Height Gage

QM-Height
SERIES 518 — High-performance Height Gage

- This highly precise height gage is useful not only in height measurements but also in a wide range of applications such as measurement of steps, inside and outside diameters, and runouts.
- Easy-to-view, simple control panel enables most measurements to be made with a single keystroke. SPC (Digimatic) and RS-232C data output allow easy data management with a PC.
- Pneumatic floating models, which feature an air-suspension mechanism, can move smoothly on a surface plate (accuracy cannot be guaranteed for measurement while the unit is air-suspended).
- It features a long continuous operating time of approximately 1,200 hours with four AA alkaline batteries.
  (Four commercially available NiMH/HR6 rechargeable batteries can also be used.)

64PKA130C

SPECIFICATIONS

Order No.	Inch / Metric	64PKA094C	64PKA095C	64PKA129C	64PKA130C
Measuring range (stroke)		0 - 18 in (14 in) 0 to 465 mm (350 mm)	0 - 28 in (24 in) 0 to 715 mm (600 mm)	0 - 18 in (14 in) 0 to 465 mm (350 mm)	0 - 28 in (24 in) 0 to 715 mm (600 mm)
Resolution	Inch / Metric	0.001 / 0.005 mm 0.00005 / 0.0001 / 0.0002 in (Selectable)			
Accuracy	Indication accuracy*1	± (2.4 + 2.1L/600) µm			
	Repeatability*1	2 $\sigma \leq$ 1.8 µm			
Perpendicularity*2		7 µm	12 µm	7 µm	12 µm
Guiding method		Roller bearing			
Drive method		Manual (wheel)			
Measurement principle		Electromagnetic induction absolute encoder			
Measuring force		1.5±0.5 N			
Data output ports		Digimatic / USB*3			
Air-floating system		Not included		Included (for positioning only)	
Power source		Alkaline AA / LR6 batteries×4 (standard accessories) / AC adapter*4 / supports NiMH (HR6) rechargeable batteries x 4			
Battery life guidelines*5		Approx. 1,200 hours (without using the air-floating system) Approx. 90 hours (when using the air-floating system)			
Mass		25 kg	29 kg	26 kg	30 kg
Dimensions (W×D×H)		Stroke 350 mm type: 280×273×784 mm Stroke 600 mm type: 280×273×1016 mm			
Operating temperature (recommended)		0 to 40° C (10 to 30° C)			
Operating humidity		20 to 80% RH (non-condensing)			
Storage temperature		-10 to 50° C			
Storage humidity		5 to 90% RH (non-condensing)			
Order No.	**Base Model**	**518-241**	**518-243**	**518-245**	**518-247**

- Standard Accessories: **05HZA148** ø5 mm stepped probe, **12AAA715** probe diameter calibration block, alkaline batteries x 4 (AA/LR6) (For operational checks)

*1 Indication accuracy and repeatability represent the values obtained when the standard ø5 stepped probe is used.
*2 Indicates the value obtained from the measurement of a straight surface placed perpendicular to the the base reference surface using the Lever Head (**519-521**), Mu-checker (**519-562A**) and probe mounting adapter (**932361**).
*3 Requires special communication driver.
These can be downloaded from the Mitutoyo web site. **https://www.mitutoyo.co.jp/eng/contact/products/usb/index.html**
*4 The AC adapter cannot be used to recharge rechargeable batteries.
*5 Battery life depends on the operating conditions.

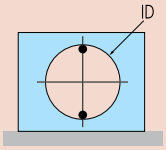
MeasurLink® ENABLED
Data Management Software by Mitutoyo

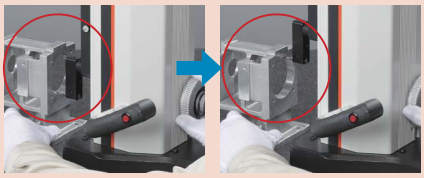
PROPRIETARY INSPECTION CERTIFICATE

Measurement example

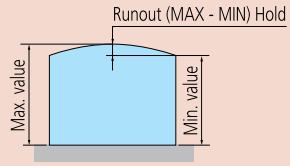
- Height measurement

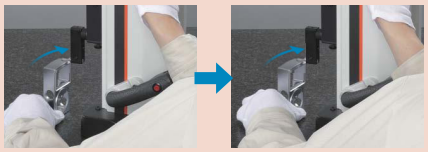
- ID measurement





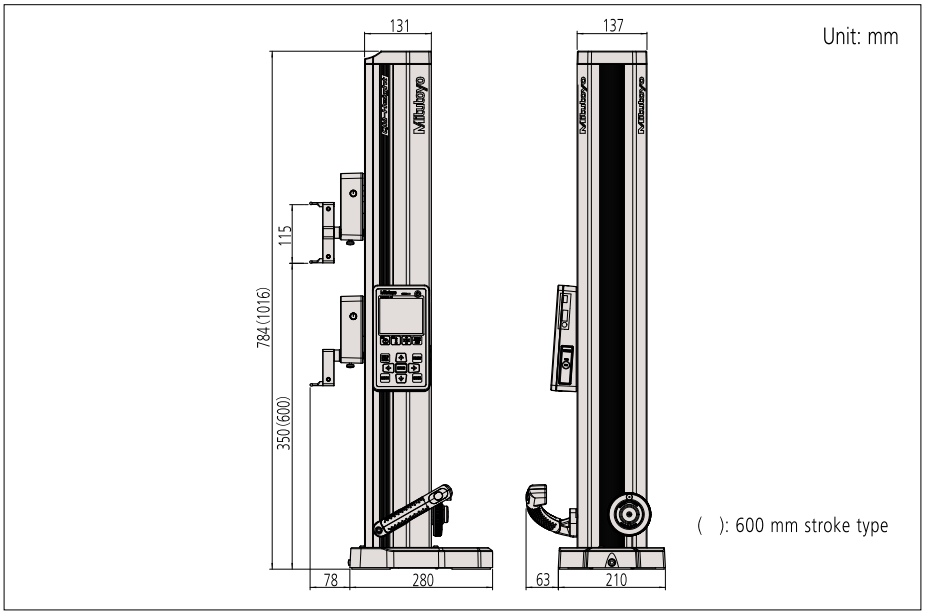
- Runout measurement



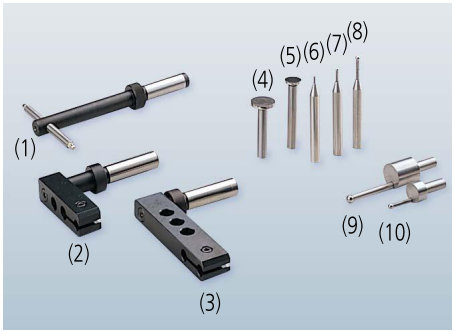


Got Questions?

DIMENSIONS



Optional Accessories



Optional accessories that enable centralized data management

Order No.	Item name
Small printer equipped with Data Logger	
264-505A	**DP-1VA LOGGER**
936937	Digimatic connection cable (1 m)
965014	Digimatic connection cable (2 m)
06AFZ050	USB cable (A-microB)
Measurement Data Input Unit	
06AFM380D	USB Input Tool Direct **USB-ITN-D**
Measurement data wireless communication system	
02AZD730G	**U-WAVE-T** (Transmission unit) (IP67 type)
02AZD880G	**U-WAVE-T** (Transmission unit) (Buzzer type)
02AZD790D	**U-WAVE-T** dedicated cable (Standard use)
02AZE140D	**U-WAVE-T** dedicated cable (For foot switch)
02AZD810D	**U-WAVE-R**
02AZE990	**U-WAVE** mounting bracket
Measurement data collection software for Excel **USB-IT PAK V2.1/V3.0**	
Measurement data network system **MeasurLink®**	

Contact points for a wide range of measurements

Item	Order No.	Description
	Depth probe	
(1)	**12AAC072**	Depth probe
	Special holder	
(2)	**12AAA792**	Holder for dial indicator
(3)	**12AAA793**	Holder (Long)
	Interchangeable contact points for ø5 mm stepped probe	
(4)	**957265**	ø20 mm disk
(5)	**957264**	ø14 mm disk
(6)	**957261**	ø2 mm ball (coaxial type)
(7)	**957262**	ø3 mm ball (coaxial type)
(8)	**957263**	ø4 mm ball (coaxial type)
(9)	**12AAA789**	ø6 mm ball (eccentric type)
(10)	**12AAA788**	ø4 mm ball (eccentric type)
	AC Adapter	
	06AGZ369JA	AC Adapter/U.S.
	Other	
	05HZA173	Scriber*

* Used for measurements, cannot be used for scribing.
Note: A gage block may be required for zero-setting depending on the probe or contact point to be used.