



2024
2025

MEASURING INSTRUMENTS

CATALOGUE NO. 107



QUALITY | INNOVATION | SERVICE | VALUE



The products with this mark are **INSIZE PLUS** brand, otherwise the products are **INSIZE** brand.

INSIZE is our standard quality

INSIZE PLUS is our premium quality



The products with this mark are supplied with manufacturer inspection certificate.

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



Please scan QR code to watch the videos of products.



How to search:

1. Search for products according to category in PRODUCT INDEX (next 6 pages)
2. Search for products in CODE NO. INDEX (page 926-932)
3. Search for products in APPLICATION INDEX OF MEASURING TOOLS (page 933-939)

We reserve the right to change or modify the design and specification of products in this catalogue without prior notice.

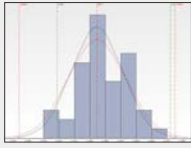
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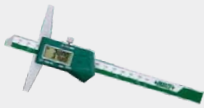
DATA MANAGEMENT SOFTWARES



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DEPTH GAGES



DEPTH GAGES



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OUTSIDE DIAMETER VARIATION MEASURING INSTRUMENTS



OUTSIDE DIAMETER MEASURING INSTRUMENTS



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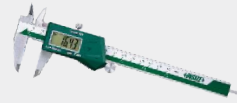
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COMPARISON GAGES



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INSIDE MICROMETERS



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DIGITAL CHAMFER GAGES



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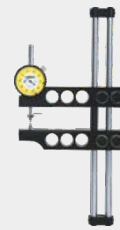
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PERPENDICULARITY TESTERS



SQUARES



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STRAIGHT EDGES



OPTICAL FLATS



FLATNESS MEASUREMENT STANDS

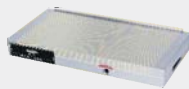
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GRANITE SURFACE PLATES



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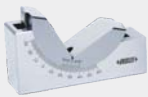
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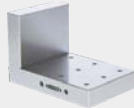
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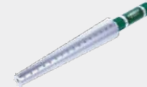
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ZERO SETTERS



ZERO SETTERS

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LEVELS



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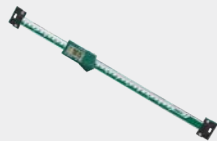
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CMM



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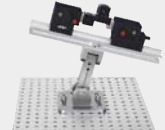
STYLI FOR CMM



GAGE BLOCK STANDS FOR CMM



CERAMIC BALL GAGES



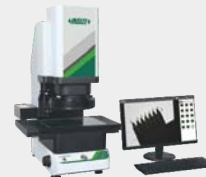
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PROFILE PROJECTORS



QUICK MEASUREMENT SYSTEMS



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TOOLMAKER MICROSCOPES



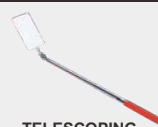
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MICROSCOPES



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ULTRASONIC THICKNESS GAGES



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UNIVERSAL
TESTING MACHINES



IMPACT
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DIGITAL SPRING
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FORCE GAGES



DIAL TENSION GAGES



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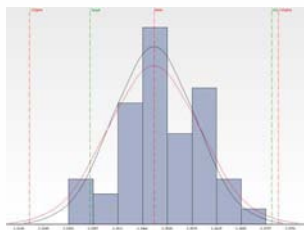
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SALT SPRAY TESTERS



TEMPERATURE AND
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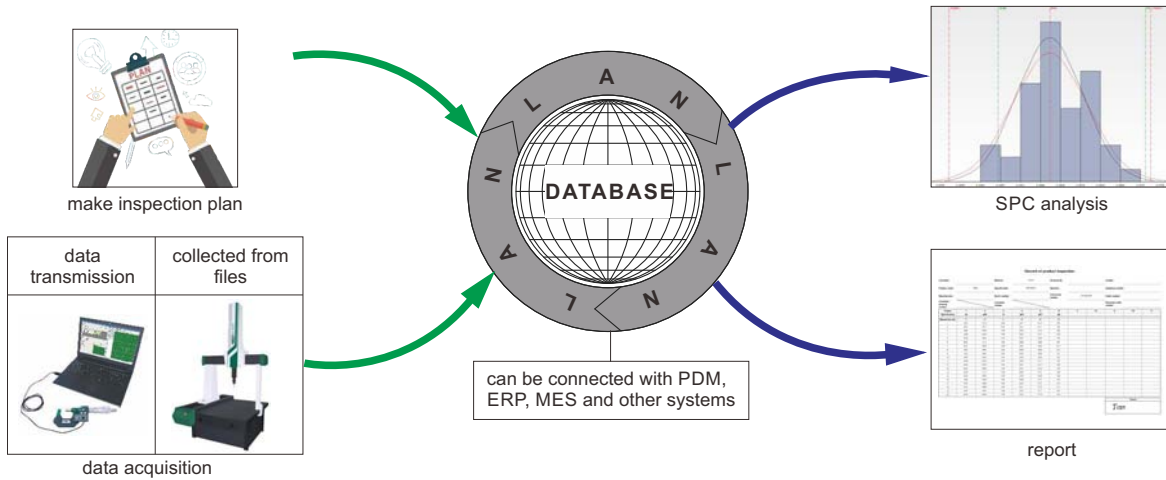


Wireless Data Transmission Systems
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Data Output Cables
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MEASUREMENT DATA MANAGEMENT AND ANALYSIS SOFTWARE CODE 7317



Make inspection plan

- Define the dimensions, tolerances, control range and other parameters of workpieces

define the drawing of workpieces

define association items of data

define the measured dimension and tolerance

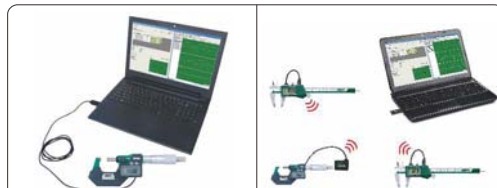
Seq	Data Member Code	Data Member Name	Measuring Tool	1	2	3	4	5	6
1	DC04070001	Check type		2022-06-08 11:16:27	2022-06-08 11:16:27	2022-06-08 11:16:27	2022-06-08 11:16:27	2022-06-08 11:16:27	2022-06-08 11:16:27
2	DC04070002	Serial number							
3	DC04070003	Furnace No.							
4	DC02070001	Flatness0.008	CHN1						
5	DC02070002	2.39+0.01/-0.03	Vernier caliper						
6	DC02070003	Verticality0.008	CHN1						
7	DC02070004	2.335±0.004	Vernier caliper						
8	DC02070005	Outside diameterΦ=45±0.002	Micrometer						
9	DC02070006	Inner diameterΦ=45±0.002	Micrometer						
10	DC02070007	Wall thickness							
		Input User		Administrator	Administrator	Administrator	Administrator	Administrator	Administrator

define the drawing of workpieces

Data acquisition



manual input



data transmission



collected from files



screen capture

Seq	Data Member Code	Data Member Name	Measuring Tool	1	2	3	4	5
1	DC04070001	Check type		2022-06-08 11:16:27	2022-06-08 11:16:27	2022-06-08 11:16:27	2022-06-08 11:16:27	2022-06-08 11:16:27
2	DC04070002	Serial number						
3	DC04070003	Furnace No.						
4	DC02070001	Flatness0.008	CHN1	0.0080	0.0080	0.0080	0.0080	0.0080
5	DC02070002	2.39+0.01/-0.03	Vernier caliper	2.391	2.391	2.391	2.400	
6	DC02070003	Verticality0.008	CHN1	0.0080	0.0080	0.0080	0.0080	
7	DC02070004	2.335±0.004	Vernier caliper	2.3350	2.3350	2.3350	2.3350	
8	DC02070005	Outside diameterΦ=45±0.002	Micrometer	45.0030	45.0030	45.0030	44.9977	
9	DC02070006	Inner diameterΦ=45±0.002	Micrometer	45.0010	45.0010	45.0010	45.0010	
10	DC02070007	Wall thickness		0.0010	0.0020	0.0010	-0.0033	
		Input User		Administrator	Administrator	Administrator	Administrator	Admin

measurement interface

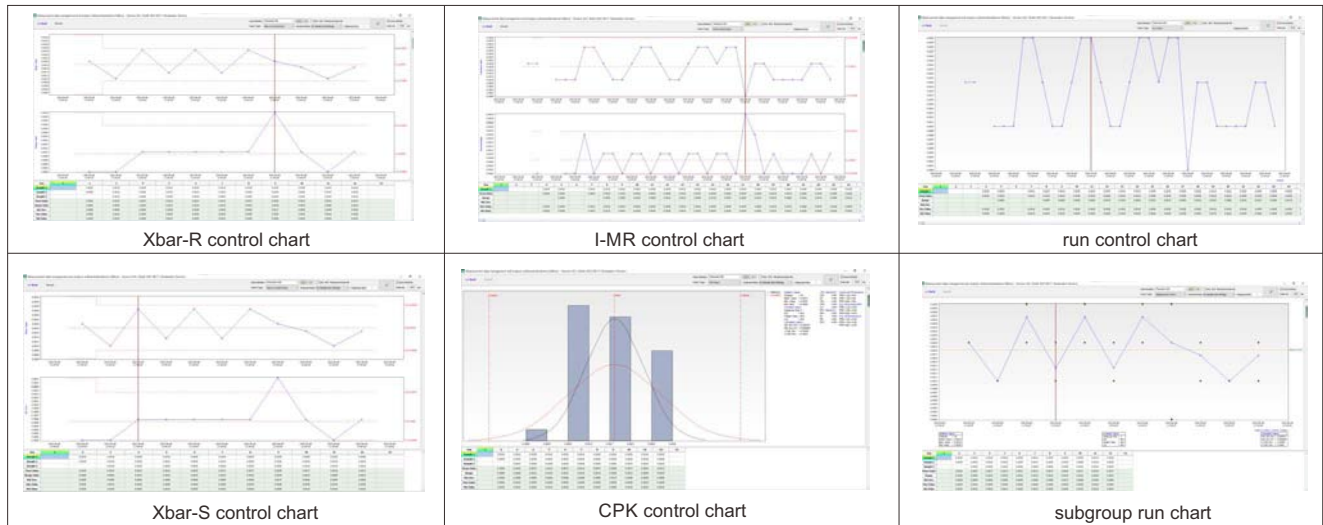
To be continued

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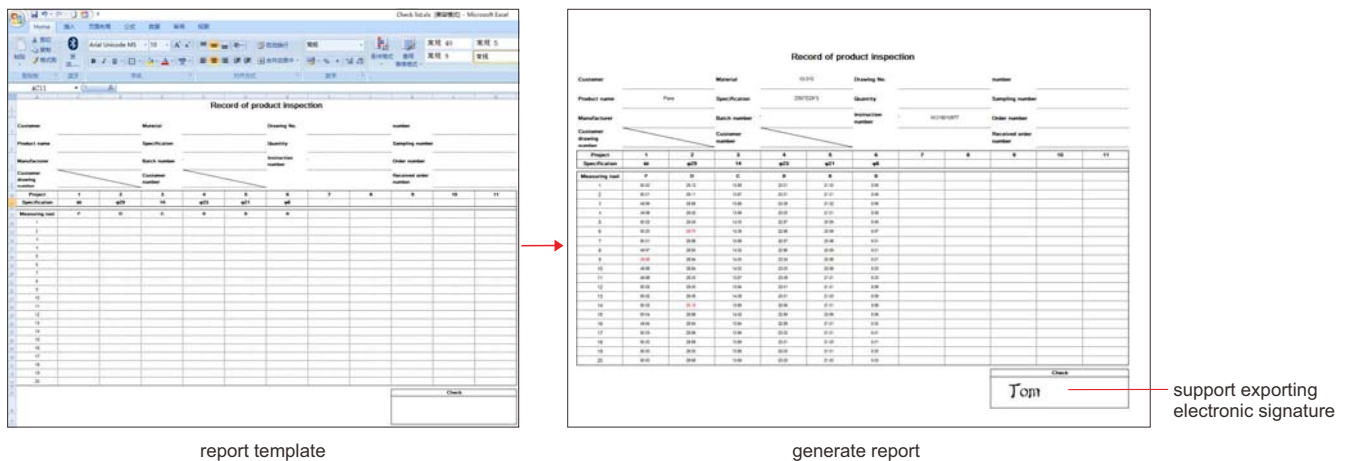
1

SPC

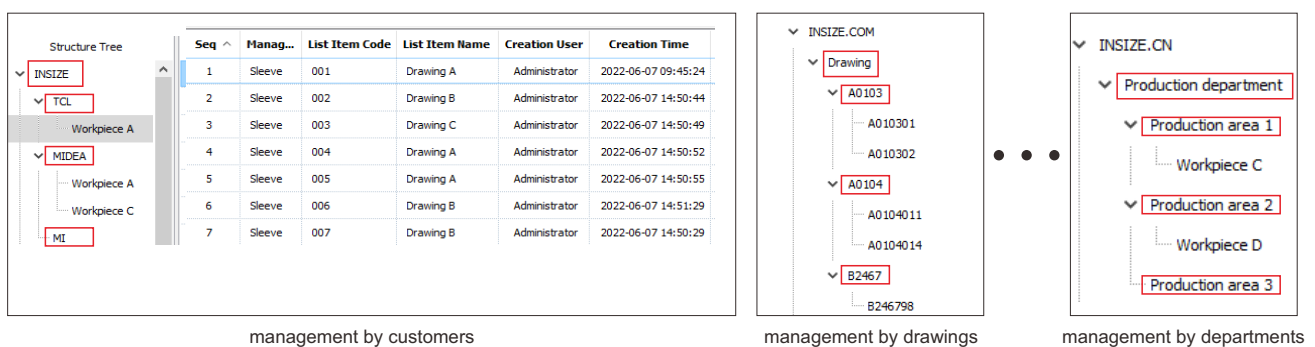
- Provide variety of quality analysis control charts



Report



Management of inspection plan

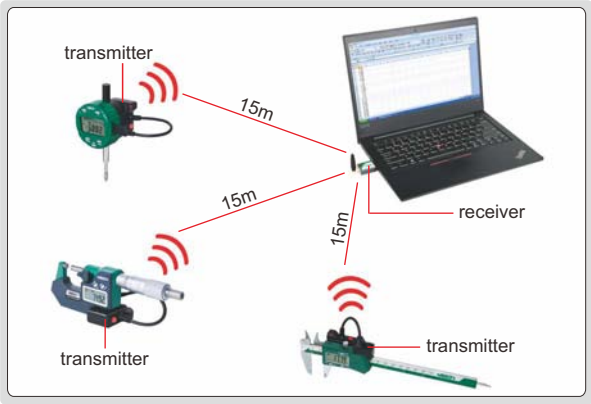


1 WIRELESS DATA TRANSMISSION SYSTEM

- Through wireless transmission, the measurement data can be transmitted to computers or mobile phones
- Wireless zigbee protocol, conforming to IEEE802, 2.4GHz band
- Transmission distance is 15 meter (under the condition of no obstruction and no electromagnetic interference)

Transmitter

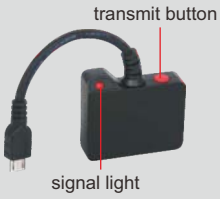
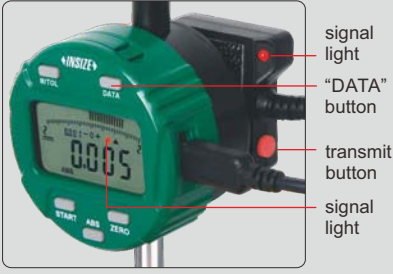




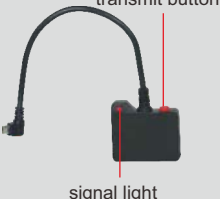

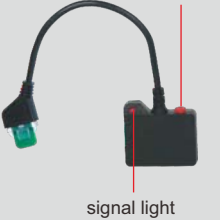

- Connecting to digital measuring tools such as calipers, micrometers and indicators
- CR2032 battery



Code	Description	Transmitter	Connecting with measuring tool	Transmit data
7315-21	transmitter for digital calipers			<ul style="list-style-type: none"> Press the transmit button on the plug of cable, can also press the transmit button of the transmitter Data is transmitted once, the signal light of the transmitter flashes once
7315-22	transmitter for large digital calipers			<ul style="list-style-type: none"> Press the transmit button of the transmitter Data is transmitted once, the signal light of the transmitter flashes once
7315-30	transmitter for digital micrometers			<ul style="list-style-type: none"> Press the "data" button of digital micrometer, can also press the transmit button of the transmitter Data is transmitted once, the signal light of the transmitter flashes once, at the same time, the signal light on the digital micrometer flashes once
7315-31	transmitter for digital micrometers			<ul style="list-style-type: none"> Press the "data" button of digital micrometer Data is transmitted once, the signal light on the digital micrometer flashes once

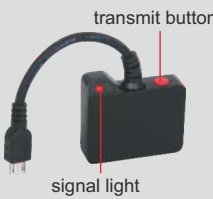

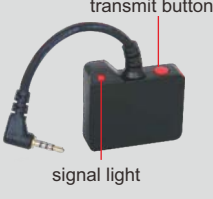

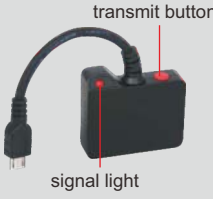
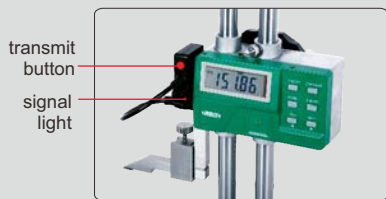
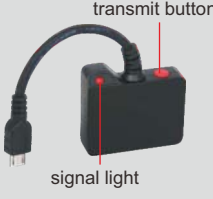

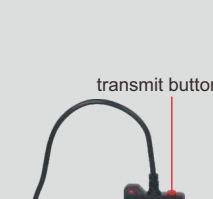
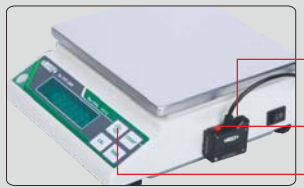

To be continued

Continued from previous page

Code	Description	Transmitter	Connecting with measuring tool	Transmit data
7315-50M	transmitter for digital indicators	 <p>transmit button</p> <p>signal light</p>	 <p>for 2108, 2138, 2139 series digital indicators</p>	<ul style="list-style-type: none"> Press the "DATA" button of digital indicator, can also press the transmit button of the transmitter Data is transmitted once, the signal light of the transmitter flashes once, at the same time, the signal light on digital indicator flashes once
			 <p>for other digital indicators</p>	<ul style="list-style-type: none"> Press the transmit button of the transmitter Data is transmitted once, the signal light of the transmitter flashes once
7315-51	transmitter for digital indicators		 <p>for 2108, 2138, 2139 series digital indicators</p>  <p>foot switch (code 7304-7, optional)</p> <p>back</p>	<ul style="list-style-type: none"> Press the "DATA" button of digital indicator, can also press the foot switch (code 7304-7, optional) Data is transmitted once, the signal light on digital indicator flashes once
7315-60	transmitter for high precision digital indicators	 <p>transmit button</p> <p>signal light</p>		<ul style="list-style-type: none"> Press the transmit button of the transmitter Data is transmitted once, the signal light of the transmitter flashes once
7315-80	transmitter for digital calipers/micrometers	 <p>transmit button</p> <p>signal light</p>	 <p>"SET" button</p> <p>transmit button</p>	<ul style="list-style-type: none"> Press the "SET" button of the calipers/micrometers, can also press the transmit button of the transmitter Data is transmitted once, the signal light of the transmitter flashes once

To be continued

Continued from previous page

Code	Description	Transmitter	Connecting with measuring tool	Transmit data
7315-3350	transmitter for digital micrometers			<ul style="list-style-type: none"> Press the transmit button of the transmitter Data is transmitted once, the signal light of the transmitter flashes once
7315-1150	transmitter for digital height gages			<ul style="list-style-type: none"> Press the transmit button of the transmitter Data is transmitted once, the signal light of the transmitter flashes once
7315-1151	transmitter for digital height gages			<ul style="list-style-type: none"> Press the transmit button of the transmitter Data is transmitted once, the signal light of the transmitter flashes once
7315-2771	transmitter for digital protractor			<ul style="list-style-type: none"> Press the transmit button of the transmitter Data is transmitted once, the signal light of the transmitter flashes once
7315-8301	transmitter for electronic balances		 	<ul style="list-style-type: none"> Press the “⌨” transmit button of the electronic balances, can also press the transmit button of the transmitter Data is transmitted once, the signal light of the transmitter flashes once





Receiver (keyboard signal)

- For computers and mobile phones
- Recognized as HID keyboard device, the transmitted data is recognized by computers or mobile phones as keyboard input data and press enter, such as 12.34℃. No need to install drivers and softwares
- Data can be transmitted to excel, word, txt etc.
- For any softwares which can receive keyboard signal

Code	Product	Description	Remark
7315-3	 USB port	single channel receiver	connected with 1 transmitter only


To be continued

Continued from previous page

Code	Product	Description	Remark
7315-6		multichannel receiver	connected with 6 transmitters, each channel has status indicator
7315-7			
7315-8			
7315-9			

Receiver (text format, virtual com port)

- For computers with windows system
- Text format virtual com port, converted to keyboard format with supplied software
- Supplied with Excel directional input software
- Measurement data can be transmitted to excel, word, txt etc. and any software which receives keyboard signal

Code	Product	Description	Remark
7315-2		multichannel receiver	connected with maximum 16 transmitters, each of them has unique identification code

Excel directional input software

- Supplied with 7315-2 receiver
- The measurement data of multiple measuring tools can be transmitted to the designated area of excel, which facilitates data management and improves efficiency

Excel directional input software (included in 7315-2), application example 1

Set the display area of caliper at B4-B9, the readings of caliper are displayed at B4, B5...B9. Set the display area of micrometer at C4-C9, the readings of micrometer are displayed at C4, C5... C9. Set the display area of height gage at D4-D9, the readings of height gage are displayed at D4, D5... D9.

	A	B	C	D
1	Project	Length	Width	Height
2	Dimension and Tolerance	50±0.05	24±0.01	10±0.05/±0.06
3	Measuring tool	Caliper	Micrometer	Height gage
4	1	50.02	24.004	9.98
5	2	50.01	24.010	10.01
6	3	49.99	23.990	10.02
7	4	50.00	23.996	9.99
8	5	50.04	24.000	10.01
9	6	Channel 1	Channel 2	Channel 3

serial of workpieces the next data display area is indicated in green

Excel directional input software (included in 7315-2), application example 2

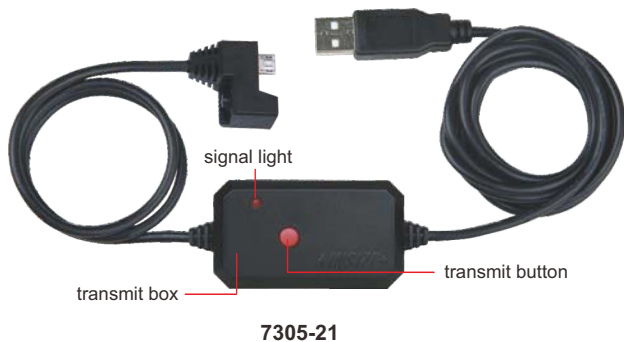
Set the display area of micrometer at B4-C9, data input is from the left to the right, the readings of micrometer are displayed at B4, C4, B5, C5... B9, C9. Set the display area of caliper at D4-D9, the readings of caliper are displayed at D4, D5... D9. Set the display area of depth gage at E4-E9, the readings of depth gage are displayed at E4, E5... E9.

	A	B	C	D	E
1	Project	External diameter1	External diameter2	Length	Depth
2	Dimension and Tolerance	Φ23+0.01/-0.02	Φ21+0.01/-0.02	50±0.04	28±0.05
3	Measuring tool	Micrometer	Micrometer	Caliper	Depth gage
4	1	23.010	21.008	49.98	28.01
5	2	23.010	21.000	49.98	27.98
6	3	22.999	21.000	50	28
7	4	23.007	20.998	50	28
8	5	23.000	20.985	50.01	28.01
9	6	23.008	Channel 1	Channel 2	Channel 3

serial of workpieces the next data display area is indicated in green

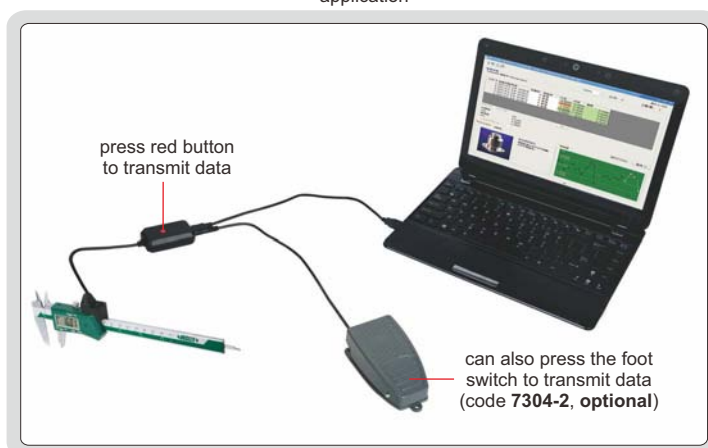
DATA OUTPUT CABLES (TEXT FORMAT, VIRTUAL COM PORT)

1) Data output cables with transmit box



7305-21

application











Single transmit (can be switched to continuous transmit)

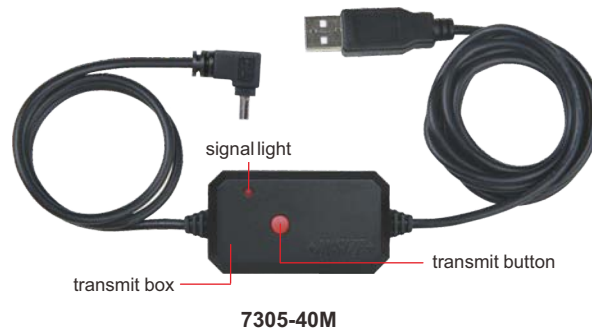
Code	Description	Plug to measuring tool	Plug to computer	Connecting with measuring tool	Transmit data
7305-21	cable for digital calipers (length 3m)				<ul style="list-style-type: none"> Press the transmit button on the plug of cable, can also press the transmit button of the transmit box, or press the foot switch Data is transmitted once, the signal light of the transmit box flashes once
7305-R21					
7305-22	cable for large digital calipers (length 2.5m)				<ul style="list-style-type: none"> Press the transmit button of the transmit box, or press the foot switch Data is transmitted once, the signal light of the transmit box flashes once
7305-R22					
7305-30	cable for digital micrometers (length 2.5m)			 	<ul style="list-style-type: none"> Press the "data" button of digital micrometer, can also press the transmit button of the transmit box, or press the foot switch Data is transmitted once, the signal light of the transmit box flashes once, at the same time, the signal light on the digital micrometer flashes once
7305-R30					
7305-31	cable for digital micrometers (length 2.5m)			 	<ul style="list-style-type: none"> Press the "data" button of digital micrometer, can also press the transmit button of the transmit box, or press the foot switch Data is transmitted once, the signal light of the transmit box flashes once, at the same time, the signal light on the digital micrometer flashes once
7305-R31					

To be continued





Continued from previous page

1

Code	Description	Plug to measuring tool	Plug to computer	Connecting with measuring tool	Transmit data
7305-50M	cable for digital gages (length 2.5m)				<ul style="list-style-type: none"> Press the transmit button of the transmit box, or press the foot switch Data is transmitted once, the signal light of the transmit box flashes once
7305-R50M					
7305-1150	cable for digital height gages (length 2.5m)				<ul style="list-style-type: none"> Press the transmit button of the transmit box, or press the foot switch Data is transmitted once, the signal light of the transmit box flashes once
7305-R1150					



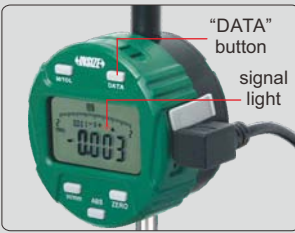



Continuous transmit (can be switched to single transmit)

Code	Description	Plug to measuring tool	Plug to computer	Connecting with measuring tool	Transmit data
7305-40M	cable for digital indicators (length 2.5m)			 <p>for 2108, 2138, 2139 series digital indicators</p>	<p>Continuous transmit is controlled in software</p> <p>Single transmit:</p> <ul style="list-style-type: none"> Press the "DATA" button of digital indicator, can also press the transmit button of the transmit box, or press the foot switch Data is transmitted once, the signal light of the transmit box flashes once, at the same time, the signal light on digital indicator flashes once <p>Note: long press transmit button to zero the digital indicators; software of data transmit is included</p>
				 <p>for other digital indicators</p>	<p>Continuous transmit is controlled in software</p> <p>Single transmit:</p> <ul style="list-style-type: none"> Press the transmit button of the transmit box, or press the foot switch Data is transmitted once, the signal light of the transmit box flashes once <p>Note: long press transmit button to zero the digital indicators; software of data transmit is included</p>

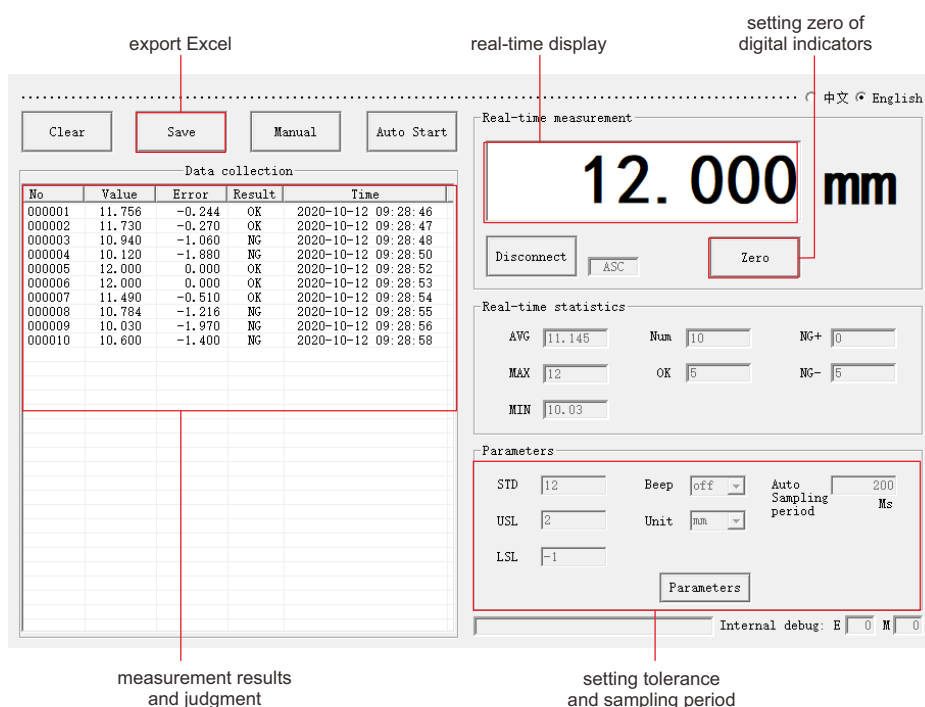
To be continued

Continued from previous page

Code	Description	Plug to measuring tool	Plug to computer	Connecting with measuring tool	Transmit data
7305-R40M	cable for digital indicators (length 2.5m)			 <p>for 2108, 2138, 2139 series digital indicators</p>	<p>Continuous transmit is controlled in software</p> <p>Single transmit:</p> <ul style="list-style-type: none"> Press the "DATA" button of digital indicator, can also press the transmit button of the transmit box, or press the foot switch Data is transmitted once, the signal light of the transmit box flashes once, at the same time, the signal light on digital indicator flashes once <p>Note: long press transmit button to zero the digital indicators; software of data transmit is included</p>
				 <p>for other digital indicators</p>	<p>Continuous transmit is controlled in software</p> <p>Single transmit:</p> <ul style="list-style-type: none"> Press the transmit button of the transmit box, or press the foot switch Data is transmitted once, the signal light of the transmit box flashes once <p>Note: long press transmit button to zero the digital indicators; software of data transmit is included</p>

Software (included in 7305-40M and 7305-R40M)

- Real-time display
- Tolerance setting, automatic judgment, out-of-tolerance alarm
- Real time statistics: max, min, average, Go/No-Go number
- Can save results as Excel



The screenshot shows the INSIZE software interface with the following components and annotations:

- export Excel:** Points to the 'Save' button in the top toolbar.
- real-time display:** Points to the large digital display showing '12.000 mm'.
- setting zero of digital indicators:** Points to the 'Zero' button below the display.
- measurement results and judgment:** Points to the 'Data collection' table.
- setting tolerance and sampling period:** Points to the 'Parameters' section.

Data collection table:

No	Value	Error	Result	Time
000001	11.756	-0.244	OK	2020-10-12 09:28:46
000002	11.730	-0.270	OK	2020-10-12 09:28:47
000003	10.940	-1.060	NG	2020-10-12 09:28:48
000004	10.120	-1.880	NG	2020-10-12 09:28:50
000005	12.000	0.000	OK	2020-10-12 09:28:52
000006	12.000	0.000	OK	2020-10-12 09:28:53
000007	11.490	-0.510	OK	2020-10-12 09:28:54
000008	10.784	-1.216	NG	2020-10-12 09:28:55
000009	10.030	-1.970	NG	2020-10-12 09:28:56
000010	10.600	-1.400	NG	2020-10-12 09:28:58

Real-time statistics:

AVG	11.145	Num	10	NG+	0
MAX	12	OK	5	NG-	5
MIN	10.03				

Parameters:

STD	12	Beep	off	Auto Sampling period	200
USL	2	Unit	mm		Ms
LSL	-1				

Internal debug: E 0 M 0

To be continued

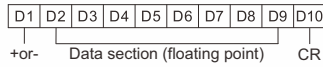
Continued from previous page

communication protocol

1

- Baud: 9600bps
Data bit: 8
Stop bit 1
Check bit: None
No flow control

▪ Data output format



Data format example	
Display	Output
1.234	➡ +0001.234 ✓
-1.234	➡ -0001.234 ✓

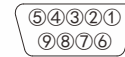
▪ Data output format with ID number



Data format example	
Display	Output
1.234	➡ 4109210605 +0001.234 ✓
-1.234	➡ 4109210605 -0001.234 ✓

- The data transmission mode can be switched: single or continuous;
The data output format can be switched: with ID number or without ID number;
Data of digital indicators can be transmitted by instruction;
The digital indicators can be zeroed by instruction

▪ Pin definition of RS232 plug:



Pin No.	Symbol	Description
2	TXD	Data OUT
3	RXD	Data IN
4	VDD	+5V Power
5	GND	Ground

2) Data output cables without transmit box







application



7305-G3350



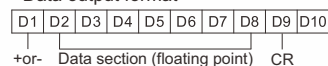
Single transmit

Code	Description	Plug to measuring tool	Plug to computer	Connecting with measuring tool	Transmit data
7305-G60	cable for high precision digital indicators (length 3m)				<ul style="list-style-type: none"> ▪ Press the "DATA" button of high precision digital indicator
7305-G3350	cable for digital micrometers (length 3m)				<ul style="list-style-type: none"> ▪ Press the "DATA" button of digital micrometer

communication protocol

- Baud: 9600bps
Data bit: 8
Stop bit 1
Check bit: None
No flow control

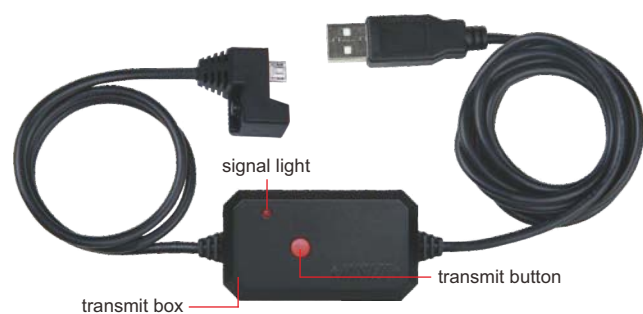
▪ Data output format



Data format example	
Display	Output
1.234	➡ +0001.234 ✓
-1.234	➡ -0001.234 ✓

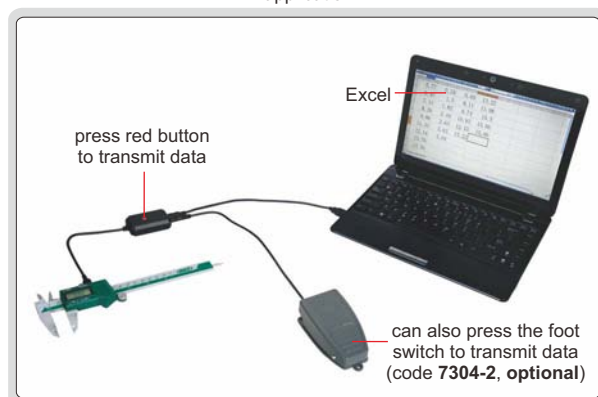
- Data of high precision digital indicators can be transmitted by instruction;
The high precision digital indicators can be zeroed by instruction

DATA OUTPUT CABLES (KEYBOARD FORMAT)



7302-21

application
















- Recognized as HID keyboard device by computer, no need to install drivers and softwares
- Data can be transmitted to Excel, Word, txt and other files (press transmit button, which is recognized by the computer as keyboard input data and press enter, such as 12.34↵)
- For any softwares which can receive keyboard signal
- Optional accessory: foot switch (code: 7304-2), hub (code: 7324-HUB4, 7324-HUB7), extension cables (code: 7325-ADD5, 7325-ADD10)

Code	Description	Plug	Connecting with measuring tool	Transmit data
7302-21	cable for digital calipers (length 3m)			<ul style="list-style-type: none"> ■ Press the transmit button on the plug of cable, can also press the transmit button of the transmit box, or press the foot switch ■ Data is transmitted once, the signal light of the transmit box flashes once
7302-22	cable for large digital calipers (length 2.5m)			<ul style="list-style-type: none"> ■ Press the transmit button of the transmit box, or press the foot switch ■ Data is transmitted once, the signal light of the transmit box flashes once
7302-30	cable for digital micrometers (length 2.5m)			<ul style="list-style-type: none"> ■ Press the "data" button of digital micrometer, can also press the transmit button of the transmit box, or press the foot switch ■ Data is transmitted once, the signal light of the transmit box flashes once, at the same time, the signal light on the digital micrometer flashes once
7302-31	cable for digital micrometers (length 2.5m)			<ul style="list-style-type: none"> ■ Press the "data" button of digital micrometer, can also press the transmit button of the transmit box, or press the foot switch ■ Data is transmitted once, the signal light of the transmit box flashes once, at the same time, the signal light on the digital micrometer flashes once

To be continued











Continued from the previous page

1

Code	Description	Plug	Connecting with measuring tool	Transmit data
7302-50M	cable for digital gages (length 2.5m)			<ul style="list-style-type: none"> Press the transmit button of the transmit box, or press the foot switch Data is transmitted once, the signal light of the transmit box flashes once
7302-40M	cable for digital indicators (length 2.5m)		 <p>for 2108, 2138, 2139 series digital indicators</p>	<ul style="list-style-type: none"> Press the "DATA" button of digital indicator, can also press the transmit button of the transmit box, or press the foot switch Data is transmitted once, the signal light of the transmit box flashes once, at the same time, the signal light on digital indicator flashes once <p>Note: long press transmit button to zero the digital indicators</p>
			 <p>for other digital indicators</p>	<ul style="list-style-type: none"> Press the transmit button of the transmit box, or press the foot switch Data is transmitted once, the signal light of the transmit box flashes once <p>Note: long press transmit button to zero the digital indicators</p>
7302-60	cable for high precision digital indicators (length 2.5m)		 <p>"DATA" button</p>	<ul style="list-style-type: none"> Press the "DATA" button of high precision digital indicator, can also press the transmit button of the transmit box, or press the foot switch Data is transmitted once, the signal light of the transmit box flashes once
7302-3350	cable for digital micrometers (length 2.5m)		 <p>"DATA" button</p>	<ul style="list-style-type: none"> Press the "DATA" button of digital micrometer, can also press the transmit button of the transmit box, or press the foot switch Data is transmitted once, the signal light of the transmit box flashes once
7302-1151	cable for digital height gages (length 2.5m)			<ul style="list-style-type: none"> Press the transmit button of the transmit box, or press the foot switch Data is transmitted once, the signal light of the transmit box flashes once
7302-SPC7	cable for digital height gages (length 2.5m)			<ul style="list-style-type: none"> Press the transmit button of the transmit box, or press the foot switch Data is transmitted once, the signal light of the transmit box flashes once

To be continued

Continued from the previous page

Code	Description	Plug	Connecting with measuring tool	Transmit data
7302-8001	cable for weighing scales (length 2.5m)		 <p>back</p>  <p>for 8301 and 8305 series electronic balances</p>	<ul style="list-style-type: none"> Press the “” button of electronic balances, can also press the transmit button of the transmit box, or press the foot switch Data is transmitted once, the signal light of the transmit box flashes once
			 <p>back</p>  <p>for 8001-6D, 8001-15D, 8001-30D series weighing scales and 8501 series platform scales</p>	<ul style="list-style-type: none"> Press the transmit button of the transmit box, or press the foot switch Data is transmitted once, the signal light of the transmit box flashes once
7302-8304	cable for electronic balances (length 3m)		 <p>back</p> 	<ul style="list-style-type: none"> Press the “” button of electronic balances, can also press the transmit button of the transmit box, or press the foot switch Data is transmitted once, the signal light of the transmit box flashes once

DISPLAY UNIT CODE 7106-1A

REFER TO PAGE 261
FOR DETAILS



connected with digital indicator



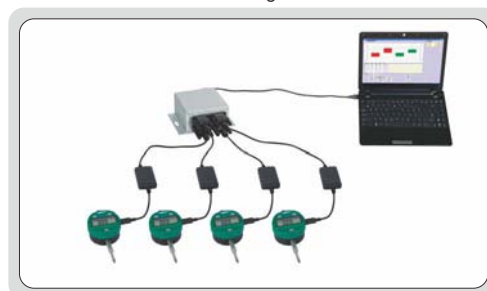
MULTICHANNEL INTERFACE BOXES

REFER TO PAGE 262
FOR DETAILS



7107-1

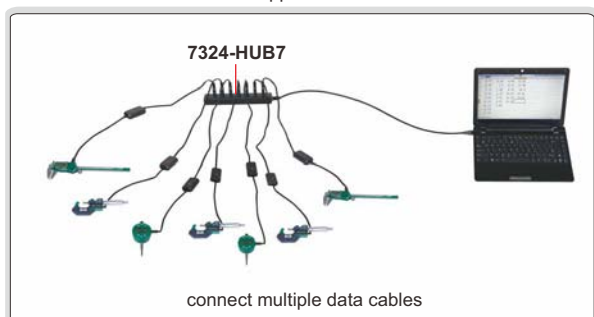
connected with digital indicators



HUBS

1

application



7324-HUB4



7324-HUB7

Code	Description	Applicable products
7324-HUB4	4-channel hub (length 0.2m, USB computer plug)	7302 series data cables
7324-HUB7	7-channel hub (length 1m, USB computer plug)	7305 series data cables (USB plug)

- For USB plug data cable

EXTENSION CABLES

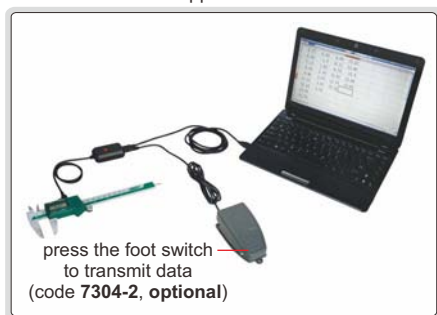
application



7325-ADD5

Code	Description	Applicable products
7325-ADD5	data extension cable (length 5m, USB plug)	7302 series data cables
7325-ADD10	data extension cable (length 10m, USB plug)	7305 series data cables (USB plug)

application



7304-2

FOOT SWITCH

- For data transmission

Code	Description	Applicable products
7304-2	data transmission foot switch with cable (length 2m)	7302 series data cables 7305 series data cables

OK/NG INPUT SWITCHES



7327-FS



7327-SW

Code	Description
7327-FS	foot switch for OK/NG input
7327-SW	hand switch for OK/NG input

- Used with 7317 software, output OK or NG
- USB plug, length 1.5m

application





Digital Calipers
Page 17-24



Vernier Calipers
Page 24-28



Dial Calipers
Page 28



Large Digital Calipers
Page 29-31



Large Vernier Calipers
Page 31-33



Depth Base Attachments
Page 34



Caliper/Height Gage Checkers
Page 34



Caliper End Grinding Machines
Page 34



Accessory Sets For Digital Calipers
Page 35-36



Special Purpose Calipers
Page 37-66



DATA
OUTPUT

IP67
WATERPROOF

- IP67 dust/waterproof
- Resolution: 0.01mm/0.0005"
- Button function: zero, mm/inch, preset, data output
- Battery CR2032
- Automatic power off, move the digital unit to turn on power
- Data output
- Meet DIN862
- Made of stainless steel
- Optional accessory: data output cable
(code 7315-80 need receiver page 5, 7302-80)

IP67 WATERPROOF DIGITAL CALIPERS

INSIZE PLUS
MADE IN EUROPE

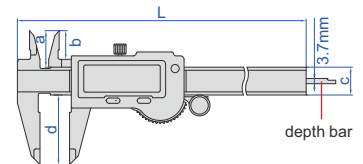


1195-150

Code	Range	Accuracy	L	a	b	c	d	Remark
1195-150*	0-150mm/0-6"	±0.02mm	235	21	16.5	16	40	with depth bar
1195-200*	0-200mm/0-8"	±0.03mm	290	24.5	20	16	50	with depth bar
1195-300*	0-300mm/0-12"	±0.03mm	387	23	18.5	16	64	without depth bar

* Supplied with manufacturer inspection certificate

(mm)



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

ATTENTION:
NO DATA OUTPUT

IP67
WATERPROOF

IP67 WATERPROOF DIGITAL CALIPERS

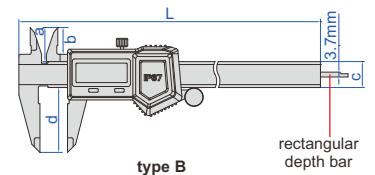


1118-150B

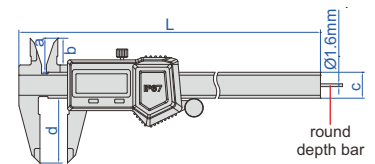


1118-150R

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



type B



type R

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

* Supplied with manufacturer inspection certificate

ATTENTION:
NO DATA OUTPUT

IP67
WATERPROOF

IP67 WATERPROOF DIGITAL CALIPERS



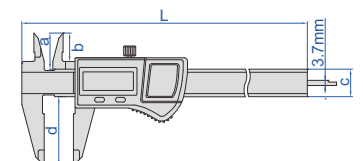
- IP67 dust/waterproof
- Resolution: 0.01mm/0.0005"
- Button function: zero, on/off, mm/inch
- Battery CR2032
- Automatic power off
- Meet DIN862
- Made of stainless steel



1115-150

Code	Range	Accuracy	L	a	b	c	d
1115-150*	0-150mm/0-6"	±0.03mm	235mm	20mm	15mm	16mm	40mm
1115-200*	0-200mm/0-8"	±0.03mm	287mm	24mm	19mm	16mm	50mm
1115-300*	0-300mm/0-12"	±0.03mm	388mm	26mm	21mm	16mm	60mm

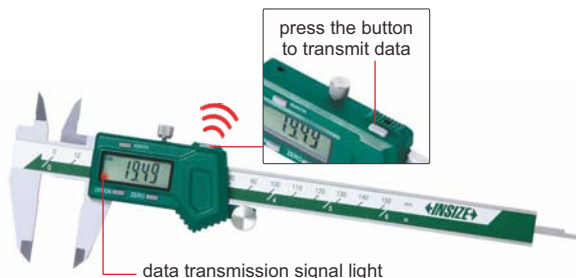
* Supplied with manufacturer inspection certificate



WIRELESS DIGITAL CALIPERS

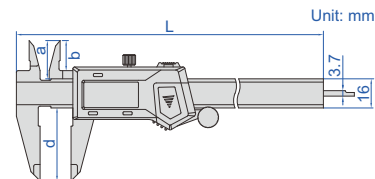


ATTENTION: THE WORKING LIFE OF A BATTERY IS ABOUT 3-5 MONTHS

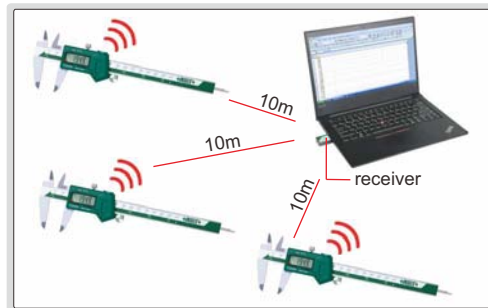


1113-150

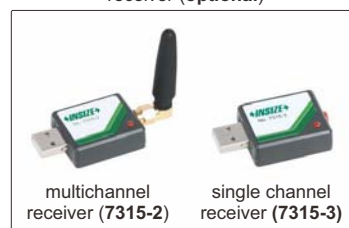
- Non waterproof
- Built-in wireless data transmission module, Zigbee signal
- Transmission distance is 10 meter (under the condition of no obstruction and no electromagnetic interference)
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch, data transmission
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Made of stainless steel
- Optional accessory: receiver (code 7315-2/3/6/7/8/9)



application



receiver (optional)



Code	Range	Accuracy	L	a	b	d
1113-150*	0-150mm/0-6"	±0.03mm	236	21	16	40
1113-200*	0-200mm/0-8"	±0.03mm	286	24	19	50
1113-300*	0-300mm/0-12"	±0.03mm	400	25	20.5	60

*Supplied with manufacturer inspection certificate

DIGITAL CALIPERS (ABSOLUTE SYSTEM)

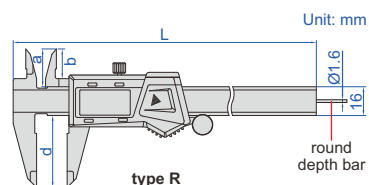
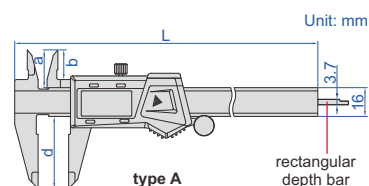


1103-150

- Non waterproof
- Absolute system, low power consumption, long battery life
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, mm/inch, ORIGIN, ZERO/ABS
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Data output
- Meet DIN862
- Made of stainless steel
- Optional accessory: wireless transmitter, code 7315-22 need receiver page 4, data output cable (keyboard format), code 7302-22 page 12

Code	Range	Accuracy	Type	L	a	b	d
1103-150*	0-150mm/0-6"	±0.03mm	A	236mm	21mm	16.5mm	40mm
1103-200*	0-200mm/0-8"	±0.03mm	A	286mm	24mm	19.5mm	50mm
1103-300*	0-300mm/0-12"	±0.03mm	A	400mm	26mm	21.5mm	60mm
1103-150R*	0-150mm/0-6"	±0.03mm	R	236mm	21mm	16.5mm	40mm

*Supplied with manufacturer inspection certificate



DATA
OUTPUT

INSPECTION
CERTIFICATE

DIGITAL CALIPERS (FRACTION READING)

- Non waterproof
- Resolution: 1/128", 0.01mm, 0.0005"
- Buttons: unit (inch fraction/mm/inch), on/off, zero
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Data output (for mm and inch)
- Meet DIN862
- Made of stainless steel
- Optional accessory: data output cable
(code **7315-21** need receiver page 4, **7302-21** page 12)



1102-150



inch fraction reading



mm reading

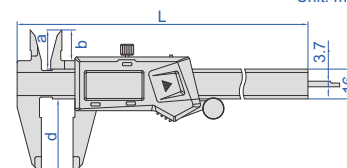


inch reading

Unit: mm

Code	Range	Accuracy	L	a	b	d
1102-150 *	0-150mm/0-6"	±0.02mm	236mm	21mm	16mm	40mm
1102-200 *	0-200mm/0-8"	±0.03mm	286mm	24mm	19mm	50mm
1102-300 *	0-300mm/0-12"	±0.03mm	400mm	25mm	20.5mm	60mm

* Supplied with manufacturer inspection certificate



ATTENTION:
NO DATA OUTPUT

INSPECTION
CERTIFICATE

DIGITAL CALIPERS

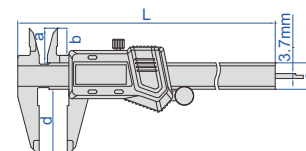
- Non waterproof
- Zinc alloy housing for digital unit
- Resolution: 0.01mm/0.0005"
- Buttons: zero, on/off, mm/inch
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Meet DIN862
- Made of stainless steel



1114-150A

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

* Supplied with manufacturer inspection certificate



DATA
OUTPUT

INSPECTION
CERTIFICATE

POPULAR
MODEL

DIGITAL CALIPERS (STANDARD TYPE)

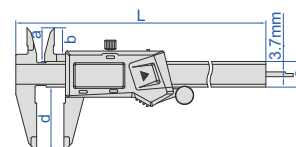
- Non waterproof
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Data output
- Meet DIN862
- Made of stainless steel
- Optional accessory: data output cable
(code **7315-21** need receiver page 4, **7302-21** page 12)



1108-150

Code	Range	Accuracy	L	a	b	c	d
1108-150 *	0-150mm/0-6"	±0.02mm	236mm	21mm	16mm	16mm	40mm
1108-200 *	0-200mm/0-8"	±0.03mm	286mm	24mm	19mm	16mm	50mm
1108-250 *	0-250mm/0-10"	±0.03mm	350mm	25mm	20.5mm	16mm	60mm
1108-300 *	0-300mm/0-12"	±0.03mm	400mm	25mm	20.5mm	16mm	60mm

* Supplied with manufacturer inspection certificate



HEAVY DUTY 300mm DIGITAL CALIPER

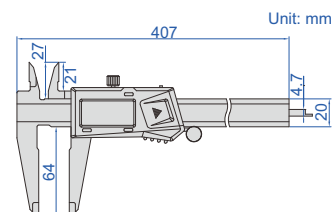
DATA
OUTPUT

INSPECTION
CERTIFICATE

- Non waterproof
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Data output
- Meet DIN862
- Made of stainless steel
- Optional accessory: data output cable (code 7315-22 need receiver page 4, 7302-22 page 12)



1196-300



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

* Supplied with manufacturer inspection certificate

METRIC DIGITAL CALIPERS

INSPECTION
CERTIFICATE

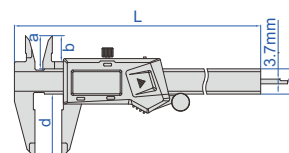
LOCK READING WITH
"HOLD" BUTTON

DATA
OUTPUT

- Non waterproof
- Resolution: 0.01mm
- Buttons: on/off, zero, hold
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Data output
- Meet DIN862
- Made of stainless steel
- Optional accessory: data output cable (code 7315-21 need receiver page 4, 7302-21 page 12)



1109-150



Code	Range	Accuracy	L	a	b	c	d
1109-150 *	0-150mm	±0.03mm	236mm	21mm	16mm	16mm	40mm
1109-200 *	0-200mm	±0.03mm	286mm	24mm	19mm	16mm	50mm
1109-300 *	0-300mm	±0.03mm	400mm	25mm	20.5mm	16mm	60mm

* Supplied with manufacturer inspection certificate

DIGITAL CALIPERS WITH ROUND DEPTH BAR

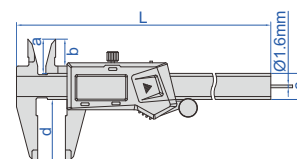
INSPECTION
CERTIFICATE

DATA
OUTPUT

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



1119-150



With data interface (data output cable code 7315-21 need receiver page 4, 7302-21 page 12, optional)

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



round depth
bar Ø1.6mm

Built-in wireless (receiver code 7315-2/3/6/7/8/9 is required)

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

* Supplied with manufacturer inspection certificate



LEFT HAND DIGITAL CALIPERS

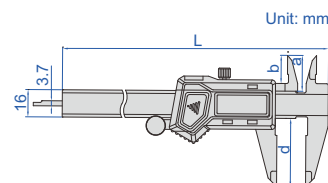
- Non waterproof
- Designed for left handed users
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Data output
- Meet DIN862
- Made of stainless steel
- Optional accessory: data output cable (code 7315-22 need receiver page 4, 7302-22 page 12)



1130-150

Code	Range	Accuracy	L	a	b	d
1130-150*	0-150mm/0-6"	±0.03mm	236mm	21mm	16mm	40mm
1130-200*	0-200mm/0-8"	±0.03mm	286mm	24mm	19mm	50mm
1130-300*	0-300mm/0-12"	±0.03mm	400mm	25mm	20.5mm	60mm

* Supplied with manufacturer inspection certificate



Unit: mm

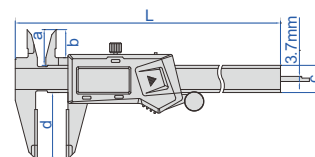


DIGITAL CALIPERS WITH CERAMIC TIPPED JAWS

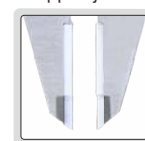


1193-150

- Non waterproof
- Ceramic tipped jaws for outside measurement, extremely wear-resistant, non-magnetic and non electric conductive
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Battery CR2032, made of stainless steel
- Meet DIN862



ceramic
tipped jaws



With data interface (data output cable code 7315-21 need receiver page 4, 7302-21 page 12, optional)

Code	Range	Accuracy	L	a	b	c	d
1193-150*	0-150mm/0-6"	±0.03mm	235mm	21mm	16.5mm	16mm	40mm
1193-200*	0-200mm/0-8"	±0.03mm	287mm	24mm	20mm	16mm	50mm
1193-300*	0-300mm/0-12"	±0.03mm	390mm	26mm	21.5mm	16mm	60mm

Built-in wireless (receiver code 7315-2/3/6/7/8/9 is required)

Code	Range	Accuracy	L	a	b	c	d
1193-150WL*	0-150mm/0-6"	±0.03mm	235mm	21mm	16.5mm	16mm	40mm
1193-200WL*	0-200mm/0-8"	±0.03mm	287mm	24mm	20mm	16mm	50mm
1193-300WL*	0-300mm/0-12"	±0.03mm	390mm	26mm	21.5mm	16mm	60mm

* Supplied with manufacturer inspection certificate

DIGITAL CALIPERS WITH CARBIDE TIPPED JAWS



2

carbide measuring faces



1110-150A

steel measuring faces



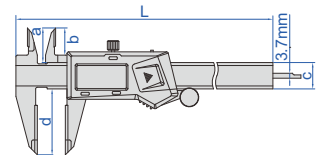
1110-150B

carbide measuring faces



1110-150C

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



Non waterproof, with data interface (data output cable code 7315-21 need receiver page 4, 7302-21 page 12, optional)

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

Non waterproof, built-in wireless (receiver code 7315-2/3/6/7/8/9 is required)

Code	Range	Accuracy	L	a	b	c	d	Remark
1110-150AWL *	0-150mm/0-6"	±0.03mm	236mm	21mm	16mm	16mm	40mm	carbide tipped upper and lower jaws
1110-200AWL *	0-200mm/0-8"	±0.03mm	286mm	24mm	19mm	16mm	50mm	carbide tipped upper and lower jaws
1110-300AWL *	0-300mm/0-12"	±0.03mm	400mm	25mm	20.5mm	16mm	60mm	carbide tipped upper and lower jaws
1110-150BWL *	0-150mm/0-6"	±0.03mm	236mm	21mm	16mm	16mm	40mm	carbide tipped lower jaws
1110-200BWL *	0-200mm/0-8"	±0.03mm	286mm	24mm	19mm	16mm	50mm	carbide tipped lower jaws
1110-300BWL *	0-300mm/0-12"	±0.03mm	400mm	25mm	20.5mm	16mm	60mm	carbide tipped lower jaws

IP67 dust/waterproof, without data interface

Code	Range	Accuracy	L	a	b	c	d	Remark
1110-150C *	0-150mm/0-6"	±0.03mm	236mm	21mm	16mm	16mm	40mm	carbide tipped upper and lower jaws
1110-150D *	0-150mm/0-6"	±0.03mm	236mm	21mm	16mm	16mm	40mm	carbide tipped lower jaws

* Supplied with manufacturer inspection certificate

DATA
OUTPUT

DIGITAL CALIPERS

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

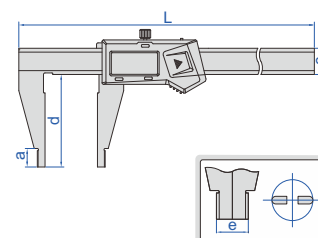


1170-300

With data interface

(data output cable code 7315-21 need receiver page 4, 7302-21 page 12, optional)

Code	Range	Accuracy	a	c	d	e	L
1170-200	0-200mm/0-8"	±0.03mm	12mm	17mm	60mm	10mm	314mm
1170-306	0-300mm/0-12"	±0.04mm	12mm	17mm	60mm	10mm	420mm
1170-300	0-300mm/0-12"	±0.06mm	12mm	17mm	90mm	10mm	420mm



Built-in wireless (receiver code 7315-2/3/6/7/8/9 is required)

Code	Range	Accuracy	a	c	d	e	L
1170-200WL	0-200mm/0-8"	±0.03mm	12mm	17mm	60mm	10mm	314mm
1170-306WL	0-300mm/0-12"	±0.04mm	12mm	17mm	60mm	10mm	420mm
1170-300WL	0-300mm/0-12"	±0.06mm	12mm	17mm	90mm	10mm	420mm

DATA
OUTPUT

DIGITAL CALIPERS

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

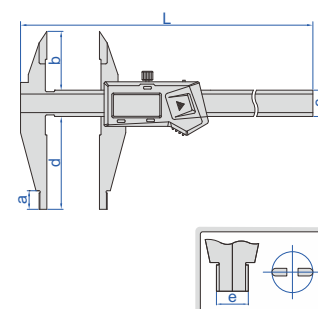


1171-300

With data interface

(data output cable code 7315-21 need receiver page 4, 7302-21 page 12, optional)

Code	Range	Accuracy	a	b	c	d	e	L
1171-200	0-200mm/0-8"	±0.03mm	12mm	38mm	17mm	60mm	10mm	320mm
1171-250	0-250mm/0-10"	±0.03mm	12mm	38mm	17mm	60mm	10mm	365mm
1171-306	0-300mm/0-12"	±0.04mm	12mm	38mm	17mm	60mm	10mm	420mm
1171-300	0-300mm/0-12"	±0.06mm	12mm	38mm	17mm	90mm	10mm	420mm



Built-in wireless (receiver code 7315-2/3/6/7/8/9 is required)

Code	Range	Accuracy	a	b	c	d	e	L
1171-200WL	0-200mm/0-8"	±0.03mm	12mm	38mm	17mm	60mm	10mm	320mm
1171-250WL	0-250mm/0-10"	±0.03mm	12mm	38mm	17mm	60mm	10mm	365mm
1171-306WL	0-300mm/0-12"	±0.04mm	12mm	38mm	17mm	60mm	10mm	420mm
1171-300WL	0-300mm/0-12"	±0.06mm	12mm	38mm	17mm	90mm	10mm	420mm

MINI DIGITAL CALIPERS

ATTENTION:
NO DATA OUTPUT

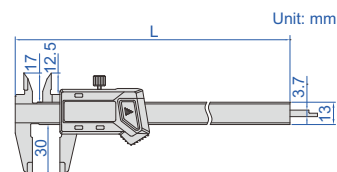
2

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



1111-100A

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



PLASTIC DIGITAL CALIPER

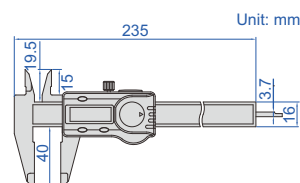
ATTENTION:
NO DATA OUTPUT

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



1139-150

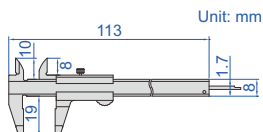
Code	Range	Accuracy
1139-150	0-150mm/0-6"	±0.1mm



MINI VERNIER CALIPERS

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

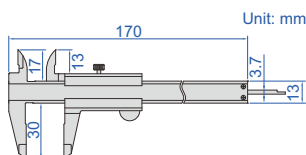
Code	Range	Graduation	Accuracy
1204-70	0-70mm	0.05mm	±0.05mm



1204-70



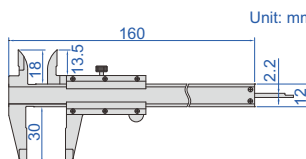
Code	Range	Graduation	Accuracy
1203-1003	0-100mm	0.05mm	±0.05mm



1203-1003



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



1201-1003



POPULAR
MODEL

VERNIER CALIPERS

2



1205-150S

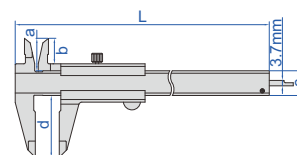
Graduation 0.05mm/1/128" (mm)							
Code	Range	Accuracy	L	a	b	c	d
1205-150S	0-150mm/0-6"	±0.05mm	235	20.5	15.5	16	40
1205-200S	0-200mm/0-8"	±0.05mm	290	23.5	19	17	50
1205-250S	0-250mm/0-10"	±0.05mm	364	27.5	22	20	64
1205-300S	0-300mm/0-12"	±0.05mm	414	27.5	22	20	64

Graduation 0.05mm (mm)							
Code	Range	Accuracy	L	a	b	c	d
1205-1503S	0-150mm	±0.05mm	235	20.5	15.5	16	40
1205-2003S	0-200mm	±0.05mm	290	23.5	19	17	50
1205-2503S	0-250mm	±0.05mm	350	26	21.5	16	60
1205-3003S	0-300mm	±0.05mm	414	27.5	22	20	64

Graduation 0.02mm/0.001" (mm)							
Code	Range	Accuracy	L	a	b	c	d
1205-1502S	0-150mm/0-6"	±0.03mm	235	20.5	15.5	16	40
1205-2002S	0-200mm/0-8"	±0.03mm	290	23.5	19	17	50
1205-2502S	0-250mm/0-10"	±0.03mm	364	27.5	22	20	64
1205-3002S	0-300mm/0-12"	±0.03mm	414	27.5	22	20	64

Graduation 0.02mm (mm)							
Code	Range	Accuracy	L	a	b	c	d
1205-1501S	0-150mm	±0.03mm	235	20.5	15.5	16	40
1205-2001S	0-200mm	±0.03mm	290	23.5	19	17	50
1205-2501S	0-250mm	±0.03mm	350	26	21.5	16	60
1205-3001S	0-300mm	±0.03mm	414	27.5	22	20	64

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



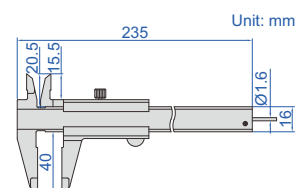
VERNIER CALIPER WITH ROUND DEPTH BAR



1202-150

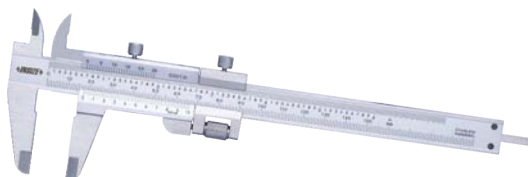
- Graduation 0.05mm/1/128"
- Round depth bar
- Meet DIN862
- Made of stainless steel
- Satin chrome plated reading surface

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



VERNIER CALIPERS WITH FINE ADJUSTMENT

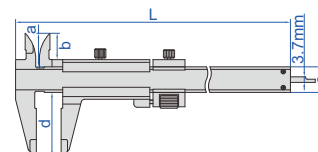
- Graduation 0.02mm/0.001"
- With fine adjustment
- Meet DIN862
- Made of stainless steel
- Satin chrome plated reading surface



1233-130

Code	Range	Accuracy	L	a	b	c	d
1233-130	0-130mm/0-5"	±0.03mm	230	20.5	16.5	16	40
1233-180	0-180mm/0-7"	±0.03mm	295	23.5	19	16	50
1233-280	0-280mm/0-11"	±0.03mm	410	26	20	20	60

(mm)



VERNIER CALIPERS WITH THUMB CLAMP

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

Graduation 0.05mm/1/128"

(mm)

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

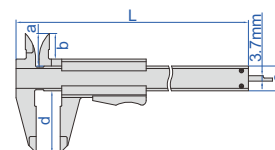


1223-150

Graduation 0.02mm/0.001"

(mm)

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



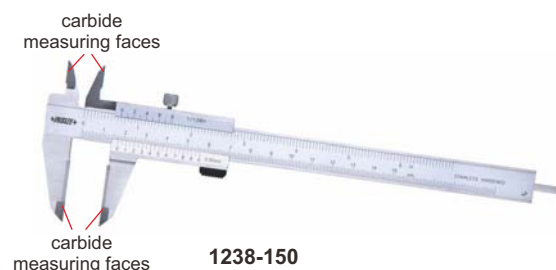
VERNIER CALIPERS WITH CARBIDE TIPPED JAWS

- Carbide tipped jaws for inside and outside measurements
- Meet DIN862
- Made of stainless steel
- Satin chrome plated reading surface

Graduation 0.05mm/1/128"

(mm)

Code	Range	Accuracy	L	a	b	c	d
1238-150	0-150mm/0-6"	±0.05mm	230	21	16.5	16	40
1238-200	0-200mm/0-8"	±0.05mm	295	24	19	16	50
1238-300	0-300mm/0-12"	±0.05mm	410	25	20	16	60

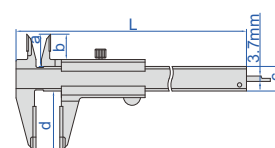


1238-150

Graduation 0.02mm/0.001"

(mm)

Code	Range	Accuracy	L	a	b	c	d
1238-1502	0-150mm/0-6"	±0.03mm	230	21	16.5	16	40
1238-2002	0-200mm/0-8"	±0.03mm	295	24	19	16	50
1238-3002	0-300mm/0-12"	±0.03mm	410	25	20	16	60



VERNIER CALIPERS

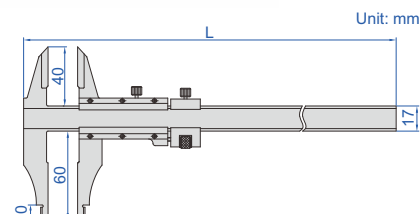
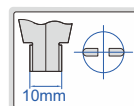
2



1217-3001

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

Code	Range	Graduation	Accuracy	L
1217-2503	0-250mm	0.05mm	±0.05mm	360mm
1217-3001	0-300mm	0.02mm	±0.03mm	410mm



ATTENTION:
NOT HARDENED

PURE COPPER

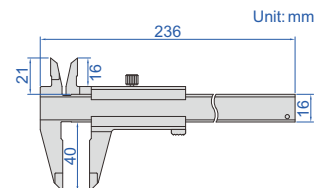
VERNIER CALIPERS (ANTI MAGNETIC)



1224-150A

- Suitable for magnetic parts
- Made of pure copper

Code	Range	Graduation	Accuracy
1224-150A	0-150mm	0.02mm	±0.05mm
1224-1501A	0-150mm	0.05mm	±0.05mm



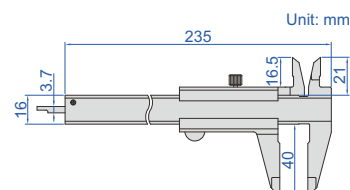
LEFT HAND VERNIER CALIPERS



1239-1502

- Designed for left handed users
- Made of stainless steel
- Satin chrome plated reading surface

Code	Range	Graduation	Accuracy
1239-150	0-150mm/0-6"	0.05mm/1/128"	±0.05mm
1239-1503	0-150mm	0.05mm	±0.05mm
1239-1502	0-150mm/0-6"	0.02mm/0.001"	±0.03mm
1239-1501	0-150mm	0.02mm	±0.03mm



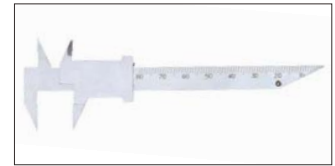
TEETH VERNIER CALIPER

- Used for teeth
- Made of stainless steel

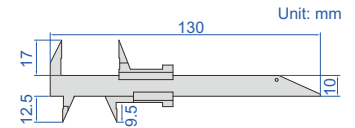


1226-70

scale on the back



Code	Range	Graduation	Accuracy
1226-70	0-70mm	0.1mm	±0.1mm

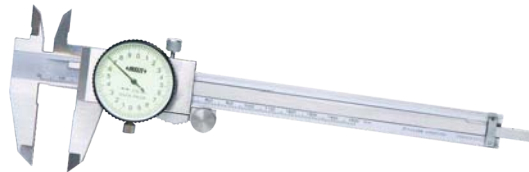


DIAL CALIPERS

SHOCK
PROOF

INSPECTION
CERTIFICATE

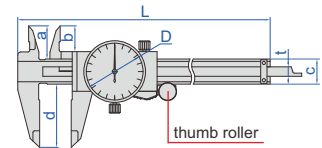
- Shockproof dial indicator
- Made of stainless steel



1312-150A

Dial indicator graduation: 0.02mm

Code	Range	Accuracy	Thumb roller	L	a	b	c	d	D	t
1312-150A *	0-150mm	±0.03mm	with	235	21	16.5	16	40	Ø39	6.5
1312-200A *	0-200mm	±0.03mm	with	288	24	19	16	48	Ø39	6.5
1312-300A *	0-300mm	±0.03mm	with	410	28	22	20	62	Ø44.5	7.5
1312-100AW *	0-100mm	±0.02mm	without	165	18	13	13	30	Ø32	6



Dial indicator graduation: 0.01mm

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

*Supplied with manufacturer inspection certificate

DIAL CALIPERS

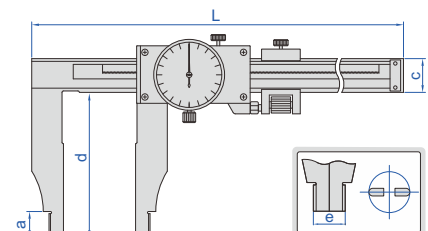
SHOCK
PROOF



1316-500

- Shockproof dial indicator
- Dial indicator graduation: 0.02mm
- Made of stainless steel

Code	Range	Accuracy	a	c	d	e	L
1316-500	0-500mm	±0.05mm	18	21	90	20	650
1316-600	0-600mm	±0.05mm	18	21	90	20	750
1316-1000	0-1000mm	±0.07mm	24	28	150	20	1190
1316-1500	0-1500mm	±0.11mm	24	28	150	20	1690



DATA
OUTPUT

POPULAR
MODEL

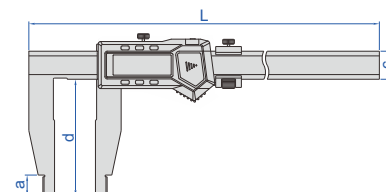
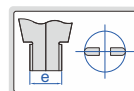
DIGITAL CALIPERS

2



1106-501

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



With data interface

(mm)

Code	Range	Accuracy	a	c	d	e	L	Data output cable (optional)
1106-301	0-300mm/0-12"	±0.05mm	18	24	100	20	420	7315-22 need receiver page 4, 7302-22 page 12
1106-302	0-300mm/0-12"	±0.05mm	18	24	150	20	420	7315-22 need receiver page 4, 7302-22 page 12
1106-451	0-450mm/0-18"	±0.05mm	18	24	100	20	625	7315-22 need receiver page 4, 7302-22 page 12
1106-501	0-500mm/0-20"	±0.05mm	18	24	100	20	675	7315-22 need receiver page 4, 7302-22 page 12
1106-502	0-500mm/0-20"	±0.06mm	18	24	150	20	675	7315-22 need receiver page 4, 7302-22 page 12
1106-503	0-500mm/0-20"	±0.06mm	24	31	200	20	675	7315-22 need receiver page 4, 7302-22 page 12
1106-505	0-500mm/0-20"	±0.08mm	24	42	300	20	675	7315-20B need receiver, 7302-SPC1A
1106-601	0-600mm/0-24"	±0.05mm	18	24	100	20	770	7315-22 need receiver page 4, 7302-22 page 12
1106-602	0-600mm/0-24"	±0.06mm	18	24	150	20	770	7315-22 need receiver page 4, 7302-22 page 12
1106-603	0-600mm/0-24"	±0.06mm	24	31	200	20	770	7315-22 need receiver page 4, 7302-22 page 12
1106-802	0-800mm/0-32"	±0.07mm	24	31	150	20	1025	7315-22 need receiver page 4, 7302-22 page 12
1106-1002	0-1000mm/0-40"	±0.08mm	24	31	150	20	1220	7315-22 need receiver page 4, 7302-22 page 12
1106-1003	0-1000mm/0-40"	±0.08mm	24	31	200	20	1220	7315-22 need receiver page 4, 7302-22 page 12
1106-1005	0-1000mm/0-40"	±0.10mm	24	42	300	20	1220	7315-20B need receiver, 7302-SPC1A
1106-1502	0-1500mm/0-60"	±0.11mm	24	42	150	20	1780	7315-20B need receiver, 7302-SPC1A
1106-1503	0-1500mm/0-60"	±0.12mm	24	42	200	20	1780	7315-20B need receiver, 7302-SPC1A
1106-2002	0-2000mm/0-80"	±0.14mm	24	42	150	20	2290	7315-20B need receiver, 7302-SPC1A
1106-2003	0-2000mm/0-80"	±0.14mm	24	42	200	20	2290	7315-20B need receiver, 7302-SPC1A
1106-2502	0-2500mm/0-100"	±0.22mm	24	42	150	20	2800	7315-20B need receiver, 7302-SPC1A
1106-3002	0-3000mm/0-120"	±0.26mm	24	42	150	20	3300	7315-20B need receiver, 7302-SPC1A

Built-in wireless (receiver code 7315-2/3/6/7/8/9 is required)

Code	Range	Accuracy	a	c	d	e	L
1106-301WL	0-300mm/0-12"	±0.05mm	18mm	24mm	100mm	20mm	420mm
1106-302WL	0-300mm/0-12"	±0.05mm	18mm	24mm	150mm	20mm	420mm
1106-451WL	0-450mm/0-18"	±0.05mm	18mm	24mm	100mm	20mm	625mm
1106-501WL	0-500mm/0-20"	±0.05mm	18mm	24mm	100mm	20mm	675mm
1106-502WL	0-500mm/0-20"	±0.06mm	18mm	24mm	150mm	20mm	675mm
1106-601WL	0-600mm/0-24"	±0.05mm	18mm	24mm	100mm	20mm	770mm
1106-602WL	0-600mm/0-24"	±0.06mm	18mm	24mm	150mm	20mm	770mm

DIGITAL CALIPERS

DATA
OUTPUT

2

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

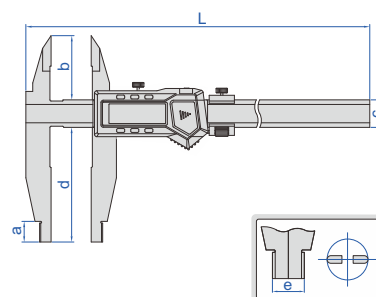


1117-501

With data interface

(data output cable code 7315-22 need receiver page 4, 7302-22 page 12, optional)

Code	Range	Accuracy	a	b	c	d	e	L
1117-301	0-300mm/0-12"	±0.05mm	18mm	56mm	24mm	100mm	20mm	420mm
1117-501	0-500mm/0-20"	±0.05mm	18mm	56mm	24mm	100mm	20mm	675mm
1117-502	0-500mm/0-20"	±0.06mm	24mm	56mm	24mm	150mm	20mm	675mm
1117-601	0-600mm/0-24"	±0.05mm	18mm	56mm	24mm	100mm	20mm	770mm
1117-802	0-800mm/0-32"	±0.07mm	24mm	67mm	31mm	150mm	20mm	1025mm
1117-1002	0-1000mm/0-40"	±0.08mm	24mm	67mm	31mm	150mm	20mm	1220mm



Built-in wireless (receiver code 7315-2/3/6/7/8/9 is required)

Code	Range	Accuracy	a	b	c	d	e	L
1117-301WL	0-300mm/0-12"	±0.05mm	18mm	56mm	24mm	100mm	20mm	420mm
1117-501WL	0-500mm/0-20"	±0.05mm	18mm	56mm	24mm	100mm	20mm	675mm
1117-502WL	0-500mm/0-20"	±0.06mm	24mm	56mm	24mm	150mm	20mm	675mm
1117-601WL	0-600mm/0-24"	±0.05mm	18mm	56mm	24mm	100mm	20mm	770mm

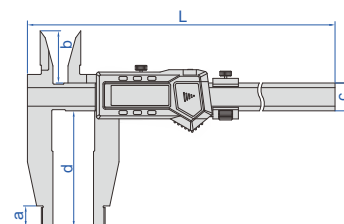
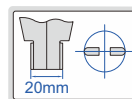
DIGITAL CALIPERS

DATA
OUTPUT

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



1136-501



With data interface (data output cable code 7315-22 need receiver page 4, 7302-22 page 12, optional, for calipers with c=24mm or 31mm)

Code	Range	Accuracy	a	b	c	d	L
1136-301	0-300mm/0-12"	±0.05mm	18	45	24	100	420
1136-451	0-450mm/0-18"	±0.05mm	18	45	24	100	625
1136-501	0-500mm/0-20"	±0.05mm	18	45	24	100	675
1136-502	0-500mm/0-20"	±0.06mm	18	45	24	150	675
1136-503	0-500mm/0-20"	±0.06mm	24	60	31	200	675
1136-601	0-600mm/0-24"	±0.05mm	18	45	24	100	770
1136-1002	0-1000mm/0-40"	±0.08mm	24	60	31	150	1220
1136-1502	0-1500mm/0-60"	±0.11mm	24	60	42	150	1780
1136-2002	0-2000mm/0-80"	±0.14mm	24	60	42	150	2290

Built-in wireless

(receiver code 7315-2/3/6/7/8/9 is required)

(mm)

Code	Range	Accuracy	a	b	c	d	L
1136-301WL	0-300mm/0-12"	±0.05mm	18	45	24	100	420
1136-451WL	0-450mm/0-18"	±0.05mm	18	45	24	100	625
1136-501WL	0-500mm/0-20"	±0.05mm	18	45	24	100	675
1136-502WL	0-500mm/0-20"	±0.06mm	18	45	24	150	675
1136-601WL	0-600mm/0-24"	±0.05mm	18	45	24	100	770

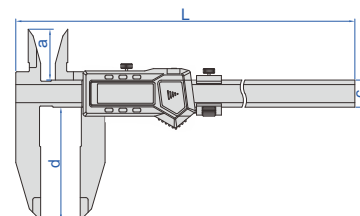
DATA
OUTPUT

DIGITAL CALIPERS



1135-601

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



With data interface (data output cable code 7315-22 need receiver page 4, 7302-22 page 12, optional) (mm)

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

Built-in wireless (receiver code 7315-2/3/6/7/8/9 is required) (mm)

Code	Range	Accuracy	a	c	d	L
1135-451WL	0-450mm/0-18"	±0.05mm	45	24	100	625
1135-601WL	0-600mm/0-24"	±0.05mm	45	24	100	770

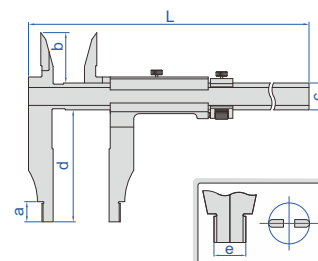
VERNIER CALIPERS (SOLID TYPE)

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



1236-521

solid type
(without screw)



Graduation 0.05mm/1/128" (mm)

Code	Range	Accuracy	a	b	c	d	e	L
1236-394	0-300mm/0-12"	±0.07mm	12	38	20	90	10	450
1236-514	0-500mm/0-20"	±0.07mm	18	45	24	100	20	670
1236-524	0-500mm/0-20"	±0.08mm	18	45	24	150	20	670
1236-614	0-600mm/0-24"	±0.08mm	18	45	24	100	20	770
1236-824	0-800mm/0-32"	±0.09mm	24	60	31	150	20	1030
1236-1024	0-1000mm/0-40"	±0.12mm	24	60	31	150	20	1230

Graduation 0.02mm (mm)

Code	Range	Accuracy	a	b	c	d	e	L
1236-511	0-500mm	±0.05mm	18	45	24	100	20	670
1236-521	0-500mm	±0.06mm	18	45	24	150	20	670
1236-1021	0-1000mm	±0.08mm	24	60	31	150	20	1230

VERNIER CALIPERS (SOLID TYPE)

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

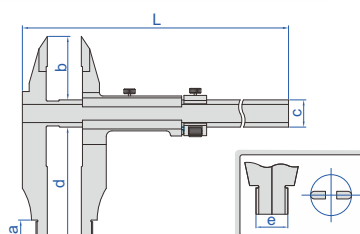
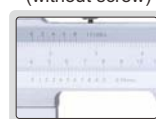


1207-514

(mm)

Code	Range	Accuracy	a	b	c	d	e	L
1207-394	0-300mm/0-12"	±0.07mm	12	40	20	90	10	440
1207-514	0-500mm/0-20"	±0.07mm	18	56	24	100	20	670
1207-524	0-500mm/0-20"	±0.08mm	18	56	24	150	20	670
1207-824	0-800mm/0-32"	±0.09mm	24	67	31	150	20	930
1207-1024	0-1000mm/0-40"	±0.12mm	24	67	31	150	20	1230

solid type
(without screw)



VERNIER CALIPERS (SOLID TYPE)

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



1208-511

Graduation 0.05mm/1/128"

(mm)

Code	Range	Accuracy	a	c	d	e	L
1208-214	0-200mm/0-8"	±0.06mm	10	20	100	10	330
1208-394	0-300mm/0-12"	±0.07mm	10	20	90	10	410
1208-324	0-300mm/0-12"	±0.07mm	18	24	150	20	410
1208-524	0-500mm/0-20"	±0.08mm	18	24	150	20	670
1208-614	0-600mm/0-24"	±0.08mm	18	24	100	20	770
1208-624	0-600mm/0-24"	±0.09mm	18	24	150	20	770
1208-824	0-800mm/0-32"	±0.09mm	24	31	150	20	1030
1208-1024	0-1000mm/0-40"	±0.12mm	24	31	150	20	1230
1208-1524	0-1500mm/0-60"	±0.16mm	24	42	150	20	1820
1208-2024	0-2000mm/0-80"	±0.20mm	24	42	150	20	2330

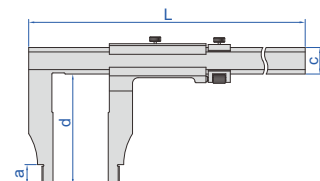
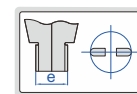
solid type
(without screw)



Graduation 0.02mm

(mm)

Code	Range	Accuracy	a	c	d	e	L
1208-511	0-500mm	±0.05mm	18	24	100	20	670
1208-521	0-500mm	±0.06mm	18	24	150	20	670
1208-1021	0-1000mm	±0.08mm	24	31	150	20	1230
1208-1521	0-1500mm	±0.11mm	24	42	150	20	1820



VERNIER CALIPERS (SOLID TYPE)

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



1210-611

Graduation 0.05mm/1/128"

(mm)

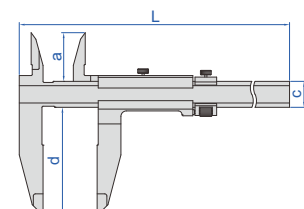
Code	Range	Accuracy	a	c	d	L
1210-614	0-600mm/0-24"	±0.08mm	45	24	100	770
1210-1024	0-1000mm/0-40"	±0.12mm	60	31	150	1230

Graduation 0.02mm

(mm)

Code	Range	Accuracy	a	c	d	L
1210-611	0-600mm	±0.05mm	45	24	100	770
1210-1021	0-1000mm	±0.08mm	60	31	150	1230

solid type
(without screw)



POPULAR
MODEL

VERNIER CALIPERS (SEPARATE TYPE)

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

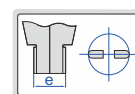
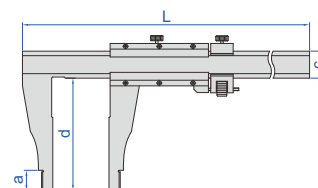
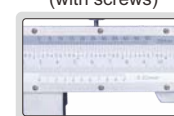


1214-500

Graduation 0.02mm/0.001"

(mm)

Code	Range	Accuracy	a	c	d	e	L
1214-300	0-300mm/0-12"	±0.05mm	10	20	75	10	410
1214-450	0-450mm/0-18"	±0.05mm	18	24	100	20	620
1214-500	0-500mm/0-20"	±0.05mm	18	24	100	20	670
1214-600	0-600mm/0-24"	±0.05mm	18	24	100	20	770
1214-1000	0-1000mm/0-40"	±0.08mm	24	32	140	20	1216
1214-1500	0-1500mm/0-60"	±0.12mm	24	42	200	20	1830
1214-2000	0-2000mm/0-80"	±0.14mm	24	42	200	20	2320


separate type
(with screws)


Graduation 0.05mm/1/128"

(mm)

Code	Range	Accuracy	a	c	d	e	L
1214-6004	0-600mm/0-24"	±0.08mm	18	24	100	20	770
1214-1004	0-1000mm/0-40"	±0.12mm	24	32	140	20	1216

LONG JAW VERNIER CALIPERS (SEPARATE TYPE)

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

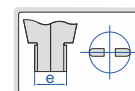
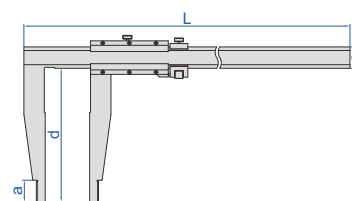
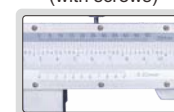


1215-1032

Graduation 0.02mm/0.001"

(mm)

Code	Range	Accuracy	a	c	d	e	L
1215-392	0-300mm/0-12"	±0.05mm	10	17	90	10	410
1215-322	0-300mm/0-12"	±0.05mm	18	24	150	20	470
1215-522	0-500mm/0-20"	±0.06mm	18	24	150	20	670
1215-532	0-500mm/0-20"	±0.06mm	18	24	200	20	670
1215-622	0-600mm/0-24"	±0.06mm	18	24	150	20	770
1215-642	0-600mm/0-24"	±0.08mm	24	32	250	20	870
1215-822	0-800mm/0-32"	±0.07mm	24	32	150	20	1020
1215-832	0-800mm/0-32"	±0.07mm	24	32	200	20	1020
1215-1032	0-1000mm/0-40"	±0.08mm	24	32	200	20	1220
1215-1052	0-1000mm/0-40"	±0.11mm	24	42	300	20	1330
1215-3052	0-3000mm/0-120"	±0.26mm	24	50	300	20	3360

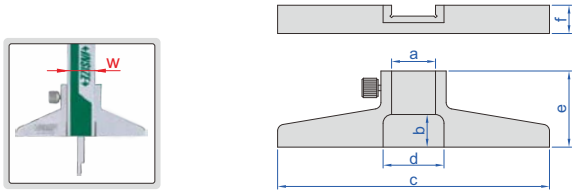

separate type
(with screws)


Graduation 0.05mm/1/128"

(mm)

Code	Range	Accuracy	a	c	d	e	L
1215-524	0-500mm/0-20"	±0.08mm	18	24	150	20	670
1215-1034	0-1000mm/0-40"	±0.12mm	24	32	200	20	1330

DEPTH BASE ATTACHMENTS



6140



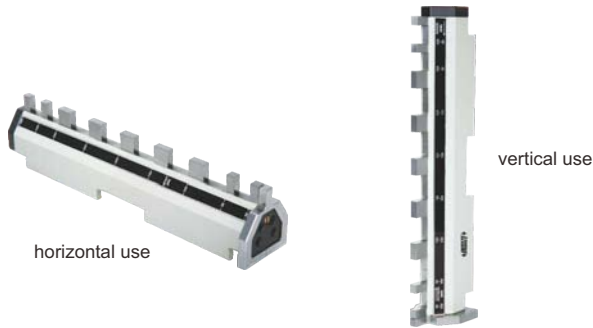
6140-16B

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

							(mm)	
Code	a	b	c	d	e	f	Type	Application
6140	16.5	9	75	18	30	6	narrow base (f=6)	suitable for calipers with beam width (w) 16mm
6140-300A	20	15	125	22	34	9	narrow base (f=9)	suitable for calipers with beam width (w) 20mm
6140-16B	16	12.5	75	24.5	30	11	wide base (f=11), high stability	suitable for calipers with beam width (w) 16mm
6140-300B	20	15	125	28	35	13	wide base (f=13), high stability	suitable for calipers with beam width (w) 20mm

CALIPER/HEIGHT GAGE CHECKERS

REFER TO PAGE 332
FOR DETAILS



horizontal use

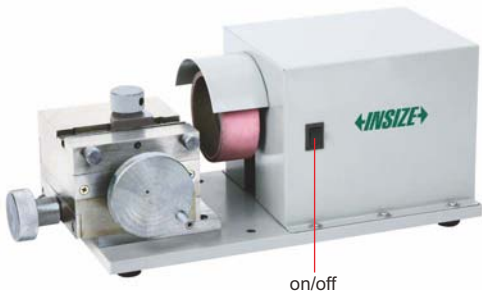
vertical use

6884-300

CALIPER END GRINDING MACHINE CODE 6309



VIDEO



on/off

- Used for grinding the depth measuring surface of the end of calipers

SPECIFICATION

Power supply	220V, 50/60Hz
Dimension (L×W×H)	370×200×160mm
Weight	15kg

application



REFER TO PAGE 162
FOR DETAILS

CALIPER/MICROMETER LAPPING MACHINE CODE 6318

2



lapping measuring surfaces of
caliper lower jaws

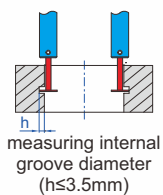


- For lapping measuring surfaces of caliper lower jaws

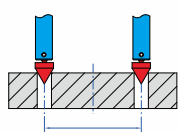


VIDEO

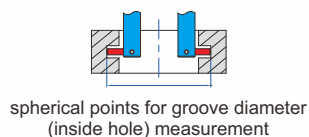
ACCESSORY SET FOR DIGITAL CALIPERS CODE 6144



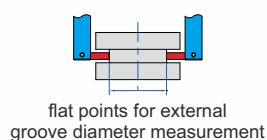
measuring internal
groove diameter
($h \leq 3.5\text{mm}$)



measuring center distance



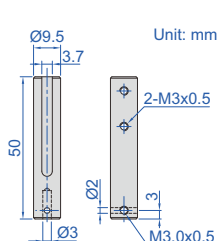
spherical points for groove diameter
(inside hole) measurement



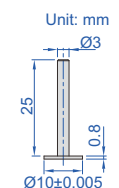
flat points for external
groove diameter measurement



6144

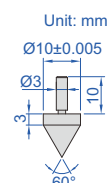


Unit: mm



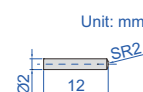
Unit: mm

disk points
(stainless steel)



Unit: mm

conical points
(stainless steel)



Unit: mm

spherical/flat points
(stainless steel)

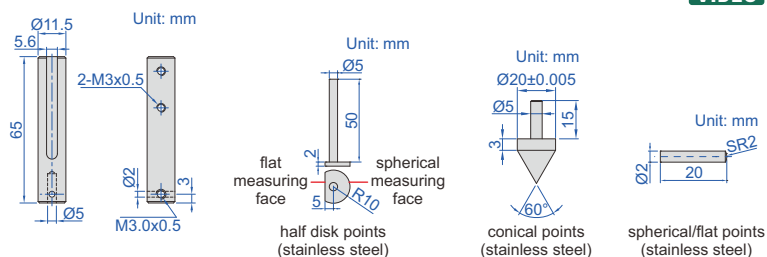
- Suitable for 0-150mm/0-6" and 0-200mm/0-8" digital calipers (thickness of lower jaws $\leq 3.7\text{mm}$)

Code
6144

ACCESSORY SET FOR LARGE DIGITAL CALIPERS CODE 6145-500



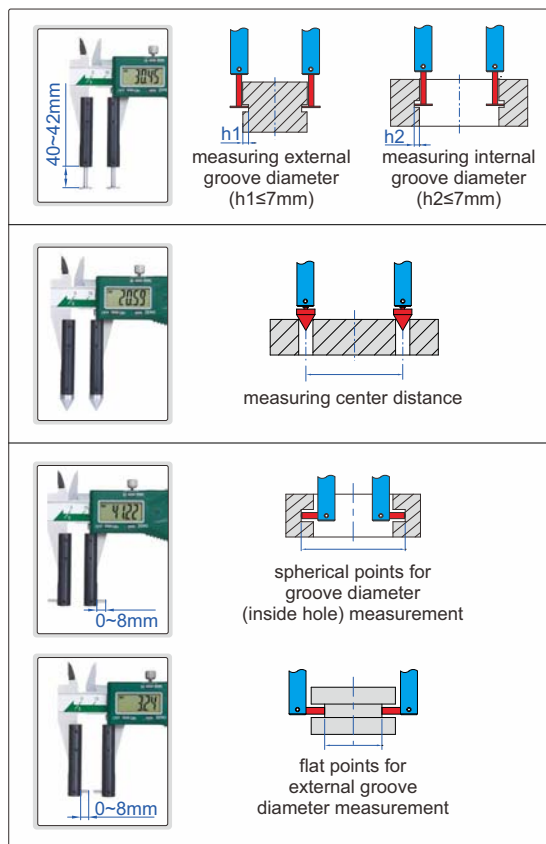
6145-500



- Suitable for 0-500mm/0-20" and 0-600mm/0-24" digital calipers (thickness of lower jaws ≤ 5.6mm)

Code

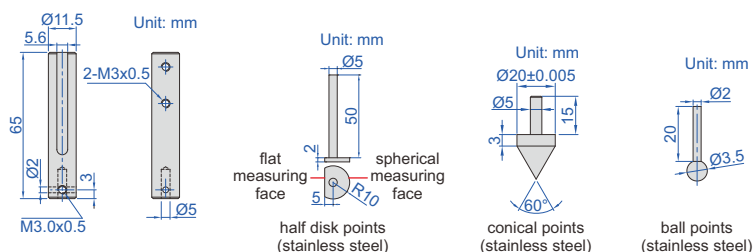
6145-500



ACCESSORY SET FOR LARGE DIGITAL CALIPERS (WITH SIDE POINTS) CODE 6146-500B



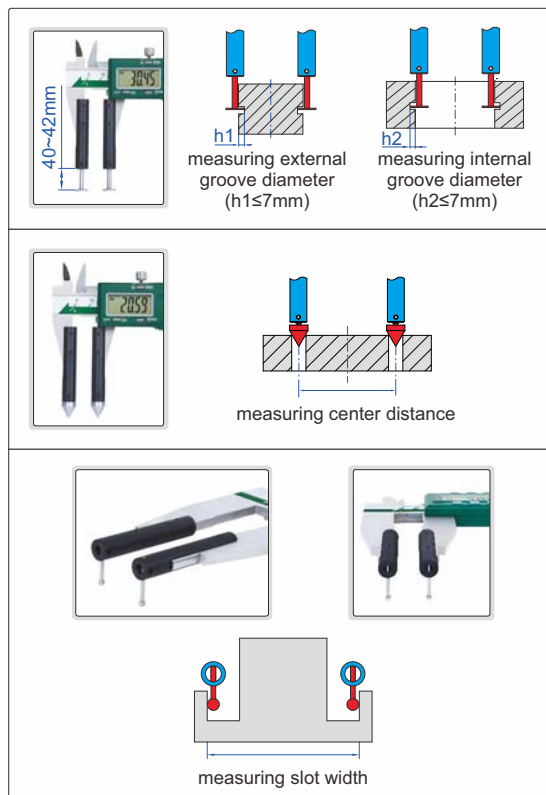
6146-500B



- Suitable for 0-500mm/0-20" and 0-600mm/0-24" digital calipers (thickness of lower jaws ≤ 5.6mm)

Code

6146-500B



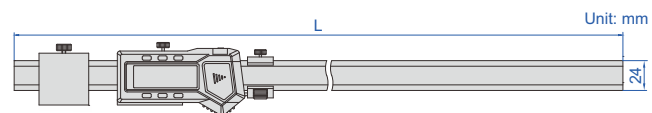


DATA
OUTPUT

UNIVERSAL CALIPERS

- Non waterproof
- Buttons: on/off, set, mm/inch, ABS, preset (+, -)
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Made of stainless steel

1125-600



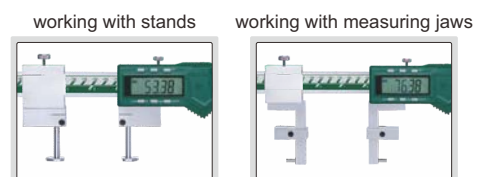
With data interface (data output cable
code 7315-22 need receiver page 4, 7302-22 page 12, optional)

Code	Range *	Resolution	Accuracy	L
1125-600	0-600mm/0-24"	0.01mm/0.0005"	±0.05mm	778mm
1125-1000	0-1000mm/0-40"	0.01mm/0.0005"	±0.07mm	1205mm

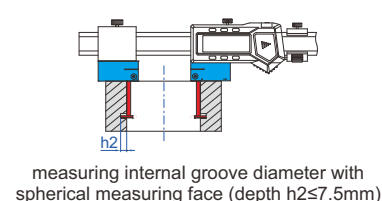
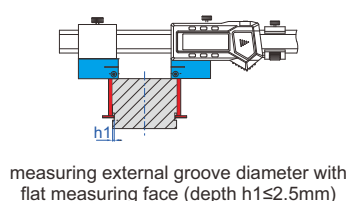
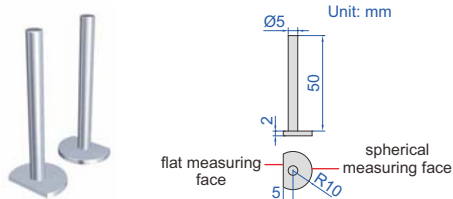
Built-in wireless (receiver code 7315-2/3/6/7/8/9 is required)

Code	Range *	Resolution	Accuracy	L
1125-600WL	0-600mm/0-24"	0.01mm/0.0005"	±0.05mm	778mm
1125-1000WL	0-1000mm/0-40"	0.01mm/0.0005"	±0.07mm	1205mm

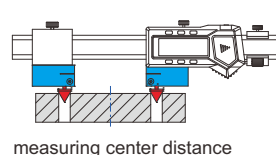
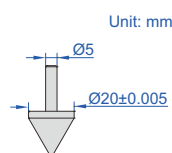
*The range changes according to different points



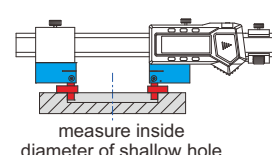
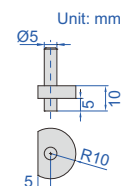
Half disk points (included)



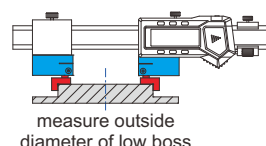
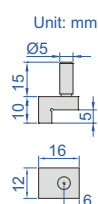
Conical points (optional)



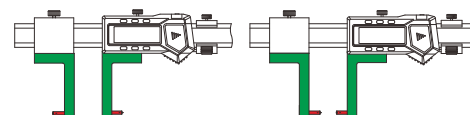
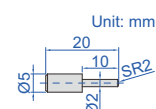
Round shoulder points (optional)



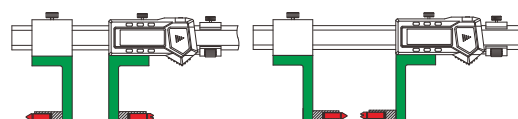
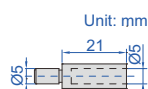
Flat shoulder points (optional)



Spherical points (included)

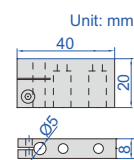


Point sleeve (optional)



working with multifunctional points,
ball points and screw thread points

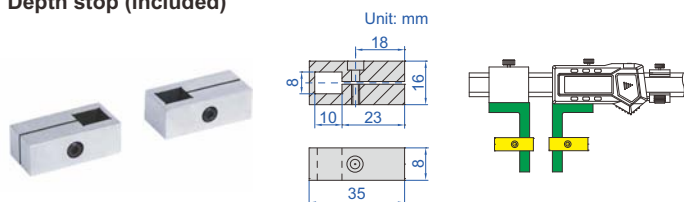
Stands (included)



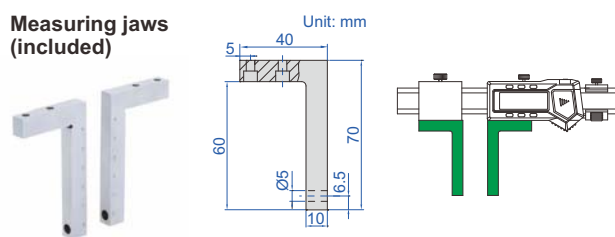
To be continued

Continued from previous page

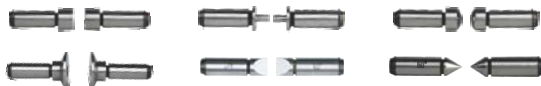
Depth stop (included)



Measuring jaws (included)



Multifunctional points 7392* (optional, page 39)



* It is necessary to use point sleeve (code 1125-T104) for these points

Ball points 7391* (optional, page 39)



Screw thread points 7381*, 7321* (optional, page 39)



DIGITAL CALIPERS WITH INTERCHANGEABLE POINTS

DATA
OUTPUT



1526-200

- Non waterproof
- Supplied with 3 pairs of points and zero setting block for external measurement
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, set, mm/inch, preset (+, -)
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Made of stainless steel
- Optional accessory: points



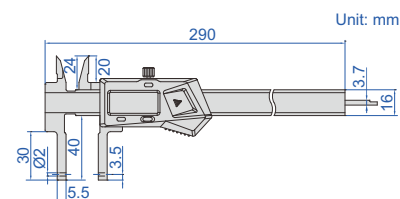
short spherical points (included)



long spherical/flat points (included)



spherical blade points (included)



With data interface

Code	Data output cable (optional)
1526-200	code 7315-21 need receiver page 4, 7302-21 page 12

Built-in wireless

Code	Receiver (optional)
1526-200WL	code 7315-2/3/6/7/8/9

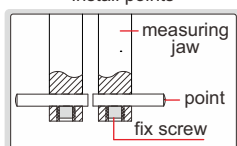
Point	Range	Accuracy	Application
short spherical points	12-212mm/0.5-8.5" (internal)	±0.03mm	for grooves inside small hole
long spherical/flat points	24-224mm/1-8.8" (internal) 0-187mm/0-7.5" (external)	±0.03mm	spherical points for grooves inside hole flat points for external grooves
spherical blade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



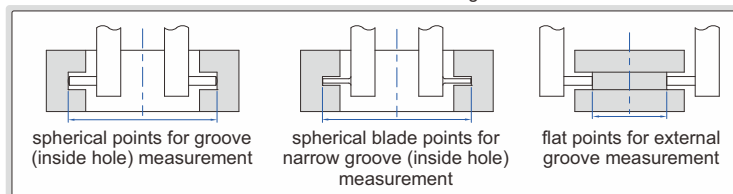
zero setting block for external measurement (included)



install points



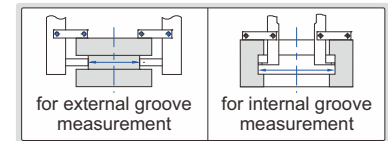
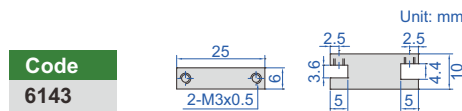
measure internal and external grooves



To be continued

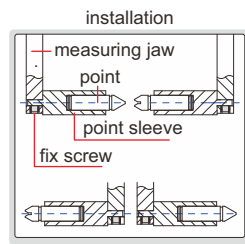
Continued from previous page

Depth stop (optional)



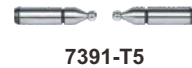
2

Point sleeve (optional)



Code
1526-T101

Ball points (optional)



* It is necessary to use point sleeve (code **1526-T101**) for these points
** Range of **1526-200** and **1526-200WL** after installing the points and point sleeve

Code	Ball dia. (D)	Range**
7391-T3*	SØ2.0mm	75-275mm/3.0-10.8" (internal) 0-146mm/0-5.7" (external)
7391-T4*	SØ2.5mm	76-276mm/3.0-10.8" (internal) 0-145mm/0-5.7" (external)
7391-T5*	SØ3.0mm	77-277mm/3.0-10.9" (internal) 0-144mm/0-5.6" (external)
7391-T6*	SØ3.5mm	78-278mm/3.1-10.9" (internal) 0-143mm/0-5.6" (external)
7391-T7*	SØ4.0mm	79-279mm/3.1-10.9" (internal) 0-142mm/0-5.6" (external)
7391-T8*	SØ4.5mm	80-280mm/3.2-11.0" (internal) 0-141mm/0-5.5" (external)
7391-T9*	SØ5.0mm	81-281mm/3.2-11.0" (internal) 0-140mm/0-5.5" (external)
7391-T10*	SØ6.0mm	83-283mm/3.3-11.1" (internal) 0-138mm/0-5.4" (external)

Multifunctional points (optional)



7392-T1



7392-T2



7392-T3



7392-T4



7392-T5



7392-T6



7392-T7



7392-T8



7392-T9

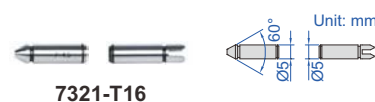
Code	Type
7392-T1*	flat
7392-T2*	spherical
7392-T3*	spline
7392-T4*	disk
7392-T5*	blade
7392-T6*	knife-edge
7392-T7*	point
7392-T8*	knife-edge
7392-T9*	point

* It is necessary to use point sleeve (code **1526-T101**) for these points

Range**
66-266mm/2.6-10.5" (internal), 0-155mm/0-6.1" (external)

** Range of **1526-200** and **1526-200WL** after installing the points and point sleeve

Screw thread points (optional)



7321-T16



7381-T11

Internal thread (60° thread angle)

Code	Pitch
7321-T11*	0.4-0.5mm/64-48TPI
7321-T12*	0.6-0.9mm/44-28TPI
7321-T13*	1-1.75mm/24-14TPI
7321-T14*	2-3mm/13-9TPI
7321-T15*	3.5-5mm/8-5TPI
7321-T16*	5.5-7mm/4.5-3.5TPI
7321-T1S*	6 pairs/set, including all above points

External thread (60° thread angle)

Code	Pitch
7381-T11*	0.4-0.5mm/64-48TPI
7381-T12*	0.6-0.9mm/44-28TPI
7381-T13*	1-1.75mm/24-14TPI
7381-T14*	2-3mm/13-9TPI
7381-T15*	3.5-5mm/8-5TPI
7381-T16*	5.5-7mm/4.5-3.5TPI
7381-TS*	6 pairs/set, including all above points

Range**
66-266mm/2.6-10.5" (internal)
0-155mm/0-6.1" (external)

** Range of **1526-200** and **1526-200WL** after installing the points and point sleeve

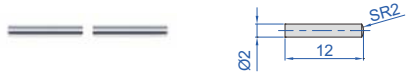
* It is necessary to use point sleeve (code **1526-T101**) for these points

DIGITAL CALIPERS WITH INTERCHANGEABLE POINTS

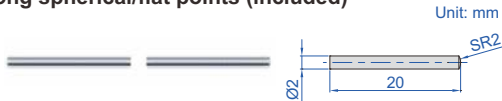
DATA
OUTPUT



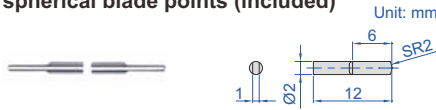
short spherical/flat points (included)



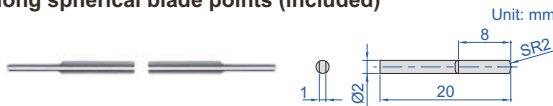
long spherical/flat points (included)



short spherical blade points (included)



long spherical blade points (included)



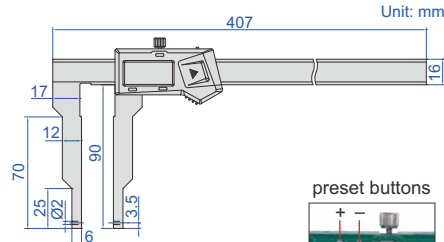
- Non waterproof
- Supplied with 4 pairs of points and zero setting block for external measurement
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, set, mm/inch, preset (+, -)
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Made of stainless steel
- Optional accessory: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

With data interface

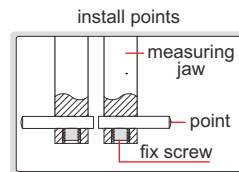
Code	Data output cable (optional)
1124-300A	code 7315-21 need receiver page 4, 7302-21 page 12



1124-300A



preset buttons



install points

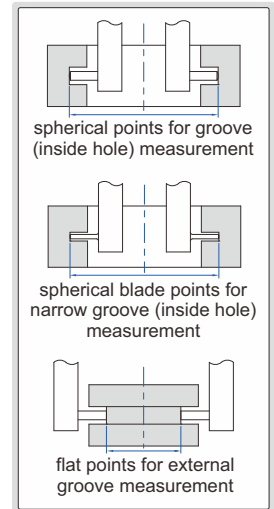


depth stop 6143 (optional)

zero setting block for external measurement (included)



measure internal and external grooves

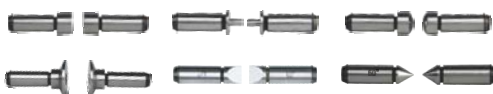


Built-in wireless

Code	Receiver (optional)
1124-300AWL	code 7315-2/3/6/7/8/9

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

Multifunctional points 7392* (optional, page 39)



Ball points 7391* (optional, page 39)



Screw thread points 7381*, 7321* (optional, page 39)



* It is necessary to use point sleeve (code **1526-T101**) for these points

DATA
OUTPUT

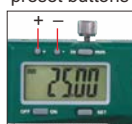
VARIOUS POINTS ARE
AVAILABLE (PAGE 250~252)

DIGITAL CALIPERS WITH INTERCHANGEABLE POINTS



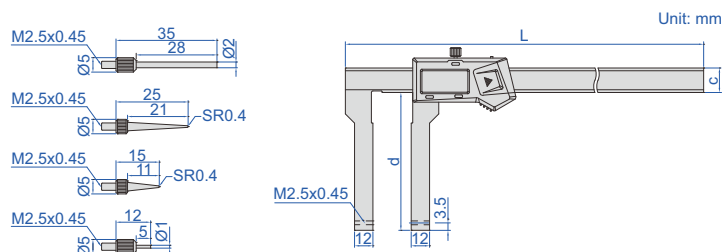
VIDEO

preset buttons

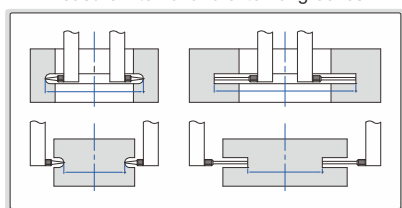


1530-300

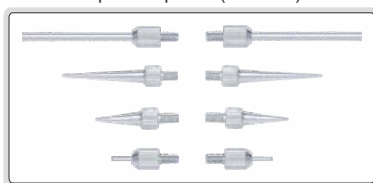
- Non waterproof
- Supplied with 4 pairs of points and zero setting block for external measurement
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, set, mm/inch, preset (+, -)
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Made of stainless steel
- Optional accessory: points (page 250~252), depth stop (code **6143**)



measure internal and external grooves



4 pairs of points (included)



zero setting block for
external measurement
(included)



depth stop **6143** (optional)



(mm)

Code	Range*	Accuracy	L	d	c	Data output cable (optional)
1530-300	0-300mm/0-12"	±0.06mm	407	90	16	7315-21 need receiver page 4, 7302-21 page 12
1530-500	0-500mm/0-20"	±0.08mm	740	100	24	7315-22 need receiver page 4, 7302-22 page 12

Built-in wireless
(receiver code 7315-2/3/6/7/8/9 is required)

(mm)

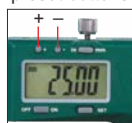
Code	Range*	Accuracy	L	d	c
1530-300WL	0-300mm/0-12"	±0.06mm	407	90	16
1530-500WL	0-500mm/0-20"	±0.08mm	740	100	24

*For different points, the measuring range changes accordingly

DIGITAL INSIDE GROOVE CALIPERS

2

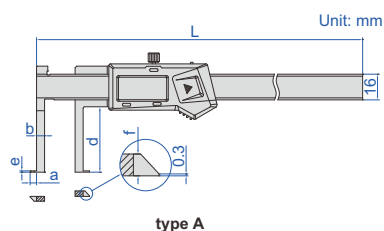
preset buttons



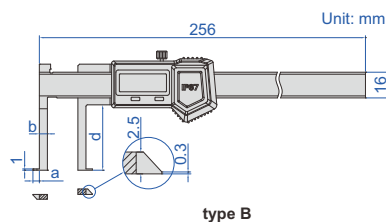
1520-150



1520-150P



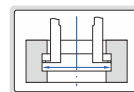
type A



type B

- Measure diameter of grooves inside small bores
- Resolution: 0.01mm/0.0005"
- Buttons type A: on/off, set, mm/inch, preset (+, -), type B: on/off, zero, mm/inch, ABS/REL, hold
- Battery CR2032
- Made of stainless steel
- Optional accessory: depth stop (code 6143)

depth stop 6143
(optional)



Non waterproof, with data interface (data output cable code 7315-21 need receiver page 4, 7302-21 page 12, optional)

Code	Range	Type	Accuracy	L	a	b	d	e	f
1520-150	11-150mm/0.43-6"	A	±0.04mm	236mm	3.5mm	5mm	41mm	1mm	2.5mm
1520-200	16-200mm/0.63-8"	A	±0.04mm	285mm	5mm	7mm	41mm	1mm	3mm
1520-300	20-300mm/0.79-12"	A	±0.05mm	398mm	7.5mm	9mm	62mm	2mm	4mm

Non waterproof, built-in wireless (receiver code 7315-2/3/6/7/8/9 is required)

Code	Range	Type	Accuracy	L	a	b	d	e	f
1520-150WL	11-150mm/0.43-6"	A	±0.04mm	236mm	3.5mm	5mm	41mm	1mm	2.5mm
1520-200WL	16-200mm/0.63-8"	A	±0.04mm	285mm	5mm	7mm	41mm	1mm	3mm
1520-300WL	20-300mm/0.79-12"	A	±0.05mm	398mm	7.5mm	9mm	62mm	2mm	4mm

IP67 dust/waterproof, no automatic power off, set zero after power on each time, without data interface

Code	Range	Type	Accuracy	a	b	d
1520-150P	14-150mm/0.56-6"	B	±0.04mm	5mm	7mm	30mm
1520-1501P	8-150mm/0.31-6"	B	±0.04mm	2mm	4mm	40mm

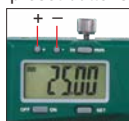
DATA OUTPUT

DIGITAL INSIDE POINT CALIPERS

depth stop 6143
(optional)



preset buttons

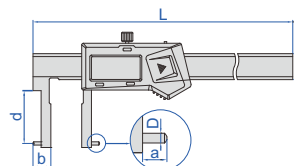
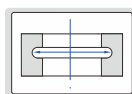


1121-150A
type A



1121-150B
type B

- Non waterproof
- Measure groove diameter
- Resolution: 0.01mm/0.0005"
- Buttons type A: on/off, set, mm/inch, preset (+, -)
type B: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Data output
- Made of stainless steel
- Optional accessory: depth stop
(code 6143, for calipers with c=16mm)



Preset (no need to add the width of the jaws on the reading), with data interface

(mm)

Code	Range	Type	Accuracy	L	a	b	c	d	D	Data output cable (optional)
1121-150A	24-150mm/0.94-6"	A	±0.04mm	250	5	12	16	28	Ø2	7315-21 need receiver page 4, 7302-21 page 12
1121-1501	35-150mm/1.38-6"	A	±0.05mm	250	6	17.5	16	60	Ø2	7315-21 need receiver page 4, 7302-21 page 12
1121-200A	25-200mm/0.98-8"	A	±0.04mm	310	5	12.5	16	37	Ø2	7315-21 need receiver page 4, 7302-21 page 12
1121-2001	40-200mm/1.57-8"	A	±0.05mm	310	7	20	16	70	Ø3	7315-21 need receiver page 4, 7302-21 page 12
1121-300A	30-300mm/1.18-12"	A	±0.07mm	410	5	15	16	50	Ø2	7315-21 need receiver page 4, 7302-21 page 12
1121-3001A	50-300mm/1.97-12"	A	±0.07mm	410	8	25	16	77	Ø3	7315-21 need receiver page 4, 7302-21 page 12
1121-500A	40-500mm/1.57-20"	A	±0.07mm	680	5	20	24	90	Ø3	7315-22 need receiver page 4, 7302-22 page 12
1121-5001	60-500mm/2.36-20"	A	±0.08mm	680	10	30	24	120	Ø3	7315-22 need receiver page 4, 7302-22 page 12
1121-5002	80-500mm/3.15-20"	A	±0.08mm	680	16	40	24	150	Ø3	7315-22 need receiver page 4, 7302-22 page 12

Preset (no need to add the width of the jaws on the reading), built-in wireless (receiver code 7315-2/3/6/7/8/9 is required)

Code	Range	Type	Accuracy	L	a	b	c	d	D
1121-150AWL	24-150mm/0.94-6"	A	±0.04mm	250mm	5mm	12mm	16mm	28mm	Ø2mm
1121-1501WL	35-150mm/1.38-6"	A	±0.05mm	250mm	6mm	17.5mm	16mm	60mm	Ø2mm
1121-200AWL	25-200mm/0.98-8"	A	±0.04mm	310mm	5mm	12.5mm	16mm	37mm	Ø2mm
1121-2001WL	40-200mm/1.57-8"	A	±0.05mm	310mm	7mm	20mm	16mm	70mm	Ø3mm
1121-300AWL	30-300mm/1.18-12"	A	±0.07mm	410mm	5mm	15mm	16mm	50mm	Ø2mm
1121-3001AWL	50-300mm/1.97-12"	A	±0.07mm	410mm	8mm	25mm	16mm	77mm	Ø3mm
1121-500AWL	40-500mm/1.57-20"	A	±0.07mm	680mm	5mm	20mm	24mm	90mm	Ø3mm
1121-5001WL	60-500mm/2.36-20"	A	±0.08mm	680mm	10mm	30mm	24mm	120mm	Ø3mm
1121-5002WL	80-500mm/3.15-20"	A	±0.08mm	680mm	16mm	40mm	24mm	150mm	Ø3mm

No preset (need to add the width of the jaws on the reading)

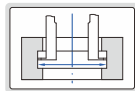
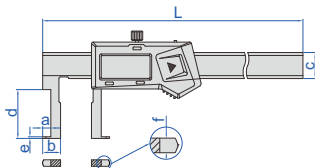
Code	Range	Type	Accuracy	L	a	b	c	d	D
1121-150B	50-150mm/1.97-6"	B	±0.06mm	270mm	8mm	25mm	20mm	90mm	Ø3mm
1121-200B	60-200mm/2.36-8"	B	±0.06mm	320mm	10mm	30mm	20mm	100mm	Ø3mm
1121-300B	60-300mm/2.36-12"	B	±0.07mm	420mm	10mm	30mm	20mm	110mm	Ø3mm

DIGITAL INSIDE GROOVE CALIPERS

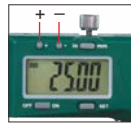
depth stop 6143
(optional)



- Measure groove diameter
- Resolution: 0.01mm/0.0005"
- Buttons type A: on/off, set, mm/inch, preset (+, -)
type B: on/off, zero, mm/inch
type C: on/off, zero, mm/inch, ABS/REL, hold
- Battery CR2032
- Made of stainless steel
- Optional accessory: depth stop
(code 6143, for calipers with c=16mm)



preset buttons



1120-150A
type A



1120-150B
type B



1120-150P
type C

Non waterproof, preset (no need to add the width of the jaws on the reading), with data interface

(mm)

Code	Range	Type	Accuracy	L	a	b	c	d	e	f	Data output cable (optional)
1120-150A	22-150mm/0.87-6"	A	±0.04mm	250	5	11	16	30	1	4	7315-21 need receiver page 4, 7302-21 page 12
1120-1501	35-150mm/1.38-6"	A	±0.06mm	250	6	17.5	16	60	1.5	4	7315-21 need receiver page 4, 7302-21 page 12
1120-200A	25-200mm/0.98-8"	A	±0.04mm	310	5	12.5	16	40	1	4	7315-21 need receiver page 4, 7302-21 page 12
1120-2001	40-200mm/1.57-8"	A	±0.06mm	310	7	20	16	70	2.5	4	7315-21 need receiver page 4, 7302-21 page 12
1120-300A	30-300mm/1.18-12"	A	±0.05mm	410	5	15	16	50	1.5	4	7315-21 need receiver page 4, 7302-21 page 12
1120-3001	50-300mm/1.97-12"	A	±0.07mm	410	8	25	16	80	2.5	4	7315-21 need receiver page 4, 7302-21 page 12
1120-500	40-500mm/1.57-20"	A	±0.07mm	680	5	20	24	90	2.2	5.5	7315-22 need receiver page 4, 7302-22 page 12
1120-5001	60-500mm/2.36-20"	A	±0.08mm	680	10	30	24	120	3.4	5.5	7315-22 need receiver page 4, 7302-22 page 12
1120-5002	80-500mm/3.15-20"	A	±0.08mm	680	16	40	24	150	5.2	5.5	7315-22 need receiver page 4, 7302-22 page 12

Non waterproof, preset (no need to add the width of the jaws on the reading),
built-in wireless (receiver code 7315-2/3/6/7/8/9 is required)

Code	Range	Type	Accuracy	L	a	b	c	d	e	f
1120-150AWL	22-150mm/0.87-6"	A	±0.04mm	250mm	5mm	11mm	16mm	30mm	1mm	4mm
1120-1501WL	35-150mm/1.38-6"	A	±0.06mm	250mm	6mm	17.5mm	16mm	60mm	1.5mm	4mm
1120-200AWL	25-200mm/0.98-8"	A	±0.04mm	310mm	5mm	12.5mm	16mm	40mm	1mm	4mm
1120-2001WL	40-200mm/1.57-8"	A	±0.06mm	310mm	7mm	20mm	16mm	70mm	2.5mm	4mm
1120-300AWL	30-300mm/1.18-12"	A	±0.05mm	410mm	5mm	15mm	16mm	50mm	1.5mm	4mm
1120-3001WL	50-300mm/1.97-12"	A	±0.07mm	410mm	8mm	25mm	16mm	80mm	2.5mm	4mm
1120-500WL	40-500mm/1.57-20"	A	±0.07mm	680mm	5mm	20mm	24mm	90mm	2.2mm	5.5mm
1120-5001WL	60-500mm/2.36-20"	A	±0.08mm	680mm	10mm	30mm	24mm	120mm	3.4mm	5.5mm
1120-5002WL	80-500mm/3.15-20"	A	±0.08mm	680mm	16mm	40mm	24mm	150mm	5.2mm	5.5mm

Non waterproof, no preset (need to add the width of the jaws on the reading)

Code	Range	Type	Accuracy	L	a	b	c	d	e	f
1120-150B	50-150mm/1.97-6"	B	±0.06mm	270mm	8mm	25mm	20mm	90mm	3.4mm	4mm
1120-200B	60-200mm/2.36-8"	B	±0.06mm	320mm	10mm	30mm	20mm	100mm	3.4mm	4mm
1120-300B	60-300mm/2.36-12"	B	±0.07mm	420mm	10mm	30mm	20mm	110mm	3.4mm	4mm

IP67 dust/waterproof, no automatic power off, set zero after power on each time,
no preset (need to add the width of the jaws on the reading), without data interface

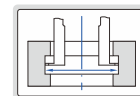
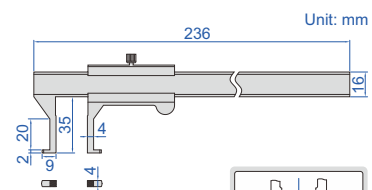
Code	Range	Type	Accuracy	L	a	b	c	d	e	f
1120-150P	22-150mm/0.87-6"	C	±0.04mm	250mm	5mm	11mm	16mm	30mm	1mm	4mm

INSIDE GROOVE VERNIER CALIPER

- Measure diameter of grooves inside bores
- Made of stainless steel
- Satin chrome plated reading surface

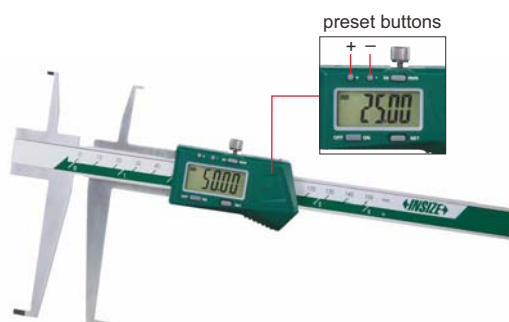


1262-150A



Code	Range	Graduation	Accuracy
1262-150A	18-150mm	0.02mm	±0.04mm

DIGITAL INSIDE GROOVE CALIPERS

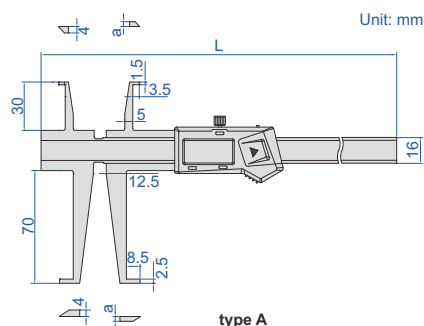


1176-150

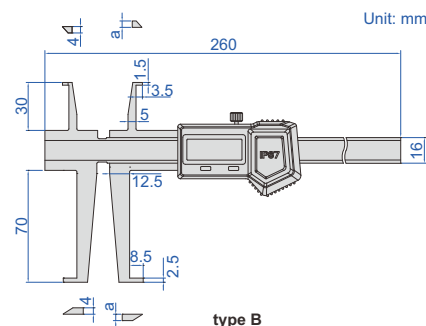


1176-150P

depth stop 6143
(optional)



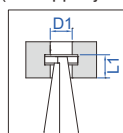
type A



type B

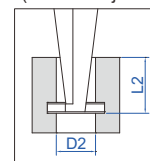
- Measure diameter of grooves inside bores
- Resolution: 0.01mm/0.0005"
- Buttons type A: on/off, set, mm/inch, preset (+, -)
type B: on/off, zero, mm/inch, ABS/REL, hold
- Battery CR2032
- Made of stainless steel
- Optional accessory: depth stop (code 6143)

sizes to be measured
(use upper jaws)



(mm)	
D1	L1
Ø9	<8
Ø10	<15
Ø11-200	<30

sizes to be measured
(use lower jaws)



(mm)	
D2	L2
Ø17	<16
Ø18	<28
Ø19	<40
Ø20	<50
Ø21	<58
Ø22-200	<70

Non waterproof, with data interface

(data output cable code 7315-21 need receiver page 4, 7302-21 page 12, optional)

Code	Range of upper jaw	Range of lower jaw	Type	Accuracy	L	a
1176-150	9-150mm/0.35-6"	17-150mm/0.70-6"	A	±0.04mm	260mm	3mm
1176-200	9-200mm/0.35-8"	17-200mm/0.70-8"	A	±0.05mm	320mm	3.5mm

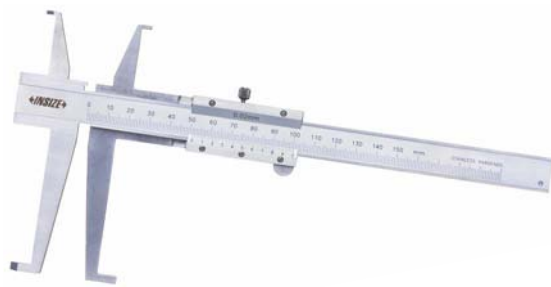
Non waterproof, built-in wireless (receiver code 7315-2/3/6/7/8/9 is required)

Code	Range of upper jaw	Range of lower jaw	Type	Accuracy	L	a
1176-150WL	9-150mm/0.35-6"	17-150mm/0.70-6"	A	±0.04mm	260mm	3mm
1176-200WL	9-200mm/0.35-8"	17-200mm/0.70-8"	A	±0.05mm	320mm	3.5mm

IP67 dust/waterproof, without data interface, no automatic power off, set zero after power on each time

Code	Range of upper jaw	Range of lower jaw	Type	Accuracy	a
1176-150P	9-150mm/0.35-6"	17-150mm/0.70-6"	B	±0.04mm	4mm

INSIDE GROOVE CALIPERS



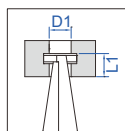
1199-150

depth stop 6143
(optional)



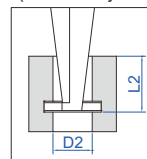
- Measure diameter of grooves inside bores
- Graduation: 0.02mm
- Made of stainless steel
- Optional accessory: depth stop (code 6143)

sizes to be measured
(use upper jaws)



(mm)	
D1	L1
Ø9	<8
Ø10	<12
Ø11	<15
Ø12	<20
Ø13-300	<30

sizes to be measured
(use lower jaws)

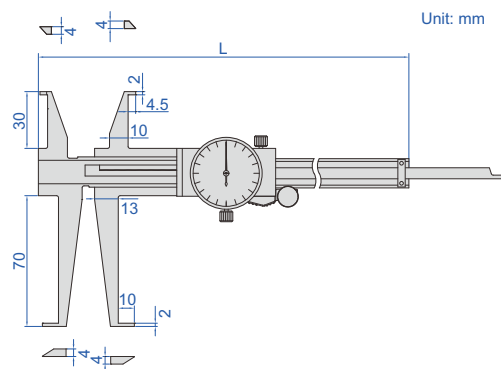


(mm)	
D2	L2
Ø18	<30
Ø19	<40
Ø20	<45
Ø21	<55
Ø22	<60
Ø23-300	<70

Code	Range of upper jaw	Range of lower jaw	Accuracy	L	a	b
1199-150	9-150mm	18-150mm	±0.04mm	248mm	1.6mm	2.5mm
1199-200	9-200mm	18-200mm	±0.05mm	298mm	1.8mm	2.8mm
1199-300	9-300mm	18-300mm	±0.06mm	398mm	2.0mm	3.0mm

INSIDE GROOVE DIAL CALIPERS

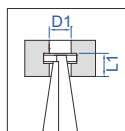
SHOCK
PROOF



1376-150

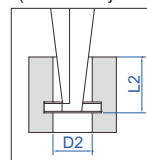
- Measure diameter of grooves inside bores
- Shockproof dial indicator
- Dial indicator graduation: 0.02mm
- Made of stainless steel
- Optional accessory: depth stop (code 6143)

sizes to be measured
(use upper jaws)



(mm)	
D1	L1
Ø11	<8
Ø12	<10
Ø13	<15
Ø14	<20
Ø15-300	<30

sizes to be measured
(use lower jaws)



(mm)	
D2	L2
Ø18	<20
Ø19	<28
Ø20	<35
Ø21	<40
Ø22	<50
Ø23-300	<70

Code	Range of upper jaw	Range of lower jaw	Accuracy	L
1376-150	11-150mm	18-150mm	±0.03mm	240mm
1376-200	11-200mm	18-200mm	±0.03mm	290mm
1376-300	11-300mm	18-300mm	±0.04mm	390mm

DATA
OUTPUT

DIGITAL DEEP HOLE INSIDE GROOVE CALIPERS

preset buttons

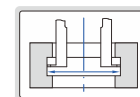
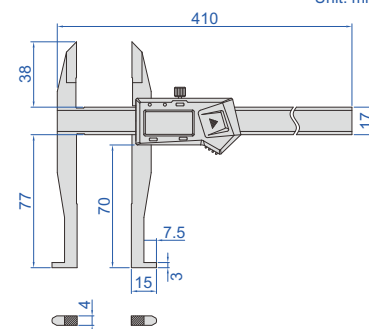


1129-300

Unit: mm

- Non waterproof
- Measure diameter of grooves inside deep holes
- 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
- Made of stainless steel
- Optional accessory: depth stop (code 6143)

depth stop 6143 (optional)



With data interface (data output cable
code 7315-21 need receiver page 4, 7302-21 page 12, optional)

Code	Range of upper jaw	Range of lower jaw	Accuracy
1129-300	0-300mm/0-12"	30-300mm/1.2-12"	±0.06mm

Built-in wireless (receiver code 7315-2/3/6/7/8/9 is required)

Code	Range of upper jaw	Range of lower jaw	Accuracy
1129-300WL	0-300mm/0-12"	30-300mm/1.2-12"	±0.06mm

DATA
OUTPUT

DIGITAL INSIDE GROOVE CALIPERS

- Non waterproof
- Measure diameter or distance of grooves
- 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
- Made of stainless steel



1128-200

Unit: mm

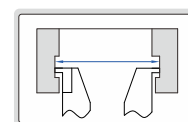
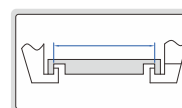
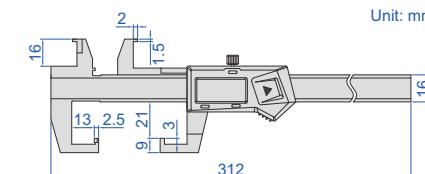
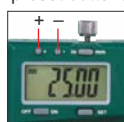
With data interface (data output cable
code 7315-21 need receiver page 4, 7302-21 page 12, optional)

Code	Range of upper jaw	Range of lower jaw	Accuracy
1128-200	10-200mm/0.39-8"	3-200mm/0.12-8"	±0.03mm

Built-in wireless (receiver code 7315-2/3/6/7/8/9 is required)

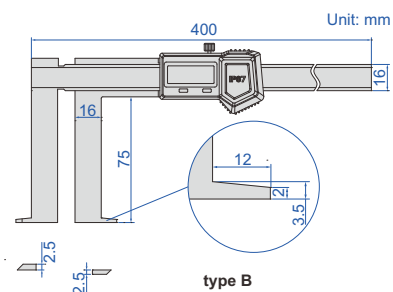
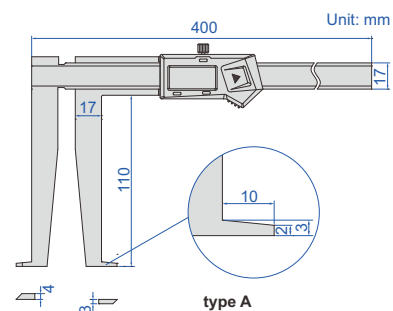
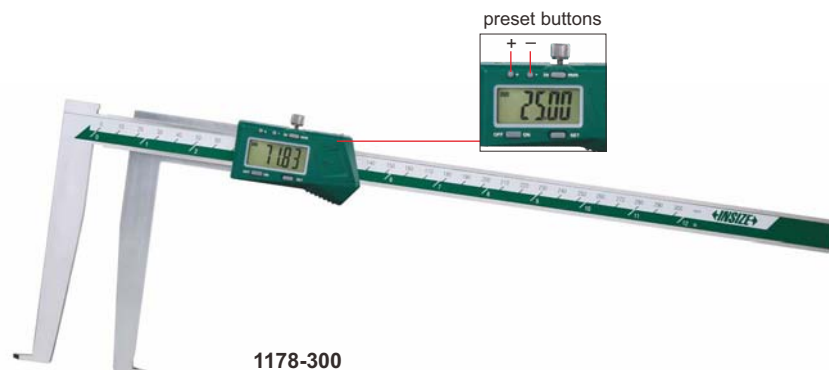
Code	Range of upper jaw	Range of lower jaw	Accuracy
1128-200WL	10-200mm/0.39-8"	3-200mm/0.12-8"	±0.03mm

preset buttons



DIGITAL INSIDE GROOVE CALIPERS

2



- Measure diameter of grooves inside bores
- Resolution: 0.01mm/0.0005"
- Buttons type A: on/off, set, mm/inch, preset (+, -)
type B: on/off, zero, mm/inch, ABS/REL, hold
- Battery CR2032
- Made of stainless steel
- Optional accessory: depth stop (code 6143)

depth stop 6143
(optional)



Non waterproof, built-in wireless
(receiver code 7315-2/3/6/7/8/9 is required)

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

Non waterproof, with data interface (data output cable
code 7315-21 need receiver page 4, 7302-21 page 12, optional)

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

IP67 dust/waterproof, no automatic power off, set zero
after power on each time, without data interface

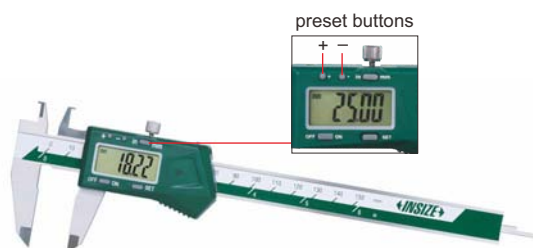
Code	Range	Type	Accuracy
1178-300P	33-300mm/1.30-12"	B	±0.05mm

DATA
OUTPUT

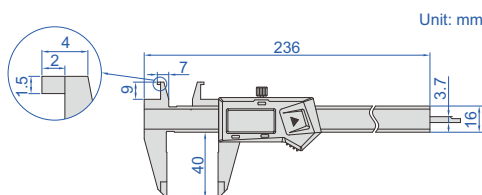
DIGITAL INSIDE GROOVE CALIPERS



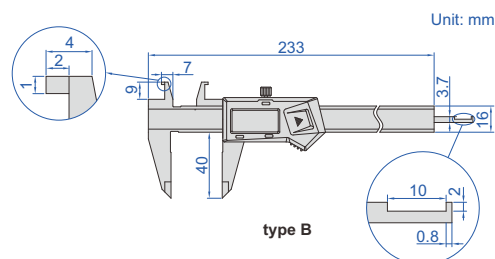
1191-150



1191-150B



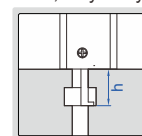
type A



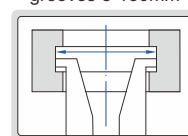
type B

- Non waterproof
- Upper jaws for measuring diameter of grooves
- Resolution: 0.01mm/0.0005"
- Buttons type A: on/off, zero, mm/inch
type B: on/off, set, mm/inch, preset (+, -)
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Made of stainless steel

measure depth of grooves
(h<10mm, only for type B)



measure diameter of grooves 8-150mm



With data interface

(data output cable code 7315-21 need receiver page 4, 7302-21 page 12, optional)

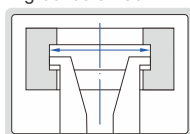
Code	Range of upper jaw	Range of lower jaw	Accuracy	Type
1191-150	8-150mm/0.3-6"	0-150mm/0-6"	±0.03mm	A
1191-150B	8-150mm/0.3-6"	0-150mm/0-6"	±0.03mm	B

Built-in wireless (receiver code 7315-2/3/6/7/8/9 is required)

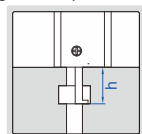
Code	Range of upper jaw	Range of lower jaw	Accuracy	Type
1191-150WL	8-150mm/0.3-6"	0-150mm/0-6"	±0.03mm	A
1191-150BWL	8-150mm/0.3-6"	0-150mm/0-6"	±0.03mm	B

INSIDE GROOVE VERNIER CALIPER

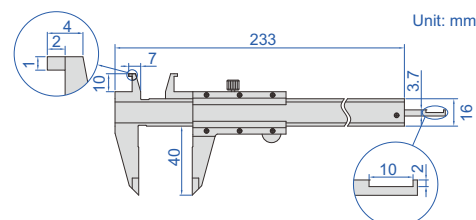
measure diameter of grooves 8-150mm



measure depth of grooves (h<10mm)



1291-150



- Graduation: 0.02mm
- Made of stainless steel
- Satin chrome plated reading surface

Code	Range of upper jaw	Range of lower jaw	Accuracy
1291-150	8-150mm	0-150mm	±0.03mm

DIGITAL OUTSIDE NECK CALIPERS

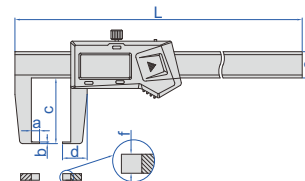
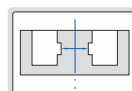
DATA
OUTPUT

- Non waterproof
- Measure grooves and recesses
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Made of stainless steel
- Optional accessory: depth stop (code **6143**, for calipers with e=16mm)



1187-150A

depth stop **6143**
(optional)



With data interface

(mm)

Code	Range	Accuracy	L	a	b	c	d	e	f	Data output cable (optional)
1187-150A	0-150mm/0-6"	±0.04mm	250	5	1	40	15	16	4	7315-21 need receiver page 4, 7302-21 page 12
1187-200A	0-200mm/0-8"	±0.05mm	310	9	1.5	80	23	16	4	7315-21 need receiver page 4, 7302-21 page 12
1187-300A	0-300mm/0-12"	±0.06mm	490	12	2	150	36	24	4	7315-22 need receiver page 4, 7302-22 page 12
1187-500A	0-500mm/0-20"	±0.07mm	690	12	2	150	36	24	5.5	7315-22 need receiver page 4, 7302-22 page 12

Built-in wireless (receiver code 7315-2/3/6/7/8/9 is required)

Code	Range	Accuracy	L	a	b	c	d	e	f
1187-150AWL	0-150mm/0-6"	±0.04mm	250mm	5mm	1mm	40mm	15mm	16mm	4mm
1187-200AWL	0-200mm/0-8"	±0.05mm	310mm	9mm	1.5mm	80mm	23mm	16mm	4mm
1187-300AWL	0-300mm/0-12"	±0.06mm	490mm	12mm	2mm	150mm	36mm	24mm	4mm
1187-500AWL	0-500mm/0-20"	±0.07mm	690mm	12mm	2mm	150mm	36mm	24mm	5.5mm

DIGITAL OUTSIDE POINT CALIPERS

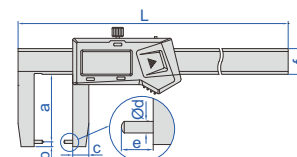
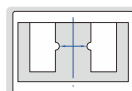
DATA
OUTPUT

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



1185-150A

depth stop **6143**
(optional)



With data interface

(mm)

Code	Range	Accuracy	L	a	b	c	Ød	e	f	Data output cable (optional)
1185-150A	0-150mm/0-6"	±0.04mm	250	40	3	10	2	5	16	7315-21 need receiver page 4, 7302-21 page 12
1185-200A	0-200mm/0-8"	±0.05mm	310	80	3	14	3	9	16	7315-21 need receiver page 4, 7302-21 page 12
1185-300A	0-300mm/0-12"	±0.06mm	490	150	3	20	3	12	24	7315-22 need receiver page 4, 7302-22 page 12

Built-in wireless (receiver code 7315-2/3/6/7/8/9 is required)

(mm)

Code	Range	Accuracy	L	a	b	c	Ød	e	f
1185-150AWL	0-150mm/0-6"	±0.04mm	250	40	3	10	2	5	16
1185-200AWL	0-200mm/0-8"	±0.05mm	310	80	3	14	3	9	16
1185-300AWL	0-300mm/0-12"	±0.06mm	490	150	3	20	3	12	24

DATA OUTPUT

DIGITAL OUTSIDE GROOVE CALIPERS

- Non waterproof
- Measure grooves and recesses in small spaces
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Made of stainless steel



1535-100

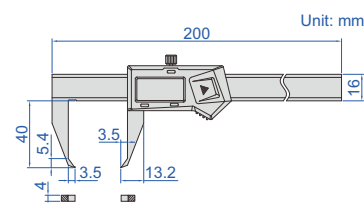
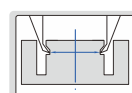


With data interface (data output cable code 7315-21 need receiver page 4, 7302-21 page 12, optional)

Code	Range	Accuracy
1535-100	0-100mm/0-4"	±0.03mm

Built-in wireless (receiver code 7315-2/3/6/7/8/9 is required)

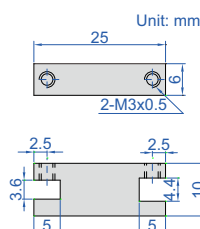
Code	Range	Accuracy
1535-100WL	0-100mm/0-4"	±0.03mm



DEPTH STOP FOR CALIPERS



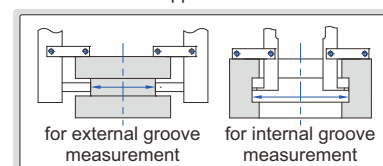
6143



- Supplied in pair
- Made of stainless steel
- Suitable for caliper series 1124, 1526, 1530, 1199, 1520, 1176, 1178, 1120, 1121, 1187, 1129, 1185 and 1376

Code
6143

application



DIGITAL SMALL POINT CALIPERS

DATA OUTPUT

- Non waterproof
- Small pointed jaws fit into small grooves and recesses
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Made of stainless steel



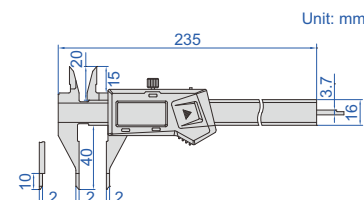
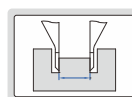
1169-150

With data interface (data output cable code 7315-21 need receiver page 4, 7302-21 page 12, optional)

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

Built-in wireless (receiver code 7315-2/3/6/7/8/9 is required)

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



DIGITAL POINT CALIPERS

DATA
OUTPUT

2

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



1183-150A

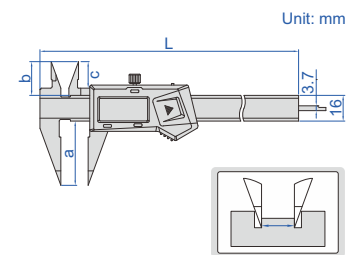
With data interface

(data output cable code 7315-21 need receiver page 4, 7302-21 page 12, optional)

Code	Range	Accuracy	L	a	b	c
1183-150A	0-150mm/0-6"	±0.03mm	236mm	40mm	21mm	16.5mm
1183-200A	0-200mm/0-8"	±0.03mm	286mm	50mm	24mm	19.5mm
1183-300A	0-300mm/0-12"	±0.03mm	400mm	60mm	25mm	21.5mm

Built-in wireless (receiver code 7315-2/3/6/7/8/9 is required)

Code	Range	Accuracy	L	a	b	c
1183-150AWL	0-150mm/0-6"	±0.03mm	236mm	40mm	21mm	16.5mm
1183-200AWL	0-200mm/0-8"	±0.03mm	286mm	50mm	24mm	19.5mm
1183-300AWL	0-300mm/0-12"	±0.03mm	400mm	60mm	25mm	21.5mm



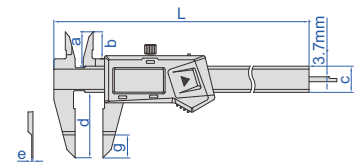
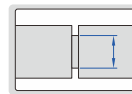
DIGITAL BLADE CALIPERS

DATA
OUTPUT



1188-150A

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



With data interface (data output cable code 7315-21 need receiver page 4, 7302-21 page 12, optional)

Code	Range	Accuracy	L	a	b	c	d	e	g
1188-150A	0-150mm/0-6"	±0.03mm	235mm	21mm	16.5mm	16mm	40mm	0.85mm	17mm
1188-200A	0-200mm/0-8"	±0.03mm	297mm	24mm	20mm	16mm	50mm	0.85mm	17mm
1188-300A	0-300mm/0-12"	±0.04mm	390mm	26mm	21.5mm	16mm	60mm	1.00mm	17mm

Built-in wireless (receiver code 7315-2/3/6/7/8/9 is required)

Code	Range	Accuracy	L	a	b	c	d	e	g
1188-150AWL	0-150mm/0-6"	±0.03mm	235mm	21mm	16.5mm	16mm	40mm	0.85mm	17mm
1188-200AWL	0-200mm/0-8"	±0.03mm	297mm	24mm	20mm	16mm	50mm	0.85mm	17mm
1188-300AWL	0-300mm/0-12"	±0.04mm	390mm	26mm	21.5mm	16mm	60mm	1.00mm	17mm

- Non waterproof
- Lower jaws with positioning surfaces, for measuring inside diameters quickly
- 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
- Made of stainless steel

With data interface (data output cable code 7315-21 need receiver page 4, 7302-21 page 12, optional)

Code	Range	Accuracy
1534-200	0-200mm/0-8"	±0.03mm

Built-in wireless (receiver code 7315-2/3/6/7/8/9 is required)

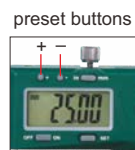
Code	Range	Accuracy
1534-200WL	0-200mm/0-8"	±0.03mm

DIGITAL CALIPERS WITH POSITIONING SURFACES

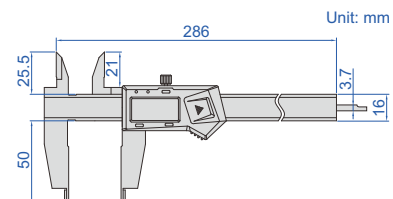
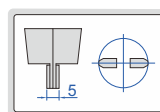
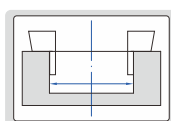


1534-200

DATA OUTPUT



preset buttons



Unit: mm

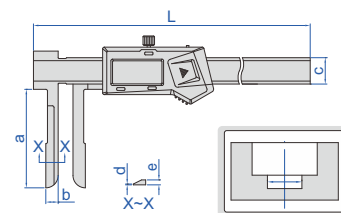
DATA OUTPUT

DIGITAL INSIDE KNIFE-EDGE CALIPERS

- Non waterproof
- Measure diameter of deep step holes
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Made of stainless steel



1123-150A



With data interface

(mm)

Code	Range	Accuracy	L	a	b	c	d	e	Data output cable (optional)
1123-150A	15-150mm/0.6-6"	±0.05mm	250	60	12	16	0.3	3.5	7315-21 need receiver page 4, 7302-21 page 12
1123-200A	20-200mm/0.8-8"	±0.06mm	305	100	17	16	0.3	3.5	7315-21 need receiver page 4, 7302-21 page 12
1123-300A	24-300mm/0.9-12"	±0.06mm	500	150	22	24	0.5	3.5	7315-22 need receiver page 4, 7302-22 page 12

Built-in wireless (receiver code 7315-2/3/6/7/8/9 is required)

(mm)

Code	Range	Accuracy	L	a	b	c	d	e
1123-150AWL	15-150mm/0.6-6"	±0.05mm	250	60	12	16	0.3	3.5
1123-200AWL	20-200mm/0.8-8"	±0.06mm	305	100	17	16	0.3	3.5

DIGITAL CALIPERS WITH KNIFE-EDGE LOWER JAWS

- Non waterproof
- Measure diameter of narrow grooves
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Made of stainless steel

With data interface (data output cable code 7315-21 need receiver page 4, 7302-21 page 12, optional)

Code	Range	Accuracy
1532-200	0-200mm/0-8"	±0.03mm

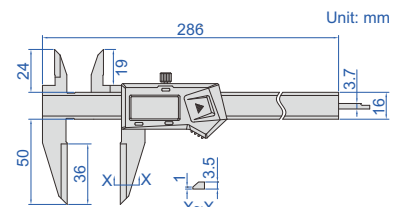
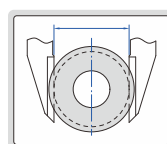
Built-in wireless (receiver code 7315-2/3/6/7/8/9 is required)

Code	Range	Accuracy
1532-200WL	0-200mm/0-8"	±0.03mm



1532-200

DATA OUTPUT



Unit: mm

DIGITAL CALIPERS WITH LONG UPPER JAWS

DATA
OUTPUT

2

- Non waterproof
- Long upper jaws for measuring diameter of deep holes
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Made of stainless steel



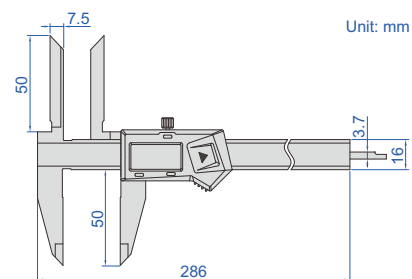
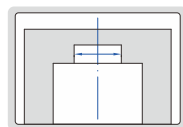
1138-200

With data interface (data output cable code 7315-21 need receiver page 4, 7302-21 page 12, optional)

Code	Range	Accuracy
1138-200	0-200mm/0-8"	±0.04mm

Built-in wireless (receiver code 7315-2/3/6/7/8/9 is required)

Code	Range	Accuracy
1138-200WL	0-200mm/0-8"	±0.04mm



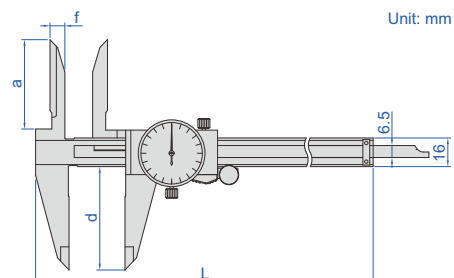
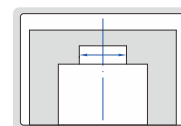
DIAL CALIPERS WITH LONG UPPER JAWS

SHOCK
PROOF



1338-300

- Long upper jaws for measuring diameter of deep holes
- Shockproof dial indicator
- Dial indicator graduation: 0.02mm
- Made of stainless steel



(mm)						
Code	Range	Accuracy	L	a	d	f
1338-150	0-150mm	±0.03mm	236	40	40	6.5
1338-200	0-200mm	±0.03mm	288	45	50	7.5
1338-300	0-300mm	±0.04mm	400	50	60	8

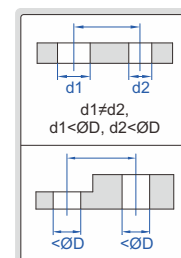
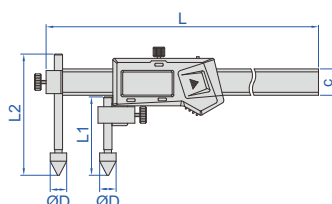
DATA
OUTPUT

DIGITAL OFFSET CENTERLINE CALIPERS



1192-150A

preset buttons



- Non waterproof
- Measure hole center distance in the same or offset planes
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, set, mm/inch, preset (+, -)
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Made of stainless steel

With data interface

(mm)

Code	Range	Accuracy	c	ØD	L1	L2	L	Data output cable (optional)
1192-150A	10-150mm/0.4-6"	±0.05mm	16	10	46	79	236	7315-21 need receiver page 4, 7302-21 page 12
1192-200A	10-200mm/0.4-8"	±0.07mm	16	10	46	79	286	7315-21 need receiver page 4, 7302-21 page 12
1192-300A	10-300mm/0.4-12"	±0.09mm	16	10	46	79	396	7315-21 need receiver page 4, 7302-21 page 12
1192-500A	20-500mm/0.8-20"	±0.09mm	24	20	52	112	725	7315-22 need receiver page 4, 7302-22 page 12
1192-1000A	30-1000mm/1.2-40"	±0.12mm	31	30	75	120	1255	7315-22 need receiver page 4, 7302-22 page 12
1192-1500A	30-1500mm/1.2-60"	±0.15mm	31	30	75	120	1760	7315-22 need receiver page 4, 7302-22 page 12

Built-in wireless (receiver code 7315-2/3/6/7/8/9 is required)

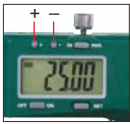
(mm)

Code	Range	Accuracy	c	ØD	L1	L2	L
1192-150AWL	10-150mm/0.4-6"	±0.05mm	16	10	46	79	236
1192-200AWL	10-200mm/0.4-8"	±0.07mm	16	10	46	79	286
1192-300AWL	10-300mm/0.4-12"	±0.09mm	16	10	46	79	396
1192-500AWL	20-500mm/0.8-20"	±0.09mm	24	20	52	112	725

DIGITAL BACK-JAW CENTERLINE CALIPERS

DATA
OUTPUT

preset buttons

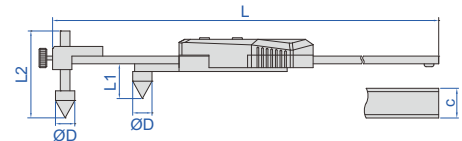
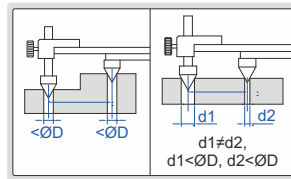


1177-200

back-jaw



- Non waterproof
- Measure hole center distance in the same or offset planes
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, set, mm/inch, preset (+, -)
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Made of stainless steel



With data interface

(mm)

Code	Range	Accuracy	ØD	c	L1	L2	L	Data output cable (optional)
1177-200	10-200mm/0.4-8"	±0.10mm	10	16	18	45	310	7315-21 need receiver page 4, 7302-21 page 12
1177-300	10-300mm/0.4-12"	±0.10mm	10	16	18	45	410	7315-21 need receiver page 4, 7302-21 page 12
1177-500	20-500mm/0.8-20"	±0.10mm	20	24	26	70	692	7315-22 need receiver page 4, 7302-22 page 12
1177-1000	30-1000mm/1.2-40"	±0.12mm	30	31	39	70	1242	7315-22 need receiver page 4, 7302-22 page 12
1177-1500	30-1500mm/1.2-60"	±0.15mm	30	31	39	70	1745	7315-22 need receiver page 4, 7302-22 page 12

Built-in wireless (receiver code 7315-2/3/6/7/8/9 is required)

(mm)

Code	Range	Accuracy	ØD	c	L1	L2	L
1177-200WL	10-200mm/0.4-8"	±0.10mm	10	16	18	45	310
1177-300WL	10-300mm/0.4-12"	±0.10mm	10	16	18	45	410
1177-500WL	20-500mm/0.8-20"	±0.10mm	20	24	26	70	692

DIGITAL BACK-JAW EDGE TO CENTER CALIPERS

DATA
OUTPUT

- Non waterproof
- Measure edge to hole center distance
- 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
- Made of stainless steel

With data interface (data output cable code 7315-21 need receiver page 4, 7302-21 page 12, optional)

Code	Range	Accuracy	L
1524-200	5-200mm/0.2-8"	±0.1mm	310mm
1524-300	5-300mm/0.2-12"	±0.1mm	410mm

Built-in wireless

(receiver code 7315-2/3/6/7/8/9 is required)

Code	Range	Accuracy	L
1524-200WL	5-200mm/0.2-8"	±0.1mm	310mm
1524-300WL	5-300mm/0.2-12"	±0.1mm	410mm

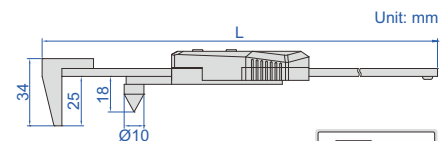
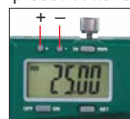


1524-200

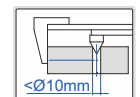
back-jaw



preset buttons



Unit: mm



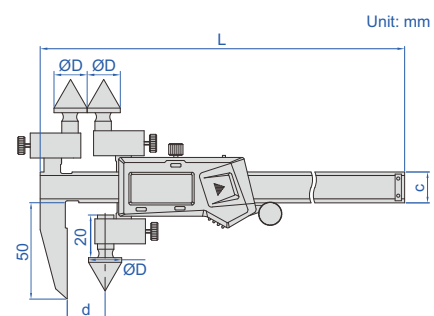
DATA
OUTPUT

DIGITAL CENTERLINE AND EDGE TO CENTER CALIPERS



1521-2002

- Non waterproof
- Measure hole center distance in the same or offset planes and edge to hole center distance
- 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
- Made of stainless steel

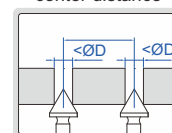
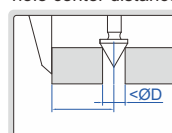


With data interface

(data output cable code 7315-21 need receiver page 4, 7302-21 page 12, optional)

(mm)

Code	Range	Accuracy	ØD	d	L	c
1521-150	5-150mm/0.2-6"	±0.05mm	5	5	236	16
1521-1501	10-150mm/0.4-6"	±0.05mm	10	10	236	16
1521-1502	20-150mm/0.8-6"	±0.05mm	20	20	236	16
1521-200	5-200mm/0.2-8"	±0.05mm	5	5	285	16
1521-2001	10-200mm/0.4-8"	±0.05mm	10	10	285	16
1521-2002	20-200mm/0.8-8"	±0.05mm	20	20	285	16
1521-300	5-300mm/0.2-12"	±0.07mm	5	5	385	17
1521-3001	10-300mm/0.4-12"	±0.07mm	10	10	385	17
1521-3002	20-300mm/0.8-12"	±0.07mm	20	20	385	17

measure hole
center distance

measure edge to
hole center distance


Built-in wireless (receiver code 7315-2/3/6/7/8/9 is required)

(mm)

Code	Range	Accuracy	ØD	d	L	c
1521-150WL	5-150mm/0.2-6"	±0.05mm	5	5	236	16
1521-1501WL	10-150mm/0.4-6"	±0.05mm	10	10	236	16
1521-1502WL	20-150mm/0.8-6"	±0.05mm	20	20	236	16
1521-200WL	5-200mm/0.2-8"	±0.05mm	5	5	285	16
1521-2001WL	10-200mm/0.4-8"	±0.05mm	10	10	285	16
1521-2002WL	20-200mm/0.8-8"	±0.05mm	20	20	285	16
1521-300WL	5-300mm/0.2-12"	±0.07mm	5	5	385	17
1521-3001WL	10-300mm/0.4-12"	±0.07mm	10	10	385	17
1521-3002WL	20-300mm/0.8-12"	±0.07mm	20	20	385	17

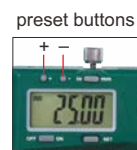
DIGITAL CENTERLINE AND EDGE TO CENTER CALIPERS

DATA
OUTPUT

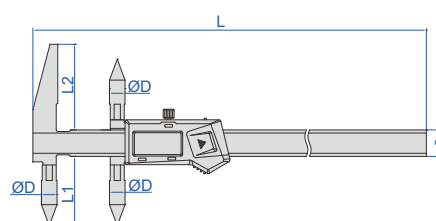
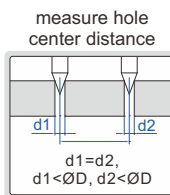
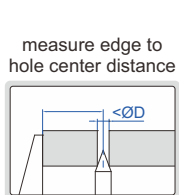
2



1525-300



- Non waterproof
- Measure hole center distance or edge to hole center distance
- 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
- Made of stainless steel



With data interface

(mm)

Code	Range of upper jaw (edge to center)	Range of lower jaw (center to center)	Accuracy	ØD	L1	L2	c	L	Data output cable (optional)
1525-300	5-300mm/0.2-12"	10-300mm/0.4-12"	±0.08mm	10	44.5	55	17	410	7315-21 need receiver page 4, 7302-21 page 12
1525-3001	10-300mm/0.4-12"	20-300mm/0.8-12"	±0.08mm	20	48	60	17	410	
1525-500	10-500mm/0.4-20"	20-500mm/0.8-20"	±0.09mm	20	50	60	24	690	7315-22 need receiver page 4, 7302-22 page 12
1525-1000	15-1000mm/0.6-40"	30-1000mm/1.2-40"	±0.12mm	30	70	81	31	1255	
1525-1500	15-1500mm/0.6-60"	30-1500mm/1.2-60"	±0.15mm	30	70	81	31	1760	

Built-in wireless (receiver code 7315-2/3/6/7/8/9 is required)

(mm)

Code	Range of upper jaw (edge to center)	Range of lower jaw (center to center)	Accuracy	ØD	L1	L2	c	L
1525-300WL	5-300mm/0.2-12"	10-300mm/0.4-12"	±0.08mm	10	44.5	55	17	410
1525-3001WL	10-300mm/0.4-12"	20-300mm/0.8-12"	±0.08mm	20	48	60	17	410
1525-500WL	10-500mm/0.4-20"	20-500mm/0.8-20"	±0.09mm	20	50	60	24	690

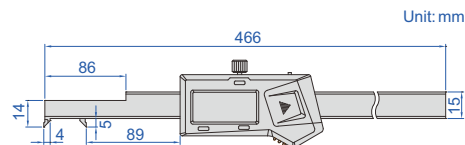
DIGITAL HOOK CALIPERS

DATA
OUTPUT



1122-300

- Non waterproof
- Measure width and distance of grooves inside bores
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Made of stainless steel

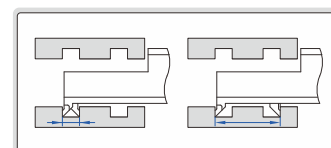


With data interface (data output cable code 7315-21 need receiver page 4, 7302-21 page 12, optional)

Code	Range	Accuracy
1122-300	4-300mm/0.16-12"	±0.04mm

Built-in wireless (receiver code 7315-2/3/6/7/8/9 is required)

Code	Range	Accuracy
1122-300WL	4-300mm/0.16-12"	±0.04mm



DATA
OUTPUT

DIGITAL CALIPERS WITH ONE DIRECTION UPPER JAWS

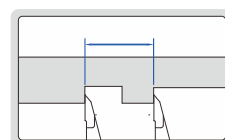
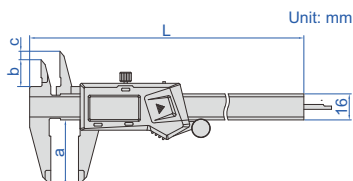


1184-200



1184-150A

- Non waterproof
- Resolution: 0.01mm/0.0005"
- Buttons: zero, power on/off, inch/mm
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Data output
- Made of stainless steel
- Optional accessory: data output cable (code 7315-21 need receiver page 4, 7302-21 page 12)



jaws with same height
used for measuring the
distance in same level



jaws with different height
used for measuring the
distance in different level

Jaws with same height (mm)

Code	Range	Accuracy	L	a	b	c
1184-150	0-150mm/0-6"	±0.03mm	236	40	17	0
1184-200	0-200mm/0-8"	±0.03mm	286	50	20	0
1184-300	0-300mm/0-12"	±0.03mm	400	60	22	0

Jaws with different height (mm)

Code	Range	Accuracy	L	a	b	c
1184-150A	0-150mm/0-6"	±0.03mm	236	40	17	5
1184-200A	0-200mm/0-8"	±0.03mm	286	50	20	8
1184-300A	0-300mm/0-12"	±0.03mm	400	60	22	10

DATA
OUTPUT

DIGITAL OFFSET CALIPERS



1186-150A

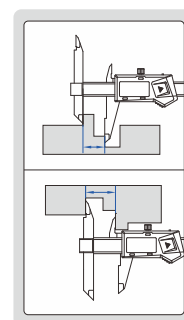
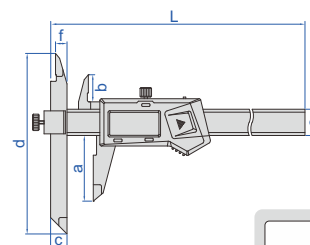
- Non waterproof
- The left jaw can slide up and down to facilitate measurement of stepped sections
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Made of stainless steel

With data interface (data output cable code 7315-21 need receiver page 4, 7302-21 page 12, optional) (mm)

Code	Range	Accuracy	L	a	b	c	d	e	f
1186-150A	0-150mm/0-6"	±0.04mm	249	40	16.5	10	110	17	7
1186-200A	0-200mm/0-8"	±0.04mm	299	50	19.5	10	120	17	7
1186-300A	0-300mm/0-12"	±0.05mm	399	60	20.5	10	130	17	7

Built-in wireless (receiver code 7315-2/3/6/7/8/9 is required) (mm)

Code	Range	Accuracy	L	a	b	c	d	e	f
1186-150AWL	0-150mm/0-6"	±0.04mm	249	40	16.5	10	110	17	7
1186-200AWL	0-200mm/0-8"	±0.04mm	299	50	19.5	10	120	17	7
1186-300AWL	0-300mm/0-12"	±0.05mm	399	60	20.5	10	130	17	7



DIGITAL TUBE THICKNESS CALIPERS

DATA
OUTPUT

2

- Non waterproof
- Measure wall thickness of tubes
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Made of stainless steel



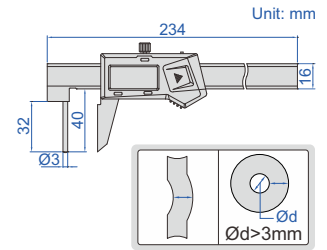
1161-150A

With data interface (data output cable code 7315-21 need receiver page 4, 7302-21 page 12, optional)

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

Built-in wireless (receiver code 7315-2/3/6/7/8/9 is required)

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

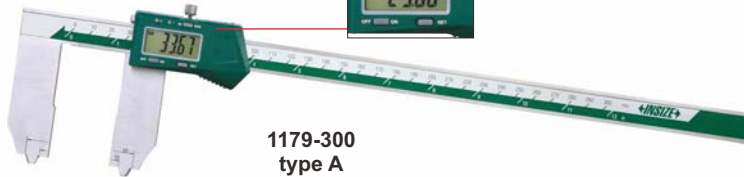


DIGITAL RTJ RING GROOVE CALIPERS

DATA
OUTPUT

- Non waterproof
- Angle of RTJ ring groove: 23°
- Measure ring grooves of flange
- Resolution: 0.01mm/0.0005"
- Button function: on/off, set, zero, mm/inch, data preset
- Battery CR2032
- Made of stainless steel

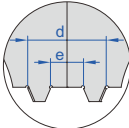
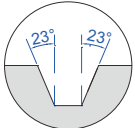
preset buttons



1179-300
type A

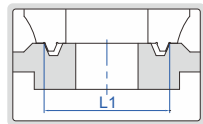
applicable for
RTJ ring grooves
with angle 23°

d and e need
to be added
on the reading

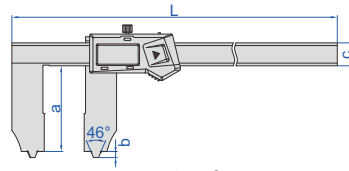
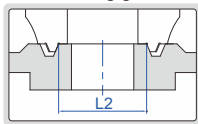


1179-600
type B

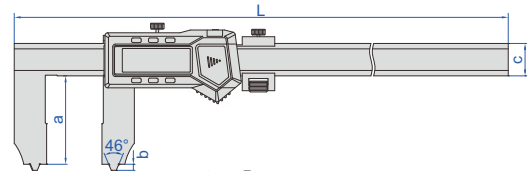
measure outside diameter
of RTJ ring groove



measure inside diameter
of RTJ ring groove



type A



type B

With data interface

(mm)

Code	Range (inside diameter of RTJ ring groove)	Range (outside diameter of RTJ ring groove)	Accuracy	Type	L	a	b	c	d	e	Data output cable (optional)
1179-300	10-300mm/0.4-12"	25-300mm/1-12"	±0.06mm	A	410	63.5	4.5	17	25	10	7315-21 need receiver page 4, 7302-21 page 12
1179-600	10-600mm/0.4-24"	25-600mm/1-24"	±0.07mm	B	770	65.5	4.5	24	25	10	7315-22 need receiver page 4, 7302-22 page 12
1179-1000	15-1000mm/0.6-40"	30-1000mm/1.2-40"	±0.09mm	B	1220	90	5	31	30	15	

Built-in wireless (receiver code 7315-2/3/6/7/8/9 is required)

(mm)

Code	Range (inside diameter of RTJ ring groove)	Range (outside diameter of RTJ ring groove)	Accuracy	Type	L	a	b	c	d	e
1179-300WL	10-300mm/0.4-12"	25-300mm/1-12"	±0.06mm	A	410	63.5	4.5	17	25	10
1179-600WL	10-600mm/0.4-24"	25-600mm/1-24"	±0.07mm	B	770	65.5	4.5	24	25	10

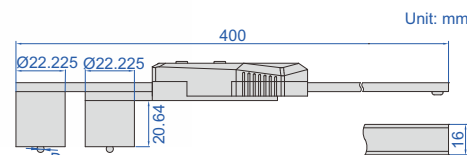
DIGITAL CALIPERS WITH INTERCHANGEABLE BALL TIPS

DATA
OUTPUT

2



1527-3001



- Non waterproof
- 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
- Made of stainless steel
- Optional accessory: ball tips

With data interface (data output cable code 7315-21 need receiver page 4, 7302-21 page 12, optional)

Code	Range	Accuracy
1527-3001	(22.22+D)~300mm*	±0.03mm

Built-in wireless (receiver code 7315-2/3/6/7/8/9 is required)

Code	Range	Accuracy
1527-3001WL	(22.22+D)~300mm*	±0.03mm

*"D" is the diameter of ball tips.

Ball tips (optional, supplied in pair)



1527-T101

type A



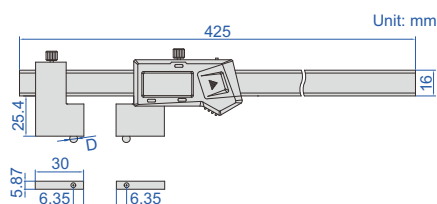
1527-T104

type B

Code	Diameter (D)	Accuracy of diameter	Type	Material
1527-T101	1/16" (Ø1.5875mm)	±0.005mm	A	ruby
1527-T102	1/8" (Ø3.175mm)	±0.005mm	B	stainless steel
1527-T103	3/16" (Ø4.7625mm)	±0.005mm	B	stainless steel
1527-T104	1/4" (Ø6.35mm)	±0.005mm	B	stainless steel
1527-T105	3/8" (Ø9.525mm)	±0.005mm	B	stainless steel
1527-T106	1/2" (Ø12.7mm)	±0.005mm	B	stainless steel

DATA
OUTPUT

DIGITAL CALIPERS WITH INTERCHANGEABLE BALL TIPS



ball tips are optional

1528-3001



- Non waterproof
- 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
- Made of stainless steel
- Optional accessory: ball tips

With data interface (data output cable code 7315-21 need receiver page 4, 7302-21 page 12, optional)

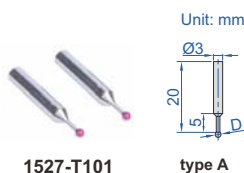
Code	Range	Accuracy
1528-3001	(12.7+D)~300mm*	±0.03mm

Built-in wireless (receiver code 7315-2/3/6/7/8/9 is required)

Code	Range	Accuracy
1528-3001WL	(12.7+D)~300mm*	±0.03mm

*"D" is the diameter of ball tips.

Ball tips (optional, supplied in pair)



1527-T101

type A



1527-T104

type B

Code	Diameter (D)	Accuracy of diameter	Type	Material
1527-T101	1/16" (Ø1.5875mm)	±0.005mm	A	ruby
1527-T102	1/8" (Ø3.175mm)	±0.005mm	B	stainless steel
1527-T103	3/16" (Ø4.7625mm)	±0.005mm	B	stainless steel
1527-T104	1/4" (Ø6.35mm)	±0.005mm	B	stainless steel
1527-T105	3/8" (Ø9.525mm)	±0.005mm	B	stainless steel
1527-T106	1/2" (Ø12.7mm)	±0.005mm	B	stainless steel

DIGITAL CRIMP HEIGHT CALIPERS

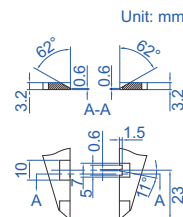
RELATIVE PRODUCT: CRIMP HEIGHT
MICROMETER (CODE 3266-25BA, 3566-25BA)

DATA
OUTPUT

- Non waterproof
- Measure crimp height
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Battery CR2032, meet DIN862
- Made of stainless steel



1165-150A

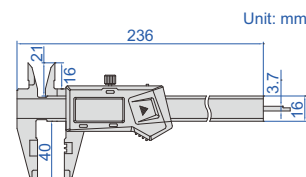


With data interface (data output cable
code 7315-21 need receiver page 4,
7302-21 page 12, optional)

Code	Range	Accuracy
1165-150A	0-150mm/0-6"	±0.03mm

Built-in wireless
(receiver code 7315-2/3/6/7/8/9 is required)

Code	Range	Accuracy
1165-150AWL	0-150mm/0-6"	±0.03mm



DIGITAL CALIPERS WITH LARGE MEASURING FACES

DATA
OUTPUT

- Non waterproof
- Measure diameter of wire ropes, and thickness of soft materials like rubber, sponge, etc.
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Made of stainless steel



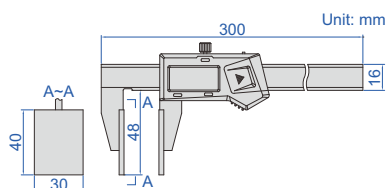
1172-200

With data interface (data output cable
code 7315-21 need receiver page 4,
7302-21 page 12, optional)

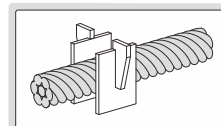
Code	Range	Accuracy
1172-200	0-200mm/0-8"	±0.07mm

Built-in wireless
(receiver code 7315-2/3/6/7/8/9 is required)

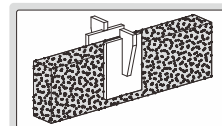
Code	Range	Accuracy
1172-200WL	0-200mm/0-8"	±0.07mm



measure diameter
of wire ropes



measure thickness of
rubber, sponge, etc.



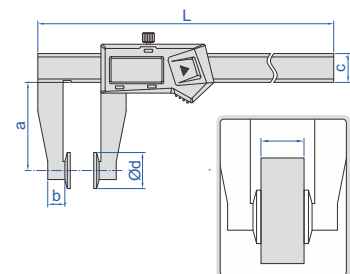
DIGITAL CALIPERS WITH DISK FACES

DATA
OUTPUT

- Non waterproof
- Measure thickness of soft sheets
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Made of stainless steel



1533-150



With data interface

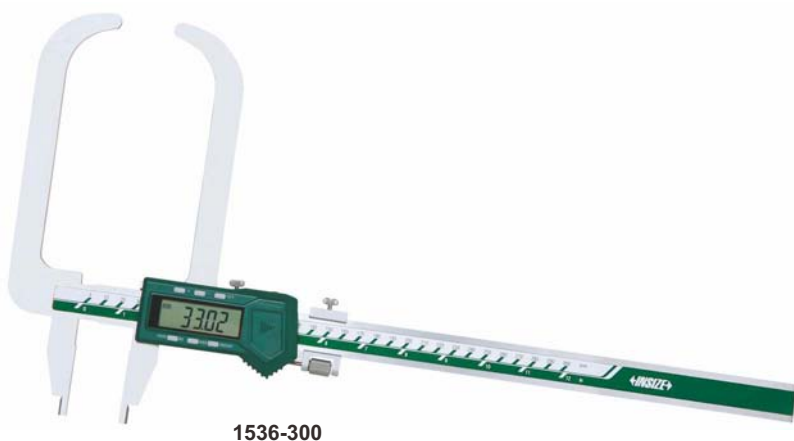
Code	Range	Accuracy	L	a	b	c	Ød	Data output cable (optional)
1533-150	0-150mm/0-6"	±0.04mm	245	50	11	16	20	7315-21 need receiver page 4, 7302-21 page 12
1533-200	0-200mm/0-8"	±0.05mm	310	80	11	16	30	7315-21 need receiver page 4, 7302-21 page 12
1533-500	0-500mm/0-20"	±0.07mm	680	150	12.5	24	50	7315-22 need receiver page 4, 7302-22 page 12

Built-in wireless (receiver code 7315-2/3/6/7/8/9 is required)

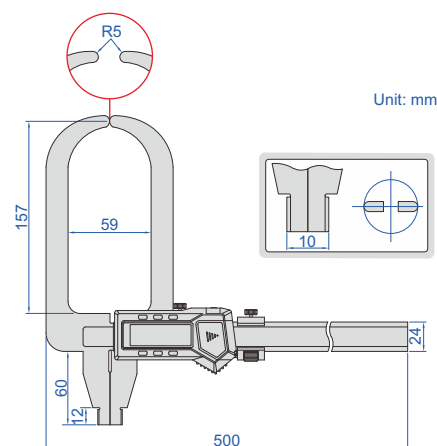
Code	Range	Accuracy	L	a	b	c	Ød
1533-150WL	0-150mm/0-6"	±0.04mm	245	50	11	16	20
1533-200WL	0-200mm/0-8"	±0.05mm	310	80	11	16	30
1533-500WL	0-500mm/0-20"	±0.07mm	680	150	12.5	24	50

DATA
OUTPUT

DIGITAL WALL THICKNESS CALIPERS



1536-300



Unit: mm

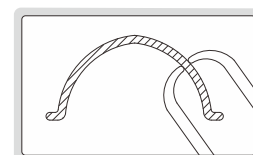
With data interface (data output cable
code 7315-22 need receiver page 4,
7302-22 page 12, optional)

Code	Range	Accuracy
1536-300	0-300mm/0-12"	±0.05mm

Built-in wireless
(receiver code 7315-2/3/6/7/8/9 is required)

Code	Range	Accuracy
1536-300WL	0-300mm/0-12"	±0.05mm

- Non waterproof
- Measure wall thickness of helmets, domes and curved pots
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch, ABS, data preset
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Made of stainless steel



DIRECT READING,
CALCULATION IS NOT REQUIRED

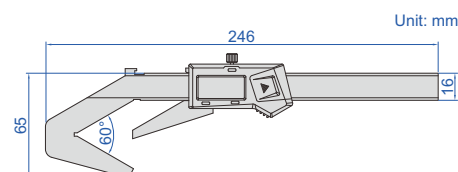
DATA
OUTPUT

DIGITAL V SHAPE CALIPER

- Non waterproof
- Measure outside diameter of three number of flutes (such as taps, reamers, end mills and gears)
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch
- Battery CR2032
- Automatic power off, move the digital unit to turn on power
- Data output
- Made of stainless steel
- Optional accessory: data output cable (code 7315-1529 need receiver, 7302-1529)



1539-3



Unit: mm

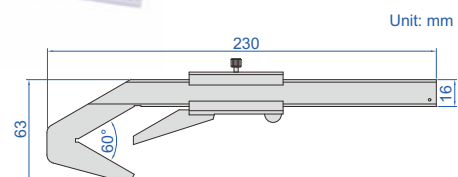
Code	Range	Accuracy
1539-3	Ø4-Ø40mm/0.16"-1.58" DIA	±0.03mm

V SHAPE VERNIER CALIPER

- Measure outside diameter of three number of flutes (such as taps, reamers, end mills and gears)
- Made of stainless steel
- Satin chrome plated reading surface



1273-403



Unit: mm

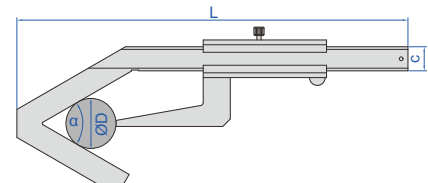
Code	Range	Graduation	Accuracy
1273-403	Ø4-40mm	0.05mm	±0.05mm

V SHAPE VERNIER CALIPERS

- Measure outside diameter of odd number of flutes (such as taps, reamers, end mills and gears)
- Made of stainless steel
- Satin chrome plated reading surface
- Optional accessory: 4mm pin gage (code **4110-4D00**), Ø50mm calibration cylinder (code **6316-50**)



1229-3

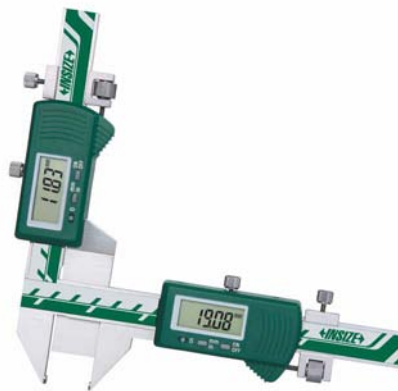


Code	Range (ØD)	Graduation	Accuracy	Flutes	Angle α	L	c
1229-3	Ø4-60mm	0.02mm	±0.04mm	3	60°	260mm	16mm
1229-35	Ø50-200mm	0.02mm	±0.06mm	3	60°	516mm	20mm
1229-5	Ø4-60mm	0.02mm	±0.04mm	5	108°	210mm	16mm
1229-55	Ø50-200mm	0.02mm	±0.06mm	5	108°	360mm	20mm

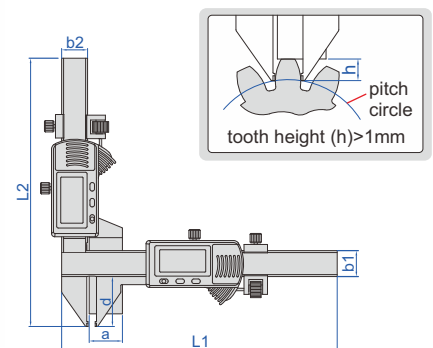
DIGITAL GEAR TOOTH CALIPERS

ATTENTION:
NO DATA OUTPUT

- Non waterproof
- Resolution: 0.01mm/0.0005"
- Carbide tips
- Measure the tooth thickness by positioning the tooth height (for tooth height > 1mm)
- Buttons: zero, on/off, mm/inch
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Made of stainless steel

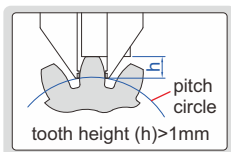


1181-M25A



Code	Range	Accuracy of height measurement	Accuracy of thickness measurement	Total accuracy	L1	L2	a	b1	b2	d
1181-M25A	M1-25mm	±0.03mm	±0.03mm	±0.04mm	170mm	165.5mm	21mm	16mm	16mm	30.5mm
1181-M50A	M5-50mm	±0.03mm	±0.03mm	±0.04mm	220mm	190mm	50.5mm	16mm	16mm	55mm

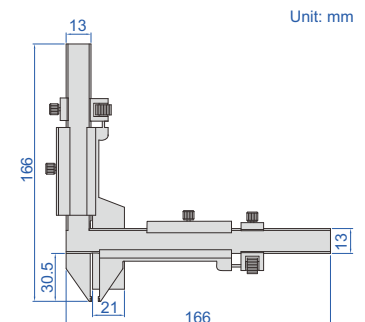
GEAR TOOTH VERNIER CALIPER



- Carbide tips
- Measure the tooth thickness by positioning the tooth height (for tooth height > 1mm)
- Made of stainless steel
- Satin chrome plated reading surface



1281-M26A



Code	Range	Graduation	Accuracy of height measurement	Accuracy of thickness measurement	Total accuracy
1281-M26A	M1-26mm	0.02mm	±0.03mm	±0.03mm	±0.04mm

REFER TO PAGE 212
FOR DETAILS



1189-150B

DIGITAL ARC RADIUS CALIPERS

2

REFER TO PAGE 441
FOR DETAILS



1166-150A

DIGITAL SCRIBING CALIPERS

- Non waterproof
- Measure thickness of disk brakes
- Resolution 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Made of stainless steel

DIGITAL DISK BRAKE CALIPERS

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

DATA
OUTPUT



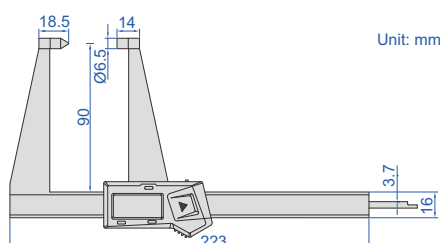
1162-125A

With data interface (data output cable
code 7315-21 need receiver page 4,
7302-21 page 12, optional)

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

Built-in wireless
(receiver code 7315-2/3/6/7/8/9 is required)

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



Unit: mm



DATA
OUTPUT

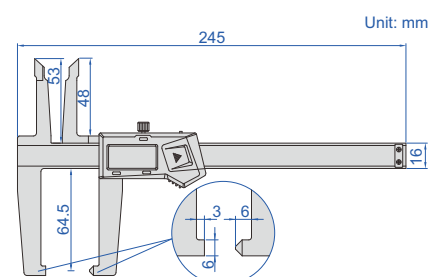
RELATIVE PRODUCT: DISK BRAKE
MICROMETER (CODE 3288-, 3588-)

DIGITAL DISK BRAKE AND PAD CALIPERS

- Non waterproof
- Measure thickness of disk brakes and pad wear
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Made of stainless steel



1167-150A



Unit: mm

With data interface (data output cable
code 7315-21 need receiver page 4,
7302-21 page 12, optional)

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

Built-in wireless
(receiver code 7315-2/3/6/7/8/9 is required)

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



DIGITAL DRUM BRAKE CALIPERS

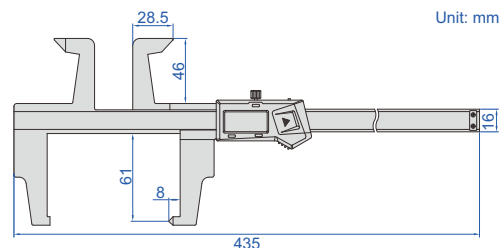
RELATIVE PRODUCT: DISK BRAKE MICROMETER (CODE 3288-, 3588-)

DATA OUTPUT



1168-300A

- Non waterproof
- Measure internal and external diameter of drum brakes
- Resolution 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Made of stainless steel



With data interface (data output cable code 7315-21 need receiver page 4, 7302-21 page 12, optional)

Code	Range	Accuracy
1168-300A	0-300mm/0-12"	±0.07mm

Built-in wireless (receiver code 7315-2/3/6/7/8/9 is required)

Code	Range	Accuracy
1168-300AWL	0-300mm/0-12"	±0.07mm



DIGITAL DRUM BRAKE CALIPER

DATA OUTPUT

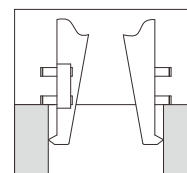
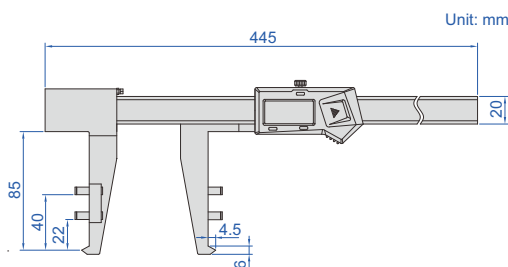
calibration block (included)



1538-300

- Non waterproof
- Measure internal diameter of drum brakes
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Data output
- Made of stainless steel
- Optional accessory: data output cable (code 7315-22 need receiver page 4, 7302-22 page 12)

Code	Range	Accuracy
1538-300	30-300mm/1.2-12"	±0.05mm





Digital Depth Gages
Page 68-73



Dial Depth Gages
Page 73



Vernier Depth Gages
Page 74-76



Extension Bases
Page 76



Mini Depth Gages
Page 76-77



Depth Gages
Page 78-81



Depth Micrometers
Page 82-83



Depth Micrometer Checkers
Page 83

IP67 WATERPROOF DIGITAL DEPTH GAGES

ATTENTION:
NO DATA OUTPUT

IP67
WATERPROOF

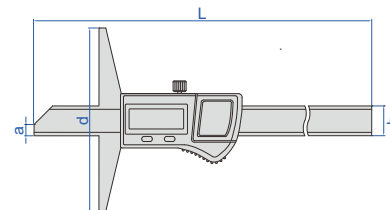
3



1543-150

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

Code	Range	Accuracy	L	a	b	d
1543-150	0-150mm/0-6"	±0.03mm	235mm	5mm	16mm	100mm
1543-200	0-200mm/0-8"	±0.03mm	285mm	5mm	16mm	100mm
1543-300	0-300mm/0-12"	±0.03mm	387mm	5mm	16mm	100mm



IP67 WATERPROOF DIGITAL DEPTH GAGES

IP67
WATERPROOF

ATTENTION: NO
DATA OUTPUT

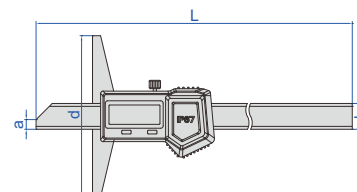
ATTENTION: IT IS NECESSARY TO SET
ZERO AFTER POWER ON EACH TIME

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



1149-150

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



DATA
OUTPUTPOPULAR
MODEL

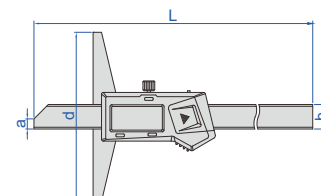
DIGITAL DEPTH GAGES (STANDARD TYPE)

3



1141-150A

- Non waterproof
- Buttons: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Meet DIN862 (except 0-500mm/0-20", 0-1000mm/0-40", 0-1500mm/0-60")
- Battery CR2032
- Made of stainless steel



With data interface

(mm)

Code	Range	Resolution	Accuracy	L	a	b	d	Data output cable (optional)
1141-150A	0-150mm/0-6"	0.01mm/0.0005"	±0.03mm	230	6	14.5	100	7315-21 need receiver page 4, 7302-21 page 12
1141-200A	0-200mm/0-8"	0.01mm/0.0005"	±0.03mm	280	6	14.5	100	7315-21 need receiver page 4, 7302-21 page 12
1141-300A	0-300mm/0-12"	0.01mm/0.0005"	±0.03mm	380	6	14.5	150	7315-21 need receiver page 4, 7302-21 page 12
1141-500A	0-500mm/0-20"	0.01mm/0.0005"	±0.05mm	585	7	15	150	7315-22 need receiver page 4, 7302-22 page 12
1141-5001A	0-500mm/0-20"	0.01mm/0.0005"	±0.05mm	585	7	15	200	7315-22 need receiver page 4, 7302-22 page 12
1141-1000A	0-1000mm/0-40"	0.01mm/0.0005"	±0.07mm	1188	7	18	150	7315-22 need receiver page 4, 7302-22 page 12
1141-10001A	0-1000mm/0-40"	0.01mm/0.0005"	±0.07mm	1188	7	18	200	7315-22 need receiver page 4, 7302-22 page 12
1141-10002A	0-1000mm/0-40"	0.01mm/0.0005"	±0.07mm	1188	7	18	250	7315-22 need receiver page 4, 7302-22 page 12
1141-10003A	0-1000mm/0-40"	0.01mm/0.0005"	±0.07mm	1188	7	18	300	7315-22 need receiver page 4, 7302-22 page 12
1141-1500A	0-1500mm/0-60"	0.01mm/0.0005"	±0.11mm	1695	7	18	200	7315-22 need receiver page 4, 7302-22 page 12

Built-in wireless (receiver code 7315-2/3/6/7/8/9 is required)

Code	Range	Resolution	Accuracy	L	a	b	d
1141-150AWL	0-150mm/0-6"	0.01mm/0.0005"	±0.03mm	230mm	6mm	14.5mm	100mm
1141-200AWL	0-200mm/0-8"	0.01mm/0.0005"	±0.03mm	280mm	6mm	14.5mm	100mm
1141-300AWL	0-300mm/0-12"	0.01mm/0.0005"	±0.03mm	380mm	6mm	14.5mm	150mm
1141-500AWL	0-500mm/0-20"	0.01mm/0.0005"	±0.05mm	585mm	7mm	15mm	150mm
1141-5001AWL	0-500mm/0-20"	0.01mm/0.0005"	±0.05mm	585mm	7mm	15mm	200mm

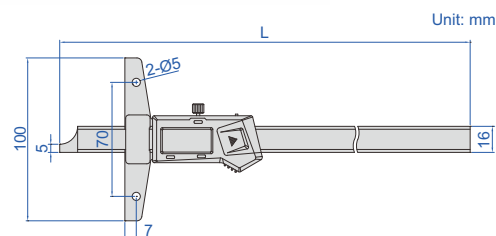
DIGITAL DEPTH GAGES WITH MOUNTING HOLES FOR EXTENSION BASE

DATA
OUTPUT



1147-300

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



With data interface (data output cable code 7315-21 need receiver page 4, 7302-21 page 12, optional)

Code	Range	Accuracy	L
1147-150	0-150mm/0-6"	±0.03mm	237mm
1147-200	0-200mm/0-8"	±0.03mm	287mm
1147-300	0-300mm/0-12"	±0.03mm	403mm
1147-500	0-500mm/0-20"	±0.05mm	605mm
1147-700	0-700mm/0-28"	±0.06mm	805mm

Built-in wireless (receiver code 7315-2/3/6/7/8/9 is required)

Code	Range	Accuracy	L
1147-150WL	0-150mm/0-6"	±0.03mm	237mm
1147-200WL	0-200mm/0-8"	±0.03mm	287mm
1147-300WL	0-300mm/0-12"	±0.03mm	403mm
1147-500WL	0-500mm/0-20"	±0.05mm	605mm
1147-700WL	0-700mm/0-28"	±0.06mm	805mm

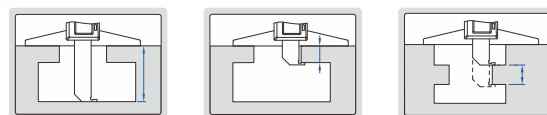
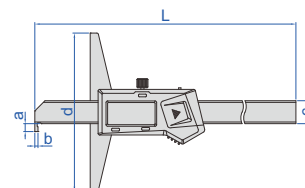
DIGITAL HOOK DEPTH GAGES

DATA
OUTPUT



1142-150A

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



With data interface

Code	Range	Accuracy	L	d	a	b	c	Data output cable (optional)
1142-150A	0-150mm/0-6"	±0.03mm	230	100	5	2	14.5	7315-21 need receiver page 4, 7302-21 page 12
1142-200A	0-200mm/0-8"	±0.03mm	280	100	5	2	14.5	7315-21 need receiver page 4, 7302-21 page 12
1142-300A	0-300mm/0-12"	±0.04mm	380	150	5	2	14.5	7315-21 need receiver page 4, 7302-21 page 12
1142-500A	0-500mm/0-20"	±0.05mm	585	150	8	3	15	7315-22 need receiver page 4, 7302-22 page 12
1142-5001A	0-500mm/0-20"	±0.05mm	585	200	8	3	15	7315-22 need receiver page 4, 7302-22 page 12
1142-1000A	0-1000mm/0-40"	±0.07mm	1188	150	10	4	18	7315-22 need receiver page 4, 7302-22 page 12
1142-10001A	0-1000mm/0-40"	±0.07mm	1188	200	10	4	18	7315-22 need receiver page 4, 7302-22 page 12
1142-10002A	0-1000mm/0-40"	±0.07mm	1188	250	10	4	18	7315-22 need receiver page 4, 7302-22 page 12

Built-in wireless (receiver code 7315-2/3/6/7/8/9 is required)

Code	Range	Accuracy	L	d	a	b	c
1142-150AWL	0-150mm/0-6"	±0.03mm	230mm	100mm	5mm	2mm	14.5mm
1142-200AWL	0-200mm/0-8"	±0.03mm	280mm	100mm	5mm	2mm	14.5mm
1142-300AWL	0-300mm/0-12"	±0.04mm	380mm	150mm	5mm	2mm	14.5mm
1142-500AWL	0-500mm/0-20"	±0.05mm	585mm	150mm	8mm	3mm	15mm
1142-5001AWL	0-500mm/0-20"	±0.05mm	585mm	200mm	8mm	3mm	15mm

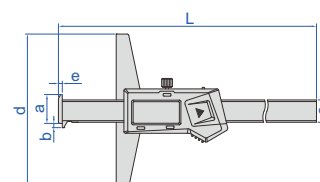
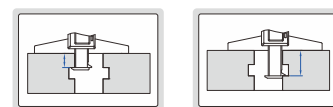
DATA OUTPUT

DIGITAL DOUBLE HOOK DEPTH GAGES

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



1144-150A



(mm)

With data interface

Code	Range	Accuracy	L	d	a	b	c	e	Data output cable (optional)
1144-150A	0-150mm/0-6"	±0.03mm	233	100	21.5	3.5	14.5	2.5	7315-21 need receiver page 4, 7302-21 page 12
1144-200A	0-200mm/0-8"	±0.03mm	283	100	21.5	3.5	14.5	2.5	7315-21 need receiver page 4, 7302-21 page 12
1144-300A	0-300mm/0-12"	±0.03mm	383	150	21.5	3.5	14.5	2.5	7315-21 need receiver page 4, 7302-21 page 12
1144-500A	0-500mm/0-20"	±0.05mm	585	150	25	5	15	3	7315-22 need receiver page 4, 7302-22 page 12
1144-5001A	0-500mm/0-20"	±0.05mm	585	200	25	5	15	3	7315-22 need receiver page 4, 7302-22 page 12
1144-1000A	0-1000mm/0-40"	±0.07mm	1188	150	32	7	18	4	7315-22 need receiver page 4, 7302-22 page 12
1144-10001A	0-1000mm/0-40"	±0.07mm	1188	200	32	7	18	4	7315-22 need receiver page 4, 7302-22 page 12
1144-10002A	0-1000mm/0-40"	±0.07mm	1188	250	32	7	18	4	7315-22 need receiver page 4, 7302-22 page 12

Built-in wireless (receiver code 7315-2/3/6/7/8/9 is required)

Code	Range	Accuracy	L	d	a	b	c	e
1144-150AWL	0-150mm/0-6"	±0.03mm	233mm	100mm	21.5mm	3.5mm	14.5mm	2.5mm
1144-200AWL	0-200mm/0-8"	±0.03mm	283mm	100mm	21.5mm	3.5mm	14.5mm	2.5mm
1144-300AWL	0-300mm/0-12"	±0.03mm	383mm	150mm	21.5mm	3.5mm	14.5mm	2.5mm
1144-500AWL	0-500mm/0-20"	±0.05mm	585mm	150mm	25mm	5mm	15mm	3mm
1144-5001AWL	0-500mm/0-20"	±0.05mm	585mm	200mm	25mm	5mm	15mm	3mm

DATA OUTPUT

DIGITAL DOUBLE HOOK DEPTH GAGE

- Non waterproof
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch, ABS/INC, data hold, TOL, set
- ABS/INC is for absolute and incremental measurement
- TOL is for tolerance measurement
- Made of stainless steel
- LR44 battery, data output
- Supplied with gage block for zero setting
- Optional accessory: extension base, data output cable (code 7302-SPC7 page 13, keyboard format), wireless data transmission (transmitter code 7315-1150 need receiver page 6)

Code	Range	Accuracy
1540-300	0-300mm/0-12"	±0.04mm

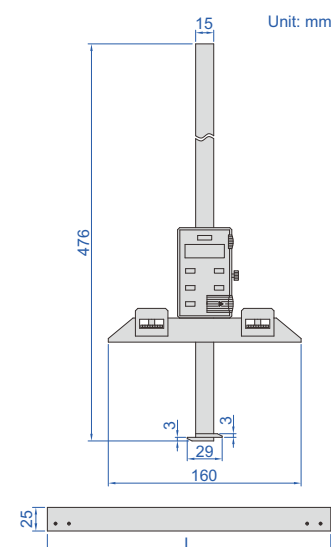
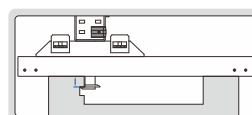
Extension base (optional)

Code	L
1540-L300	300mm
1540-L400	400mm
1540-L500	500mm
1540-L600	600mm
1540-L800	800mm

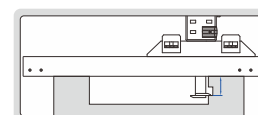
gage block for zero setting (included)



1540-300



Unit: mm



DIGITAL DEPTH GAGES WITH ROUND DEPTH BAR

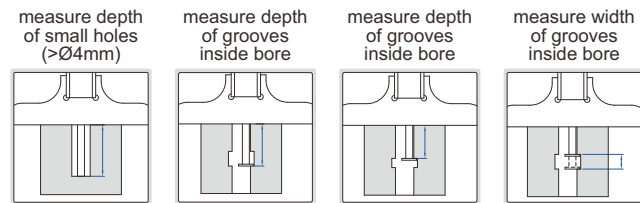
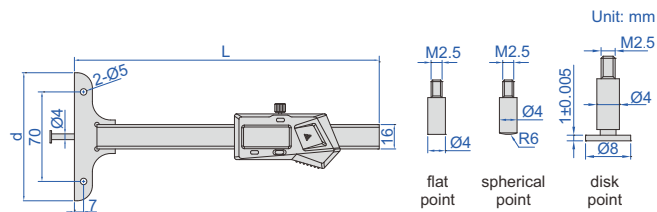
MEASURE WIDTH AND DEPTH
OF GROOVES INSIDE BORE

MEASURE DEPTH OF
SMALL HOLES (>Ø4mm)

DATA
OUTPUT

3

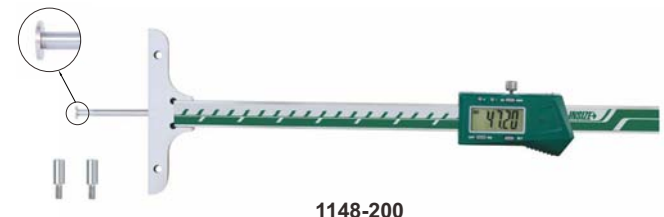
- Non waterproof
- Resolution: 0.01mm/0.0005"
- Supplied with three interchangeable points (flat, spherical, disk)
- Buttons: on/off, set, mm/inch, preset (+, -)
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Made of stainless steel
- Optional accessory: extension base
(code 6141, for 1148-120, 1148-120WL, 1148-200, 1148-200WL, 1148-300 and 1148-300WL)



1148-100S



1148-120



1148-200

With data interface (data output cable code 7315-21 need receiver page 4, 7302-21 page 12, optional)

Code	Range *	Accuracy	L	d	Remark
1148-100S	0-100mm/0-4"	±0.02mm	200mm	45mm	
1148-100	0-100mm/0-4"	±0.02mm	200mm	85mm	
1148-120	0-120mm/0-4.7"	±0.03mm	300mm	101mm	one-hand use, with mounting holes for extension base
1148-200	0-200mm/0-8"	±0.03mm	300mm	101mm	with mounting holes for extension base
1148-300	0-300mm/0-12"	±0.04mm	400mm	101mm	with mounting holes for extension base

Built-in wireless (receiver code 7315-2/3/6/7/8/9 is required)

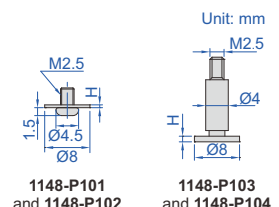
Code	Range *	Accuracy	L	d	Remark
1148-100SWL	0-100mm/0-4"	±0.02mm	200mm	45mm	
1148-100WL	0-100mm/0-4"	±0.02mm	200mm	85mm	
1148-120WL	0-120mm/0-4.7"	±0.03mm	300mm	101mm	one-hand use, with mounting holes for extension base
1148-200WL	0-200mm/0-8"	±0.03mm	300mm	101mm	with mounting holes for extension base
1148-300WL	0-300mm/0-12"	±0.04mm	400mm	101mm	with mounting holes for extension base

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

OPTIONAL DISK POINTS

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

1148-P101
(optional)



1148-P101
and 1148-P102

1148-P103
and 1148-P104

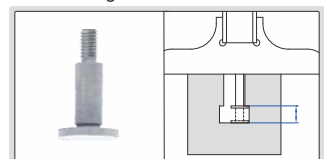
one-hand use of 1148-120
and 1148-120WL



extension base for 1148-120,
1148-120WL, 1148-200, 1148-200WL,
1148-300 and 1148-300WL (optional)



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



SHOCK
PROOF

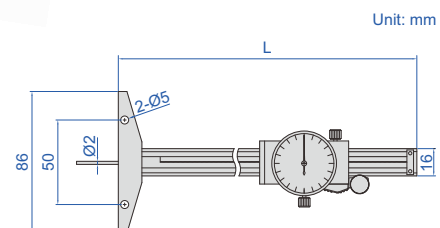
DIAL DEPTH GAGES WITH ROUND BAR



1341-100

- Shockproof dial indicator
- Dial indicator graduation: 0.02mm
- Made of stainless steel

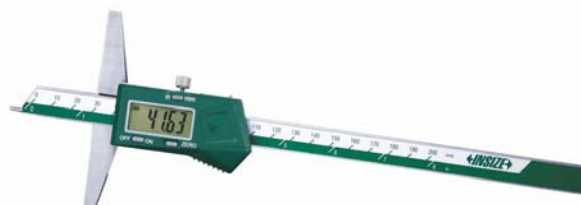
Code	Range	Accuracy	L
1341-100	0-100mm	±0.02mm	181mm
1341-200	0-200mm	±0.03mm	284mm



3

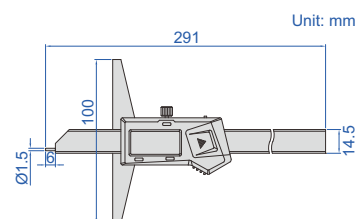
DATA
OUTPUT

DIGITAL POINT DEPTH GAGES



1143-200A

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

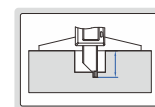


With data interface (data output cable code 7315-21 need receiver page 4, 7302-21 page 12, optional)

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

Built-in wireless (receiver code 7315-2/3/6/7/8/9 is required)

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



SHOCK
PROOF

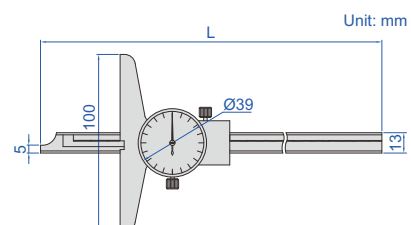
DIAL DEPTH GAGES



1340-150

- Shockproof dial indicator
- Made of stainless steel

Code	Range	Graduation	Accuracy	L
1340-150	0-150mm	0.02mm	±0.03mm	232mm
1340-200	0-200mm	0.02mm	±0.03mm	282mm
1340-300	0-300mm	0.02mm	±0.04mm	382mm



VERNIER DEPTH GAGES (STANDARD TYPE)

POPULAR
MODEL

- Made of stainless steel
- Satin chrome plated reading surface



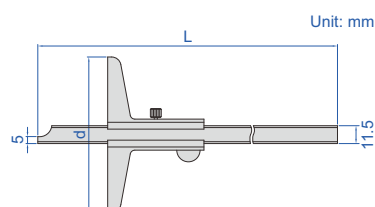
1240-2001

Graduation 0.05mm

Code	Range	Accuracy	L	d
1240-150	0-150mm	±0.05mm	245mm	100mm
1240-200	0-200mm	±0.05mm	282mm	100mm
1240-300	0-300mm	±0.08mm	382mm	100mm
1240-500	0-500mm	±0.09mm	585mm	150mm

Graduation 0.02mm

Code	Range	Accuracy	L	d
1240-1501	0-150mm	±0.03mm	245mm	100mm
1240-2001	0-200mm	±0.03mm	282mm	100mm
1240-3001	0-300mm	±0.04mm	382mm	100mm
1240-5001	0-500mm	±0.05mm	585mm	150mm

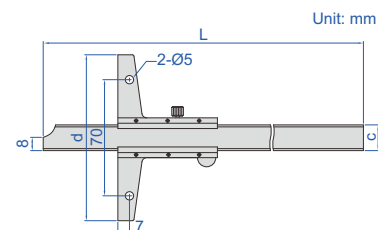


VERNIER DEPTH GAGES

WITH MOUNTING HOLES
FOR EXTENSION BASE

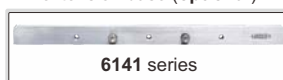


1247-2001



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

extension base (optional)



Range	L	c	d
0-150mm	240mm	16mm	100mm
0-200mm	290mm	16mm	100mm
0-300mm	390mm	16mm	100mm
0-600mm	704mm	16mm	150mm
0-1000mm	1124mm	16mm	200mm

Code	Range	Accuracy	Graduation
1247-150	0-150mm	±0.05mm	0.05mm
1247-200	0-200mm	±0.05mm	0.05mm
1247-300	0-300mm	±0.08mm	0.05mm
1247-600	0-600mm	±0.10mm	0.05mm
1247-1000	0-1000mm	±0.15mm	0.05mm

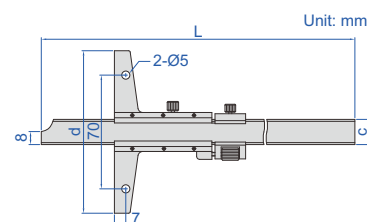
Code	Range	Accuracy	Graduation
1247-1501	0-150mm	±0.03mm	0.02mm
1247-2001	0-200mm	±0.03mm	0.02mm
1247-3001	0-300mm	±0.04mm	0.02mm
1247-6001	0-600mm	±0.05mm	0.02mm
1247-1001	0-1000mm	±0.07mm	0.02mm

WITH MOUNTING HOLES
FOR EXTENSION BASE

VERNIER DEPTH GAGES WITH FINE ADJUSTMENT

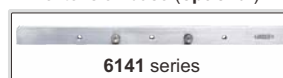


1249-1501



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

extension base (optional)



Graduation 0.02mm

Code	Range	Accuracy
1249-1501	0-150mm	±0.03mm
1249-2001	0-200mm	±0.03mm
1249-3001	0-300mm	±0.04mm

Graduation 0.05mm

Code	Range	Accuracy
1249-150	0-150mm	±0.05mm
1249-200	0-200mm	±0.05mm
1249-300	0-300mm	±0.08mm

Range	L	c	d
0-150mm	256mm	16mm	100mm
0-200mm	306mm	16mm	100mm
0-300mm	406mm	16mm	100mm

WITH MOUNTING HOLES
FOR EXTENSION BASE

VERNIER HOOK DEPTH GAGES

extension base (optional)

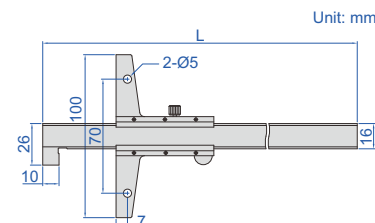


1248-1501

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

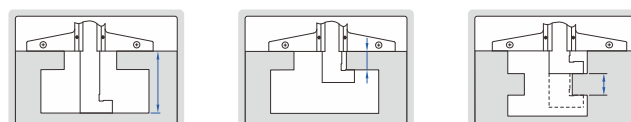
Graduation 0.05mm

Code	Range	Accuracy	L
1248-150	0-150mm	±0.05mm	266mm
1248-200	0-200mm	±0.05mm	316mm
1248-300	0-300mm	±0.08mm	416mm



Graduation 0.02mm

Code	Range	Accuracy	L
1248-1501	0-150mm	±0.03mm	266mm
1248-2001	0-200mm	±0.03mm	316mm
1248-3001	0-300mm	±0.04mm	416mm



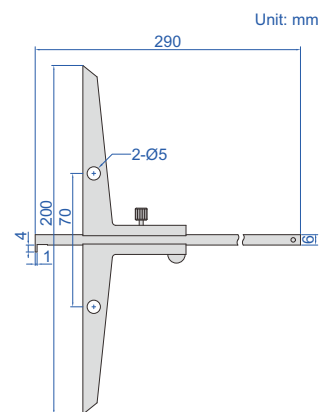
VERNIER HOOK DEPTH GAGE



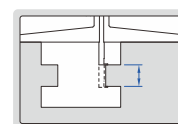
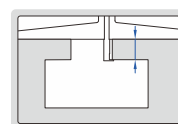
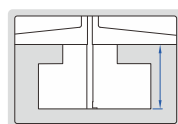
1243-2001

- Graduation 0.02mm
- Made of stainless steel
- Satin chrome plating finish on reading surface

Code	Range	Accuracy
1243-2001	0-200mm	±0.04mm



Unit: mm



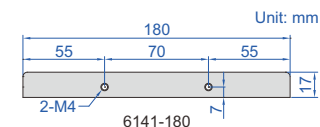
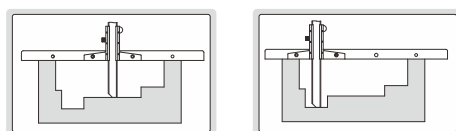
EXTENSION BASES



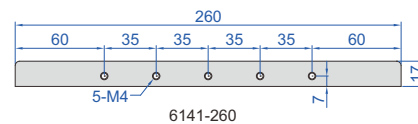
6141-260

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

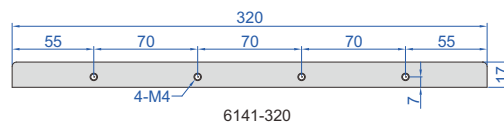
Code	Length
6141-180	180mm
6141-260	260mm
6141-320	320mm
6141-600	600mm



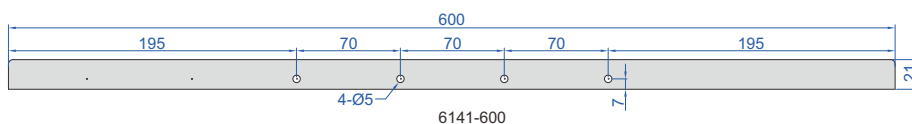
6141-180



6141-260



6141-320



6141-600

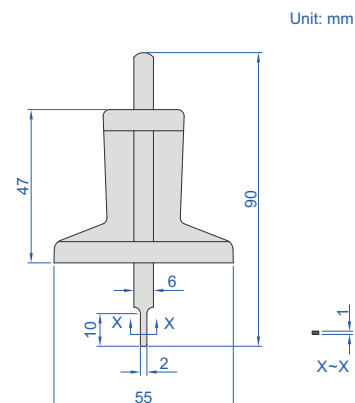
MINI VERNIER DEPTH GAGE

- Graduation: 0.1mm
- Made of stainless steel

Code	Range	Accuracy
1244-30	0-30mm	±0.10mm



1244-30



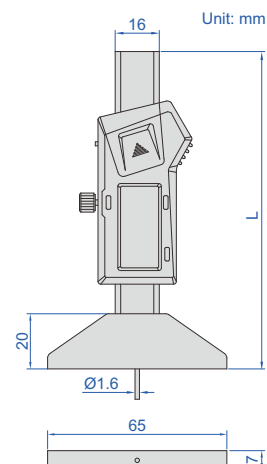
Unit: mm

DATA OUTPUT

MINI DIGITAL DEPTH GAGES WITH ROUND BAR



- Non waterproof
- Measure depth of small groove and hole
- 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
- Made of stainless steel



1140-25

With data interface (data output cable code 7315-21 need receiver page 4, 7302-21 page 12, optional)

Code	Range	Accuracy	L
1140-25	0-25mm/0-1"	±0.02mm	114mm
1140-50	0-50mm/0-2"	±0.02mm	140mm
1140-100	0-100mm/0-4"	±0.02mm	190mm
1140-150	0-150mm/0-6"	±0.03mm	236mm

Built-in wireless (receiver code 7315-2/3/6/7/8/9 is required)

Code	Range	Accuracy	L
1140-25WL	0-25mm/0-1"	±0.02mm	114mm
1140-50WL	0-50mm/0-2"	±0.02mm	140mm
1140-100WL	0-100mm/0-4"	±0.02mm	190mm
1140-150WL	0-150mm/0-6"	±0.03mm	236mm

MINI DIGITAL DEPTH GAGES

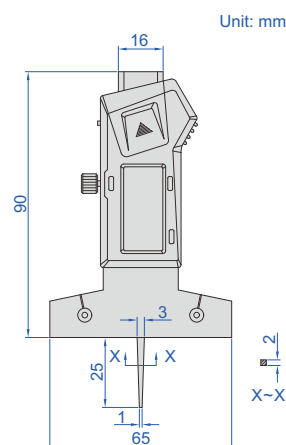
DATA OUTPUT



- Non waterproof
- Measure depth of small groove and hole, also measure depth of tire tread
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch
- Supplied with zero set surface
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Made of stainless steel



1145-25A



With data interface (data output cable code 7315-21 need receiver page 4, 7302-21 page 12, optional)

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

Built-in wireless (receiver code 7315-2/3/6/7/8/9 is required)

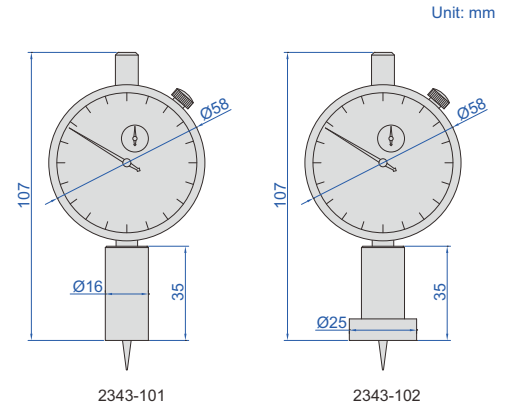
Code	Range	Accuracy
1145-25AWL	0-25mm/0-1"	±0.03mm

DIAL DEPTH GAGES

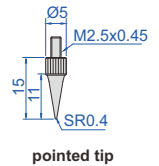
- Accuracy: $\pm 0.017\text{mm}$
- Stainless steel base
- Pointed tip



2343-102



Code	Range	Dial indicator stroke	Dial indicator graduation	Base
2343-101	0-10mm	10mm	0.01mm	Ø16mm
2343-102	0-10mm	10mm	0.01mm	Ø25mm



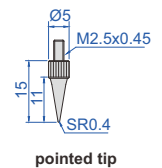
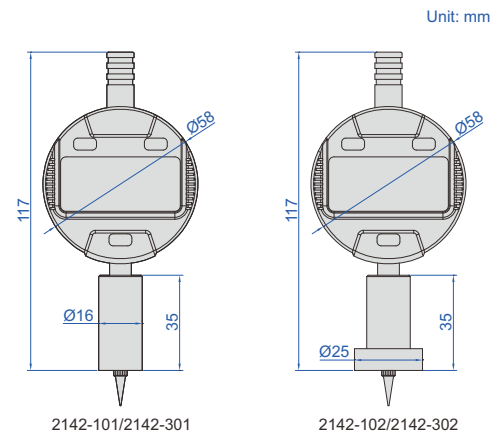
DIGITAL DEPTH GAGES

DATA
OUTPUT

- Button function: on/off, zero, mm/inch, ABS, data preset, change measuring direction (time is adjustable)
- Data output
- Stainless steel base
- Pointed tip
- Optional accessory: data output cable (code 7315-50M need receiver page 5, 7302-40M page 13)



2142-102



Code	Range	Digital indicator stroke	Digital indicator resolution	Accuracy	Base
2142-101	0-12.7mm/0-0.5"	12.7mm/0.5"	0.01mm/0.0005"	$\pm 20\mu\text{m}$	Ø16mm
2142-102	0-12.7mm/0-0.5"	12.7mm/0.5"	0.01mm/0.0005"	$\pm 20\mu\text{m}$	Ø25mm
2142-301	0-12.7mm/0-0.5"	12.7mm/0.5"	0.001mm/0.00005"	$\pm 5\mu\text{m}$	Ø16mm
2142-302	0-12.7mm/0-0.5"	12.7mm/0.5"	0.001mm/0.00005"	$\pm 5\mu\text{m}$	Ø25mm

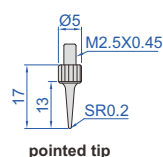
DIAL DEPTH GAGE

Unit: mm

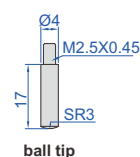
- Accuracy: $\pm 0.017\text{mm}$
- Stainless steel base
- Supplied with pointed tip and ball tip



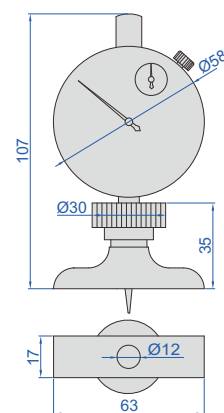
2341-101A



pointed tip



ball tip



Code	Range	Dial indicator stroke	Dial indicator graduation
2341-101A	0-10mm	10mm	0.01mm

DIAL DEPTH GAGES

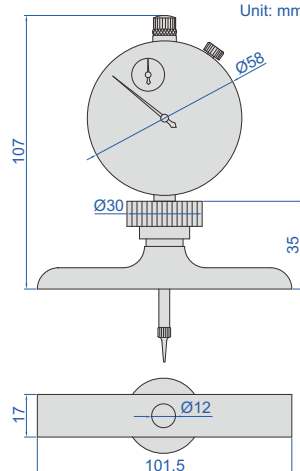
Unit: mm



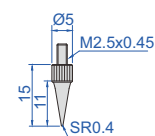
2342-202



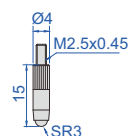
2342-201



2342-202



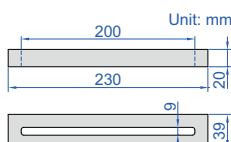
pointed tip



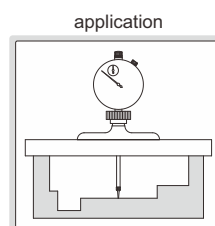
ball tip



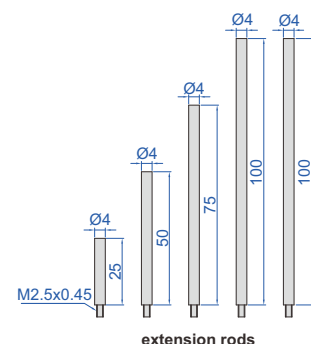
2141-10 (optional),
can be customized
according to workpieces



- Dial indicator graduation: 0.01mm
- Accuracy: $\pm 0.03\text{mm}$
- Stainless steel base
- Extension rods: 25mm (1 pc), 50mm (1 pc), 75mm (1 pc), 100mm (2 pcs)
- Supplied with pointed tip and ball tip
- Optional accessory:
granite extension holder (code 2141-10)



application



extension rods

Code	Range	Dial indicator stroke	Base
2342-201	0-300mm	30mm	63x17mm
2342-202	0-300mm	30mm	101.5x17mm

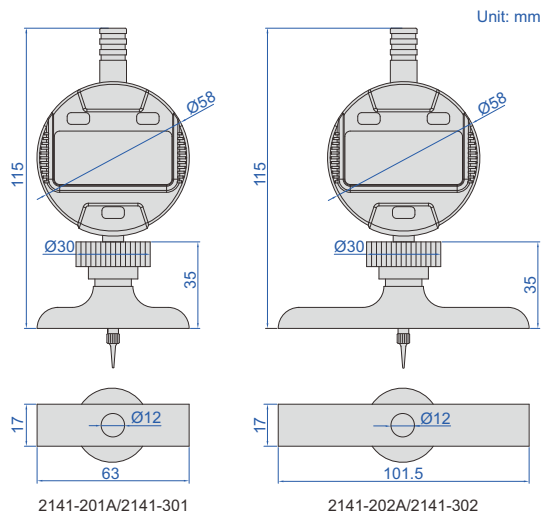
DIGITAL DEPTH GAGES

DATA
OUTPUT

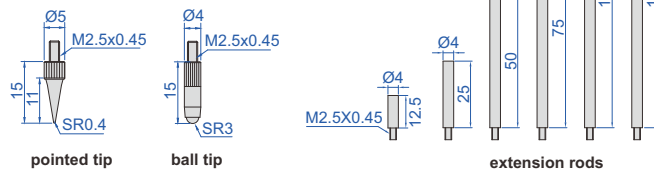
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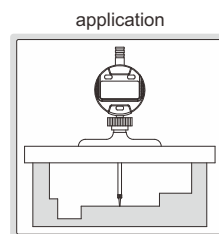
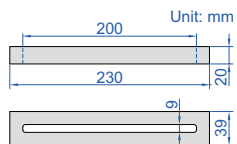
2141-202A



- Button function: on/off, zero, mm/inch, ABS, data preset, change measuring direction
- CR2032 battery, automatic power off (time is adjustable)
- Data output
- Stainless steel base
- Extension rods: 12.5mm (1 pc), 25mm (1 pc), 50mm (1 pc), 75mm (1 pc), 100mm (2 pcs)
- Supplied with pointed tip and ball tip
- Optional accessory: data output cable (code 7315-50M need receiver page 5, 7302-40M page 13), granite extension holder (code 2141-10)



2141-10 (optional),
can be customized
according to workpieces



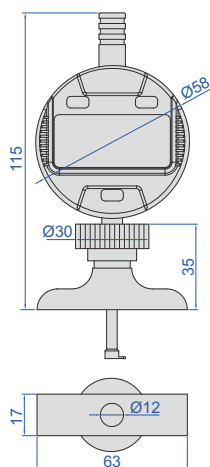
Code	Range	Digital indicator stroke	Digital indicator resolution	Accuracy	Base
2141-201A	0-300mm/0-12"	12.7mm/0.5"	0.01mm/0.0005"	±20μm	63x17mm
2141-202A	0-300mm/0-12"	12.7mm/0.5"	0.01mm/0.0005"	±20μm	101.5x17mm
2141-301	0-300mm/0-12"	12.7mm/0.5"	0.001mm/0.00005"	±5μm	63x17mm
2141-302	0-300mm/0-12"	12.7mm/0.5"	0.001mm/0.00005"	±5μm	101.5x17mm

DATA
OUTPUT

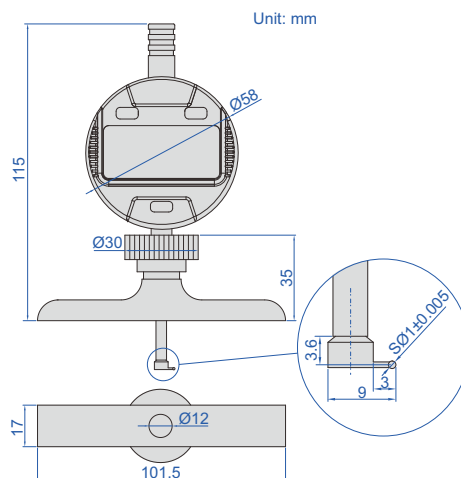
DIGITAL GROOVE GAGES



2145-202

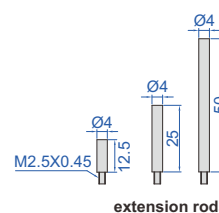


2145-201/2145-301



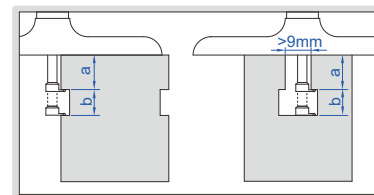
2145-202/2145-302

- Button function: on/off, zero, mm/inch, absolute/incremental measurement, data preset, change measuring direction
- CR2032 battery, automatic power off (time is adjustable)
- Data output
- Stainless steel base
- Supplied with extension rods: 12.5mm (1 pc), 25mm (1 pc), 50mm (1 pc)
- Supplied with groove point
- Optional accessory: data output cable (code 7315-50M need receiver page 5, 7302-40M page 13)



extension rods

measure width (b) and depth (a) of groove



Code	Range (a)	Digital indicator stroke (b)	Digital indicator resolution	Accuracy	Base
2145-201	0-85mm/0-3.35"	12.7mm/0.5"	0.01mm/0.0005"	±20μm	63x17mm
2145-202	0-85mm/0-3.35"	12.7mm/0.5"	0.01mm/0.0005"	±20μm	101.5x17mm
2145-301	0-85mm/0-3.35"	12.7mm/0.5"	0.001mm/0.00005"	±5μm	63x17mm
2145-302	0-85mm/0-3.35"	12.7mm/0.5"	0.001mm/0.00005"	±5μm	101.5x17mm

DATA
OUTPUT

DIGITAL DEPTH GAGE (60° KNIFE EDGE BASE)

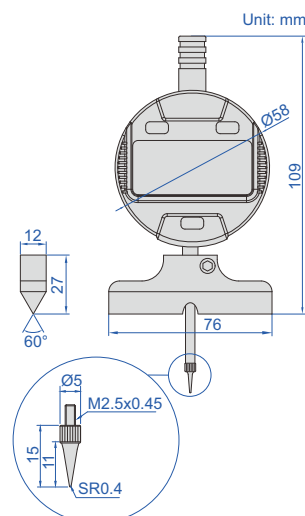
- Button function: on/off, zero, inch/mm, ABS, data preset, change measuring direction
- CR2032 battery, automatic power off (time is adjustable)
- Data output
- Stainless steel base with 60° knife edge
- Optional accessory: data output cable (code 7315-50M need receiver page 5, 7302-40M page 13)



front view

side view

2143-101



Unit: mm

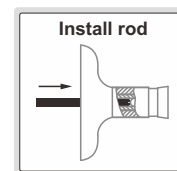
Code	Range	Digital indicator stroke	Digital indicator resolution	Accuracy
2143-101	0-12.7mm/0-0.5"	12.7mm/0.5"	0.01mm/0.0005"	±20μm

DIGITAL DEPTH MICROMETERS

IP65
WATERPROOF

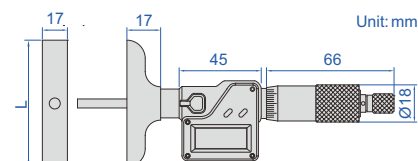
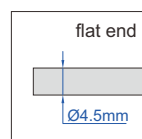
DATA
OUTPUT

- Resolution: 0.001mm/0.00005"
- Micrometer head accuracy: $\pm 3\mu\text{m}$
- Rod accuracy: $\pm (2+L/75)\mu\text{m}$, L is the measuring range in mm
- Button function: on/off, set, mm/inch, data transmit
- IP65 dust/waterproof
- Data output
- Automatic power off
- Rods with flat end
- Ratchet stop
- Optional accessory: data output cable
(code **7315-31** need receiver page 4, **7302-31** page 12)

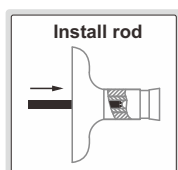


3540-50

Code	Range	Rods	L
3540-25	0-25mm/0-1"	1 pc	101.5mm
3540-50	0-50mm/0-2"	2 pcs	101.5mm
3540-100	0-100mm/0-4"	4 pcs	101.5mm
3540-150	0-150mm/0-6"	6 pcs	101.5mm
3540-300	0-300mm/0-12"	12 pcs	101.5mm
3540-B25	0-25mm/0-1"	1 pc	63mm
3540-B50	0-50mm/0-2"	2 pcs	63mm
3540-B100	0-100mm/0-4"	4 pcs	63mm
3540-B150	0-150mm/0-6"	6 pcs	63mm
3540-B300	0-300mm/0-12"	12 pcs	63mm

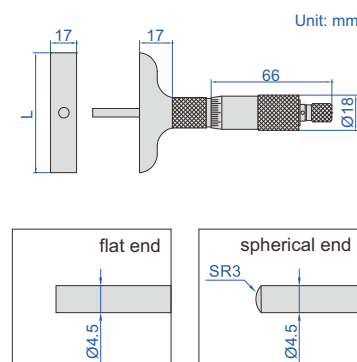


DEPTH MICROMETERS



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

3240-100



Flat end

Code	Range	Rods	L
3240-25	0-25mm	1 pc	101.5mm
3240-50	0-50mm	2 pcs	101.5mm
3240-75	0-75mm	3 pcs	101.5mm
3240-100	0-100mm	4 pcs	101.5mm
3240-150	0-150mm	6 pcs	101.5mm
3240-200	0-200mm	8 pcs	101.5mm
3240-300	0-300mm	12 pcs	101.5mm
3240-B25	0-25mm	1 pc	63mm
3240-B50	0-50mm	2 pcs	63mm
3240-B100	0-100mm	4 pcs	63mm
3240-B150	0-150mm	6 pcs	63mm
3240-B300	0-300mm	12 pcs	63mm

Spherical end

Code	Range	Rods	L
3240-25S	0-25mm	1 pc	101.5mm
3240-50S	0-50mm	2 pcs	101.5mm
3240-100S	0-100mm	4 pcs	101.5mm
3240-150S	0-150mm	6 pcs	101.5mm
3240-300S	0-300mm	12 pcs	101.5mm
3240-B25S	0-25mm	1 pc	63mm
3240-B50S	0-50mm	2 pcs	63mm
3240-B100S	0-100mm	4 pcs	63mm
3240-B150S	0-150mm	6 pcs	63mm
3240-B300S	0-300mm	12 pcs	63mm

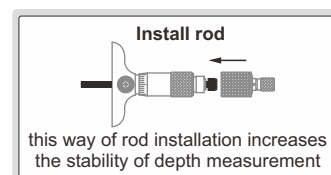
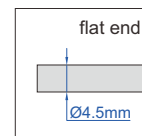
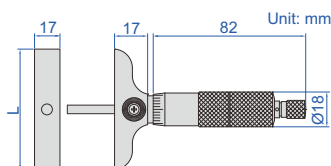
- Meet DIN863-2
- Graduation: 0.01mm
- Micrometer head accuracy: $\pm 3\mu\text{m}$
- Rod accuracy: $\pm (2+L/75)\mu\text{m}$, L is the measuring range in mm
- Rods with flat end
- Ratchet stop

DEPTH MICROMETERS

Code	Range	Rods	L
3241-25	0-25mm	1 pc	101.5mm
3241-50	0-50mm	2 pcs	101.5mm
3241-75	0-75mm	3 pcs	101.5mm
3241-100	0-100mm	4 pcs	101.5mm
3241-150	0-150mm	6 pcs	101.5mm
3241-200	0-200mm	8 pcs	101.5mm
3241-300	0-300mm	12 pcs	101.5mm
3241-B25	0-25mm	1 pc	63mm
3241-B50	0-50mm	2 pcs	63mm
3241-B100	0-100mm	4 pcs	63mm
3241-B150	0-150mm	6 pcs	63mm
3241-B300	0-300mm	12 pcs	63mm



3241-100



3

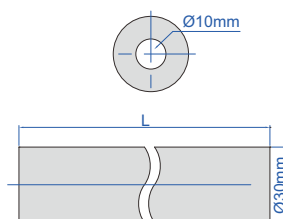
CYLINDER GAGE BLOCKS FOR DEPTH MICROMETERS

Code	Length (L)
4179-25 *	25mm
4179-50 *	50mm
4179-75 *	75mm
4179-100 *	100mm
4179-125 *	125mm
4179-150 *	150mm
4179-175 *	175mm
4179-200 *	200mm
4179-225 *	225mm
4179-250 *	250mm
4179-275 *	275mm

* Supplied with manufacturer inspection certificate



4179-25



- Made of special alloy steel, hardness HRC64, high stability, wear resistance and easy combination
- Meet ISO3650 grade 1

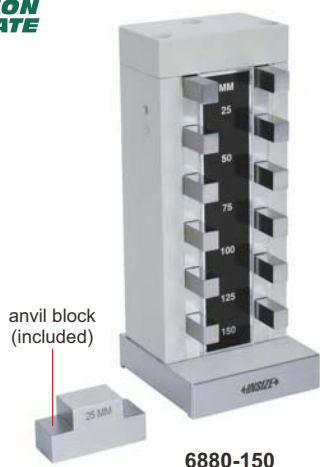
INSPECTION CERTIFICATE

application



INSPECTION CERTIFICATE

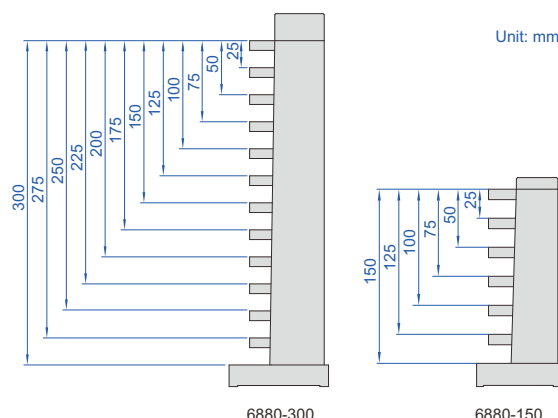
DEPTH MICROMETER CHECKERS



6880-150



application



6880-300

6880-150

Code	Size	Range (mm)	Accuracy
6880-150 *	0-150mm	25, 50, 75, 100, 125, 150	$\pm 2\mu\text{m}$
6880-300 *	0-300mm	25, 50, 75, 100, 125, 150, 175, 200, 225, 250, 275, 300	$\pm 3\mu\text{m}$

* Supplied with manufacturer inspection certificate

- To check depth micrometers and set zero
- Constructed with steel gage blocks
- Supplied with anvil block



Digital Height Gages
Page 85-87



Dial Indicator Stands
Page 87



Height Gages
Page 88-92



Height Gage Checkers
Page 92

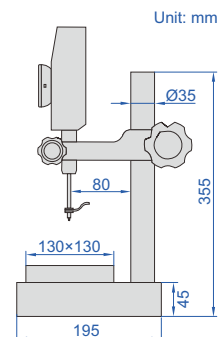


DATA
OUTPUT

HIGH PRECISION DIGITAL HEIGHT GAGES



1155-505



4

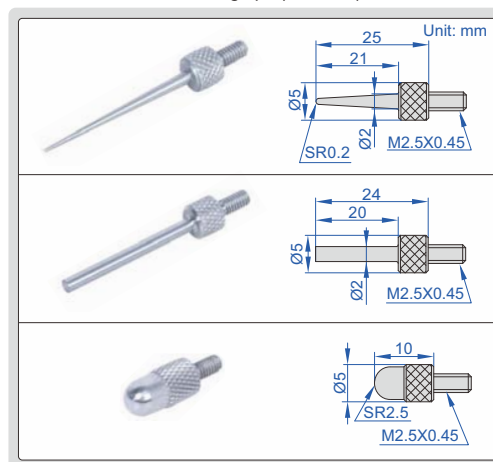


power supplied by charge pal



data transmitted to Excel without software;
short press the foot switch to transmit data,
long press to zero

measuring tips (included)



- High stability, high precision, high response speed (5000mm/s)
- High brightness LED display
- Ceramic base flatness: 1µm

Code	Range	Resolution	Accuracy (20°C)	Measuring force	Output	Power supply
1155-505	0~50mm	0.5µm/0.00002" (can switch to: 1µm/0.00005")	1.5µm	0.8~1.2N	USB	5V/1A (adapter or charge pal)
1155-510	0~50mm	0.1µm/0.000005" (can switch to: 1µm/0.00005")	1µm	0.8~1.2N	USB	5V/1A (adapter or charge pal)

STANDARD DELIVERY

Main unit	1 pc
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OPTIONAL ACCESSORY

Contact point	code 6282
Charge pal	1155-5-POB
Data output cable (including foot switch)	1155-5-FOS

DIGITAL HEIGHT GAGES

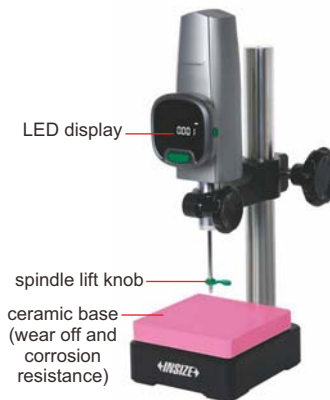
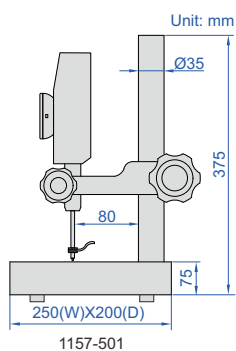
DATA
OUTPUT



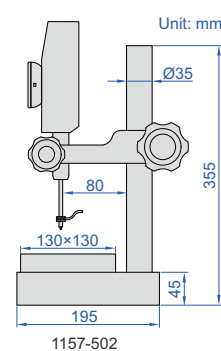
4



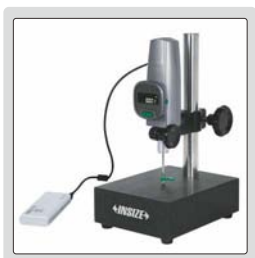
1157-501



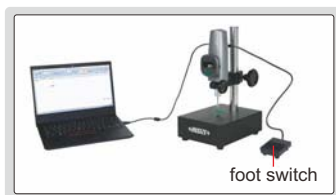
1157-502



- Buttons: on/off, zero, mm/inch, mix/min/mix-min
- High response speed (5000mm/s)
- High brightness LED display

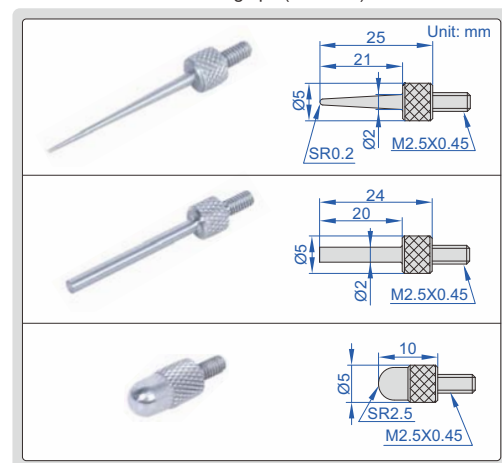


power supplied by charge pal



data transmitted to Excel without software;
short press the foot switch to transmit data,
long press to zero

measuring tips (included)



Code	Range	Resolution	Accuracy (20°C)	Measuring force	Output	Power supply	Base
1157-501	0~50mm	1µm/0.00005"	3µm	0.8~1.2N	USB	5V/1A (adapter or charge pal)	granite (flatness: 2µm)
1157-502	0~50mm	1µm/0.00005"	3µm	0.8~1.2N	USB	5V/1A (adapter or charge pal)	ceramic (flatness: 1µm)

OPTIONAL ACCESSORY

Contact point	code 6282
Charge pal	1155-5-POB
Data output cable (including foot switch)	1155-5-FOS

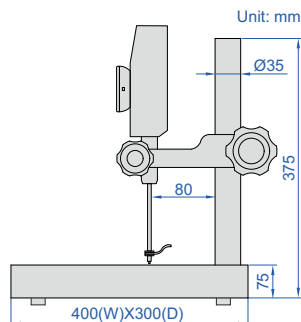
STANDARD DELIVERY

Main unit	1 pc
-----------	------

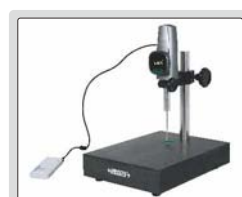
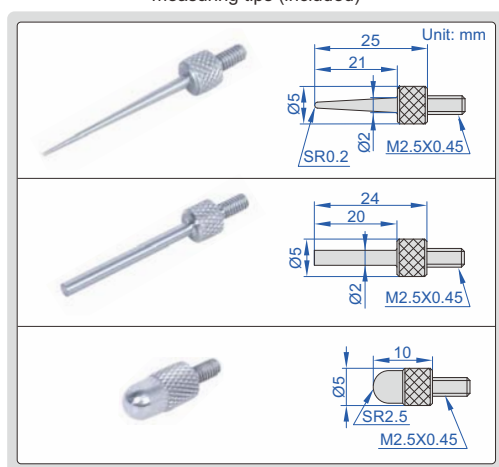
DATA
OUTPUT

LARGE RANGE DIGITAL HEIGHT GAGE

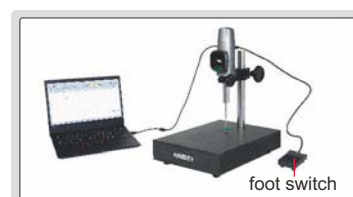
- High stability, high precision, high response speed (5000mm/s)
- High brightness LED display
- Granite base flatness: 3μm



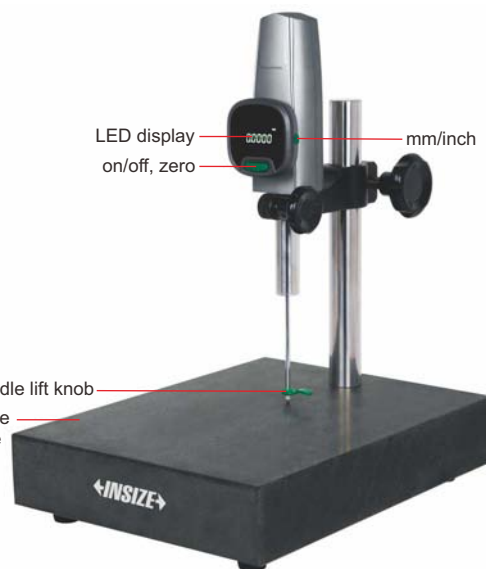
measuring tips (included)



power supplied by charge pal



data transmitted to Excel without software; short press the foot switch to transmit data, long press to zero



1158-100

Code	Range	Resolution	Accuracy (20°C)	Measuring force	Output	Power supply
1158-100	0~100mm	0.1μm/0.000005" (can switch to: 1μm/0.00005")	3μm	0.8~1.2N	USB	5V/1A (adapter or charge pal)

STANDARD DELIVERY

Main unit	1 pc
-----------	------

OPTIONAL ACCESSORY

Contact point	code 6282
Charge pal	1155-5-POB
Data output cable (including foot switch)	1155-5-FOS

DIAL INDICATOR STANDS

REFER TO PAGE
273~275 FOR DETAILS



6862-1001



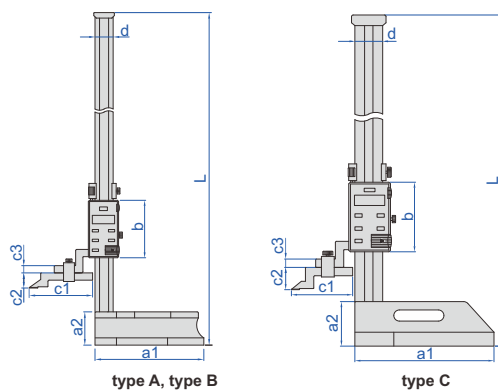
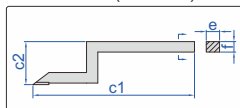
6864-250T



6867-250

**DATA
OUTPUT**

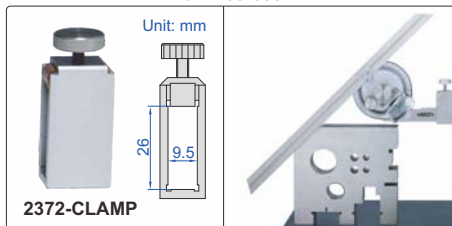
- subscriber (included)



type A, type B

type C

Unit: mm

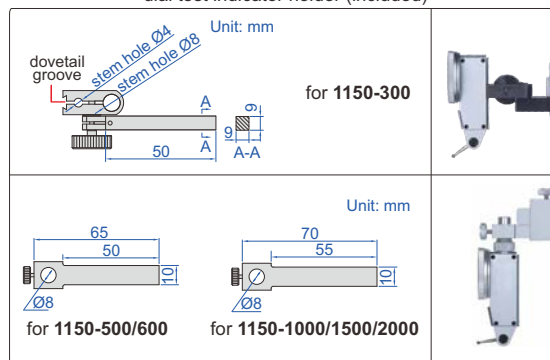


1150-1000

1150-500

1150-300

Unit: mm

88

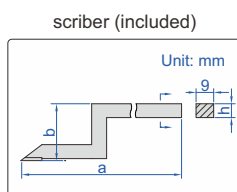
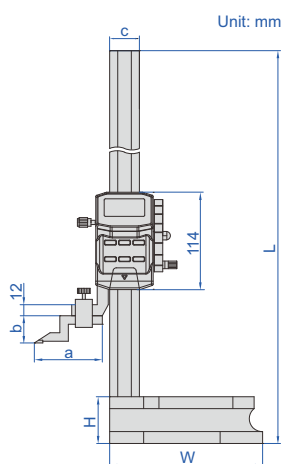


DIGITAL HEIGHT GAGES WITH DRIVING WHEEL

4

DATA
OUTPUT

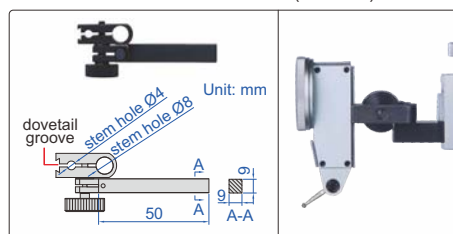
- Non waterproof
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch, preset +, preset -, ABS/INC
- Automatic power off, move the digital unit to turn on power
- Carbide tipped scriber
- Made of stainless steel
- Battery CR2032
- Data output
- Supplied with dust cover
- With dial test indicator holder
- Optional accessory: data output cable (code **7302-22** page 12), wireless data transmission (transmitter code **7315-22 need receiver** page 4), clamp for protractors (code **2372-CLAMP**)



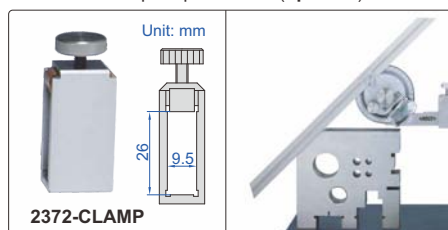
1156-300

1156-1000

dial test indicator holder (included)



clamp for protractors (optional)



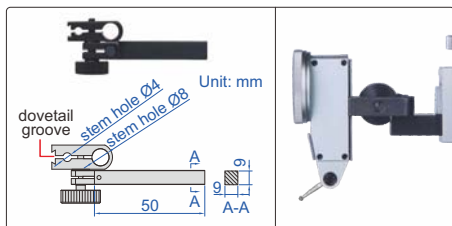
Code	Range	Accuracy	L	W	H	a	b	c	h
1156-300*	0-300mm/0-12"	±0.03mm	515mm	180mm	55mm	80mm	30mm	35mm	9mm
1156-600*	0-600mm/0-24"	±0.05mm	815mm	180mm	55mm	80mm	30mm	35mm	9mm
1156-1000*	0-1000mm/0-40"	±0.07mm	1220mm	265mm	70mm	92mm	48mm	40mm	12mm

* Supplied with manufacturer inspection certificate

DIGITAL HEIGHT GAGES

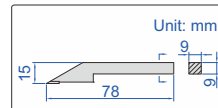
DATA
OUTPUT

dial test indicator holder (included)

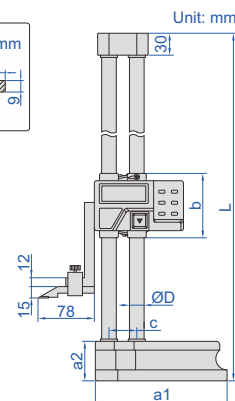


1151-300A

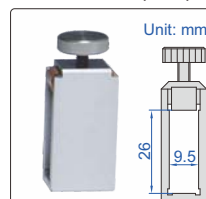
scriber (included)



driving wheel
on the back



clamp for protractors (optional)



2372-CLAMP

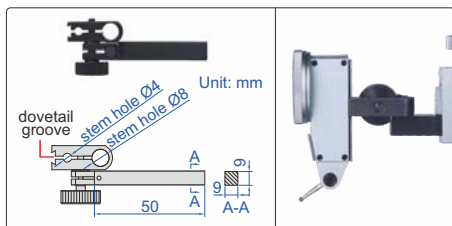


- Non waterproof
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch, data hold, ABS/INC, preset
- ABS/INC is for absolute and incremental measurement
- Automatic power off, move the digital unit to turn on power
- Carbide tipped scriber
- Made of stainless steel
- Battery CR2032, data output
- With driving wheel
- With dial test indicator holder
- Supplied with dust cover
- Optional accessory: data output cable (code 7302-1151 page 13, keyboard format), wireless data transmission (transmitter code 7315-1151 need receiver page 6), clamp for protractors (code 2372-CLAMP)

Code	Range	Accuracy	L	a1	a2	b	c	ØD
1151-300A	0-300mm/0-12"	±0.04mm	475	135	43	84	33	15
1151-450A	0-450mm/0-18"	±0.05mm	660	180	54	88	38	20
1151-600A	0-600mm/0-24"	±0.05mm	810	180	54	88	38	20

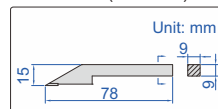
DIAL HEIGHT GAGES

dial test indicator holder (included)

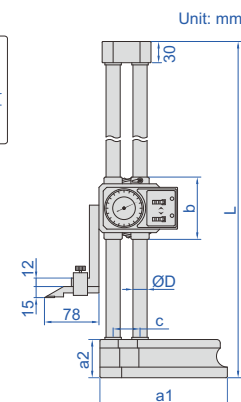


1351-300

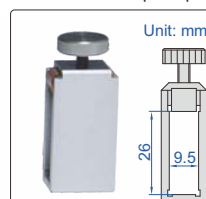
scriber (included)



driving wheel
on the back



clamp for protractors (optional)



2372-CLAMP



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

Code	Range	Accuracy	L	a1	a2	b	c	ØD
1351-300	0-300mm	±0.04mm	475	135	43	84	33	15
1351-450	0-450mm	±0.05mm	660	180	54	88	38	20
1351-600	0-600mm	±0.05mm	810	180	54	88	38	20

DATA OUTPUT

- Non waterproof
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Carbide tipped scriber
- With fine adjustment
- Made of stainless steel
- Battery CR2032
- Optional accessory: dial test indicator holder (code **7151-CL1**)

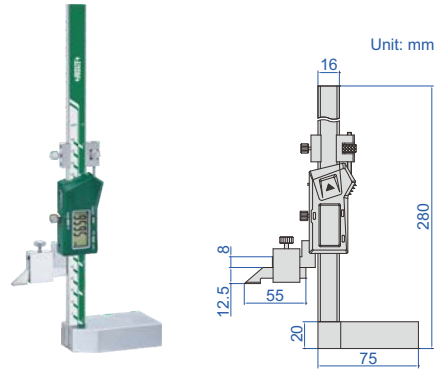
With data interface (data output cable code **7315-21** need receiver page 4, **7302-21** page 12, optional)

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

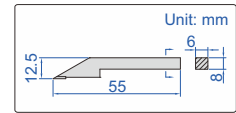
Built-in wireless (receiver code **7315-2/3/6/7/8/9** is required)

Code	Range	Accuracy
1154-150WL	0-150mm/0-6"	±0.03mm

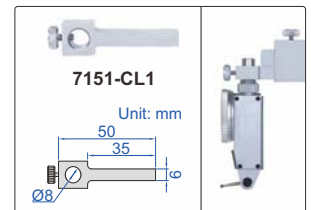
1154-150



scraper (included)



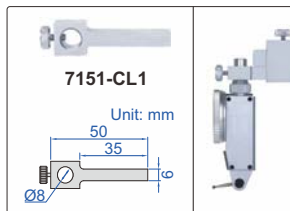
dial test indicator holder (optional)



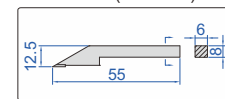
MINI VERNIER HEIGHT GAGES

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

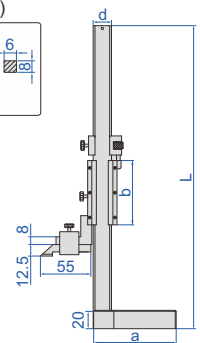
dial test indicator holder (optional)



scraper (included)



Unit: mm



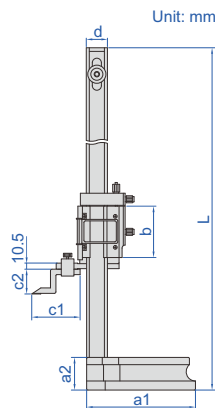
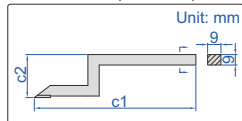
1253-200

Code	Range	Accuracy	L	a	b	d
1253-150	0-150mm/0-6"	±0.03mm	265	75	57	16
1253-200	0-200mm/0-8"	±0.03mm	325	90	70	20

VERNIER HEIGHT GAGES

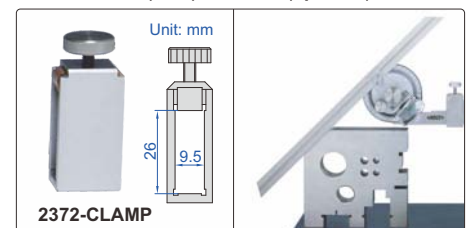
- Graduation: 0.02mm/0.001"
- Adjustable main scale to set zero
- Carbide tipped scriber
- Made of stainless steel (except the base)
- Satin chrome plated scale
- Supplied with magnifier
- With fine adjustment
- Supplied with dust cover
- Optional accessory: dial test indicator holder (code **6293-6**),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

scraper (included)

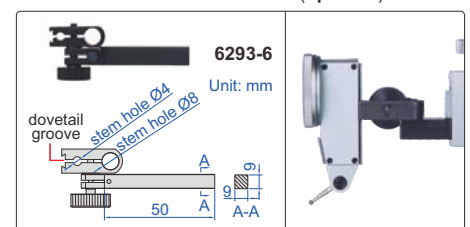


1250-300

clamp for protractors (optional)



dial test indicator holder (optional)



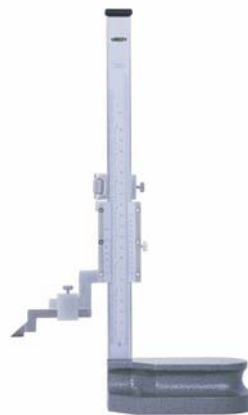
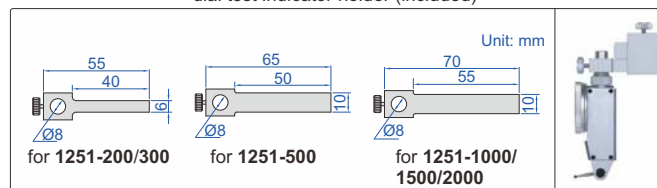
Code	Range	Accuracy	L	a1	a2	b	c1	c2	d
1250-300	0-300mm/0-12"	±0.04mm	545	135	43	75	80	30	28
1250-450	0-450mm/0-18"	±0.05mm	720	180	54	85	80	41	35
1250-600	0-600mm/0-24"	±0.05mm	870	180	54	85	80	41	35

VERNIER HEIGHT GAGES (BASIC TYPE)

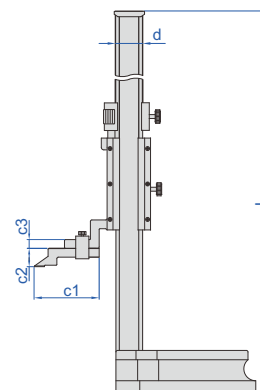
- Graduation: 0.02mm/0.001"
- Carbide tipped scriber
- Made of stainless steel (except the base)
- Satin chrome plated scale
- With dial test indicator holder
- Supplied with dust cover

POPULAR
MODEL

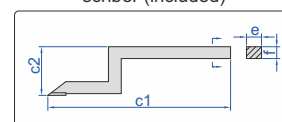
dial test indicator holder (included)



1251-200



scriber (included)



Code	Range	Accuracy	L	c1	c2	c3	d	e	f
1251-200	0-200mm/0-8"	±0.03mm	370	76	25	10	23	6	8
1251-300	0-300mm/0-12"	±0.04mm	470	76	25	10	23	6	8
1251-500	0-500mm/0-20"	±0.05mm	720	105	25	12	30	10	12
1251-1000	0-1000mm/0-40"	±0.07mm	1275	110	39	15	50	10	15
1251-1500	0-1500mm/0-60"	±0.11mm	1790	110	39	15	50	10	15
1251-2000	0-2000mm/0-80"	±0.14mm	2290	110	39	15	50	10	15

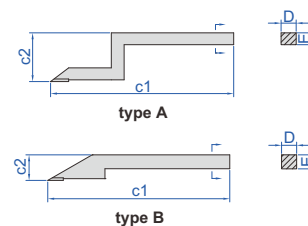
SCRIBERS FOR HEIGHT GAGES

- Carbide tipped



7150-SC3

Code	For height gages	Type	c1	c2	D	E
7150-SC2	1150-500, 1150-600	A	103mm	25mm	10mm	12mm
7150-SC3	1150-1000, 1150-1500, 1150-2000	A	110mm	39mm	10mm	15mm
7150-SC4	1351-300, 1351-450, 1351-600, 1151-300A, 1151-450A, 1151-600A	B	78mm	15mm	9mm	9mm
7150-SC6	1250-300, 1156-300, 1156-600, 1150-300	A	80mm	30mm	9mm	9mm
7150-SC7	1250-450, 1250-600	A	80mm	41mm	9mm	9mm
7150-SC9	1253-150, 1253-200, 1154-150	B	55mm	12.5mm	6mm	8mm
7150-SC10	1156-1000	A	92mm	48mm	9mm	12mm



CALIPER/HEIGHT GAGE CHECKERS

REFER TO PAGE 332
FOR DETAILS

horizontal use



vertical use



6884-300



Carbon Fiber Comparison Gages
Page 94



Comparison Gages
Page 95-96



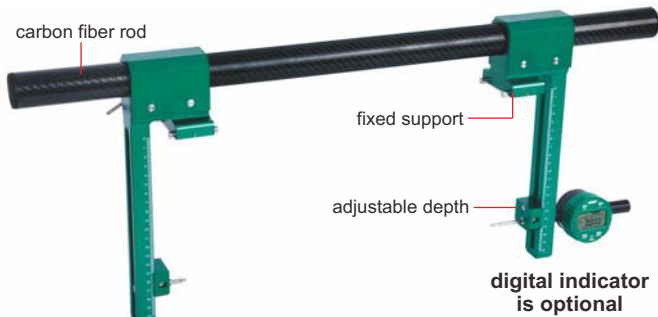
**Internal And External Diameter
Comparison Instruments**
Page 97-98



Outside Diameter Measuring Stands
Page 99

CARBON FIBER COMPARISON GAGES

CARBON FIBER RODS, LIGHT WEIGHT, NOT EASY TO DEFORM, NO TEMPERATURE EXPAND, SUITABLE FOR THIN-WALL WORKPIECES AND LARGE-SIZE WORKPIECES



measure outer diameter



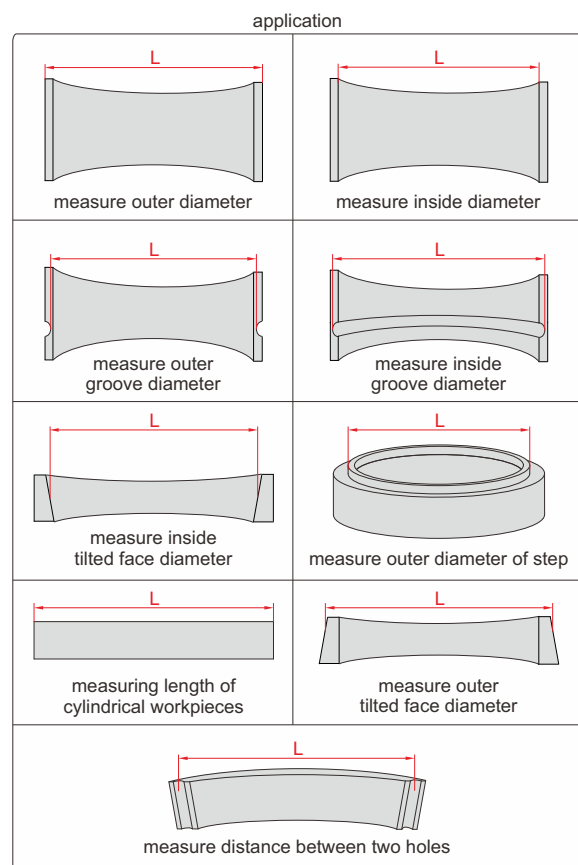
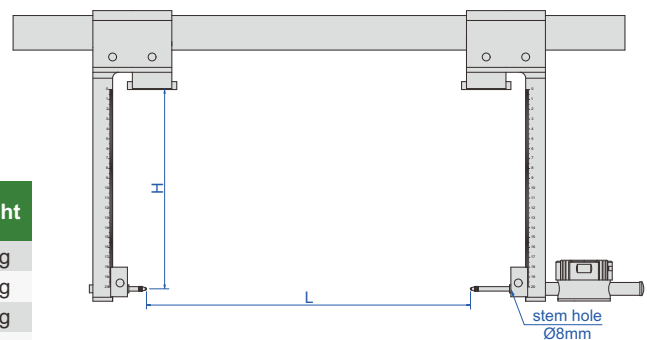
measure inside diameter, minimum diameter is 220mm

2931-D1000B



- Measure outer diameter, inside diameter, holes distance and cylindrical workpiece length
- Carbon fiber rods, light weight, not easy to deform, no temperature expand
- Optional accessory: cylinder gage blocks (code 4001), digital indicators (code 2138-25SP/2139-25SP/2103-25SP/2104-25SP)

Code	Maximum measuring range (L)	Measuring depth (H)	Repeatability	Weight
2931-D1000A	1000mm	0-100mm	5μm	2.0kg
2931-D1000B	1000mm	0-200mm	10μm	2.3kg
2931-D1000C	1000mm	0-300mm	25μm	2.6kg
2931-D1500A	1500mm	0-100mm	8μm	2.3kg
2931-D1500B	1500mm	0-200mm	15μm	2.6kg
2931-D1500C	1500mm	0-300mm	30μm	2.9kg
2931-D2000A	2000mm	0-100mm	10μm	2.6kg
2931-D2000B	2000mm	0-200mm	20μm	2.9kg
2931-D2000C	2000mm	0-300mm	35μm	3.2kg
2931-D2500A	2500mm	0-100mm	12μm	2.9kg
2931-D2500B	2500mm	0-200mm	25μm	3.2kg
2931-D2500C	2500mm	0-300mm	50μm	3.5kg
2931-D3000A	3000mm	0-100mm	14μm	3.2kg
2931-D3000B	3000mm	0-200mm	30μm	3.5kg
2931-D3000C	3000mm	0-300mm	60μm	3.8kg
2931-D4000A	4000mm	0-100mm	16μm	3.8kg
2931-D4000B	4000mm	0-200mm	35μm	4.1kg
2931-D4000C	4000mm	0-300mm	65μm	4.4kg
2931-D5000A	5000mm	0-100mm	25μm	4.4kg
2931-D5000B	5000mm	0-200mm	40μm	4.7kg
2931-D5000C	5000mm	0-300mm	70μm	5.0kg
2931-D6000A	6000mm	0-100mm	28μm	8.4kg
2931-D6000B	6000mm	0-200mm	50μm	8.8kg
2931-D6000C	6000mm	0-300mm	80μm	9.2kg
2931-D7000A	7000mm	0-100mm	30μm	9.2kg
2931-D7000B	7000mm	0-200mm	55μm	9.6kg
2931-D7000C	7000mm	0-300mm	100μm	10kg
2931-D8000A	8000mm	0-100mm	32μm	10kg
2931-D8000B	8000mm	0-200mm	60μm	10.4kg
2931-D8000C	8000mm	0-300mm	110μm	10.8kg
2931-D9000A	9000mm	0-100mm	35μm	10.7kg
2931-D9000B	9000mm	0-200mm	70μm	11.1kg
2931-D9000C	9000mm	0-300mm	120μm	11.5kg



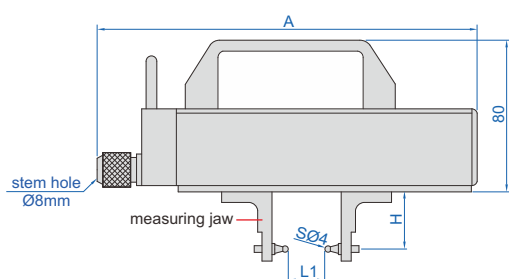
CUSTOMIZABLE MEASURING JAWS AND POINTS

COMPARISON GAGES



digital indicator is optional

measure external diameter
2252-110

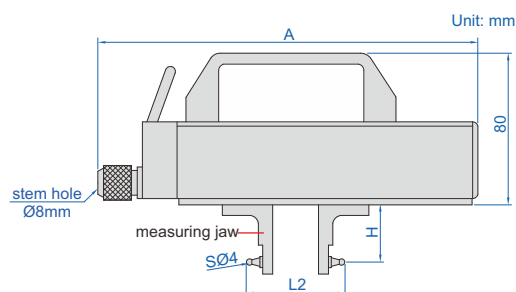


2252-101, 2252-102, 2252-110 and 2252-120



digital indicator is optional

measure internal diameter
2252-220



2252-201, 2252-202, 2252-210 and 2252-220

- Measure external diameter, internal diameter and over-pin diameter of gears
- Total range of movable point: 8mm, effective range of movable point: ± 2 mm
- Optional accessory: digital indicator (code **2138-10F**), gage block grade 1 (**4101-B** series)

Measure external diameter

Code	Range of external diameter (L1)	Accuracy*	Repeatability	A	H
2252-101	0-100mm/0-4"	$\pm 5\mu\text{m}$	$1\mu\text{m}$	245mm	40mm
2252-102	0-170mm/0-6.6"	$\pm 5\mu\text{m}$	$1\mu\text{m}$	315mm	40mm
2252-110	0-100mm/0-4"	$\pm 5\mu\text{m}$	$2\mu\text{m}$	245mm	60mm
2252-120	0-170mm/0-6.6"	$\pm 5\mu\text{m}$	$2\mu\text{m}$	315mm	60mm

Measure internal diameter

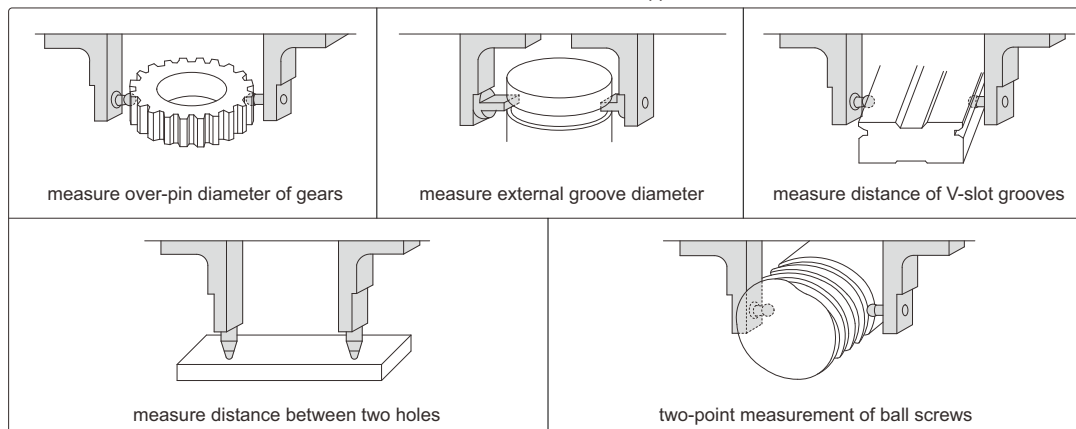
Code	Range of external diameter (L2)	Accuracy*	Repeatability	A	H
2252-201	20-130mm/0.8-5.1"	$\pm 5\mu\text{m}$	$1\mu\text{m}$	195mm	40mm
2252-202	20-200mm/0.8-7.8"	$\pm 5\mu\text{m}$	$1\mu\text{m}$	265mm	40mm
2252-210	20-130mm/0.8-5.1"	$\pm 5\mu\text{m}$	$2\mu\text{m}$	195mm	60mm
2252-220	20-200mm/0.8-7.8"	$\pm 5\mu\text{m}$	$2\mu\text{m}$	265mm	60mm

*Within ± 2 mm effective range



VIDEO

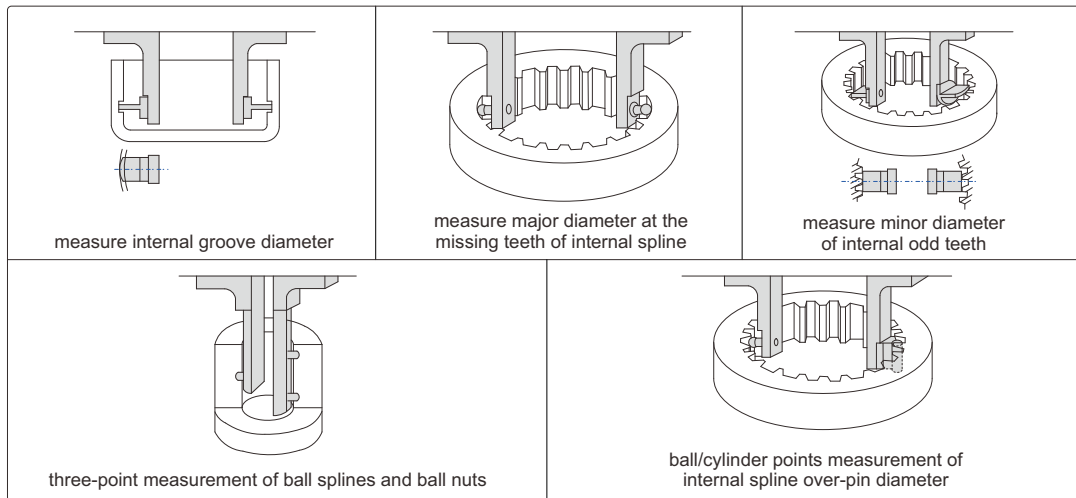
external diameter measurement application



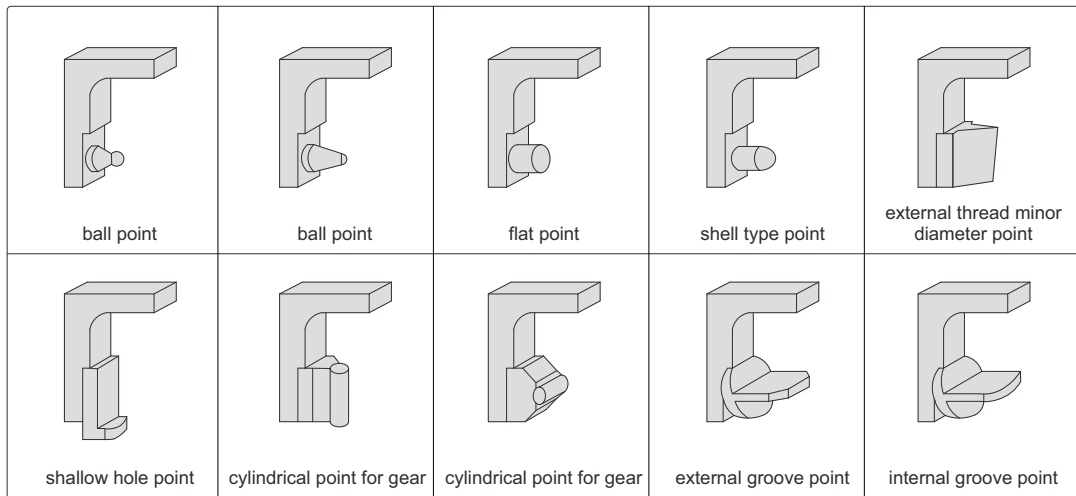
To be continued

Continued from previous page

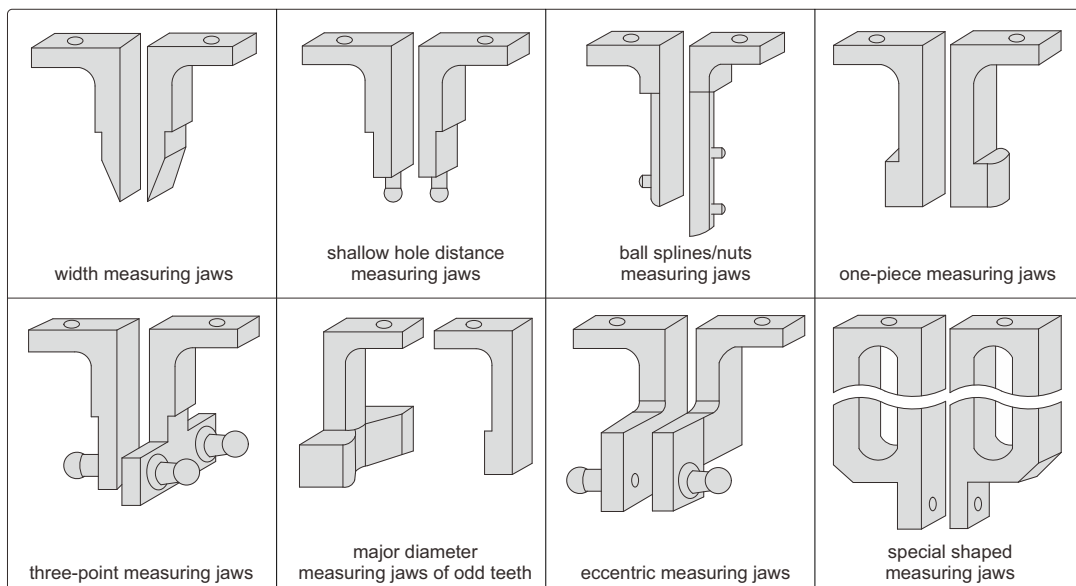
internal diameter measurement application



customizable points

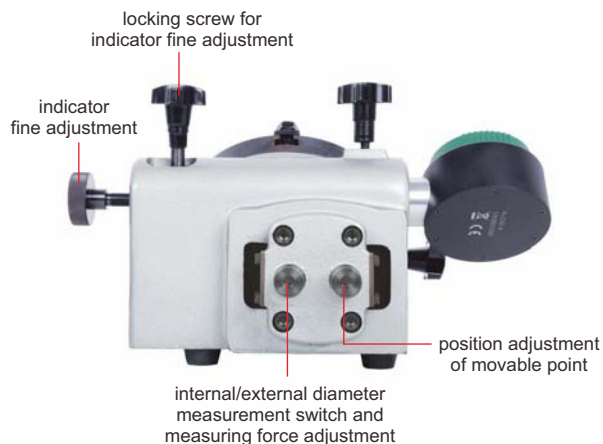


customizable measuring jaws

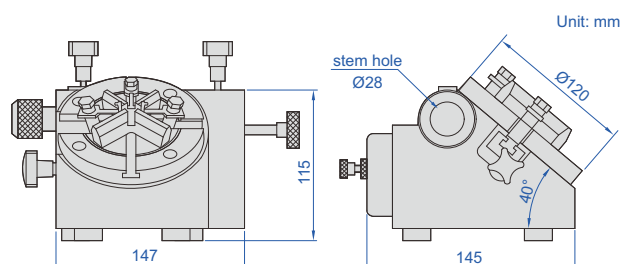




INTERNAL AND EXTERNAL DIAMETER COMPARISON INSTRUMENT

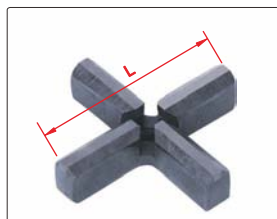


- Measure internal/external diameter, variation and taper
- Total range of movable point: 2mm, effective range of movable point: $\pm 0.1\text{mm}$
- Groove probes and disc probes are included
- Optional accessory: $\varnothing 28\text{mm}/\varnothing 8\text{mm}$ bush (code 6843-B8), cross table, 0.001mm digital/dial indicators, high precision digital indicators (code 2140-6, 2140-6WL)



Code	Applicable holding stem	Range of internal diameter	Range of external diameter	Accuracy	Repeatability
6844-100	$\varnothing 28\text{mm}$	20-100mm/0.8-3.9"	15-80mm/0.6-3.1"	$\pm 0.001\text{mm}$	0.001mm

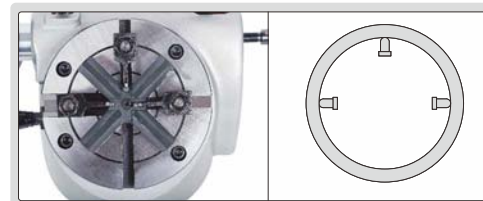
cross table (working with groove probes)



disc probes (included)



groove probes to measure small internal diameter and internal groove diameter



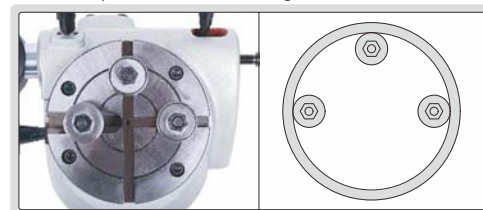
Cross table

Code	L	Remark
6844-T40	40mm	included
6844-T80	80mm	optional
6844-T100	100mm	optional

groove probe (included)



disc probes to measure large internal diameter



$\varnothing 28\text{mm}/\varnothing 8\text{mm}$ bush (optional)

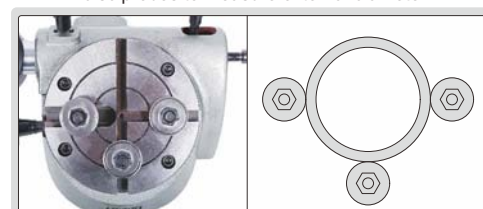


Code
6843-B8

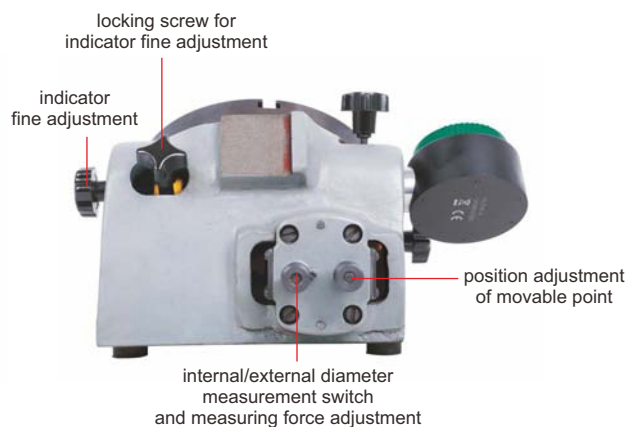
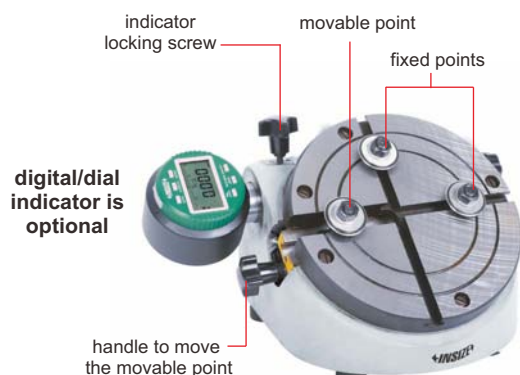
application



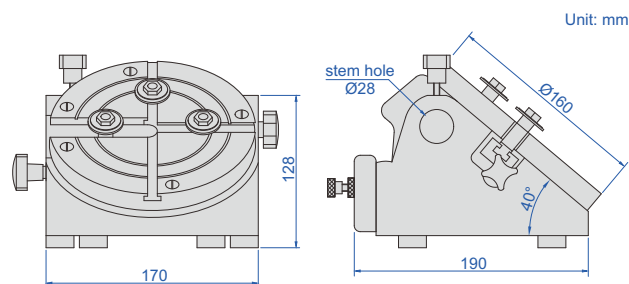
disc probes to measure external diameter



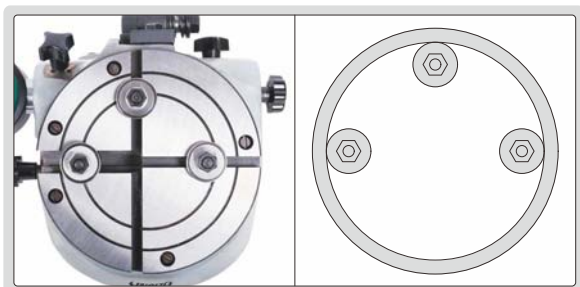
INTERNAL AND EXTERNAL DIAMETER COMPARISON INSTRUMENT



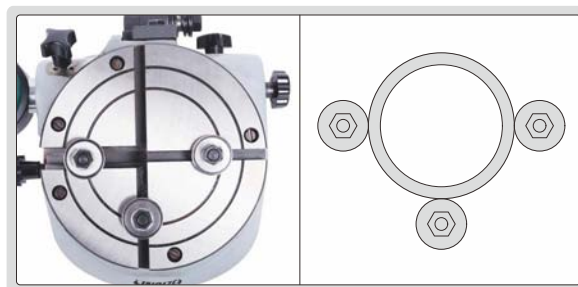
- Measure internal/external diameter, variation and taper
- Total range of movable point: 2mm, effective range of movable point: $\pm 0.1\text{mm}$
- Optional accessory: $\varnothing 28\text{mm}/\varnothing 8\text{mm}$ bush (code **6843-B8**), 0.001mm digital/dial indicators, high precision digital indicators (code **2140-6**, **2140-6WL**)



internal diameter measurement



external diameter measurement



Code	Applicable holding stem	Range of internal diameter	Range of external diameter	Accuracy	Repeatability
6843-140	$\varnothing 28\text{mm}$	50-140mm/2-5.5"	30-120mm/1.2-4.7"	$\pm 0.001\text{mm}$	0.001mm

$\varnothing 28\text{mm}/\varnothing 8\text{mm}$ bush (optional)



Code

6843-B8

application

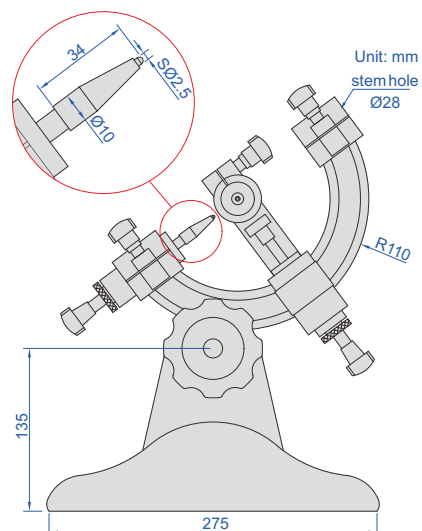




OUTSIDE DIAMETER MEASURING STAND



6847-50



- To measure diameter and roundness of cylinders and steel balls
- Supplied with measuring base (code **6847-A100**)
- Optional accessory: Ø28mm/Ø8mm bush (code **6843-B8**), 0.001mm digital/dial indicators, high precision digital indicators (code **2140-6**, **2140-6WL**), gage blocks (**4101** series, for zero setting of cylinders), custom plug gages (for zero setting of cylinders), ceramic standard balls (**4190** series, for zero setting of steel balls)

Code	Range of outside diameter	Accuracy	Repeatability
6847-50	1.5-50mm/0.06-2"	±0.001mm	0.0005mm

Measuring base

Code	Diameter	Remark
6847-A10	10mm	optional
6847-A20	20mm	optional
6847-A30	30mm	optional
6847-A40	40mm	optional
6847-A50	50mm	optional
6847-A60	60mm	optional
6847-A70	70mm	optional
6847-A75	75mm	optional
6847-A80	80mm	optional
6847-A90	90mm	optional
6847-A100	100mm	included

Ø28mm/Ø8mm bush (optional)



Code
6843-B8

application





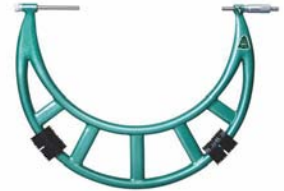
Digital Micrometers/Snap Gages
Page 102-105



Digital Micrometers
Page 106-111



Outside Micrometers
Page 112-117



Large Outside Micrometers
Page 117-121



Limit Micrometers
Page 121



Indicating Micrometers
Page 122



Micrometers With Dial Indicator
Page 123-125



Groove Micrometers
Page 125



3-Wires
Page 126



Screw Thread Micrometers
Page 127-130



Gear Tooth Micrometers
Page 131-133



Point Micrometers
Page 134-135



Gear Root Diameter Micrometers
Page 136



Blade Micrometers
Page 137-139



Crimp Height Micrometers
Page 140



Spline Micrometers
Page 140-142



Tube Micrometers
Page 143-145



Disk Brake Micrometers
Page 146



Sheet Metal Micrometers
Page 146-147



Interchangeable Anvil Micrometers
Page 147-148



Large Anvil Micrometers
Page 148



V-Anvil Micrometers
Page 149



Universal Micrometers
Page 150



Caliper Type Micrometers
Page 151



Jaw Type Micrometers
Page 152



Disk Micrometers
Page 153-156



Sheet Metal Micrometers
Page 157



Micrometers For Hot Plate
Page 157



Hub Micrometers
Page 157



Wire Micrometers
Page 158



Can Seam Micrometers
Page 158



Optical Parallels
Page 158



**Parallelism Inspect Devices
For Outside Micrometers**
Page 159



**Micrometer Measuring
Force Detectors**
Page 159



**Micrometer Inspection
Gage Block Sets**
Page 159



Micrometer Stands
Page 159-160



**Micrometer Setting
Standards**
Page 161



**Micrometer Lapping
Machines**
Page 162-163



Micrometer Heads
Page 163-167

DIGITAL MICROMETERS/SNAP GAGES

ONE TURN OF SLEEVE MAKES 10MM SPINDLE FEED,
PRESS THE FORK, THE SPINDLE RETRACTS 3MM

MEASUREMENT ACCURACY IS NOT
AFFECTED BY THE USE OF SLEEVE

IP65
WATERPROOF

DATA
OUTPUT

ABSOLUTE ENCODER, THE ORIGINAL
DATA REMAINS AFTER POWER OFF

ATTENTION: RECHARGEABLE BATTERY,
FOR 24 HOURS CONTINUOUS WORKING

NON-ROTATING
SPINDLE

INSPECTION
CERTIFICATE

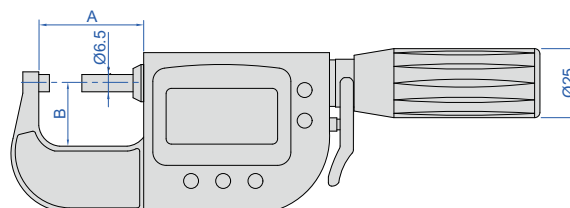
POPULAR
MODEL



Unit: mm

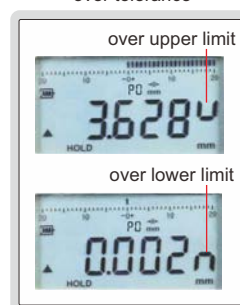


3358-25



- Absolute encoder, the original data remains after power off
- Resolution: 0.001mm/0.00005"
- One turn of sleeve makes 10mm spindle feed
- Measurement accuracy is not affected by the use of sleeve
- Press the fork, the spindle retracts 3mm
- Carbide spindle and anvil
- Measuring force 5-10N
- Button function: data output, tolerance, data preset, data hold, measuring direction change, max./min./TIR, power off time, on/off, zero, mm/inch
- Supplied with gage blocks for zero setting (except 0-25mm/0-1")
- Power: rechargeable battery, for 24 hours continuous working

alarm when
over tolerance



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



With data interface

Optional accessory:

wireless transmitter, code **7315-3350** need receiver page 6

data output cable (keyboard format), code **7302-3350** page 13

Code	Range	Accuracy	Repeatability	Measuring faces		A	B
				flatness	parallelism		
3358-25 *	0-25mm/0-1"	2µm	1µm	0.5µm	1.2µm	38mm	24mm
3358-50 *	25-50mm/1-2"	2µm	1µm	0.5µm	1.2µm	64mm	32.5mm
3358-75 *	50-75mm/2-3"	3µm	1µm	0.5µm	1.8µm	89mm	46mm
3358-100 *	75-100mm/3-4"	3µm	1µm	0.5µm	1.8µm	114mm	60mm

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	Repeatability	Measuring faces		A	B
				flatness	parallelism		
3358-25WL *	0-25mm/0-1"	2µm	1µm	0.5µm	1.2µm	38mm	24mm
3358-50WL *	25-50mm/1-2"	2µm	1µm	0.5µm	1.2µm	64mm	32.5mm
3358-75WL *	50-75mm/2-3"	3µm	1µm	0.5µm	1.8µm	89mm	46mm
3358-100WL *	75-100mm/3-4"	3µm	1µm	0.5µm	1.8µm	114mm	60mm

* Supplied with manufacturer inspection certificate

HIGH PRECISION DIGITAL MICROMETERS/SNAP GAGES

ONE TURN OF SLEEVE MAKES 10MM SPINDLE FEED,
PRESS THE FORK, THE SPINDLE RETRACTS 3MM

MEASUREMENT ACCURACY IS NOT
AFFECTED BY THE USE OF SLEEVE

IP65
WATERPROOF

DATA
OUTPUT

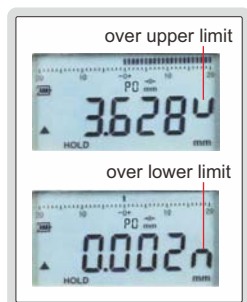
ABSOLUTE ENCODER, THE ORIGINAL
DATA REMAINS AFTER POWER OFF

ATTENTION: RECHARGEABLE BATTERY,
FOR 24 HOURS CONTINUOUS WORKING

NON-ROTATING
SPINDLE

INSPECTION
CERTIFICATE

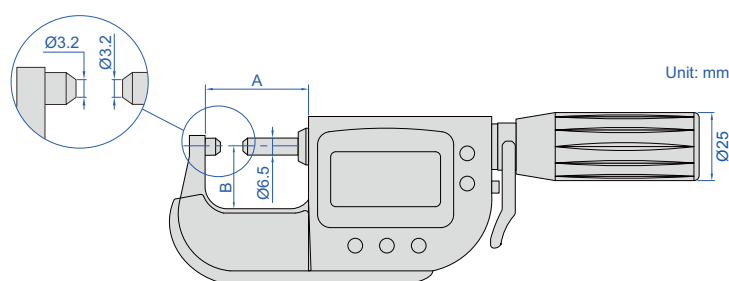
alarm when
over tolerance



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



3359-25



- Absolute encoder, the original data remains after power off
- Resolution: 0.0001mm/0.00001"
- One turn of sleeve makes 10mm spindle feed
- Measurement accuracy is not affected by the use of sleeve
- Press the fork, the spindle retracts 3mm
- Carbide spindle and anvil
- Measuring force 5-10N
- Button function: data output, tolerance, data preset, data hold, measuring direction change, max./min./TIR, power off time, on/off, zero, mm/inch
- Power: rechargeable battery, for 24 hours continuous working

With data interface

Optional accessory:

wireless transmitter, code 7315-3350 need receiver page 6

data output cable (keyboard format), code 7302-3350 page 13

Code	Range	Accuracy	Repeatability	Measuring faces		A	B
				flatness	parallelism		
3359-25 *	0-25mm/0-1"	±0.5µm	0.3µm	0.3µm	0.6µm	38mm	24mm

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	Repeatability	Measuring faces		A	B
				flatness	parallelism		
3359-25WL *	0-25mm/0-1"	±0.5µm	0.3µm	0.3µm	0.6µm	38mm	24mm

* Supplied with manufacturer inspection certificate

HIGH PRECISION DIGITAL MICROMETERS/SNAP GAGES (ADVANCED TYPE)

ONE TURN OF SLEEVE MAKES 5MM SPINDLE FEED,
PRESS THE FORK, THE SPINDLE RETRACTS 3MM

MEASUREMENT ACCURACY IS NOT
AFFECTED BY THE USE OF SLEEVE

IP65
WATERPROOF

DATA
OUTPUT

ATTENTION: RECHARGEABLE BATTERY,
FOR 24 HOURS CONTINUOUS WORKING

NON-ROTATING
SPINDLE

ABSOLUTE ENCODER, THE ORIGINAL
DATA REMAINS AFTER POWER OFF

**INSPECTION
CERTIFICATE**

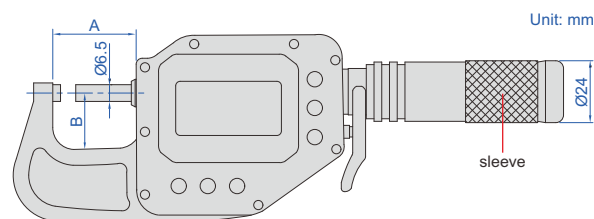


6

- Absolute encoder, the original data remains after power off
- Adjustable resolution: 0.0002mm/0.00001"
0.001mm/0.00005"
0.01mm/0.0005"
- One turn of sleeve makes 5mm spindle feed
- Measurement accuracy is not affected by the use of sleeve
- Press the fork, the spindle retracts 3mm
- Linear ball bearings for ten million times use
- Carbide spindle and anvil
- Measuring force 7-10N
Customizable measuring force range 2-12N
Attention: small measuring force will reduce the dustproof and waterproof level
- Button function: data output, tolerance, data preset, data hold, measuring direction change, max./min./TIR, power off time, on/off, zero, mm/inch, adjust resolution
- Supplied with gage blocks for zero setting (except 0-25mm/0-1")
- Power: rechargeable battery, for 24 hours continuous working



3350-25



With data interface

Optional accessory:

wireless transmitter, code **7315-3350** need receiver page 6

data output cable (keyboard format), code **7302-3350** page 13

Code	Range	Accuracy	Repeatability	Measuring faces		A	B
				flatness	parallelism		
3350-25 *	0-25mm/0-1"	1.4μm	0.6μm	0.5μm	1μm	38mm	24mm
3350-50 *	25-50mm/1-2"	1.6μm	1μm	0.5μm	1μm	63mm	28mm
3350-75 *	50-75mm/2-3"	1.8μm	1μm	0.5μm	1μm	88mm	45mm
3350-100 *	75-100mm/3-3.95"	2μm	1μm	0.5μm	1μm	113mm	57mm

Built-in wireless

Optional accessory:

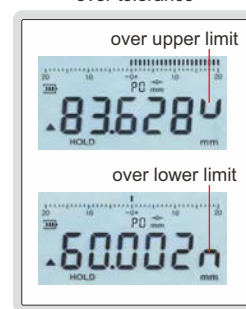
wireless receiver (keyboard format, connect up to 15 digital indicators), code **2134-R1**

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

Code	Range	Accuracy	Repeatability	Measuring faces		A	B
				flatness	parallelism		
3350-25WL *	0-25mm/0-1"	1.4μm	0.6μm	0.5μm	1μm	38mm	24mm
3350-50WL *	25-50mm/1-2"	1.6μm	1μm	0.5μm	1μm	63mm	28mm
3350-75WL *	50-75mm/2-3"	1.8μm	1μm	0.5μm	1μm	88mm	45mm
3350-100WL *	75-100mm/3-3.95"	2μm	1μm	0.5μm	1μm	113mm	57mm

* Supplied with manufacturer inspection certificate

alarm when
over tolerance



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



IP65
WATERPROOF

ABSOLUTE ENCODER, THE ORIGINAL
DATA REMAINS AFTER POWER OFF

ONE TURN OF SLEEVE MAKES 5MM SPINDLE FEED,
PRESS THE FORK, THE SPINDLE RETRACTS 3MM

ATTENTION: RECHARGEABLE BATTERY,
FOR 24 HOURS CONTINUOUS WORKING

NON-ROTATING
SPINDLE

DATA
OUTPUT

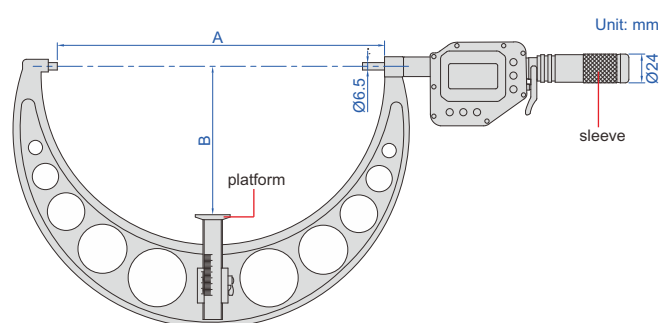
MEASUREMENT ACCURACY IS NOT
AFFECTED BY THE USE OF SLEEVE

INSPECTION
CERTIFICATE

HIGH PRECISION DIGITAL MICROMETERS/SNAP GAGES



3351-275



- Absolute encoder, the original data remains after power off
- Adjustable resolution: 0.0002mm/0.00001" (when the reading exceeds 100mm, the resolution is automatically switched to 0.001mm/0.00005" 0.01mm/0.0005")
- One turn of sleeve makes 5mm spindle feed
- Measurement accuracy is not affected by the use of sleeve
- Press the fork, the spindle retracts 3mm
- Linear ball bearings for ten million times use
- Carbide spindle and anvil
- Measuring force 5-8N
- Customizable measuring force range 2-12N
- Attention: small measuring force will reduce the dustproof and waterproof level
- Button function: data output, tolerance, data preset, data hold, measuring direction change, max./min./TIR, power off time, on/off, zero, mm/inch, adjust resolution
- Supplied with gage blocks for zero setting
- Power: rechargeable battery, for 24 hours continuous working



gage blocks for zero setting (included)



With data interface

Optional accessory:
wireless transmitter, code **7315-3350** need receiver page 6
data output cable (keyboard format), code **7302-3350** page 13

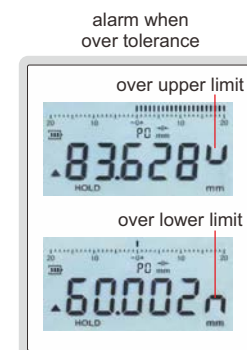
Code	Range	Accuracy	Repeatability	Measuring faces		A	B
				flatness	parallelism		
3351-125 *	100-125mm/4-5"	3µm	1µm	0.5µm	2µm	128mm	62.5mm
3351-150 *	125-150mm/5-6"	3µm	1µm	0.5µm	2µm	153mm	75mm
3351-175 *	150-175mm/6-7"	4µm	1µm	0.5µm	2.5µm	178mm	87.5mm
3351-200 *	175-200mm/7-8"	4µm	1µm	0.5µm	2.5µm	203mm	100mm
3351-225 *	200-225mm/8-9"	5µm	1µm	0.5µm	3µm	228mm	112.5mm
3351-250 *	225-250mm/9-10"	5µm	1µm	0.5µm	3µm	253mm	125mm
3351-275 *	250-275mm/10-11"	6µm	1µm	0.5µm	3.5µm	278mm	137.5mm
3351-300 *	275-300mm/11-12"	6µm	1µm	0.5µm	3.5µm	303mm	150mm

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	Repeatability	Measuring faces		A	B
				flatness	parallelism		
3351-125WL *	100-125mm/4-5"	3µm	1µm	0.5µm	2µm	128mm	62.5mm
3351-150WL *	125-150mm/5-6"	3µm	1µm	0.5µm	2µm	153mm	75mm
3351-175WL *	150-175mm/6-7"	4µm	1µm	0.5µm	2.5µm	178mm	87.5mm
3351-200WL *	175-200mm/7-8"	4µm	1µm	0.5µm	2.5µm	203mm	100mm
3351-225WL *	200-225mm/8-9"	5µm	1µm	0.5µm	3µm	228mm	112.5mm
3351-250WL *	225-250mm/9-10"	5µm	1µm	0.5µm	3µm	253mm	125mm
3351-275WL *	250-275mm/10-11"	6µm	1µm	0.5µm	3.5µm	278mm	137.5mm
3351-300WL *	275-300mm/11-12"	6µm	1µm	0.5µm	3.5µm	303mm	150mm

* Supplied with manufacturer inspection certificate



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



NON-ROTATING SPINDLE DIGITAL MICROMETERS

INSIZE PLUS
MADE IN EUROPE

**INSPECTION
CERTIFICATE**

QUICK MEASUREMENT
ONE TURN OF SLEEVE OR RATCHET
STOP MAKES 2mm SPINDLE FEED

LEVER FORCE MEASURING DEVICE
SUITABLE FOR MASS MEASUREMENT

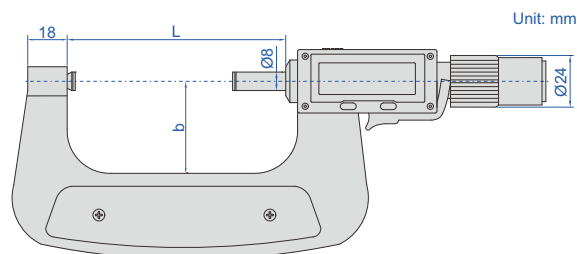
IP65
WATERPROOF

NON-ROTATING
SPINDLE

DATA
OUTPUT



3632-80A



Unit: mm

- Adjustable resolution: 0.01mm/0.0005", 0.001mm/0.00005", 0.0005mm/0.00002"
- Repeatability: 1µm
- Measuring force: 5-10N
- Lever force measuring device, suitable for mass measurement
- No-rotating spindle, suitable for measuring cylindrical workpiece
- Quick measurement: one turn of sleeve or ratchet stop makes 2mm spindle feed
- Carbide measuring faces
- Data output
- Button function: mm/inch, max./min. value tracking, preset value, hold, on/off, zero
- Ratchet sets force measurement
- CR2032 battery, automatic power off
- Supplied with setting standards (except 0-30mm/0-1.18")
- Optional accessory: data output cable (code 7315-80 need receiver page 5, 7302-80)

lever force measuring device

press the lever force measuring device, the spindle retracted 1.5mm (MAX). release the force measuring device, the spindle extends, contacts the measured workpiece, and the measured force is constant



(mm)

Code	Range	Accuracy		L	b
		stroke≤25mm	stroke>25mm		
3632-30A *	0-30mm/0-1.18"	±2µm	±3µm	38	24
3632-55A *	25-55mm/0.98-2.17"	±2µm	±3µm	63	30.5
3632-80A *	50-80mm/1.97-3.15"	±3µm	±4µm	88	44
3632-105A *	75-105mm/2.95-4.13"	±3µm	±4µm	113	57
3632-130A *	100-130mm/3.94-5.12"	±3µm	±5µm	138	70
3632-155A *	125-155mm/4.92-6.1"	±3µm	±5µm	163	83
3632-180A *	150-180mm/5.91-7.09"	±4µm	±6µm	188	96
3632-205A *	175-205mm/6.89-8.07"	±4µm	±6µm	213	109
3632-230A *	200-230mm/7.87-9.06"	±4µm	±6µm	238	122
3632-255A *	225-255mm/8.86-10.04"	±4µm	±6µm	268	135
3632-280A *	250-280mm/9.84-11.02"	±5µm	±7µm	293	147.5
3632-305A *	275-305mm/10.83-12.01"	±5µm	±7µm	318	160

* Supplied with manufacturer inspection certificate

HIGH PRECISION NON-ROTATING SPINDLE DIGITAL MICROMETERS

INSIZE PLUS
MADE IN EUROPE

QUICK MEASUREMENT
ONE TURN OF SLEEVE OR RATCHET
STOP MAKES 2MM SPINDLE FEED

ATTENTION: SETTING
STANDARDS ARE NOT INCLUDED

IP65
WATERPROOF

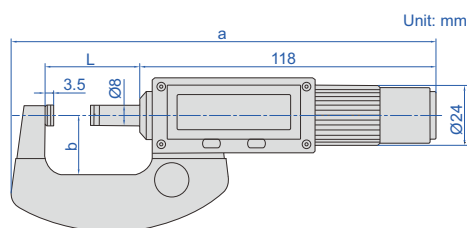
NON-ROTATING
SPINDLE

DATA
OUTPUT

STROKE
30mm



3661-30



- Adjustable resolution: 0.01mm/0.0005", 0.001mm/0.00005", 0.0005mm/0.00002"
- Repeatability: 0.5µm
- Measuring force: 5-10N
- Flatness of measuring faces: 0.3µm
- Parallelism of measuring faces: 0.5µm
- Ratchet stop
- Non-rotating spindle, suitable for cylinders
- Quick measurement: one turn of sleeve or ratchet stop makes 2mm spindle feed
- Carbide measuring faces
- Data output
- Button function: mm/inch, max./min. value tracking, preset value, hold, on/off, zero
- CR2032 battery
- Automatic power off, turn the sleeve to turn on
- Optional accessory: setting standards (code **7386**), data output cable (code **7315-80** need receiver page 5, **7302-80**)

(mm)

Code	Range	Accuracy		L	a	b
		stroke ≤25mm	stroke >25mm			
3661-30	0-30mm/0-1.18"	±2µm	±3µm	38	169	24
3661-55	25-55mm/0.98-2.17"	±2µm	±3µm	63	195	30.5
3661-80	50-80mm/1.97-3.15"	±3µm	±4µm	88	228	44
3661-105	75-105mm/2.95-4.13"	±3µm	±4µm	113	257	57
3661-130	100-130mm/3.94-5.12"	±3µm	±5µm	138	289	70
3661-155	125-155mm/4.92-6.1"	±3µm	±5µm	163	315	83
3661-180	150-180mm/5.91-7.09"	±4µm	±6µm	188	340	96
3661-205	175-205mm/6.89-8.07"	±4µm	±6µm	213	363	109
3661-230	200-230mm/7.87-9.06"	±4µm	±6µm	238	388	122
3661-255	225-255mm/8.86-10.04"	±4µm	±6µm	268	429	135
3661-280	250-280mm/9.84-11.02"	±5µm	±7µm	293	454	147.5
3661-305	275-305mm/10.83-12.01"	±5µm	±7µm	318	479	160

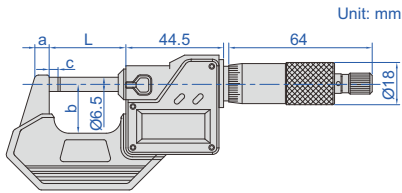
WATERPROOF DIGITAL OUTSIDE MICROMETERS (WITH DATA OUTPUT)

POPULAR
MODEL

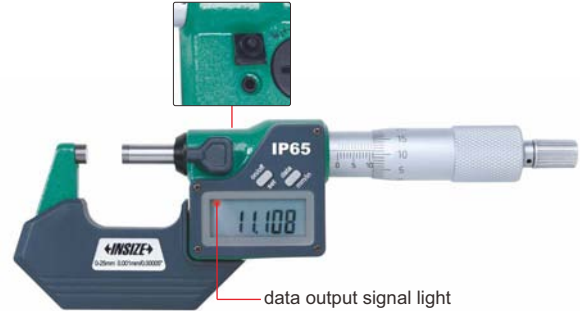
DATA
OUTPUT

IP65
WATERPROOF

INSPECTION
CERTIFICATE



data output interface
on the back



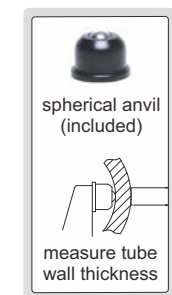
3101-25A

- IP65 dust/waterproof
- Button function: on/off, set, mm/inch, data transmit
- Automatic power off
- Carbide measuring faces
- Supplied with spherical anvil
- Setting standards are included (except 0-25mm/0-1")
- Optional accessory: data output cable
(code 7315-31 need receiver page 4, 7302-31 page 12)

Metric/Inch type (ratchet stop)

(mm)

Code	Range	Resolution	Accuracy	L	a	b	c
3101-25A*	0-25mm/0-1"	0.001mm/0.00005"	±2µm	34.5	6	25	3
3101-50A*	25-50mm/1-2"	0.001mm/0.00005"	±2µm	59.5	8	32	3
3101-75A*	50-75mm/2-3"	0.001mm/0.00005"	±3µm	84.5	8	44.5	3
3101-100A*	75-100mm/3-4"	0.001mm/0.00005"	±3µm	109.5	8	57	3
3101-125A	100-125mm/4-5"	0.001mm/0.00005"	±3µm	135	10	70	3
3101-150A	125-150mm/5-6"	0.001mm/0.00005"	±3µm	160.5	10	82	3
3101-175A	150-175mm/6-7"	0.001mm/0.00005"	±4µm	186	12	94.5	5.5
3101-200A	175-200mm/7-8"	0.001mm/0.00005"	±4µm	211.5	12	107	5.5
3101-225A	200-225mm/8-9"	0.001mm/0.00005"	±4µm	236	23	129.5	5.5
3101-250A	225-250mm/9-10"	0.001mm/0.00005"	±4µm	261.5	23	142.5	5.5
3101-275A	250-275mm/10-11"	0.001mm/0.0001"	±5µm	287	23	155	5.5
3101-300A	275-300mm/11-12"	0.001mm/0.0001"	±5µm	312.5	23	167.5	5.5



Metric/Inch type (friction thimble)

(mm)

Code	Range	Resolution	Accuracy	L	a	b	c
3101-25FA*	0-25mm/0-1"	0.001mm/0.00005"	±2µm	34.5	6	25	3

Metric type (ratchet stop)

(mm)

Code	Range	Resolution	Accuracy	L	a	b	c
3101-25AJ*	0-25mm	0.001mm	±2µm	34.5	6	25	3
3101-50AJ*	25-50mm	0.001mm	±2µm	59.5	8	32	3
3101-75AJ*	50-75mm	0.001mm	±3µm	84.5	8	44.5	3
3101-100AJ*	75-100mm	0.001mm	±3µm	109.5	8	57	3

Set (ratchet stop type)

Code	Range	Micrometers included	Packaging
3101-753A*	0-75mm/0-3"	3101-25A, 3101-50A, 3101-75A	blow mould case
3101-1004A*	0-100mm/0-4"	3101-25A, 3101-50A, 3101-75A, 3101-100A	blow mould case
3101-1506A	0-150mm/0-6"	3101-25A, 3101-50A, 3101-75A, 3101-100A, 3101-125A, 3101-150A	aluminum box
3101-3006A	150-300mm/6-12"	3101-175A, 3101-200A, 3101-225A, 3101-250A, 3101-275A, 3101-300A	aluminum box

* Supplied with manufacturer inspection certificate



3101-753A

3101-1506A

WATERPROOF DIGITAL OUTSIDE MICROMETERS (WITHOUT DATA OUTPUT)

IP65
WATERPROOF

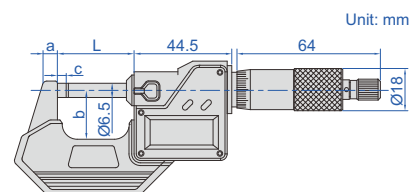
**ATTENTION: NO
DATA OUTPUT**

**INSPECTION
CERTIFICATE**



3108-25A

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



Ratchet stop type (mm)

Code	Range	Accuracy	L	a	b	c
3108-25A*	0-25mm/0-1"	±2µm	34.5	6	25	3
3108-50A*	25-50mm/1-2"	±2µm	59.5	8	32	3
3108-75A*	50-75mm/2-3"	±3µm	84.5	8	44.5	3
3108-100A*	75-100mm/3-4"	±3µm	109.5	8	57	3
3108-125A	100-125mm/4-5"	±3µm	135	10	70	3
3108-150A	125-150mm/5-6"	±3µm	160.5	10	82	3
3108-175A	150-175mm/6-7"	±4µm	186	12	94.5	5.5
3108-200A	175-200mm/7-8"	±4µm	211.5	12	107	5.5



Friction thimble type (mm)

Code	Range	Accuracy	L	a	b	c
3108-25FA*	0-25mm/0-1"	±2µm	34.5	6	25	3



3108-753A



3108-1506A



Set

Code	Range	Micrometers included	Packaging
3108-753A*	0-75mm/0-3"	3108-25A, 3108-50A, 3108-75A	blow mould case
3108-1004A*	0-100mm/0-4"	3108-25A, 3108-50A, 3108-75A, 3108-100A	blow mould case
3108-1506A	0-150mm/0-6"	3108-25A, 3108-50A, 3108-75A, 3108-100A, 3108-125A, 3108-150A	aluminum box

* Supplied with manufacturer inspection certificate

DIGITAL OUTSIDE MICROMETERS (BASIC TYPE, WITH DATA OUTPUT)

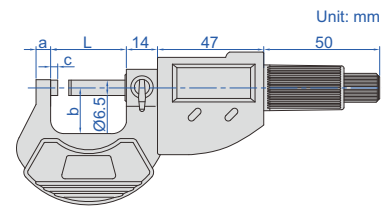


DATA
OUTPUT



3102-25

- Resolution 0.001mm/0.00005"
- Button function: on/off, set, mm/inch, data transmit
- Automatic power off
- Carbide measuring faces
- Friction thimble
- Supplied with spherical anvil
- Setting standards are included (except 0-25mm/0-1")
- Optional accessory: data output cable
(code 7315-30 need receiver page 4, 7302-30 page 12)



Individual (mm)						
Code	Range	Accuracy	L	a	b	c
3102-25 *	0-25mm/0-1"	±2µm	32	6	24	3
3102-50 *	25-50mm/1-2"	±2µm	57	8	32	3
3102-75 *	50-75mm/2-3"	±3µm	82	8	45	3
3102-100 *	75-100mm/3-4"	±3µm	107	10	57	3
3102-125	100-125mm/4-5"	±3µm	133	10	70	3
3102-150	125-150mm/5-6"	±3µm	158	10	82	3
3102-175	150-175mm/6-7"	±4µm	183	12	95	5.5
3102-200	175-200mm/7-8"	±4µm	209	12	107	5.5



3102-753A



3102-1506A

Set

Code	Range	Micrometers included	Packaging
3102-753A *	0-75mm/0-3"	3102-25, 3102-50, 3102-75	blow mould case
3102-1004A *	0-100mm/0-4"	3102-25, 3102-50, 3102-75, 3102-100	blow mould case
3102-1506A	0-150mm/0-6"	3102-25, 3102-50, 3102-75, 3102-100, 3102-125, 3102-150	aluminum box

* Supplied with manufacturer inspection certificate

POPULAR MODEL

DIGITAL OUTSIDE MICROMETERS (BASIC TYPE, WITHOUT DATA OUTPUT)

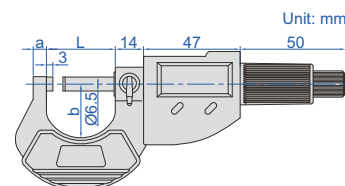


ATTENTION: NO DATA OUTPUT

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



3109-25A



Individual

Code	Range	Accuracy	L	a	b
3109-25A*	0-25mm/0-1"	±2μm	32mm	6mm	28mm
3109-50A*	25-50mm/1-2"	±2μm	57mm	8mm	37mm
3109-75A*	50-75mm/2-3"	±3μm	82mm	8mm	50mm
3109-100A*	75-100mm/3-4"	±3μm	107mm	10mm	61mm
3109-125A	100-125mm/4-5"	±3μm	132mm	10mm	73mm
3109-150A	125-150mm/5-6"	±3μm	157mm	10mm	85mm
3109-175A	150-175mm/6-7"	±4μm	182mm	20mm	104mm
3109-200A	175-200mm/7-8"	±4μm	207mm	20mm	117mm
3109-225A	200-225mm/8-9"	±4μm	234mm	20mm	130mm
3109-250A	225-250mm/9-10"	±4μm	260mm	20mm	143mm
3109-275A	250-275mm/10-11"	±5μm	285mm	20mm	155mm
3109-300A	275-300mm/11-12"	±5μm	310mm	20mm	168mm

Set

Code	Range	Micrometers included	Packaging
3109-753A*	0-75mm/0-3"	3109-25A, 3109-50A, 3109-75A	blow mould case
3109-1004A*	0-100mm/0-4"	3109-25A, 3109-50A, 3109-75A, 3109-100A	blow mould case
3109-1506A	0-150mm/0-6"	3109-25A, 3109-50A, 3109-75A, 3109-100A, 3109-125A, 3109-150A	aluminum box
3109-3006A	150-300mm/6-12"	3109-175A, 3109-200A, 3109-225A, 3109-250A, 3109-275A, 3109-300A	aluminum box

* Supplied with manufacturer inspection certificate



3109-753A



3109-1506A

6

DATA OUTPUT

IP65 WATERPROOF

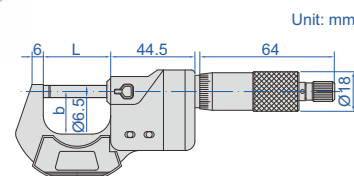


DIGITAL VERTICAL MICROMETERS

- Measure the thickness of plates for easy reading
- Resolution 0.001mm/0.00005"
- IP65 dust/waterproof
- Button function: on/off, set, mm/inch, ABS/INC
- Data output
- Automatic power off
- Carbide spindle tip
- Ratchet stop
- Supplied with setting standards (except 0-25mm/0-1")
- Optional accessory: data output cable (code 7315-30 need receiver page 4, 7302-30 page 12)

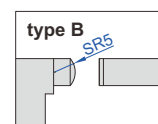
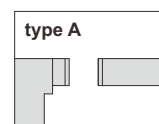


3565-25A



Code	Range	Type	Accuracy	L	b
3565-25A*	0-25mm/0-1"	A	±2μm	34.5mm	25mm
3565-50A*	25-50mm/1-2"	A	±2μm	59.5mm	32mm
3565-25BA*	0-25mm/0-1"	B	±2μm	34.5mm	25mm
3565-50BA*	25-50mm/1-2"	B	±2μm	59.5mm	32mm

* Supplied with manufacturer inspection certificate



OUTSIDE MICROMETERS

INSIZE PLUS
MADE IN EUROPE

- Carbide measuring faces
- Graduation: 0.01mm
- Meet DIN863-1
- Friction thimble
- Optional accessory: setting standards (code 7386)

Code	Range	Accuracy	L	b
3701-25A *	0-25mm	4μm	37mm	24mm
3701-50A *	25-50mm	4μm	62mm	34mm
3701-75A *	50-75mm	5μm	87mm	46mm
3701-100A *	75-100mm	5μm	112mm	60mm
3701-125A *	100-125mm	6μm	139mm	72mm
3701-150A *	125-150mm	6μm	164mm	85mm
3701-175A *	150-175mm	7μm	190mm	97mm
3701-200A *	175-200mm	7μm	215mm	110mm
3701-225A *	200-225mm	8μm	240mm	122mm
3701-250A *	225-250mm	8μm	264mm	135mm
3701-275A *	250-275mm	9μm	290mm	148mm
3701-300A *	275-300mm	9μm	315mm	160mm

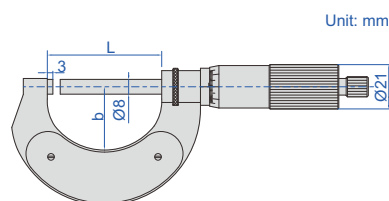
* Supplied with manufacturer inspection certificate

ATTENTION: SETTING
STANDARDS ARE NOT INCLUDED

INSPECTION
CERTIFICATE



3701-25A



OUTSIDE MICROMETERS WITH 50mm RANGE

INSIZE PLUS
MADE IN EUROPE

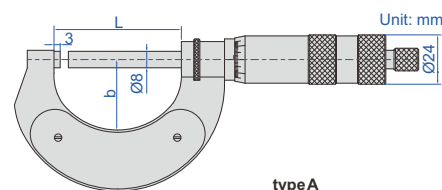
- Graduation 0.01mm
- Ratchet stop
- One turn of sleeve makes 1mm spindle feed
- Carbide measuring faces
- Optional accessory: setting standards (code 7386)

ATTENTION: SETTING
STANDARDS ARE NOT INCLUDED

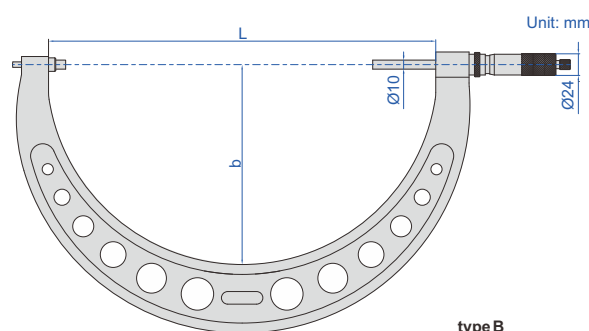
LIGHT
WEIGHT



3682-50



type A



type B

Code	Range	Type	Accuracy	L	b	Weight
3682-50	0-50mm	A	4μm	62	34	0.46kg
3682-100	50-100mm	A	5μm	112	60	0.62kg
3682-150	100-150mm	A	6μm	164	85	0.78kg
3682-200	150-200mm	A	7μm	215	110	1.03kg
3682-250	200-250mm	A	8μm	264	135	1.25kg
3682-300	250-300mm	A	9μm	315	160	1.45kg
3682-350	300-350mm	B	10μm	370	190	1.50kg
3682-400	350-400mm	B	11μm	430	220	1.80kg
3682-450	400-450mm	B	12μm	475	250	2.15kg
3682-500	450-500mm	B	13μm	530	273	2.30kg
3682-550	500-550mm	B	14μm	570	291	2.40kg
3682-600	550-600mm	B	14μm	630	323	3.00kg
3682-650	600-650mm	B	16μm	675	351	3.30kg
3682-700	650-700mm	B	16μm	730	378	3.70kg
3682-750	700-750mm	B	18μm	785	401	3.90kg
3682-800	750-800mm	B	18μm	830	423	4.10kg
3682-850	800-850mm	B	20μm	885	440	4.30kg
3682-900	850-900mm	B	20μm	930	473	4.90kg
3682-950	900-950mm	B	22μm	980	503	5.80kg
3682-1000	950-1000mm	B	22μm	1030	520	6.10kg

ATTENTION: SETTING
STANDARDS ARE NOT INCLUDED

OUTSIDE MICROMETERS (GRADUATION 0.005mm)

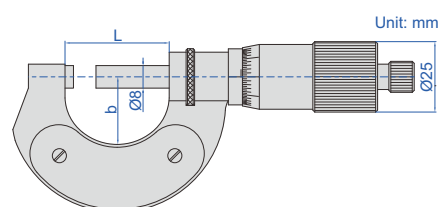
INSIZE PLUS
MADE IN EUROPE

- Graduation 0.005mm
- Friction thimble
- One turn of sleeve makes 0.5mm spindle feed
- Carbide measuring faces
- Optional accessory: setting standards (code 7386)



3681-25

(mm)				
Code	Range	Accuracy	L	b
3681-25	0-25mm	4μm	37	24
3681-50	25-50mm	4μm	62	34
3681-75	50-75mm	5μm	87	46
3681-100	75-100mm	5μm	112	60
3681-125	100-125mm	6μm	139	72
3681-150	125-150mm	6μm	164	85
3681-175	150-175mm	7μm	190	97
3681-200	175-200mm	7μm	215	110
3681-225	200-225mm	8μm	240	122
3681-250	225-250mm	8μm	264	135
3681-275	250-275mm	9μm	290	148
3681-300	275-300mm	9μm	315	160



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

Individual

Code	Range	Accuracy	L	a	b
3202-25A *	0-25mm	4μm	32mm	6mm	24mm
3202-50A *	25-50mm	4μm	57mm	8mm	32mm
3202-75A *	50-75mm	5μm	82mm	8mm	45mm
3202-100A *	75-100mm	5μm	107mm	8mm	57mm
3202-125A	100-125mm	6μm	133mm	8mm	70mm
3202-150A	125-150mm	6μm	125mm	8mm	82mm
3202-175A	150-175mm	7μm	183mm	8mm	95mm
3202-200A	175-200mm	7μm	209mm	8mm	107mm

Set

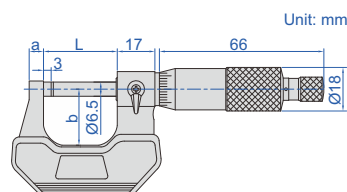
Code	Range	Micrometers included
3202-753A *	0-75mm	3202-25A, 3202-50A, 3202-75A
3202-1004A *	0-100mm	3202-25A, 3202-50A, 3202-75A, 3202-100A
3202-1506A	0-150mm	3202-25A, 3202-50A, 3202-75A, 3202-100A, 3202-125A, 3202-150A

* Supplied with manufacturer inspection certificate

OUTSIDE MICROMETERS



3202-25A



OUTSIDE MICROMETERS

POPULAR
MODEL

INSPECTION
CERTIFICATE



3203-25A



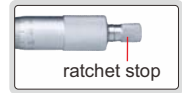
3203-50A



3203-1004A



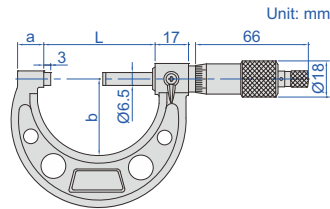
3203-3006A



ratchet stop



friction thimble
for one hand
operation



- Graduation: metric 0.01mm
inch 0.0001"
- Carbide measuring faces
- Meet DIN863-1
- Supplied with setting standards
(except 0-25mm and 0-1")

Metric (ratchet stop type)

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

Inch (ratchet stop type)

Code	Range	Accuracy	L	a	b
3203-1A*	0-1"	±0.0001"	1.260"	0.354"	1.102"
3203-2A*	1-2"	±0.0001"	2.244"	0.551"	1.496"
3203-3A*	2-3"	±0.0001"	3.228"	0.591"	1.929"
3203-4A*	3-4"	±0.00015"	4.213"	0.591"	2.362"
3203-5A*	4-5"	±0.00015"	5.236"	0.650"	2.874"
3203-6A*	5-6"	±0.00015"	6.220"	0.650"	3.346"
3203-7A	6-7"	±0.0002"	7.205"	0.764"	4.094"
3203-8A	7-8"	±0.0002"	8.228"	0.764"	4.606"
3203-9A	8-9"	±0.0002"	9.213"	0.764"	5.118"
3203-10A	9-10"	±0.00025"	10.236"	0.764"	5.591"
3203-11A	10-11"	±0.00025"	11.220"	0.764"	6.102"
3203-12A	11-12"	±0.00025"	12.205"	0.764"	6.614"

Metric micrometer set (ratchet stop type)

Code	Range	Micrometers included	Packaging
3203-753A*	0-75mm	3203-25A, 3203-50A, 3203-75A	blow mould case
3203-1004A*	0-100mm	3203-25A, 3203-50A, 3203-75A, 3203-100A	blow mould case
3203-1506A	0-150mm	3203-25A, 3203-50A, 3203-75A, 3203-100A, 3203-125A, 3203-150A	blow mould case
3203-3006A	150-300mm	3203-175A, 3203-200A, 3203-225A, 3203-250A, 3203-275A, 3203-300A	aluminum box
3203-3012A	0-300mm	3203-25A, 3203-50A, 3203-75A, 3203-100A, 3203-125A, 3203-150A, 3203-175A, 3203-200A, 3203-225A, 3203-250A, 3203-275A, 3203-300A	aluminum box

Inch micrometer set (ratchet stop type)

Code	Range	Micrometers included	Packaging
3203-33A*	0-3"	3203-1A, 3203-2A, 3203-3A	blow mould case
3203-44A*	0-4"	3203-1A, 3203-2A, 3203-3A, 3203-4A	blow mould case
3203-66A*	0-6"	3203-1A, 3203-2A, 3203-3A, 3203-4A, 3203-5A, 3203-6A	blow mould case
3203-126A	6-12"	3203-7A, 3203-8A, 3203-9A, 3203-10A, 3203-11A, 3203-12A	aluminum box
3203-1212A	0-12"	3203-1A, 3203-2A, 3203-3A, 3203-4A, 3203-5A, 3203-6A, 3203-7A, 3203-8A, 3203-9A, 3203-10A, 3203-11A, 3203-12A	aluminum box

Inch (friction thimble type)

Code	Range	Accuracy	L	a	b
3203-1FA*	0-1"	±0.0001"	1.260"	0.354"	1.102"
3203-2FA*	1-2"	±0.0001"	2.244"	0.551"	1.496"
3203-3FA*	2-3"	±0.0001"	2.244"	0.591"	1.929"

*Supplied with manufacturer inspection certificate

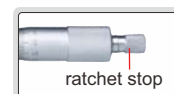


1µm GRADUATION OUTSIDE MICROMETERS

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

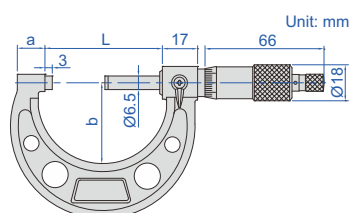


3210-25A



Ratchet stop type (mm)

Code	Range	Accuracy	L	a	b
3210-25A *	0-25mm	4µm	32	9	28
3210-50A *	25-50mm	4µm	57	14	38
3210-75A *	50-75mm	5µm	82	15	49
3210-100A *	75-100mm	5µm	107	15	60
3210-125A	100-125mm	6µm	133	16.5	73
3210-150A	125-150mm	6µm	158	16.5	85
3210-175A	150-175mm	7µm	183	19.4	104
3210-200A	175-200mm	7µm	209	19.4	117



Friction thimble type (mm)

Code	Range	Accuracy	L	a	b
3210-25FA *	0-25mm	4µm	32	9	28
3210-50FA *	25-50mm	4µm	57	14	38

* Supplied with manufacturer inspection certificate

Micrometer set (ratchet stop type)

Code	Range	Micrometers included
3210-753A *	0-75mm	3210-25A, 3210-50A, 3210-75A
3210-1004A *	0-100mm	3210-25A, 3210-50A, 3210-75A, 3210-100A
3210-1506A	0-150mm	3210-25A, 3210-50A, 3210-75A, 3210-100A, 3210-125A, 3210-150A



OUTSIDE MICROMETERS WITH COUNTER

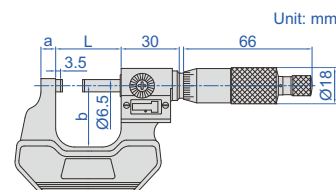
- Counter resolution: 0.01mm
- Thimble graduation: 0.01mm
- Carbide measuring faces
- Meet DIN863-1
- Ratchet stop
- Supplied with setting standards (except 0-25mm)



3400-25

Code	Range	Accuracy	L	a	b
3400-25 *	0-25mm	4µm	32mm	6mm	26mm
3400-50 *	25-50mm	4µm	57mm	8mm	32mm
3400-75 *	50-75mm	5µm	82mm	8mm	44.5mm
3400-100 *	75-100mm	5µm	107mm	8mm	57mm
3400-125 *	100-125mm	6µm	132.4mm	17mm	71.8mm
3400-150 *	125-150mm	6µm	157.8mm	17mm	84mm
3400-175 *	150-175mm	7µm	185mm	20mm	98.5mm
3400-200 *	175-200mm	7µm	210.4mm	20mm	111mm
3400-225 *	200-225mm	8µm	236mm	20mm	124mm
3400-250 *	225-250mm	8µm	261mm	20mm	136.5mm
3400-275 *	250-275mm	9µm	287mm	20mm	149mm
3400-300 *	275-300mm	9µm	312mm	20mm	162mm

* Supplied with manufacturer inspection certificate



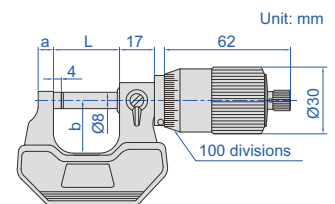
QUICK FEEDING OUTSIDE MICROMETERS

- Graduation 0.01mm
- 1mm feeding of each turn
- Friction thimble
- Carbide measuring faces
- Meet DIN863-1
- Supplied with setting standards (except 0-25mm)

Code	Range	Accuracy	L	a	b
3208-25B	0-25mm	4μm	32mm	6mm	24mm
3208-50B	25-50mm	4μm	57mm	8mm	32mm
3208-75B	50-75mm	5μm	82mm	8mm	45mm
3208-100B	75-100mm	5μm	107mm	8mm	57mm
3208-125B	100-125mm	6μm	133mm	8mm	70mm
3208-150B	125-150mm	6μm	158mm	8mm	82mm
3208-175B	150-175mm	7μm	183mm	8mm	95mm
3208-200B	175-200mm	7μm	209mm	8mm	107mm



3208-25B

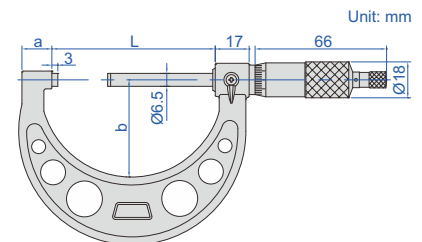


LONG SPINDLE OUTSIDE MICROMETERS

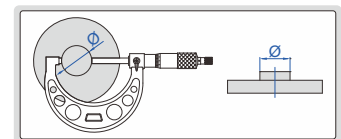
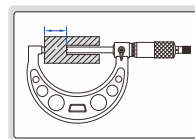
- Graduation 0.01mm
- Carbide measuring faces
- Meet DIN863-1
- Ratchet stop
- Supplied with setting standards (except 0-25mm)



3209-25



Code	Range	Accuracy	L	a	b
3209-25	0-25mm	4μm	57mm	14mm	38mm
3209-50	25-50mm	4μm	82mm	15mm	49mm
3209-75	50-75mm	5μm	107mm	15mm	60mm
3209-100	75-100mm	5μm	133mm	16.5mm	73mm



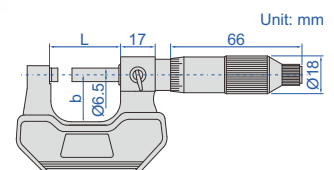
NON MAGNETIC MICROMETERS

- Suitable for magnetic materials
- Graduation: 0.01mm
- Non magnetic carbide measuring faces
- Ratchet stop



3231-25A

Code	Range	Accuracy	L	b
3231-25A	0-25mm	4μm	32mm	24mm
3231-50A	25-50mm	4μm	57mm	32mm
3231-75A	50-75mm	5μm	82mm	45mm
3231-100A	75-100mm	5μm	105mm	57mm



OUTSIDE MICROMETERS FOR LEFT OR RIGHT HANDERS

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

(mm)					
Code	Range	Accuracy	L	a	b
3236-25B	0-25mm	4μm	32	6	24
3236-50B	25-50mm	4μm	57	8	32
3236-75B	50-75mm	5μm	82	8	45
3236-100B	75-100mm	5μm	107	8	57
3236-125B	100-125mm	6μm	133	8	70
3236-150B	125-150mm	6μm	158	8	82
3236-175B	150-175mm	7μm	183	8	95
3236-200B	175-200mm	7μm	209	8	107

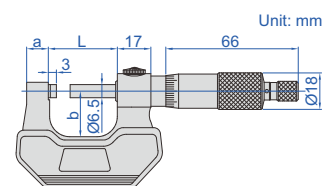


front



back

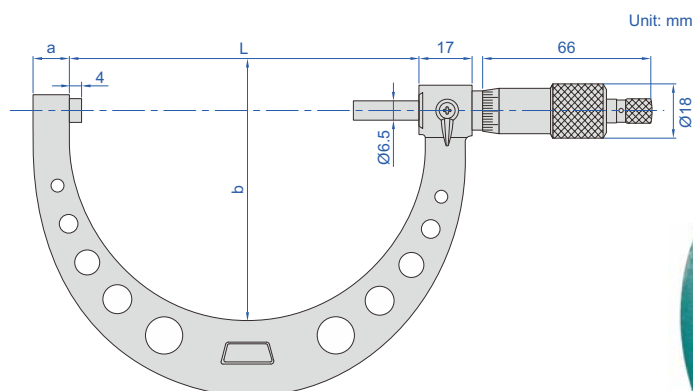
3236-25B



Unit: mm

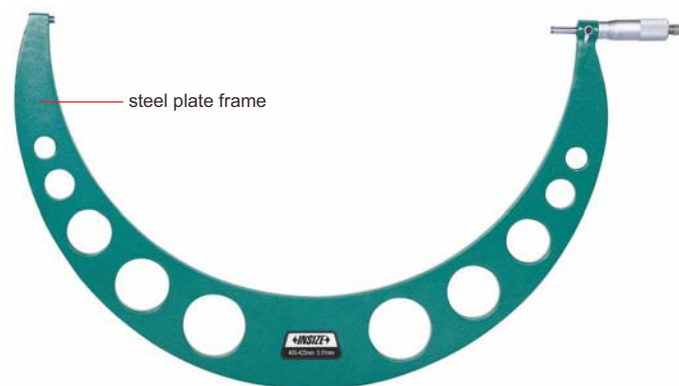
6

OUTSIDE MICROMETERS



Unit: mm

- Graduation: 0.01mm
- Carbide measuring faces
- Meet DIN863-1
- Ratchet stop
- Supplied with setting standards



steel plate frame

3216-425

(mm)					
Code	Range	Accuracy	L	a	b
3216-325	300-325mm	10μm	338	20	176
3216-350	325-350mm	10μm	364	20	192
3216-375	350-375mm	11μm	389	20	202
3216-400	375-400mm	11μm	414	20	217
3216-425	400-425mm	12μm	440	20	226
3216-450	425-450mm	12μm	465	20	241
3216-475	450-475mm	13μm	491	20	255
3216-500	475-500mm	13μm	516	20	268



setting standard (included)

OUTSIDE MICROMETERS WITH INTERCHANGEABLE ANVILS

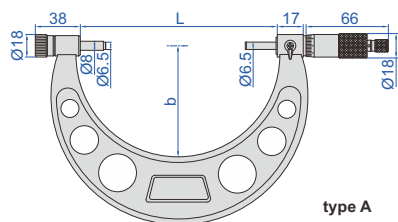
6



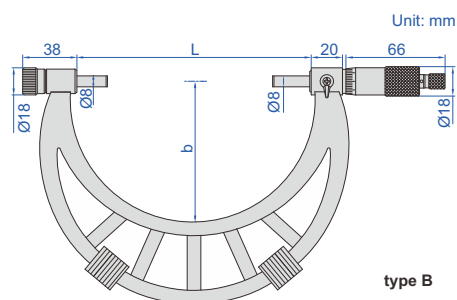
3206-150A



3206-400

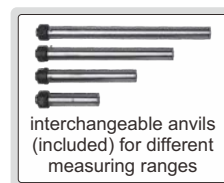
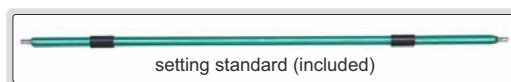


type A



type B

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

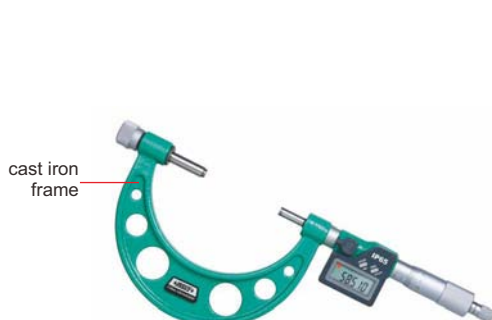


(mm)						
Code	Range	Type	Accuracy	L	b	Setting standard (included)
3206-50A	0-50mm	A	4μm	58	35	25
3206-100A	0-100mm	A	5μm	108	57	25, 50, 75
3206-150A	0-150mm	A	6μm	158	82	25, 50, 75, 100, 125
3206-151A	50-150mm	A	6μm	158	82	50, 75, 100, 125
3206-200A	100-200mm	A	7μm	208	114	100, 125, 150, 175
3206-300A	150-300mm	A	9μm	308	165	150, 175, 200, 225, 250, 275
3206-301A	200-300mm	A	9μm	308	165	200, 225, 250, 275
3206-400	300-400mm	B	11μm	409	224	325, 375
3206-500	400-500mm	B	13μm	509	275	425, 475
3206-600	500-600mm	B	14μm	609	321	525, 575
3206-700	600-700mm	B	16μm	709	371	625, 675
3206-800	700-800mm	B	18μm	809	426	725, 775
3206-900	800-900mm	B	20μm	909	476	825, 875
3206-1000	900-1000mm	B	22μm	1009	576	925, 975

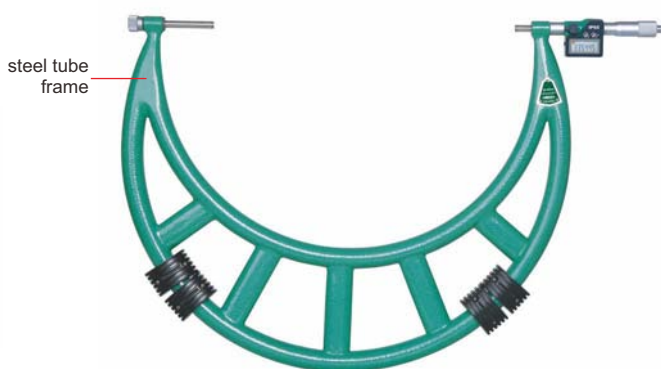
IP65
WATERPROOF

DATA
OUTPUT

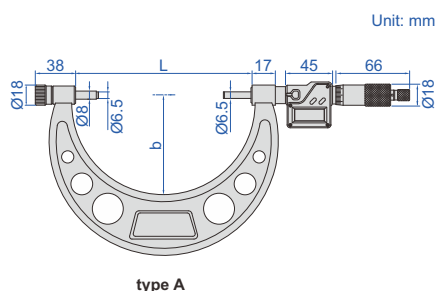
DIGITAL OUTSIDE MICROMETERS WITH INTERCHANGEABLE ANVILS



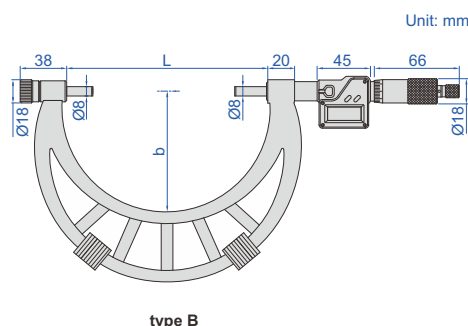
3506-100A



3506-400A

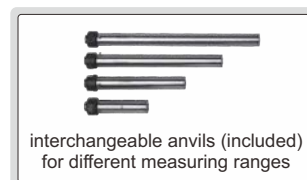


type A



type B

- Resolution 0.001mm/0.0001"
(resolution of **3506-100A** and **3506-150A** is 0.001mm/0.00005")
- IP65 dust/waterproof
- Button function: on/off, set, mm/inch, data transmit
- Data output
- Automatic power off
- Ratchet stop
- Carbide measuring faces
- Supplied with setting standards
- Optional accessory: data output cable (code **7315-31** need receiver page 4, **7302-31** page 12)



(mm)

Code	Range	Type	Accuracy	L	b	Setting standard (included)
3506-100A	0-100mm/0-4"	A	±5μm	105	57	25, 50, 75
3506-150A	0-150mm/0-6"	A	±6μm	155	82	25, 50, 75, 100, 125
3506-300A	150-300mm/6-12"	A	±8μm	305	165	150, 175, 200, 225, 250, 275
3506-301A	200-300mm/8-12"	A	±8μm	305	165	200, 225, 250, 275
3506-400A	300-400mm/12-16"	B	±9μm	405	224	325, 375
3506-500A	400-500mm/16-20"	B	±11μm	505	275	425, 475
3506-600A	500-600mm/20-24"	B	±12μm	605	321	525, 575
3506-700A	600-700mm/24-28"	B	±13μm	705	371	625, 675
3506-800A	700-800mm/28-32"	B	±15μm	805	426	725, 775
3506-900A	800-900mm/32-36"	B	±16μm	905	476	825, 875
3506-1000A	900-1000mm/36-40"	B	±17μm	1005	576	925, 975

OUTSIDE MICROMETERS WITH INTERCHANGEABLE ANVILS

INSIZE PLUS
MADE IN EUROPE

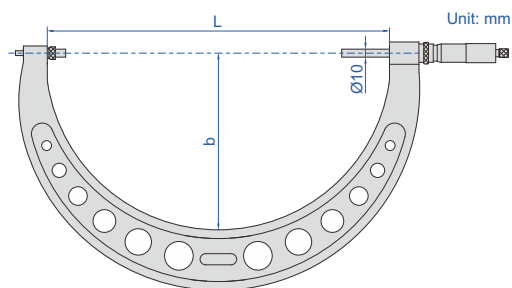
ATTENTION: SETTING
STANDARDS ARE NOT INCLUDED

LIGHT
WEIGHT

QUICK MEASUREMENT
ONE TURN OF SLEEVE OR RATCHET
STOP MAKES 1MM SPINDLE FEED



3675-300



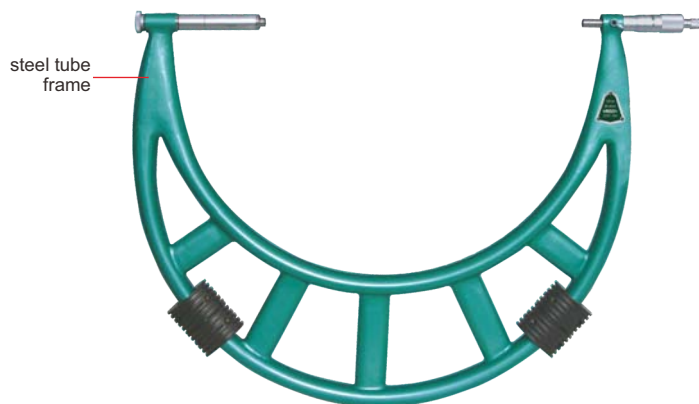
- Graduation 0.01mm
- Ratchet stop
- Meet DIN863-3
- Carbide measuring faces
- Light weight
- Optional accessory: setting standards (code **7386**)

interchangeable anvil (included)
for different measuring ranges



						(mm)
Code	Range	Accuracy	L	b	Weight	
3675-200	100-200mm	6µm	240	122	1.2kg	
3675-300	200-300mm	6µm	325	165	1.5kg	
3675-400	300-400mm	7µm	430	220	1.9kg	
3675-500	400-500mm	8µm	530	273	2.4kg	
3675-600	500-600mm	9µm	630	323	3.1kg	
3675-700	600-700mm	9µm	730	378	3.8kg	
3675-800	700-800mm	9µm	830	423	4.2kg	
3675-900	800-900mm	10µm	930	473	5kg	
3675-1000	900-1000mm	10µm	1030	520	6.2kg	
3675-1100	1000-1100mm	11µm	1135	585	7.6kg	
3675-1200	1100-1200mm	11µm	1230	635	8.6kg	
3675-1300	1200-1300mm	12µm	1335	685	9.7kg	
3675-1400	1300-1400mm	12µm	1430	735	11.3kg	
3675-1500	1400-1500mm	13µm	1530	780	12.5kg	
3675-1600	1500-1600mm	18µm	1660	840	13.6kg	
3675-1700	1600-1700mm	19µm	1765	890	14.9kg	
3675-1800	1700-1800mm	20µm	1870	940	16.2kg	
3675-1900	1800-1900mm	21µm	1970	1000	17.5kg	
3675-2000	1900-2000mm	22µm	2075	1055	18.8kg	

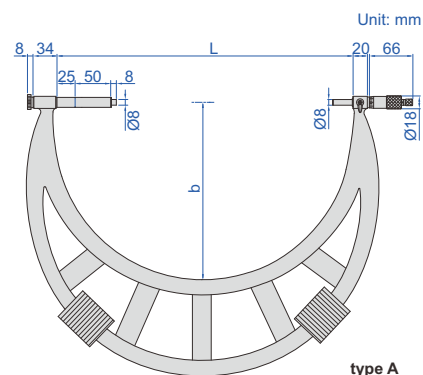
OUTSIDE MICROMETERS WITH EXTENSION ANVIL COLLAR



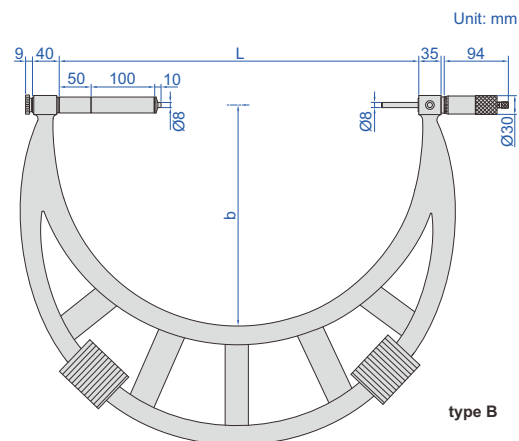
3205-400



- Graduation 0.01mm
- Adjust collars for different measuring ranges
- Ratchet stop
- Carbide measuring faces
- Supplied with setting standards



type A



type B

(mm)

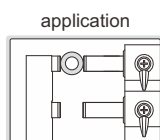
Code	Range	Type	Accuracy	L	b	Setting standard (included)
3205-400	300-400mm	A	11μm	410	250	325, 375
3205-500	400-500mm	A	13μm	510	295	425, 475
3205-600	500-600mm	A	14μm	610	345	525, 575
3205-700	600-700mm	A	16μm	710	395	625, 675
3205-800	700-800mm	A	18μm	810	445	725, 775,
3205-900	800-900mm	A	20μm	910	495	825, 875
3205-1000	900-1000mm	A	22μm	1010	545	925, 975
3205-1200	1000-1200mm	B	22μm	1210	645	1050, 1150
3205-1400	1200-1400mm	B	24μm	1410	745	1250, 1350
3205-1600	1400-1600mm	B	28μm	1610	845	1450, 1550
3205-1800	1600-1800mm	B	31μm	1810	945	1650, 1750
3205-2000	1800-2000mm	B	34μm	2010	1045	1850, 1950



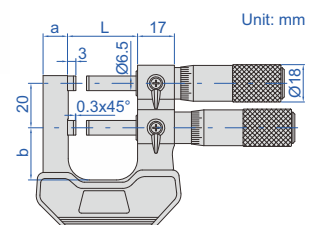
adjust collars for different measuring ranges

LIMIT MICROMETERS

- Used as Go/No-Go gage by setting upper and lower limits
- Graduation 0.002mm
- Carbide measuring faces
- Supplied with setting standard (except 0-25mm)



3235-25A



Code	Range	Accuracy	L	a	b
3235-25A	0-25mm	4μm	32mm	12mm	24mm
3235-50A	25-50mm	4μm	57mm	15mm	32mm

INDICATING MICROMETERS

INSIZE PLUS
MADE IN EUROPE

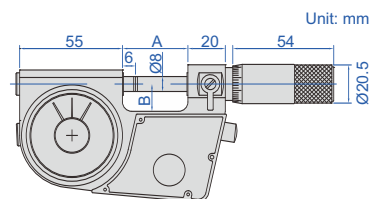
**INSPECTION
CERTIFICATE**

ATTENTION: SETTING
STANDARDS ARE NOT INCLUDED

- Meet DIN863-3
- Carbide measuring faces
- Measuring force 5-10N
- Dial can be adjusted
- Optional accessory: gage blocks grade 0 (4101-A series), for zero setting



3333-25



(mm)

Code	Micrometer head			Dial indicator			A	B
	range	graduation	accuracy	range	graduation	accuracy		
3333-25 *	0-25mm	0.01mm	4μm	±0.07mm	1μm	±1μm	35.5	15
3333-252 *	0-25mm	0.01mm	4μm	±0.14mm	2μm	±2μm	35.5	15
3333-50 *	25-50mm	0.01mm	4μm	±0.07mm	1μm	±1μm	60.5	25
3333-502 *	25-50mm	0.01mm	4μm	±0.14mm	2μm	±2μm	60.5	25
3333-75 *	50-75mm	0.01mm	4μm	±0.07mm	1μm	±1μm	88	37.5
3333-752 *	50-75mm	0.01mm	4μm	±0.14mm	2μm	±2μm	88	37.5
3333-100 *	75-100mm	0.01mm	4μm	±0.07mm	1μm	±1μm	111	50
3333-1002 *	75-100mm	0.01mm	4μm	±0.14mm	2μm	±2μm	111	50
3333-125 *	100-125mm	0.01mm	4μm	±0.07mm	1μm	±1μm	136	62.5
3333-1252 *	100-125mm	0.01mm	4μm	±0.14mm	2μm	±2μm	136	62.5
3333-150 *	125-150mm	0.01mm	4μm	±0.07mm	1μm	±1μm	161	75
3333-1502 *	125-150mm	0.01mm	4μm	±0.14mm	2μm	±2μm	161	75
3333-175 *	150-175mm	0.01mm	4μm	±0.14mm	2μm	±2μm	186	88
3333-200 *	175-200mm	0.01mm	4μm	±0.14mm	2μm	±2μm	211	101
3333-225 *	200-225mm	0.01mm	4μm	±0.14mm	2μm	±2μm	236	113
3333-250 *	225-250mm	0.01mm	4μm	±0.14mm	2μm	±2μm	261	126
3333-275 *	250-275mm	0.01mm	4μm	±0.14mm	2μm	±2μm	286	138
3333-300 *	275-300mm	0.01mm	4μm	±0.14mm	2μm	±2μm	311	151

* Supplied with manufacturer inspection certificate



INDICATING MICROMETERS

ATTENTION: SETTING
STANDARDS ARE NOT INCLUDED

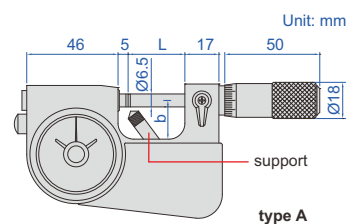
- Meet DIN863-3
- Micrometer head graduation: 0.002mm
- Dial indicator: range ±0.04mm, graduation 0.001mm, accuracy 0.001mm
- Carbide measuring faces
- Optional accessory: gage blocks grade 0 (4101-A series), for zero setting



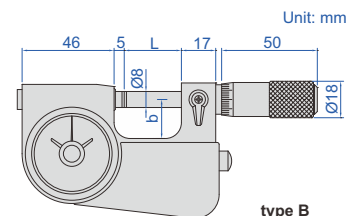
3332-25



3332-25B



type A



type B

(mm)

Code	Micrometer head range	Micrometer head accuracy	Type	L	b	Remark
3332-25	0-25mm	4μm	A	28.5	19	with support
3332-50	25-50mm	4μm	A	53.5	30	with support
3332-75	50-75mm	5μm	A	78.5	45	without support
3332-100	75-100mm	5μm	A	103.5	57	without support
3332-25B	0-25mm	4μm	B	28.5	19	without support

ATTENTION: SETTING
STANDARDS ARE NOT INCLUDED

LIGHT
WEIGHT

MICROMETERS WITH DIAL INDICATOR

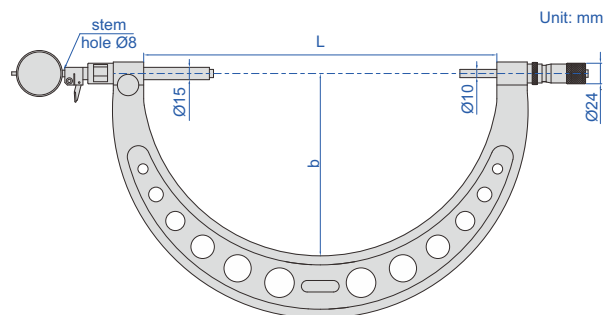
INSIZE PLUS
MADE IN EUROPE

digital indicator
is optional



spindle
retract fork

3685-300



- Graduation 0.01mm
- Anvil with vernier graduation, convenient adjustment for different measuring ranges
- Meet DIN863-3
- Carbide measuring faces
- Anvil retracting range: 2.5mm
- Optional accessory: dial/digital indicators, setting standards (code **7386**)

anvil with vernier graduation,
can be adjusted for different measuring ranges



Range 100mm

(mm)

Code	Range	Micrometer head accuracy	L	b	Weight
3685-300	200-300mm	6µm	320	165	1.7kg
3685-400	300-400mm	7µm	430	220	2.1kg
3685-500	400-500mm	8µm	530	273	2.6kg
3685-600	500-600mm	9µm	630	323	3.3kg
3685-700	600-700mm	9µm	730	378	4.0kg
3685-800	700-800mm	9µm	830	423	4.4kg
3685-900	800-900mm	10µm	930	473	5.2kg
3685-1000	900-1000mm	10µm	1030	520	6.4kg

Range 200mm

(mm)

Code	Range	Micrometer head accuracy	L	b	Weight
3685-402	200-400mm	7µm	430	220	2.2kg
3685-602	400-600mm	9µm	630	323	3.4kg
3685-802	600-800mm	9µm	830	423	4.5kg
3685-1002	800-1000mm	10µm	1030	520	6.5kg
3685-1202	1000-1200mm	11µm	1230	635	8.9kg
3685-1402	1200-1400mm	12µm	1430	735	11.6kg
3685-1602	1400-1600mm	18µm	1660	840	13.9kg
3685-1802	1600-1800mm	20µm	1870	940	16.5kg
3685-2002	1800-2000mm	22µm	2075	1055	19.1kg

MICROMETERS WITH DIAL INDICATOR

INSIZE PLUS
MADE IN EUROPE

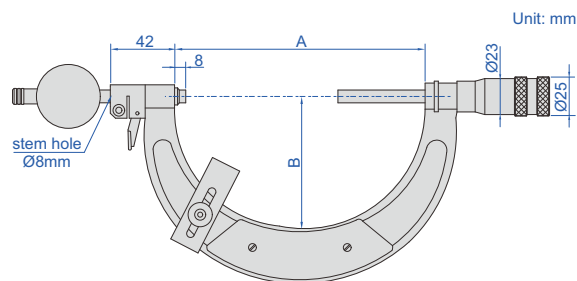
ATTENTION: SETTING
STANDARDS ARE NOT INCLUDED

**INSPECTION
CERTIFICATE**

digital indicator
is optional



3346-25



6

(mm)

Code	Micrometer head range	Micrometer head graduation	Micrometer head accuracy	A	B
3346-25 *	0-25mm	5μm	4μm	37	24
3346-50 *	25-50mm	5μm	4μm	62	34
3346-75 *	50-75mm	5μm	5μm	87	46
3346-100 *	75-100mm	5μm	5μm	112	60
3346-150 *	100-150mm	5μm	6μm	164	85
3346-200 *	150-200mm	5μm	7μm	215	110
3346-250 *	200-250mm	5μm	8μm	264	135
3346-300 *	250-300mm	5μm	9μm	315	160

* Supplied with manufacturer inspection certificate

- Anvil retracting range: 2.5mm
- Carbide measuring faces
- Parallelism of measuring faces: 1μm
- Optional accessory: dial indicator (code 2890-1F), digital indicator, gage blocks grade 1 (4101-B series), for zero setting

MICROMETERS WITH DIAL INDICATOR

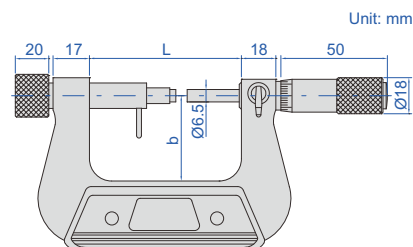
ATTENTION: NOT SUITABLE
FOR 0.001MM DIAL INDICATORS

- Meet DIN863-3
- Micrometer head graduation 0.01mm
- Anvil retracting range: 8mm
- Carbide measuring faces
- Supplied with setting standards (except 0-25mm)
- Optional accessory: dial indicators (graduation 0.01mm), digital indicators (resolution 0.01mm/0.0005")



3331-25A

Code	Micrometer head range	Micrometer head accuracy	L	b
3331-25A	0-25mm	4μm	67mm	38mm
3331-50A	25-50mm	4μm	92.4mm	50mm
3331-75A	50-75mm	5μm	117.6mm	62mm
3331-100A	75-100mm	5μm	143mm	70mm
3331-125A	100-125mm	6μm	168.2mm	82mm
3331-150A	125-150mm	6μm	192mm	94.5mm
3331-175A	150-175mm	7μm	217mm	107mm

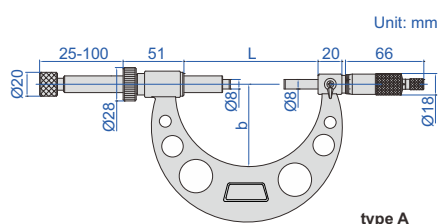


ATTENTION: NOT SUITABLE
FOR 0.001MM DIAL INDICATORS



digital indicator
is optional

3296-100A

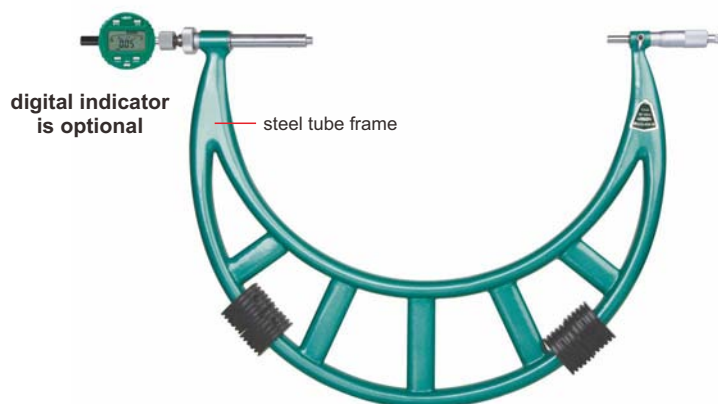


type A

Code	Range	Type	Accuracy	L	b
3296-100A	0-100mm	A	6µm	115	68
3296-200A	100-200mm	A	7µm	215	120
3296-300A	200-300mm	A	8µm	315	170
3296-400A	300-400mm	B	9µm	415	225
3296-500A	400-500mm	B	10µm	515	275
3296-600A	500-600mm	B	11µm	615	325
3296-700A	600-700mm	B	12µm	715	375
3296-800A	700-800mm	B	13µm	815	430
3296-900A	800-900mm	B	14µm	915	480
3296-1000A	900-1000mm	B	15µm	1015	530

(mm)

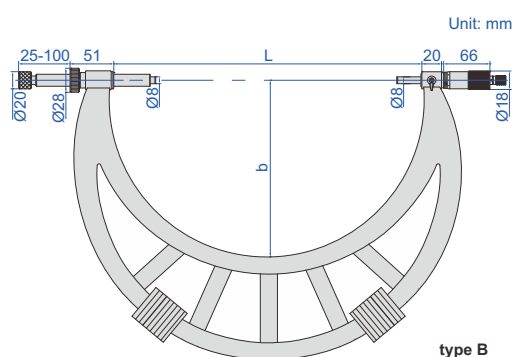
MICROMETERS WITH DIAL INDICATOR



digital indicator
is optional

steel tube frame

3296-400A



type B

- Meet DIN863-3
- Graduation 0.01mm
- Ratchet stop
- Carbide measuring faces
- Supplied with setting standards
- Optional accessory: dial indicators (graduation 0.01mm)
digital indicators (resolution 0.01mm/0.0005")

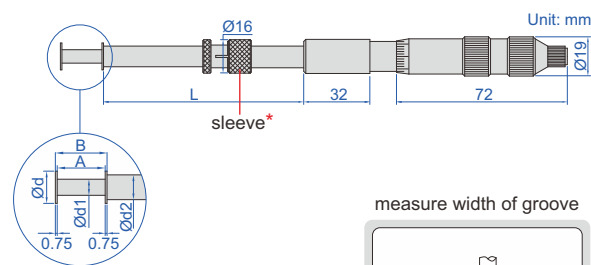
6

GROOVE MICROMETERS



3287-50B

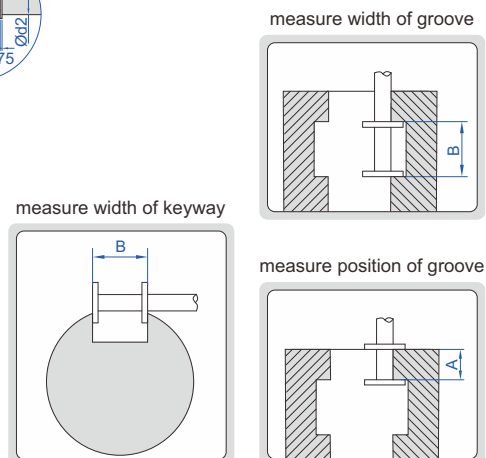
- Measure width of grooves inside bores
- Graduation 0.01mm
- Two graduations for inside and outside measurements
- Non-rotating spindle
- Two-directional ratchet stop



Code	Range (outside A)	Range (inside B)	Accuracy	L	Ød	Ød1	Ød2
3287-25B	0-25mm	1.6-26.5mm	10µm	120	13	6.5	10
3287-50B	25-50mm	26.5-51.5mm	10µm	120	13	6.5	10
3287-75B	50-75mm	51.5-76.5mm	10µm	120	13	6.5	10
3287-100B	75-100mm	76.5-101.5mm	10µm	120	13	6.5	10
3287-125B	100-125mm	101.5-126.5mm	15µm	120	13	6.5	10
3287-150B	125-150mm	126.5-151.5mm	15µm	120	13	6.5	10
3287-251B*	0-25mm	1.6-26.5mm	10µm	90	6.5	3	5

(mm)

*3287-251B does not have sleeve



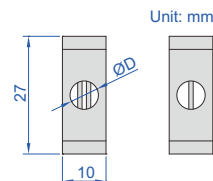
3-WIRES



- Used with standard outside micrometers to measure pitch diameter of screw threads
- Diameter accuracy: $\pm 0.5\mu\text{m}$
- Cylindricity: $1\mu\text{m}$
- Hardness: HRC60
- Supplied with manufacturer inspection certificate



7382-19



application



For outside micrometers with spindle $\varnothing 6.35\text{mm}$ ($\varnothing D$)

Code	Pin gage diameter	Applicable pitch
7382-11	$\varnothing 0.170\text{mm}$	0.2mm, 0.25mm, 0.3mm
7382-12	$\varnothing 0.195\text{mm}$	0.35mm
7382-13	$\varnothing 0.220\text{mm}$	0.4mm
7382-14	$\varnothing 0.250\text{mm}$	0.45mm
7382-15	$\varnothing 0.290\text{mm}$	0.5mm
7382-16	$\varnothing 0.335\text{mm}$	0.6mm
7382-17	$\varnothing 0.390\text{mm}$	0.7mm
7382-18	$\varnothing 0.455\text{mm}$	0.75mm, 0.8mm
7382-19	$\varnothing 0.530\text{mm}$	0.9mm
7382-110	$\varnothing 0.620\text{mm}$	1.0mm
7382-111	$\varnothing 0.725\text{mm}$	1.25mm
7382-112	$\varnothing 0.895\text{mm}$	1.5mm
7382-113	$\varnothing 1.100\text{mm}$	1.75mm, 2.0mm
7382-114	$\varnothing 1.350\text{mm}$	2.5mm
7382-115	$\varnothing 1.650\text{mm}$	3.0mm
7382-116	$\varnothing 2.050\text{mm}$	3.5mm
7382-117	$\varnothing 2.550\text{mm}$	4mm, 4.5mm
7382-118	$\varnothing 3.200\text{mm}$	5mm, 5.5mm, 6mm
7382-1S	18 pairs/set, including all above 3-wires	

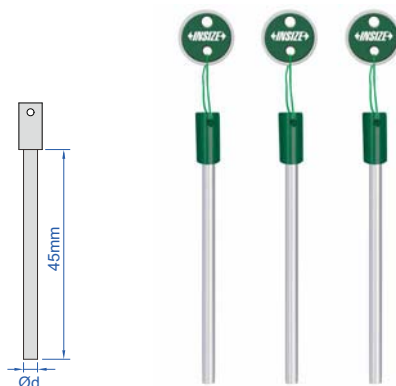
For outside micrometers with spindle $\varnothing 6.50\text{mm}$ ($\varnothing D$)

Code	Pin gage diameter	Applicable pitch
7382-21	$\varnothing 0.170\text{mm}$	0.2mm, 0.25mm, 0.3mm
7382-22	$\varnothing 0.195\text{mm}$	0.35mm
7382-23	$\varnothing 0.220\text{mm}$	0.4mm
7382-24	$\varnothing 0.250\text{mm}$	0.45mm
7382-25	$\varnothing 0.290\text{mm}$	0.5mm
7382-26	$\varnothing 0.335\text{mm}$	0.6mm
7382-27	$\varnothing 0.390\text{mm}$	0.7mm
7382-28	$\varnothing 0.455\text{mm}$	0.75mm, 0.8mm
7382-29	$\varnothing 0.530\text{mm}$	0.9mm
7382-210	$\varnothing 0.620\text{mm}$	1.0mm
7382-211	$\varnothing 0.725\text{mm}$	1.25mm
7382-212	$\varnothing 0.895\text{mm}$	1.5mm
7382-213	$\varnothing 1.100\text{mm}$	1.75mm, 2.0mm
7382-214	$\varnothing 1.350\text{mm}$	2.5mm
7382-215	$\varnothing 1.650\text{mm}$	3.0mm
7382-216	$\varnothing 2.050\text{mm}$	3.5mm
7382-217	$\varnothing 2.550\text{mm}$	4mm, 4.5mm
7382-218	$\varnothing 3.200\text{mm}$	5mm, 5.5mm, 6mm
7382-2S	18 pairs/set, including all above 3-wires	

3-WIRES



CUSTOMIZABLE
DIAMETER $\varnothing d$



7394-75A

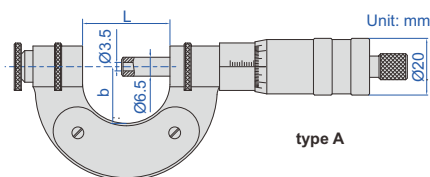
- $\varnothing d \leq 0.3\text{mm}$, made of alloy steel, hardness HRC60;
- $\varnothing d > 0.3\text{mm}$, made of carbide, hardness HRA90
- Diameter accuracy: $\pm 0.5\mu\text{m}$
- Cylindricity: $\pm 0.5\mu\text{m}$
- Supplied with manufacturer inspection certificate

Code	Diameter ($\varnothing d$)	Applicable pitch
7394-60A*	0.170mm	0.2mm, 0.25mm, 0.3mm
7394-61A*	0.195mm	0.35mm
7394-62A*	0.220mm	0.4mm
7394-63A*	0.250mm	0.45mm
7394-64A*	0.290mm	0.5mm
7394-65A	0.335mm	0.6mm
7394-66A	0.390mm	0.7mm
7394-67A	0.455mm	0.75mm, 0.8mm
7394-68A	0.530mm	0.9mm
7394-69A	0.620mm	1.0mm
7394-70A	0.725mm	1.25mm
7394-71A	0.895mm	1.5mm
7394-72A	1.100mm	1.75mm, 2.0mm
7394-73A	1.350mm	2.5mm
7394-74A	1.650mm	3.0mm
7394-75A	2.050mm	3.5mm
7394-76A	2.550mm	4mm, 4.5mm
7394-77A	3.200mm	5mm, 5.5mm, 6mm

* Made of alloy steel



3680-50



- Measure pitch diameter of screw threads
- Graduation 0.01mm
- Optional accessory: setting standards (code **7384**), external tread tips (code **7390**), dial/digital indicators (only for type B)

Type A (ratchet stop)

(mm)

Code	Range	Accuracy	L	b
3680-25 *	0-25mm	4µm	37	24
3680-50 *	25-50mm	4µm	62	34
3680-75 *	50-75mm	4µm	87	46
3680-100 *	75-100mm	4µm	112	60
3680-125 *	100-125mm	5µm	139	72
3680-150 *	125-150mm	5µm	164	85
3680-200 *	150-200mm	7µm	215	110
3680-250 *	200-250mm	7µm	264	135
3680-300 *	250-300mm	7µm	315	160

Type B (without ratchet stop)

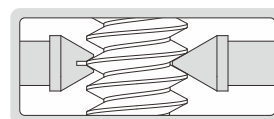
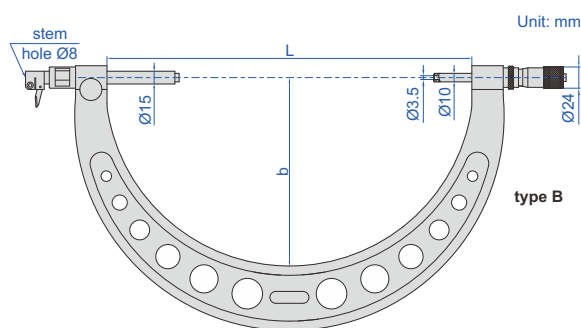
(mm)

Code	Range	Left anvil retracting stroke	Micrometer head accuracy	L	b
3680-3001 *	200-300mm	2.5mm	6µm	320	165
3680-4001 *	300-400mm	2.5mm	7µm	430	220
3680-5001 *	400-500mm	2.5mm	8µm	530	273
3680-6001 *	500-600mm	2.5mm	9µm	630	323
3680-7001 *	600-700mm	2.5mm	9µm	730	378
3680-8001 *	700-800mm	2.5mm	9µm	830	423
3680-9001 *	800-900mm	2.5mm	10µm	930	473
3680-10001 *	900-1000mm	2.5mm	10µm	1030	520
3680-4002 *	200-400mm	2.5mm	7µm	430	220
3680-6002 *	400-600mm	2.5mm	9µm	630	323
3680-8002 *	600-800mm	2.5mm	9µm	830	423
3680-10002 *	800-1000mm	2.5mm	10µm	1030	520
3680-12002 *	1000-1200mm	2.5mm	11µm	1230	635
3680-14002 *	1200-1400mm	2.5mm	12µm	1430	735
3680-16002 *	1400-1600mm	2.5mm	18µm	1660	840
3680-18002 *	1600-1800mm	2.5mm	20µm	1870	940
3680-20002 *	1800-2000mm	2.5mm	22µm	2075	1055

* Supplied with manufacturer inspection certificate



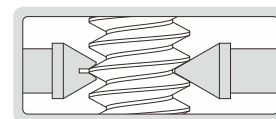
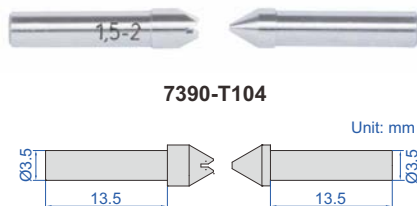
3680-4001



MEASURING TIPS FOR EXTERNAL SCREW THREAD MICROMETERS

INSIZE PLUS
MADE IN EUROPE

- Supplied in pair
- Made of hardened steel
- Suitable for 3680 series micrometers



60° thread angle

Code	Pitch
7390-T101	0.35-0.5mm/ 72-48TPI
7390-T102	0.6-0.8mm/ 44-32TPI
7390-T103	0.9-1.25mm/ 28-18TPI
7390-T104	1.5-2mm/ 16-11TPI
7390-T105	2.5-3.5mm/ 10-7TPI
7390-T106	4-6mm/ 6-4TPI

55° thread angle

Code	Pitch
7390-T201	60-48TPI
7390-T202	40-32TPI
7390-T203	28-22TPI
7390-T204	20-16TPI
7390-T205	14-11TPI
7390-T206	10-7TPI
7390-T207	6-4TPI

30° thread angle

Code	Pitch
7390-T301	1.5mm
7390-T302	2mm
7390-T303	3mm
7390-T304	4mm
7390-T305	5-6mm
7390-T306	7-8mm
7390-T307	9-10mm
7390-T308	12-14mm

SETTING STANDARDS FOR EXTERNAL SCREW THREAD MICROMETERS

INSIZE PLUS
MADE IN EUROPE

ATTENTION: WHEN PITCH <0.4MM OR >63.5 TPI,
SETTING STANDARDS CANNOT BE USED TO SET ZERO,
A CALIBRATED WORK PIECE CAN BE USED INSTEAD

TIPS FOR TRAPEZOIDAL, ACME
THREAD ARE ALSO AVAILABLE



7384-A100

- Made of hardened steel
- Deviation (difference between the ordered size and the size marked on the setting standard when supplied): $\pm 20\mu\text{m}$
For example, the ordered size is 25mm, the size marked on the setting standard when supplied may be 25.015mm

60° thread angle

Code	L	Ød	Accuracy
7384-A25	25	7.8	$\pm 2.5\mu\text{m}$
7384-A50	50	7.8	$\pm 3\mu\text{m}$
7384-A75	75	7.8	$\pm 3.5\mu\text{m}$
7384-A100	100	7.8	$\pm 4\mu\text{m}$
7384-A125	125	7.8	$\pm 4.5\mu\text{m}$
7384-A150	150	7.8	$\pm 5\mu\text{m}$
7384-A175	175	7.8	$\pm 5.5\mu\text{m}$
7384-A200	200	7.8	$\pm 6\mu\text{m}$
7384-A225	225	10	$\pm 6.5\mu\text{m}$
7384-A250	250	10	$\pm 7\mu\text{m}$
7384-A275	275	10	$\pm 7.5\mu\text{m}$
7384-A300	300	10	$\pm 8\mu\text{m}$

55° thread angle

Code	L	Ød	Accuracy
7384-B25	25	7.8	$\pm 2.5\mu\text{m}$
7384-B50	50	7.8	$\pm 3\mu\text{m}$
7384-B75	75	7.8	$\pm 3.5\mu\text{m}$
7384-B100	100	7.8	$\pm 4\mu\text{m}$
7384-B125	125	7.8	$\pm 4.5\mu\text{m}$
7384-B150	150	7.8	$\pm 5\mu\text{m}$
7384-B175	175	7.8	$\pm 5.5\mu\text{m}$
7384-B200	200	7.8	$\pm 6\mu\text{m}$
7384-B225	225	10	$\pm 6.5\mu\text{m}$
7384-B250	250	10	$\pm 7\mu\text{m}$
7384-B275	275	10	$\pm 7.5\mu\text{m}$
7384-B300	300	10	$\pm 8\mu\text{m}$

NON-ROTATING
SPINDLE

SCREW THREAD MICROMETERS

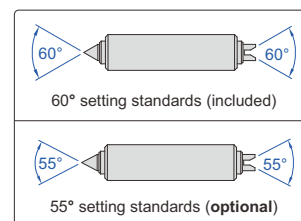
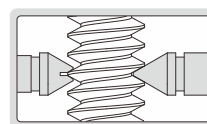


3281-25A
(measuring tips are optional)



3281-S25
(measuring tips are included)

- Measure pitch diameter of screw threads
- Graduation 0.01mm
- Non-rotating spindle
- Ratchet stop
- Supplied with 60° setting standards (except 0-25mm)
- Optional accessory: 55° setting standards



Measuring tips are optional (mm)

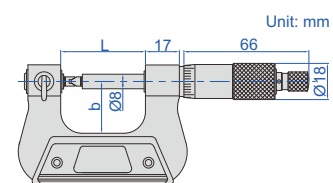
Code	Range	L	b	55° setting standard (optional)
3281-25A	0-25mm	42	26	—
3281-50A	25-50mm	67	38	3281-SP1
3281-75A	50-75mm	92	50	3281-SP2
3281-100A	75-100mm	117.6	62	3281-SP3
3281-125A	100-125mm	143	70	3281-SP4
3281-150A	125-150mm	168.2	82	3281-SP5
3281-175A	150-175mm	192	94.5	3281-SP6
3281-200A	175-200mm	217	107	3281-SP7
3281-225A	200-225mm	242	130	3281-SP8
3281-250A	225-250mm	267	142	3281-SP9
3281-275A	250-275mm	291	155	3281-SP10
3281-300A	275-300mm	317	167	3281-SP11

Measuring tips are included (mm)

Code	Range	L	b	Measuring tips (included)	55° setting standard (optional)
3281-S25	0-25mm	42	26	6 pairs of measuring tips: metric and unified thread (60° thread angle) 0.4-0.5mm/64-48TPI, 0.6-0.9mm/44-28TPI, 1-1.75mm/24-14TPI, 2-3mm/13-9TPI, 3.5-5mm/8-5TPI, 5.5-7mm/4.5-3.5TPI	—
3281-S50	25-50mm	67	38		3281-SP1
3281-S75	50-75mm	92	50		3281-SP2
3281-S100	75-100mm	117.6	62		3281-SP3
3281-S125	100-125mm	143	70		3281-SP4
3281-S150	125-150mm	168.2	82		3281-SP5
3281-S175	150-175mm	192	94.5		3281-SP6
3281-S200	175-200mm	217	107		3281-SP7
3281-S225	200-225mm	242	130		3281-SP8
3281-S250	225-250mm	267	142		3281-SP9
3281-S275	250-275mm	291	155		3281-SP10
3281-S300	275-300mm	317	167		3281-SP11

accuracy of micrometers with tips (mm)

Pitch	Range							
	0-25	25-50	50-75	75-100	100-125	125-200	200-225	225-300
0.4~0.5	±0.01	-	-	-	-	-	-	-
0.6~0.8	±0.01	±0.013	-	-	-	-	-	-
1~1.25	±0.012	±0.015	±0.017	±0.017	-	-	-	-
1.5~2.0	±0.014	±0.017	±0.019	±0.019	±0.020	±0.023	±0.025	±0.028
2.5~3.5	±0.016	±0.019	±0.021	±0.021	±0.023	±0.025	±0.028	±0.031
4.0~7.0	-	±0.021	±0.023	±0.023	±0.025	±0.028	±0.031	±0.033



DIGITAL SCREW THREAD MICROMETERS

DATA
OUTPUT

NON-ROTATING
SPINDLE



3581-25A
(measuring tips are optional)



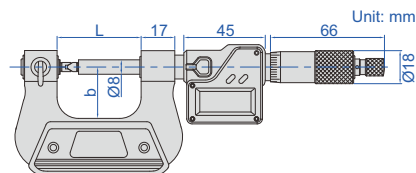
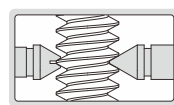
3581-S25
(measuring tips are included)

Measuring tips are optional

(mm)

Code	Range	L	b	55° setting standard (optional)
3581-25A	0-25mm/0-1"	42	26	—
3581-50A	25-50mm/1-2"	67	38	3281-SP1
3581-75A	50-75mm/2-3"	92	50	3281-SP2
3581-100A	75-100mm/3-4"	117.6	62	3281-SP3
3581-125A	100-125mm/4-5"	143	70	3281-SP4
3581-150A	125-150mm/5-6"	168.2	82	3281-SP5
3581-175A	150-175mm/6-7"	192	94.5	3281-SP6
3581-200A	175-200mm/7-8"	217	107	3281-SP7
3581-225A	200-225mm/8-9"	242	130	3281-SP8
3581-250A	225-250mm/9-10"	267	142	3281-SP9
3581-275A	250-275mm/10-11"	291	155	3281-SP10
3581-300A	275-300mm/11-12"	317	167	3281-SP11

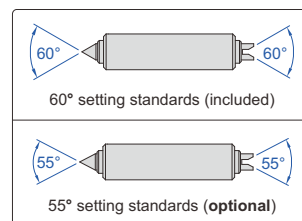
- Measure pitch diameter of screw threads
- Resolution 0.001mm/0.00005"
- Button function: on/off, set, mm/inch, data transmit
- Data output
- Automatic power off
- Non-rotating spindle
- Ratchet stop
- Supplied with 60° setting standards (except 0-25mm/0-1")
- Optional accessory: 55° setting standards, data output cable (code 7315-31 need receiver page 4, 7302-31 page 12)



Measuring tips are included

(mm)

Code	Range	L	b	Measuring tips (included)	55° setting standard (optional)
3581-S25	0-25mm/0-1"	42	26	6 pairs of measuring tips: metric and unified thread (60° thread angle) 0.4-0.5mm/64-48TPI, 0.6-0.9mm/44-28TPI, 1-1.75mm/24-14TPI, 2-3mm/13-9TPI, 3.5-5mm/8-5TPI, 5.5-7mm/4.5-3.5TPI	—
3581-S50	25-50mm/1-2"	67	38		3281-SP1
3581-S75	50-75mm/2-3"	92	50		3281-SP2
3581-S100	75-100mm/3-4"	117.6	62		3281-SP3
3581-S125	100-125mm/4-5"	143	70		3281-SP4
3581-S150	125-150mm/5-6"	168.2	82		3281-SP5
3581-S175	150-175mm/6-7"	192	94.5		3281-SP6
3581-S200	175-200mm/7-8"	217	107		3281-SP7
3581-S225	200-225mm/8-9"	242	130		3281-SP8
3581-S250	225-250mm/9-10"	267	142		3281-SP9
3581-S275	250-275mm/10-11"	291	155		3281-SP10
3581-S300	275-300mm/11-12"	317	167		3281-SP11

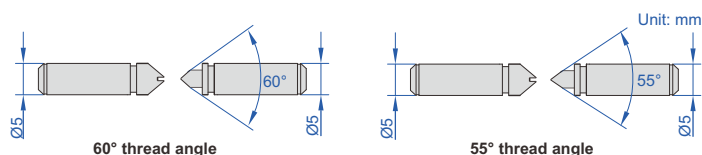


accuracy of micrometers with tips

(mm)

Pitch	Range							
	0-25	25-50	50-75	75-100	100-125	125-200	200-225	225-300
0.4~0.5	±0.01	-	-	-	-	-	-	-
0.6~0.8	±0.01	±0.013	-	-	-	-	-	-
1~1.25	±0.012	±0.015	±0.017	±0.017	-	-	-	-
1.5~2.0	±0.014	±0.017	±0.019	±0.019	±0.020	±0.023	±0.025	±0.028
2.5~3.5	±0.016	±0.019	±0.021	±0.021	±0.023	±0.025	±0.028	±0.031
4.0~7.0	-	±0.021	±0.023	±0.023	±0.025	±0.028	±0.031	±0.033

MEASURING TIPS FOR SCREW THREAD MICROMETERS



7381-T13

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

Metric and unified thread (60° thread angle)

Code	Pitch
7381-T11	0.4-0.5mm/ 64-48TPI
7381-T12	0.6-0.9mm/ 44-28TPI
7381-T13	1-1.75mm/ 24-14TPI
7381-T14	2-3mm/ 13-9TPI
7381-T15	3.5-5mm/ 8-5TPI
7381-T16	5.5-7mm/ 4.5-3.5TPI
7381-TS	6 pairs/set, including all above tips

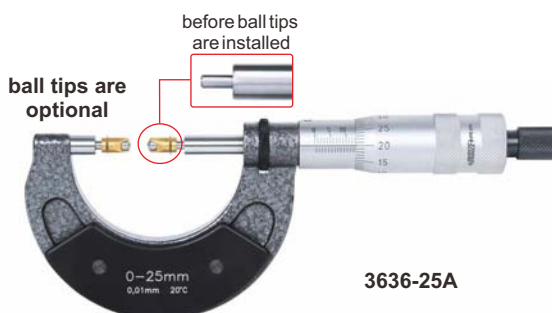
Whitworth thread (55° thread angle)

Code	Pitch
7381-T21	60-48TPI
7381-T22	48-40TPI
7381-T23	40-32TPI
7381-T24	32-24TPI
7381-T25	24-18TPI
7381-T26	18-14TPI
7381-T27	14-10TPI
7381-T28	10-7TPI
7381-T29	7-4.5TPI
7381-T210	4.5-3.5TPI
7381-T2S	10 pairs/set, including all above tips

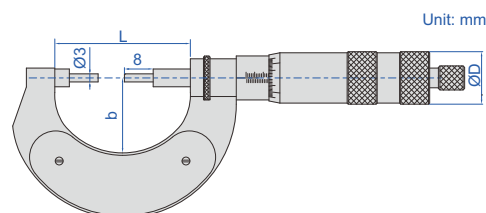


ATTENTION: SETTING
STANDARDS ARE NOT INCLUDED

EXTERNAL GEAR TOOTH MICROMETERS

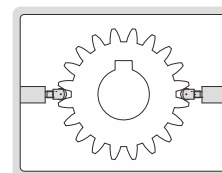


3636-25A



- Meet DIN863-3
- Measure over-pin diameter of gears
- Graduation 0.01mm
- Ratchet stop
- Optional accessory: ball tips (code **7389**), cylindrical tips (code **7393**), setting standards (code **7386**)

cylindrical tips (optional)



Code	Range	Accuracy	L	b	ØD
3636-25A*	0-25mm	3µm	62	34	20
3636-50A*	25-50mm	3µm	87	46	20
3636-75A*	50-75mm	4µm	112	60	20
3636-100A*	75-100mm	4µm	139	72	20
3636-125A*	100-125mm	5µm	164	85	20
3636-150A*	125-150mm	5µm	190	97	20
3636-175A*	150-175mm	5µm	215	110	20
3636-200A*	175-200mm	5µm	240	122	20

* Supplied with manufacturer inspection certificate

Code	Range	Accuracy	L	b	ØD
3636-225A*	200-225mm	6µm	264	135	20
3636-250A*	225-250mm	6µm	290	148	20
3636-300A*	250-300mm	6µm	325	165	24
3636-350A*	300-350mm	7µm	370	190	24
3636-400A*	350-400mm	7µm	430	220	24
3636-450A*	400-450mm	8µm	475	250	24
3636-500A*	450-500mm	8µm	530	273	24
3636-550A*	500-550mm	9µm	570	291	24
3636-600A*	550-600mm	9µm	630	323	24

CYLINDRICAL TIPS FOR GEAR TOOTH MICROMETERS

INSIZE PLUS
MADE IN EUROPE

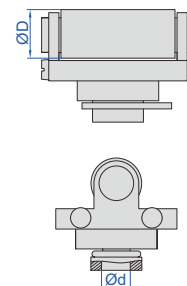
CYLINDRICAL DIAMETER
ØD CAN BE CUSTOMIZED

- Supplied in pair
- Made of hardened steel
- Self-positioning
- Suitable for **3636, 3638, 3678**, series micrometers

Code	Diameter of shaft (ØD)	Ød	Accuracy
7393-T1	1mm	3mm	±1µm
7393-T2	2mm	3mm	±1µm
7393-T3	3mm	3mm	±1µm
7393-T3D5	3.5mm	3mm	±1µm
7393-T4	4mm	3mm	±1µm
7393-T5	5mm	3mm	±1µm
7393-T6	6mm	3mm	±1µm
7393-T7	7mm	3mm	±1µm
7393-T8	8mm	3mm	±1µm



7393-T5

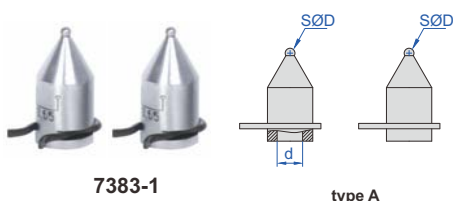


6

BALL TIPS FOR GEAR TOOTH MICROMETERS

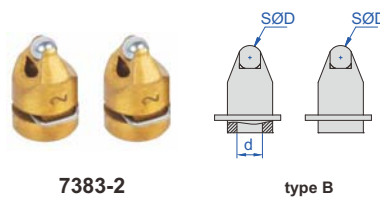
INSIZE PLUS
MADE IN EUROPE

BALL TIPS DIAMETER
SØD CAN BE CUSTOMIZED



7383-1

type A



7383-2

type B

- Supplied in pair
- Made of hardened steel
- Suitable for **3636, 3638, 3678** series micrometers

Code	Ball dia. (SØD)	d	Accuracy	Type
7383-1	SØ1mm	Ø3mm	±1µm	A
7383-1D5	SØ1.5mm	Ø3mm	±1µm	B
7383-1D75	SØ1.75mm	Ø3mm	±1µm	B
7383-2	SØ2mm	Ø3mm	±1µm	B
7383-2D25	SØ2.25mm	Ø3mm	±1µm	B
7383-2D5	SØ2.5mm	Ø3mm	±1µm	B
7383-3	SØ3mm	Ø3mm	±1µm	B
7383-3D5	SØ3.5mm	Ø3mm	±1µm	B
7383-4	SØ4mm	Ø3mm	±1µm	B
7383-4D5	SØ4.5mm	Ø3mm	±1µm	B
7383-5	SØ5mm	Ø3mm	±1µm	B
7383-5D5	SØ5.5mm	Ø3mm	±1µm	B
7383-6	SØ6mm	Ø3mm	±1µm	B

Code	Ball dia. (SØD)	d	Accuracy	Type
7383-6D5	SØ6.5mm	Ø3mm	±1µm	B
7383-7	SØ7mm	Ø3mm	±1µm	B
7383-7D5	SØ7.5mm	Ø3mm	±1µm	B
7383-8	SØ8mm	Ø3mm	±1µm	B
7383-9	SØ9mm	Ø3mm	±1µm	B
7383-10	SØ10mm	Ø3mm	±1µm	B
7383-10D5	SØ10.5mm	Ø3mm	±1.5µm	B
7383-11	SØ11mm	Ø3mm	±1.5µm	B
7383-12	SØ12mm	Ø3mm	±1.5µm	B
7383-13	SØ13mm	Ø3mm	±1.5µm	B
7383-14	SØ14mm	Ø3mm	±1.5µm	B
7383-15	SØ15mm	Ø3mm	±1.5µm	B
7383-16	SØ16mm	Ø3mm	±1.5µm	B

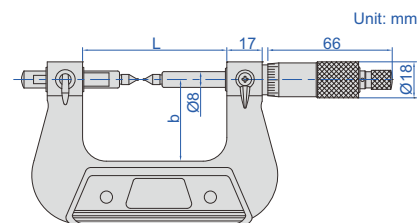
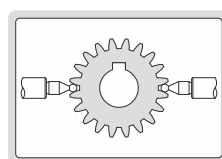
GEAR TOOTH MICROMETERS

- Meet DIN863-3
- Measure over-pin diameter of gears
- Graduation 0.01mm
- Ratchet stop
- Supplied with setting standards (except 0-25mm)
- Optional accessory: ball tips (code 7391)

Code	Range	Accuracy	L	b
3291-25	0-25mm	4μm	67	38
3291-50	25-50mm	4μm	92.4	50
3291-75	50-75mm	5μm	117.6	62
3291-100	75-100mm	5μm	143	70
3291-125	100-125mm	6μm	168.2	82
3291-150	125-150mm	6μm	192	94.5
3291-175	150-175mm	7μm	217	107
3291-200	175-200mm	7μm	242	130
3291-225	200-225mm	8μm	267	142.5
3291-250	225-250mm	8μm	292	155
3291-275	250-275mm	9μm	317	167.5



3291-25



6

IP65
WATERPROOF

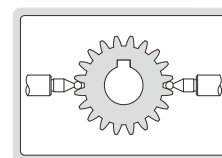
DATA
OUTPUT

DIGITAL GEAR TOOTH MICROMETERS

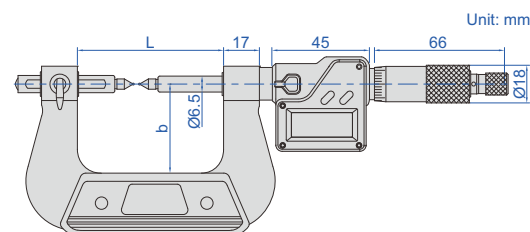
- Measure over-pin diameter of gears
- Resolution 0.001mm/0.00005"
- IP65 dust/waterproof
- Button function: on/off, set, mm/inch, data transmit
- Data output
- Automatic power off
- Ratchet stop
- Supplied with setting standards (except 0-25mm/0-1")
- Optional accessory: ball tips (code 7391), data output cable (code 7315-31 need receiver page 4, 7302-31 page 12)



3591-25A



Code	Range	Accuracy	L	b
3591-25A	0-25mm/0-1"	±4μm	67	38
3591-50A	25-50mm/1-2"	±4μm	92.4	50
3591-75A	50-75mm/2-3"	±5μm	117.6	62
3591-100A	75-100mm/3-4"	±5μm	143	70
3591-125A	100-125mm/4-5"	±6μm	168.2	82
3591-150A	125-150mm/5-6"	±6μm	192	94.5
3591-175A	150-175mm/6-7"	±7μm	217	107



BALL TIPS DIAMETER SØD CAN BE
CUSTOMIZED WITH SIZES BETWEEN 1.50-6.00MM

BALL TIPS FOR GEAR TOOTH MICROMETERS

- Supplied in pair
- Suitable for 3291, 3591 series micrometers

Code	Ball dia. (D)
7391-T2	SØ1.5mm
7391-T3	SØ2.0mm
7391-T4	SØ2.5mm
7391-T5	SØ3.0mm

Code	Ball dia. (D)
7391-T6	SØ3.5mm
7391-T7	SØ4.0mm
7391-T8	SØ4.5mm
7391-T9	SØ5.0mm
7391-T10	SØ6.0mm



7391-T5



POINT MICROMETERS

INSIZE PLUS
MADE IN EUROPE

ATTENTION: SETTING
STANDARDS ARE NOT INCLUDED

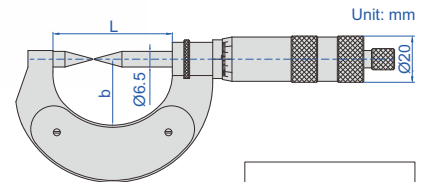
INSPECTION
CERTIFICATE

Code	Range	Accuracy	L	b
3659-25A*	0-25mm	4μm	62	34
3659-50A*	25-50mm	4μm	87	46
3659-75A*	50-75mm	5μm	112	60
3659-100A*	75-100mm	5μm	139	72
3659-125A*	100-125mm	6μm	164	85
3659-150A*	125-150mm	6μm	190	97
3659-175A*	150-175mm	7μm	215	110
3659-200A*	175-200mm	7μm	240	122
3659-225A*	200-225mm	8μm	264	135
3659-250A*	225-250mm	8μm	290	148

*Supplied with manufacturer inspection certificate



3659-25A



- Measure the web thickness of drills, small grooves and keyways
- Graduation: 0.01mm
- Ratchet stop
- Carbide tips
- Optional accessory: setting standards (code 7386)

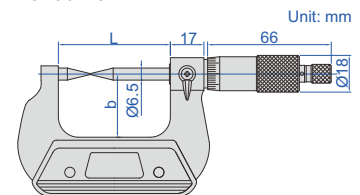
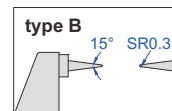
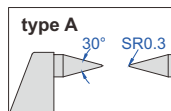
POINT MICROMETERS

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

Code	Range	Type	Accuracy	L	b
3230-25A	0-25mm	A	4μm	57	32
3230-50A	25-50mm	A	4μm	82	44.5
3230-75A	50-75mm	A	5μm	107	57
3230-100A	75-100mm	A	5μm	132.6	69.5
3230-25BA	0-25mm	B	4μm	57	32
3230-50BA	25-50mm	B	4μm	82	44.5
3230-75BA	50-75mm	B	5μm	107	57
3230-100BA	75-100mm	B	5μm	132.6	69.5



3230-25A



DIGITAL POINT MICROMETERS

- Measure the web thickness of drills, small grooves and keyways
- Resolution 0.001mm/0.00005"
- IP65 dust/waterproof
- Button function: on/off, set, mm/inch, data transmit
- Data output
- Automatic power off
- Ratchet stop
- Carbide tips
- Supplied with setting standards (except 0-25mm/0-1")
- Optional accessory: data output cable (code 7315-31 need receiver page 4, 7302-31 page 12)

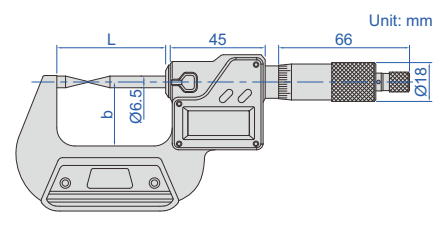
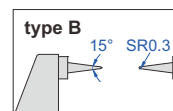
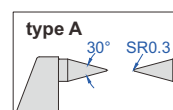
DATA
OUTPUT

IP65
WATERPROOF



3530-25A

Code	Range	Type	Accuracy	L	b
3530-25A	0-25mm/0-1"	A	±4μm	57	32
3530-50A	25-50mm/1-2"	A	±4μm	82	44.5
3530-75A	50-75mm/2-3"	A	±5μm	107	57
3530-100A	75-100mm/3-4"	A	±5μm	132.6	69.5
3530-25BA	0-25mm/0-1"	B	±4μm	57	32
3530-50BA	25-50mm/1-2"	B	±4μm	82	44.5
3530-75BA	50-75mm/2-3"	B	±5μm	107	57
3530-100BA	75-100mm/3-4"	B	±5μm	132.6	69.5



HIGH PRECISION DIGITAL POINT MICROMETERS/SNAP GAGES

ONE TURN OF SLEEVE MAKES 5MM SPINDLE FEED,
PRESS THE FORK, THE SPINDLE RETRACTS 3MM

ABSOLUTE ENCODER, THE ORIGINAL
DATA REMAINS AFTER POWER OFF

MEASUREMENT ACCURACY IS NOT
AFFECTED BY THE USE OF SLEEVE

NON-ROTATING
SPINDLE

DATA
OUTPUT

ATTENTION: RECHARGEABLE BATTERY,
FOR 24 HOURS CONTINUOUS WORKING

IP65
WATERPROOF

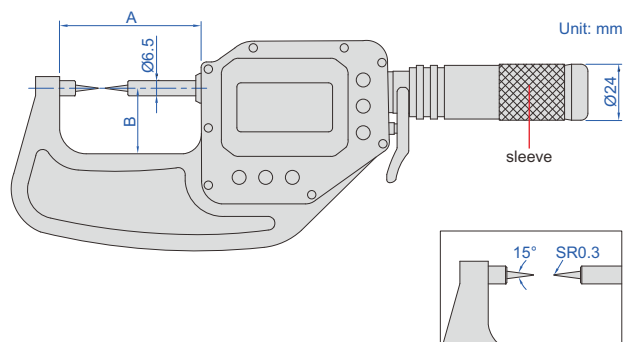
INSPECTION
CERTIFICATE



VIDEO

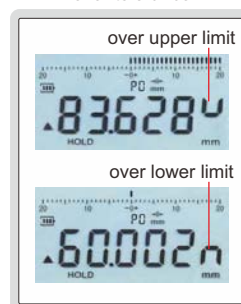


3354-25



- Measure the web thickness of drills, small grooves and keyways
- Absolute encoder, the original data remains after power off
- Adjustable resolution: 0.0002mm/0.00001"
0.001mm/0.00005"
0.01mm/0.0005"
- One turn of sleeve makes 5mm spindle feed
- Measurement accuracy is not affected by the use of sleeve
- Press the fork, the spindle retracts 3mm
- Linear ball bearings for ten million times use
- Carbide spindle and anvil
- Measuring force 7-10N
- Customizable measuring force range 2-12N
- Attention: small measuring force will reduce the dustproof and waterproof level
- Button function: data output, tolerance, data preset, data hold, measuring direction change, max./min./TIR, power off time, on/off, zero, mm/inch, adjust resolution
- Supplied with gage blocks for zero setting (except 0-25mm/0-1")
- Power: rechargeable battery, for 24 hours continuous working

alarm when
over tolerance



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



With data interface

Optional accessory:

wireless transmitter, code 7315-3350 need receiver page 6

data output cable (keyboard format), code 7302-3350 page 13

Code	Range	Accuracy	Repeatability	A	B
3354-25 *	0-25mm/0-1"	2μm	1μm	63mm	25mm
3354-50 *	25-50mm/1-2"	2μm	1μm	88mm	42mm
3354-75 *	50-75mm/2-3"	2μm	1μm	113mm	56mm

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	Repeatability	A	B
3354-25WL *	0-25mm/0-1"	2μm	1μm	63mm	25mm
3354-50WL *	25-50mm/1-2"	2μm	1μm	88mm	42mm
3354-75WL *	50-75mm/2-3"	2μm	1μm	113mm	56mm

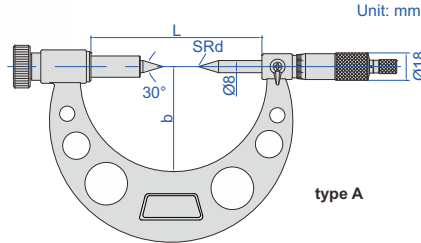
* Supplied with manufacturer inspection certificate

GEAR ROOT DIAMETER MICROMETERS

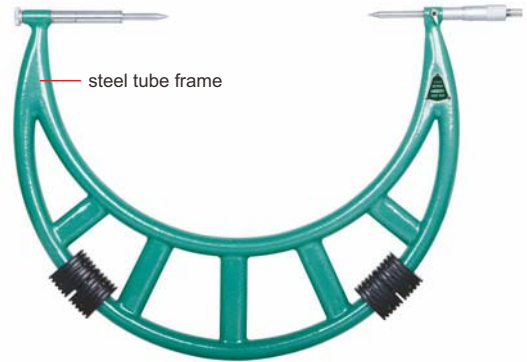


3297-100

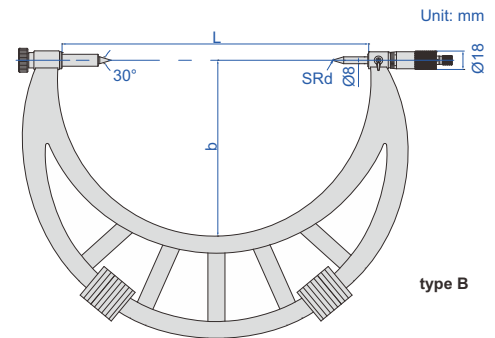
- Measure diameter of gear root circle
- Graduation 0.01mm
- Ratchet stop
- Meet DIN863-3
- Carbide measuring faces
- Supplied with setting standards



type A



3297-300



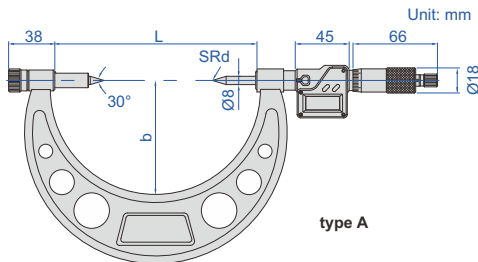
type B

Code	Range	Type	Accuracy	L	b	SRd
3297-100	5-100mm	A	5μm	137	72	0.4
3297-200	100-200mm	A	7μm	237	129	0.5
3297-300	200-300mm	B	9μm	414	225	0.7
3297-400	300-400mm	B	11μm	514	275	0.7
3297-500	400-500mm	B	13μm	614	325	0.7
3297-600	500-600mm	B	15μm	714	375	0.7
3297-700	600-700mm	B	16μm	814	425	0.7
3297-800	700-800mm	B	18μm	914	475	0.7
3297-900	800-900mm	B	20μm	1014	525	0.7

DIGITAL GEAR ROOT DIAMETER MICROMETERS

IP65
WATERPROOF

DATA
OUTPUT



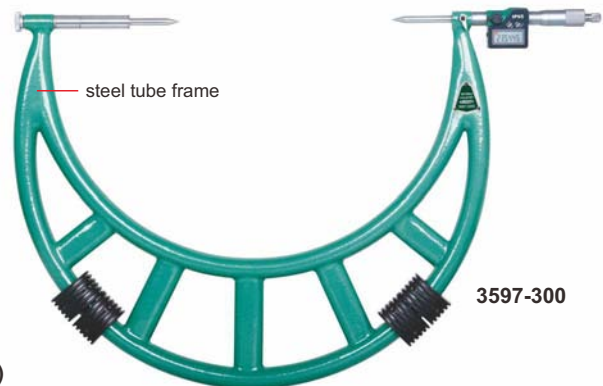
type A

- Measure diameter of gear root circle
- Resolution 0.001mm/0.0001" (resolution of 3597-100 and 3597-200 is 0.001mm/0.00005")
- IP65 dust/waterproof
- Button function: on/off, set, mm/inch, data transmit
- Data output
- Automatic power off
- Ratchet stop
- Carbide measuring faces
- Supplied with setting standards
- Optional accessory: data output cable (code 7315-31 need receiver page 4, 7302-31 page 12)

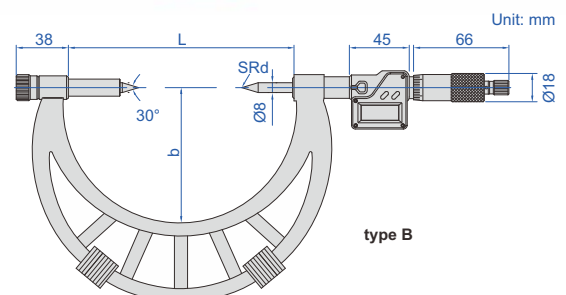
Code	Range	Type	Accuracy	L	b	SRd
3597-100	5-100mm	A	3μm	137	72	0.4
3597-200	100-200mm	A	4μm	237	129	0.5
3597-300	200-300mm	B	5μm	414	225	0.7
3597-400	300-400mm	B	6μm	514	275	0.7
3597-500	400-500mm	B	7μm	614	325	0.7
3597-600	500-600mm	B	8μm	714	375	0.7
3597-700	600-700mm	B	8μm	814	425	0.7
3597-800	700-800mm	B	9μm	914	475	0.7
3597-900	800-900mm	B	10μm	1014	525	0.7



3597-100



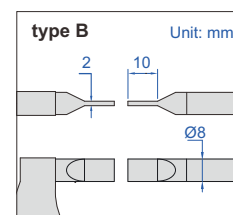
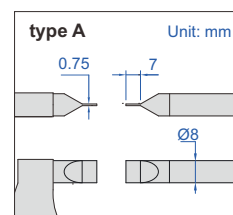
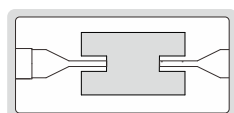
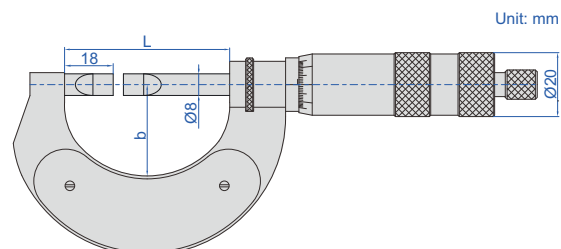
3597-300



type B



3650-25A



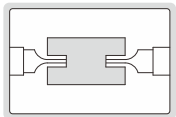
- Meet DIN863-3
- Graduation 0.01mm
- Force: 5-10N
- Optional accessory: setting standards (code **7386**)

(mm)

Code	Range	Type	Accuracy	L	b
3650-25A*	0-25mm	A	4µm	62	34
3650-50A*	25-50mm	A	4µm	87	46
3650-75A*	50-75mm	B	5µm	112	60
3650-100A*	75-100mm	B	5µm	139	72
3650-125A*	100-125mm	B	6µm	164	85
3650-150A*	125-150mm	B	6µm	190	97
3650-175A*	150-175mm	B	7µm	215	110
3650-200A*	175-200mm	B	7µm	240	122
3650-225A*	200-225mm	B	8µm	264	135
3650-250A*	225-250mm	B	8µm	290	148
3650-275A*	250-275mm	B	9µm	315	160
3650-300A*	275-300mm	B	9µm	340	174

* Supplied with manufacturer inspection certificate

BLADE MICROMETERS

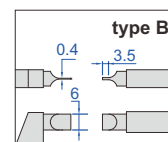
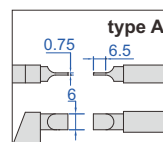
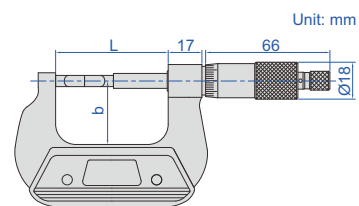


- Meet DIN863-3
- Measure the groove diameter of shafts and keyways
- Graduation 0.01mm
- Non-rotating spindle
- Ratchet stop
- Supplied with setting standards (except 0-25mm)



3232-25A

NON-ROTATING
SPINDLE



6

Type A (mm)

Code	Range	Accuracy	L	b
3232-25A	0-25mm	4μm	57	32
3232-50A	25-50mm	4μm	82	44.5
3232-75A	50-75mm	5μm	107	57
3232-100A	75-100mm	5μm	132.6	69.5
3232-125A	100-125mm	6μm	158	82
3232-150A	125-150mm	6μm	183.4	94.5
3232-175A	150-175mm	7μm	208.8	107
3232-200A	175-200mm	7μm	234.2	129.6
3232-225A	200-225mm	8μm	259.6	142.3
3232-250A	225-250mm	8μm	285	155
3232-275A	250-275mm	9μm	310.4	167.7
3232-300A	275-300mm	9μm	336.5	177.8

Type B (mm)

Code	Range	Accuracy	L	b
3232-25BA	0-25mm	4μm	57	32
3232-50BA	25-50mm	4μm	82	44.5
3232-75BA	50-75mm	5μm	107	57
3232-100BA	75-100mm	5μm	132.6	69.5
3232-125BA	100-125mm	6μm	158	82
3232-150BA	125-150mm	6μm	183.4	94.5
3232-175BA	150-175mm	7μm	208.8	107
3232-200BA	175-200mm	7μm	234.2	129.6
3232-225BA	200-225mm	8μm	259.6	142.3
3232-250BA	225-250mm	8μm	285	155
3232-275BA	250-275mm	9μm	310.4	167.7
3232-300BA	275-300mm	9μm	336.5	177.8

DIGITAL BLADE MICROMETERS

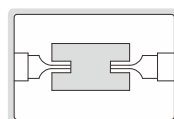
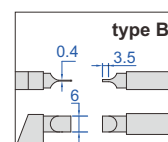
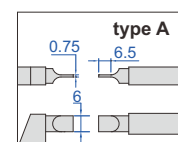
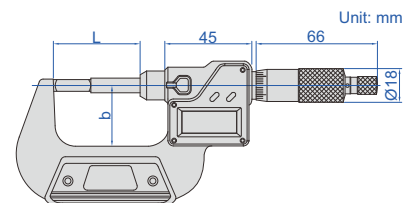
- Measure the groove diameter of shafts and keyways
- Resolution 0.001mm/0.00005"
- Non-rotating spindle
- Button function: on/off, set, mm/inch, data transmit
- Data output
- Automatic power off
- Ratchet stop
- Supplied with setting standards (except 0-25mm/0-1")
- Optional accessory: data output cable (code 7315-31 need receiver page 4, 7302-31 page 12)



3532-25A

DATA
OUTPUT

NON-ROTATING
SPINDLE



(mm)

Code	Range	Type	Accuracy	L	b
3532-25A	0-25mm/0-1"	A	±4μm	57	32
3532-50A	25-50mm/1-2"	A	±4μm	82	44.5
3532-75A	50-75mm/2-3"	A	±5μm	107	57
3532-100A	75-100mm/3-4"	A	±5μm	132.6	69.5
3532-125A	100-125mm/4-5"	A	±6μm	158	82
3532-150A	125-150mm/5-6"	A	±6μm	183.4	94.5
3532-175A	150-175mm/6-7"	A	±7μm	208.8	107
3532-25BA	0-25mm/0-1"	B	±4μm	57	32
3532-50BA	25-50mm/1-2"	B	±4μm	82	44.5
3532-75BA	50-75mm/2-3"	B	±5μm	107	57
3532-100BA	75-100mm/3-4"	B	±5μm	132.6	69.5
3532-125BA	100-125mm/4-5"	B	±6μm	158	82
3532-150BA	125-150mm/5-6"	B	±6μm	183.4	94.5
3532-175BA	150-175mm/6-7"	B	±7μm	208.8	107

ATTENTION: RECHARGEABLE BATTERY,
FOR 24 HOURS CONTINUOUS WORKING

MEASUREMENT ACCURACY IS NOT
AFFECTED BY THE USE OF SLEEVE

IP65
WATERPROOF

DATA
OUTPUT

ABSOLUTE ENCODER, THE ORIGINAL
DATA REMAINS AFTER POWER OFF

NON-ROTATING
SPINDLE

ONE TURN OF SLEEVE MAKES 5MM SPINDLE FEED,
PRESS THE FORK, THE SPINDLE RETRACTS 3MM

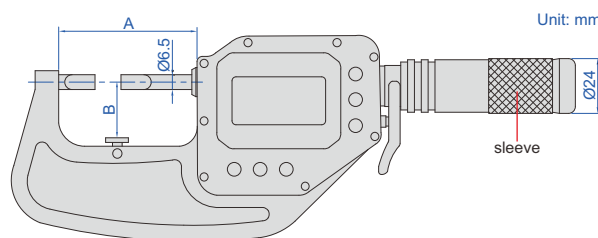


INSPECTION
CERTIFICATE

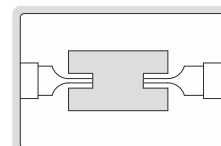
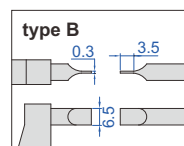
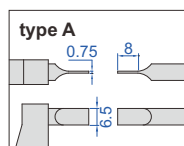


3352-25A

- Measure the groove diameter of shafts and keyways
- Absolute encoder, the original data remains after power off
- Adjustable resolution: 0.0002mm/0.00001"
0.001mm/0.00005"
0.01mm/0.0005"
- One turn of sleeve makes 5mm spindle feed
- Measurement accuracy is not affected by the use of sleeve
- Press the fork, the spindle retracts 3mm
- Linear ball bearings for ten million times use
- Carbide spindle and anvil
- Measuring force 7-10N
- Customizable measuring force range 2-12N
- Attention: small measuring force will reduce the dustproof and waterproof level
- Button function: data output, tolerance, data preset, data hold, measuring direction change, max./min./TIR, power off time, on/off, zero, mm/inch, adjust resolution
- Supplied with gage blocks for zero setting (except 0-25mm/0-1")
- Power: rechargeable battery, for 24 hours continuous working



Unit: mm



With data interface

Optional accessory:

wireless transmitter, code 7315-3350 need receiver page 6

data output cable (keyboard format), code 7302-3350 page 13

Code	Range	Type	Accuracy	Repeatability	A	B
3352-25A*	0-25mm/0-1"	A	2μm	1μm	63mm	25mm
3352-50A*	25-50mm/1-2"	A	2μm	1μm	88mm	42mm
3352-75A*	50-75mm/2-3"	A	2μm	1μm	113mm	56mm
3352-25B*	0-25mm/0-1"	B	2μm	1μm	63mm	25mm
3352-50B*	25-50mm/1-2"	B	2μm	1μm	88mm	42mm
3352-75B*	50-75mm/2-3"	B	2μm	1μm	113mm	56mm

Built-in wireless

Optional accessory:

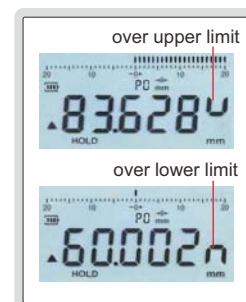
wireless receiver (keyboard format, connect up to 15 digital indicators), code 2134-R1

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

Code	Range	Type	Accuracy	Repeatability	A	B
3352-25AWL*	0-25mm/0-1"	A	2μm	1μm	63mm	25mm
3352-50AWL*	25-50mm/1-2"	A	2μm	1μm	88mm	42mm
3352-75AWL*	50-75mm/2-3"	A	2μm	1μm	113mm	56mm
3352-25BWL*	0-25mm/0-1"	B	2μm	1μm	63mm	25mm
3352-50BWL*	25-50mm/1-2"	B	2μm	1μm	88mm	42mm
3352-75BWL*	50-75mm/2-3"	B	2μm	1μm	113mm	56mm

* Supplied with manufacturer inspection certificate

alarm when
over tolerance

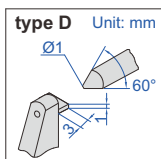
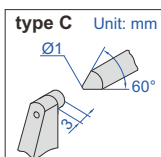
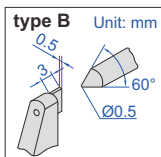


wireless receiver
2134-R1, 2134-R2 (optional)



CRIMP HEIGHT MICROMETERS

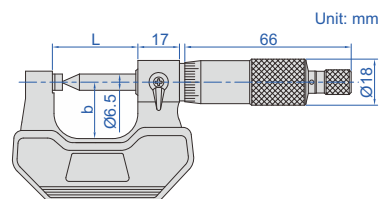
- Measure the height of crimp contact
- Graduation 0.01mm
- Ratchet stop
- Supplied with setting standards (except 0-25mm)



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



3266-25BA



Code	Range	Type	Accuracy	L	b
3266-25BA	0-25mm	B	4µm	34	24
3266-25CA	0-25mm	C	4µm	34	24
3266-50CA	25-50mm	C	4µm	59	32
3266-75CA	50-75mm	C	5µm	85	45
3266-100CA	75-100mm	C	5µm	110	57
3266-25DA	0-25mm	D	4µm	34	24

6

DIGITAL CRIMP HEIGHT MICROMETERS

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

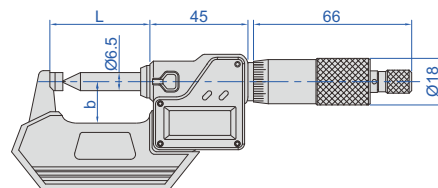
DATA
OUTPUT

IP65
WATERPROOF

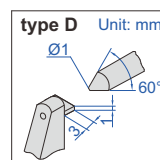
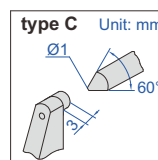
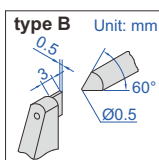
- Measure the height of crimp contact
- Resolution 0.001mm/0.00005"
- IP65 dust/waterproof
- Button function: on/off, set, mm/inch, data transmit
- Data output
- Automatic power off
- Ratchet stop
- Supplied with setting standards (except 0-25mm/0-1")
- Optional accessory: data output cable (code 7315-31 need receiver page 4, 7302-31 page 12)



3566-25BA



Code	Range	Type	Accuracy	L	b
3566-25BA	0-25mm/0-1"	B	±4µm	34.5	25
3566-25CA	0-25mm/0-1"	C	±4µm	34.5	25
3566-50CA	25-50mm/0-1"	C	±4µm	59.5	32
3566-75CA	50-75mm/0-1"	C	±5µm	84.5	44.5
3566-100CA	75-100mm/0-1"	C	±5µm	109.5	57
3566-25DA	0-25mm/0-1"	D	±4µm	34.5	25



SPLINE MICROMETERS

INSIZE PLUS
MADE IN EUROPE

Code	Range	Accuracy	L	b
3658-25 *	0-25mm	4µm	62	34
3658-50 *	25-50mm	4µm	87	46
3658-75 *	50-75mm	5µm	112	60
3658-100 *	75-100mm	5µm	139	72
3658-125 *	100-125mm	6µm	164	85
3658-150 *	125-150mm	6µm	190	97
3658-175 *	150-175mm	7µm	215	110
3658-200 *	175-200mm	7µm	240	122
3658-225 *	200-225mm	8µm	264	135
3658-250 *	225-250mm	8µm	290	148

* Supplied with manufacturer inspection certificate

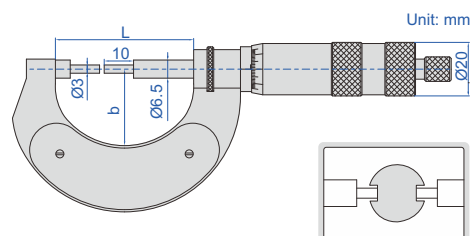


3658-25

INSPECTION
CERTIFICATE

ATTENTION: SETTING
STANDARDS ARE NOT INCLUDED

- Meet DIN863-3
- Measure splined shafts, slots and keyways
- Graduation 0.01mm
- Ratchet stop
- Carbide measuring faces
- Optional accessory: setting standards (code 7386)

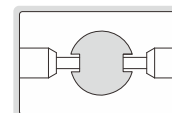


SPLINE MICROMETERS

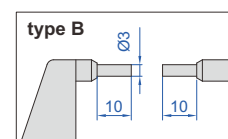
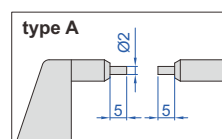
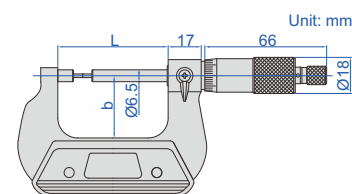
- Meet DIN863-3
- Measure splined shafts, slots and keyways
- Graduation 0.01mm
- Ratchet stop
- Carbide measuring faces
- Supplied with setting standards (except 0-25mm)



3233-25BA



Code	Range	Type	Accuracy	L	b
3233-25A	0-25mm	A	4μm	57	32
3233-50A	25-50mm	A	4μm	82	44.5
3233-75A	50-75mm	A	5μm	107	57
3233-100A	75-100mm	A	5μm	132.6	69.5
3233-125A	100-125mm	A	6μm	158	82
3233-150A	125-150mm	A	6μm	183.4	94.5
3233-175A	150-175mm	A	7μm	208.8	107
3233-25BA	0-25mm	B	4μm	57	32
3233-50BA	25-50mm	B	4μm	82	44.5
3233-75BA	50-75mm	B	5μm	107	57
3233-100BA	75-100mm	B	5μm	132.6	69.5
3233-125BA	100-125mm	B	6μm	158	82
3233-150BA	125-150mm	B	6μm	183.4	94.5
3233-175BA	150-175mm	B	7μm	208.8	107



6

IP65
WATERPROOF

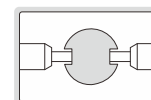
DATA
OUTPUT

DIGITAL SPLINE MICROMETERS

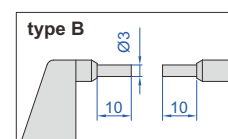
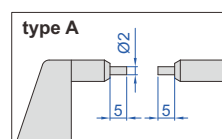
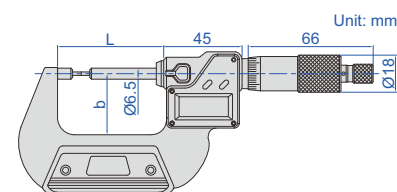
- Measure splined shafts, slots and keyways
- Resolution 0.001mm/0.00005"
- IP65 dust/waterproof
- Button function: on/off, set, mm/inch, data transmit
- Data output
- Automatic power off
- Ratchet stop
- Carbide measuring faces
- Supplied with setting standards (except 0-25mm/0-1")
- Optional accessory: data output cable (code 7315-31 need receiver page 4, 7302-31 page 12)



3533-25BA



Code	Range	Type	Accuracy	L	b
3533-25A	0-25mm/0-1"	A	±4μm	57	32
3533-50A	25-50mm/1-2"	A	±4μm	82	44.5
3533-75A	50-75mm/2-3"	A	±5μm	107	57
3533-100A	75-100mm/3-4"	A	±5μm	132.6	69.5
3533-125A	100-125mm/4-5"	A	±6μm	158	82
3533-150A	125-150mm/5-6"	A	±6μm	183.4	94.5
3533-175A	150-175mm/6-7"	A	±7μm	208.8	107
3533-25BA	0-25mm/0-1"	B	±4μm	57	32
3533-50BA	25-50mm/1-2"	B	±4μm	82	44.5
3533-75BA	50-75mm/2-3"	B	±5μm	107	57
3533-100BA	75-100mm/3-4"	B	±5μm	132.6	69.5
3533-125BA	100-125mm/4-5"	B	±6μm	158	82
3533-150BA	125-150mm/5-6"	B	±6μm	183.4	94.5
3533-175BA	150-175mm/6-7"	B	±7μm	208.8	107



HIGH PRECISION DIGITAL SPLINE MICROMETERS/SNAP GAGES

ONE TURN OF SLEEVE MAKES 5MM SPINDLE FEED,
PRESS THE FORK, THE SPINDLE RETRACTS 3MM

MEASUREMENT ACCURACY IS NOT
AFFECTED BY THE USE OF SLEEVE

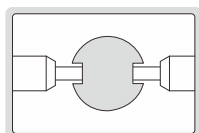
NON-ROTATING
SPINDLE

ABSOLUTE ENCODER, THE ORIGINAL
DATA REMAINS AFTER POWER OFF

IP65
WATERPROOF

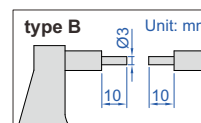
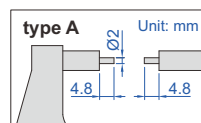
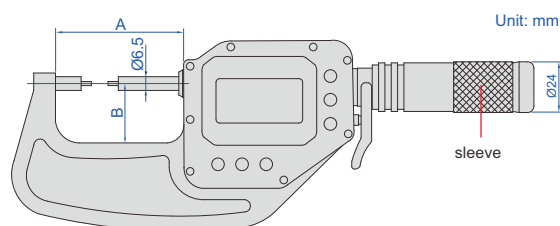
ATTENTION: RECHARGEABLE BATTERY,
FOR 24 HOURS CONTINUOUS WORKING

DATA
OUTPUT



3356-25

- Measure splined shafts, slots and keyways
- Absolute encoder, the original data remains after power off
- Adjustable resolution: 0.0002mm/0.00001"
0.001mm/0.00005"
0.01mm/0.0005"
- One turn of sleeve makes 5mm spindle feed
- Measurement accuracy is not affected by the use of sleeve
- Press the fork, the spindle retracts 3mm
- Linear ball bearings for ten million times use
- Carbide spindle and anvil
- Measuring force 7-10N
Customizable measuring force range 2-12N
Attention: small measuring force will reduce the dustproof and waterproof level
- Button function: data output, tolerance, data preset, data hold, measuring direction change, max./min./TIR, power off time, on/off, zero, mm/inch, adjust resolution
- Supplied with gage blocks for zero setting (except 0-25mm/0-1")
- Power: rechargeable battery, for 24 hours continuous working



With data interface

Optional accessory:

wireless transmitter, code **7315-3350** need receiver page 6

data output cable (keyboard format), code **7302-3350** page 13

Code	Range	Accuracy	Type	Repeatability	A	B
3356-25 *	0-25mm/0-1"	2µm	A	1µm	63mm	25mm
3356-50 *	25-50mm/1-2"	2µm	A	1µm	88mm	42mm
3356-75 *	50-75mm/2-3"	2µm	A	1µm	113mm	56mm
3356-25B *	0-25mm/0-1"	2µm	B	1µm	63mm	25mm
3356-50B *	25-50mm/1-2"	2µm	B	1µm	88mm	42mm
3356-75B *	50-75mm/2-3"	2µm	B	1µm	113mm	56mm

Built-in wireless

Optional accessory:

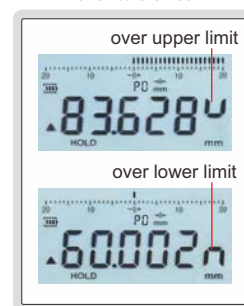
wireless receiver (keyboard format, connect up to 15 digital indicators), code **2134-R1**

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

Code	Range	Accuracy	Type	Repeatability	A	B
3356-25WL *	0-25mm/0-1"	2µm	A	1µm	63mm	25mm
3356-50WL *	25-50mm/1-2"	2µm	A	1µm	88mm	42mm
3356-75WL *	50-75mm/2-3"	2µm	A	1µm	113mm	56mm
3356-25BWL *	0-25mm/0-1"	2µm	B	1µm	63mm	25mm
3356-50BWL *	25-50mm/1-2"	2µm	B	1µm	88mm	42mm
3356-75BWL *	50-75mm/2-3"	2µm	B	1µm	113mm	56mm

* Supplied with manufacturer inspection certificate

alarm when
over tolerance



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

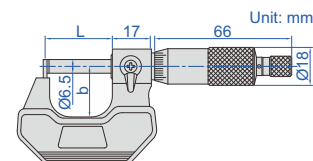
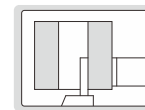


CYLINDRICAL ANVIL TUBE MICROMETERS

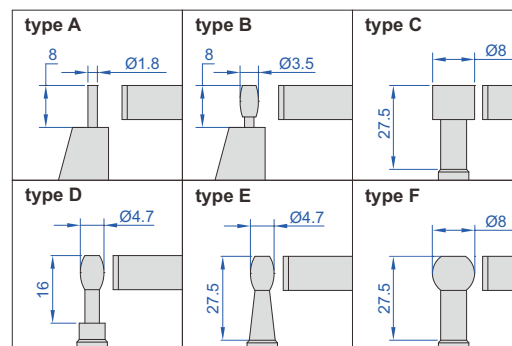
- Measure wall thickness of tubes
- Graduation 0.01mm
- Ratchet stop
- Carbide spindle tip
- Supplied with setting standards (except 0-25mm)



3261-25A



(mm)					
Code	Range	Type	Accuracy	L	b
3261-25A	0-25mm	A	6µm	36	25
3261-50A	25-50mm	A	6µm	61	32
3261-25BA	0-25mm	B	6µm	36	25
3261-50BA	25-50mm	B	6µm	61	32
3261-25CA	0-25mm	C	6µm	36	25
3261-50CA	25-50mm	C	6µm	61	32
3261-25DA	0-25mm	D	6µm	36	25
3261-50DA	25-50mm	D	6µm	61	32
3261-25EA	0-25mm	E	6µm	36	25
3261-50EA	25-50mm	E	6µm	61	32
3261-25FA	0-25mm	F	6µm	36	25
3261-50FA	25-50mm	F	6µm	61	32



6

IP65
WATERPROOF

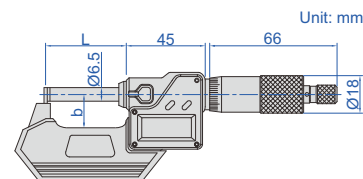
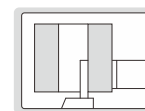
DATA
OUTPUT

DIGITAL CYLINDRICAL ANVIL TUBE MICROMETERS

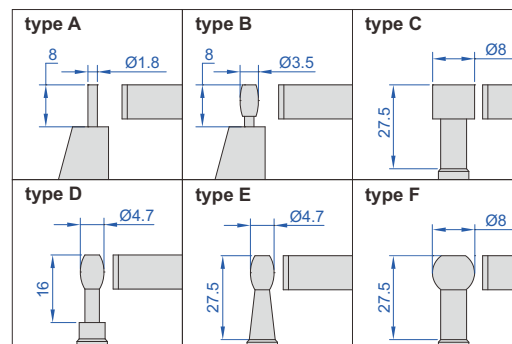
- Measure wall thickness of tubes
- Resolution 0.001mm/0.00005"
- IP65 dust/waterproof
- Button function: on/off, set, mm/inch, data transmit
- Data output
- Automatic power off
- Ratchet stop
- Carbide spindle tip
- Supplied with setting standards (except 0-25mm/0-1")
- Optional accessory: data output cable (code 7315-31 need receiver page 4, 7302-31 page 12)



3561-25A



(mm)					
Code	Range	Type	Accuracy	L	b
3561-25A	0-25mm/0-1"	A	±6µm	36	25
3561-50A	25-50mm/1-2"	A	±6µm	61	32
3561-25BA	0-25mm/0-1"	B	±6µm	36	25
3561-50BA	25-50mm/1-2"	B	±6µm	61	32
3561-25CA	0-25mm/0-1"	C	±6µm	36	25
3561-50CA	25-50mm/1-2"	C	±6µm	61	32
3561-25DA	0-25mm/0-1"	D	±6µm	36	25
3561-50DA	25-50mm/1-2"	D	±6µm	61	32
3561-25EA	0-25mm/0-1"	E	±6µm	36	25
3561-50EA	25-50mm/1-2"	E	±6µm	61	32
3561-25FA	0-25mm/0-1"	F	±6µm	36	25
3561-50FA	25-50mm/1-2"	F	±6µm	61	32



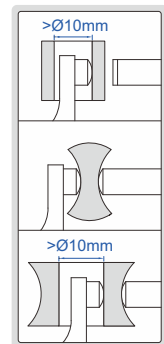
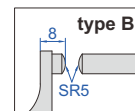
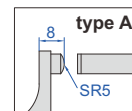
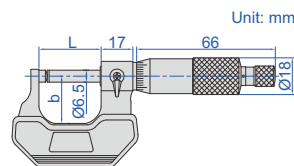
SPHERICAL ANVIL TUBE MICROMETERS

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



3260-25A

(mm)					
Code	Range	Type	Accuracy	L	b
3260-25A	0-25mm	A	4μm	32	24
3260-50A	25-50mm	A	4μm	57	32
3260-75A	50-75mm	A	5μm	82	44.5
3260-100A	75-100mm	A	5μm	107	57
3260-25SA	0-25mm	B	4μm	32	24
3260-50SA	25-50mm	B	4μm	57	32
3260-75SA	50-75mm	B	5μm	82	44.5
3260-100SA	75-100mm	B	5μm	107	57

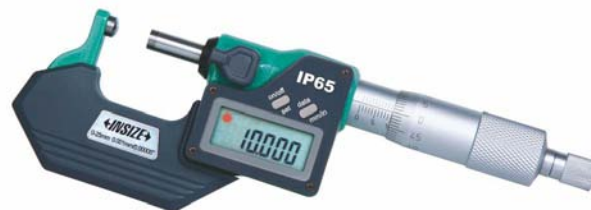


DIGITAL SPHERICAL ANVIL TUBE MICROMETERS

IP65
WATERPROOF

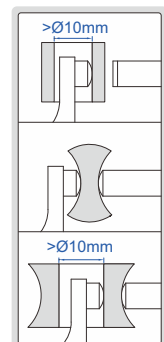
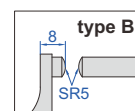
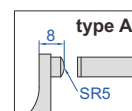
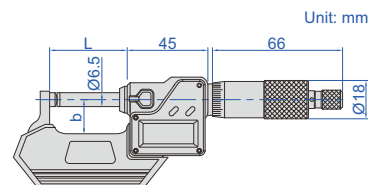
DATA
OUTPUT

- Measure wall thickness of tubes
- Resolution 0.001mm/0.00005"
- IP65 dust/waterproof
- Button function: on/off, set, mm/inch, data transmit
- Data output
- Automatic power off
- Ratchet stop
- Carbide measuring faces
- Supplied with setting standards (except 0-25mm/0-1")
- Optional accessory: data output cable (code 7315-31 need receiver page 4, 7302-31 page 12)



3560-25A

(mm)					
Code	Range	Type	Accuracy	L	b
3560-25A	0-25mm/0-1"	A	±4μm	32	24
3560-50A	25-50mm/1-2"	A	±4μm	57	32
3560-75A	50-75mm/2-3"	A	±5μm	82	44.5
3560-100A	75-100mm/3-4"	A	±5μm	107	57
3560-25SA	0-25mm/0-1"	B	±4μm	32	24
3560-50SA	25-50mm/1-2"	B	±4μm	57	32
3560-75SA	50-75mm/2-3"	B	±5μm	82	44.5
3560-100SA	75-100mm/3-4"	B	±5μm	107	57



HIGH PRECISION DIGITAL SPHERICAL ANVIL TUBE MICROMETERS/SNAP GAGES

IP65
WATERPROOF

NON-ROTATING
SPINDLE

ABSOLUTE ENCODER, THE ORIGINAL
DATA REMAINS AFTER POWER OFF

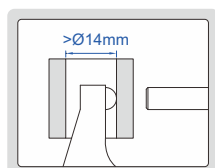
ONE TURN OF SLEEVE MAKES 5MM SPINDLE FEED,
PRESS THE FORK, THE SPINDLE RETRACTS 3MM

MEASUREMENT ACCURACY IS NOT
AFFECTED BY THE USE OF SLEEVE

INSPECTION
CERTIFICATE

ATTENTION: RECHARGEABLE BATTERY,
FOR 24 HOURS CONTINUOUS WORKING

DATA
OUTPUT

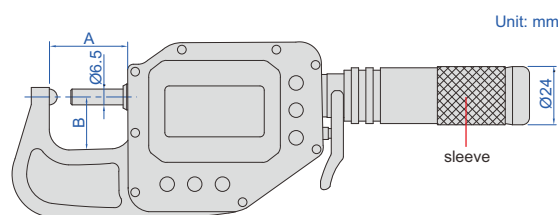


VIDEO

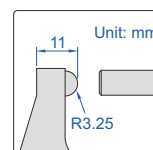


3355-25

- Measure wall thickness of tubes
- Absolute encoder, the original data remains after power off
- Adjustable resolution: 0.0002mm/0.00001"
0.001mm/0.00005"
0.01mm/0.0005"
- One turn of sleeve makes 5mm spindle feed
- Measurement accuracy is not affected by the use of sleeve
- Press the fork, the spindle retracts 3mm
- Linear ball bearings for ten million times use
- Carbide spindle and anvil
- Measuring force 7-10N
Customizable measuring force range 2-12N
Attention: small measuring force will reduce the dustproof and waterproof level
- Button function: data output, tolerance, data preset, data hold, measuring direction change, max./min./TIR, power off time, on/off, zero, mm/inch, adjust resolution
- Supplied with gage blocks for zero setting (except 0-25mm/0-1")
- Power: rechargeable battery, for 24 hours continuous working



Unit: mm



Unit: mm

With data interface

Optional accessory:

wireless transmitter, code **7315-3350** need receiver page 6

data output cable (keyboard format), code **7302-3350** page 13

Code	Range	Accuracy	Repeatability	A	B
3355-25 *	0-25mm/0-1"	2μm	1μm	38mm	24mm
3355-50 *	25-50mm/1-2"	2μm	1μm	63mm	25mm
3355-75 *	50-75mm/2-3"	2μm	1μm	88mm	42mm
3355-100 *	75-100mm/3-3.95"	2μm	1μm	113mm	56mm

Built-in wireless

Optional accessory:

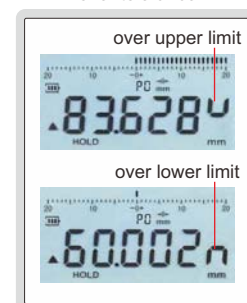
wireless receiver (keyboard format, connect up to 15 digital indicators), code **2134-R1**

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

Code	Range	Accuracy	Repeatability	A	B
3355-25WL *	0-25mm/0-1"	2μm	1μm	38mm	24mm
3355-50WL *	25-50mm/1-2"	2μm	1μm	63mm	25mm
3355-75WL *	50-75mm/2-3"	2μm	1μm	88mm	42mm
3355-100WL *	75-100mm/3-3.95"	2μm	1μm	113mm	56mm

* Supplied with manufacturer inspection certificate

alarm when
over tolerance



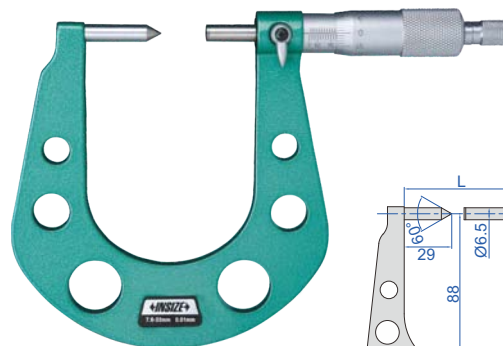
wireless receiver
2134-R1, 2134-R2 (optional)



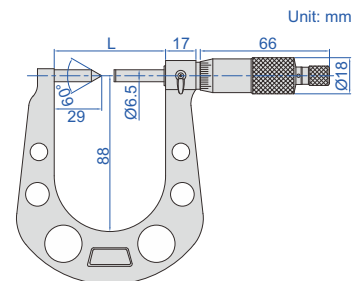
DISK BRAKE MICROMETERS

RELATIVE PRODUCT: DIGITAL DISK BRAKE AND PAD CALIPER
DIGITAL DRUM BRAKE CALIPER (CODE 1162-125A, 1167-150A, 1168-300A)

- Measure thickness of disk brakes
- Graduation 0.01mm
- Ratchet stop
- Carbide measuring faces
- Supplied with setting standards



3288-33A



Code	Range	Accuracy	L
3288-33A	7.6-33mm	5µm	64.5mm
3288-50A	25-50mm	5µm	82mm

6

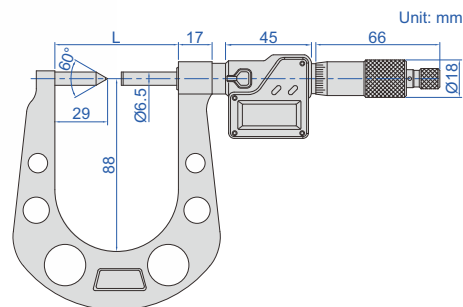
DIGITAL DISK BRAKE MICROMETERS

RELATIVE PRODUCT: DIGITAL DISK BRAKE AND PAD CALIPER
DIGITAL DRUM BRAKE CALIPER (CODE 1162-125A, 1167-150A, 1168-300A)

- Measure thickness of disk brakes
- Resolution 0.001mm/0.00005"
- IP65 dust/waterproof
- Button function: on/off, set, mm/inch, data transmit
- Data output
- Automatic power off
- Ratchet stop
- Carbide measuring faces
- Supplied with setting standards
- Optional accessory: data output cable (code 7315-31 need receiver page 4, 7302-31 page 12)



3588-33A



IP65
WATERPROOF

DATA
OUTPUT

Code	Range	Accuracy	L
3588-33A	7.6-33mm/0.3-1.3"	±5µm	64.5mm
3588-50A	25-50mm/1-2"	±5µm	82mm

SHEET METAL MICROMETERS

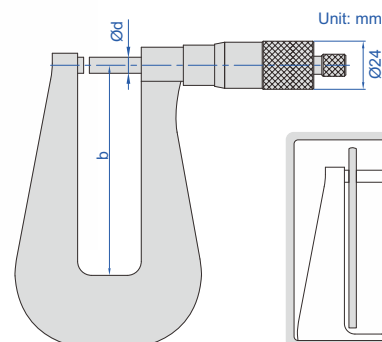
INSIZE PLUS
MADE IN EUROPE

- Deep frame suitable for sheet metal, paper and plastic
- Graduation 0.01mm
- Ratchet stop
- Carbide measuring faces
- Optional accessory: setting standards (code 7386)

ATTENTION: SETTING
STANDARDS ARE NOT INCLUDED



3653-252A



Code	Range	Accuracy	b	Ød
3653-251A	0-25mm	4µm	50	6.5
3653-252A	0-25mm	5µm	100	8
3653-253A	0-25mm	6µm	150	6.5
3653-254A	0-25mm	8µm	250	6.5
3653-501A	25-50mm	4µm	50	8
3653-502A	0-50mm	4µm	50	8
3653-503A	0-50mm	5µm	100	8
3653-100A	50-100mm	5µm	100	8

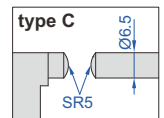
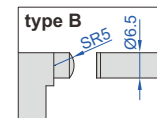
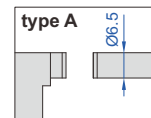
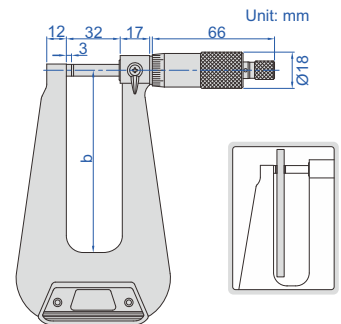
SHEET METAL MICROMETERS

- Deep frame suitable for sheet metal, paper and plastic
- Graduation 0.01mm
- Ratchet stop
- Carbide measuring faces

Code	Range	Type	Accuracy	b
3239-253	0-25mm	A	7μm	155mm
3239-253F	0-25mm	B	7μm	155mm
3239-254F	0-25mm	B	10μm	310mm
3239-253S	0-25mm	C	7μm	155mm



3239-253



DIGITAL SHEET METAL MICROMETERS

DATA OUTPUT

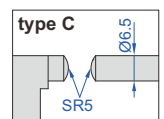
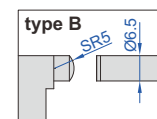
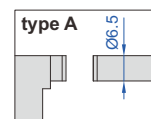
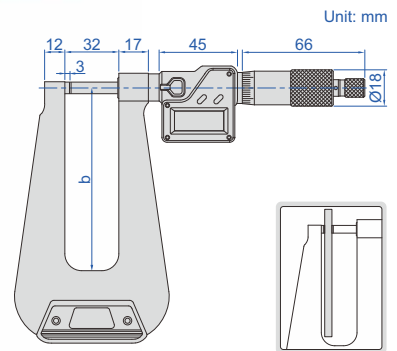
IP65
WATERPROOF

- Deep frame suitable for sheet metal, paper and plastic
- Resolution 0.001mm/0.00005"
- IP65 dust/waterproof
- Button function: on/off, set, mm/inch, data transmit
- Data output
- Automatic power off
- Ratchet stop
- Carbide measuring faces
- Optional accessory: data output cable
(code **7315-31** need receiver page 4, **7302-31** page 12)

Code	Range	Type	Accuracy	b
3539-253A	0-25mm/0-1"	A	±7µm	155mm
3539-253FA	0-25mm/0-1"	B	±7µm	155mm
3539-254FA	0-25mm/0-1"	B	±10µm	310mm
3539-253SA	0-25mm/0-1"	C	±7µm	155mm



3539-253A

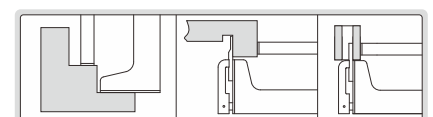
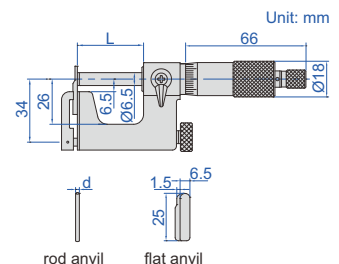


INTERCHANGEABLE ANVIL MICROMETERS

- Measure tube thickness, shoulder edge distance, rivet head height, etc.
- Supplied with flat anvil and rod anvil
- Graduation 0.01mm
- Ratchet stop
- Carbide spindle tip
- Setting standards are included (except 0-25mm)



3262-25A



Code	Range	Accuracy	L	d
3262-25A	0-25mm	4µm	28.5mm	Ø3mm
3262-50A	25-50mm	4µm	53.5mm	Ø5mm

DIGITAL INTERCHANGEABLE ANVIL MICROMETERS

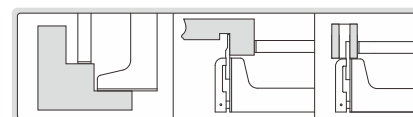
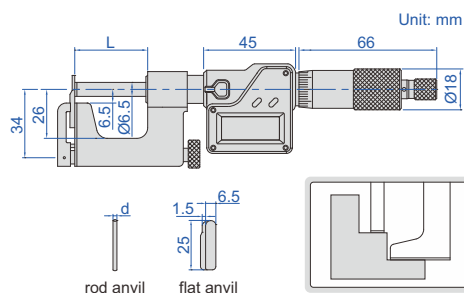
IP65
WATERPROOF

DATA
OUTPUT

- Measure tube thickness, shoulder edge distance, rivet head height, etc.
- Supplied with flat anvil and rod anvil
- Resolution 0.001mm/0.00005"
- IP65 dust/waterproof
- Button function: on/off, set, mm/inch, data transmit
- Data output
- Automatic power off
- Ratchet stop
- Carbide spindle tip
- Setting standards are included (except 0-25mm/0-1")
- Optional accessory: data output cable (code 7315-31 need receiver page 4, 7302-31 page 12)

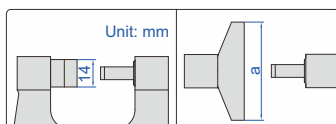


3562-25A



Code	Range	Accuracy	L	d
3562-25A	0-25mm/0-1"	±4μm	28.5mm	Ø3mm
3562-50A	25-50mm/1-2"	±4μm	53.5mm	Ø5mm

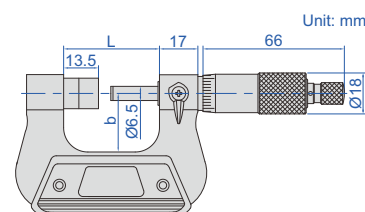
LARGE ANVIL MICROMETERS



3234-25A

- Graduation 0.01mm
- Ratchet stop
- Supplied with setting standards (except 0-25mm)

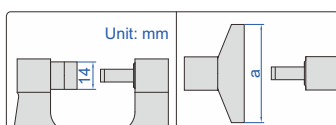
Code	Range	Accuracy	L	a	b
3234-25A	0-25mm	4μm	42mm	50mm	26mm
3234-50A	25-50mm	4μm	67mm	60mm	38mm



DIGITAL LARGE ANVIL MICROMETERS

DATA
OUTPUT

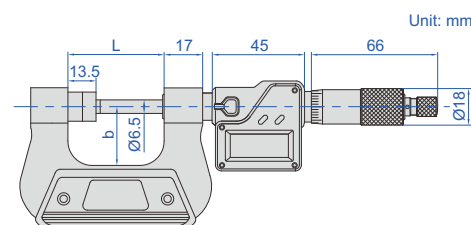
IP65
WATERPROOF



3534-25A

- Resolution 0.001mm/0.00005"
- IP65 dust/waterproof
- Button function: on/off, set, mm/inch, data transmit
- Data output
- Automatic power off
- Ratchet stop
- Supplied with setting standards (except 0-25mm/0-1")
- Optional accessory: data output cable (code 7315-31 need receiver page 4, 7302-31 page 12)

Code	Range	Accuracy	L	a	b
3534-25A	0-25mm/0-1"	±4μm	42mm	50mm	26mm
3534-50A	25-50mm/1-2"	±4μm	67mm	60mm	38mm

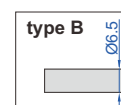
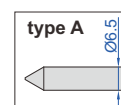
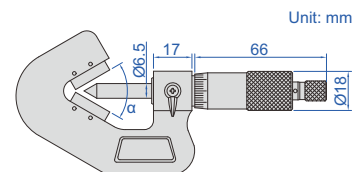


V-ANVIL MICROMETERS



3290-153A

- Measure the diameter of parts or cutting tools with odd grooves, such as taps, reamers and end mills
- Graduation 0.01mm
- Ratchet stop
- Carbide measuring faces
- Supplied with setting standards



Code	Range	Flutes	Accuracy	α	Type
3290-153A	1-15mm	3	4μm	60°	A
3290-203A	5-20mm	3	4μm	60°	B
3290-353A	20-35mm	3	5μm	60°	B
3290-503A	35-50mm	3	5μm	60°	B
3290-653A	50-65mm	3	6μm	60°	B
3290-803A	65-80mm	3	6μm	60°	B
3290-953A	80-95mm	3	7μm	60°	B
3290-255A	5-25mm	5	4μm	108°	B

Code	Range	Flutes	Accuracy	α	Type
3290-455A	25-45mm	5	5μm	108°	B
3290-655A	45-65mm	5	6μm	108°	B
3290-855A	65-85mm	5	7μm	108°	B
3290-1055A	85-105mm	5	8μm	108°	B
3290-257A	5-25mm	7	4μm	128°34'17"	B
3290-457A	25-45mm	7	5μm	128°34'17"	B
3290-657A	45-65mm	7	6μm	128°34'17"	B
3290-857A	65-85mm	7	7μm	128°34'17"	B

6

IP65
WATERPROOF

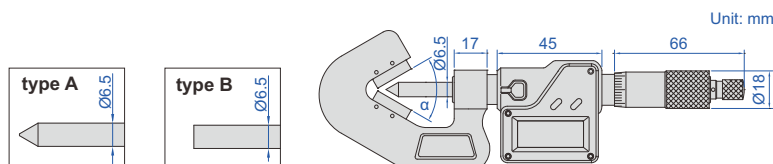
DATA
OUTPUT

DIGITAL V-ANVIL MICROMETERS



3590-153A

- Measure the diameter of parts or cutting tools with odd grooves, such as taps, reamers and end mills
- Resolution 0.001mm/0.0005"
- IP65 dust/waterproof
- Button function: on/off, set, mm/inch, data transmit
- Data output
- Automatic power off
- Ratchet stop
- Carbide measuring faces
- Supplied with setting standards
- Optional accessory: data output cable (code 7315-31 need receiver page 4, 7302-31 page 12)



Code	Range	Flutes	Accuracy	α	Type
3590-153A	1-15mm/0.04-0.6"	3	±4μm	60°	A
3590-203A	5-20mm/0.2-0.8"	3	±4μm	60°	B
3590-353A	20-35mm/0.8-1.4"	3	±5μm	60°	B
3590-503A	35-50mm/1.4-2.0"	3	±5μm	60°	B
3590-653A	50-65mm/2.0-2.6"	3	±6μm	60°	B
3590-803A	65-80mm/2.6-3.2"	3	±6μm	60°	B
3590-953A	80-95mm/3.2-3.6"	3	±6μm	60°	B
3590-255A	5-25mm/0.2-1.0"	5	±4μm	108°	B

Code	Range	Flutes	Accuracy	α	Type
3590-455A	25-45mm/1.0-1.8"	5	±5μm	108°	B
3590-655A	45-65mm/1.8-2.6"	5	±6μm	108°	B
3590-855A	65-85mm/2.6-3.4"	5	±6μm	108°	B
3590-1055A	85-105mm/3.4-4.2"	5	±6μm	108°	B
3590-257A	5-25mm/0.2-1.0"	7	±4μm	128°34'17"	B
3590-457A	25-45mm/1.0-1.8"	7	±4μm	128°34'17"	B
3590-657A	45-65mm/1.8-2.6"	7	±5μm	128°34'17"	B
3590-857A	65-85mm/2.6-3.4"	7	±5μm	128°34'17"	B

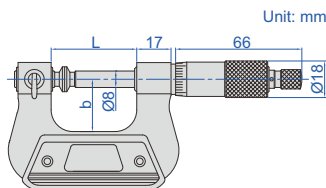
NON-ROTATING SPINDLE UNIVERSAL MICROMETERS

NON-ROTATING
SPINDLE



3280-25A

- Meet DIN863-3
- Graduation 0.01mm
- Non-rotating spindle
- Ratchet stop
- Supplied with 7 pairs of anvil/spindle tip
- Setting standards are included (except 0-25mm)
- Optional accessory: 55° anvil/spindle tip (code **3280-SP1** and **3280-SP2**)



Anvil/spindle tip (included)

Unit: mm

Flat		
Spherical		
Spline		
Disk		
Blade		
Knife-edge		
Point		

55° anvil/spindle tip (optional)

Unit: mm

Code 3280-SP1 Knife-edge		
Code 3280-SP2 Point		

Code	Range	Accuracy	L	b
3280-25A	0-25mm	4µm	42mm	26mm
3280-50A	25-50mm	4µm	67mm	38mm
3280-75A	50-75mm	5µm	92mm	50mm
3280-100A	75-100mm	5µm	118mm	62mm
3280-125A	100-125mm	6µm	143mm	70mm
3280-150A	125-150mm	6µm	168mm	82mm
3280-175A	150-175mm	7µm	192mm	95mm
3280-200A	175-200mm	7µm	217mm	107mm

DIGITAL UNIVERSAL MICROMETERS

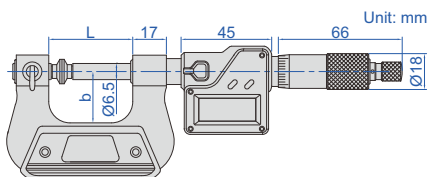
DATA
OUTPUT

NON-ROTATING
SPINDLE



3580-25A

- Resolution 0.001mm/0.00005"
- Non-rotating spindle
- Button function: on/off, set, mm/inch, data transmit
- Data output
- Automatic power off
- Ratchet stop
- Supplied with 7 pairs of anvil/spindle tip
- Setting standards are included (except 0-25mm/0-1")
- Optional accessory: 55° anvil/spindle tip code **3280-SP1** and **3280-SP2**, data output cable (code **7315-31** need receiver page 4, **7302-31** page 12)



(mm)

Code	Range	Accuracy	L	b
3580-25A	0-25mm/0-1"	±4µm	42	26
3580-50A	25-50mm/1-2"	±4µm	67	38
3580-75A	50-75mm/2-3"	±5µm	92	50
3580-100A	75-100mm/3-4"	±5µm	118	62
3580-125A	100-125mm/4-5"	±6µm	143	70
3580-150A	125-150mm/5-6"	±6µm	168	82
3580-175A	150-175mm/6-7"	±7µm	192	95
3580-200A	175-200mm/7-8"	±7µm	217	107

Anvil/spindle tip (included)

Unit: mm

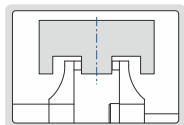
Flat		
Spherical		
Spline		
Disk		
Blade		
Knife-edge		
Point		

55° anvil/spindle tip (optional)

Unit: mm

Code 3280-SP1 Knife-edge		
Code 3280-SP2 Point		

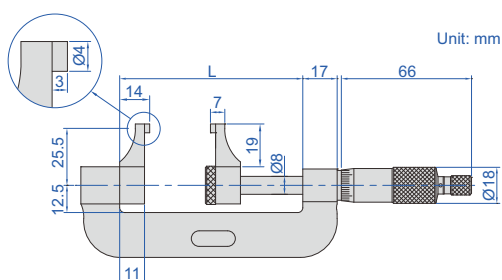
CALIPER TYPE MICROMETERS



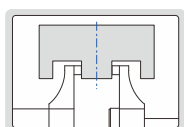
3238-25

- Graduation 0.01mm
- Non-rotating spindle
- Ratchet stop
- Carbide measuring faces
- Supplied with setting standards (except 0-25mm)

Code	Range	Accuracy	L
3238-25	0-25mm	10μm	56mm
3238-50	25-50mm	10μm	81mm
3238-75	50-75mm	11μm	106mm
3238-100	75-100mm	11μm	131mm



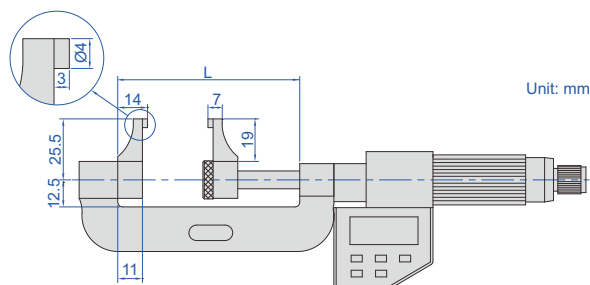
DIGITAL CALIPER TYPE MICROMETERS



3538-25

- Resolution: 0.001mm/0.00005"
- Non-rotating spindle
- Buttons: on/off, data set, mm/in, ABS/INC
- Data output
- Automatic power off
- Ratchet friction thimble
- Carbide measuring faces
- Supplied with setting standards (except 0-25mm/0-1")

Code	Range	Accuracy	L
3538-25	0-25mm/0-1"	±10μm	56mm
3538-50	25-50mm/1-2"	±10μm	81mm
3538-75	50-75mm/2-3"	±11μm	106mm
3538-100	75-100mm/3-4"	±11μm	131mm



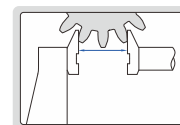
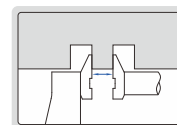
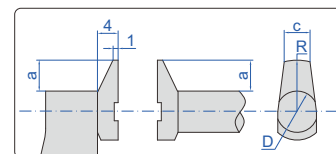
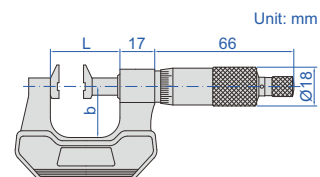
JAW TYPE MICROMETERS

NON-ROTATING
SPINDLE

- Graduation 0.01mm
- Non-rotating spindle
- Ratchet stop
- Supplied with setting standards (except 0-25mm)



3283-25A



(mm)

Code	Range	Accuracy	L	a	b	c	R	D
3283-25A	0-25mm	4μm	34	6	24	5	10	8
3283-50A	25-50mm	4μm	59	6	32	5	10	8
3283-75A	50-75mm	5μm	85	6	45	5	10	8
3283-100A	75-100mm	5μm	110	6	57	5	10	8
3283-125A	100-125mm	6μm	138	9	70	8	15	12
3283-150A	125-150mm	6μm	163	9	82	8	15	12
3283-175A	150-175mm	7μm	188	9	95	8	15	12
3283-200A	175-200mm	7μm	214	9	107	8	15	12

DIGITAL JAW TYPE MICROMETERS

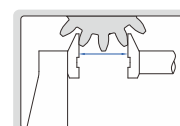
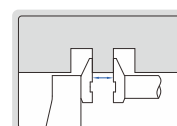
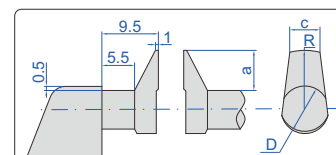
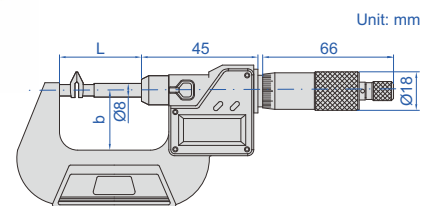
DATA
OUTPUT

NON-ROTATING
SPINDLE



3583-25A

- Resolution 0.001mm/0.00005"
- Non-rotating spindle
- Button function: on/off, set, mm/inch, data transmit
- Data output
- Automatic power off
- Ratchet stop
- Supplied with setting standards (except 0-25mm/0-1")
- Optional accessory: data output cable (code 7315-31 need receiver page 4, 7302-31 page 12)



(mm)

Code	Range	Accuracy	L	a	b	c	R	D
3583-25A	0-25mm/0-1"	±4μm	43	6.5	32	5	10	8
3583-50A	25-50mm/1-2"	±4μm	85	6.5	44.5	5	10	8
3583-75A	50-75mm/2-3"	±5μm	110	6.5	57	5	10	8
3583-100A	75-100mm/3-4"	±5μm	135	6.5	70	5	10	8
3583-125A	100-125mm/4-5"	±6μm	160	11.5	86	8	15	12
3583-150A	125-150mm/5-6"	±6μm	186	11.5	94.5	8	15	12
3583-175A	150-175mm/6-7"	±7μm	211	11.5	107	8	15	12
3583-200A	175-200mm/7-8"	±7μm	236	11.5	120	8	15	12



ATTENTION: SETTING
STANDARDS ARE NOT INCLUDED

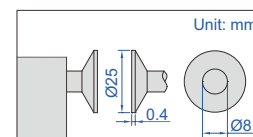
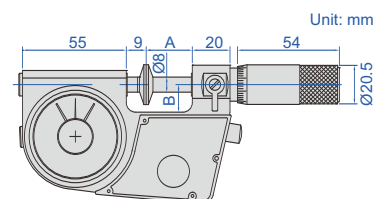
DISK INDICATING MICROMETERS

INSIZE PLUS
MADE IN EUROPE



3338-20

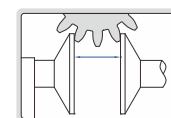
- Meet DIN863-3
- Suitable for measuring the common normal length of spur and helical gears
- Carbide measuring faces
- Measuring force 5-10N
- Optional accessory: gage blocks grade 0 (4101-A series), for zero setting



(mm)

Code	Micrometer head			Dial indicator			A	B
	range	graduation	accuracy	range	graduation	accuracy		
3338-201 *	0-20mm	0.01mm	4µm	±0.07mm	1µm	2µm	26	15
3338-20 *	0-20mm	0.01mm	4µm	±0.14mm	2µm	4µm	26	15
3338-451 *	20-45mm	0.01mm	4µm	±0.07mm	1µm	2µm	51.5	25
3338-45 *	20-45mm	0.01mm	4µm	±0.14mm	2µm	4µm	51.5	25
3338-701 *	45-70mm	0.01mm	4µm	±0.07mm	1µm	2µm	76.5	37
3338-70 *	45-70mm	0.01mm	4µm	±0.14mm	2µm	4µm	76.5	37
3338-951 *	70-95mm	0.01mm	4µm	±0.07mm	1µm	2µm	101.5	52.5
3338-95 *	70-95mm	0.01mm	4µm	±0.14mm	2µm	4µm	101.5	52.5
3338-120 *	95-120mm	0.01mm	4µm	±0.14mm	2µm	2µm	126.5	65
3338-145 *	120-145mm	0.01mm	4µm	±0.14mm	2µm	4µm	126.5	77.5

* Supplied with manufacturer inspection certificate



6

ATTENTION: SETTING
STANDARDS ARE NOT INCLUDED

DISK MICROMETERS

INSIZE PLUS
MADE IN EUROPE

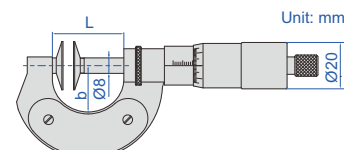
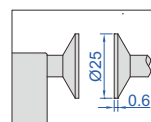
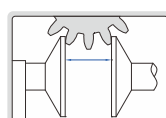
- Graduation: 0.01mm
- Ratchet stop
- One turn of sleeve makes 0.5mm spindle feed
- Optional accessory: setting standards (code 7386)



3676-25

(mm)

Code	Range	Accuracy	L	b
3676-25	0-25mm	4µm	37	24
3676-50	25-50mm	4µm	62	34
3676-75	50-75mm	5µm	87	46
3676-100	75-100mm	5µm	112	60
3676-125	100-125mm	6µm	139	72
3676-150	125-150mm	6µm	164	85
3676-175	150-175mm	7µm	190	97
3676-200	175-200mm	7µm	215	110
3676-225	200-225mm	8µm	240	122
3676-250	225-250mm	8µm	264	135
3676-275	250-275mm	9µm	290	148
3676-300	275-300mm	9µm	315	160

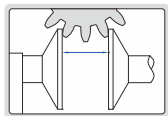


LARGE RANGE DISK MICROMETERS

INSIZE PLUS
MADE IN EUROPE

ATTENTION: SETTING
STANDARDS ARE NOT INCLUDED

LIGHT
WEIGHT



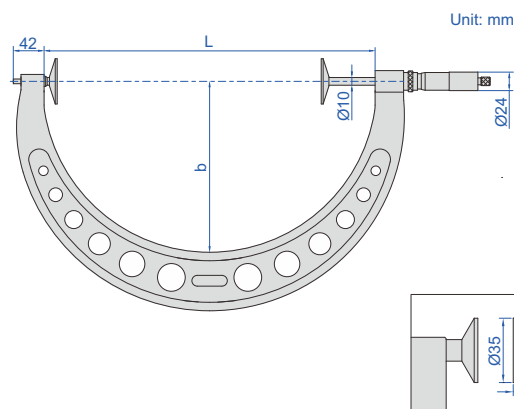
- Graduation: 0.01mm
- Ratchet stop
- Quick measurement, one turn of sleeve makes 1mm spindle feed
- Light weight
- Optional accessory: setting standards (code 7386)



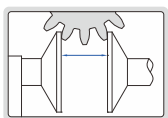
3677-350

(mm)

Code	Range	Accuracy	L	b	Weight
3677-350	300-350mm	8μm	370	190	1.65kg
3677-400	350-400mm	8μm	430	220	1.95kg
3677-450	400-450mm	9μm	475	250	2.30kg
3677-500	450-500mm	9μm	530	273	2.45kg
3677-550	500-550mm	10μm	570	291	2.55kg
3677-600	550-600mm	10μm	630	323	3.15kg
3677-650	600-650mm	10μm	675	351	3.45kg
3677-700	650-700mm	10μm	730	378	3.85kg
3677-750	700-750mm	10μm	785	401	4.05kg
3677-800	750-800mm	10μm	830	423	4.25kg
3677-850	800-850mm	11μm	885	440	4.45kg
3677-900	850-900mm	11μm	930	473	5.05kg
3677-950	900-950mm	11μm	980	503	5.95kg
3677-1000	950-1000mm	11μm	1030	520	6.25kg



DISK MICROMETERS



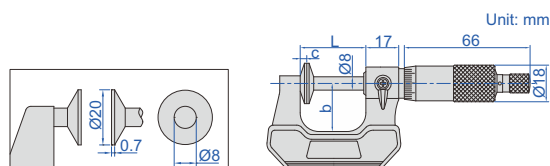
- Measure root tangent length of gear
- Graduation 0.01mm
- Ratchet stop
- Supplied with setting standards



3282-25

(mm)

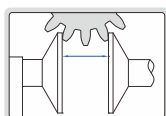
Code	Range	Accuracy	Parallelism	L	b	c
3282-25	0-25mm	4μm	5μm	34	24	3.3
3282-50	25-50mm	4μm	5μm	59	32	3.3
3282-75	50-75mm	5μm	5μm	85	45	3.3
3282-100	75-100mm	5μm	5μm	110	57	3.3



NON-ROTATING SPINDLE

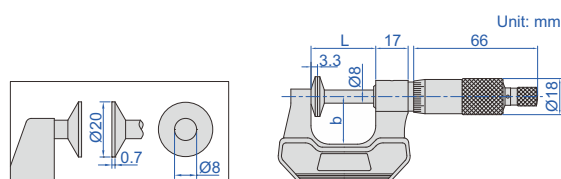
NON-ROTATING SPINDLE DISK MICROMETERS

- Measure root tangent length of gear
- Graduation 0.01mm
- Non-rotating spindle
- Ratchet stop
- Supplied with setting standards



3294-25

(mm)					
Code	Range	Accuracy	Parallelism	L	b
3294-25	0-25mm	4μm	5μm	34	24
3294-50	25-50mm	4μm	5μm	59	32
3294-75	50-75mm	5μm	5μm	85	45
3294-100	75-100mm	5μm	5μm	110	57

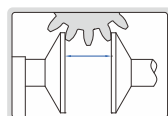


Unit: mm

DATA OUTPUT

NON-ROTATING SPINDLE

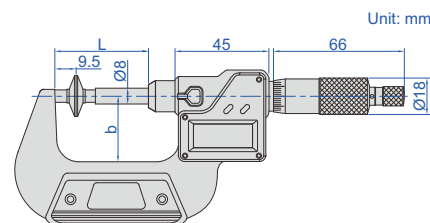
DIGITAL NON-ROTATING SPINDLE DISK MICROMETERS



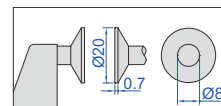
3594-25A

- Measure root tangent length of gear
- Resolution 0.001mm/0.00005"
- Non-rotating spindle
- Button function: on/off, set, mm/inch, data transmit
- Data output
- Automatic power off
- Ratchet stop
- Supplied with setting standards
- Optional accessory: data output cable (code 7315-31 need receiver page 4, 7302-31 page 12)

Code	Range	Accuracy	Parallelism	L	b
3594-25A	0-25mm/0-1"	±4μm	5μm	43mm	32mm
3594-50A	25-50mm/1-2"	±4μm	5μm	68mm	44.5mm
3594-75A	50-75mm/2-3"	±5μm	5μm	93mm	57mm
3594-100A	75-100mm/3-4"	±5μm	5μm	118.5mm	70mm



Unit: mm



HIGH PRECISION DIGITAL DISK MICROMETERS/SNAP GAGES

DATA
OUTPUT

NON-ROTATING
SPINDLE

ONE TURN OF SLEEVE MAKES 5MM SPINDLE FEED,
PRESS THE FORK, THE SPINDLE RETRACTS 3MM

ABSOLUTE ENCODER, THE ORIGINAL
DATA REMAINS AFTER POWER OFF

MEASUREMENT ACCURACY IS NOT
AFFECTED BY THE USE OF SLEEVE

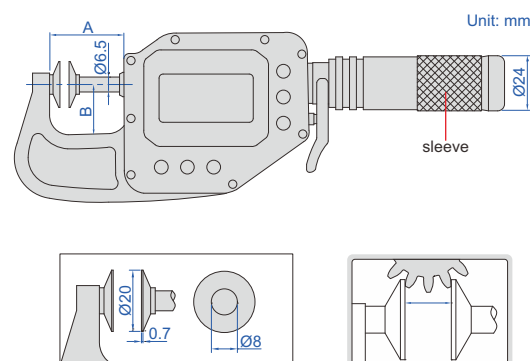
ATTENTION: RECHARGEABLE BATTERY,
FOR 24 HOURS CONTINUOUS WORKING

IP65
WATERPROOF

INSPECTION
CERTIFICATE



3353-25



- Measure root tangent length of gear
- Absolute encoder, the original data remains after power off
- Adjustable resolution: 0.0002mm/0.00001"
0.001mm/0.00005"
0.01mm/0.0005"
- One turn of sleeve makes 5mm spindle feed
- Measurement accuracy is not affected by the use of sleeve
- Press the fork, the spindle retracts 3mm
- Linear ball bearings for ten million times use
- Carbide spindle and anvil
- Measuring force 7-10N
Customizable measuring force range 2-12N
Attention: small measuring force will reduce the dustproof and waterproof level
- Button function: data output, tolerance, data preset, data hold, measuring direction change, max./min./TIR, power off time, on/off, zero, mm/inch, adjust resolution
- Supplied with gage blocks for zero setting
- Power: rechargeable battery, for 24 hours continuous working

With data interface

Optional accessory:

wireless transmitter, code **7315-3350** need receiver page 6

data output cable (keyboard format), code **7302-3350** page 13

Code	Range	Accuracy	Repeatability	Parallelism	A	B
3353-25 *	0-25mm/0-1"	4μm	1μm	4μm	38mm	24mm
3353-50 *	25-50mm/1-2"	4μm	1μm	4μm	63mm	25mm
3353-75 *	50-75mm/2-3"	5μm	1μm	5μm	88mm	42mm
3353-100 *	75-100mm/3-3.95"	5μm	1μm	5μm	113mm	56mm
3353-125 *	100-125mm/4-5"	6μm	2μm	6μm	128mm	62.5mm
3353-150 *	125-150mm/5-6"	6μm	2μm	6μm	153mm	75mm

Built-in wireless

Optional accessory:

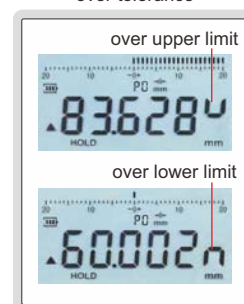
wireless receiver (keyboard format, connect up to 15 digital indicators), code **2134-R1**

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

Code	Range	Accuracy	Repeatability	Parallelism	A	B
3353-25WL *	0-25mm/0-1"	4μm	1μm	4μm	38mm	24mm
3353-50WL *	25-50mm/1-2"	4μm	1μm	4μm	63mm	25mm
3353-75WL *	50-75mm/2-3"	5μm	1μm	5μm	88mm	42mm
3353-100WL *	75-100mm/3-3.95"	5μm	1μm	5μm	113mm	56mm
3353-125WL *	100-125mm/4-5"	6μm	2μm	6μm	128mm	62.5mm
3353-150WL *	125-150mm/5-6"	6μm	2μm	6μm	153mm	75mm

* Supplied with manufacturer inspection certificate

alarm when
over tolerance



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



SHEET METAL MICROMETERS

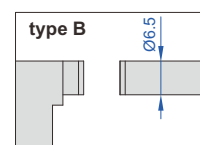
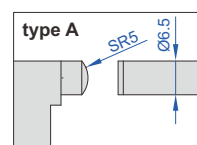
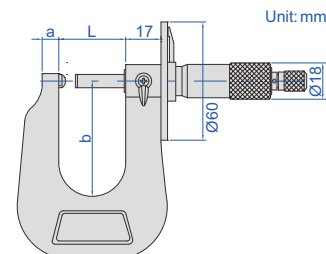
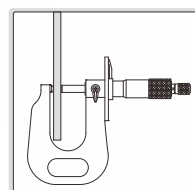
- Meet DIN863-3
- Measure thickness of sheet metal, paper, plastic and rubber parts
- Graduation 0.01mm
- Ratchet stop
- Carbide measuring faces



3263-25A

(mm)

Code	Range	Type	Accuracy	L	a	b
3263-15A	0-15mm	A	4μm	22	8	50
3263-25A	0-25mm	A	4μm	32	8	50
3263-50A	0-50mm	A	5μm	57	12	100
3263-15B	0-15mm	B	4μm	22	8	50
3263-25B	0-25mm	B	4μm	32	8	50
3263-50B	0-50mm	B	5μm	57	12	100



6

MICROMETERS FOR HOT PLATE

- Measure thickness of hot rolling sheet metal
- Carbide measuring faces
- Supplied with setting standard (except 0-15mm)

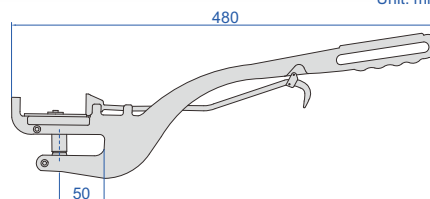


VIDEO



3264-15

Unit: mm



Code	Range	Graduation	Accuracy
3264-15	0-15mm	0.05mm	0.05mm
3264-30	15-30mm	0.05mm	0.05mm
3264-45	30-45mm	0.05mm	0.05mm
3264-60	45-60mm	0.05mm	0.05mm
3264-75	60-75mm	0.05mm	0.05mm
3264-90	75-90mm	0.05mm	0.05mm
3264-105	90-105mm	0.05mm	0.05mm

HUB MICROMETERS

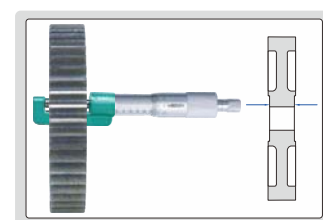
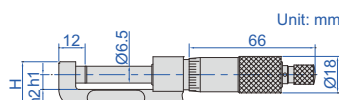
- Meet DIN863-3
- Measure hub thickness and shoulder inside a bore
- Graduation 0.01mm
- Ratchet stop
- Carbide measuring faces
- Supplied with setting standards (except 0-25mm)



3292-25

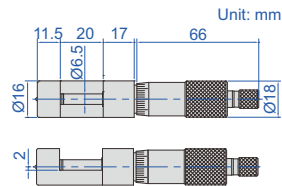
(mm)

Code	Range	Accuracy	h1	h2	H
3292-25	0-25mm	4μm	6	9	18.7
3292-50	25-50mm	4μm	6.5	11	21.2
3292-75	50-75mm	5μm	6.5	11	21.2
3292-100	75-100mm	5μm	6.5	11	21.2

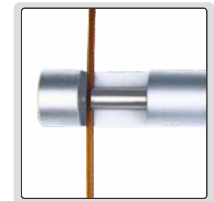


WIRE MICROMETER

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



3285-10



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

6

CAN SEAM MICROMETERS



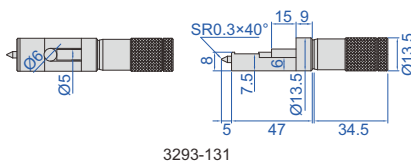
3293-131



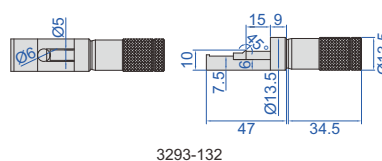
3293-132



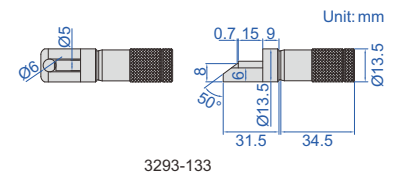
3293-133



3293-131



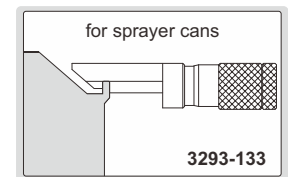
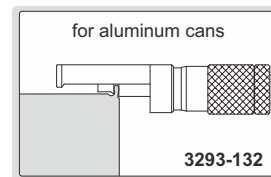
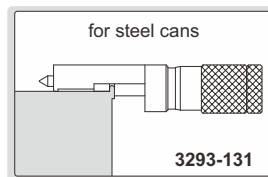
3293-132



3293-133

- Measure the width, height and depth of can seams
- Graduation 0.01mm

Code	Range	Accuracy
3293-131	0-13mm	4µm
3293-132	0-13mm	4µm
3293-133	0-13mm	4µm



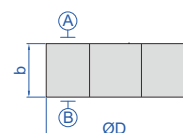
OPTICAL PARALLELS

- Check the flatness and parallelism of measuring faces of micrometer
- Flatness of A and B: 0.1µm
- Parallelism between A and B: 0.6µm



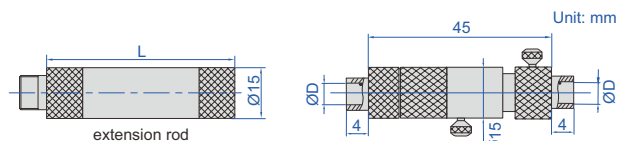
4184-41A

Code	Parallels included (b)	ØD	Applicable micrometer
4184-41A	15.62mm, 15.75mm, 15.87mm, 16.00mm	30mm	0-25mm
4184-42A	40.62mm, 40.75mm, 40.87mm, 41.00mm	30mm	25-50mm
4184-43B	65.62mm, 65.75mm, 65.87mm, 66.00mm	40mm	50-75mm
4184-44B	90.62mm, 90.75mm, 90.87mm, 91.00mm	50mm	75-100mm



MEASURING TIPS DIAMETER
ØD CAN BE CUSTOMIZED

PARALLELISM INSPECT DEVICES FOR OUTSIDE MICROMETERS



4199-1000



- Check parallelism of outside micrometers
- Simple structure, wide measuring range, high reliability
- Stainless steel measuring tips and extension rod
- Supplied with two kinds of measuring tips

Code	Range	Measuring tips dia. (ØD)	Extension rod (L)
4199-1000	50-1000mm	6.5mm, 8mm	15mm, 25mm, 50mm, 100mm (3 pcs), 150mm, 200mm (2 pcs)
4199-2000	50-2000mm	6.5mm, 8mm	15mm, 25mm, 50mm, 100mm (3 pcs), 150mm, 200mm (7 pcs)

6

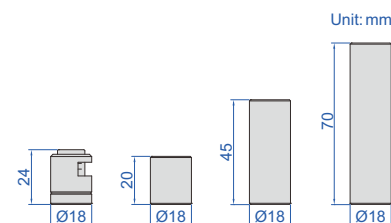
MICROMETER MEASURING FORCE DETECTOR

- For outside micrometers
0-25mm/0-1", 25-50mm/1-2",
50-75mm/2-3" and 75-100mm/3-4"

Code	Measuring force
6315	5-12N



6315



REFER TO PAGE
326-327 FOR DETAILS

MICROMETER INSPECTION GAGE BLOCK SETS



4107-10



4160-10

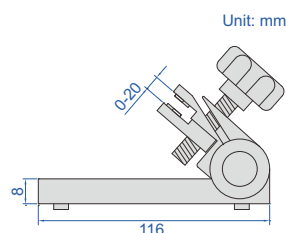
MICROMETER STAND

- Suitable for outside micrometers
up to 100mm

Code
6300



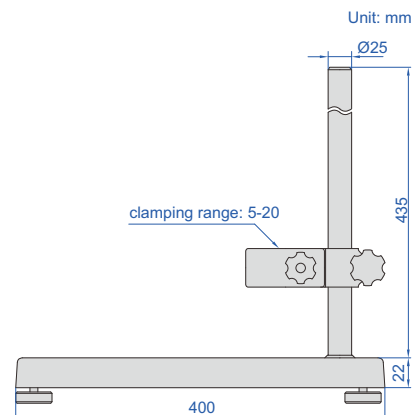
6300



MICROMETER STAND



6302

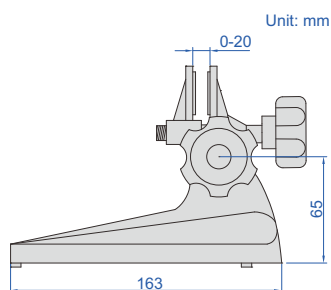


Code
6302

- Suitable for 100-300mm outside micrometers (except 3675 series)

MICROMETER STAND

- Suitable for outside micrometers up to 100mm

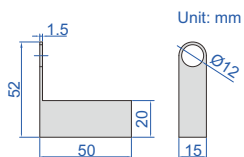


Code
6301



6301

- Suitable for inside micrometers



6301-1

Code

Description

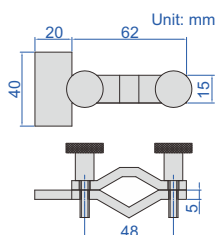
Applicable products

6301-1

clamp for inside micrometers

all sizes of 3220 series

- Suitable for three points internal micrometers



6301-2

Code

Description

Applicable products

6301-2

clamp for three points internal micrometers

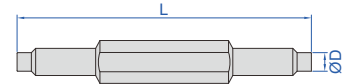
up to 100mm of 3127 and 3227 series

MICROMETER SETTING STANDARDS

INSIZE PLUS
MADE IN EUROPE



7386-100



■ Suitable for outside micrometers

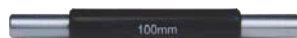
Code	Length (L)	Accuracy	ØD
7386-25	25mm	±1.25µm	6.5mm
7386-50	50mm	± 1.25µm	6.5mm
7386-75	75mm	± 1.5µm	6.5mm
7386-100	100mm	± 2µm	6.5mm
7386-125	125mm	± 2.5µm	6.5mm
7386-150	150mm	± 2.5µm	6.5mm
7386-175	175mm	± 2.5µm	6.5mm
7386-200	200mm	± 3µm	6.5mm
7386-225	225mm	± 3µm	6.5mm
7386-250	250mm	± 3µm	6.5mm
7386-275	275mm	±3µm	6.5mm
7386-300	300mm	±3µm	10mm
7386-325	325mm	±3.5µm	10mm
7386-350	350mm	±3.5µm	10mm
7386-375	375mm	±3.5µm	10mm
7386-400	400mm	±3.5µm	10mm

Code	Length (L)	Accuracy	ØD
7386-425	425mm	±3.5µm	10mm
7386-450	450mm	±3.5µm	10mm
7386-475	475mm	±3.5µm	10mm
7386-500	500mm	±3.5µm	10mm
7386-525	525mm	±3.5µm	10mm
7386-550	550mm	±3.5µm	10mm
7386-575	575mm	±3.5µm	10mm
7386-600	600mm	±3.5µm	10mm
7386-625	625mm	±4µm	10mm
7386-650	650mm	±4µm	10mm
7386-675	675mm	±4µm	10mm
7386-700	700mm	±4µm	10mm
7386-725	725mm	±4µm	10mm
7386-750	750mm	±4µm	10mm
7386-775	775mm	±4µm	10mm
7386-800	800mm	±4µm	10mm
7386-825	825mm	±4µm	10mm

Code	Length (L)	Accuracy	ØD
7386-850	850mm	±4µm	10mm
7386-875	875mm	±4µm	10mm
7386-900	900mm	±5µm	10mm
7386-925	925mm	±5µm	10mm
7386-950	950mm	±5µm	10mm
7386-975	975mm	±5µm	10mm
7386-1000	1000mm	±5µm	10mm
7386-1050	1050mm	±5µm	10mm
7386-1150	1150mm	±6µm	10mm
7386-1250	1250mm	±7µm	10mm
7386-1350	1350mm	±7µm	10mm
7386-1450	1450mm	±7µm	10mm
7386-1550	1550mm	±9µm	10mm
7386-1650	1650mm	±10µm	10mm
7386-1750	1750mm	±10µm	10mm
7386-1850	1850mm	±11µm	10mm
7386-1950	1950mm	±12µm	10mm

6

MICROMETER SETTING STANDARDS



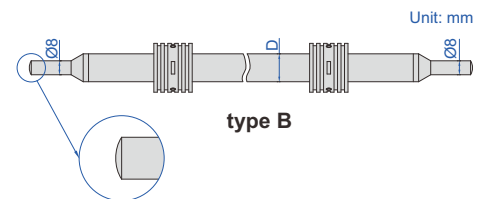
6310-100



type A



6310-300



type B

Unit: mm

Code	Length	Type	Accuracy	D
6310-25	25	A	±1.5µm	Ø7
6310-50	50	A	±2µm	Ø7
6310-75	75	A	±2.5µm	Ø7
6310-100	100	A	±3µm	Ø8
6310-125	125	A	±3.5µm	Ø8
6310-150	150	A	±4µm	Ø8
6310-175	175	A	±4.5µm	Ø8
6310-200	200	A	±5µm	Ø8
6310-225	225	A	±5.5µm	Ø8
6310-250	250	A	±6µm	Ø8
6310-275	275	A	±6.5µm	Ø8
6310-300	300	B	±7µm	Ø16
6310-325	325	B	±7.5µm	Ø16
6310-350	350	B	±8µm	Ø16
6310-375	375	B	±8.5µm	Ø16

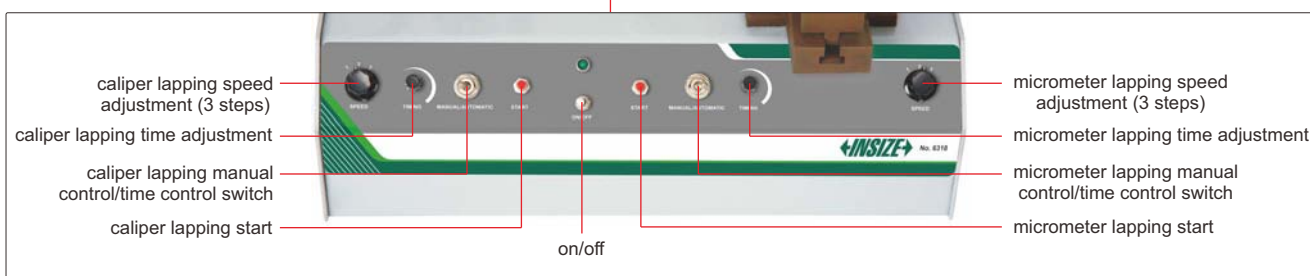
Code	Length	Type	Accuracy	D
6310-400	400	B	±9µm	Ø16
6310-425	425	B	±9.5µm	Ø16
6310-450	450	B	±10µm	Ø16
6310-475	475	B	±10.5µm	Ø16
6310-500	500	B	±11µm	Ø16
6310-525	525	B	±11.5µm	Ø16
6310-575	575	B	±12.5µm	Ø16
6310-625	625	B	±13.5µm	Ø16
6310-675	675	B	±14.5µm	Ø16
6310-725	725	B	±15.5µm	Ø16
6310-775	775	B	±16.5µm	Ø16
6310-825	825	B	±17.5µm	Ø16
6310-875	875	B	±18.5µm	Ø16
6310-925	925	B	±19.5µm	Ø16
6310-975	975	B	±20.5µm	Ø16

Code	Length	Type	Accuracy	D
6310-1050	1050	B	±22µm	Ø23
6310-1150	1150	B	±24µm	Ø23
6310-1250	1250	B	±26µm	Ø23
6310-1350	1350	B	±28µm	Ø23
6310-1450	1450	B	±30µm	Ø23
6310-1550	1550	B	±32µm	Ø23
6310-1650	1650	B	±34µm	Ø23
6310-1750	1750	B	±36µm	Ø23
6310-1850	1850	B	±38µm	Ø23
6310-1950	1950	B	±40µm	Ø23

CALIPER/MICROMETER LAPPING MACHINE CODE 6318



6



lapping measuring surfaces of caliper lower jaws



lapping measuring surfaces of outside micrometer



- For lapping measuring surfaces of caliper lower jaws and outside micrometers
- Suitable for 0-300mm range calipers and 0-100mm range outside micrometers
- Supplied with lapping block and diamond paste for calipers
- Lapping blocks for micrometers are optional, diamond paste is included
- Optional accessory: micrometer lapping blocks

caliper lapping block (included)



micrometer lapping blocks (code: **6307-1**, optional)



SPECIFICATION

Power supply	220V, 50/60Hz
Dimension (L×W×H)	430×400×210mm
Weight	28kg

MICROMETER LAPPING BLOCKS (optional)

Code	For micrometer	Remark
6307-1	0~25mm	includes 4 lapping blocks
6307-2	25~50mm	includes 4 lapping blocks
6307-3	50~75mm	includes 4 lapping blocks
6307-4	75~100mm	includes 4 lapping blocks

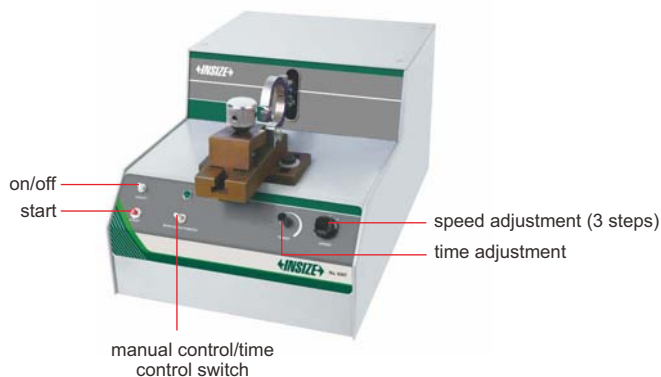


MICROMETER LAPPING MACHINE CODE 6307

- Used for lapping micrometer measuring surfaces
- Suitable for 0~100mm outside micrometers
- Supplied with diamond paste
- Optional accessory: micrometer lapping blocks

SPECIFICATION

Power supply	220V, 50/60HZ
Dimension (L×W×H)	360×230×210mm
Weight	15kg



MICROMETER LAPPING BLOCKS (optional)

Code	For micrometer	Remark
6307-1	0~25mm	includes 4 lapping blocks
6307-2	25~50mm	includes 4 lapping blocks
6307-3	50~75mm	includes 4 lapping blocks
6307-4	75~100mm	includes 4 lapping blocks

micrometer lapping blocks (code: 6307-1, optional)



6

IP65
WATERPROOF

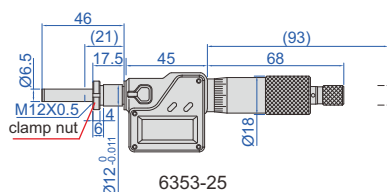
DATA
OUTPUT

DIGITAL MICROMETER HEADS

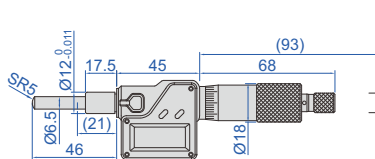
- Resolution: 0.001mm/0.00005"
- IP65 dust/waterproof
- Button function: on/off, set, mm/inch, data transmit
- Data output, automatic power off
- Ratchet stop
- Optional accessory: data output cable (code 7315-31 need receiver page 4, 7302-31 page 12)



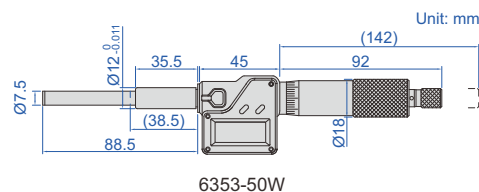
6353-25W



6353-25



6353-25WS

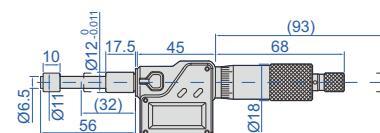


6353-50W

Unit: mm

Rotating spindle

Code	Range	Stem	Spindle tip	Accuracy
6353-25	0-25mm/0-1"	with clamp nut	flat (carbide)	±2μm
6353-25W	0-25mm/0-1"	plain	flat (carbide)	±2μm
6353-25S	0-25mm/0-1"	with clamp nut	spherical (SR5)	±2μm
6353-25WS	0-25mm/0-1"	plain	spherical (SR5)	±2μm
6353-50W	0-50mm/0-2"	plain	flat (carbide)	±4μm



6354-25W

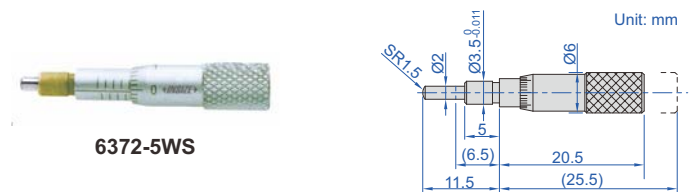
Non-rotating spindle

Code	Range	Stem	Spindle tip	Accuracy
6354-25W	0-25mm/0-1"	plain	flat	±2μm

SMALL MICROMETER HEAD

- Graduation: 0.02mm

Code	Range	Stem	Spindle tip	Accuracy
6372-5WS	0-5mm	plain	spherical (SR1.5)	5µm



6372-5WS

SMALL MICROMETER HEADS

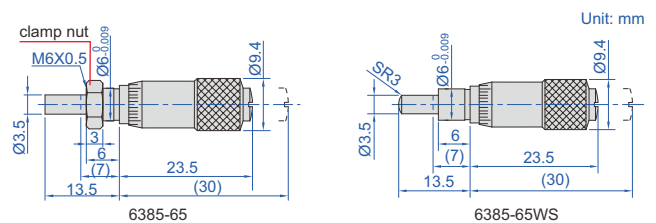
6

- Range: 0-6.5mm
- Graduation: 0.01mm
- Accuracy: 5µm



6385-65W

Code	Stem	Spindle tip
6385-65	with clamp nut	flat
6385-65W	plain	flat
6385-65S	with clamp nut	spherical (SR3)
6385-65WS	plain	spherical (SR3)



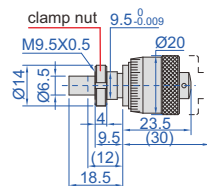
6385-65

6385-65WS

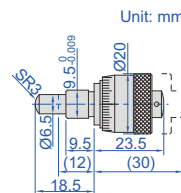
LARGE THIMBLE MICROMETER HEADS



6373-65



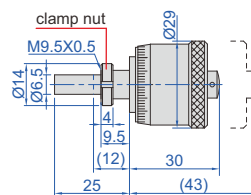
6373-65



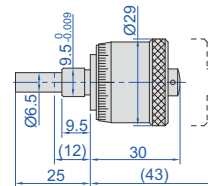
6373-65WS



6373-13



6373-13



6373-13W

Code	Range	Stem	Spindle tip
6373-65	0-6.5mm	with clamp nut	flat
6373-65W	0-6.5mm	plain	flat
6373-65S	0-6.5mm	with clamp nut	spherical (SR3)
6373-65WS	0-6.5mm	plain	spherical (SR3)
6373-13	0-13mm	with clamp nut	flat
6373-13W	0-13mm	plain	flat

- Meet DIN863-2
- Large thimble diameter for easy reading
- Graduation: 0.01mm
- Accuracy: 3µm

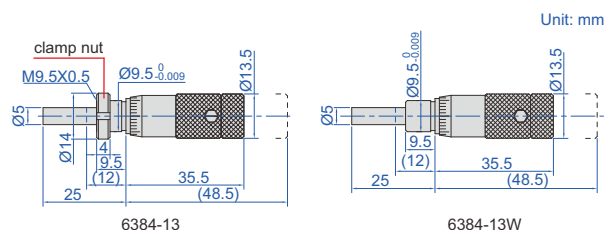
MICROMETER HEADS WITH ZERO ADJUSTABLE THIMBLE

- Meet DIN863-2
- Range: 0-13mm
- Graduation: 0.01mm
- Accuracy: 3µm
- The thimble can be set to zero at any position



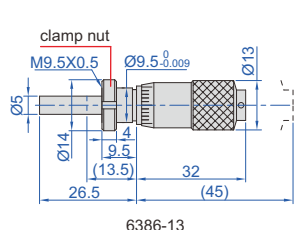
6384-13W

Code	Stem	Spindle tip
6384-13	with clamp nut	flat
6384-13W	plain	flat

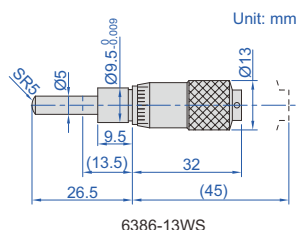


MICROMETER HEADS

6



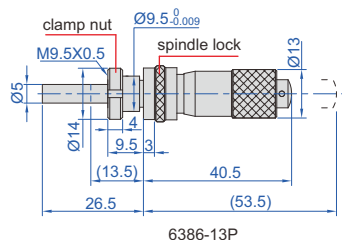
6386-13



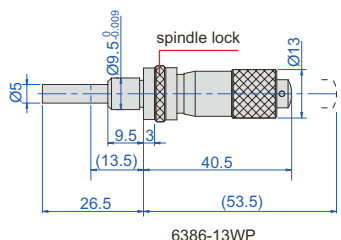
6386-13WS



6386-13W



6386-13P



6386-13WP



6386-13P

Code	Range	Stem	Spindle tip	Remark	Accuracy
6386-13	0-13mm	with clamp nut	flat		3µm
6386-13W	0-13mm	plain	flat		3µm
6386-13S	0-13mm	with clamp nut	spherical (SR5)		3µm
6386-13WS	0-13mm	plain	spherical (SR5)		3µm
6386-13P	0-13mm	with clamp nut	flat	with spindle lock	3µm
6386-13WP	0-13mm	plain	flat	with spindle lock	3µm

- Meet DIN863-2
- Graduation: 0.01mm

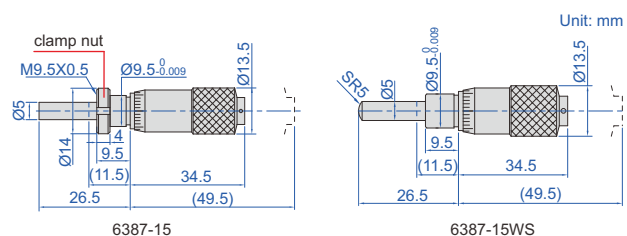
MICROMETER HEADS

- Meet DIN863-2
- Graduation: 0.01mm
- Accuracy: 3µm



6387-15WS

Code	Range	Stem	Spindle tip
6387-15	0-15mm	with clamp nut	flat
6387-15W	0-15mm	plain	flat
6387-15S	0-15mm	with clamp nut	spherical (SR5)
6387-15WS	0-15mm	plain	spherical (SR5)



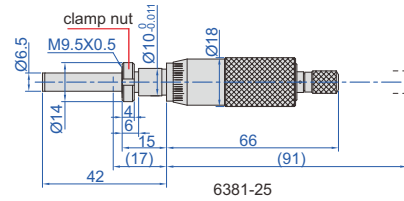
6387-15

6387-15WS

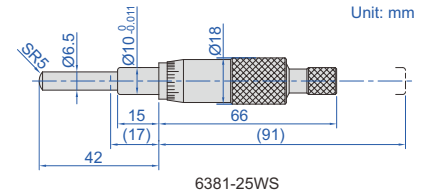
MICROMETER HEADS



6381-25



6381-25

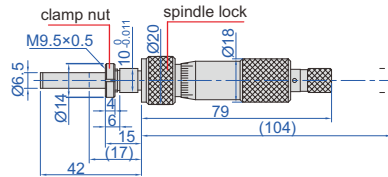


6381-25WS

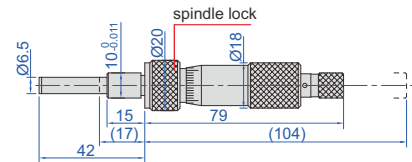
Unit: mm



6381-25P



6381-25P



6381-25WP

- Meet DIN863-2
- Graduation: 0.01mm
- Ratchet stop

Code	Range	Stem	Spindle tip	Remark	Accuracy
6381-25	0-25mm	with clamp nut	flat (carbide)		3µm
6381-25W	0-25mm	plain	flat (carbide)		3µm
6381-25S	0-25mm	with clamp nut	spherical (SR5)		3µm
6381-25WS	0-25mm	plain	spherical (SR5)		3µm
6381-25P	0-25mm	with clamp nut	flat (carbide)	with spindle lock	3µm
6381-25WP	0-25mm	plain	flat (carbide)	with spindle lock	3µm

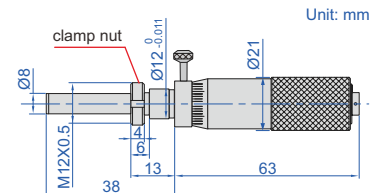
MICROMETER HEADS

NON-ROTATING
SPINDLE

- Non-rotating spindle
- One turn of sleeve makes 0.05mm spindle feed
- Carbide measuring faces



6389-1A



Unit: mm

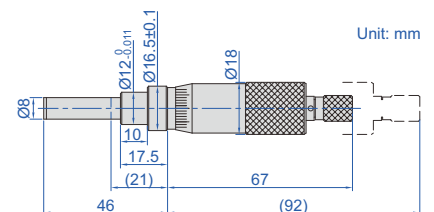
Code	Range	Graduation	Accuracy	
			full range	within 0.05mm
6389-1A	0-2.5mm	0.001mm	5µm	1.5µm
6389-2A	0-2.5mm	0.001mm	7µm	3µm

NON-ROTATING SPINDLE MICROMETER HEAD

- Meet DIN863-2
- Graduation: 0.01mm
- Ratchet stop
- Non-rotating spindle



6377-25W



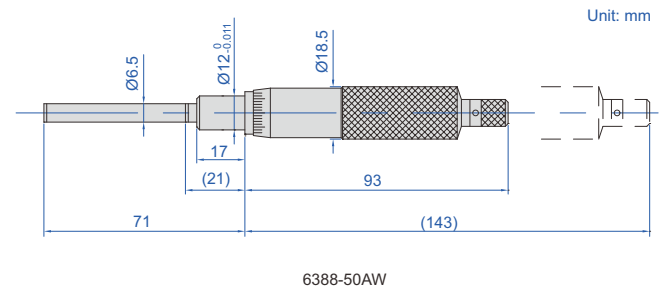
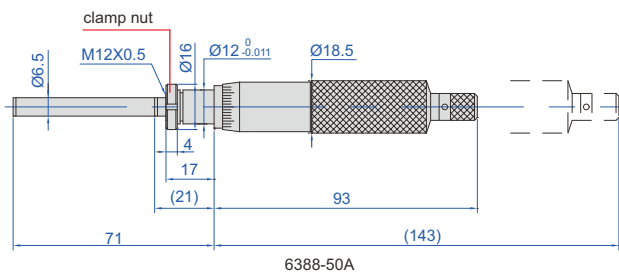
Unit: mm

Code	Range	Stem	Spindle tip	Accuracy
6377-25W	0-25mm	plain	flat (carbide)	3µm

LARGE MICROMETER HEADS



6388-50AW



- Graduation: 0.01mm
- Ratchet stop

Code	Range	Stem	Spindle tip	Accuracy
6388-50A	0-50mm	with clamp nut	flat (carbide)	5µm
6388-50AW	0-50mm	plain	flat (carbide)	5µm

QUICK SPINDLE FEEDING MICROMETER HEADS



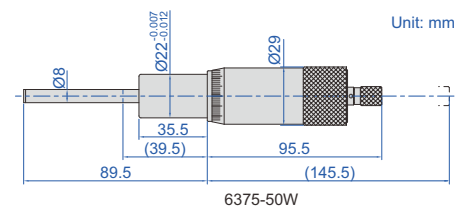
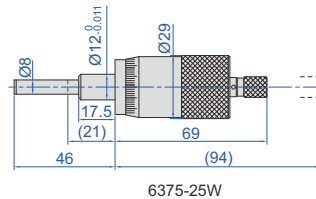
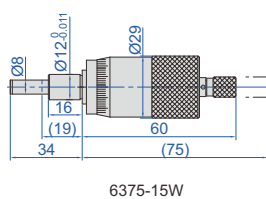
6375-15W



6375-25W



6375-50W



- Micrometers up to 25mm meet DIN863-2
- Graduation: 0.01mm
- Quick spindle feed of 1mm/rev.
- Ratchet stop

Code	Range	Stem	Spindle tip	Accuracy
6375-15W	0-15mm	plain	flat (carbide)	3µm
6375-25W	0-25mm	plain	flat (carbide)	3µm
6375-50W	0-50mm	plain	flat (carbide)	5µm



Inside Micrometers
Page 169-170



Inside Micrometers
Page 170-177



Three Points Internal Micrometers
Page 178-181



Pistol Grip Three Points Bore Gages
Page 182



Bore Plug Gages
Page 183-184



Split Type Dial Bore Gages
Page 185-186



Bore Gages
Page 187-195/197



Gear Bore Gages
Page 196



Bore Gage Setters
Page 198



Carbon Fiber Bore Gages
Page 199



Internal Chamfer Gages
Page 200



Telescoping Gage Sets
Page 200-201



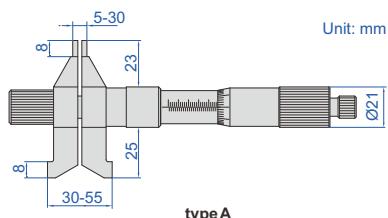
Tape Bore Gages
Page 201-202



Circumference Tapes
Page 203-204



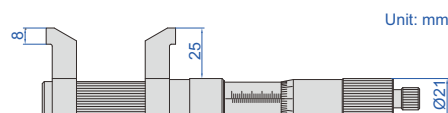
3679-55



type A



3679-75



type B

for type A, the upper jaws and lower jaws can be set zero separately



- Graduation: 0.01mm
- Carbide measuring faces
- Ratchet stop
- Optional accessory: setting ring (code **6312**), caliper/height gage checker (code **6884**)

Code	Range	Type	Accuracy
3679-55 *	5-55mm	A	4µm
3679-75 *	50-75mm	B	5µm
3679-100 *	75-100mm	B	6µm
3679-125 *	100-125mm	B	7µm
3679-150 *	125-150mm	B	8µm
3679-175 *	150-175mm	B	9µm
3679-200 *	175-200mm	B	9µm
3679-225 *	200-225mm	B	10µm
3679-250 *	225-250mm	B	10µm
3679-275 *	250-275mm	B	12µm
3679-300 *	275-300mm	B	12µm

* Supplied with manufacturer inspection certificate

Code	Range	Type	Accuracy
3679-325 *	300-325mm	B	15µm
3679-350 *	325-350mm	B	15µm
3679-375 *	350-375mm	B	16µm
3679-400 *	375-400mm	B	16µm
3679-425 *	400-425mm	B	17µm
3679-450 *	425-450mm	B	17µm
3679-475 *	450-475mm	B	18µm
3679-500 *	475-500mm	B	18µm
3679-525 *	500-525mm	B	19µm
3679-550 *	525-550mm	B	19µm
3679-575 *	550-575mm	B	20µm
3679-600 *	575-600mm	B	20µm

ATTENTION: LOW PARALLELISM
OF TWO MEASURING FACES

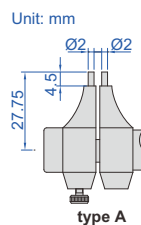
- Graduation 0.01mm
- Ratchet stop
- Carbide measuring faces
- Optional accessory: setting ring (code **6312**), micrometer stand and clamp (code **6301** and **6301-1**)

micrometer stand
with clamp (optional)



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

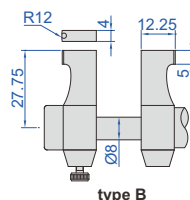
INSIDE MICROMETERS (ECONOMIC TYPE)



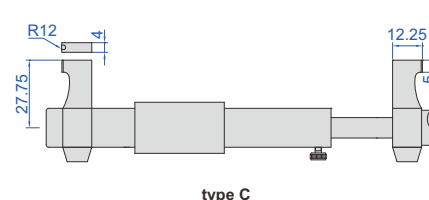
type A



3220-50



type B



type C

DIGITAL INSIDE MICROMETERS (ECONOMIC TYPE)

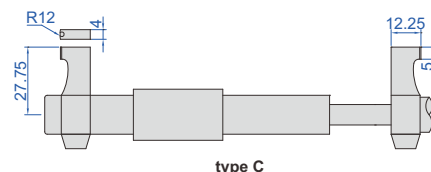
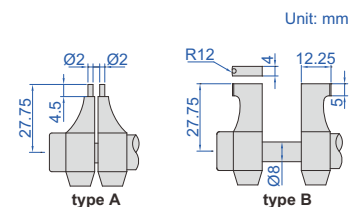
DATA
OUTPUT

ATTENTION: LOW PARALLELISM
OF TWO MEASURING FACES

- Resolution 0.001mm/0.00005"
- Button function: on/off, set, mm/inch, data transmit
- Data output
- Automatic power off
- Ratchet stop
- Carbide measuring faces
- Optional accessory: data output cable (code 7315-31 need receiver page 4, 7302-31 page 12), setting ring (code 6312)



3520-30



Code	Range	Type	Setting ring	Accuracy
3520-30	5-30mm/0.2-1.2"	A	5mm (included)	$\pm 5\mu\text{m}$
3520-50	25-50mm/1-2"	B	25mm (included)	$\pm 6\mu\text{m}$
3520-75	50-75mm/2-3"	B	50mm (optional)	$\pm 7\mu\text{m}$
3520-100	75-100mm/3-4"	C	75mm (optional)	$\pm 8\mu\text{m}$

7 INTERNAL GEAR TOOTH MICROMETERS

INSIZE PLUS
MADE IN EUROPE

INSPECTION
CERTIFICATE

- Measure over-pin diameter of gears
- Graduation: 0.01mm
- Ratchet stop
- Optional accessory: ball tips (code 7383), cylindrical tips (code 7393, only for micrometers with L=8mm)

before ball tips
are installed ball tips are optional



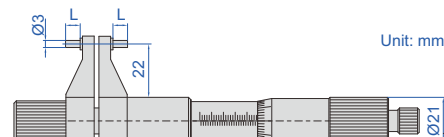
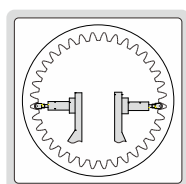
3678-50

cylindrical tips (optional)
(only for micrometers
with L=8mm)



Code	Range	Accuracy	L
3678-50*	25-50mm	4 μm	6mm
3678-75*	50-75mm	5 μm	8mm

* Supplied with manufacturer inspection certificate



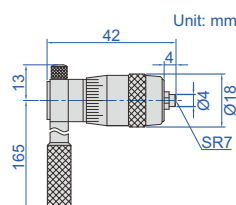
TUBULAR INSIDE MICROMETERS

- Graduation 0.01mm
- Accuracy: $(6+L/50)\mu\text{m}$
L=maximum measuring length (mm)
- Optional accessory: setting ring (code 6312), gage block accessory (code 6881), cylinder gage block (code 4001), caliper/height gage checker (code 6884)

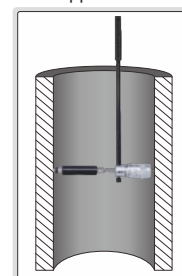


3221-200

Code	Range	Travel of micrometer head	Extension rods
3221-32	25-32mm	7mm	—
3221-50	25-50mm	7mm	2 pcs
3221-63	50-63mm	13mm	—
3221-200	50-200mm	13mm	6 pcs
3221-300	50-300mm	13mm	10 pcs
3221-225	200-225mm	25mm	—
3221-500	200-500mm	25mm	3 pcs
3221-1000	200-1000mm	25mm	8 pcs



application



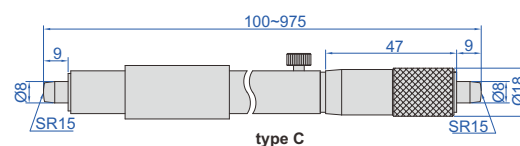
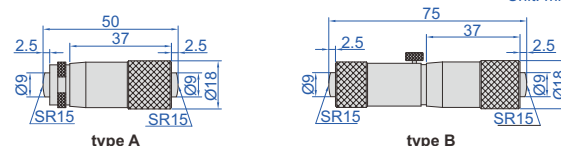
TUBULAR INSIDE MICROMETERS

- Micrometers up to 500mm meet DIN863-4
- Graduation 0.01mm
- Carbide measuring faces
- Optional accessory: gage block accessory (code **6881**), cylinder gage block (code **4001**), caliper/height gage checker (code **6884**)



3229-225

Unit: mm



Code	Range	Type	Accuracy
3229-75	50-75mm	A	5μm
3229-100	75-100mm	B	5μm
3229-125	100-125mm	C	6μm
3229-150	125-150mm	C	6μm
3229-175	150-175mm	C	7μm
3229-200	175-200mm	C	7μm
3229-225	200-225mm	C	8μm
3229-250	225-250mm	C	8μm
3229-275	250-275mm	C	9μm
3229-300	275-300mm	C	9μm
3229-325	300-325mm	C	9μm
3229-350	325-350mm	C	9μm
3229-375	350-375mm	C	10μm
3229-400	375-400mm	C	10μm
3229-425	400-425mm	C	10μm
3229-450	425-450mm	C	10μm
3229-475	450-475mm	C	11μm
3229-500	475-500mm	C	11μm
3229-525	500-525mm	C	11μm
3229-550	525-550mm	C	11μm
3229-575	550-575mm	C	11μm
3229-600	575-600mm	C	12μm
3229-625	600-625mm	C	12μm
3229-650	625-650mm	C	12μm
3229-675	650-675mm	C	13μm
3229-700	675-700mm	C	13μm

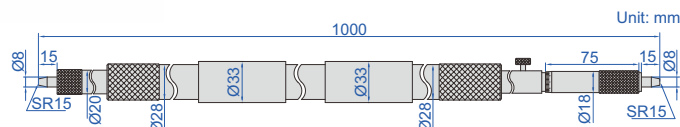
Code	Range	Type	Accuracy
3229-725	700-725mm	C	13μm
3229-750	725-750mm	C	14μm
3229-775	750-775mm	C	14μm
3229-800	775-800mm	C	14μm
3229-825	800-825mm	C	15μm
3229-850	825-850mm	C	15μm
3229-875	850-875mm	C	15μm
3229-900	875-900mm	C	16μm
3229-925	900-925mm	C	16μm
3229-950	925-950mm	C	16μm
3229-975	950-975mm	C	17μm
3229-1000	975-1000mm	C	17μm

7

TUBULAR INSIDE MICROMETERS



3224-2000



Code	Range	Extension rods
3224-2000	1000-2000mm	50mm, 100mm (2 pcs), 200mm, 500mm
3224-3000	1000-3000mm	50mm, 100mm (2 pcs), 200mm, 500mm, 1000mm
3224-4000	1000-4000mm	50mm, 100mm (2 pcs), 200mm, 500mm, 1000mm (2 pcs)
3224-5000	1000-5000mm	50mm, 100mm (2 pcs), 200mm, 500mm, 1000mm (3 pcs)

- Micrometer head: 1000-1050mm
- Graduation 0.01mm
- Accuracy: $(7+n+L/50)\mu\text{m}$
n=number of rods
L=maximum measuring length (mm)
- Travel of micrometer head 50mm
- Carbide measuring faces

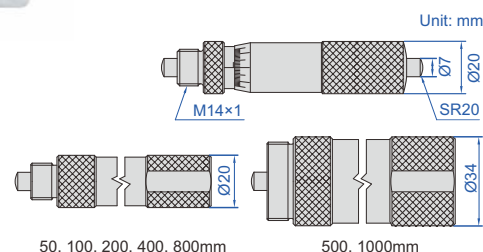
TUBULAR INSIDE MICROMETERS

INSIZE PLUS
MADE IN EUROPE



3683-200

- Micrometer head: 100-150mm
- Graduation: 0.01mm
- Carbide measuring faces
- Heat insulation extension rods



Code	Range	Accuracy	Travel of micrometer head	Heat insulation extension rods
3683-150	100-150mm	6µm	50mm	—
3683-200	100-200mm	7µm	50mm	50mm
3683-300	100-300mm	9µm	50mm	50mm, 100mm
3683-500	100-500mm	13µm	50mm	50mm, 100mm, 200mm
3683-900	100-900mm	16µm	50mm	50mm, 100mm, 200mm, 400mm
3683-1300	100-1300mm	22µm	50mm	50mm, 100mm, 200mm, 400mm (2 pcs)
3683-1700	100-1700mm	27µm	50mm	50mm, 100mm, 200mm, 400mm, 800mm
3683-2000	100-2000mm	32µm	50mm	50mm, 100mm, 200mm (2 pcs), 500mm, 1000mm
3683-2100	100-2100mm	32µm	50mm	50mm, 100mm, 200mm, 400mm (2 pcs), 800mm
3683-2500	100-2500mm	40µm	50mm	50mm, 100mm, 200mm, 400mm, 800mm (2 pcs)
3683-3000	100-3000mm	50µm	50mm	50mm, 100mm, 200mm (2 pcs), 500mm, 1000mm (2 pcs)
3683-4000	100-4000mm	60µm	50mm	50mm, 100mm, 200mm (2 pcs), 500mm, 1000mm (3 pcs)
3683-5000	100-5000mm	72µm	50mm	50mm, 100mm, 200mm (2 pcs), 500mm, 1000mm (4 pcs)
3683-6000	100-6000mm	90µm	50mm	50mm, 100mm, 200mm (2 pcs), 500mm, 1000mm (5 pcs)

7

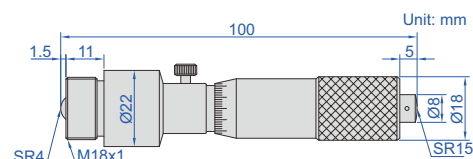
TUBULAR INSIDE MICROMETERS

- Micrometer head: 100-125mm
- Graduation 0.01mm
- Accuracy: $(3+n+L/50)\mu\text{m}$
n=number of rods
L=maximum measuring length (mm)
- Travel of micrometer head 25mm
- Supplied with setting standards
- Carbide measuring faces



3225-500

Code	Range	Extension rods
3225-125	100-125mm	—
3225-500	100-500mm	25mm, 50mm, 100mm, 200mm
3225-900	100-900mm	25mm, 50mm, 100mm, 200mm, 400mm
3225-1300	100-1300mm	25mm, 50mm, 100mm, 200mm, 400mm (2 pcs)
3225-1700	100-1700mm	25mm, 50mm, 100mm, 200mm, 400mm (3 pcs)
3225-2100	100-2100mm	25mm, 50mm, 100mm, 200mm, 400mm (4 pcs)

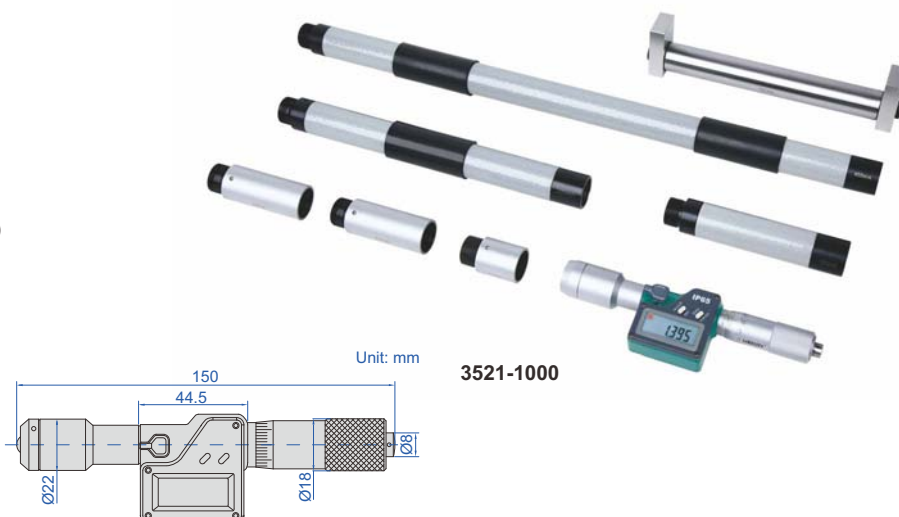


DIGITAL TUBULAR INSIDE MICROMETERS

IP65
WATERPROOF

DATA
OUTPUT

- Micrometer head: 150-175mm
- Resolution: 0.001mm/0.00005"
- Accuracy: $(3+n+L/50)\mu\text{m}$
n=number of rods
L=maximum measuring length (mm)
- Carbide measuring faces
- The diameter of extension rods is 22mm
- IP65 dust/waterproof
- Button function: on/off, set, mm/inch, data transmit
- Data output
- Automatic power off
- Supplied with setting standards
- Optional accessory: data output cable (code 7315-31 need receiver page 4, 7302-31 page 12)



3521-1000

Code	Range	Travel of micrometer head	Extension rods
3521-175	150-175mm	25mm	—
3521-1000	150-1000mm	25mm	25mm, 50mm (2 pcs), 100mm, 200mm, 400mm
3521-1500	150-1500mm	25mm	25mm, 50mm (2 pcs), 100mm (2 pcs), 200mm, 400mm (2 pcs)
3521-2000	150-2000mm	25mm	25mm, 50mm (2 pcs), 100mm, 200mm (2 pcs), 400mm (3 pcs)

TUBULAR INSIDE MICROMETERS

INSIZE PLUS
MADE IN EUROPE

- Carbide measuring faces for micrometer head and extension rods
- Points of extension rods are spring loaded
- Optional accessory:
gage block accessory (code 6881),
cylinder gage block (code 4001),
caliper/height gage checker (code 6884)



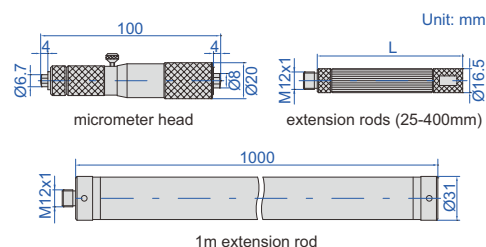
3634-1300

Micrometer head

Range	Graduation	Accuracy	Weight
100-125mm	0.01mm	$\pm 4\mu\text{m}$	154g

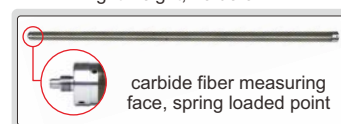
Extension rods

Length (L)	Accuracy	Weight	Material
25mm	$\pm 1.25\mu\text{m}$	37g	steel
50mm	$\pm 1.25\mu\text{m}$	65g	steel
100mm	$\pm 2\mu\text{m}$	113g	steel
200mm	$\pm 3.5\mu\text{m}$	208g	steel
400mm	$\pm 4.5\mu\text{m}$	402g	steel
1000mm	$\pm 7.5\mu\text{m}$	909g	carbon fiber



Code	Range	Extension rods
3634-350	100-350mm	25mm, 200mm
3634-500	100-500mm	25mm, 50mm, 100mm, 200mm
3634-1300	100-1300mm	25mm, 50mm, 100mm, 200mm, 400mm (2 pcs)
3634-1500	100-1500mm	25mm, 50mm, 100mm, 200mm (2 pcs), 400mm (2 pcs)
3634-2100	100-2100mm	25mm, 50mm, 100mm, 200mm, 400mm (4 pcs)
3634-3100	100-3100mm	25mm, 50mm, 100mm, 200mm (2 pcs), 400mm, 1000mm (2 pcs)
3634-4100	100-4100mm	25mm, 50mm, 100mm, 200mm (2 pcs), 400mm, 1000mm (3 pcs)
3634-5100	100-5100mm	25mm, 50mm, 100mm, 200mm (2 pcs), 400mm, 1000mm (4 pcs)
3634-6100	100-6100mm	25mm, 50mm, 100mm, 200mm (2 pcs), 400mm, 1000mm (5 pcs)

1m carbon fiber extension rod,
light weight, no deform



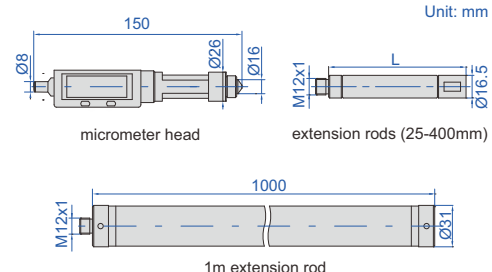
DATA
OUTPUT

SPRING LOADED
MEASURING POINT

DIGITAL NON-ROTATING SPINDLE TUBULAR INSIDE MICROMETERS

INSIZE PLUS
MADE IN EUROPE

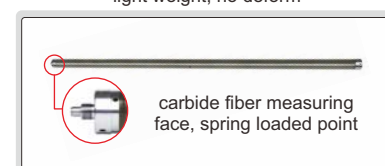
NON-ROTATING
SPINDLE



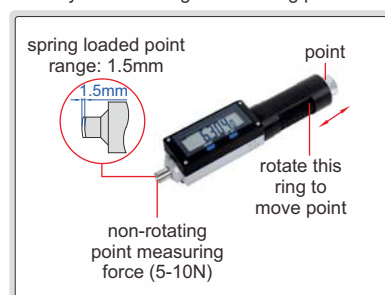
Unit: mm

- Carbide measuring faces for micrometer head and extension rods
- Points of extension rods are spring loaded
- Data output
- Button function: mm/inch, max./min. value tracking, preset value, hold, on/off, zero
- CR2032 battery, automatic power off, turn the sleeve to turn on
- Optional accessory: data output cable (code **7315-80** need receiver page 5, **7302-80**), gage block accessory (code **6881**), cylinder gage block (code **4001**), caliper/height gage checker (code **6884**)

1m carbon fiber extension rod,
light weight, no deform



non-rotating spindle, spring loaded point
and max./min. value tracking make it
easy to find the right measuring position



Extension rods

Length (L)	Accuracy	Weight	Material
25mm	±1.25µm	37g	steel
50mm	±1.25µm	65g	steel
100mm	±2µm	113g	steel
200mm	±3.5µm	208g	steel
400mm	±4.5µm	402g	steel
1000mm	±7.5µm	909g	carbon fiber

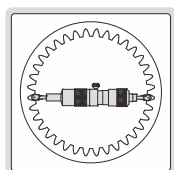
Micrometer head

Range	Resolution	Accuracy	Repeatability	Measuring force	Weight
150-180mm	0.001mm/0.00005" 0.01mm/0.0005" 0.0005mm/0.00002" (switchable)	±4µm	1µm	5-10N	275g

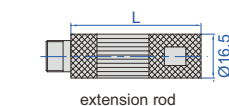
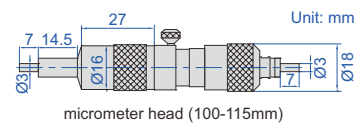
Code	Range	Extension rods
3635-350	150-350mm	25mm, 50mm, 100mm
3635-550	150-550mm	25mm, 50mm, 100mm, 200mm
3635-950	150-950mm	25mm, 50mm, 100mm, 200mm, 400mm
3635-1550	150-1550mm	25mm, 50mm, 100mm, 200mm (2 pcs), 400mm (2 pcs)
3635-2150	150-2150mm	25mm, 50mm, 100mm, 200mm, 400mm (4 pcs)
3635-3150	150-3150mm	25mm, 50mm, 100mm, 200mm (2 pcs), 400mm, 1000mm (2 pcs)
3635-4150	150-4150mm	25mm, 50mm, 100mm, 200mm (2 pcs), 400mm, 1000mm (3 pcs)
3635-5150	150-5150mm	25mm, 50mm, 100mm, 200mm (2 pcs), 400mm, 1000mm (4 pcs)
3635-6150	150-6150mm	25mm, 50mm, 100mm, 200mm (2 pcs), 400mm, 1000mm (5 pcs)

INTERNAL GEAR TOOTH MICROMETERS

INSIZE PLUS
MADE IN EUROPE



3638-200



- Measure over-pin diameter of gears
- Points of extension rods are spring loaded
- Optional accessory: ball tips (code 7383)

Micrometer head

Range	Graduation	Accuracy
100-115mm	0.01mm	±4µm
150-175mm	0.01mm	±4µm

Extension rod

Length (L)	Accuracy
15mm	±1µm
25mm	±1.25µm
30mm	±1.25µm
50mm	±1.25µm
100mm	±2µm
200mm	±3.5µm
400mm	±4.5µm

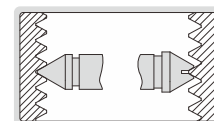
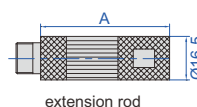
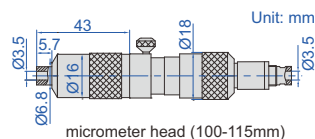
Code	Range	Micrometer head	Extension rod (L)
3638-200	100-205mm	100-115mm	15mm, 25mm, 50mm
3638-500	100-505mm	100-115mm	15mm, 25mm, 50mm, 100mm, 200mm
3638-900	100-905mm	100-115mm	15mm, 25mm, 50mm, 100mm, 200mm, 400mm
3638-1100	150-1150mm	150-175mm	25mm, 50mm, 100mm, 200mm, 200mm, 400mm

INTERNAL SCREW THREAD MICROMETERS

INSIZE PLUS
MADE IN EUROPE



3641-200



- Measure pitch diameter of screw thread
- Points of extension rods are spring loaded
- Optional accessory: measuring tips for internal screw thread micrometer (code 7385, L=13.5mm)

Micrometer head

Range	Graduation	Accuracy
100-115mm	0.01mm	±4µm
150-175mm	0.01mm	±4µm

Extension rod

Length (A)	Accuracy
15mm	±1µm
25mm	±1.25µm
50mm	±1.25µm
100mm	±2µm
200mm	±3.5µm
400mm	±4.5µm

Code	Range	Micrometer head	Extension rod (A)	Applicable tips
3641-200	100-205mm	100-115mm	15mm, 25mm, 50mm	stem length L=13.5mm
3641-500	100-505mm	100-115mm	15mm, 25mm, 50mm, 100mm, 200mm	stem length L=13.5mm
3641-900	100-905mm	100-115mm	15mm, 25mm, 50mm, 100mm, 200mm, 400mm	stem length L=13.5mm
3641-1100	150-1150mm	150-175mm	25mm, 50mm, 100mm, 200mm, 200mm, 400mm	stem length L=13.5mm

TIPS FOR TRAPEZOIDAL, ACME
THREAD ARE ALSO AVAILABLE

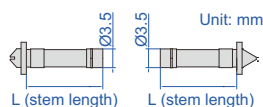
MEASURING TIPS FOR INTERNAL SCREW THREAD MICROMETERS

INSIZE PLUS
MADE IN EUROPE

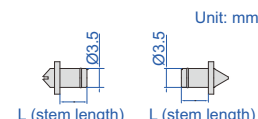
- Supplied in pair
- Made of hardened steel
- Suitable for 3641 series micrometers



7385-T106A



7385-T106B



60° thread angle

Code		Applicable pitch (mm)
L=13.5mm	L=5mm	
7385-T101A	7385-T101B	0.35
7385-T102A	7385-T102B	0.4/0.45
7385-T103A	7385-T103B	0.5/0.6
7385-T104A	7385-T104B	0.7/0.75/0.8
7385-T105A	7385-T105B	1/1.25
7385-T106A	7385-T106B	1.5/1.75
7385-T107A	7385-T107B	2.0/2.5
7385-T108A	7385-T108B	3.0/3.5
7385-T109A	7385-T109B	4.0/4.5/5.0
7385-T110A	7385-T110B	5.5/6.0

55° thread angle

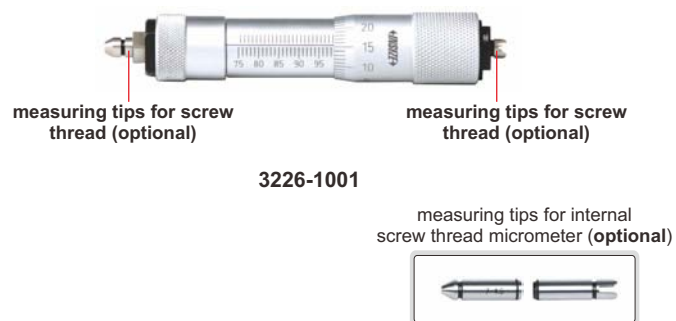
Code		Applicable pitch (TPI)
L=13.5mm	L=5mm	
7385-T201A	7385-T201B	60/48
7385-T202A	7385-T202B	40/32
7385-T203A	7385-T203B	28/26/24/22
7385-T204A	7385-T204B	20/19/18/16
7385-T205A	7385-T205B	14/12/11
7385-T206A	7385-T206B	10/9/8
7385-T207A	7385-T207B	7/6
7385-T208A	7385-T208B	5/4.5/4
7385-T209A	7385-T209B	3.5/3.25/3/2.875/2.75
7385-T210A	7385-T210B	2.625/2.5/2

INTERNAL SCREW THREAD MICROMETERS

- Graduation: 0.01mm
- Optional accessory: measuring tips for internal screw thread micrometer (code 7321)

Code	Range
3226-1001	75-100mm
3226-1251	100-125mm
3226-1501	125-150mm
3226-1751	150-175mm
3226-2001	175-200mm

Code	Range
3226-2251	200-225mm
3226-2501	225-250mm
3226-2751	250-275mm
3226-3001	275-300mm

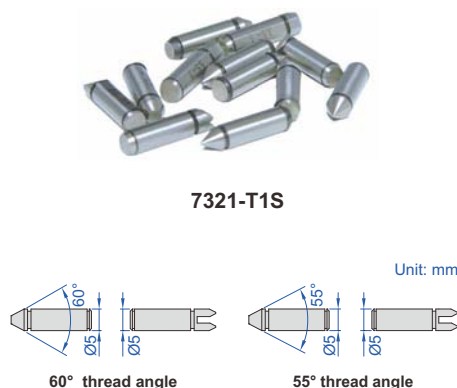


MEASURING TIPS FOR INTERNAL SCREW THREAD MICROMETERS

- Supplied in pair
- Suitable for 3226 series micrometers

Metric and unified screw (60° thread angle)

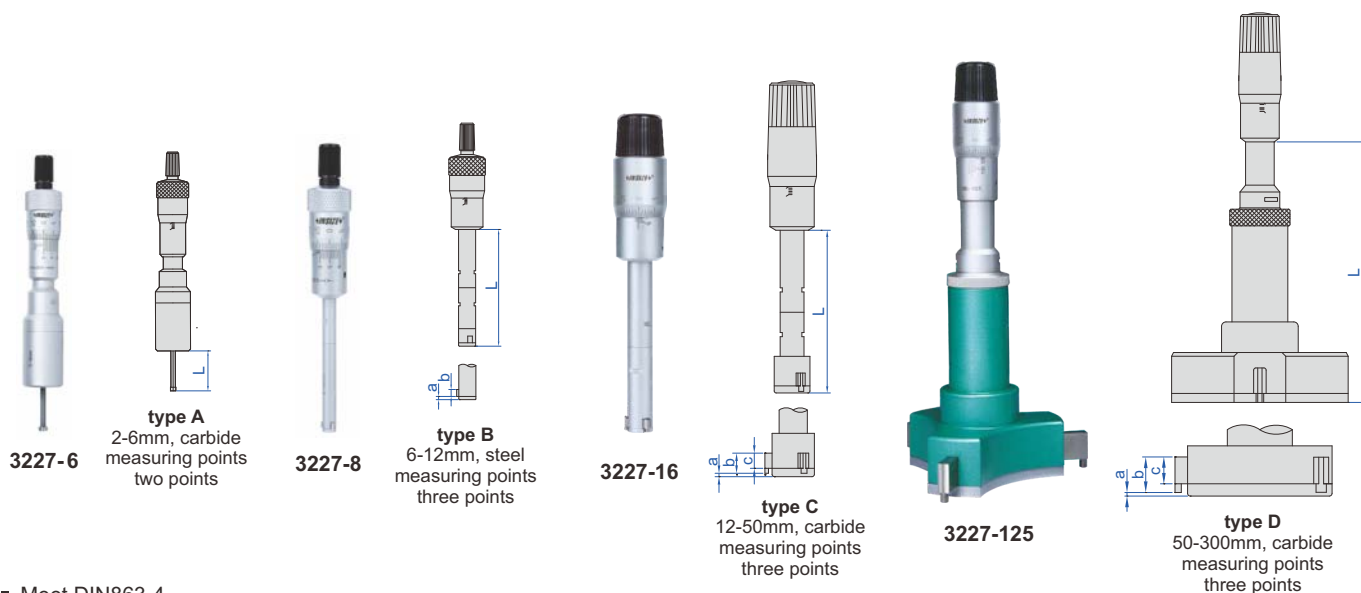
Code	Pitch
7321-T11	0.4-0.5mm/64-48TPI
7321-T12	0.6-0.9mm/44-28TPI
7321-T13	1-1.75mm/24-14TPI
7321-T14	2-3mm/13-9TPI
7321-T15	3.5-5mm/8-5TPI
7321-T16	5.5-7mm/4.5-3.5TPI
7321-T1S	6 pairs/set, including all above tips



Whitworth screw (55° thread angle)

Code	Pitch
7321-T21	60-48TPI
7321-T22	48-40TPI
7321-T23	40-32TPI
7321-T24	32-24TPI
7321-T25	24-18TPI
7321-T26	18-14TPI
7321-T27	14-10TPI
7321-T28	10-7TPI
7321-T29	7-4.5TPI
7321-T210	4.5-3.5TPI
7321-T2S	10 pairs/set, including all above tips

TWO POINTS/THREE POINTS INTERNAL MICROMETERS



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

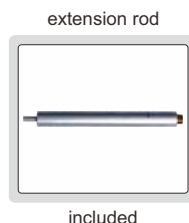
Individual

(mm)

Code	Range	Type	Accuracy	Setting ring	Extension rod (included)	L	a	b	c
3227-2 *	2-2.5mm	A (two points)	6µm	Ø2.5 (included)	—	12	—	—	—
3227-3 *	2.5-3mm	A (two points)	6µm	Ø2.5 (included)	—	12	—	—	—
3227-4 *	3-4mm	A (two points)	6µm	Ø4 (included)	—	22	—	—	—
3227-5 *	4-5mm	A (two points)	6µm	Ø5 (included)	—	22	—	—	—
3227-6 *	5-6mm	A (two points)	6µm	Ø6 (included)	—	22	—	—	—
3227-8 *	6-8mm	B (three points)	4µm	Ø6 (included)	100	54.5	1.5	2.5	—
3227-10 *	8-10mm	B (three points)	4µm	Ø8 (included)	100	54.5	1.5	2.5	—
3227-12 *	10-12mm	B (three points)	4µm	Ø10 (included)	100	54.5	1.5	2.5	—
3227-16 *	12-16mm	C (three points)	4µm	Ø16 (included)	150	80	0.5	6	4.5
3227-20 *	16-20mm	C (three points)	4µm	Ø16 (included)	150	80	0.5	6	4.5
3227-25 *	20-25mm	C (three points)	4µm	Ø25 (included)	150	90	0.5	8	6
3227-30 *	25-30mm	C (three points)	4µm	Ø25 (included)	150	90	0.5	8	6
3227-40 *	30-40mm	C (three points)	4µm	Ø40 (included)	150	97	0.5	14	12
3227-50 *	40-50mm	C (three points)	5µm	Ø40 (included)	150	97	0.5	14	12
3227-63 *	50-63mm	D (three points)	5µm	Ø62 (included)	150	114	0.5	17.5	14.5
3227-75 *	62-75mm	D (three points)	5µm	Ø62 (included)	150	114	0.5	17.5	14.5
3227-88 *	75-88mm	D (three points)	5µm	Ø87 (included)	150	114	0.5	17.5	14.5
3227-100 *	87-100mm	D (three points)	5µm	Ø87 (included)	150	114	0.5	17.5	14.5
3227-125 *	100-125mm	D (three points)	6µm	optional	150	140	0.9	29	25
3227-150 *	125-150mm	D (three points)	6µm	optional	150	140	0.9	29	25
3227-175 *	150-175mm	D (three points)	7µm	optional	150	140	0.9	29	25
3227-200 *	175-200mm	D (three points)	7µm	optional	150	140	0.9	29	25
3227-225	200-225mm	D (three points)	8µm	optional	150	140	0.9	29	25
3227-250	225-250mm	D (three points)	8µm	optional	150	140	0.9	29	25
3227-275	250-275mm	D (three points)	9µm	optional	150	140	0.9	29	25
3227-300	275-300mm	D (three points)	9µm	optional	150	140	0.9	29	25

To be continued

Continued from previous page



3227-504

Set

Code	Range	Micrometers included	Setting ring (included)	Extension rod (included)
3227-232 *	2-3mm	2-2.5mm, 2.5-3mm	Ø2.5mm	—
3227-363 *	3-6mm	3-4mm, 4-5mm, 5-6mm	Ø4mm, Ø5mm, Ø6mm	—
3227-123 *	6-12mm	6-8mm, 8-10mm, 10-12mm	Ø6mm, Ø8mm, Ø10mm	100mm
3227-202 *	12-20mm	12-16mm, 16-20mm	Ø16mm	150mm
3227-504 *	20-50mm	20-25mm, 25-30mm, 30-40mm, 40-50mm	Ø25mm, Ø40mm	150mm
3227-1004 *	50-100mm	50-63mm, 62-75mm, 75-88mm, 87-100mm	Ø62mm, Ø87mm	150mm

* Supplied with manufacturer inspection certificate

7



DIGITAL TWO POINTS/THREE POINTS INTERNAL MICROMETERS



3127-5

type A
2-6mm, carbide
measuring points
two points



3127-12

type B
6-12mm, steel
measuring points
three points



3127-40

type C
12-50mm, carbide
measuring points
three points



3127-125

type D
50-300mm, carbide
measuring points
three points

- Resolution 0.001mm/0.00005" (resolution of 3127-275 and 3127-300 is 0.001mm/0.0001")
- IP65 dust/waterproof
- Buttons: on/off, set, mm/inch, data transmit
- Data output
- Automatic power off
- Ratchet stop
- Optional accessory: data output cable (code 7315-31 need receiver page 4, 7302-31 page 12), setting ring (code 6312), micrometer stand and clamp (code 6301 and 6301-2)

To be continued

Continued from previous page

micrometer stand
with clamp (optional)

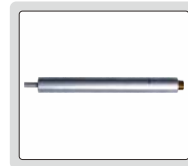


setting ring



2-100mm: included
100-300mm: optional

extension rod



included



3127-202

Individual

(mm)

Code	Range	Type	Accuracy	Setting ring	Extension rod (included)	L	a	b	c
3127-2 *	2-2.5mm/0.08-0.10"	A (two points)	6μm	Ø2.5 (included)	—	12	—	—	—
3127-3 *	2.5-3mm/0.10-0.12"	A (two points)	6μm	Ø2.5 (included)	—	12	—	—	—
3127-4 *	3-4mm/0.12-0.16"	A (two points)	6μm	Ø4 (included)	—	22	—	—	—
3127-5 *	4-5mm/0.16-0.20"	A (two points)	6μm	Ø5 (included)	—	22	—	—	—
3127-6 *	5-6mm/0.20-0.24"	A (two points)	6μm	Ø6 (included)	—	22	—	—	—
3127-8 *	6-8mm/0.24-0.31"	B (three points)	4μm	Ø6 (included)	100	57	1.5	2.5	—
3127-10 *	8-10mm/0.31-0.39"	B (three points)	4μm	Ø8 (included)	100	57	1.5	2.5	—
3127-12 *	10-12mm/0.39-0.47"	B (three points)	4μm	Ø10 (included)	100	57	1.5	2.5	—
3127-16 *	12-16mm/0.47-0.63"	C (three points)	4μm	Ø16 (included)	150	99	0.5	6	4.5
3127-20 *	16-20mm/0.63-0.79"	C (three points)	4μm	Ø16 (included)	150	99	0.5	6	4.5
3127-25 *	20-25mm/0.79-0.98"	C (three points)	4μm	Ø25 (included)	150	105	0.5	8	6
3127-30 *	25-30mm/0.98-1.18"	C (three points)	4μm	Ø25 (included)	150	105	0.5	8	6
3127-40 *	30-40mm/1.18-1.57"	C (three points)	4μm	Ø40 (included)	150	110	0.5	14	12
3127-50 *	40-50mm/1.57-1.97"	C (three points)	5μm	Ø40 (included)	150	110	0.5	14	12
3127-63 *	50-63mm/1.97-2.48"	D (three points)	5μm	Ø62 (included)	150	127	0.5	17.5	14.5
3127-75 *	62-75mm/2.44-2.95"	D (three points)	5μm	Ø62 (included)	150	127	0.5	17.5	14.5
3127-88 *	75-88mm/2.95-3.46"	D (three points)	5μm	Ø87 (included)	150	127	0.5	17.5	14.5
3127-100 *	87-100mm/3.43-3.94"	D (three points)	5μm	Ø87 (included)	150	127	0.5	17.5	14.5
3127-125 *	100-125mm/3.94-4.92"	D (three points)	6μm	optional	150	175	0.9	29	25
3127-150 *	125-150mm/4.92-5.91"	D (three points)	6μm	optional	150	175	0.9	29	25
3127-175 *	150-175mm/5.91-6.89"	D (three points)	7μm	optional	150	175	0.9	29	25
3127-200 *	175-200mm/6.89-7.87"	D (three points)	7μm	optional	150	175	0.9	29	25
3127-225	200-225mm/7.87-8.86"	D (three points)	8μm	optional	150	175	0.9	29	25
3127-250	225-250mm/8.86-9.84"	D (three points)	8μm	optional	150	175	0.9	29	25
3127-275	250-275mm/9.84-10.83"	D (three points)	9μm	optional	150	175	0.9	29	25
3127-300	275-300mm/10.83-11.81"	D (three points)	9μm	optional	150	175	0.9	29	25

Set

Code	Range	Micrometers included	Setting ring (included)	Extension rod (included)
3127-232 *	2-3mm/0.08-0.12"	2-2.5mm, 2.5-3mm	Ø2.5mm	—
3127-363 *	3-6mm/0.12-0.24"	3-4mm, 4-5mm, 5-6mm	Ø4mm, Ø5mm, Ø6mm	—
3127-123 *	6-12mm/0.24-0.47"	6-8mm, 8-10mm, 10-12mm	Ø6mm, Ø8mm, Ø10mm	100mm
3127-202 *	12-20mm/0.47-0.79"	12-16mm, 16-20mm	Ø16mm	150mm
3127-504 *	20-50mm/0.79-1.97"	20-25mm, 25-30mm, 30-40mm, 40-50mm	Ø25mm, Ø40mm	150mm
3127-1004 *	50-100mm/1.97-3.94"	50-63mm, 62-75mm, 75-88mm, 87-100mm	Ø62mm, Ø87mm	150mm

* Supplied with manufacturer inspection certificate

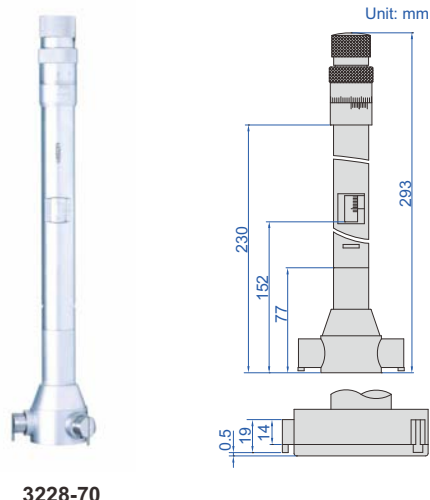


WIDE RANGE THREE POINTS INTERNAL MICROMETERS

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

Code	Range	Accuracy	Setting ring
3228-70 *	50-70mm	5µm	Ø50mm (included)
3228-100 *	70-100mm	5µm	Ø70mm (included)
3228-150 *	100-150mm	6µm	Ø100mm (included)
3228-250 *	150-250mm	8µm	Ø150mm (included)
3228-300 *	200-300mm	9µm	Ø200mm (optional)

* Supplied with manufacturer inspection certificate



3228-70



setting ring

7



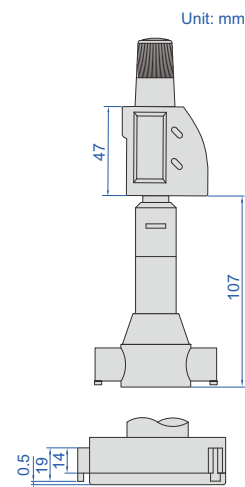
DIGITAL WIDE RANGE THREE POINTS INTERNAL MICROMETERS



- Meet DIN863-4
- Resolution 0.001mm/0.00005" (resolution of **3128-300** is 0.001mm/0.0001")
- IP54 dust/waterproof
- Buttons: on/off, set, mm/inch
- Data output
- Automatic power off
- Carbide measuring faces
- Ratchet stop
- Supplied with extension rods
- Setting rings are included (except 200-300mm)
- Optional accessory: data output cable (code **7315-30** need receiver page 4, **7302-30** page 12)



3128-150



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

* Supplied with manufacturer inspection certificate

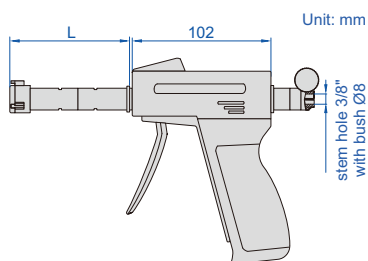


setting ring

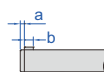


extension rod (included)

PISTOL GRIP THREE POINTS BORE GAGES



Unit: mm

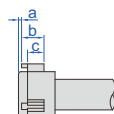


type A
6-12mm, steel
measuring points



2124-8

digital indicator
is optional

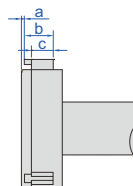


type B
12-50mm, carbide
measuring points



2124-25

digital indicator
is optional



type C
50-300mm, carbide
measuring points



2124-125

digital indicator
is optional

- Optional accessory:
digital indicators (code **2108-101F**,
resolution 0.001mm/0.00005"),
setting rings (code **6312**)

setting ring



6-100mm: included
100-300mm: **optional**

extension rod



included

Individual

Code	Range	Type	Accuracy (without digital indicator)	Setting ring	Extension rod (included)	L	a	b	c
2124-8 *	6-8mm	A	4µm	Ø6mm (included)	100mm	50	1.5	2.5	—
2124-10 *	8-10mm	A	4µm	Ø8mm (included)	100mm	50	1.5	2.5	—
2124-12 *	10-12mm	A	4µm	Ø10mm (included)	100mm	50	1.5	2.5	—
2124-16 *	12-16mm	B	4µm	Ø16mm (included)	150mm	65	0.5	6	4.5
2124-20 *	16-20mm	B	4µm	Ø16mm (included)	150mm	65	0.5	6	4.5
2124-25 *	20-25mm	B	4µm	Ø25mm (included)	150mm	91	0.5	8	6
2124-30 *	25-30mm	B	4µm	Ø25mm (included)	150mm	91	0.5	8	6
2124-40 *	30-40mm	B	4µm	Ø40mm (included)	150mm	97	0.5	14	12
2124-50 *	40-50mm	B	5µm	Ø40mm (included)	150mm	97	0.5	14	12
2124-63 *	50-63mm	C	5µm	Ø62mm (included)	150mm	112	0.5	17.5	14.5
2124-75 *	62-75mm	C	5µm	Ø62mm (included)	150mm	112	0.5	17.5	14.5
2124-88 *	75-88mm	C	5µm	Ø87mm (included)	150mm	112	0.5	17.5	14.5
2124-100 *	87-100mm	C	5µm	Ø87mm (included)	150mm	112	0.5	17.5	14.5
2124-125 *	100-125mm	C	6µm	optional	150mm	140	0.9	29	25
2124-150 *	125-150mm	C	6µm	optional	150mm	140	0.9	29	25
2124-175 *	150-175mm	C	7µm	optional	150mm	140	0.9	29	25
2124-200 *	175-200mm	C	7µm	optional	150mm	140	0.9	29	25
2124-225	200-225mm	C	8µm	optional	150mm	140	0.9	29	25
2124-250	225-250mm	C	8µm	optional	150mm	140	0.9	29	25
2124-275	250-275mm	C	9µm	optional	150mm	140	0.9	29	25
2124-300	275-300mm	C	9µm	optional	150mm	140	0.9	29	25

Set

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



2124-S504

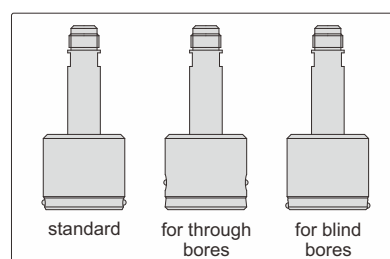
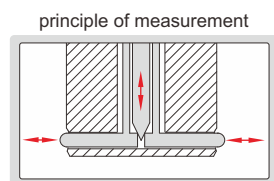
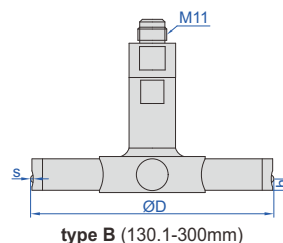
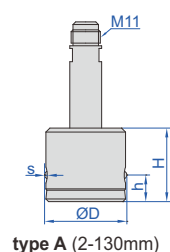
* Supplied with manufacturer inspection certificate



VIDEO

BORE PLUG GAGES

INSIZE PLUS
MADE IN EUROPE



SPECIFICATION OF PROBE

(mm)

Range (ØD)	2-3	3.1-4	4.1-6	6.1-9	9.1-12	12.1-20	20.1-40	40.1-60	60.1-130	130.1-300
Type	A	A	A	A	A	A	A	A	A	B
Travel of point (s)	0.15	0.15	0.15	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Height of point (h)	standard	1	1.5	1.5	2.5	2.5	2.5	3.5	3.5	6
	for through bores	—	6	6	6	10	10	10	10	—
Height of probe (H)	for blind bores	0.7	1	1	1	1	1	1.2	1.2	3
		17.5	26	10	15	15	15	20	28	33
Repeatability	0.001	0.001	0.001	0.0005	0.0005	0.0005	0.0005	0.0005	0.001	0.002

To be continued

Continued from previous page



PROBE

Code	Type
4653-A□□□□□	standard
4653-B□□□□□	for through bores
4653-C□□□□□	for blind bores

SETTING RING

Code
6312-□□□□□

Ordering examples:

Code	Type	Range
4653-A30D6H7	standard	30.6H7

Attention: "D" stands for "."



4653-G



4653-J



set measuring depth

DEPTH STOP

Code	Applicable for probe
4653-G□□□□□	3.0~60mm
4653-J□□□□□	30~130mm

Ordering examples:

Code	Applicable for probe
4653-G22H7	22H7



set measuring depth



HANDLE FOR INDUCTIVE PROBE

Code
4653-F110

application



BASE

Code	Applicable holding stem
4663-STAND	Ø12mm
4663-STAND1	Ø18mm



retraction button

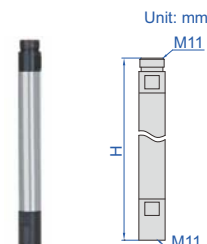
HANDLE

Code	Length (L)	Diameter (ØD)	Retraction
4653-150	45mm	12mm	without
4653-1105	105mm	12mm	without
4653-1235	235mm	12mm	without
4653-2145	145mm	18mm *	without
4653-2235	235mm	18mm *	without
4653-H70	70mm	12mm	with

* When measuring range is larger than 60mm, we suggest to use the 18mm handle

EXTENSION ROD FOR HANDLE

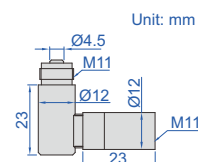
Code	Length (H)
4653-R50	50mm
4653-R100	100mm
4653-R250	250mm
4653-R500	500mm



Unit: mm

90° ADAPTER

Code
4653-K1



Unit: mm

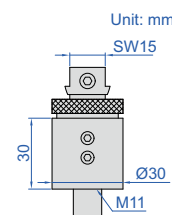
application



FLOATING CLAMP HANDLE

Code
4653-M30

Suitable for automatic measurement



Unit: mm

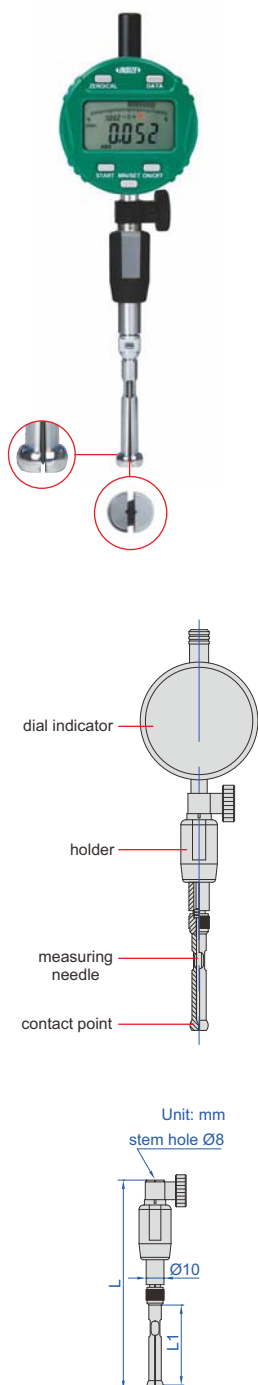
application



SPLIT TYPE DIAL BORE GAGES

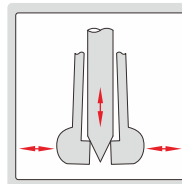
INSIZE PLUS
MADE IN EUROPE

digital indicator
is optional



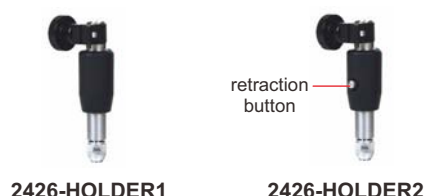
- Split type contact points
- Accuracy (without indicator):
3µm (measuring range 0.95~10mm),
4µm (measuring range 10~20.6mm)
- Repeatability (without indicator): 1µm
- Optional accessory:
digital/dial indicators or dial comparator

principle of measurement



(mm)

Contact point					Measuring needle	Setting ring	
code	measuring range	measuring depth (L1)	total length (L)	material of points	code	code	diameter
2426-1	0.95-1.15	13	89	carbide	2426-N1D4	6312-1	1
2426-1D1	1.07-1.25	13	89	carbide		6312-1D1	1.1
2426-1D2	1.17-1.35	13	89	carbide		6312-1D2	1.2
2426-1D3	1.27-1.45	13	89	carbide		6312-1D3	1.3
2426-1D4	1.37-1.55	13	89	carbide		6312-1D4	1.4
2426-1D75	1.5-1.9	17	93	carbide	2426-N2D25	6312-1D75	1.75
2426-2	1.8-2.2	17	93	carbide		6312-2	2
2426-2D25	2.05-2.45	17	93	carbide		6312-2D25	2.25
2426-2D5	2.3-2.7	25	101	carbide	2426-N4	6312-2D5	2.5
2426-2D75	2.55-2.95	25	101	carbide		6312-2D75	2.75
2426-3	2.8-3.2	25	101	carbide		6312-3	3
2426-3D25	3.05-3.45	25	101	carbide		6312-3D25	3.25
2426-3D5	3.3-3.7	25	101	carbide		6312-3D5	3.5
2426-3D75	3.55-3.95	25	101	carbide	2426-N9	6312-3D75	3.75
2426-4	3.8-4.2	25	101	carbide		6312-4	4
2426-4D5	4.15-4.8	41	118	DLC coating		6312-4D5	4.5
2426-5	4.7-5.3	41	118	DLC coating		6312-5	5
2426-5D5	5.2-5.8	41	118	DLC coating		6312-5D5	5.5
2426-6	5.7-6.3	41	118	DLC coating		6312-6	6
2426-6D5	6.2-6.8	41	118	DLC coating		6312-6D5	6.5
2426-7	6.7-7.3	41	118	DLC coating		6312-7	7
2426-7D5	7.2-7.8	45	118	DLC coating	2426-N20	6312-7D5	7.5
2426-8	7.7-8.3	45	118	DLC coating		6312-8	8
2426-8D5	8.2-8.8	45	118	DLC coating		6312-8D5	8.5
2426-9	8.7-9.3	45	118	DLC coating		6312-9	9
2426-10	9.2-10.5	45	118	DLC coating		6312-10	10
2426-11	10.2-11.5	45	118	DLC coating	2426-N20	6312-11	11
2426-12	11.2-12.5	45	118	DLC coating		6312-12	12
2426-13	12.2-13.5	45	118	DLC coating		6312-13	13
2426-14	13.4-14.6	45	118	DLC coating		6312-14	14
2426-15	14.4-15.6	45	118	DLC coating		6312-15	15
2426-16	15.4-16.6	45	118	DLC coating		6312-16	16
2426-17	16.4-17.6	45	118	DLC coating		6312-17	17
2426-18	17.4-18.6	45	118	DLC coating		6312-18	18
2426-19	18.4-19.6	45	118	DLC coating		6312-19	19
2426-20	19.4-20.6	45	118	DLC coating		6312-20	20



HOLDER

Code	Retraction	Applicable points
2426-HOLDER1	without	all
2426-HOLDER2	with	all

SPLIT TYPE DIAL BORE GAGE SETS

INSIZE PLUS
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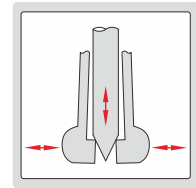
- Split type contact points
- Accuracy (without indicator): 3µm (measuring range 0.95~10mm), 4µm (measuring range 10~20.6mm)
- Repeatability (without indicator): 1µm
- Setting rings and dial indicators are optional



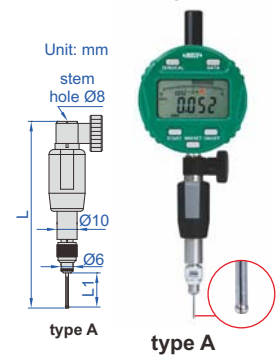
2421-121 (mm)

Code	Range	Quantity of points	Measuring range of point	Measuring depth (L1)	Total length (L)	Material of points	Type of point	Setting ring (optional)	
								code	diameter
2421-1D4	0.95-1.55	5	0.95-1.15	13	89	carbide	A	6312-1	1
			1.07-1.25	13	89	carbide	A	6312-1D1	1.1
			1.17-1.35	13	89	carbide	A	6312-1D2	1.2
			1.27-1.45	13	89	carbide	A	6312-1D3	1.3
			1.37-1.55	13	89	carbide	A	6312-1D4	1.4
2421-4	1.5-4.2	10	1.5-1.9	17	93	carbide	A	6312-1D75	1.75
			1.8-2.2	17	93	carbide	A	6312-2	2
			2.05-2.45	17	93	carbide	A	6312-2D25	2.25
			2.3-2.7	25	101	carbide	A	6312-2D5	2.5
			2.55-2.95	25	101	carbide	A	6312-2D75	2.75
			2.8-3.2	25	101	carbide	A	6312-3	3
			3.05-3.45	25	101	carbide	A	6312-3D25	3.25
			3.3-3.7	25	101	carbide	A	6312-3D5	3.5
			3.55-3.95	25	101	carbide	A	6312-3D75	3.75
			3.8-4.2	25	101	carbide	A	6312-4	4
2421-7D5	4.15-7.8	7	4.15-4.8	41	118	hard chromed	B	6312-4D5	4.5
			4.7-5.3	41	118	hard chromed	B	6312-5	5
			5.2-5.8	41	118	hard chromed	B	6312-5D5	5.5
			5.7-6.3	41	118	hard chromed	B	6312-6	6
			6.2-6.8	41	118	hard chromed	B	6312-6D5	6.5
			6.7-7.3	41	118	hard chromed	B	6312-7	7
			7.2-7.8	45	118	hard chromed	C	6312-7D5	7.5
2421-12	7.7-12.5	6	7.7-8.3	45	118	hard chromed	C	6312-8	8
			8.2-8.8	45	118	hard chromed	C	6312-8D5	8.5
			8.7-9.3	45	118	hard chromed	C	6312-9	9
			9.2-10.5	45	118	hard chromed	C	6312-10	10
			10.2-11.5	45	118	hard chromed	C	6312-11	11
			11.2-12.5	45	118	hard chromed	C	6312-12	12
2421-20	12.2-20.6	8	12.2-13.5	45	118	hard chromed	C	6312-13	13
			13.4-14.6	45	118	hard chromed	C	6312-14	14
			14.4-15.6	45	118	hard chromed	C	6312-15	15
			15.4-16.6	45	118	hard chromed	C	6312-16	16
			16.4-17.6	45	118	hard chromed	C	6312-17	17
			17.4-18.6	45	118	hard chromed	C	6312-18	18
			18.4-19.6	45	118	hard chromed	C	6312-19	19
			19.4-20.6	45	118	hard chromed	C	6312-20	20
2421-121	4.15-12.5	13	4.15-4.8	41	118	hard chromed	B	6312-4D5	4.5
			4.7-5.3	41	118	hard chromed	B	6312-5	5
			5.2-5.8	41	118	hard chromed	B	6312-5D5	5.5
			5.7-6.3	41	118	hard chromed	B	6312-6	6
			6.2-6.8	41	118	hard chromed	B	6312-6D5	6.5
			6.7-7.3	41	118	hard chromed	B	6312-7	7
			7.2-7.8	45	118	hard chromed	C	6312-7D5	7.5
			7.7-8.3	45	118	hard chromed	C	6312-8	8
			8.2-8.8	45	118	hard chromed	C	6312-8D5	8.5
			8.7-9.3	45	118	hard chromed	C	6312-9	9
			9.2-10.5	45	118	hard chromed	C	6312-10	10
			10.2-11.5	45	118	hard chromed	C	6312-11	11
			11.2-12.5	45	118	hard chromed	C	6312-12	12

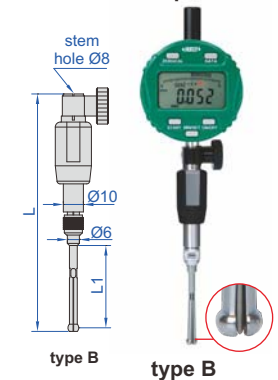
principle of measurement



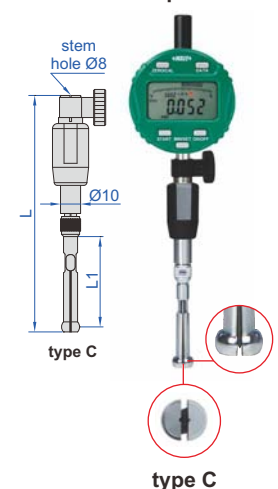
digital indicator is optional



digital indicator is optional



digital indicator is optional



BORE GAGES FOR SMALL HOLES

INSIZE PLUS
MADE IN EUROPE

- Applicable for 0.01mm or 0.001mm, graduation dial indicators
- Carbide contact point and anvil
- Optional accessory: dial indicator or dial comparator, setting ring (code 6312)

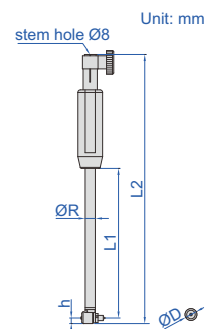
Code	Range	Accuracy (without dial comparator)	Repeatability (without dial comparator)	L1	L2	ØR	ØD	h
2425-6	4.5-6mm	2µm	0.5µm	80	147	4	4	2
2425-8	6-8mm	2µm	0.5µm	100	165	5	5.2	2.6
2425-12	8-12mm	2µm	0.5µm	100	166	5	6.5	3.25
2425-20	12-20mm	2µm	0.5µm	110	204	8	9	4.5

(mm)

digital indicator
is optional



2425-6



7

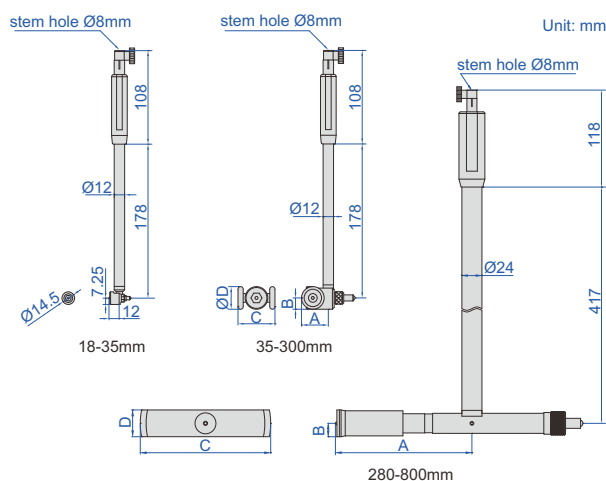
BORE GAGES

INSIZE PLUS
MADE IN EUROPE

digital indicator
is optional



2422-150

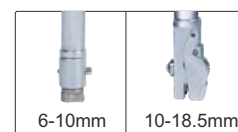
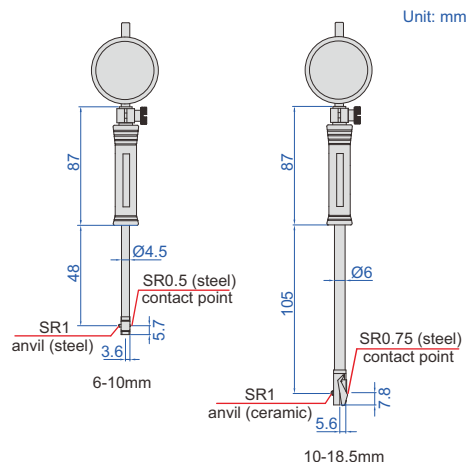


- Applicable for 0.01mm or 0.001mm graduation dial indicators
- Optional accessory:
 - Dial indicator or dial comparator
 - Setting ring (code 6312)
 - Long handle (code 7352)
 - Bore gage setter

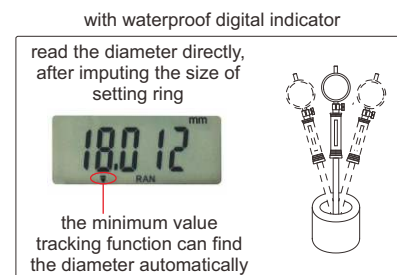
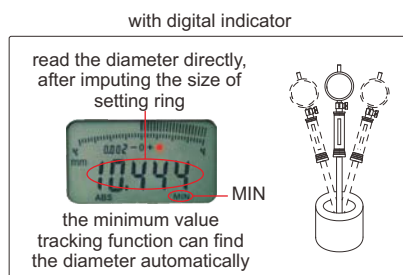
Code	Range	Accuracy (without dial comparator)	Repeatability (without dial comparator)
2422-35	18-35mm	4µm	2µm
2422-60	35-60mm	4µm	2µm
2422-150	50-150mm	4µm	2µm
2422-300	150-300mm	4µm	2µm
2422-510	280-510mm	3µm	1.5µm
2422-800	400-800mm	3µm	1.5µm

Code	A	B	C	D
2422-60	19.5mm	10.5mm	28mm	21mm
2422-150	30.8mm	13mm	42.5mm	26mm
2422-300	30.8mm	13mm	76.5mm	26mm
2422-510	164mm	16mm	156mm	32mm
2422-800	305mm	18mm	300mm	36mm

PRECISION BORE GAGES FOR SMALL HOLES (WITH DIAL INDICATOR)



- Optional accessory:
setting ring (code 6312),
bore gage setter



With dial indicator

Code	Range	Indicator	Accuracy	Repeatability
2853-10	6-10mm	dial indicator, range 1mm, graduation 0.001mm (code 2313-1FA)	±0.007mm	0.0015mm
2853-18	10-18.5mm		±0.007mm	0.0015mm

With digital indicator

(data output cable code 7315-50M need receiver page 5, 7302-40M page 13, optional)

Code	Range	Indicator	Accuracy	Repeatability
2153-10	6-10mm	digital indicator, code 2108-101F, range 12.7mm/0.5", resolution 0.001mm/0.00005"	±0.007mm	0.002mm
2153-18	10-18.5mm		±0.007mm	0.002mm

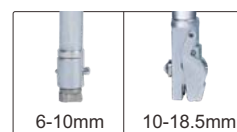
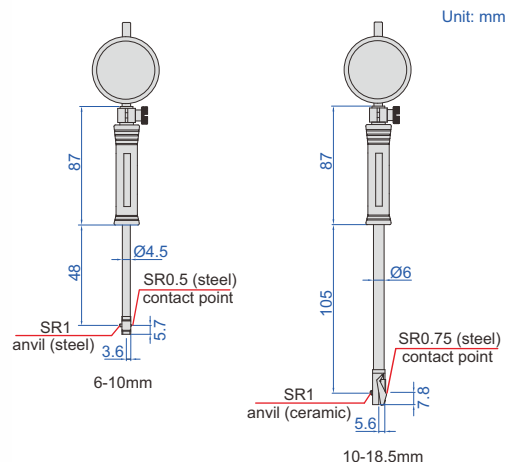
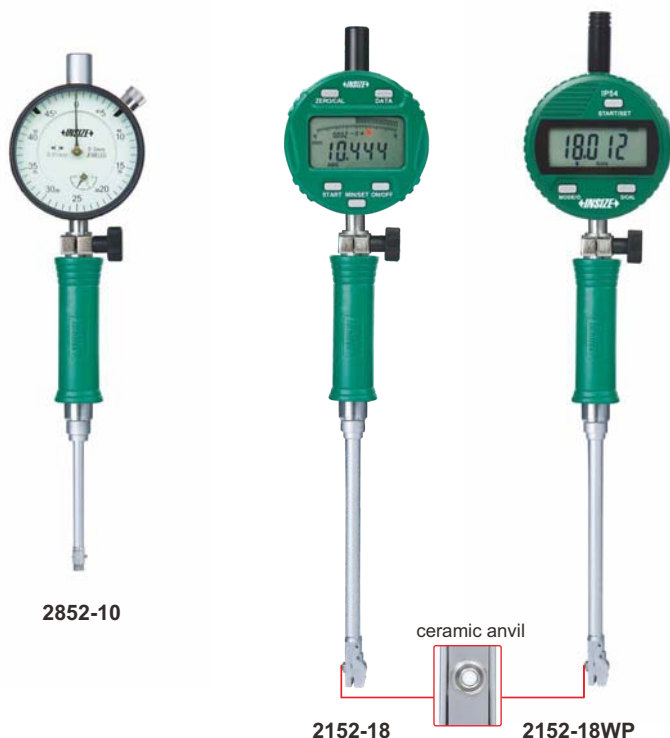
With waterproof digital indicator

(data output cable code 7315-50M need receiver page 5, 7302-40M page 13, optional)

Code	Range	Indicator	Accuracy	Repeatability
2153-10WP	6-10mm	waterproof digital indicator, code 2137-101F, range 12.7mm/0.5", dust/waterproof IP54, resolution 0.001mm/0.00005"	±0.007mm	0.002mm
2153-18WP	10-18.5mm		±0.007mm	0.002mm

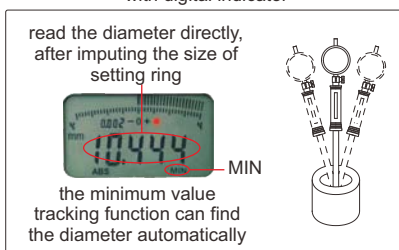
ATTENTION: NOT SUITABLE
FOR 0.001MM DIAL INDICATORS

BORE GAGES FOR SMALL HOLES (WITH DIAL INDICATOR)

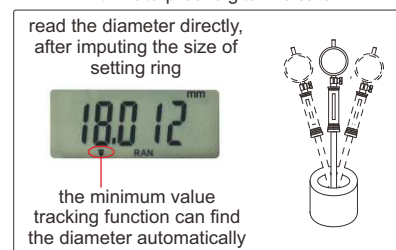


- Optional accessory:
setting ring (code 6312),
bore gage setter

with digital indicator



with waterproof digital indicator



With dial indicator

Code	Range	Indicator	Accuracy	Repeatability
2852-10	6-10mm	dial indicator, range 3mm, graduation 0.01mm (code 2311-3F)	±0.012mm	0.003mm
2852-18	10-18.5mm		±0.012mm	0.003mm

With digital indicator

(data output cable code 7315-50M need receiver page 5, 7302-40M page 13, optional)

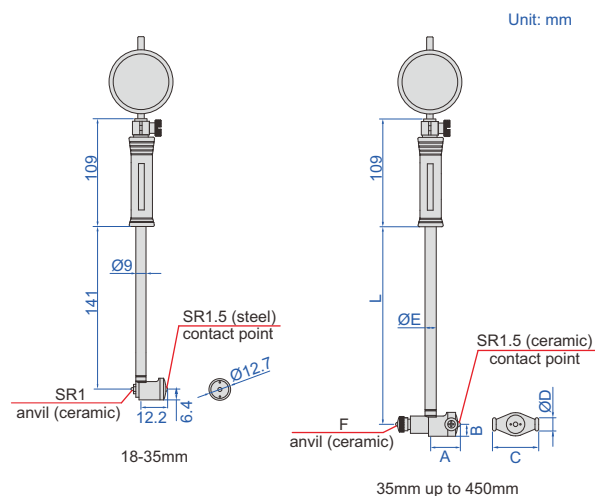
Code	Range	Indicator	Accuracy	Repeatability
2152-10	6-10mm	digital indicator, code 2108-10F, range 12.7mm/0.5", resolution 0.002mm/0.0001" (can switch to 0.01mm/0.0005")	±0.012mm	0.003mm
2152-18	10-18.5mm		±0.012mm	0.003mm

With waterproof digital indicator

(data output cable code 7315-50M need receiver page 5, 7302-40M page 13, optional)

Code	Range	Indicator	Accuracy	Repeatability
2152-10WP	6-10mm	waterproof digital indicator, code 2137-10F, range 12.7mm/0.5", dust/waterproof IP54, resolution 0.002mm/0.0001" (can switch to 0.01mm/0.0005")	±0.012mm	0.003mm
2152-18WP	10-18.5mm		±0.012mm	0.003mm

PRECISION BORE GAGES (WITH DIAL INDICATOR)



7

- Optional accessory: setting ring (code 6312), bore gage setter

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

With dial indicator

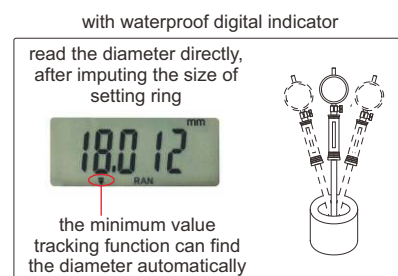
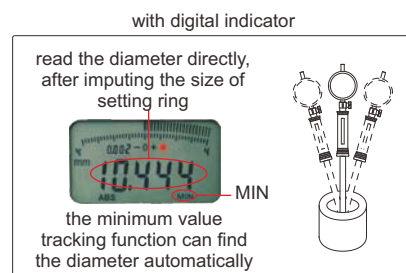
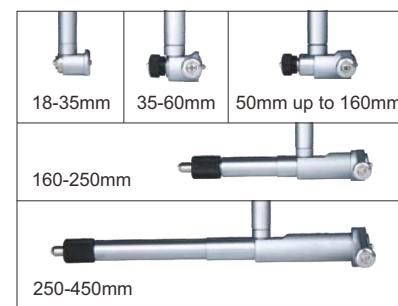
Code	Range	Indicator	Accuracy	Repeatability
2825-35	18-35mm	dial indicator, range 1mm, graduation 0.001mm (code 2313-1FA)	±0.007mm	0.0015mm
2825-60	35-60mm		±0.007mm	0.0015mm
2825-100	50-100mm		±0.007mm	0.0015mm
2825-160	50-160mm		±0.007mm	0.0015mm
2825-161	100-160mm		±0.007mm	0.0015mm
2825-250	160-250mm		±0.007mm	0.0015mm
2825-450	250-450mm		±0.007mm	0.0015mm

With digital indicator (data output cable code 7315-50M need receiver page 5, 7302-40M page 13, optional)

Code	Range	Indicator	Accuracy	Repeatability
2126-35	18-35mm	digital indicator, code 2108-101F, range 12.7mm/0.5", resolution 0.001mm/0.00005"	±0.007mm	0.002mm
2126-60	35-60mm		±0.007mm	0.002mm
2126-100	50-100mm		±0.007mm	0.002mm
2126-160	50-160mm		±0.007mm	0.002mm
2126-161	100-160mm		±0.007mm	0.002mm
2126-250	160-250mm		±0.007mm	0.002mm
2126-450	250-450mm		±0.007mm	0.002mm

With waterproof digital indicator (data output cable code 7315-50M need receiver page 5, 7302-40M page 13, optional)

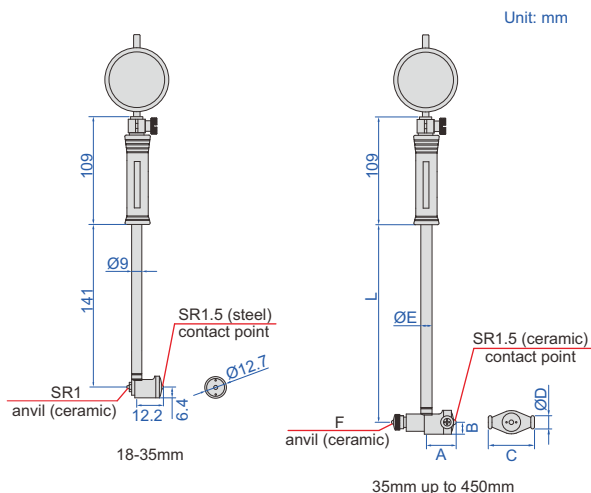
Code	Range	Indicator	Accuracy	Repeatability
2126-35WP	18-35mm	waterproof digital indicator, code 2137-101F, range 12.7mm/0.5", dust/waterproof IP54, resolution 0.001mm/0.00005"	±0.007mm	0.002mm
2126-60WP	35-60mm		±0.007mm	0.002mm
2126-100WP	50-100mm		±0.007mm	0.002mm
2126-160WP	50-160mm		±0.007mm	0.002mm
2126-161WP	100-160mm		±0.007mm	0.002mm
2126-250WP	160-250mm		±0.007mm	0.002mm
2126-450WP	250-450mm		±0.007mm	0.002mm



ATTENTION: NOT SUITABLE
FOR 0.001MM DIAL INDICATORS

POPULAR
MODEL

BORE GAGES (WITH DIAL INDICATOR)



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

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

(mm)



2322-160A



VIDEO



2122-35A

2122-35AWP

With dial indicator

Code	Range	Indicator	Accuracy	Repeatability
2322-35A	18-35mm	dial indicator, range 10mm, graduation 0.01mm (code 2308-10FA)	±0.015mm	0.003mm
2322-60A	35-60mm		±0.018mm	0.003mm
2322-100A	50-100mm		±0.018mm	0.003mm
2322-160A	50-160mm		±0.018mm	0.003mm
2322-161A	100-160mm		±0.018mm	0.003mm
2322-250A	160-250mm		±0.018mm	0.003mm
2322-450A	250-450mm		±0.018mm	0.003mm

With digital indicator

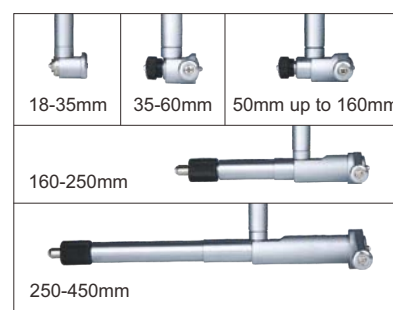
(data output cable code **7315-50M** need receiver page 5, **7302-40M** page 13, optional)

Code	Range	Indicator	Accuracy	Repeatability
2122-35A	18-35mm	digital indicator, code 2108-10F , range 12.7mm/0.5", resolution 0.002mm/0.0001" (can switch to 0.01mm/0.0005")	±0.015mm	0.003mm
2122-60A	35-60mm		±0.018mm	0.003mm
2122-100A	50-100mm		±0.018mm	0.003mm
2122-160A	50-160mm		±0.018mm	0.003mm
2122-161A	100-160mm		±0.018mm	0.003mm
2122-250A	160-250mm		±0.018mm	0.003mm
2122-450A	250-450mm		±0.018mm	0.003mm

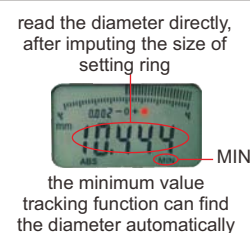
With waterproof digital indicator

(data output cable code **7315-50M** need receiver page 5, **7302-40M** page 13, optional)

Code	Range	Indicator	Accuracy	Repeatability
2122-35AWP	18-35mm	waterproof digital indicator, code 2137-10F , range 12.7mm/0.5", dust/waterproof IP54, resolution 0.002mm/0.0001" (can switch to 0.01mm/0.0005")	±0.015mm	0.003mm
2122-60AWP	35-60mm		±0.018mm	0.003mm
2122-100AWP	50-100mm		±0.018mm	0.003mm
2122-160AWP	50-160mm		±0.018mm	0.003mm
2122-161AWP	100-160mm		±0.018mm	0.003mm
2122-250AWP	160-250mm		±0.018mm	0.003mm
2122-450AWP	250-450mm		±0.018mm	0.003mm



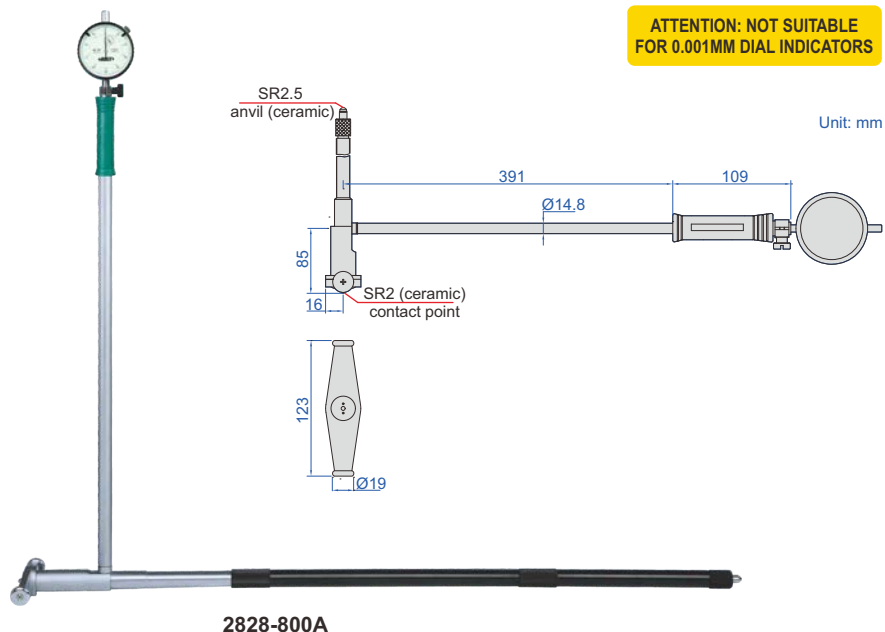
with digital indicator



with waterproof digital indicator



BORE GAGES (WITH DIAL INDICATOR)



ATTENTION: NOT SUITABLE
FOR 0.001MM DIAL INDICATORS

With dial indicator

Code	Range	Indicator	Accuracy	Repeatability
2828-800A	400-800mm	dial indicator, code 2308-10FA , range 10mm, graduation 0.01mm	±0.025mm	0.003mm

With digital indicator (data output cable code 7315-50M need receiver page 5, 7302-40M page 13, optional)

Code	Range	Indicator	Accuracy	Repeatability
2128-800A	400-800mm	digital indicator, code 2108-10F , range 12.7mm/0.5", resolution 0.002mm/0.0001" (can switch to 0.01mm/0.0005")	±0.025mm	0.003mm

With waterproof digital indicator (data output cable code 7315-50M need receiver page 5, 7302-40M page 13, optional)

Code	Range	Indicator	Accuracy	Repeatability
2128-800AWP	400-800mm	waterproof digital indicator, code 2137-10F , range 12.7mm/0.5", dust/waterproof IP54, resolution 0.002mm/0.0001" (can switch to 0.01mm/0.0005")	±0.025mm	0.003mm

BORE GAGE SET

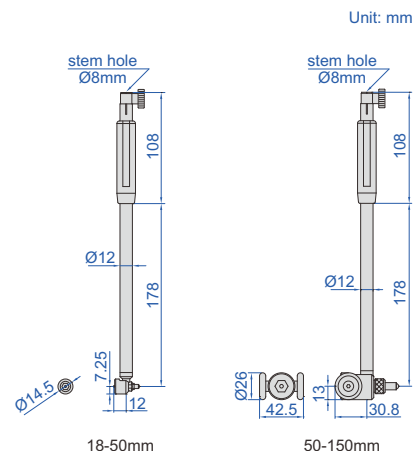
INSIZE PLUS
MADE IN EUROPE



2423-S2

- Includes bore gages 18-50mm and 50-150mm
- Optional accessory:
 - 0.01mm or 0.001mm graduation dial indicator or dial comparator
 - Setting ring (code **6312**)
 - Long handle (code **7352**)
 - Bore gage setter

digital indicator is optional



Code	Range	Accuracy (without dial comparator)	Repeatability (without dial comparator)
2423-S2	18-150mm	4µm	2µm

ATTENTION: NOT SUITABLE
FOR 0.001MM DIAL INDICATORS

BORE GAGE SETS (WITH DIAL INDICATOR)



2824-S160



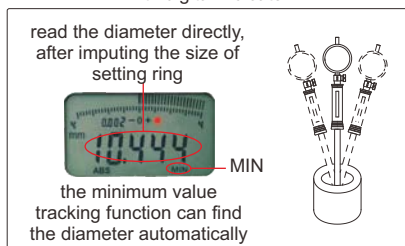
2724-S3



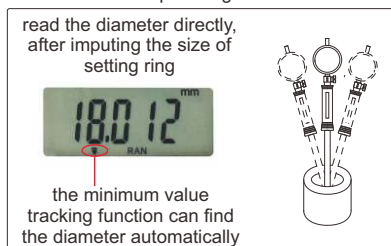
2724-S3WP

- Optional accessory: setting ring (code 6312), long handle (code 7351), bore gage setter

with digital indicator



with waterproof digital indicator



packaging (code 2824-S3)



With dial indicator

Code	Range	Indicator	Bore gages included	Accuracy	Repeatability
2824-S160	35-160mm	dial indicator, code 2308-10FA, range 10mm, graduation 0.01mm	① 35-50mm (dial indicator and handle are not included) ② 50-160mm	35-50mm $\pm 0.018\text{mm}$ 50-160mm $\pm 0.018\text{mm}$	0.003mm
2824-S3	18-160mm	dial indicator, code 2308-10FA, range 10mm, graduation 0.01mm	① 18-35mm ② 35-60mm (dial indicator is not included) ③ 50-160mm (dial indicator is not included)	18-35mm $\pm 0.015\text{mm}$ 35-60mm $\pm 0.018\text{mm}$ 50-160mm $\pm 0.018\text{mm}$	0.003mm

With digital indicator (data output cable code 7315-50M need receiver page 5, 7302-40M page 13, optional)

Code	Range	Indicator	Bore gages included	Accuracy	Repeatability
2724-S160	35-160mm	digital indicator, code 2108-10F range 12.7mm/0.5", resolution 0.002mm/0.0001" (can switch to: 0.01mm/0.0005")	① 35-50mm (digital indicator and handle are not included) ② 50-160mm	35-50mm $\pm 0.018\text{mm}$ 50-160mm $\pm 0.018\text{mm}$	0.003mm
2724-S3	18-160mm	digital indicator, code 2108-10F range 12.7mm/0.5", resolution 0.002mm/0.0001" (can switch to: 0.01mm/0.0005")	① 18-35mm ② 35-60mm (digital indicator is not included) ③ 50-160mm (digital indicator is not included)	18-35mm $\pm 0.015\text{mm}$ 35-60mm $\pm 0.018\text{mm}$ 50-160mm $\pm 0.018\text{mm}$	0.003mm

To be continued

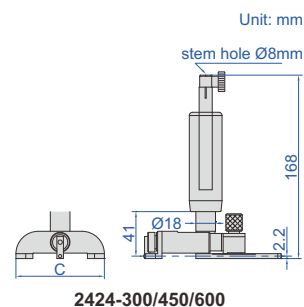
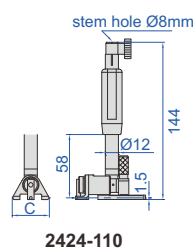
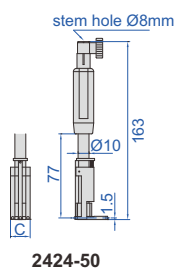
Continued from previous page

With waterproof digital indicator (data output cable code 7315-50M need receiver page 5, 7302-40M page 13, optional)

Code	Range	Indicator	Bore gages included	Accuracy	Repeatability
2724-S160WP	35-160mm	waterproof digital indicator, code 2137-10F , range 12.7mm/0.5", dust/waterproof IP54, resolution 0.002mm/0.0001" (can switch to 0.01mm/0.0005")	① 35-50mm (digital indicator and handle are not included) ② 50-160mm	35-50mm ±0.018mm 50-160mm ±0.018mm	0.003mm
2724-S3WP	18-160mm	waterproof digital indicator, code 2137-10F , range 12.7mm/0.5", dust/waterproof IP54, resolution 0.002mm/0.0001" (can switch to 0.01mm/0.0005")	① 18-35mm ② 35-60mm (digital indicator is not included) ③ 50-160mm (digital indicator is not included)	18-35mm ±0.015mm 35-60mm ±0.018mm 50-160mm ±0.018mm	0.003mm

BORE GAGES FOR BLIND HOLES

INSIZE PLUS
MADE IN EUROPE



- To measure diameter of shallow and blind holes
- Optional accessory:
 - 0.01mm or 0.001mm graduation dial indicators
 - Setting ring (code **6312**)
 - Long handle (code **7352**)
 - Bore gage setter

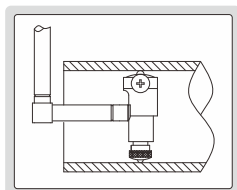


Code	Range	Accuracy (without dial indicator)	Repeatability (without dial indicator)	C
2424-50	20-50mm	4µm	1µm	18mm
2424-110	50-110mm	4µm	1µm	34mm
2424-300	110-300mm	4µm	1µm	81mm
2424-450	200-450mm	4µm	1µm	81mm
2424-600	300-600mm	4µm	1µm	140mm

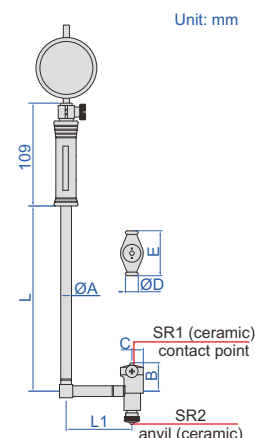
ATTENTION: NOT SUITABLE
FOR 0.001MM DIAL INDICATORS

BORE GAGES (WITH DIAL INDICATOR)

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



2827-160A



2308-10FA

2108-10F

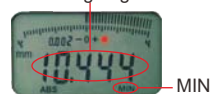
2137-10F

Range	ØA	B	C	ØD	E	L	L1
35-60mm	12.8	22	9	13	27	141	75
50-160mm	12.8	28.5	9.2	13	35	141	76.2
160-250mm	14.5	62.0	12.7	15	74.5	391	100
250-450mm	14.5	91.5	15.0	15	101.5	391	100

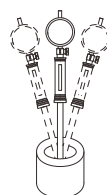
(mm)

with digital indicator

read the diameter directly,
after inputting the size of
setting ring



the minimum value
tracking function can find
the diameter automatically

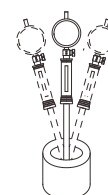


with waterproof digital indicator

read the diameter directly,
after inputting the size of
setting ring



the minimum value
tracking function can find
the diameter automatically



With dial indicator

Code	Range	Indicator	Accuracy	Repeatability
2827-60A	35-60mm	dial indicator, code 2308-10FA , range 10mm, graduation 0.01mm	±0.018mm	0.003mm
2827-160A	50-160mm		±0.018mm	0.003mm
2827-250A	160-250mm		±0.018mm	0.003mm
2827-450A	250-450mm		±0.018mm	0.003mm

With digital indicator

(data output cable code **7315-50M** need receiver page 5, **7302-40M** page 13, optional)

Code	Range	Indicator	Accuracy	Repeatability
2127-60	35-60mm	digital indicator, code 2108-10F , range 12.7mm/0.5", resolution 0.002mm/0.0001" (can switch to: 0.01mm/0.0005")	±0.018mm	0.003mm
2127-160	50-160mm		±0.018mm	0.003mm
2127-250	160-250mm		±0.018mm	0.003mm
2127-450	250-450mm		±0.018mm	0.003mm

With waterproof digital indicator

(data output cable code **7315-50M** need receiver page 5, **7302-40M** page 13, optional)

Code	Range	Indicator	Accuracy	Repeatability
2127-60WP	35-60mm	waterproof digital indicator, code 2137-10F , range 12.7mm/0.5", dust/waterproof IP54, resolution 0.002mm/0.0001" (can switch to 0.01mm/0.0005")	±0.018mm	0.003mm
2127-160WP	50-160mm		±0.018mm	0.003mm
2127-250WP	160-250mm		±0.018mm	0.003mm
2127-450WP	250-450mm		±0.018mm	0.003mm

GEAR BORE GAGES

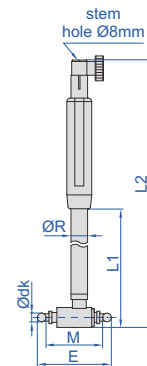
INSIZE PLUS
MADE IN EUROPE

- Tungsten carbide ball points, diameter accuracy 2µm
- Optional accessory:
 - Dial indicator or dial comparator
 - Ball points
 - Thread adaptor
 - Long handle (code 7352)



2428-55

RELATIVE PRODUCT: INTERNAL GEAR TOOTH MICROMETER (CODE 3638)



(mm)

Code	Range (E)	Accuracy (without dial comparator)	Repeatability (without dial comparator)	ØR	L1	L2	Thread for ball points
2428-12	8-12mm	2µm	0.5µm	5	100	165	M1.6
2428-22	12-22mm	2µm	0.5µm	5	102	168	M1.6
2428-55	22-55mm	2µm	0.5µm	8	110	204	M2.5
2428-250	55-250mm	2µm	0.5µm	12	177	290	M4
2428-510	100-510mm	2µm	0.5µm	18	235	363	M4

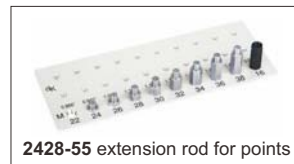
Ball points (optional)

Ball point diameter Ødk	2428-12	2428-22	2428-55	2428-250	2428-510
	point thread M1.6	point thread M1.6	point thread M2.5	point thread M4	point thread M4
	point code	point code	point code	point code	point code
1mm	2428-A1	2428-E1	2428-B1	2428-C1	2428-C1
1.5mm	2428-A1D5	2428-E1D5	2428-B1D5	2428-C1D5	2428-C1D5
2mm	2428-A2	2428-E2	2428-B2	2428-C2	2428-C2
2.5mm	—	2428-E2D5	2428-B2D5	2428-C2D5	2428-C2D5
3mm	—	2428-E3	2428-B3	2428-C3	2428-C3
3.5mm	—	2428-E3D5	2428-B3D5	2428-C3D5	2428-C3D5
4mm	—	2428-E4	2428-B4	2428-C4	2428-C4
4.5mm	—	—	2428-B4D5	2428-C4D5	2428-C4D5
5mm	—	—	2428-B5	2428-C5	2428-C5
5.5mm	—	—	2428-B5D5	2428-C5D5	2428-C5D5
6mm	—	—	2428-B6	2428-C6	2428-C6
6.5mm	—	—	2428-B6D5	2428-C6D5	2428-C6D5
7mm	—	—	2428-B7	2428-C7	2428-C7
7.5mm	—	—	2428-B7D5	2428-C7D5	2428-C7D5
8mm	—	—	2428-B8	2428-C8	2428-C8
8.5mm	—	—	2428-B8D5	2428-C8D5	2428-C8D5
9mm	—	—	2428-B9	2428-C9	2428-C9
9.5mm	—	—	2428-B9D5	2428-C9D5	2428-C9D5
10mm	—	—	2428-B10	2428-C10	2428-C10

Thread adaptor (optional)

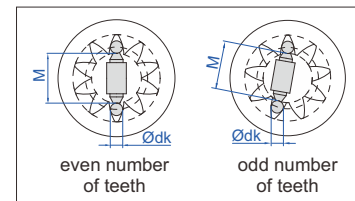
Code	Thread	Remark
2428-D1	M1.6/M2.5	For example, use 2428-E1 with 2428-D1 to replace 2428-B1
2428-D2	M2.5/M4	For example, use 2428-B1 with 2428-D2 to replace 2428-C1

extension rod for points (included)

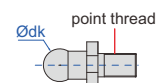


2428-55 extension rod for points

method of measurement



ball points (optional), in pair



ATTENTION: NOT SUITABLE
FOR 0.001MM DIAL INDICATORS

MEASURE DIAMETER OF
BORES WITH BARRIER INSIDE

BORE GAGE FOR BARRIER INSIDE BORE

digital indicator
is optional

application

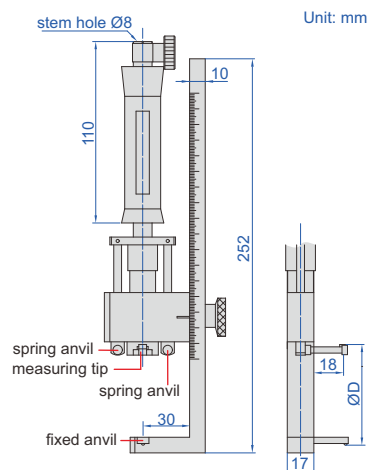


VIDEO

- Measure diameter of bores with barrier inside
- Optional accessory:
 - 0.01mm graduation dial indicators
 - Setting ring (code 6312)



2348-210



(mm)

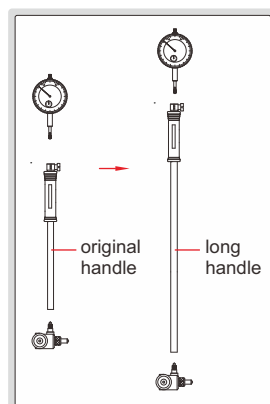
Code	Range ØD	Diameter of barrier Ød	Travel of measuring tip	Accuracy (without dial indicator)	Measuring force
2348-210	40-210mm	<D-14 (less than 50mm)*	1.6	0.018	2N

*For example:

When measuring size ØD is 40mm, D-14=26mm, so the diameter of barrier should be less than 26mm.
When measuring size ØD is 70mm, D-14=56mm, however it should be less than 50mm,
so the diameter of barrier should be less than 50mm.

LONG HANDLES

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

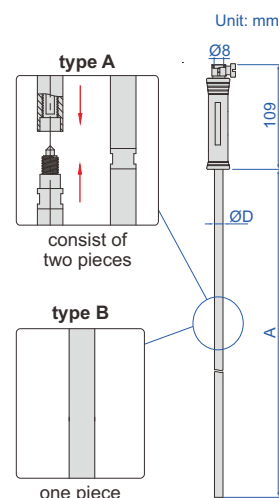


- To assist deep-hole measurement
- Can be used for bore gages 2122, 2322, 2824, 2724, 2127 and 2827

Code	Applicable bore gages	A	ØD	Type
7351-EX11	35-60mm, 50-100mm, 50-160mm, 100-160mm	475mm	13mm	B
7351-EX12		980mm	13mm	
7351-EX13		1480mm	14.5mm	A
7351-EX14		1980mm	14.5mm	
7351-EX21	160-250mm, 250-450mm	480mm	14.5mm	B
7351-EX22		980mm	14.5mm	
7351-EX23		1480mm	14.5mm	A
7351-EX24		1980mm	14.5mm	



7351-EX11



ANVILS FOR BORE GAGES

- For bore gages 2852, 2152, 2322, 2122, 2127, 2724, 2825, 2126, 2824, 2853, 2153 and 2827



7350-160

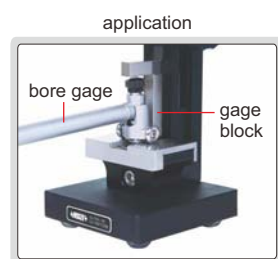
Code	Applicable bore gages	Material of measuring face	Quantity per set	Measuring range of anvil (mm)
7350-10	6-10mm	steel	9 pcs	6, 6.5, 7, 7.5, 8, 8.5, 9, 9.5, 10
7350-18	10-18.5mm	ceramic	9 pcs	10, 11, 12, 13, 14, 15, 16, 17, 18
7350-35	18-35mm	ceramic	9 pcs	18, 20, 22, 24, 26, 28, 30, 32, 34
7350-60	35-60mm	ceramic	6 pcs	35, 40, 45, 50, 55, 60
7350-100	50-100mm	ceramic	11 pcs	50, 55, 60, 65, 70, 75, 80, 85, 90, 95, 100
7350-160	50-160mm	ceramic	12 pcs	50, 55, 60, 65, 70, 75, 80, 85, 90, 95, 100, 105
7350-161	100-160mm	ceramic	12 pcs	50, 55, 60, 65, 70, 75, 80, 85, 90, 95, 100, 105
7350-250	160-250mm	ceramic	5 pcs	160, 170, 180, 190, 200
7350-450	250-450mm	ceramic	5 pcs	250, 260, 270, 280, 290

7

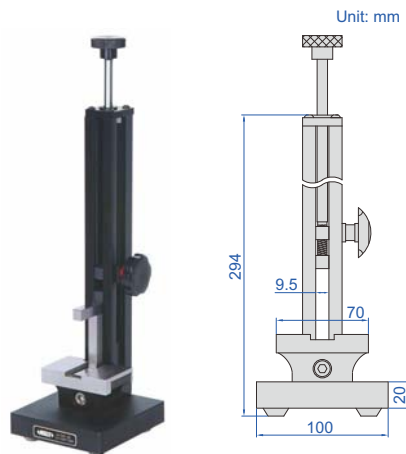
BORE GAGE SETTERS



VIDEO



- Vertical and horizontal use
- To be used with gage blocks



7353-160



gage blocks for 7353-160



Gage block set for 7353-160

Blocks per set	Size (mm)	Step (mm)	Quantity	Remark
33	1.005		1 pc	grade 2 (ISO3650)
	1.01-1.09	0.01	9 pcs	
	1.1-1.9	0.1	9 pcs	
	1-9	1	9 pcs	
	10-30	10	3 pcs	
	50		1 pc	
	100		1 pc	

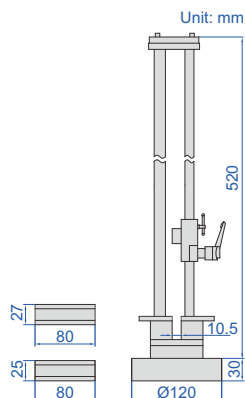
Code	Range	Repeatability	Remark
7353-160	0-160mm	1.2μm	with gage block set
7353-160W	0-160mm	1.2μm	without gage block set

BORE GAGE SETTER

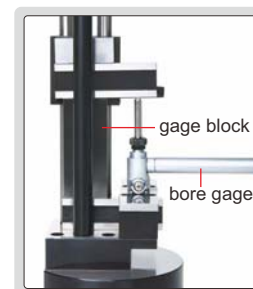


VIDEO

- Used together with gage blocks to set bore gages



2395-400



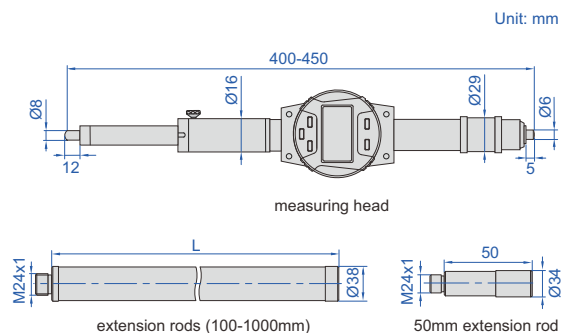
Code	Setting range
2395-400	18-400mm

SPRING LOADED
MEASURING POINT

CARBON FIBER EXTENSION RODS, LIGHT WEIGHT,
NOT EASY TO DEFORM, LOW THERMAL EXPANSION

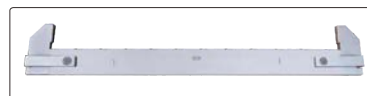
DATA
OUTPUT

CARBON FIBER BORE GAGES



- Carbon fiber extension rods, light weight, not easy to deform, low thermal expansion
- Carbide measuring faces
- Data output
- 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
- Supplied with 400mm setting standard
- Optional accessory: data output cable (code **7302-40M** page 13), wireless data transmission (transmitter code **7315-51** need receiver page 5)

setting standard (included),
used to set the measuring head



Measuring head

Range	Resolution	Accuracy	Repeatability	Weight
400-450mm	0.001mm/0.00005"	±6µm	±3µm	1kg

Extension rods

Length (L)	Accuracy	Weight	Material
50mm	±2µm	230g	steel
100mm	±3µm	300g	carbon fiber
200mm	±4.5µm	390g	carbon fiber
300mm	±6µm	470g	carbon fiber
600mm	±9µm	730g	carbon fiber
1000mm	±11µm	1000g	carbon fiber

spring loaded point, and max./min. value tracking
make it easy to find the right measuring position



Code	Range	Weight	Extension rods
3522-1000	400-1000mm	3.8kg	50mm, 100mm, 200mm, 300mm
3522-1500	400-1500mm	4.5kg	50mm, 100mm, 200mm, 300mm, 600mm
3522-2000	400-2000mm	5.3kg	50mm, 100mm, 200mm, 300mm, 600mm (2 pcs)
3522-2400	400-2400mm	6.0kg	50mm, 100mm, 200mm, 300mm, 600mm (3 pcs)
3522-3400	400-3400mm	6.7kg	50mm, 100mm, 200mm, 300mm, 600mm (4 pcs)
3522-6400	400-6400mm	9.5kg	50mm, 100mm, 200mm, 300mm, 600mm, 1000mm (5 pcs)

INTERNAL CHAMFER GAGES

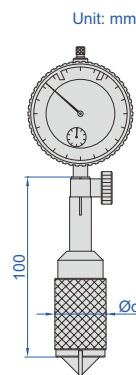
INSIZE PLUS
MADE IN EUROPE

- Measure end diameter of chamfer or taper holes
- With limit pointers
- 2941-20** and **2941-203** are supplied with 5mm setting ring

5mm setting ring for
2941-20 and **2941-203**

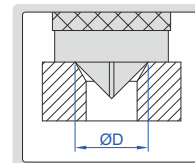


2941-20



**INSPECTION
CERTIFICATE**

measurement principle

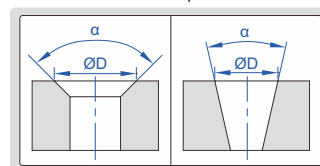


Code	Range ØD	Applicable angle α	Graduation	Accuracy	Ød
2941-20*	0.5-20.1mm	0-90°	0.01mm	±0.02mm	28.3mm
2941-40*	20-40mm	0-90°	0.01mm	±0.02mm	50mm
2941-203*	0.5-20.1mm	90-127°	0.02mm	±0.04mm	28.3mm
2941-403*	20-40mm	90-127°	0.02mm	±0.04mm	50mm



VIDEO

measure end diameter of
chamfer or taper holes



* Supplied with manufacturer inspection certificate

DIGITAL INTERNAL CHAMFER GAGES

INSIZE PLUS
MADE IN EUROPE

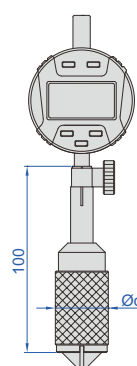
- Measure end diameter of chamfer or taper holes
- 2942-20** and **2942-203** are supplied with 5mm setting ring
- Resolution: 0.01mm/0.0005"
- Optional accessory: data output cable (code **7315-50M** need receiver page 5, **7302-40M** page 13)

5mm setting ring for
2942-20 and **2942-203**



2942-20

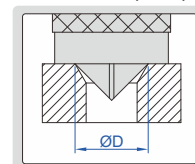
Unit: mm



**INSPECTION
CERTIFICATE**

DATA
OUTPUT

measurement principle

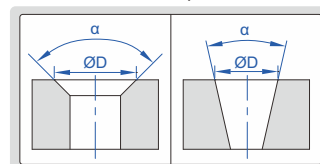


Code	Range ØD	Applicable angle α	Accuracy	Ød
2942-20*	0.5-20.1mm	0-90°	±0.02mm	28.3mm
2942-40*	20-40mm	0-90°	±0.02mm	50mm
2942-203*	0.5-20.1mm	90-127°	±0.04mm	28.3mm
2942-403*	20-40mm	90-127°	±0.04mm	50mm



VIDEO

measure end diameter of
chamfer or taper holes



* Supplied with manufacturer inspection certificate

SMALL HOLE GAGE SET

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

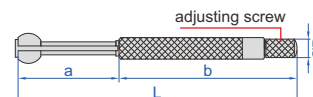
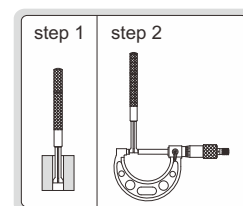


4208-1

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

(mm)

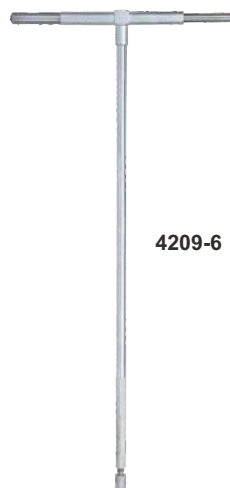
Code	Total range	Gages included
4208-1	3-13mm	3-5mm, 5-7.5mm, 7.5-10mm, 10-13mm



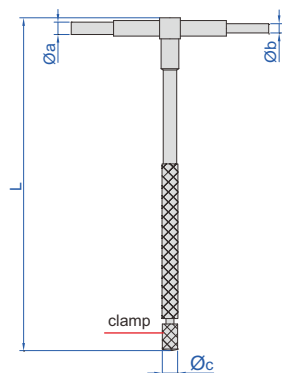
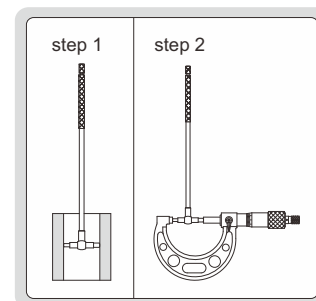
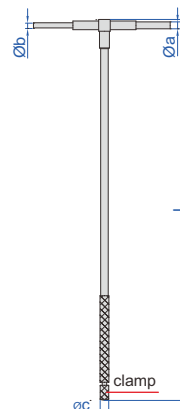
LONG HANDLE TELESCOPING GAGES

- 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



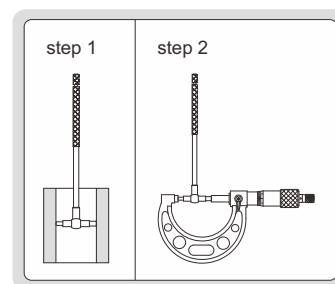
- 6 gages per set
- For quick measurement of inside diameter of holes and width of slots
- Satin chrome finish



4206-1

TELESCOPING GAGE SET

7



Range	L	$\varnothing a$	$\varnothing b$	$\varnothing c$
8-12.7mm	115	3.9	2.9	6.2
12.7-19mm	115	5.3	3.8	6.2
19-32mm	115	5.3	3.8	6.2
32-54mm	137	7.6	6.1	7.2
54-90mm	137	7.6	6.1	7.2
90-150mm	137	7.6	6.1	7.2

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

FLEXIBLE INNER DIAMETER TAPES



7137-60



Code	Diameter range	Graduation	Accuracy
7137-30	Ø10-30mm	0.05mm	±0.10mm
7137-60	Ø30-60mm	0.05mm	±0.10mm
7137-100	Ø50-100mm	0.05mm	±0.10mm
7137-200	Ø100-200mm	0.05mm	±0.10mm
7137-350	Ø200-350mm	0.05mm	±0.15mm

- Measure average inner diameter of flexible materials
- Made of PET



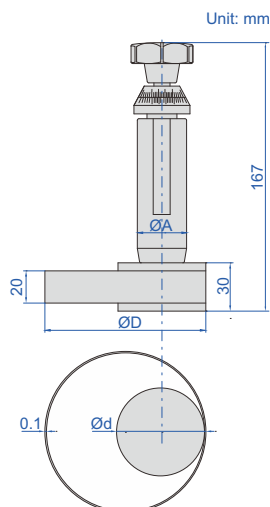
TAPE BORE GAGES

INSIZE PLUS
MADE IN EUROPE



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

Code	Range ØD	Ød	ØA	Measuring depth (mm)
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	94.5	30.5	15-106
2430-330	245-330mm	94.5	30.5	15-106



7

DIAMETER TAPES

CAN BE CUSTOM-MADE



7135-525

- Measure diameter of pipes, trees, tires, etc.
- Made of stainless steel



Code	Diameter range	Graduation	Accuracy
7135-35*	Ø20-35mm	0.05mm	±0.05mm
7135-55*	Ø30-55mm	0.05mm	±0.05mm
7135-125	Ø50-125mm	0.01mm	±0.05mm
7135-225	Ø100-225mm	0.01mm	±0.05mm
7135-375	Ø200-375mm	0.01mm	±0.05mm
7135-525	Ø350-525mm	0.01mm	±0.05mm
7135-725	Ø500-725mm	0.01mm	±0.06mm
7135-925	Ø700-925mm	0.01mm	±0.06mm
7135-1125	Ø900-1125mm	0.02mm	±0.06mm
7135-1325	Ø1100-1325mm	0.02mm	±0.08mm
7135-1525	Ø1300-1525mm	0.02mm	±0.08mm
7135-1725	Ø1500-1725mm	0.02mm	±0.08mm
7135-1925	Ø1700-1925mm	0.02mm	±0.08mm
7135-2125	Ø1900-2125mm	0.02mm	±0.08mm
7135-2325	Ø2100-2325mm	0.02mm	±0.10mm
7135-2525	Ø2300-2525mm	0.02mm	±0.10mm
7135-2750	Ø2500-2750mm	0.02mm	±0.10mm
7135-3000	Ø2750-3000mm	0.02mm	±0.10mm
7135-3250	Ø3000-3250mm	0.02mm	±0.15mm
7135-3500	Ø3250-3500mm	0.02mm	±0.15mm

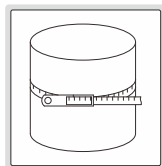
Code	Diameter range	Graduation	Accuracy
7135-3750	Ø3500-3750mm	0.02mm	±0.15mm
7135-4000	Ø3750-4000mm	0.02mm	±0.20mm
7135-4250	Ø4000-4250mm	0.02mm	±0.20mm
7135-4500	Ø4250-4500mm	0.02mm	±0.20mm
7135-4750	Ø4500-4750mm	0.02mm	±0.20mm
7135-5000	Ø4750-5000mm	0.02mm	±0.20mm
7135-5250	Ø5000-5250mm	0.02mm	±0.005%L**
7135-5500	Ø5250-5500mm	0.02mm	±0.005%L**
7135-5750	Ø5500-5750mm	0.02mm	±0.005%L**
7135-6000	Ø5750-6000mm	0.02mm	±0.005%L**
7135-6250	Ø6000-6250mm	0.02mm	±0.005%L**
7135-6500	Ø6250-6500mm	0.02mm	±0.005%L**
7135-6750	Ø6500-6750mm	0.02mm	±0.005%L**
7135-7000	Ø6750-7000mm	0.02mm	±0.005%L**
7135-7250	Ø7000-7250mm	0.02mm	±0.005%L**
7135-7500	Ø7250-7500mm	0.02mm	±0.005%L**
7135-7750	Ø7500-7750mm	0.02mm	±0.005%L**
7135-8000	Ø7750-8000mm	0.02mm	±0.005%L**
7135-8250	Ø8000-8250mm	0.02mm	±0.005%L**

** L is the actual measured value (unit: mm)

* The thickness of code 7135-35 and 7135-55 is 0.10mm, while the thickness of other codes is 0.25mm

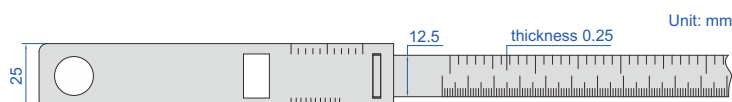
CAN BE CUSTOM-MADE

CIRCUMFERENCE TAPES



7136-1880

- Measure diameter and circumference of pipes, trees, tires, etc.
- Made of stainless steel



Unit: mm

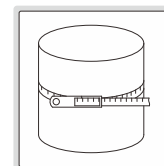
Code	Circumference range	Diameter range	Graduation	Accuracy	
				circumference	diameter
7136-940	160-940mm	Ø50-300mm	0.1mm	±0.30mm	±0.10mm
7136-1880	940-1880mm	Ø300-600mm	0.1mm	±0.30mm	±0.10mm
7136-2830	1880-2830mm	Ø600-900mm	0.1mm	±0.30mm	±0.10mm
7136-3770	2830-3770mm	Ø900-1200mm	0.1mm	±0.30mm	±0.10mm
7136-4710	3770-4710mm	Ø1200-1500mm	0.1mm	±0.30mm	±0.10mm
7136-5650	4710-5650mm	Ø1500-1800mm	0.1mm	±0.30mm	±0.10mm
7136-6600	5650-6600mm	Ø1800-2100mm	0.1mm	±0.30mm	±0.10mm
7136-7540	6600-7540mm	Ø2100-2400mm	0.1mm	±0.30mm	±0.10mm
7136-8480	7540-8480mm	Ø2400-2700mm	0.1mm	±0.30mm	±0.10mm
7136-9430	8480-9430mm	Ø2700-3000mm	0.1mm	±0.30mm	±0.10mm

CIRCUMFERENCE TAPES (ECONOMIC TYPE)

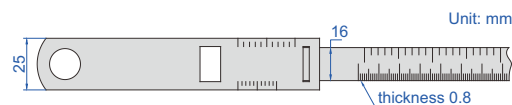
- Measure diameter and circumference of soft materials like pipes, trees, tires, etc.
- Graduation: 0.1mm
- Laser engraved scale
- Made of stainless steel



7114-950



Code	Circumference range	Diameter range	Accuracy	
			circumference	diameter
7114-950	150-950mm	Ø50-300mm	±3mm	±1mm
7114-2200	940-2200mm	Ø300-700mm	±3mm	±1mm
7114-3460	2190-3460mm	Ø700-1100mm	±3mm	±1mm

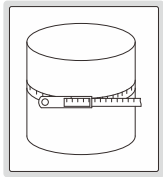


Unit: mm

CIRCUMFERENCE TAPES

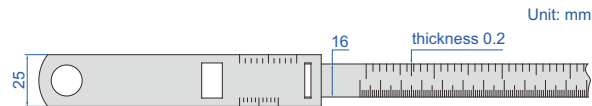
INSIZE PLUS
MADE IN EUROPE

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



7115-3460

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



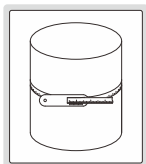
7

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

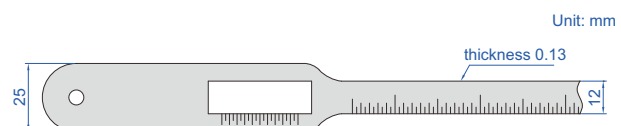
INSIZE PLUS
MADE IN EUROPE



7116-115

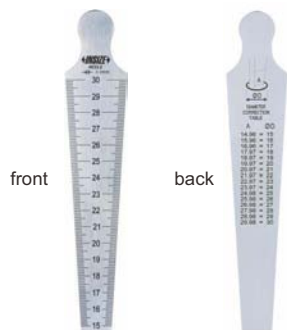
- Measure diameter of cables, thin plastic pipes, etc., which may deform
- Laser engraved scale
- Made of stainless steel

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



REFER TO PAGE 420
FOR DETAILS

TAPER GAGES



4833-2



TAPER GAGE SET
4837-1

REFER TO PAGE 421
FOR DETAILS

TAPER BORE GAGES

7



4852-15

REFER TO PAGE 421
FOR DETAILS

SMALL TAPER BORE GAGE



4855-5

REFER TO PAGE 429
FOR DETAILS

INSIDE SPRING CALIPERS



7261-150



Large Diameter Gages
Page 207



Outside Diameter Variation Measuring
Instruments
Page 208



Outside Diameter Measuring
Instruments
Page 209



Digital Radius Gages
Page 210



Digital Radius Gages
Page 211-212



Digital Arc Radius Calipers
Page 212



Digital Radius Calipers
Page 213



Radius Gages
Page 213

DATA
OUTPUT



LARGE DIAMETER GAGE CODE ISQ-RA600

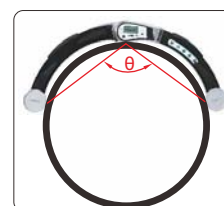
INSIZE PLUS
MADE IN EUROPE



- To measure large external or internal diameters
- Automatic judgment and display external or internal diameter
- Backlight LCD display, can rotate 180° for easy reading
- Memory of 12 readings and average calculation
- With minimum and maximum measurement mode
- Angle can be displayed



software flash disk
(included)



display of angle



external diameter measurement



internal diameter measurement



software (included),
data output, save and print

SPECIFICATION

Range	external	Ø500~6000mm/19.69~236.22"
	internal	Ø1100~6000mm/43.31~236.22"
Resolution	0.01mm/0.001"	
Accuracy	±(0.01+D²/30)mm (D is the diameter to be measured, in meter)	
Power supply	rechargeable battery (for 8 hours working)	
Weight	3.8kg	

STANDARD DELIVERY

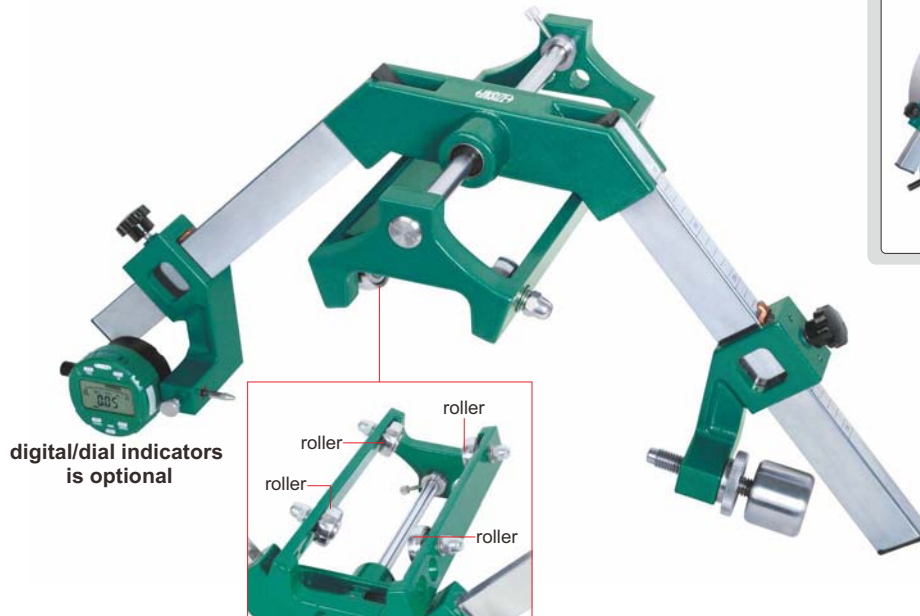
Main unit	1 pc
AC/DC adapter	1 pc
Software and USB cable	1 pc

Accuracy sample by diameters

Diameter	Accuracy
500mm	±0.018mm
1000mm	±0.043mm
1500mm	±0.085mm
2000mm	±0.143mm
2500mm	±0.218mm
3000mm	±0.310mm
4000mm	±0.543mm
5000mm	±0.843mm
6000mm	±1.210mm

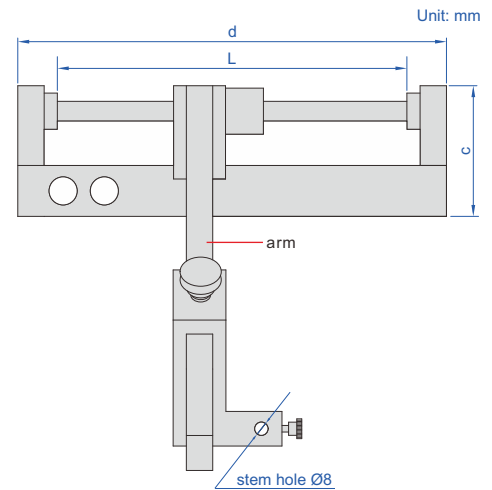
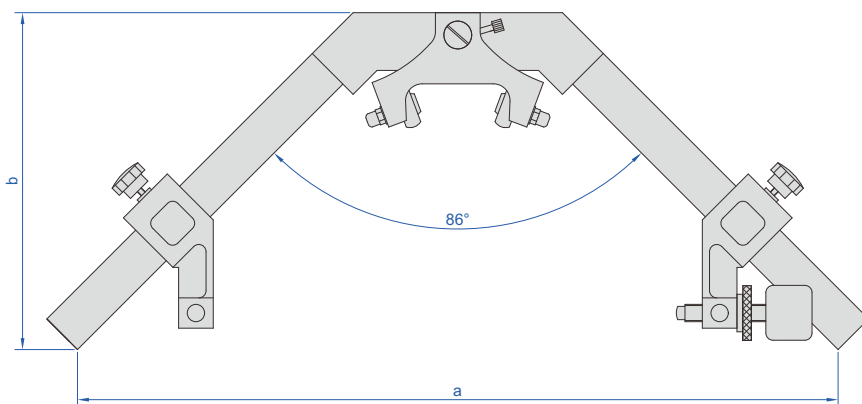
OUTSIDE DIAMETER VARIATION MEASURING INSTRUMENTS

CAN BE
CUSTOM-MADE



2715-350

application



- Measurement of diameter variation, convexity, concavity, taper and other parameters
- Continuous measurement in the axis direction
- Four rollers are included
- Optional accessory: 0.01mm or 0.001mm graduation digital/dial indicators

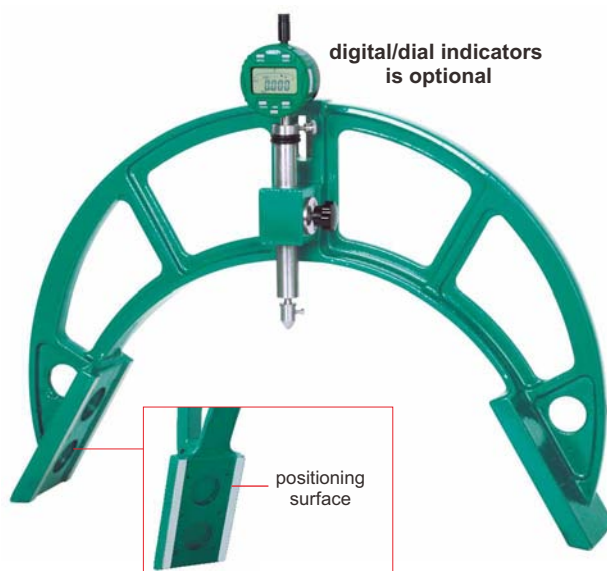
(mm)

Code	Range (diameter)	Accuracy	Repeatability	Arm moving range (L)	a	b	c	d	Weight
2715-350	100-350mm/4-14"	0.01mm	3µm	200mm	500	230	80	260	4kg
2715-500	200-500mm/8-20"	0.01mm	3µm	151mm	630	260	95	260	5kg
2715-700	300-700mm/12-28"	0.01mm	3µm	197mm	910	372	112	320	6.5kg
2715-1000	500-1000mm/20-40"	0.01mm	3µm	190mm	1170	460	120	320	8kg
2715-1600	800-1600mm/32-64"	0.02mm	6µm	202mm	1860	690	180	320	12.5kg
2715-2000	1400-2000mm/56-80"	0.02mm	6µm	232mm	2156	860	210	350	18.5kg



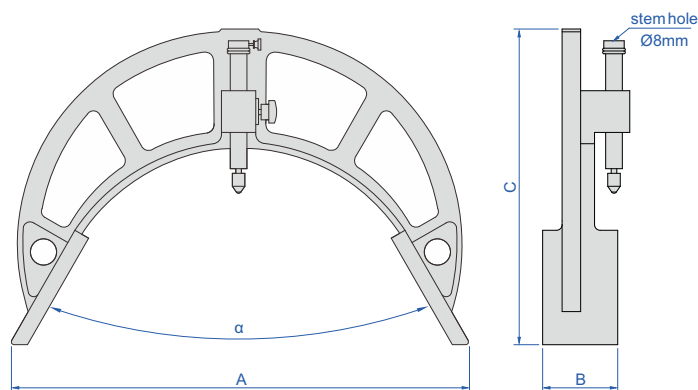
VIDEO

OUTSIDE DIAMETER MEASURING INSTRUMENTS



2716-500

- Need standard workpieces to set zero
- The frame is made of aluminum magnesium alloy with light weight and high strength
- Optional accessory: 0.01mm or 0.001mm digital/dial indicators



(mm)

Code	Range (diameter)	Repeatability	α	A	B	C	Weight
2716-60	18-60	0.01mm	60°	140	60	160	1kg
2716-120	60-120	0.01mm	60°	166	65	162	1.5kg
2716-200	120-200	0.01mm	60°	225	70	228	2kg
2716-300	200-300	0.01mm	60°	330	80	262	2.5kg
2716-400	300-400	0.01mm	60°	405	80	303	4kg
2716-500	400-500	0.01mm	60°	494	80	340	5kg
2716-600	500-600	0.01mm	60°	594	80	398	6kg
2716-700	600-700	0.01mm	60°	685	80	446	7.5kg
2716-800	700-800	0.01mm	60°	772	80	479	9kg
2716-900	800-900	0.01mm	60°	860	80	520	10kg
2716-1000	900-1000	0.01mm	60°	950	80	560	11.5kg
2716-1100	1000-1100	0.01mm	60°	1035	90	575	13kg
2716-1200	1000-1200	0.01mm	83.62°	960	100	460	12kg
2716-1300	1100-1300	0.01mm	83.62°	1000	100	485	13.5kg
2716-1400	1200-1400	0.01mm	83.62°	1100	100	512	15kg
2716-1600	1400-1600	0.01mm	83.62°	1260	100	540	17kg
2716-1800	1600-1800	0.01mm	83.62°	1460	100	570	19kg
2716-2000	1800-2000	0.01mm	83.62°	1645	100	605	21kg

DIGITAL RADIUS GAGES

DATA
OUTPUT



2188-55



2188-233



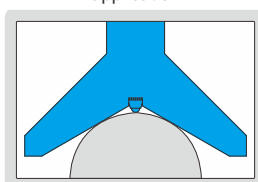
2188-143



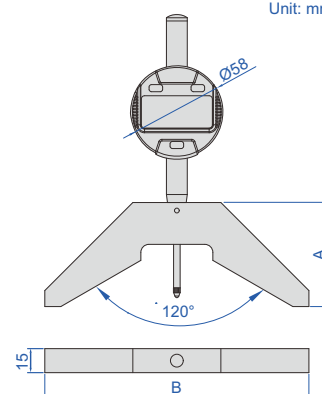
2188-323

- 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 (time is adjustable)
- Data output
- Stainless steel base
- Optional accessory: setting standards, data output cable (code 7315-50M need receiver page 5, 7302-40M page 13)

application



Unit: mm



Code	Range (radius)	Resolution	Accuracy	A	B
2188-55	4-53mm/0.16-2.09"	0.01mm/0.0005"	±0.02mm	40mm	65mm
2188-143	48-143mm/1.89-5.63"	0.01mm/0.0005"	±0.03mm	65mm	165mm
2188-233	138-233mm/5.43-9.17"	0.01mm/0.0005"	±0.03mm	85mm	255mm
2188-323	228-323mm/8.98-12.72"	0.01mm/0.0005"	±0.04mm	95mm	345mm

Setting standards

Code	Setting standards	Remark
4110-10D00	setting standard for 2188-55	included
2188-P143	setting standard for 2188-143	optional
2188-P233	setting standard for 2188-233	optional
2188-P323	setting standard for 2188-323	optional



2188-P143

setting standard application



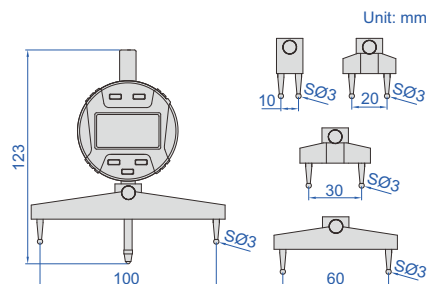
DIGITAL RADIUS GAGE (LOW ACCURACY)



VIDEO



2183



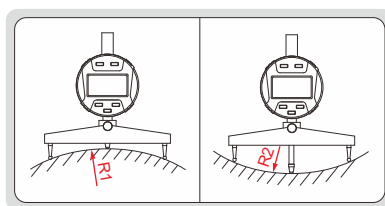
Unit: mm

DATA
OUTPUT

calibration standard application



- Resolution: 0.01mm/0.001"
- 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
- Data output
- Battery CR2032
- Automatic power off (time is adjustable)
- Optional accessory: calibration standard (code **2183-BLOCK**), data output cable (code **7315-2183 need receiver, 7302-2183**)



2183-BLOCK

Calibration standard (optional)

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

Code	Remark
2183-BLOCK	includes 5 standard blocks

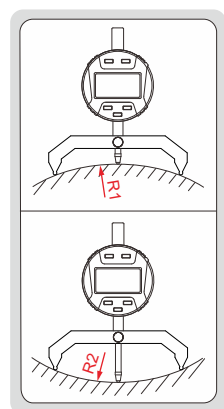
8

DATA
OUTPUT

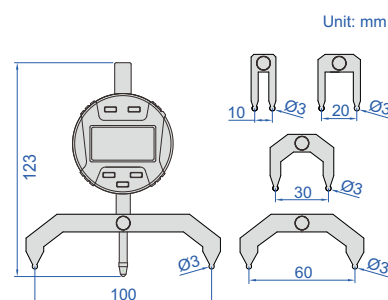


VIDEO

DIGITAL RADIUS GAGE



2511



Unit: mm

calibration standard application



- Resolution: 0.01mm/0.001"
- Buttons: on/off, hold, mm/inch, s (select jaws), zero
- Measure radius of internal or external arcs
- Cylindrical measuring jaws, self-positioning
- Display can be rotated by 320°
- Supplied with 5 jaws for different sizes of arc
- Data output
- Battery CR2032
- Automatic power off (time is adjustable)
- Optional accessory: calibration standard (code **2183-BLOCK**), data output cable (code **7315-2183 need receiver, 7302-2183**)



2183-BLOCK

Calibration standard (optional)

Code	Range of external radius (R1)	Range of internal radius (R2)	Accuracy (mm)
2511	5-910mm/0.2-35.83"	7-910mm/0.3-35.83"	±0.005R *

* R is the radius to be measured. For example, radius is 100mm, the accuracy is ±0.005x100=±0.5mm

Code	Remark
2183-BLOCK	includes 5 standard blocks

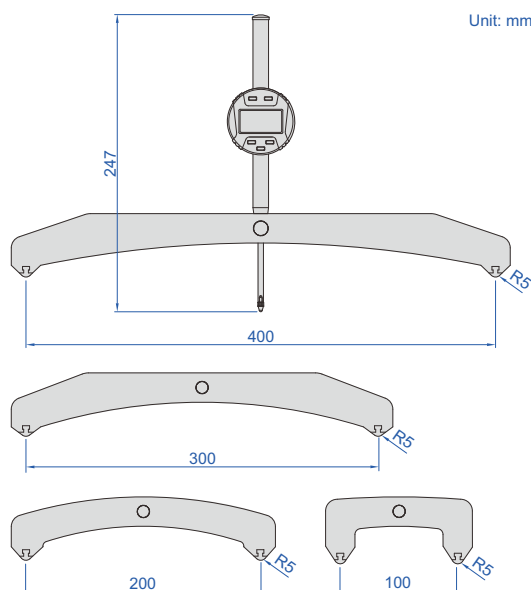
LARGE RANGE DIGITAL RADIUS GAGE

DATA
OUTPUT

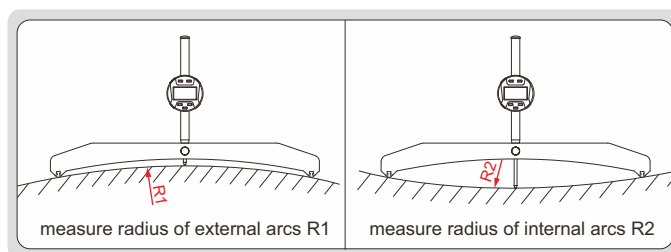
Unit: mm



2197



- Measure radius of internal or external arcs
- Resolution: 0.01mm/0.001"
- Buttons: on/off, hold, mm/inch, s (select jaws), zero
- Display can be rotated by 320°
- Supplied with 4 jaws for different sizes of arc
- Battery CR2032, automatic power off (time is adjustable)
- Data output
- Optional accessory: data output cable (code 7315-2183 need receiver, 7302-2183)



Code	Range of external radius (R1)	Range of internal radius (R2)	Accuracy (mm)
2197	100-15000mm/4-590"	100-15000mm/4-590"	±0.005R*

*R is the radius to be measured. For example, radius is 100mm, the accuracy is $\pm 0.005 \times 100 = \pm 0.5\text{mm}$



VIDEO

DIGITAL ARC RADIUS CALIPERS

DATA
OUTPUT

- Non waterproof
- Measure the radius of arc less than half round
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Data output
- Made of stainless steel



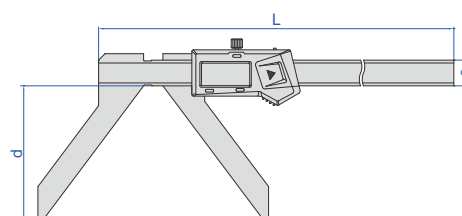
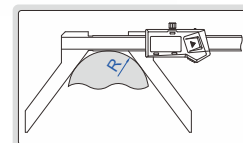
1189-200B

With data interface (data output cable code 7315-21 need receiver page 4, 7302-21 page 12, optional)

Code	Range (R)	Accuracy	L	c	d
1189-150B	5-150mm/0.2-6"	±0.05mm	263mm	16mm	65mm
1189-200B	5-200mm/0.2-8"	±0.07mm	313mm	16mm	85mm

Built-in wireless (receiver code 7315-2/3/6/7/8/9 is required)

Code	Range (R)	Accuracy	L	c	d
1189-150BWL	5-150mm/0.2-6"	±0.05mm	263mm	16mm	65mm
1189-200BWL	5-200mm/0.2-8"	±0.07mm	313mm	16mm	85mm



DATA
OUTPUT

DIRECT READING,
CALCULATION IS NOT REQUIRED

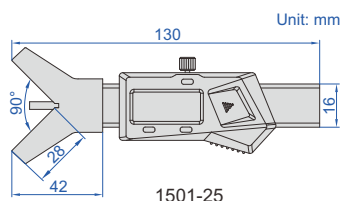
DIGITAL RADIUS CALIPERS



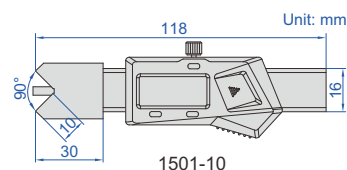
1501-25



1501-10



1501-25

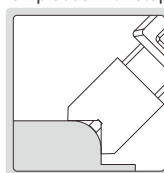


1501-10

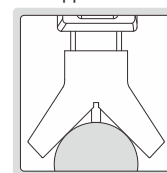
- Non waterproof
- Measure radius of external arc, arc angle of measured surface should be larger than 90°
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Data output
- Made of stainless steel
- Supplied with pin gage for zero setting
- Optional accessory: data output cable (code 7315-1529 need receiver, 7302-1529)

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

1501-10 can measure small workpieces or workpieces with steps



application



pin gage (included)



REFER TO PAGE 416
FOR DETAILS

RADIUS GAGES



4801-17



4802-31



RADIUS GAGE SET
4804-26



Keyway Symmetry Gages
Page 215

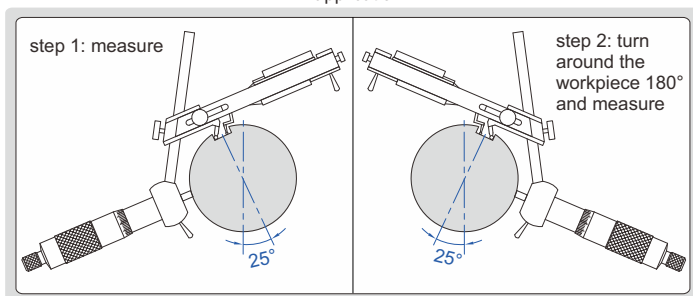


Keyway Symmetry Digital Calipers
Page 215

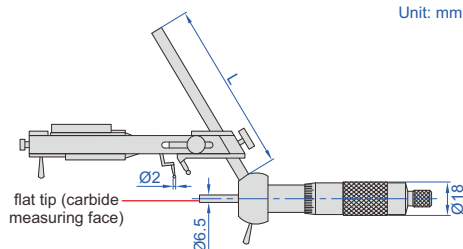


Digital Keyway Depth Gages
Page 216

application



Unit: mm



- Used to measure the symmetry of shaft keyways

KEYWAY SYMMETRY GAGE



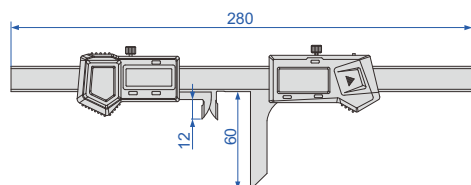
4865-14

Code	Range		Graduation	Accuracy	L
	diameter of shaft	width of keyway			
4865-14	14-110mm	5-28mm	0.01mm	0.02mm	100mm

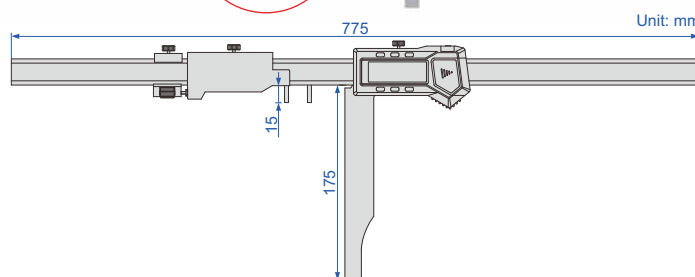
KEYWAY SYMMETRY DIGITAL CALIPERS



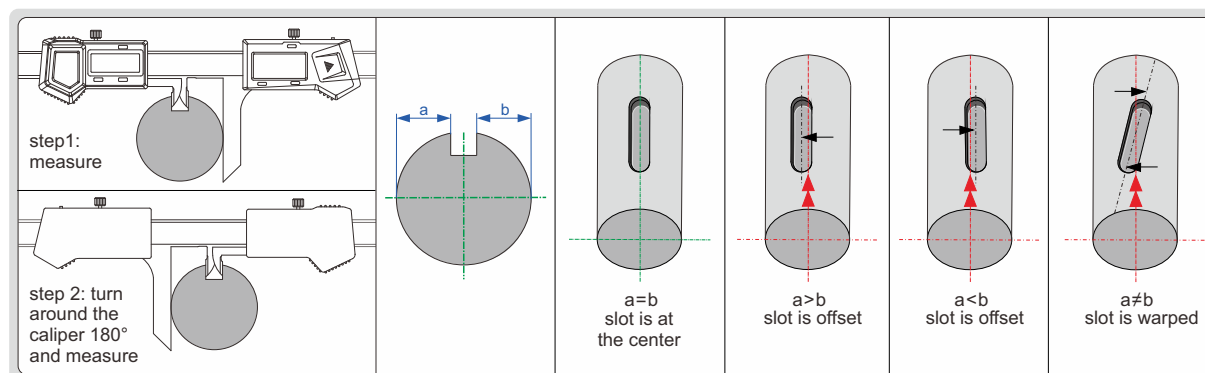
1531-60



1531-200



9



DATA
OUTPUT

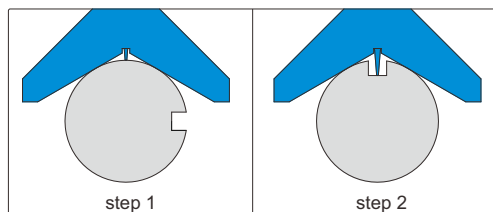
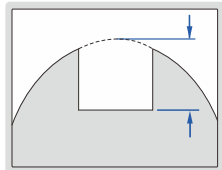
- Non waterproof
- Used to measure the symmetry of shaft keyways
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Battery CR2032, data output
- Made of stainless steel
- Optional accessory: data output cable (code 7315-22 need receiver page 4, 7302-22 page 12)

Code	Width of keyway	Diameter of shaft	Accuracy	Remark
1531-60	6-45mm	Ø10-120mm	±0.05mm	can measure keyway width
1531-200	3-250mm	Ø6-350mm	±0.05mm	cannot measure keyway width

DIGITAL KEYWAY DEPTH GAGE

DATA
OUTPUT

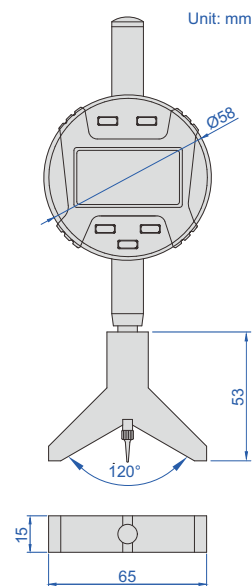
measure depth of keyway



- Measure keyway depth of cylindrical workpieces with diameter Ø10-100mm
- Button function: on/off, zero, inch/metric conversion, absolute/incremental measurement, data preset, measuring direction change
- CR2032 battery, automatic power off (time is adjustable)
- Data output
- Stainless steel base
- Pointed tip
- Optional accessory: data output cable (code **7315-50M** need receiver page 5, **7302-40M** page 13)



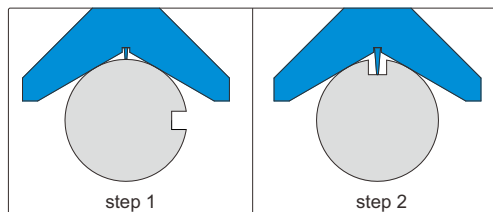
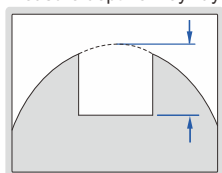
2182-25



Code	Range	Resolution	Accuracy
2182-25	0-25.4mm/0-1"	0.01mm/0.0005"	±0.02mm

DIAL KEYWAY DEPTH GAGE

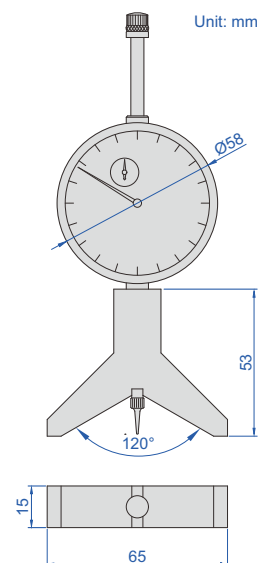
measure depth of keyway



- Measure keyway depth of cylindrical workpieces with diameter Ø10-100mm
- Stainless steel base
- Pointed tip



2189-30



Code	Range	Graduation	Accuracy
2189-30	0-30mm	0.01mm	±0.03mm



Digital Chamfer Gages
Page 218



Chamfer Gages
Page 219



Digital Chamfer Gages
Page 219



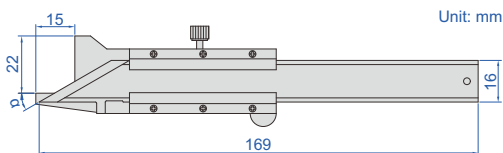
Chamfer Height Gages
Page 220

CHAMFER GAGES

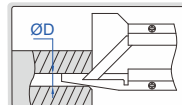


1267-6

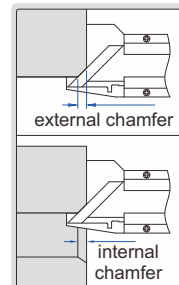
- Measure 30°/45°/60° chamfer dimension
- Graduation: 0.02mm
- Made of stainless steel
- Satin chrome plated reading surface



for internal chamfer measurement, diameter should be larger than ØD



measure chamfer dimension



Code	Range	Accuracy	Chamfer (α)	ØD
1267-6	0-10mm	±0.06mm	45°	7mm
1267-63	0-10mm	±0.06mm	30°	8mm
1267-66	0-10mm	±0.06mm	60°	7mm

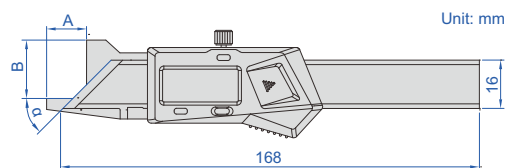
DIGITAL CHAMFER GAGES

DATA OUTPUT

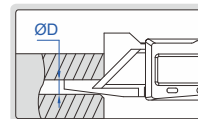


1180-6

- Non waterproof
- Measure 15°/20°/30°/45°/60° chamfer dimension
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Data output
- Made of stainless steel



for internal chamfer measurement, diameter should be larger than ØD

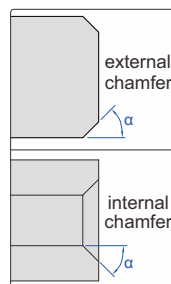


With data interface
(data output cable code 7315-21 need receiver page 4, 7302-21 page 12, optional)

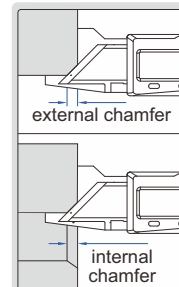
Code	Range	Accuracy	Chamfer (α)	A	B	ØD
1180-6	0-10mm/0-0.39"	±0.06mm	45°	15mm	22mm	7mm
1180-61	0-10mm/0-0.39"	±0.06mm	15°	33mm	20mm	11mm
1180-62	0-10mm/0-0.39"	±0.06mm	20°	33mm	20mm	11mm
1180-63	0-10mm/0-0.39"	±0.06mm	30°	15mm	22mm	8mm
1180-66	0-10mm/0-0.39"	±0.06mm	60°	14mm	21mm	7mm

Built-in wireless (receiver code 7315-2/3/6/7/8/9 is required)

Code	Range	Accuracy	Chamfer (α)	A	B	ØD
1180-6WL	0-10mm/0-0.39"	±0.06mm	45°	15mm	22mm	7mm
1180-61WL	0-10mm/0-0.39"	±0.06mm	15°	33mm	20mm	11mm
1180-62WL	0-10mm/0-0.39"	±0.06mm	20°	33mm	20mm	11mm
1180-63WL	0-10mm/0-0.39"	±0.06mm	30°	15mm	22mm	8mm
1180-66WL	0-10mm/0-0.39"	±0.06mm	60°	14mm	21mm	7mm

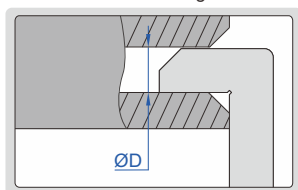


measure chamfer dimension

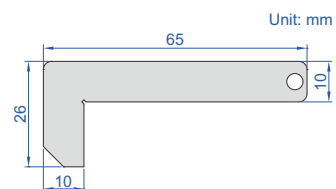


CHAMFER GAGE

for internal chamfer measurement,
diameter should be larger than ØD



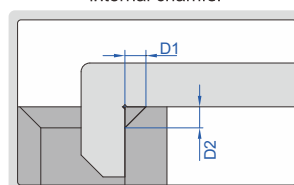
4844-1



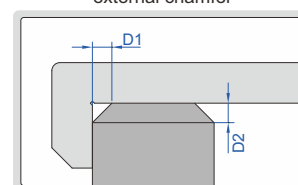
- To measure internal and external chamfers
- Made of stainless steel

Code	Graduation	Accuracy	ØD
4844-1	0.5mm	±0.25mm	11mm

internal chamfer



external chamfer



ATTENTION: CHAMFER OF
HOLES CANNOT BE MEASURED

DATA
OUTPUT

DIRECT READING,
CALCULATION IS NOT REQUIRED

DIGITAL CHAMFER GAGES

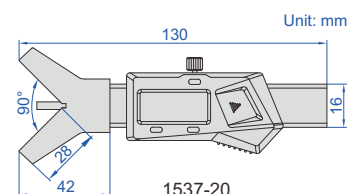


- Non waterproof
- Measure 45° chamfer length
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Data output
- Made of stainless steel
- Supplied with pin gage for zero setting
- Optional accessory: data output cable (code 7315-1529 need receiver, 7302-1529)

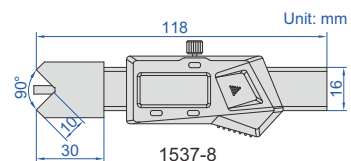
Code	Range	Accuracy
1537-20	0-20mm/0-0.787"	±0.05mm
1537-8	0-8mm/0-0.315"	±0.05mm



1537-20



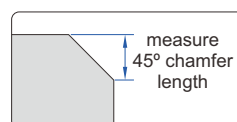
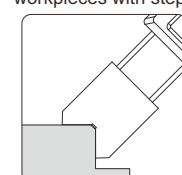
1537-8



pin gage
(included)



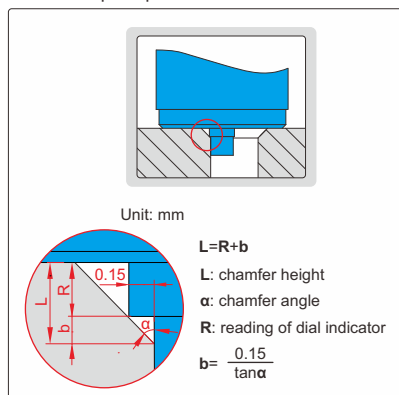
1537-8 can measure
small workpieces or
workpieces with steps



CHAMFER HEIGHT GAGE

INSIZE PLUS
MADE IN EUROPE

principle of measurement



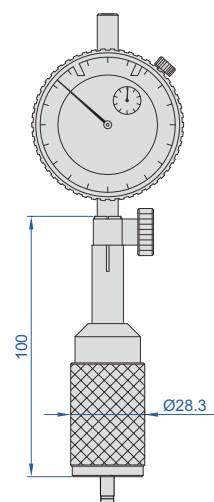
- Measure outside or inside chamfer height
- Suitable for diameter of bores $\geq 6\text{mm}$, chamfer angle $\alpha \geq 30^\circ$
- Setting gage is included

Code	Range (L)	Graduation	Accuracy
2943-1	0.2-5mm	0.01mm	$\pm 0.02\text{mm}$

Unit: mm



2943-1



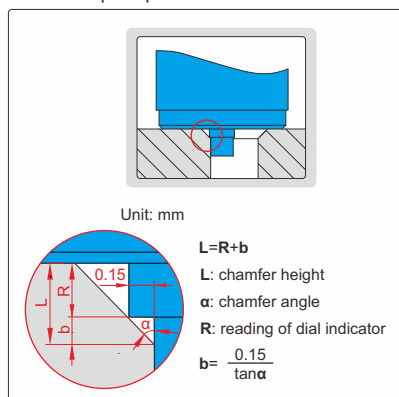
setting gage (included)



DIGITAL CHAMFER HEIGHT GAGE

INSIZE PLUS
MADE IN EUROPE

principle of measurement



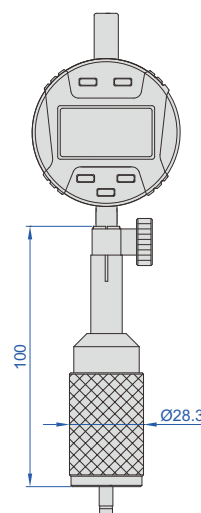
- Measure outside or inside chamfer height
- Suitable for diameter of bores $\geq 6\text{mm}$, chamfer angle $\alpha \geq 30^\circ$
- Resolution: 0.01mm/0.0005"
- Setting gage is included
- Optional accessory: data output cable (code 7315-50M need receiver page 5, 7302-40M page 13)

Code	Range (L)	Accuracy
2944-1	0.2-5mm/0.008-0.197"	$\pm 0.02\text{mm}$

Unit: mm



2944-1



setting gage (included)



INDICATORS, LINEAR GAGES, DIAL INDICATOR STANDS

11



Dial Test Indicators
Page 222-226



Styli For Dial Test Indicators
Page 226



Digital Indicators
Page 227-239



Zeroing Foot Switches
Page 236



High Precision Digital Indicators
Page 240



Dial Comparators
Page 240



Dial Indicators
Page 241-250



Points
Page 250-252



Spindle Lift Knobs
Page 253



Shaft Sleeves
Page 253



Backs
Page 253-254



Dial Indicator Testers
Page 255



Optical Grating Linear Gages And Display Units
Page 256-259



Capacitance Type Linear Gages And Display Units
Page 260-262



Dial Test Indicator Holders
Page 263-264



Magnetic Stands
Page 265-270



Dial Indicator Stands (non-magnetic)
Page 270-271



Dial Indicator Stands
Page 272-278

PRECISION DIAL TEST INDICATOR

INSIZE PLUS
MADE IN EUROPE

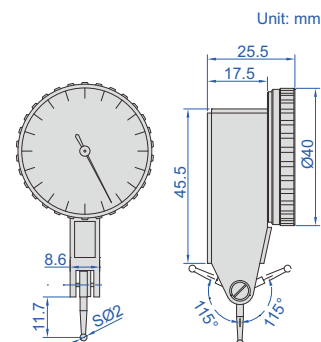
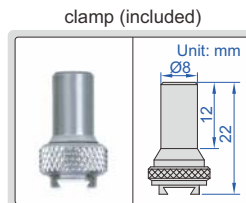
**INSPECTION
CERTIFICATE**

ANTI MAGNETIC
CARBIDE CONTACT POINT

- Meet DIN2270
- Ceramic bearing
- Anti magnetic carbide contact point
- Two measuring directions
- Supplied with one clamp: diameter Ø8mm
- Optional accessory: styli (page 226)



2897-02



Code	Range	Graduation	Accuracy	Hysteresis	Dial reading
2897-02 *	0.2mm	0.001mm	4µm	2µm	0-100-0

* Supplied with manufacturer inspection certificate

PRECISION DIAL TEST INDICATORS

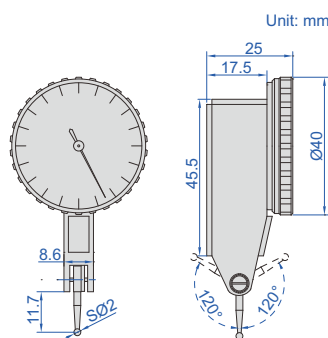
INSIZE PLUS
MADE IN EUROPE

**INSPECTION
CERTIFICATE**

- Meet DIN2270
- Ceramic bearing
- Two measuring directions
- Supplied with one clamp: diameter Ø8mm
- Optional accessory: styli (page 226)



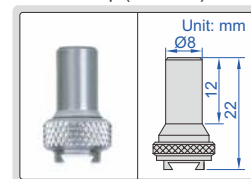
2880-02



ruby contact
point of 2880-02R



clamp (included)



Code	Range	Graduation	Accuracy	Hysteresis	Dialreading	Remark
2880-02 *	0.2mm	0.002mm	4µm	2µm	0-100-0	anti magnetic carbide contact point
2880-02R *	0.2mm	0.002mm	4µm	2µm	0-100-0	ruby contact point

* Supplied with manufacturer inspection certificate

DIAL TEST INDICATORS

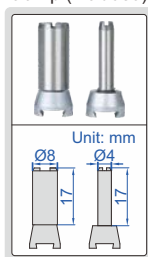
**JEWELLED
BEARING**

**INSPECTION
CERTIFICATE**

**POPULAR
MODEL**

- Meet DIN2270 (except 2380-02, 2381-02, 2381-021)
- Jeweled bearing
- Carbide contact point
- Two measuring directions
- Anti magnetic body
- Supplied with two clamps: diameter Ø4mm and Ø8mm
- Optional accessory: styli (page 226)

clamp (included)

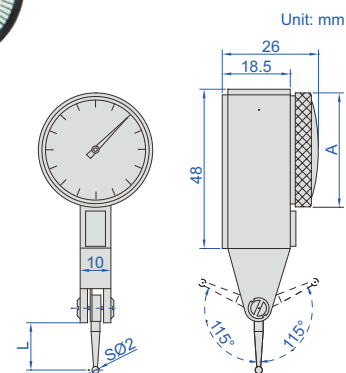


2380-08

(mm)

Code	Range	Graduation	Accuracy	Hysteresis	Dial reading	A	L
2380-08 *	0.8mm	0.01mm	13µm	3µm	0-40-0	Ø30	13.5
2381-08 *	0.8mm	0.01mm	13µm	3µm	0-40-0	Ø37	13.5
2380-02 *	0.2mm	0.002mm	6µm	2µm	0-100-0	Ø30	12.5
2381-02 *	0.2mm	0.002mm	6µm	2µm	0-100-0	Ø37	12.5
2381-021 *	0.2mm	0.001mm	6µm	2µm	0-100-0	Ø37	12.5

* Supplied with manufacturer inspection certificate



JEWELLED BEARING

INSPECTION CERTIFICATE

- Jeweled bearing
- Carbide contact point
- Two measuring directions
- Anti magnetic body
- Supplied with two clamps: 5/32" DIA and 3/8" DIA

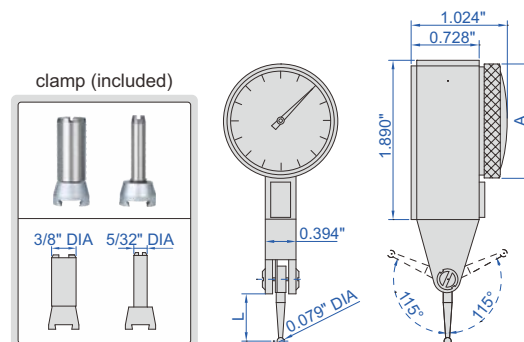


2380-31

Code	Range	Graduation	Accuracy	Dial reading	A	L
2380-31 *	0.03"	0.001"	±0.001"	0-15-0	1.181" DIA	0.50"
2380-35 *	0.03"	0.0005"	±0.0005"	0-15-0	1.181" DIA	0.50"
2380-301 *	0.008"	0.0001"	±0.0001"	0-40-0	1.181" DIA	0.563"
2381-31 *	0.03"	0.001"	±0.001"	0-15-0	1.457" DIA	0.50"
2381-35 *	0.03"	0.0005"	±0.0005"	0-15-0	1.457" DIA	0.50"
2381-301 *	0.008"	0.0001"	±0.0001"	0-40-0	1.457" DIA	0.563"

* Supplied with manufacturer inspection certificate

INCH DIAL TEST INDICATORS



ANTI MAGNETIC CARBIDE CONTACT POINT

INSPECTION CERTIFICATE

- Meet DIN2270
- Ceramic bearing
- Anti magnetic carbide contact point
- Two measuring directions
- Supplied with one clamp: diameter Ø8mm
- Optional accessory: styli (page 226)



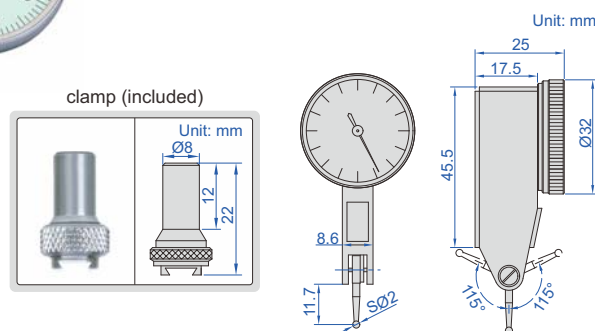
2895-08

Code	Range	Graduation	Accuracy	Hysteresis	Dial reading
2895-08 *	0.8mm	0.01mm	13µm	3µm	0-40-0

* Supplied with manufacturer inspection certificate

DIAL TEST INDICATOR

INSIZE PLUS
MADE IN EUROPE



11

ANTI MAGNETIC CARBIDE CONTACT POINT

INSPECTION CERTIFICATE

- Meet DIN2270
- Ceramic bearing
- Anti magnetic carbide contact point
- Two measuring directions
- Supplied with one clamp: diameter Ø8mm
- Optional accessory: styli (page 226)



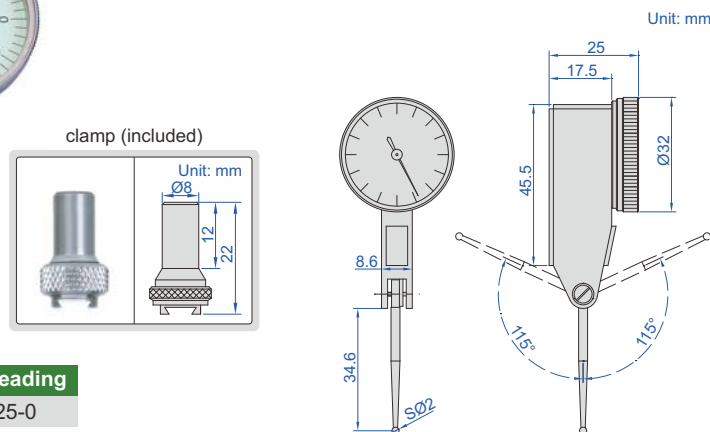
2896-05

Code	Range	Graduation	Accuracy	Hysteresis	Dial reading
2896-05 *	0.5mm	0.01mm	13µm	3µm	0-25-0

* Supplied with manufacturer inspection certificate

LONG STYLUS DIAL TEST INDICATOR

INSIZE PLUS
MADE IN EUROPE



LONG STYLUS DIAL TEST INDICATOR

- Meet DIN2270
- Jeweled bearing
- Carbide contact point
- Two measuring directions
- Anti magnetic body
- Supplied with two clamps: diameter Ø4mm and Ø8mm
- Optional accessory: styli (page 226)



2383-08A

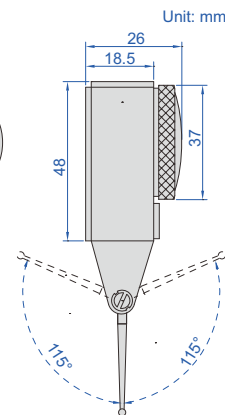
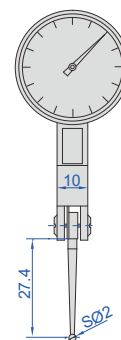
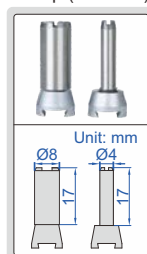
Code	Range	Graduation	Accuracy	Hysteresis	Dial reading
2383-08A*	0.8mm	0.01mm	13µm	3µm	0-40-0

* Supplied with manufacturer inspection certificate

JEWELLED BEARING

INSPECTION CERTIFICATE

clamp (included)



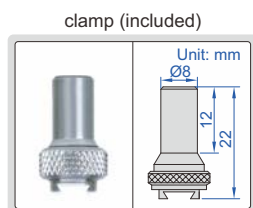
VERTICAL TYPE LONG STYLUS DIAL TEST INDICATOR

INSIZE PLUS
MADE IN EUROPE

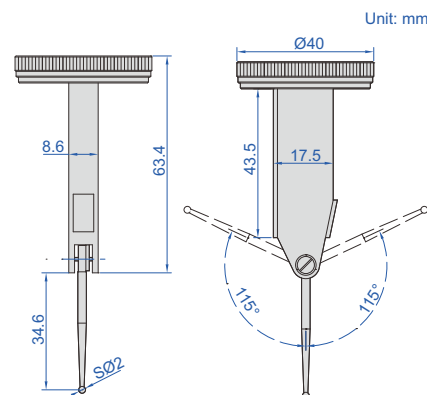
ANTI MAGNETIC CARBIDE CONTACT POINT

INSPECTION CERTIFICATE

- Meet DIN2270
- Ceramic bearing
- Anti magnetic carbide contact point
- Two measuring directions
- Supplied with one clamp: diameter Ø8mm
- Optional accessory: styli (page 226)



2899-05



Code	Range	Graduation	Accuracy	Hysteresis	Dial reading
2899-05*	0.5mm	0.01mm	13µm	3µm	0-25-0

* Supplied with manufacturer inspection certificate

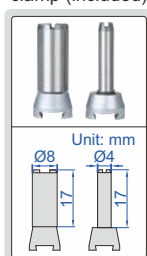
VERTICAL TYPE DIAL TEST INDICATOR

JEWELLED BEARING

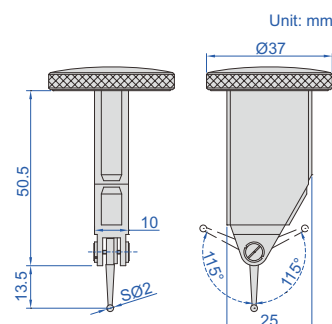
INSPECTION CERTIFICATE

- Meet DIN2270
- Jeweled bearing
- Carbide contact point
- Two measuring directions
- Anti magnetic body
- Supplied with two clamps: diameter Ø4mm and Ø8mm
- Optional accessory: styli (page 226)

clamp (included)



2398-08



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

* Supplied with manufacturer inspection certificate

ANTI MAGNETIC
CARBIDE CONTACT POINT

INSPECTION
CERTIFICATE

SIDE TYPE DIAL TEST INDICATOR

INSIZE PLUS
MADE IN EUROPE

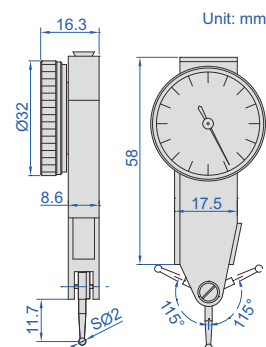
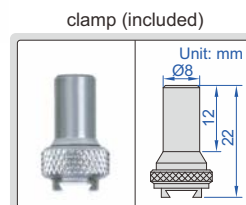
- Meet DIN2270
- Ceramic bearing
- Anti magnetic carbide contact point
- Two measuring directions
- Supplied with one clamp:
diameter Ø8mm
- Optional accessory: styli (page 226)



2898-08

Code	Range	Graduation	Accuracy	Hysteresis	Dial reading
2898-08*	0.8mm	0.01mm	13µm	3µm	0-40-0

* Supplied with manufacturer inspection certificate



INSPECTION
CERTIFICATE

JEWELLED
BEARING

TILTED FACE TYPE DIAL TEST INDICATOR

- Meet DIN2270
- Jeweled bearing
- Carbide contact point
- Two measuring directions
- Anti magnetic body
- Supplied with two clamps:
diameter Ø4mm and Ø8mm
- Optional accessory: styli (page 226)

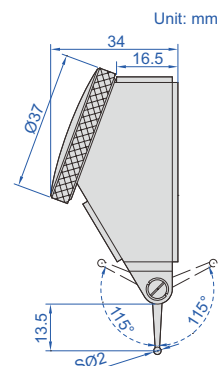
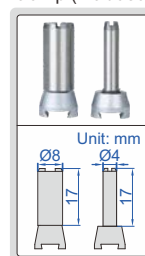


2399-08

Code	Range	Graduation	Accuracy	Hysteresis	Dial reading
2399-08*	0.8mm	0.01mm	13µm	3µm	0-40-0

* Supplied with manufacturer inspection certificate

clamp (included)



INSPECTION
CERTIFICATE

JEWELLED
BEARING

LARGE RANGE DIAL TEST INDICATOR

- Dial reading: 0-40-0
- Jeweled bearing
- Carbide contact point
- Two measuring directions
- Anti magnetic body
- Supplied with two clamps:
diameter Ø4mm and Ø8mm
- Optional accessory: styli (page 226)

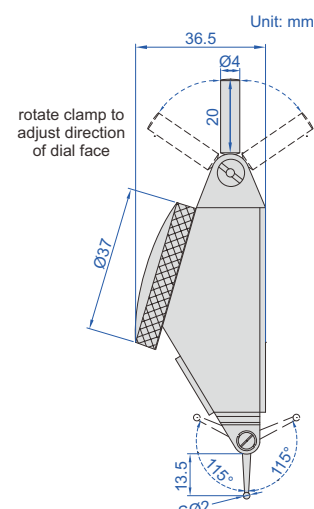
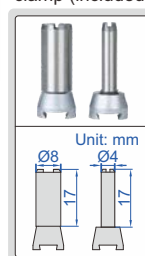


2386-16A

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

* Supplied with manufacturer inspection certificate

clamp (included)

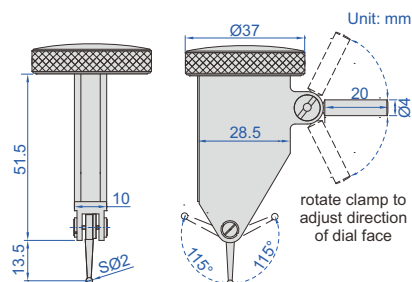


LARGE RANGE VERTICAL TYPE DIAL TEST INDICATOR

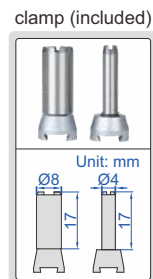
JEWELLED BEARING


**INSPECTION
CERTIFICATE**

- Dial Reading: 0-40-0
- Jeweled bearing
- Carbide contact point
- Two measuring directions
- Anti magnetic body
- Supplied with two clamps:
diameter Ø4mm and Ø8mm
- Optional accessory:
styli (page 226)



2480-16



Code	Range	Graduation	Accuracy	Hysteresis
2480-16*	1.6mm	0.01mm	18µm	3µm

* Supplied with manufacturer inspection certificate

CLAMPS FOR DIAL TEST INDICATORS



6298-1



6298-2



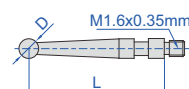
Code	ØD
6298-1	Ø4mm
6298-2	Ø8mm

STYLI FOR DIAL TEST INDICATORS

Code	For dial test indicator	Material of contact point	L	D
6284-1	2380-08 2398-08 2381-08 2399-08	steel	13.5mm	SØ1mm
6284-31		ruby	13.5mm	SØ1mm
6284-3		carbide	13.5mm	SØ2mm
6284-4		ruby	13.5mm	SØ2mm
6284-8		carbide	13.5mm	SØ3mm
6284-21	2380-02 2381-02 2381-021	steel	12.5mm	SØ1mm
6284-22		carbide	12.5mm	SØ2mm
6284-24		ruby	12.5mm	SØ2mm
6284-23		carbide	12.5mm	SØ3mm
6284-61	2386-16A 2480-16	steel	13.5mm	SØ1mm
6284-62		carbide	13.5mm	SØ2mm
6284-63		ruby	13.5mm	SØ2mm
6284-64		carbide	13.5mm	SØ3mm
6284-81	2383-08A	steel	27.4mm	SØ1mm
6284-82		carbide	27.4mm	SØ2mm
6284-83		ruby	27.4mm	SØ2mm
6284-84		carbide	27.4mm	SØ3mm



6284-3



DATA
OUTPUT

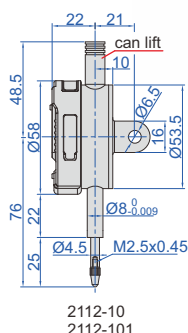
INSPECTION
CERTIFICATE

DIGITAL INDICATORS (STANDARD TYPE)

POPULAR
MODEL



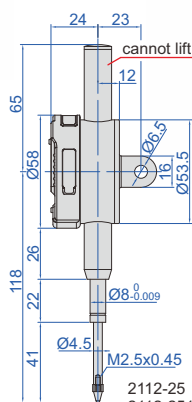
2112-10



2112-10
2112-101



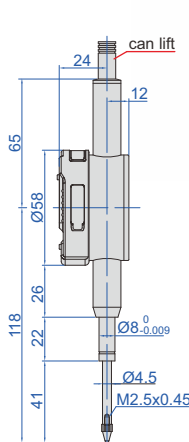
2112-251



2112-25
2112-251



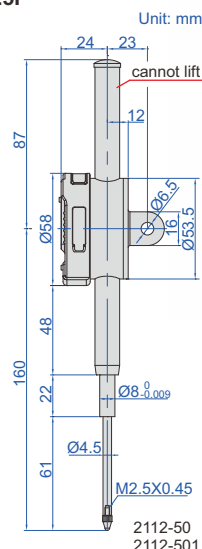
2112-25P



2112-25P
2112-251P



2112-501



2112-50
2112-501

- Button function: on/off, inch/mm, zero, data preset, change measuring direction, absolute/incremental measurement
- 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: data output cable (code **7315-50M** need receiver page 5, **7302-40M** page 13, **7305-40M** page 9), backs (page 253~254), contact points (page 250~252)

Resolution 0.001mm/0.0005"

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

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



spindle lift knob is
included



METRIC DIGITAL INDICATORS

**DATA
OUTPUT**


**INSPECTION
CERTIFICATE**

2116-10



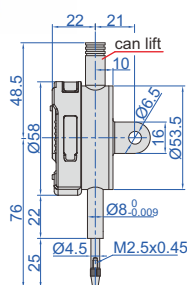
2116-251



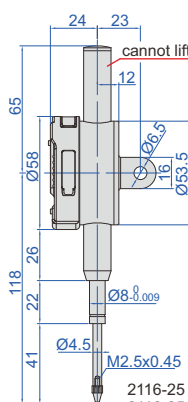
2116-251P



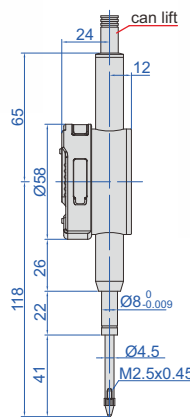
2116-501



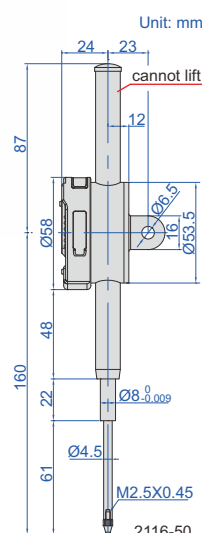
2116-10
2116-101



2116-25
2116-251



2116-25P
2116-251P



2116-50
2116-501

- Button function: on/off, zero, data preset, change measuring direction, absolute/incremental measurement
- 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: data output cable (code **7315-50M** need receiver page 5, **7302-40M** page 13, **7305-40M** page 9), backs (page 253~254), contact points (page 250~252)

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

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



spindle lift knob is included



DIGITAL INDICATORS (ADVANCED TYPE)

DATA OUTPUT



2103-10



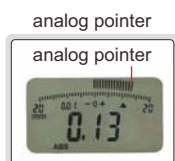
2104-25



2104-25P



2103-50

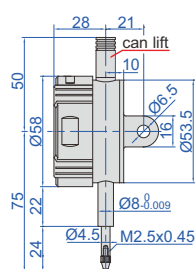


analog pointer

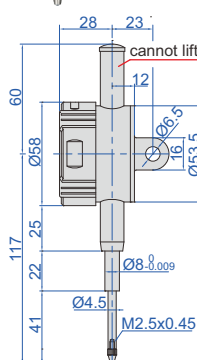
analog pointer



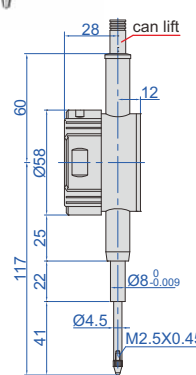
spindle lift knob is included



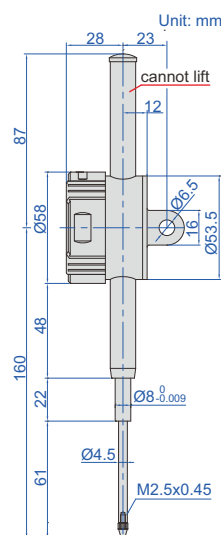
2103-10
2104-10



2103-25
2104-25

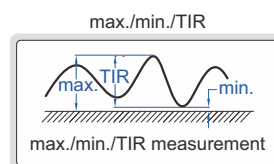


2103-25P
2104-25P



2103-50
2104-50

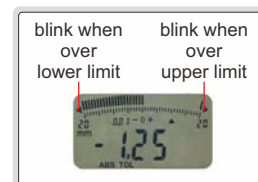
- Reading in digital and analog
- Display can be rotated by 320°
- Button function: tolerance Go and No-Go display, data preset, measuring direction change, max./min./TIR measurement, inch/metric conversion, absolute/incremental measurement
- Keep preset data and tolerance data in memory after restart
- CR2032 battery, automatic power off (time is adjustable), data output
- Optional accessory: data output cable (code **7315-50M** **need receiver** page 5, **7302-40M** page 13, **7305-40M** page 9), backs (page 253~254), contact points (page 250~252)



Resolution 0.001mm/0.00005"

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

alarm 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

WATERPROOF

**DATA
OUTPUT**

INSPECTION CERTIFICATE

WATERPROOF DIGITAL INDICATORS

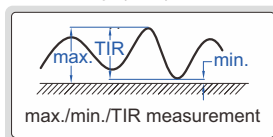
alarm when over tolerance



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



max./min./TIR



2115-10

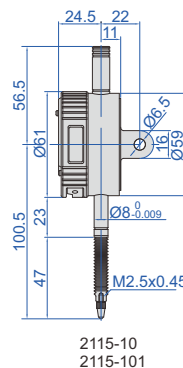


2115-25

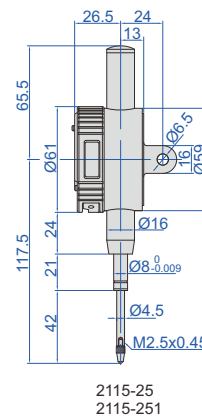


2115-50

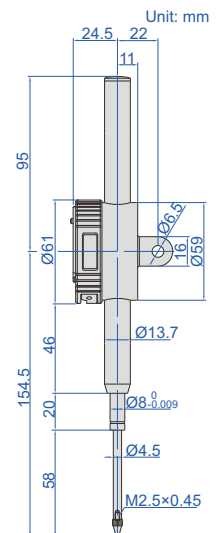
- Dust/waterproof
- Button function: on/off, zero, mm/inch, data preset, tolerance, change measuring direction, max./min./TIR measurement, absolute/incremental measurement
- Keep preset data and tolerance data in memory after restart
- CR2032 battery, automatic power off
- Data output
- Optional accessory: data output cable (code **7315-50M need receiver** page 5, **7302-40M** page 13, **7305-40M** page 9), backs (page 253~254), contact points (page 250~252)



2115-10
2115-101



2115-25
2115-251



2115-50
2115-501

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

ADJUSTABLE COEFFICIENT DIGITAL INDICATORS



**DATA
OUTPUT**


**INSPECTION
CERTIFICATE**

2501-10



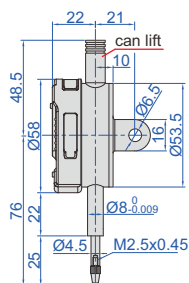
2501-25



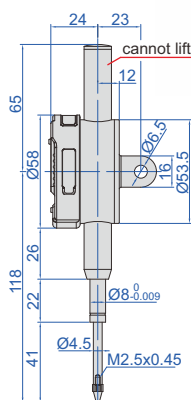
2501-25P



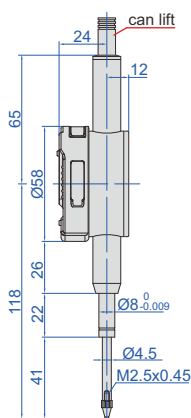
2501-50



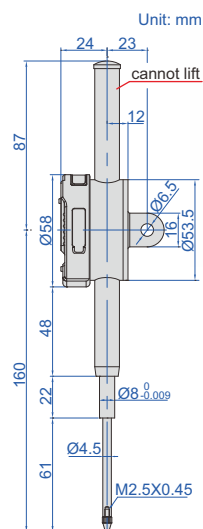
2501-10



2501-25



2501-25P



2501-50

Unit: mm

11

- **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
- 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: data output cable (code **7315-50M** need receiver
page 5, **7302-40M** page 13, **7305-40M** page 9),
bags (page 253~254), contact points (page 250~252)

2501-25P/50P



spindle lift knob is included



Resolution 0.01mm/0.0005"

Code	Range	Accuracy	Hysteresis	Maximum measuring force	Remark
2501-10*	12.7mm/0.5"	20µm	10µm	1.5N	lug back
2501-25*	25.4mm/1"	20µm	10µm	2.2N	lug back
2501-50*	50.8mm/2"	30µm	10µm	2.5N	lug back
2501-10F*	12.7mm/0.5"	20µm	10µm	1.5N	flat back
2501-25F*	25.4mm/1"	20µm	10µm	2.2N	flat back
2501-50F*	50.8mm/2"	30µm	10µm	2.5N	flat back
2501-25P*	25.4mm/1"	20µm	10µm	2.2N	flat back, with lift cap
2501-50P*	50.8mm/2"	30µm	10µm	2.5N	flat back, with lift cap

* Supplied with manufacturer inspection certificate

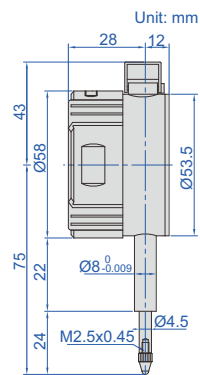
DIGITAL INDICATORS WITH LIFTING LEVER

DATA
OUTPUT

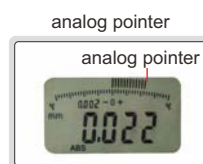
INSPECTION
CERTIFICATE



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 (time is adjustable)
- Data output
- Optional accessory: data output cable (code **7315-50M** need receiver page 5, **7302-40M** page 13, **7305-40M** page 9), backs (page 253~254), contact points (page 250~252)



alarm when over tolerance

blink when over lower limit blink when over upper limit



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

11

COMPACT DIGITAL INDICATORS

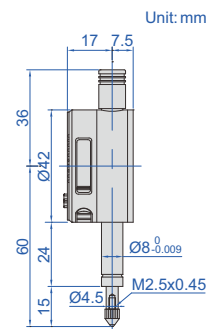
DATA
OUTPUT

INSPECTION
CERTIFICATE

- 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** need receiver page 5, **7302-40M** page 13, **7305-40M** page 9), contact points (page 250~252)



2114-51F



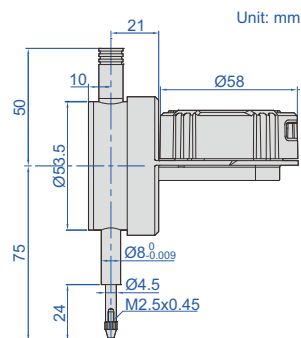
Code	Range	Resolution	Accuracy	Hysteresis	Remark
2114-5F *	5mm/0.2"	0.01mm/0.0005"	20µm	10µm	flat back
2114-51F *	5mm/0.2"	0.001mm/0.00005"	5µm	2µm	flat back

* Supplied with manufacturer inspection certificate

BACK PLUNGER TYPE DIGITAL INDICATORS



2118-10

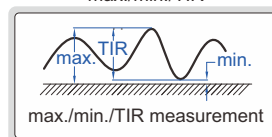


- Display can rotate 320°, and display direction is changeable
- Reading in digital and analog
- Button function: tolerance Go and No-Go display, data preset, measuring direction change, max./min./TIR measurement, inch/metric conversion, absolute/incremental measurement
- Keep preset data and tolerance data in memory after restart
- CR2032 battery, automatic power off (time is adjustable)
- Data output
- Optional accessory: data output cable (code **7315-50M** need receiver page 5, **7302-40M** page 13, **7305-40M** page 9), backs (page 253~254), contact points (page 250~252)

spindle lift knob
is included



max./min./TIR



alarm when over tolerance

blink when
over
lower limit

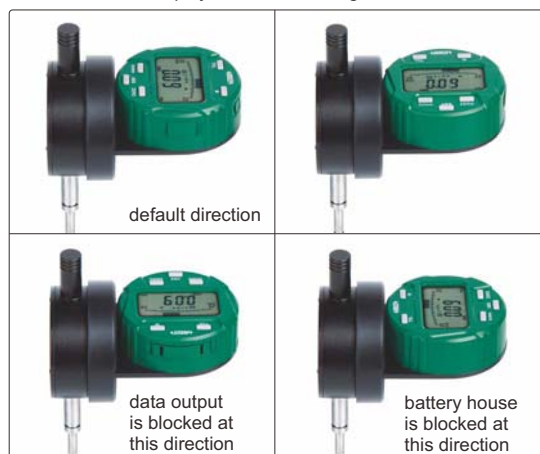
blink when
over
upper limit

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.

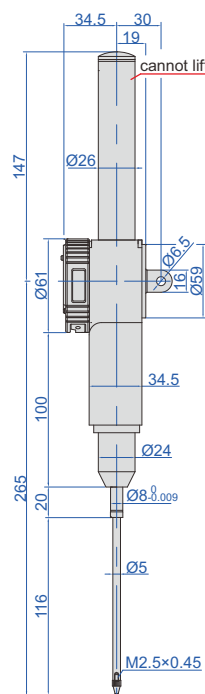
display can rotate 320°



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

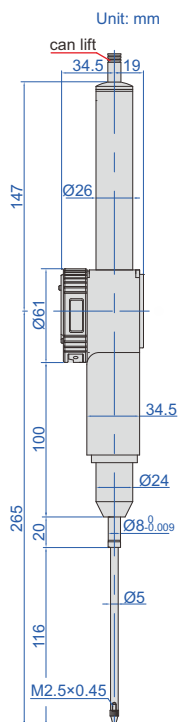
LARGE STROKE DIGITAL INDICATORS



2117-100
2117-1001



2117-100



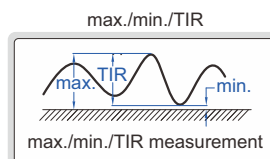
2117-100P
2117-1001P



2117-100P

- 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 need receiver** page 5, **7302-40M** page 13, **7305-40M** page 9), backs (page 253~254), contact points (page 250~252)

**DATA
OUTPUT**



spindle lift knob is included



alarm when over tolerance



2117-100P/1001P



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"

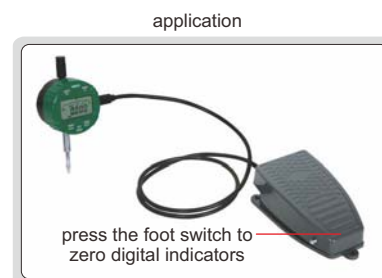
Code	Range	Accuracy	Hysteresis	Remark
2117-1001	100mm/4"	9µm	3µm	lug back
2117-1001P	100mm/4"	9µm	3µm	flat back, with lift cap

ZEROING FOOT SWITCH

- For zeroing of digital indicators



7360-1M



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

INDUCTIVE DIGITAL COMPARATOR (HIGH ACCURACY)

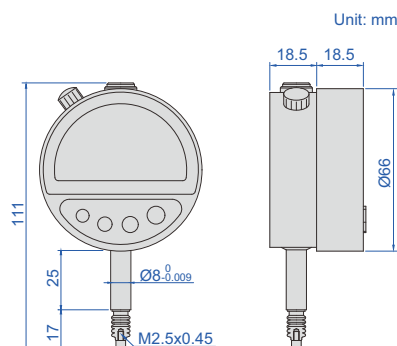
ATTENTION: RECHARGEABLE BATTERY,
FOR 12 HOURS CONTINUOUS WORKING

IP54
WATERPROOF

DATA
OUTPUT



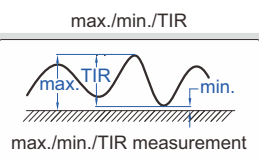
2149-2



data interface
(with protective cover)



touch sensor
to transmit data
signal light



wireless receiver (optional)



printer (optional)



- 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**)

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

WIRELESS HIGH PRECISION DIGITAL INDICATORS



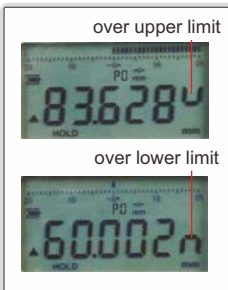
ABSOLUTE ENCODER, THE ORIGINAL DATA REMAINS AFTER POWER OFF

ATTENTION: RECHARGEABLE BATTERY, FOR 24 HOURS CONTINUOUS WORKING

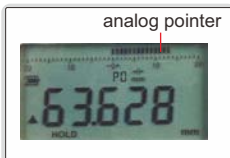
CONTINUOUS DATA COLLECTION CAN BE CUSTOMIZED (PRESS "DATA" BUTTON TO START CONTINUOUS COLLECTION, PRESS AGAIN TO STOP; COLLECTION FREQUENCY CAN BE CUSTOMIZED, THE FASTEST DATA COLLECTION IS 10PCS PER SECOND)

LINEAR BALL BEARINGS FOR TEN MILLION TIMES USE

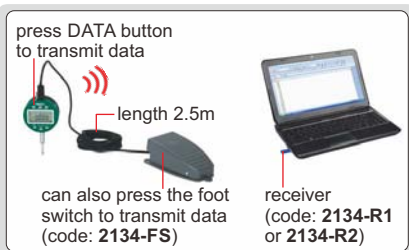
alarm when over tolerance



analog pointer



transmit data



- 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 250~252), foot switch, code: **2134-FS**
wireless receiver, code: **2134-R1** (keyboard format)
2134-R2 (serial port format)

Standard 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
2134-10L*	12.7mm/0.5"	3µm	1.5µm	75.4mm	20.6mm	24.8mm	5mm	lug 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

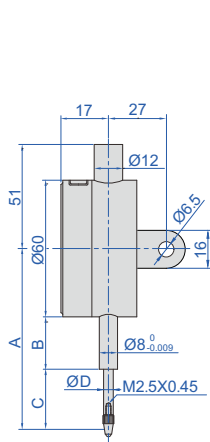
High precision

Ruby probe

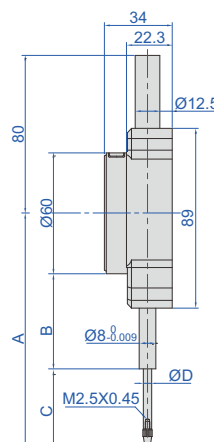
Adjustable resolution: 0.0002mm/0.00001"
0.001mm/0.00005"
0.01mm/0.0005"

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
2134-101L*	12.7mm/0.5"	1.5µm	1µm	77.4	26	21.4	4	lug back
2134-251*	25.4mm/1"	1.8µm	1µm	116.1	42.5	44	4	flat back

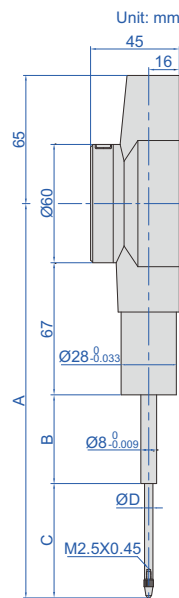
*Supplied with manufacturer inspection certificate



2134-10L
2134-101L



2134-25
2134-251

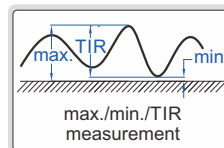


2134-50

spindle lift knob is included



max./min./TIR



LINEAR BALL BEARINGS
FOR TEN MILLION TIMES USE

ABSOLUTE ENCODER, THE ORIGINAL
DATA REMAINS AFTER POWER OFF

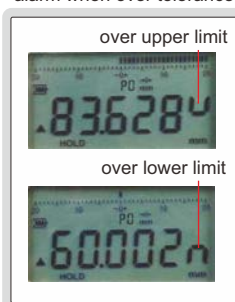
DATA
OUTPUT

ATTENTION: RECHARGEABLE BATTERY,
FOR 24 HOURS CONTINUOUS WORKING



HIGH PRECISION DIGITAL INDICATORS

alarm when over tolerance



- 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 250~252), wireless transmitter, code **7315-60** need receiver page 5 data output cable (keyboard format), code **7302-60** page 13 data output cable (serial port format), code **7305-G60** page 11 (cable length 3m, optional cable length maximum 15m; RS232 protocol, optional RS485 protocol)

Standard 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
2133-10L*	12.7mm/0.5"	3µm	1.5µm	75.4mm	20.6mm	24.8mm	5mm	lug 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

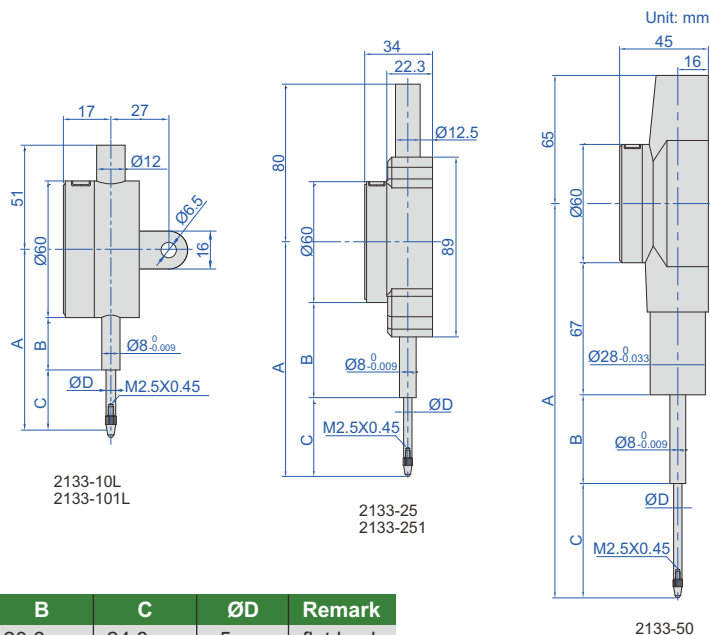
High precision

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
2133-101L*	12.7mm/0.5"	1.5µm	1µm	77.4mm	26mm	21.4mm	4mm	lug back
2133-251*	25.4mm/1"	1.8µm	1µm	116.1mm	42.5mm	44mm	4mm	flat back

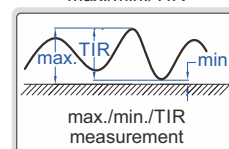
*Supplied with manufacturer inspection certificate



spindle lift knob is included



max./min./TIR



HIGH PRECISION DIGITAL INDICATORS

DATA
OUTPUT

Ø28MM STEM SUITABLE FOR
REINFORCED CLAMPING

ABSOLUTE ENCODER, THE ORIGINAL
DATA REMAINS AFTER POWER OFF

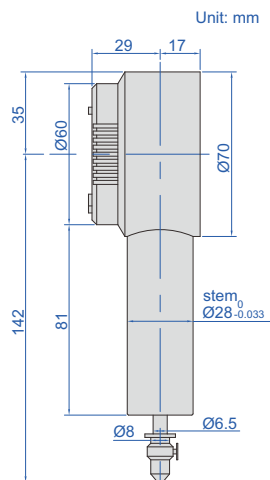
LINEAR BALL BEARINGS
FOR TEN MILLION TIMES USE

ATTENTION: RECHARGEABLE BATTERY,
FOR 24 HOURS CONTINUOUS WORKING

- 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

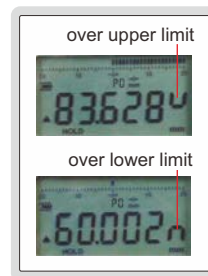


2140-6

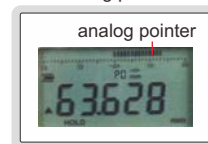


Unit: mm

alarm when
over tolerance



analog pointer



With data interface

Optional accessory:

wireless transmitter, code **7315-60** need receiver page 5
data output cable (keyboard format), code **7302-60** page 13
data output cable (serial port format), code **7305-G60** page 11
(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

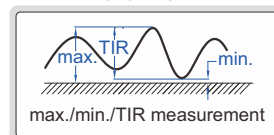
Optional accessory:

wireless receiver (keyboard format, 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	Remark
2140-6WL*	0-6mm/0-0.24"	1.6µm	0.8µm	flat back

*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)

max./min./TIR



wireless receiver

2134-R1, 2134-R2 (optional)



DIAL COMPARATOR

INSIZE PLUS
MADE IN EUROPE

JEWELLED
BEARING

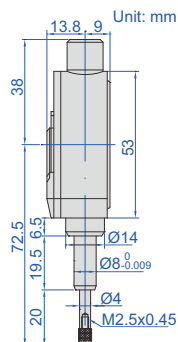
SHOCK
PROOF

INSPECTION
CERTIFICATE

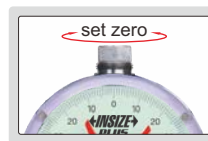
- Meet DIN879-1
- Shockproof
- Jeweled bearing
- Overtravel: 3mm
- Shadow free dial face cover
- Supplied with limit pointers
- Initial measuring force 1.2N
- Optional accessory:
lifting lever (code **6289-150**)



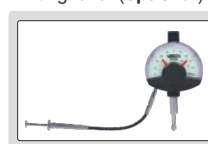
2881-01



Unit: mm



lifting lever (optional)



Code	Range	Graduation	Accuracy	Hysteresis	Dial reading	Remark
2881-01*	0.1mm	0.001mm	1.2µm	0.5µm	50-0-50	flat back

*Supplied with manufacturer inspection certificate

PRECISION DIAL INDICATORS

←INSIZE→ PLUS
MADE IN EUROPE

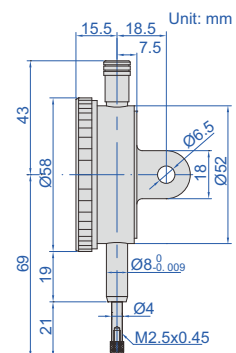


2830-1

- Shockproof
- Jeweled bearing
- With limit pointers
- Optional accessory:
backs (page 253~254),
contact points (page 250~252)

Code	Range	Graduation	Accuracy	Hysteresis	Range/rev	Dial reading	Remark
2830-1 *	1mm	0.001mm	5µm	2µm	0.2mm	0-100-0	lug back
2830-1F *	1mm	0.001mm	5µm	2µm	0.2mm	0-100-0	flat back

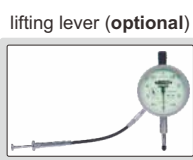
* Supplied with manufacturer inspection certificate



HIGH PRECISION DIAL INDICATORS

INSIZE[®] PLUS
MADE IN EUROPE

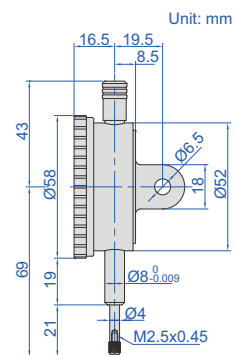
- Shockproof
- Jeweled bearing
- With limit pointers
- Optional accessory:
backs (page 253~254),
contact points (page 250~252),
lifting lever (code **6289-150**)



2891-1

Code	Range	Graduation	Accuracy	Hysteresis	Range/rev	Dialreading	Remark
2891-1 *	1mm	0.001mm	3μm	1.5μm	0.1mm	0-100	lug back
2891-1F *	1mm	0.001mm	3μm	1.5μm	0.1mm	0-100	flat back

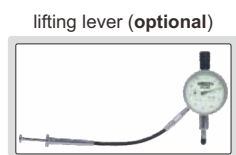
* Supplied with manufacturer inspection certificate



HIGH PRECISION COMPACT DIAL INDICATORS

←INSIZE→ PLUS
MADE IN EUROPE

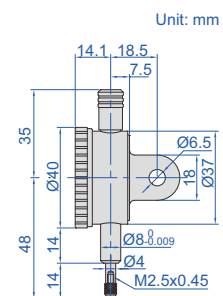
- Shockproof
- Jeweled bearing
- With limit pointers
- Optional accessory:
backs (page 253~254),
contact points (page 250~252),
lifting lever (code **6289-150**)



2890-1

Code	Range	Graduation	Accuracy	Hysteresis	Range/rev	Dial reading	Remark
2890-1*	1mm	0.001mm	3µm	1.5µm	0.1mm	0-100	lug back
2890-1F*	1mm	0.001mm	3µm	1.5µm	0.1mm	0-100	flat back

* Supplied with manufacturer inspection certificate



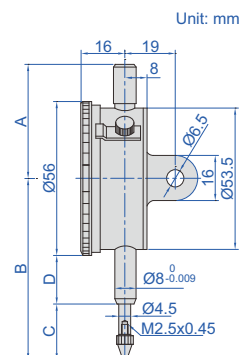
PRECISION DIAL INDICATORS

JEWELLED BEARING


**INSPECTION
CERTIFICATE**

2313-1A

- Graduation: 0.001mm
- Jeweled bearing
- Supplied with limit pointers and bezel clamp
- Optional accessory: backs (page 253~254), contact points (page 250~252)



										(mm)
Code	Range	Accuracy	Hysteresis	Range/rev	Dial reading	Remark	A	B	C	D
2313-1FA *	1mm	5µm	2µm	0.2mm	0-100-0	flat back	45	62.5	19.5	15
2313-2FA *	2mm	6µm	2.5µm	0.2mm	0-100-0	flat back	45	62.5	19.5	15
2313-1A *	1mm	5µm	2µm	0.2mm	0-100-0	lug back	45	62.5	19.5	15
2313-2A *	2mm	6µm	2.5µm	0.2mm	0-100-0	lug back	45	62.5	19.5	15

* Supplied with manufacturer inspection certificate

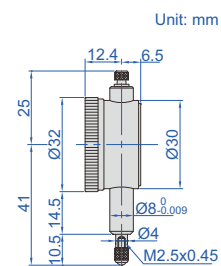
COMPACT DIAL INDICATOR

←INSIZE→ PLUS
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**INSPECTION
CERTIFICATE**

2886-3F

- Meet DIN878
- With limit pointers
- Optional accessory: backs (page 253~254), contact points (page 250~252)



Code	Range	Graduation	Accuracy	Hysteresis	Range/rev	Dial reading	Remark
2886-3F *	3mm	0.01mm	12µm	3µm	0.5mm	0-50	flat back

* Supplied with manufacturer inspection certificate

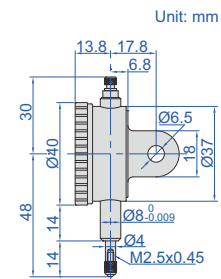
COMPACT DIAL INDICATORS

←INSIZE→ PLUS
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**INSPECTION
CERTIFICATE**

2887-5

- Meet DIN878
- With limit pointers
- Optional accessory: backs (page 253~254), contact points (page 250~252)



Code	Range	Graduation	Accuracy	Hysteresis	Range/rev	Dial reading	Remark
2887-5 *	5mm	0.01mm	14µm	3µm	0.5mm	0-50	lug back
2887-5F *	5mm	0.01mm	14µm	3µm	0.5mm	0-50	flat back

* Supplied with manufacturer inspection certificate

JEWELLED
BEARING

INSPECTION
CERTIFICATE

COMPACT DIAL INDICATORS

- Meet DIN878
- Jeweled bearing
- Supplied with limit pointers and bezel clamp
- Optional accessory: backs (page 253~254), contact points (page 250~252)

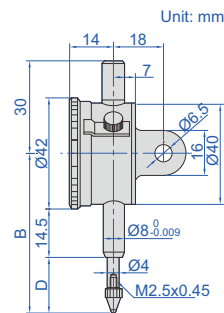


2311-5

(mm)

Code	Range	Graduation	Accuracy	Hysteresis	Range/rev	Dial reading	Remark	B	D
2311-3F *	3mm	0.01mm	12μm	3μm	0.5mm	0-50	flat back	46	10.5
2311-5F *	5mm	0.01mm	14μm	3μm	0.5mm	0-50	flat back	48	12.5
2311-3 *	3mm	0.01mm	12μm	3μm	0.5mm	0-50	lug back	46	10.5
2311-5 *	5mm	0.01mm	14μm	3μm	0.5mm	0-50	lug back	48	12.5

* Supplied with manufacturer inspection certificate



INSPECTION
CERTIFICATE

DIAL INDICATORS

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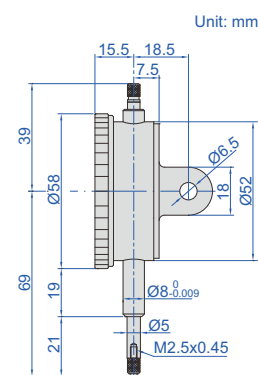
- Meet DIN878
- With limit pointers
- Optional accessory: backs (page 253~254), contact points (page 250~252)



2892-10

Code	Range	Graduation	Accuracy	Hysteresis	Range/rev	Dial reading	Remark
2892-10 *	10mm	0.01mm	17μm	3μm	1mm	0-100	lug back
2892-10F *	10mm	0.01mm	17μm	3μm	1mm	0-100	flat back

* Supplied with manufacturer inspection certificate



11

JEWELLED
BEARING

INSPECTION
CERTIFICATE

DIAL INDICATORS (STANDARD TYPE)

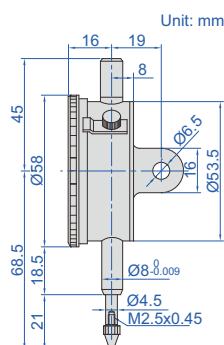
- Meet DIN878
- Jeweled bearing
- Supplied with limit pointers and bezel clamp
- Optional accessory: backs (page 253~254), contact points (page 250~252)



2308-10A

Code	Range	Graduation	Accuracy	Hysteresis	Range/rev	Dial reading	Remark
2308-3FA *	3mm	0.01mm	12μm	3μm	1mm	0-100	flat back
2308-5FA *	5mm	0.01mm	14μm	3μm	1mm	0-100	flat back
2308-10FA *	10mm	0.01mm	17μm	3μm	1mm	0-100	flat back
2308-3A *	3mm	0.01mm	12μm	3μm	1mm	0-100	lug back
2308-5A *	5mm	0.01mm	14μm	3μm	1mm	0-100	lug back
2308-10A *	10mm	0.01mm	17μm	3μm	1mm	0-100	lug back

* Supplied with manufacturer inspection certificate



DIAL INDICATORS (BASIC TYPE)


**INSPECTION
CERTIFICATE**

JEWELLED BEARING

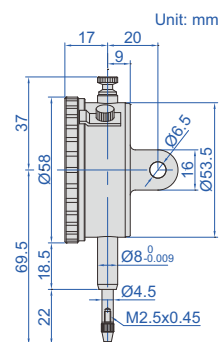
**POPULAR
MODEL**

- Meet DIN878
- Jeweled bearing
- Supplied with limit hands and bezel clamp
- Packed in carton box
- Optional accessory:
backs (page 253~254),
contact points (page 250~252)



2301-10

Code	Range	Graduation	Accuracy	Hysteresis	Range/rev	Dial reading	Remark
2301-10F *	10mm	0.01mm	17µm	3µm	1mm	0-100	flat back
2301-10 *	10mm	0.01mm	17µm	3µm	1mm	0-100	lug back with spare flat back



* Supplied with manufacturer inspection certificate

REVERSE READING DIAL INDICATORS


**INSPECTION
CERTIFICATE**

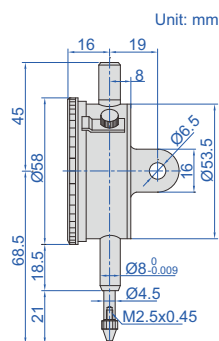
JEWELLED BEARING

- Meet DIN878
- Suitable for depth and step measurements
- Jeweled bearing
- Supplied with limit pointers and bezel clamp
- Optional accessory: backs (page 253~254), contact points (page 250~252)



2801-10

Code	Range	Graduation	Accuracy	Hysteresis	Range/rev	Dial reading	Remark
2801-10F *	10mm	0.01mm	17µm	3µm	1mm	100-0	flat back
2801-10 *	10mm	0.01mm	17µm	3µm	1mm	100-0	lug back



* Supplied with manufacturer inspection certificate

LARGE DIAL FACE DIAL INDICATOR

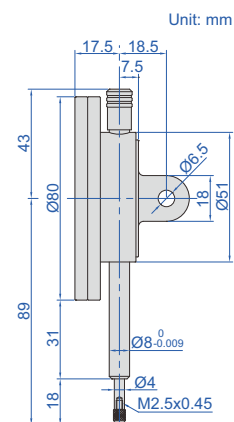
INSIZE[®] PLUS
MADE IN EUROPE


**INSPECTION
CERTIFICATE**

- Large, easy-to-read dial face
- With limit pointers
- Optional accessory: backs (page 253~254), contact points (page 250~252)



2888-10



Code	Range	Graduation	Accuracy	Hysteresis	Range/rev	Dial reading	Remark
2888-10*	10mm	0.01mm	17µm	5µm	1mm	0-100	flat back, with spare lug back

* Supplied with manufacturer inspection certificate



SHOCK
PROOF

JEWELLED
BEARING

SHOCKPROOF DIAL INDICATORS

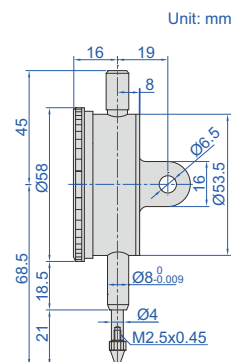
- Meet DIN878
- Shockproof
- Jeweled bearing
- Supplied with limit pointers and bezel clamp
- Optional accessory: backs (page 253~254), contact points (page 250~252)



2314-10A

Code	Range	Graduation	Accuracy	Hysteresis	Range/rev	Dial reading	Remark
2314-3FA *	3mm	0.01mm	12µm	3µm	1mm	0-100	flat back
2314-5FA *	5mm	0.01mm	14µm	3µm	1mm	0-100	flat back
2314-10FA *	10mm	0.01mm	17µm	3µm	1mm	0-100	flat back
2314-3A *	3mm	0.01mm	12µm	3µm	1mm	0-100	lug back
2314-5A *	5mm	0.01mm	14µm	3µm	1mm	0-100	lug back
2314-10A *	10mm	0.01mm	17µm	3µm	1mm	0-100	lug back

* Supplied with manufacturer inspection certificate



BACK PLUNGER DIAL INDICATOR

INSIZE PLUS
MADE IN EUROPE

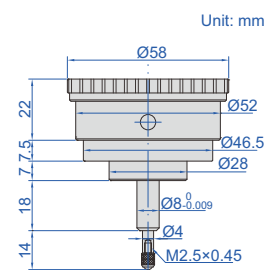
- With limit pointers
- Optional accessory: contact points (page 250~252)



2893-3

Code	Range	Graduation	Accuracy	Hysteresis	Range/rev	Dial reading
2893-3 *	3mm	0.01mm	15µm	5µm	1mm	0-100

* Supplied with manufacturer inspection certificate



SHOCK
PROOF

IP67
WATERPROOF

WATERPROOF DIAL INDICATOR

INSIZE PLUS
MADE IN EUROPE

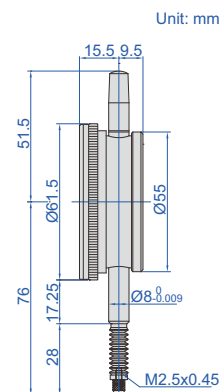
- Meet DIN878
- Shockproof
- IP67 dust/waterproof
- With limit pointers
- Optional accessory: contact points (page 250~252)



2894-10F

Code	Range	Graduation	Accuracy	Hysteresis	Range/rev	Dial reading	Remark
2894-10F *	10mm	0.01mm	17µm	3µm	1mm	0-100	flat back

* Supplied with manufacturer inspection certificate



WATERPROOF DIAL INDICATORS

IP54
WATERPROOF


**INSPECTION
CERTIFICATE**

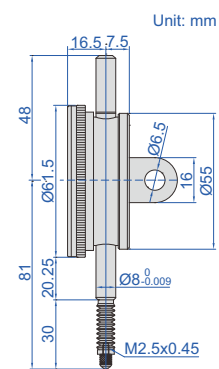
- Meet DIN878
- IP54 dust/waterproof
- With limit pointers
- Optional accessory: backs (page 253~254), contact points (page 250~252)



2324-10A

Code	Range	Graduation	Accuracy	Hysteresis	Range/rev	Dial reading	Remark
2324-10FA *	10mm	0.01mm	17µm	3µm	1mm	0-100	flat back
2324-10A *	10mm	0.01mm	17µm	3µm	1mm	0-100	lug back

* Supplied with manufacturer inspection certificate



DIAL INDICATORS (LONG STROKE)

←INSIZE→ PLUS
MADE IN EUROPE

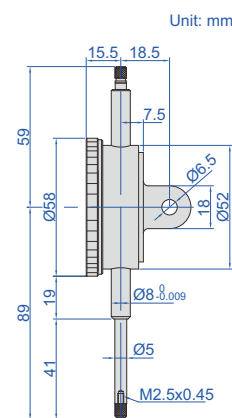

**INSPECTION
CERTIFICATE**

2889-30

- With limit pointers
- Optional accessory: backs (page 253~254), contact points (page 250~252)

Code	Range	Graduation	Accuracy	Hysteresis	Range/rev	Dial reading	Remark
2889-30 *	30mm	0.01mm	35µm	7µm	1mm	0-100	lug back
2889-30F *	30mm	0.01mm	35µm	7µm	1mm	0-100	flat back

*Supplied with manufacturer inspection certificate



DIAL INDICATORS (LONG STROKE)

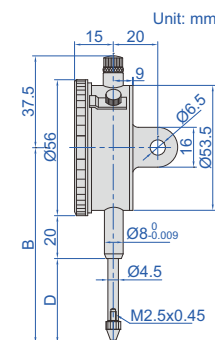

**INSPECTION
CERTIFICATE**

2310-30A

- Supplied with limit pointers and bezel clamp
- Optional accessory: backs (page 253~254), contact points (page 250~252)

Code	Range	Graduation	Accuracy	Hysteresis	Range/rev	Dial reading	Remark	B	D
2310-20FA *	20mm	0.01mm	25µm	5µm	1mm	0-100	flat back	83	35
2310-30FA *	30mm	0.01mm	35µm	7µm	1mm	0-100	flat back	88	40
2310-20A *	20mm	0.01mm	25µm	5µm	1mm	0-100	lug back	83	35
2310-30A *	30mm	0.01mm	35µm	7µm	1mm	0-100	lug back	88	40

* Supplied with manufacturer inspection certificate





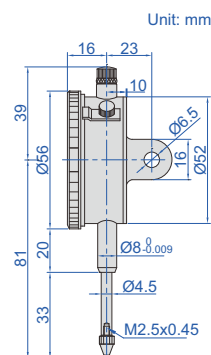
POPULAR
MODEL

DIAL INDICATORS (LONG STROKE, BASIC TYPE)

- Supplied with limit pointers and bezel clamp
- Packed in carton box
- Optional accessory: backs (page 253~254), contact points (page 250~252)



2302-25



Code	Range	Graduation	Accuracy	Hysteresis	Range/rev	Dial reading	Remark
2302-25F *	25mm	0.01mm	35μm	7μm	1mm	0-100	flat back
2302-25 *	25mm	0.01mm	35μm	7μm	1mm	0-100	lug back with spare flat back

* Supplied with manufacturer inspection certificate

JEWELLED
BEARING



DOUBLE FACE DIAL INDICATOR

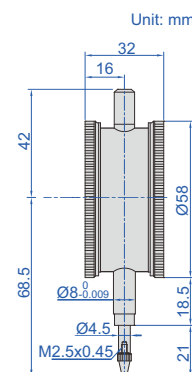
- Meet DIN878
- Read from both sides
- Jeweled bearing
- Supplied with limit pointers
- Optional accessory: contact points (page 250~252)



front



back



Code	Range	Graduation	Accuracy	Hysteresis	Range/rev	Dial reading
2328-10 *	10mm	0.01mm	17μm	3μm	1mm	0-100

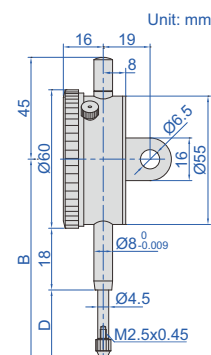
* Supplied with manufacturer inspection certificate

DIAL INDICATORS (GRADUATION 0.1mm)

- Supplied with limit pointers and bezel clamp
- Optional accessory: backs (page 253~254), contact points (page 250~252)



2318-30

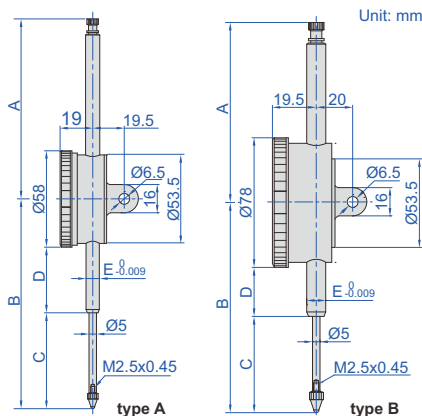


Code	Range	Graduation	Accuracy	Hysteresis	Range/rev	Dial reading	Remark	(mm)	
2318-10F	10mm	0.1mm	40μm	20μm	10mm	0-10	flat back	B	D
2318-20F	20mm	0.1mm	50μm	20μm	10mm	0-10	flat back	85	35
2318-25F	25mm	0.1mm	60μm	20μm	10mm	0-10	flat back	85	35
2318-30F	30mm	0.1mm	60μm	20μm	10mm	0-10	flat back	90	40
2318-10	10mm	0.1mm	40μm	20μm	10mm	0-10	lug back	70	20
2318-20	20mm	0.1mm	50μm	20μm	10mm	0-10	lug back	85	35
2318-25	25mm	0.1mm	60μm	20μm	10mm	0-10	lug back	85	35
2318-30	30mm	0.1mm	60μm	20μm	10mm	0-10	lug back	90	40

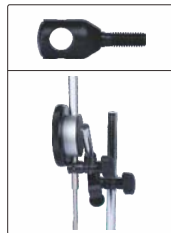
DIAL INDICATORS (LONG STROKE)



- Shockproof
- Jeweled bearing
- Supplied with limit pointers
- Optional accessory: backs (page 253~254), contact points (page 250~252)



stem clamp Ø10mm
for 2309-100D



back of type B



2309-50

Code	Type	A	B	C	D	E
2309-30F	A	37.5	89.5	40.9	19.5	Ø8
2309-30	A	37.5	89.5	40.9	19.5	Ø8
2309-50	A	108.3	126.2	57.7	39.5	Ø8
2309-50D	B	108.3	126.2	57.7	29.5	Ø8
2309-80	A	138.4	168.4	88	51.3	Ø8
2309-80D	B	138.4	168.4	88	41.3	Ø8
2309-100D	B	167.6	207.8	108	60.8	Ø10

Code	Range	Graduation	Type	Accuracy	Hysteresis	Range/rev	Dial reading	Remark
2309-30F *	30mm	0.01mm	A	35µm	7µm	1mm	0-100	flat back
2309-30 *	30mm	0.01mm	A	35µm	7µm	1mm	0-100	lug back
2309-50 *	50mm	0.01mm	A	40µm	8µm	1mm	0-100	flat back with spare lug back
2309-50D *	50mm	0.01mm	B	40µm	8µm	1mm	0-100	flat back with spare lug back
2309-80	80mm	0.01mm	A	50µm	9µm	1mm	0-100	flat back with spare lug back
2309-80D	80mm	0.01mm	B	50µm	9µm	1mm	0-100	flat back with spare lug back
2309-100D	100mm	0.01mm	B	50µm	9µm	1mm	0-100	flat back with spare lug back

Note: 1) 2309-80, 2309-80D and 2309-100D can only be used vertically
 2) 2309-100D is supplied with stem clamp Ø10mm for magnetic stands (code 6200-60, 6201-60, 6202-80, 6202-100)
 3) 2309-30 and 2309-30F can not accept optional backs (page 253~254)

*Supplied with manufacturer inspection certificate

ONE REVOLUTION PRECISION DIAL INDICATORS

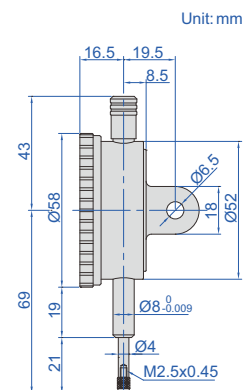
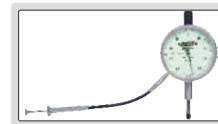


- Eliminate the possibility of reading errors due to miscounting
- Shockproof
- Jeweled bearing
- Free stroke: 4.5mm
- With limit pointers
- Optional accessory: backs (page 253~254), contact points (page 250~252), lifting lever (code 6289-150)



2885-008

lifting lever (optional)



Code	Range	Graduation	Accuracy	Hysteresis	Dial reading	Remark
2885-008 *	0.08mm	0.001mm	3µm	1.5µm	40-0-40	lug back
2885-008F *	0.08mm	0.001mm	3µm	1.5µm	40-0-40	flat back

*Supplied with manufacturer inspection certificate

SHOCK
PROOF

INSPECTION
CERTIFICATE

ONE REVOLUTION DIAL INDICATORS

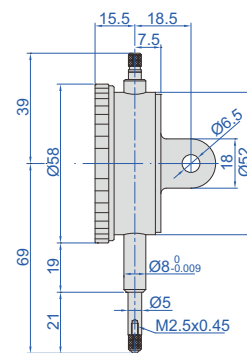
INSIZE PLUS
MADE IN EUROPE

- Meet DIN878
- Eliminate the possibility of reading errors due to miscounting
- Shockproof
- Free stroke: 7mm
- With limit pointers
- Optional accessory: backs (page 253~254), contact points (page 250~252)



2882-08

Unit: mm



Code	Range	Graduation	Accuracy	Hysteresis	Dial reading	Remark
2882-08 *	0.8mm	0.01mm	9μm	3μm	40-0-40	lug back
2882-08F *	0.8mm	0.01mm	9μm	3μm	40-0-40	flat back

* Supplied with manufacturer inspection certificate

SHOCK
PROOF

INSPECTION
CERTIFICATE

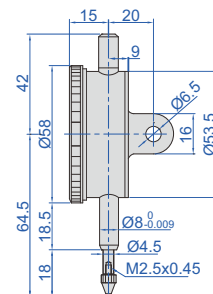
ONE REVOLUTION DIAL INDICATORS

- Meet DIN878
- Eliminate the possibility of reading errors due to miscounting
- Shockproof
- Supplied with limit pointers
- Optional accessory: backs (page 253~254), contact points (page 250~252)



2316-05

Unit: mm



Code	Range	Dial indicator stroke	Graduation	Accuracy	Hysteresis	Dial reading	Remark
2316-05F *	0.5mm	5mm	0.01mm	9μm	3μm	25-0-25	flat back
2316-1F *	1mm	5mm	0.01mm	9μm	3μm	50-0-50	flat back
2316-05 *	0.5mm	5mm	0.01mm	9μm	3μm	25-0-25	lug back
2316-1 *	1mm	5mm	0.01mm	9μm	3μm	50-0-50	lug back

* Supplied with manufacturer inspection certificate

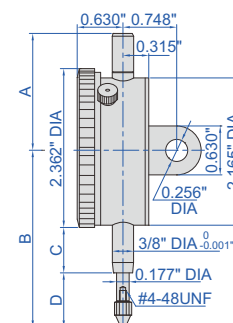
INSPECTION
CERTIFICATE

- Meet ASME B89.1.10M-2001
- With lug back
- Supplied with limit pointers and bezel clamp
- Optional accessory: backs (page 253~254), contact points (page 250~252)



2307-1

INCH DIAL INDICATORS



Code	Range	Graduation	Accuracy		Range/rev	Dial reading
			First 2.5 rev	Overall		
2307-025 *	0.25"	0.001"	±0.001"	±0.001"	0.1"	0-100
2307-05 *	0.5"	0.001"	±0.001"	±0.002"	0.1"	0-100
2307-1 *	1"	0.001"	±0.001"	±0.002"	0.1"	0-100
2307-2 *	2"	0.001"	±0.001"	±0.004"	0.1"	0-100
2307-0255 *	0.25"	0.0005"	±0.0005"	±0.0015"	0.05"	0-50
2307-055 *	0.5"	0.0005"	±0.0005"	±0.0015"	0.05"	0-50
2307-105 *	1"	0.0005"	±0.0005"	±0.002"	0.05"	0-50
2307-205 *	2"	0.0005"	±0.0005"	±0.002"	0.05"	0-50

* Supplied with manufacturer inspection certificate

Range	A	B	C	D
0.25"	1.811"	2.953"	0.787"	0.984"
0.5"	1.811"	2.953"	0.787"	0.984"
1"	1.811"	3.346"	0.787"	1.378"
2"	4.370"	5.472"	1.969"	2.323"

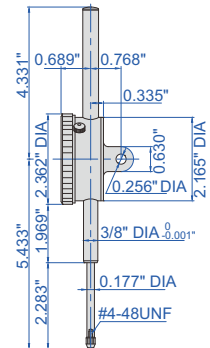
INCH LONG STROKE DIAL INDICATOR



- Graduation 0.001"
- With lug back
- Supplied with limit pointers and bezel clamp
- Optional accessory: backs (page 253~254), contact points (page 250~252)



2326-2



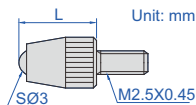
Code	Range	Accuracy		Range/rev	Dial reading
		first 2.5 rev	overall		
2326-2*	2"	±0.001"	±0.004"	0.1"	0-100

* Supplied with manufacturer inspection certificate

BALL POINTS



6282-0101

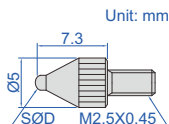


Code	Material of measuring face	L (mm)
6282-0101	carbide	7.3
6282-0103	ceramic	7.3
6282-0104	carbide	8.3
6282-0106	carbide	12.1
6282-0107	carbide	14
6282-0108	carbide	15
6282-0109	ceramic	15
6282-0110	carbide	17

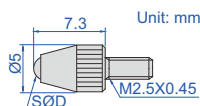
Code	Material of measuring face	L (mm)
6282-0111	carbide	19.3
6282-0112	carbide	20
6282-0113	ceramic	20
6282-0114	carbide	22
6282-0115	carbide	25
6282-0116	ceramic	25
6282-0117	carbide	30
6282-0118	ceramic	30



6282-0301



6282-0304

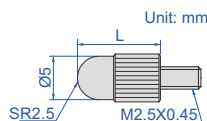


Code	Material of measuring face	SØD (mm)
6282-0301	steel	1
6282-0302	carbide	1.5
6282-0303	carbide	1.8
6282-0304	carbide	2.5
6282-0305	carbide	4

SHELL TYPE POINTS



6282-0202



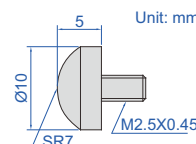
Code	Material of measuring face	L (mm)
6282-0202	steel	5
6282-0203	steel	10
6282-0205	steel	15

Code	Material of measuring face	L (mm)
6282-0207	steel	20
6282-0208	steel	25
6282-0210	steel	30

SPHERICAL POINT

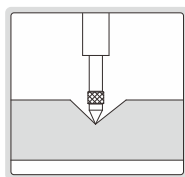


6282-0401



Code	Material of measuring face
6282-0401	steel

CONICAL POINTS



6282-0601



6282-0701

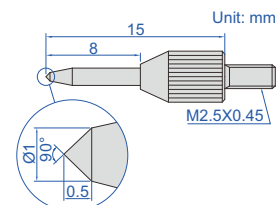
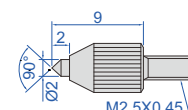
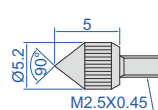
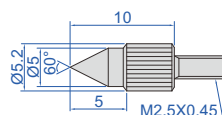


6282-0801



6282-0901

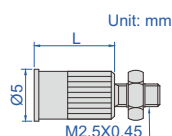
Code	Material of measuring face
6282-0601	steel
6282-0701	steel
6282-0801	steel
6282-0901	steel



FLAT POINTS



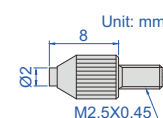
6282-1101



Code	Material of measuring face	L (mm)
6282-1101	steel	8
6282-1102	steel	10



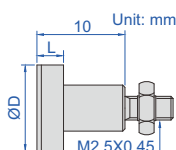
6282-1301



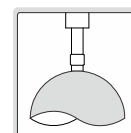
Code	Material of measuring face
6282-1301	carbide



6282-1201



Code	Material of measuring face	ØD	L
6282-1201	steel	10mm	3mm
6282-1202	steel	15mm	4mm
6282-1203	steel	20mm	3mm
6282-1204	steel	25mm	4mm
6282-1205	steel	30mm	4mm

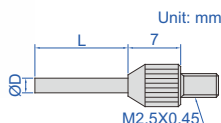


11

NEEDLE POINTS



6282-1711

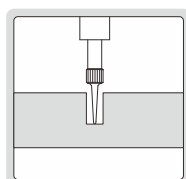
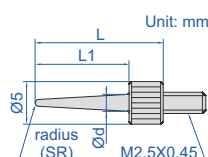


Code	Material of measuring face	ØD	L
6282-1701	steel	0.45	3
6282-1702	steel	0.45	5
6282-1703	carbide	1	3
6282-1704	carbide	1	5
6282-1705	carbide	1	8
6282-1706	carbide	1	10
6282-1707	carbide	1	20
6282-1708	carbide	1	40
6282-1709	carbide	1.5	5

Code	Material of measuring face	ØD	L
6282-1710	carbide	1.5	10
6282-1711	carbide	1.5	13
6282-1712	carbide	1.5	20
6282-1713	carbide	1.5	40
6282-1714	carbide	2	8
6282-1715	carbide	2	18
6282-1716	carbide	2	28
6282-1717	carbide	2	40



6282-1601



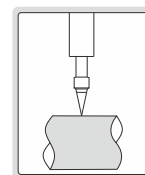
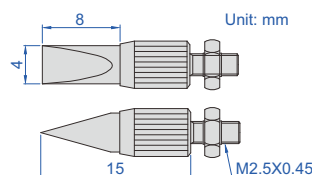
Code	Material of measuring face	L1	L	SR	Ød
6282-1601	steel	11	15	0.4	2
6282-1602	steel	13	17	0.2	2
6282-1603	steel	21	25	0.4	3
6282-1604	steel	31	35	0.4	3

KNIFE EDGE POINT

Code	Material of measuring face
6282-1001	steel



6282-1001

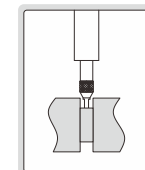
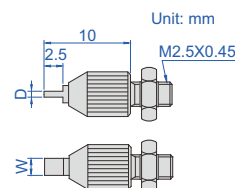


BLADE POINTS

Code	Material of measuring face	D	W
6282-1801	steel	0.4mm	2mm
6282-1802	steel	0.6mm	2mm
6282-1803	steel	1mm	4mm

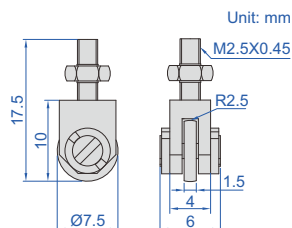


6282-1801



ROLLER POINT

Code	Material of measuring face
6282-1901	steel



6282-1901

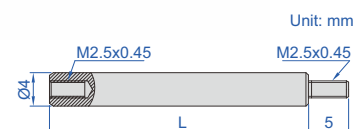
EXTENSION RODS

Code	Material	L (mm)
6282-2001	steel	10
6282-2002	steel	15
6282-2003	steel	20
6282-2004	steel	25
6282-2005	steel	30
6282-2006	steel	35
6282-2007	steel	40
6282-2008	steel	45
6282-2009	steel	50

Code	Material	L (mm)
6282-2010	steel	55
6282-2011	steel	60
6282-2012	steel	65
6282-2013	steel	70
6282-2014	steel	75
6282-2015	steel	80
6282-2016	steel	90
6282-2017	steel	100



6282-2010

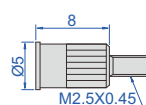


POINT SET

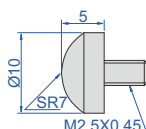


6282-S6

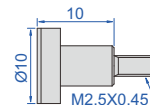
Code	Material of measuring face
6282-S6	steel



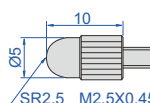
flat point



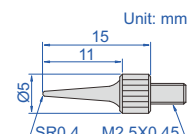
spherical point



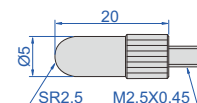
flat point



shell type point



needle point



shell type point

SPINDLE LIFT KNOB

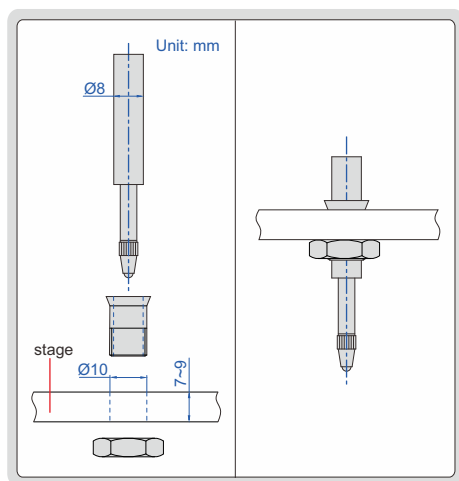
- For dial/digital indicators with spindle diameter $\varnothing 4.5\text{mm}$ or $\varnothing 5\text{mm}$

Code
7332

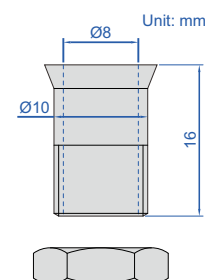


7332

SHAFT SLEEVE



7333



- For dial indicators and probes with shaft diameter $\varnothing 8\text{mm}$

Code
7333

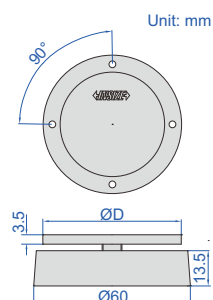
MAGNETIC BACKS

11

Code	ØD	For digital/dial indicators
7331-M1	51.5mm	2103
		2104
		2108
		2109
		2112
		2115
		2116
		2117
		2118
		2138
		2139
		2501
		2301
		2302
		2308
		2309 (except 2309-30, 2309-30F)
		2313
7331-M2	54mm	2314
		2316
		2324
		2801
		2318



7331-M2



FLAT BACKS

Code	For digital/ dial indicators
7330-F1	2311
7330-F2	2301
	2302
	2308
	2309 (except 2309-30, 2309-30F)
	2313
	2314
	2316
7330-F5	2324
	2801
	2103
	2104
	2108
	2109
	2112
	2115
	2116
	2117
	2118
	2138
	2139
	2501
	2137

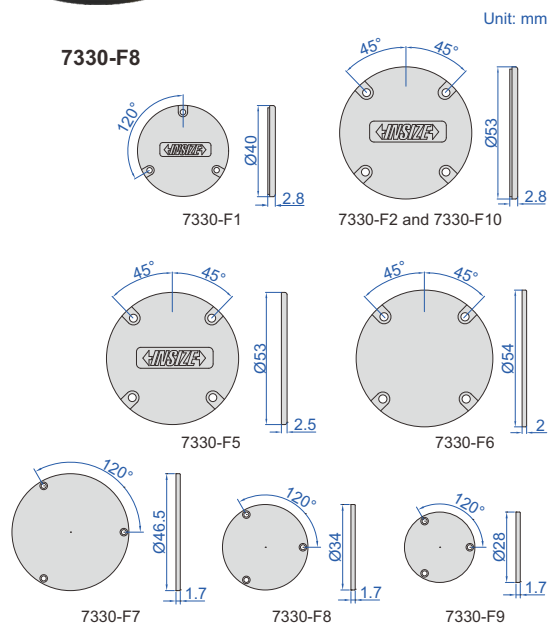


7330-F2



7330-F8

Code	For digital/ dial indicators
7330-F6	2318
	2307
	2326
7330-F7	2830
	2882
	2885
	2888
	2889
	2891
	2892
7330-F8	2890
7330-F9	2887
7330-F10	2886
7330-F10	2310



LUG BACKS

11

Code	For digital/ dial indicators
7330-L1	2311
7330-L2	2301
	2302
	2308
	2309 (except 2309-30, 2309-30F)
	2313
	2314
	2316
7330-L5	2324
	2801
	2103
	2104
	2108
	2109
	2112
	2115
	2116
	2117
	2118
	2138
	2139
	2501
	2137

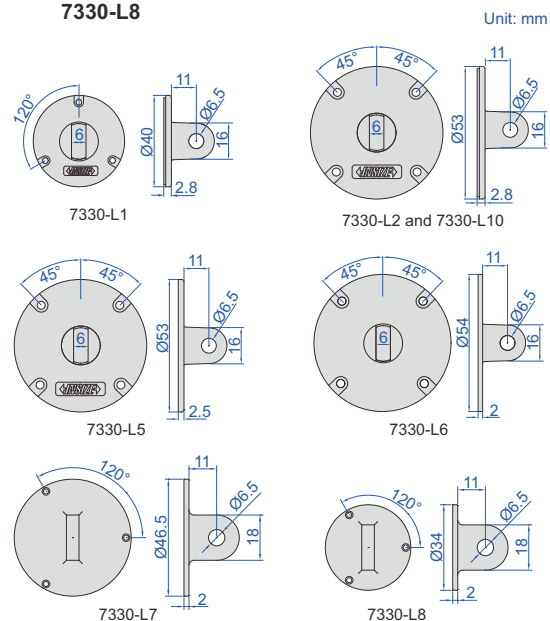


7330-L2



7330-L8

Code	For digital/ dial indicators
7330-L6	2318
	2307
	2326
7330-L7	2830
	2882
	2885
	2888
	2889
	2891
	2892
7330-L8	2890
7330-L10	2887
7330-L10	2310

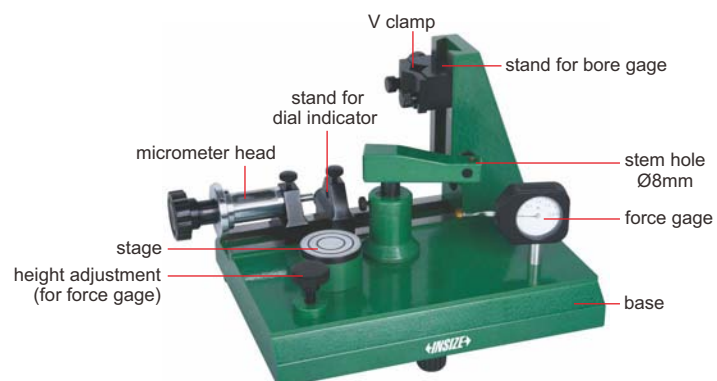


ATTENTION: NOT SUITABLE FOR DIAL INDICATORS WITH GRADUATION 0.001MM



- To calibrate dial indicators, test indicators and dial bore gages
- Dimension: 270x210x205mm
- Weight: 11kg

DIAL INDICATOR TESTER CODE 2396-25A



2396-25A

Micrometer head

Range	Sampling interval	Accuracy	Hysteresis
0-25mm	0.1mm	4µm (0-25mm), 3µm (0-10mm), 2µm (0-1mm)	1µm

Force gage

Range	Graduation	Accuracy
0-1.6N	0.05N	±5% (of load capacity)

Stage

Diameter	Flatness	Roughness
50mm	1µm	0.05µm



inspect accuracy of dial indicators (range 0-25mm)



inspect accuracy of dial bore gages (range 6-450mm)



inspect accuracy of test indicators



check force of dial indicators



check repeatability of dial indicators



check the effect of lateral force on accuracy of dial indicators (half round gage block is required)



check the effect of lateral force on accuracy of test indicators (half round gage block is required)

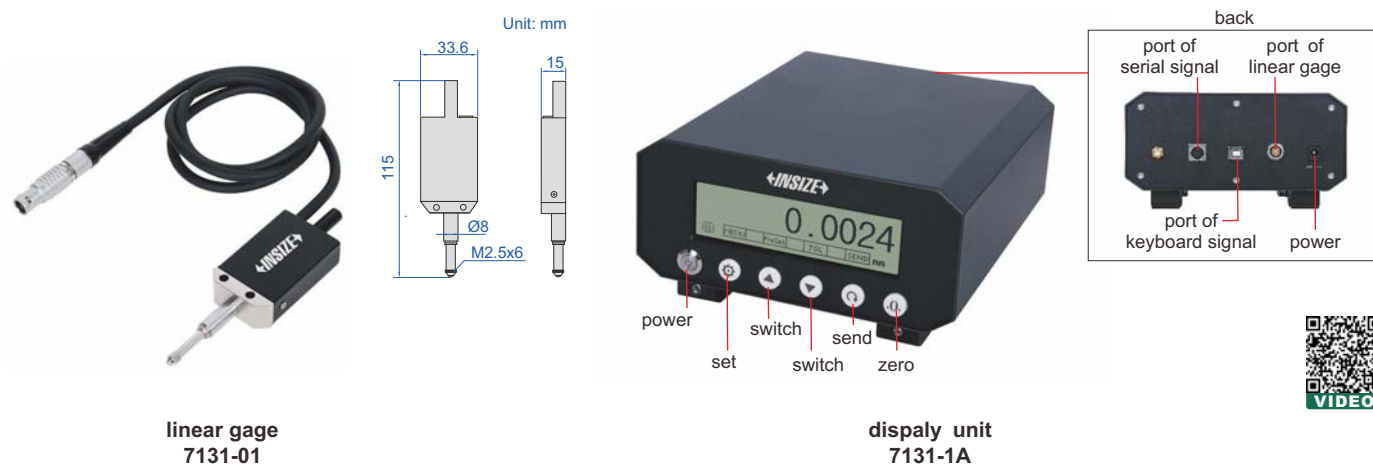
Half round gage block (optional)

Code	Parallelism
2396-block	1µm

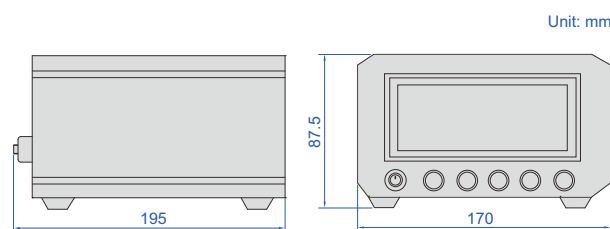


half round gage block
code 2396-block (optional)

LINEAR GAGES AND DISPLAY UNIT



- Linear gage type: optical grating
- Display unit: display displacement data in real time, data preset, set tolerance and make judgment (out of upper tolerance, within tolerance, out of lower tolerance), set zero, change measuring direction, resolution (0.1μm/1μm), unit switch (μm/mm/inch)
- Two data transmission methods: can output keyboard signal and data can be transmitted to excel, word, txt etc, can also output serial signal and transmit data to serial communication software



LINEAR GAGE SPECIFICATION

Code	7131-01	7131-02
Range	12.5mm	12.5mm
Resolution	0.1μm	1μm
Accuracy (19~20°C)	1μm	3μm
Repeatability	0.2μm	2μm
Linear gage type	optical grating	
Working life	ten million times	
Dust/waterproof	IP50	
Measuring force	0.7±0.3N	
Cable length	900mm	
Operation environment	0~40°C, 20~80%RH	
Power supply	5~24V	
Dimension (L×W×H)	33.6×15×115mm	
Weight	133g	



DISPLAY UNIT SPECIFICATION

Code	7131-1A
Display	4" LCD screen
Unit	μm, mm, inch
Quantity of linear gage to be connected	1 pc
Dimension (L×W×H)	170×195×87.5mm
Weight	1.45kg

DIGITAL LINEAR GAGES



ABSOLUTE ENCODER, THE ORIGINAL
DATA REMAINS AFTER POWER OFF

DUSTPROOF
WATERPROOF




- Scale type: optical grating
- Absolute encoder, the original data remains after power off
- Digital signal output, amplifier is not required
- Measuring force: ≤1.5N
- Dust/waterproof: IP43/IP66
- Baud rate: 9600 (can be customized)
- Cable length: 3m (can be customized)






To be continued

Continued from previous page




Dust/waterproof IP43, resolution 0.1μm

Code	Range	Repeatability	Accuracy	Outgoing cable direction	Output signal	Output interface
7130-10	0-12.5mm	0.5μm	1μm	horizontal	RS232, TTL level	
7130-10L	0-12.5mm	0.5μm	1μm	vertical	RS232, TTL level	
7130-11	0-12.5mm	0.5μm	1μm	horizontal	RS232, 232 level	
7130-11L	0-12.5mm	0.5μm	1μm	vertical	RS232, 232 level	
7130-12	0-12.5mm	0.5μm	1μm	horizontal	RS485 (VCC+5~12V)	
7130-12L	0-12.5mm	0.5μm	1μm	vertical	RS485 (VCC+5~12V)	
7130-13	0-12.5mm	0.5μm	1μm	horizontal	RS232, TTL level	
7130-13L	0-12.5mm	0.5μm	1μm	vertical	RS232, TTL level	
7130-14	0-12.5mm	0.5μm	1μm	horizontal	RS232, 232 level	
7130-14L	0-12.5mm	0.5μm	1μm	vertical	RS232, 232 level	




Dust/waterproof IP43, resolution 0.5μm

Code	Range	Repeatability	Accuracy	Outgoing cable direction	Output signal	Output interface
7130-20	0-12.5mm	1.5μm	3μm	horizontal	RS232, TTL level	
7130-20L	0-12.5mm	1.5μm	3μm	vertical	RS232, TTL level	
7130-21	0-12.5mm	1.5μm	3μm	horizontal	RS232, 232 level	
7130-21L	0-12.5mm	1.5μm	3μm	vertical	RS232, 232 level	
7130-22	0-12.5mm	1.5μm	3μm	horizontal	RS485 (VCC+5~12V)	
7130-22L	0-12.5mm	1.5μm	3μm	vertical	RS485 (VCC+5~12V)	
7130-23	0-12.5mm	1.5μm	3μm	horizontal	RS232, TTL level	
7130-23L	0-12.5mm	1.5μm	3μm	vertical	RS232, TTL level	
7130-24	0-12.5mm	1.5μm	3μm	horizontal	RS232, 232 level	
7130-24L	0-12.5mm	1.5μm	3μm	vertical	RS232, 232 level	

Dust/waterproof IP66, resolution 0.1μm

Code	Range	Repeatability	Accuracy	Outgoing cable direction	Output signal	Output interface
7130-30	0-12.5mm	0.5μm	1μm	horizontal	RS232, TTL level	
7130-30L	0-12.5mm	0.5μm	1μm	vertical	RS232, TTL level	
7130-31	0-12.5mm	0.5μm	1μm	horizontal	RS232, 232 level	
7130-31L	0-12.5mm	0.5μm	1μm	vertical	RS232, 232 level	
7130-32	0-12.5mm	0.5μm	1μm	horizontal	RS485 (VCC+5~12V)	
7130-32L	0-12.5mm	0.5μm	1μm	vertical	RS485 (VCC+5~12V)	
7130-33	0-12.5mm	0.5μm	1μm	horizontal	RS232, TTL level	
7130-33L	0-12.5mm	0.5μm	1μm	vertical	RS232, TTL level	
7130-34	0-12.5mm	0.5μm	1μm	horizontal	RS232, 232 level	
7130-34L	0-12.5mm	0.5μm	1μm	vertical	RS232, 232 level	

Dust/waterproof IP66, resolution 0.5μm

Code	Range	Repeatability	Accuracy	Outgoing cable direction	Output signal	Output interface
7130-40	0-12.5mm	1.5μm	3μm	horizontal	RS232, TTL level	
7130-40L	0-12.5mm	1.5μm	3μm	vertical	RS232, TTL level	
7130-41	0-12.5mm	1.5μm	3μm	horizontal	RS232, 232 level	
7130-41L	0-12.5mm	1.5μm	3μm	vertical	RS232, 232 level	
7130-42	0-12.5mm	1.5μm	3μm	horizontal	RS485 (VCC+5~12V)	
7130-42L	0-12.5mm	1.5μm	3μm	vertical	RS485 (VCC+5~12V)	
7130-43	0-12.5mm	1.5μm	3μm	horizontal	RS232, TTL level	
7130-43L	0-12.5mm	1.5μm	3μm	vertical	RS232, TTL level	
7130-44	0-12.5mm	1.5μm	3μm	horizontal	RS232, 232 level	
7130-44L	0-12.5mm	1.5μm	3μm	vertical	RS232, 232 level	

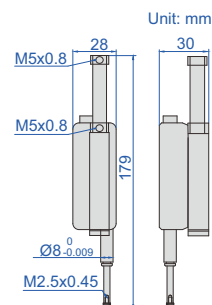
PNEUMATIC DIGITAL LINEAR GAGES



DUSTPROOF
WATERPROOF

ABSOLUTE ENCODER, THE ORIGINAL
DATA REMAINS AFTER POWER OFF

- Scale type: optical grating
- Absolute encoder, the original data remains after power off
- Digital signal output, amplifier is not required
- Air pressure: 0.2-0.5MPa
- Measuring force: $\leq 1.5\text{N}$
- Dust/waterproof: IP43/IP66
- Baud rate: 9600 (can be customized)
- Cable length: 3m (can be customized)



7134-10L

Dust/waterproof IP43, resolution 0.1 μm

Code	Range	Repeatability	Accuracy	Outgoing cable direction	Output signal	Output interface
7134-10	0-12.5mm	0.5 μm	1 μm	horizontal	RS232, TTL level	
7134-10L	0-12.5mm	0.5 μm	1 μm	vertical	RS232, TTL level	
7134-11	0-12.5mm	0.5 μm	1 μm	horizontal	RS232, 232 level	
7134-11L	0-12.5mm	0.5 μm	1 μm	vertical	RS232, 232 level	
7134-12	0-12.5mm	0.5 μm	1 μm	horizontal	RS485 (VCC+5~12V)	
7134-12L	0-12.5mm	0.5 μm	1 μm	vertical	RS485 (VCC+5~12V)	
7134-13	0-12.5mm	0.5 μm	1 μm	horizontal	RS232, TTL level	
7134-13L	0-12.5mm	0.5 μm	1 μm	vertical	RS232, TTL level	
7134-14	0-12.5mm	0.5 μm	1 μm	horizontal	RS232, 232 level	
7134-14L	0-12.5mm	0.5 μm	1 μm	vertical	RS232, 232 level	

Dust/waterproof IP43, resolution 0.5 μm

Code	Range	Repeatability	Accuracy	Outgoing cable direction	Output signal	Output interface
7134-20	0-12.5mm	1.5 μm	3 μm	horizontal	RS232, TTL level	
7134-20L	0-12.5mm	1.5 μm	3 μm	vertical	RS232, TTL level	
7134-21	0-12.5mm	1.5 μm	3 μm	horizontal	RS232, 232 level	
7134-21L	0-12.5mm	1.5 μm	3 μm	vertical	RS232, 232 level	
7134-22	0-12.5mm	1.5 μm	3 μm	horizontal	RS485 (VCC+5~12V)	
7134-22L	0-12.5mm	1.5 μm	3 μm	vertical	RS485 (VCC+5~12V)	
7134-23	0-12.5mm	1.5 μm	3 μm	horizontal	RS232, TTL level	
7134-23L	0-12.5mm	1.5 μm	3 μm	vertical	RS232, TTL level	
7134-24	0-12.5mm	1.5 μm	3 μm	horizontal	RS232, 232 level	
7134-24L	0-12.5mm	1.5 μm	3 μm	vertical	RS232, 232 level	




Dust/waterproof IP66, resolution 0.1 μm

Code	Range	Repeatability	Accuracy	Outgoing cable direction	Output signal	Output interface
7134-30	0-12.5mm	0.5 μm	1 μm	horizontal	RS232, TTL level	
7134-30L	0-12.5mm	0.5 μm	1 μm	vertical	RS232, TTL level	
7134-31	0-12.5mm	0.5 μm	1 μm	horizontal	RS232, 232 level	
7134-31L	0-12.5mm	0.5 μm	1 μm	vertical	RS232, 232 level	
7134-32	0-12.5mm	0.5 μm	1 μm	horizontal	RS485 (VCC+5~12V)	
7134-32L	0-12.5mm	0.5 μm	1 μm	vertical	RS485 (VCC+5~12V)	
7134-33	0-12.5mm	0.5 μm	1 μm	horizontal	RS232, TTL level	
7134-33L	0-12.5mm	0.5 μm	1 μm	vertical	RS232, TTL level	
7134-34	0-12.5mm	0.5 μm	1 μm	horizontal	RS232, 232 level	
7134-34L	0-12.5mm	0.5 μm	1 μm	vertical	RS232, 232 level	

To be continued

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Dust/waterproof IP66, resolution 0.5μm

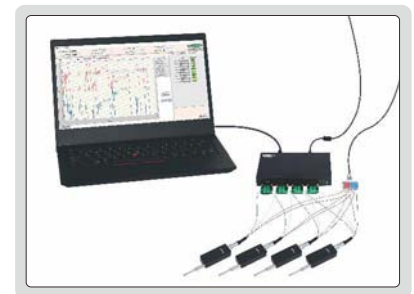
Code	Range	Repeatability	Accuracy	Outgoing cable direction	Output signal	Output interface
7134-40	0-12.5mm	1.5μm	3μm	horizontal	RS232, TTL level	
7134-40L	0-12.5mm	1.5μm	3μm	vertical	RS232, TTL level	
7134-41	0-12.5mm	1.5μm	3μm	horizontal	RS232, 232 level	
7134-41L	0-12.5mm	1.5μm	3μm	vertical	RS232, 232 level	
7134-42	0-12.5mm	1.5μm	3μm	horizontal	RS485 (VCC+5~12V)	
7134-42L	0-12.5mm	1.5μm	3μm	vertical	RS485 (VCC+5~12V)	
7134-43	0-12.5mm	1.5μm	3μm	horizontal	RS232, TTL level	
7134-43L	0-12.5mm	1.5μm	3μm	vertical	RS232, TTL level	
7134-44	0-12.5mm	1.5μm	3μm	horizontal	RS232, 232 level	
7134-44L	0-12.5mm	1.5μm	3μm	vertical	RS232, 232 level	

MULTICHANNEL INTERFACE BOXES OF LINEAR GAGES

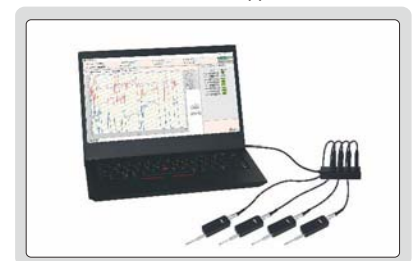


- Can be connected with 7130 or 7134 series linear gages
- Optional accessory: software of linear gage (code: 7130-SOFTWARE, 8 linear gages can be connected simultaneously)

7212-4A application



7324-HUB4 application



software of linear gage (optional)



SPECIFICATION

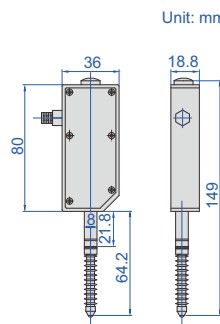
Code	7212-4A	7212-8A	7324-HUB4	7324-HUB7
Quantity of linear gages	4	8	4	7
Applicable linear gages	7130-12, 7130-12L, 7130-22, 7130-22L, 7130-32, 7130-32L, 7130-42, 7130-42L, 7134-12, 7134-12L, 7134-22, 7134-22L, 7134-32, 7134-32L, 7134-42, 7134-42L		7130-10, 7130-10L, 7130-20, 7130-20L, 7130-30, 7130-30L, 7130-40, 7130-40L, 7134-10, 7134-10L, 7134-20, 7134-20L, 7134-30, 7134-30L, 7134-40, 7134-40L	
Type of linear gage	RS485 protocol		RS232 protocol	
Type of output	USB		USB	

LINEAR GAGES

LINEAR GAGE
IP65
WATERPROOF



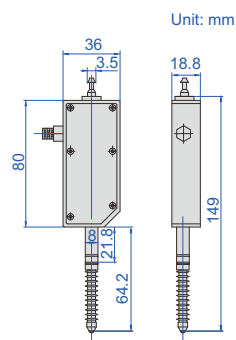
7107-12



7107-11
7107-12



7107-12V



7107-11V
7107-12V

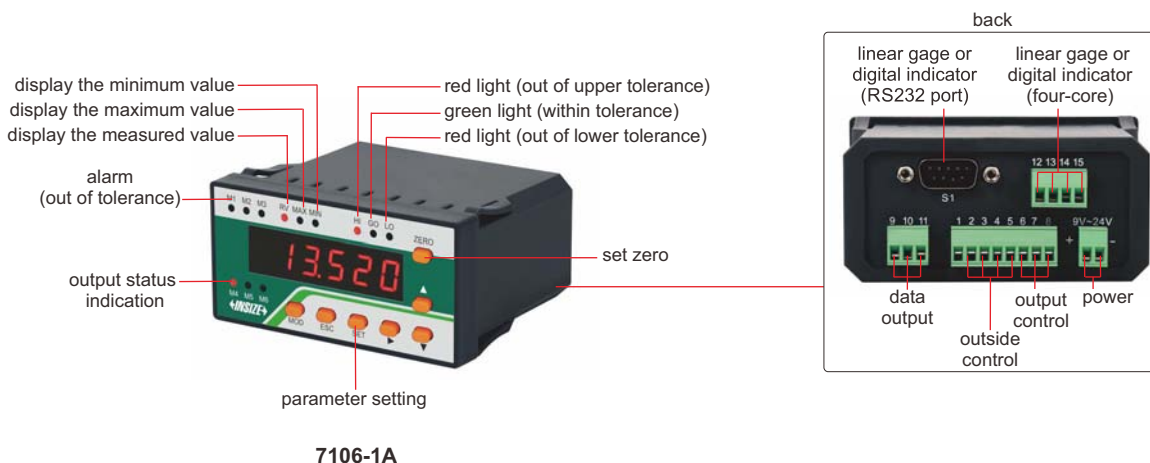
- Capacitance type linear encoder
- Shock-proof, water proof, dust proof, suitable for high speed movement, long working life
- Optional: display unit **7106-1A**, multichannel interface box **7107-1** or **7107-2**

SPECIFICATION

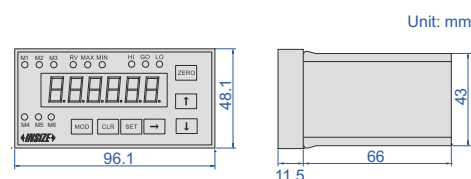
Code	7107-11	7107-12	7107-11V	7107-12V
Measuring range	12mm/0.47"	12mm/0.47"	12mm/0.47"	12mm/0.47"
Resolution	0.01mm/0.0004"	0.001mm/0.00004"	0.01mm/0.0004"	0.001mm/0.00004"
Accuracy	20μm	5μm	20μm	5μm
Hysteresis	10μm	2μm	10μm	2μm
Driving type	spring		pneumatic	
Measuring force	1.5N		adjusted by air pressure	
Measuring principle	capacitance type linear encoder			
Voltage	5V			
Sampling frequency	100 times/sec			
Working life	ten million times			
Dust/waterproof	IP65			
Cable length	2m			
Data output	RS232			



DISPLAY UNIT FOR CAPACITANCE LINEAR GAGES CODE 7106-1A



- Can be connected with **7107-11**, **7107-12**, **7107-11V** or **7107-12V** linear gage, can also be connected with digital indicator (data cable **7309-C01M** is needed)
- Set tolerance and make judgment (out of upper tolerance, within tolerance, out of lower tolerance), output the judgment to control outside devices, control from outside (set zero, hold reading and collect data)
- Software of display unit (included): in the software, it is possible to set tolerance and show judgment (red when out of tolerance, green when within tolerance), set zero, collect data manually or automatically (time is adjustable), output data to Excel, print report



connected with **7107-11**, **7107-12**, **7107-11V** or **7107-12V** linear gage



11

connected with digital indicator (data cable **7309-C01M** is needed)



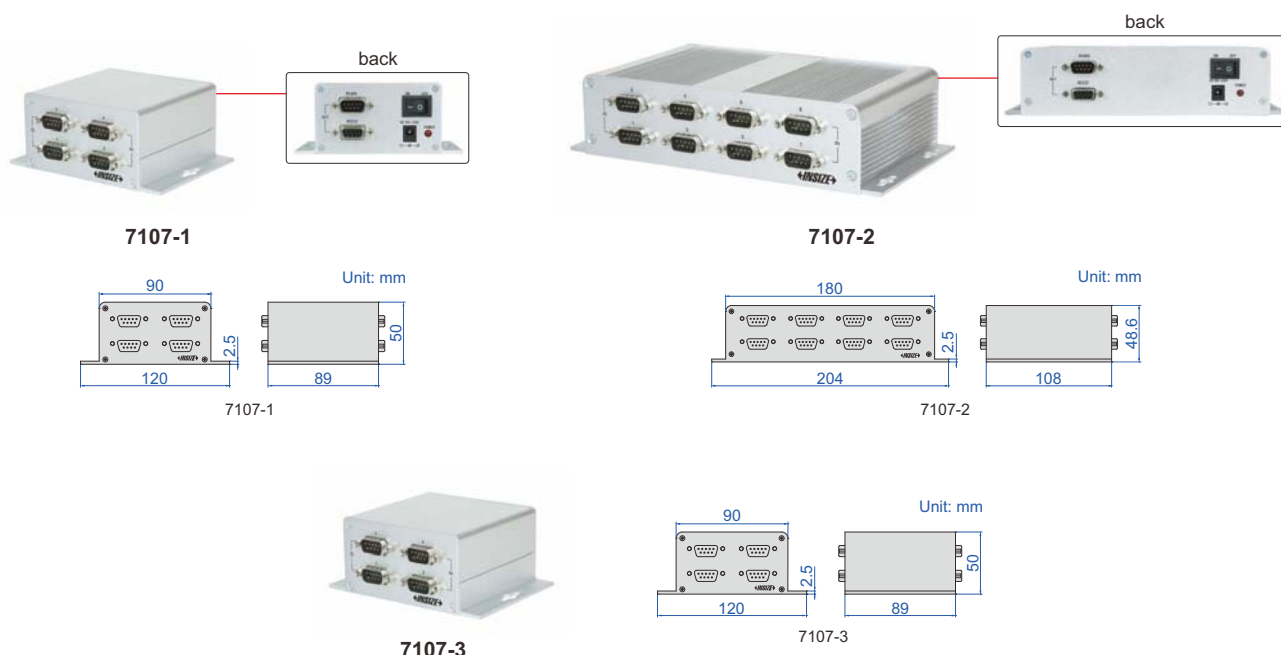
software (included)



SPECIFICATION

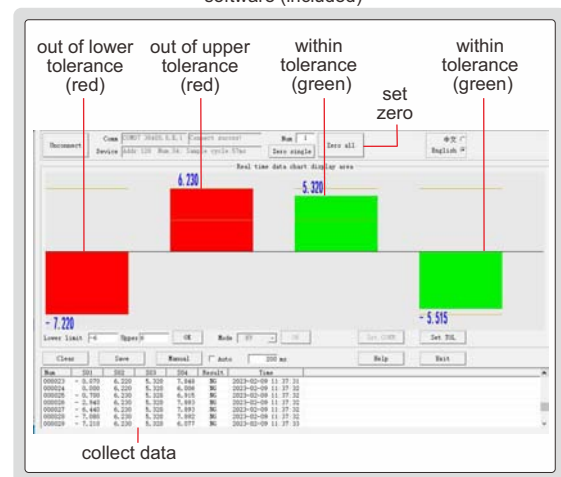
Display	6 digits
Quantity of linear gage or digital indicator to be connected	1 pc
Tolerance	set tolerance and make judgment with alarm and lights (out of upper tolerance, within tolerance, out of lower tolerance)
Output control	output the tolerance judgment (out of upper tolerance, within tolerance, out of lower tolerance) to control outside devices
Outside control	control the display units from outside (set zero, hold reading and collect data)
Data output	connect to computer software and serial communication
Power supply	DC 9~24V

MULTICHANNEL INTERFACE BOXES FOR CAPACITANCE LINEAR GAGES

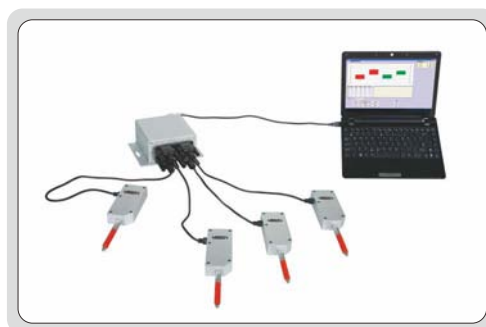


- Can be connected with **7107-11**, **7107-12**, **7107-11V** or **7107-12V** linear gages, can also be connected with digital indicators (data cable **7309-C01M** is needed)
- Connection box (code: **7107-3**) is needed to connect interface boxes, when two or more interface boxes are used. Maximum 4 interface boxes can be connected.
- Software of interface boxes (included): in the software, it is possible to set tolerance of each channel and show judgment (red when out of tolerance, green when within tolerance), set zero, collect data manually or automatically (time is adjustable), output data to Excel, print report.

software (included)



connected with **7107-11**, **7107-12**, **7107-11V** or **7107-12V** linear gages



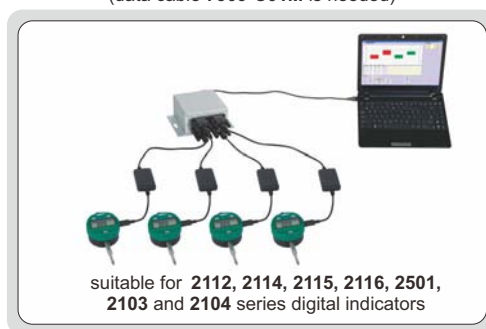
INTERFACE BOX SPECIFICATION

Code	7107-1	7107-2
Quantity of linear gages or digital indicators to be connected	4 pcs	8 pcs
Data output	RS232 and RS485	
Power supply	DC 9~24V	

CONNECTION BOX (OPTIONAL) SPECIFICATION

Code	7107-3
Quantity of interface boxes to be connected	4 pcs (maximum 4 interface boxes can be connected)
Data output	RS232 and RS485
Power supply	DC 9~24V

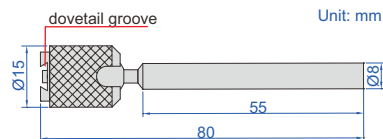
connected with digital indicators (data cable **7309-C01M** is needed)



DIAL TEST INDICATOR UNIVERSAL HOLDER



6297-1



Code

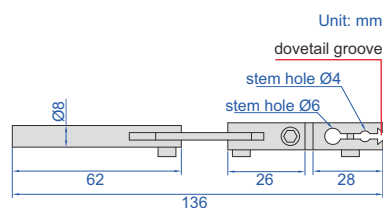
6297-1

- Set the indicators at the desired attitude to the workpiece

DIAL TEST INDICATOR HOLDER



6296-1



Code

6296-1

- Supplied with hex key

DIAL TEST INDICATOR HOLDERS

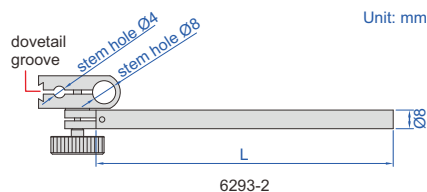
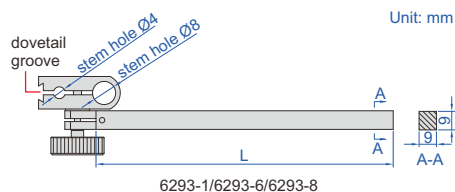
11



6293-1



6293-2



Code	Stem section	Stem length (L)
6293-1	9x9mm	100mm
6293-6	9x9mm	50mm
6293-8 *	9x9mm	200mm
6293-2	Ø8mm	115mm

* Only apply for 0.01mm dial test indicator



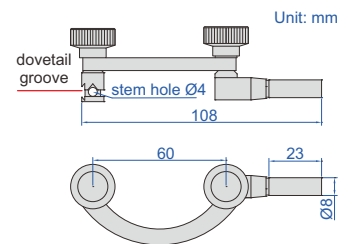
DIAL TEST INDICATOR HOLDER

- Can be used with dial test indicators

Code
6291-1



6291-1



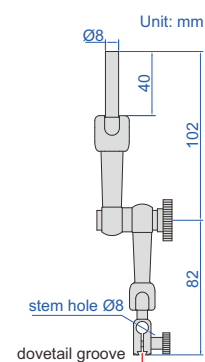
DIAL TEST INDICATOR HOLDER

- Can be used with dial test indicators

Code
6295-1A



6295-1A



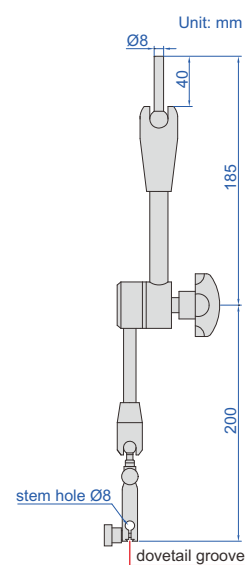
DIAL INDICATOR HOLDER

- Can be used with dial test indicators or dial indicators

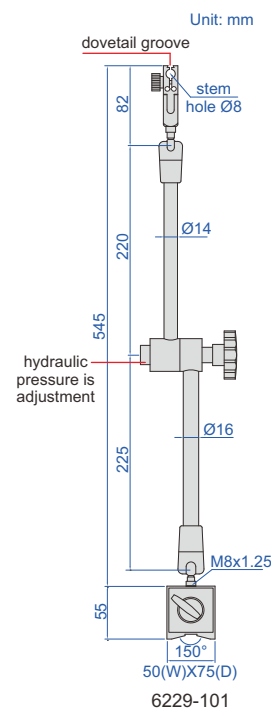
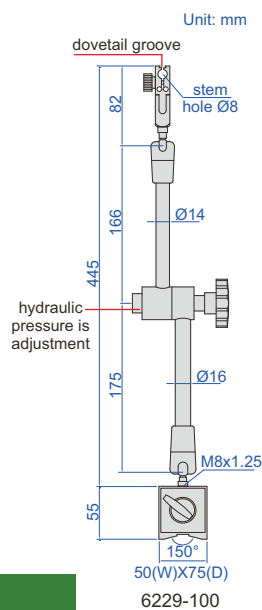
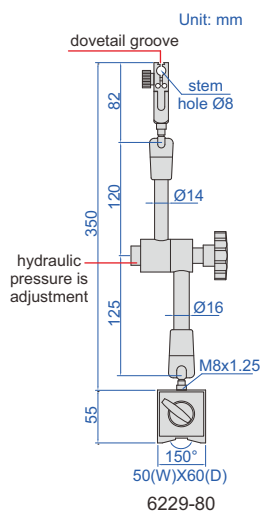
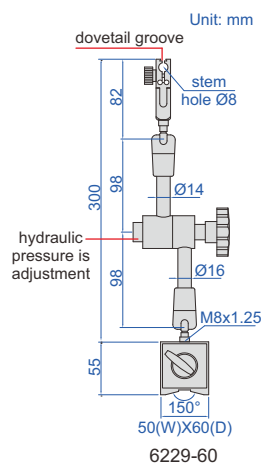
Code
6294-1A



6294-1A



HYDRAULIC UNIVERSAL MAGNETIC STANDS

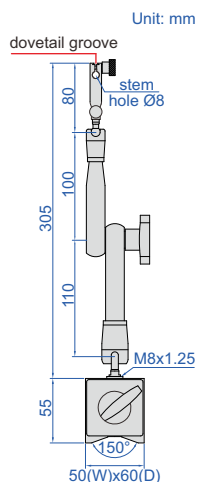


- Hydraulic pressure is adjustment
- For digital/dial indicators and dial test indicators

Code	Magnetic force	Applicable holding stem	Remark
6229-60	60kgf	Ø8mm	with fine adjustment and dovetail groove
6229-80	80kgf	Ø8mm	with fine adjustment and dovetail groove
6229-100	100kgf	Ø8mm	with fine adjustment and dovetail groove
6229-101	100kgf	Ø8mm	with fine adjustment and dovetail groove

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LARGE LOCKING FORCE MAGNETIC STAND

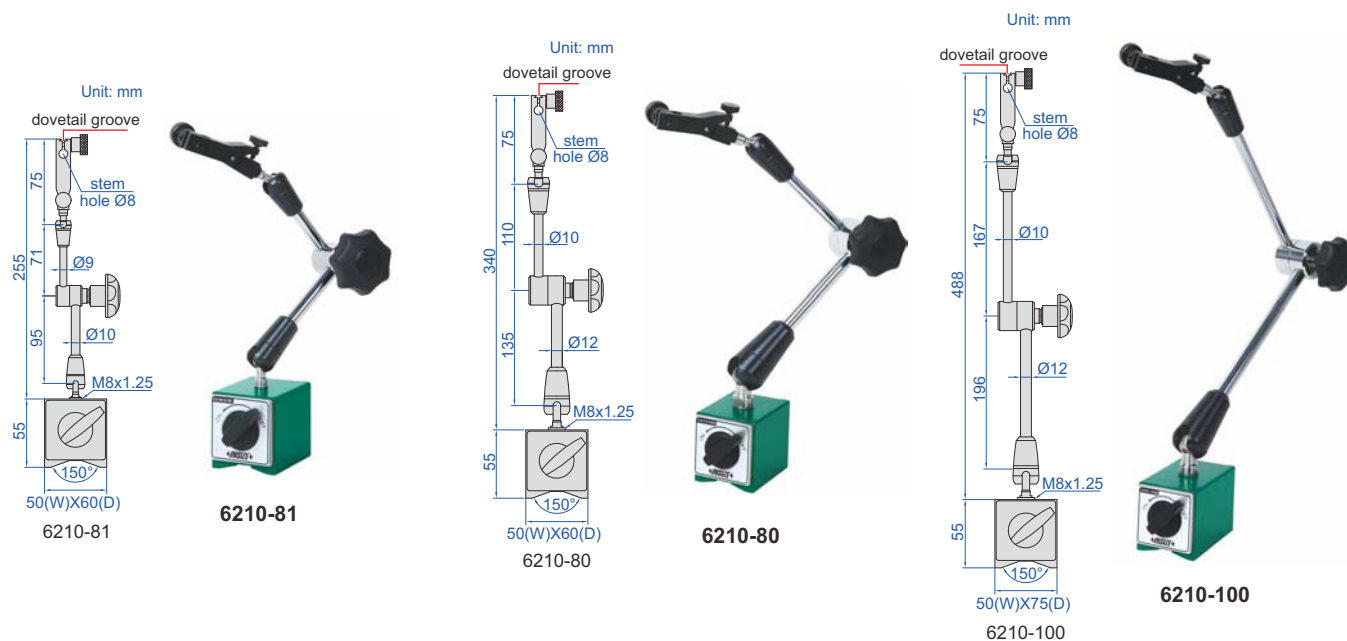


- For digital/dial indicators and dial test indicators

Code	Magnetic force	Applicable holding stem	Remark
6219-80	80kgf	Ø8mm	with fine adjustment and dovetail groove

UNIVERSAL MAGNETIC STANDS

POPULAR
MODEL



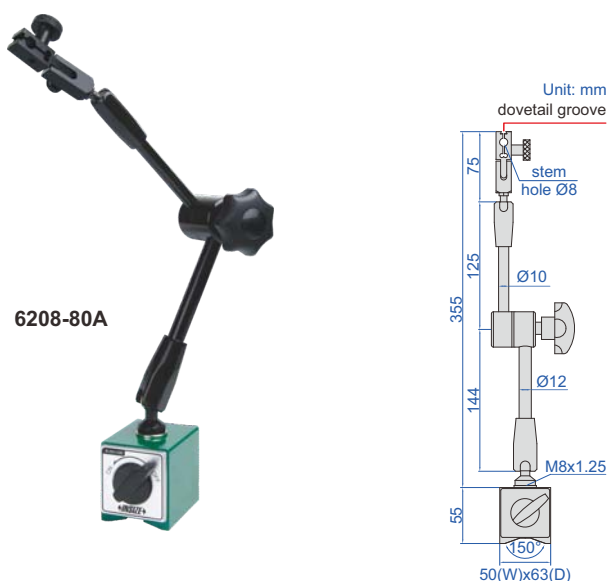
- For digital/dial indicators and dial test indicators

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

UNIVERSAL MAGNETIC STAND (ECONOMIC TYPE)

ATTENTION: LOW
LOCKING FORCE

- For digital/dial indicators and dial test indicators

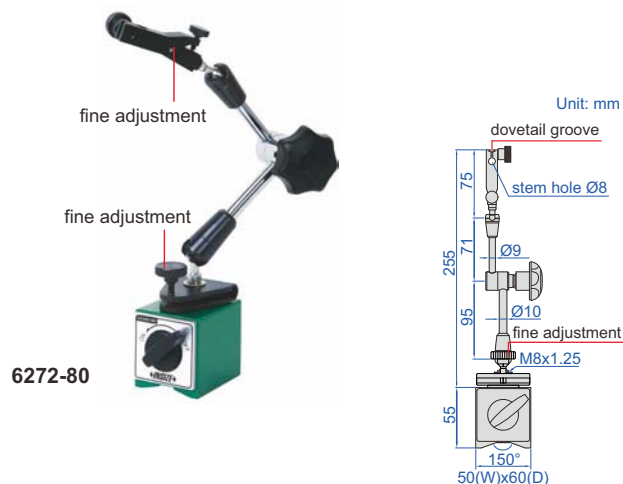


Code	Magnetic force	Applicable holding stem	Remark
6208-80A	80kgf	Ø8mm	with fine adjustment and dovetail groove

MAGNETIC STAND WITH TWO FINE ADJUSTMENTS

- With two fine adjustments on the head and on the base
- For digital/dial indicators and dial test indicators

Code	Magnetic force	Applicable holding stem	Remark
6272-80	80kgf	Ø8mm	with two fine adjustments and dovetail groove

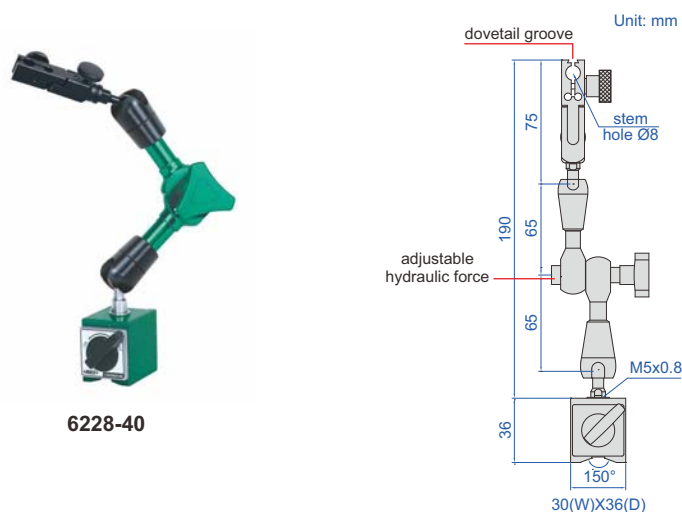


ATTENTION: FOR DIAL TEST INDICATORS ONLY

HYDRAULIC MINI MAGNETIC STAND

- For dial test indicators
- With fine adjustment and dovetail groove
- Adjustable hydraulic force

Code	Magnetic force	Applicable holding stem
6228-40	40kgf	Ø8mm

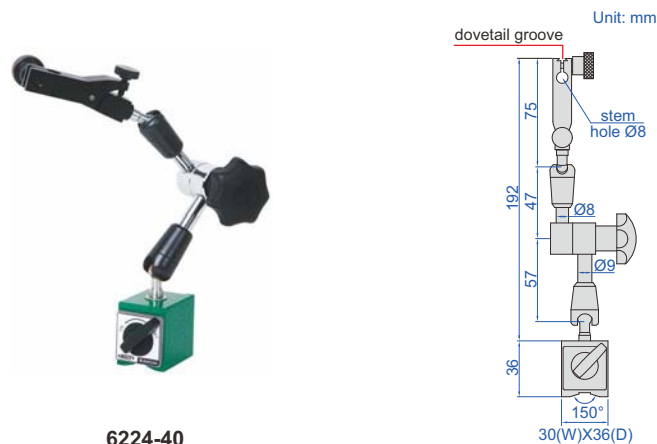


ATTENTION: FOR DIAL TEST INDICATORS ONLY

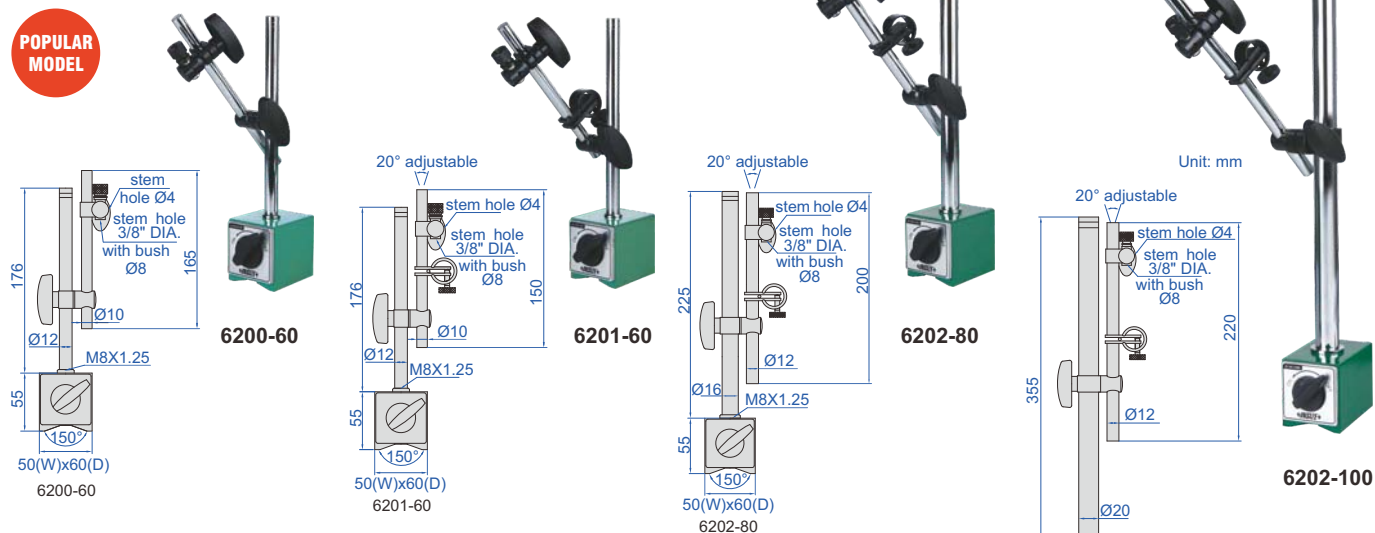
MINI MAGNETIC STAND

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

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



MAGNETIC STANDS



- For digital/dial indicators and dial test indicators

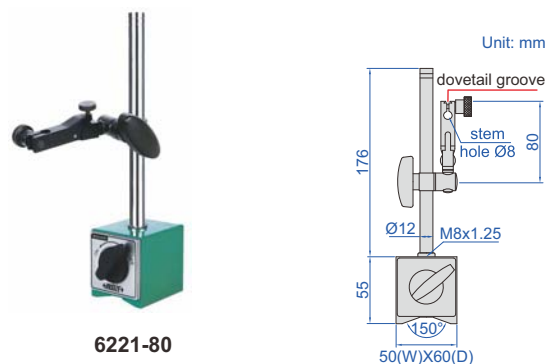
Code	Magnetic force	Applicable holding stem	Remark
6200-60	60kgf	Ø8mm, Ø4mm, 3/8" DIA.	without fine adjustment
6201-60	60kgf	Ø8mm, Ø4mm, 3/8" DIA.	with fine adjustment
6202-80	80kgf	Ø8mm, Ø4mm, 3/8" DIA.	with fine adjustment
6202-100	100kgf	Ø8mm, Ø4mm, 3/8" DIA.	with fine adjustment

MAGNETIC STAND (FOR 0.001MM DIAL AND TEST INDICATORS)

11

- For 0.001mm and 0.01mm dial and test indicators

Code	Magnetic force	Applicable holding stem	Remark
6221-80	80kgf	Ø8mm	with fine adjustment and dovetail groove



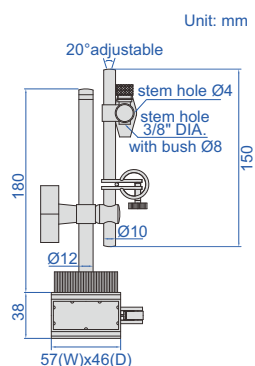
MAGNETIC STAND

- For digital/dial indicators and dial test indicators

Code	Magnetic force	Applicable holding stem	Remark
6216-80	80kgf	Ø8mm	with fine adjustment and dovetail groove

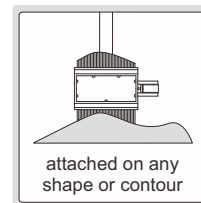


MAGNETIC STAND FOR UNEVEN SURFACES



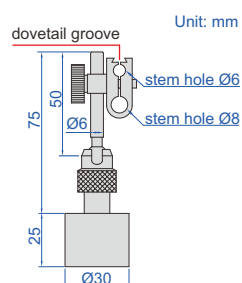
6215-60

- For digital/dial indicators and dial test indicators
- With fine adjustment



Code	Magnetic force	Applicable holding stem
6215-60	60kgf	Ø8mm, Ø4mm, 3/8" DIA.

MINI MAGNETIC STAND



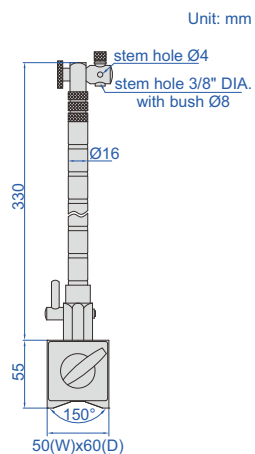
6211-10

- For dial test indicators
- With dovetail groove

ATTENTION: FOR DIAL TEST INDICATORS ONLY

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

FLEX ARM MAGNETIC STAND



6207-80A

- For dial test indicators

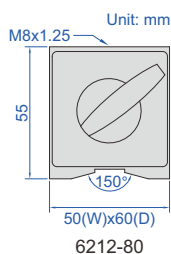
ATTENTION: FOR DIAL TEST INDICATORS ONLY

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

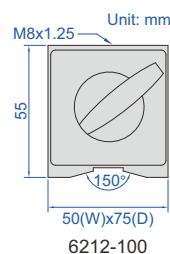
MAGNETIC BASES



6212-80



6212-100

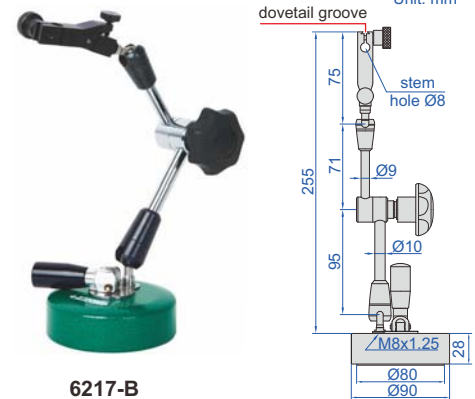


Code	Magnetic force
6212-80	80kgf
6212-100	100kgf

VACUUM STAND

- Suitable for granite surface plates or cast iron surface plates
- For digital/dial indicators and dial test indicators

Code	Diameter of vacuum disc	Vacuum force	Applicable holding stem	Remark
6217-B	Ø80mm	80kgf	Ø8mm	with fine adjustment and dovetail groove



6217-B

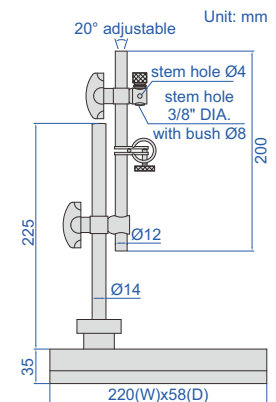
UNIVERSAL STAND

- For digital/dial indicators and dial test indicators
- With fine adjustment

Code	Applicable holding stem
6214-A	Ø8mm, Ø4mm, 3/8" DIA.

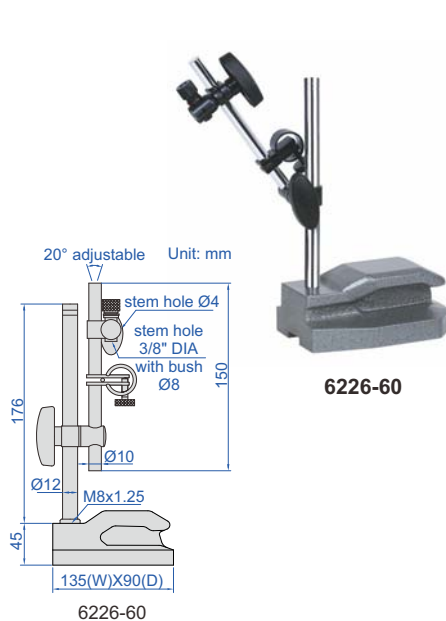


6214-A

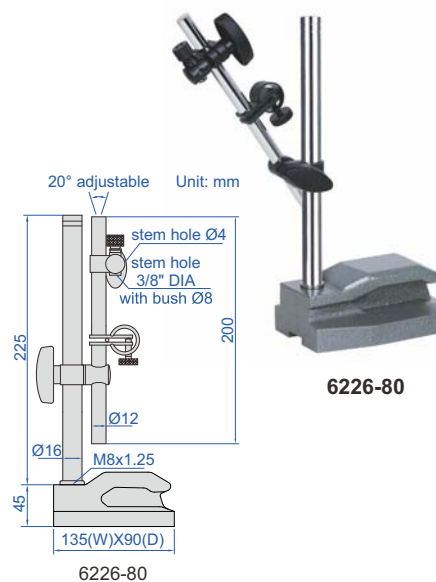


DIAL INDICATOR STANDS (NON-MAGNETIC)

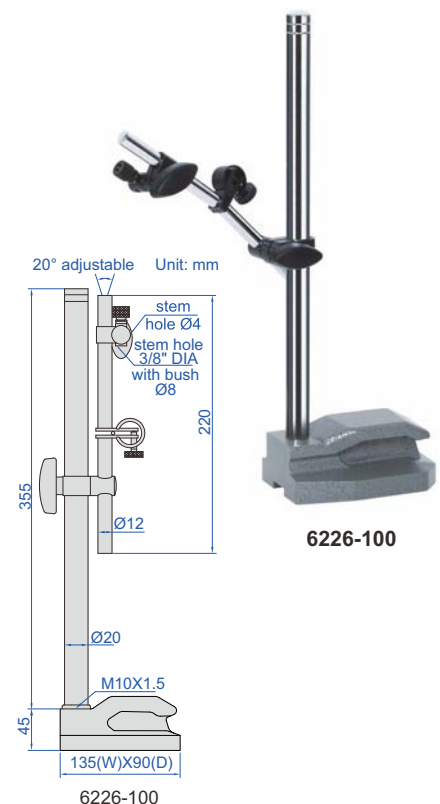
11



6226-60



6226-80



6226-100

Code	Applicable holding stem	Remark
6226-60	Ø8mm, Ø4mm, 3/8" DIA	with fine adjustment
6226-80	Ø8mm, Ø4mm, 3/8" DIA	with fine adjustment
6226-100	Ø8mm, Ø4mm, 3/8" DIA	with fine adjustment

- Hardened base
- Suitable for granite surface plates and cast iron surface plates
- For digital/dial indicators and dial test indicators

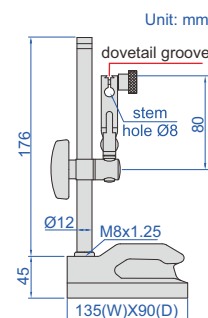
DIAL INDICATOR STAND (FOR 0.001MM DIAL AND TEST INDICATORS)

- Non-magnetic and hardened base
- Suitable for granite surface plates or cast iron surface plates
- For 0.001mm and 0.01mm dial and test indicators

Code	Applicable holding stem	Remark
6230-60	Ø8mm	with fine adjustment and dovetail groove



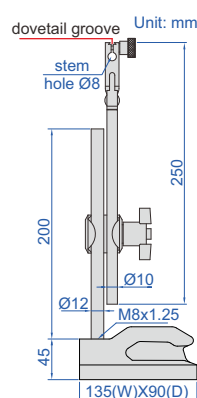
6230-60



DIAL INDICATOR STAND (NON-MAGNETIC)

- Hardened base
- Suitable for granite surface plates and cast iron surface plates
- For digital/dial indicators and dial test indicators

Code	Applicable holding stem	Remark
6227-80	Ø8mm	with fine adjustment and dovetail groove



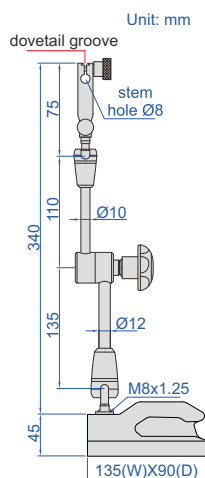
6227-80

UNIVERSAL DIAL INDICATOR STANDS (NON-MAGNETIC)

- Hardened base
- Suitable for granite surface plates and cast iron surface plates
- For digital/dial indicators and dial test indicators



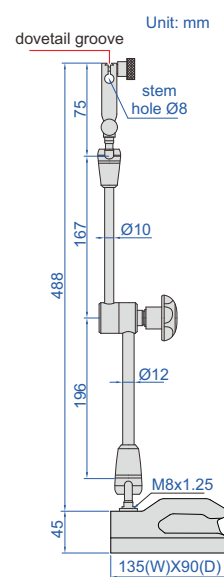
6225-80



6225-80



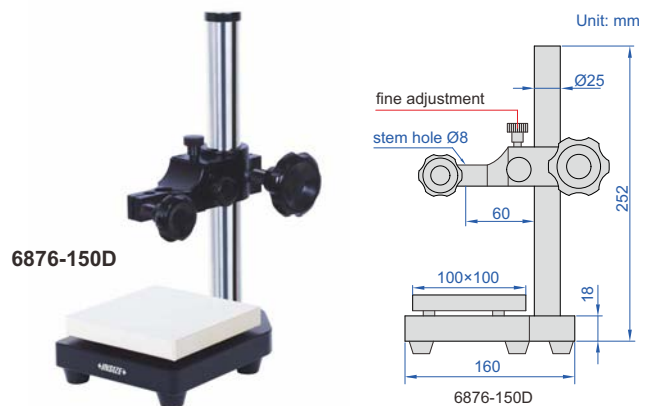
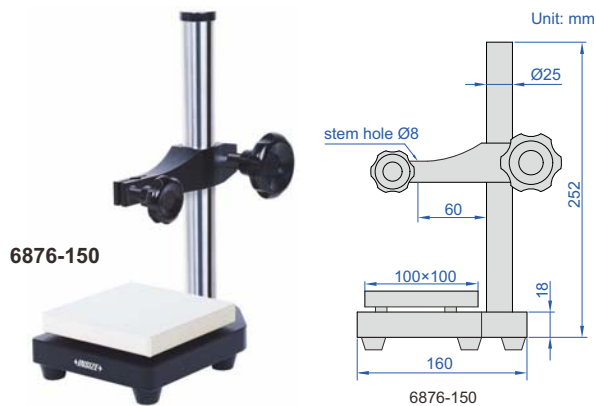
6225-100



6225-100

Code	Applicable holding stem	Remark
6225-80	Ø8mm	with fine adjustment and dovetail groove
6225-100	Ø8mm	with fine adjustment and dovetail groove

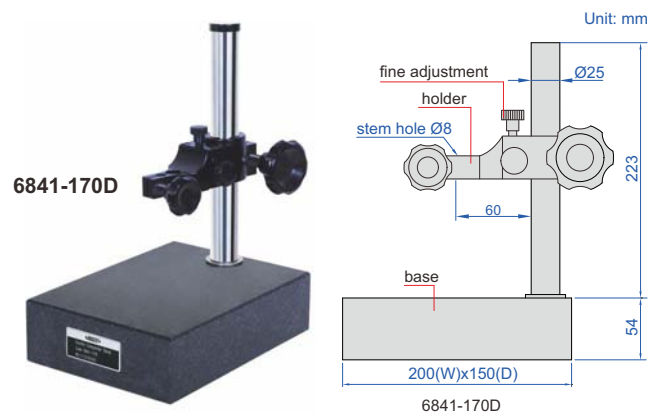
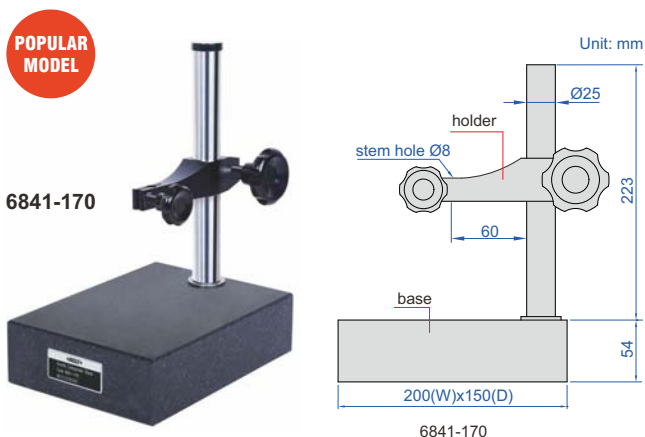
DIAL INDICATOR STANDS



Code	Applicable holding stem	Anvil	Remark
6876-150	Ø8mm	ceramic, plain, flatness 1.5µm	without fine adjustment
6876-150D	Ø8mm	ceramic, plain, flatness 1.5µm	with fine adjustment, fine adjustment range 3mm

- Vertical travel of holder: 150mm
- Ceramic anvil
- Supplied with dust cover

GRANITE DIAL INDICATOR STANDS (BASIC TYPE)



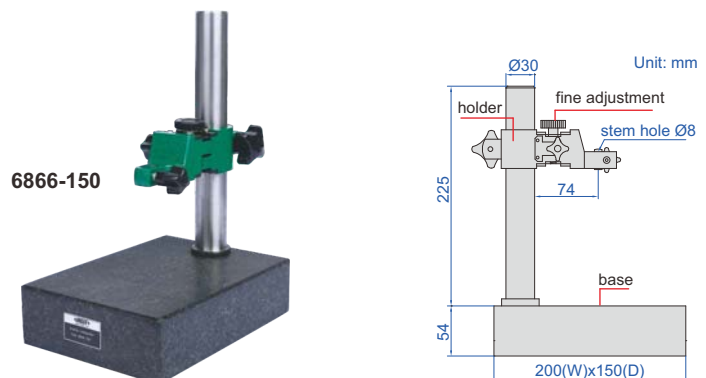
Code	Applicable holding stem	Base	Remark
6841-170	Ø8mm	flatness 2.5µm	without fine adjustment
6841-170D	Ø8mm	flatness 2.5µm	with fine adjustment, fine adjustment range 3mm

- Vertical travel of holder: 170mm
- Supplied with dust cover

GRANITE DIAL INDICATOR STAND

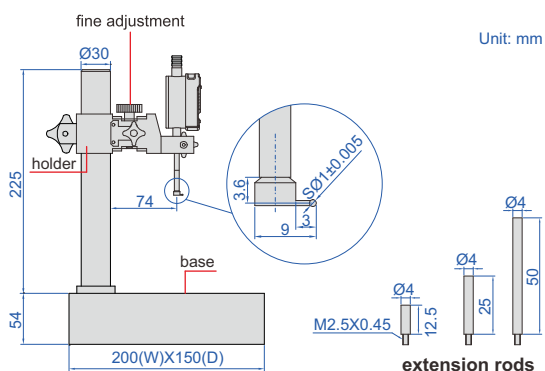
- Vertical travel of holder: 150mm
- Fine adjustment range: 2mm
- Supplied with dust cover

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



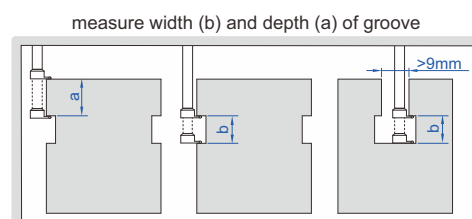
DATA
OUTPUT

DIGITAL GROOVE MEASUREMENT STANDS



6870-150

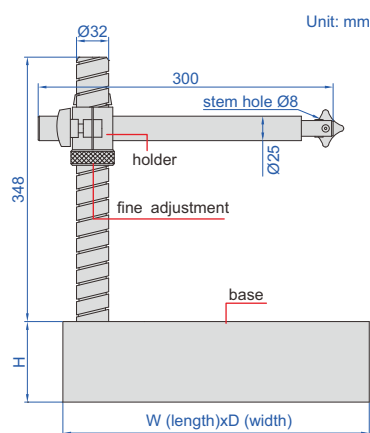
- Button function: on/off, zero, mm/inch, measuring direction change, data preset, absolute/incremental measurement
- Vertical travel of holder: 150mm
- Fine adjustment range: 2mm
- CR2032 battery, automatic power off (time is adjustable)
- Data output
- Supplied with extension rods: 12.5mm (1 pc), 25mm (1 pc), 50mm (1 pc)
- Supplied with groove point and dust cover
- Optional accessory: data output cable (code 7315-50M need receiver page 5, 7302-40M page 13)



Code	Digital indicator stroke	Digital indicator resolution	Accuracy	Applicable holding stem	Base
6870-150	12.7mm/0.5"	0.01mm/0.0005"	$\pm 20\mu\text{m}$	$\varnothing 8\text{mm}$	flatness 2.5 μm
6870-1501	12.7mm/0.5"	0.001mm/0.00005"	$\pm 5\mu\text{m}$	$\varnothing 8\text{mm}$	flatness 2.5 μm

GRANITE DIAL INDICATOR STANDS

11



6867-250

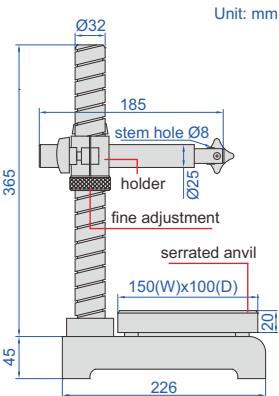


6867-400

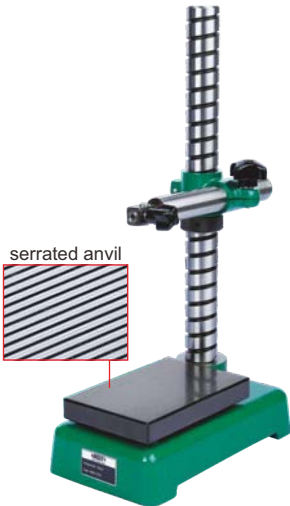
- Vertical travel of holder: 250mm
- Fine adjustment range: entire stroke
- Supplied with dust cover

Code	Applicable holding stem	W	D	H	Base
6867-250	$\varnothing 8\text{mm}$	300mm	300mm	75mm	flatness 2.8 μm
6867-400	$\varnothing 8\text{mm}$	400mm	300mm	100mm	flatness 3 μm

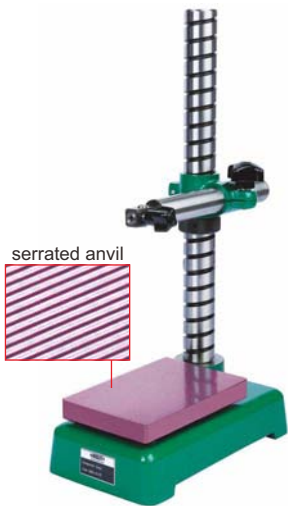
DIAL INDICATOR STANDS



- Vertical travel of holder: 250mm
- Fine adjustment range: entire stroke
- Supplied with dust cover



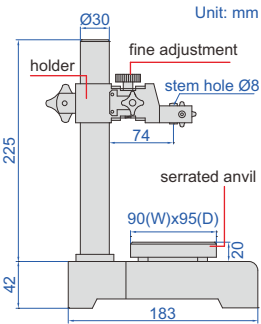
6864-250



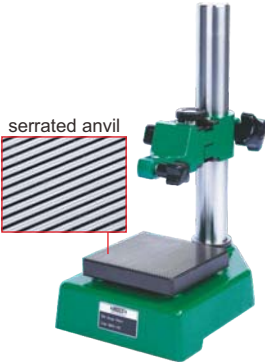
6864-250T

Code	Applicable holding stem	Anvil
6864-250	Ø8mm	steel (hardness HRC60±2), serrated, flatness 1.5µm
6864-250T	Ø8mm	ceramic, serrated, flatness 1.5µm

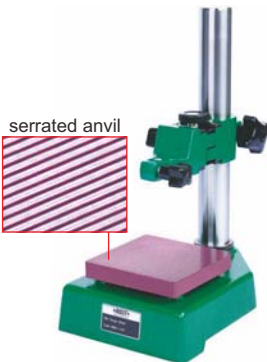
11 DIAL INDICATOR STANDS



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



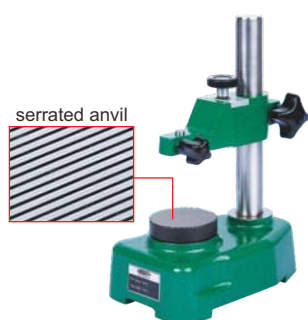
6863-150



6863-150T

Code	Applicable holding stem	Anvil
6863-150	Ø8mm	steel (hardness HRC60±2), serrated, flatness 1.5µm
6863-150T	Ø8mm	ceramic, serrated, flatness 1.5µm

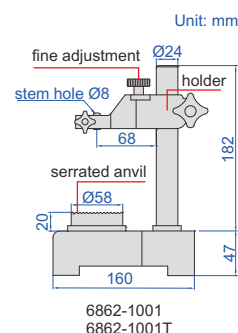
DIAL INDICATOR STANDS



6862-1001



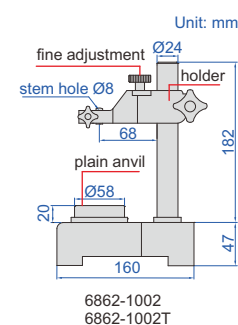
6862-1002



6862-1001T



6862-1002T

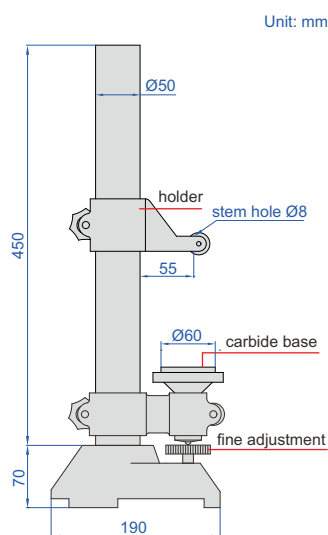


Code	Applicable holding stem	Anvil
6862-1001	Ø8mm	steel (hardness HRC60±2), serrated, flatness 1.5µm
6862-1002	Ø8mm	steel (hardness HRC60±2), plain, flatness 1.5µm
6862-1001T	Ø8mm	ceramic, serrated, flatness 1.5µm
6862-1002T	Ø8mm	ceramic, plain, flatness 1.5µm

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

HEAVY DUTY DIAL INDICATOR STAND

- Vertical travel of holder: 300mm
- Fine adjustment range: 5mm
- Carbide base
- Supplied with dust cover
- Optional accessory:
holder with stem hole Ø28 (code 6869-D28)



6869-300

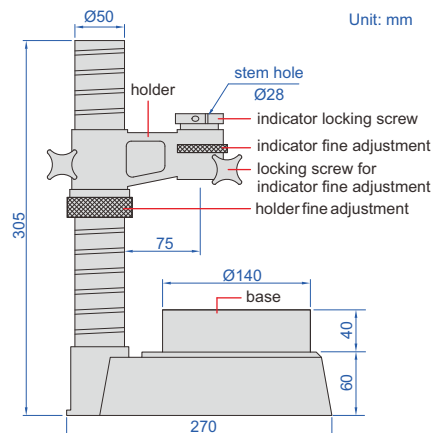
Code	Applicable holding stem	Base
6869-300	Ø8mm	plain, flatness 1µm, carbide

DIAL INDICATOR STAND

GAGE BLOCKS ARE NEEDED
FOR ZERO SETTING



digital/dial
indicator is
optional



6842-150



locating fork for workpiece (included)



rotary lever probe (included)



base with step (included)

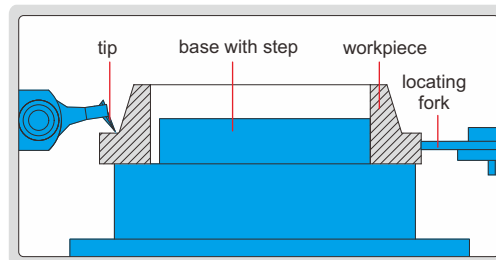


11

- Vertical travel of holder: 180mm
- Holder fine adjustment range: entire stroke
- Indicator fine adjustment range: 10mm
- Optional accessory: Ø28mm/Ø8mm bush (code 6843-B8), 0.001mm digital/dial indicators, high precision digital indicators (code 2140-6, 2140-6WL), gage blocks (4101 series, for zero setting)

Code	Applicable holding stem	Base
6842-150	Ø28mm	flatness 2µm

the tip of rotary lever probe can reach narrow areas



Ø28mm/Ø8mm bush (optional)



Code
6843-B8

application



locating fork
for workpieces

base with
step



rotary lever probe



can rotate 60°, in
order to change the
workpieces quickly,
suitable for mass
measurement

GAGE BLOCKS ARE NEEDED
FOR ZERO SETTING

locating fork for workpieces (included)



digital/dial
indicator is
optional

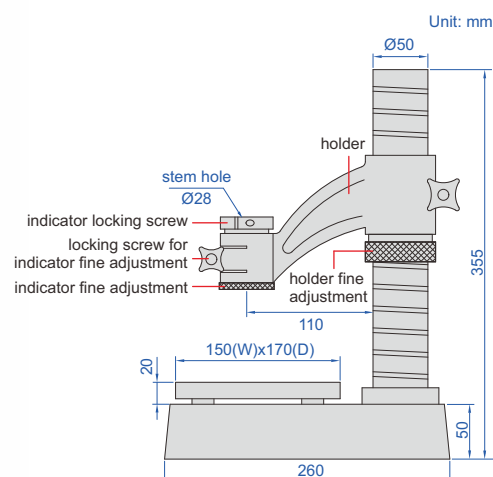


6846-140

- Vertical travel of holder: 140mm
- Holder fine adjustment range: entire stroke
- Indicator fine adjustment range: 3mm
- Optional accessory: Ø28mm/Ø8mm bush (code 6843-B8), 0.001mm digital/dial indicators, high precision digital indicators (code 2140-6, 2140-6WL), gage blocks (4101 series, for zero setting)

Code	Applicable holding stem	Anvil
6846-140	Ø28mm	grid, flatness 1µm

DIAL INDICATOR STAND



Ø28mm/Ø8mm bush (optional)



Code
6843-B8

application



GAGE BLOCKS ARE NEEDED
FOR ZERO SETTING

locating fork for workpieces (included)



digital/dial
indicator is
optional

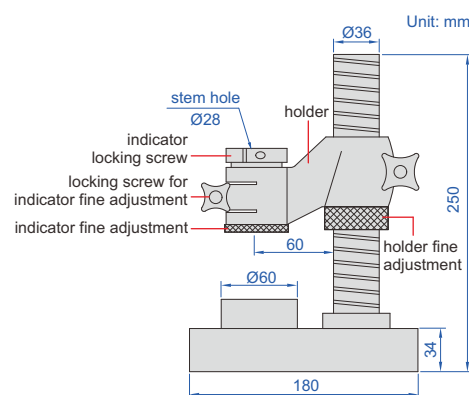


6845-100

- Vertical travel of holder: 100mm
- Holder fine adjustment range: entire stroke
- Indicator fine adjustment range: 3mm
- Optional accessory: Ø28mm/Ø8mm bush (code 6843-B8), 0.001mm digital/dial indicators, high precision digital indicators (code 2140-6, 2140-6WL), gage blocks (4101 series, for zero setting)

Code	Applicable holding stem	Anvil
6845-100	Ø28mm	serrated, flatness 1µm

DIAL INDICATOR STAND



Ø28mm/Ø8mm bush (optional)



Code
6843-B8

application



TRANSFER STANDS

application



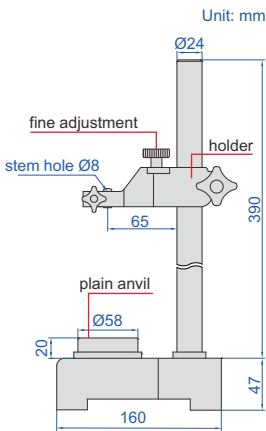
rigid construction, designed to make comparison height measurement (set zero with gage block then measure height of workpiece) with dial indicators or digital indicators (variation of measuring force is high)



6865-300



6865-300T



- Vertical travel of holder: 335mm
- Fine adjustment range: 2mm
- Supplied with dust cover

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

DIGITAL HEIGHT GAGES

REFER TO PAGE 85-87 FOR DETAILS



1155-505



1157-501



1158-100



Internal Caliper Gages
Page 280-284



External Caliper Gages
Page 284-285



Thickness Gages
Page 286-292



Rubber Thickness Gages
Page 292



Tube Thickness Gages
Page 293-294



Saw Teeth Setting Gages
Page 294



Snap Gages
Page 294-297



Step And Gap Gages
Page 298



Mini Digital Height Gages
Page 298-299



Height Gages
Page 299-300



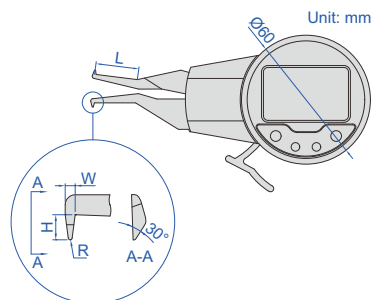
Crankshaft Testers
Page 300

DIGITAL INTERNAL CALIPER GAGES

DATA
OUTPUT

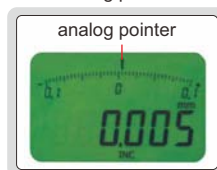


2121-15

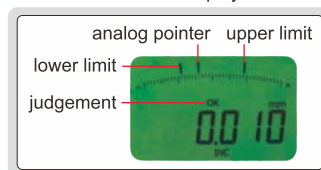


- Resolution: 0.005mm/0.0002"
- Reading in digit and analog
- Display can be rotated by 170°
- Button function: tolerance Go and No-Go display, data preset, max./min. measurement, data holding, inch/metric conversion, absolute/incremental measurement
- CR2032 battery, automatic power off
- Data output
- Optional accessory: data output cable (code 7315-30 need receiver page 4, 7302-30 page 12)

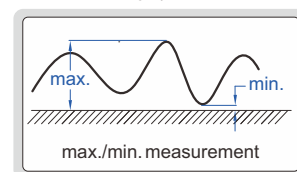
analog pointer



tolerance display



max./min.



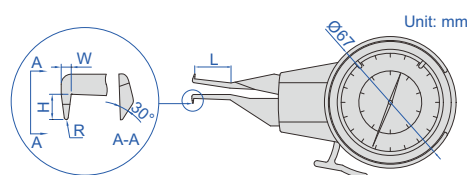
(mm)							
Code	Range	Accuracy	Repeatability	L	H	W	R
2121-15	5-15mm/0.2-0.6"	±0.03mm	0.01mm	20	2	1.5	R0.3
2121-25	5-25mm/0.2-1.0"	±0.03mm	0.01mm	35	1.5	1.0	R0.3
2121-31	10-30mm/0.4-1.2"	±0.03mm	0.01mm	55	5.5	2.5	R0.5
2121-41	20-40mm/0.8-1.6"	±0.03mm	0.01mm	80	6.0	3.0	R0.5
2121-51	30-50mm/1.2-2.0"	±0.03mm	0.01mm	80	8.0	3.0	R0.5
2121-61	40-60mm/1.6-2.4"	±0.03mm	0.01mm	80	8.0	3.0	R0.5

12

INTERNAL DIAL CALIPER GAGES



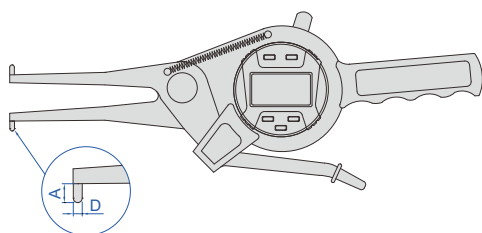
2222-15



(mm)							
Code	Range	Graduation	Accuracy	L	H	W	R
2222-15	5-15mm	0.01mm	±0.03mm	20	2	1.5	R0.3
2222-25	5-25mm	0.01mm	±0.03mm	35	1.5	1.0	R0.3
2222-301	10-30mm	0.01mm	±0.03mm	55	5.5	2.5	R0.5
2222-401	20-40mm	0.01mm	±0.03mm	80	6.0	3.0	R0.5
2222-501	30-50mm	0.01mm	±0.03mm	80	8.0	3.0	R0.5
2222-60	40-60mm	0.01mm	±0.03mm	80	8.0	3.0	R0.5

DATA OUTPUT

DIGITAL INTERNAL CALIPER GAGES

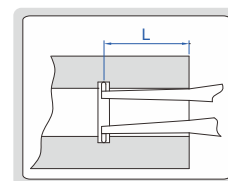


2151-35

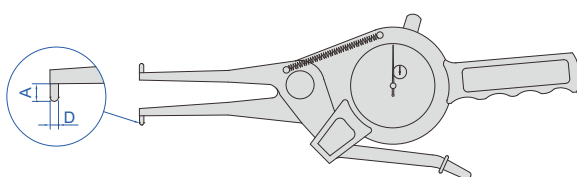
- Carbide measuring tips
- Reading in digit and analog
- With transmission button and signal light
- Display can be rotated by 320°
- Button function: on/off, zero, tolerance Go and No-Go display, data preset, measuring direction change, max./min./TIR measurement, inch/metric conversion, data output, absolute/incremental measurement
- CR2032 battery, automatic power off (time is adjustable)
- Data output
- Optional accessory: data output cable (code **7315-50M** need receiver page 5, **7302-50M** page 13)

Code	Range	Resolution	Accuracy	L	A	D
2151-35	15-35mm/0.6-1.4"	0.01mm/0.0005"	±0.04mm	<50	3	Ø3
2151-AL35	15-35mm/0.6-1.4"	0.01mm/0.0005"	±0.04mm	<200	3	Ø3
2151-55	35-55mm/1.4-2.2"	0.01mm/0.0005"	±0.04mm	<80	6	Ø3
2151-AL55	35-55mm/1.4-2.2"	0.01mm/0.0005"	±0.04mm	<250	8	Ø3
2151-75	55-75mm/2.2-3"	0.01mm/0.0005"	±0.04mm	<90	8	Ø3
2151-AL75	55-75mm/2.2-3"	0.01mm/0.0005"	±0.04mm	<250	8	Ø3
2151-95	75-95mm/3-3.8"	0.01mm/0.0005"	±0.04mm	<100	8	Ø3
2151-115	95-115mm/3.8-4.6"	0.01mm/0.0005"	±0.04mm	<120	10	Ø3.2
2151-135	115-135mm/4.6-5.4"	0.01mm/0.0005"	±0.04mm	<120	10	Ø3.2

(mm)



INTERNAL DIAL CALIPER GAGES

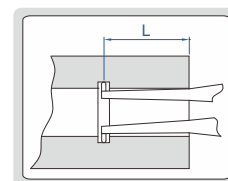


2321-35

- Carbide measuring tips

Code	Range	Graduation	Accuracy	L	A	D
2321-35	15-35mm	0.01mm	±0.04mm	<50	3	Ø3
2321-AL35	15-35mm	0.01mm	±0.04mm	<200	3	Ø3
2321-55	35-55mm	0.01mm	±0.04mm	<80	6	Ø3
2321-AL55	35-55mm	0.01mm	±0.04mm	<250	8	Ø3
2321-75	55-75mm	0.01mm	±0.04mm	<90	8	Ø3
2321-AL75	55-75mm	0.01mm	±0.04mm	<250	8	Ø3
2321-95	75-95mm	0.01mm	±0.04mm	<100	8	Ø3
2321-115	95-115mm	0.01mm	±0.04mm	<120	10	Ø3.2
2321-135	115-135mm	0.01mm	±0.04mm	<120	10	Ø3.2

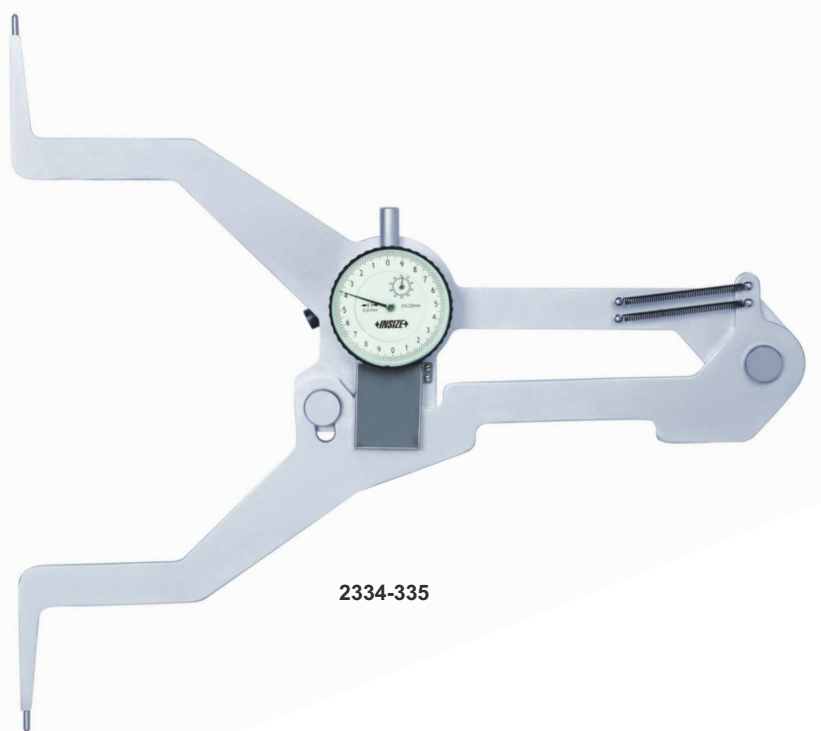
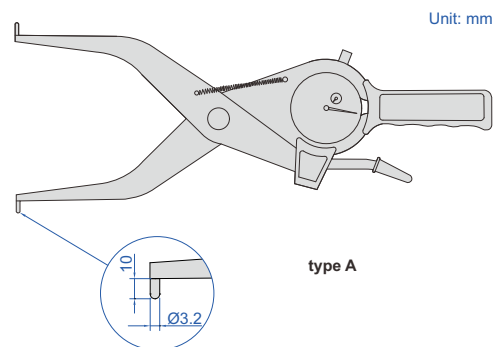
(mm)



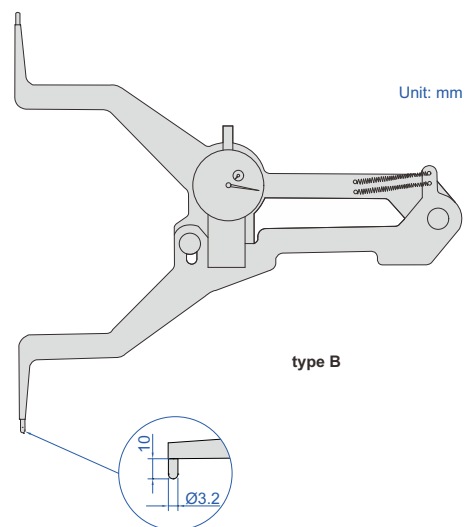
LARGE RANGE INTERNAL DIAL CALIPER GAGES



2334-155

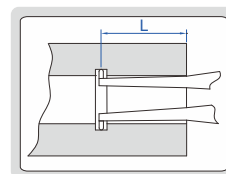


2334-335



■ Carbide measuring tips

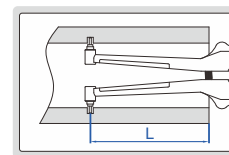
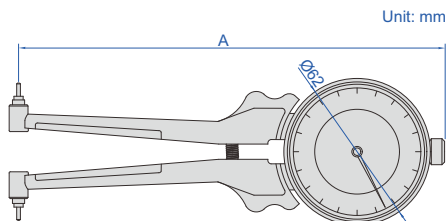
Code	Range	Graduation	Accuracy	Type	(mm)
					L
2334-155	135-155mm	0.01mm	±0.04mm	A	<200
2334-175	155-175mm	0.01mm	±0.04mm	A	<200
2334-195	175-195mm	0.01mm	±0.04mm	A	<200
2334-215	195-215mm	0.01mm	±0.04mm	A	<200
2334-235	215-235mm	0.01mm	±0.04mm	A	<200
2334-255	235-255mm	0.01mm	±0.04mm	A	<200
2334-275	255-275mm	0.01mm	±0.04mm	A	<200
2334-295	275-295mm	0.01mm	±0.04mm	A	<200
2334-315	295-315mm	0.01mm	±0.04mm	A	<200
2334-335	315-335mm	0.01mm	±0.04mm	B	<200
2334-355	335-355mm	0.01mm	±0.04mm	B	<200
2334-375	355-375mm	0.01mm	±0.04mm	B	<200



INTERNAL DIAL CALIPER GAGES WITH INTERCHANGEABLE POINTS

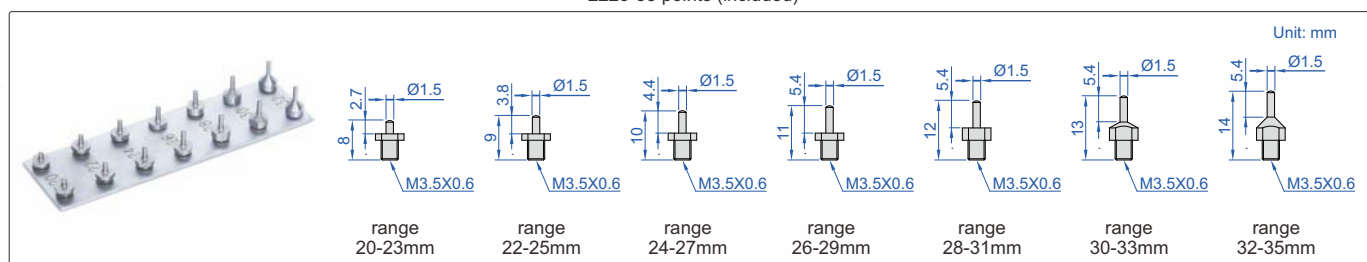


2223-153

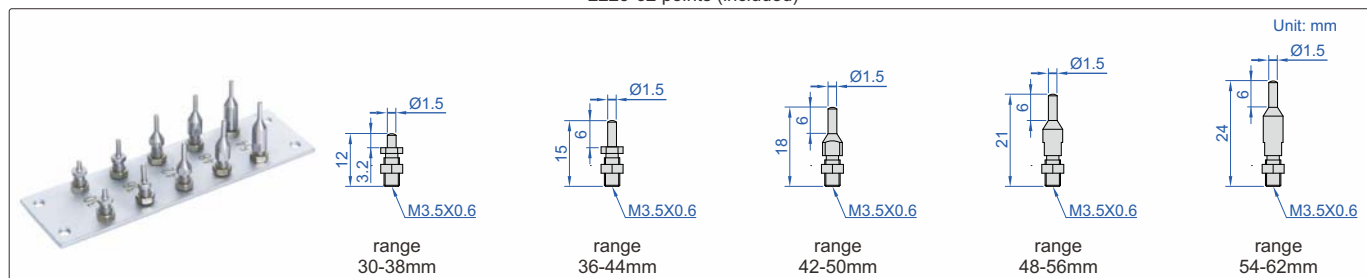


Code	Range	Dial indicator range	Graduation	Accuracy	A	L	Remark
2223-35	20-35mm	2mm	0.01mm	±0.02mm	164mm	<70mm	supplied with 7 pairs of points
2223-62	30-62mm	2mm	0.01mm	±0.02mm	170mm	<75mm	supplied with 5 pairs of points
2223-153	55-153mm	2mm	0.01mm	±0.02mm	179mm	<90mm	supplied with 6 pairs of points

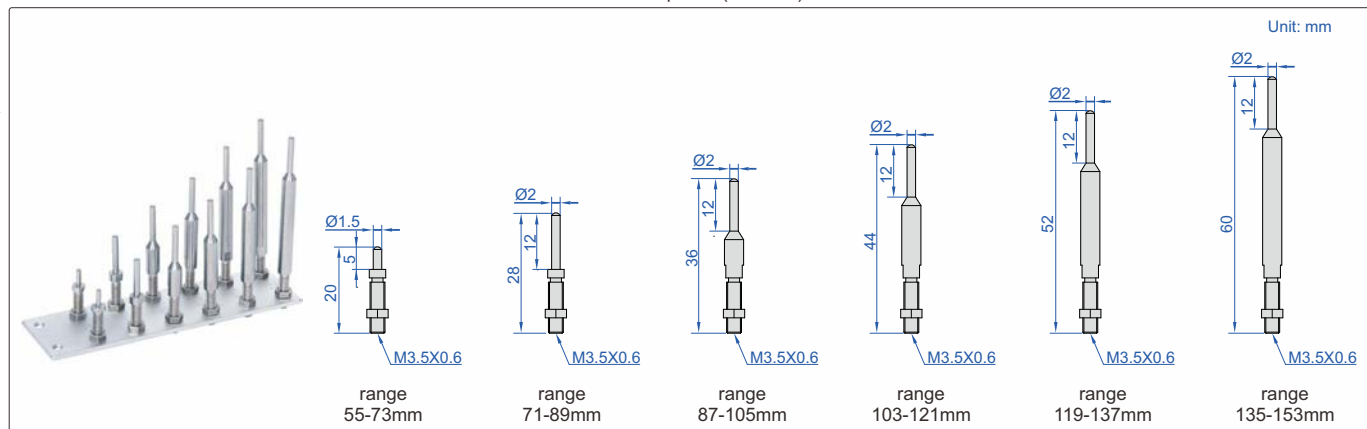
2223-35 points (included)



2223-62 points (included)



2223-153 points (included)

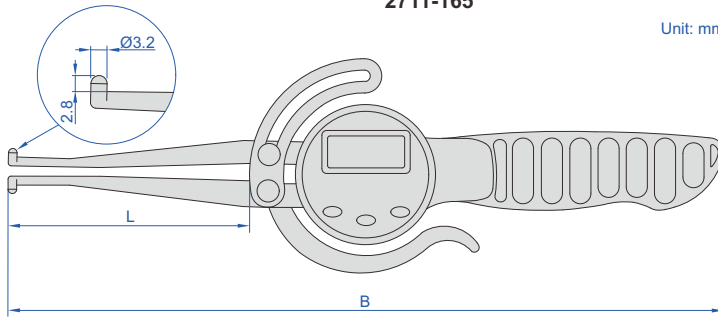


DIGITAL INTERNAL CALIPER GAGES (ECONOMIC TYPE)

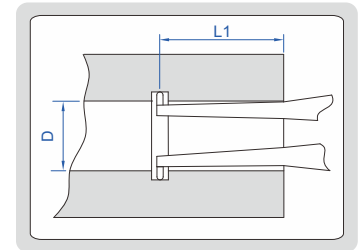


2711-165

Unit: mm



sizes to be measured



- Button function: on/off, zero, mm/inch, data hold
- Battery CR2032, automatic power off

Code	Range	Resolution	Accuracy	Repeatability	L	B
2711-165	12.7-165mm/0.5-6.5"	0.1mm/0.01"	±0.3mm	0.2mm	85	252
2711-216	12.7-216mm/0.5-8.5"	0.1mm/0.01"	±0.3mm	0.2mm	160	327

(mm)		(mm)	
Code 2711-165	Code 2711-216	D	L1
Ø13	<42	Ø13	<50
Ø15	<45	Ø15	<55
Ø17	<50	Ø17	<60
Ø20	<60	Ø20	<65
Ø25	<75	Ø25	<75
Ø27	<80	Ø30	<95
Ø29~165	<85	Ø35~216	<160

DIGITAL EXTERNAL CALIPER GAGES

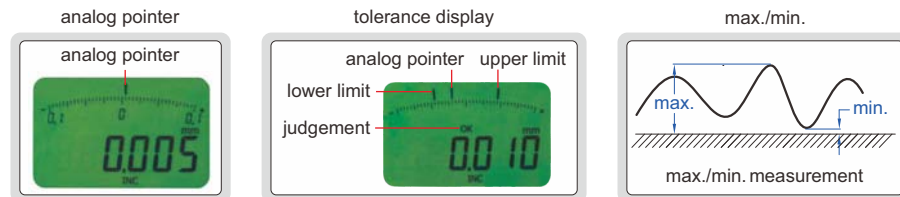
DATA
OUTPUT

- Resolution: 0.005mm/0.0002"
- Reading in digit and analog
- Display can be rotated by 170°
- Button function: tolerance Go and No-Go display, data preset, max./min. measurement, data holding, inch/metric conversion, absolute/incremental measurement
- CR2032 battery, automatic power off
- Data output
- Optional accessory: data output cable (code 7315-30 need receiver page 4, 7302-30 page 12)

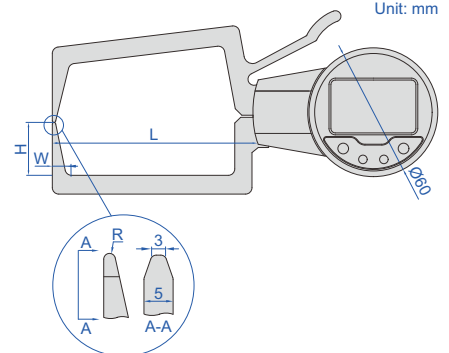


2131-21

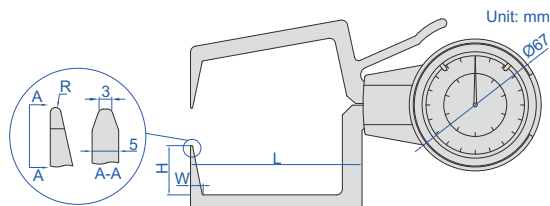
Unit: mm



Code	Range	Accuracy	Repeatability	L	H	W	R
2131-21	0-20mm/0-0.8"	±0.03mm	0.01mm	80mm	25mm	6.5mm	R0.5mm
2131-31	10-30mm/0.4-1.2"	±0.03mm	0.01mm	80mm	25mm	6.5mm	R0.5mm
2131-41	20-40mm/0.8-1.6"	±0.03mm	0.01mm	80mm	25mm	6.5mm	R0.5mm
2131-51	30-50mm/1.2-2.0"	±0.03mm	0.01mm	80mm	25mm	6.5mm	R0.5mm
2131-61	40-60mm/1.6-2.4"	±0.03mm	0.01mm	80mm	25mm	6.5mm	R0.5mm



EXTERNAL DIAL CALIPER GAGES



Code	Range	Graduation	Accuracy	L	H	W	R
2333-201	0-20mm	0.01mm	±0.03mm	80	25	6.5	R0.5
2333-301	10-30mm	0.01mm	±0.03mm	80	25	6.5	R0.5
2333-401	20-40mm	0.01mm	±0.03mm	80	25	6.5	R0.5
2333-501	30-50mm	0.01mm	±0.03mm	80	25	6.5	R0.5
2333-601	40-60mm	0.01mm	±0.03mm	80	25	6.5	R0.5

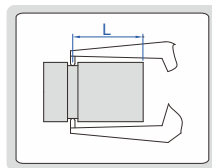


2333-201

DIGITAL EXTERNAL CALIPER GAGES

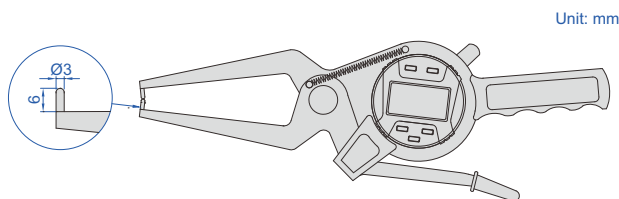
DATA
OUTPUT

- Carbide measuring tips
- Reading in digit and analog
- With transmission button and signal light
- 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
- CR2032 battery
- Automatic power off (time is adjustable)
- Data output
- Optional accessory: data output cable (code 7315-50M need receiver page 5, 7302-50M page 13)

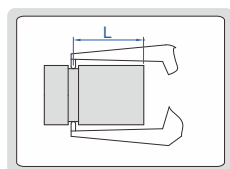


2132-20

Code	Range	Resolution	Accuracy	L
2132-20	0-20mm/0-0.8"	0.01mm/0.0005"	±0.04mm	<60mm
2132-40	20-40mm/0.8-1.6"	0.01mm/0.0005"	±0.04mm	<60mm
2132-60	40-60mm/1.6-2.4"	0.01mm/0.0005"	±0.04mm	<55mm
2132-80	60-80mm/2.4-3.2"	0.01mm/0.0005"	±0.04mm	<55mm
2132-100	80-100mm/3.2-4"	0.01mm/0.0005"	±0.04mm	<55mm



EXTERNAL DIAL CALIPER GAGES

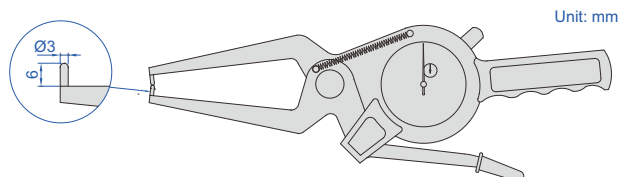


- Carbide measuring tips

Code	Range	Graduation	Accuracy	L
2332-20	0-20mm	0.01mm	±0.04mm	<60
2332-40	20-40mm	0.01mm	±0.04mm	<60
2332-60	40-60mm	0.01mm	±0.04mm	<55
2332-80	60-80mm	0.01mm	±0.04mm	<55
2332-100	80-100mm	0.01mm	±0.04mm	<55



2332-20



Unit: mm

DIGITAL THICKNESS GAGES

- Ceramic spindle tip and anvil
- Button function: on/off, inch/mm, zero, data preset, change measuring direction, absolute/incremental measurement
- Keep preset data in memory after restart
- CR2032 battery, automatic power off (time is adjustable)
- Data output
- Optional accessory: data output cable (code **7315-50M** need receiver page 5, **7302-50M** page 13)

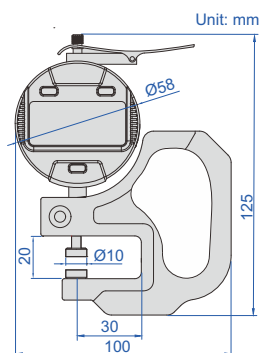
Code	Range	Resolution	Accuracy
2871-10	0-10mm/0-0.4"	0.01mm/0.0005"	±0.02mm
2871-101	0-10mm/0-0.4"	0.001mm/0.00005"	±0.005mm



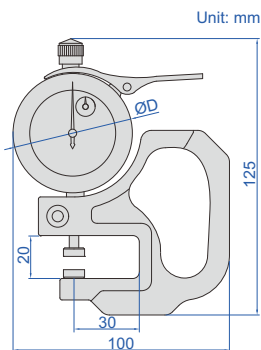
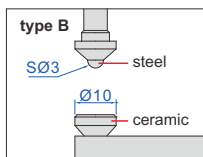
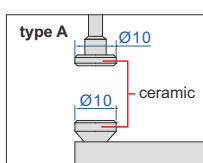
2871-101

POPULAR
MODEL

DATA
OUTPUT



THICKNESS GAGES



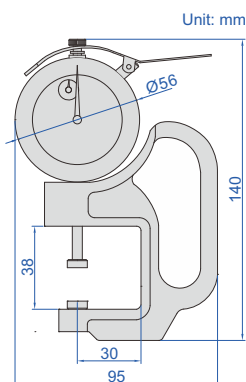
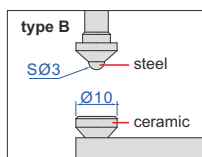
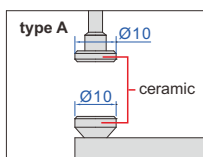
2364-10



2364-1

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

THICKNESS GAGES

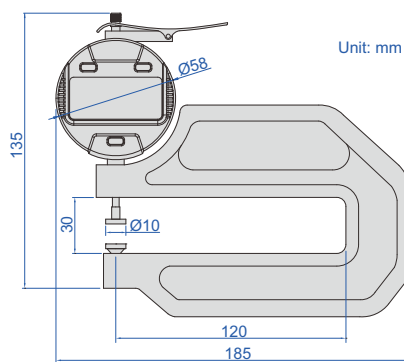


2366-30

Code	Range	Graduation	Accuracy	Type
2366-30	0-30mm	0.01mm	±0.035mm	A
2366-30B	0-30mm	0.01mm	±0.035mm	B

DATA OUTPUT

measuring tips and anvils can be custom-made



- Ceramic spindle tip and anvil
- Buttons: on/off, inch/mm, zero, data preset, change measuring direction, absolute/incremental measurement
- Keep preset data in memory after restart
- Battery CR2032, automatic power off (time is adjustable)
- Data output
- Optional accessory: data output cable (code **7315-50M** need receiver page 5, **7302-50M** page 13)

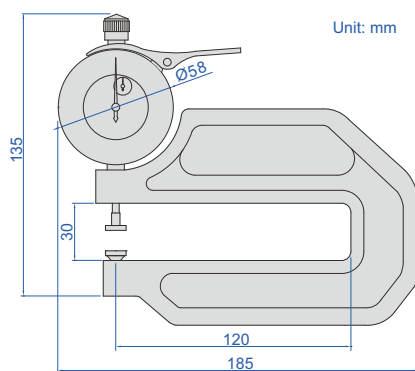
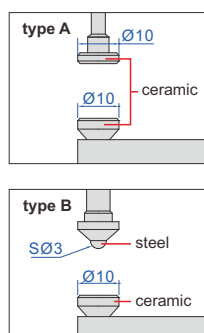
DIGITAL THICKNESS GAGES



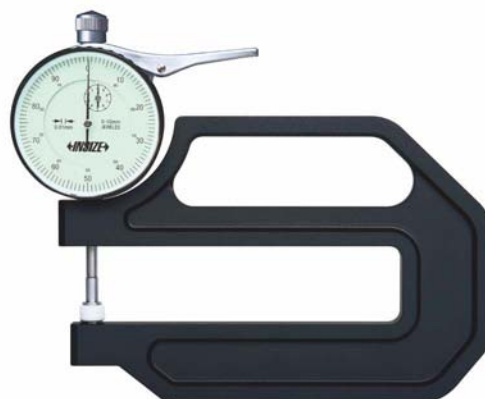
2872-10

Code	Range	Resolution	Accuracy
2872-10	0-10mm/0-0.4"	0.01mm/0.0005"	±0.02mm
2872-101	0-10mm/0-0.4"	0.001mm/0.00005"	±0.01mm

THICKNESS GAGES



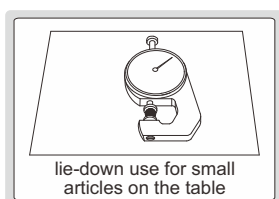
measuring tips and anvils can be custom-made



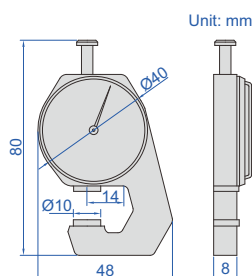
2365-10

Code	Range	Graduation	Accuracy	Type
2365-10	0-10mm	0.01mm	±0.02mm	A
2365-20	0-20mm	0.01mm	±0.03mm	A
2365-10B	0-10mm	0.01mm	±0.02mm	B
2365-20B	0-20mm	0.01mm	±0.03mm	B

SUITABLE FOR JEWELLERY

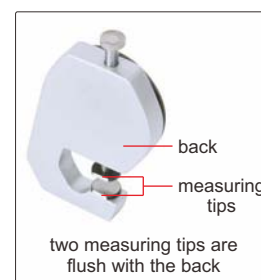


lie-down use for small articles on the table



2361-10

THICKNESS GAGE



two measuring tips are flush with the back

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

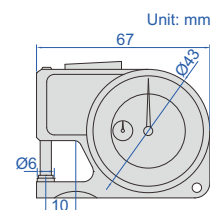
THICKNESS GAGE

- Stainless steel spindle tip and anvil

Code	Range	Graduation	Accuracy
2363-10	0-10mm	0.01mm	±0.03mm



2363-10



DIGITAL ROLLER THICKNESS GAGES

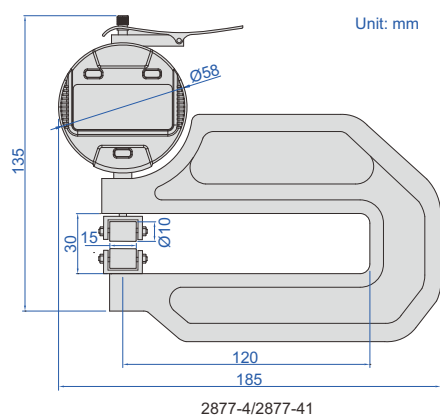
DATA
OUTPUT



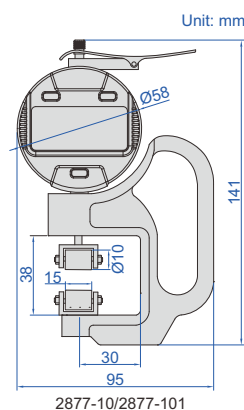
2877-4



2877-10



2877-4/2877-41



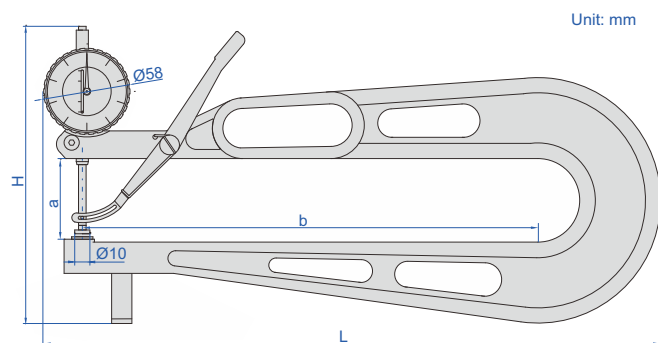
2877-10/2877-101

- Buttons: on/off, inch/mm, zero, data preset, change measuring direction, absolute/incremental measurement
- Keep preset data in memory after restart
- Battery CR2032, automatic power off (time is adjustable)
- Data output
- Optional accessory: data output cable (code 7315-50M need receiver page 5, 7302-50M page 13)

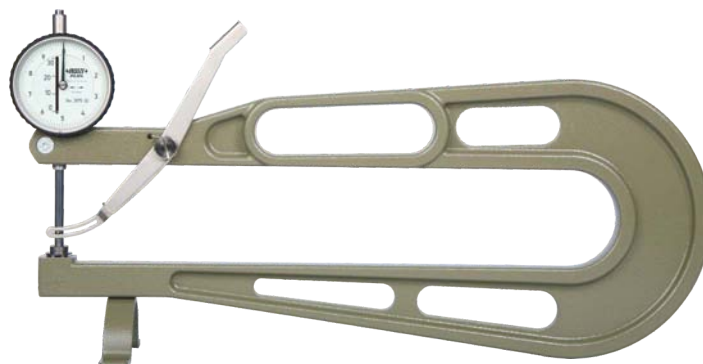
Code	Range	Resolution	Accuracy
2877-4	0-4.5mm/0-0.18"	0.01mm/0.0005"	±0.02mm
2877-41	0-4.5mm/0-0.18"	0.001mm/0.00005"	±0.01mm
2877-10	0-10mm/0-0.4"	0.01mm/0.0005"	±0.02mm
2877-101	0-10mm/0-0.4"	0.001mm/0.00005"	±0.01mm

THICKNESS GAGES

INSIZE PLUS
MADE IN EUROPE



Unit: mm



2875-30

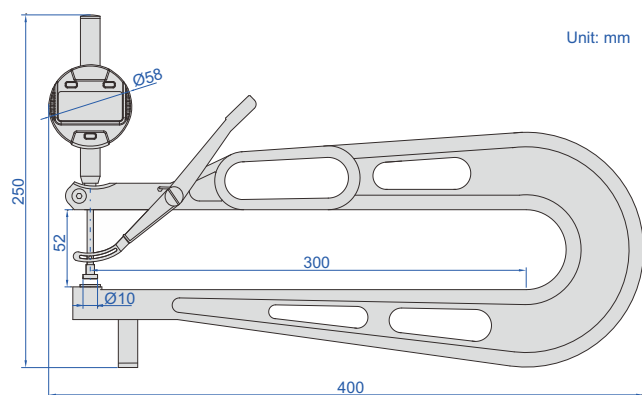
Code	Range	Graduation	Accuracy	L	H	a	b
2875-30	0-30mm	0.1mm	±0.05mm	400mm	195mm	55mm	300mm
2875-50	0-50mm	0.1mm	±0.05mm	700mm	295mm	75mm	600mm

INSPECTION
CERTIFICATE

DATA
OUTPUT

DIGITAL THICKNESS GAGE

INSIZE PLUS
MADE IN EUROPE



Unit: mm



2860-25

- Buttons: on/off, inch/mm, zero, data preset, change measuring direction, absolute/incremental measurement
- Keep preset data in memory after restart
- Battery CR2032, automatic power off (time is adjustable)
- Data output
- Optional accessory: data output cable (code 7315-50M need receiver page 5, 7302-40M page 13)

Code	Range	Resolution	Accuracy
2860-25*	0-25.4mm/0-1"	0.01mm/0.0005"	±0.05mm

* Supplied with manufacturer inspection certificate

HIGH PRECISION DIGITAL THICKNESS GAGES

ATTENTION: RECHARGEABLE BATTERY,
FOR 12 HOURS CONTINUOUS WORKING

DATA
OUTPUT

MEASURING TIPS AND ANVILS
CAN BE CUSTOM-MADE

ABSOLUTE ENCODER, THE ORIGINAL
DATA REMAINS AFTER POWER OFF



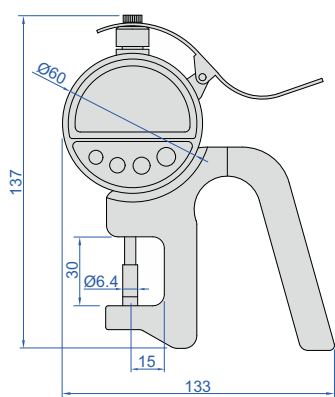
2879-10



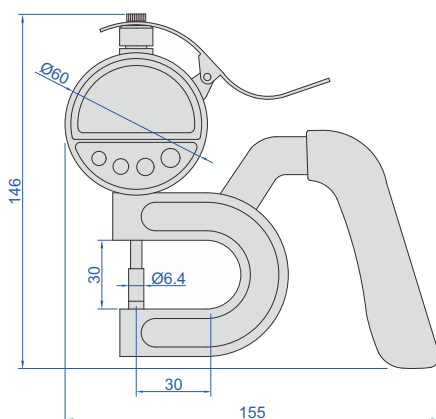
2879-30



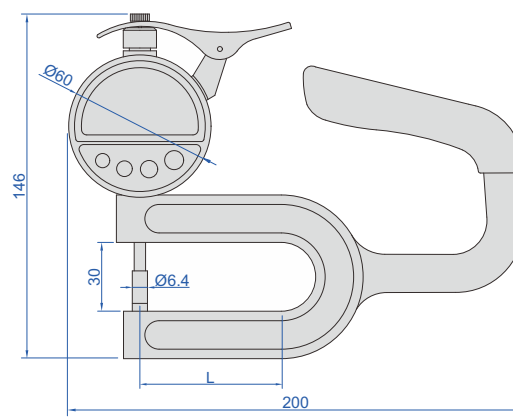
2879-60



2879-10
2879-101



2879-30



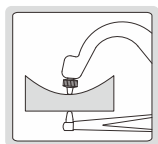
2879-60
2879-100

Unit: mm

- Absolute encoder, the original data remains after power off
- Button function: on/off, zero, tolerance, absolute/incremental measurement, max./min./TIR, data preset, mm/inch, data output, data hold
- Reading in digital and analog
- Power: rechargeable battery, for 12 hours continuous working
- Data output
- Supplied with data output cable (keyboard format)

Code	Range	Resolution	Accuracy	Repeatability	Measuring force	L
2879-10	0-10mm/0-0.4"	0.001mm/0.00005"	±0.002mm	0.001mm	0.5-1N	—
2879-101	0-10mm/0-0.4"	0.0005mm/0.00002"	±0.0015mm	0.0005mm	0.5-1N	—
2879-30	0-10mm/0-0.4"	0.001mm/0.00005"	±0.002mm	0.001mm	0.5-1N	—
2879-60	0-10mm/0-0.4"	0.001mm/0.00005"	±0.003mm	0.001mm	0.5-1N	60mm
2879-100	0-10mm/0-0.4"	0.001mm/0.00005"	±0.004mm	0.001mm	0.5-1N	100mm

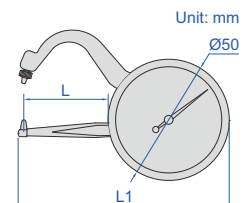
THICKNESS GAGES



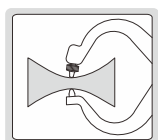
Code	Range	Graduation	Accuracy	L	L1
2862-101	0-10mm	0.05mm	±0.1mm	35mm	85mm
2862-102	0-10mm	0.05mm	±0.1mm	60mm	110mm



2862-101



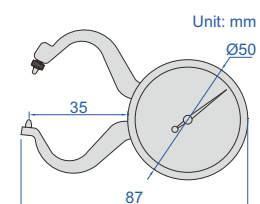
THICKNESS GAGE



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

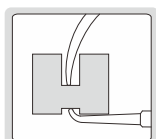


2863-10



THICKNESS GAGE WITH POINTED TIPS

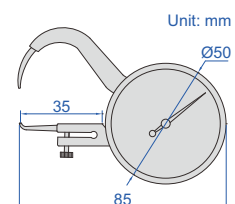
- Pointed tips fit into small grooves and recesses



Code	Range	Graduation	Accuracy
2866-10	0-10mm	0.05mm	±0.1mm



2866-10



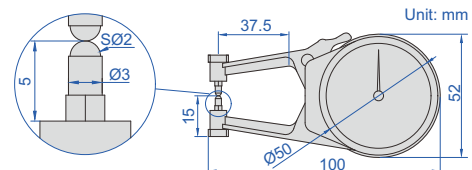
THICKNESS GAGE

- Main body is made of hard plastic



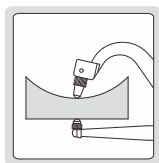
2870-10

Code	Range	Graduation	Accuracy
2870-10	0-10mm	0.1mm	±0.1mm

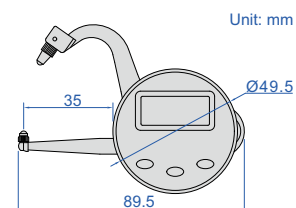


DIGITAL THICKNESS GAGE

- Resolution: 0.01mm, 0.001", 1/64"
- Buttons: on/off, zero, unit (mm/in/fraction), data hold
- Battery CR2032, automatic power off



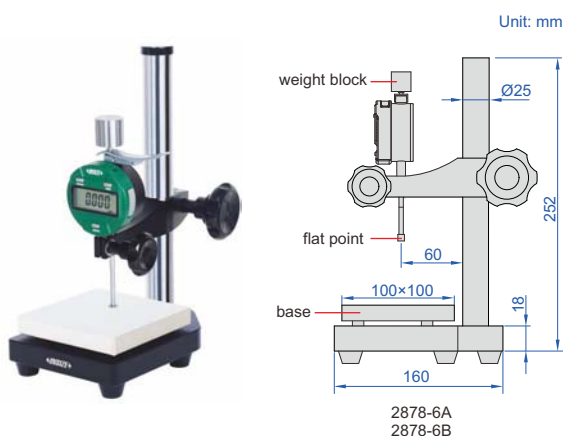
2710-25



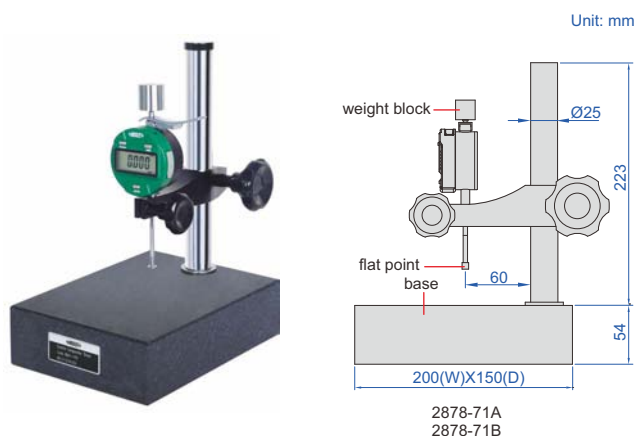
Code	Range	Accuracy	Repeatability
2710-25	0-25.4mm/0-1"	0.05mm	0.02mm

DIGITAL RUBBER THICKNESS GAGES

DATA
OUTPUT



2878-6B



2878-71B

- Measure thickness of vulcanized rubber and plastic products
- Button function: on/off, inch/mm, zero, data preset, change measuring direction, absolute/incremental measurement
- CR2032 battery, automatic power off (time is adjustable)
- Supplied with dust cover
- Optional accessory: data output cable (code 7315-50M need receiver page 5, 7302-50M page 13), flat points, weight blocks

Code	Range	Resolution	Accuracy	Flat point diameter	Pressure	Base
2878-6A	12.7mm/0.5"	0.01mm/0.0005"	20µm	6mm	22kPa±5kPa	ceramic, plain, flatness 1.5µm
2878-6B	12.7mm/0.5"	0.001mm/0.00005"	5µm	6mm	22kPa±5kPa	ceramic, plain, flatness 1.5µm
2878-71A	12.7mm/0.5"	0.01mm/0.0005"	20µm	6mm	22kPa±5kPa	granite, plain, flatness 2.5µm
2878-71B	12.7mm/0.5"	0.001mm/0.00005"	5µm	6mm	22kPa±5kPa	granite, plain, flatness 2.5µm

Flat points and weight blocks (optional)

Flat point	Flat point code	Pressure				
		10kPa±2kPa weight block code	22kPa±5kPa weight block code	20kPa±3kPa weight block code	70kPa±5kPa weight block code	1.6kPa±0.1kPa weight block code
Ø4mm	2878-P4	—	2878-W4B	—	—	—
Ø5mm	2878-P5	2878-W5A	2878-W5B	2878-W5C	2878-W5D	—
Ø6mm	2878-P6	2878-W6A	2878-W6B	—	—	—
Ø8mm	2878-P8	2878-W8A	2878-W8B	—	—	—
Ø10mm	2878-P10	2878-W10A	2878-W10B	2878-W10C	—	—
Ø25mm	2878-P25	—	—	—	—	2878-W25E
1x4mm (rectangle)	2878-P14	—	—	—	2878-W14D	—