

Mitutoyo

Catalog No. US-1002



Measuring Instruments Catalog

FOR MORE INFORMATION PLEASE VISIT OUR WEBSITE

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02-214-0101

Thickness Gage

SERIES 547, 7

The Thickness Gages offer a quick and efficient means of inspection with their convenient grip handle, thumb trigger and spring-loaded spindle. The various models cover a wide range of applications.

FEATURES

- Wide range of applications with various types of measuring faces (on the

spindle and anvil).

- The digital models incorporate Mitutoyo's popular ID-C and ID-S Series Digimatic Indicators to provide error-free LCD readings as well as data output for SPC analysis.
- 547-401 (547-400) is ideally suited for measuring thicknesses of paper, film, wire, sheet metal and similar materials.

Standard Type / Digital



Deep Throat Type / Digital



Standard Type / Dial



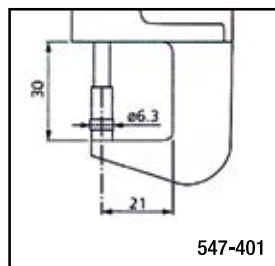
Deep Throat Type / Dial



High Accuracy Type / Digital



DIMENSION



SPC

ABSOLUTE[®]
Absolute System Patented by MITUTOYO

Technical Data of Digital Models

Accuracy: Refer to the list of specifications (excluding quantizing error)
Resolution: 0.01mm, 0.001mm, .0005"/0.01mm, .0001"/0.001mm or .00005"/0.001mm
Display: LCD
Length standard: ABSOLUTE electrostatic capacitance type linear encoder
Max. response speed: Unlimited
Measuring force: Refer to the list of specifications
Battery: SR44 (1 pc.), 938882
Battery life: Approx. 5,000 hours under normal use
Dust/Water protection level: IP42 or IP53 (dust-proof type)

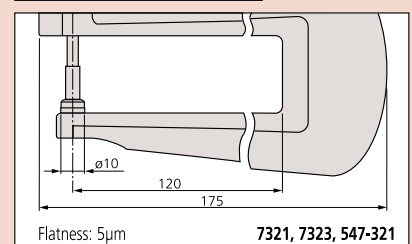
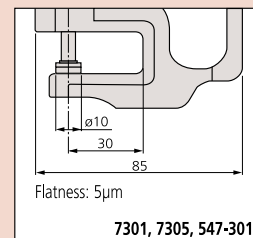
Function of Digital Models

Origin-set/Preset, Zero-set, GO/±NG judgment, Counting direction switching, Power ON/OFF, Data output, inch/mm conversion (inch/mm models)
Alarm: Low voltage, Counting value composition error, Over-flow error, Tolerance limit setting error

Optional Accessory

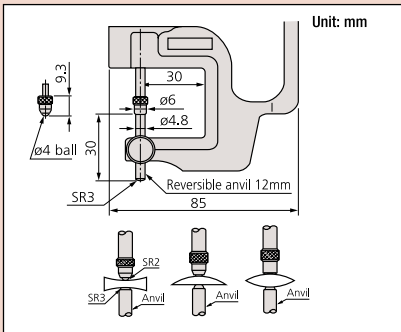
905338: SPC cable (1m) for digital models
905409: SPC cable (2m) for digital models
902011: Spindle lifting lever (ISO/JIS type)*
137693: Spindle lifting hook**
540774: Spindle lifting cable
125317: Spare rubber boot (for dust-proof type)
02ACA571: Auxiliary spindle spring for 25mm/1" models***
02ACA773: Auxiliary spindle spring for 50mm/2" models****
****Can be used on 12mm/.5" models only.
**Can be used on 25mm/1" or 50mm/2" models.
***Required when orienting the indicator upside down.

DIMENSION



Unit: mm

DIMENSION



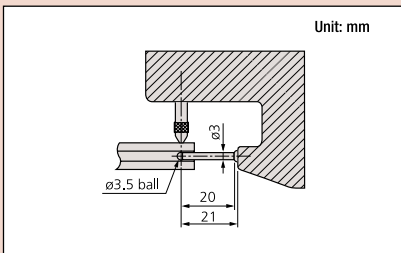
Lens thickness measurement



SPC
ABSOLUTE
Absolute System Protected by IPR2005



DIMENSION



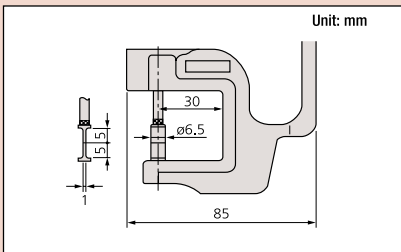
Tube thickness measurement



SPC
ABSOLUTE
Absolute System Protected by IPR2005



DIMENSION



Groove thickness measurement



SPC
ABSOLUTE
Absolute System Protected by IPR2005



SPECIFICATIONS

Metric Digital Type			Inch/Metric Digital Type					
Range	Order No.	Resolution	Range	Order No.	Resolution	Accuracy	Measuring force	Remarks
0 - 12mm	547-401	0.001mm	0 - .47"	547-400 /	.00005"/0.001mm	±3µm	3.5N or less	High accuracy, carbide spindle/anvil
0 - 10mm	547-301	0.01mm	0 - .4" / 0 - .47"	547-300 / 547-500*	.0005"/0.01mm	±20µm	1.5N or less	Standard, ceramic spindle/anvil
0 - 10mm	547-321	0.01mm	0 - .4" / 0 - .47"	547-320 / 547-520*	.0005"/0.01mm	±20µm	1.5N or less	Deep throat, ceramic spindle/anvil
0 - 10mm	547-313	0.01mm	0 - .4" / 0 - .47"	547-312 / 547-512*	.0005"/0.01mm	±20µm	1.5N or less	Lens thickness
0 - 10mm	547-315	0.01mm	0 - .4" / 0 - .47"	547-316 / 547-516*	.0005"/0.01mm	±20µm	1.5N or less	Groove thickness
0 - 10mm	547-360	0.01mm	0 - .4" / 0 - .47"	547-361 / 547-561*	.0005"/0.01mm	±20µm	1.5N or less	Tube thickness

*using ID-S Digimatic indicator, Standard model with .0001"/0.001mm resolution ID-S is available (547-526).

Metric Dial Type					
Range	Order No.	Dial reading	Accuracy	Measuring force	Remarks
0 - 1mm	7327	0.001mm	±5µm	1.4N or less	Fine dial reading, ceramic spindle/anvil
0 - 10mm	7301	0.01mm	±15µm	1.4N or less	Standard, ceramic spindle/anvil
0 - 20mm	7305	0.01mm	±20µm	2.0N or less	Standard, ceramic spindle/anvil
0 - 10mm	7321	0.01mm	±15µm	1.4N or less	Deep throat, ceramic spindle/anvil
0 - 20mm	7323	0.01mm	±22µm	2.0N or less	Deep throat, ceramic spindle/anvil
0 - 10mm	7313	0.01mm	±15µm	1.4N or less	Lens thickness
0 - 10mm	7315	0.01mm	±15µm	1.4N or less	Groove thickness
0 - 10mm	7360	0.01mm	±15µm	1.4N or less	Tube thickness

Light-Weight Dial Thickness Gage

SERIES 7



Application

Measuring paper thickness



Measuring thickness of a human hair

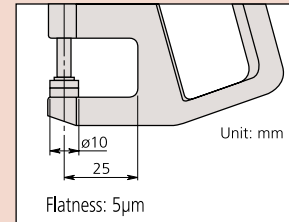


SPECIFICATIONS

Metric

Range	Order No.	Dial reading	Accuracy	Measuring force
0 - 10mm	7331	0.01mm	±20µm	1.4N or less

DIMENSION



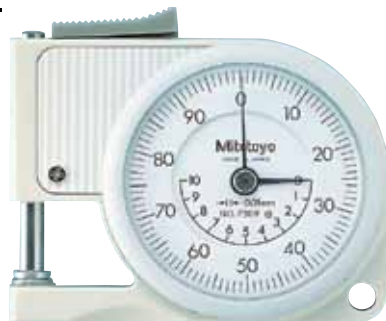
Pocket Thickness Gage

SERIES 7

A very compact thickness gage is designed for carrying convenience and is ideally suited for quick inspection of paper, leather, wire, plastic, sheet metal and similar materials. The spindle is pre-loaded to provide a constant measuring force (2N or less).

FEATURES

- Measuring faces are hardened, ground and lapped for accuracy.
- Easy adjustment for zero point.



7309

SPECIFICATIONS

Metric

Range	Order No.	Dial reading	Accuracy
0 - 10mm	7309	0.01mm	±20µm

DIMENSION

