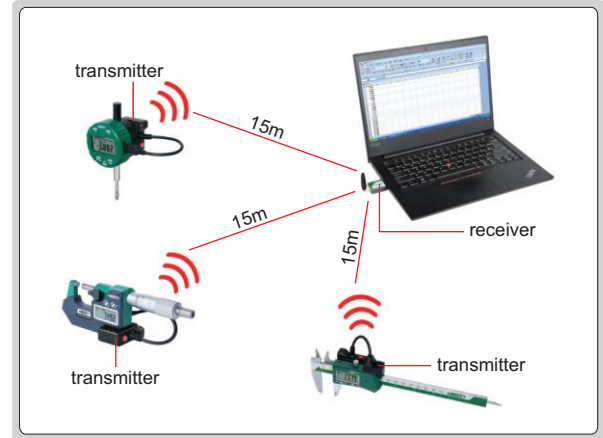


## WIRELESS DATA TRANSMISSION SYSTEM (ZIGBEE)



- Through wireless transmission, the readings of measuring tools can be transmitted to computers or mobile phone
- 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
7315-25	transmitter for digital calipers			<ul style="list-style-type: none"> <li>Press the button of the transmitter</li> <li>Data is transmitted once, the signal light of the transmitter flashes once</li> </ul>
7315-22	transmitter for large digital calipers			<ul style="list-style-type: none"> <li>Press the button of the transmitter</li> <li>Data is transmitted once, the signal light of the transmitter flashes once</li> </ul>
7315-30	transmitter for digital micrometers		 for 3102, 3128, 3565 series digital micrometers	<ul style="list-style-type: none"> <li>Press the "data" button of digital micrometer, can also press the button of the transmitter</li> <li>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</li> </ul>

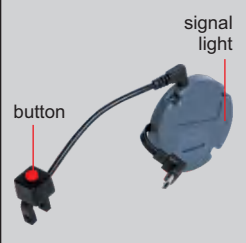
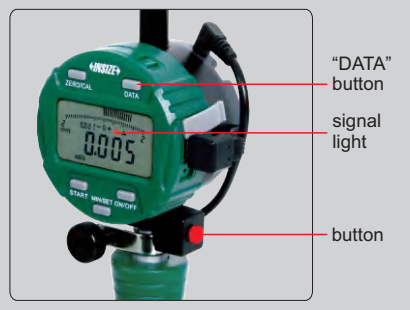
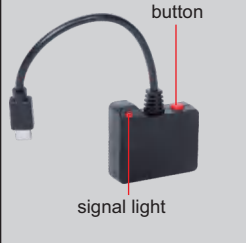

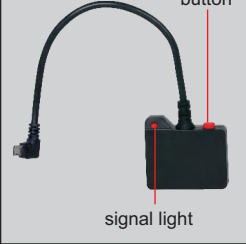

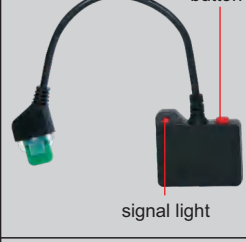



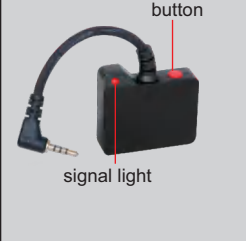

To be continued

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Code	Description	Transmitter	Connecting with measuring tool	Transmit data
7315-31	transmitter for digital micrometers		<p>“data” button signal light back</p>	<ul style="list-style-type: none"> <li>Press the “data” button of digital micrometer</li> <li>Data is transmitted once, the signal light on the digital micrometer flashes once</li> </ul>
7315-50M	transmitter for digital indicators		<p>signal light button</p>	<ul style="list-style-type: none"> <li>Press the button of the transmitter</li> <li>Data is transmitted once, the signal light of the transmitter flashes once</li> </ul>
7315-51	transmitter for digital indicators		<p>“DATA” button signal light button</p> <p>for 2108, 2138, 2139 series digital indicators</p> <p>signal light foot switch (code 7304-7, optional) back</p>	<ul style="list-style-type: none"> <li>Press the “DATA” button of digital indicator, can also press the button of the transmitter</li> <li>Transmitter button can be fixed on request</li> <li>Data is transmitted once, the signal light on digital indicator flashes once</li> </ul>
			<p>button</p> <p>for other digital indicators</p> <p>signal light foot switch (code 7304-7, optional) back</p>	<ul style="list-style-type: none"> <li>Press the button of the transmitter</li> <li>Transmitter button can be fixed on request</li> <li>Data is transmitted once, the signal light on digital indicator flashes once</li> </ul>

To be continued

Continued from previous page

Code	Description	Transmitter	Connecting with measuring tool	Transmit data
7315-51B	transmitter for bore gauges			<ul style="list-style-type: none"> <li>Press the "DATA" button of digital indicator, can also press the button of the transmitter</li> <li>Data is transmitted once, the signal light on digital indicator flashes once</li> </ul>
7315-2183	transmitter for digital indicators			<ul style="list-style-type: none"> <li>Press the button of the transmitter</li> <li>Data is transmitted once, the signal light of the transmitter flashes once</li> </ul>
7315-60	transmitter for high precision digital indicators			<ul style="list-style-type: none"> <li>Press the button of the transmitter</li> <li>Data is transmitted once, the signal light of the transmitter flashes once</li> </ul>
7315-80	transmitter for digital calipers/micrometers			<ul style="list-style-type: none"> <li>Press the "SET" button of the calipers/micrometers, can also press the button of the transmitter</li> <li>Data is transmitted once, the signal light of the transmitter flashes once</li> </ul>
7315-3350	transmitter for digital micrometers			<ul style="list-style-type: none"> <li>Press the button of the transmitter</li> <li>Data is transmitted once, the signal light of the transmitter flashes once</li> </ul>
7315-1150	transmitter for digital height gauges			<ul style="list-style-type: none"> <li>Press the button of the transmitter</li> <li>Data is transmitted once, the signal light of the transmitter flashes once</li> </ul>

To be continued

Continued from previous page






Code	Description	Transmitter	Connecting with measuring tool	Transmit data
7315-1151	transmitter for digital height gauges			<ul style="list-style-type: none"> <li>Press the button of the transmitter</li> <li>Data is transmitted once, the signal light of the transmitter flashes once</li> </ul>
7315-2172	transmitter for digital protractors			<ul style="list-style-type: none"> <li>Press the button of the transmitter</li> <li>Data is transmitted once, the signal light of the transmitter flashes once</li> </ul>
7315-2771	transmitter for digital protractors			<ul style="list-style-type: none"> <li>Press the button of the transmitter</li> <li>Data is transmitted once, the signal light of the transmitter flashes once</li> </ul>
7315-8001	transmitter for electronic balances		 <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"> <li>Press the button of the transmitter</li> <li>Data is transmitted once, the signal light of the transmitter flashes once</li> </ul>
7315-8301	transmitter for electronic balances		 <p>back</p>	<ul style="list-style-type: none"> <li>Press the "t" button of the electronic balances, can also press the button of the transmitter</li> <li>Data is transmitted once, the signal light of the transmitter flashes once</li> </ul>

To be continued

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### 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 key, 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
7315-6	 USB port	multichannel receiver	connected with 6 transmitters, each channel has status indicator
7315-7	 type-C port		
7315-8	 micro USB port		
7315-9	 lightning port		

### 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	 USB port antenna	multichannel receiver	connected with maximum 16 transmitters, each of them has unique identification code


To be continued



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### Receiver (485 communication)

- Modbus-RTU protocols , baud rate 9600
- Can be connected to a PC or PLC
- The communication address is configurable

Code	Product	Description	Remark
7315-485		multichannel receiver	connected with 6 transmitters, each channel has status indicator

### Excel directional input software

- Supplied with 7315-2 receiver
- The readings of 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 gauge at D4-D9, the readings of height gauge 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 gauge at E4-E9, the readings of depth gauge 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

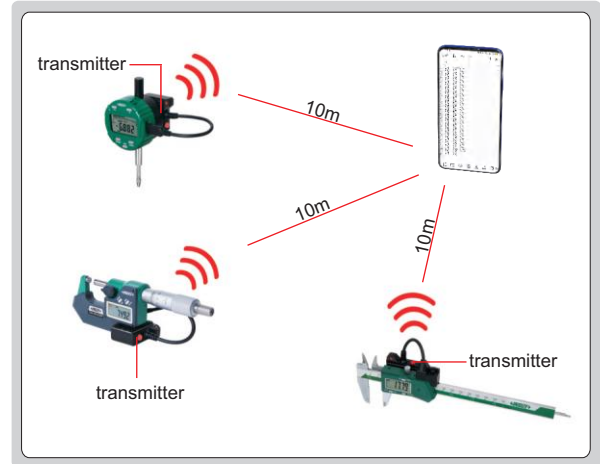
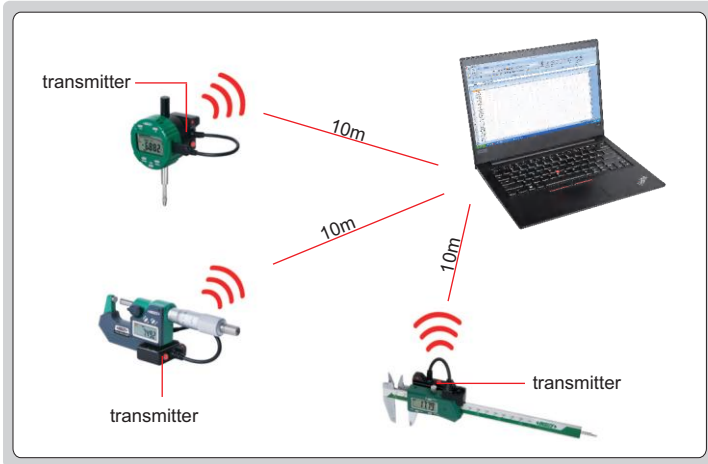
## BLUETOOTH TRANSMITTERS



- Through bluetooth transmission, the readings of measuring tools can be transmitted to computers or mobile phones
- 2.4GHz band
- Recognized as HID keyboard device, the transmitted data is recognized by computers or mobile phones as keyboard input data and press enter key, 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
- Transmission distance is 10 meter (under the condition of no obstruction and no electromagnetic interference)
- Connecting to digital measuring tools such as calipers, micrometers and indicators
- CR2032 battery

connecting with computer

connecting with mobile phone



Code	Description	Transmitter	Connecting with measuring tool	Transmit data
7214-25	transmitter for digital calipers			<ul style="list-style-type: none"> <li>■ Press the button of the transmitter</li> <li>■ Data is transmitted once, the signal light of the transmitter flashes once</li> </ul>
7214-22	transmitter for large digital calipers			<ul style="list-style-type: none"> <li>■ Press the button of the transmitter</li> <li>■ Data is transmitted once, the signal light of the transmitter flashes once</li> </ul>
7214-30	transmitter for digital micrometers		 for 3102, 3128, 3565 series digital micrometers	<ul style="list-style-type: none"> <li>■ Press the "data" button of the digital micrometer, can also press the button of the transmitter</li> <li>■ Data is transmitted once, the signal light of the transmitted flashes once, at the same time, the signal light on the digital micrometer flashes once</li> </ul>

To be continued

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Code	Description	Transmitter	Connecting with measuring tool	Transmit data
7214-31	transmitter for digital micrometers		<p>“data” button signal light back</p>	<ul style="list-style-type: none"> <li>Press the “data” button of digital micrometer</li> <li>Data is transmitted once, the signal light on the digital micrometer flashes once</li> </ul>
7214-50M	transmitter for digital indicators		<p>signal light button</p> <p>for digital indicators without data button</p>	<ul style="list-style-type: none"> <li>Press the button of the transmitter</li> <li>Data is transmitted once, the signal light of the transmitter flashes once</li> </ul>
7214-51	transmitter for digital indicators		<p>“DATA” button signal light button</p> <p>for digital indicators with data button</p> <p>signal light foot switch (code 7304-7, optional) back</p>	<ul style="list-style-type: none"> <li>Press the “DATA” button of digital indicator, can also press the button of the transmitter</li> <li>Transmitter button can be fixed on request</li> <li>Data is transmitted once, the signal light on digital indicator flashes once</li> </ul>
7214-51B	transmitter for bore gauges		<p>“DATA” button signal light button</p> <p>for bore gauges with data button</p>	<ul style="list-style-type: none"> <li>Press the “DATA” button of digital indicator, can also press the button of the transmitter</li> <li>Data is transmitted once, the signal light on digital indicator flashes once</li> </ul>



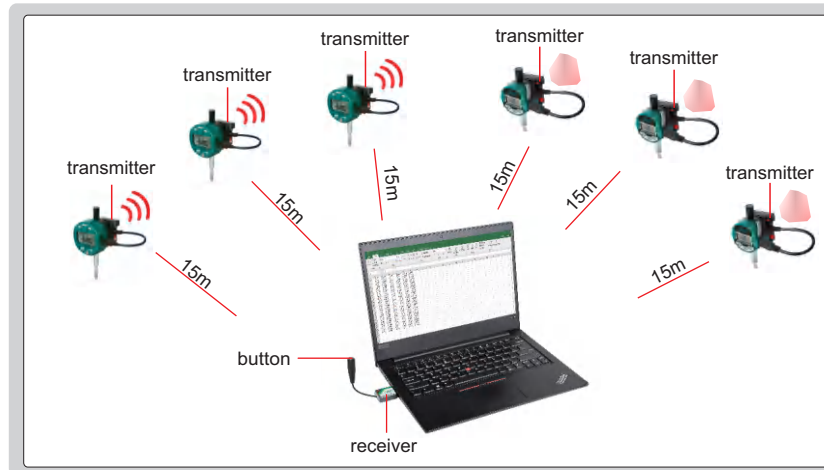
# WIRELESS DATA TRANSMISSION SYSTEM OF DIGITAL INDICATORS (REMOTE CONTROL)



- The readings of digital indicators can be transmitted to computers or mobile phones
- Data acquisition can be remotely controlled through the receiver
- Wireless zigbee protocol, conforming to IEEE802, 2.4GHz band
- Transmission distance is 15 meter (under the condition of no obstruction and no electromagnetic interference)

transmission method: the button on receiver is pressed once, the readings of all digital indicators are transmitted

	channel 1	channel 2	channel 3	channel 4	channel 5	channel 6
	A	B	C	D	E	F
1	24.35	0.4045	57.72	1.949	0.4075	0.03568
2	24.45	0.5045	57.82	2.049	0.5075	0.13568
3	26.35	0.4045	57.72	1.949	0.4075	0.00078
4	27.35	0.4045	57.72	1.7575	0.4075	0.0762
5	28.35	0.4045	57.72	1.7575	0.4075	0.0762
6	29.35	0.4045	57.72	1.7575	0.4075	0.07618
7	30.35	0.4045	57.72	1.7575	0.4075	0.55334
8	31.35	0.4045	57.72	1.7575	0.4075	0.61198
9	24.35	0.4045	57.72	1.7575	0.4075	0.6172



## Transmitter

- Suitable for digital indicators
- CR2032 battery
- 80 hours of operation on a single battery in measurement mode





Code	Transmitter	Connecting with digital indicators	Transmit data
7213-56			<ul style="list-style-type: none"> <li>▪ Press and hold the button to enter the measurement mode</li> <li>▪ Press the receiver button in measurement mode to acquire data</li> </ul>

To be continued

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### 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 key, such as 12.34€.
- No need to install drivers and softwares
- Data can be transmitted to excel, word, txt etc.
- Suitable for any softwares which can receive keyboard signal

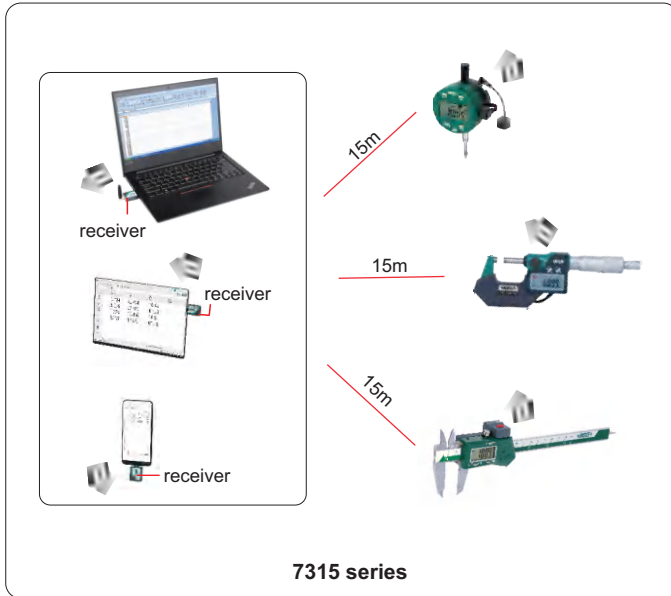
Code	Product	Description	Remark	Transmit data
7213-6M		multichannel receiver	connected with 6 transmitter, each channel has status indicator	<ul style="list-style-type: none"> <li>▪ Press the button of the receiver</li> <li>▪ Data is transmitted once, the signal light of the receiver flashes once</li> </ul>
7213-7M				
7213-8M				
7213-9M				

hand switch, code **7213-SW** (included), length 2m

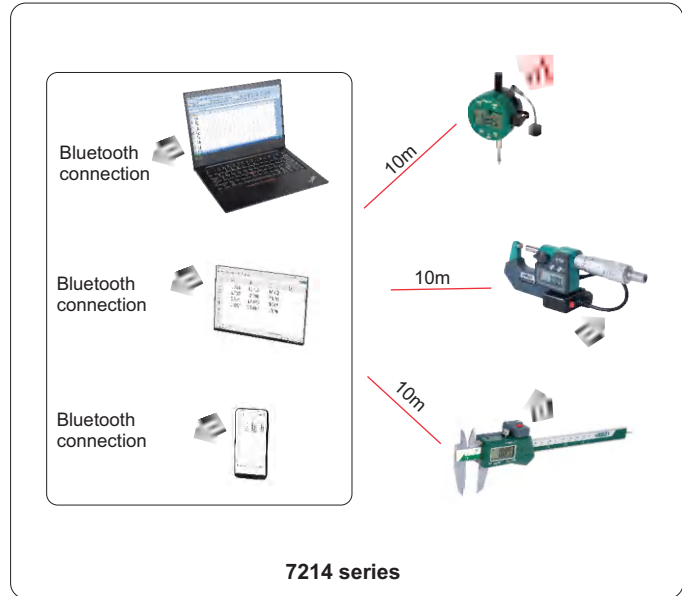


## COMPARISON TABLE

### ZIGBEE Wireless Transmission



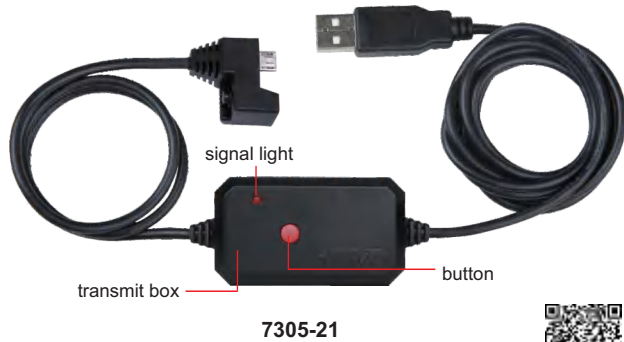
### Bluetooth Wireless Transmission



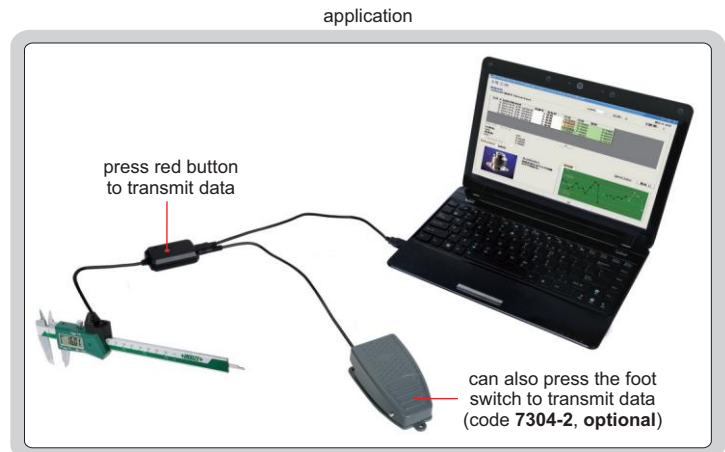
Code	7315 series	7214 series
Function	wireless transmission of measurement data from measuring tools to computers or mobile phones	
Operation system	Windows, Android or iOS	
Wireless module	Zigbee	Bluetooth 5.0
Receiver	need receiver (one receiver can be connected to 16 transmitters)	receiver is not needed, Bluetooth connection (one computer/mobile phone can be connected to 7 transmitters)
Communication type	keyboard format (suitable for any software or APP which can receive keyboard input values)	keyboard format (suitable for any software or APP which can receive keyboard input values)
	text format, virtual com port (a. connect to software which recognizes different channels and IDs according to serial communication protocols and defines data entry area for different measurement tools; b. can also use the software (included in the <b>7315-2</b> receiver) to transmit measurement data from multiple measuring tools to the designated area in Excel for easy data management)	
Acquisition method	press-button single transmission	
Transmission performance	transmission performance with low power consumption, high speed, accurate and stable data, and strong anti-interference performance	transmission performance depends on the Bluetooth performance of computers/mobile phones
Transmission distance	15m	10m
Connection memory	matching operation is not needed after the computer/mobile phone is turned off and on again	need to press the button to match after the computer/mobile phone is turned off and on again

## DATA OUTPUT CABLES (TEXT FORMAT, VIRTUAL COM PORT)

### 1) Data output cables with transmit box



Single transmit (can be switched to continuous transmit)

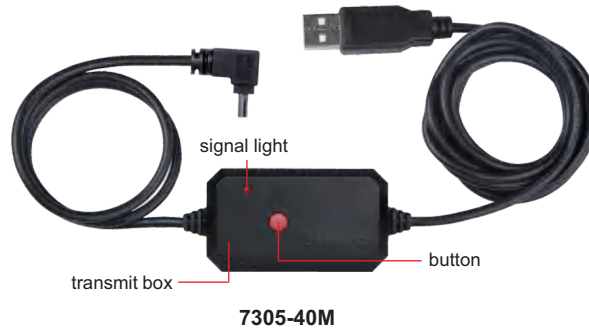


Code	Description	Plug to measuring tool	Plug to computer	Connecting with measuring tool	Transmit data																						
7305-21	cable for digital calipers (length 3m)				<ul style="list-style-type: none"> <li>Press the button on the plug of cable, can also press the button of the transmit box, or press the foot switch</li> <li>Data is transmitted once, the signal light of the transmit box flashes once</li> </ul>																						
7305-R21						7305-22	cable for large digital calipers (length 2.5m)				<ul style="list-style-type: none"> <li>Press the button of the transmit box, or press the foot switch</li> <li>Data is transmitted once, the signal light of the transmit box flashes once</li> </ul>	7305-R22		7305-30	cable for digital micrometers (length 2.5m)			 "data" button	<ul style="list-style-type: none"> <li>Press the "data" button of digital micrometer, can also press the button of the transmit box, or press the foot switch</li> <li>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</li> </ul>	7305-R30		 back for 3102, 3128, 3565 series digital micrometers	7305-31	cable for digital micrometers (length 2.5m)			 "data" button signal light
7305-22	cable for large digital calipers (length 2.5m)				<ul style="list-style-type: none"> <li>Press the button of the transmit box, or press the foot switch</li> <li>Data is transmitted once, the signal light of the transmit box flashes once</li> </ul>																						
7305-R22						7305-30	cable for digital micrometers (length 2.5m)			 "data" button	<ul style="list-style-type: none"> <li>Press the "data" button of digital micrometer, can also press the button of the transmit box, or press the foot switch</li> <li>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</li> </ul>	7305-R30		 back for 3102, 3128, 3565 series digital micrometers	7305-31	cable for digital micrometers (length 2.5m)			 "data" button signal light	<ul style="list-style-type: none"> <li>Press the "data" button of digital micrometer, can also press the button of the transmit box, or press the foot switch</li> <li>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</li> </ul>	7305-R31		 back				
7305-30	cable for digital micrometers (length 2.5m)			 "data" button	<ul style="list-style-type: none"> <li>Press the "data" button of digital micrometer, can also press the button of the transmit box, or press the foot switch</li> <li>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</li> </ul>																						
7305-R30						 back for 3102, 3128, 3565 series digital micrometers																					
7305-31	cable for digital micrometers (length 2.5m)			 "data" button signal light	<ul style="list-style-type: none"> <li>Press the "data" button of digital micrometer, can also press the button of the transmit box, or press the foot switch</li> <li>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</li> </ul>																						
7305-R31						 back																					

To be continued

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Code	Description	Plug to measuring tool	Plug to computer	Connecting with measuring tool	Transmit data
7305-50M	cable for digital gauges (length 2.5m)				<ul style="list-style-type: none"> <li>Press the button of the transmit box, or press the foot switch</li> <li>Data is transmitted once, the signal light of the transmit box flashes once</li> </ul>
7305-R50M					
7305-1150	cable for digital height gauges (length 2.5m)				<ul style="list-style-type: none"> <li>Press the button of the transmit box, or press the foot switch</li> <li>Data is transmitted once, the signal light of the transmit box flashes once</li> </ul>
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"> <li>Press the "DATA" button of digital indicator, can also press the button of the transmit box, or press the foot switch</li> <li>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</li> </ul> <p>Note: long press 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"> <li>Press the button of the transmit box, or press the foot switch</li> <li>Data is transmitted once, the signal light of the transmit box flashes once</li> </ul> <p>Note: long press button to zero the digital indicators; software of data transmit is included</p>

To be continued



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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"> <li>Press the "DATA" button of digital indicator, can also press the button of the transmit box, or press the foot switch</li> <li>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</li> </ul> <p>Note: long press 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"> <li>Press the button of the transmit box, or press the foot switch</li> <li>Data is transmitted once, the signal light of the transmit box flashes once</li> </ul> <p>Note: long press 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

export Excel

real-time display

setting zero of digital indicators

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

measurement results and judgment

setting tolerance and sampling period

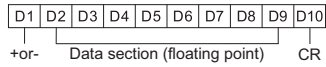
To be continued

Continued from previous page

communication protocol

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

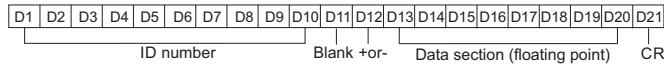
▪ Data output format



Data format example

Display	Output
1.234	➔ +0001.234 ✓
-1.234	➔ -0001.234 ✓

▪ Data 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 can be transmitted by command;  
The digital indicators can be zeroed by command

▪ Pin definition of RS232C 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



7305-G3350

application



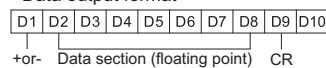
### Single transmit

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"> <li>▪ Press the "DATA" button of high precision digital indicator</li> </ul>
7305-G3350	cable for digital micrometers (length 3m)				<ul style="list-style-type: none"> <li>▪ Press the "DATA" button of digital micrometer</li> </ul>

communication protocol

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

▪ Data output format



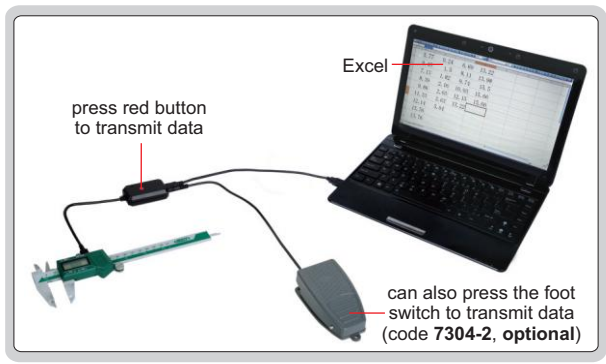
Data format example

Display	Output
1.234	➔ +0001.234 ✓
-1.234	➔ -0001.234 ✓

- Data can be transmitted by command  
The digital indicators or micrometers can be zeroed by command

## DATA OUTPUT CABLES (KEYBOARD FORMAT)

application



7302-21














- 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 key, 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"> <li>▪ Press the button on the plug of cable, can also press the button of the transmit box, or press the foot switch</li> <li>▪ Data is transmitted once, the signal light of the transmit box flashes once</li> </ul>
7302-22	cable for large digital calipers (length 2.5m)			<ul style="list-style-type: none"> <li>▪ Press the button of the transmit box, or press the foot switch</li> <li>▪ Data is transmitted once, the signal light of the transmit box flashes once</li> </ul>
7302-30	cable for digital micrometers (length 2.5m)		 for 3102, 3128, 3565 series digital micrometers	<ul style="list-style-type: none"> <li>▪ Press the "data" button of digital micrometer, can also press the button of the box, or press the foot switch</li> <li>▪ 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</li> </ul>
7302-31	cable for digital micrometers (length 2.5m)		 IP65	<ul style="list-style-type: none"> <li>▪ Press the "data" button of digital micrometer, can also press the button of the transmit box, or press the foot switch</li> <li>▪ 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</li> </ul>

















To be continued

Continued from previous page

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

To be continued

Continued from previous page

Code	Description	Plug	Connecting with measuring tool	Transmit data
7302-SPC7	cable for digital height gauges (length 2.5m)			<ul style="list-style-type: none"> <li>Press the button of the transmit box, or press the foot switch</li> <li>Data is transmitted once, the signal light of the transmit box flashes once</li> </ul>
7302-8001	cable for weighing scales (length 2.5m)		  <p>back</p> <p>“” button</p> <p>for 8301 and 8305 series electronic balances</p>	<ul style="list-style-type: none"> <li>Press the “” button of electronic balance, can also press the button of the transmit box, or press the foot switch</li> <li>Data is transmitted once, the signal light of the transmit box flashes once</li> </ul>
			  <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"> <li>Press the button of the transmit box, or press the foot switch</li> <li>Data is transmitted once, the signal light of the transmit box flashes once</li> </ul>
7302-8304	cable for electronic balances (length 3m)		  <p>back</p> <p>“” button</p>	<ul style="list-style-type: none"> <li>Press the “” button of electronic balance, can also press the button of the transmit box, or press the foot switch</li> <li>Data is transmitted once, the signal light of the transmit box flashes once</li> </ul>
7302-LDM	cable for laser scan micrometers (length 3m)			<ul style="list-style-type: none"> <li>Press the button of the transmit box, or press the foot switch</li> <li>Data is transmitted once, the signal light of the transmit box flashes once</li> </ul>







## 485 DATA OUTPUT CABLES

- Modbus-RTU protocols
- Can be connected to a PC or PLC
- The baud rate is configurable (9600, 19200, 38400)
- The communication address is configurable



7215-50M

Code	Description	Plug	Connecting with measuring tool	Transmit data
7215-21	cable for digital calipers (length 3m)			<ul style="list-style-type: none"> <li>▪ Acquiring data through host computers</li> </ul>
7215-22	cable for digital calipers (length 2.5m)			<ul style="list-style-type: none"> <li>▪ Acquiring data through host computers</li> </ul>
7215-30	cable for digital micrometers (length 2.5m)		 for 3102, 3128, 3565 series digital micrometers  back	<ul style="list-style-type: none"> <li>▪ Acquiring data through host computers</li> </ul>
7215-31	cable for digital micrometers (length 2.5m)		 IP65  back	<ul style="list-style-type: none"> <li>▪ Acquiring data through host computers</li> </ul>
7215-40M	cable for digital indicators (length 2.5m)			<ul style="list-style-type: none"> <li>▪ Acquiring data through host computers</li> </ul>
7215-50M	cable for digital gauges (length 2.5m)			<ul style="list-style-type: none"> <li>▪ Acquiring data through host computers</li> </ul>

# INTERFACE BOX AND DATA OUTPUT CABLES

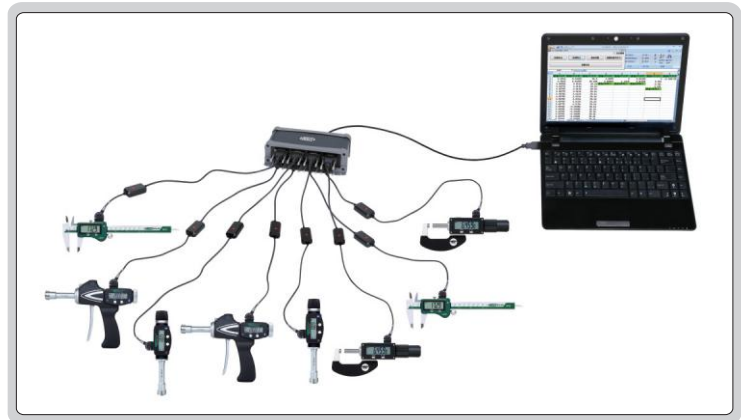


**8-channel interface box  
7210-2**



**data output cable  
7305-R40M**

application



- The interface box can be connected to digital measuring tools, such as calipers, micrometers, indicators (7305-R series data output cables are needed)
- The interface box is supplied with Excel directional input software
- The interface box can be connected with 8 data output cables, each of them has unique identification code

### INTERFACE BOX SPECIFICATION

<b>Code</b>	<b>7210-2</b>
<b>Quantity of digital measuring tools to be connected</b>	8 pcs
<b>Output port</b>	USB (virtual serial signal)

### Excel directional input software

- Supplied with 7210-2 interface box
- The measurement data of multiple measuring tools can be transmitted to the designated area of Excel, which is convenient for data management and improves efficiency

excel directional input software 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 gauge at D4-D9, the readings of height gauge 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 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 gauge at E4-E9, the readings of depth gauge are displayed at E4, E5... E9.






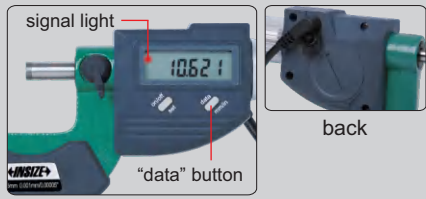







	A	B	C	D	E
1	Project	External diameter1	External diameter2	Length	Depth
2	Dimension and Tolerance	Φ23+0.01/-0.02	Φ21+0.01/-0.02	50±0.04	28±0.05
3	Measuring tool	Micrometer	Micrometer	Caliper	Depth gage
4	1	23.010	21.008	49.98	28.01
5	2	23.010	21.000	49.98	27.98
6	3	22.999	21.000	50	28
7	4	23.007	20.998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

To be continued

Continued from previous page

**DATA OUTPUT CABLE SPECIFICATION**

Code	Description	Plug to measuring tool	Connecting with measuring tool	Transmit data
7305-R21	cable for digital calipers (length 3m)			<ul style="list-style-type: none"> <li>Press the button on the plug of cable, can also press the button of the transmit box, or press the foot switch</li> <li>Data is transmitted once, the signal light of the transmit box flashes once</li> </ul>
7305-R22	cable for large digital calipers (length 2.5m)			<ul style="list-style-type: none"> <li>Press the button of the transmit box, or press the foot switch</li> <li>Data is transmitted once, the signal light of the transmit box flashes once</li> </ul>
7305-R30	cable for digital micrometers (length 2.5m)			<ul style="list-style-type: none"> <li>Press the "data" button of digital micrometer, can also press the button of the transmit box, or press the foot switch</li> <li>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</li> </ul>
7305-R40M	cable for digital indicators (length 2.5m)		 suitable for 2108, 2138, 2139 series digital indicators	<ul style="list-style-type: none"> <li>Press the "DATA" button of digital indicator, can also press the button of the transmit box, or press the foot switch</li> <li>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</li> </ul>
			 suitable for other digital indicators	<ul style="list-style-type: none"> <li>Press the button of the transmit box, or press the foot switch</li> <li>Data is transmitted once, the signal light of the transmit box flashes once</li> </ul>
7305-R50M	cable for digital gauges (length 2.5m)			<ul style="list-style-type: none"> <li>Press the button of the transmit box, or press the foot switch</li> <li>Data is transmitted once, the signal light of the transmit box flashes once</li> </ul>
7305-R1150	cable for digital height gauges (length 2.5m)			<ul style="list-style-type: none"> <li>Press the button of the transmit box, or press the foot switch</li> <li>Data is transmitted once, the signal light of the transmit box flashes once</li> </ul>

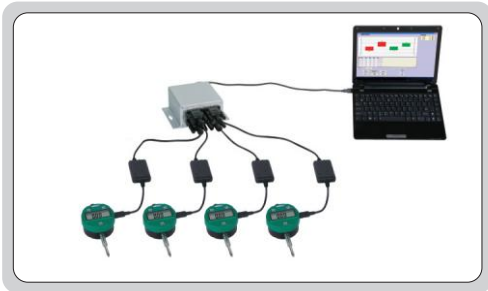
connected with digital indicator



## DISPLAY UNIT CODE 7106-1A

REFER TO PAGE 563  
FOR DETAILS

connected with digital indicators



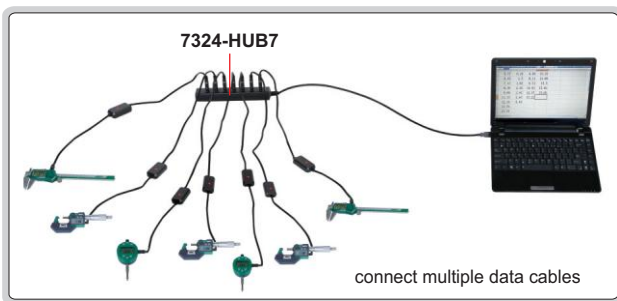
## MULTICHANNEL INTERFACE BOXES

REFER TO PAGE 564  
FOR DETAILS



7107-1

application



7324-HUB7

connect multiple data cables

## HUBS



7324-HUB4



7324-HUB7

adapter (optional)



7324-ADAPTER

- Suitable for USB plug data cable



7324-HUB16

Code	Description	Applicable products	Note
7324-HUB4	4-channel hub (length 0.2m, USB computer plug)	7302 series data cables (USB plug) 7305 series data cables (USB plug)	no adapter required
7324-HUB7	7-channel hub (length 1m, USB computer plug)		optional: adapter (code: 7324-ADAPTER) note: adapter required for connecting high power devices
7324-HUB16	16-channel hub (length 1m, USB computer plug)		adapter is included

## EXTENSION CABLES

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)



7325-ADD5

application





## FOOT SWITCH

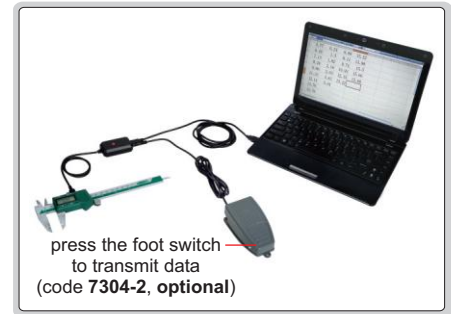


7304-2

- 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

application



## OK/NG INPUT SWITCHES



7327-FS



7327-SW

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

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

application

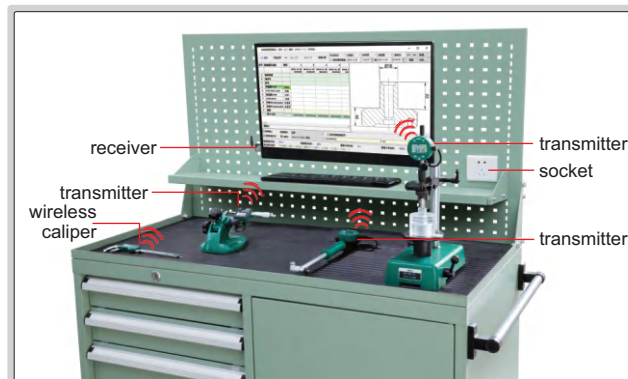


## MOBILE WORKBENCH



7901-10A

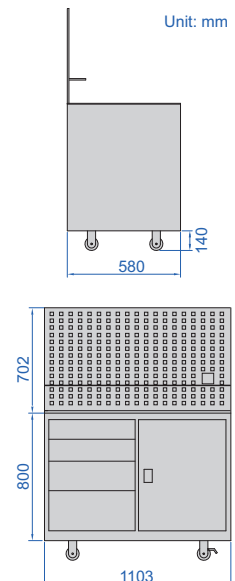
application



- Tabletop can support 50kg

Code	L×W×H (without caster)
7901-10A	1103×580×1502mm

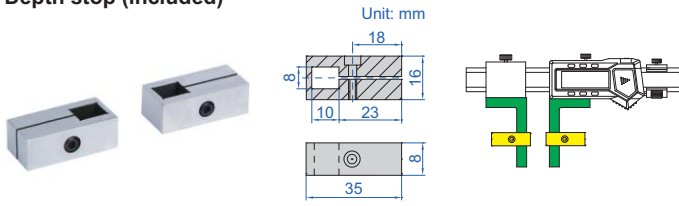
Unit: mm



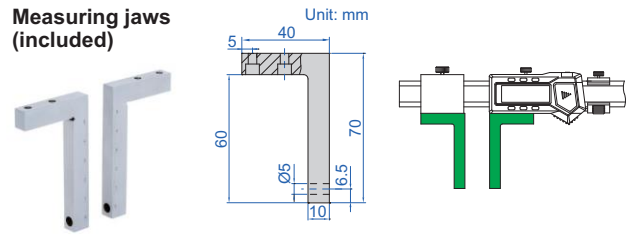


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**Depth stop (included)**



**Measuring jaws (included)**



**Multifunctional points 7392\* (optional, page 52)**



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

**Ball points 7391\* (optional, page 52)**



**Screw thread points 7381\*, 7321\* (optional, page 52)**



## 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



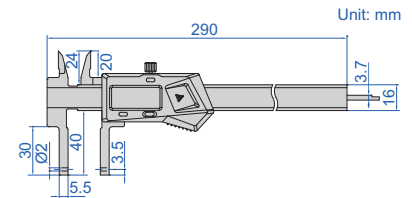
**short spherical points (included)** Unit: mm



**long spherical/flat points (included)** Unit: mm



**spherical blade points (included)** Unit: mm



**With data interface**

Code	Data output cable (optional)
1526-200	7315-25 (receiver is needed) page 5, 7214-25 page 11, 7302-21 page 20

**Built-in wireless**

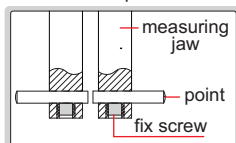
Code	Receiver (optional)
1526-200WL	code 7315-2/3/6/7/8/9

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

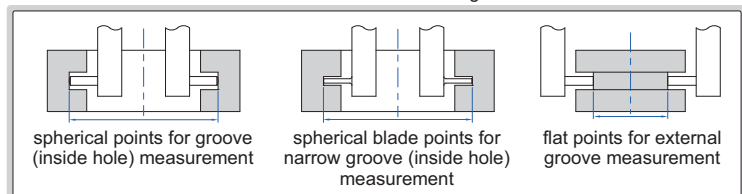
zero setting block for external measurement (included)



install points



measure internal and external grooves



To be continued

Continued from previous page

### Depth stop (optional)

**Code**  
**6143**

Unit: mm

**6143**

for external groove measurement

for internal groove measurement

### Point sleeve (optional)

Unit: mm

**1526-T101**

installation

**Code**  
**1526-T101**

### Ball points (optional)

Unit: mm

**7391-T5**

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

**\*** 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

### Multifunctional points (optional)

**7392-T1**

**7392-T4**

**7392-T7**

**7392-T2**

**7392-T5**

**7392-T8**

**7392-T3**

**7392-T6**

**7392-T9**

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

**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

### Screw thread points (optional)

**7321-T16**

Unit: mm

**7381-T11**

Unit: mm

### Internal thread (60° thread angle)

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

### External thread (60° thread angle)

Code	Pitch
<b>7381-T11*</b>	0.4-0.5mm/64-48TPI
<b>7381-T12*</b>	0.6-0.9mm/44-28TPI
<b>7381-T13*</b>	1-1.75mm/24-14TPI
<b>7381-T14*</b>	2-3mm/13-9TPI
<b>7381-T15*</b>	3.5-5mm/8-5TPI
<b>7381-T16*</b>	5.5-7mm/4.5-3.5TPI
<b>7381-TS*</b>	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

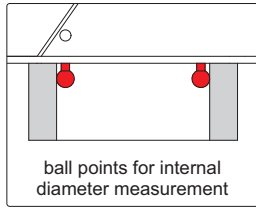
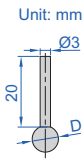
**\*** It is necessary to use point sleeve (code **1526-T101**) for these points

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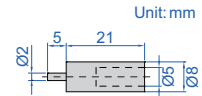
### Ball points (optional, supplied in pair)



1527-T104



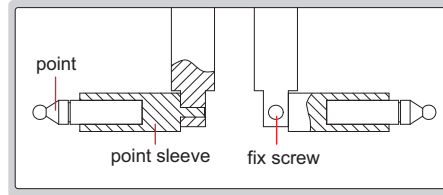
### Point sleeve (optional, supplied in pair)



#### Code

1526-T101

#### installation



5

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

### Multifunctional points (optional, supplied in pair)



7392-T1



7392-T2



7392-T3



7392-T4



7392-T5



7392-T6



7392-T7



7392-T8



7392-T9

#### Measuring range \*\*

80-105mm/3.2-4.2"

\*\* After installing points and point sleeve

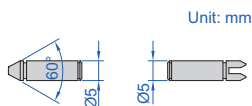
Code	Type
7392-T1 *	flat
7392-T2 *	spherical
7392-T3 *	spline
7392-T4 *	disk
7392-T5 *	blade
7392-T6 *	knife-edge
7392-T7 *	point
7392-T8 *	knife-edge
7392-T9 *	point

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

### Screw thread points (optional, supplied in pair)



7321-T16



#### Measuring range \*\*

80-105mm/3.2-4.2"

\*\* After installing points and point sleeve

#### Internal thread (60° thread angle)

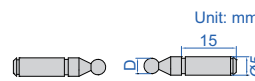
Code	Pitch
7321-T11 *	0.4-0.5mm/64-48TPI
7321-T12 *	0.6-0.9mm/44-28TPI
7321-T13 *	1-1.75mm/24-14TPI
7321-T14 *	2-3mm/13-9TPI
7321-T15 *	3.5-5mm/8-5TPI
7321-T16 *	5.5-7mm/4.5-3.5TPI
7321-T1S *	6 pairs/set, including all above points

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

### Ball points (optional, supplied in pair)



7391-T5



#### Measuring range \*\*

80-105mm/3.2-4.2"

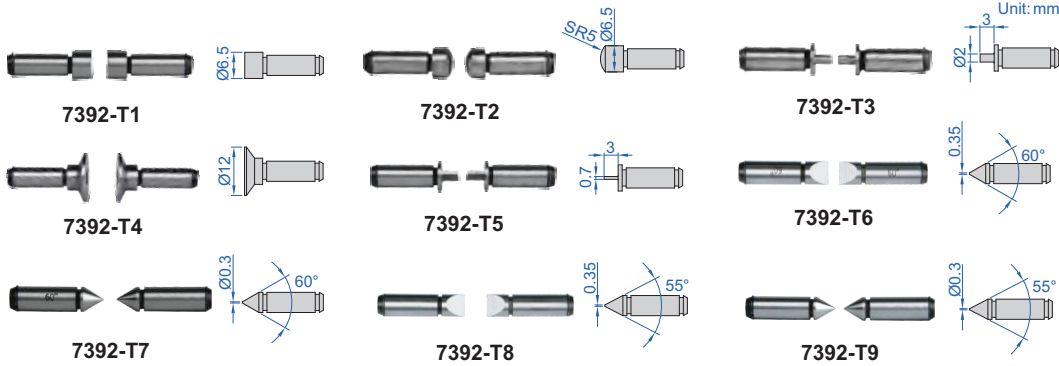
\*\* After installing points and point sleeve

Code	Ball dia. (D)
7391-T2 *	SØ1.5mm
7391-T3 *	SØ2.0mm
7391-T4 *	SØ2.5mm
7391-T5 *	SØ3.0mm
7391-T6 *	SØ3.5mm
7391-T7 *	SØ4.0mm
7391-T8 *	SØ4.5mm
7391-T9 *	SØ5.0mm
7391-T10 *	SØ6.0mm

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

Continued from previous page

### Multifunctional points (optional, supplied in pair)



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

#### Measuring range \*\*

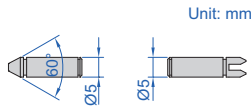
100-370mm/3.94-14.5"

\*\* After installing points and point sleeve

### Screw thread points (optional, supplied in pair)



7321-T16



Unit: mm

#### 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

#### Measuring range \*\*

100-370mm/3.94-14.5"

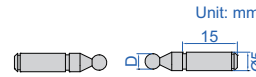
\*\* After installing points and point sleeve

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

### Ball points (optional, supplied in pair)



7391-T5



Unit: mm

#### Measuring range \*\*

100-370mm/3.94-14.5"

\*\* After installing points and point sleeve

Code	Ball dia. (D)
7391-T2 *	SØ1.5mm
7391-T3 *	SØ2.0mm
7391-T4 *	SØ2.5mm
7391-T5 *	SØ3.0mm
7391-T6 *	SØ3.5mm
7391-T7 *	SØ4.0mm
7391-T8 *	SØ4.5mm
7391-T9 *	SØ5.0mm
7391-T10 *	SØ6.0mm

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

## LARGE RANGE DIGITAL EXTERNAL MEASURING GAUGES

DATA OUTPUT



2935-321

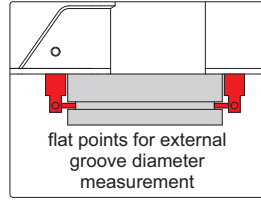
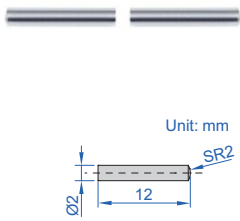


- Measure external dimensions
- Resolution: 0.001mm/0.00005"
- Accuracy: 5µm
- Repeatability: 1µm
- Movable point stroke: 5mm/0.02"
- Point height is adjustable, h=2-25mm
- CR2032 battery, automatic power off (time is adjustable)
- Data output

To be continued

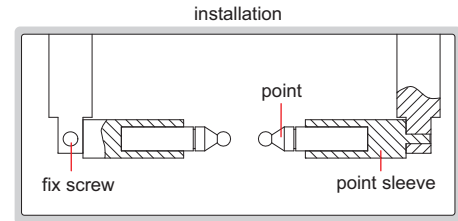
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### Spherical/flat points (optional, supplied in pair)



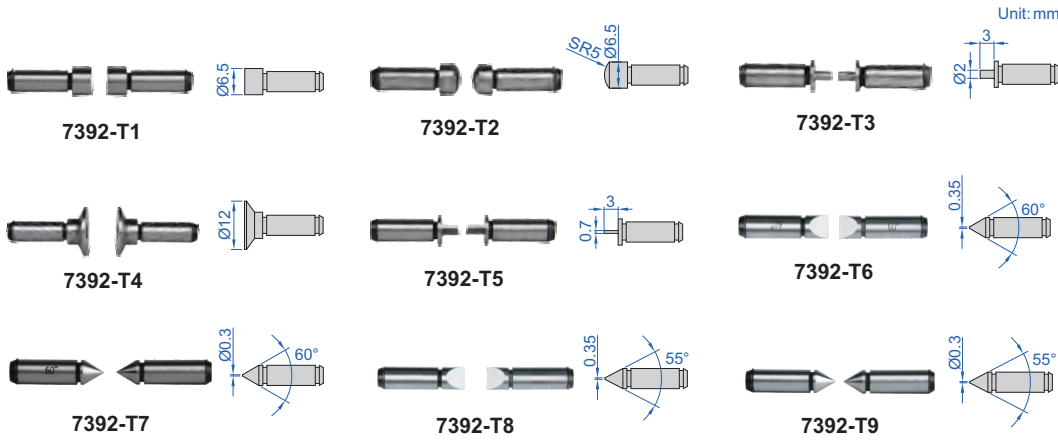
Code	Measuring range	Material
2932-S103	30-320mm/1.2-12.6"	stainless steel

### Point sleeve (optional, supplied in pair)



Code
1526-T101

### Multifunctional points (optional, supplied in pair)



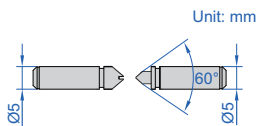
Code	Type
7392-T1 *	flat
7392-T2 *	spherical
7392-T3 *	spline
7392-T4 *	disk
7392-T5 *	blade
7392-T6 *	knife-edge
7392-T7 *	point
7392-T8 *	knife-edge
7392-T9 *	point

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

Measuring range **
0-300mm/0-11.8"

\*\* After installing points and point sleeve

### Screw thread points (optional, supplied in pair)



Measuring range **
0-300mm/0-11.8"

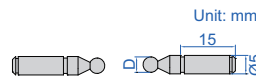
\*\* After installing points and point sleeve

#### 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

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

### Ball points (optional, supplied in pair)



Measuring range **
0-300mm/0-11.8"

\*\* After installing points and point sleeve

Code	Ball dia. (D)
7391-T2 *	SØ1.5mm
7391-T3 *	SØ2.0mm
7391-T4 *	SØ2.5mm
7391-T5 *	SØ3.0mm
7391-T6 *	SØ3.5mm
7391-T7 *	SØ4.0mm
7391-T8 *	SØ4.5mm
7391-T9 *	SØ5.0mm
7391-T10 *	SØ6.0mm

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



### 3-WIRES

application

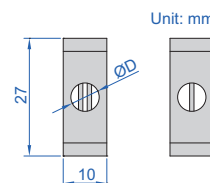


**INSPECTION  
CERTIFICATE**

- 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
- Scope of application: outside diameter of thread  $\leq 50\text{mm}$



7382-19



#### For outside micrometers with spindle $\text{Ø}6.35\text{mm}$ (ØD)

Code	Pin gauge diameter	Applicable pitch
7382-11	Ø0.170mm	0.2mm, 0.25mm, 0.3mm
7382-12	Ø0.195mm	0.35mm
7382-13	Ø0.220mm	0.4mm
7382-14	Ø0.250mm	0.45mm
7382-15	Ø0.290mm	0.5mm
7382-16	Ø0.335mm	0.6mm
7382-17	Ø0.390mm	0.7mm
7382-18	Ø0.455mm	0.75mm, 0.8mm
7382-19	Ø0.530mm	0.9mm
7382-110	Ø0.620mm	1.0mm
7382-111	Ø0.725mm	1.25mm
7382-112	Ø0.895mm	1.5mm
7382-113	Ø1.100mm	1.75mm, 2.0mm
7382-114	Ø1.350mm	2.5mm
7382-115	Ø1.650mm	3.0mm
7382-116	Ø2.050mm	3.5mm
7382-117	Ø2.550mm	4mm, 4.5mm
7382-118	Ø3.200mm	5mm, 5.5mm, 6mm
7382-1S	18 pairs/set, including all above 3-wires	

#### For outside micrometers with spindle $\text{Ø}6.50\text{mm}$ (ØD)

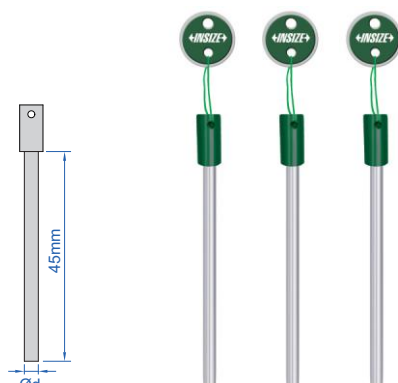
Code	Pin gauge diameter	Applicable pitch
7382-21	Ø0.170mm	0.2mm, 0.25mm, 0.3mm
7382-22	Ø0.195mm	0.35mm
7382-23	Ø0.220mm	0.4mm
7382-24	Ø0.250mm	0.45mm
7382-25	Ø0.290mm	0.5mm
7382-26	Ø0.335mm	0.6mm
7382-27	Ø0.390mm	0.7mm
7382-28	Ø0.455mm	0.75mm, 0.8mm
7382-29	Ø0.530mm	0.9mm
7382-210	Ø0.620mm	1.0mm
7382-211	Ø0.725mm	1.25mm
7382-212	Ø0.895mm	1.5mm
7382-213	Ø1.100mm	1.75mm, 2.0mm
7382-214	Ø1.350mm	2.5mm
7382-215	Ø1.650mm	3.0mm
7382-216	Ø2.050mm	3.5mm
7382-217	Ø2.550mm	4mm, 4.5mm
7382-218	Ø3.200mm	5mm, 5.5mm, 6mm
7382-2S	18 pairs/set, including all above 3-wires	

6

**INSPECTION  
CERTIFICATE**

### 3-WIRES

CUSTOMIZABLE  
DIAMETER Ød



7394-75A

- $\text{Ø}d \leq 0.3\text{mm}$ , made of alloy steel, hardness HRC60;  
 $\text{Ø}d > 0.3\text{mm}$ , 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 (Ød)	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

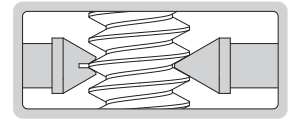
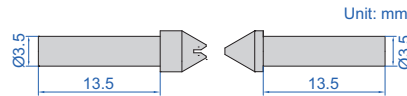
## MEASURING TIPS FOR EXTERNAL SCREW THREAD MICROMETERS

**INSIZE PLUS**  
MADE IN EUROPE

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



7390-T104



### 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 >63.5TPI, 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

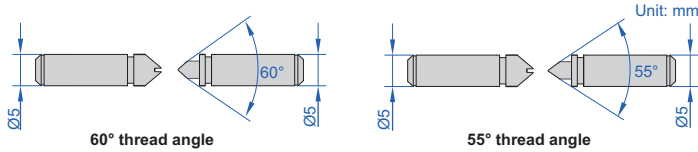
### 60° thread angle

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	$\pm 8\mu\text{m}$

## 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

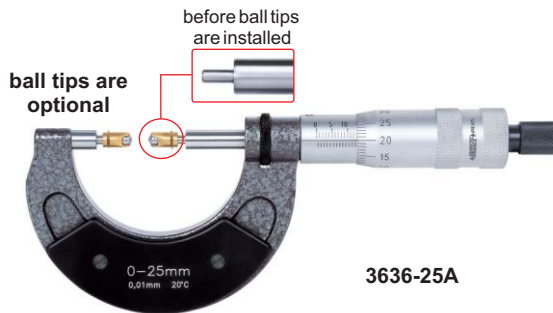
6

## EXTERNAL GEAR TOOTH MICROMETERS

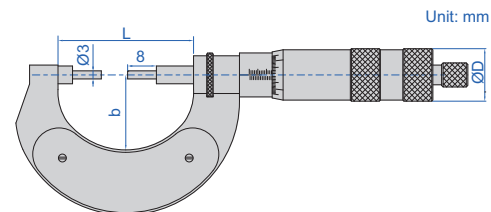
**INSIZE PLUS**  
MADE IN EUROPE

INSPECTION  
CERTIFICATE

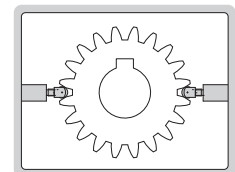
ATTENTION: SETTING  
STANDARDS ARE NOT INCLUDED



3636-25A



- Meet DIN863-3
- Measure over-pin diameter of gears
- Graduation 0.01mm
- Ratchet stop
- Optional accessory: ball tips (code 7383), setting standards (code 7386)



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

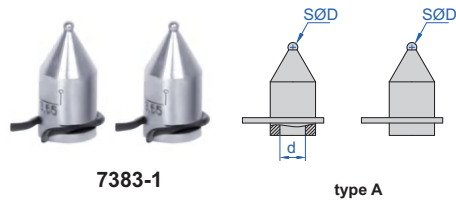
Code	Range	Accuracy	L	b	ØD
3636-225A*	200-225mm	6µm	264	135	20
3636-250A*	225-250mm	6µm	290	148	20
3636-300A*	250-300mm	6µm	325	165	24
3636-350A*	300-350mm	7µm	370	190	24
3636-400A*	350-400mm	7µm	430	220	24
3636-450A*	400-450mm	8µm	475	250	24
3636-500A*	450-500mm	8µm	530	273	24
3636-550A*	500-550mm	9µm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

\*Supplied with manufacturer inspection certificate

BALL TIPS DIAMETER  
SØD CAN BE CUSTOMIZED

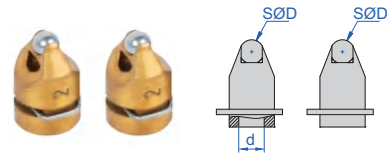
## BALL TIPS FOR GEAR TOOTH MICROMETERS

**INSIZE PLUS**  
MADE IN EUROPE



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

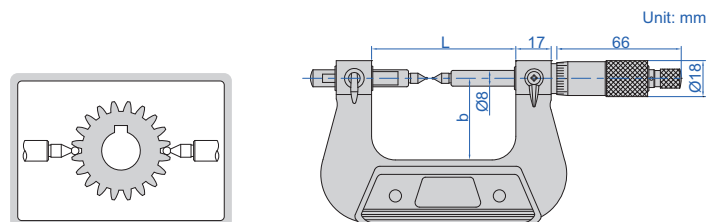
- Meet DIN863-3
- Measure over-pin diameter of gears
- Graduation 0.01mm
- Ratchet stop
- Supplied with setting standards (except 0-25mm)
- Optional accessory: ball tips (code 7391)

ball tips are optional



3291-25

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



## DIGITAL GEAR TOOTH MICROMETERS

**IP65**  
WATERPROOF

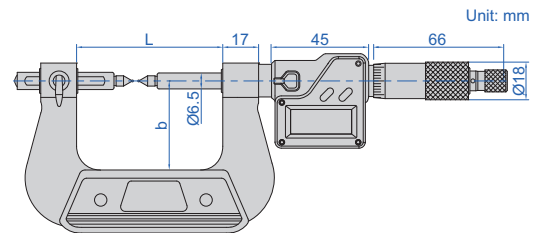
**DATA**  
OUTPUT

ball tips are optional



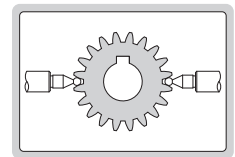
3591-25A

- Measure over-pin diameter of gears
- Resolution 0.001mm/0.0005"
- 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), wireless transmitter code 7315-31 (receiver is needed) page 6, bluetooth transmitter code 7214-31 page 12, data output cable code 7302-31 page 20



(mm)

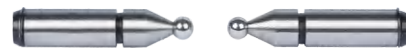
Code	Range	Accuracy	L	b
3591-25A	0-25mm/0-1"	±4µm	67	38
3591-50A	25-50mm/1-2"	±4µm	92.4	50
3591-75A	50-75mm/2-3"	±5µm	117.6	62
3591-100A	75-100mm/3-4"	±5µm	143	70
3591-125A	100-125mm/4-5"	±6µm	168.2	82
3591-150A	125-150mm/5-6"	±6µm	192	94.5
3591-175A	150-175mm/6-7"	±7µm	217	107
3591-200A	175-200mm/7-8"	±7µm	242	130
3591-225A	200-225mm/8-9"	±8µm	267	142.5
3591-250A	225-250mm/9-10"	±8µm	292	155
3591-275A	250-275mm/10-11"	±9µm	317	167.5



## BALL TIPS FOR GEAR TOOTH MICROMETERS

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

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



7391-T5

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





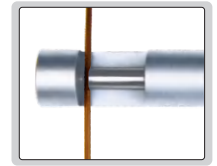
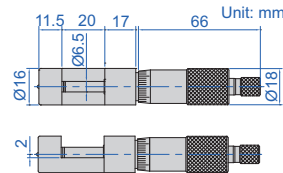
## WIRE MICROMETER

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



3285-10

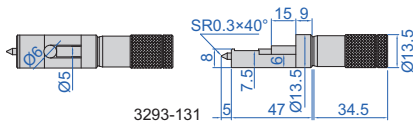
Code	Range	Accuracy
3285-10	0-10mm	4µm



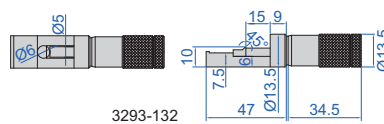
## CAN SEAM MICROMETERS



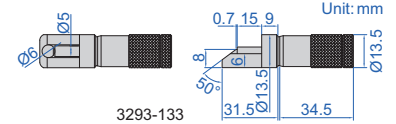
3293-131



3293-132

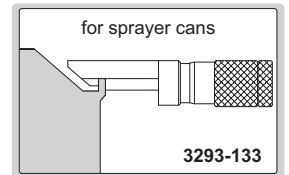
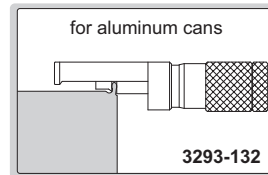
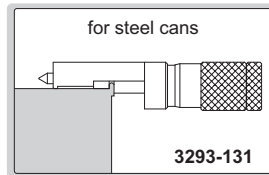


3293-133



- 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

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



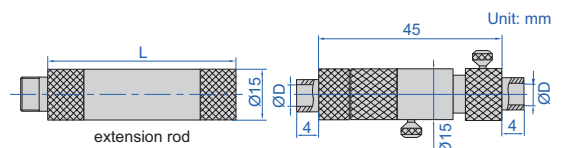
## PARALLELISM INSPECT DEVICES FOR OUTSIDE MICROMETERS

- 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



4199-1000

MEASURING TIPS DIAMETER ØD CAN BE CUSTOMIZED



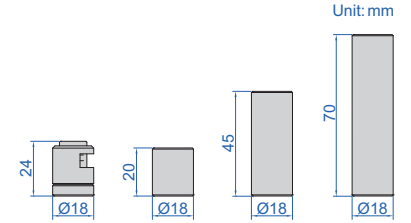
Code	Range	Measuring tips dia. (ØD)	Extension rod (L)
4199-1000	50-1000mm	6.5mm, 8mm	15mm, 25mm, 50mm, 100mm (3 pcs), 150mm, 200mm (2 pcs)
4199-2000	50-2000mm	6.5mm, 8mm	15mm, 25mm, 50mm, 100mm (3 pcs), 150mm, 200mm (7 pcs)

## MICROMETER MEASURING FORCE DETECTOR

- For outside micrometers  
0-25mm/0-1", 25-50mm/1-2",  
50-75mm/2-3" and 75-100mm/3-4"



6315



Code	Measuring force
6315	5-12N

REFER TO PAGE 356  
FOR DETAILS

## MICROMETER INSPECTION GAUGE BLOCK SETS



4107-10

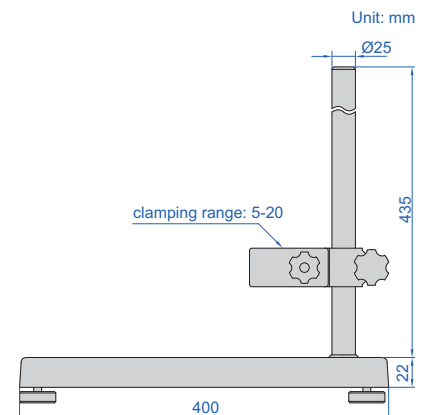


4160-10

## MICROMETER STAND



6302



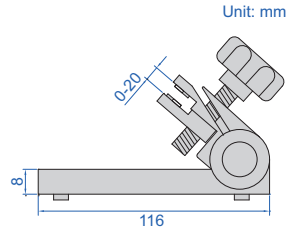
Code
6302

- Suitable for 100-300mm outside micrometers  
(except 3675 series)

**MICROMETER STAND**



6300



**Code**

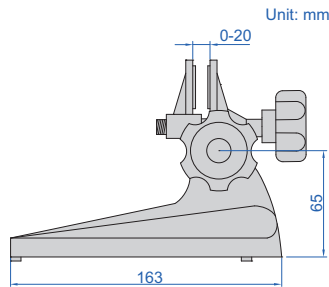
6300

- Suitable for outside micrometers up to 100mm

6

**MICROMETER STAND**

- Suitable for outside micrometers up to 100mm

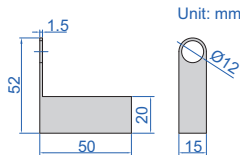


6301

**Code**

6301

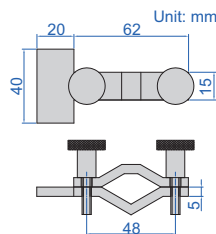
- Suitable for inside micrometers



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

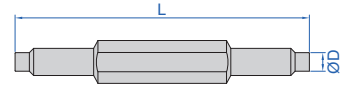
Code	Description	Applicable products
6301-2	clamp for three points internal micrometers	up to 100mm of 3127 and 3227 series

## MICROMETER SETTING STANDARDS

**INSIZE PLUS**  
MADE IN EUROPE



7386-100



▪ Suitable for outside micrometers

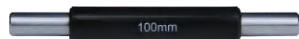
Code	Length (L)	Accuracy	ØD
7386-25	25mm	±1.25µm	6.5mm
7386-50	50mm	±1.25µm	6.5mm
7386-75	75mm	±1.5µm	6.5mm
7386-100	100mm	±2µm	6.5mm
7386-125	125mm	±2.5µm	6.5mm
7386-150	150mm	±2.5µm	6.5mm
7386-175	175mm	±2.5µm	6.5mm
7386-200	200mm	±3µm	6.5mm
7386-225	225mm	±3µm	6.5mm
7386-250	250mm	±3µm	6.5mm
7386-275	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



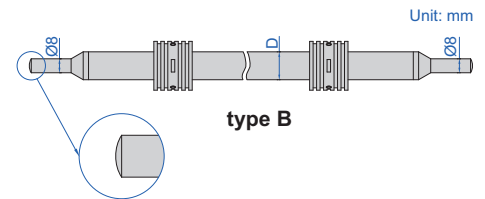
6310-100



type A



6310-300



type B

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

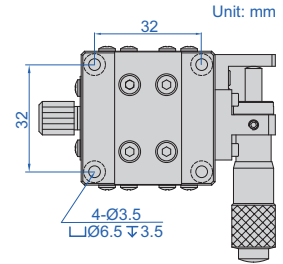
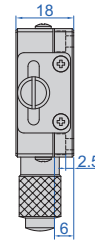
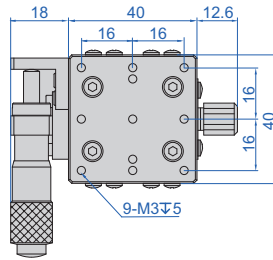
Code	Length	Type	Accuracy	D
6310-400	400	B	±9µm	Ø16
6310-425	425	B	±9.5µm	Ø16
6310-450	450	B	±10µm	Ø16
6310-475	475	B	±10.5µm	Ø16
6310-500	500	B	±11µm	Ø16
6310-525	525	B	±11.5µm	Ø16
6310-575	575	B	±12.5µm	Ø16
6310-625	625	B	±13.5µm	Ø16
6310-675	675	B	±14.5µm	Ø16
6310-725	725	B	±15.5µm	Ø16
6310-775	775	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

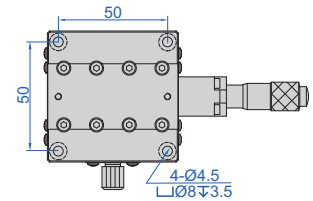
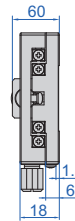
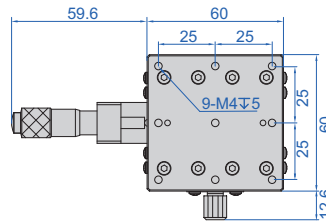
## X-AXIS STAGES



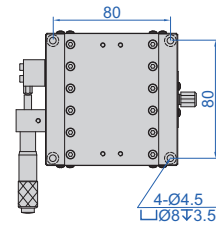
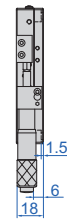
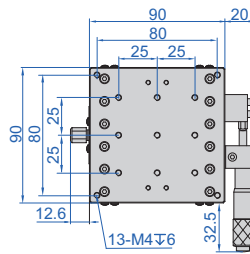
6582-401



6582-602



6582-903



- Cross roller guides, achieve high precision and smooth movement
- Stages made of aluminum alloy

### SPECIFICATION (micrometer on the left)

Code	X-axis displacement	Parallelism of top to bottom surface	Micrometer graduation	Micrometer accuracy	Maximum load	Micrometer location	Stage size	Weight
6582-401	±6.5mm	0.02mm	0.01mm	0.01mm	29.4N (3kgf)	left	40x40mm	0.14kg
6582-601	±6.5mm	0.03mm	0.01mm	0.01mm	49N (5kgf)	left	60x60mm	0.24kg
6582-901	±12.5mm	0.03mm	0.01mm	0.02mm	93.1N (9.5kgf)	left	90x90mm	0.47kg
6582-1251	±12.5mm	0.04mm	0.01mm	0.02mm	180N (18.4kgf)	left	125x125mm	1.40kg

### SPECIFICATION (micrometer in the middle)

Code	X-axis displacement	Parallelism of top to bottom surface	Micrometer graduation	Micrometer accuracy	Maximum load	Micrometer location	Stage size	Weight
6582-402	±6.5mm	0.02mm	0.01mm	0.01mm	29.4N (3kgf)	middle	40x40mm	0.14kg
6582-602	±6.5mm	0.03mm	0.01mm	0.01mm	49N (5kgf)	middle	60x60mm	0.24kg
6582-902	±12.5mm	0.03mm	0.01mm	0.02mm	93.1N (9.5kgf)	middle	90x90mm	0.47kg
6582-1252	±12.5mm	0.04mm	0.01mm	0.02mm	180N (18.4kgf)	middle	125x125mm	1.40kg

### SPECIFICATION (micrometer on the right)

Code	X-axis displacement	Parallelism of top to bottom surface	Micrometer graduation	Micrometer accuracy	Maximum load	Micrometer location	Stage size	Weight
6582-403	±6.5mm	0.02mm	0.01mm	0.01mm	29.4N (3kgf)	right	40x40mm	0.14kg
6582-603	±6.5mm	0.03mm	0.01mm	0.01mm	49N (5kgf)	right	60x60mm	0.24kg
6582-903	±12.5mm	0.03mm	0.01mm	0.02mm	93.1N (9.5kgf)	right	90x90mm	0.47kg
6582-1253	±12.5mm	0.04mm	0.01mm	0.02mm	180N (18.4kgf)	right	125x125mm	1.40kg