

Linear Height

SERIES 518 — High Performance 2D Measurement System

FEATURES

- Excellent accuracy of $(1.1+0.6L/600)\mu\text{m}$ with $0.1\mu\text{m}/0.4\mu\text{m}$ resolution / repeatability.
- Perpendicularity (frontal) of $5\mu\text{m}$ and straightness of $4\mu\text{m}$ are guaranteed.
- Pneumatic full / semi-floating system allows adjustment of air-cushion height.
- Basic statistical functions are provided and, additionally, RS-232C data output provides the option of evaluating measurement data externally with SPC software on a PC.

- One-key operation for running a semi-automatic measurement.
- Data entry from a Digimatic tool.
- Choice of message language in English, German, French, Spanish, Italian, Dutch, Portuguese, Swedish, Czech, Hungarian, Slovenian, Polish, Turkish, Traditional Chinese*, Korean** and Japanese for user-friendly operation.

*Optional **518-341K and 518-342K only



518-341A-21



518-342A-21
(with power grip)



SPECIFICATIONS

Inch/Metric	
Order No.	Remarks
518-341A-21 / 518-342A-21*	120V w/ English manual
518-341A-22 / 518-342A-22*	120V w/ Spanish manual
518-341D-21 / 518-342D-21*	220V w/ English manual
518-341D-22 / 518-342D-22*	220V w/ Spanish manual
518-341D-23 / 518-342D-23*	220V w/ German manual
518-341D-24 / 518-342D-24*	220V w/ French manual
518-341D-25 / 518-342D-25*	220V w/ Italian manual
518-341E-21 / 518-342E-21*	240V w/ English manual
518-341DC / 518-342DC*	220V w/ Chinese manual
518-341K / 518-342K*	220V w/ Korean manual

*Power grip pre-installed models

Inch/Metric Large capacity battery Type

Order No.	Remarks
518-343A-21 / 518-344A-21*	120V w/ English manual
518-343A-22 / 518-344A-22*	120V w/ Spanish manual
518-343D-21 / 518-344D-21*	220V w/ English manual
518-343D-22 / 518-344D-22*	220V w/ Spanish manual
518-343D-23 / 518-344D-23*	220V w/ German manual
518-343D-24 / 518-344D-24*	220V w/ French manual
518-343D-25 / 518-344D-25*	220V w/ Italian manual
518-343E-21 / 518-344E-21*	240V w/ English manual
518-343DC / 518-344DC*	220V w/ Chinese manual
518-343K / 518-344K*	220V w/ Korean manual

*Power grip pre-installed models



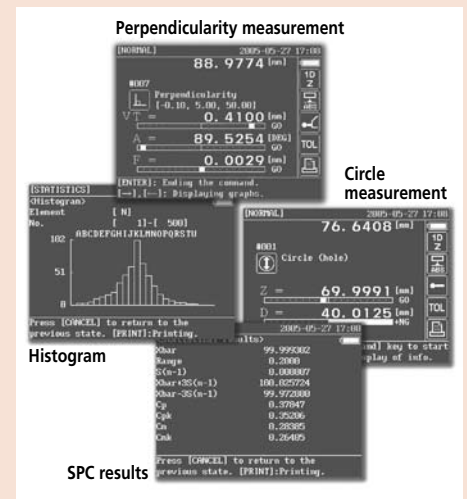
(Refer to page VIII for details.)

Technical Data

- Measuring range: 0 - 972mm
- Slider stroke: 600mm
- Resolution: 0.0001 / 0.001 / 0.01 / 0.1mm or (switchable) .00001" / .0001" / .001" / .01"
- Accuracy at 20°C*1: $(1.1+0.6L/600)\mu\text{m}$
L = Measuring length (mm)
- Repeatability (2σ)*1: Plane: 0.4μm, Bore: 0.9μm
- Perpendicularity*2: 5μm (after compensation)
- Straightness*2: 4μm (mechanical straightness)
- Drive method: Manual / motor (5 - 40mm/s, 7 steps)
- Measuring force: 1N
- Balancing method: Counter balance
- Floating method: Full / semi-floating with built-in air compressor
- Display: Graphic LCD (320 x 240 dot, with back light)
- Language for display: English / German / French / Spanish / Italian / Dutch / Portuguese / Swedish / Turkish / Czech / Hungarian / Slovenian / Polish / Traditional Chinese (optional) / Korean (518-341K and 518-342K) / Japanese
- No. of stored programs: 50 programs (max.)
- No. of stored data: 60,000 data (max.)
- Power supply: AC adapter / battery (Ni-MH)
- Battery operation time: Approx. 5 hours (air floating & slider elevation : 25%)

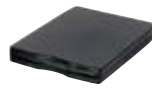
*1It is guaranteed when using the standard eccentric ø5 probe.

*2It is guaranteed when using the Lever Head (MLH-321) or Mu-checker (M-411)



Optional Accessories

- 12AAC072:** Depth probe
- 12AAC073:** $\phi 20$ mm taper probe
- 12AAA787:** Block for calibrating probe diameter (applicable to taper probe)
- 12AAA792:** Dial indicator ($\phi 8$ mm stem) holder
- 12AAA837:** Dial indicator ($\phi 3/8$ " stem) holder
- 12AAA793:** Probe extension holder (85mm/3.3")
- 12AAB136:** $\phi 10$ mm cylindrical probe
- 932361:** Mu-checker lever head holder
- 12AAF666:** $\phi 1$ mm ball probe (coaxial type)
- 12AAF667:** $\phi 2$ mm ruby ball probe (coaxial type)
- 957261:** $\phi 2$ mm ball probe (coaxial type)
- 957262:** $\phi 3$ mm ball probe (coaxial type)
- 957263:** $\phi 4$ mm ball probe (coaxial type)
- 12AAB552:** $\phi 10$ mm ball probe, L = 55mm (coaxial type)
- 12AAF668:** $\phi 10$ mm ball probe, L = 82mm (coaxial type)
- 12AAF669:** $\phi 10$ mm ball probe, L = 120mm (coaxial type)
- 12AAF670:** $\phi 5$ mm disk probe
- 12AAF671:** $\phi 10$ mm disk probe
- 957264:** $\phi 14$ mm disk probe
- 957265:** $\phi 20$ mm disk probe
- 12AAF672:** $\phi 1$ mm ball offset probe
- 12AAF673:** $\phi 2$ mm ball offset probe
- 12AAA788:** $\phi 4$ mm ball offset probe
- 12AAA789:** $\phi 6$ mm ball offset probe
- 226116:** Test indicator ($\phi 6$ mm stem) adapter
- 226117:** M2 CMM stylus adapter
- 226118:** M3 CMM stylus adapter
- _____ : CMM ball and disk hard probes are available.
- 12AAF712:** Battery pack
- 12AAG245:** Large capacity battery pack
- 12AAF675:** Large capacity battery set
- 12AAA796:** Thermal receipt printer (220V)
- 12AAA797:** Thermal receipt printer (120V)
- 12AAA802:** Thermal receipt printing paper (10 pcs.)
- 12AAA804:** Cable for page printer (2m)
- 12AAA807:** RS-232C cable (2m/80")
- 12AAG920:** RS-232C cable (3m/118")
- 12AAH035:** USB-FDD unit



USB-FDD unit



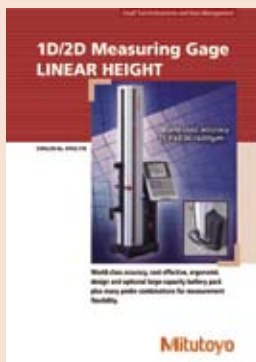
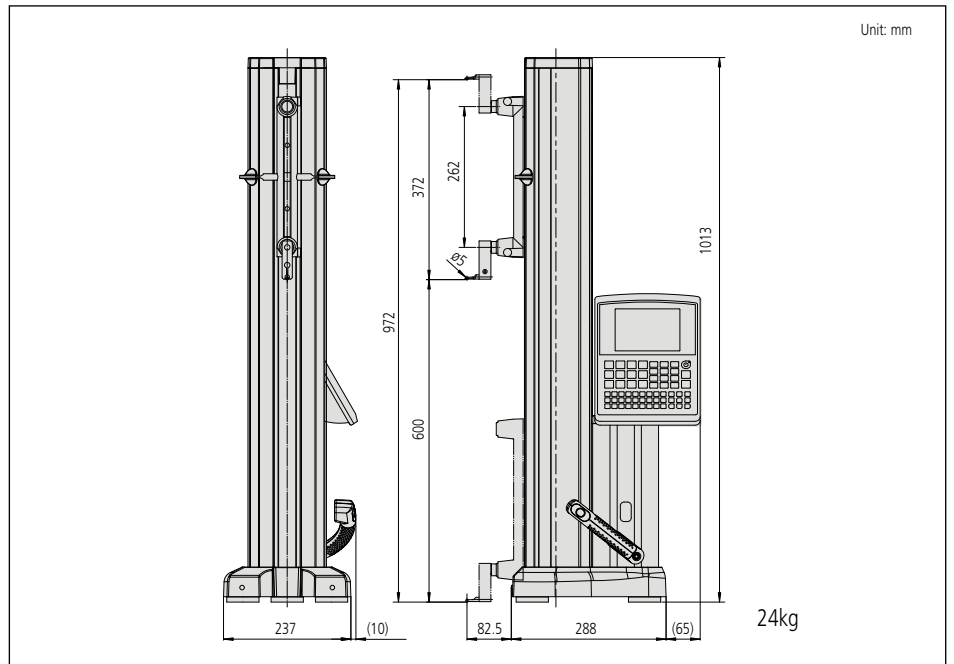
Thermal printer

```

Printer ON/OFF
Contents to Be Printed : All Results to Command Menu
Point
N0001
X = 1.000 Y = 2.000
Circle
N0002
X = 1.999 Y = 2.001
D = 2.000 FZ = 0.002
Circle-Point Distance
R1+2
N0003
LC = 0.597 LL = 1.997
LB = 0.000 ZD = 0.997
VD = -0.001
Start Pitch Measurement
Pitch
N0004
LC = 1.000 ZD = 1.000
VD = 0.000 AC = 18.2506
Pitch
N0005
LC = 0.999 ZD = 0.999
VD = 0.000 AC = 18.2506
    
```

Sample of printout

DIMENSIONS AND MASS



Refer to the Linear Height leaflet (E4162) for more details.

