

Digimatic Holtest
SERIES 468 — Three-point Bore Micrometers

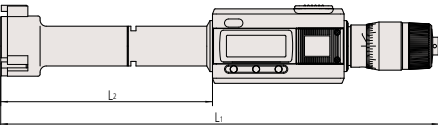
- These three-point bore Digimatic micrometers for inside measurement are suitable for highly accurate measurements.
- Can measure deep holes using an extension rod (optional).
- Can measure close to the bottom of a blind hole.
- Titanium-coated measuring pins provide excellent durability and impact resistance.
- Two values can be preset as a reference point, allowing you to store multiple measured values of setting rings and to quickly prepare for measurement.

SPECIFICATIONS

Metric				
Code No.	Range*2 (mm)	Resolution (mm)	Maximum permissible error J _{MPE} (μm)*1	Extension Rod (optional)
468-161	6 - 8	0.001	±2 (maximum difference 2)	952322 (100 mm)
468-162	8 - 10			
468-163	10 - 12			
468-164	12 - 16		±3 (maximum difference 3)	952621 (150 mm)
468-165	16 - 20			
468-166	20 - 25			
468-167	25 - 30			
468-168	30 - 40			
468-169	40 - 50			
468-170	50 - 63			
468-171	62 - 75			
468-172	75 - 88			
468-173	87 - 100			
468-174	100 - 125		±5 (maximum difference 5)	
468-175	125 - 150			
468-176	150 - 175			
468-177	175 - 200		±6 (maximum difference 6)	
468-178	200 - 225			
468-179	225 - 250			
468-180	250 - 275			
468-181	275 - 300			

- Power source: SR44 battery (1 pc.), 938882 included as standard (for operational checks)
 - Battery life: Approx. 1.2 years under normal use
 - Position detection method: Electromagnetic induction-type rotary encoder
 - *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
6 - 8, 8 - 10, 10 - 12 mm	59	175 - 177
12 - 16, 16 - 20 mm	84	197 - 201
20 - 25, 25 - 30 mm	93	206 - 211
30 - 40, 40 - 50 mm	103	214 - 224
50 - 63, 62 - 75, 75 - 88, 87 - 100 mm	105	219 - 232
100 - 125, 125 - 150, 150 - 175, 175 - 200, 200 - 225, 225 - 250, 250 - 275, 275 - 300 mm	151	286 - 311

* L2 is maximum depth of measurement possible.
Note: External view differs depending on measurement range.

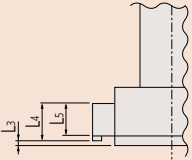


Measurement example



Reference dimensions when measuring a blind hole

Range (mm)	L3 (mm)	L4 (mm)	L5 (mm)
6 - 12	2 or below	—	2.5
12 - 20	—	5.6	3.5
20 - 30	0.3 or below	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



Functions

- Zero-setting
- Origin restoration
- Data hold
- 2-point Preset
- Function lock
- inch/mm readout (inch/mm type)
- Automatic power ON/OFF
- Error alarm
- Data output

Optional Accessories

Code No.	Type	description
264-020	—	USB Input Tool Series USB Keyboard Signal Conversion Type IT-020U
05CZA662	B	Connection cable (1 m)
05CZA663	B	Connection cable (2 m)
06AFM380B	B	USB Input Tool Direct (2 m)
02AZD730*	IP67	U-WAVE-T
02AZD880*	Buzzer	U-WAVE-T
02AZD790B	B	Connection cable for U-WAVE-T (160 mm)
02AZE140B	B	Connection cable for U-WAVE-T For foot switch

* Add suffix to Code No.; **G** for Asia, Europe and the Americas, **H** for Brazil and **J** for Korea.

Mounting bracket (optional)

A bracket used to fix a micrometer on the MS-R micrometer stand.
04AZB157



For details of Special-order Products, refer to page 13-16.

Optional Accessories

Code No.	Type	description
264-020	—	USB Input Tool Series USB Keyboard Signal Conversion Type IT-020U
05CZA662	B	Connection cable (1 m)
05CZA663	B	Connection cable (2 m)
06AFM380B	B	USB Input Tool Direct (2 m)
02AZD730*	IP67	U-WAVE-T
02AZD880*	Buzzer	U-WAVE-T
02AZD790B	B	Connection cable for U-WAVE-T (160 mm)
02AZE140B	B	Connection cable for U-WAVE-T For foot switch

* Add suffix to Code No.; **G** for Asia, Europe and the Americas,
H for Brazil and **J** for Korea.

Interchangeable Head Sets



468-971



468-972



468-973



468-974

Metric		
Set code No.	Range* (mm)	Content of set
468-971	6 - 12	Display unit 6 - 12 mm 1 pc.
		Measuring head 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. Phillips screwdriver 1 pc.
468-972	12 - 20	Display unit 12 - 20 mm 1 pc.
		Measuring head 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. Phillips screwdriver 1 pc.
468-973	20 - 50	Display unit 20 - 50 mm 1 pc.
		Measuring head 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. Phillips screwdriver 1 pc.
468-974	50 - 100	Display unit 50 - 100 mm 1 pc.
		Measuring head 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. Phillips screwdriver 1 pc.

Inch / Metric		
Set code No.	Range* (in)	Content of set
468-976	0.275 - 0.5	Display unit 0.275 - 0.5 in 1 pc.
		Measuring head 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., 0.425 in DIA.) 1 pc. each
		Extension rod (100 mm) 1 pc.
		Spanner 2 pcs. Hex wrench 1 pc. Phillips screwdriver 1 pc.
468-977	0.5 - 0.8	Display unit 0.5 - 0.8 in 1 pc.
		Measuring head 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. Phillips screwdriver 1 pc.
468-978	0.8 - 2	Display unit 0.8 - 2 in 1 pc.
		Measuring head 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. Phillips screwdriver 1 pc.
468-979	2 - 4	Display unit 2 - 4 in 1 pc.
		Measuring head 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. Phillips screwdriver 1 pc.

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

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Interchangeable Head Sets



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

468-975

Accessories (optional)
Refer to page 08-4.

Metric			Inch / Metric		
Set code No.	Range* (mm)	Content of set	Set code No.	Range* (in)	Content of set
468-975	100 - 200	Display unit	468-980	4 - 8	Display unit
		100 - 200 mm 1 pc.			4 - 8 in 1 pc.
		Measuring head			Measuring head
		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 1 pc. each
		Extension rod (150 mm) 1 pc.			(5 in DIA., 7 in DIA.)
		Spanner 2 pcs.			Extension rod (150 mm) 1 pc.
		Hex wrench 1 pc.			Spanner 2 pcs.
		Phillips screwdriver 1 pc.			Hex wrench 1 pc.
					Phillips screwdriver 1 pc.

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

Accessories (optional)

Refer to page 08-4.

Non-interchangeable Head Sets



468-981



468-982



468-983



468-984



468-985

Metric			
Set code No.	Range*2 (mm)	Content of set	Extension rod (optional)
468-981	6 - 12	Display unit 6 - 8 mm 1 pc. 8 - 10 mm 1 pc. 10 - 12 mm 1 pc. Setting ring (ø8, ø10) 1 pc. each Spanner 2 pcs. Hex wrench 1 pc. Phillips screwdriver 1 pc.	100 mm 1 pc.
468-982	12 - 25	Display unit 12 - 16 mm 1 pc. 16 - 20 mm 1 pc. 20 - 25 mm 1 pc. Setting ring (ø16, ø20) 1 pc. each Spanner 2 pcs. Hex wrench 1 pc. Phillips screwdriver 1 pc.	150 mm 2 pcs.*1
468-983	25 - 50	Display unit 25 - 30 mm 1 pc. 30 - 40 mm 1 pc. 40 - 50 mm 1 pc. Setting ring (ø30, ø40) 1 pc. each Spanner 1 pc. Hex wrench 1 pc. Phillips screwdriver 1 pc.	150 mm 1 pc.
468-984	50 - 75	Display unit 50 - 63 mm 1 pc. 62 - 75 mm 1 pc. Setting ring (ø62) 1 pc. Spanner 1 pc. Hex wrench 1 pc. Phillips screwdriver 1 pc.	150 mm 1 pc.
468-985	75 - 100	Display unit 75 - 88 mm 1 pc. 87 - 100 mm 1 pc. Setting ring (ø87) 1 pc. Spanner 1 pc. Hex wrench 1 pc. Phillips screwdriver 1 pc.	150 mm 1 pc.

Inch / Metric			
Set code No.	Range*2 (in)	Content of set	Extension rod (optional)
468-986	0.275 - 0.5	Display 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., 0.425 in DIA.) 1 pc. each Spanner 2 pcs. Hex wrench 1 pc. Phillips screwdriver 1 pc.	100 mm 1 pc.
468-987	0.5 - 1	Display unit 0.5 - 0.65 in 1 pc. 0.65 - 0.8 in 1 pc. 0.8 - 1 in 1 pc. Setting ring (0.65 in DIA., 0.8 in DIA.) 1 pc. each Spanner 2 pcs. Hex wrench 1 pc. Phillips screwdriver 1 pc.	150 mm 2 pcs.*1
468-988	1 - 2	Display unit 1 - 1.2 in 1 pc. 1.2 - 1.6 in 1 pc. 1.6 - 2 in 1 pc. Setting ring (1.2 in DIA., 1.6 in DIA.) 1 pc. each Spanner 1 pc. Hex wrench 1 pc. Phillips screwdriver 1 pc.	150 mm 1 pc.
468-989	2 - 3	Display unit 2 - 2.5 in 1 pc. 2.5 - 3 in 1 pc. Setting ring (2.5 in DIA.) 1 pc. Spanner 1 pc. Hex wrench 1 pc. Phillips screwdriver 1 pc.	150 mm 1 pc.
468-990	3 - 4	Display unit 3 - 3.5 in 1 pc. 3.5 - 4 in 1 pc. Setting ring (3.5 in DIA.) 1 pc. Spanner 1 pc. Hex wrench 1 pc. Phillips screwdriver 1 pc.	150 mm 1 pc.

*1 Total 2 pcs. of extension rods: Code No. **952621** (for measuring range 12 to 16 mm, 16 to 20 mm) and code No. **952622** (for measuring range 20 to 25 mm).

Two extension rods cannot be connected due to the different mounting positions.

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