

Digimatic Holtest SERIES 468 — Three-point Internal Micrometers

- Three-point internal micrometer with large LCD readout. (Character height 7.4 mm)
- Deep holes can be measured by attaching an Extension Rod (optional).
- Measurements can be made close to the bottom of a blind hole.
- Titanium-coated measuring pins provide excellent durability and impact resistance.
- Two preset values can be stored as reference points.



SPECIFICATIONS

Metric					Inch / Metric				
Order No.	Range*2 (mm)	Resolution (mm)	Maximum permissible error $J_{MPE} (\mu m)^{*1}$	Extension Rod (optional)	Order No.	Range*2 (in)	Resolution	Maximum permissible error $J_{MPE} (in)^{*1}$	Extension Rod (optional)
468-161	6 - 8	0.001	± 2 (maximum difference 2)	952322 (100 mm)	468-261	0.275 - 0.35	0.00005 in / 0.001 mm	± 0.0001 (maximum difference 0.0001)	952322 (100 mm)
468-162	8 - 10				468-262	0.35 - 0.425			
468-163	10 - 12				468-263	0.425 - 0.5			
468-164	12 - 16				468-264	0.5 - 0.65			
468-165	16 - 20				468-265	0.65 - 0.8			
468-166	20 - 25				468-266	0.8 - 1			
468-167	25 - 30		± 3 (maximum difference 3)	952622 (150 mm)	468-267	1 - 1.2		± 0.00015 (maximum difference 0.00015)	952621 (150 mm)
468-168	30 - 40				468-268	1.2 - 1.6			
468-169	40 - 50				468-269	1.6 - 2			
468-170	50 - 63				468-270	2 - 2.5			
468-171	62 - 75				468-271	2.5 - 3			
468-172	75 - 88				468-272	3 - 3.5			
468-173	87 - 100		± 4 (maximum difference 4)	952623 (150 mm)	468-273	3.5 - 4		± 0.0002 (maximum difference 0.0002)	952622 (150 mm)
468-174	100 - 125				468-274	4 - 5			
468-175	125 - 150				468-275	5 - 6			
468-176	150 - 175				468-276	6 - 7			
468-177	175 - 200				468-277	7 - 8			
468-178	200 - 225				468-278	8 - 9			
468-179	225 - 250	± 5 (maximum difference 5)	952623 (150 mm)	468-279	9 - 10	± 0.00025 (maximum difference 0.00025)	952623 (150 mm)		
468-180	250 - 275			468-280	10 - 11				
468-181	275 - 300			468-281	11 - 12				
468-179	225 - 250	± 6 (maximum difference 6)	952623 (150 mm)	468-279	9 - 10	± 0.0003 (maximum difference 0.0003)	952623 (150 mm)		
468-180	250 - 275			468-280	10 - 11				
468-181	275 - 300			468-281	11 - 12				

- Battery: SR44 (1 pc.), 938882, for initial operational checks (standard accessory)
 - Battery life: Approx. 1.2 years under normal use
 - Scale type: 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

Range	L2*	L1
6 - 8, 8 - 10, 10 - 12 mm	59	175 - 177
12 - 16, 16 - 20 mm	84	197.5 - 201.5
20 - 25, 25 - 30 mm	93	206.9 - 211.9
30 - 40, 40 - 50 mm	103.8	214.7 - 224.7
50 - 63, 62 - 75, 75 - 88, 87 - 100 mm	105.4	219.6 - 232.6
100 - 125, 125 - 150, 150 - 175, 175 - 200, 200 - 225, 225 - 250, 250 - 275, 275 - 300 mm	151.4	286.3 - 311.3

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

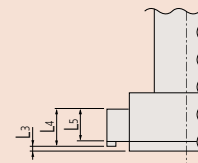


Measurement example



You can measure the diameter of a blind hole to the bottom.

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



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

Order No.	Type	description
05CZA662	B	Connecting cable (1 m)
05CZA663	B	Connecting cable (2 m)
06AFM380B	B	USB Input Tool Direct (2 m)
02AZD790B	B	Connecting cables for U-WAVE-T (160 mm)
02AZE140B	B	Connecting cables for U-WAVE-T For foot switch

Mounting bracket (optional)

04AZB157

For details of Special-order Products, refer to page C-57.

Interchangeable-Head Sets



Optional Accessories

Order No.	Type	description
05CZA662	B	Connecting cable (1 m)
05CZA663	B	Connecting cable (2 m)
06AFM380B	B	USB Input Tool Direct (2 m)
02AZD790B	B	Connecting cables for U-WAVE-T (160 mm)
02AZE140B	B	Connecting cables for U-WAVE-T For foot switch

Metric		
Set Order 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 Order 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).

Interchangeable-Head Sets



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

468-975

Accessories (optional)

Refer to page C-4.

Metric			Inch / Metric		
Set Order No.	Range* (mm)	Content of set	Set Order No.	Range* (in)	Content of set
468-975	100 - 200	Display unit	468-980	4 - 8	Display unit
		100 - 200 mm			4 - 8 in
		Measuring head			Measuring head
		100 - 125 mm			4 - 5 in
		125 - 150 mm			5 - 6 in
		150 - 175 mm			6 - 7 in
		175 - 200 mm			7 - 8 in
		Setting ring (ø125, ø175)			Setting ring (5 in DIA., 7 in DIA.)
		Extension rod (150 mm)			Extension rod (150 mm)
Spanner	Spanner				
Hex wrench	Hex wrench				
Phillips screwdriver	Phillips screwdriver				

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

Accessories (optional)

Refer to page C-4.

Non-Interchangeable-Head Sets



468-981

468-982

468-983

468-984

468-985

Metric				Inch / Metric			
Set Order No.	Range* ² (mm)	Content of set	Extension rod (optional)	Set Order No.	Range* ² (in)	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.	468-986	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.
468-982	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	468-987	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
468-983	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.	468-988	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.
468-984	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.	468-989	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.
468-985	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.	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: 1 pc. of Order No. **952621** (for measuring range 12 to 16 mm, 16 to 20 mm) and Order 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).