

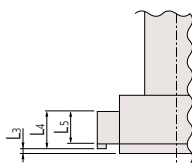
Holtest

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)	L ₃ (mm)	L ₄ (mm)	L ₅ (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



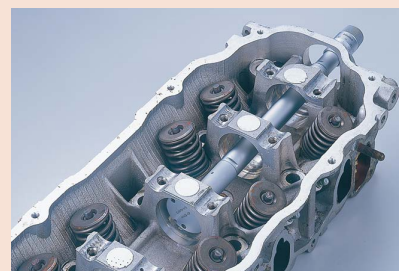
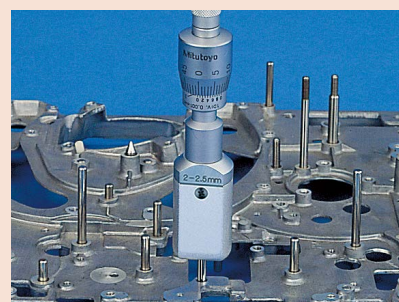
368-170



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		952621 (150 mm)	
368-167	25 - 30			
368-168	30 - 40			
368-169	40 - 50		952622 (150 mm)	
368-170	50 - 63			
368-171	62 - 75			
368-172	75 - 88		±4 (within 4)	952623 (150 mm)
368-173	87 - 100			
368-174	100 - 125			
368-175	125 - 150		±5 (within 5)	
368-176	150 - 175			
368-177	175 - 200			
368-178	200 - 225	±6 (within 6)		
368-179	225 - 250			
368-180	250 - 275			
368-181	275 - 300			

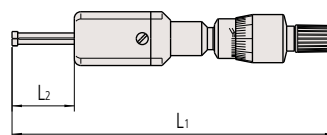
*1 Additionally, the difference in permissible error allowable is limited to a value within this range, as given in parentheses, and is measured with the entire measuring surface in contact with the object measured.

*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.

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	0.0002	± 0.00015 (within 0.00015)	952621 (150 mm)
368-026	0.24 - 0.28			
(Three-point)				
368-261	0.275 - 0.35			
368-262	0.35 - 0.425		± 0.0002 (within 0.0002)	952622 (150 mm)
368-263	0.425 - 0.5			
368-264	0.5 - 0.65		± 0.00025 (within 0.00025)	952623 (150 mm)
368-265	0.65 - 0.8			
368-266	0.8 - 1		± 0.0003 (within 0.0003)	952623 (150 mm)
368-267	1 - 1.2			
368-268	1.2 - 1.6	0.0002	± 0.0003 (within 0.0003)	952623 (150 mm)
368-269	1.6 - 2			
368-270	2 - 2.5			
368-271	2.5 - 3			
368-272	3 - 3.5			
368-273	3.5 - 4			
368-274	4 - 5			
368-275	5 - 6			
368-276	6 - 7			
368-277	7 - 8			
368-278	8 - 9	0.0001	± 0.0001 (within 0.0001)	—
368-279	9 - 10			
368-280	10 - 11			
368-281	11 - 12			

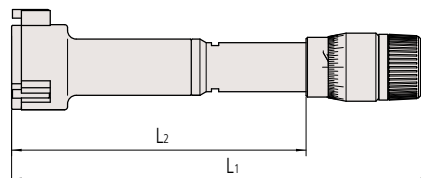
DIMENSIONS



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.

Holtest

For easy and accurate measurement of inside diameters

Holtest

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



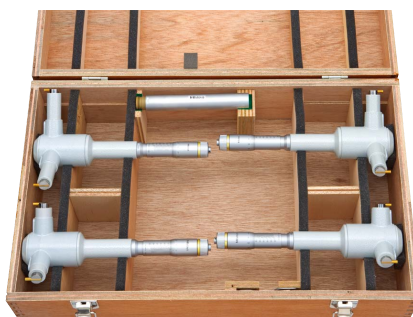
368-912



368-913



368-914



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

368-915

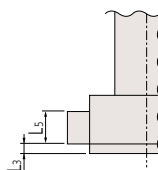
Holtest

For easy and accurate measurement of inside diameters

Holtest (Type II) SERIES 368 — Three-point Internal Micrometers

- Affordable, entry-level Holtest.
- Same accuracy as the titanium-coated Holtest models.
- For details of Setting Rings, refer to page C-47.
- Constant-force device allows repeatable measurement, regardless of operator's skill.

Range (mm)	L ₃ (mm)	L ₅ (mm)
12 - 20	2.6 or below	3.5
20 - 30		5.2
30 - 50	3.4 or below	10
50 - 100		14
100 - 300	19.6 or below	13.8



- Deep holes can be measured by attaching an Extension Rod (optional).



368-769



368-770



368-774



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



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

SPECIFICATIONS

Metric		Individual		
Order No.	Range*2 (mm)	Graduation (mm)	Maximum permissible error J_{MPE} (μm)*1	Extension Rod (optional)
368-764	12 - 16	0.005	±3 (within 3)	952621 (150 mm)
368-765	16 - 20			
368-766	20 - 25			952622 (150 mm)
368-767	25 - 30			
368-768	30 - 40			
368-769	40 - 50		±4 (within 4)	952623 (150 mm)
368-770	50 - 63			
368-771	62 - 75			
368-772	75 - 88			
368-773	87 - 100		±5 (within 5)	
368-774	100 - 125			
368-775	125 - 150			
368-776	150 - 175		±6 (within 6)	
368-777	175 - 200			
368-778	200 - 225			
368-779	225 - 250			
368-780	250 - 275			
368-781	275 - 300			

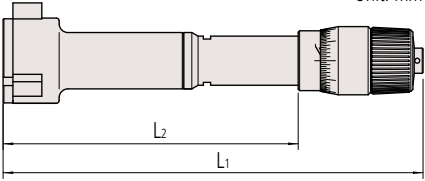
Inch	Individual			
Order No.	Range*2 (in)	Graduation (in)	Maximum permissible error J_{MPE} (in)*1	Extension Rod (optional)
368-864	0.5 - 0.65	0.0002	±0.00015 (within 0.00015)	952621 (150 mm)
368-865	0.65 - 0.8			952622 (150 mm)
368-866	0.8 - 1			
368-867	1 - 1.2			
368-868	1.2 - 1.6		±0.0002 (within 0.0002)	
368-869	1.6 - 2			
368-870	2 - 2.5			
368-871	2.5 - 3			
368-872	3 - 3.5		±0.00025 (within 0.00025)	
368-873	3.5 - 4			
368-874	4 - 5			
368-875	5 - 6			
368-876	6 - 7		952623 (150 mm)	
368-877	7 - 8			
368-878	8 - 9			
368-879	9 - 10			
368-880	10 - 11	±0.0003 (within 0.0003)		
368-881	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
	12 - 16, 16 - 20	82	126 - 130
	20 - 25, 25 - 30	94	137 - 142
	30 - 40, 40 - 50	102	145 - 155
	50 - 63, 62 - 75, 75 - 88, 87 - 100	105	150 - 163
	100 - 125, 125 - 150, 150 - 175, 175 - 200 200 - 225, 225 - 250, 250 - 275, 275 - 300	161	227 - 252

Note: External appearance differs depending on the measuring range.

Non-Interchangeable-Head Sets

Metric			Inch						
Order No.	Range* (mm)	Graduation (mm)	Content of Set		Order No.	Range* (in)	Graduation (in)	Content of Set	
368-991	12 - 20	0.005	Micrometer head unit		368-995	0.5 - 0.8	0.0002	Micrometer head unit	
			12 - 16 mm	1 pc.				0.5 - 0.65 in	1 pc.
			16 - 20 mm	1 pc.				0.65 - 0.8 in	1 pc.
			Setting ring (ø16)	1 pc.				Setting ring (0.65 in DIA.)	1 pc.
			Extension rod (150 mm)	1 pc.				Extension rod (150 mm)	1 pc.
			Spanner	2 pcs.				Spanner	2 pcs.
Hex wrench	1 pc.		Hex wrench	1 pc.					
368-992	20 - 50		Micrometer head unit		368-996	0.8 - 2		Micrometer head unit	
			20 - 25 mm	1 pc.				0.8 - 1 in	1 pc.
			25 - 30 mm	1 pc.				1 - 1.2 in	1 pc.
			30 - 40 mm	1 pc.				1.2 - 1.6 in	1 pc.
			40 - 50 mm	1 pc.				1.6 - 2 in	1 pc.
			Setting ring (ø25, ø40)	1 pc. each				Setting ring (1 in DIA., 1.6 in DIA.)	1 pc. each
Extension rod (150 mm)	1 pc.		Extension rod (150 mm)	1 pc.					
Spanner	2 pcs.		Spanner	2 pcs.					
Hex wrench	1 pc.		Hex wrench	1 pc.					
368-993	50 - 100		Micrometer head unit		368-997	2 - 4		Micrometer head unit	
			50 - 63 mm	1 pc.				2 - 2.5 in	1 pc.
			62 - 75 mm	1 pc.				2.5 - 3 in	1 pc.
			75 - 88 mm	1 pc.				3 - 3.5 in	1 pc.
		87 - 100 mm	1 pc.	3.5 - 4 in			1 pc.		
		Setting ring (ø62, ø87)	1 pc. each	Setting ring (2.5 in DIA., 3.5 in DIA.)			1 pc. each		
Extension rod (150 mm)	1 pc.	Extension rod (150 mm)	1 pc.						
Spanner	2 pcs.	Spanner	2 pcs.						
Hex wrench	1 pc.	Hex wrench	1 pc.						
368-994	100 - 200	Micrometer head unit		368-998	4 - 8	Micrometer head unit			
		100 - 125 mm	1 pc.			4 - 5 in	1 pc.		
		125 - 150 mm	1 pc.			5 - 6 in	1 pc.		
		150 - 175 mm	1 pc.			6 - 7 in	1 pc.		
		175 - 200 mm	1 pc.			7 - 8 in	1 pc.		
		Setting ring (ø125, ø175)	1 pc. each			Setting ring (5 in DIA., 7 in DIA.)	1 pc. each		
Extension rod (150 mm)	1 pc.	Extension rod (150 mm)	1 pc.						
Spanner	2 pcs.	Spanner	2 pcs.						
Hex wrench	1 pc.	Hex wrench	1 pc.						

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



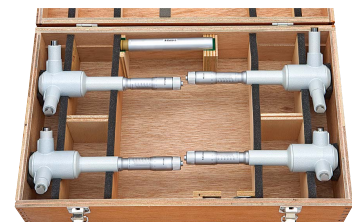
368-991



368-992



368-993



Setting rings are supplied as standard (ø125, ø175) (Packed separately)

368-994