## **Data Sheet**

# Ergonomics Testing Kits **Series EK3**

32-1126 REV 1020

Series EK3 kits make job task analysis and ergonomics analysis simple and accurate, ideal for workplace design, strength assessment, and ergonomic studies. These kits present the ergonomist and other professionals with a simple and economical testing solution. 100 lbF, 200 lbF and 500 lbF capacities are available. The kits consist of all the items listed below:







# | Section | Sect

### Series 3 digital force gauge

- $-\pm0.3\%$  accuracy
- USB output
- Compact design, easy to hold
- Measures in IbF, kgF, or N
- Peak force capture for push and pull forces
- Durable construction ensures longevity
- Battery or AC operation
- USB output cable and driver

#### ■ MESUR<sup>®</sup> Lite software

MESUR® Lite tabulates continuous or single point data from the gauge. One-click export to Excel easily allows for further data manipulation.

# Double- and single-handle cradles

Contain non-slip rubber handles for various applications.

#### Padded attachments

Flat, curved, and square padded attachments mount directly to the force gauge for conducting strength analysis.

#### Snap Hook

Features a snap clasp, for added safety. Swiveling action ensures proper alignment.

#### ■ Flat Attachment

Round attachment for compression tests.

#### Accessories

Cushioned carrying case, AC adapter, battery, user's manual, and NIST-traceable certificate of calibration.

## Ordering Information

| Model No. | Description                     |
|-----------|---------------------------------|
| EK3-100   | Ergonomics testing kit, 100 lbF |
| EK3-200   | Ergonomics testing kit, 200 lbF |
| EK3-500   | Ergonomics testing kit, 500 lbF |

All models include 110V AC adapters. Add suffix 'E' for Euro plug, 'U' for UK plug, or 'A' for Australian plug. Ex: EK3-100E, EK3-200U, EK3-500A

## MARK - 10





# Digital Force Gauges **Series 3**

32-1121 REV 1020

ARKODO

Series 3 digital force gauges are designed for tension and compression force testing in numerous applications from 0.12 lbF to 500 lbF (0.5 N to 2500 N). The gauges feature a sampling rate of

2,000 Hz, producing accurate results under a wide range of test conditions. A backlit graphic LCD displays large characters, and a menu is available to access the gauges' features and configurable parameters. USB output is provided for data collection purposes.

Set point indicators are provided for pass-fail testing. The gauges are overload protected to 200% of capacity, and an analog load bar is shown on the display for graphical representation of applied force.

An ergonomic, reversible aluminum housing allows for hand held use or test stand mounting for more sophisticated testing requirements. Series 3 digital force gauges are directly compatible with Mark-10 test stands, grips, and software.

> Series 3 gauges include MESUR® Lite data acquisition software, for tabulation of continuous or individual data points. One-click export to Excel button easily allows for further data manipulation.



Shown with an ES20 test stand and G1061 wedge grips

## **Features**

- High-speed 2,000 Hz sampling rate
- USB data output of continuous or individual data points
- Ultra-compact size
- Large backlit graphic display

MESUR® Lite data acquisition software

is included with Series 3 gauges

- Programmable set points with pass/fail indicators
- Live load bar graph with set point markers
- Peak readings and set points always displayed
- Configurable audio alarms and key tones
- 4 selectable units of measurement
- MESUR° Lite data collection software included







# Digital Force Gauges Series 3

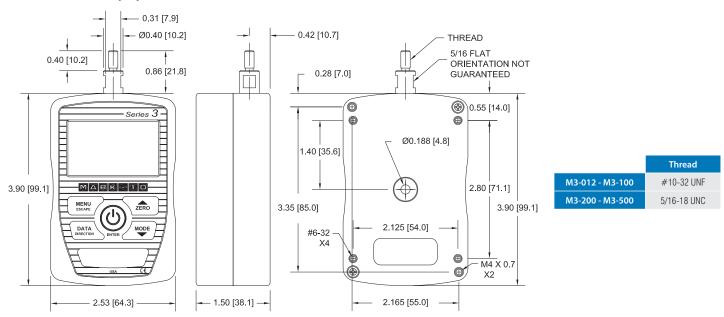
32-1121 REV 1020 Page 2 of 3



## Specifications

| Accuracy:                   | $\pm 0.3\%$ of full scale  |  |  |  |
|-----------------------------|--|--|--|--|
| Sampling Rate:              | 2,000 Hz   |  |  |  |
| Power:                      | AC adapter: 100-240VAC, 50-60 Hz, 0.3 A Battery: Rechargeable 8.4V NiMH Low battery indicator appears when battery level is low, and gauge powers off automatically when power reaches critical stage. |  |  |  |
| Battery life:               | Backlight on / off: up to 7 / 24 hours of continuous use   |  |  |  |
| USB Output:                 | Configurable to 115,200 baud.  |  |  |  |
| Safe overload:              | 200% of full scale (display shows "OVER" at 110% and above)  |  |  |  |
| Weight (gauge only):        | <b>M3-012 - M3-100:</b> 0.7 lb [0.33 kg]<br><b>M3-200 - M3-500:</b> 0.9 lb [0.41 kg]   |  |  |  |
| Load cell deflection:       | All models 0.010 [0.25], except 0.005 [0.13] for M3-012  |  |  |  |
| Environmental requirements: | 40 - 100°F, max. 96% humidity, non-condensating  |  |  |  |
| Warranty:                   | 3 years (see individual statement for further details)   |  |  |  |

## Dimensions in [mm]









## **Data Sheet**

# Digital Force Gauges Series 3

32-1121 REV 1020

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Series 3 force gauges are shipped as shown at left, and include the following accessories:

- (1) Extension rod \*
- (1) Hook \*
- (1) Cone \*
- (1) Chisel \*
- (1) V-Groove \*
- (1) Flat \*
- (1) Coupling \*
- (1) Carrying case
- (1) USB cable
- (1) AC adapter
- (1) Battery
- (1) Certificate of calibration without data (for data, add part no.
- \* The specific accessory depends on the force gauge model. Refer to the website for details.

## Capacity & Resolution

| Model  | lbF           | kgF         | gF        | N            |
|--------|---------------|-------------|-----------|--------------|
| M3-012 | 0.12 x 0.0001 | -           | 50 x 0.05 | 0.5 x 0.0005 |
| M3-025 | 0.25 x 0.0002 | -           | 100 x 0.1 | 1 x 0.001    |
| M3-05  | 0.5 x 0.0005  | -           | 250 x 0.2 | 2.5 x 0.002  |
| M3-2   | 2 x 0.002     | 1 x 0.001   | -         | 10 x 0.01    |
| M3-5   | 5 x 0.005     | 2.5 x 0.002 | -         | 25 x 0.02    |
| M3-10  | 10 x 0.01     | 5 x 0.005   | -         | 50 x 0.05    |
| M3-20  | 20 x 0.02     | 10 x 0.01   | -         | 100 x 0.1    |
| M3-50  | 50 x 0.05     | 25 x 0.02   | -         | 250 x 0.2    |
| M3-100 | 100 x 0.1     | 50 x 0.05   | -         | 500 x 0.5    |
| M3-200 | 200 x 0.2     | 100 x 0.1   | -         | 1000 x 1     |
| M3-500 | 500 x 0.5     | 250 x 0.2   | -         | 2500 x 2     |

All models include 110V AC adapters, unless ordered as below:

Add suffix 'E' for euro plug (220V), 'U' for UK plug (220V) or 'A' for Australian plug (220V).

Example: M3-05E, M3-100U, M3-500A





