

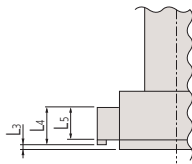
# Holtest

For easy and accurate measurement of inside diameters

## Holtest SERIES 368 — Three-point/Two-point Internal Micrometers

- Titanium-coated measuring pins on the three-point type (over 6mm range models) provide excellent durability and impact resistance and allow the instrument to measure right to the bottom of a blind hole.
- Three-point bore micrometer with measuring range 6mm or longer allows stable measurement through automatic centering.
- Can measure deep holes using an Extension rod (optional) which is available on models over 6mm (.275") measuring range.
- Ratchet Stop ensures constant-force, repeatable measurement.
- Setting Rings for accurately setting the instrument are optional. Refer to page C-47 for details.

| Range (mm) | L <sub>3</sub> (mm) | L <sub>4</sub> (mm) | L <sub>5</sub> (mm) |
|------------|---------------------|---------------------|---------------------|
| 2 - 6      | —                   | —                   | 2                   |
| 6 - 12     | 2 or below          | —                   | 2.5                 |
| 12 - 20    | 0.3 or below        | 5.6                 | 3.5                 |
| 20 - 30    |                     | 8.3                 | 5.2                 |
| 30 - 50    |                     | 13.0                | 10.0                |
| 50 - 100   |                     | 17.0                | 14.0                |
| 100 - 300  | 12.4 or below       | 21.0                | 13.8                |



**368-001**  
(Two-point contact model)



**368-168**



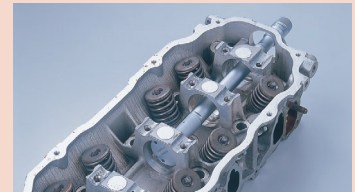
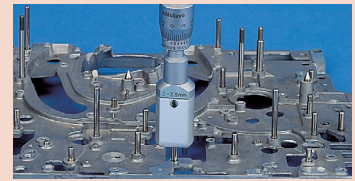
**368-170**



**368-174**



An inspection certificate is supplied as standard. Refer to page IX for details.



Application using an extension rod

For details of Special-order Products, refer to page C-49.

## SPECIFICATIONS

| Metric                          |             |                   |                           |                          | Inch                            |              |            |                           |                          |
|---------------------------------|-------------|-------------------|---------------------------|--------------------------|---------------------------------|--------------|------------|---------------------------|--------------------------|
| Order No.                       | Range       | Graduation        | Accuracy*1                | Extension Rod (optional) | Order No.                       | Range        | Graduation | Accuracy*1                | Extension Rod (optional) |
| (Two-point)<br><b>368-001</b>   | 2 - 2.5mm   | 0.001mm           | ±2μm (within 2μm)         | —                        | (Two-point)<br><b>368-021</b>   | .08" - .1"   | .0001"     | ±.0001" (within .0001")   | —                        |
| <b>368-002</b>                  | 2.5 - 3mm   |                   |                           |                          | <b>368-022</b>                  | .1" - .12"   |            |                           |                          |
| <b>368-003</b>                  | 3 - 4mm     |                   |                           |                          | <b>368-023</b>                  | .12" - .16"  |            |                           |                          |
| <b>368-004</b>                  | 4 - 5mm     |                   |                           |                          | <b>368-024</b>                  | .16" - .2"   |            |                           |                          |
| <b>368-005</b>                  | 5 - 6mm     |                   |                           |                          | <b>368-025</b>                  | .2" - .24"   |            |                           |                          |
| (Three-point)<br><b>368-161</b> | 6 - 8mm     | <b>368-026</b>    | .24" - .28"               |                          |                                 |              |            |                           |                          |
| <b>368-162</b>                  | 8 - 10mm    | 952322 (100mm)    | ±.0001" (within .0001")   | —                        | (Three-point)<br><b>368-261</b> | .275" - .35" | .0002"     | ±.00015" (within .00015") | 952322 (100mm)           |
| <b>368-163</b>                  | 10 - 12mm   |                   |                           |                          | <b>368-262</b>                  | .35" - .425" |            |                           |                          |
| <b>368-164</b>                  | 12 - 16mm   | 952621 (150mm)    | ±.00015" (within .00015") | —                        | <b>368-263</b>                  | .425" - .5"  |            |                           |                          |
| <b>368-165</b>                  | 16 - 20mm   |                   |                           |                          | <b>368-264</b>                  | .5" - .65"   |            |                           |                          |
| <b>368-166</b>                  | 20 - 25mm   | 952622 (150mm)    | ±.00015" (within .00015") | —                        | <b>368-265</b>                  | .65" - .8"   |            |                           |                          |
| <b>368-167</b>                  | 25 - 30mm   |                   |                           |                          | <b>368-266</b>                  | .8" - 1"     |            |                           |                          |
| <b>368-168</b>                  | 30 - 40mm   | 952623 (150mm)    | ±.00025" (within .00025") | —                        | <b>368-267</b>                  | 1" - 1.2"    |            |                           |                          |
| <b>368-169</b>                  | 40 - 50mm   |                   |                           |                          | <b>368-268</b>                  | 1.2" - 1.6"  |            |                           |                          |
| <b>368-170</b>                  | 50 - 63mm   | ±3μm (within 3μm) | ±.00025" (within .00025") | —                        | <b>368-269</b>                  | 1.6" - 2"    |            |                           |                          |
| <b>368-171</b>                  | 62 - 75mm   |                   |                           |                          | <b>368-270</b>                  | 2" - 2.5"    |            |                           |                          |
| <b>368-172</b>                  | 75 - 88mm   | ±5μm (within 5μm) | ±.00025" (within .00025") | —                        | <b>368-271</b>                  | 2.5" - 3"    |            |                           |                          |
| <b>368-173</b>                  | 87 - 100mm  |                   |                           |                          | <b>368-272</b>                  | 3" - 3.5"    |            |                           |                          |
| <b>368-174</b>                  | 100 - 125mm | ±5μm (within 5μm) | ±.00025" (within .00025") | —                        | <b>368-273</b>                  | 3.5" - 4"    |            |                           |                          |
| <b>368-175</b>                  | 125 - 150mm |                   |                           |                          | <b>368-274</b>                  | 4" - 5"      |            |                           |                          |
| <b>368-176</b>                  | 150 - 175mm | ±5μm (within 5μm) | ±.00025" (within .00025") | —                        | <b>368-275</b>                  | 5" - 6"      |            |                           |                          |
| <b>368-177</b>                  | 175 - 200mm |                   |                           |                          | <b>368-276</b>                  | 6" - 7"      |            |                           |                          |
| <b>368-178</b>                  | 200 - 225mm | ±5μm (within 5μm) | ±.00025" (within .00025") | —                        | <b>368-277</b>                  | 7" - 8"      |            |                           |                          |
| <b>368-179</b>                  | 225 - 250mm |                   |                           |                          | <b>368-278</b>                  | 8" - 9"      |            |                           |                          |
| <b>368-180</b>                  | 250 - 275mm | ±5μm (within 5μm) | ±.00025" (within .00025") | —                        | <b>368-279</b>                  | 9" - 10"     |            |                           |                          |
| <b>368-181</b>                  | 275 - 300mm |                   |                           |                          | <b>368-280</b>                  | 10" - 11"    |            |                           |                          |
|                                 |             |                   |                           |                          | <b>368-281</b>                  | 11" - 12"    |            |                           |                          |

\*1 Excluding quantizing error.

Accuracy: values measured across the entire measuring face.

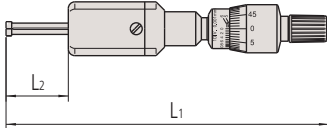
Maximum difference: differences between the maximum and minimum values.

\* Setting ring and extension rod: optional.

\* It is not advisable to use measuring heads other than as supplied as a standard accessory, or widen a measuring range by using any other multiple sub-measuring heads. (The measuring accuracy in such cases is not guaranteed.)

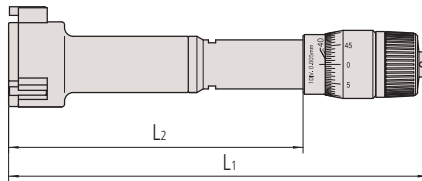
## DIMENSIONS

Unit: mm



| Range                 | L <sub>2</sub> | L <sub>1</sub> |
|-----------------------|----------------|----------------|
| 2 - 2.5, 2.5 - 3mm    | 12             | 103.5 - 104    |
| 3 - 4, 4 - 5, 5 - 6mm | 22             | 113 - 114      |

External appearance differs depending on the measuring range.



| Range  | L <sub>2</sub> | L <sub>1</sub> |
|--|----------------|----------------|
| 6 - 8, 8 - 10, 10 - 12mm   | 59             | 102 - 104      |
| 12 - 16, 16 - 20mm   | 82             | 126 - 130      |
| 20 - 25, 25 - 30mm   | 94             | 137 - 142      |
| 30 - 40, 40 - 50mm   | 102            | 145 - 155      |
| 50 - 63, 62 - 75, 75 - 88, 87 - 100mm  | 105            | 150 - 163      |
| 100 - 125, 125 - 150, 150 - 175, 175 - 200, 200 - 225, 225 - 250, 250 - 275, 275 - 300mm | 161            | 227 - 252      |

External appearance differs depending on the measuring range.