## Data Sheet

## Economical Digital Force Gauges Series 2

32-1166 REV 1020



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 200% 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 rechargeable battery or AC adapter
- Reversible housing for alternate load cell orientation

> Shown with an ES20 test stand with G1061 wedge grips







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### **Optional Items**



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



Attachments Available individually or as kits. Select from hooks, flats, cones, chisels, v-grooves, and extension rods.

### Ordering Information - Gauges

| Model  | Capacity x Resolution |             |           |
|--------|-----------------------|-------------|-----------|
|        | 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  |

# <text>

**Certificate of calibration** Includes 10 data points in the tension and compression directions. NIST-traceable.

### In The Box



Series 2 force gauges are shipped as shown above, and include the following accessories:

- (1) Cushioned shipping box
- (1) AC adapter
- (1) Battery
- (1) Certificate of conformance

### Ordering Information - Optional Items

| For All Series 2 Gauges    |   |  |  |
|----------------------------|---|--|--|
| CERT                       | Certificate of calibration with data                |  |  |
| 12-1049                    | Carrying case                                       |  |  |
| For M2-2 - M2-100 Gauges   |   |  |  |
| G1038                      | Medium hook, #10-32M (requires G1039)               |  |  |
| G1039                      | Coupling, #10-32F/F                                 |  |  |
| G1029                      | Flat head, #10-32F                                  |  |  |
| G1026                      | Cone, #10-32F                                       |  |  |
| G1025                      | Chisel point, #10-32F                               |  |  |
| G1027                      | V-groove, #10-32F                                   |  |  |
| G1024                      | Extension rod, 5", #10-32F                          |  |  |
| 23-1031-2                  | Attachments kit (qty. 1 of G1038 through G1024)     |  |  |
| For M2-200 - M2-500 Gauges |   |  |  |
| G1035                      | Large hook, 5/16-18M (requires G1037)               |  |  |
| G1037                      | Coupling, 5/16-18F/F                                |  |  |
| G1036                      | Flat head, 5/16-18F                                 |  |  |
| G1033                      | Cone, 5/16-18F                                      |  |  |
| G1032                      | Chisel point, 5/16-18F                              |  |  |
| G1034                      | V-groove, 5/16-18F                                  |  |  |
| G1031                      | Extension rod, 5", 5/16-18F                         |  |  |
| 23-1031-3                  | Attachments kit (qty. 1 ea. of G1035 through G1031) |  |  |





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## Data Sheet

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### Specifications

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| Accuracy:                   | $\pm 0.5\%$ of full scale   |  |  |
|-----------------------------|---|--|--|
| Sampling Rate:              | 500 Hz  |  |  |
| Power:                      | AC adapter: 100-240VAC, 50-60 Hz, 0.3 A<br>Battery: Rechargeable 8.4V NiMH<br>Low battery indicator appears when battery level is low, and gauge powers off<br>automatically when power reaches critical stage. |  |  |
| Battery life:               | Backlight on: Up to 7 hours of continuous use<br>Backlight off: Up to 24 hours of continuous use  |  |  |
| Safe overload:              | 200% of full scale (display shows "OVER" at 110% and above)   |  |  |
| Weight:                     | M2-2 – M2-100: 0.7 lb [0.33 kg]<br>M2-200 – M2-500: 0.9 lb [0.41 kg]  |  |  |
| Environmental requirements: | 40 - 100°F, max. 96% humidity, non-condensing   |  |  |
| Warranty:                   | 3 years (see individual statement for further details)  |  |  |







