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







Mark-10 Corporation ■ www.mark-10.com ■ info@mark-10.com Toll-free: 888-MARK-TEN ■ Tel: 631-842-9200 ■ Fax: 631-842-9201



Data Sheet

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Dimensions in [mm]

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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] M2-2 – M2-100: 0.7 lb [0.33 kg] 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)

0.42 [10.7] 5/16 FLAT ORIENTATION NOT GUARANTEED 0.40 [10.2] 0.86 [21.8] 0.28 [7.0] (a) 0.55 [14.0] Ø0.188 [4.8] 40 [35.6] 2.80 [71.1] 3.90 [99.1] 3.35 [85.0] 3.90 [99.1] 2.125 [54.0] M4 X 0.7 — 1.50 [38.1] — 2.165 [55.0]

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

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	

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		



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