

QM-Height

SERIES 518 — High Precision ABSOLUTE Digital Height Gage

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 judgement result is out of tolerance, the display backlighting changes from green to red, so tolerance judgment can be made at a glance.



518-224



- Slider elevation knob (for travel) / wheel (for measurement).
- With SPC and RS-232C output.



(Refer to the page 9 for details.)

Technical Data

Measuring range: 0 - 465mm or 0 - 715mm
 Slider stroke: 350mm or 600mm
 Resolution: 0.001 / 0.005mm or 0.001 / 0.005mm / .00005" / .0001" / .0002"
 Accuracy at 20°C*: $\pm(2.8+5L/1000)\mu\text{m}$
 L = Measuring length (mm)
 Repeatability (2 σ): 1.8 μm
 Perpendicularity**: 6 μm (0 - 350mm), 13 μm (0 - 600mm)
 Guiding method: Roller bearing
 Drive method: Manual
 Length standard: ABSOLUTE electrostatic capacitance type linear encoder
 Measuring force: 1.6 \pm 0.5N
 Display: LCD
 Power supply: AC adapter (optional) / battery (LR6 x 4)
 Battery operation time: Approx. 260 hours***
 (approx. 6 hours when using back light)

* It is guaranteed when using the standard eccentric $\phi 5$ probe.
 ** It is guaranteed when using a lever head (MLH-321) or Mu-Checker (M-411)
 *** 260 hours (using back light in the power saving mode)
 6 hours (using back light in the full-time turn-on mode)

SPECIFICATIONS

Metric	
Range	Order No.
0 - 350mm	518-220 / 518-224*
0 - 600mm	518-222 / 518-226*

*Model with setting block for ball probe (12AAA715)

Inch/Metric	
Range	Order No.
0 - 14"	518-221 / 518-225*
0 - 24"	518-223 / 518-227*

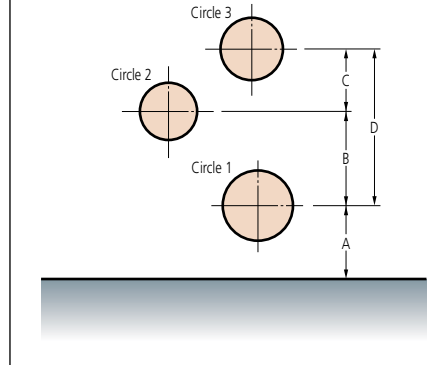
*Model with setting block for ball probe (12AAA715)

Optional Accessory

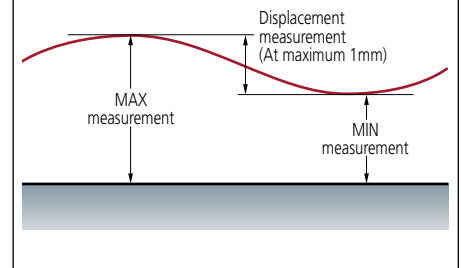
- 12AAC072:** Depth probe
- 12AAA792:** Dial indicator (ø8mm stem) holder
- 12AAA837:** Dial indicator (ø3/8" stem) holder
- 12AAA793:** Probe extension holder (85mm/3.3")
- 12AAF667:** ø2mm ruby ball probe
- 957261:** ø2mm ball probe
- 957262:** ø3mm ball probe
- 957263:** ø4mm ball probe
- 12AAB552:** ø10mm ball probe, L = 55mm
- 12AAF670:** ø5mm disk probe
- 12AAF671:** ø10mm disk probe
- 957264:** ø14mm disk probe
- 957265:** ø20mm disk probe
- 12AAA788:** ø4mm ball offset probe
- 12AAF394:** ø5mm ball offset probe
- 12AAA789:** ø6mm ball offset probe
- 226116:** Test indicator (ø6mm stem) adapter
- 05HZA173:** Scriber
- 264-504:** DP-1VR
- 936937:** SPC cable (1m)
- 965014:** SPC cable (2m)
- 526688:** AC adapter (100V)
- 526688A:** AC adapter (120V)
- 526688D:** AC adapter (220V)
- 526688E:** AC adapter (240V/220V)

Circle pitch measurement

The length A, B, C and D can be determined by measuring circles 1 to 3 once each, using the memory of measuring data together with the calculation function. (A maximum of nine circle measurement data can be saved.)



Maximum / minimum and displacement measurement



Height measurement



Inside diameter measurement



DIMENSION AND MASS

