

### ELECTRONIC HEIGHT GAGES

#### 2000 ALTISSIMO® ELECTRONIC HEIGHT GAGES

#### 0-24"/600MM

Altissimo® Electronic Height Gages are innovative, easy-to-use, and loaded with Starrett-exclusive functions for easy-to-program measuring routines that run smoothly and reliably.



#### **F**EATURES

- A unique, ergonomically shaped base, hardened and ground, that fits your grip just right to easily move the gage and press the hot key
- Hot key allows you to select measuring results on the fly
- 0-24" Measuring Range
- Smart probe that can measure I.D. or O.D. without attachments
- Electronically adjusted probe force
- Large, easy-to-read interactive LCD with unique scanning meter for monitoring probe position
- Electronically adjustable beeper volume
- Bold screen icons indicate the current routine
- Three electronically adjustable resolutions
- Retains the last calibrated diameter of the measuring probe, even after the gage is shut down
- Dynamic bi-directional probing with point and scan modes
- Easy operation with speed wheel, which also has fine-adjust feature
- · Locking mechanism for scribing
- Five measurement modes: (ID/OD, Center, TIR, Max/Min, Continuous Display)
- Instant inch/millimeter conversion
- Two selectable Datums and Presets

- Auto Power Off after two hours with retention of probe calibration
- · Automatic calculation of eight measurement routines:
  - Center
  - Diameter
  - Height
  - Max
  - Min
  - TIR
  - Distance to last feature
  - Distance between last two points
- Rechargeable NiMH batteries with 100 hours of continuous life
- · Seven setup functions:
  - Probe Calibration (2)
  - Beeper Volume
  - Display Resolution
  - Probe Force Adjustment
  - Printer On/Off
  - Force Calibration
- Optional probe kit features a variety of probes for many applications
- Gages include carbide probe, probe holder and probe calibration block
- RS232 data output port
- Starrett capacitive measurement system ensures the accuracy and reliability you expect
- Excellent value loaded with features and competitively priced

108

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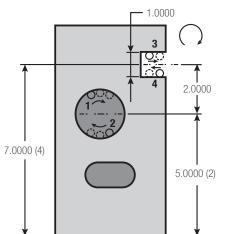
Large, easy-to-view /understand display shows the diameter of a hole or boss



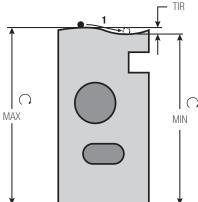
Display showing TIR



Interactive LCD with unique scanning meter for easy probe position viewing

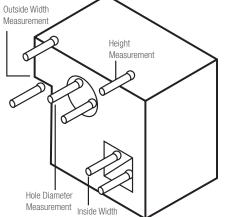


Altissimo includes many routines including diameter of a bore (1 and 2), width of a slot or a rib (3 and 4), distance from datum to center of a hole or slot and distance between features



TIR mode can measure the high or low point of a diameter or other surface. The datum can then be set to the max or min value.

Specifications	
Measuring Range	24"/600mm (Extendible to 30"/750mm by rotating the probe holder 180°)
Resolution	.0001"/.0005"/.001" (0.002mm/0.01mm/0.02mm)
Accuracy	±.0003" (0.008mm)
Repeatability	±.0002" (±0.002mm)
Power Source	NiMH Rechargeable Batteries (120V AC/60Hz Charger/Adapter included).
Fower Source	Operation time: 100+ hours, Recharging time: 10 hours
Included	.1875"/4.8mm Dia. Carbide Probe, Probe Holder
Accessories	AC Charger/Adapter, Probe Calibration Block
Dimensions	Length 11" (279mm), Width 7-3/4" (197mm), Height 36-1/2" (927mm)
Weight	40 lb (18 kg)
Perpendicularity	.0004" (0.010mm)

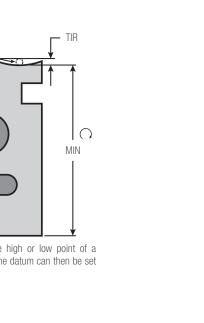


Measurement

Starrett

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### ELECTRONIC HEIGHT GAGES

#### ALTISSIMO® ELECTRONIC HEIGHT GAGES



Optional Circular Carbide Scriber, PT27950

		with Standard Components
Cat. No.	EDP	Description
2000-24	67008	Height Gage
PT27937	67009	Carbide Probe .1875" (4.8mm) Dia. (Standard)
PT27940	67010	Probe Holder (Standard)
PT27944	67011	Probe Calibration Block (Standard)
Accessories for A	Altissimo Electron	ic Height Gages
Part No.	EDP	Description
S2000AZ	66997	Accessory Set Includes:
PT27948	67012	Probe Tip, 5-Way Adapter
PT23942	65255	.040" (1mm) Carbide Contact Point
PT23914	64222	.078" (2mm) Carbide Contact Point
PT23943	65256	.120" (3mm) Carbide Contact Point
PT27952	67013	Contact Wrench
PT27945	67014	.400" (10.2mm) Cylindrical Probe
PT27950	67015	Circular Carbide Scriber
PT27949	67016	Depth Gage Attachment
PT27946	67017	Holder for Dovetail Indicators
PT62011	67018	Replacement Battery Pack, NiMH 6V
PT62015	67002	Power Supply Charger for USA and Canadian Configuration
PT62130	67003	Power Supply Charger for United Kingdom Configuration
PT62131	67004	Power Supply Charger for European Configuration
2000SCM	69907	Cable to 7612 or 7613 Multiplexer
2000SCKB	69908	USB cable to PC (In focused window)
2000SCU	29728	Cable to PC Running Data Collection SPC Software - USB



# Starrett

### ELECTRONIC HEIGHT GAGES

#### **3751** Electronic Height $G \land ge$ (without output)

#### 0-6"/150MM

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

3751 Electronic I	3751 Electronic Height Gage (0-6"/150mm Range)				
Cat. No.	EDP	Description			
3751AZ-6/150	12221	Height Gage, in Case			
Accessories and	Accessories and Cables for 3751 Electronic Height Gage				
Part No.	EDP	Description			
PT99492	65650	One 3-Volt Batteries, CR2032			
PT08680A	51383	Depth Attachment for 6" (150mm) Height Gages			
947	56756	Wood Case Only			



#### 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
- Easy access to single long-life battery, 3-volt CR2032
- 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
- Linear Accuracy: ±.001" (± 0.02mm)
- Resolution: .0005" (0.01mm)
- 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

#### ELECTRONIC HEIGHT GAGES NEW!

#### 3754 ELECTRONIC HEIGHT GAGES

The 3754 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. It is available in 0-12" and 0-24" ranges.

#### **F**EATURES

- Large (.380"/9.65mm), easy to read LCD display reads to .0005" or 0.01mm
- Large positive keypad
- · Relative scale
- · Fine adjust
- Furnished with two (2) 3-volt batteries (CR2032) and carbide tip scriber

On/Off Button

Improved battery cover

± Button Toggles polarity or direction change

Hold Button -Retains current reading at any position

5.1875 (auto off after 30 minutes of nonuse) Starrett' NOFF

HOLD

PRESET

Toggles Inch or metric readout Secondary: LIMITS min/max tolerance specifications at

any position

Primary: In/mm

Shift Set Button Toggles between Primary and Secondary Functions

Primary: ZERO/ABS Toggles Zero at current position or absolute

Secondary: PRESET Button Install any reading at any position



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3754-12/300



3754 Electronic Height Gage						
Cat. No.	EDP	Range	Accuracy	Resolution		
3754-12/300	72625	0-12" (300mm)	0.001"	.0005"		
3754-24/600	46003	0-24" (600mm)	.002 " (>18")	.0005"		
Cables, Accesso	ries, Cases for 3754	Electronic Height	Gages			
Cat. No.	EDP	Description	Description			
PT61120	65446	3-volt battery, CR2	032 (2), required			
928	55249	Wood case only for 12" gage				
945 56684 Wood case only for 24" gage						
733SCKB	69888	USB cable to PC (In focused window)				
733SCU	69898	USB cable to PC running SPC Data Collection software				
733SCM	69893	Cable to 7612 or 7613 Multiplexer				
Eurnished without case unless otherwise ordered						

Furnished without case unless otherwise ordered.

# How to Read a Starrett 50-Division Vernier Height Gage Graduated in Inches and Millimeters (Direct Reading)

#### INCH READING

- Refer to the left side bar graduations and the inch vernier plate. Inches are numbered in sequence over the full range of the bar. Each bar graduation is .050". Every second graduation between the inch lines is numbered and equals .100".
- The vernier plate is divided into 50 parts, each representing .001". Every fifth line is numbered 5, 10, 15 ... 45, 50 for easy counting.
- To read the gage, first count how many inches and how many .050" lines lie between the zero line on the bar and the zero line on the vernier plate and add them.
- Then count the number of graduations on the vernier plate from its zero line to the line that coincides with a line on the bar. Multiply the number of vernier plate graduations you counted by .001" and add this figure to the number of inches and .050" lines you counted on the bar. This is your total reading.

#### EXAMPLE

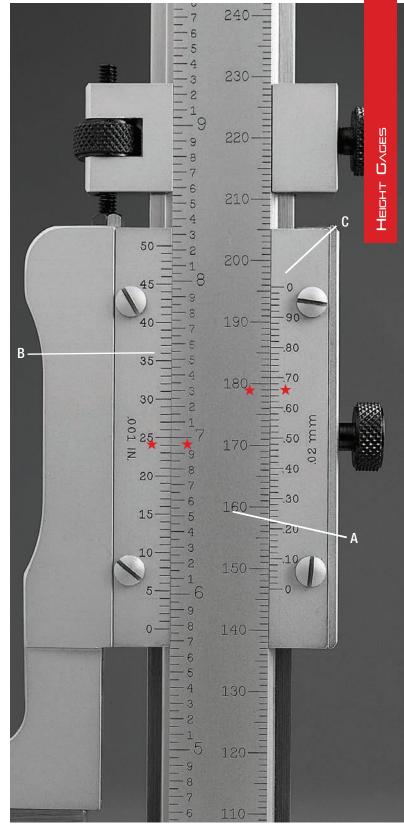
★ In the photo, the vernier plate zero line is five inches (5.000") plus .750" beyond the zero line on the bar, or 5.750". The 25th graduation on the vernier plate coincides with a line on the bar (as indicated by stars). 25 x .001 (.025") is therefore added to the 5.750" bar reading, and the total reading is 5.775".

#### MILLIMETER READING

- Refer to the right side bar graduations and millimeter vernier plate. Each bar graduation is 1.00mm. Every tenth graduation is numbered in sequence – 10mm, 20mm, 30mm, etc. – over the full range of the bar. This provides for direct reading in millimeters.
- The vernier plate is divided into 50 parts, each representing 0.02mm. Every fifth line is numbered in sequence 0.10mm, 0.20mm, 0.30mm ... 0.80mm, 0.90mm providing for direct reading in hundredths of a millimeter.
- To read the gage, first count how many millimeters lie between the zero line on the bar and the zero line on the vernier plate.
- Then find the graduation on the vernier plate that coincides with a line on the bar and note its value in hundredths of a millimeter. Add the vernier plate reading in hundredths of a millimeter to the number of millimeters you counted on the bar. This is your total reading.

#### EXAMPLE

★ In the photo, the vernier plate zero line is 146 millimeters beyond the zero line on the bar, and the 0.68mm graduation on the vernier plate coincides with a line on the bar (as indicated by stars). 0.68 millimeters is therefore added to the 146 millimeter bar reading, and the total reading is 146.68 millimeters.



Open-face long Vernier with 50 widely spaced graduations for easy reading. Flush-fitting Vernier and master bar eliminates parallax.

A. Master Bar B. Inch Vernier Plate C. Millimeter Vernier Plate



### VERNIER HEIGHT GAGES

#### 254, 254M MASTER VERNIER HEIGHT GAGES

0-72"/0-900MM

#### 254EM MASTER VERNIER HEIGHT GAGES

#### 0-24"/0-600MM

This Master Vernier Height Gage is an accurate, rugged and reliable tool that gives precise and dependable measurements over long ranges. It has an easy-to-read vernier, is stronger, and is offered in greater ranges than other height gages.

#### READABILITY FEATURES

- Long, 50-division vernier scales permits half as many bar graduations as single vernier tools. These widely spaced graduations provide easy reading to .001" or 0.02mm
- Flush fitting of the vernier scales to the main scale eliminates parallax
- Vernier scales are adjustable
- Black lines and figures against Starrett satin chrome finish make reading easy
- Scriber and base are designed for direct reading from zero (bottom of base)

#### 254 Master Vernier Height Gages (.001" Graduation) Cat. No. EDP Range Approximate Base Dimensions 254Z-12 0-12" 51219 5-7/8" x 3-7/8" 254Z-18 0-18" 51220 7-1/2" x 4-1/2" 254Z-24 51221 0-24" 254Z-36 51222 0-36" 254Z-48 51223 0-48" 10" x 6-1/2" 254Z-60 56183 0-60" 56184 254Z-72 0-72" 254M Master Vernier Height Gages (0.02mm Graduation) Cat. No. EDP Range **Approximate Base Dimensions** 254MZ-300 56214 0-300mm 150mm x 95mm 254MZ-450 56215 0-450mm 190mm x 115mm 254M7-600 56216 0-600mm 254MZ-900 56217 0-900mm 250mm x 165mm 254EM Master Vernier Height Gages (.001"/0.02mm Graduation) Cat. No. EDP Range Approximate Base Dimensions 254EMZ-12 51224 0-12"/300mm 5-7/8" x 3-7/8" 254EMZ-18 51225 0-18"/450mm 7-1/2" x 4-1/2" 254EMZ-24 51226 0-24"/600mm 254M and 254EM Master Vernier Height Gages Accessories for 254 Part No. EDP Description PT22357 12295 Auxilliary Straight Carbide Scriber 67007 PT28131 Auxilliary Circular Carbide Scriber PT05409A 51227 Depth Gage Attachment

Hardened bars on all sizes through 24" and 600mm

Furnished with Auxilliary Straight Carbide Scriber. Shown with optional Auxilliary Circular Carbide Scriber.

#### EASE-OF-HANDLING FEATURES

- · Quick-adjust release on the slide allows for fast positioning
- Extremely fine adjustments by a knob on the base isolating the column and slide from external pressures
- Additional remote fine adjustment located on top of the bar for sizes 36" (900mm) and larger
- Special master bar design and the balanced design and weight of the base eliminates vibration
- Master bars on models up to 24" and 600mm are hardened and stabilized
- Base is hardened, ground, and lapped square with the bar and has finger grooves to provide ease of movement
- 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
- Tool can also be used with our 359 Protractor for checking angles



Quick-adjusting screw release allows rapid slide movement to desired area, then precisely position with the fine adjustment knob



Precise positioning with fine-adjustment knob on the base isolates column and slide from external pressures

254Z-12

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## VERNIER HEIGHT GAGES

#### 255, 255M VERNIER HEIGHT GAGES

0-18"/0-300MM

### 255EM VERNIER HEIGHT GAGES

#### 0-18"/0-450MM

This tool is the "baby brother" of the 254 Master Vernier Height Gage. It is essentially the same tool, but a much lighter version for normal use where heavy duty applications are not practical. The 18" and 450mm models weigh 3-1/4 lb (1.5kg). No other height gage features this favorable combination of design, weight and accuracy.

#### READABILITY FEATURES

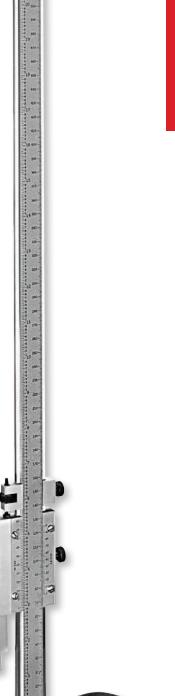
- Long, 50-division vernier scales that can be read to .001" or 0.02mm without a magnifying glass
- Flush-fitting of the vernier scales to the main scale eliminates parallax
- Easy-reading sharp black lines and figures against Starrett satin chrome finish background
- The scriber and the base are designed so that the gage will read directly from zero

#### EASE-OF-HANDLING FEATURES

- Slides easily for quick adjustment and has a screw type adjusting nut on the bar for precise positioning
- The design of the hardened and stabilized bar plus the balanced design and weight of the base eliminate vibration
- The base is hardened, ground, and lapped and is hand shaped for sure grip and easy movement
- The vertical bar is positioned near the center of the base for balance and stability
- Ability to scribe lines, measure with dial indicators or electronic probes and accept depth attachments
- The auxiliary scriber is a circular carbide scriber cuts sharp, clean lines smoothly rotatable for wear

Case      Name      Case      Without Case        2557-12      51229      0-12"      15/16" x 7/32"      4-7/16" x 2-9/32"      In Case        2557-18      51231      0-18"      15/16" x 7/32"      4-7/16" x 2-9/32"      In Case        2557-18      51232      0-18"      15/16" x 7/32"      4-7/16" x 2-9/32"      In Case        2557      51232      0-18"      15/16" x 7/32"      4-7/16" x 2-9/32"      In Case        2557      51232      0-18"      15/16" x 7/32"      4-7/16" x 2-9/32"      In Case        2557      51232      0-18"      15/16" x 7/32"      4-7/16" x 2-9/32"      In Case        2557      51232      0-300mm      24mm x 5.5mm      113mm x 58mm      Description        255      52514      6218      0-300mm      24mm x 5.5mm      113mm x 58mm      Description        255      52514      Verture Height Gages (.001"/0.02mm Graduation)      In Case      Without Case        255      525      535      0-18"/450mm      15/16" x 7/32"      4-7/16" x 2-9/32"      In Case        255      525      535						
Cat. No.      EDP      Range      (Width x Thickness)      (Length x Width)      Description        2552-12      51229      0-12"      15/16" x 7/32"      4-7/16" x 2-9/32"      In Case Without Case        2552-18      51231      0-18"      15/16" x 7/32"      4-7/16" x 2-9/32"      In Case Without Case        2555-18      51231      0-18"      15/16" x 7/32"      4-7/16" x 2-9/32"      In Case Without Case        2555-18      51232      0-18"      15/16" x 7/32"      4-7/16" x 2-9/32"      In Case Without Case        2555M Vernier Height Gages (0.02mm Graduetor)      0-300mm      24mm x 5.5mm      113mm x 58mm      Description        2555M Vernier Height Gages (.001"/0.02mm      Erde and x 5.5mm      113mm x 58mm      In Case Without Case        2555EM Vernier Height Gages (.001"/0.02mm      Bar Approximate (Width x Thickness)      Base Approximate (Length x Width)      Description        255EM Vernier Height Gages (.001"/0.02mm      15/16" x 7/32"      4-7/16" x 2-9/32"      In Case        255EM Vernier Height Gages (.001"/0.02mm      15/16" x 7/32"      4-7/16" x 2-9/32"      In Case        255EM Vernier Height Gages      0-18"/450mm      15/16" x 7/32"      4-7/16" x 2-9/32"	255 Vernier	Height G	ages (.001" Graduatior	I)		
255-12      51230      0-12"      15/16" x 7/32"      4-7/16" x 2-9/32"      Without Case        255-18      51231      0-18"      15/16" x 7/32"      4-7/16" x 2-9/32"      In Case        255-18      51232      0-18"      15/16" x 7/32"      4-7/16" x 2-9/32"      In Case        255-18      51232      0-18"      15/16" x 7/32"      4-7/16" x 2-9/32"      In Case        255-18      51232      0-18"      Bar Approximate (With x Thickness)      Base Approximate (Length x With)      Description        255MZ-300      56218      0-300mm      24mm x 5.5mm      113mm x 58mm      In Case        255EM Verrit= Height Gages (.001"/0.02mm      Graduation)      In Case      Without Case        255EM Verrit= Height Gages (.001"/0.02mm      Graduation)      In Case      Without Case        255EM Verrit= Height Gages (.001"/0.02mm      Graduation)      In Case      Without Case        255EM Verrit= Height Gages (.001"/0.02mm      In Case      Without Case      Without Case        255EM Verrit= Height Gages (.001"/0.02mm      In Case      In Case      Without Case        255EM Verrit= Height Gages (.001"/0.02mm      In Case      Without Ca	Cat. No.	EDP	Range			Description
2255-18      51232      0-18"      15/16" x 7/32"      4-7/16" x 2-9/32"      Without Case        255M Vernier Height Gages (0.02mm Graduation)      Bar Approximate (Vidth x Thickness)      Base Approximate (Length x Width)      Description        255M 2-300      56218      0-300mm      24mm x 5.5mm      113mm x 58mm      In Case Without Case        255EM Vernier Height Gages (.001"/0.02mm      Graduation      Base Approximate (Length x Width)      In Case Without Case        255EM Vernier Height Gages (.001"/0.02mm      Bar Approximate (Width x Thickness)      Base Approximate (Length x Width)      Description        255EM Vernier Height Gages (.001"/0.02mm      Bar Approximate (Width x Thickness)      Base Approximate (Length x Width)      Description        255EM Vernier Height Gages      0-18"/450mm      15/16" x 7/32" (24mm x 5.5mm)      4-7/16" x 2-9/32" (113mm x 58mm)      In Case Without Case        255EM 2-18      65160      0-18"/450mm      15/16" x 7/32" (24mm x 5.5mm)      4-7/16" x 2-9/32" (113mm x 58mm)      In Case Without Case        265EM 2-18      65160      Description      2000000000000000000000000000000000000	255Z-12 255-12		0-12"	15/16" x 7/32"	4-7/16" x 2-9/32"	
Cat. No.EDPRangeBar Approximate (Width x Thickness)Base Approximate (Length x Width)Description255MZ-30056218 562190-300mm24mm x 5.5mm113mm x 58mmIn Case Without Case255EM Vernier Height Gages ( .001"/0.02mm Graduation)Base Approximate (Width x Thickness)In Case Without Case255EM Vernier Height Gages ( .001"/0.02mm Graduation)Base Approximate (Length x Width)Description255EM Vernier Height Gages ( .001"/0.02mm Graduation)Base Approximate (Length x Width)Description255EM Vernier Height Gages ( .001"/0.02mm Graduation)Base Approximate (Length x Width)Description255EM Vernier Height Gages ( .001"/0.02mm Graduation)15/16" x 7/32" (24mm x 5.5mm)4-7/16" x 2-9/32" (113mm x 58mm)In Case Without Case255EM Vernier Height Gages0-18"/450mm15/16" x 7/32" (24mm x 5.5mm)4-7/16" x 2-9/32" (113mm x 58mm)In Case Without Case265EM Vernier Height GagesDescriptionWithout Case113mm x 58mm)Without Case271379171460Straight Scriber Carbide Scriber (3/16" x 25/64" x 2-3/4")Vernier Height Gages	255Z-18 255-18		0-18"	15/16" x 7/32"	4-7/16" x 2-9/32"	
Sat. No.      EDP      Range      (Width x Thickness)      (Length x Width)      Description        255MZ-300      56218      0-300mm      24mm x 5.5mm      113mm x 58mm      In Case Without Case        255EM Verrier Height Gages ( .001"/0.02mm Graduation)      Base Approximate (Width x Thickness)      Base Approximate (Length x Width)      Description        255EM Verrier Height Gages ( .001"/0.02mm Graduation)      Base Approximate (Width x Thickness)      Description        255EMZ-18      65160      0-18"/450mm      15/16" x 7/32" (24mm x 5.5mm)      4-7/16" x 2-9/32" (113mm x 58mm)      In Case        255EMZ-18      65161      0-18"/450mm      15/16" x 7/32" (24mm x 5.5mm)      4-7/16" x 2-9/32" (113mm x 58mm)      In Case        255EM Versiter Height Gages      Description      Without Case      Without Case        255EM No.      EDP      Description      Without Case        26173791      71460      Straight Scriber      Straight Scriber        2727710      67187      Carbide Scriber (3/16" x 25/64" x 2-3/4")	255M Vernie	r Height	Gages (0.02mm Gradu	ation)		
Part No.      EDP 65160      Range      24mm x 5.5mm      113mm x 58mm      Without Case        255EM Verview Height Gages ( .001"/0.02mm Graduation)      Bar Approximate (Width x Thickness)      Base Approximate (Length x Width)      Description        255EMZ-18      65160 65161      0-18"/450mm      15/16" x 7/32" (24mm x 5.5mm)      4-7/16" x 2-9/32" (113mm x 58mm)      In Case Without Case        Accessories      for 255, 255M and 255EM Verview Height Gages      Without Case      Without Case        Part No.      EDP PT13791      Description      Verview Height Gages      Verview Height Gages        PT13791      71460      Straight Scriber Carbide Scriber (3/16" x 2/5/64" x 2-3/4")      Verview Height Scriber	Cat. No.	EDP	Range			Description
Cat. No.      EDP      Range      Bar Approximate (Width x Thickness)      Base Approximate (Length x Width)      Description        255EMZ-18      65160      0-18"/450mm      15/16" x 7/32" (24mm x 5.5mm)      4-7/16" x 2-9/32" (113mm x 58mm)      In Case Without Case        Accessories      for 255, 255M and 255EM Venuer Height Gages      Without Case      Venuer Height Gages        Part No.      EDP      Description      Venuer Height Gages      Venuer Height Gages        P113791      71460      Straight Scriber      Carbide Scriber (3/16" x 25/64" x 2-3/4")      Venuer Height Gages	255MZ-300 255M-300		0-300mm	24mm x 5.5mm	113mm x 58mm	
Part No.      EDP      Hange      (Width x Thickness)      (Length x Width)      Description        255EMZ-18      65160      0-18"/450mm      15/16" x 7/32"      4-7/16" x 2-9/32"      In Case        255EMZ-18      65161      0-18"/450mm      15/16" x 7/32"      4-7/16" x 2-9/32"      In Case        Accessories      for 255, 255M and 255EM Vernier Height Gages      Without Case      Without Case        Part No.      EDP      Description      E      E        P113791      71460      Straight Scriber      Carbide Scriber (3/16" x 25/64" x 2-3/4")      E	255EM Vern	ier Heigh	nt Gages ( .001"/0.02m	m Graduation)		
Part No.      EDP      Description      (24mm x 5.5mm)      (113mm x 58mm)      Without Case        PT13791      71460      Straight Scriber	Cat. No.	EDP	Range			Description
Part No.EDPDescriptionPT1379171460Straight ScriberPT2771067187Carbide Scriber (3/16" x 25/64" x 2-3/4")	255EMZ-18 255EM-18		0-18"/450mm			
T13791      71460      Straight Scriber        PT27710      67187      Carbide Scriber (3/16" x 25/64" x 2-3/4")	Accessories for 255, 255M and 255EM Vernier Height Gages					
PT27710 67187 Carbide Scriber (3/16" x 25/64" x 2-3/4")	Part No.	EDP	Description			
	PT13791	71460	Straight Scriber			
PT08962A 51233 Depth Gage Attachment	PT27710	67187	Carbide Scriber (3/16" x 25/64" x 2-3/4")			
	PT08962A	51233	Depth Gage Attachment			

Furnished with Straight Scriber.



255EM-18

## DIAL HEIGHT GAGES

#### 3250 DIAL HEIGHT GAGES

#### 0-6"/0-150MM

The compact 3250 Dial Height Gage is a very useful tool for machinists and inspectors. Applications include scribing lines for layout, height measurement (with or without dial test indicator), and depth measurement (with optional attachment). It is simple to use, reliable, accurate, and fits into most toolboxes.

3250 Height Gages					
Cat. No.	EDP	Range	Dial Grads	Description	
3250Z-6	69865	0-6"	.001"	Dial Height Gage, English	
3250MZ-150 PT08680A	69861 51383	0-150mm	0.20mm	Dial Height Gage, Metric Depth Attachment	

#### FEATURES & SPECIFICATIONS

- Sharp, clear dial graduations of .001" or 2mm in one revolution
- Sharp, black graduations on the satin chrome finish bar every .100" or 1mm
- Fine adjustment thumb roll for precision measurements
- Vertical bar set back from the edge for better stability
- Hardened, ground, and lapped base with finger grooves for control and ease of movement
- Base clearance allows the gage to measure full gage range of 0 - 6" or 150mm
- · Dial lock screw
- Lock to hold the slide in position
- The auxiliary scriber has a rounded nose for cutting clean, sharp lines with smoothness and less pressure
- Hardened, stainless steel bar, rack, gears, scriber, and scriber carrier
- Positive spring-loaded double pinion anti-backlash control



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### DIGI-CHEK<sup>™</sup> HEIGHT G∧GES

### DHG DIGI-CHEK™ II HEIGHT M∧STER

#### RANGES UP TO 85" AND 2150MM

These are the world's fastest and most precise height masters, ideal for those who need the highest degree of accuracy over an extremely long vertical range.

DIGI-CHEK II Height Master (1-85" Range)					
Cat. No.	EDP	Capacity			
DHG 25.	93265	1-25"			
DHG 37.	93266	1-37"			
DHG 49.	93267	1-49"			
DHG 61.	93268	1-61"			
DHG 73.*	93269	1-73"			
DHG 85.*	93270	1-85"			
DIGI-CHEK II Height Ma	aster (25-2150mm Range)				
Cat. No.	EDP	Capacity			
DHG 625.	93271	25-625mm			
DHG 1025.	93272	25-1025mm			
DHG 1225.	93273	25-1225mm			
DHG 1550.	93274	25-1550mm			
DHG 1800.*	93640	25-1800mm			
DHG 2150.*	93275	25-2150mm			

\* Setup charge extra depending on location.

Optional Equipment for DIGI-CHEK II Height Master				
Cat. No.	EDP	Description		
HG 525.60 (Inch)	92579	Poweree Peeding Pleake		
HG 501.3M (Millimeter)	91486	Reverse Reading Blocks		
HG 525.61 (Inch)	92577	1" or 25mm base blocks for use with reverse reading blocks to		
HG 501.4M (Millimeter)	91487	set dial bore gages		
CS 9133.	92320	Finished wood case for reverse reading and base block		

Specifications for DIGI-CHEK II Height Master							
Description	Inch System	Metric System					
Tolerance (Stack)	expressed in µin	expressed in µm					
Maximum:	2.5L + 10 (in inches)	.0025L + .25 (in mm)					
Minimum:	-10	25					
Parallelism: Gage Surfaces to Base and Each Other	15 µin	0.4 µm					
Resolution	10 µin or 20 µin	0.5 µm or 1.0 µm					
Repeatability of Readout	±20 μin	0.5 µm or 1.0 µm					
Digital Readout	1/2" high figures	12.5mm					
Readout Pedestal Height	38"	970mm					
Power Supply	Switchable: 115 V 60 0	Cycle or 220 V 50 Cycle					
Certificate of Calibration (Extra Cost)	expressed in µin	expressed in µm					
Uncertainty of Calibration of Stack	10 + 2.0L (in inches)	.25 + .002L (in mm)					
Uncertainty of Calibration of Readout	±30 μin	±0.75 μm					

 $\mu$  = .000001 x unit of measure

The accuracy of the surface that supports the gage must be taken into account when determining the accuracy of any measurements.

- Can be used in the laboratory or on the shop floor
- Lower inspection costs by saving time within 10 seconds the tool can be set into position
- The gage block stack is free-standing, so it will adapt to temperature differences in a reasonable time period
- 1" or 25mm range of adjustment
- Reverse reading block allows readings from the underside of the master gage blocks
- The large, remote digital readout can be placed in the most convenient location and adjusted for best readability
- The housing is heavy and extremely stable with hardened and lapped three-point bearings
- Standard equipment: pedestal stand for readout unit, DIGI-CHEK II plastic dust cover and wood shipping/ storage case



SIMPLE, TWO STEP OPERATION IN LESS THAN 10 SECONDS.

- 1. Set rapid positioner (A) to within .005" (0.15mm) (3 seconds).
- 2. Final setting (5 seconds).

HEIGHT CAGES

### DIGI-CHEK<sup>™</sup> HEIGHT G∧GES

#### 258. 258M DIGI-CHEK™ HEIGHT GAGES

#### .100"-24.100"/2-602MM

These gages combine the accuracy of Starrett-Webber Gage Blocks with a precision micrometer head and digital readout.

258 DIGI-CHEK Height Gages (.100"-24.100" Range Graduation Digital Micrometer Gage Cat. No. **FDP** Range Scales Readout Head Accuracy DHG12-258 93005 .100"-12.100" .001" .0001" ±.0002" 93006 .100"-18.100" ±.0002" DHG18-258 .001" .0001" Inches 93357 .100"-24.100" .0001" ±.0002" DHG24-258 .001" 258M DIGI-CHEK Height Gages (2-602mm Range) Graduation Digital Micrometer Gage Cat. No. EDP Range Scales Readout Head Accuracy DHG300-258 0.01mm 0.002mm ±.005mm 93007 2mm-302mm DHG450-258 93008 2mm-452mm Millimeters 0.01mm 0.002mm ±.005mm DHG600-258 93358 2mm-602mm 0.01mm 0.002mm ±.005mm

Finished wood case for 12" (300mm) and 18" (450mm) also available, at additional cost,

These finished wood cases are NOT suitable for shipping. Use suggested shipping materials.

Certificate of Calibration available at additional cost.

digital display

Questions and repair regarding Digi-Chek gages should be referred to the Starrett-Webber Division, Tel · 440-835-0001

The accuracy of the surface that supports the gage must be taken into account when determining the accuracy of any measurements.



DGH12-258 with

analog display

#### READABLITY FEATURES

- Satin chrome scales mounted beside the gage block column for quick reference to the nearest 1" or 25mm reading
- Digital readout reads in .001" or 0.01mm and has a range of 1" or 25mm
- Reads directly from the micrometer head to .0001" or 0.002mm. The micrometer head (our 469) has black figures on the satin chrome thimble. The graduations are staggered for easy counting.
- Both the micrometer head and digital readout are mounted on top of the gage, directly in line with the operator's vision

#### EASE-OF-HANDLING FEATURES

- The micrometer head has a speeder knob for rapid positioning
- Both over and under heights can be checked directly from the gage blocks in a single setting. Because reference surfaces are provided on the top and bottom of each block, adjacent blocks are in the exact same plane. This eliminates the need to add or subtract block thickness.
- Readings can also be taken from either left, center, or right of the gage block column
- Parts can be checked from .100" or 2mm in height
- The gage block column design permits wringing a 1" block between two blocks in the column. This is convenient for setting and checking other gages such as inside micrometers, end measuring rods, dial bore gages, etc.

#### ACCURACY AND LONG-LIFE FEATURES

- · Gage is housed in a heavily flanged frame for stability and the base has three-point hardened, ground, and lapped bearing pads, making it virtually tip-proof. Gage blocks are assembled in a free-standing system that allows the blocks to conform to temperature variations independently of the frame, thereby reading the same as the workpiece.
- The highly accurate micrometer spindle is one piece, with hardened and stabilized measuring threads
- A 10" riser block is available for increased height capacity

NEW!

Starrett

### Height $G \land G \in \Lambda$ ccessories

#### DEPTH GAGE ATTACHMENTS FOR HEIGHT GAGES

These attachments replace standard scribers and measure the depths of holes and slots, recesses; inside of jigs, fixtures; and over high projections.

They have adjustable rods which are held in the desired position by a knurled binding nut. The ends have a slight radius for point contact on the work.

Depth Gage Attachments for Height Gages					
Part No.	EDP	Rod Length	Fits Starrett Height Gage No./Size		
PT08962A	51233	6" (150mm)	255 8", 12", 18", 300mm, 450mm		
PT05409A	51227	8" (200mm)	254 12", 18", 24", 300mm, 450mm, 600mm and all Metric and English 259, 180 and 240, 3752 120 (300mm) and 240 (600mm), 755 240 (600mm)		
PT08680A	51383	6" (150mm)	751		

#### 258RRB, 258RRBM Reverse Reading Blocks for 258 Digi-Chek™ Height Gage

Used on 258 DIGI-CHEK<sup>™</sup> Height Gages for the precise calibration of working gages and for setting dial bore gages. The block fits in alternate inch positions, its tongue entering the odd numbers and its groove entering the even numbers of the gage block stack.

258RRB and 258RRBM Reverse Reading Blocks					
Cat. No.	EDP	Description			
HG 258.RRB	92433	Fits 12", 18" and 24" Gages			
HG 258.RRBM	92434	Fits 300mm, 450mm and 600mm Gages			

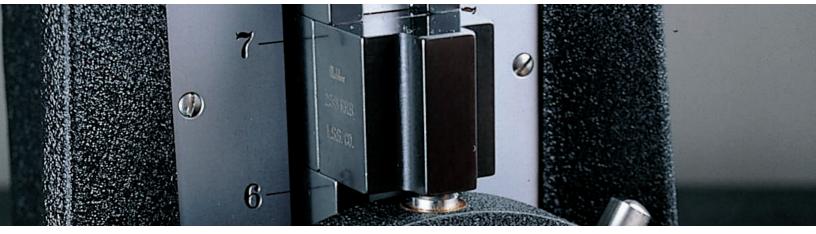


### 258R, 258MR RISER BLOCKS FOR 258 DIGI-CHEK<sup>®</sup> HEIGHT GAGE

Increases the range of Inch reading 258 DIGI-CHEK<sup>™</sup> Height Gages by 10" and metric reading 258 DIGI-CHEKs<sup>™</sup> by 250mm. Heavily flanged for rigidity and stability. Both top and base have three ground and lapped pads to match the pads on the DIGI-CHEK<sup>™</sup> base. Retaining plate prevents the DIGI-CHEK<sup>™</sup> from being pushed or sliding off the pads. Attractive black wrinkle finish. If desired, riser blocks can be stacked one on top of another.

258R Riser Bl	ocks (10	" Blocks)		
Cat. No.	EDP	Accuracy	For:	
HG 258.R	99865	+.000040"	12" Gage	
HG 258.RA	99866	±.000040	18" Gage	
258MR Riser Blocks (250mm Blocks)				
Cat. No.	EDP	Accuracy	For:	
HG 258.MR	99867	. 0.001.000	300mm Gage	
HG 258.MRA	99868	±0.001mm	450mm Gage	











### HEIGHT GAGE ACCESSORIES

#### 252 HEIGHT TRANSFER GAGES

#### 0-48"/0-1200MM

The 252 Height Transfer Gage is ideal for use with test indicators or electronic amplifiers to accurately transfer height settings from gage blocks, height gages and other standards.

#### 252 Height Transfer Gages

			Fine Adjustment	Base Size - L x W	
Cat. No.	EDP	Range	(Approximate)	(Approximate)	Gage Rod Dimension
252Z-14	55000	0-14"		5-3/4" x 3-1/2"	
2022-14	22090	(350mm)		(145 x 90mm)	
252Z-24	51216	0-24"	3/8" (9.5mm)	7-1/2" x 4-1/2"	9" L x .375" Dia. (225 x
		(600mm)		(190 x 115mm)	9.5mm) with steps
0507 40	51017	0-48" (1200mm)		9" x 6"	
2022-40	51217	(1200mm)		(225 x 150mm)	

Larger sizes available on special order

Starrett 708, 709, 711, 650 Test Indicators; 25, 81, 196, 655, 656 Dial Indicators and supplementary attachments also available.

Gage furnished with 9" (225mm) Rod and PT06784-A Gage Holding Rod in wood case.



Pictured with 717 Gage Amplifier and 715-12 lever probe.

#### ACCURACY AND LONG-LIFE FEATURES

- Extreme rigidity provides the vibration-proof stability necessary to permit precise repeat readings with indicators of the highest amplification
- Extremely rigid, rectangular box-type hollow column mounted integrally on a heavy base
- Adjusting mechanism is located in the base so the column and indicator are isolated and not affected by external factors, such as heat or hand pressure

#### EASE-OF-OPERATION FEATURES

- Hand-fitting base design for sure-grip handling and easy movement
- Bottom of the base has three ground and lapped pads for stability and smooth movement on the surface plate
- Adjustable slide, incorporating a snug for holding test indicators or electronic gage heads, has rapid vertical manual adjustment
- Thumb screw allows slide to be locked
- Knob on base allows fine vertical adjustment of the slide unit relative to the fixed column. This permits the slide with its test indicator to be quickly and precisely adjusted to the desired setting.

#### TOOL AND GAGING HOLDERS

- A snug on the slide provides two holes (.375" [9.5mm] and .156" [4mm]) for holding gage rods or scribers. A 9" (225mm) rod furnished with the gage is especially useful for reaching confined areas or reaching heights greater than the range of the gage.
- The rod has a major diameter of .375" (9.5mm) and stepped diameters of 1/4" (3.2mm) and 7/32" (5.5mm) at one end and 5/16" (8mm) at the opposite end
- 708 and 709 Test Indicators can be mounted on this rod using PT22428 swivel clamp. 196 Universal Back-Plunger Indicators can be mounted using Starrett snugs, Part PT18718 or PT18724 (snugs not furnished).
- PT06784-A Gage Holding Rod is included to accommodate the 715-1 Gaging Head when the Transfer Gage is used with the 717 Electronic Gage. A wire retaining clip keeps electronic gage head cables from deflecting the gage-holding rod.
- 25, 81, 655 and 656 Dial Indicators also can be used on the height gage by means of a PT06784-A Gage Rod (furnished)
- Other useful attachments (extra) are surface gage spindles (57C or 57D, 12" [300m]) and 18" [450mm])
   which are extremely useful for scribing and layout

Starrett

## Height $G \land G \in \Lambda$ ccessories

#### STRAIGHT SCRIBERS FOR STARRETT HEIGHT GAGES\*

All steel scribers are hardened to approximately HRC 62 and have a rounded tip which cuts sharp, clear lines smoothly, with less pressure, on any material.



Straight S	Straight Scribers for Starrett Height Gages				
Part No.	EDP	Point	Size	Fits Starrett Height Gage No./Size	
PT14343	71511		````	254 12", 18", 24", 300mm,	
PT13816	52367	Hardened Tool Steel	1/4 x 1/2 x 6" (6.4 x 12.7 x 150mm)	450mm, 600mm 254 Metric and English	
PT13817	52368		1/4 x 1/2 x 10" (6.4 x 12.7 x 250mm)	259 18" and 24"	
PT16566	72288	Hardened Tool Steel	5/8 x 3/8 x 3-5/8"	254 36", 48", 60", 72",900mm	
PT13791	71460	Hardened Tool Steel	3/16 x 25/64 x 2-3/4" (4.8 x 10 x 69.9mm)	255 8", 12", 18", 300mm, 450mm	
PT22357	12295	Carbide	1/4 x 7/16 x 3" (6.4 x 11.1 x 75mm)	3752	

#### 3259-AC DIGITAL HEIGHT GAGE Scriber Carrier Holder

Scriber carrier for use with 3259 Height Gages to allow attachment of standard quarter inch by half inch tall accessories.

3259-AC Digital Height Gage Scriber Carrier Holder			
Cat. No.	EDP	Description	
3259-AC	69859	Digital height gage scriber carrier holder	



3259-AC

HEIGHT GAGES

NEW!

# STEM-MOUNT INDICATOR ATTACHMENT FOR HEIGHT GAGES

This attachment replaces the standard scriber and provides a way to mount dial indicators or LVTD style probes having 3/8" diameter shafts onto your height gage. By using the lower stem of the indicator as an attachment point, the indicator can be used to guarantee the amount

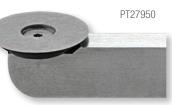
of down pressure on the part is the same as the original set zero position.

PT99441

Stem-Mount Indicator Attachment for Height Gages			
Part No.	EDP	Description	
PT99441	52991	Stem-mount indicator attachment	

#### CIRCULAR CARBIDE SCRIBERS\*

This circular scriber cuts a sharper, cleaner line with less pressure than any other scriber. It resists breakage and chipping but can be rotated for wear.



Circular Carbide Scribers				
Part No.	EDP	Point	Size	Fits Starrett Height Gage No./Size
PT27724	67185	Circular Carbide	1/4 x 1/2 x 3" (6.4 x 12.7 x 75mm)	254 12", 18", 24", 300mm, 450mm, 600m 254 Metric and English
PT27708	67186		1/4 x 1/2 x 6" (6.4 x 12.7 x 150mm)	259 18", 24"
PT27710	67187	Circular Carbide	3/16 x 25/64 x 2-3/4" (4.8 x 10 x 69.9mm)	255 8", 12", 18", 300mm, 450mm
PT27950	67015	Circular Carbide	1/4" (6.4mm) Diameter Shank	2000, 2001 Altissimo
PT28131	67007	Circular Carbide	1/4 x 7/16 x 3" (6.4 x 11.1 x 75mm)	3752, 752

#### INDICATOR ATTACHMENT

#### DOVETAIL STYLE

Replaces standard scriber. Provides means to attach dovetail equipped test indicators or electronic probes to height gages. Allows indicator to be used to ensure the down pressure on the part is the same as the original set zero position.



\*Starrett Originals