

Holtest

SERIES 368 — Three-Point/Two-Point Internal Micrometers

These Holtests are versatile, self-centering three-point internal micrometers for the accurate and efficient direct-measurement of internal diameters. Three anvils, evenly spaced at 120° apart, contact the internal wall surfaces and find true alignment with the axis of the bore for accurate ID measurement.



FEATURES

- TiN-coated measuring contact points (over 6mm / .275" range models) provide excellent durability and impact resistance and allow the instrument to measure to the bottom of a blind hole (up to 100mm / 4" models).
- Highly durable because of carbide-tipped contact points (anvils up to 12mm / .5" models).
- Measure deep holes using an extension rod (optional) which is available on models over 6mm (.275") measuring range.
- With Ratchet Stop for constant force.
- Setting rings for zero point adjustment are optional.
- Supplied in fitted plastic case up to 100mm / 4". Over 100mm / 4" supplied in wooden case.



Two-point contact type



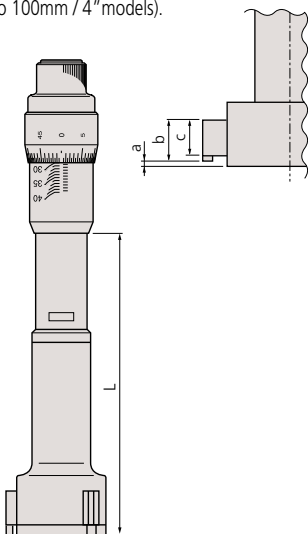
TiN-coated contact points (excluding models up to 12mm/.5")

DIMENSIONS

Measuring a Blind Hole

The measuring contact points held in the jaws permit measuring the diameter of a blind hole right down to the bottom (up to 100mm / 4" models).

Unit: mm



| Range | L | Mass (g) | Range | L | Mass (g) |
|------------------------|-----|----------|------------------------|-----|----------|
| 2 - 2.5mm / .08 - .1" | 12 | 88 | 40 - 50mm / 1.6 - 2" | 102 | 330 |
| 2.5 - 3mm / .1 - .12" | 12 | 88 | 50 - 63mm / 2 - 2.5" | 105 | 440 |
| 3 - 4mm / .12 - .16" | 22 | 91 | 62 - 75mm / 2.5 - 3" | 105 | 450 |
| 4 - 5mm / .16 - .2" | 22 | 91 | 75 - 88mm / 3 - 3.5" | 105 | 490 |
| 5 - 6mm / .2 - .24" | 22 | 91 | 87 - 100mm / 3.5 - 4" | 105 | 500 |
| 6 - 8mm / .275 - .35" | 59 | 57 | 100 - 125mm / 4 - 5" | 161 | 1050 |
| 8 - 10mm / .35 - .425" | 59 | 58 | 125 - 150mm / 5 - 6" | 161 | 1120 |
| 10 - 12mm / .425 - .5" | 59 | 59 | 150 - 175mm / 6 - 7" | 161 | 1190 |
| 12 - 16mm / .5 - .65" | 82 | 140 | 175 - 200mm / 7 - 8" | 161 | 1260 |
| 16 - 20mm / .65 - .8" | 82 | 145 | 200 - 225mm / 8 - 9" | 161 | 1420 |
| 20 - 25mm / .8 - 1" | 94 | 250 | 225 - 250mm / 9 - 10" | 161 | 1580 |
| 25 - 30mm / 1 - 1.2" | 94 | 270 | 250 - 275mm / 10 - 11" | 161 | 1600 |
| 30 - 40mm / 1.2 - 1.6" | 102 | 290 | 275 - 300mm / 11 - 12" | 161 | 1690 |

| Range | a | b | c |
|-----------------------|------|-----|------|
| 2 - 6mm / .08 - .275" | — | — | 2 |
| 6 - 12mm / .275 - .5" | 2 | — | 2.5 |
| 12 - 20mm / .5 - .8" | 0.3 | 5.6 | 3.5 |
| 20 - 30mm / .8 - 1.2" | 0.3 | 8.3 | 5.2 |
| 30 - 50mm / 1.2 - 2" | 0.3 | 13 | 10 |
| 50 - 100mm / 2 - 4" | 0.3 | 17 | 14 |
| 100 - 300mm / 4 - 12" | 12.4 | 21 | 13.8 |



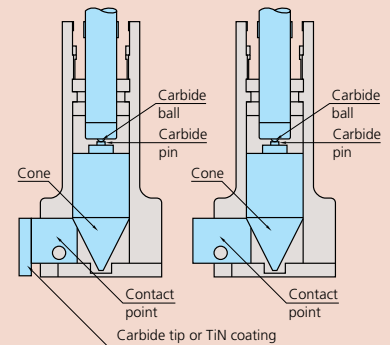
Technical Data

Graduation: 0.001mm, 0.005mm*, .0001" or .0002"*
(*over 12mm or .5" models)

| Range | Measuring method | Contact-point material |
|------------------|--------------------|---------------------------|
| 2-6mm/.08-.28" | Two-point method | Carbide |
| 6-300mm/.275-12" | Three-point method | TiN coating (1700-2000HV) |

Optional Accessories

- 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



Using the optional extension rod



SPECIFICATIONS

Metric Individual with TiN-coated contact points

| Range | Order No. | Accuracy |
|-------------|----------------|----------|
| 2 - 2.5mm | 368-001 | ±2μm |
| 2.5 - 3mm | 368-002 | ±2μm |
| 3 - 4mm | 368-003 | ±2μm |
| 4 - 5mm | 368-004 | ±2μm |
| 5 - 6mm | 368-005 | ±2μm |
| 6 - 8mm | 368-161 | ±2μm |
| 8 - 10mm | 368-162 | ±2μm |
| 10 - 12mm | 368-163 | ±2μm |
| 12 - 16mm | 368-164 | ±2μm |
| 16 - 20mm | 368-165 | ±2μm |
| 20 - 25mm | 368-166 | ±3μm |
| 25 - 30mm | 368-167 | ±3μm |
| 30 - 40mm | 368-168 | ±3μm |
| 40 - 50mm | 368-169 | ±3μm |
| 50 - 63mm | 368-170 | ±3μm |
| 62 - 75mm | 368-171 | ±3μm |
| 75 - 88mm | 368-172 | ±3μm |
| 87 - 100mm | 368-173 | ±3μm |
| 100 - 125mm | 368-174 | ±5μm |
| 125 - 150mm | 368-175 | ±5μm |
| 150 - 175mm | 368-176 | ±5μm |
| 175 - 200mm | 368-177 | ±5μm |
| 200 - 225mm | 368-178 | ±5μm |
| 225 - 250mm | 368-179 | ±5μm |
| 250 - 275mm | 368-180 | ±5μm |
| 275 - 300mm | 368-181 | ±5μm |

Inch Individual with TiN-coated contact points

| Range | Order No. | Accuracy |
|-------------|----------------|----------|
| .08 - .1" | 368-021 | ±.0001" |
| .1 - .12" | 368-022 | ±.0001" |
| .12 - .16" | 368-023 | ±.0001" |
| .16 - .2" | 368-024 | ±.0001" |
| .2 - .24" | 368-025 | ±.0001" |
| .24 - .28" | 368-026 | ±.0001" |
| .275 - .35" | 368-261 | ±.0001" |
| .35 - .425" | 368-262 | ±.0001" |
| .425 - .5" | 368-263 | ±.0001" |
| .5 - .65" | 368-264 | ±.0001" |
| .65 - .8" | 368-265 | ±.0001" |
| .8 - 1" | 368-266 | ±.00015" |
| 1 - 1.2" | 368-267 | ±.00015" |
| 1.2 - 1.6" | 368-268 | ±.00015" |
| 1.6 - 2" | 368-269 | ±.00015" |
| 2 - 2.5" | 368-270 | ±.00015" |
| 2.5 - 3" | 368-271 | ±.00015" |
| 3 - 3.5" | 368-272 | ±.00015" |
| 3.5 - 4" | 368-273 | ±.00015" |
| 4 - 5" | 368-274 | ±.00025" |
| 5 - 6" | 368-275 | ±.00025" |
| 6 - 7" | 368-276 | ±.00025" |
| 7 - 8" | 368-277 | ±.00025" |
| 8 - 9" | 368-278 | ±.00025" |
| 9 - 10" | 368-279 | ±.00025" |
| 10 - 11" | 368-280 | ±.00025" |
| 11 - 12" | 368-281 | ±.00025" |

Complete Unit Set

Each set includes complete gages (micrometer head units and measuring heads for each size).

Metric with TiN-coated contact points

| Range | Order No. | Individual range | Setting rings included | Remarks |
|-------------|----------------|--------------------------------------|------------------------|--------------------|
| 2 - 3mm | 368-906 | 2-2.5, 2.5-3mm | ø2.5mm | — |
| 3 - 6mm | 368-907 | 3-4, 4-5, 5-6mm | ø4mm, ø5mm | — |
| 6 - 12mm | 368-911 | 6-8, 8-10, 10-12mm | ø8mm, ø10mm | with extension rod |
| 12 - 20mm | 368-912 | 12-16, 16-20mm | ø16mm | with extension rod |
| 20 - 50mm | 368-913 | 20-25, 25-30, 30-40, 40-50mm | ø25mm, ø40mm | with extension rod |
| 50 - 100mm | 368-914 | 50-63, 62-75, 75-88, 87-100mm | ø62mm, ø87mm | with extension rod |
| 100 - 200mm | 368-915 | 100-125, 125-150, 150-175, 175-200mm | ø125mm, ø175mm | with extension rod |

Inch with TiN-coated contact points

| Range | Order No. | Individual range | Setting rings included | Remarks |
|-------------|----------------|--------------------------------------|------------------------|--------------------|
| .08" - .12" | 368-926 | .08-.1", .1-.12" | .1" DIA. | — |
| .12" - .28" | 368-927 | .12-.16", .16-.2", .2-.24", .24-.28" | .16" DIA., .24" DIA. | — |
| .275" - .5" | 368-916 | .275-.35", .35-.425", .425-.5" | .35" DIA., .5" DIA. | with extension rod |
| .5" - .8" | 368-917 | .5-.65", .65-.8" | .65" DIA. | with extension rod |
| .8" - 2" | 368-918 | .8-1", 1-1.2", 1.2-1.6", 1.6-2" | 1" DIA., 1.6" DIA. | with extension rod |
| 2" - 4" | 368-919 | 2-2.5", 2.5-3", 3-3.5", 3.5-4" | 2.5" DIA., 3.5" DIA. | with extension rod |
| 4" - 8" | 368-920 | 4-5", 5-6", 6-7", 7-8" | 5" DIA., 7" DIA. | with extension rod |

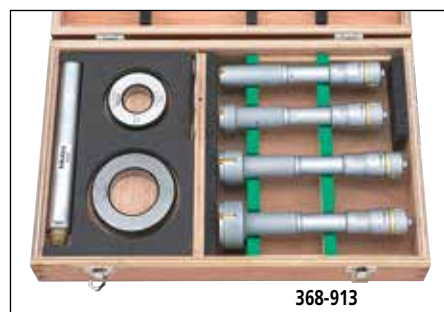
*.0001" graduation



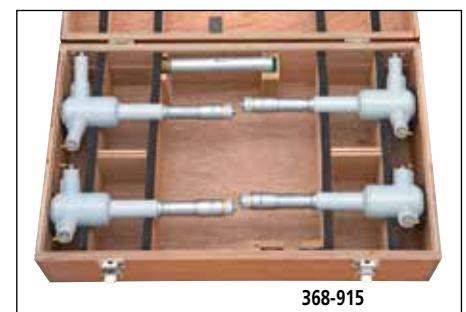
368-906



368-911



368-913



368-915