MeasurLink® ENABLED
Data Management Software by Mitutoyo

Thickness Gages
SERIES 547, 7

- With a single touch, the dial thickness gage can quickly measure the thickness of small parts, paper, felt, etc.
- For models using a ceramic contact and anvil, there is no need to worry about rust.
- Watertight assembly of bezel and crystal prevents water or oil from penetrating the dial indicator.

Standard Type (Resolution: 0.01 mm)

547-301A

547-321A

High Accuracy Type (Resolution: 0.0005 mm)

547-401A

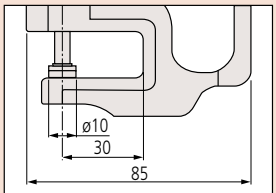
Standard Type (Graduation: 0.01 mm)

7301A

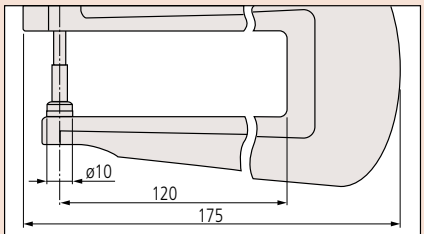
7321A

DIMENSIONS

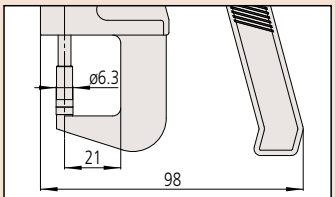
Unit: mm



7301A, 7305A, 7327A, 547-301A, 547-526S, 547-300A, 547-500S



7321A, 7323A, 7322A, 547-321A, 547-320S,547-520S



547-401A, 547-400A

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- Display: 6-digit LCD, sign
  (7-digit for models with 0.0005 mm resolution)
- Battery: CR2032 (1 pc.), for initial operational checks (standard accessory)
- Battery life: Approx. 2.5 years under normal use
  Approx. 2,700 hours of continuous use
- Maximum response speed: Not restricted (except for scanning measurement)
- Zero-setting (INC system)
- Presetting (ABS system)
- Measuring direction switching
- Tolerance judgment
- Resolution switching (For **547-401A** and **547-400A**)
- Function Lock
- Calibration schedule warning function
- Data output
- Display value holding (when no external device is connected)
- 330° rotary display
- Low battery voltage alarm display
- Error alarm display

Optional Accessories

- SPC Cable:
  06AGL011 (1 m)
  02AGL021 (2 m)
- USB Input Tool Direct (2 m): **06AGQ001F**

Note: A **06AGQ001F** is necessary for each **ID**.

- Measurement Data Management USB-ITPAK V3.0: **06AGR543**
- Input Tool Series
  IT-020U (USB Keyboard Signal Conversion Type): **264-020**
  IT-007R (RS-232C Communication Conversion Type): **264-007**
- Connecting Cables for **U-WAVE-T** (160 mm): **02AZG011**
  For foot switch: **02AZG021**
- Digimatic Mini-Processor **DP-1VA LOGGER**: **264-505**

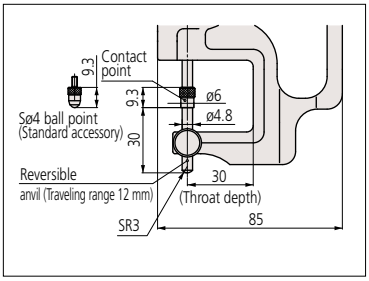
Lens thickness measurement

- Thickness of concave-convex lenses and surfaces can be measured. (Contact point, Anvil: hardened steel)
- Anvils and contact points are interchangeable to enable concave surfaces to be measured.
- Provided with a ball point as standard.

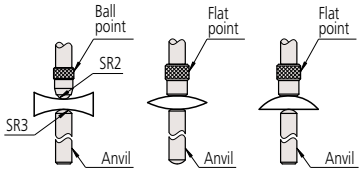
547-313A **7313A**

DIMENSIONS

Unit: mm



Typical applications



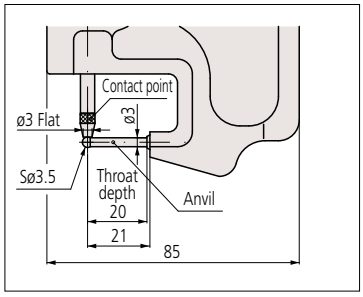
Pipe gage measurement

- Pipe wall thickness, thickness of curved boards can be measured. (Contact point, Anvil: hardened steel)

547-360A **7360A**

DIMENSIONS

Unit: mm



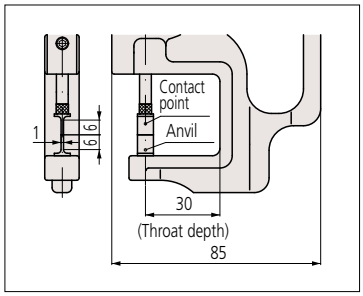
Blade thickness measurement

- Ideal for measuring narrow grooves on round objects.
- The measuring faces of the contact point and anvil are in the shape of a 1 mm-thick blade.

547-315A **7315A**

DIMENSIONS

Unit: mm



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Thickness Gages
SERIES 547, 7

SPECIFICATIONS

Metric

Order No.	Resolution (mm)	Range (mm)	Measuring depth (mm)	Contact point, Anvil (mm)	Parallelism of Contact point, Anvil (µm)	Accuracy (µm)	Measuring force (N)	Mass (g)	Remarks
547-401A	0.0005 (0.001/0.01 selectable)	0 - 12	21	ø6.3 Flat (Carbide)	3	±3	3.5 or less	275	High accuracy, carbide point anvil
547-301A	0.01	0 - 10	30	ø10 Flat	10	±20	1.5 or less	245	Standard, ceramic point/anvil
547-321A	0.01	0 - 10	120	ø10 Flat	10	±20	1.5 or less	385	Deep throat, ceramic point/anvil
547-313A	0.01	0 - 10	30	ø6 Flat (Contact point) ø4.8 Flat (Anvil)	10	±20	1.5 or less	265	Lens thickness
547-315A	0.01	0 - 10	30	t=1 Blade	10	±20	1.5 or less	260	Blade thickness
547-360A	0.01	0 - 10	20	ø3 Flat (Contact point) ø3.5 Ball (Anvil)	—	±20	1.5 or less	230	Pipe gage

Inch/Metric

Order No.	Resolution	Range (in)	Measuring depth	Contact point, Anvil	Parallelism of Contact point, Anvil	Accuracy	Measuring force (N)	Mass (g)	Remarks
547-400A	0.00002/0.00005/ 0.0001/0.0005 in 0.0005/0.001/ 0.01 mm (selectable)	0 - 0.47	21 mm (0.83 in)	ø6.3 mm (ø0.25 in) Flat	0.0001 in/0.003 mm	±0.00012 in/±3 µm	3.5 or less	275	High accuracy, carbide point anvil
547-526S*	0.0001 in/0.001 mm	0 - 0.47*	30 mm (1.18 in)	ø10 mm (ø0.39 in) Flat	0.0002 in/0.005 mm	±0.0002 in/±5 µm	1.5 or less	225	Standard, ceramic point/anvil
547-300A	0.0005 in/0.01 mm	0 - 0.4	30 mm (1.18 in)	ø10 mm (ø0.39 in) Flat	0.005 in/0.01 mm	±0.001 in/±20 µm	1.5 or less	245	Standard, ceramic point/anvil
547-500S*	0.0005 in/0.01 mm	0 - 0.47*	30 mm (1.18 in)	ø10 mm (ø0.39 in) Flat	0.005 in/0.01 mm	±0.001 in/±20 µm	1.5 or less	225	Standard, ceramic point/anvil
547-320A	0.0005 in/0.01 mm	0 - 0.4	120 mm (4.72 in)	ø10 mm (ø0.39 in) Flat	0.005 in/0.01 mm	±0.001 in/±20 µm	1.5 or less	385	Deep throat, ceramic point/anvil
547-520S*	0.0005 in/0.01 mm	0 - 0.47*	120 mm (4.72 in)	ø10 mm (ø0.39 in) Flat	0.005 in/0.01 mm	±0.001 in/±20 µm	1.5 or less	380	Deep throat, ceramic point/anvil
547-312A	0.0005 in/0.01 mm	0 - 0.4	30 mm (1.18 in)	ø6 mm (ø0.24 in) Flat (Contact point) ø4.8 mm (ø0.19 in) Flat (Anvil)	0.005 in/0.01 mm	±0.001 in/±20 µm	1.5 or less	265	Lens thickness
547-512A*	0.0005 in/0.01 mm	0 - 0.47*	30 mm (1.18 in)	ø6 mm (ø0.24 in) Flat (Contact point) ø4.8 mm (ø0.19 in) Flat (Anvil)	0.005 in/0.01 mm	±0.001 in/±20 µm	1.5 or less	240	Lens thickness
547-316A	0.0005 in/0.01 mm	0 - 0.4	30 mm (1.18 in)	t=1 mm (0.04 in) Blade	0.005 in/0.01 mm	±0.001 in/±20 µm	1.5 or less	260	Blade thickness
547-516A*	0.0005 in/0.01 mm	0 - 0.47*	30 mm (1.18 in)	t=1 mm (0.04 in) Blade	0.005 in/0.01 mm	±0.001 in/±20 µm	1.5 or less	240	Blade thickness
547-361A	0.0005 in/0.01 mm	0 - 0.4	20 mm (0.79 in)	ø3 mm (ø0.12 in) Flat (Contact point) ø3.5 mm (ø0.14 in) Ball (Anvil)	—	±0.001 in/±20 µm	1.5 or less	230	Pipe gage
547-561S	0.0005 in/0.01 mm	0 - 0.47*	20 mm (0.79 in)	ø3 mm (ø0.12 in) Flat (Contact point) ø3.5 mm (ø0.14 in) Ball (Anvil)	—	±0.001 in/±20 µm	1.5 or less	215	Pipe gage

* Using ID-SX Digimatic indicator.

Metric

Order No.	Graduation (mm)	Range (mm)	Measuring depth (mm)	Contact point, Anvil (mm)	Parallelism of Contact point, Anvil (µm)	Accuracy (µm)	Measuring force (N)	Mass (g)	Remarks
7327A	0.001	0 - 1	30	ø10 Flat	5	±5	1.5 or less	225	Fine dial reading, ceramic point/anvil
7301A	0.01	0 - 10	30	ø10 Flat	5	±15	1.4 or less	205	Standard, ceramic point/anvil
7305A	0.01	0 - 20	30	ø10 Flat	5	±20	2.0 or less	220	Standard, ceramic point/anvil
7321A	0.01	0 - 10	120	ø10 Flat	5	±15	1.4 or less	370	Deep throat, ceramic point/anvil
7323A	0.01	0 - 20	120	ø10 Flat	5	±22	2.0 or less	370	Deep throat, ceramic point/anvil
7313A	0.01	0 - 10	30	ø6 Flat (Contact point) ø4.8 Flat (Anvil)	5	±15	1.4 or less	210	Lens thickness
7315A	0.01	0 - 10	30	t=1 Blade	5	±15	1.4 or less	220	Blade thickness
7360A	0.01	0 - 10	20	ø3 Flat (Contact point) ø3.5 Ball (Anvil)	—	±15	1.4 or less	200	Pipe gage

Inch

Order No.	Graduation (in)	Range (in)	Measuring depth (in)	Contact point, Anvil (in)	Parallelism of Contact point, Anvil (in)	Accuracy (in)	Measuring force (N)	Mass (g)	Remarks
7326A	0.0001	0 - 0.05	1.18	ø0.39 Flat	0.0002	±0.0002	2.0 or less	205	Fine dial reading, ceramic point/anvil
7300A	0.001	0 - 0.5	1.18	ø0.39 Flat	0.0005	±0.001	1.8 or less	205	Standard, ceramic point/anvil
7304A	0.001	0 - 1	1.18	ø0.39 Flat	0.0005	±0.002	1.8 or less	220	Standard, ceramic point/anvil
7322A	0.001	0 - 1	4.72	ø0.39 Flat	0.0005	±0.002	1.8 or less	370	Deep throat, ceramic point/anvil
7312A	0.001	0 - 0.5	1.18	ø0.24 Flat (Contact point) ø0.19 Flat (Anvil)	0.0005	±0.001	1.8 or less	215	Lens thickness
7316A	0.001	0 - 0.5	1.18	t=0.04 Blade	0.0005	±0.001	1.8 or less	220	Blade thickness
7361A	0.001	0 - 0.5	0.8	ø0.12 Flat (Contact point) ø0.14 Ball (Anvil)	—	±0.001	1.8 or less	200	Pipe gage

Note: The dial indicator needs to be reset when a contact point is replaced.