supplied with manufacturer inspection certificate





COMPACT DIGITAL INDICATORS

Button function:

in/mm: short press for inch/metric conversion

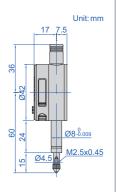
long press to change measuring direction

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: wireless transmitter code 7315-50M (receiver is needed) page 6, bluetooth transmitter code 7214-50M page 12, data output cable code 7302-40M page 21, 7305-40M page 17, backs (page 277~278), contact points (page 272~276)





2114-51F

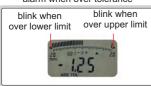
Code	Range	Resolution	Accuracy	Hysteresis	Maximum measuring force	Сар	Remark
2114-5F*	5mm/0.2"	0.01mm/0.0005"	20µm	10µm	1.5N	can lift	flat back
2114-51F*	5mm/0.2"	0.001mm/0.00005"	5µm	2µm	1.5N	can lift	flat back

^{*}Supplied with manufacturer inspection certificate

+INSIZE

BACK PLUNGER TYPE DIGITAL INDICATORS

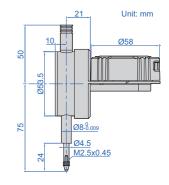
alarm when over tolerance





- 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 (time is adjustable)
- Data output
- Optional accessory: wireless transmitter code 7315-50M (receiver is needed) page 6, bluetooth transmitter code 7214-50M page 12, data output cable code 7302-40M page 21, 7305-40M page 17, backs (page 277~278), contact points (page 272~276)





INSPECTION

DATA

2118-10

display can rotate 320°

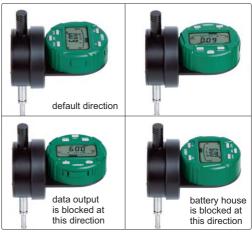




-min max./min./TIR measurement

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	Maximum measuring force	Сар	Remark
2118-10 *	12.7mm/0.5"	0.01mm/0.0005"	20µm	10µm	1.5N	can lift	flat back
2118-101*	12.7mm/0.5"	0.001mm/0.00005"	5µm	2µm	1.5N	can lift	flat back

^{*}Supplied with manufacturer inspection certificate

ZEROING FOOT SWITCH

For zeroing of digital indicators





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





application

press the foot switch to zero digital indicators

+INSIZE+



LARGE STROKE DIGITAL INDICATORS



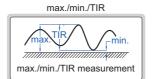








- Button function: on/off, zero, mm/inch, data preset, tolerance, change measuring direction, max./min./TIR measurement, absolute/incremental measurement
- Keep preset data and tolerance data in memory after restart
- CR2032 battery, automatic power off
- Data output
- Optional accessory:
 wireless transmitter code 7315-50M (receiver is needed) page 6,
 bluetooth transmitter code 7214-50M page 12,
 data output cable code 7302-40M page 21, 7305-40M page 17,
 backs (page 277~278), contact points (page 272~276)



Resolution 0.01mm/0.0005"

Code	Range	Accuracy	Hysteresis	Maximum measuring force	Сар	Remark
2117-100	100mm/4"	30µm	10μm	3.2N	cannot lift	lug back
2117-100P	100mm/4"	30µm	10μm	3.2N	can lift	flat back

Resolution 0.001mm/0.00005"

Code	Range	Accuracy	Hysteresis	Maximum measuring force	Сар	Remark
2117-1001	100mm/4"	9µm	3µm	3.2N	cannot lift	lug back
2117-1001P	100mm/4"	9µm	3µm	3.2N	can lift	flat back

WIRELESS HIGH PRECISION DIGITAL INDICATORS



ABSOLUTE ENCODER, THE ORIGINAL DATA REMAINS AFTER POWER OFF

ATTENTION: RECHARGEABLE BATTERY, FOR 24 HOURS CONTINUOUS WORKING

CONTINUOUS DATA COLLECTION CAN BE CUSTOMIZED (PRESS "DATA" BUTTON TO START CONTINUOUS COLLECTION, PRESS AGAIN TO STOP; COLLECTION FREQUENCY CAN BE CUSTOMIZED, THE FASTEST DATA COLLECTION IS 10PCS PER SECOND)

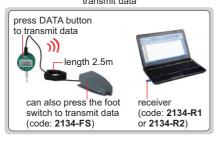
LINEAR BALL BEARINGS FOR TEN MILLION TIMES USE FOR 24 HOURS CONTINUOUS WORKIN

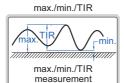






transmit data







■ Built-in wireless transmission, Zigbee singal

- 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 272~276), foot switch, code: 2134-FS

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

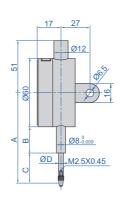
Standard accuracy

Carbide probe

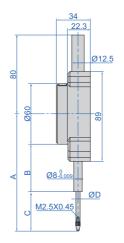
10

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

0.001mm/0.0000 0.01mm/0.0005"







2134-25 2134-251

(mm)

	45
	16
65	090
V	Ø28-8.033 I
	Ø8.0000 I
	M2.5X0.45
	2134-50

Unit: mm

Code	Range	Accuracy	Hysteresis	A	В	С	ØD	Maximum measuring force	Сар	Remark
2134-10*	12.7mm/0.5"	3µm	1.5µm	75.4	20.6	24.8	5	1.5N	can lift	flat back
2134-10L*	12.7mm/0.5"	3µm	1.5µm	75.4	20.6	24.8	5	1.5N	can lift	lug back
2134-25*	25.4mm/1"	3µm	1.5µm	109.5	38.5	41	5	2.2N	cannot lift	flat back
2134-50*	50.8mm/2"	3µm	1.5µm	201	32	72	4.5	2.5N	_	flat back

High accuracy

Ruby probe

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

	0.0111111	1/0.0005								(mm)
Code	Range	Accuracy	Hysteresis	A	В	С	ØD	Maximum measuring force	Сар	Remark
2134-101*	12.7mm/0.5"	1.5µm	1µm	77.4	26	21.4	4	1.5N	can lift	flat back
2134-101L*	12.7mm/0.5"	1.5µm	1µm	77.4	26	21.4	4	1.5N	can lift	lug back
2134-251*	25.4mm/1"	1.8µm	1µm	116.1	42.5	44	4	2.2N	cannot lift	flat back

*Supplied with manufacturer inspection certificate

spindle lift





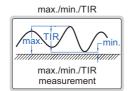
LINEAR BALL BEARINGS FOR TEN MILLION TIMES USE ABSOLUTE ENCODER, THE ORIGINAL DATA REMAINS AFTER POWER OFF

HIGH PRECISION DIGITAL INDICATORS



ATTENTION: RECHARGEABLE BATTERY, FOR 24 HOURS CONTINUOUS WORKING





alarm when over tolerance











2133-10

2133-25

2133-50

Ø28-8.03

Ø8-8.00

M2.5X0.45

ØD

2133-50

Unit: mm

16

45

- 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 272~276), wireless transmitter code 7315-60 (receiver is needed) page 7, data output cable (keyboard format) code 7302-60 page 21, data output cable (serial port format) code 7305-G60 page 19 (cable length 3m, optional cable length maximum 15m; RS232 protocol, optional RS485 protocol)

Standard accuracy

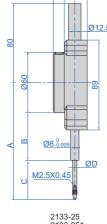
Carbide probe

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

0.01mm/0.0005"

0.01mm/0.0005"

Ø8-0.009 ØD ____M2.5X0.45 2133-101 2133-101L



22.3

2133-25 2133-251

(mm)

(mm)

Code	Range	Accuracy	Hysteresis	Α	В	С	ØD	Maximum measuring force	Сар	Remark
2133-10*	12.7mm/0.5"	3µm	1.5µm	75.4	20.6	24.8	5	1.5N	can lift	flat back
2133-10L*	12.7mm/0.5"	3µm	1.5µm	75.4	20.6	24.8	5	1.5N	can lift	lug back
2133-25*	25.4mm/1"	3µm	1.5µm	109.5	38.5	41	5	2.2N	cannot lift	flat back
2133-50*	50.8mm/2"	3µm	1.5µm	201	32	72	4.5	2.5N	_	flat back

High accuracy

Ruby probe

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

	0.0111111	1/0.0000								(111111)
Code	Range	Accuracy	Hysteresis	Α	В	С	ØD	Maximum measuring force	Сар	Remark
2133-101*	12.7mm/0.5"	1.5µm	1µm	77.4	26	21.4	4	1.5N	can lift	flat back
2133-101L*	12.7mm/0.5"	1.5µm	1µm	77.4	26	21.4	4	1.5N	can lift	lug back
2133-251*	25.4mm/1"	1.8µm	1µm	116.1	42.5	44	4	2.2N	cannot lift	flat back



spindle lift knob is included





HIGH PRECISION DIGITAL INDICATORS

ATTENTION: RECHARGEABLE BATTERY, FOR 30 HOURS CONTINUOUS WORKING

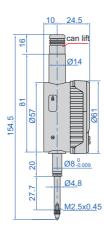




ABSOLUTE ENCODER, THE ORIGINAL DATA REMAINS AFTER POWER OFF

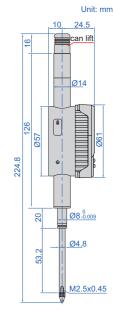








pull cap to lift point



10

- IP54 dust/waterproof (when cap is lifted, no dust/waterproof)
- Absolute encoder, the original data remains after power off
- Automatic power off
- Reading in digital and analog
- Display can be rotated by 270°
- Button function: on/off, zero setting, data preset, tolerance Go and No-Go display, data hold, mm/inch, measuring direction change, max./min./TIR, absolute/incremental measurement, data output
- Data output with USB cable (keyboard format), cable length 1.8 meters, single and continuous transmission (the fastest data output is 40pcs per 10s)
- Power: rechargeable battery, for 30 hours continuous working

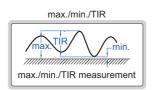














Resolution 0.0005mm/0.00002"

Code	Range	Accuracy	Hysteresis	Maximum measuring force	Сар	Remark
2136-10*	0-12.7mm/0-0.5"	2µm	1.5µm	1.5N	can lift	flat back
2136-25*	0-25.4mm/0-1"	2µm	1.5µm	1.8N	can lift	flat back
2136-50 *	0-50.8mm/0-2"	4µm	2µm	2.3N	can lift	flat back

 $^{^{}ullet}$ Supplied with manufacturer inspection certificate

INSPECTION

-INSIZE+

BLUETOOTH HIGH PRECISION DIGITAL INDICATORS





COLOR DISPLAY LARGE CHARACTERS WITH BACKLIGHT

ABSOLUTE ENCODER, THE ORIGINAL DATA REMAINS AFTER POWER OFF









- IP54 dust/waterproof (when cap is lifted, no dust/waterproof)
- Color display, large characters with backlight
- Absolute encoder, the original data remains after power off
- Automatic power off
- Display can be rotated by 270°
 Adjustable resolution: 0.0005mm/0.00002"
- 0.001mm/0.00005"

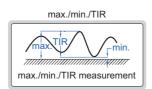
- Button function: on/off, zero setting, data preset, tolerance Go and No-Go display, data hold, mm/inch, measuring direction change, blue tooth, max./min./TIR, adjust resolution, absolute/incremental measurement, data output
- Android and iPhone APP, USB type-C cable are included
- Power: rechargeable Li-battery, for 30 hours continuous working (bluetooth transmission reduces working hours)

waming in red when over tolerance



spindle lift knob is included







OV

pull cap to lift point

Code	Range	Accuracy	Hysteresis	Maximum measuring force	Сар	Remark
2135-10*	12.7mm/0.5"	2µm	1.5µm	1.5N	can lift	flat back
2135-25 *	25.4mm/1"	2µm	1.5µm	1.8N	can lift	flat back
2135-50 *	50.8mm/2"	4µm	2µm	2.3N	can lift	flat back

 $^{^{}ullet}$ Supplied with manufacturer inspection certificate

To be continued

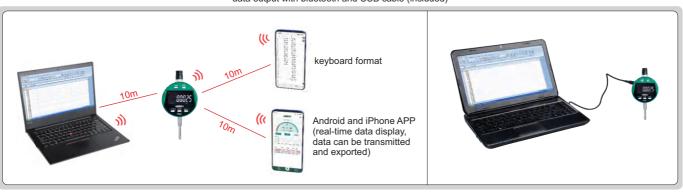
Continued from previous page

Data output

10

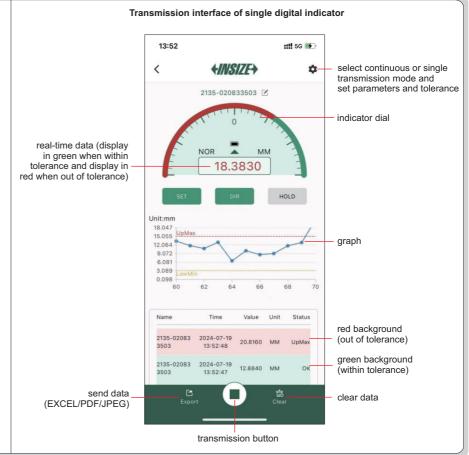
Data output with bluetooth (transmission distance	keyboard format	data can be transmitted to Excel, Word, txt, etc.	single or continuous transmission (the fastest data output is 15pcs per 10s)		
is 10 meters)	virtual com port	data can be transmitted to Android and iPhone APP	real-time display (continuous transmission) or single transmission		
Data output with USB cable (cable length 1.8 meters)	keyboard format	data can be transmitted to Excel, Word, txt, etc. single or continuous transmission (the fastest data output is 40pcs per 10			
(virtual com port and 485 data output can be customized				

data output with bluetooth and USB cable (included)



Android and iPhone APP (included), can choose real-time display (continuous transmission) or single transmission









HIGH PRECISION DIGITAL INDICATORS

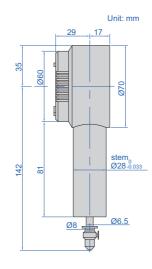
DATA OUTPUT **Ø28MM STEM SUITABLE FOR** REINFORCED CLAMPING

ABSOLUTE ENCODER, THE ORIGINAL DATA REMAINS AFTER POWER OFF

LINEAR BALL BEARINGS FOR TEN MILLION TIMES USE

ATTENTION: RECHARGEABLE BATTERY, FOR 24 HOURS CONTINUOUS WORKING

2140-6



■ 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 (receiver is needed) page 7 data output cable (keyboard format) code 7302-60 page 21 data output cable (serial port format) code 7305-G60 page 19 (cable length 3m, optional cable length maximum 15m; RS232 protocol, optional RS485 protocol)

Code	Range	Accuracy	Hysteresis	Maximum measuring force	Remark
2140-6	0-6mm/0-0.24"	1.6µm	0.8µm	1.5N	flat back

Built-in wireless

Optional accessory:

wireless receiver (keyboard format, connect up to 15 digital indicators), code 2134-R1 wireless receiver (serial port format, connect up to 15 digital indicators), code 2134-R2

Code	Range	Accuracy	Hysteresis	Maximum measuring force	Remark
2140-6WL*	0-6mm/0-0.24"	1.6µm	0.8µm	1.5N	flat back

 st Continuous data collection can be customized (press "DATA" button to start continuous collection, press again to stop; collection frequency can be customized, the fastest data collection is 10 pcs per second)



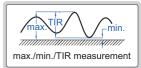
over lower limit

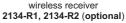


analog pointer











SMART HIGH PRECISION DIGITAL INDICATORS

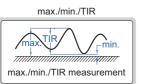
THE MEASURING TIME PERIOD CAN BE SET (1-99S IS ADJUSTABLE),
THE MAX./MIN./TIR/AVG. CAN BE MEASURED AUTOMATICALLY DURING THIS PERIOD,
AND THE DATA CAN BE TRANSMITTED AUTOMATICALLY AFTER EACH MEASUREMENT

ATTENTION: RECHARGEABLE BATTERY, FOR 24 HOURS CONTINUOUS WORKING



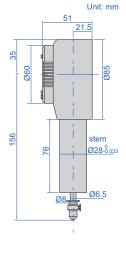


PRESS BUTTON OR PROBE MOVEMENT CAN START AUTOMATIC MEASUREMENT, THE MEASUREMENT CAN BE DELAYED (1-99S IS ADJUSTABLE)



- 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: 0.0001mm/0.00001"
 0.001mm/0.00005"
 0.01mm/0.0005"
- Reading in digital and analog
- Button function: on/off, adjust resolution, data hold, data output, max./min./TIR/avg., data preset, tolerance, mm/inch, automatic power off, measuring direction change, delay setting, measuring time setting
- Power: rechargeable Li-battery, for 24 hours continuous working
- Ruby probe





2150-5A

analog pointer

analog pointer

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



alarm when over tolerance



With data interface

Optional accessory:

wireless transmitter code **7315-60** (receiver is needed) page 7 data output cable (keyboard format) code **7302-60** page 21 data output cable (serial port format) code **7305-G60** page 19

(cable length 3m, optional cable length maximum 15m; RS232 protocol, optional RS485 protocol)

Code	Range	Accuracy	Hysteresis	Maximum measuring force	Remark
2150-5A	0-5mm/0-0.2"	0.5µm	0.3µm	1.5N	probe movement starts measurement
2150-5B	0-5mm/0-0.2"	0.5µm	0.3µm	1.5N	press button starts measurement

Built-in wireless

Optional accessory:

wireless receiver (keyboard format, connect up to 15 digital indicators), code 2134-R1 wireless receiver (serial port format, connect up to 15 digital indicators), code 2134-R2

Code	Range	Accuracy	Hysteresis	Maximum measuring force	Remark
2150-5AWL*	0-5mm/0-0.2"	0.5µm	0.3µm	1.5N	probe movement starts measurement
2150-5BWL*	0-5mm/0-0.2"	0.5µm	0.3µm	1.5N	press button starts measurement

^{*}Continuous data collection can be customized (press "DATA" button to start continuous collection, press it again to stop; collection frequency can be customized, the fastest data collection is 10pcs per second)

ATTENTION: RECHARGEABLE BATTERY, FOR 12 HOURS CONTINUOUS WORKING

INDUCTIVE DIGITAL COMPARATOR (HIGH ACCURACY)

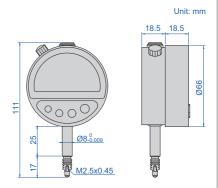




data interface (with protective cover)







2149-2

- Built-in wireless transmission
- IP54 dust/waterproof
- Reading in digital and analog
- Display can be rotated by 320°
- Can store 10 set parameters, and the parameter can be searched and recalled
- 999 groups value can be stored
- Touch sensor: use the sensor to transmit data, avoiding press the button to cause deformation of the dial indicator stand and affect the zero position
- Button function: on/off, zero, data hold, measuring direction change, inch/metric conversion, data preset, absolute/incremental measurement, max./min./TIR measurement, tolerance Go and No-Go display, data output, analog pointer resolution and range change, print data
- Power: rechargeable battery, for 12 hours continuous working
- Ruby probe
- Data output
- Optional accessory: wireless receiver (code 2149-RE, transmission distance is 2 meters), printer (code ISF-DF-PRINTER)





max./min./TIR

max./min./TIR measurement

TIR

Code	Range	Resolution	Accuracy	Hysteresis	Repeatability	Measuring force
2149-2	2mm/0.08"	0.1µm/0.000005"	0.5µm	0.2µm	0.3µm	0.8-1N

PRECISION DIAL INDICATORS





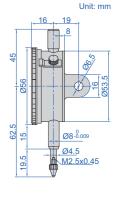


- Graduation: 0.001mm
- Jeweled bearing
- Supplied with limit pointers and bezel clamp
- Optional accessory: backs (page 277~278), contact points (page 272~276)

231	2_1	Δ

Code	Range	Accuracy	Hysteresis	Range/rev	Dial reading	Maximum measuring force	Сар	Remark
2313-1FA *	1mm	5µm	2µm	0.2mm	0-100-0	2N	cannot lift	flat back
2313-2FA *	2mm	6µm	2.5µm	0.2mm	0-100-0	2N	cannot lift	flat back
2313-1A*	1mm	5µm	2µm	0.2mm	0-100-0	2N	cannot lift	lug back
2313-2A*	2mm	6µm	2.5µm	0.2mm	0-100-0	2N	cannot lift	lug back







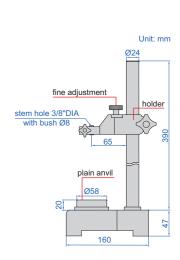
TRANSFER STANDS



rigid construction, designed to make comparison height measurement (set zero with gauge block then measure height of workpiece) with dial indicators or digital indicators (variation of measuring force is high)



6865-300 6865-300T



Vertical travel of holder: 335mmFine adjustment range: 2mm

Supplied with dust cover

Code	Applicable holding stem	Anvil
6865-300	3/8"DIA, Ø8mm	steel (hardness HRC60±2), plain, flatness 1.5µm
6865-300T	3/8"DIA, Ø8mm	ceramic, plain, flatness 1.5µm

REFER TO PAGE 102-104 FOR DETAILS

DIGITAL HEIGHT GAUGES







1158-100