

Dial Indicator Applications

Comparison measuring instruments which ensure high quality, high accuracy and reliability.

Thickness Gages SERIES 547, 7

- Dial thickness gages can quickly measure the thickness of thin products such as paper and felt.
- Contact point and anvil are both made of ceramic: rust-free (547-401 is excluded.)
- Integrated molding of the bezel and crystal ensures protection against water and oil penetration via the front face.

Standard Type



547-301



547-321

High Accuracy Type



547-401

Standard Type



7301

Lightweight Type (integrated molding of the bezel)



7331S



7321

Usage examples

Measuring paper thickness

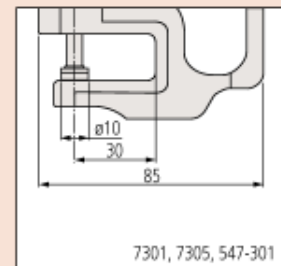


Measuring thickness of a human hair

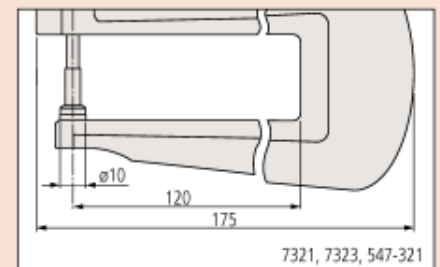


DIMENSIONS

Unit: mm



7301, 7305, 547-301



7321, 7323, 547-321

Optional Accessories

905338: SPC cable (1m) for digital models

905409: SPC cable (2m) for digital models

02AZD790F: SPC cable for U-WAVE (160mm)

Digimatic Mini-Processor DP-1VR

Refer to page A-13 for details.

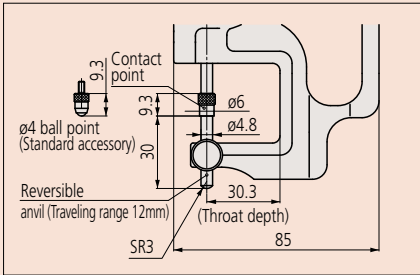
Input Tool

Convenient Interface Input Tools which enable the conversion of measurement data to keyboard signals and directly input them to cells in off-the-shelf spreadsheet software such as Excel.

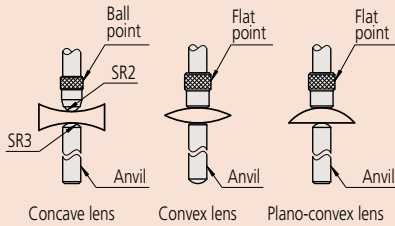
(Refer to pages A-4 to A-8 for details.)

DIMENSIONS

Unit: mm



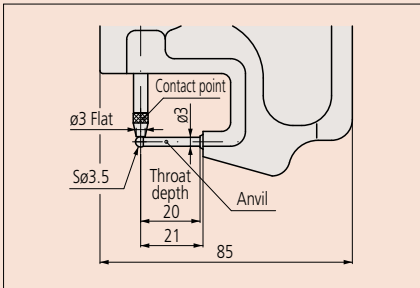
Application examples



Note: Parallelism between the flat point and anvil
547-313: 10 μ m
7313: 5 μ m

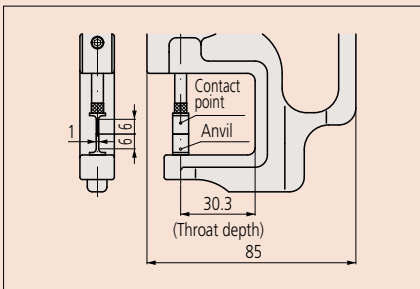
DIMENSIONS

Unit: mm



DIMENSIONS

Unit: mm



Lens thickness measurement

- Thickness of concave-convex lenses and surfaces can be measured.
- Anvils and contact points are interchangeable to enable concave surfaces to be measured.

- Provided with a ball point.



547-313



7313

Tube thickness measurement

- Pipe wall thickness, thickness of curved boards can be measured.



547-360



7360

Groove depth measurement

- Suitable for measuring narrow grooves.

- Measuring face of the contact point and anvil are blade-shaped (thickness: 1mm).



547-315



7315

Dial Indicator Applications

Comparison measuring instruments which ensure high quality, high accuracy and reliability.

Thickness Gages SERIES 547, 7

SPECIFICATIONS

| Metric | | | | | |
|-----------|--------|------------|----------|-----------------|--------------------------------------|
| Order No. | Range | Resolution | Accuracy | Measuring force | Remarks |
| 547-401 | 0-12mm | 0.001mm | ±3µm | 3.5N or less | High accuracy, carbide spindle anvil |
| 547-301 | 0-10mm | 0.01mm | ±20µm | 1.5N or less | Standard, ceramic spindle/anvil |
| 547-321 | 0-10mm | 0.01mm | ±20µm | 1.5N or less | Deep throat, ceramic spindle/anvil |
| 547-313 | 0-10mm | 0.01mm | ±20µm | 1.5N or less | Lens thickness |
| 547-315 | 0-10mm | 0.01mm | ±20µm | 1.5N or less | Groove depth |
| 547-360 | 0-10mm | 0.01mm | ±20µm | 1.5N or less | Tube thickness |

| Inch/Metric | | | | | |
|----------------------|---------------|-----------------|--------------|-----------------|--------------------------------------|
| Order No. | Range | Resolution | Accuracy | Measuring force | Remarks |
| 547-400S/ - | 0-.47" | .00005"/0.001mm | ±.0001"/±3µm | 3.5N or less | High accuracy, carbide spindle anvil |
| - / 547-526S* | 0-.47" | .0001"/0.001mm | ±.0002"/±5µm | 1.5N or less | Standard, ceramic spindle/anvil |
| 547-300S / 547-500S* | 0-.4"/0-.47"* | .0005"/0.01mm | ±.001"/±20µm | 1.5N or less | Standard, ceramic spindle/anvil |
| 547-320S / 547-520S* | 0-.4"/0-.47"* | .0005"/0.01mm | ±.001"/±20µm | 1.5N or less | Deep throat, ceramic spindle/anvil |
| 547-312S / 547-512S* | 0-.4"/0-.47"* | .0005"/0.01mm | ±.001"/±20µm | 1.5N or less | Lens thickness |
| 547-316S / 547-516S* | 0-.4"/0-.47"* | .0005"/0.01mm | ±.001"/±20µm | 1.5N or less | Groove depth |
| 547-361S / 547-561S* | 0-.4"/0-.47"* | .0005"/0.01mm | ±.001"/±20µm | 1.5N or less | Tube thickness |

* using ID-SX Digimatic indicator.

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

| Inch | | | | | |
|-----------|--------|------------|----------|-----------------|------------------------------------------|
| Order No. | Range | Graduation | Accuracy | Measuring force | Remarks |
| 7326S | 0-.05" | .0001" | ±.0002" | 1.4N or less | Fine dial reading, ceramic spindle/anvil |
| 7300S | 0-.5" | .001" | ±.001" | 1.4N or less | Standard, ceramic spindle/anvil |
| 7304S | 0-1" | .001" | ±.002" | 2.0N or less | Standard, ceramic spindle/anvil |
| 7322S | 0-1" | .001" | ±.002" | 2.0N or less | Deep throat, ceramic spindle/anvil |
| 7312S | 0-.5" | .001" | ±.001" | 1.4N or less | Lens thickness |
| 7316S | 0-.5" | .001" | ±.001" | 1.4N or less | Groove depth |
| 7361S | 0-.5" | .001" | ±.001" | 1.4N or less | Tube thickness |

