MACHINE SHOP DISCOUNT SUPPLY



FLUSH READING VERNIER HEIGHT GAGES

STARRETT SERIES 255:



Amply proportioned measuring beams and bases for extra rigidity.

VERNIER HEIGHT GAGES

- Satin chrome Finish
- Double Spaced Vernier
- Vernier Scale : 1/1000" x 1/50mm
- Magnifying Glass
- Fitted Case

SERIES 216:

Sliding scale permitting all measurement to start from an even reference point.

Range	Order No.	Price
0-12"/0-300mm 0-18"/0-450mm 0-24"/0-600mm	1500112 1500118 1500124	



Combines the right balance and weight for applications where a heavy duty gage is not practical. Features long 50-division vernier with widely spaced, easy-to-read graduations for simplified settings and readings without a magnifying glass. Open-face design with flush fitting of the vernier scale to the main scale, both the same plane, eliminates parallax. Satin chrome finish eliminates glare and improves readability. Surfaces hard chrome plated for resistance to rust and stain. Bar and vernier scale machine divided. Hardened and stabilized bar features straight and angular ways for positive alignment and easy adjustment. A hand-fitting natural grip base design permits direct readings from base over full range without calculations. Scriber has rounded point and cuts clean, sharp lines with minimum pressure. Furnished in case.



Superior Import

Range	Graduation	Catalog No.	EDP No.	Price
0 – 12"	.001"	255Z-12	51229	
0 – 18	.001	255Z-18	51231	
0 – 300mm	0.02mm	255MZ-300	56218	
0 -18"/450mm	.001"/0.02mm	255EMZ-18	65160	

MASTER VERNIER HEIGHT GAGES

STARRETT SERIES 254:

- Exceptionally stable and accurate with easy-reading vernier style.
- Long, 50-division vernier scales permit half as many graduations as single vernier tools.
- Widely spaced graduations make easy reading to .001" or 0.02mm without needing a magnifying glass.
- Flush fitting of the vernier scale to the main scale means that these are in the same plane, which eliminates parallax.
- Extremely fine adjustments are achieved by a knob located on the base.
- Quick-adjust release on the slide allows for fast positioning.
- Special master bar design and the balanced design and weight of the base eliminates vibration.
- Vertical bar is positioned near the center of the base for balance and stability.
- Versatile tool will scribe lines, mount dial indicators or electronic probes and accept depth attachments.
- Base is hardened, ground and lapped square.
- Fitted Case, Scriber.



INCH READING – Graduation - .001" METRIC READING - Graduation - 0.02mm

Range	Catalog No.	EDP No.	Price
0-12"	254Z-12	51219	
0-18"	254Z-18	51220	
0-24"	254Z-24	51221	
0-36"	254Z-36	51222	
0-48"	254Z-48	51223	
0-300mm	254MZ-300	56214	
0-450mm	254MZ-450	56215	
0-600mm	254MZ-600	56216	
0-900mm	254MZ-900	56217	
0-12"/300mm	254EMZ-12	51224	
0-18"/450mm	254EMZ-18	51225	
0-24"/600mm	254EMZ-24	51226	



which can be reset individually anywhere within the range for quick and easy upward and downward reading. The last digit on the counter is .1" or 1.0mm. The dial face is graduated in .001" or .01mm.

- Bottom surface of the base is stainless steel, hardened and ground
- With fine-adjusting wheel and lock
- Carbide tipped scriber

INCH		METRIC			
Range	Order No.	Price	Range	Order No.	Price
0-12" 0-18" 0-24"	2160000 2160001 2160002		0-300mm 0-450mm 0-600mm	2160003 2160004 2160005	

Quality Precision Tools



Mitutoyo

Starrett

The Choice Is Yours!!!

SERIES ELECTRONIC HEIGHT GAGE

STARRETT SERIES 3751:

0-6" / 150mm (without output)

This height gage is light, portable and easy to use for vertical measurements within its range.

Readability Features

- Easy-to-read LCD .32" high characters Accuracy and Long Life Design Features
- Hardened, stainless steel bar for long life
- Depth attachment PT08680A available for measuring depth of holes, slots, and recesses
- Fine adjustment thumb roll for precision measurements
- Rounded nose scriber cuts clean, sharp lines with smoothness and less pressure
- Lock to hold the slide in position
- Hardened, ground, and lapped base with finger grooves provides ease of movement
- Vertical bar is back from the edge of the nose for better stability
- Scriber can reference zero from the bottom of the base to get the full 6" (150mm) usable range Action Features with Three Control Buttons
- Inch-millimeter conversion
- Zero at any position
- Manual ON/OFF plus a built in automatic OFF after 5 minutes of nonuse

(0-6"/150mm Range)					
Catalog No. EDP Description			Price		
3751AZ-6/150 912221 Height Gage, in Case					
Accessories and Cables for 3751 Electronic Height Gage					
PT99492 65650 One 3-Volt Batteries, CR2032					
PT08680A 51383 Depth Attachment					

DIGITAL COUNTER TYPE HEIGHT GAGES

MIT SERIES 192:

FEATURES

- Easy and error-free reading with both up and down digital counters as well as a dial.
- The counters and dial can be zero-set at any scriber position.
- Provided with a feed wheel for easy coarse feeding.
- Carbide-tipped scriber.

INCH

Order No.	Range	Accuracy	Price
192-150	0-12"	±.0015"	
192-151	0-18"	±.002"	
192-152	0-24"	±.002"	
192-153	0-40"	±.003"	

Digital Counter Graduation: .1" (Dual Reading)

Dial Graduation: .001"

Standard Accessories: Scriber 900258 Scriber Clamp 901385

METRIC

Order No.	Range	Accuracy	Price
192-130	0-300mm	±0.03mm	
192-131	0-450mm	±0.05mm	
192-132	0-600mm	±0.05mm	
192-133	0-1000mm	±0.07mm	

Digital Counter Graduation: 1.0mm" (Dual Reading)

Dial Graduation: 0.01mm"

Standard Accessories: Scriber 07GZA000, Scriber Clamp 07GZA002

Starrett'

ELECTRONIC DIGITAL DOUBLE BEAM HEIGHT GAGES

SERIES 725:



FEATURES

- Rigid twin column structure
- 6 digit LCD display and minus sign (-)
- Large size feed wheel
- Lock on measuring slider
- Battery furnished
- Carbide tipped scriber

FUNCTIONS

- Zero setting,
- Inch/mm conversion
- Data hold

Linear Accuracy: ±.001" (± 0.02mm)

Plus/minus presetting



Range	Graduation	Order No.	Price
0-12"/0-300mm 0-18"/0-450mm 0-24"/0-600mm	.001"/.01mm .001"/.01mm .001"/.01mm	7255012 7255018 7255024	

DIGIMATIC HEIGHT GAGES

MIT SERIES 192:

Self-contained Electronic Inch/Metric Display.

FEATURES

Mitutoyo

- Easy-to-use design.
- Double-column structure ensures high measuring accuracy.
- Display: LCD Height .394", 6 digits and a minus sign (-).
- Carbide-tipped scriber.
- Dust/water protection level conforms to IP-40 standards.
- Optional wooden case available.

FUNCTIONS

- Zero/ABS Setting (ABS and INC modes)
- Preset Value Memory(ABS mode)
- Data Hold
- Presetting (ABS and INC modes)
- ±Counting Direction Changeover
- Inch/mm Conversion
- Coarse/Fine Feed Switching
- Over-speed Alarm
- Low Battery Alarm.

INCH/METRIC

Order No.	Range	Accuracy	Price
192-630	0-12"/	±.001"	
	0-304.8mm		
192-631	0-18"/	±.002"	
	0-457.2mm		
192-632	0-24"/	±.002"	
	0-609.6mm		
192-633	0-40"/	±.003"	
192-033	0-1016mm		

Resolution: .0005"/0.01mm Quantizing Error: ± 1 count Response Speed: 19.69"/s (500mm/s)

Power Supply: One CR2032 Lithium cell 05SAA217

Standard Accessories: Scriber 900258, Scriber clamp 901385,

One CR2032 Lithium Cell 05SAA217



Mitutovo

MACHINE SHOP DISCOUNT SUPPLY

ELECTRONIC HEIGHT GAGES

SERIES 725:

Rugged construction of stainless steel with no rack, no pinion, and no glass scale.

FEATURES:

- 5 Digit high contrast display
- Inch / Metric switch
- Floating "Zero" reference point
- Resolution ± .0005" / 0.01mm
- Accuracy .001"
- Includes: fitted case / battery



Range	Order No.	Price
0-12"/0-300mm 0-18"/0-450mm	7251112 7251118	

HEAVY DUTY DIGIMATIC HEIGHT GAGES

MIT SERIES 192:

FEATURES

- Two measuring modes, ABS (absolute) and INC (incremental), for increased inspection efficiency.
- Rigid construction ensures repeatable measurements.
- Bi-directional touch signal probe for improved efficiency and reliability of measurement. (192-008) Optional Accessory below
- Display: LCD, Height .394", 6 digits and a minus sign (-). **FUNCTIONS**
- Zero/ABS setting (ABS and INC modes)
- Origin restoration
- Presetting (ABS and INC modes)
- Preset value memory (ABS mode)
- Data hold
- Inch/mm conversion
- Coarse/Fine Feed switching
- Counting direction
- Error alarm, Low battery alarm.
- Provided with a data output port for connection with the SPC system.

Shown with

192-008 Probe

• Standard scriber and optional long scriber (5.90") both carbide-tipped. **CONTROL PANEL FEATURES**

HDS DIGIMATIC HEIGHT GAGES WITH

- On/Off switch Inch/Metric switch Zero/ABS switch
- Data/Hold switch
 Preset switch (for all digits)
- Counting direction switch

7251124 0-24"/0-600mm

INCH/METRIC

Order No.	Range	Accuracy	Price
192-670	0-12"/	±.001"	
	0-304.8mm		
192-671	0-18"/	±.0015"	
	0-457.2mm		
192-672	0-24"/	±.0015"	
	0-609.6mm		
192-673	0-40"/	±.0025"	
	0-1016mm		

Resolution: .0005"/0.01mm Quantizing: ±1count

Response Speed: 19.69"/s (500mm/s)

Power Supply: One CR2032 Lithium cell No. 05SAA217

Data Output: Digimatic code output.

Standard Accessories: Scriber 905201, Scriber Clamp 901385

One CR2032 Lithium cell 05SAA217

Optional Accessories: Two-Directional Touch Probe 192008*

For SPC output order Connecting Cable No. 905338 (1m) or 905409 (2m)

*TOUCH PROBE

Measuring Direction: **Two-Directions** Over Travel: .06" (1.5mm) Repeatability: .00008" (2µm) Measuring Force: 0.4N

Contact Point: .12" (3mm) carbide ball

Mitutoyo

Order No. 192-008	Price:	

ABSOLUTE ENCODER

MIT SERIES 570:

FEATURES:

- Can easily measure the height of small parts.
- Feed Wheel.
- Display: Easy-to-read large LCD display, 6 digit and minus sign (-)
- Absolute encoder for direct measurement from power on.
- Economical energy-saving design.
- Unlimited response speed.

	570-312*	570-313*	570-314*		
Measuring Range	0-12"/300mm		0-24"/600mm		
Resolution	.0005	'/0.01mm			
Accuracy	±.0015"	±.002"			
Repeatability	.0005" (0.01mm)				
Power Supply	Silver oxide cell (SR-44) 1pc 541980				
Data Output	Digimatic code output (SPC output)				
Mass	10.12 lbs	12.98 lbs	14.08 lbs		
Standard	Scriber 900258				
Accessories	Scriber Clamp 901385				
	SR-44 battery 1 pc.				

^{*} For SPC output order connecting cable 905338 (1m) or 905409 (2m). Replacement battery: 541980 (1pc.), 541980-10 (10 pcs./SET)



- Functions include: Zero-setting (ABS and INC modes), Presetting (ABS and INC modes), Hold / Data button, Counting direction changeover, Inch/mm conversion, Data output, Inch/mm conversion, Data output, Error alarm, Low battery alarm, On/Off, Origin.
- Provided with a data output port for connection with the SPC system.*
- Battery Life: (Approx.) 20,000 hours of continual use.

	Order No.	Price
·	570-312	:
	570-313	1
	570-314	



Tel 201.518.8472 / 800.388.0459 (USA & CANADA) / Email sales@msdiscounttool.com

Height Gage shown with optional Auxilliary Circular

Carbide Scriber, PT 28131.

Gages are furnished with

Auxilliary Straight Carbide Scriber, TP 22357.

56684

945

Resolution:

.0005"

(0.01mm)

ELECTRONIC HEIGHT GAGES

STARRETT SERIES 3752:

The 3752 Electronic Height Gage is a full featured, versatile and economic solution for most height measurement applications. All measuring information from these tools can be entered directly into Starrett Data Collection Systems for analysis, data collection and hard copy documentation. They are available in 0-12" and 0-24" ranges.

Readability and Control Features

- Clear bar graduations in .100" and 5mm increments
- Large (.380"/9.65mm), easy-to-read LCD display reads to .0005" or 0.01mm
- Instant inch-millimeter conversion
- Carrier and scriber designed to read from zero
- "Hold" control feature retains a reading at any position
- Plus or minus indication allows reading in proper direction
- Ability to set zero at any position
- Manual on/off plus a built-in automatic off after 30 minutes of nonuse

Full Function Action Features

- · Large positive action keypad
- Ability to retain and return to the true zero reading of the height gage
- PRESET button to install any reading at any position
- Ability to install minimum and maximum limits
- RS232 data output port

3752 Electronic Height Gages

- Works well with Starrett Datasure® Wireless Data Collection Systems Battery Life
- 1-1/2+ years battery life. Two 3-volt batteries furnished (CR2450)

Specifications for 3752 Electronic Height Gages				
Resolution	.0005" (0.01mm)			
Graduations	ns .100" (5mm)			
Overall ±.0015" (.04mm) 0-18" (0-450mm) ±.0 (.05mm) 18-24" (450-600mm)				
Battery Life	Over 1-1/2 Years Average Use			

3732 Electronic Height Gages				
Range Description		Catalog No.	EDP	Price
0-12" (300mm)	Llaight Caga without Caga	3752-12/300	68815	
0-24" (600mm)	Height Gage without Case	3752-24/600	68816	
Cables, Accessories, Cases				
Description		Catalog No.	EDP	Price
Shielded Cable to Starrett 761/772 Series Modules, PT61768 Adaptor		PT22938	64059	
Interface Adaptor for Starrett Tools to PC		PT61768	66454	
3-Volt Battery, CR2450 (2) Required		PT61120	65446	
Wood Case Only for 12" Gage		928	55249	

Furnished without case unless otherwise ordered.

Wood Case Only for 24" Gage

While we show the most popular Starrett items, we can supply their entire range of products; please inquire.

Starrett : DIAL TRAVEL INDICATORS

SERIES 220:

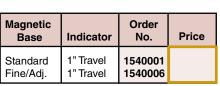
These Indicators are graduated in .001" or .01mm with the second hand reading every .010" or .1mm. Range per revolution .10" or 1.0mm. Reading 0-100. Back has clamping lug.



١.					- 1
		White Face Order No. Price		Black Face	
	Travel			Order No.	Price
	1/4"	1530025		-	
	1/2	1530005		-	
	1	1530010		1530011	
	2	1530020		1530021	
	10mm	1530000		-	
	25mm	1530100		-	

MAGNETIC BASE & INDICATOR SETS

SERIES 221:





MAGNETIC BACK FOR DIAL INDICATOR

SERIES 221:

Product Description

- Permanent powerful magnet
- Attaches to the back of 2" diameter AGD dial indicators

Diameter		Thickness		
in.	mm	in.	mm	
2-1/4	57	1/2	12.5	

Order No.: 2210000 Price

DIAL INDICATORS - MINIATURE

STARRETT SERIES 80:





Starrett AGD dial indicators have a hardened stainless steel rack, pinions and gears which resist shock and extend wear life to a remarkable degree. These moving parts are finished to extremely fine tolerances, delivering a smooth, sensitive action that minimizes friction and lost motion and insures precise repetitive readings.

MINIATURE DIAL INDICATORS -

1-1/4" DIAL DIAMETER, 7/32" STEM

Similar in design to AGD dial indicators, these miniatures are built for measuring bed travel on machines, gaging fixtures and for gaging dimensions in tight places. Equipped with high precision, low friction movements, they are made in three models, all with frictionally adjustable bezels for quick, positive zero setting. No glare, white eggshell finish dials, black bezel, satin chrome finish on case, furnished with balanced dial, jeweled bearings and lug-on-center back.

Grad.	Reading	Total Range	Range One Rev.	Catalog No.	EDP No.	Price
.001"	0-20-0	.100"	.040"	80-144J	55893	
.0005"	0-10-0	.050"	.020"	80-134J	55892	
.0001"	0-2-0	.010"	.004"	80-114J	55891	