

QM-Height

SERIES 518 — High Precision ABSOLUTE Digital Height Gauge

FEATURES

- Newly developed high accuracy and high resolution ABSOLUTE linear encoder for position detection.
- Easy reference icon keys.
- Possible to measure inside/outside diameter via unique process (detect the circle apex and process by tracing measurement).
- Various types of optional probes are available.
- Large size LCD with back light.
- GO/±NG judgment is performed by setting the upper and lower tolerances. If a judgment result is out of tolerance, the display backlighting changes from green to red, so tolerance judgment can be made at a glance.
- Slider elevation knob (for travel) / wheel (for measurement).
- With SPC and USB output.



SPC

ABSOLUTE®
Absolute System Patented by MITUTOYO

Technical Data

Measuring range*: 0 - 18.3" or 0 - 28.1"
0 - 465mm or 0 - 715mm
Slider stroke: 14" / 350mm or 24" / 600mm
Resolution: .00005" / .0001" / .0002" / 0.001 / 0.005mm or 0.001 / 0.005mm
Accuracy at 20°C: Refer to the list of specifications
Guiding method: Roller bearing
Drive method: Manual
Length standard: ABSOLUTE electromagnetic induction type linear encoder
Measuring force: 1.5±0.5N
Display: LCD
Power supply: AC adapter (06AEG180JA) 120V battery (LR6x4)
Battery operation time: Refer to the list of specifications
* Maximum values are obtained with the probe at the highest position. Any change of the probe orientation requires the coordinate system be re-zeroed. With the probe in the highest position, minimum measurable height is 4.53"/115mm.

SPECIFICATIONS

Inch/Metric

Order No.	64PKA094A	64PKA095A	64PKA129A	64PKA130A
Model	QMH-14"A	QMH-24"A	QMH-14"B	QMH-24"B
Range	0 - 14"/0-350mm	0 - 24"/0-600mm	0 - 14"/0-350mm	0 - 24"/0-600mm
Resolution	0.001 / 0.0005mm / .00005" / .0001"			
Accuracy	Accuracy*1 ±(2.4+2.1L/600)µm L = Measuring length (mm)			
at 20°C	Repeatability*1 2σ≤1.8µm			
Perpendicularity	7µm	12µm	7µm	12µm
Guiding method	Roller bearing			
Drive method	Manual Operation			
Scale type	Electromagnetic induction type ABSOLUTE linear encoder			
Measuring force	1.5±0.5(N)			
Data Output	Digimatic output/USB			
Pneumatic floating system	NA		Included (for movement only)	
Power supply	AC adapter battery / (LR6 x 4) Standard accessory / Nickel metal hydride battery (x4)			
Battery operation time	Approx. 300 hours (Not using pneumatic floating system)			
	Approx. 80 hours (Using pneumatic floating system regularly)			
Standard Accessories	Stepped probe (05H2A148) Probe diameter calibration block (12AAA715) LR6 Battery / AC Adapter (06AEG180JA) 120V			
Mass	55.16 lbs (25kg)	63.93 lbs (29kg)	57.32 lbs (26kg)	66.14 lbs (30kg)
Dimensions	41.85"x21.85x18.94" 1063(W)x555(D)x481(H)	51.02"x21.85x18.94" 1296(W)x555(D)x481(H)	41.85"x21.85x18.94" 1063(W)x555(D)x481(H)	51.02"x21.85x18.94" 1296(W)x555(D)x481(H)
Main Unit	518-231	518-233	518-235	518-237

*1 Guaranteed when using the standard eccentric ø5 probe.

