



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



1D with Motorized Travel 446F34

←INSIZE→ WESTWARD Mitutoyo Mahr

Digital Height Gauges

- Includes display
- 2D Digital Height Gauges include SCS Certificate of calibration
- SPC Output except where noted

1D digital height gauges are used measure height and scribe lines for layout applications.

2D digital height gauges have a scriber that moves along the X axis so the operator

can perform measurements in 2 dimensions. They measure height and inspect round parts and bores, with the probe moving in a circular path. They are also used to scribe lines in layout applications.



TESA TECHNOLOGY

brown & sharpe

Range	Res.	Accuracy	Data Output Type	Includes Fine Adjustment	Beam Style	Brand	Item No.
1D Digital Height Gauges with Manual Travel							
0 in to 12 in/0 to 300 mm	0.0005 in/0.01 mm	±0.0015 in	—	No	Single-Pole	Westward	2YND4
0 in to 12 in/0 to 300 mm	0.0005 in/0.01 mm	±0.012 in	Cable, Wireless with Transmitter	—	Single-Pole	Insizes	463D71
0 in to 12 in/0 to 300 mm	0.0005 in/0.01 mm, 0.0002 in/0.005 mm	±0.001 in	—	Yes	Double-Pole	Mitutoyo	33RK45
0 in to 18 in/0 to 450 mm	0.0005 in/0.01 mm	±0.002 in	—	No	Single-Pole	Westward	2YND5
0 in to 18 in/0 to 450 mm	0.0005 in/0.01 mm, 0.0002 in/0.005 mm	±0.002 in	—	Yes	Double-Pole	Mitutoyo	33RK46
0 in to 24 in/0 to 600 mm	0.0005 in/0.01 mm	±0.002 in	Cable, Wireless with Transmitter	—	Single-Pole	Insizes	463D72
0 in to 24 in/0 to 600 mm	0.0005 in/0.01 mm, 0.0002 in/0.005 mm	±0.002 in	—	Yes	Double-Pole	Mitutoyo	546F34
0 in to 40 in/0 to 1,000 mm	0.0005 in/0.01 mm	±0.0031 in	Cable	—	Single-Pole	Insizes	463J19
0 in to 40 in/0 to 1,000 mm	0.0005 in/0.01 mm, 0.0002 in/0.005 mm	±0.025 in	—	Yes	Double-Pole	Mitutoyo	33RK47
1D Digital Height Gauges with Motorized Travel							
0 in to 14 in/0 to 350 mm	0.00005 in/0.001 mm, 0.0001 in/0.01 mm	±(2.8+L/300) micron	—	Yes	Single-Pole	Mahr	446F34
0 in to 24 in/0 to 600 mm	0.00005 in/0.001 mm, 0.0001 in/0.01 mm	±(2.8+L/300) micron	—	Yes	Single-Pole	Mahr	446F35
2D Digital Height Gauges with Manual Travel							
0 to 350 mm/170 to 520 mm	0.00001 in/0.0001 mm, 0.0001 in/0.001 mm, 0.001 in/0.01 mm	±(2+2 x L/1000) micron	Cable, Wireless	Yes	Single-Pole	Tesa Brown & Sharpe	54VL05
0 to 600 mm/170 to 770 mm	0.00001 in/0.0001 mm, 0.0001 in/0.001 mm, 0.001 in/0.01 mm	±(2+2 x L/1000) micron	Cable, Wireless	Yes	Single-Pole	Tesa Brown & Sharpe	54VL06
0 to 900 mm/175 to 1075 mm	0.00001 in/0.0001 mm, 0.0001 in/0.001 mm, 0.001 in/0.01 mm	±(2+2 x L/1000) micron	Cable, Wireless	Yes	Single-Pole	Tesa Brown & Sharpe	54VL07
0 to 900 mm/175 to 1075 mm	0.00001 in/0.0001 mm, 0.0001 in/0.001 mm, 0.001 in/0.01 mm	±(2+2 x L/1000) micron	Cable, Wireless	No	Single-Pole	Tesa Brown & Sharpe	462H45



Dial Bore 26Y775

←INSIZE→ Starrett Mitutoyo

Bore Gauges

Dial Bore Gauges are mounted to the gauge handle. The user rocks the gauge in the bore or hole to find the minimum reading on the dial.
Digital bore gauges have an integrated LCD or removable and exchangeable digital indicator that provides quick, easy reading of inside-diameter measurements of holes and openings.

Range	Accuracy	Dial Graduation	Requires Indicator	Contact Point Material	Brand	Item No.
Dial Bore Gauges Anvil Contact Style						
0.4 in to 0.7 in	±0.00075 in	0.0005 in	Yes	Steel	Insizes	463F37
0.7 in to 1.5 in	±0.00025 in	0.0005 in	—	Carbide	Starrett	5UAR3
0.7 in to 1.5 in	±0.00075 in	0.0005 in	Yes	Steel	Insizes	463F39
1.4 in to 2.4 in	±0.0009 in	0.0005 in	Yes	Ceramic	Insizes	463F41
1.4 in to 2.4 in	±0.0008 in	0.0001 in	Yes	Carbide	Mitutoyo	6ANT9
2 in to 6 in	±0.00025 in	0.0005 in	—	Carbide	Starrett	5UAR2
2 in to 6 in	±0.0009 in	0.0005 in	Yes	Ceramic	Insizes	463F42
6 in to 10 in	±0.0009 in	0.0005 in	Yes	Ceramic	Insizes	463F38
6.5 in to 10 in	±0.0008 in	0.0001 in	Yes	Carbide	Mitutoyo	6ANU1
10 in to 16 in	±0.0009 in	0.0005 in	Yes	Ceramic	Insizes	463F40
Ball Contact Style						
0 in to 0.05 in	±0.0001 in	0.0001 in	Yes	Carbide Tipped	Mitutoyo	785TH3
Split Ball Contact Style						
0.56 in to 1.565 in	±0.0002 in	0.0001 in	Yes	—	Starrett	26Y763
Three-Point Contact Style						
1.5 in to 3 in	±0.0002 in	0.0001 in	Yes	Steel	Starrett	26Y775
3 in to 5.1875 in	±0.0002 in	0.0001 in	Yes	Steel	Starrett	26Y776
5 in to 8 in	±0.0002 in	0.0001 in	Yes	Steel	Starrett	26Y777
Digital Bore Gauges Anvil Contact Style						
0.24 in to 0.4 in	+/-0.00075 in	—	No	Steel	Insizes	463D81
0.4 in to 0.7 in	+/-0.00075 in	—	No	Steel	Insizes	463D82
0.7 in to 1.5 in	+/-0.00075 in	—	No	Steel	Insizes	463D84
1.4 in to 2.4 in	+/-0.0009 in	—	No	Steel	Insizes	463D86
2 in to 6 in	+/-0.0009 in	—	No	Steel	Insizes	463D87
6 in to 10 in	+/-0.0009 in	—	No	Steel	Insizes	463D83
10 in to 16 in	+/-0.0009 in	—	No	Steel	Insizes	463D85

Telescoping Gauge Sets



22VC3

Inserted into openings and controlled by a knurled knob or small handle that expands the telescoping arm until the spring-loaded plungers make contact with the sides of the bore. Polished-steel gauge is locked into place and removed. It is then measured with an outside micrometer to determine a bore's hole diameter.

No. of Pieces	Range	Overall Length	Gauge Plunger Style	Replaceable Measuring Handle	Maximum Depth	Brand	Item No.
4	0.315 in to 2.126 in	4 2 3/4 in to 5 2 3/4 in	Double-Arm Plunger	—	5 in	Mitutoyo	5CT18
4	5/16 in to 2 1/8 in	2 1/2 in	Double-Arm Plunger	Yes	2.375 in	Starrett	22VC3
5	1/2 in to 6 in	2 3/4 in	Single-Arm Plunger	Yes	2.625 in	Starrett	22VA9
5	1/2 in to 5 1/8 in	4 2 3/4 in to 6 in	Double-Arm Plunger	—	—	Mitutoyo	1AR82
6	5/16 in to 2 1/8 in	2 3/4 in, 3 1/4 in	Double-Arm Plunger	Yes	2.375 in	Starrett	5UA1V
6	5/16 in to 6 in	4 2 3/4 in to 6 in	Double-Arm Plunger	—	6 in	Mitutoyo	5CT17
6	5/16 in to 6 in	4.528 in, 5.394 in	Double-Arm Plunger	Yes	—	Insizes	54XJ15
6	1 1/16 in to 5 in	(3) 4 3/4 in, (3) 5 1/2 in	Double-Arm Plunger	No	—	Westward	4KU95

Taper Gauges & Sets



30C249

No. of Leaves	Range	Graduations	Overall Length	Material	Brand	Item No.
Flat Leaf						
1	1/2 in to 3/4 in	1/64 in	5 3/4 in	Stainless Steel	Insizes	54XJ11
4	1/16 in to 3/16 in, 2 3/4 in to 3 1/4 in, 3 3/4 in to 4 1/4 in	1/64 in	5 3/4 in	Stainless Steel	Insizes	55VN64
8	0.100 in to 0.500 in	0.001 in	2 1/2 in	Tempered Steel	Starrett	22VC1
10	1/2 in to 1 in	0.001 in	2 3/4 in	Tempered Steel	Starrett	30C249
Rounded Body						
1	0.6 in to 1.2 in	0.005 in	6 1/2 in	Carbon Steel	Insizes	55VN65
1	1.2 in to 1.8 in	0.005 in	6 1/2 in	Carbon Steel	Insizes	55VN66

←INSIZE→ Starrett