

Holtest

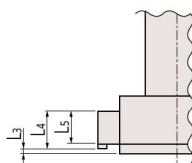
For easy and accurate measurement of inside diameters

Holtest

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

- Titanium-coated measuring pins on the three-point type (over 6 mm range models) provide excellent durability and impact resistance.
- Three-point bore micrometer with measuring range 6 mm or longer allows stable measurement through automatic centering.
- Measurement can be made close to the bottom of a blind hole.
- Deep holes can be measured by attaching an Extension Rod (optional) which is available on models over 6 mm (0.275 in) measuring range.
- Constant-force device allows repeatable measurement, regardless of operator's skill.
- For details of Setting Rings, refer to page C-47.

Range (mm)	L3 (mm)	L4 (mm)	L5 (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



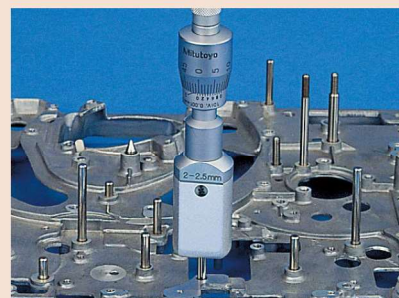
368-170



368-174



An inspection certificate is supplied as standard. Refer to page U-11 for details.



Typical application using an extension rod

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

SPECIFICATIONS

Metric				
Order No.	Range*2 (mm)	Graduation (mm)	Maximum permissible error J_{MPE} (μm)*1	Extension Rod (optional)
(Two-point)		0.001	±2 (within 2)	—
368-001	2 - 2.5			
368-002	2.5 - 3			
368-003	3 - 4			
368-004	4 - 5			
368-005	5 - 6			
(Three-point)		0.005	±3 (within 3)	952322 (100 mm)
368-161	6 - 8			
368-162	8 - 10			
368-163	10 - 12			
368-164	12 - 16			
368-165	16 - 20			
368-166	20 - 25			
368-167	25 - 30			
368-168	30 - 40			
368-169	40 - 50			
368-170	50 - 63			
368-171	62 - 75			
368-172	75 - 88			
368-173	87 - 100			
368-174	100 - 125			
368-175	125 - 150			
368-176	150 - 175			
368-177	175 - 200			
368-178	200 - 225			
368-179	225 - 250			
368-180	250 - 275			
368-181	275 - 300			
			±4 (within 4)	952623 (150 mm)
			±5 (within 5)	
			±6 (within 6)	

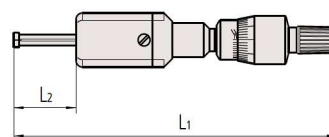
Inch				
Order No.	Range*2 (in)	Graduation (in)	Maximum permissible error J_{MPE} (in)*1	Extension Rod (optional)
(Two-point)		0.0001	± 0.0001 (within 0.0001)	—
368-021	0.08 - 0.1			
368-022	0.1 - 0.12			
368-023	0.12 - 0.16			
368-024	0.16 - 0.2			
368-025	0.2 - 0.24			
368-026	0.24 - 0.28			
(Three-point)		0.0002	± 0.00015 (within 0.00015)	952322 (100 mm)
368-261	0.275 - 0.35			
368-262	0.35 - 0.425			
368-263	0.425 - 0.5			
368-264	0.5 - 0.65			952621 (150 mm)
368-265	0.65 - 0.8			
368-266	0.8 - 1			
368-267	1 - 1.2		952622 (150 mm)	
368-268	1.2 - 1.6			
368-269	1.6 - 2			
368-270	2 - 2.5		± 0.0002 (within 0.0002)	952623 (150 mm)
368-271	2.5 - 3			
368-272	3 - 3.5			
368-273	3.5 - 4		± 0.00025 (within 0.00025)	
368-274	4 - 5			
368-275	5 - 6			
368-276	6 - 7		± 0.0003 (within 0.0003)	
368-277	7 - 8			
368-278	8 - 9			
368-279	9 - 10			
368-280	10 - 11			
368-281	11 - 12			

*1 Additionally, the difference in permissible error allowable is limited to a value within this range, as given in parentheses, and is measured with the entire measuring surface in contact with the object measured.

*2 The measurement range cannot be enlarged by measuring heads that are not standard-supplied (the accuracy is not guaranteed).

Note: Setting rings are optional.

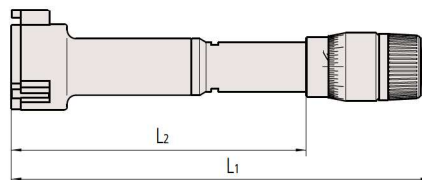
DIMENSIONS



Unit: mm

Range	L2	L1
2 - 2.5, 2.5 - 3 mm	12	103.5 - 104
3 - 4, 4 - 5, 5 - 6 mm	22	113 - 114

Note: External appearance differs depending on the measuring range.



Range	L2	L1
6 - 8, 8 - 10, 10 - 12 mm	59	102 - 104
12 - 16, 16 - 20 mm	82	126 - 130
20 - 25, 25 - 30 mm	94	137 - 142
30 - 40, 40 - 50 mm	102	145 - 155
50 - 63, 62 - 75, 75 - 88, 87 - 100 mm	105	150 - 163
100 - 125, 125 - 150, 150 - 175, 175 - 200, 200 - 225, 225 - 250, 250 - 275, 275 - 300 mm	161	227 - 252

Note: External appearance differs depending on the measuring range.

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

Non-Interchangeable-Head Sets

Metric			
Set Order No.	Range* (mm)	Graduation (mm)	Content of Set
(Two-point) 368-906	2 - 3	0.001	Micrometer head unit 2 - 2.5 mm 1 pc. 2.5 - 3 mm 1 pc. Setting ring (ø2.5) 1 pc. Hex wrench 1 pc.
368-907	3 - 6		Micrometer head unit 3 - 4 mm 1 pc. 4 - 5 mm 1 pc. 5 - 6 mm 1 pc. Setting ring (ø4, ø5) 1 pc. each Hex wrench 1 pc.
(Three-point) 368-911	6 - 12		Micrometer head unit 6 - 8 mm 1 pc. 8 - 10 mm 1 pc. 10 - 12 mm 1 pc. Setting ring (ø8, ø10) 1 pc. each Extension rod (100 mm) 1 pc. Spanner 2 pcs. Hex wrench 1 pc.
368-912	12 - 20	0.005	Micrometer head unit 12 - 16 mm 1 pc. 16 - 20 mm 1 pc. Setting ring (ø16) 1 pc. Extension rod (150 mm) 1 pc. Spanner 2 pcs. Hex wrench 1 pc.
368-913	20 - 50		Micrometer head unit 20 - 25 mm 1 pc. 25 - 30 mm 1 pc. 30 - 40 mm 1 pc. 40 - 50 mm 1 pc. Setting ring (ø25, ø40) 1 pc. each Extension rod (150 mm) 1 pc. Spanner 2 pcs. Hex wrench 1 pc.
368-914	50 - 100		Micrometer head unit 50 - 63 mm 1 pc. 62 - 75 mm 1 pc. 75 - 88 mm 1 pc. 87 - 100 mm 1 pc. Setting ring (ø62, ø87) 1 pc. each Extension rod (150 mm) 1 pc. Spanner 2 pcs. Hex wrench 1 pc.
368-915	100 - 200		Micrometer head unit 100 - 125 mm 1 pc. 125 - 150 mm 1 pc. 150 - 175 mm 1 pc. 175 - 200 mm 1 pc. Setting ring (ø125, ø175) 1 pc. each Extension rod (150 mm) 1 pc. Spanner 2 pcs. Hex wrench 1 pc.

Inch			
Set Order No.	Range* (in)	Graduation (in)	Content of Set
(Two-point) 368-926	0.08 - 0.12	0.0001	Micrometer head unit 0.08 - 0.1 in 1 pc. 0.1 - 0.12 in 1 pc. Setting ring (0.1 in DIA) 1 pc. Hex wrench 1 pc.
368-927	0.12 - 0.28		Micrometer head unit 0.12 - 0.16 in 1 pc. 0.16 - 0.2 in 1 pc. 0.2 - 0.24 in 1 pc. 0.24 - 0.28 in 1 pc. Setting ring (0.16 in DIA., 0.24 in DIA) 1 pc. each Hex wrench 1 pc.
(Three-point) 368-916	0.275 - 0.5		Micrometer head unit 0.275 - 0.35 in 1 pc. 0.35 - 0.425 in 1 pc. 0.425 - 0.5 in 1 pc. Setting ring (0.35 in DIA., 0.5 in DIA) 1 pc. each Extension rod (100 mm) 1 pc. Spanner 2 pcs. Hex wrench 1 pc.
368-917	0.5 - 0.8	0.0002	Micrometer head unit 0.5 - 0.65 in 1 pc. 0.65 - 0.8 in 1 pc. Setting ring (0.65 in DIA) 1 pc. Extension rod (150 mm) 1 pc. Spanner 2 pcs. Hex wrench 1 pc.
368-918	0.8 - 2		Micrometer head unit 0.8 - 1 in 1 pc. 1 - 1.2 in 1 pc. 1.2 - 1.6 in 1 pc. 1.6 - 2 in 1 pc. Setting ring (1 in DIA., 1.6 in DIA) 1 pc. each Extension rod (150 mm) 1 pc. Spanner 2 pcs. Hex wrench 1 pc.
368-919	2 - 4		Micrometer head unit 2 - 2.5 in 1 pc. 2.5 - 3 in 1 pc. 3 - 3.5 in 1 pc. 3.5 - 4 in 1 pc. Setting ring (2.5 in DIA., 3.5 in DIA) 1 pc. each Extension rod (150 mm) 1 pc. Spanner 2 pcs. Hex wrench 1 pc.
368-920	4 - 8		Micrometer head unit 4 - 5 in 1 pc. 5 - 6 in 1 pc. 6 - 7 in 1 pc. 7 - 8 in 1 pc. Setting ring (5 in DIA., 7 in DIA) 1 pc. each Extension rod (150 mm) 1 pc. Spanner 2 pcs. Hex wrench 1 pc.

* The measurement range cannot be enlarged by measuring heads that are not standard-supplied (the accuracy is not guaranteed).



368-906



368-907



368-911



368-912



368-913



368-914



Setting rings are supplied as standard
($\phi 125$, $\phi 175$) (Packed separately)

368-915