

Holtest

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

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



368-268

368-174

FEATURES

- TiN-coated measuring contact points (over 6mm / .275" range models) provide excellent durability and impact resistance and allow the instrument to measure to the bottom of a blind hole (up to 100mm / 4" models).
- Highly durable because of carbide-tipped contact points (anvils up to 12mm / .5" models).
- 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 zero point adjustment are optional.
- Supplied in fitted plastic case up to 100mm / 4". Over 100mm / 4" supplied in wooden case.



368-001

Two-point contact type

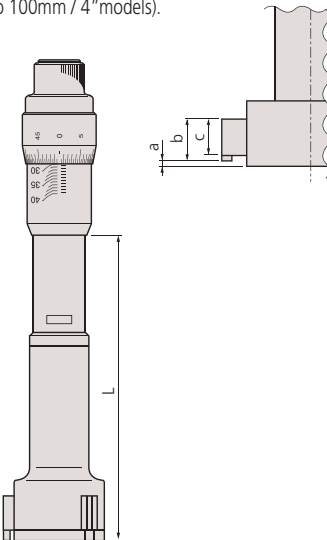


TiN coated contact points (excluding models up to 12mm/.5")

DIMENSIONS

Measuring a Blind Hole

The measuring contact points held in the jaws permit measuring the diameter of a blind hole right down to the bottom (up to 100mm / 4" models).



Unit: mm

Range	L	Mass (g)	Range	L	Mass (g)
2 - 2.5mm / .08 - .1"	12	88	40 - 50mm / 1.6 - 2"	102	330
2.5 - 3mm / .1 - .12"	12	88	50 - 63mm / 2 - 2.5"	105	440
3 - 4mm / .12 - .16"	22	91	62 - 75mm / 2.5 - 3"	105	450
4 - 5mm / .16 - .2"	22	91	75 - 88mm / 3 - 3.5"	105	490
5 - 6mm / .2 - .24"	22	91	87 - 100mm / 3.5 - 4"	105	500
6 - 8mm / .275 - .35"	59	57	100 - 125mm / 4 - 5"	161	1050
8 - 10mm / .35 - .425"	59	58	125 - 150mm / 5 - 6"	161	1120
10 - 12mm / .425 - .5"	59	59	150 - 175mm / 6 - 7"	161	1190
12 - 16mm / .5 - .65"	82	140	175 - 200mm / 7 - 8"	161	1260
16 - 20mm / .65 - .8"	82	145	200 - 225mm / 8 - 9"	161	1420
20 - 25mm / .8 - 1"	94	250	225 - 250mm / 9 - 10"	161	1580
25 - 30mm / 1 - 1.2"	94	270	250 - 275mm / 10 - 11"	161	1600
30 - 40mm / 1.2 - 1.6"	102	290	275 - 300mm / 11 - 12"	161	1690

Range	a	b	c
2 - 6mm / .08 - .275"	—	—	2
6 - 12mm / .275 - .5"	2	—	2.5
12 - 20mm / .5 - .8"	0.3	5.6	3.5
20 - 30mm / .8 - 1.2"	0.3	8.3	5.2
30 - 50mm / 1.2 - 2"	0.3	13	10
50 - 100mm / 2 - 4"	0.3	17	14
100 - 300mm / 4 - 12"	12.4	21	13.8



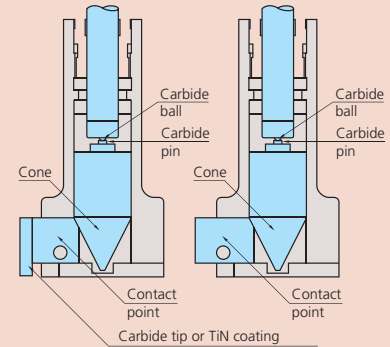
Technical Data

Graduation: 0.001mm, 0.005mm*, .0001" or .0002"*
(*over 12mm or .5" models)

Range	Measuring method	Contact-point material
2 - 3mm / .08 - .12"	Two-point method	Hardened steel (HRC60.5 or more)
3 - 6mm / .12 - .28"	Two-point method	Hardened steel (HRC60.5 or more)
6 - 12mm / .28 - .5"	Three-point method	Carbide
over 12mm / over .5"	Three-point method	TiN coating (1700-2000Hv)

Optional Accessories

- 952322:** Extension rod 100mm / 3.94"
For range 6-12mm / .275-.5" models
- 952621:** Extension rod 150mm / 5.9"
For range 12-20mm / .5" - .8" models
- 952622:** Extension rod 150mm / 5.9"
For range 20-50mm / .8" - 2" models
- 952623:** Extension rod 150mm / 5.9"
For range 50-300mm / 2"-12" models



Using the optional extension rod



SPECIFICATIONS

Metric <input type="checkbox"/> Individual <input type="checkbox"/>		
Range	Order No.	Accuracy
2 - 2.5mm	368-001	±2µm
2.5 - 3mm	368-002	±2µm
3 - 4mm	368-003	±2µm
4 - 5mm	368-004	±2µm
5 - 6mm	368-005	±2µm
6 - 8mm	368-161	±2µm
8 - 10mm	368-162	±2µm
10 - 12mm	368-163	±2µm
12 - 16mm	368-164	±2µm
16 - 20mm	368-165	±2µm
20 - 25mm	368-166	±3µm
25 - 30mm	368-167	±3µm
30 - 40mm	368-168	±3µm
40 - 50mm	368-169	±3µm
50 - 63mm	368-170	±3µm
62 - 75mm	368-171	±3µm
75 - 88mm	368-172	±3µm
87 - 100mm	368-173	±3µm
100 - 125mm	368-174	±5µm
125 - 150mm	368-175	±5µm
150 - 175mm	368-176	±5µm
175 - 200mm	368-177	±5µm
200 - 225mm	368-178	±5µm
225 - 250mm	368-179	±5µm
250 - 275mm	368-180	±5µm
275 - 300mm	368-181	±5µm

Inch <input type="checkbox"/> Individual <input type="checkbox"/> with TiN coated contact points <input type="checkbox"/>		
Range	Order No.	Accuracy
.08 - .1"	368-021	±.0001"
.1 - .12"	368-022	±.0001"
.12 - .16"	368-023	±.0001"
.16 - .2"	368-024	±.0001"
.2 - .24"	368-025	±.0001"
.24 - .28"	368-026	±.0001"
.275 - .35"	368-261	±.0001"
.35 - .425"	368-262	±.0001"
.425 - .5"	368-263	±.0001"
.5 - .65"	368-264	±.0001"
.65 - .8"	368-265	±.0001"
.8 - 1"	368-266	±.00015"
1 - 1.2"	368-267	±.00015"
1.2 - 1.6"	368-268	±.00015"
1.6 - 2"	368-269	±.00015"
2 - 2.5"	368-270	±.00015"
2.5 - 3"	368-271	±.00015"
3 - 3.5"	368-272	±.00015"
3.5 - 4"	368-273	±.00015"
4 - 5"	368-274	±.00025"
5 - 6"	368-275	±.00025"
6 - 7"	368-276	±.00025"
7 - 8"	368-277	±.00025"
8 - 9"	368-278	±.00025"
9 - 10"	368-279	±.00025"
10 - 11"	368-280	±.00025"
11 - 12"	368-281	±.00025"

Complete Unit Set

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

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

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

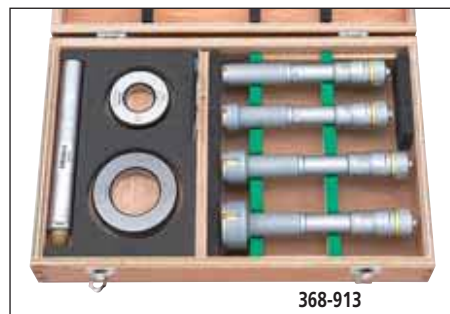
*.0001" graduation



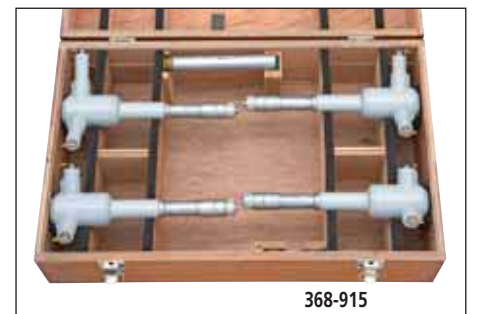
368-906



368-901-10



368-913



368-915