



For more information on Precision Measuring Instruments, see page 2210.

Starrett **INSIZE**

IP65 Digital 3-Point Inside Micrometers for Harsh & Washdown Environments

- 0.0005 in/ 0.001 mm Resolution
- Ratchet-stop thimble
- Curved contact point shape
- SPC Output
- For SPC processors and accessories see page 2221

Range	Accuracy	Maximum Measuring Depth	Data Output Type	Brand	Item No.
Carbide Contact Point Material					
0.25 in to 0.3125 in, 6 mm to 8 mm	+/-0.00015 in; +/-0.004 mm	2.25 in	Cable, Wireless with Transmitter	Starrett	53VE40
1 in to 1.1 in, 250 mm to 275 mm	+/-0.00035 in; +/-0.009 mm	4.625 in	Cable, Wireless with Transmitter	Starrett	53VE31
3.25 in to 4 in, 80 mm to 100 mm	+/-0.0002 in	4 in	Cable, Wireless with Transmitter	Starrett	53VE43
1.1 in to 1.2 in, 275 mm to 300 mm	+/-0.00035 in; +/-0.009 mm	4.625 in	Cable, Wireless with Transmitter	Starrett	53VE32
16 mm to 20 mm, 0.625 in to 0.75 in	+/-0.00015 in; +/-0.004 mm	2.625 in	Cable, Wireless with Transmitter	Starrett	53VE49
101 mm to 127 mm, 4 in to 5 in	+/-0.00025 in; +/-0.006 mm	6 in	Cable	Insize	54XH72
127 mm to 152 mm, 5 in to 6 in	+/-0.00025 in; +/-0.006 mm	6 in	Cable	Insize	54XH73
Steel Contact Point Material					
0.425 in to 0.5 in, 11 mm to 13 mm	+/-0.00015 in; +/-0.004 mm	2.18 in	Cable	Insize	55VM84



Mitutoyo **Starrett** **WESTWARD**

INSIZE Mahr TESA brown & sharpe

Outside Micrometers with Direct-Reading Vernier Scale

- Ratchet thimble type

These carbide-tipped mechanical micrometers are the standard/classic micrometer design for most high-precision outside dimension measurements when higher resolution than a caliper is required.

Range	Accuracy	Rotating Spindle	Brand	Item No.	
0.0001 in Resolution					
0 in to 1 in	+/-0.001 in	No	Mitutoyo	5C688 *	
	+/-0.00016 in	Yes	Westward	4KU90	
	+/-0.00016 in	Yes	Insize	462U15	
	+/-0.00016 in	Yes	Insize	462U16 *	
	+/-0.0001 in	No	Starrett	22T27	
	+/-0.0001 in	No	Starrett	22TX8	
	+/-0.0001 in	No	Starrett	30ZR6	
	+/-0.0001 in	No	Starrett	30A474	
	+/-0.0001 in	No	Starrett	30ZR5	
	+/-0.0001 in	Yes	Starrett	53VC94	
	+/-0.001 in	No	Mitutoyo	5C677 *	
	+/-0.00020 in	Yes	Insize	462U26	
0 in to 3 in	+/-0.00020 in	Yes	Insize	462U28	
1 in to 2 in	+/-0.001 in	No	Mitutoyo	5C689 *	
	+/-0.0001 in	No	Starrett	22T29	
	+/-0.0001 in	No	Starrett	30A476	
	+/-0.0001 in	No	Mitutoyo	4CGA4	
	+/-0.0001 in	Yes	Starrett	53VC95	
	+/-0.001 in	No	Mitutoyo	5C683 *	
	+/-0.0001 in	No	Starrett	22UA2	
	+/-0.0001 in	Yes	Starrett	53VC96	
	+/-0.0015 in	No	Mitutoyo	5C684 *	
	+/-0.0001 in	Yes	Tesa Brown & Sharpe	499K43 *	
	+/-0.0001 in	Yes	Starrett	53VC97	
	+/-0.0001 in	Yes	Starrett	30A475	
2 in to 3 in	+/-0.0005 in	Yes	Mitutoyo	5C685 *	
	+/-0.0015 in	No	Mitutoyo	5C686 *	
	+/-0.0001 in	Yes	Starrett	53VC99	
	+/-0.0001 in	Yes	Starrett	53VC91	
	+/-0.0001 in	Yes	Starrett	53VC92	
	+/-0.0001 in	Yes	Starrett	53VC93	
	+/-0.0001 in	Yes	Starrett	53VC88	
	+/-0.0001 in	Yes	Starrett	53VC90	
	0.001 in Resolution				
	0 in to 1 in	+/-0.001 in	No	Mitutoyo	5C687 *
		+/-0.001 in	Yes	Westward	2YNA1
		+/-0.0001 in	No	Starrett	22T26
+/-0.0001 in		No	Mitutoyo	4CGC4	
+/-0.002 mm		Yes	Starrett	53VD01 *	
+/-0.001 in		No	Mitutoyo	5C681 *	
+/-0.0001 in		No	Starrett	22T28	
+/-0.0001 in		No	Mitutoyo	4CGC6 *	
+/-0.00005 in		No	Starrett	6NAY0 *	
+/-0.001 in		No	Mitutoyo	5C682 *	
+/-0.0001 in		No	Starrett	22UA1	
+/-0.00015 in		No	Mitutoyo	4CGC7	
0 mm to 25 mm	+/-0.0001 in	No	Starrett	22UA3	
	+/-0.0001 in	No	Starrett	22UA4	
	+/-0.0001 in	No	Starrett	22UA5	
	+/-0.0002 in	No	Mitutoyo	4CGC8	
	0.01 mm Resolution				
	0 mm to 25 mm	+/-0.002 mm	Yes	Starrett	53VC85

INSIZE Mitutoyo **Starrett**

IP65 & IP67 Digital Outside Micrometers without SPC for Harsh & Washdown Environments

- 0.00005 in./0.001 mm Resolution
- Ratchet thimble except where noted

Range	Accuracy	Brand	Item No.
Carbide Anvil IP65 Rating			
0 in to 1 in, 0 to 25 mm	±2 µm	Insize	54XH93
Flat Anvil IP65 Rating			
0 in to 1 in, 0 to 25 mm	±0.00005 in	Mitutoyo	2NXD5
0 in to 1 in, 0 to 25 mm	±0.00005 in	Mitutoyo	2NXD3
0 in to 1 in, 0 to 25 mm	±0.0001 in	Mitutoyo	4CGG2
0 in to 1 in, 0 to 25.4 mm	±0.00005 in	Mitutoyo	1ARB6
0 in to 1 in, 0 to 25.4 mm	±0.00005 in	Mitutoyo	4LA70
0 to 25 mm	±1 µm	Mitutoyo	16X239
1 in to 2 in	±0.00005 in	Mitutoyo	2NXD6
1 in to 2 in, 25.4 to 50.8 mm	±0.00005 in	Mitutoyo	6NPY6
1 in to 2 in, 25.4 to 50.8 mm	±0.00005 in	Mitutoyo	4CGF8 *
1 in to 2 in, 25.4 to 50.8 mm	±0.00005 in	Mitutoyo	4LA71
2 in to 3 in, 50.8 to 76.2 mm	±0.00005 in	Mitutoyo	6NPY7
3 in to 4 in, 76.2 to 101.6 mm	±0.0001 in	Mitutoyo	4CGG1
IP67 Rating			
0 in to 1 in, 0 to 25 mm	±0.00005 in	Starrett	22TX2 *
0 in to 1 in, 0 to 25 mm	±0.00005 in	Starrett	22TX6
1 in to 2 in	±0.0001 in	Starrett	53VD16 *
1 in to 2 in, 25 to 50 mm	±0.0001 in	Starrett	53VD19
Long Form Calibration Certificate Long Form Calibration Certificate Traceable to NIST, IP65 Rating			
0 in to 1 in, 0 to 25.4 mm	±0.00005 in	Mitutoyo	1ARD4 *
0 in to 1 in, 0 to 25.4 mm	±0.00005 in	Mitutoyo	1ARB5 *
Flat Carbide Tipped Anvil IP65 Rating			
0 in to 1 in, 0 to 25.4 mm	±0.00005 in	Mitutoyo	54GF36 *
0 in to 1 in, 0 to 25.4 mm	±0.00005 in	Mitutoyo	4LA73
1 in to 2 in, 25.4 to 50.8 mm	±0.00005 in	Mitutoyo	1ARD5
2 in to 3 in, 50.8 to 76.2 mm	±0.00005 in	Mitutoyo	4CGF9
Long Form Calibration Certificate Long Form Calibration Certificate Traceable to NIST, IP65 Rating			
0 in to 1 in, 0 to 25.4 mm	±0.00005 in	Mitutoyo	36J712
1 in to 2 in, 25.4 to 50.8 mm	±0.00005 in	Mitutoyo	36J711
2 in to 3 in, 50.8 to 76.2 mm	±0.00005 in	Mitutoyo	36J714



*Friction Thimble † Rotating Thimble

Digital Outside Micrometer Sets Mitutoyo **Starrett** **INSIZE** Mahr

- For SPC processors and accessories see page 2221

These digital outside micrometer sets contain individual micrometers in measuring range increments of 1 inch or 25mm. They have the same construction, finish, graduation, and thimble type, so users get the same style and feel across a broad range of measurements.

Number of Micrometers	Res.	Accuracy	Thimble Type	IP Rating	Data Output Type	Brand	Item No.
0 in to 3 in							
3	0.00005 in	+/-0.00005 in	Ratchet	IP65	Cable	Mitutoyo	4LA77
0 in to 4 in							
4	0.00005 in	+/-0.00005 in, +/-0.0001 in	Ratchet	IP65	Cable	Mitutoyo	4CGG3
4	0.0001 in	+/-0.0001 in	Ratchet	Not Rated	No Output	Starrett	53VD24
—	0.00005 in/0.001 mm	+/-0.00012 in, +/-0.0008 in	Ratchet	IP65	Cable, Wireless	Insize	462T90
—	0.00005 in/0.001 mm	±0.002 mm	Ratchet	IP65	Wireless	Mahr	446F09
0 in to 6 in							
6	0.00005 in	+/-0.0001 in	Friction	Not Rated	No Output	Starrett	30A542
6	0.0001 in	+/-0.0001 in	Ratchet	Not Rated	No Output	Starrett	53VD25
—	0.00005 in/0.001 mm	+/-0.00012 in, +/-0.0008 in	Ratchet	IP65	Cable, Wireless	Insize	462T92

