



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



brown & sharpe

INSIZE Starrett Mitutoyo

Dial Indicators

Conform to American Gage Design (AGD) standards

If tolerances are bilateral, a balanced dial is preferred. If tolerance is unilateral, a continuous dial is preferred.

Balanced Reading
22UH4



Continuous Reading
408R60



Reverse-Reading Continuous Reading
409U13



Range	Graduations	Dial Size	Dial Reading	Range per Revolution	Brand	Item No.
Balanced Reading AGD 1						
0 in to 0.035 in	0.0005 in	2.25 in	0-20-0	0.35 in	Tesa Brown & Sharpe	45JK43
	0.001 in	2.25 in	0-50-0	0.35 in	Tesa Brown & Sharpe	45JK42
0 in to 0.05 in	0.001 in	1.69 in	0-5-0	0.05 in	Tesa Brown & Sharpe	45JK37
	0.0005 in	2.25 in	0-5-0	0.2 in	Tesa Brown & Sharpe	45JK34
0 in to 0.2 in	0.001 in	1.58 in	0-10	0.02 in	Insize	409L49
	0.001 in	1.69 in	0-50-0	0.1 in	Starrett	22UH4
0 in to 0.25 in	0.001 in	1.69 in	0-50-0	0.25 in	Tesa Brown & Sharpe	45JK40
	0.001 in	40 mm	0-50-0	0.1 in	Mitutoyo	6NRA5
AGD 2						
0 in to 0.025 in	0.0001 in	57 mm	0-5-0	0.01 in	Mitutoyo	6NRA7
0 in to 0.05 in	0.0001 in	57 mm	0-5-0	0.01 in	Mitutoyo	6NRA9
0 in to 0.2 in	0.0001 in	2.25 in	0-5-0	0.01 in	Starrett	4CER5
0 in to 0.25 in	0.001 in	2.25 in	0-50-0	0.1 in	Starrett	4CEP9
0 in to 0.5 in	0.001 in	2.25 in	0-50-0	0.1 in	Starrett	22UH7
	0.001 in	2.25 in	0-50-0	0.1 in	Starrett	4CER3
0 in to 1 in	0.001 in	57 mm	0-50-0	0.1 in	Mitutoyo	6NRC1
0 in to 2 in	0.001 in	2.25 in	0-100	0.1 in	Starrett	4CER1
0 to 1 mm	0.001 mm	57 mm	0-100-0	0.2 mm	Mitutoyo	6NRC3
0 to 50 mm	0.01 mm	2.25 in	0-100	1 mm	Starrett	5UAJ3
Continuous Reading AGD 1						
0 in to 0.1 in	0.0005 in	1.58 in	0-50	0.05 in	Insize	408R46
	0.001 in	1.58 in	0-100	0.1 in	Insize	408R45
	0.0005 in	1.58 in	0-50	0.05 in	Insize	408R48
0 in to 0.2 in	0.001 in	1.58 in	0-100	0.1 in	Insize	409L46
	0.001 in	1.66 in	0-100	0.1 in	Insize	409U02
	0.0005 in	1.58 in	0-50	0.05 in	Insize	408R50
	0.001 in	1.58 in	0-100	0.1 in	Insize	408R49
0 in to 0.25 in	0.001 in	1.69 in	0-100	0.1 in	Starrett	22UH5
	0.001 in	40 mm	0-100	0.1 in	Mitutoyo	1ARB1
	0.001 in	40 mm	0-100	0.1 in	Mitutoyo	6NRA4
0 in to 1 in	0.0005 in	2.25 in	0-100	1 in	Tesa Brown & Sharpe	45JK46
	0.001 in	2.25 in	0-100	1 in	Tesa Brown & Sharpe	45JK48

Range	Graduations	Dial Size	Dial Reading	Range per Revolution	Brand	Item No.	
AGD 2							
0 in to 0.025 in	0.0001 in	2.25 in	0-10	0.01 in	Starrett	22UH6	
	0.0001 in	2.2 in	0-100	0.01 in	Insize	408R61	
0 in to 0.05 in	0.0001 in	57 mm	0-10	0.01 in	Mitutoyo	4CGP7	
0 in to 0.2 in	0.0001 in	2.25 in	0-10	0.01 in	Starrett	4CER6	
	0.0005 in	2.36 in	0-50	0.05 in	Insize	408R52	
0 in to 0.25 in	0.001 in	2.36 in	0-100	0.1 in	Insize	408R51	
	0.0005 in	2.36 in	0-50	0.05 in	Insize	408R54	
0 in to 0.5 in	0.001 in	2.25 in	0-100	0.1 in	Starrett	22UH8	
	0.001 in	2.28 in	0-100	0.1 in	Insize	409L47	
	0.0005 in	2.25 in	0-50	0.05 in	Starrett	4CER7	
	0.0005 in	2.36 in	0-50	0.05 in	Insize	408R56	
0 in to 1 in	0.0005 in	57 mm	0-50	0.05 in	Mitutoyo	4CGP6	
	0.001 in	2.25 in	0-100	0.1 in	Starrett	22UH9	
	0.001 in	2.28 in	0-100	0.1 in	Insize	409L48	
	0.001 in	2.36 in	0-100	0.1 in	Insize	408R55	
0 in to 2 in	0.0005 in	2.36 in	0-50	0.05 in	Insize	408R58	
	0.001 in	2.36 in	0-100	0.1 in	Insize	408R57	
	0.001 in	57 mm	0-100	1 in	Mitutoyo	1ARD3	
0 in to 3 in	0.001 in	2.25 in	0-100	0.1 in	Starrett	4CER2	
0 in to 4 in	0.001 in	2.25 in	0-100	0.1 in	Starrett	4CER4	
0 to 10 mm	0.01 mm	2.25 in	0-100	1 mm	Starrett	22UJ1	
	0.01 mm	57 mm	0-100	1 mm	Mitutoyo	16X2J1	
0 to 25 mm	0.01 mm	2.25 in	0-100	1 mm	Starrett	22UJ2	
	0.1 in	0.001 in	1.69 in	0-100	0.1 in	Starrett	6NAV6
AGD 3							
0 in to 1.5 in	0.001 in	2.99 in	0-100	0.1 in	Insize	408R59	
0 in to 2 in	0.001 in	2.99 in	0-100	0.1 in	Insize	408R60	
AGD 4							
0 in to 3 in	0.001 in	92 mm	0-100	0.1 in	Mitutoyo	4CGR1	
Reverse-Reading Continuous Reading AGD 2							
0 in to 1 in	0.001 in	2.36 in	0-100	0.1 in	Insize	409U13	

Mitutoyo Starrett WESTWARD Mahr INSIZE

Digital Indicators

Digital drop indicators, also called electronic indicators, have a linear encoder which an LCD fixed to a plunger-style stem with a contact point on the end. When the contact point touches the workpiece or feature, the up-and-down movement will be translated to a numeric value on the digital display.

Back Lug
6NRA3



Non-Removable Flat Back
409P02



Removable Flat Back
54GE89



Range	Res.	Accuracy	IP Rating	SPC Output	Variable Resolution	Display Type	Brand	Item No.
Digital Indicators with Back Lug								
0 in to 0.5 in	0.001 mm, 0.00005 in	±0.0001 in	IP42	Yes	No	LCD	Mitutoyo	4GPPY1
	0.001 mm, 0.00005 in	±0.0001 in	IP42	Yes	No	LCD	Mitutoyo	6NRA3
	0.001 mm, 0.00005 in	±0.0001 in	IP42	Yes	No	LCD	Mitutoyo	41T254
	0.001 mm, 0.00005 in	±0.0001 in	IP42	Yes	No	LCD	Mitutoyo	36J702
	0.001 mm, 0.00005 in	±0.0001 in	IP42	Yes	No	LCD	Mitutoyo	36J699
	0.001 mm, 0.00005 in, 0.0001 in, 0.01 mm, 0.0005 in	±0.00012 in	IP42	Yes	No	LCD With Analog Bar	Mitutoyo	54GE84
	0.001 mm, 0.0001 in	±0.0001 in	IP42	Yes	No	LCD	Mitutoyo	1ARJ7
	0.01 mm, 0.0005 in	±0.0008 in	IP42	Yes	No	LCD	Mitutoyo	1ARJ6
	0.01 mm, 0.0005 in	±0.001 in	IP42	Yes	No	LCD	Mitutoyo	4GPPY2
	0.01 mm, 0.00005 in	±0.0001 in; ±0.002 mm	IP54	Yes	Yes	LCD	Starrett	53VE12
0 in to 1 in	0.01 mm, 0.0005 in	—	No	—	—	—	Westward	2YNK1
	0.01 mm, 0.0005 in	±0.001 in	IP67	Yes	No	LCD	Starrett	53VD81
0 in to 2 in	0.02 mm, 0.0001 in	±0.0002 in; ±0.004 mm	IP54	Yes	Yes	LCD	Starrett	53VE16
0 in to 4 in	0.02 mm, 0.0001 in	±0.0002 in; ±0.004 mm	IP54	Yes	Yes	LCD	Starrett	53VE20
0.0002 in to 4 in	0.0002 mm, 0.00002 in, 0.001 mm, 0.00005 in, 0.002 mm, 0.0001 in, 0.005 mm, 0.01 mm, 0.0005 in	±0.002 mm	IP42	Yes	Yes	LCD	Mahr	45PG20
Digital Indicators with Non-Removable Flat Back								
0 in to 0.5 in	0.0002 mm, 0.00001 in	±0.00012 in	IP42	Yes	No	LCD With Analog Bar	Mitutoyo	54GE87
	0.001 mm, 0.00005 in	±0.00015 in	IP42	Yes	No	LCD With Analog Bar	Insize	409P02
0 in to 1 in	0.001 mm, 0.00005 in	±2 Res.	IP54	Yes	Yes	Color LCD	Starrett	53V066
	0.001 mm, 0.00005 in, 0.0001 in, 0.01 mm, 0.0005 in, 0.001 in	±0.00012 in; ±0.003 mm	IP42	Yes	No	LCD	Mitutoyo	36J886
	0.002 mm, 0.0001 in	±2 Res.	IP54	Yes	Yes	Color LCD	Starrett	53V065
0 in to 1.2 in	0.01 mm, 0.0005 in	±0.0008 in	IP42	Yes	No	LCD	Mitutoyo	1ARU1
	0.0005 mm, 0.00002 in, 0.001 mm, 0.00005 in, 0.0001 in, 0.0005 in	±0.0015 mm	IP42	Yes	No	LCD	Mitutoyo	36J694
0 in to 2.4 in	0.00002 in, 0.001 mm, 0.00005 in, 0.0001 in, 0.0005 in	±0.0025 mm	IP42	Yes	No	LCD	Mitutoyo	41T256
0 in to 4 in	0.01 mm, 0.0005 in	±2 Res.	IP54	Yes	Yes	Color LCD	Starrett	53VD69
Digital Indicators with Removable Flat Back								
0 in to 0.22 in	0.001 mm, 0.0005 in	±0.0008 in; ±0.020 mm	IP42	Yes	No	LCD	Mitutoyo	54GE89
	0.001 mm, 0.00005 in	±0.0001 in	IP42	Yes	No	LCD	Mitutoyo	33RK38
	0.001 mm, 0.00005 in	±0.0001 in	IP53	Yes	No	LCD	Mitutoyo	41T258
0 in to 0.5 in	0.001 mm, 0.00005 in, 0.0001 in, 0.01 mm, 0.0005 in	±0.00012 in	IP42	Yes	No	LCD With Analog Bar	Mitutoyo	54GE85
	0.001 mm, 0.0001 in	±0.0001 in	IP42	Yes	No	LCD	Mitutoyo	1ARJ8
0 in to 0.98 in	0.01 mm	±0.001 in	IP42	Yes	No	LCD	Mitutoyo	4GPY3
0 in to 1 in	0.001 mm, 0.00005 in	±0.0001 in	IP42	Yes	No	LCD	Mitutoyo	36J695
0 in to 2 in	0.001 mm, 0.00005 in	±0.0001 in	IP42	Yes	No	LCD	Mitutoyo	4GPY5
0.00001 in to 0.039 in	0.001 mm, 0.005 mm, 0.0005 in	±0.0002 in	IP42	Yes	No	LCD	Mitutoyo	4GPY6
0.00001 in to 0.04 in	0.0002 mm, 0.00001 in, 0.00002 in, 0.001 mm, 0.00005 in, 0.0002 mm, 0.0001 in, 0.005 mm, 0.01 mm, 0.0005 in, 0.02 in	0.5% OF Standard Range	IP54	Yes	Yes	LCD	Mahr	5RHJ0
	0.0002 mm, 0.00001 in, 0.00002 in, 0.001 mm, 0.00005 in, 0.0002 mm, 0.0001 in, 0.005 mm, 0.01 mm, 0.0005 in, 0.02 in	±0.5% over ±0.040 in; ±0.25% over ±0.020 in	IP54	Yes	Yes	LCD	Mahr	5RHJ4
0.00002 in to 0.4 in	0.0002 mm, 0.00001 in, 0.00002 in, 0.001 mm, 0.00005 in, 0.0002 mm, 0.0001 in, 0.005 mm, 0.01 mm, 0.0005 in, 0.02 in	±0.002 mm	IP54	Yes	Yes	LCD	Mahr	508V81