



**Holtest ABSOLUTE Borematic**



**Inside Micrometers**



**Bore Gages**

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Digimatic Holtest

Holtest

Absolute Borematic

Digimatic Inside Micrometer

Digimatic Bore Gage

Bore Gage

# Digimatic Holtest

## SERIES 468 — Three-Point Internal Micrometers

### FEATURES

- Titanium-coated measuring pins provide excellent durability and impact resistance and allow the instrument to measure right to the bottom of a blind hole.
- Large LCD readout.
- With Ratchet Stop for constant measuring force.
- Measurement can be taken close to the bottom of a blind hole.
- Can measure deep holes by attaching an Extension rod (optional).
- Setting rings for accurately setting the instrument are optional.



468-161



468-168



468-174



Titanium-coated contact surfaces for durability

### DIMENSIONS AND MASS

Unit: mm

Range	L
6 - 8mm	59
8 - 10mm	59
10 - 12mm	59
12 - 16mm	84
16 - 20mm	84
20 - 25mm	93
25 - 30mm	93
30 - 40mm	103.8
40 - 50mm	103.8
50 - 63mm	105.4
62 - 75mm	105.4
75 - 88mm	105.4
87 - 100mm	105.4
100 - 125mm	151.4
125 - 150mm	151.4
150 - 175mm	151.4
175 - 200mm	151.4
200 - 225mm	151.4
225 - 250mm	151.4
250 - 275mm	151.4
275 - 300mm	151.4

#### Measuring a Blind Hole

The measuring pins fixed to the anvils permit measuring the diameter of a blind hole right down to the bottom.

Range	a	b	c
6 - 12mm	2	—	2.5
12 - 20mm	0.3	5.6	3.5
20 - 30mm	0.3	8.3	5.2
30 - 50mm	0.3	13	10
50 - 100mm	0.3	17	14
100 - 300mm	12.4	21	13.8



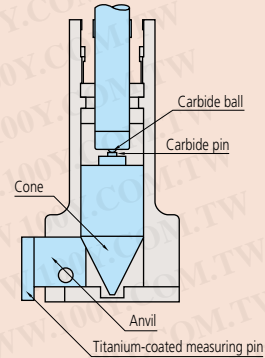
(Refer to page IX for details.)



(Refer to page IX for details.)

### Technical Data

Accuracy: Refer to the list of specifications.  
 Resolution: 0.001mm, .00005"/0.001mm (models up to 4")  
 or .0001"/0.001mm (models over 5")  
 Measuring pins: Titanium-coated tungsten carbide  
 Measuring method: Three-point method  
 Display: LCD  
 Battery: SR44 (1 pcs.), **938882**  
 Battery life: Approx. 1.2 years under normal use



### Functions

Zero-setting, Data hold, Automatic power ON/OFF, Data output, 2-point Preset, Function lock, Automatic power on/off, inch/mm conversion (inch/mm models)  
 Alarm: Low voltage, Counting value composition error

### Optional Accessories

- 05CZA662:** SPC cable with data switch (1m)
- 05CZA663:** SPC cable with data switch (2m)
- 02AZD790B:** SPC cable for U-WAVE w/ data switch (160mm)
- 04AZB157:** Mounting plate for stand
- 156-101:** Stand
- : Extension rod (Refer to the list of specifications.)
- : Setting ring (See page C-28.)



### Complete-Unit Sets



468-981



468-982



468-983



468-984



468-985

### Interchangeable-Head Sets



468-971



468-972



468-973



468-974

## SPECIFICATIONS

Metric		Inch/Metric		Accuracy*		Extension rod (optional)
Range	Order No.	Range	Order No.			
6 - 8mm	<b>468-161</b>	.275" - .35"	<b>468-261</b>	±2µm (within 2µm)	±.0001" (within .0001")	100mm ( <b>952322</b> )
8 - 10mm	<b>468-162</b>	.35" - .425"	<b>468-262</b>	±2µm (within 2µm)	±.0001" (within .0001")	100mm ( <b>952322</b> )
10 - 12mm	<b>468-163</b>	.425" - .5"	<b>468-263</b>	±2µm (within 2µm)	±.0001" (within .0001")	100mm ( <b>952322</b> )
12 - 16mm	<b>468-164</b>	.5" - .65"	<b>468-264</b>	±2µm (within 2µm)	±.0001" (within .0001")	150mm ( <b>952621</b> )
16 - 20mm	<b>468-165</b>	.65" - .8"	<b>468-265</b>	±2µm (within 2µm)	±.0001" (within .0001")	150mm ( <b>952621</b> )
20 - 25mm	<b>468-166</b>	.8" - 1"	<b>468-266</b>	±3µm (within 3µm)	±.00015" (within .00015")	150mm ( <b>952622</b> )
25 - 30mm	<b>468-167</b>	1" - 1.2"	<b>468-267</b>	±3µm (within 3µm)	±.00015" (within .00015")	150mm ( <b>952622</b> )
30 - 40mm	<b>468-168</b>	1.2" - 1.6"	<b>468-268</b>	±3µm (within 3µm)	±.00015" (within .00015")	150mm ( <b>952622</b> )
40 - 50mm	<b>468-169</b>	1.6" - 2"	<b>468-269</b>	±3µm (within 3µm)	±.00015" (within .00015")	150mm ( <b>952622</b> )
50 - 63mm	<b>468-170</b>	2" - 2.5"	<b>468-270</b>	±3µm (within 3µm)	±.00015" (within .00015")	150mm ( <b>952623</b> )
62 - 75mm	<b>468-171</b>	2.5" - 3"	<b>468-271</b>	±3µm (within 3µm)	±.00015" (within .00015")	150mm ( <b>952623</b> )
75 - 88mm	<b>468-172</b>	3" - 3.5"	<b>468-272</b>	±3µm (within 3µm)	±.00015" (within .00015")	150mm ( <b>952623</b> )
87 - 100mm	<b>468-173</b>	3.5" - 4"	<b>468-273</b>	±3µm (within 3µm)	±.00015" (within .00015")	150mm ( <b>952623</b> )
100 - 125mm	<b>468-174</b>	4" - 5"	<b>468-274</b>	±5µm (within 5µm)	±.00025" (within .00025")	150mm ( <b>952623</b> )
125 - 150mm	<b>468-175</b>	5" - 6"	<b>468-275</b>	±5µm (within 5µm)	±.00025" (within .00025")	150mm ( <b>952623</b> )
150 - 175mm	<b>468-176</b>	6" - 7"	<b>468-276</b>	±5µm (within 5µm)	±.00025" (within .00025")	150mm ( <b>952623</b> )
175 - 200mm	<b>468-177</b>	7" - 8"	<b>468-277</b>	±5µm (within 5µm)	±.00025" (within .00025")	150mm ( <b>952623</b> )
200 - 225mm	<b>468-178</b>	8" - 9"	<b>468-278</b>	±5µm (within 5µm)	±.00025" (within .00025")	150mm ( <b>952623</b> )
225 - 250mm	<b>468-179</b>	9" - 10"	<b>468-279</b>	±5µm (within 5µm)	±.00025" (within .00025")	150mm ( <b>952623</b> )
250 - 275mm	<b>468-180</b>	10" - 11"	<b>468-280</b>	±5µm (within 5µm)	±.00025" (within .00025")	150mm ( <b>952623</b> )
275 - 300mm	<b>468-181</b>	11" - 12"	<b>468-281</b>	±5µm (within 5µm)	±.00025" (within .00025")	150mm ( <b>952623</b> )

\*Instrumental error excluding quantizing error (maximum error)

### Complete-Unit Set

Each set includes complete gages (display units and measuring heads for each size).

Metric				
Range	Order No.	Individual ranges	Setting rings included	Remarks
6 - 12mm	<b>468-981</b>	6-8, 8-10, 10-12mm	ø8mm, ø10mm	—
12 - 25mm	<b>468-982</b>	12-16, 16-20, 20-25mm	ø16mm, ø20mm	—
25 - 50mm	<b>468-983</b>	25-30, 30-40, 40-50mm	ø30mm, ø40mm	—
50 - 75mm	<b>468-984</b>	50-63, 62-75mm	ø62mm	—
75 - 100mm	<b>468-985</b>	75-88, 87-100mm	ø87mm	—

Inch/Metric				
Range	Order No.	Individual ranges	Setting rings included	Remarks
.275" - .5"	<b>468-986</b>	.275-.35", .35-.425", .425-.5"	.35" DIA., .425" DIA.	—
.5" - 1"	<b>468-987</b>	.5-.65", .65-.8", .8-1"	.65" DIA., .8" DIA.	—
1" - 2"	<b>468-988</b>	1-1.2", 1.2-1.6", 1.6-2"	1.2" DIA., 1.6" DIA.	—
2" - 3"	<b>468-989</b>	2-2.5", 2.5-3"	2.5" DIA.	—
3" - 4"	<b>468-990</b>	3-3.5", 3.5-4"	3.5" DIA.	—

### Interchangeable-Head Sets

Each set includes one display unit with interchangeable measuring heads of the sizes specified.

Metric				
Range	Order No.	Individual ranges	Setting rings included	Remarks
6 - 12mm	<b>468-971</b>	6-8, 8-10, 10-12mm	ø8mm, ø10mm	with extension rod
12 - 20mm	<b>468-972</b>	12-16, 16-20mm	ø16mm	with extension rod
20 - 50mm	<b>468-973</b>	20-25, 25-30, 30-40, 40-50mm	ø25mm, ø40mm	with extension rod
50 - 100mm	<b>468-974</b>	50-63, 62-75, 75-88, 87-100mm	ø62mm, ø87mm	with extension rod
100 - 200mm	<b>468-975</b>	100-125, 125-150, 150-175, 175-200mm	ø125mm, ø175mm	with extension rod

Inch/Metric				
Range	Order No.	Individual ranges	Setting rings included	Remarks
.275" - .5"	<b>468-976</b>	.275-.35", .35-.425", .425-.5"	.35" DIA., .425" DIA.	with extension rod
.5" - .8"	<b>468-977</b>	.5-.65", .65-.8"	.65" DIA.	with extension rod
.8" - 2"	<b>468-978</b>	.8-1", 1-1.2", 1.2-1.6", 1.6-2"	1" DIA., 1.6" DIA.	with extension rod
2" - 4"	<b>468-979</b>	2-2.5", 2.5-3", 3-3.5", 3.5-4"	2.5" DIA., 3.5" DIA.	with extension rod
4" - 8"	<b>468-980</b>	4-5", 5-6", 6-7", 7-8"	5" DIA., 7" DIA.	with extension rod

# Holtest

## SERIES 368 — Three-Point/Two-Point Internal Micrometers

These Holtests are versatile, self-centering three-point micrometers for the accurate and efficient direct-measurement of internal diameters. Three anvils, evenly spaced at 120° apart, contact the hole surface and find true alignment with the axis of a hole for accurate measurement.

### FEATURES

- Titanium-coated measuring pins (over 6mm range models) provide excellent durability and impact resistance and allow the instrument to measure right to the bottom of a blind hole.
- Can measure deep holes using an Extension rod (optional) which is available on models over 6mm (.275") measuring range.
- With Ratchet Stop for constant force.
- Setting Rings for accurately setting the instrument are optional.



368-168

368-174



Two-point contact type

368-001



Titanium-coated contact surfaces for durability (excluding models up to 6mm/.24")

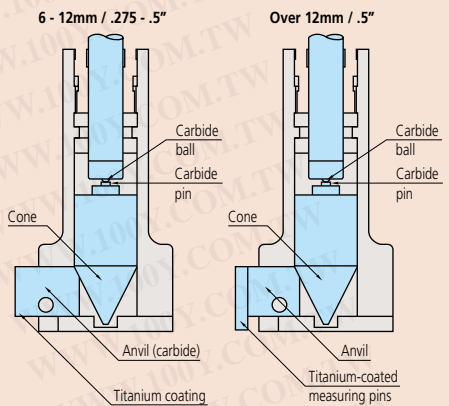


(Refer to page IX for details.)

### Technical Data

Accuracy: Refer to the list of specifications.  
 Graduation: 0.001mm, 0.005mm (models over 12mm),  
 .0001" or .0002" (models over .5")

Range	Measuring method	Measuring-surface material
2 - 3mm .08 - .12"	Two-point	Carbide
3 - 6mm .12 - .28"	Two-point	Carbide
6 - 12mm .275 - .5"	Three-point	Titanium coating (1700-2000Hv)
over 12mm over .5"	Three-point	Titanium coating (1700-2000Hv)



### Optional Accessories

- : Extension rod (Refer to the list of specifications.)
- : Setting ring (See page C-28.)

### DIMENSIONS

Unit: mm

#### Measuring a Blind Hole

The measuring pins fixed to the anvils permit measuring the diameter of a blind hole right down to the bottom.

Range	a	b	c
2 - 6mm	—	—	2
6 - 12mm	2	—	2.5
12 - 20mm	0.3	5.6	3.5
20 - 30mm	0.3	8.3	5.2
30 - 50mm	0.3	13	10
50 - 100mm	0.3	17	14
100 - 300mm	12.4	21	13.8

Range	L	Range	L
2 - 2.5mm	12	40 - 50mm	102
2.5 - 3mm	12	50 - 63mm	105
3 - 4mm	22	62 - 75mm	105
4 - 5mm	22	75 - 88mm	105
5 - 6mm	22	87 - 100mm	105
6 - 8mm	59	100 - 125mm	161
8 - 10mm	59	125 - 150mm	161
10 - 12mm	59	150 - 175mm	161
12 - 16mm	82	175 - 200mm	161
16 - 20mm	82	200 - 225mm	161
20 - 25mm	94	225 - 250mm	161
25 - 30mm	94	250 - 275mm	161
30 - 40mm	102	275 - 300mm	161



Using the optional extension rod

## Complete-Unit Sets



368-906

368-907



368-911



368-912



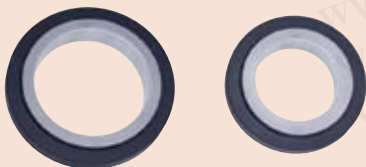
368-913



368-914



368-915



## SPECIFICATIONS

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

\*Instrumental error (maximum error)

with titanium-coated contact surfaces

## Complete-Unit Sets

Each set includes complete gages (micrometer head units and measuring heads for each size).

Metric				
Range	Order No.	Individual ranges	Setting rings included	Remarks
2 - 3mm	<b>368-906</b>	2-2.5, 2.5-3mm	ø2.5mm	—
3 - 6mm	<b>368-907</b>	3-4, 4-5, 5-6mm	ø4mm, ø5mm	—
6 - 12mm	<b>368-911</b>	6-8, 8-10, 10-12mm	ø8mm, ø10mm	with extension rod
12 - 20mm	<b>368-912</b>	12-16, 16-20mm	ø16mm	with extension rod
20 - 50mm	<b>368-913</b>	20-25, 25-30, 30-40, 40-50mm	ø25mm, ø40mm	with extension rod
50 - 100mm	<b>368-914</b>	50-63, 62-75, 75-88, 87-100mm	ø62mm, ø87mm	with extension rod
100 - 200mm	<b>368-915</b>	100-125, 125-150, 150-175, 175-200mm	ø125mm, ø175mm	with extension rod

with titanium-coated contact surfaces

Inch				
Range	Order No.	Individual ranges	Setting rings included	Remarks
.08" - .12"	<b>368-926</b>	.08-.1", .1-.12"	.1" DIA.	—
.12" - .28"	<b>368-927</b>	.12-.16", .16-.2", .2-.24", .24-.28"	.16" DIA., .24" DIA.	—
.275" - .5"	<b>368-916</b>	.275-.35", .35-.425", .425-.5"	.35" DIA., .5" DIA.	with extension rod
.5" - .8"	<b>368-917</b>	.5-.65", .65-.8"	.65" DIA.	with extension rod
.8" - 2"	<b>368-918</b>	.8-1", 1-1.2", 1.2-1.6", 1.6-2"	1" DIA., 1.6" DIA.	with extension rod
2" - 4"	<b>368-919</b>	2-2.5", 2.5-3", 3-3.5", 3.5-4"	2.5" DIA., 3.5" DIA.	with extension rod
4" - 8"	<b>368-920</b>	4-5", 5-6", 6-7", 7-8"	5" DIA., 7" DIA.	with extension rod

with titanium-coated contact surfaces

# Holtest (Type II)

## SERIES 368 — Three-Point Internal Micrometers

### FEATURES

- The Holtests (type II) have three anvils made of high-grade tool steel.
- Economy price.
- Measurement can be taken close to the bottom of a blind hole.
- Can measure deep holes using an Extension Rod (optional).
- With Ratchet Stop for constant force.
- Setting Rings for accurately setting the instrument are optional.

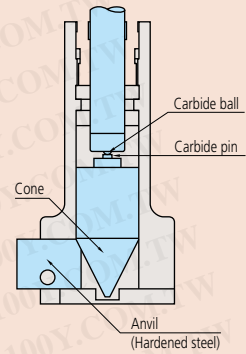


(Refer to page IX for details.)



### Technical Data

Accuracy: Refer to the list of specifications.  
 Graduation: 0.005mm or .0002"  
 Measuring method: Three-point  
 Anvils: Hardened steel



### Optional Accessories

- : Extension rod (Refer to the list of specifications.)
- : Setting ring (See page C-28.)

### DIMENSIONS AND MASS

Range	L
12 - 16mm	82
16 - 20mm	82
20 - 25mm	94
25 - 30mm	94
30 - 40mm	102
40 - 50mm	102
50 - 63mm	105
62 - 75mm	105
75 - 88mm	105
87 - 100mm	105
100 - 125mm	161
125 - 150mm	161
150 - 175mm	161
175 - 200mm	161
200 - 225mm	161
225 - 250mm	161
250 - 275mm	161
275 - 300mm	161

**Measuring a Blind Hole**

The measuring pins fixed to the anvils permit measuring the diameter of a blind hole right down to the bottom.

Range	a	b
12 - 20mm	2.6	3.5
20 - 30mm	3.4	5.2
30 - 50mm	3.4	10
50 - 100mm	3.4	14
100 - 300mm	19.6	13.8

Unit: mm

## SPECIFICATIONS

Metric		Inch		Accuracy		Extension Rod (optional)
Range	Order No.	Range	Order No.			
12 - 16mm	<b>368-764</b>	.5" - .65"	<b>368-864</b>	±2μm (within 2μm)	±.0001" (within .0001")	150mm <b>(952621)</b>
16 - 20mm	<b>368-765</b>	.65" - .8"	<b>368-865</b>	±2μm (within 2μm)	±.0001" (within .0001")	150mm <b>(952621)</b>
20 - 25mm	<b>368-766</b>	.8" - 1"	<b>368-866</b>	±3μm (within 3μm)	±.00015" (within .00015")	150mm <b>(952622)</b>
25 - 30mm	<b>368-767</b>	1" - 1.2"	<b>368-867</b>	±3μm (within 3μm)	±.00015" (within .00015")	150mm <b>(952622)</b>
30 - 40mm	<b>368-768</b>	1.2" - 1.6"	<b>368-868</b>	±3μm (within 3μm)	±.00015" (within .00015")	150mm <b>(952622)</b>
40 - 50mm	<b>368-769</b>	1.6" - 2"	<b>368-869</b>	±3μm (within 3μm)	±.00015" (within .00015")	150mm <b>(952622)</b>
50 - 63mm	<b>368-770</b>	2" - 2.5"	<b>368-870</b>	±3μm (within 3μm)	±.00015" (within .00015")	150mm <b>(952623)</b>
62 - 75mm	<b>368-771</b>	2.5" - 3"	<b>368-871</b>	±3μm (within 3μm)	±.00015" (within .00015")	150mm <b>(952623)</b>
75 - 88mm	<b>368-772</b>	3" - 3.5"	<b>368-872</b>	±3μm (within 3μm)	±.00015" (within .00015")	150mm <b>(952623)</b>
87 - 100mm	<b>368-773</b>	3.5" - 4"	<b>368-873</b>	±3μm (within 3μm)	±.00015" (within .00015")	150mm <b>(952623)</b>
100 - 125mm	<b>368-774</b>	4" - 5"	<b>368-874</b>	±5μm (within 5μm)	±.00025" (within .00025")	150mm <b>(952623)</b>
125 - 150mm	<b>368-775</b>	5" - 6"	<b>368-875</b>	±5μm (within 5μm)	±.00025" (within .00025")	150mm <b>(952623)</b>
150 - 175mm	<b>368-776</b>	6" - 7"	<b>368-876</b>	±5μm (within 5μm)	±.00025" (within .00025")	150mm <b>(952623)</b>
175 - 200mm	<b>368-777</b>	7" - 8"	<b>368-877</b>	±5μm (within 5μm)	±.00025" (within .00025")	150mm <b>(952623)</b>
200 - 225mm	<b>368-778</b>	8" - 9"	<b>368-878</b>	±5μm (within 5μm)	±.00025" (within .00025")	150mm <b>(952623)</b>
225 - 250mm	<b>368-779</b>	9" - 10"	<b>368-879</b>	±5μm (within 5μm)	±.00025" (within .00025")	150mm <b>(952623)</b>
250 - 275mm	<b>368-780</b>	10" - 11"	<b>368-880</b>	±5μm (within 5μm)	±.00025" (within .00025")	150mm <b>(952623)</b>
275 - 300mm	<b>368-781</b>	11" - 12"	<b>368-881</b>	±5μm (within 5μm)	±.00025" (within .00025")	150mm <b>(952623)</b>

### Complete-Unit Sets

Each set includes complete gages (micrometer head units and measuring heads for each size).

Metric				
Range	Order No.	Individual ranges	Setting rings included	Remarks
12 - 20mm	<b>368-991</b>	12-16, 16-20mm	ø16mm	with extension rod
20 - 50mm	<b>368-992</b>	20-25, 25-30, 30-40, 40-50mm	ø25mm, ø40mm	with extension rod
50 - 100mm	<b>368-993</b>	50-63, 62-75, 75-88, 87-100mm	ø62mm, ø87mm	with extension rod
100 - 200mm	<b>368-994</b>	100-125, 125-150, 150-175, 175-200mm	ø125mm, ø175mm	with extension rod

Inch				
Range	Order No.	Individual ranges	Setting rings included	Remarks
.5" - .8"	<b>368-995</b>	.5-.65", .65-.8"	.65" DIA.	with extension rod
.8" - 2"	<b>368-996</b>	.8-1", 1-1.2", 1.2-1.6", 1.6-2"	1" DIA., 1.6" DIA.	with extension rod
2" - 4"	<b>368-997</b>	2-2.5", 2.5-3", 3-3.5", 3.5-4"	2.5" DIA., 3.5" DIA.	with extension rod
4" - 8"	<b>368-998</b>	4-5", 5-6", 6-7", 7-8"	5" DIA., 7" DIA.	with extension rod



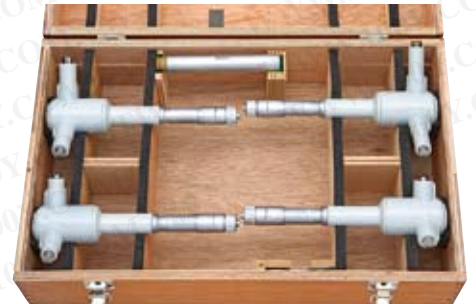
368-991



368-992



368-993



368-994

# ABSOLUTE Borematic

## SERIES 568 — ABSOLUTE Digimatic Snap-Open Bore Gages

The Borematic enables the operator to take measurements more accurately and more quickly than ever before. The Borematic retains the setting for the life of the battery. Therefore no longer repeated setting (presetting) is no longer necessary.

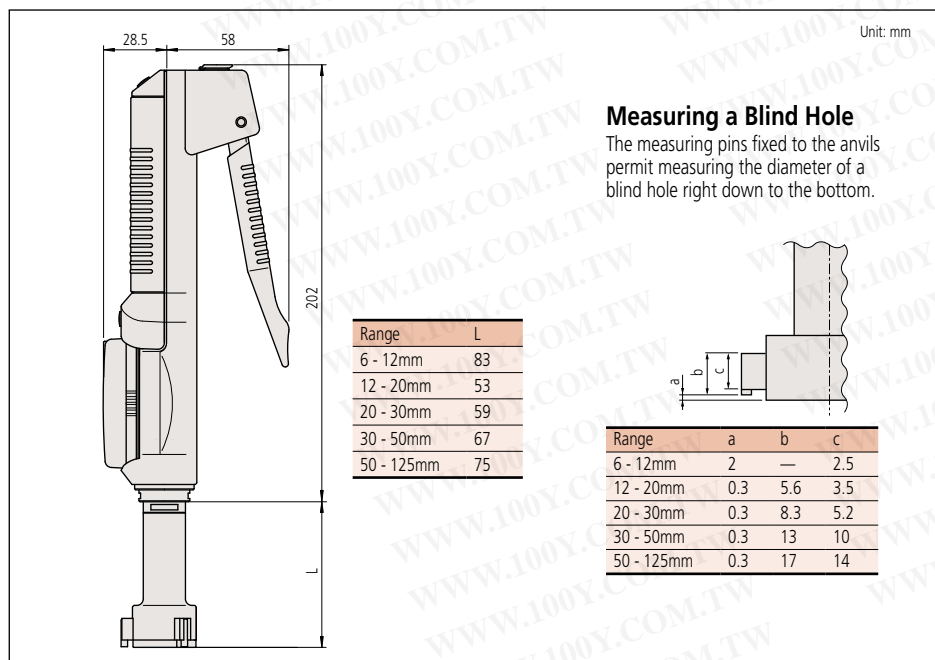
### FEATURES

- Titanium-coated measuring pins provide excellent durability and impact resistance and allow the instrument to measure right to the bottom of a blind hole.
- Large LCD digits of 8.5mm height for error-free reading.
- 330-degree rotatable display unit for easy reading at any angle.
- GO/NO-GO judgment function.
- The ABSOLUTE linear encoder eliminates any concerns regarding over-speed errors.
- With SPC data output.
- Setting rings for accurately setting the instrument are optional.
- Can measure deep holes by attaching an optional extension rod.



Titanium-coated contact surfaces for durability

### DIMENSIONS



#### Measuring a Blind Hole

The measuring pins fixed to the anvils permit measuring the diameter of a blind hole right down to the bottom.



(Refer to page IX for details.)



Absolute System Patented by MITUTOYO

(Refer to page IX for details.)

### Technical Data

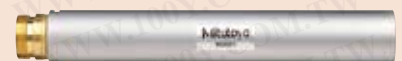
Accuracy: Refer to the list of specifications.  
 Resolution: 0.001mm or .00005"/0.001mm  
 Measuring pins: Titanium coated  
 Measuring method: Three-point method  
 Display: LCD  
 Battery: SR44 (1 pc.) (938882)  
 Battery life: Approx. 1 year

### Functions

Preset, GO/NO-GO judgment, Data hold, Power ON/OFF, Data output, inch/mm conversion (inch/mm models)

### Optional Accessories

- 937387:** SPC cable (1m)
- 965013:** SPC cable (2m)
- 02AZD790E:** SPC cable for U-WAVE (160mm)
- 952322:** Extension rod for 6 - 12mm (.275" - .500") gages
- 952621:** Extension rod for 12 - 20mm (.50" - .80") gages
- 952622:** Extension rod for 20 - 50mm (.8" - 2.0") gages
- 952623:** Extension rod for 50 - 125mm (2.0" - 5.0") gages
- : Setting ring (See page C-28.)



## Complete-Unit Sets



568-981-10



568-983-10



568-986-10

## Interchangeable-Contact Head Sets



568-971-10



568-973-10

## SPECIFICATION

Metric Individual		
Range	Order No.	Accuracy*
6 - 8mm	<b>568-331-10</b>	±5µm (within 5µm)
8 - 10mm	<b>568-332-10</b>	±5µm (within 5µm)
10 - 12mm	<b>568-333-10</b>	±5µm (within 5µm)
12 - 16mm	<b>568-334-10</b>	±5µm (within 5µm)
16 - 20mm	<b>568-335-10</b>	±5µm (within 5µm)
20 - 25mm	<b>568-336-10</b>	±6µm (within 6µm)
25 - 30mm	<b>568-337-10</b>	±6µm (within 6µm)
30 - 40mm	<b>568-338-10</b>	±6µm (within 6µm)
40 - 50mm	<b>568-339-10</b>	±6µm (within 6µm)
50 - 63mm	<b>568-340-10</b>	±6µm (within 6µm)
62 - 75mm	<b>568-341-10</b>	±6µm (within 6µm)
75 - 88mm	<b>568-342-10</b>	±6µm (within 6µm)
87 - 100mm	<b>568-343-10</b>	±6µm (within 6µm)
100 - 113mm	<b>568-344-10</b>	±6µm (within 6µm)
112 - 125mm	<b>568-345-10</b>	±6µm (within 6µm)
50 - 75mm	<b>568-346-10</b>	±6µm (within 6µm)
75 - 100mm	<b>568-347-10</b>	±6µm (within 6µm)
100 - 125mm	<b>568-348-10</b>	±6µm (within 6µm)

\*Instrumental error excluding quantizing error (maximum error)

Inch/Metric Individual		
Range	Order No.	Accuracy
.275" - .350"	<b>568-431-10</b>	±.00025" (within .00025")
.350" - .425"	<b>568-432-10</b>	±.00025" (within .00025")
.425" - .500"	<b>568-433-10</b>	±.00025" (within .00025")
.50" - .65"	<b>568-434-10</b>	±.00025" (within .00025")
.65" - .80"	<b>568-435-10</b>	±.00025" (within .00025")
.8" - 1.0"	<b>568-436-10</b>	±.0003" (within .0003")
1.0" - 1.2"	<b>568-437-10</b>	±.0003" (within .0003")
1.2" - 1.6"	<b>568-438-10</b>	±.0003" (within .0003")
1.6" - 2.0"	<b>568-439-10</b>	±.0003" (within .0003")
2.0" - 2.5"	<b>568-440-10</b>	±.0003" (within .0003")
2.5" - 3.0"	<b>568-441-10</b>	±.0003" (within .0003")
3.0" - 3.5"	<b>568-442-10</b>	±.0003" (within .0003")
3.5" - 4.0"	<b>568-443-10</b>	±.0003" (within .0003")
4.0" - 4.5"	<b>568-444-10</b>	±.0003" (within .0003")
4.5" - 5.0"	<b>568-445-10</b>	±.0003" (within .0003")
2.0" - 3.0"	<b>568-446-10</b>	±.0003" (within .0003")
3.0" - 4.0"	<b>568-447-10</b>	±.0003" (within .0003")
4.0" - 5.0"	<b>568-448-10</b>	±.0003" (within .0003")

## Complete-Unit Set

Each set includes complete gages (display units and measuring heads for each size).

Metric				
Range	Order No.	Individual ranges	Setting rings included	Remarks
6 - 12mm	<b>568-981-10</b>	6-8, 8-10, 10-12mm	ø8mm, ø10mm	
12 - 25mm	<b>568-982-10</b>	12-16, 16-20, 20-25mm	ø16mm, ø20mm	
25 - 50mm	<b>568-983-10</b>	25-30, 30-40, 40-50mm	ø30mm, ø40mm	
50 - 75mm	<b>568-984-10</b>	50-63, 62-75mm	ø62mm	
75 - 100mm	<b>568-985-10</b>	75-88, 87-100mm	ø87mm	
50 - 100mm	<b>568-986-10</b>	50-63, 75-88mm (62-75, 87-100mm)*	ø62mm, ø87mm	

\*Using interchangeable measuring pins

Inch				
Range	Order No.	Individual ranges	Setting rings included	Remarks
.275" - .5"	<b>568-987-10</b>	.275-.35", .35-.425", .425-.5"	ø.35" DIA, ø.425" DIA	
.5" - 1"	<b>568-988-10</b>	.5-.65", .65-.8", .8-1"	ø.65" DIA, ø.8" DIA	
1" - 2"	<b>568-989-10</b>	1-1.2", 1.2-1.6", 1.6-2"	ø1.2" DIA, ø1.6" DIA	
2" - 3"	<b>568-990-10</b>	2-2.5", 2.5-3"	ø2.5" DIA	
3" - 4"	<b>568-991-10</b>	3-3.5", 3.5-4"	ø3.5" DIA	
2" - 4"	<b>568-992-10</b>	2-2.5", 3-3.5" (2.5-3", 3.5-4")*	ø2.5" DIA, ø3.5" DIA	

\*Using interchangeable measuring pins

## Interchangeable-Head Set

Each set includes one display unit with interchangeable measuring heads of the sizes specified.

Metric				
Range	Order No.	Individual ranges	Setting rings included	Remarks
6 - 12mm	<b>568-971-10</b>	6-8, 8-10, 10-12mm	ø8mm, ø10mm	
12 - 25mm	<b>568-972-10</b>	12-16, 16-20, 20-25mm	ø16mm, ø20mm	
25 - 50mm	<b>568-973-10</b>	25-30, 30-40, 40-50mm	ø30mm, ø40mm	
50 - 100mm	<b>568-974-10</b>	50-63, 62-75, 75-88, 87-100mm	ø62mm, ø87mm	
50 - 100mm	<b>568-975-10</b>	50-63, 75-88mm (62-75, 87-100mm)*	ø62mm, ø87mm	

\*Using interchangeable measuring pins

Inch				
Range	Order No.	Individual ranges	Setting rings included	Remarks
.275" - .5"	<b>568-976-10</b>	.275-.35", .35-.425", .425-.5"	ø.35" DIA, ø.425" DIA	
.5" - 1"	<b>568-977-10</b>	.5-.65", .65-.8", .8-1"	ø.65" DIA, ø.8" DIA	
1" - 2"	<b>568-978-10</b>	1-1.2", 1.2-1.6", 1.6-2"	ø1.2" DIA, ø1.6" DIA	
3" - 4"	<b>568-979-10</b>	2-2.5", 2.5-3", 3-3.5", 3.5-4"	ø2.5" DIA, ø3.5" DIA	
2" - 4"	<b>568-980-10</b>	2-2.5", 3-3.5" (2.5-3", 3.5-4")*	ø2.5" DIA, ø3.5" DIA	

\*Using interchangeable measuring pins