## Data Sheet Economical Digital Force Gauges Series 2

32-1166 REV 2



Series 2 digital force gauges are designed for basic tension and compression force testing applications up to 500 lbF (2,500 N). Peak tension and compression readings are reliably captured via the gauges'  $\pm 0.5\%$  accuracy and 500 Hz sampling rate. A backlit graphic LCD displays the current, peak tension, or peak compression reading.

The gauges are overload protected to 150% of capacity. An ergonomic, reversible aluminum housing allows for hand held use or fixture mounting, rugged enough for applications in both production and laboratory environments. Series 2 gauges are directly compatible with Mark-10 test stands and grips.



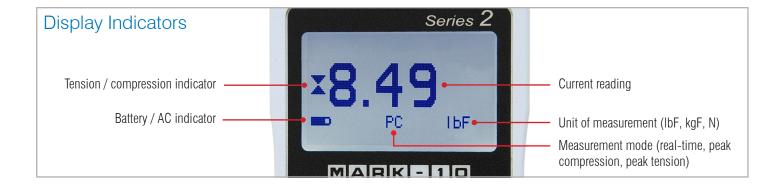
< Shown with the included cushioned shipping carton and optional accessories

### **Features**

- Calculates peak tension and compression values
- 3 selectable units of measurement
- Ultra-compact, ergonomic housing
- Configurable default measurement unit and mode
- 500 Hz sampling rate
- Large, backlit graphic display with auto-dimming
- Powered by 9V battery or available AC adapter
- Reversible housing for alternate load cell orientation

> Shown with an ES20 test stand with G1061 wedge grips









## Data Sheet

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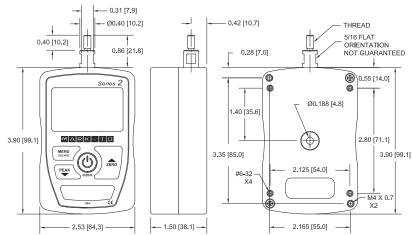
### **Specifications**

| Accuracy:                   | $\pm 0.5\%$ of full scale  |  |  |
|-----------------------------|--|--|--|
| Sampling Rate:              | 500 Hz   |  |  |
| Power:                      | AC or 9V non-rechargeable battery, with multi-step low battery indicator.                |  |  |
| Battery life:               | Backlight on / off: up to 24 hours / 92 hours of continuous use                          |  |  |
| Safe overload:              | 150% of full scale (display shows "OVER" at 110% and above)                              |  |  |
| Weight:                     | 0.7 lb [0.33 kg]<br>M2-2 – M2-100: 0.7 lb [0.33 kg]<br>M2-200 – M2-500: 0.9 lb [0.41 kg] |  |  |
| Included items:             | 9V battery, quick-start guide, resource CD, certificate of conformance.                  |  |  |
| Environmental requirements: | 40 - 100°F, max. 96% humidity, non-condensating  |  |  |
| Warranty:                   | 3 years (see individual statement for further details)                                   |  |  |

## Capacity & Resolution

| Model  | lbF                 | kgF         | N         |  |
|--------|---------------------|-------------|-----------|--|
| M2-2   | 2 x 0.002           | 1 x 0.001   | 10 x 0.01 |  |
| M2-5   | 5 x 0.005           | 2.5 x 0.002 | 25 x 0.02 |  |
| M2-10  | 10 x 0.01           | 5 x 0.005   | 50 x 0.05 |  |
| M2-20  | 20 x 0.02           | 10 x 0.01   | 100 x 0.1 |  |
| M2-50  | 50 x 0.05           | 25 x 0.02   | 250 x 0.2 |  |
| M2-100 | 100 x 0.1 50 x 0.05 |             | 500 x 0.5 |  |
| M2-200 | 200 x 0.2           | 100 x 0.1   | 1000 x 1  |  |
| M2-500 | 500 x 0.5           | 250 x 0.2   | 2500 x 2  |  |

#### Dimensions in [mm]



|                 | Thread      |
|-----------------|-------------|
| M2-2 – M2-100   | #10-32 UNF  |
| M2-200 – M2-500 | 5/16-18 UNC |

### **Optional Items**



#### **Carrying case**

Cushioned hard plastic carrying case provides storage space for the gauge, AC adapter, and attachments.



#### **AC** adapters

Select from 110V US, 220V Euro, 220V UK, or 220V Australian



#### Certificate of calibration

Includes 10 data points in the tension and compression directions. NIST-traceable.



#### **Attachments**

Available individually or as a kit. Select from a hook, flat, cone, chisel, v-groove, and extension rod.

### Ordering Information

Force gauge model numbers are shown in the Capacity & Resolution table above. Optional item part numbers are shown below:

| Part No. | Description           | Part No. | Description                           | Part No.  | Description                                     |
|----------|-----------------------|----------|---------------------------------------|-----------|---|
| 12-1049  | Carrying case         | CERT     | Certificate of calibration with data  | G1025     | Chisel point, #10-32F                           |
| AC1030   | AC adapter, 110V US   | G1038    | Medium hook, #10-32M (requires G1039) | G1027     | V-groove, #10-32F                               |
| AC1031   | AC adapter, 220V Euro | G1039    | Coupling, #10-32F/F                   | G1024     | Extension rod, 5", #10-32F                      |
| AC1032   | AC adapter, 220V UK   | G1029    | Flat head, #10-32F                    | 23-1031-2 | Attachments kit (qty. 1 of G1038 through G1024) |
| AC1033   | AC adapter, 220V Aus  | G1026    | Cone, #10-32F                         |           |   |



