

Digimatic Holtest

SERIES 468 — Three-Point Internal Micrometers

FEATURES

- TiN-coated measuring contact points provide excellent durability and impact resistance and allow the instrument to measure to the bottom of a blind hole (up to 100mm / 4" models).
- Large LCD readout.
- Functions available: Presetting, Zero/ABS, Auto power On/Off, Data hold, Data output, Error alarm, Battery replacement alarm.
- With Ratchet Stop for constant force.
- Measure deep holes by attaching an extension rod (optional).
- Setting rings for origin point setting are optional.
- Supplied in fitted plastic case up to 100mm / 4". Over 100mm / 4" supplied in wooden case.



468-261



468-263



468-274



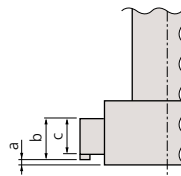
TiN-coated contact points
(" -10" suffix models only)

DIMENSIONS AND MASS

Unit: mm			
Range	L	Mass (g)	
6 - 8mm / .275 - .35"	59	400	
8 - 10mm / .35 - .425"	59	400	
10 - 12mm / .425 - .5"	59	400	
12 - 16mm / .5 - .65"	84	430	
16 - 20mm / .65 - .8"	84	430	
20 - 25mm / .8 - 1"	93	500	
25 - 30mm / 1 - 1.2"	93	510	
30 - 40mm / 1.2 - 1.6"	103.8	510	
40 - 50mm / 1.6 - 2"	103.8	530	
50 - 63mm / 2 - 2.5"	105.4	650	
62 - 75mm / 2.5 - 3.0"	105.4	660	
75 - 88mm / 3.0 - 3.5"	105.4	990	
87 - 100mm / 3.5 - 4.0"	105.4	1000	
100 - 125mm / 4 - 5"	151.4	970	
125 - 150mm / 5 - 6"	151.4	1060	
150 - 175mm / 6 - 7"	151.4	1150	
175 - 200mm / 7 - 8"	151.4	1240	
200 - 225mm / 8 - 9"	151.4	1330	
225 - 250mm / 9 - 10"	151.4	1420	
250 - 275mm / 10 - 11"	151.4	1510	
275 - 300mm / 11 - 12"	151.4	1600	

Measuring a Blind Hole

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



Range	a	b	c
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

Accuracy: Refer to the list of specifications.
Resolution: 0.001mm or .00005"/0.001mm
(over 4 - 5" models: .0001"/0.001mm)
Contact point: TiN coating
Measuring method: Three-point method
Display: LCD
Battery: SR44 (2 pcs.), **938882**
Battery life: Approx. 1.2 years under normal use

Function

Zero/ABS, Auto Power On/Off, Data hold, Data output,
Preset, inch/mm conversion (on inch/metric models only)
Alarm: Low voltage, Counting value composition error

Optional Accessories

05CZA662: SPC cable (1m / 40")

05CZA663: SPC cable (2m / 80")

04AZB157: Mounting plate for stand

156-101-10: Stand

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



04AZB157

SPECIFICATIONS

Metric ☐ with TiN-coated contact points

Range	Accuracy	Order Code	
		Individual	Main Body Assembly
6-8	±2μm	468-161	04AZB106
8-10		468-162	
10-12		468-163	
12-16		468-164	04AZB107
16-20		468-165	
20-25	±3μm	468-166	04AZB108
25-30		468-167	
30-40		468-168	
40-50		468-169	04AZB109
50-63		468-170	
62-75	±5μm	468-171	04AZB110
75-88		468-172	
87-100		468-173	
100-125		468-174	04AZB110
125-150		468-175	
150-175		468-176	
175-200	±5μm	468-177	04AZB110
200-225		468-178	
225-250		468-179	
250-275		468-180	04AZB110
275-300		468-181	

Inch/Metric ☐ with TiN-coated contact points

Range	Accuracy	Order Code	
		Individual	Main Body Assembly
.275-.35" / 6.925-8.89mm	±.0001"	468-261	04AZB111
.35-.425" / 8.89-10.795mm		468-262	
.425-.5" / 10.795-12.7mm		468-263	
.5-.65" / 12.7-16.51mm		468-264	04AZB112
.65-.8" / 16.51-20.32mm		468-265	
.8-1" / 20.32-25.4mm	±.00015"	468-266	04AZB113
1-1.2" / 25.4-30.48mm		468-267	
1.2-1.6" / 30.48-40.64mm		468-268	
1.6-2" / 40.64-50.8mm		468-269	04AZB114
2-2.5" / 50.8-63.5mm		468-270	
2.5-3" / 63.5-76.2mm	±.00025"	468-271	04AZB115
3-3.5" / 76.2-88.9mm		468-272	
3.5-4" / 88.9-101.6mm		468-273	
4-5" / 101.6-127mm		468-274	04AZB115
5-6" / 127-152.4mm		468-275	
6-7" / 152.4-177.8mm		468-276	
7-8" / 177.8-203.2mm	±.00025"	468-277	04AZB115
8-9" / 203.2-228.6mm		468-278	
9-10" / 228.6-254mm		468-279	
10-11" / 254-279.4mm		468-280	04AZB115
11-12" / 279.4-304.8mm		468-281	

Complete Unit Set

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

Metric ☐ with TiN-coated contact points

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

Inch/Metric ☐ with TiN-coated contact points

Range	Order No.	Individual range	Setting rings included	Remarks
.275 - .5" / 6.925 - 12.7mm	468-986	.275-.35", .35-.425", .425-.5"	.35" DIA., .425" DIA.	—
.5 - 1" / 12.7 - 25.4mm	468-987	.5-.65", .65-.8", .8-1"	.65" DIA., .8" DIA.	—
1 - 2" / 25.4 - 50.8mm	468-988	1-1.2", 1.2-1.6", 1.6-2"	1.2" DIA., 1.6" DIA.	—
2 - 3" / 50.8 - 76.2mm	468-989	2-2.5", 2.5-3"	2.5" DIA.	—
3 - 4" / 76.2 - 101.6mm	468-990	3-3.5", 3.5-4"	3.5" DIA.	—

Interchangeable Head Set

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

Metric ☐ with TiN-coated contact points

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

Inch/Metric ☐ with TiN-coated contact points

Range	Order No.	Individual range	Setting rings included	Remarks
.275 - .5" / 6.925 - 12.7mm	468-976	.275-.35", .35-.425", .425-.5"	.35" DIA., .425" DIA.	with extension rod
.5 - .8" / 12.7 - 20.32mm	468-977	.5-.65", .65-.8"	.65" DIA.	with extension rod
.8 - 2" / 20.32 - 50.8mm	468-978	.8-1", 1-1.2", 1.2-1.6", 1.6-2"	1" DIA., 1.6" DIA.	with extension rod
2 - 4" / 50.8 - 101.6mm	468-979	2-2.5", 2.5-3", 3-3.5", 3.5-4"	2.5" DIA., 3.5" DIA.	with extension rod
4 - 8" / 101.6 - 203.2mm	468-980	4-5", 5-6", 6-7", 7-8"	5" DIA., 7" DIA.	with extension rod



468-986



468-978

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).
- 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

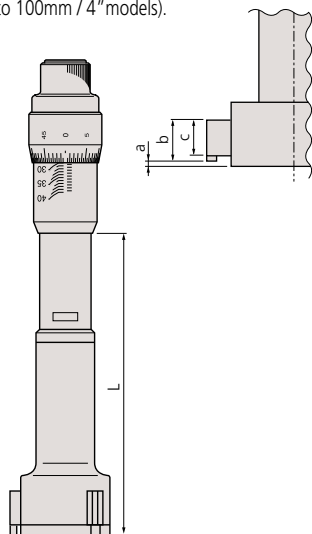


TiN-coated contact points (excluding models up to 12mm/.5")

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).



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



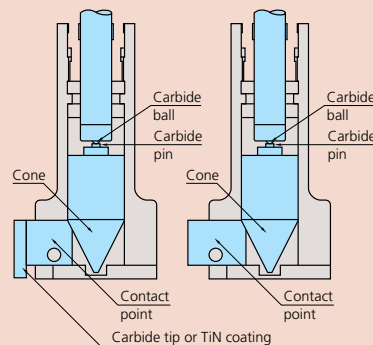
Technical Data

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

Range	Measuring method	Contact-point material
2-6mm/.08-.28"	Two-point method	Carbide
6-300mm/.275-12"	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 Individual ☐ with TiN-coated contact points

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 Individual ☐ with TiN-coated contact points

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 Individual ☐ with TiN-coated contact points

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 Individual ☐ with TiN-coated contact points

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

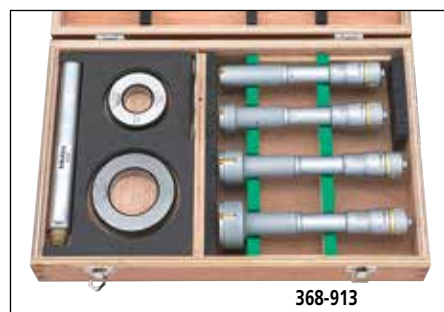
*.0001" graduation



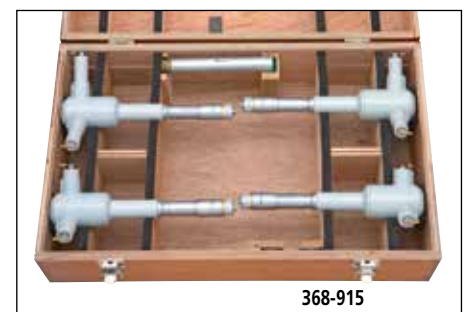
368-906



368-911



368-913



368-915

Mitutoyo

Holtest (Type II)

SERIES 368 — Three-Point Internal Micrometers

FEATURES

- The Holtests (type II) have three contact points made of alloy steel.
- Measurement can be taken closer to the bottom of the blind bore (up to 100mm / 4" models).
- Measure deep holes using an extension rod (optional).
- With Ratchet Stop for constant force.
- Setting rings for origin point settings are optional.
- Supplied in fitted plastic case up to 100mm / 4". Over 100mm / 4" supplied in wooden case.



368-869

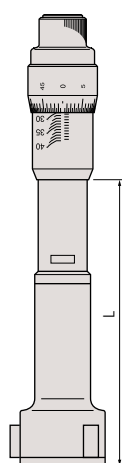


368-770



368-774

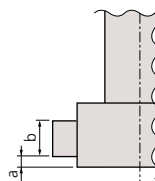
DIMENSIONS AND MASS



Range	L	Mass (g)
12 - 16mm / .5 - .65"	82	150
16 - 20mm / .65 - .8"	82	150
20 - 25mm / .8 - 1"	94	260
25 - 30mm / 1 - 1.2"	94	280
30 - 40mm / 1.2 - 1.6"	102	290
40 - 50mm / 1.6 - 2"	102	330
50 - 63mm / 2 - 2.5"	105	440
62 - 75mm / 2.5 - 3"	105	450
75 - 88mm / 3 - 3.5"	105	560
87 - 100mm / 3.5 - 4"	105	570
100 - 125mm / 4 - 5"	161	1020
125 - 150mm / 5 - 6"	161	1110
150 - 175mm / 6 - 7"	161	1200
175 - 200mm / 7 - 8"	161	1300
200 - 225mm / 8 - 9"	161	1420
225 - 250mm / 9 - 10"	161	1540
250 - 275mm / 10 - 11"	161	1690
275 - 300mm / 11 - 12"	161	1860

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).



Range	a	b
12 - 20mm / .5 - .8"	2.6	3.5
20 - 30mm / .8 - .12"	3.4	5.2
30 - 50mm / 1.2 - 2"	3.4	10
50 - 100mm / 2 - 4"	3.4	14
100 - 300mm / 4 - 12"	19.6	13.8



Technical Data

Graduation: 0.005mm or .0002"

Measuring method: Three-point method

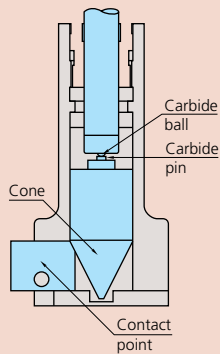
Contact point: Hardened steel (over HRC 60)

Optional Accessories

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



HT (Type II)

Head Assy Order No.	Measuring Range	HT (type II) Order No.
04AZA839	12 - 16mm	368-764
04AZA840	16 - 20mm	368-765
04AZA848	20 - 25mm	368-766
04AZA849	25 - 30mm	368-767
04AZA857	30 - 40mm	368-768
04AZA858	40 - 50mm	368-769
04AZA870	50 - 63mm	368-770
04AZA871	62 - 75mm	368-771
04AZA872	75 - 88mm	368-772
04AZA873	87 - 100mm	368-773
04AZA895	100 - 125mm	368-774
04AZA896	125 - 150mm	368-775
04AZA897	150 - 175mm	368-776
04AZA898	175 - 200mm	368-777
04AZA899	200 - 225mm	368-778
04AZA900	225 - 250mm	368-779
04AZA901	250 - 275mm	368-780
04AZA902	275 - 300mm	368-781
04AZA841	.5 - .65"	368-864
04AZA842	.65 - .8"	368-865
04AZA850	.8 - 1"	368-866
04AZA851	1 - 1.2"	368-867
04AZA859	1.2 - 1.6"	368-868
04AZA860	1.6 - 2"	368-869
04AZA874	2 - 2.5"	368-870
04AZA875	2.5 - 3"	368-871
04AZA876	3 - 3.5"	368-872
04AZA877	3.5 - 4"	368-873
04AZA903	4 - 5"	368-874
04AZA904	5 - 6"	368-875
04AZA905	6 - 7"	368-876
04AZA906	7 - 8"	368-877
04AZA907	8 - 9"	368-878
04AZA908	9 - 10"	368-879
04AZA909	10 - 11"	368-880
04AZA910	11 - 12"	368-881

SPECIFICATIONS

Metric	Individual
Range	Order No.
12 - 16mm	368-764
16 - 20mm	368-765
20 - 25mm	368-766
25 - 30mm	368-767
30 - 40mm	368-768
40 - 50mm	368-769
50 - 63mm	368-770
62 - 75mm	368-771
75 - 88mm	368-772
87 - 100mm	368-773
100 - 125mm	368-774
125 - 150mm	368-775
150 - 175mm	368-776
175 - 200mm	368-777
200 - 225mm	368-778
225 - 250mm	368-779
250 - 275mm	368-780
275 - 300mm	368-781

Inch	Individual
Range	Order No.
.5 - .65"	368-864
.65 - .8"	368-865
.8 - 1"	368-866
1 - 1.2"	368-867
1.2 - 1.6"	368-868
1.6 - 2"	368-869
2 - 2.5"	368-870
2.5 - 3"	368-871
3 - 3.5"	368-872
3.5 - 4"	368-873
4 - 5"	368-874
5 - 6"	368-875
6 - 7"	368-876
7 - 8"	368-877
8 - 9"	368-878
9 - 10"	368-879
10 - 11"	368-880
11 - 12"	368-881

Complete Unit Set

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

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

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



368-991



368-992



368-993



368-994