# Starrett® 4/NS/ZF+

For more information on Precision Measuring Instruments, see page 2325

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

- 0.0005 in/ 0.001 mm Resolution SPC Output
- Ratchet-stop thimble
- Curved contact point shape
- For SPC processors and accessories see page 2336

	see page 2550					
Range Carbide Contact I	Accuracy	Maximum Measuring Depth		Brand	Item No.	Storner 13 1355
			0 11 140 1			R .
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	4
1 in to 11 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	
11 in to 12 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		2.625 in	Cable, Wireless with Transmitter	Starrett	53VE49	N-58
101 mm to 127 mm, 4 in to 5 in	+/-0.00025 in; +/-0.006 mm	ьш	Cable	Insize	54XH72	1
127 mm to 152 mm, 5 in to 6 in	+/-0.00025 in; +/-0.006 mm	6 in	Cable	Insize	54XH73	<b>(4</b> )
Steel Contact Poi						Carbide
0.425 in to 0.5 in,	+/-0.00015 in;	2.18 in	Cable	Insize	55VM84	53VE40



# Mitutoyo Starrett Westward









## **Outside Micrometers with Direct-Reading Vernier Scale**

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	Thimble Type	Brand	Item No.			
	0.0001 in F	+/-0.001 in	No	Friction/Ratchet	Mitutovo	5C688			
١		+/-0.001111 +/-0.00016 in	Yes			4KU90			
		+/-0.00016111 +/-0.0001 in	No	Friction Friction	Westward Starrett	2ZTZ7			
	0 in to 1 in		No	Friction	Mitutovo	4CGA3			
	U III LU I III	+/-0.0001 in	No	Friction	Starrett	3DZR6			
١		+/-0.0001 in	No	Ratchet	Starrett	2ZTX8			
١		+/-0.0001 in	No	Ratchet	Mitutoyo	4CGA2			
١	0 in to 3 in	+/-0.0001 in	Yes	Ratchet	Insize	462U26			
١	0 in to 4 in	+/-0.00020 in	Yes	Ratchet	Insize	462U28			
١	0 111 10 4 111	+/-0.001 in	No	Friction/Ratchet	Mitutoyo	5C689			
	1 in to 2 in		No	Friction	Starrett	2ZTZ9			
	1 111 10 2 111	+/-0.0001 in	Yes	Ratchet	Starrett	53VC95			
		. / 0.001 in	No	Friction/Ratchet	Mitutoyo	5C683			
١	2 in to 3 in	+/-0.0002 in	Yes	Ratchet	Mahr	446F05			
		+/-0.0015 in	No	Friction/Ratchet	Mitutoyo	5C684			
		+/-0.0002 in	Yes	Ratchet	Mahr	446F06			
	3 in to 4 in	+/-0.0001 in	Yes	Fixed/Friction	Tesa Brown & Sharpe				
١		+/-0.0001 in	Yes	Ratchet	Starrett	53VC97			
١		+/-0.00005 in	Yes	Friction	Starrett	30A467			
١	4 in to 5 in	+/-0.0015 in	No	Friction/Ratchet	Mitutoyo	5C685			
١		+/-0.0001 in	Yes	Ratchet	Starrett	53VC98			
١	5 in to 6 in	+/-0.0015 in	No	Friction/Ratchet	Mitutoyo	5C686			
١		+/-0.0001 in	Yes	Ratchet	Starrett	53VC99			
١	6 in to 7 in	+/-0.0001 in	Yes	Ratchet	Starrett	53VC91			
١	0.001 in Re								
١		+/-0.001 in	No	Friction/Ratchet	Mitutoyo	5C687			
١	0 in to 1 in	+/-0.001 in	Yes	Ratchet	Westward	2YNA1			
١	0 111 10 1 111	+/-0.0001 in	No	Ratchet	Starrett	2ZTZ6			
١		+/-0.0001 in	No	Ratchet	Mitutoyo	4CGC4			
	0 mm to 25 mm	+/-0.002 mm	Yes	Ratchet	Starrett	53VD01			
١		+/-0.001 in	No	Friction/Ratchet	Mitutoyo	5C681			
	1 in to 2 in	+/-0.0001 in	No	Friction	Mitutoyo	4CGC6			
		+/-0.0001 in	No	Ratchet	Starrett	2ZTZ8			
١	2 in to 3 in	+/-0.001 in	No	Friction/Ratchet	Mitutoyo	5C682			
I	2 III 10 0 III	+/-U.UUU I IN	No	Ratchet	Starrett	2ZUA1			
١	3 in to 4 in	+/-0.00015 in	No	Ratchet	Mitutoyo	4CGC7			
١		+/-0.0001 in	No	Ratchet	Starrett	2ZUA3			
١	4 in to 5 in	+/-0.0001 in	No	Ratchet	Starrett	2ZUA4			
١	5 in to 6 in	+/-0.0001 in	No	Ratchet	Starrett	2ZUA5			
١	6 in to 7 in	+/-0.0002 in	No	Ratchet	Mitutoyo	4CGC8			
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## +///S/ZE+ Millutoyo 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	2ZTX2 *	
0 in to 1 in, 0 to 25 mm	±0.00005 in	Starrett	2ZTX6	
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 Certifica	te Long Form C	alibration		
Certificate Traceable to NIST. IF	P65 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 1 in to 2 in, 25.4 to 50.8 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	
<b>Long Form Calibration Certifica</b>	te Long Form C	alibration		
Certificate Traceable to NIST, IF				
0 in to 1 in. 0 to 25.4 mm		Mitutoyo	36J712	
0 111 10 1 111, 0 10 23.4 111111	±0.00005 in			
	±0.00005 in	Mitutoyo	36J711	
1 in to 2 in, 25.4 to 50.8 mm 2 in to 3 in, 50.8 to 76.2 mm				



54XH93



Flat Anvil 6NPY6

1ARD5



# Digital Outside Micrometer Sets Mitutoyo Starrett +///SIZE+

Mahr

■ For SPC processors and accessories see page 2336

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

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	+/-0.00010 in, +/-0.00015 in	Rachet	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	
	0.0000E in/0.001 mm	./ 0.00010 in ./ 0.00015 in	Doobot	IDGE	Cable Mireless	Incizo	462T02	

