Application Products

ABS Digimatic Thickness Gage



Metric	ISO/JIS Type

Order No.	Resolution	Measuring range	Throat depth	Contact point and anvil	Parallelism of contact point and anvil	Accuracy	Measuring force
547-301	0.01mm	0~10mm 30mm		ø10mm flat	10μm or less	±20µm	1.5N or less
547-321	0.01mm	0~10mm	120mm	ø10mm flat	10µm or less	±20µm	1.5N or less
547-401	0.001mm	0~12mm	21mm	ø6.3mm flat (carbide tipped)	3μm or less	± 3µm	3.5N or less

Inch/Metric ANSI/AGD Type

Order No.	Resolution	Measuring range	Throat depth	Contact point and anvil	Parallelism of contact point and anvil	Accuracy	Measuring force
547-300S	.0005"/0.01mm	0~.4"/0~10mm	30mm	ø10mm flat	.0005" or less	±.001"	1.5N or less
547-320S	.0005"/0.01mm	0~.4"/0~10mm	120mm	ø10mm flat	.0005" or less	±.001"	1.5N or less
547-400S	.00005"/0.001mm	0~.47"/0~12mm	21mm	ø6.3mm flat (carbide tipped)	.0001 " or less	±.0001"	3.5N or less

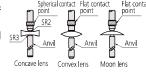
- Note) 1. Changing the contact point requires total adjustment, including the main display unit. Contact Mitutoyo for advice.
 - 2. The accuracy specification does not include the quantizing error of ± 1 count.
 - 3. Left-handed models can be supplied to special order.

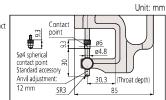
ABS Digimatic Lens Meter



- Designed for measuring the thickness of concavo-convex lenses and flat objects
- The thickness of flat objects can be measured by replacing the anvil.
- Includes a spherical contact point.

Metric ISO/JIS Type





Unit: mm

547-321

Order No.	Resolution	Measuring range	Throat depth	Anvil adjustment	Accuracy	Measuring force
547-313	0.01mm	0~10mm	30mm	12mm	±20µm or less	1.5N or less

Inch/Metric	ANSI/AGD Type					
Order No.	Resolution	Measuring range	Throat depth	Anvi l adjustment	Accuracy	Measuring force
547-312S	.0005"/0.01mm	0~.4"/0~10mm	30mm	12mm	±.001" or less	1.5N or less

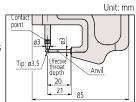
Note) The accuracy specification does not include the quantizing error of ±1 count. Left-handed models can be supplied to special order.



ABS Digimatic Pipe Gage



• Designed for measuring the thickness of pipes and curved boards



Metric IS	O/J I S Type
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Order No.	Resolution Measuring rang		I I nroat denth	Minimum inside diameter of pipe	Accuracy	Measuring force
547-360	0.01mm	0~10mm	20mm	ø3.5mm	±20µm or less	1.5N or less

Inch/Metric	ANSI/AGD Type				
Order No.	Resolution	Measuring range		Minimum inside diameter of pipe	Accuracy
547-361S	.0005"/0.01mm	0~.4"/0~10mm	20mm	ø3.5mm	±.001" or less

Note) 1. Changing the contact point requires total adjustment, including the main display unit. Contact Mitutoyo for advice.

- .0005"/0.01mm 0~.4"/0~10mm 20mm 2. The accuracy specification does not include the quantizing error of ±1 count.

 3. Left-handed models can be supplied to special order.

ABS Digimatic Groove Gage



- Best suited for measuring the depth of narrow grooves on cylindrical workpieces
- The contact point and measuring face of the anvil are 1mm thick blade blades.

30.3 (Throat depth

Metric ISO/JIS	Type
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547-315 0.01mm 0~10mm 30mm 6.5mm x 1mm ±20μm or less 1.5N or less	Order No.	Resolution	Measuring range	Throat depth	Contact point and anvil dimensions (W × D)	Accuracy	Measuring force
	547-315	0.01mm	0~10mm	30mm	6.5mm x 1mm	±20µm or less	1.5N or less

Inch/Metric ANSI/AGD Type

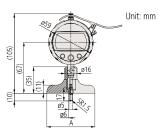
Order No.	Resolution	Measuring range	Throat depth	Contact point and anvil dimensions (W × D)	Accuracy	Measuring force	
547-316S	.0005"/0.01mm	0~4"/0~10mm	30mm	6.5mm x 1mm	±.001" or less	1.5N or less	

- Note) 1. Changing the contact point requires total adjustment, including the main display unit. Contact Mitutoyo for advice.
 - 2. The accuracy specification does not include the quantizing error of ± 1 count. 3. Left-handed models can be supplied to special order.

ABS Digimatic Depth Gage

- Suitable for measuring the depth of holes, narrow grooves, and steps.
- The lifting lever can be used either on the left or right sides.





Measuring force

1.5N or less

Unit: mm

Metric ISO/JIS Type

Order No.	Resolution	esolution Measuring		Accuracy	Measuring B.				Contact point: Carblde-	Extension rods
Order No.	Nesolution	range	Sticke Acct	Accuracy	force	Length	Width	Flatness	tipped ball	Exterision rous
547-211	0.01mm 0.001mm	0~200mm 12m		· ·	1 5N or less 1	63.5mm	16mm	5µm or less	- 21JAA224	5 pcs. (10, 20, 30, 30, 100mm)
547-212			12mm			101.6mm				
547-251		U~200mm		±5µm	1 5N or loss L	63.5mm		2μm or less		
547-252						101.6mm				

Inch/Metric ANSI/AGD Type

Order No.	Resolution N	Measuring	Ctroko	Accuracy	Measuring	Base			Contact point: Carbide-	Extension rods
	Nesolution	range	Sticke	Accuracy	force	Length	Width	F l atness	tipped ball	LATERISION TOUS
547-217S	.0005"/0.01mm	0~8"	.5"	±.001" or less	1.5N or less	2.5"	.63"	.0002" or less	21JAZA242	4 pcs. (.5",1",2",4")
547-2185	.0005"/0.01mm	0~8"	.5"	±.001" or less	1.5N or less	4"	.63"	.0002" or less		4 pcs. (.5",1",2",4")
547-257S	.00005"/0.001mm	0~8"	.5"	±.0002 " or less	1.5N or less	2.5"	.63"	.00008" or less		4 pcs. (.5",1",2",4")
547-258S	.00005"/0.001mm	0~8"	.5"	±.0002" or less	1.5N or less	4"	.63"	.00008" or less		4 pcs. (.5",1",2",4")

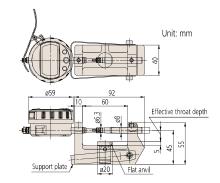
Note) The accuracy specification does not include the quantizing error of ±1 count.



ABS Digimatic Bench Gage

- The support plate allows easy reading by tilting the anvil.
- Carbide measuring faces (for the contact point and anvil)
- The lifting lever can be used either on the left or right sides.





Metric ISO/JIS Type

Order No.	Indicator stroke	Resolution	Workpiece height	Effective throat depth	Anvil adjustment	Accuracy	Measuring force
547-064	12mm	0.01mm	ø20mm	15mm	13mm	±20µm or less	1.5N or less

Inch/Metric ANSI/AGD Type

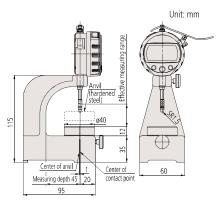
Order No.	Indicator stroke	Resolution	Remarks (contact point)	Effective throat depth	Workpiece height	Accuracy	Measuring force
547-066S	.5"	.0005"/0.01mm	.248" DIA flat type	.59"	1"	±.001" or less	1.5N or less

Note) The accuracy specification does not include the quantizing error of ±1 count.

ABS Digimatic Upright Gage

- Best suited for inspection of small parts at a site
- Carbide ball contact point
- The lifting lever that is a standard accessory for No. 547-054, **547-034S** can be used either on the left or right sides.





Metric ISO/JIS Type

Order No.	Resolution	Measuring range	Anvil	Workpiece height	Accuracy	Measuring force	
547-054	0.01mm	12.7mm	ø40mm (steel type)		±20µm or less		
547-053	111111111111111111111111111111111111111		ø50mm (ceramic type)	30mm	± 3µm or less	1.5N or less	
547-055			ø40mm (steel type)		± 3µm or less		

Inch/Metric ANSI/AGD Type

Order No.	Resolution	Measuring range	Anvil	Workpiece height	Accuracy	Measuring force
547-0345	.0005"/0.01mm	.5"	1.57" DIA steel type	1.2"	±.001" or less	
547-033S	.00005"/0.001mm	.5"	1.97" DIA ceramic type	1.2"	±.0001" or less	1.5N or less
547-035S	.00005"/0.001mm	.5"	1.57" DIA steel type	1.2"	±.0001" or less	

- Note) 1. The lifting lever (part No. 21EZA198) is a standard accessory for **547-054**.

 2. The lifting lever (part No. 21EZA199) is a standard accessory for **547-034S**.

 3. The lifting cable (part No. 540774) is a standard accessory for **547-055**, **547-033S**, **547-035S**.

 4. The accuracy specification does not include the quantizing error of ±1 count.
- The ABS (ABSOLUTE) scale used in these products is a capacitance type absolute encoder. Its patent has been registered in Japan, the U.S., the U.K., Germany, and China.