

**MeasurLink<sup>®</sup> ENABLED**  
Data Management Software by Mitutoyo



# FALL PROMO 2018

## PRECISION TOOLS & INSTRUMENTS

Effective September 10 through December 21, 2018

FALL PROMO 2018

### U-WAVE<sup>fit</sup>





## Dear Valued Customers,

I want to take a moment to express my sincere appreciation for your continued support and commitment to Mitutoyo products and services.

Inside the pages of the 2018 fall promotion, you will find a lot of great deals on a variety of Mitutoyo tools and instruments including calipers, micrometers, indicators, height gages, microscopes and profile projectors. Prices are effective September 10, 2018 – December 21, 2018.

You can find all of the latest promotions, products and events on our website, [www.mitutoyo.com](http://www.mitutoyo.com).

Thank you for trusting us with your metrology needs.

Sincerely,

*Matthew B. Dye*

**Matt Dye**  
President, Mitutoyo America Corporation

Mitutoyo products are sold only through authorized distributors. To find an authorized Mitutoyo distributor near you, visit: [www.mitutoyo.com/distributor-locator/](http://www.mitutoyo.com/distributor-locator/)



Prices effective September 10 through December 21, 2018



U-WAVE-TM



U-WAVE-TC



**Mitutoyo's new U-Wave Fit wireless data transmitter fits to the back of popular Mitutoyo hand-held measuring instruments. This new design allows for a snug fit behind the display resulting in a more ergonomic feel. U-Wave Fit is the same technology as the U-Wave T, just a smaller version.**



IP65 Micrometer with U-WAVE-TM (buzzer type) and connection unit

- The transmitter is designed to fit in the space behind the display, and the connecting cable has been replaced by a rigid connector
- Approx. 20 m transmission range (within visible range)
- 2.4GHz wireless system for reliable and secure data transmission
- Easy data export to Microsoft® Excel® or SPC software applications
- Transmitter confirms data transfer by an LED signal and optional buzzer
- An IP67 transmitter is available to ensure a coolant-proof gaging system
- Low power consumption: 400,000 data transmissions with a single battery

### Specifications

Wireless communication protocol	IEEE 802.15.4
Modulation method	DS-SS (Direct Sequence Spread Spectrum)
Communication distance	Approx. 20 m (within visible range)
Communication speed	250 kbps
Communication frequency	2.4 GHz (ISM: universal frequency band)
User band	15 channels (2.405 to 2.475GHz at intervals of 5 MHz)
OS compatibility	Windows® 2000 Professional (≥SP4), Windows® XP Professional (≥SP2), Windows® XP Home Edition (≥SP2), Windows Vista®, Windows® 7 (32bit, 64bit), Windows® 8, 8.1, Windows® 10 (32bit, 64bit)

### U-WAVE-T (Transmitter)

Order No.	Model	Measuring Instrument*	Remarks	List	Promo
264-620	U-WAVE-TC	4", 6", 8", 12" IP67 caliper/standard caliper	IP67/LED	\$190.00	\$180.50
264-621	U-WAVE-TC	4", 6", 8", 12" IP67 caliper/standard caliper	Buzzer/LED	\$190.00	\$180.50
264-622	U-WAVE-TM	COOLANT-PROOF (IP65) micrometer	IP67/LED	\$190.00	\$180.50
264-623	U-WAVE-TM	COOLANT-PROOF (IP65) micrometer	Buzzer/LED	\$190.00	\$180.50
02AZF310	Connection unit	IP67 caliper/COOLANT-PROOF (IP65) micrometer	Waterproof	\$70.00	\$66.50
02AZF300	Connection unit	Standard caliper	Standard	\$70.00	\$66.50

\* Please contact Mitutoyo or distributor for further details

### U-WAVE-R (Receiver)

Order No.	Remarks	Software	Number of U-WAVE-R units that can be connected to PC	Number of U-WAVE-T units that can be connected	List	Promo
02AZD810D	U-WAVE-R + software	U-WAVE PAK	Up to 15	Up to 100	\$499.00	\$474.05

## QuantuMike Micrometer

### 4X Faster Spindle Travel

- > Faster measurement with 2mm travel per revolution instead of the standard 0.5mm.
- > A patented ratchet thimble mechanism helps ensure repeatability.
- > Function-lock system prevents inadvertent setting changes.
- > Long battery life – 2.4 years under normal operation.
- > Certificate of inspection provided.



293-180-30



COOLANT PROOF™

COMPATIBLE WITH  
**U-WAVE fit**



U-WAVE-TM

	Order No.	Range	Resolution	List	Promo
<b>fit</b>	<b>293-180-30*</b>	0-1"/0 - 25.4mm	.00005"/0.001mm	\$262.00	<b>\$248.90</b>
	<b>293-185-30</b>	0-1"/0 - 25.4mm	.00005"/0.001mm	\$226.00	<b>\$214.70</b>
<b>fit</b>	<b>293-181-30*</b>	1-2"/25.4 - 50.8mm	.00005"/0.001mm	\$300.00	<b>\$285.00</b>
	<b>293-186-30</b>	1-2"/25.4 - 50.8mm	.00005"/0.001mm	\$258.00	<b>\$245.10</b>
<b>fit</b>	<b>293-182-30*</b>	2-3"/50.8 - 76.2mm	.00005"/0.001mm	\$358.00	<b>\$340.10</b>
	<b>293-187-30</b>	2-3"/50.8 - 76.2mm	.00005"/0.001mm	\$310.00	<b>\$294.50</b>
<b>fit</b>	<b>293-183-30*</b>	3-4"/76.2 - 101.6mm	.00005"/0.001mm	\$385.00	<b>\$365.75</b>
	<b>293-188-30</b>	3-4"/76.2 - 101.6mm	.00005"/0.001mm	\$372.00	<b>\$353.40</b>

\*with SPC Output

SPC cable with data switch – 1m: **05CZA662** 2m: **05CZA663**

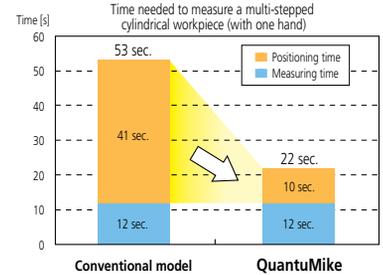
**fit** U-Wave Fit compatible



www.mitutoyo.com/qm4x  
VIDEO DEMO

**MeasurLink ENABLED**  
Data Management Software by Mitutoyo

### Significant reduction in positioning time



## NEW Tool Kit

Tool Kit includes:

- QuantuMike **293-185-30**
- Digimatic Caliper **500-196-30**
- Mahogany Case **64PPP932**

**\$368.10 Promo**

\$409.00 List Price  
Order No. **64PKA152**



## MDC Micrometer

- > New electromagnetic ABSOLUTE sensor - Improved resistance to environmental conditions such as dirt, oil and water, which can cause false readings.
- > New ratchet thimble on select models improves one-hand operability.
- > New anti-slip finish for improved grip while taking measurements.
- > Long battery life – 2.4 years under normal operation.
- > Fully compatible with existing Mitutoyo Digimatic peripherals (SPC Cables, U-Wave wireless transmitters, DP1-VR, etc.) – SPC output-enabled IP65 models.
- > Function-lock system prevents inadvertent setting changes.
- > Certificate of inspection provided.



293-330-30



COOLANT PROOF™



www.mitutoyo.com/MDC  
VIDEO DEMO

	Order No.	Range	Resolution	Remarks	List	Promo
<b>fit</b>	<b>293-330-30*</b>	0-1"/0-25.4mm	.00005"/0.001mm	Ratchet Stop	\$240.00	<b>\$228.00</b>
	<b>293-340-30</b>	0-1"/0-25.4mm	.00005"/0.001mm	Ratchet Stop	\$187.00	<b>\$177.65</b>
	<b>293-344-30</b>	0-1"/0-25.4mm	.00005"/0.001mm	Ratchet Thimble	\$187.00	<b>\$177.65</b>
	<b>293-348-30</b>	0-1"/0-25.4mm	.00005"/0.001mm	Friction Thimble	\$187.00	<b>\$177.65</b>
	<b>293-349-30</b>	0-1"/0-25.4mm	.0001"/0.001mm	Ratchet Thimble	\$187.00	<b>\$177.65</b>
<b>fit</b>	<b>293-331-30*</b>	1-2"/25.4-50.8mm	.00005"/0.001mm	Ratchet Stop w/Standard	\$283.00	<b>\$268.85</b>
	<b>293-341-30</b>	1-2"/25.4-50.8mm	.00005"/0.001mm	Ratchet Stop w/Standard	\$243.00	<b>\$230.85</b>
	<b>293-345-30</b>	1-2"/25.4-50.8mm	.00005"/0.001mm	Ratchet Thimble w/Standard	\$243.00	<b>\$230.85</b>

\*with SPC Output **fit** U-Wave Fit compatible

SPC cable with data switch – 1m: **05CZA662** 2m: **05CZA663**



Ratchet Thimble

Ratchet thimble

Speeder

←

## Spline Micrometer

- > The anvil and spindle have a small diameter for measuring splined shafts, slots and keyways.
- > With SPC output
- > With a standard bar except 0-1"
- > Resolution: .00005"/0.001mm

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**IP65** **SPC**



331-351-30



Digital

Order No.	Range	Accuracy	Contacts	List	Promo
<b>fit</b> 331-351-30	0 - 1" / 0 - 25.4mm	±.0001"	Ø.118"	\$470.00	<b>\$446.50</b>
<b>fit</b> 331-361-30		±.0001"	Ø.079"	\$470.00	<b>\$446.50</b>
<b>fit</b> 331-352-30	1 - 2" / 25.4-50.8mm	±.0001"	Ø.118"	\$527.00	<b>\$500.65</b>
<b>fit</b> 331-362-30		±.0001"	Ø.079"	\$527.00	<b>\$500.65</b>
<b>fit</b> 331-353-30	2 - 3" / 50.8-76.2mm	±.0001"	Ø.118"	\$571.00	<b>\$542.45</b>
<b>fit</b> 331-363-30		±.0001"	Ø.079"	\$549.00	<b>\$521.55</b>
<b>fit</b> 331-354-30	3 - 4" / 76.2-101.6mm	±.00015"	Ø.118"	\$661.00	<b>\$627.95</b>
<b>fit</b> 331-364-30		±.00015"	Ø.079"	\$577.00	<b>\$548.15</b>

**fit** U-Wave Fit compatible

SPC cable with data switch - 1m: **05CZA662** 2m: **05CZA663**

## Spherical Face Micrometer

- > Designed to measure the wall thickness of various tubing.
- > Resolution: .00005" / 0.001mm
- > With SPC output.
- > With a standard bar except 0 - 1" model.
- > With digit counter.



395-371-30

**IP65** **SPC**

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Digital model with spherical anvil

Order No.	Range	Accuracy	Min ID	List	Promo
<b>fit</b> 395-371-30 <sup>S-S</sup>	0 - 1" / 0 - 25.4mm	±.0001"	D: .59"	\$410.00	<b>\$389.50</b>
<b>fit</b> 395-372-30 <sup>S-S</sup>	1" - 2" / 25.4 - 50.8mm	±.0001"	D: .59"	\$435.00	<b>\$413.25</b>
<b>fit</b> 395-373-30 <sup>S-S</sup>	2" - 3" / 50.8-76.2mm	±.0001"	D: .75"	\$494.00	<b>\$469.30</b>
<b>fit</b> 395-374-30 <sup>S-S</sup>	3" - 4" / 76.2-101.6mm	±.00015"	D: .79"	\$527.00	<b>\$500.65</b>
<b>fit</b> 395-351-30 <sup>S-F</sup>	0 - 1" / 0 - 25.4mm	±.0001"	D: .59"	\$397.00	<b>\$377.15</b>
<b>fit</b> 395-352-30 <sup>S-F</sup>	1" - 2" / 25.4 - 50.8mm	±.0001"	D: .59"	\$425.00	<b>\$403.75</b>
<b>fit</b> 395-353-30 <sup>S-F</sup>	2" - 3" / 50.8-76.2mm	±.0001"	D: .75"	\$482.00	<b>\$457.90</b>
<b>fit</b> 395-354-30 <sup>S-F</sup>	3" - 4" / 76.2-101.6mm	±.00015"	D: .79"	\$516.00	<b>\$490.20</b>

S-F: Spherical anvil and flat spindle

S-S: Spherical anvil and spherical spindle

**fit** U-Wave Fit compatible

SPC cable with data switch - 1m: **05CZA662** 2m: **05CZA663**

## Point Micrometer

- > Pointed spindle and anvil for measuring the web thickness of drills, small grooves, keyways and other hard-to-reach dimensions.
- > The measuring points have approximately 0.3mm / .012" radius.
- > With a standard bar except 0 - 1"
- > Resolution: .00005" / 0.001mm (digital models)
- > With SPC output.
- > With carbide tips

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**IP65** **SPC**



342-351-30



Digital

Order No.	Range	Accuracy	Point	List	Promo
<b>fit</b> 342-351-30	0 - 1" / 0 - 25.4mm	±.0001"	15°	\$462.00	<b>\$438.90</b>
<b>fit</b> 342-361-30		±.0001"	30°	\$462.00	<b>\$438.90</b>
<b>fit</b> 342-352-30	1" - 2" / 25.4 - 50.8mm	±.0001"	15°	\$515.00	<b>\$489.25</b>
<b>fit</b> 342-362-30		±.0001"	30°	\$504.00	<b>\$478.80</b>
<b>fit</b> 342-353-30	2" - 3" / 50.8 - 76.2mm	±.0001"	15°	\$537.00	<b>\$510.15</b>
<b>fit</b> 342-363-30		±.0001"	30°	\$537.00	<b>\$510.15</b>
<b>fit</b> 342-354-30	3" - 4" / 76.2 - 101.6mm	±.00015"	15°	\$571.00	<b>\$542.45</b>
<b>fit</b> 342-364-30		±.00015"	30°	\$571.00	<b>\$542.45</b>

**fit** U-Wave Fit compatible

SPC cable with data switch - 1m: **05CZA662** 2m: **05CZA663**

## Tube Micrometer

- > Used to measure the wall thickness on tubing, pipe and other hard-to-reach places. Spherical or cylindrical anvils are available.
- > IP65 water/dust protection
- > With SPC output.



Type B



Type C

Type D

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395-363-30

**IP65** **SPC**

Anvil Type C



Digital

Order No.	Range	Resolution	Accuracy	Type	List	Promo
<b>fit</b> 395-362-30	0 - 1" / 0 - 25.4mm	.00005" / 0.001mm	±.00015"	B	\$438.00	<b>\$416.10</b>
<b>fit</b> 395-363-30				C	\$451.00	<b>\$428.45</b>
<b>fit</b> 395-364-30				D	\$451.00	<b>\$428.45</b>

**fit** U-Wave Fit compatible

SPC cable with data switch - 1m: **05CZA662** 2m: **05CZA663**

## Outside Micrometer with Interchangeable Anvils

- > Large range micrometers have an oversize frame and multiple anvils to allow a single micrometer to be used over a 6" range. This reduces tool cost for infrequently measured ranges.
- > Wide measuring range with interchangeable anvils.
- > Supplied with zero-setting standards bar for each range.



### SPC Connecting Cables (optional)

Order No.	Description	List
With Data Out Switch		
05CZA662	1m — IP65 Micrometers	\$83.80
05CZA663	2m — IP65 Micrometers	\$92.45
959149	1m - Non IP Calipers, Large Micrometers	\$49.25
959150	2m - Non IP Calipers, Large Micrometers	\$55.20



05CZA662: 1m (40")  
05CZA663: 2m (80")



959149: 1m (40")  
959150: 2m (80")

Order No.	Range	Resolution	List	Promo
<b>fit</b> 340-351-30	0-6" / 0-152.4mm	.00005" / 0.001mm	\$732.00	<b>\$695.40</b>
<b>fit</b> 340-352-30	6-12" / 152.4 - 304.8mm	.0001" / 0.001mm	\$900.00	<b>\$855.00</b>
340-720*	12-18" / 304.8 - 457.2mm	.0001" / 0.001mm	\$1,130.00	<b>\$1,073.50</b>
340-721*	18-24" / 457.2 - 609.6mm	.0001" / 0.001mm	\$1,280.00	<b>\$1,216.00</b>
340-722*	24-30" / 609.6 - 762.0mm	.0001" / 0.001mm	\$1,420.00	<b>\$1,349.00</b>
340-723*	30-36" / 762.0 - 914.4mm	.0001" / 0.001mm	\$1,500.00	<b>\$1,425.00</b>

**fit** U-Wave Fit compatible

SPC cable with data switch – 1m: **05CZA662** 2m: **05CZA663**  
\* 1m: **959149** 2m: **959150**

## U-Wave Wireless System

U-WAVE is a wireless system that connects to a gage with SPC Output. The data is sent to a receiver that is connected to a PC through USB connection.

Whether the existence of a data switch affects usability	Incorporates a data switch, so the tool is usable regardless of whether or not the measuring instrument has a switch.			Does not incorporate a data switch, so an instrument fitted with a switch is required in order to use the instrument alone. (However, the tool can be used with USB-ITPAK.)			
Cable type	<b>A</b> Coolantproof with switch	<b>B</b> Coolantproof with switch	<b>C</b> With switch	<b>D</b> 10-pin plain	<b>E</b> 6-pin round	<b>F</b> Straight type	<b>G</b> Coolantproof straight type
Illustration of the plug that connects to the measuring instrument							
Socket type on the measuring instrument							

- > 2.4 GHz ZigBee wireless with a 60ft range.
- > HID compatible (Keyboard Entry) and Serial(VCP).
- > Supports Mitutoyo Digimatic or Digimatic 2 Type A, B, C, D, E, F, G.
- > Includes U-WAVEPAK Setup Software.

### Software Requirements

- > Windows 7, 8 or 10.
- > 32 or 64 Bit

Order No.	Description	List	Promo
02AZD730G	U-WAVE-T/IP67 TYPE	\$220.00	<b>\$209.00</b>
02AZD880G	U-WAVE-T/BUZZER TYPE	\$220.00	<b>\$209.00</b>
02AZD810D	U-WAVE-R	\$499.00	<b>\$474.05</b>
02AZD790A	U-WAVE CONNECTING CABLE A	\$110.00	<b>\$104.50</b>
02AZD790B	U-WAVE CONNECTING CABLE B	\$110.00	<b>\$104.50</b>
02AZD790C	U-WAVE CONNECTING CABLE C	\$110.00	<b>\$104.50</b>
02AZD790D	U-WAVE CONNECTING CABLE D	\$110.00	<b>\$104.50</b>
02AZD790E	U-WAVE CONNECTING CABLE E	\$110.00	<b>\$104.50</b>
02AZD790F	U-WAVE CONNECTING CABLE F	\$110.00	<b>\$104.50</b>
02AZD790G	U-WAVE CONNECTING CABLE G	\$110.00	<b>\$104.50</b>



02AZD810D



Purchase the world's first 5μinch /0.1μm resolution micrometer and receive a USB input tool and cable (\$280 value)

Using precision digital measuring tools together with a USB input tool improves both measurement results and data reliability. The latest version of digimatic output, d2, allows output to a resolution of 1 millionths of an inch. The high-accuracy MDH with 5 millionths resolution can be output in its entirety in both inch and metric. Resulting data can be input directly to Excel, MeasurLink® or other SPC programs.

To receive this special offer, use promo code: **PROMO026**.

Part #	Description	List Price
<b>PROMO026</b>	Package: MDH Mic, SPC Cable, USB Input Tool	<b>\$1,630.00</b>
<b>293-130-10</b>	MDH Micrometer with high accuracy, high resolution output	\$1,630.00
<b>05CZA662</b>	SPC CONNECTING CABLE (1M)	\$83.80
<b>264-016-10</b>	USB INPUT TOOL	\$197.00



High accuracy, High Resolution MDH Micrometer with new d2 output

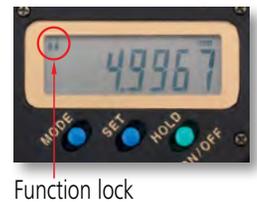
- >Enabling .000005"/0.0001mm resolution measurement, this micrometer is ideal for those who need to make highly accurate measurements with a handheld tool.
- >The ABS (absolute) rotary sensor eliminates the need to perform origin setting each time the power is turned on, allowing you to start measuring right away. With no possibility of overspeed errors, the high-accuracy digimatic micrometer delivers a higher level of reliability.
- >Certificate of inspection provided.



Specifications

Order No.	Range	Resolution	Accuracy
<b>293-130-10</b>	0 - 1" / 0 - 25.4mm	.000005"/.00002" 0.0001mm/0.0005mm (switchable)	±.00002"

Model	Display	Output	Format
Standard Micrometer	.01235	.01235	Digimatic
MDH Micrometer w/d2	.012345	.012345	Digimatic d2



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September 10 – 15, 2018  
McCormick Place | Chicago, IL  
**VISIT US AT BOOTH 135215**

Prices effective September 10 through December 21, 2018

## ABSOLUTE Coolant-Proof Calipers

- > Sealed housing is IP-67 rated, meaning it's immune to the coolants, dirt, grit and chips found in many manufacturing environments.
- > Easy to use - no need to wipe or clean the scale.
- > .0005"/0.01mm resolution with  $\pm 0.001$ " accuracy.
- > Automatic power-on/off.
- > Certificate of inspection provided.

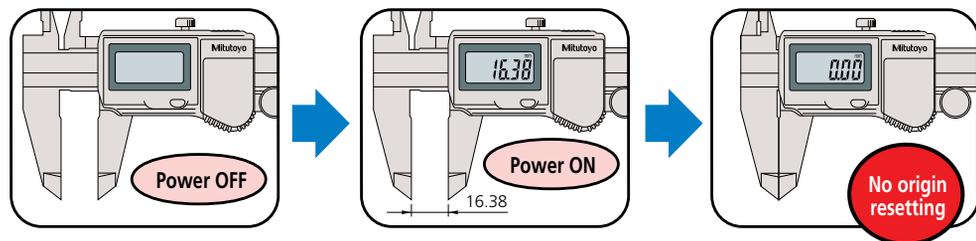


**COOLANT PROOF™**

COMPATIBLE WITH  
**U-WAVE fit**



Built-in ABS (absolute) scale means these calipers are ready to use immediately after power-on without origin resetting. It's as easy as vernier caliper measurements.



Order No.	Range	List	Promo
<b>Non-Output Style</b>			
500-752-20	0-6"/0-150mm	\$209.00	<b>\$198.55</b>
500-753-20	0-8"/0-200mm	\$280.00	<b>\$266.00</b>
500-754-10*	0-12"/0-300mm	\$484.00	<b>\$459.80</b>
<b>SPC Output Style</b>			
<b>fit</b> 500-762-20	0-6"/0-150mm	\$248.00	<b>\$235.60</b>
<b>fit</b> 500-763-20	0-8"/0-200mm	\$312.00	<b>\$296.40</b>
<b>fit</b> 500-764-10*	0-12"/0-300mm	\$537.00	<b>\$510.15</b>

\*  $\pm 0.0015$ " accuracy **fit** U-Wave Fit compatible SPC cable - 1m: **05CZA624** 2m: **05CZA625**



**COOLANT PROOF™ IP67**

COOLANTPROOF is the universal term of Mitutoyo Digimatic Small Tool Instruments that are free from measurement error and physical deterioration due to routine exposure to water, cutting oil or coolant. This high performance is achieved by using encoders that are inherently immune to contamination, where exposure is inevitable, combined with comprehensive sealing techniques and extremely oil-resistant materials to guarantee a long working life under normal operating conditions.

## Digimatic Carbon Fiber Caliper



**IP66 SPC ABSOLUTE™**  
Absolute System Powered by MITUTOYO

Order No.	Range	Accuracy	Resolution	List	Promo
552-312-10	0(.5")-18"	+/- .002"	.0005"/0.01mm	\$947.00	<b>\$899.65</b>
552-313-10	0(.5")-24"	+/- .002"	.0005"/0.01mm	\$1,060.00	<b>\$1,007.00</b>
552-314-10	0(1")-40"	+/- .002"	.0005"/0.01mm	\$1,890.00	<b>\$1,795.50</b>
552-315-10	0(1")-60"	+/- .004"	.0005"/0.01mm	\$2,260.00	<b>\$2,147.00</b>
552-316-10	0(1")-80"	+/- .005"	.0005"/0.01mm	\$3,540.00	<b>\$3,363.00</b>

SPC cable - 1m: **05CZA624** 2m: **05CZA625**

- > Lightweight Digimatic Calipers that employ CFRP (Carbon Fiber Reinforced Plastics) in the beam and jaws.
- > Highly durable and easy to handle.
- > Direct readout of ID measurements from the LCD. (Offset value can be set easily by pressing the Offset key.)
- > Preset function for setting a desired starting point.
- > With SPC data output.
- > Special models available with ceramic jaws which are suitable for measuring abrasive and magnetic products.
- > Can be used in workshop conditions exposed to coolant, water, dust or oil.
- > Incorporates absolute measurement system.
- > Automatic power-on/off.

### ABSOLUTE Digimatic Calipers

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- > Electromagnetic inductive sensor improves environmental resistance against dirt, water and oil.
- > A battery life of approximately 3.5 years has been achieved under normal use through the adoption of Mitutoyo's ABSOLUTE scale.
- > The slider configuration features an ergonomic, thumb-friendly shape.
- > Step-measurement capable.
- > The data output function allows integration into statistical process control and measurement systems.
- > Display character height: 9mm
- > AOS applies to 4", 6" and 8" models
- > Resolution: .0005"/0.01mm



www.mitutoyo.com/aoscd  
VIDEO DEMO

COMPATIBLE WITH  
**U-WAVE fit**



500-171-30



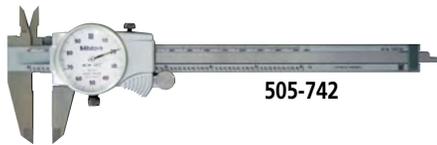
AOS: Advanced Onsite Sensor

Order No.	Range	Remarks	List	Promo
<b>No SPC Output Style</b>				
500-195-30	0-4"/0-100mm	.075" round depth bar	\$144.00	\$136.80
500-196-30	0-6"/0-150mm		\$156.00	\$148.20
500-197-30	0-8"/0-200mm		\$224.00	\$212.80
500-193	0-12"/0-300mm		\$450.00	\$427.50
<b>With SPC Output Style</b>				
<b>fit</b> 500-170-30	0-4"/0-100mm	.075" Round depth bar	\$172.00	\$163.40
<b>fit</b> 500-171-30	0-6"/0-150mm		\$183.00	\$173.85
<b>fit</b> 500-172-30	0-8"/0-200mm		\$241.00	\$228.95
<b>fit</b> 500-173	0-12"/0-300mm		\$525.00	\$498.75
500-505-10	0-18"/0-450mm	without thumb roller	\$819.00	\$778.05
500-506-10	0-24"/0-600mm	without thumb roller	\$900.00	\$855.00
500-507-10	0-40"/0-1000mm	without thumb roller	\$1,740.00	\$1,653.00

**fit** U-Wave Fit compatible

SPC cable with data switch - 1m: 959149 2m: 959150

### Dial Calipers



505-742

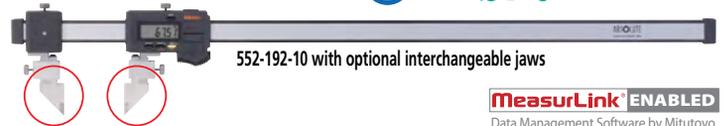
- > Smooth sliding with high shock protection.
- > Lock screw for dial bezel and for holding the sliding jaw position.
- > Can measure OD, ID, depth and steps.
- > Models available with carbide-tipped OD and ID jaws.

Order No.	Range	Remarks	List	Promo
505-742	6" .100"/rev.		\$121.00	\$108.90
505-738	6" .100"/rev.	carbide-tipped jaws	\$207.00	\$186.30
505-740	6" .200"/rev.		\$111.00	\$99.90
505-743	8" .100"/rev		\$177.00	\$159.30
505-746	12" .100/rev		\$281.00	\$252.90
505-749	12" .200/rev		\$261.00	\$234.90
505-742-56	6" .100"/rev.	black dial face	\$121.00	\$108.90

Prices effective September 10 through December 21, 2018

### Coolant-Proof Carbon Fiber Caliper with Interchangeable Jaws

- > The range of applications can be expanded by using interchangeable jaws (optional).
- > Quick and easy change of jaws due to the unique clamping mechanism. (A pair of clamping wheels is a standard accessory.)
- > Provided with preset function for setting a desired starting point, which allows direct readout of offset measurements.
- > Resolution: .0005"/0.01mm



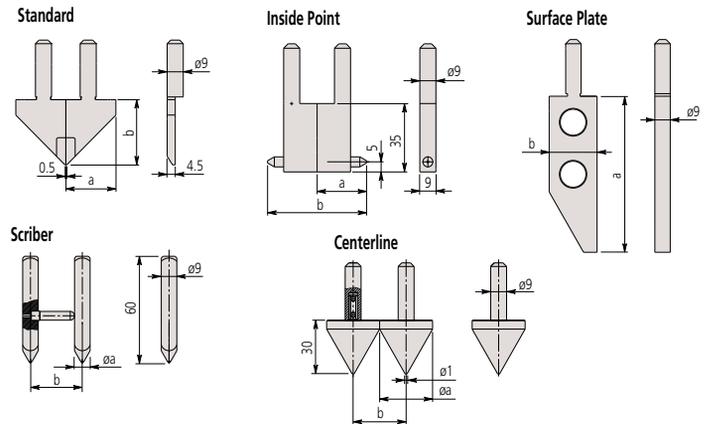
552-192-10 with optional interchangeable jaws

**MeasurLink** ENABLED  
Data Management Software by Mitutoyo

Order No.	Range	Accuracy	List	Promo
552-191-10	0 - 18" / 0 - 450mm	±.002"	\$910.00	\$864.50
552-192-10	0 - 24" / 0 - 600mm	±.002"	\$940.00	\$893.00
552-193-10	0 - 40" / 0 - 1000mm	±.002"	\$1,510.00	\$1,434.50
552-194-10	0 - 60" / 0 - 1500mm	±.004"	\$2,450.00	\$2,327.50
552-195-10	0 - 80" / 0 - 2000mm	±.005"	\$3,430.00	\$3,258.50

SPC cable with data switch - 1m: 05CZA624 2m: 05CZA625

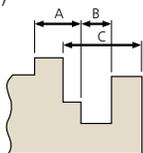
### Interchangeable Jaws (optional)



Order No.	Components	a	b	List	Promo
<b>Standard</b>					
07CZA056	Right (07CAA044), Left (07CAA045)	28mm (1.1")	30mm (1.2")	\$308.00	\$292.60
<b>Inside Point</b>					
07CZA058	07CZA041 x 2pcs.	25mm	50mm	\$317.00	\$301.15
07CZA059	07CZA048 x 2pcs.	1"	2"	\$342.00	\$324.90
<b>Scriber</b>					
07CZA055	Right (07CZA042), Left (07CZA043)	8mm	30mm	\$335.00	\$318.25
07CZA061	Right (07CZA042), Left (07CZA049)	.31"	1.2"	\$342.00	\$324.90
<b>Surface Plate</b>					
07CZA044		3.5" / 90mm	1.1" / 28mm	\$267.00	\$253.65
<b>Centerline</b>					
07CZA057	07CZA039 x 2pcs.	30mm	30mm	\$342.00	\$324.90
07CZA060	07CZA047 x 2pcs.	1.2"	1.2"	\$317.00	\$301.15

## Offset Caliper

- Main scale jaw can slide up and down to facilitate measurement of stepped sections. (Hard-to-reach dimensions such as A, B, C can be accurately measured.)
- With depth bar.
- With SPC data output.



573-701-20

**MeasurLink** ENABLED Data Management Software by Mitutoyo **IP67** **SPC** **ABSOLUTE** Absolute System Powered by MITUTOYO

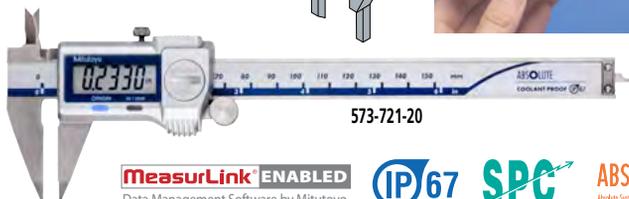
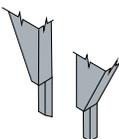
Order No.	Range	Accuracy	Resolution	List	Promo
<b>fit</b> 573-701-20	0 - 6" / 0 - 150mm	±.001"	.0005" / 0.01mm	\$464.00	<b>\$440.80</b>
<b>fit</b> 573-702-20	0 - 8" / 0 - 200mm	±.001"	.0005" / 0.01mm	\$532.00	<b>\$505.40</b>
<b>fit</b> 573-704	0 - 12" / 0 - 300mm	±.0015"	.0005" / 0.01mm	\$714.00	<b>\$678.30</b>

**fit** U-Wave Fit compatible

SPC cable with data switch - 1m: **05CZA624** 2m: **05CZA625**

## Point Caliper

- Narrow tip jaws fit into very small grooves and tracks, making many previously difficult outside measurements easier to obtain.
- With depth bar.
- With SPC data output.



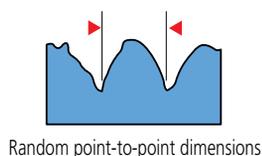
573-721-20

**MeasurLink** ENABLED Data Management Software by Mitutoyo **IP67** **SPC** **ABSOLUTE** Absolute System Powered by MITUTOYO

Order No.	Range	Accuracy	Resolution	List	Promo
<b>fit</b> 573-721-20	0 - 6" / 0 - 150mm	±.001"	.0005" / 0.01mm	\$407.00	<b>\$386.65</b>
<b>fit</b> 573-725-20*	0 - 6" / 0 - 150mm	±.001"	.0005" / 0.01mm	\$505.00	<b>\$479.75</b>

\* Extended tips **fit** U-Wave Fit compatible

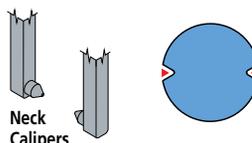
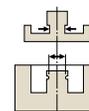
SPC cable with data switch - 1m: **05CZA624** 2m: **05CZA625**



Random point-to-point dimensions

## Neck Caliper

- Point-jaw type can measure wall thickness inside bores and recesses.
- Flat-jaw type can measure grooves and recesses.
- With SPC data output.



Neck Calipers

**MeasurLink** ENABLED Data Management Software by Mitutoyo



573-751-20

**IP67** **SPC** **ABSOLUTE** Absolute System Powered by MITUTOYO

Order No.	Range	Accuracy	Resolution	List	Promo
<b>fit</b> 573-751-20	0 - 6" / 0 - 150mm	±.0015"	.0005" / 0.01mm	\$667.00	<b>\$633.65</b>
<b>fit</b> 573-752-20*	0 - 6" / 0 - 150mm	±.0015"	.0005" / 0.01mm	\$802.00	<b>\$761.90</b>

\*Point jaw **fit** U-Wave Fit compatible

SPC cable with data switch - 1m: **05CZA624** 2m: **05CZA625**

## Low-Force Caliper

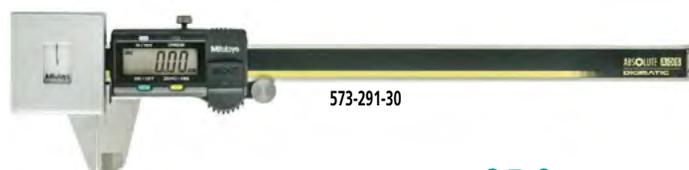
- Due to the low measuring force, these calipers are ideal for elastic or resilient workpieces such as plastic parts and rubber parts that standard calipers can't measure consistently.
- With SPC data output.



### Measurement procedures



To measure resilient workpieces, take the measurement when the pointer is between the two index lines.



573-291-30

**MeasurLink** ENABLED Data Management Software by Mitutoyo **SPC** **ABSOLUTE** Absolute System Powered by MITUTOYO

Order No.	Range	Accuracy	Resolution	List	Promo
<b>fit</b> 573-291-30	0 - 7" / 0 - 180mm	±.002"	.0005" / 0.01mm	\$820.00	<b>\$779.00</b>

**fit** U-Wave Fit compatible

SPC cable with data switch - 1m: **959149** 2m: **959150**

### Digimatic Caliper with Nib-Style Jaws

- > The rounded faces of the jaws are ideal for accurate ID (inside diameter) measurement.
- > With SPC output.



550-341-10

**MeasurLink** ENABLED  
Data Management Software by Mitutoyo

**IP67** **SPC** **ABSOLUTE**  
Absolute System Powered by MI01010

SPC cable with data switch – 1m: **05CZA624** 2m: **05CZA625**

Order No.	Range*	Accuracy	Resolution	List	Promo
<b>fit</b> 550-311-20	0 (.4") - 8" / 0 (10) - 200mm	±.001"	.0005" / 0.01mm	\$525.00	<b>\$498.75</b>
<b>fit</b> 550-341-10	0 (.4") - 12" / 0 (10) - 300mm	±.0015"	.0005" / 0.01mm	\$763.00	<b>\$724.85</b>
550-223-10**	0 (.5") - 18" / 0 (20) - 450mm	±.002"	.0005" / 0.01mm	\$956.00	<b>\$908.20</b>
550-225-10**	0 (.5") - 24" / 0 (20) - 600mm	±.002"	.0005" / 0.01mm	\$1,070.00	<b>\$1,016.50</b>
550-227-10**	0 (1") - 40" / 0 (20) - 1000mm	±.003"	.0005" / 0.01mm	\$1,910.00	<b>\$1,814.50</b>

\* ( ) : Minimum dimension in ID measurement \*\*Models are not IP67 rated **fit** U-Wave Fit compatible

### Digimatic Caliper with Nib and Standard Jaws

- > The rounded faces of the jaws are ideal for accurate ID (inside diameter) measurement.
- > With SPC output.



551-224-10

**MeasurLink** ENABLED  
Data Management Software by Mitutoyo

**IP67** **SPC**

SPC cable with data switch – 1m: **05CZA624** 2m: **05CZA625**

Order No.	Range*	Accuracy	Resolution	List	Promo
<b>fit</b> 551-311-20	0 (.4") - 8" / 0 (10) - 200mm	±.001"	.0005" / 0.01mm	\$579.00	<b>\$550.05</b>
<b>fit</b> 551-341-10	0 (.4") - 12" / 0 (10) - 300mm	±.002"	.0005" / 0.01mm	\$829.00	<b>\$787.55</b>
551-224-10**	0 (.5") - 20" / 0 (20) - 500mm	±.0025"	.0005" / 0.01mm	\$1,220.00	<b>\$1,159.00</b>
551-226-10**	0 (.5") - 30" / 0 (20) - 750mm	±.0025"	.0005" / 0.01mm	\$1,980.00	<b>\$1,881.00</b>
551-227-10**	0 (1") - 40" / 0 (20) - 1000mm	±.003"	.0005" / 0.01mm	\$2,080.00	<b>\$1,976.00</b>

\* ( ) : Minimum dimension in ID measurement **fit** U-Wave Fit compatible  
\*\* Models are not IP67 rated

### Inside Caliper Knife-Edge/Inside Groove/Point Jaw

- > Special ID jaw calipers are designed for difficult-to-measure areas, such as ID grooves or recessed areas.
- > With SPC data output.



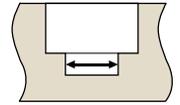
**IP67** **SPC** **ABSOLUTE**  
Absolute System Powered by MI01010

#### Knife edge



573-742-20

Measurable min. hole diameter:  $\phi$ .4"



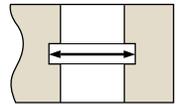
**MeasurLink** ENABLED  
Data Management Software by Mitutoyo

#### Inside groove



573-745-20

Measurable min. hole diameter:  $\phi$ .4"



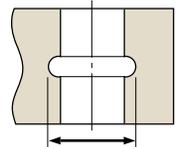
**MeasurLink** ENABLED  
Data Management Software by Mitutoyo

#### Point jaw

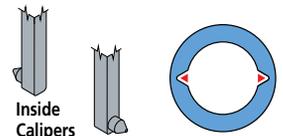


573-746-20

Measurable min. hole diameter:  $\phi$ .8"



**MeasurLink** ENABLED  
Data Management Software by Mitutoyo



Order No.	Range	Accuracy	List	Promo
<b>fit</b> 573-742-20	.4" - 8" / 10-200mm	±.002"	\$910.00	<b>\$864.50</b>
<b>fit</b> 573-745-20	.4" - 6" / 10-150mm	±.002"	\$727.00	<b>\$690.65</b>
<b>fit</b> 573-746-20	.8" - 6" / 20-150mm	±.0015"	\$883.00	<b>\$838.85</b>

**fit** U-Wave Fit compatible

SPC cable with data switch – 1m: **05CZA624** 2m: **05CZA625**

## Dial Test Indicators



Contact point length is printed on dial face to avoid accuracy issues

Part #	Range	Graduations	Set Type	Face Color	List	Promo	Remarks
<b>Standard</b>							
513-401-10E	.14"	0.001mm	Basic	Yellow	\$221.00	\$198.90	
513-402-10E	.03"	.0005"	Basic	White	\$130.00	\$117.00	
513-402-10T	.03"	.0005"	Full	White	\$154.00	\$138.60	
513-403-10E	.008"	.0001"	Basic	White	\$169.00	\$152.10	
513-403-10T	.008"	.0001"	Full	White	\$198.00	\$178.20	
513-404-10E	0.8mm	0.01mm	Basic	Yellow	\$132.00	\$118.80	
513-404-10A	0.8mm	0.01mm	Plus	Yellow	\$145.00	\$130.50	
513-404-10T	0.8mm	0.01mm	Full	Yellow	\$155.00	\$139.50	
513-405-10E	0.2mm	0.002mm	Basic	Yellow	\$146.00	\$131.40	
513-405-10T	0.2mm	0.002mm	Full	Yellow	\$191.00	\$171.90	
513-406-10E	.03"/0.7mm	.0005"/0.01mm	Basic	White/Yellow	\$152.00	\$136.80	
513-406-10T	.03"/0.7mm	.0005"/0.01mm	Full	White/Yellow	\$169.00	\$152.10	
513-409-10E	0.2mm/.0076"	0.002mm/.0001"	Basic	Yellow/White	\$196.00	\$176.40	
513-409-10T	0.2mm/.0076"	0.002mm/.0001"	Full	Yellow/White	\$199.00	\$179.10	
513-412-10E	.03"	.0005"	Basic	White	\$186.00	\$167.40	
513-412-10T	.03"	.0005"	Full	White	\$215.00	\$193.50	
513-415-10E	1.0mm	0.01mm	Basic	Yellow	\$140.00	\$126.00	Long stylus
513-415-10H	1.0mm	0.01mm	Basic	Yellow	\$153.00	\$137.70	Long stylus
<b>Ruby Tip</b>							
513-472-10E	.03"	.0005"	Basic	White	\$145.00	\$130.50	
513-479-10E	.03"	.0005"	Basic	White	\$153.00	\$137.70	Long stylus
<b>Standard (20° tilted face)</b>							
513-442-10A	.06"	.0005"	Basic	White	\$176.00	\$158.40	
513-442-10T	.06"	.0005"	Full	White	\$199.00	\$179.10	
513-442-16A	.06"	.0005"	Basic	Black	\$176.00	\$158.40	
513-442-16T	.06"	.0005"	Full	Black	\$199.00	\$179.10	
513-443-10A	.016"	.0001"	Basic	White	\$221.00	\$198.90	
513-443-10T	.016"	.0001"	Full	White	\$251.00	\$225.90	
513-446-16A	.06"	.0005"	Basic	Black	\$235.00	\$211.50	
513-446-16T	.06"	.0005"	Full	Black	\$265.00	\$238.50	
513-446-10A	.06"	.0005"	Basic	White	\$235.00	\$211.50	Long stylus
513-446-10T	.06"	.0005"	Full	White	\$265.00	\$238.50	Long stylus
<b>Vertical: dial is on the top of the frame</b>							
513-452-10E	.03"	.0005"	Basic	White	\$169.00	\$152.10	
513-452-10T	.03"	.0005"	Full	White	\$186.00	\$167.40	
513-453-10E	.008"	.0001"	Basic	White	\$201.00	\$180.90	
<b>Parallel: dial is on the side of the frame</b>							
513-485-10E	0.2mm	0.002mm	Basic	Yellow	\$215.00	\$193.50	

## Set Configuration

### Inch

**Full set**

Contact point, .039" DIA. carbide  
 Contact point, .118" DIA. carbide  
 Stem, .157" DIA. (21CAB106)  
 Swivel clamp (900322 for .157" DIA., 3/8" DIA. dovetail)  
 Inch holding bar (L: 4") (900306)

**Basic set**

Contact point, .079" DIA. (Carbide)  
 Indicator  
 Knurled clamp ring  
 Stem, .157" DIA. (21CAB106)  
 Stem, 3/8" DIA.

**T set**

**E, A set**

### Metric

**Full set**

Swivel clamp (900321 for ø4mm, ø8mm, dovetail)  
 Metric holding bar (L: 100mm) (900209)

**Plus set**

Contact point, ø1mm carbide  
 Contact point, ø3mm carbide  
 Stem, ø4mm (21CAB106)

**Basic set**

Contact point, ø2mm (Carbide)  
 Indicator  
 Knurled clamp ring  
 Stem, ø8mm (Set No. 902804)

**T set**

**A set**

**C set** (ø 6 Stem)

**E set**

**H set** (ø 6 Stem)

### Calculation-Type Digimatic Indicator ID-C

- > The Absolute Digimatic indicator performs internal calculations using the formula  $Ax+B+Cx-1$  (assuming spindle displacement as  $x$ ), while the specified coefficients A, B and C can be set with respect to the purpose of measurement or dimensions of the fixtures. This unique feature allows for reading measurements directly, without fumbling for conversions.
- > Calculation-Type Digimatic Indicator features both a key lock and parameter lock.
- > Fast measurement frequency up to 50 per second.
- > An analog bar provides easy-to-read values when scanning for Max, Min and TIR Values.

- > Improved parameter setting software makes it even easier to set all of the available parameters and determine and upload the proper coefficients for calculation. (optional) **21EZA313**



**MeasurLink** ENABLED  
Data Management Software by Mitutoyo



www.mitutoyo.com/dccal  
VIDEO DEMO



543-342B

Stem dia. 3/8" #4-48 UNF Thread

Order No.	Resolution	Range	Accuracy	Measuring Force	List	Promo
<b>543-342B</b>	.00005/.0001/.0005"	.5"/12.7mm	±.00010"/0.003mm	1.5N or less	\$445.00	<b>\$400.50</b>
<b>543-592B</b>	(0.001/0.01mm)	1"/25.4mm	±.00010"/0.003mm	1.8N or less	\$596.00	<b>\$536.40</b>
<b>543-597B</b>	Selectable	2"/50.8mm	±.00025"/0.006mm	2.3N or less	\$748.00	<b>\$673.20</b>

SPC cable – 1m: **905338** 2m: **905409**



Installed on optional bore gage probe (page 14)

### Bore Gage ABSOLUTE Digimatic Indicator ID-C

- > Hold automatically picks up hole diameter after a sweep.
- > Bore Gage Digimatic Indicator features both a key lock and parameter lock.
- > Fast measurement frequency up to 50 per second.
- > An analog bar indicator is integrated to enhance the intuition in reading.
- > Up to three sets of master values and upper/lower tolerance values can be memorized.

- > Go/no-go judgment
- > Employing the ABSOLUTE linear encoder, the ID-C always displays the spindle Absolute Position from the origin at power-on.
- > Improved parameter setting software makes it even easier to set all of the available parameters and determine and upload the proper coefficients for calculation. (optional) **21EZA313**

**MeasurLink** ENABLED  
Data Management Software by Mitutoyo



543-312B

Order No.	Resolution	Range	Accuracy	Measuring Force	List	Promo
<b>543-312B</b>	.00005/.0001/.0005"	.5"/12.7mm	±.00010"/0.003mm	1.5N or less	\$445.00	<b>\$400.50</b>

SPC cable – 1m: **905338** 2m: **905409**



### Peak Hold ABSOLUTE Digimatic Indicator ID-C

With Max./Min. Value Holding Function

- > Peak Hold Digimatic Indicator features both a Key Lock and Parameter Lock.
- > An analog bar provides easy-to-read values when scanning for Max, Min and TIR Values.
- > Go/no-go judgment
- > The maximum, minimum or runout value can be displayed during measurement.

- > Fast measurement frequency up to 50 per second.
- > Employing the ABSOLUTE linear encoder, the Signal ID-C always displays the spindle Absolute Position from the origin at power-on.
- > Improved parameter setting software makes it even easier to set all of the available parameters and determine and upload the proper coefficients for calculation. (optional) **21EZA313**

**MeasurLink** ENABLED  
Data Management Software by Mitutoyo



543-302B

Order No.	Resolution	Range	Accuracy	Remarks	List	Promo
<b>Stem dia. 3/8", #4-48 UNF Thread</b>						
<b>543-302</b>	.00005/.0001/.0005"	.5"/12.7mm	±.00010"/0.003mm	w/lug	\$445.00	<b>\$400.50</b>
<b>543-302B</b>	(0.001/0.01mm)	.5"/12.7mm	±.00010"/0.003mm	Flat-back	\$445.00	<b>\$400.50</b>
	Selectable					

SPC cable – 1m: **905338** 2m: **905409**



Prices effective September 10 through December 21, 2018

## Digimatic Indicator ID-H

Remote Programming Capable

- > This digital indicator offers the excellent accuracy and functionality expected from this class of indicator. Take advantage of its high accuracy backed up by 0.5µm / .00002" resolution, remote control functionality via a handheld controller (or an RS-232C interface) and easy runout measurements with the well-established analog bar display.
- > The maximum, minimum or runout value can be displayed during measurement.
- > Go/no-go judgment is performed by setting the upper and lower tolerances. If a judgment result is out of tolerance, the display backlighting changes from green to red, so tolerance judgment can be made at a glance.
- > With RS-232C input/output

Stem dia. 3/8" #4-48 UNF Thread

Order No.	Resolution	Range	Model	Accuracy	List	Promo
543-562A	.00002", .00005", .0001", 0.0005mm,	1.2" / 30.4mm	ID-H530E	0.0015mm	\$883.00	<b>\$794.70</b>
543-564A	0.001mm	2.4" / 60.9mm	ID-H560E	0.0025mm	\$1,050.00	<b>\$945.00</b>

SPC cable – 1m: 936937 2m: 965014

21EZA099  
Remote controller  
(optional)



543-564A



MeasurLink ENABLED  
Data Management Software by Mitutoyo

## ABSOLUTE Digimatic Indicator ID-F

- > With the ABSOLUTE linear encoder technology, once the measurement reference point has been preset, it will not be lost when the power is turned on.
- > Go/no-go judgment is performed by setting the upper and lower tolerances. If a judgment result is out of tolerance, the display backlighting changes from green to red, so tolerance judgment can be made at a glance.
- > The maximum, minimum or runout value can be displayed during measurement.
- > An analog bar indicator has been integrated to handle upper/lower limit approaching and zero approaching. It enhances the ease of operation in the same manner as a dial indicator. The display range of the analog bar can be changed.



Stem dia. 3/8" #4-48 UNF Thread

Order No.	Resolution	Range	Model	Accuracy	List	Promo
543-552A	.00005", .0001", .0005", .001", 0.001mm,	1" / 25.4mm	ID-F125E	.00012"	\$667.00	<b>\$600.30</b>
543-558A	0.01mm	2" / 50.8mm	ID-F150HE	.00012"	\$773.00	<b>\$695.70</b>

SPC cable – 1m: 936937 2m: 965014



543-552A



543-558A



MeasurLink ENABLED  
Data Management Software by Mitutoyo

## ABSOLUTE Digimatic Indicator ID-U

- > Slim digital indicator with low price.
- > Large LCD and simple key operation.
- > After the initial origin setting, the ID-U no longer needs absolute positioning over the entire battery life; the origin is remembered even after power-off.
- > Ideal for installation into measuring devices because of compact design and long battery life.
- > Employing the ABSOLUTE linear encoder, the ID-U always displays the spindle Absolute Position from the origin at power-on. Also unlimited response speed eliminates overspeed errors.
- > Flat-back type has no option for backs.

Order No.	Resolution	Range	Model	Accuracy	Measuring force	List	Promo
575-123	.0005"/0.01mm	1" / 25.4mm	ID-U1025E	.0008"	1.8N or less	\$195.00	<b>\$175.50</b>

SPC cable – 1m: 905338 2m: 905409



575-123



MeasurLink ENABLED  
Data Management Software by Mitutoyo

### ABSOLUTE Digimatic Indicator ID-S

- > Employing the ABSOLUTE linear encoder, the ID-S always displays the spindle Absolute Position from the origin at power-on. Also unlimited response speed eliminates overspeed errors.
- > Dust/Water protection level: IP42 (IP53: **543-794B, 543-795B, 543-796B**)
- > SPC data output.



**MeasurLink** ENABLED  
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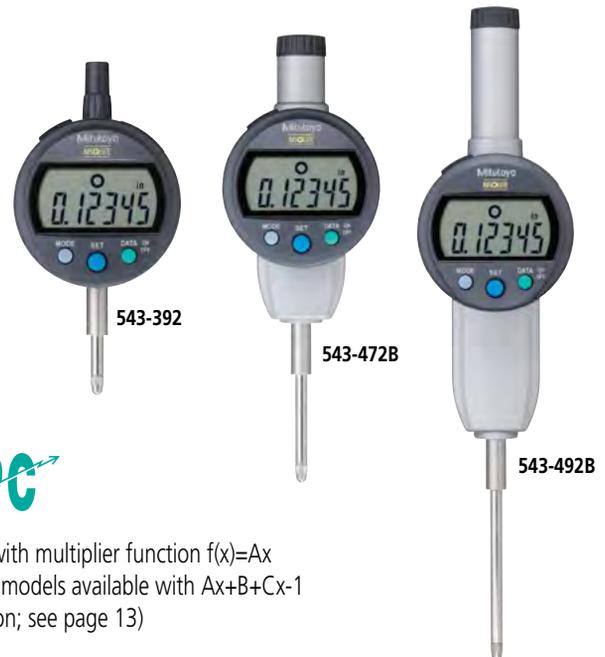
Order No.	Resolution	Range	Accuracy	Measuring force	Remarks	List	Promo
<b>Stem dia. 3/8", #4-48 UNF Thread</b>							
543-792	.00005"/0.001mm	.5" / 12.7mm	±.0001"	1.5N or less	w/ lug back	\$273.00	<b>\$259.00</b>
543-796	.00005"/0.001mm	.5" / 12.7mm	±.0001"	2.5N or less	w/ lug back	\$301.00	<b>\$285.00</b>
543-793	.0001"/0.001mm	.5" / 12.7mm	±.0001"	1.5N or less	w/ lug back	\$273.00	<b>\$260.00</b>
543-783	.0005"/0.01mm	.5" / 12.7mm	±.0010"	1.5N or less	w/ lug back	\$177.00	<b>\$168.00</b>
543-792B	.00005"/0.001mm	.5" / 12.7mm	±.0001"	1.5N or less	w/ flat-back	\$273.00	<b>\$259.00</b>
543-796B	.00005"/0.001mm	.5" / 12.7mm	±.0001"	2.5N or less	w/ flat-back	\$301.00	<b>\$286.00</b>
543-793B	.0001"/0.001mm	.5" / 12.7mm	±.0001"	1.5N or less	w/ flat-back	\$273.00	<b>\$259.00</b>
543-783B	.0005"/0.01mm	.5" / 12.7mm	±.0010"	1.5N or less	w/ flat-back	\$177.00	<b>\$168.00</b>
<b>Stem ø 8mm, M2.5 x 0.45 Thread</b>							
543-791	.00005"/0.001mm	.5" / 12.7mm	±.0001"	1.5N or less	w/ lug back	\$282.00	<b>\$268.00</b>
543-795	.00005"/0.001mm	.5" / 12.7mm	±.0001"	2.5N or less	w/ lug back	\$310.00	<b>\$295.00</b>
543-782	.0005"/0.01mm	.5" / 12.7mm	±.001"	1.5N or less	w/ lug back	\$177.00	<b>\$168.00</b>
543-791B	.00005"/0.001mm	.5" / 12.7mm	±.0001"	1.5N or less	w/ flat-back	\$282.00	<b>\$268.00</b>
543-795B	.00005"/0.001mm	.5" / 12.7mm	±.0001"	2.5N or less	w/ flat-back	\$310.00	<b>\$295.00</b>
543-782B	.0005"/0.01mm	.5" / 12.7mm	±.001"	1.5N or less	w/ flat-back	\$177.00	<b>\$168.00</b>

SPC cable – 1m: 905338 2m: 905409

### IDC Digimatic Indicators

- > Absolute Encoder ensures all settings and readings maintained for the life of the battery (even when the power is turned off).
- > Preset, zero set, inch/mm, +/- direction and go/no-go functions.
- > Face rotates 330° for use at various angles.
- > Stem diameter: 3/8"
- > Immune to overspeed error.
- > SPC output provided.
- > Average battery life 7,000 hours using SR-44 battery (938882).

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Now with multiplier function  $f(x)=Ax$  (other models available with  $Ax+B+Cx-1$  function; see page 13)

Order No.	Range	Remarks	List	Promo
<b>.0005"/0.01mm Resolution</b>				
543-402	.500"/12.7mm	Lug Back	\$310.00	<b>\$294.50</b>
543-402B	.500"/12.7mm	Flat Back	\$310.00	<b>\$294.50</b>
543-476B	1"/25mm	Flat Back	\$454.00	<b>\$431.30</b>
543-496B	2"/50mm	Flat Back	\$597.00	<b>\$567.15</b>
<b>.00005"/.0001"/.0005"/0.001mm/0.01mm selectable resolutions</b>				
543-392	.500"/12.7mm	Lug Back	\$424.00	<b>\$402.80</b>
543-392B	.500"/12.7mm	Flat Back	\$424.00	<b>\$402.80</b>
543-472B	1"/25mm	Flat Back	\$568.00	<b>\$539.60</b>
543-492B	2"/50mm	Flat Back	\$713.00	<b>\$677.35</b>

Prices effective September 10 through December 21, 2018

SPC cable – 1m: 905338 2m: 905409

www.mitutoyo.com

## Bore Gages

- Carbide-tipped contact points for durability.
- The dial indicator is fully protected by a rugged cover.
- Optional extension rods can be attached for measuring deep holes.

See digimatic indicators for bore gages (page 13)



### Optional Accessories

- 953549:** 125mm / 4.92" Extension rod for 18-35mm / .7 - 1.4" models
- 953552:** 125mm / 4.92" Extension rod for 35-160mm / 1.4 - 6.5" models
- 953557:** 125mm / 4.92" Extension rod for 160-400mm / 6.5 - 16" models
- 953550:** 250mm / 9.84" Extension rod for 18-35mm / .7 - 1.4" models
- 953553:** 250mm / 9.84" Extension rod for 35-160mm / 1.4 - 6.5" models
- 952361:** 250mm / 9.84" Extension rod for 160-400mm / 6.5 - 16" models
- 953551:** 500mm / 19.69" Extension rod for 18-35mm / .7 - 1.4" models
- 953554:** 500mm / 19.69" Extension rod for 35-160mm / 1.4 - 6.5" models
- 953558:** 500mm / 19.69" Extension rod for 160-400mm / 6.5 - 16" models
- 953555:** 750mm / 29.53" Extension rod for 35-160mm / 1.4 - 6.5" models
- 953559:** 750mm / 29.53" Extension rod for 160-400mm / 6.5 - 16" models
- 953556:** 1000mm / 39.37" Extension rod for 35-160mm / 1.4 - 6.5" models
- 953560:** 1000mm / 39.37" Extension rod for 160-400mm / 6.5 - 16" models



511-751

Order No	Range	Graduation (Indicator)	Anvils	Spacers	List	Promo
511-751	.7 - 1.4"	.0001" (2923SB-10)	9	2	\$411.00	<b>\$369.90</b>
511-752	1.4 - 2.5"		6	4	\$401.00	<b>\$360.90</b>
511-753	2.0 - 6.0"		11 (2" sub anvil)	4	\$438.00	<b>\$394.20</b>
511-754	4.0 - 6.5"		13	4	\$579.00	<b>\$521.10</b>
511-755	6.5 - 10"		6	7	\$652.00	<b>\$586.80</b>
511-756	10 - 16"		5 (3" sub anvil)	7	\$776.00	<b>\$698.40</b>

## Digimatic Holtest

- TiN-coated measuring contact points provide excellent durability and impact resistance and allow the instrument to measure close to the bottom of blind holes ( up to 4"/100mm models).
- Large LCD readout.
- Functions available: Presetting, Zero/ABS, Auto power On/Off, Data hold, Data output, Error alarm, Battery replacement alarm.
- With ratchet stop for constant force.
- Measure deep holes by attaching an extension rod (optional).
- Setting rings are included in sets, but optional for individual gages.
- Supplied in fitted plastic case up to 4"/100mm. Over 4"/100mm supplied in wooden case.
- Resolution: .00005"/0.001mm (over 4" models: .0001"/0.001mm)

# SAVE 20%



468-263



468-274

**MeasurLink** ENABLED  
Data Management Software by Mitutoyo



www.mitutoyo.com/dholtest  
VIDEO DEMO



Order No	Range	Accuracy	List	Promo
468-261	.275 - .35" / 6.925 - 8.89mm	±.0001"	\$1,110.00	<b>\$888.00</b>
468-262	.35 - .425" / 8.89 - 10.795mm	±.0001"	\$1,110.00	<b>\$888.00</b>
468-263	.425 - .5" / 10.795 - 12.7mm	±.0001"	\$1,120.00	<b>\$896.00</b>
468-264	.5 - .65" / 12.7 - 16.51mm	±.0001"	\$1,220.00	<b>\$976.00</b>
468-265	.65 - .8" / 16.51 - 20.32mm	±.0001"	\$1,220.00	<b>\$976.00</b>
468-266	.8 - 1" / 20.32 - 25.4mm	±.00015"	\$1,250.00	<b>\$1,000.00</b>
468-267	1 - 1.2" / 25.4 - 30.48mm	±.00015"	\$1,250.00	<b>\$1,000.00</b>
468-268	1.2 - 1.6" / 30.48 - 40.64mm	±.00015"	\$1,280.00	<b>\$1,024.00</b>
468-269	1.6 - 2" / 40.64 - 50.8mm	±.00015"	\$1,290.00	<b>\$1,032.00</b>
468-270	2 - 2.5" / 50.8 - 63.5mm	±.00015"	\$1,400.00	<b>\$1,120.00</b>
468-271	2.5 - 3" / 63.5 - 76.2mm	±.00015"	\$1,400.00	<b>\$1,120.00</b>
468-272	3 - 3.5" / 76.2 - 88.9mm	±.00015"	\$1,420.00	<b>\$1,136.00</b>
468-273	3.5 - 4" / 88.9 - 101.6mm	±.00015"	\$1,440.00	<b>\$1,152.00</b>
468-274	4 - 5" / 101.6 - 127mm	±.0002"	\$1,880.00	<b>\$1,504.00</b>

### Optional Accessories

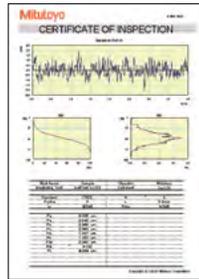
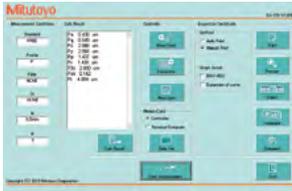
- 04AZB157:** Mounting plate for stand
- 156-101-10:** Stand
- 952322:** Extension rod 100mm / 3.94"  
For range 6-12mm / .275 - .5" models
- 952621:** Extension rod 150mm / 5.9"  
For range 12-20mm / .5" - .8" models
- 952622:** Extension rod 150mm / 5.9"  
For range 20-50mm / .8" - 2" models
- 952623:** Extension rod 150mm / 5.9"  
For range 50-300mm / 2" - 12" models



## Surftest SJ-210

- > The 2.4" color graphic, back-lit LCD gives you excellent readability.
- > Skid system gives you user friendly and intuitive menu navigation.
- > Performs roughness analysis conforming to various international standards (EN ISO, VDA, ANSI, JIS) and customized settings.
- > Calculation results, assessed profiles, bearing and amplitude curves can be displayed.
- > Support of 21 languages.

Free communication software SJ Tools can be downloaded at <http://www.mitutoyo.com>



## Surftest SJ-310

- > Skid system with touch-screen functionality and built-in printer.
- > Easy and intuitive menu navigation.
- > The large 5.7" color LCD gives you high visibility.
- > You can store up to 10 different measuring conditions inside the SJ-310, and up to 500 with an optional SD card.
- > Statistical analysis and colored tolerance judgement.
- > Comes with support for 16 languages.



## Surftest SJ-411

- > Skidless system with touch-screen functionality and built-in printer.
- > The large 5.7" color LCD gives you high visibility.
- > The skidless detector allows you to measure the primary profile (P), roughness profile (R), waviness profile (W) and more.
- > Surface compensation of curved, radial and tilted surfaces.
- > Comes with support for 16 languages.
- > Available options include an auto-set unit, X-axis fine adjustment and digital levelling unit.



Order No.	Description	List	Promo
178-561-02A	SJ-210 IN 4MN (STANDARD DRIVE UNIT)	\$2,430.00	<b>\$2,308.50</b>
178-563-02A	SJ-210 IN 4MN (R-DRIVE UNIT)	\$2,740.00	<b>\$2,603.00</b>
178-565-02A	SJ-210 IN 4MN (S-DRIVE UNIT)	\$4,680.00	<b>\$4,446.00</b>
178-571-02A	SJ-310 (INCH/MM, 4mN)	\$4,170.00	<b>\$3,961.50</b>
178-581-02A	SJ-411 (4MN INCH/MM)	\$7,790.00	<b>\$7,400.50</b>
178-583-02A	SJ-412 (INCH/MM, 4mN)	\$9,640.00	<b>\$9,158.00</b>

## 10% Off - Plus Complimentary Accredited Calibration\* (A2LA 0750.01) and Shipping\*\*

### Linear Height LH-600E

The Mitutoyo Linear Height LH-600E offers advanced performance for reliable and easy 2D measurement.

Measuring Range (stroke) 0-38" (24") / 0-972mm(600mm)

- > Excellent accuracy of  $(1.1+0.6L/600)\mu\text{m}$  with  $0.1\mu\text{m}/0.5\mu\text{m}$  resolution/repeatability.
- > Perpendicularity of  $5\mu\text{m}$  and straightness of  $4\mu\text{m}$  are guaranteed.
- > Pneumatic full/semi-floating system.
- > One-key operation for running a semi-automatic measurement.
- > Data entry from a Digimatic tool.



5.7" color LCD

**MeasurLink** ENABLED  
Data Management Software by Mitutoyo

Promo Price  
**\$7,632**

518-351A-21

Order No.  
**PROMO027**



standard

Promo Price  
**\$8,091**

518-352A-21

Order No.  
**PROMO028**



with power grip



\* Complimentary accredited calibration applies to orders placed September 10 through December 21, 2018. Mitutoyo America Corporation reserves the right to change or discontinue this offer at any time. This offer is void wherever prohibited or restricted by law. No cash value. Complimentary accredited calibration will be conducted prior to unit shipping and cannot be applied toward previously placed orders. Refer to our terms and conditions for further details.

\*\* Complimentary ground shipping for the 48 contiguous United States. Offer applies to orders placed September 10 through December 21, 2018. Mitutoyo America Corporation reserves the right to change or discontinue this offer at any time. This offer is void wherever prohibited or restricted by law.

No cash value. For Alaska and Hawaii special rates apply. Contact us for details. Complimentary shipping cannot be applied toward previously placed orders. Orders may only be shipped to a single address. If customer returns product, they are responsible for the shipping cost. Refer to our terms and conditions for further details.

## QM-Height High-Precision ABSOLUTE Digital Height Gage

- > High-accuracy / high-resolution ABSOLUTE linear encoder for position detection
- > High-accuracy –  $\pm(2.4 + 2.1L / 600)\mu\text{m}$
- > Pneumatic flotation system / positioning grip – allows for smooth movement along surface plate (select models)
- > Large, stationary display panel with user-friendly icon control keys and go/no-go LED indicator
- > Digital and USB output: Supports Mitutoyo wireless SPC output
- > Long battery life with standard AA batteries (4) – Up to 300 hours (80 hours with regular use of pneumatic flotation function)
- > Fully compatible with existing Mitutoyo Digimatic peripherals (SPC cables, U-Wave wireless transmitters, multiplexers, etc.)

### Go/ $\pm$ NG judgment by LED (red, orange, green) and measurement examples

- > LEDs are activated at the time of tolerance judgment – green for Go, red for +NG, and orange for -NG. -NG, GO and +NG also appear on the LCD.

Order No.	Range	Resolution	Remarks	List	Promo
<b>64PKA094A</b>	0 - 14" / 0 - 350mm	0.001mm / 0.0005mm /.00005" / .0001"	Pneumatic Flotation System	\$3,990.00	<b>\$3,591.00</b>
<b>64PKA095A</b>	0 - 24" / 0 - 600mm			\$4,490.00	<b>\$4,041.00</b>
<b>64PKA129A</b>	0 - 14" / 0 - 350mm			\$4,490.00	<b>\$4,041.00</b>
<b>64PKA130A</b>	0 - 24" / 0 - 600mm			\$4,990.00	<b>\$4,491.00</b>



**MeasurLink** ENABLED  
Data Management Software by Mitutoyo

## Digimatic Height Gages (Multi-Function)

Now with two resolutions (.0002"/.0005"), two-value preset memory and increased character height for easier viewing.

- > Highly versatile, multi-function type.
- > Carbide-tipped long scriber is provided.
- > Rigid construction ensures repeatable measurement.
- > Switchable resolution.
- > Coarse/fine feed switching.
- > With SPC data output.
- > Two preset reference heights.
- > Inclined handle improves slider ergonomics.
- > Zero/ABS setting (ABS and INC modes)
- > Two-value preset memory
- > Data/hold
- >  $\pm$  Counting
- > Inch/mm conversion



192-670-10

**MeasurLink** ENABLED  
Data Management Software by Mitutoyo

Order No.	Range	Resolution	Accuracy	List	Promo
<b>192-670-10</b>	0-12" / 0-300mm	.0005" (0.01mm)	$\pm 001"$	\$1,770.00	<b>\$1,681.50</b>
<b>192-671-10</b>	0-18" / 0-450mm	[.0002" (0.005mm) Switchable]	$\pm 0015"$	\$2,280.00	<b>\$2,166.00</b>
<b>192-672-10</b>	0-24" / 0-600mm	[.0002" (0.005mm) Switchable]	$\pm 0015"$	\$2,920.00	<b>\$2,774.00</b>

## Dial Height Gages

Double-column structure ensures high measuring accuracy. Coarse/fine feed switching. Carbide-tipped scriber.

- > Easy and error-free reading with both up and down digital counters as well as a dial.
- > Provided with a feed wheel for easy coarse feeding.
- > Carbide-tipped scriber is provided.
- > The counters and dial can be re-zeroed at any scriber position.
- > Fits comfortably in the hand and moves easily on the surface plate.



Easy and error-free reading



192-150

Order No.	Range	Graduation	List	Promo
<b>192-150</b>	0-12"	.001"	\$1,010.00	<b>\$959.50</b>
<b>192-151</b>	0-18"	.001"	\$1,400.00	<b>\$1,330.00</b>
<b>192-152</b>	0 - 24"	.001"	\$1,820.00	<b>\$1,729.00</b>

**Durometers (Digital and Analog)**  
For Rubber and Plastics Hardness Testing

> Durometers are suitable for testing natural rubber, neoprene, polyesters, PVC, leather, Thiokol, nitril, wax, vinyl, cellulose acetates, glass, polystyrol and other materials.



Compact Dial  
811-336-10



Compact Digital  
811-336-10

**MeasurLink** ENABLED  
Data Management Software by Mitutoyo

Order No	Model	Scale	Display	Graduation	Range	Indenter	List	Promo
811-335-10	HH-335	Shore A	Analog	1.0	10~90	Blunt Taper	\$599.00	\$569.05
811-336-10	HH-336	Shore A	Digital	0.5	10~90	Blunt Taper	\$1,280.00	\$1,216.00
811-337-10	HH-337	Shore D	Analog	1.0	20~90	Sharp Point	\$599.00	\$569.05
811-338-10	HH-338	Shore D	Digital	0.5	20~90	Sharp Point	\$1,280.00	\$1,216.00
64AAA964	Test Block Set (Shore A Scale)						\$188.00	\$178.60
64AAA590	Test Block Set (Shore D Scale)						\$188.00	\$178.60
64AAA962	A Scale Durometer Stand						\$959.00	\$911.05
64AAA796	D Scale Durometer Stand						\$2,500.00	\$2,375.00



**HH-411 Hardmatic**

Rebound portable hardness tester featuring reproducibility and ease of operation on large parts. It is lightweight and can be carried into the shop or out in the field.

**MeasurLink** ENABLED  
Data Management Software by Mitutoyo



Order No.	Type	List	Promo
810-298-10	HH-411 Hardmatic	\$3,990.00	\$3,790.50

Model	HH-411		
Order No.	810-298-10		
Hardness Range	L-Value (ASTM A956)		
Detector	Input device D (carbide ball)		
Display	<b>Hardness</b>	<b>Range</b>	<b>Resolution</b>
	HL	1-999 HL	1 HL
	HV	43-950 HV	1 HV
	HB	20-894 HB	1 HB
	HRC	19.3-68.2 HRC	0.1 HRC
	HRB	13.5 - 101.7 HRB	0.1 HRB
	HS	13.2 - 99.3 HS	0.1 HS
	HTN	499 - 1996 Mpa	1 Mpa
Functions	Conversions: HL, HV, HB, HRC, HRB, HS, HTN Judgment: OK/NG Offsetting Memory: 1,800 data		
Output	RS-232C, SPC		
Power supply	Alkaline AA Battery 2pcs.		
Dimensions	Detector: (Dia. X H) 1.10" x 6.89" (28 x 175mm) Display: (W x D x H) 2.76" x 4.33" x 1.38" (70 x 110 x 35mm)		
Mass	Detector: .26lbs (120g) Display: .44lbs (200g)		



September 10 – 15, 2018  
McCormick Place | Chicago, IL  
**VISIT US AT BOOTH 135215**

## MF Measuring Microscopes

- › Observation with a crisp and high-resolution erect image and a wide field of view.
- › Measuring accuracy that is highest in its class (and conforms to JIS B 7153).
- › Included 3x objective and binocular eyetube.
- › Illumination unit (reflected/transmitted) selectable from a high-intensity LED.
- › Quick-release mechanism useful for moving the stage quickly when measuring workpieces that are large in size or quantity.
- › Dedicated camera port allows for simultaneous eyepiece and digital observation.



176-861-10

Model No. (XY stage size)	1010D
Order No.	176-861-10
XY stage travel range	4 x 4" / 100 x 100mm
Z-axis travel range	6" / 150mm
Focusing method	Manual focusing (Coarse focusing: 30mm/rev., Fine focusing: 0.2mm/rev.)
Measurement method	Linear encoder (2-axis model: X / Y-axis, 3-axis model: X / Y / Z-axis)
Resolution (switchable)	.0001" / .00005" / .00001" (0.001mm / 0.0005mm / 0.0001mm)
Measuring accuracy (at 20°C)	XY-axis: (2.2+0.02L)µm, L = Measuring length (mm) when not loaded, JIS B 7153
Indication accuracy (at 20°C)	Z-axis: (5+0.04L)µm, L = Measuring length (mm), (MF-B type)
Floating function	X and Y axes with Quick-release mechanism
XY stage top size	11 x 11" / 280 x 280mm
Effective glass size	7 x 7" / 180 x 180mm
Max. stage loading	22lbs / 10kg
Max. workpiece height	6" / 150mm

Order No	Description	List	Promo
<b>64PKA092A</b>	<b>MF-A1010D Package</b>		
176-861-10	MF-A1010D	\$18,960.00	<b>\$17,064.00</b>
176-445A	LED Illumination unit (MF)		
176-393	Binocular Tube		

## TM Toolmakers' Microscopes

- › Angle measurement is performed easily by turning the angle scale disc to align the cross-hair reticle with the workpiece image.
- › Illumination intensity can be adjusted.
- › Included standard accessories create an overall magnification of 30X. Magnifications can be changed from 20 - 200X by using optional objectives and/or eyepieces.



Conventional illumination



Newly designed LED illumination



TM-A505B  
176-820A

Model No.	TM-505B	TM-A505B	TM-1005B	TM-A1005B	
Order No.	176-818A	176-820A	176-819A	176-821A	
Eyepiece	Standard accessory: 15X (field number: 13), Options: 10X, 20X				
Objective lens	Standard accessory: 2X, Options: 5X, 10X				
Microscope head	Maximum height of workpiece	4.53" / 115mm	4.21" / 107mm		
	Illumination unit	Transmitted illumination: Stepless brightness adjustment, White LED light source, With green filter			
	Surface illumination	Oblique single-source type, Stepless brightness adjustment, White LED light source			
Cross-travel stage	Measuring range	2" x 2" / 50x50mm	4" x 2" / 100x50mm (An optional 2"/50mm gauge block is required to cover full range. A CERA block is recommended.)		
	Usable area of the stage glass	3.8" x 3.8" / 96x96mm	6" x 3.8" / 154x96mm		
	Maximum stage glass loading	11 lbs. / 5kg			
Linear measurement method	Micrometer heads optional	Micrometer heads included	Micrometer heads optional	Micrometer heads included	
	<b>List</b>	\$3,790.00	\$5,590.00	\$5,490.00	\$7,290.00
	<b>Promo</b>	<b>\$3,411.00</b>	<b>\$5,031.00</b>	<b>\$4,941.00</b>	<b>\$6,561.00</b>

**Trinocular Stereo Microscope MSM-414TL**

- > Continuous 1X - 4X magnification
- > Image always in focus throughout zoom range
- > Crisp, erect images with high resolution and excellent stereoscopic effect
- > Stereo-tube can be rotated a full 360° for viewing at any angle
- > Bilateral zoom control knob adds convenience and increases operator efficiency
- > Diopter adjustment for both eyepieces

Model	MSM-414TL
<b>Order No.</b>	<b>377-974A</b>
Optical tube	Trinocular
Total magnification	10X - 40X
Eyeiece	10X (377-016)
Objective	1X - 4X
Working distance	80mm
Field of view	20mm - 5mm
Dimensions	H=13.2" x W=6.7" x D=9.3"
Mass	13.2 lbs (6kg)



Camera with software for digital viewing

Order No.	Description	List	Promo
<b>377-974A</b>	MSM-414TL Stereo Microscope	\$1,380.00	<b>\$1,311.00</b>
<b>377-481</b>	C-mount Video Adapter for MSM-414TL	\$53.85	<b>\$51.16</b>
<b>64AAB526</b>	Moticam 1080, 2.0 Mega Pixels, HDMI/USB	\$1,250.00	<b>\$1,187.50</b>

**Mitutoyo's Digital Readout Packages**

Mounting Hardware Included on all machine retrofit packages

**All DRO Packages Include:**

- > KA-200 Counter
- > KA-200 Counter tray/arm kit
- > Linear Scales
- > Bracket Kit(s)



SAVE  
**\$200**  
PER PACKAGE

**MeasurLink** ENABLED  
Data Management Software by Mitutoyo

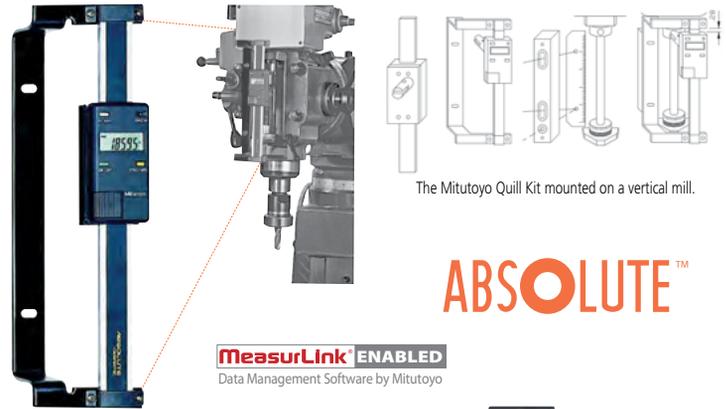
Package Part No.	Description	X Travel	Y Travel	Z Travel	X Axis Type	Y Axis Type	Z Axis Type	List	Promo
<b>64PKA058A</b>	12" X 30" DRO Mill Package	30"	12"		AT715	AT715		\$1,490.00	<b>\$1,290.00</b>
<b>64PKA059A</b>	12" X 36" DRO Mill Package	36"	12"		AT715	AT715		\$1,490.00	<b>\$1,290.00</b>
<b>64PKA060A</b>	14" X 30" DRO Mill Package	30"	14"		AT715	AT715		\$1,490.00	<b>\$1,290.00</b>
<b>64PKA062A</b>	16" X 36" DRO Mill Package	36"	16"		AT715	AT715		\$1,490.00	<b>\$1,290.00</b>
<b>64PKA063A</b>	16" X 40" DRO Mill Package	40"	16"		AT715	AT715		\$1,490.00	<b>\$1,290.00</b>
<b>64PKA035A</b>	6" X 28" Lathe Package	6"		28"	AT116		AT715	\$1,450.00	<b>\$1,250.00</b>
<b>64PKA039A</b>	8" X 40" Lathe Package	8"		40"	AT116		AT715	\$1,450.00	<b>\$1,250.00</b>
<b>64PKA042A</b>	10" X 40" Lathe Package	10"		40"	AT116		AT715	\$1,450.00	<b>\$1,250.00</b>
<b>64PKA046A</b>	12" X 40" Lathe Package	12"		40"	AT116		AT715	\$1,450.00	<b>\$1,250.00</b>
<b>64PKA050A</b>	12" X 60" Lathe Package	12"		60"	AT116		AT715	\$1,650.00	<b>\$1,450.00</b>
<b>64PKA052A</b>	14" X 40" Lathe Package	14"		40"	AT116		AT715	\$1,450.00	<b>\$1,250.00</b>
<b>64PKA057A</b>	16" X 60" Lathe Package	16"		60"	AT116		AT715	\$1,650.00	<b>\$1,450.00</b>
<b>64PKA026A</b>	6" X 12" Grinder Package	6"		12"	AT116		AT116	\$1,620.00	<b>\$1,420.00</b>
<b>64PKA028A</b>	8" X 12" Grinder Package	8"		12"	AT116		AT116	\$1,620.00	<b>\$1,420.00</b>
<b>64PKA029A</b>	8" X 14" Grinder Package	8"		14"	AT116		AT116	\$1,620.00	<b>\$1,420.00</b>

Prices effective September 10 through December 21, 2018

## Quill Kit with Absolute Encoder

### Easy Installation, Fits Most Vertical Knee Mills

- › Easy-to-read LCD with resolution of .0005"/0.01mm. 0 -6" travel.
- › Push-button controls for inch/mm, Zero-Set and On/Off.
- › Powered by a single SR-44 Battery which lasts about 1 year with normal use.
- › SPC Output for data transmission to data processors or a remote display.



The Mitutoyo Quill Kit mounted on a vertical mill.

**ABSOLUTE™**

Order No.	Description	List	Promo
053906B	Digimatic Quill Kit complete with brackets & scale for Bridgeport Type machines.	\$310.00	\$279.00

## ABSOLUTE Digimatic Scale Units

- › The Origin key allows setting of an absolute zero point to be used as reference in subsequent measurements. Once set, the ABS Digimatic Scale Unit is ready to show its true position whenever turned on, rather than 0.00" as with standard models.
- › The Zero/ABS key allows the display to be zero-set at any slider position along the beam for incremental comparison measurements. This key will also allow return to the absolute coordinate with a display of the true position from the origin point.
- › No rack, no pinion, no glass scale. Digimatic scale unit is safely embedded in the hardened stainless steel blade.
- › Horizontal or vertical face according to the scale mounting direction.
- › Multi-function types with diameter displaying function are also available for lathes. (Contact Mitutoyo.)
- › All units come with two mounting brackets, each located at either end of the scale.
- › With SPC data output.

**ABSOLUTE™**

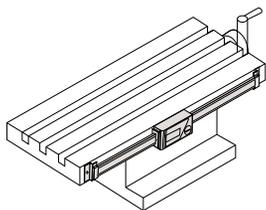
Order No	Model	Range	Accuracy	Resolution	Type	List	Promo
572-210-30	SD-4"DX	0-4" / 0-100mm	.001" / 0.03mm	.0005" / 0.01mm	Horizontal single-function	\$235.00	\$223.25
572-211-30	SD-6"DX	0-6" / 0-150mm	.001" / 0.03mm	.0005" / 0.01mm	Horizontal single-function	\$249.00	\$236.55
572-212-30	SD-8"DX	0-8" / 0-200mm	.001" / 0.03mm	.0005" / 0.01mm	Horizontal single-function	\$290.00	\$275.50
572-213-10	SD-12"D	0-12" / 0-300mm	.002" / 0.04mm	.0005" / 0.01mm	Horizontal single-function	\$559.00	\$531.05
572-310-10	SDV-6"D	0-4" / 0-100mm	.001" / 0.03mm	.0005" / 0.01mm	Vertical single function	\$260.00	\$247.00
572-311-10	SDV-6"D	0-6" / 0-150mm	.001" / 0.03mm	.0005" / 0.01mm	Vertical single-function	\$276.00	\$262.20
572-312-10	SDV-8"D	0-8" / 0-200mm	.001" / 0.03mm	.0005" / 0.01mm	Vertical single function	\$320.00	\$304.00
572-313-10	SDV-12"D	0-12" / 0-300mm	.002" / 0.04mm	.0005" / 0.01mm	Vertical single function	\$616.00	\$585.20



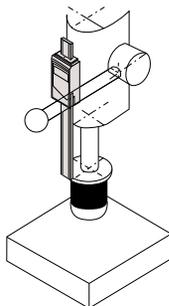
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Data Management Software by Mitutoyo

## Applications

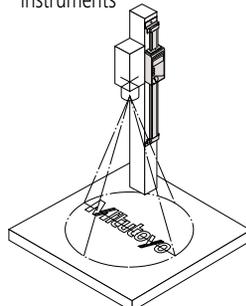
Machine table position



Drilling machine stroke position

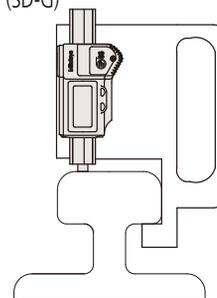


Focus setting on optical instruments



## Special Applications

As a measurement jig for outdoor use (SD-G)



Detector head mechanism



**Ultra-High Accuracy**

**Laser Scan Micrometer LSM-6902H**



- > Improved narrow range Repeatability of 0.03µm / 1.2µin
- > The best repeatability available in the 25mm/1" class.
- > The ultra-precise scanning motor enables the highest measurement accuracy.
- > Thanks to excellent linearity, an accuracy of ±0.5µm over the entire measuring range and a higher accuracy of ±(0.3+0.1ΔD)µm over a narrow range are guaranteed.
- > An excellent option for measuring pin gages or plug gages.



544-499A

**Bench Top**

**Laser Scan Micrometer LSM-9506**

- > Integrated display and measuring unit in one unit.
- > Statistical calculation mode.
- > RS-232C output, I/O interface, and SPC output interface are standard.



544-116-1A



www.mitutoyo.com/LSM  
VIDEO DEMO

Order Number	Range	Resolution	List	Promo
544-499A	.004" - 1.0"/0.1mm - 25mm	.000001" - .0005"/0.00001 - 0.01mm	\$12,200.00	\$10,980.00
544-116-1A	.020" - 2.36"/0.5mm - 60mm	.000002" - .005"/0.00005 - 0.1mm	\$8,940.00	\$8,046.00

QUICKTOOL\* is free downloadable software that makes programming the LSM-6200 quick and easy.  
\*For use with customer-supplied PC and optional RS-232C cable.

**High-Accuracy Non-Contact Measuring Systems**

- > Excellent linearity: down to +/- 0.3 micron.
- > High-speed scanning capable: 3,200 scans per second.
- > Various ranges available for selecting the best laser for your application.
- > Statistical calculation mode.
- > Memory function has been increased to allow storage of up to 100 programs.

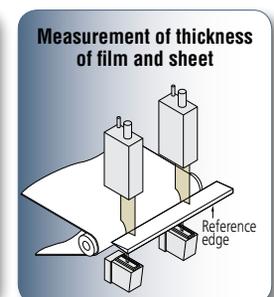
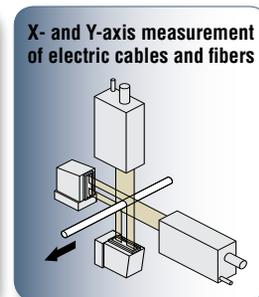
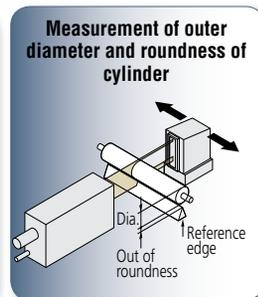
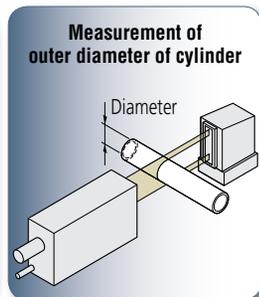
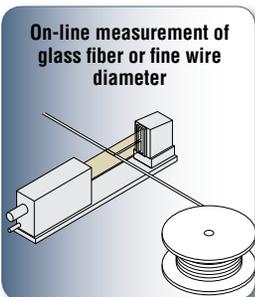
QUICKTOOL\* is free downloadable software that makes programming the LSM-6200 quick and easy.  
\*For use with customer-supplied PC and optional RS-232C cable.



**LSM-6200 Display Unit Included**

Order No	Model	Range Inch	Range mm	Repeatability	Linearity	Scanning Rate	List	Promo
64PKA117	LSM-500S	.0002" - .08"	0.005~2mm	±0.03µm	±0.3µm	3,200 scans/sec	\$10,370.00	\$7,090.00
64PKA118	LSM-501S	.002" - .4"	0.05~10mm	±0.04µm	±0.5µm <sup>†</sup>	3,200 scans/sec	\$9,330.00	\$6,050.00
64PKA119	LSM-503S	.012" - 1.18"	0.3~30mm	±0.11µm	±1.0µm <sup>†</sup>	3,200 scans/sec	\$10,110.00	\$6,830.00
64PKA120	LSM-506S	.04" - 2.36"	1~60mm	±0.36µm	±3µm <sup>†</sup>	3,200 scans/sec	\$11,480.00	\$8,200.00
64PKA121	LSM-512S	.04" - 4.72"	1~120mm	±0.85µm	±6µm <sup>†</sup>	3,200 scans/sec	\$17,680.00	\$14,400.00
64PKA122	LSM-516S	.04" - 6.30"	1~160mm	±1.4µm	±7µm <sup>†</sup>	3,200 scans/sec	\$28,480.00	\$25,200.00

<sup>†</sup> Linearity over entire range. Higher accuracies are possible over smaller ranges.



Prices effective September 10 through December 21, 2018

## Complimentary Shipping on ALL Profile Projectors\*

DOMESTIC U.S. ORDERS ONLY



\*Complimentary ground shipping for the 48 contiguous United States. Offer applies to orders placed September 10 through December 21, 2018. Mitutoyo America Corporation reserves the right to change or discontinue this offer at any time. This offer is void wherever prohibited or restricted by law. No cash value. For Alaska and Hawaii special rates apply. Contact us for details.

Complimentary shipping cannot be applied toward previously placed orders. Orders may only be shipped to a single address. If customer returns product, they are responsible for the shipping cost. Refer to our terms and conditions for further details.

## PV-5110 Profile Projector

- > Large 500mm screen
- > Floor model uses a downward illumination system.
- > Digital readout protractor screen (including zero-setting, ABS/INC coordinate switching functions) for easy and error-free angle measurement.
- > Angled screen allows projected images to be easily traced or compared with a template.
- > The oblique surface illumination system provides clear and bright images, allowing easy inspection of non-reflective workpieces such as plastic parts or printed materials.



PV-5110



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### Standard Accessories

- > 200 x 100mm (8 x 4") XY travel
- > 10x projection lens set
- > Surface illumination unit
- > Counter stand for KA counter
- > Power cord, halogen bulb, fuse, grounding wire, allen wrench, vinyl cover

Order No.	Description	List
<b>304-919A</b>	Profile Projector PV-5110	\$24,200.00
<b>264-156A</b>	QM-Data200 (Arm-Mount Model)	\$2,720.00
<b>332-151</b>	Optoeye-200	\$1,650.00
<b>12AAE672</b>	Attachment (B) for Optoeye-200	\$58.65
<b>174-183A</b>	KA 200 Counter	\$587.00

## PJ-A3000 Vertical Profile Projector

- > A series of midsize profile projectors featuring bright, 12.40" (315mm) diameter screens and easy-to-operate XY measurement tables.
- > A floating table makes measuring quick and easy.
- > Built-in, easy-to-read digital counters are located near the projection screen, thereby minimizing strain associated with excessive movement.
- > For edge-sensing capabilities, order the Optoeye-200, part number 332-151.



PJ-A3010F-200

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Order No.	Description	XY Travel	List
<b>302-701A</b>	PJ-A3010F-200	8" x 4"	\$13,600.00
<b>302-702A</b>	PJ-A3005F-150	6" x 2"	\$12,000.00
<b>302-703A</b>	PJ-A3010F-100	4" x 4"	\$10,800.00
<b>302-704A</b>	PJ-A3005D-50	2" x 2"	\$8,890.00

## PH-3515F Profile Projector

- > Heavy-duty, bench-top model with horizontal optical system.
- > Erect image on day-bright screen.
- > 14" (356mm) dia. protractor screen with crosshair line for easy alignment
- > 10" x 6" floating-type workstage incorporates linear scales for fast, accurate measurement.
- > Suitable for thread pitch measurements – free from blurred or distorted images when the workpiece is angled.
- > Robust workstage provides high accuracy and can handle a workload up to 100 lbs.



172-868A

Order No.	Description	List
<b>64PKA088A</b>	PH-3515F Profile Projector w/QM Data (Arm Mount)	\$13,500.00
<b>64PKA089B</b>	PH-3515F Profile Projector w/KA counter & tray	\$11,600.00
<b>64AAB176</b>	PH-3515 Stand (optional)	\$687.00



QM Data  
2-D Data  
Processing Unit



Optoeye-200  
Edge detection system



KA 200 Counter



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Aurora, Illinois 60502  
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**September 10 – 15, 2018**  
McCormick Place | Chicago, IL  
**VISIT US AT BOOTH 135215**

**2018 Remaining Tradeshow Schedule:**

IMTS 2018 - Booth #135215 - Sep 10, 2018 - Chicago, IL  
Neuroscience 2018 - Booth #905 - Nov 3, 2018 - San Diego, CA

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**FALL PROMO 2018**

PRECISION TOOLS & INSTRUMENTS

Effective September 10 through December 21, 2018

FALL PROMO 2018

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